



Partneriaeth Sgiliau Rhanbarthol Gogledd Cymru  
North Wales Regional Skills Partnership

# NORTH WALES

## Skills & Employment Plan

2019□-□2022

North Wales  
Regional Skills Partnership

**DRAFT (October 2019)**





# Foreword

It is a pleasure to present our new Skills and Employment Plan for North Wales 2019–2022. This is a three-year strategic Plan that will provide an insight into the supply and demand of the skills system in the region, and crucially, what employers are telling us are their needs and priorities.

It is an exciting time for North Wales, with recent positive figures showing growth in our employment rate and productivity. Despite this positive trajectory, there are many challenges, uncertainties and opportunities that lie ahead. As a region, we need to ensure that our people and businesses are able to maximise opportunities like the Growth Deal and technological changes, and minimise the impact of potential difficulties and uncertainties, like the risk of a no-deal Brexit.

Skills are fundamental to our continuing economic success. Increasingly, it is skills, not just qualifications that employers look for first. We need to make sure that the people of North Wales are equipped with the correct skills to get a job and progress in work, and that employers have the right skills is a key priority for the region.

We recognise that as a region we need to do more to improve the skills of our people by creating a better match between what our employers are looking for and what the system provides. This includes ensuring stronger links between industry and education, and enabling everyone to understand how the skills needs of our region are changing as the economy changes. Responding effectively to employers' skills needs and strengthening their

role in the education and skills system is central, and will continue to be a cornerstone of our work.

We have focussed on building intelligence on the demand for skills at a regional and sectoral level, and encouraged employers to shape the solutions that will enhance North Wales' skills performance. As well as putting forward priorities in support of specific sectors, the Plan also sets out the key challenges that face us and what actions are needed to encourage a change in our skills system.

The North Wales Regional Skills Partnership (RSP) and its partners in the region are committed and will continue to get the North Wales skills system working harder and better at filling employers' skills gaps and equipping individuals with the skills that will enable them to secure jobs, now and in the future. As an established partnership with support from employers and providers, we collectively aim to create clearer, focussed pathways into employment.

We look forward to working with colleagues across the region to implement the collective ambitions set out in this Plan and create a skills system which underpins a strong, inclusive, and outward-looking economy.



## Executive Summary

### A Resilient North Wales

#### Our Vision is:

“To create an inclusive, outward looking skills system which is agile, resilient and can adapt to opportunities and challenges that emerge from our trends.”

The North Wales Regional Skills Partnership (RSP) Skills and Employment Plan has been developed to inform Welsh Government's strategic approach to the delivery of skills and employment provision. This year, Welsh Government have asked the RSP to take a more strategic, long-term view of the skills system by producing a three-year Skills Plan. This Plan informs a Regional Outline Plan for the Further Education and Work Based Learning offer across the region up to 2022.

The aim of the Plan is to get the North Wales skills system working harder and better at filling employers' skills gaps and equipping individuals with the skills that will enable them to secure jobs, now and in the future. The people of North Wales are at the heart of this Plan, from inspiring and enthusing young people about future careers, lifelong learning, equipping the workforce with the right skills and careers advice to enabling in work progression and training in our labour market.

In developing this Plan, we have engaged with over 350 businesses across the region, through a Skills Survey (238 respondents) and focus group/consultation sessions. We've also undertaken a comprehensive review of other intelligence and data sources to further bolster our findings.

North Wales' economy is performing well, with a solid and positive growth in productivity and employment over recent years. There are many opportunities that lie ahead, with the potential of creating 4,298 jobs in high growth sectors through the North Wales Growth Deal, and other capital investments including inward investment. In order to ensure that we can maximise these opportunities, we need to ensure that the people of North Wales are equipped with the right skills and that we have a skills pipeline in place. However, we also face some deep-rooted challenges that need to be addressed if we are going to ensure an inclusive region.

#### North Wales Skills Challenges

- Stubborn economic inactivity rates;
- Growth (GVA) is not dispersed evenly across the region;
- Inclusive growth is not extended across the region, with pockets of deprivation, and earnings below the Wales average in some counties, which leads to in-work poverty;
- Demography of the region with a higher than average number of over 65 year olds leads to replacement demand issues, especially in some sectors;
- Skills under-utilisation is higher in this region, which could reflect the mismatch in our labour market;



- Skills shortages and gaps reported across most of our key sectors, and recruitment cited as one of the biggest challenges facing our North Wales employers;
- Lack of STEM skills, including take up of STEM subjects post GCSEs;
- Changing skill set requirements, such as digital skills and SMART technology, due to technological drivers;
- Work-ready & employability skills;
- Current workforce not 'agile' or 'resilient' enough to deal with shocks to the economy;
- Perception of some sectors is a barrier to recruitment and retention;
- Qualifications that are fit for purpose;
- Enabling and mainstreaming lifelong learning; routinely upskilling and provision of in work retraining or upskilling;
- Need to drive innovation and enterprise skills;
- Brexit implications on our key sectors.

In order to address these challenges, and in response to enabling our vision, this Plan provides a starting point to define specific priorities and activities that are required to support sector growth over the next three years, and address the needs of our businesses and residents. The priorities and recommendations will drive the RSP's activities for the next three years, and will also inform an action plan which will be co-produced with our partners in autumn 2019.

These priorities have been shaped through our consultation with stakeholders, Employer Skills Survey responses, data analysis and policy influences.

The priorities are captured in three of the most pertinent themes identified throughout the Plan:

### Priority 1: Building our future workforce and attracting talent

### Priority 2: Skills development for an inclusive North Wales

### Priority 3: Promote career perception, pathways and apprenticeship opportunities

We have also considered our 8 key sectors in the 'Spotlight on our sectors' section. The information in these sections on skills challenges has been informed by our Skills Survey and focus groups with the sectors, in the main. A synopsis of these priorities includes:

## Energy & Environment

- Increase STEM learners/pathways to ensure a future workforce for the sector;
- Equip and upskill the workforce with skills for implementation of new SMART technologies, and low carbon;
- Expand apprenticeship opportunities in response to replacement demand issues.

## Construction

- Upskill current workforce and new entrants with digital skills and SMART technologies, especially our small and micro businesses;
- Replacement demand is an issue within this sector and promoting apprenticeship opportunities for young entrants is key;
- Update the perception of the sector and encouragement of more female entrants.



### Advanced Manufacturing

- Succession planning is needed in light of the age profile of the current workforce and replacement demand;
- Need to encourage apprenticeships, especially higher-level apprenticeships and degree apprenticeships with clear progression routes.

### Creative & Digital

- Industry has indicated their appetite to help shape some of the course content and consider shared apprenticeship opportunities;
- Post-16 provision needs to reflect the current employer demand, rapid changes in technology and an increased and diverse offer of digital skills across all sectors, in order to keep up-to-date with how quickly industry 4.0 is currently utilising these skills;
- Careers information and guidance for young people is crucial to understanding the transferrable skills developed and navigate career choices in a more holistic way.

### Financial & Professional

- The current supply of higher-level skills cannot meet the demand. Increasing the opportunities for businesses and individuals to upskill, train and retrain via short courses at levels 4+ with professional examinations and status is required to fill current vacancies.

### Tourism & Hospitality

- Recruitment is a crucial issue for the sector and this could be exacerbated by Brexit;
- Outdated perception of the sector could be one of the biggest barriers to growth and there is a need to raise awareness of the breadth of career opportunities and raise aspiration;
- Need to promote the value of apprenticeship opportunities.

### Health & Social Care

- Recruitment and retention of workforce and need to upskill the workforce for statutory requirements;
- Recruitment and retention of the workforce, including updating the perception of the sector;
- Retain and upskill leadership and management roles;
- Increase and update digital skills.

### Food & Farming

- Upskilling the sector in line with the digitalisation potential to mainstream digital connectivity and digital skills that will deliver efficiency savings, smarter decisions, potential new growth and diversification.

The priorities articulated here will be further refined and delivered in a number of different ways, to make the most of resources, capacity and partnerships.

This Plan is a living document which changes in both ambition and action as time passes. It should not be static, or unchanging.





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## Our Purpose and Approach

### Our Purpose

The North Wales Regional Skills Partnership (RSP) has been given a key role by Welsh Government to help break the cycle of low skills, low wages and low productivity. The RSP's role is to identify skills gaps and skills shortages in the region by better understanding the opportunities and investment pipelines, and drawing on the intelligence of employers and stakeholders. Full RSP membership is attached in **Annex 1**.

This year, Welsh Government have asked the RSP to take a more strategic, long-term view of the skills system in the region by producing a three-year Regional Employment and Skills Plan 2019–2022. This Plan will provide a strategic direction for post-16 education and training providers through an indication of skills needs of employers in the region and influence the economic relevance of post-16 provision. In addition to the Plan, we are required to complete a Regional Outline Plan for Further Education (FE) and Apprenticeships, with recommendations for changes to provision over a three-year period.

The aim of this Plan is to get the North Wales skills system working harder and smarter to meet employers' skills gaps and equipping individuals with the skills that will enable them to secure jobs, now and in the future. We are seeking to build on the successes of the region's skills system and challenge weaknesses to ensure the best outcome for our citizens.

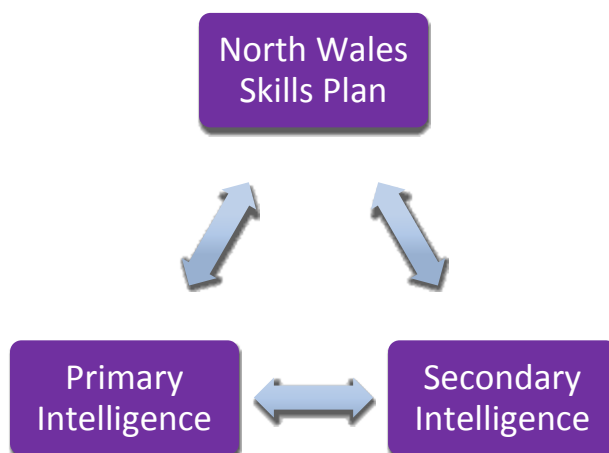
Our approach has been to analyse the strengths and weaknesses of North Wales' labour market today, and assess the demand and supply trends that will affect the market through to 2022. This Plan is evidence-based and articulates the main skills issues for North Wales, along with priorities and actions for our regional and national partners to work collectively.







## Our Approach



In developing our approach, we have carried out a comprehensive review of the economic and policy context in which the RSP operates. Analysis of the labour market intelligence has identified the key challenges that we have to address and the opportunities that we must exploit. We have consulted widely on the issues that we should be addressing and priorities for the region have emerged.

### Primary Intelligence

This year, for the first time, we conducted a North Wales Employer Skills Survey. This survey has given us an insight into key skills issues that affect our employers, and has enabled us to better understand current recruitment challenges and the impact of skills shortages and gaps. The survey was completed by 238 businesses across the region and a breakdown of responses per sector can be seen below. The results have provided us with a baseline of key intelligence that we will continue to strengthen and develop to ensure that our intelligence and evidence is robust.

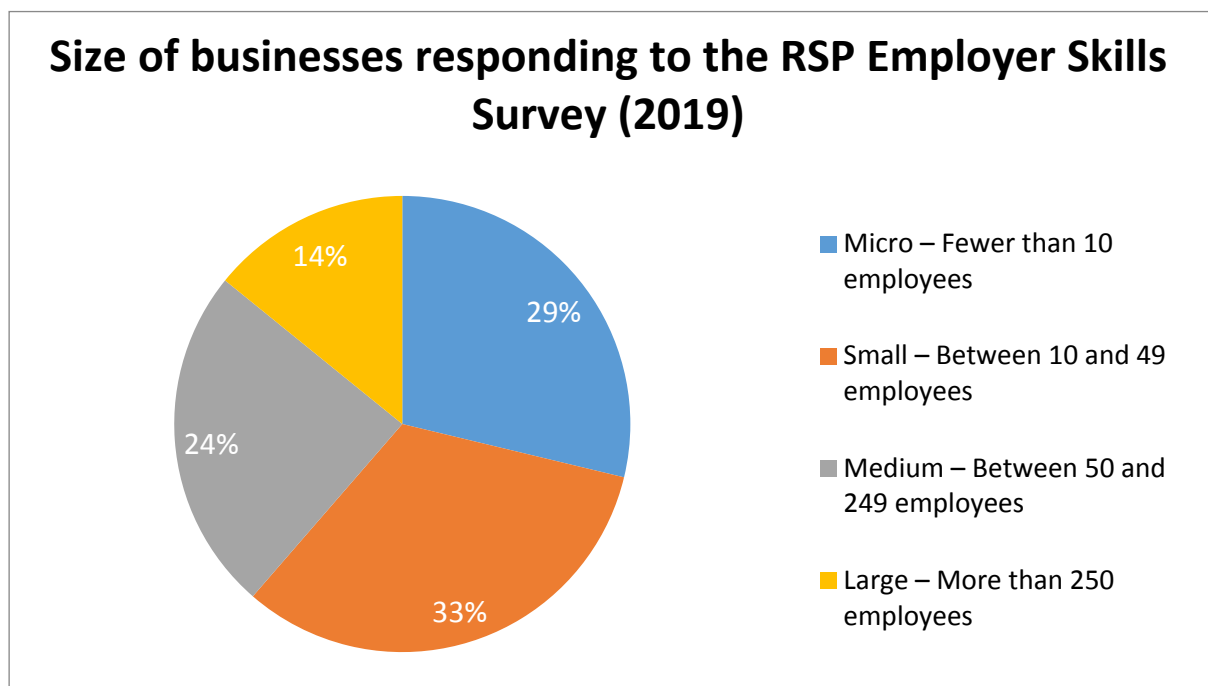
The table below provides a breakdown of survey responses acquired during our consultation phase:

Sector	Total
Advanced Manufacturing	36
Construction	26
Energy & Environment	24
Creative & Digital	16
Food & Farming	18
Financial & Professional	17
Health & Social Care	41



<b>Tourism &amp; Hospitality</b>	44
<b>Third Sector</b>	16
<b>Total:</b>	238

A large proportion of micro and small businesses responded to our survey:



In order to bolster the survey responses, we held focus groups, workshops and one-to-one meetings with employers from across our sectors and geography. These meetings were used to 'test' our evidence and help shape the direction of the plan with more qualitative discussions, narrative and case studies. We have also conducted telephone interviews with our Regionally Important and Anchor Companies. **We've consulted directly with over 350 businesses.** A full list of all businesses who took part in our consultation is attached in **Annex 2**. One of our key commitments over the next year is to fully implement our Employer Engagement strategy to strengthen and build on our current baseline/contact with employers and Industry.

Additional meetings and workshops were held with our providers and stakeholders, including an RSP workshop with the Board to discuss skills challenges, priorities and outcomes.

### Secondary Intelligence

We have conducted an extensive review of relevant reports on North Wales' labour market, the skills system and current and future skills needs. We have also conducted original quantitative analysis of large scale data-sets to inform this plan. The main source of data that underpins this Plan is acquired through Welsh Government-published Regional Labour Market Intelligence reports. Data from the following sources was analysed to provide baseline



information on demand for skills from local employers and the local supply of education and training:

- Annual Population Survey, ONS
- StatsWales
- NOMIS
- EMSI Analyst
- Think Tank reports (NESTA, IWA)
- Sector Body report (SEMTA, Cogent, National Food and Drink Academy)
- Apprenticeships and Further Education Data (Stats Wales, LLWR)
- Higher Education statistics (HESA)



Furthermore, we commissioned a North Wales analysis of the National Employer Skills Survey (which surveyed over 1,500 businesses in the region). We've also gleaned information from Federation of Small Businesses (FSB): A Skilful Wales Survey (2018), Business Wales contacts, North Wales and Mersey Dee Business Council, North Wales Business Delivery Group and West Cheshire and North Wales Chamber of Commerce quarterly survey.

### Limitation factors

- **Skills** underpin the whole economic development structure. We need to be clear that skills intervention **on its own** will not improve the quality or value of local jobs – skills needs to be seen as part of the “success mix” which will require Business Development, Investment and Infrastructure - inputs that are all part of the longer-term economic development aim for the region.
- Our Sector Profiles, in the main, reflect what businesses have told us as part of our consultation process – survey, focus groups and one-to-one meetings.
- This plan should be seen as a live document that will be reviewed regularly.







## Policy Landscape and Regional Drivers

Before we consider the fact and figures about North Wales, it is important to consider the wider strategic and policy context, and political, technological and societal drivers. Consideration will also be given to our regional drivers that will create future employment opportunities in North Wales that will have an impact on our skills system.

### Welsh Government Strategy and Policy Drivers

The skills landscape at a regional level is profoundly affected by decisions made by Government. It is worth, then, setting out some of the policy and economic context in which the plan is set. This does not seek to be exhaustive or comprehensive, as the context is so broad, but highlight some of the policy areas that directly affect our skills system.

**Welsh Government's *Prosperity for All: economic action plan*** emphasises the need to grow the economy inclusively and promote well-being. This approach is at the heart of what we are trying to achieve with this plan.

Skills and Employability play an integral role in the economic plan with an emphasis on ensuring that all individuals are equipped with the right skills for a changing world. It sets out a new approach of supporting businesses to take advantages of new forces such as **decarbonisation, automation, artificial intelligence** and other forms of **digitalisation** – all of which have implications for our regional skills system and for this Plan.

Innovation and fostering entrepreneurial culture is a key component in ensuring a more inclusive economy. There is an emphasis on research and innovation facilities that support businesses, and we consider that there is a key role for our Higher Education Institutions in helping to take this forward. M-SParc in Anglesey is a prime example of how to bring innovative businesses together in a creative and supportive environment, and help them grow. There are strong links with schools, colleges and universities and is testament to the fact that driving innovation in the region will ensure better, high-level job opportunities.



The **Wales Employability Delivery Plan (2018)** aims to simplify the support offered to people wanting a job, as well as those who need help in getting a job. There is a focus on reshaping the employability support for both people who are job ready and those furthest away from our labour market.

The North Wales RSP has worked closely with Welsh Government on key activities related to this delivery plan, including the set up and delivery of **Working Wales** in the region. Through our North Wales Advisory Group, we have worked collaboratively with Careers Wales and other partners to ensure improved partnership working to reduce the number of people who are unemployed/economically inactive. We have also developed an Employability Pathway in the region, which aims to co-ordinate the efforts of our partners. We will continue to work collaboratively with Welsh Government and our partners in the region to ensure a successful delivery of the Job Support Wales programme, which will start in April 2020.

We are also about to embark on an exciting time in our education system, with the development of the **New Curriculum for Wales**. This development is the first and one of the most crucial building blocks in ensuring a future workforce. The curriculum will provide young people in Wales with higher standards of literacy and numeracy, as well as better digital and bilingual competency. The North Wales RSP actively supports the introduction of the new curriculum and consider it to be play a pivotal role in alleviating some of the key issues facing our employers when recruiting their workforce. The role and input of businesses in shaping the curriculum has been emphasised, and the RSP is actively working with GwE North Wales Educational Consortia and employers in the region to ensure that their voices are heard.

Aligning apprenticeships with the needs of the Welsh economy is at the centre of Welsh Government's skills policy. The **Apprenticeship Plan** has seen Welsh Government setting a clear target to deliver 100,000 all-age apprenticeships aligned to the needs of the economy and to ensure that workers are equipped with high-level technical and professional skills. Apprenticeships in Wales are currently organised through more than 120 frameworks across a range of job roles and sectors, but there is a move to reduce this number to 20 in the near future. Focus has been on national and foundation sectors, and an increasing focus is on higher-level apprenticeships at level 3 and above and ensuring clear progression routes for individuals who enroll on apprenticeships at a lower level.



A key development has seen **Degree Apprenticeships** being introduced following the recommendation of the Diamond review (2016). These are set at level 6 and have included Digital and Advanced Manufacturing and Engineering Frameworks. The RSP would welcome the introduction of more degree apprenticeships in other priority areas for the region, and our employers are also keen to understand more about these opportunities.

There is now a clearer progression route for individuals who take the apprenticeship pathway, however more can be done to ensure that young people are aware of vocational opportunities and pathways that lead to a career in our region.

**Taking Wales Forward 2016-2021** recognises that Wales' future prosperity and stability depends on the skills and values of the people of Wales and that all citizens deserves the opportunity to achieve their potential, at any age. This policy recognises and promotes adult learning as a key resource to support the development of skills, improve health and wellbeing and act as a catalyst for social engagement and integration. The vision in the policy document complements our Skills Plan and North Wales Growth Deal, as well as a cross-cutting message and contribution to the Welsh Government's skills policies and interventions.

'A Wales where learning is at the core of all we do; where participation in learning is encouraged and rewarded; and where people have equal opportunities to gain the skills for life and work that they need to prosper.'

Employment law has extended the working age of people, which has increased the need for reskilling, upskilling and lifelong learning investment by employers to ensure their staff and productivity are up-to-date and delivering the outputs needed.

The **Well-being and Future Generations Act 2015** has an influence and effects all aspects of post-16 skills policy in Wales and underpins all activities in this Plan. Our approach as a region to build a 'Resilient North Wales' and promote growth in a scaleable, inclusive and integrated way is recognised by the Act.

There are also some areas that we consider as **cross-cutting** themes across all policy areas of Welsh Government, and our Skills Plan, as detailed below:



### Prosperity for All: A Low Carbon Wales

This plan outlines Welsh Government's approach to cut emissions and transition to a low carbon economy in a way which maximises wider benefits for Wales. The North Wales Growth Deal are developing a Low Carbon Energy Programme, and the RSP will play a role in considering the delivery of low carbon related skills needed at a regional level and will work with partners to take this agenda forward.

There is no doubt that the low carbon sector and green growth is core to the delivery of inclusive growth. As a region, we will be positioning ourselves as one of the leading UK locations for energy generation and energy-related supply chain investment, with an expertise in low carbon technologies and processes. As such, this Plan will start to scope some of the skills that are required in the future, as articulated by employers in the region. It will also consider some of the major programmes and projects afoot as part of the North Wales Growth Deal and Vision.

### Inequalities

#### **Gender**

As recent research undertaken by Chwarae Teg demonstrates, £13.6 billion could be added to GVA forecasts by 2028 if Wales were to achieve full gender equality. A clear need has been articulated to create a Wales where women can achieve and prosper by ensuring that the potential

female workforce is maximised in the region. Women are often under-represented in some sectors that are forecast to grow, and by not putting steps in to alleviate this trend, there is a risk of pushing them out the labour market altogether.

The gender pay gap per local authority, as of 2018:

Anglesey – 25.5%
Gwynedd - -0.20%
Conwy - -8.70%
Denbighshire – 9.40%
Flintshire – 19.1%
Wrexham – 14.9%

#### **Disability**

Welsh Government is committed to improving employment opportunities for disabled people. Compared to non-disabled people, a much greater number of disabled people are unable to secure or sustain employment for a variety of reasons, with just 45% of working age disabled people (Wales figure) currently in employment. One of the key commitments set out in Welsh Government's Employability Plan is to increase the number of employers who create inclusive and supportive workplaces for disabled people and those with long-term health conditions. The North Wales RSP are keen to ensure the success of programmes such as 'Access to Work' and 'In Work Support', and the recent Inclusive Apprenticeship offer by Welsh Government. We would like to work closely with Welsh Government and our partners on this agenda to ensure that disabled people in the region are given the opportunity to find and stay in work.





### Welsh Language

The RSP are fully supportive of the Welsh Government's ambition in *Cymraeg 2050* to achieve a million Welsh speakers by 2050. The Welsh language is a key part of the region's vibrant culture across workplaces, learning institutions and in our towns and villages. As employers place a greater emphasis on bilingual skills, the ability to be able to communicate confidently through the medium of Welsh and English can be seen as a strong advantage in the labour market.

In the region, as well as being the first languages in many workplaces, demand for Welsh language skills is increasing across all sectors. These include health and social care, food, tourism and creative and digital sectors.

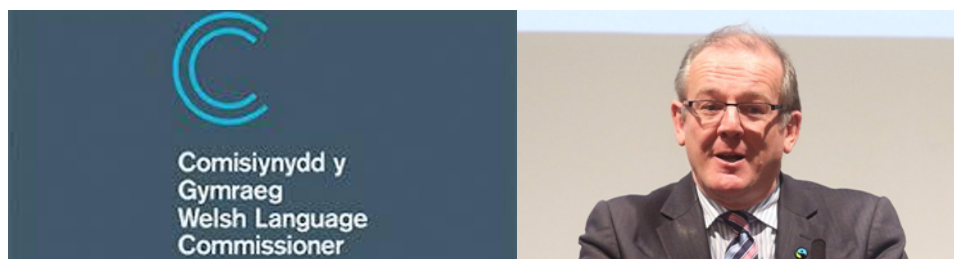
Last year, the RSP produced a 'Welsh language in the workplace' plan (2018) which considered the landscape across schools, FE, work based learning, higher education and adult learning. We have been working on delivering some of the key recommendations made in that plan.

The RSP is an active member of GwE's Welsh Language in Education Strategic Board, contributing to the development of the Regional Strategy for the Welsh language in

North Wales, set up in response to Welsh Government's *Cymraeg 2050* ambition; also taking this opportunity to voice the skills agenda relevance and regional economic importance of the Welsh language as an asset to North Wales' economic priority sectors.

Employers are increasingly aware of the benefits of bilingual skills, and in the public, private and third sectors, evidence does suggest that a number of posts which require bilingual skills have increased.

The RSP are working with Coleg Cymraeg Cenedlaethol on the delivery of the Further Education and Apprenticeships Action Plan which was launched in January 2019. The plan is ambitious and will enable all learners to maintain or develop their Welsh language skills. A better coordinated approach to marketing and promotion of bilingual post-16 provision is required, along with ensuring that our FE and work based learning partners have teachers and lecturers who are bilingual and can deliver bilingual teaching and learning experiences across a wide range of subjects. Anecdotal evidence from FE and HE partners indicates that there is a shortage of qualified teachers and lecturers in some sectors, with particular shortage in the secondary education sector in STEM subjects and bilingual STEM secondary teachers.



"We need to bridge the gap between education and the world of work in order to increase the number of Welsh speakers."

**Aled Roberts, Welsh Language Commissioner, August 2019**



Although the focus of this Plan is on skills, it is important to consider the other key drivers that potentially impact on the economy of the region, which can act as enablers or constraints to successful implementation.

### Political Drivers

#### Brexit

This poses the most immediate threat in the broader skills landscape. The impacts of a Brexit Deal (including No Deal) are likely to be far-reaching and will affect the region in three ways:

- Economy – trade agreements and regulations;
- Labour market – Changes to free movement with a potential number of EU workers returning/moving to other EU economies;
- Skills system – Due to the high number of EU students and staff and loss of EU Structural Funds. Our skills system currently receives a large proportion of funding, be it for funding to increase research and innovation to our HE institutions in the region or to help those individuals furthest away from the labour market

The WLGA-produced Brexit dashboards note the following key data for North Wales:

- Compared to other regions of Wales, North Wales has a higher proportion of its population who were born in the EU, at 3.33% compared to Wales at 3.03%.
- Within the region, Wrexham has the highest proportion of its population born in the EU, at 5.84%, whilst the lowest is in Anglesey (1.45%)
- Across the region, there are varying levels of vulnerability to Brexit. Denbighshire has the highest score on the vulnerability index, with notably high levels of deprivation and high proportion of population employed in elementary occupations.

The UK Government Immigration White Paper (2018) details migration policy after Brexit. Although proportional reduction in migration will be higher in Wales than the UK, the overall impact on Wales will be less. It also notes that the changes will not just impact “low-skilled” workers and their employers, but those with immediate skills, particularly in manufacturing will be affected, as would the care sector. According to 2017 figures, we have 14,300 EU nationals currently working in North Wales.

The proposals included in the White Paper could have a significant effect on our sectors that are reliant on a low-skilled migrant workforce.

Brexit is potentially very concerning for businesses operating across North Wales. Primary research gathered by the RSP indicates that few businesses wholly feel that Brexit will be a positive change for them. The majority of respondents indicated that increased costs were a main consideration, followed by exporting/importing difficulties and funding. We will provide further detail on what employers told us about Brexit in our Sector Snapshot section.



### Technological Drivers



It is a widely held view that the world is entering what is being described as the fourth industrial revolution – Industry 4.0 – with its reliance on technological advancements. There is no doubt that digitalisation will transform and change our occupational and skills landscape across the region and Wales as a whole. New digital technologies, such as Artificial Intelligence, the Internet of Things and new SMART Technologies, are bringing with them skills levels and competencies not seen before.

IPPR Research (Lawrence et al, 2017) noted that 46.4% of jobs in Wales have a high potential for change through automation. Accommodation and food services, as well as wholesale and retail, have the highest proportion of jobs with high potential for change through automation. Notably, it's these sectors that make up a large proportion of the North Wales economy – the foundation sector.

Work undertaken by Professor Phil Brown on the Review of Digital Innovation Wales (2018) argues that the **transformation of work** is most important, rather than the prospect of mass joblessness through automation. We will need to ensure that the workforce is **agile** and **resilient** to respond to these changes.

A new set of 'metaskills', building on self-management, social intelligence and innovation, will be needed to thrive in this increasingly complex environment. These skills will enable individuals to learn continually, and be resilient and adaptive to change, but will also be used to create new technologies and drive change.

The major requirement now is to fully develop our understanding of how to create these skills, not only in young people coming through our schools and education system, but also our existing workforce who will need to transform quickly in order to retain and create a competitive edge.

### Societal & Demographic Drivers

Global demographic shifts mean that we have an ageing population structure, with the balance between those of working age compared to those of retirement age continuing to fall over the next decades. This is a particular issue in our region with predictions of an increase in over 65 year olds and a decrease in our working age population. This will have an impact on skills in some sectors more than others. We will consider these changes in later sections of this Plan.



## North Wales Growth Vision and Growth Deal



The Growth Deal will deliver clean growth, support 6% GVA uplift, 4,298 new jobs and £1bn total investment. £511m of the direct investment will be private sector investment, £247m will be public sector investment and the aim is to attract £280m from the Growth Deal.



Major capital investment and infrastructure schemes under our Growth Vision & Deal will generate a high volume of employment opportunities which presents both a challenge and great opportunity for the region.

The Strategy for the region recognises and builds on some of the key areas of growth for our economy and aims to:

- Promote the region as one of the leading locations for low carbon energy generation;
- Become the hub of innovation and technology excellence and a leader in developing digital business clusters, with the aim of putting the region at the forefront of artificial intelligence and data revolution;
- Develop the reputation of North Wales as a centre of excellence for high-value tourism.



Further information on these programmes and projects can be found in the Growth Deal Implementation Plan.

List of Potential Growth Vision Projects (These will be phased over the next few years)

- Trawsfynydd Power Station
- Morlais Project
- Smart Local Energy Networks
- Nuclear Energy Centre of Excellence





- Enterprise Engineering and Optics Centre Project
- Centre of Environmental Technology and Industrial Accreditation Project
- Glynllifon Rural Economy Hub Project
- Llysfasi Carbon Neutral Farm
- North Wales Tourism and Hospitality Centre of Excellence
- Regional Land and Property Joint Venture
- Holyhead Gateway Programme
- Digital Connectivity Project
- Digital Signal Processing Centre
- Regional Transport Decarbonisation

The initial estimate is that the Growth Deal will help to create over 4,298 jobs. To maximise the impact of the Growth Deal and employment and skills opportunities for local residents, in line with the strategic drive of regional economic strategy, a number of actions will be required to:

- Identify Growth Deal projects whose effective implementation will require specific actions on skills;
- Identify Deal projects which offer significant employment potential for local people if they can be appropriately skilled to take advantage of them;
- Put in place plans to raise awareness of the opportunities and skills development capability to help recruit local people into the skills pipeline;
- Ensure community benefit procurement is effectively mobilised to work in synergy with skills development.

A sustainable skills base to ensure that this happens is integral to the success of the Deal and underpins the strategy and mission. The Skills and Employment programme forms one of the enabling strategic programmes within the Growth Deal and Growth Vision. The projects that fall within this programme are a critical part of the group of inter-related and co-dependant projects to deliver the Growth Vision.

The programme includes 5 projects, which the RSP, along with key partners, have been developing over the past months:

- Information and Advice Gateway – working with Working Wales on a regional delivery and also considering a brokerage service;
- Employability Pathway ;
- Regional STEM Region;
- Digital Skills for North Wales;
- North Wales Health and Social Care project.

### Other Potential Job Generating Investments

In addition to, and building on the prospective Growth Deal investments, there will be a number of other large-scale capital investments in the region which will present further opportunities for our workforce:





### Regional Housing & Regeneration Projects

- The North Wales Regional Regeneration plan identifies 3 thematic projects (Empty Properties, Housing Renewal and Important Buildings) and 4 priority Town centres (Rhyl, Bangor, Colwyn Bay, and Wrexham) as priorities for 2018-22. Some projects that form part of this strategy include Bangor Property & Investment scheme and the Rhyl Regeneration programme. The RSP and partners will be working closely with our regional Regeneration projects in the area to encourage apprenticeship opportunities and employability 'taster days' for various sites.
- There are many housing projects currently in development, including Strategic Housing and Regeneration in Flintshire which will deliver 500 new homes in the area by 2021, and the West Rhyl Housing project Pennaf Housing Group phase 1 which aims to transform a number of properties in the area and undertake comprehensive refurbishments of existing properties.

### 21<sup>st</sup> Century Schools Education Capital Projects

Our FE and HE institutions are also planning major capital investments on their sites. These include the following investments (please note that this list is not exhaustive):

- Wrexham Glyndŵr University – New build and extensive refurbishments of existing buildings including Plas Coch campus, Regent Street Campus and Wrexham Northop Campus.
- Coleg Cambria Yale Campus re-developments
- Grŵp Llandrillo Menai's plans to move their Bangor Ffriddoedd site to Parc Menai in Bangor

### Enterprise Zones

Our Enterprise Zones are also developing many key investments, with the focus in Anglesey on developing a low carbon/hydrogen island. From Canolfan STeM by Grŵp Llandrillo Menai, and M-SParc in Gaerwen, its focus will be on harnessing low carbon energy. Deeside's focus on manufacturing includes aerospace, electronics, food and sustainable energy. The flagship AMRC Cymru on the Broughton site will be ready to open its doors in the coming months and is an exciting development in the area. Snowdonia Enterprise Zone is currently developing the Trawsfynydd SMR project (part of Growth Deal projects), and the Llanbedr Aerospace Centre.

### Growth Track 360

Growth Track 360 has been launched to secure £1bn of rail improvements, which would transform the North Wales and Cheshire regional economy and deliver 70,000 new jobs over 20 years. Transport investment will act as a key enabler to help link North Wales into the wider economy of the Northern Powerhouse and European routes, allowing us to expand the potential economic offer. If successful, it will lead to a massive boost to the North Wales, Cheshire and Wirral economies, linking them with other planned rail improvements between London and the North of England. The combination of employers and investment from our flagship regional projects, key economic and growth sectors, our enterprise zones, and SMEs across the region require an increasing suite of demands in terms of skills and employment that meet their needs and support ambition and opportunity for the area.

All the above projects/programmes/major capital projects are expected to become significant economic drivers in our region. Projects change on a regular basis and it's likely that a number of projects mentioned in this section will change over coming months and years. This only serves as a guide to help determine what our future priorities should be in addressing skills needs and gaps.





## North Wales Overview: Our economy, labour market and skills landscape

This section will consider the broader economic and labour market context for the region by examining the current state of the North Wales economy. It will provide a snapshot of both our economy and education/skills landscape as it currently stands, and some key challenges for the region will be highlighted. This is a crucial context for our Skills Plan and will help us focus on what our priorities should be.

### Economic Performance & Productivity

Despite recent setbacks to the region's economy, such as the pause to Wylfa Newydd and closure of Rehau on Anglesey, the economy is performing well. There has been solid and positive growth in productivity and employment over recent years. Gross Value Added (GVA) is the best economic performance metric.

**GVA per head in North Wales was £20,800 in 2017, up 4.4% over the year and up 80.2% since 1999. In comparison, Wales GVA per head was £19,899 which was an increase of 2.7% over the year and increase of 74.1% since 1999.**

Even though this growth is positive, it is not inclusive and this could be seen as a risk. This growth is not evenly distributed across the region, with GVA per county getting weaker in North West Wales. Flintshire and Wrexham have been the engine of regional growth through their manufacturing activities.

GVA per head per county in North Wales	Figure (2017)
Anglesey	£13,951
Gwynedd	£19,793
Conwy & Denbighshire	£16,916
Flintshire & Wrexham	£25,294
<b>North Wales</b>	<b>£20,800</b>
Wales	£19,899

The economy of the region is diverse and is underpinned by **Manufacturing, Energy, Tourism**, as well as the **Public Sector**.





### Business Base, Enterprise & Innovation

There were **25,070 VAT/PAYE-registered enterprises** in North Wales in 2017, 94.3% of these in micro size bands (0-9 employees), and **98.5% of enterprises in North Wales employing under 50 employees**. Only 0.2% were classed as large enterprises (more than 250 employees). North Wales is reliant on micro and small enterprises and there seems to be a barrier to grow these businesses beyond 50 employees and attract larger enterprises to the region. This is particularly important to remember when considering the skills system. When larger/capital investments come to the area, we need to ensure that the supply chain of smaller businesses has the right skills pipeline.

When looking at measures of innovation, an estimated total of £744 million was spent on R&D in 2017 in Wales; this was an increase of £33 million (5%) compared with 2016. These figures are not broken down per region in Wales, but we do know that skills and human capital are vital ingredients for successful innovation in firms. Research findings show a positive correlation between the presence of STEM graduates in the workforce and high levels of innovation in firms. Graduate retention and pathways is important if we are to continue to foster innovation.

*Skills and human capacity are vital ingredients for innovation success, in particular STEM skills.*

Innovation and enterprise skills are crucial if we are to increase the productivity of our economy. Innovation skills can be articulated as a set of competencies including the ability to think creatively, complex problem solving, critical thinking and effective thinking – all of which are in demand by our employers. This is a foundation skill taught in primary education that should be harnessed and focussed on throughout secondary education as a life skill and of real employability value.

Innovation cuts across all sectors in our economy, but is particularly important in the following sectors, which are all priority sectors in our region:

- Energy & Environment (including Low Carbon)
- Advanced Manufacturing
- IT and Digital Economy



If we are to drive and embed innovation as an integral part of our regional economy, these activities need to be delivered jointly by universities, further education, business, industry, public and third sector (**HEFCW: Research & Innovation – The Vision for Wales, May 2019**). **Innovation is therefore a key feature of the RSP's priorities.**



### Sectors

The largest employing sectors across the region (2017 figures) are:

- Public admin, defence, education, and health (87,700)
- Wholesale, retail, transport, hotel and food (76,500).

These figures show the significant dependence on public sector jobs in our region, but it also shows that a large proportion of our employment is in what is classed as the Foundation Economy.





## Occupations

Across these sectors, the greatest numbers of job roles (2019), in descending order are in:

- Professional Occupations (49,676)
- Elementary Occupations (42,756)
- Associate Professional and Technical Occupations (33,547)
- Admin & Secretarial Occupations (32,056).

Together, these four occupational groupings account for 49% of all job roles across the region.

### Labour Demand by Occupation

Considering economic projections made by Emsi, overall, there is a greater emphasis on higher-level skills in occupations, but the situation up to 2022 is more complex than this:

- There is a predicted 2% growth in management and professional occupations, as well as skilled trades.
- 1% growth is also projected for sales and customer services jobs and a range of elementary occupations.
- Process, plant and machine operatives are projected to see the least growth across the region, but, will still require a total of 6,000 people to fill the positions of those leaving or retiring from the sector. Source: Emsi data (August 2019)

Much more significant than the growth and decline in sectors and per occupational area is the notion of **replacement demand**. Even if an occupation is in decline, due to workers retiring, migrating or leaving the occupational area, there will still be vacancies to be filled over the next 5 years. We will be considering replacement demand issues per sector in the next section.

## Employment, Unemployment and Economic Inactivity

The employment level is the total number of people (aged 16+) that are in employment and employment rate is the **percentage of working age (16-64) people in employment**. It is the best overall measure of participation in the labour market. In our region, the latest figures (year ending 31 March 2019) are captured below:

	<b>75.4%</b>	<b>4.0%</b>	<b>18.0%</b>
	<b>311,600</b>	<b>13,900</b>	<b>68,500</b>
<b>Employment rate</b>		<b>Unemployment rate</b>	<b>Economic Inactivity</b>
<b>(Population aged 16-64)</b>		<b>(Age 16+)</b>	<b>(excluding students)</b>
			<b>(Age 16-64)</b>

Source: Annual Population Survey, Office for National Statistics – StatsWales

North Wales had the highest employment rate in Wales in the year ending June 2018, and was also the region with the smallest range in both employment rate and employment levels. This means that employment levels are distributed more evenly across the region.

Since 2001, the region's employment rate has increased by 6.1 percentage points, faster than the Wales increase of 5.5 percentage points. However, the region faces some challenges:

- This growth in employment rate is not evenly distributed across all local authorities.



- Less than 59,000 people were employed in 'high value' sectors such as Energy & Environment, Digital and Advanced Manufacturing, which presents a challenge for the region if we are looking to improve the productivity and competitiveness of the region.
- Reliance on jobs in traditionally low paid sectors.

Workplace Employment Data (2017) gives us an insight into the percentage growth in workers over the 10 year period 2007–2017. This data shows that the Information and Communication sector saw the largest percentage growth in workers in this period, whilst the greatest change in level of employment was in professional, scientific and technical activities, which grew by 8,200 people.

Flintshire and Wrexham have a higher proportion of the workforce employed by larger employers, and rural areas of Gwynedd, Conwy and Anglesey are much more reliant on SMEs.

**For the year ending March 2019, the number of people in employment in North Wales was 311,600 an increase of 0.4% compared with the previous twelve months.**

## Unemployment and Economic Inactivity

For the year ending March 2019, the number of people who were unemployed in North Wales was 13,900. This was an increase of 1,700 people (13.5%) compared with the previous twelve months. However, the current unemployment rate stands at 4.0%, which is lower than Wales (4.5%)

**Looking longer term, North Wales has seen a bigger improvement in employment and unemployment rate compared to Wales for the last 18 years.**

**But, we have not seen vast improvements in economically inactive rates.**

As of March 2019, the current economic inactivity rate (including students) stands at 21.3%, which is below the Wales average (23.3%) and UK average of (21.5%). Inactivity rates in Conwy and Denbighshire were above the Wales average. The key message here is that even though our economic inactivity rate as a region is below the Wales average, the figure has remained static over many years, higher in some counties, and this indicates a challenge for the region to reduce this figure.

## Average Earnings

The picture for earnings and income in the region is diverse.

2017 figures show that Gwynedd has the lowest average full-time weekly earnings (£421.00) and second lowest in Wales. Anglesey and Conwy's weekly average full-time weekly earnings are also lower in comparison with the Wales average (£509.00). This could indicate in-work poverty for the North West region in particular.

However, at the opposite end of the region, Flintshire's average earnings (£535.00) fare higher than that of Wales, and slightly below the UK average (£569.00).

**In 2018, the average weekly earnings in North Wales are down by 2.4%.**



**There is a need to ensure inclusive growth across the region and address social and spatial irregularities/inequalities within the region.**

**Growth needs to be dispersed and scalable.**

There is a drive in the region not just to create jobs, but good quality, better paid jobs. Better jobs are jobs that enable progression that avoid the social and economic challenges of low pay and in-work poverty. Skills development plays a key role in enabling that progression.

## Deprivation

The Welsh Index for Multiple (WIMD) deprivation is the Welsh Government's official measure of relative deprivation for small areas in Wales. It is designed to identify those small areas, known as Lower Super Output Areas (LSOAs) where there are the highest concentrations of several different types of deprivation. This recognises income and employment deprivation but also takes into account other factors such as environment and access to services, which are all significant factors around a region's decline.

North Wales has a number of areas that are within the top 10% most deprived areas in Wales. These are predominantly located across the North Wales coastal and border areas. Two North Wales LSOAs are ranked as the second and third most deprived in Wales (in Rhyl and Wrexham respectively).

Applying cluster analysis methodology to this data enables the identification of those towns across North Wales that have the greatest concentration of residents living within the top 10% most deprived communities in Wales:

- Rhyl
- Wrexham Town
- Bangor
- Colwyn Bay & Llysfaen
- Caernarfon
- Holywell
- Shotton
- Llandudno
- Denbigh
- Holyhead

The form of that deprivation can be recognised in a number of ways, rural deprivation, areas that are ranked in the 10-20% decile in the WIMD, or those areas that have high scores in individual poverty and deprivation indicators. All are critical to the wellbeing of the communities affected, but must be viewed in a regional context.

## Rurality

North West Wales (Anglesey, Gwynedd, Conwy and Denbighshire) are classed as rural areas. This rural sub-region is characterised by a business base made up of small and micro businesses and supply chain reliant on the foundation economy. Many of the most deprived areas in Wales are based in our rural areas in North Wales, which further emphasises the need to ensure inclusive growth across the whole economy. As indicated in the GVA section, North West Wales counties



have lower GVA per head than our urban counties. Furthermore, our rural areas are also characterised by an ageing population and outward migration of young people.

Accessibility to services and training has also been highlighted as an issue, along with lack of infrastructure – be that travel or digital connectivity. People living in rural areas have to travel further to access services such as shopping, health, education and employment. This in itself can be an extra challenge for our residents in rural areas, and this is particularly important when we consider availability of skills provision.

However, many exciting and innovative solutions are being applied to the challenges facing our rural economy through LEADER (Rural Development Programme), with some exciting pilots in areas of low carbon and digital as well skills development and graduate retention, such as the Arfor Project.

**The Arfor Innovation fund will target support in areas where there is a high percentage of Welsh speakers and an inflow of older people and outflow of younger people. It will focus on those areas where the foundational and agricultural economy are of vital importance and in market and university towns where low incomes remain an issue.**

**This innovative programme aims to test out new approaches to promote entrepreneurship, business growth, community resilience and skills development, with a focus on the use of Welsh language. This programme will help guide future activity in areas where we know the rural and foundation economies are of paramount importance, our Welsh speaking and rural heartlands.**

## Cross-Border Economy

The A55 expressway is a critical artery across North Wales linking to the M56, A494, A483 and other major road networks, that is used to promote routes and pathways for skills, employment, culture, science, and innovation.

However, it also links the emerging centres of excellence being developed to support skills in both the workplace and academia across North Wales and across the border. Extending from the Menai Science Park (M-SParc) and new Canolfan STeM on Anglesey, to the potential suggested developments of a Tourism & Hospitality Academy in Conwy to the flagship Advanced Manufacturing Research Institute (AMRC Cymru) at Deeside. This snapshot of the facilities and centres of excellence across the region from east to west can then be further promoted with cross-border opportunities and the potential for the Cheshire Science Corridor and Thornton Science Park to be an additional extension of our regional offer and skills.

With strategic sites promoting employment and high-level skills across North Wales and into England, the skills and employment offer for this wider geography should not underestimated with its proximity to Liverpool, Manchester, and wide Northern Powerhouse geographies.

<b>£22bn</b>	<b>27,000</b>	<b>380,000</b>
is the GVA for the cross-border area known as the Mersey Dee	companies are based in the cross-border area stretching from Flintshire to the Wirral	jobs currently in this area, with 50,000 new jobs to be created by 2040



The mobility of skills and the labour market within North Wales continues to develop, and this mobility is likely to further increase with further employment opportunities resulting from regional transformational projects. Within the region, people will travel up to 90 minutes to access well-paid employment opportunities. Mobility of jobs and labour within the region is a key message for our young people to be made aware of.

Whilst the cross-border area is not eligible to proceed with its own Growth Bid or City Deal, both the North Wales Growth Bid, and the Cheshire & Warrington Growth Deal, are looking to mirror key components on either side of the border, to further enhance the synergy supporting skills, employability, and transport and infrastructure, that are critical to our employers, labour market, and students for whom there is no barriers or borders to movement and progression. We have also been working closely with the Mersey Dee Alliance Skills Group to develop an investment programme for cross-border skills issues which will be developed further over the coming months. One of the key areas that will be considered in more detail in gaining greater clarity for businesses and stakeholders about how to navigate the policy differences related to apprenticeships cross border.

Cross-border differences between provision and funding regulations seems to create issues for some employers in North Wales and more so with the levy payers. These issues are around alignment and portability of qualifications. A number of employers are frustrated at the lack of funding available in Wales at a Level 6 and above and the lack of flexibility for the apprentice to study within a college in England if this is geographically the best option for the employer and the apprentice.

### Travel to Work Area

It is estimated that 80% of the working age population reside within the cross-border area. **Data tells us that 28,600 travel from North Wales into England to work, whereas 32,400 people make the opposite journey.** It is also clear from ONS data that the distance travelled to work by people with level 4+ qualifications tends to be much higher than is the case for people with lower qualifications, suggesting that the likelihood is that many of these commuters are North Wales graduates.

### Population & Demography

The region has a resident population of 690,300 and is characterised by an ageing workforce. The population is expected to **increase by 1.2%** between 2018 and 2023, adding 8,126 people to our education and skills pipeline.

Wrexham's population is projected to grow the most by 2028. Meanwhile, Anglesey's population is projected to contract by 0.5% by 2028 and by 2.4% by 2038 relative to the 2018 population projection. The populations of 2 authorities, Conwy and Flintshire, are projected to grow over the next ten years, and then contract in the following ten years.

Across North Wales, the population of adults aged 65 and over is projected to grow to **189,500** by 2028, an increase of 16.6% on the projected figure for 2018. By 2038, this figure is projected to increase to 214,600, an increase of 32.0% on the projected figure for 2018.

The population of adults aged 65 and over is projected to grow at a higher rate than the total population during this period, which is a challenge for a region and the health, medical and social care sector.





This figure could be exacerbated if there is a reduction in the number of EU workers employed in the region. These figures are particularly pertinent to our skills planning going forward as replacement demand will become an increasing issue, especially in some sectors of the economy.

The demography of young people 14-18 years old has remained flat for the past 9 years, but, from this year onwards, we will be seeing an increase in population across the 6 counties for this age range, which will be a key consideration for post-16 curriculum planning and potential good news for hard-to-fill vacancies and skills gaps.

**Coupled with an ageing population across the region, and the talent drain with outward migration of graduates, we need to make full use of the potential workforce including those with lower employment rates.**

**There is a real challenge in how to address a workforce replacement demand gap.**

## Welsh Speakers

According to census data, there were 204,406 Welsh speakers aged three and above in the region in 2011. Data from the Annual Population Survey shows that in the year ending June 2018, Gwynedd was the authority with the highest number of Welsh speakers both in North Wales and Wales as a whole, with 76.4% of residents aged three and over saying that they could speak Welsh. Flintshire had the lowest rate of Welsh-speaking in North Wales at approximately 23.3%. On a regional level, North Wales had the highest proportion of Welsh speakers in Wales, at an estimated 42.7% (June 2018). This has important implications for our skills system, and in the next section we will be considering what businesses have told us about Welsh language skills.

## Working Age Population with No Qualifications / Higher Qualifications

The percentage of working age (18-64) people in the region with no qualifications stands at **7.0% (2018)** which compares favourably with the **Wales average of 8.4%**. The number of people with no qualifications is on a positive trajectory and has shown a steady decrease over a period of time. However, there are variances across the region, and this data shows us that Flintshire's proportion of working age people with no qualifications (8.8%) was higher than that of Wales. Turning to the higher end of the qualification spectrum, **36.3% of the working age population have a level 4+ qualification in comparison with Wales (37.8%)**.



Again, there are variances in each county across the region:



Working Age Adults Qualified to Level 4 or above in North Wales	% (2018)
Anglesey	40.3
Gwynedd	39.4
Conwy	38.8
Denbighshire	35.5
Flintshire	31.4
Wrexham	35.6
<b>North Wales</b>	<b>36.3</b>
Wales	37.8

Source: Annual Population Survey, Office for National Statistics – StatsWales

### Projections for demand by Qualification Level

According to **Working Futures projections**, overall in North Wales, there will be a large increase from 2014 to 2024 in those qualified at a higher level - QCF level 4-6 (+58.9%) and 7-8 (+17.7%). Overall, there will be a significant decrease in those with no qualifications (-66.7%) and those qualified at QCF level 1 (-21.5%).



## Current North Wales Education & Skills Landscape

Our current provision:

Pre-16	Post-16	18+
347 Primary Schools	54 Secondary schools 2 Further Education Colleges: <ul style="list-style-type: none"> <li>Grŵp Llandrillo Menai</li> <li>Coleg Cambria</li> </ul>	3 HE Institutions: <ul style="list-style-type: none"> <li>Bangor University</li> <li>Glyndŵr University</li> <li>Open University in Wales</li> </ul>

There are 9 Special Schools and 2 Middle Schools in the area.

### Further Education Colleges

Both of our further education colleges – Grŵp Llandrillo Menai and Coleg Cambria – are classed as two of the largest FE institutions across Wales.

During the last 4 years there has been a clear and consistent focus on reducing the number in non-priority provision across North Wales, and that the current provision for both FEIs reflects the demand needs of our labour market, and our past RSP Skills and Employment Plan.

<b>17,060 enrolled at Grŵp Llandrillo Menai in 2017/18 (including FE, HE &amp; WBL, all levels)</b>	<b>16,675 enrolled at Coleg Cambria in 2017/18 (including FE &amp; WBL, all levels)</b>
<b>5,655 full time</b>	<b>6,275 full time</b>
<b>8,445 part time</b>	<b>6,160 part time</b>
<b>2,960 WBL</b>	<b>4,235 WBL</b>

Source: Lifelong Learning Wales Record, Welsh Government – StatsWales

Grŵp Llandrillo Menai continues to expand facilities at all of its sites across a wide geography, with its latest **Canolfan STEM** on its site in Llangefni, featuring some of the highest quality, most state-of-the-art equipment in Wales. This Centre offers facilities that will help to meet the requirements of the energy, engineering and manufacturing sectors in the region, with workshops available across a range of disciplines including automation and robotics, CAD/CAM, and flow loop simulator. This Centre is a very important part of the jigsaw when it comes to promoting STEM subjects in the area. There is also an intention to move the Bangor campus to the Parc Menai site in Bangor, which will create a creative and digital hub.

Coleg Cambria also has some of the best teaching, learning and training facilities in Wales and the UK which includes a Centre of Excellence for Engineering, University Centre, a state-of-the-art Sixth Form, a STEM Centre, and Cambria Business School. Bersham Road has also undergone a £8.5m investment to provide a new state-of-the-art Engineering Technology Centre. Work is also underway on the £20m redevelopment to Coleg Cambria buildings at Deeside, Northop, and Bersham Road.



Both our FEIs have been involved in shaping and developing this plan and the planning and funding template. There was a general agreement on some of the challenges and issues that are facing the region's skills system, including perceptions of sectors and the importance of STEM and digital skills. Changing young people's perception of careers in specific sectors is key in changing the take-up of some courses, especially those geared towards our key sectors in the economy. They also agree that it's important to provide young people, and their parents, with the right information on learning routes and progression to various levels – vocational and work based learning, in order to ensure that they are able to make informed decisions about their choices.

### Apprenticeships & Work Based Learning

We have seen a steady increase in apprenticeships and work based learning opportunities in the region over the last 3 years. There were **11,450 apprentices in North Wales 2017/18, with 6,250 apprenticeship programme starts**. There has been a steady increase in levels 2, 3 and 4+ apprenticeships in this time; however, there are variances according to the sector and learning programmes with highest numbers in Healthcare and Public Services, Business Administration, Engineering and Construction. This is in line with the needs and growth in our economy.

The majority of the apprenticeships were offered at Foundation Level (level 2), slightly less at level 3 and less again at level 4+.

**There has been a 46.9% increase in apprenticeship programmes started in North Wales between 2014-18**

Private training providers are also a strong delivery asset for apprenticeships and work based training in North Wales working closely with employers and individuals across a broad range of sectors and geographies to support staff from operational entry level to senior and managerial levels.

Mirroring the sectors, there are stark gender differences on apprenticeships programmes, with figures for females entering Engineering and Construction apprenticeships very low in comparison to Health and Social Care and Business. This has implications when we consider how we tackle STEM issues and widen participation across all sectors.



### Higher Education

Our HE institutions play an important regional, national and international role when reflecting our current and future skills demands. For North Wales to thrive as a productive, innovative, high-skill economy we recognise the key role played by our HE partners to build a strong and dynamic knowledge base. Without it, we cannot sustain the growth of the high-performing sectors that will deliver our economic prosperity. Employers that our universities work with, and the research and innovation expertise of the universities, see research collaborations and industrial partnerships across Wales and wider.



Both Bangor University & Glyndŵr University are anchor institutions in our region: major providers of full-time higher education, aligned to growth sectors, continuing professional development for regional employers, provide graduate start-ups and scale-up support, and knowledge exchange for high-growth companies. Bangor University has a growing specialism in Nuclear and Low Carbon Energy R&D, with the proposed location of the UK National Nuclear Thermal Hydraulic Facility (£40 million major research and testing facility) in Gaerwen, linked to the Low Carbon Centre of Excellence Growth Deal proposal. Glyndŵr University has a particular specialism in harnessing optic technologies at its OpTIC centre in St Asaph.

*Research and Development uplift in the region cannot happen without the skills pipeline and the role of our HE institutions in harnessing these higher-level skills are integral.*

Our HEIs are also playing a key role in encouraging graduate start-ups in the region, but the RSP are keen to explore this even further with a regional incubation start-up programme which will play a crucial role in ensuring that our graduates stay and work in the region. We want to work collaboratively with our HEIs and other research institutions to develop greater business–HE engagement, thus driving innovation and the scale-up of the economy.

In 2017/18 there were approximately 17,290 students studying at our higher education institutions at Bangor and Glyndŵr. The Open University in Wales also has a number of part-time students in north Wales and has seen a significant increase in student numbers since the inception of the Diamond funding in 2018/19.

Over 70% of provision within both Bangor University and Glyndŵr University are aligned to the key and growth sectors identified within previous annual Skills and Employment Plans.

Both regional universities and the OU have put a significant amount of resources into developing degree apprenticeship programmes for Engineering and digital, with the identification and development of facilities and approaches in line with the WG and HEFCW approach. This included as a region, with our HEIs supported by the RSP, developing the projected outcomes of the two pilots which ranged from an additional 200+ STEM based graduates from the region by 2024, to the associated developments with employers in developing bespoke complimentary support packages in addition to the degree apprenticeships. As an RSP, we actively support the creation and take-up of higher and degree apprenticeships, and the development of clear progression routes through FE to HE.

### **Graduate Destinations (Bangor University, Glyndŵr University and University of Chester)**

A mapping exercise was conducted of graduate destinations over a five-year period from the two traditional universities in North Wales and the University of Chester against the priority industry sectors. The study identified how many of the universities' graduates stayed in the region and what proportion of them were employed in key sectors, whilst comparing with the picture outside the region.

Of those graduates who stayed in the region, **61% have found work within sectors deemed to be our priority sectors for future economic growth.**

When we zoom in on the data and map where our graduates go if they stay in the region, and if they work in what's deemed to be priority sectors, it emerges that the distribution of graduates





across the sectors are not even. The top 4 sectors are Life Sciences, Health and Social Care; Retail, Tourism and Hospitality; Financial and Professional Services. However it's important to note that Education and Public Services do underpin the wider economy and are large graduate-level employing sectors.

'Brain Drain' of graduates has been a long standing challenge for the region, and Wales as a whole. A report by think tank **Resolution Foundation in 2017** indicated that Wales attracted 23,807 graduates between 2013 and 2016, but 44,335 left – a difference of 20,528. This, coupled with a high proportion of graduates in jobs that do not require a degree (skills under-utilisation), is an issue for the region. Many schemes have sought to address this issue in the past, such as the Llwybro – Routes Project (WDA), and, more recently, the Darogan Network. This is a challenge that the region will need to tackle, and the encouragement of graduate start-up programmes and further links/work experiences with businesses in the region could help us address this issue.

### Careers Advice & Guidance

The RSP recognises the crucial role that Careers Wales play in providing impartial careers information and guidance to young people and adult customers across the region, as well as the support they provide to parents and teachers as key influencers. The perceptions children have about certain jobs and careers are formed at a young age and this is highlighted in the annual survey carried out by Careers Wales with young people in Key Stage 4. The RSP is committed to further developing our working relationship with Careers Wales in ensuring that the skills mismatches are highlighted to key influencers and that young people have access to up-to-date LMI and employer engagement activities. We fully support the need for Careers and Work Related Experiences (CWRE) to be embedded in all 6 Areas of Learning within the new curriculum and that children in primary schools are introduced to careers related experiences.

### Career Check Data

Career Check is the name given to a diagnostic questionnaire that Careers Wales uses with mainstream pupils in year 10, as a diagnostic tool on their options and ideas after year 11. The Career Check occupational choice indicates their 1st, 2nd or 3rd choice of career/job (as rough ideas in year 10) and consists of a list of 30 occupational choices.

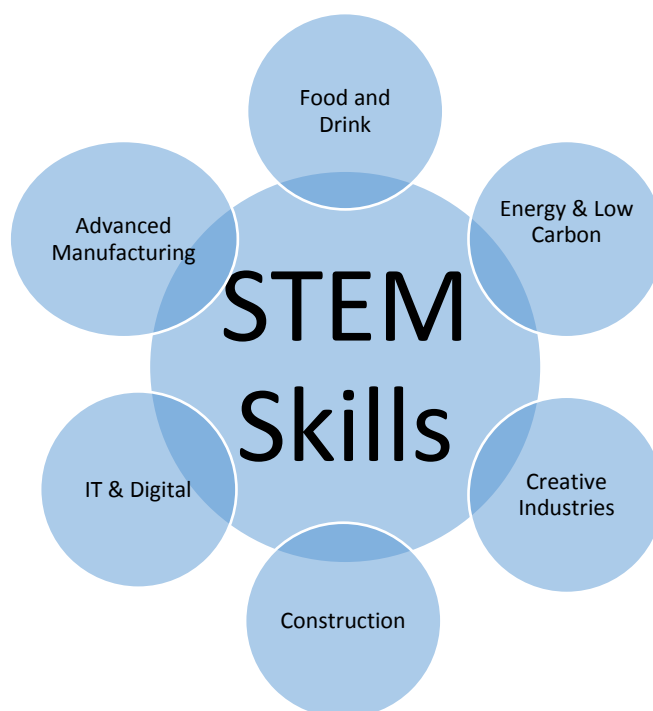
The analysis of data from the Career Check survey is an indication that young people's knowledge and perceptions of occupational choices is narrow at that age and that Careers Education needs to be introduced at an earlier age in order to broaden young people's career ideas and aspirations, based on regional needs and growth sectors, where the jobs will be. Also, if young people are going to be making apprenticeship choices at age 16, schools need to provide young people with a robust careers education programme with a focus on developing their employability skills.

The RSP has undertaken a 3-year data analysis of the Careers Wales Career Check survey for North Wales pupils.

The total year 10 cohort in North Wales annually is approximately 6,700 mainstream Year 10 young people. From this potential total cohort number in the North, an average 85% response rate has been captured over three years, which is an excellent response rate.

The most popular first choice occupational area of interest for North Wales pupils over the three years is Leisure, Sports and Tourism. The three-year trend analysis shows that young people have quite traditional career ideas with very similar patterns of response despite different messages coming from the labour market and employers. According to Career Check, the occupational choices of young people in year 10 have remained fairly stagnant over the three years. However, in 2017 there was a sharp increase in year 10 pupils indicating that having an apprenticeship after year 11 was their first choice.

The highest ranking apprenticeships as first choice occupations were engineering, construction in second place, and leisure, sports and tourism in third place. This rise could be a good indication that young people, teachers and parents are being influenced by the media marketing and careers advice of the benefits of apprenticeships. If this trend continues, or remains as high as this, employers will need to increase the number of apprenticeship vacancies available in order to meet the supply of potential labour. Also, if young people are going to be making apprenticeship choices at age 16, there needs to be better careers education and preparation in terms of young people's employability skills and their perception of certain sectors.



There are indications that young people are choosing careers in the growth and priority sectors, however not across the board and this is something we are keen to tackle across the region.

### STEM Skills

There is widespread awareness of the importance of STEM and digital skills as jobs and sectors evolve in our economy. STEM has been highlighted as a key challenge during our consultation on this Plan, and if we are to develop our STEM workforce we need a sufficient flow of secondary school students who are interested in, and have a grounding in, science and maths.



When looking at the numbers of individuals in school studying maths and science, the results suggests that North Wales' capacity to develop more STEM skilled workforce is limited by falling participation in year 12 science and maths. In the case of women, this is impeded by an alarmingly low participation. The figures are similar for apprenticeship participation in these subjects/sectors also. There is a pressing need to reverse these trends in order to overcome these limitations.

Data released for the region on achievements at GCSE Level in 2018 show that across the region's 54 secondary schools, 6,259 pupils were entered for GCSE examinations in STEM subjects.

An indicative average achievement rate of 58% of pupils achieved grades.

A\*-C in GCSE Mathematics, 58% A8-C achievement in ICT and 57% in CDT. Single science subjects achieved higher results per subject than double awards. It is difficult to have an accurate regional average measure and these are indicative figures only. There are vast variations between individual schools, and not all schools deliver each subject.

Sector reviews of Qualifications (Construction and the Built Environment, 2018, & Delivering Digital: Sector Review 2018) note that qualifications do not sufficiently cover working with new technologies. IT and ICT skills are used in many qualifications and sectors, but are usually outdated, used infrequently and the lack of digital/ICT apprenticeship frameworks has led some employers and work based learning providers to direct apprentices towards business administration apprenticeships. GCSE and AS/A Level ICT qualifications still include outdated content and do not cover some important topics relevant to the digital industry. Some of the other barriers noted are insufficient numbers of Welsh-medium resources available, outdated equipment used in educational establishments, and the need for teachers/lecturers to have better access to more up-to-date CPD. Work is being scoped on a digital skills project for the region, which will form part of a solution.

If we are to respond regionally with a future workforce that is qualified and skilled to meet the future STEM based opportunities across the region, we need a greater co-ordinated approach and careers advice and guidance to help steer individuals towards some of these opportunities at an earlier age.

A key and consistent message from micro and large employers alike is the struggle to recruit apprentices and a workforce with STEM skills. Providers also tell us that there is a lack of young people interested in STEM subjects. There is a clear mismatch here that needs to be addressed.

Work is currently ongoing in the region to develop a STEM statement, which will see a framework developed between schools, FE, HE and employers in a bid to inspire and enthuse individuals about future careers in STEM related industries. There is an appetite within the region to create a series of world class STEM hubs which would help to allieviate some of the recruitment issues facing our employers.





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Christopher Hollerbach

Parameter	Value	Unit	Limit
SP	0.000	mm/min	0.000
IP	0.000	mm/min	0.000
FP	0.000	mm/min	0.000
DP	0.000	mm/min	0.000
CP	0.000	mm/min	0.000
BP	0.000	mm/min	0.000
AP	0.000	mm/min	0.000
MP	0.000	mm/min	0.000
LP	0.000	mm/min	0.000
HP	0.000	mm/min	0.000
GP	0.000	mm/min	0.000
FP	0.000	mm/min	0.000
DP	0.000	mm/min	0.000
CP	0.000	mm/min	0.000
BP	0.000	mm/min	0.000
AP	0.000	mm/min	0.000
MP	0.000	mm/min	0.000
LP	0.000	mm/min	0.000
HP	0.000	mm/min	0.000
GP	0.000	mm/min	0.000





## What did our employers say?



This section focusses specifically on what employers bring to the analysis of the skills offer in our region. The focus of our consultation was on identifying their perception of key skills issues for their business/sector/region. Here, we will draw on the consultations and employer survey that we've undertaken as a Regional Skills Partnership. We will also draw on other employer consultations in the region, including the biennial UK Employer Skills Survey, the FSB's A Skilful Wales Survey, and intelligence & data from other sources including Emsi and Working Futures projections.

Overall, our employers report facing skills shortages and skills gaps across all sectors. In our Skills Survey, we asked about the main challenges currently facing them. The top 5 were:

Main Challenges	%
Recruitment	56.41
Economic/Financial Challenges	41.03
Making a Profit	31.20
Developing Staff	30.77
Perception of Sector	27.35

When we asked a specific question about the skills challenges facing our employers, the following issues were flagged by the majority of respondents:

Main Skills Challenges
Gaps in specific skills needed to undertake their role
Work-ready skills and employability skills and the need for an agile and resilient workforce
Shortage of workforce with STEM & digital skills
Succession planning & replacement demand
Qualifications do not always fit industry needs
Apprenticeship frameworks don't meet industry needs
Enterprise & innovation skills
Work experience





## Skills-shortage Vacancies

Skills-shortage vacancies arise where employers are unable to fill vacancies because of no or insufficient applicants with the required skill sets. This has a direct effect on businesses' profit and productivity levels. In our survey, **56.41% of businesses cited recruitment as their biggest challenge.**

From a wider perspective, a skills shortage also represents a lost opportunity for graduates from colleges or university who do not match employer needs, as well as unemployed people who are looking for work.

Over a quarter of vacancies in North Wales (30%) were proving hard to fill due to applicants lacking the necessary skills, qualifications or experience. This is up from 27% in 2015 and is also above the Wales average.

### Employer Skills Survey 2017: Skills-shortage vacancies by region

Region	Number of skill-shortage vacancies (2017)	Density (% of vacancies)
Wales	10,000	27%
North Wales	3,000	30%
Mid Wales	1,000	29%
South East Wales	4,000	25%
South West Wales	2,000	28%

**Evidence from our employer survey noted that Tourism and Health and Social care businesses reported the most difficulties in filling vacant positions.** Evidence from employer surveys has shown that difficulties in recruiting and filling vacancies are mostly due to an insufficient quality and number of applicants.

## Skills Gaps

Skills gaps arise when a proportion of employers report at least one of their employees are operating below the require competency in their job role. Our survey shows us that **61% of all businesses are currently facing a skills gap, and this figure increases/decreases depending on the sector. We will visit the differences per sector in our next section.**

There are a range of reasons to explain why employers are experiencing skills gaps, including that recruits are new to the role, or that they are not up to speed with new responsibilities/regulations. This has been highlighted by the **Employer Skills Survey 2017, IFF Research (North Wales figures)**, where 75% of businesses indicated that the main cause of a skills gap was that staff are new to the role. Skills gaps have the following impact on our businesses:



### Employer Skills Survey 2017: Impact of Skills Gaps in North Wales

Impact	2017
Increase workload for other staff	53%
Higher operating costs	32%
Difficulties meeting quality standards	27%
Lose business or orders to competitors	22%

We also asked businesses in the region which occupational areas were proving a challenge for them in terms of recruitment issues and skills gaps:

### North Wales RSP Employer Survey 2019: Challenges per occupation

Occupation	2019
Skilled trades occupations	38%
Caring, leisure and other service occupations	29%
Professional occupations	25%
* Evidence from North Wales RSP Employer Skills Survey (2019)	

**71% of employers in the region are having difficulty in recruiting for specific roles\***

## Changing skill set requirements

More widely, the evidence from our employer survey, focus groups and consultations have indicated the changing nature of the labour market and the different skill sets that will be needed to satisfy employer needs:

- **Agility and resilience** to respond to different employment opportunities and different tasks and demands within jobs, as organisations become flatter in structure and more responsive to change;
- Greater use and application of **IT & digital skills** across all sectors and occupations, including programming, network development, software engineers, cyber security, and coding;
- **STEM skills** to respond to advancements made in the engineering, digital and advanced manufacturing sectors in particular;
- **Enterprise, entrepreneurial and marketing skills**, particularly within the creative and digital sectors where self-employment and contract work is prevalent;
- **Leadership and management skills** to help organisations of all types to respond effectively to future economic opportunities and uncertainties, identify and adopt new product and process innovations to help raise the region's productivity levels;
- **Complex problem-solving skills, critical thinking, creativity and emotional intelligence.**



### Skills Under-utilisation

This reflects the situation whereby employees are in roles or carrying out tasks which do not take full advantage of their skill sets and qualifications.

In North Wales, 38% of employers report staff whose skills and qualifications are more advanced than their current job (Employer Skills Survey, 2017). This is the highest in Wales, and is higher than the Welsh average (36%). It is also another example of mismatch in the labour market: the market is not creating jobs that use these skills to the best result.

It is important to consider employers' future employment intentions as part of the whole picture. It is clear that employers are intending on taking on more staff across Wales (FSB: A Skilful Wales). It should be noted however that **only 36% of businesses in North Wales had intentions to increase employment – the lowest in Wales**. This, coupled with the uncertainty that Brexit brings, should be considered in the bigger picture and the trajectory for the region.

“The lack of skills and work experience, along with reducing workforce numbers and Brexit creates a perfect storm. This prevents growth and ambition.”

RSP Survey Respondent (June, 2019)

### Work-ready and Employability Skills

During our analysis and consultations, work-ready and employability skills have been emphasised as something that needs to be addressed in the region. The respondents were clear that they want more focus on the development of transferrable employability skills. Better employability skills will help people find work and progress in those jobs, benefitting people across the region. This message is picked up by the CBI/Pearson Education and Skills Annual Report (2018), which shows that over half of employers value broader skills such as problem solving.

Employability skills from an employer perspective consider the 'work ready' aspect, such as communication skills, and basic literacy skills, and what could be classed as 'soft skills'. Generally, 21% of employers questioned as part of our survey noted that they felt that recruits were 'not work ready' and 56.9% noted that 'it varies'.

The main reasons attributed to these results include poor attitude and motivation (49%), lack of resilience and communication skills, and 50% noted work experience as the main issue.

“Having good communication skills and having the correct attitude is key for us. We find that new recruits often lack these skills. Developing these skills through work experience and other activities could help.”

RSP Survey Respondent (June, 2019)



Secondary evidence is showing that analytical skills and creative thinking are in demand from employers. Our survey supports this notion, and we are seeing much more of an emphasis on what is classed as 'soft skills'. There is evidence to suggest that work experience can provide individuals with work-ready skills.

Employability skills are also key in the broader context of ensuring inclusive growth and ensuring that people are able to access jobs. It is important to recognise those who need help and support in getting into employment – many are not job ready and/or have too many barriers in their way. To support these people on their journey to employment, there is a need to respond locally with bespoke support. The Employability Pathway group is currently considering this matter, and working with our North Wales Advisory Group (Steering Group for implementation of Working Wales in North Wales), they have developed a framework/5 step pathway to ensure co-ordinated support to help people into work and encourage collaboration and alignment between providers. Priority actions have been identified for this work, along with a short/medium and longer-term plan to take this work forward. Presently, the focus is on trialling the pathway with 2 of our key sectors – Health & Social Care, and Construction.

The RSP has developed good partnership work and delivered projects with the regional education consortia, GwE, to explore ways of embedding regional employers' messages within the current pre-16 education provision. With the welcome development and introduction of the New Curriculum for Wales, the RSP is keen to explore more ways to harness this opportunity that can potentially align the economic needs with the pre-16 education system in schools.

### Brexit

From the 189 businesses who answered our question on Brexit in our survey, it is clear that loss of staff and loss of skills are not the biggest challenges:

What challenge does the prospect of Brexit pose for your business?	%
Increased costs	43.92
None	31.22
Funding	29.63
Procurement	17.46
Loss of staff	14.81
Loss of skills	14.29
Relocate outside the UK	3.17

However, Brexit is a concern for some sectors more than others, with the Food and Farming, Manufacturing, Leisure & Tourism and Health and Social Care sectors expected to be significantly affected. We will consider what employers have told us about Brexit in the next section.

In a time of political and economic uncertainties, there is an even more pressing need to ensure that our skills system is flexible and responsive to deal with potential 'shocks' to the economy.



### Welsh Language

Our Skills Survey indicated that 48.2% of businesses say that their workforce need and use the Welsh language (based on 222 responding to that question). 14.39% of the business surveyed cited 'oral Welsh language' skills as a skills challenge. In addition, only a further 11.0% suggested that 'written Welsh language' skills were a skills challenge for them.

Following discussion with various employers, it is clear that the level of importance of Welsh within different sectors varies significantly. For instance, the Health and Social Care sector indicated that the language is incredibly important for them, so much so that a recommendation has been made to develop bilingual provision within the subject. In addition, the Creative Industries recognise the importance of the language and indicates that it is difficult to recruit individuals with the desired linguistic skills.

### Gender

44% of our survey respondents noted that their workforce is relatively gender-balanced, but the situation does vary according to sector, with a higher representation of females in the Health and Social Care and Financial and Professional sectors, and less in the Construction, Advanced Manufacturing and Energy and Environment sectors. Further detail will be provided on gender variances in each sector overview.





## Spotlight on our sectors

In this section, our aim is to provide a deeper analysis per sector, which will include a sector profile snapshot, skills challenges, and issues and priorities, as specified by our employers as part of our consultation. Evidence for this section includes our employer survey, workshops, consultation sessions and telephone interviews. We have also, where possible, referenced other evidence/data sources to enhance our findings.

### Our Sectors

- Energy & Environment
- Construction
- Advanced Manufacturing
- Creative & Digital
- Financial & Professional
- Tourism & Hospitality
- Health & Social Care
- Food & Farming

The sector infographics can be seen in **Annex 3**.

## Energy and Environment

### Sector Snapshot



The Energy and Environment sector is a key employer in North Wales. The energy cluster is a key driver and, as it continues to expand, businesses will need to be well-equipped to exploit opportunities, especially as new technologies come on board.

The **low carbon economy in particular is at the forefront of wider changes in the labour market, driven by a merging of traditional sector skills and a drive towards energy efficiency**. There is a drive to position North Wales as one of the leading UK locations for low carbon energy generation and energy-related supply chain investment. As a result, there is a need to ensure that our skills system is aligned with energy priorities to help provide a workforce with capabilities to support energy transition in North Wales.

Regionally, Flintshire, Gwynedd and Anglesey have the largest share of businesses operating in this sector, with the likes of Minesto, Morlais and Parc Adfer Deeside listed as some of the key businesses in the area.

### Growth

The sector is changing and skills system will need to keep up with the changing needs and requirements. According to Emsi data, the sector is expected to grow by 1.5% from 2019 to 2022.



On a regional level, there are plans afoot to develop a Regional Energy Strategy and Delivery Plan, which aims to ensure maximum local economic and social benefits from the transition to a low carbon, clean growth economy, by becoming a net exporter of renewable electricity and harnessing cross border regional cooperation. The low carbon economy in particular faces a range of pressures and skills supply driven by new technologies, and a changing national policy landscape (Wales Policy).

With major new infrastructure investment in low carbon economy areas, including energy generation, there is a pressing need to ensure the availability of skilled employees. Energy and Environment is therefore identified as a key sector for our economy, because of the role it is envisaged to play in the future. Some of the key future priorities include:

- Off-shore wind and solar and sustainable marine renewables – Morlais and Minesto are currently at the forefront of development of tidal energy technology in Anglesey;
- Clean transport and the rollout of electric vehicles. SP Energy Project Charge is a £38.5m trailblazer trial in the region as a pilot;
- Exploring the potential of alternative fuels such as hydrogen;
- Rural low carbon heating.

Other Growth Deal projects also need to be considered, with the Trawsfynydd Small Modular Reactors (SMR) for nuclear industry and the nuclear energy Centre of Excellence that aims to establish world-class facilities and expertise on sustainable energy with a strong nuclear focus.

**“Deep Green Technology potential is so huge, this will be the new coal industry for Wales – with one significant difference – it’s going to last forever.”**

**Dr Martin Edlund, Chief Executive, Minesto**

### The Workforce

The Energy and Environment sector directly employs approximately 16,789 in specialist energy and environmental companies across the region, not including the other indirect and supply chain employment it creates.

The majority of businesses in this sector are in the micro-small category (under 50 employees), and, according to our survey, the majority of the workforce are in the 55+ age, which implies the need to consider replacement demand issues. The older age of the workforce heightens the importance of succession planning.

### Skills Challenges

Our survey indicated that **50% of businesses** are currently facing skills challenges in the sector, with a high percentage in the Professional, Technical and Skilled Trade occupations. It's important to note here that the sector has a diverse mix of occupations and requirements, but it's fair to note that the skills required in this sector are rooted in the Manufacturing and Construction sectors.



**Feedback indicates that employers are looking for high-quality craft and technical skills at level 3 to meet demand. In addition to these skills, employers have noted a distinct need for good-quality project managers and health and safety operatives.**

The sector is particularly diverse and is going through a rapid process of change, driven by technological innovation and shifting regulatory environments. There is a growing need for specialist IT skills to predict and improve the delivery of heat and power, and also requirements in cyber security.

As we move towards implementing the North Wales Energy Strategy and Welsh Government's policy drive, we will need to ensure that we have the right skills set in the region for the adoption of hydrogen, electric vehicles, offshore and wind technologies, and energy efficiency. STEM skills are crucial for careers in this sector, and we currently know that there is a lack of young people studying these subjects.

Some of the other major challenges that have been highlighted by the sector are the lack of career progression and also the perception of the sector, especially amongst females. This correlates with our findings on STEM skills. If we are going to address these issues, we need to ensure career progression.

### Recruitment

The majority of respondents indicated that they are experiencing difficulties in recruiting for specific roles, and these include engineering and conservation roles in particular, but also a need for qualified electricians, gas fitters and mechanical engineers.

**Employers have told us the implementation of new technologies, especially in low carbon, is also creating a new demand for technical skills in efficient and renewable energy use.**

According to Working Futures (2014–2024), changing occupational compositions in the sector demonstrate a considerable increase in demand for high-level occupations such as managers, professional and associate professionals. Skilled trades occupations will continue to have the largest share of employment. Qualification levels are following the same trend, with an increase for level 4-6 and sustained demand for levels 2 and 3.

### Post-16 Provision & Apprenticeships

Apprenticeships are an important route into the energy and low carbon economy, which are tailored specifically to employers' needs. Our survey shows that most employers in the sector are employing apprentices at level 3. With degree apprenticeships offered in Engineering at level 4+, employers have told us that there needs to be a clear progression across apprenticeships with a progression to higher qualifications.

**In 2017/18 we had 560 starts in Engineering and Manufacturing, with the majority at level 3, and 25 at level 4+.**

### Priorities for the Sector

- Increase STEM learners/pathways to ensure a workforce for the sector
- Gear the workforce with skills for implementation of new SMART technologies, especially low carbon



- Expand apprenticeship opportunities in the sector in response to replacement demand issues

## Construction

### Sector Snapshot

The Construction sector continues to be of importance in the region, due to high levels of employment and GVA. The sector is diverse, and encompasses many skills and trades which work across a variety of disciplines and specialisms and a variety of projects, including major infrastructure work and housing needs. It's fair to note that this industry in particular is highly responsive to boom times and downturns in the economy. The industry in this region is characterised by micro and small businesses.

The Construction Skills Network report for Wales (CITB) shows that, with work on Wylfa Newydd being suspended, the annual average growth rate for the sector in Wales has been revised down to 0.5% between 2019 and 2023. Modest growth is forecasted for private housing (1.3%), public non-housing (1.4%) and housing and repair work (1.8%).

In terms of job creation, the level of output growth in Wales gives an annual increase of 0.1% in the construction workforce. This means that a workforce of nearly 111,700 at the end of 2018 is set to show a slight increase to 112,400 by the end of 2023.

### Growth

The recent suspension of Wylfa Newydd has severely hampered construction growth across Wales in terms of its annual expansion. However, modest growth is still expected over the next few years, and this owes in the main to the expansion of private housing output and the recovery in the non-public housing sector.

There are many construction opportunities on the horizon for the industry over the coming years; most will be connected to the North Wales Growth Deal package of projects, where it is anticipated that 6,230 Construction jobs will be created up to 2024 (there is a caveat on this figure if the Growth Deal timescales change). There are also opportunities linked to regeneration projects across the region, and other major capital builds:

**The below lists some of the significant Glenigan projects in North Wales (CITB Data):**

Project	Value (£m)	Start Date	End Date	Project Type
Housing/Commercial and Retail Development – Flintshire	235.6	2019	2028	New housing, Private Commercial, Private Industrial
Construction Framework - Denbighshire	142.0	2018	2022	Public Non-housing



Tidal Lagoon, Conwy	100.00	2022	2025	Infrastructure
Bypass – Bontnewydd, Caernarfon	65.5	2018	2021	Infrastructure
New Build Framework, Gwynedd	23.6	2019	2023	New housing

### The Workforce

Data tells us that the majority of the workforce in this sector are male and in the 40-55+ age range, which indicates the need to ensure replacement demand in the sector over the coming years. Our Skills Survey results confirm this finding; 71.4% employed in sector in North Wales are male.

Working Futures data for the sector in the region indicates that the gender gap will widen further up to 2024, with male employment increasing from 17,000 (2014) to 23,000 (2024). Female employment on the other hand sees no change, in contrast to national projections, remaining at a total of 3,000.

There is a key message here for gender and perceptions of the sector, an issue that is currently being tackled by CITB in the form of various initiatives, such as 'Go Construct', and an annually organised event marking International Women's Day where CITB engage with schools across Wales to invite Year 8 and above female pupils to a number of events, where they can engage with local construction employers to learn more about opportunities within construction.

The employers who responded to our survey also noted that 57.14% of their workforce need and use the Welsh language.

Our survey also tells us that 58% of the workforce are currently experiencing barriers to training, and 66.7% of those are having difficulty finding training providers to deliver the training needed. Some of the areas noted that could benefit from investment to upskill include site management, communication skills and groundworks.

### Skills Challenges

The main challenges facing employers in this sector, according to our survey, are:

1. Recruitment (71.4%)
2. Developing staff (57.14%)

Our survey indicated that 78% of businesses are currently facing skills challenges in the sector, with a high percentage of those in Skilled Trade, Associate Professional and Technical and Professional occupations. Recruits lack specific skills in the following areas:

Professional Occupations:

- Architects
- Civil Engineers
- Surveyors







- Construction Project Manager roles

### Skilled Trades:

- Electrical trades
- Bricklayers
- Painters & Decorators
- Fencing

Some of the other challenges noted are that recruits also lack work-ready skills to perform their role such as communication, problem-solving, and numerical skills.

Another key challenge to the future of the sector is the need to upskill the current workforce, and new entrants with digital skills. The introduction of new technologies and materials means that employees will need to be adaptable and possess high-level IT skills, including 3D modelling. Building Information Management and CAD and SMART technology will become increasingly important, and the sector will increasingly need to ensure that the workforce have these digital skills. A recent report by CITB in 2018, 'Unlocking construction's digital future: A skills plan for industry', echoed this in terms of the need for construction leaders to drive digital transformation within the sector. Digital technologies will improve efficiency and productivity, but the construction industry has lagged behind others who are reaping the benefits of this transformation. Small and medium-sized employers in particular find it hard to introduce digital solutions.

The main challenges are:

- A lack of understanding of the business opportunities digital transformation brings;
- The leadership required to spell out why the investment is needed, identify and adapt digital technology for their business, and to make it happen.

Without this digital leadership, construction companies are likely to struggle to keep up with technological advances and to compete with their rivals. To meet this challenge, CITB launched a commission to fund £1m on projects across the UK to support the sector to achieve digital transformation.

### Post-16 Provision & Apprenticeships

In 2017/18 there were 4,790 learning opportunities in Construction in the region, and the upward trend in the number of learning activities at level 2 continues. Working Futures data demonstrates a continued demand for professional and skilled trades, with a decline in non-skilled and elementary occupations. This mirrors the information received in the employer survey. Level 1 provision is recognised as an important entry point for the sector, and this was reinforced during our consultations.

However, Working Futures data also confirms the increase in level 4-8 and, as noted, employers have also indicated problems in recruiting **architects, civil engineering and surveyors**. In 2017/18, there were no full-time first degree students enrolled in architecture, building and planning.

Apprenticeships are an important route into the construction sector. In 2017/18, there were 1,055 apprenticeship programmes in construction in North Wales, 560 of which were at level 2, 490 at level 3 and 10 higher apprenticeships. Our survey shows that 66.7% of employers in the sector are employing apprentices, mostly at levels 2 and 3, and few higher-level apprenticeships. For those



who didn't employ an apprentice, they noted the main reason to be that the apprenticeship frameworks do not meet their needs.

Increasing the number of apprenticeships remains of key importance to the Construction sector, particularly in lieu of an ageing workforce. For CITB, it forms one of their 'Big Six' objectives in respect to their 2019–2021 Business Plan setting a goal that, by 2025, they will deliver a 63% increase in the number of apprentices joining construction and a 110% increase in the diversity of applicants. To support this, the CITB increased attendance and achievement grant rates from 1st April 2019 and have further plans to provide additional help for travel and subsistence from September, as well as launching a pilot to help SMEs take on apprentices.

### Brexit

The main issue that employers in the sector flagged with us was the increased cost, in relation specifically to exporting and importing. The second highest issue was that of procurement of services. Interestingly, only a small proportion reported loss of skills and staff as their issues/challenges with Brexit.

### Priorities that need to be addressed

- Upskill the current workforce and new entrants with digital skills and SMART technology – especially our small and micro businesses;
- Replacement demand is an issue within this sector and promoting apprenticeship opportunities for young entrants is key;
- Perception of the sector and encouragement of more female entrants.

## Advanced Manufacturing

### Sector Snapshot

Advanced Manufacturing (AM) makes a vital contribution to the regional and national economy. In North Wales, the top AM activities are Aerospace, Medical and Dental instruments and supplies, Metal Products, Veneer sheets and wood based panels, Pharmaceutical preparations, Food and Drink, Chemicals, Automotive, Electronics, and Precision Engineering.

Regionally, 57% of the industry is based in Flintshire, and these are mostly large employers such as Airbus, ConvaTec, Tata Steel Europe, Toyota, UPM-Kymmene, Kingspan and Ardagh Group. These large companies support a number of smaller supply chain companies in the region which are vital for the economy. The North East is well known for this industry cluster; however, there are advanced manufacturing companies located across the whole region, with some significantly important employers in the counties further West, such as DMM and SIEMENS Healthineers in Llanberis, ISC in Bangor, Joloda Hydraroll in Anglesey and Ifor Williams Trailers in Denbighshire. The majority of AM companies in the region employ up to 50 people, and a third of these are micro businesses employing up to 9 people. Conwy experienced the greatest increase of 23.5% in new AM enterprises during the three-year period, 2014–2017.

The sector is currently buoyant and strong in the region, with a steady increase in GVA since 2015, an increase in gross weekly earnings, and great examples of expansion and innovation. For example, the Hawarden-based company Cokebusters have expanded into the Middle East after securing a £7.5m contract. The family-run Ruth Lee Ltd business in Corwen is a world leading



provider of realistic manikins used to train rescue experts across the globe. They are on track to record sales approaching £3m, thanks to exports.

The next 10 years for the sector will see significant continuing structural change within the industry, driven by automation and digitalisation of processes and increasing reliance on a higher technical and professional workforce. Our regional anchor companies, large employers and their smaller supply chains will need to be prepared to rise to this challenge and invest in the opportunities ahead. There is an expectation and opportunity for regional partners such as FE and HE providers, Business Wales, FSB and SEMTA to support employers through this period of change.

### Growth

The Advanced Manufacturing sector has been, and still is, a strong regional driver in terms of productivity. The sector is predicted to grow by 1.5% from 2019 until 2022.

The confidence in expertise and strength of the sector in the region has brought the flagship Advanced Manufacturing facility to the region, the AMRC Cymru. The Advanced Manufacturing Research Centre's aim is to encourage and support the sector to the next level of innovation to enable growth, by increasing productive collaboration between industry, academic partners and entrepreneurs. It will engage with businesses to adopt Industry 4.0 technologies and demystify and de-risk the processes through research, collaboration and knowledge. Projections suggest that the facility could drive up Welsh GVA by as much as £4bn over the next 20 years. Airbus has been officially confirmed as the first tenant when the facility opens its doors in autumn 2019. The AMRC will be able to collaborate with public and private sector partners to create the step change already afoot in the sector, and provide the confidence and leadership needed to navigate the current and future technological challenges.

### The Workforce

The Advanced Manufacturing sector directly employs approximately **36,000 people** in North Wales, not including the other indirect and supply chain employment it creates. North Wales is an area of national significance for the sector, with 27.4% share of Wales' manufacturing industry being based in North Wales.

However, there is a risk to the sector due to the current age profile of the AM&M workforce across the region, where 38% are aged 50+.

This ageing workforce is a challenge for the region in terms of replacement demand, thus creating a skills shortage and demand replacement of an average 30% across all levels in the sector. Investment in upskilling the current workforce and succession planning is a key message for employers as well as regional education and training providers to support the sector to achieve this.

### Skills Challenges

Employment forecasts are mixed for the sector, with a projected increase in demand for higher-level skills, according to Working Futures. Our survey indicates that the biggest skills challenges faced by the sector are in the Professionals and Associate Professionals & Associate occupations. Approximately 580 will be required at these levels **per annum** up to 2023. These professionals include **project managers, quality control specialists, process engineers, lean management, logistics management, and engineering drawings.**



There is also a demand for skilled trade occupations, which include vehicle and trailer manufacturing and machinery manufacturing.

The main challenges faced by our employers, as reported in our survey, are:

- Specialist skills or knowledge needed to perform the role
- Problem-solving skills
- Communication skills
- Advanced or IT specialist skills

Recent employer consultation by SEMTA in North Wales indicated that postgraduate and MEng level qualifications were needed by the sector to keep up-to-date with the demands and competition of technological changes. However, the region's current skills shortages reported by the RSP employer survey and SEMTA are also in the mid-level skilled trades occupations and lower-level process, plant, and machine operatives. For example, there were 203 vacancies posted for production workers in North Wales in 2018-2019, the highest job postings recorded, followed by 136 postings for welders/solderers. The changing composition of occupations in the sector will be a challenge in order to keep up with, and ahead of, technological changes **already** taking place.

**Employers in the sector responding to the recent RSP survey also noted that recruitment, staff development and succession planning were key challenges currently facing their business.** There are also challenges and difficulties in attracting new applicants and candidates into their business due to lack of interest or perceptions. The impact of skills shortages is increased workload for other staff, losing staff to other organisations, missing tight production deadlines and increased operating costs. For the SMEs in the sector and micro businesses in particular, the impacts of skill shortages pose a higher risk to the continued operation of their business and hinders their confidence to grow and expand.

The perceptions and knowledge that is needed to inspire young people about the Advanced Manufacturing sector are robotics and automation, augmented and virtual reality (VR), additive manufacturing, data analytics, Artificial Intelligence (AI), Cyber Security and the Internet of Things (IoT).

**“We need to encourage young people with a good work ethic into semi-skilled factory work. Last year 3 new recruits were children of current staff! Manufacturing has an ‘image problem’ in schools.”**

### **RSP survey respondent, May 2019**

#### Post-16 Provision & Apprenticeships

There was a positive response to the regional survey, with 65% reporting that they employ apprentices. Most are at level 3 but also levels 2 and 4+.



There are some employers reporting that the apprenticeship framework does not suit their needs. Regionally, specialist apprenticeships in manufacturing have decreased slightly to 345 programmes being available across the region in 2017. Most of these programmes were at level 2, but the demand is to increase availability at levels 3 and 4 and higher apprenticeships. There is also a need to ensure a clear progression to higher-level provision and postgraduate courses.

Working Futures trends also show an increase demand for qualifications at level 4-6. As technologies within the industry, apprenticeship frameworks also need to respond in a timely manner to this change that the merger of digital technologies has on the sector. **A statement from the World Economic Forum that 'nearly 50% of the subject knowledge acquired during the first year of a 4-year technical degree will be outdated by the time the students graduate' is a case for a paradigm shift in the perceptions associated with choosing an apprentice (at age 18).** This increase in apprentice take-up could be one of the key contributors to driving and sustaining higher-level skills and alleviating the pressures of succession planning for the future replacement demand in the region.

### Brexit

According to the recent RSP survey, when asked about Brexit, the main challenge for employers in AM&M was exporting/importing difficulties, closely followed by increased costs. Loss of skills and staff were not a worry for the sector, according to our survey.

### Priorities to be addressed

- Succession planning is needed in light of the age profile of the current workforce and replacement demand;
- Need to encourage higher-level apprenticeships and degree apprenticeships with a clear progression route.

## Creative and Digital

### Sector Snapshot

The traditional cluster of the 'Creative and Digital sector' is in fact two sectors. In its simplest definition, digital skills specialise in computer programming and information services. Creative skills specialise in publishing, film, TV, radio, advertising and design. Also, creative and digital jobs are found in other sectors, e.g. marketing in manufacturing, programming in education, advertising in retail, etc.

Wales' Creative and Digital industry generates a GVA of half the national average across all industries. According to research by NESTA, the UK will need 1 million new creative jobs by 2030. As the world changes to more digital platforms to design, test, buy, sell, manufacture, train, recruit and support staff and products, there is an increase in demand for digital skills across the board, as well as being a specialist area on its own. All sectors should be digital! Digital skills are an essential skill for all jobs.

In 2017, **25.3%** of businesses in the creative industries in North Wales were based in Flintshire, and **20.9%** were in Gwynedd. Flintshire (**+23.5%**), Anglesey (**+20%**) and Denbighshire (**+20%**) have seen the strongest growth in this sector in North Wales between 2014 and 2017. The sustainability and





future growth in the sector is highly dependent on excellent digital connectivity and availability of high-level skills.

The demands of the sector for high-level skills and qualifications is reflected in the higher than regional average gross weekly earnings at £569.20 for the creative industries, being the third highest out of the 8 regional sectors.

**Innovation** is a major driving force in the industry, especially the need for 'diagonal thinking' that brings creativity and entrepreneurship together. The Welsh Creative Media companies operate in a global marketplace and the industry sees this as a great opportunity, as well as a challenge in terms of finances, funding and competition.

### Growth

The Creative and Digital sector is an innovative growth sector employer within the region, and therefore is continued to be recognised as one of our key growth sectors. North Wales already has an increasing number of companies specifically supporting the wider digital economy, with expertise within digital intelligence from industry software and innovation, to video games development.

The Gogledd Creadigol/Creative North Wales network has been developed to meet the growing needs of the sector and represent the voice of industry. The RSP have undertaken regular consultations with this network whilst developing our Plan.

Growth areas for the North Wales Creative and Digital sector include:

- Innovation
- Understanding intellectual property
- Globalisation
- Welsh Television production

In the ICT and Digital sector, according to Emsi figures, we are likely to see a growth of 6% in the Digital sector from 2019 until 2023, and employment in the following roles are forecasted to grow:

- IT specialist managers
- IT business analysts, architects and system engineers
- Programmers and software development professionals
- ICT and telecommunications professionals

Recently the Welsh Government invested £30m in the development of film and television projects in Wales between 2014 and 2019, and at the recent North Wales Creative Industries Conference, the keynote, Lord Dafydd Ellis Thomas, Deputy Minister for Culture and Tourism pledged further investment and strategic plans for the Welsh Creative Industries to grow.

### The Workforce

Taking the Creative and Digital sector's broad definition and diversity into account, it isn't surprising that there are 20,000 people employed in the sector. 57% of employers in the sector are micro sized, employing less than 10 people.



There are more positive messages about this industry which should help attract people, such as the RSP survey results which showed staff retention for the industry was high, with 86% of employers indicating this wasn't an issue. NESTA research forecasts state that creative jobs will be more resistant to automation and artificial intelligence. 87% of creative workers are at a low or no risk of automation. Also, jobs in arts, crafts and design occupations are generally associated with higher levels of wellbeing.

Across Wales, 68% of the Creative workforce has a degree level qualification. This trend of higher-level skills for the sector is set to continue, with Working Futures projections forecasting steady demand for high-level occupations and skills in the Creative Industries in North Wales up to 2024. These forecasts indicate that there will be a **43.8%** increase in those qualified at QCF level 4-6 in the Creative Industries in North Wales between 2014 and 2024. Also, professional occupations in the creative industries will see the greatest increase in employment levels, with around **2,000** people in North Wales in 2024, and a replacement demand for **1,000** people to fill the positions of those leaving or retiring from the sector up to 2024.

### Skills Challenges

According to our survey, 51% of businesses were experiencing skills challenges across the following occupation areas:

- Associate Professional and Technical Occupations
- Skilled Trades Occupations
- Sales and Customer Service Occupations

Furthermore, the employers in this sector indicated that skills in written Welsh, specialist skills and knowledge to perform their role and advanced IT and specialist skills were particular challenges for them.

There are 160 companies in the TV, media and film sub-sector, with a strong cluster of Welsh language broadcasting companies based in Gwynedd. Sector consultation and responses to the RSP survey indicate that higher-level skills and qualifications are required and that the ability to be creative, digitally competent and bilingual is essential for this cluster.

### Recruitment

The RSP survey found that 29% of employers in the Creative Industries reported difficulties recruiting for specific roles: high-level technical and digital skills; IT; Art Department; Costume Department; Production Department; Sound Technicians.

This is exacerbated by niche demands in this industry, which is an emerging pattern for many sectors. The recruitment and skills challenges come from the need to find people with a multi-disciplinary mix of science and arts. This unique combination is precisely what Creative and Digital businesses are crying out for. According to IT employers in the region, one of the largest specialist computer programming, web developers and resource developers in the region, the 'User Interface' and 'User Experience' of mobile devices and games need creativity as well as scientific ability. The unique features of UI and UEx are the key to selling products.

### Post-16 Provision and Apprenticeships



There are a number of learning activities on offer by the regional FEs, with 3,300 learning activities in the region relating to Information and Communication technology and 3,785 learning activities available in the Arts, Media and Publishing sector.

There were 34 creative first degrees offered at Bangor and Glyndŵr Universities in 2018, with 1,040 students studying these courses.

Bangor, Glyndŵr and the Open University are offering the new degree apprenticeship programme in Software Engineering which started in 2019, and the success of this will be further provision in this area. There is a call for the industry to engage in the detail of the content and delivery of these new apprenticeships to ensure they meet the current and future needs.

Recent consultation with the TV, media and film clusters indicates concern that some of the education and apprenticeship offer does not meet their industry standards.

Developing and delivering apprenticeships in the Creative Media sector is proving to be challenging for the region, with a limited number of apprenticeships offered in the TV, media, film sub-sectors. Employers have indicated that there is an appetite in the region to explore and develop this offer, with shared apprentices being an option, as well as a revision of the current offer to tailor to employer needs.

### Brexit

In the recent RSP survey, employers noted that Brexit poses a threat of increased costs and a possible lack of funding streams and opportunities to help their business grow. The sector is operating a strong partnership and professional support network in the region through the Digital and Creative partnership 'Gogledd Creadigol/Creative North Wales'. Welsh Government's membership on this forum is key to introducing and supporting initiatives.

### Priorities to be addressed

- The industry has indicated their appetite to help shape some of the course content and consider shared apprenticeship opportunities.
- Post-16 provision needs to reflect the current employer demand, rapid changes in technology and an increased and diverse offer of digital skills across all sectors, in order to keep up-to-date with how quickly industry 4.0 is currently utilising these skills.
- Careers information and guidance for young people is crucial to understanding the transferrable skills developed and navigating career choices in a more holistic way.

## Financial and Professional

### Sector Snapshot

The Financial and Professional Services sector makes a substantial contribution to the region, both directly as a key source of employment allied to employment in the Foundation Economy, but also indirectly as a key source of employment and investment by providing specialist services to businesses across all sectors.



The sector is one in which there is significant competition, but is underpinned by a pool of highly qualified people who need to be supported by advanced infrastructure and supply chains where operational.

The primary areas of business activity within the sector include accountancy, insurance, legal services, corporate and 'head office' functions, human resources and other professional services. It's a relatively balanced sector in terms of the need to use the Welsh language, and gender split, and has a high number below the age of 50.

### Growth

In 2017 there were 11,385 businesses in the sector in North Wales. Micro businesses dominate the sector, with 95% of businesses in this category employing less than 10 people. In North Wales, we are expecting to see a modest growth of 1% in this industry from 2019 until 2022.

43.7% of businesses in the finance and business services sector were based in Flintshire and Wrexham. Large companies such as MoneySuperMarket, Moneypenny, HSBC, Development Bank of Wales, and HM Revenue and Customs are based in these two counties. Despite this cluster, Denbighshire saw the highest growth in the region for this sector between 2014 and 2017, 23.4%, higher than the national average of 22.7%.

FinTech (Financial Technology) is a cross-disciplinary subject that combines Finance, Technology Management and Innovation Management. Global investment in FinTech companies was worth US\$24.7 billion in 2016, and the FinTech sector is expected to create thousands of new jobs in Britain with the next two years.

The FinTech sector is set to increase globally and regionally, with an increasing number of opportunities to grow by embracing digital technologies and better connectivity being developed in the region to enable this. The FinTech industry is a relatively new specialised industry capitalising on the development of digital technologies to enable a niche growth area and ensuring its survival in a global marketplace.

The first undergraduate degree in Financial Technology in the UK was launched at Glyndŵr University in 2018. A report by Innovate Finance, a Fintech trade group, suggests the sector will be creating around 1,000,000 jobs by 2020.

The Development Bank of Wales opened its HQ in Wrexham in 2018. Wales' first ever Development Bank invested nearly £70M in more than 280 Welsh businesses in 2017/2018 – creating or safeguarding 4,000 jobs nationally.

### The Workforce

The sector employs approximately 23,000 in the region, with almost 7,000 of these based in Wrexham. Administrative and secretarial occupations have the greatest share of employment in the industry, with approximately 9,000 people employed across the region. This large group of employees are a key workforce to focus on and invest to upskill and keep pace with the digital technologies in this industry.

### Skills Challenges



44% of employers in this sector are currently experiencing skills challenges, mostly in sales and customer service, but also in managerial and professional occupations. Administrative and secretarial occupations have the greatest share of employment in the industry with approximately 9,000 people employed across the region. Digitalisation and automation is a threat to any job which is currently seen as routine and repetitive, business administration jobs are no exception. Therefore, this large group of employees, and the sector as a whole, need to embrace digital innovation and upskill working practices and expectations for the 21<sup>st</sup> century.

### Recruitment

43% of employers in the recent RSP survey were anticipating that up-to-date digital skills were a future skills challenge for their business. In other surveys for the sector across Wales, recruitment agencies such as Supertemps and Adele Carr report that skills shortages in payroll management, accounting and finance have been widely reported, with a clear demand for suitably qualified professionals not just in Wales but in the UK as a whole. Audit and risk is a particular area rising in demand, due to businesses seeking to mitigate the risk of cyber-attacks. The workforce relies on a highly-skilled and up-to-date workforce to deliver services which demand knowledge of many complex changes to legislation possibly due to Brexit. It is anticipated that the finance and legal professions will be in increased demand to navigate many companies through Brexit implications.

According to Working Futures 2014–2024, projected occupational composition in the Financial and Professional Services sector, from 2014 to 2024 in North Wales, shows considerable growth in high-level occupations, such as managers, professionals and associate professionals. The number of managers, directors and senior officials doubles from 2,000 in 2004 to 4,000 in 2024. Professional occupations also double, from 3,000 to 6,000. Associate professionals increase from 4,000 to 7,000.

### Post-16 Provision & Apprenticeships

There has been an overall decrease in the number of learning activities at the two regional FE colleges relating to business administration, particularly at lower levels. There is a focus on higher-level skills and higher-level courses, with employers demanding an increase at Levels 3 and 4.

Bangor University's banking related courses are consistently ranked as one of the top 25 institutions in the world for research in the field of Banking (RePEc, as of May 2017), as well as being one of only 8 UK universities to hold the Chartered Banker Institute 'Centre of Excellence' status.

There has been a decrease in level 2 generic business administration apprenticeships, in line with the need to deliver higher-level skills programmes in the sector. A slight increase has been introduced at levels 3 and 4, but more focussed employer engagement is required to increase the take-up and opportunities for levels 3 and 4+ apprenticeship training with particular emphasis on the finance roles.

### Priorities to be addressed

- The currently supply of higher-level skills cannot meet demand. Increasing the opportunities for businesses and individuals to upskill, train and retrain via short courses at levels 4+ with professional examinations and status is required to fill current vacancies.





## Tourism and Hospitality

### Sector Snapshot

The tourism and hospitality sector is recognised as a key contributor to the economy of North Wales. Tourism and hospitality contribute £2bn annually to the North Wales economy, employing 40,000 people and supporting 3,340 tourism businesses. Increased investment and expansion are expected as the sector matures from a seasonal industry to a year-round industry. This has a positive impact on other economic sectors, such as the food and drink industry and the transport industry.

Demand is growing for tourism and the nature of the demand is changing. The sector is developing from a service deliverer to an experience stager. Families and individuals are now seeking experiences rather than simple relaxation. These experiences may include immersion in new and different cultures, adventures, or an element of thrill seeking. Such trends are reported by and commented on by industry journalists. In North Wales this change is evident in the growth in popularity of quality restaurants, water-sports activities, mountain recreation, and businesses such as Adventure Parc Snowdonia and Zip World. North Wales offers a superb location to fulfill the changing demands of tourists.

UK Hospitality has identified the workforce as the biggest uncertainty in the future. It points to

*“an unprecedented range of factors combining to create this sense of the unknown – Brexit, the cost of employment, technological advances, education and training changes and much more. The workforce of the future is going to look very different to how it does today – as all these issues intertwine over time.”*

### Growth

One of the key challenges in the region is to grow through innovation and business development. There is an increased need to support the development of sustainable and high-value tourism jobs by supporting those already employed in the industry and those wishing to enter the industry.

The tourism industry forms a part of the North Wales Growth Deal; the North Wales Tourism and Hospitality Centre of Excellence is proposed to be based at Coleg Llandrillo in Rhos-on-Sea. The project aims to support the growth of the tourism industry in North Wales, supporting the development of sustainable high-value tourism jobs and addressing the skills shortage in the sector. The project proposes a private and public sector partnership providing training through a 'hub and spoke' model.

The primary skills excellence hub will be a purpose-build new facility at Coleg Llandrillo in Rhos-on-Sea, in partnership with tourism and hospitality businesses across the region. The hub and spokes will provide training, exhibitions, taster sessions and real work experience to several cohorts including: school pupils, full-time post-16 learners, apprentices and those who are not in education, employment or training. Each spoke will potentially develop a different area of training, and operate a high-quality apprenticeship scheme in partnership with local businesses. The project aims to achieve 45 new junior apprenticeships and 50 new apprenticeship opportunities, with 480 hospitality and tourism level 1 to 3 qualifications available at the Hub and Spokes across North Wales. The total anticipated cost of the project is £16.25m.



### The Workforce

According to Welsh Government priority sector statistics, in North Wales in 2017, there were approximately 32,100 people working in the tourism industry (25.2% of the total workforce in tourism in Wales), which represents 10.8% of the total workforce in the region or just over 1 in every 9 jobs. This is greater than the proportion across Wales of 9.4%, or just under one in every 11 jobs, which demonstrates the importance of tourism to the local economy.

According to the RSP survey, on average 22.6% of the tourism workforce was aged 16-24; 26.6% was aged 25-40; 25.6% was aged 40-55; and 25.2% was aged 55+. Regarding the Welsh language, 48% said they need and use Welsh at work; 41% said they did not need and use Welsh at work; and 11% said they need and use Welsh only as a social skill with colleagues.

Our conversation with businesses shows they recognise that labour shortages are going to become more acute. They have stated that the sector is currently at a critical point and have highlighted the following issues to address, if the sector is to further develop in the region:

- The need for the region to continue to innovate and pioneer within tourism product development;
- The need to bring more people into the sector as a consequence of a diminishing workforce in the context of Brexit;
- The need to plug specific skills gaps within the regional tourism sector;
- The need to raise awareness of the breadth of career opportunities within tourism and raise the aspiration around tourism as a career choice;
- The need to provide tailored support to tourism businesses to enable them to grow and thrive.

Traditionally the structure of the sector in North Wales has been dominated by family-run SMEs. As demand increases, labour supply diminishes and the tourism and hospitality offers changes. The current structure of the sector cannot alone deliver the workforce of the future. This amounts to a market failure and measures must be put in place to correct this. It will be the responsibility of businesses to manage their workforce, but future service provision will not be delivered by the private sector as they cannot make a profit on the services required by the tourism and hospitality sector to meet needs and wants.

According to Working Futures, 5,000 job openings are projected for elementary occupations in tourism from 2014 to 2024. In addition, there are predicted to be 2,000 job openings for managers, directors and senior officials. A 105.5% increase is expected in those qualified at QCF level 4-6 in tourism from 2014 to 2024 in North Wales, and a 36.4% increase at levels 7-8.

### Skills Challenges

The majority of respondents (60%) in the leisure and tourism industry reported experiencing skills challenges, with these challenges being most prevalent within Caring, Leisure and Other Service Occupations; Sales and Customer Service Occupations; and Skilled Trades Occupations. The top 3 skills challenges in tourism are:

1. Specialist skills or knowledge needed to perform the role
2. Communication skills
3. Problem Solving



According to the RSP survey, the top 5 challenges currently facing businesses in the leisure and tourism industry are:

- Recruitment
- Seasonality
- Making a profit
- Perception of the sector
- Poor transportation links

### Recruitment

At 69%, a high percentage of employers in the sector experienced difficulties in recruiting for specific roles. Amongst the specific roles mentioned were: chefs; front of house; reception; spa, beauty; media; sales; food and beverage assistants; business management; customer service; general labourers; bar staff; and tourist guides.

Staff retention was an issue for 32% of businesses in the leisure and tourism industry. The main reasons given were:

1. Not enough people interested in doing this type of work
2. Long/unsocial hours
3. Geographic location
4. Travel to work on public transport a problem/too difficult
5. Wages offered are low in comparison to similar organisations

### Post-16 Provision and Apprenticeships

In 2017/18, in further education in North Wales, there were 1,810 learning activities in Hospitality and Catering; 1,405 in Sport, Leisure and Recreation; and 150 in Travel and Tourism. Overall, courses in Leisure, Travel and Tourism have decreased slightly over the past three years, from 1,625 courses across North Wales in 2014/15 to 1,555 in 2017/18 (-4.3%). Courses in Hospitality and Catering have experienced a large decrease, from 4,380 in 2014/15 to 1,810 in 2017/18 (-58.7%).

In the north west of the region, Travel and Tourism and Hospitality and Catering courses are primarily delivered in Bangor, Dolgellau and Rhos-on-Sea, with no courses delivered on the Llŷn Peninsula. Demand from our employers show an increased need for level 3 across the region for general Travel & Tourism courses, and an increase for levels 2 and 3 in courses such as Professional Cookery.

There are no courses at Higher Education level.

Only 28% of respondents in tourism reported employing apprentices, with the majority at levels 2 and 3. For those not employing apprentices, the main factors were: 'Apprenticeship frameworks do not meet business needs'; 'Unsure of process in relation to offering one'; and 'Difficulty recruiting suitable candidates'. This suggests that there needs to be close liaison with employers when frameworks are developed to ensure that they are fit for purpose.

In 2017/18, in North Wales there were 450 apprenticeship programmes in Leisure, Sport and Travel, and 725 in Hospitality.

### Brexit



The main challenge posed by the prospect of Brexit as chosen by respondents in the tourism industry was increased costs. This was closely followed by 'None' which can be considered positive on one hand, but could also suggest that respondents are unsure about what it could mean for them.

### Priorities that need to be addressed

- Recruitment is a crucial issue in this sector;
- Perception of the sector could be one of the biggest barriers to growth;
- Need to increase FE and apprenticeship opportunities.



#### **DISCOVER TOURISM**

This resource is a new and exciting, bilingual, online teaching resource, launched in May 2019, with accompanying regional film aligned with the New Curriculum. Aimed at upper primary school pupils, and for teachers to deliver, the New Curriculum themes focus on the wealth and diverse opportunities that the tourism sector offers in Anglesey by using real employer scenarios. Led by the North Wales Regional Skills Partnership and developed by a perfect partnership of committed and enthusiastic employers from Anglesey, Welsh Government, the third sector, pupils and teachers of Ysgol Gynradd Amlwch, this resource can be further developed for other sectors and areas across the region and beyond.

The RSP saw an opportunity to showcase one of the region's priority sectors to a younger audience in an educational and meaningful way that can potentially influence more inspirational perceptions and messages of the tourism sector, as well as meet the New Curriculum requirements of teaching and learning with thematic focus and pupil participation. The roll out of the resource in autumn 2019 will realise the benefits of a well-coordinated education engagement project, with employers that adds value to wider policy areas such as the Welsh language, a sense of place, culture, the New Curriculum, skills, achievement and progression.

Go to the website for more information! <https://discovertourism.co.uk/>



## Health and Social Care

### Sector Snapshot

The health and social care sector in North Wales comprises two main sub-sectors:

1. NHS via Betsi Cadwaladr University Health Board (BCUHB);
2. Social work and social care provided by the six local authorities, and the health and social care services they commission to the independent sector.

The strategic importance of the sector was recognised in the publication of *Prosperity for All: the national strategy*. The sector is described as having “the greatest potential contribution to long term prosperity and well-being” and contributes to addressing worklessness and poverty. Whilst not directly referenced within the Growth Vision for the region up to 2035, its components as a sector are clearly identified as contributing to well-being, collaboration, inclusion, and prevention.

The gross spend on social services in North Wales was £460m in 2017/18. BCUHB employs 16,700 staff directly, not including the work of 84 GP practices and the commissioned NHS and private services provided by dentists, opticians, professions allied to health and pharmacists in North Wales. A key feature of the region is that micro businesses are a key employer, and within this sector also. The largest share of business in the micro size bands are based in Gwynedd and Conwy specifically.

The sector is going through a period of change with the developments above and the regulation and professionalisation of the social care workforce driven by the Regulation and Inspection of Social Care (Wales) Act 2016. The social care workforce will become a fully registered workforce over the next decade, for the first time with qualification requirements at all levels. This will help to give this essential workforce the status and recognition it deserves, but comes with a number of challenges around skills shortages and gaps; workforce patterns and flow.

### Growth

The sector is a growth sector with a 4% per year growth projection required in social care alone until 2032 according to Emsi figures, with over 2000 replacement jobs required over the next three years.

The economic value of adult social care in Wales has recently been estimated at £1.2bn GVA to the Welsh economy, 1.9% of total GVA in 2016-17<sup>1</sup> (£26.7m in North Wales). The total direct, indirect and induced value of the adult social care sector in North Wales was estimated to be over 29,000 jobs and over £500 million. Comparable GVA figures indicate that only manufacturing and real estate activities gross more GVA than this sector in Wales.

In demographic terms, it is certain that the population aged over 65, and especially people over 70 with more complex needs such as dementia, will increase in absolute terms, and as a proportion of the population over the next two decades.

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<sup>1</sup> [https://socialcare.wales/cms\\_assets/file-uploads/The-Economic-Value-of-the-Adult-Social-Care-Sector\\_Wales.pdf](https://socialcare.wales/cms_assets/file-uploads/The-Economic-Value-of-the-Adult-Social-Care-Sector_Wales.pdf)





The North Wales Growth Deal offers an opportunity for the sector to develop further by focusing on the niche expertise required in clinical and nursing competence in homes and residential care. As well as the development of therapeutic child care for residential care workers and youth workers to support mental health and emotional well-being. This project is currently being scoped by strategic sector representatives and the Regional Skills Partnership.

The ageing population increases the demands of the sector and continued increase and growth in service provision. There is a continued staffing and skills shortage and a projected 500 new jobs needed to be filled each year over the next 10 years. Overall employment in the sector continues to grow, increasing to a projected 51,000 workforce by 2024, as well as a high replacement demand of 20,000 within the same period. According to the Care Forum for Wales, representing the private care providers, it is estimated that North Wales is facing an estimated shortfall of 7,000 by the year 2026.

### The Workforce

This sector is one of the largest employers in the region employing over 44,900 workers, 11% of the total workforce. In early years there are around 1,100 settings, providing child care from self-employed childminders with services delivered in their own homes, to large nurseries employing a total 5,400 people. According to our survey, the majority of the workforce are female, and 66% of the workforce need and use the Welsh language at work.

North Wales indicates that male employment in health and social work will increase slightly from 8,000 in 2004 to 10,000 in 2024. Female employment will expand significantly from 31,000 to 40,000. The occupational breakdown in Working Futures shows that male employment in health professional occupations in North Wales is projected to increase to 4,000 in 2024, while female employment will rise from 7,000 to 12,000. Male and female employment in health and social care associate professional occupations will both double to 2000 and 4000 respectively by 2024. In caring personal service occupations, male employment will grow to 2,000 by 2024, while female employment will increase from 13,000 to 17,000.

### Skills Challenges

One of the highest response rates to this year's RSP survey came from the health and social care sector, and the findings were further explored and confirmed at two regional consultation events. The key challenges facing employers from the survey correlate with national data and research, reported as:

- Recruitment
- Perception of the sector
- Retention
- Reduced Funding

Skills shortages (workforce numbers) are acute in the health and social care system and this is a critical issue which urgently requires both immediate and longer-term action. Latest findings indicate that recruitment is a key challenge for the social care sector. Domiciliary care services were particularly likely to say they had found recruitment difficult in the last year (72% very difficult), followed by 54% of residential care services (54% very difficult or fairly difficult) and 41% of



residential homes for children (41% very difficult or fairly difficult).<sup>2</sup> This means ongoing and increased investment for both initial qualifications and on-going career and skills development is essential.

According to our survey, 57% businesses are currently experiencing skills challenges in the health and social care sector. According to these employers, recruitment and retention challenges are largely due to the initial attraction of people into the sector, unsociable hours, salaries and the impact of the benefits 'trap'.

Top occupations in demand in health and social care were noted as:

- Caring, Leisure and Other Service Occupations
- Professional Occupations
- Manager, Directors and Senior Officials

A resounding 73% of employers in the sector are having difficulty recruiting for specific roles. These include:

- Care Workers
- Nurses
- Care assistants
- Care home management roles

Challenges around recruiting managers and ensuring that managers have the knowledge and skills to lead these challenging new expectations remain across the sector, including compassionate leadership.

The North Wales Regional Partnership Board published a Workforce Strategy and Action Plan to address some of their challenges, including recruiting and upskilling managers and ensuring that managers have the knowledge and skills to lead these challenging new expectations remain across the sector, including compassionate leadership. This will also feature in the North Wales Growth Deal skills project for the sector. Succession planning and management recruitment is a cross-cutting theme for many employers and sectors across the region.

29% of employers reported in the survey and consultation events that new entrants were 'not work ready', with 58% indicating that this varies. Specifically there was lack of work specific skills, lack of work experience, lack of qualifications and poor attitudes and motivation. Just over half of employers currently offered work experience to school/FE or University students. Stronger strategic links in the region between the sector and DWP, Careers Wales, schools, colleges and training providers could have an effect on work readiness. The findings relating to work readiness and employability, or soft skills, are a cross cutting theme and is a common concern for many employers in all sectors across the region.

The impact of national and global digital developments will have an effect on the health and social care sector, requiring timely response, upskilling and investment to keep up-to-date with, and opportunities to participate in, the introduction of new innovation and technologies in the sector. Innovation in technology is currently experimenting with telemedicine and implants that could eliminate the effects of epilepsy and Alzheimer's;

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<sup>2</sup> <https://gov.wales/sites/default/files/statistics-and-research/2019-03/implications-brexit-social-care-and-childcare-workforce.pdf>



even bio-printers that will be able to print new organs. There are experiments to develop an electronic pill that keeps our health in check and personalised medication from a 3D printer, ready while you wait. In Japan, robotics are already assisting in elderly health care.

### Recruitment

A National Recruitment and Retention Campaign for social care and early years called 'WeCare' was launched in March 2019 to address the need for a further 20,000 social care and early years workers over the next 3 years. The importance of Welsh language skills across health and social care is already clear within the 'Mwy na Geiriau/More Than Just Words' campaign.

The development of new post-16 qualifications aims to drive better links between education and training and employment possibilities, and provide a more coherent pathway through the learning environments to employment in health and social care. The new recruitment campaigns in the sector also aim to combat reports that poor and outdated perceptions exist, as well as a lack of up-to-date knowledge of the sector amongst young people, teachers and parents, are possibly having an effect on the take up of post-16/17/18 vocational courses and training, in specific areas and roles within the sector. There needs to be stronger strategic links in the region between the sector and JCP, Careers Wales, schools, colleges and training providers, which could influence positive perceptions over time.

BCUHB also has a strategic recruitment plan (Train Work Live) that provides a clear direction of travel for all attraction, recruitment and retention activity across the organisation. This includes addressing the current nursing vacancy rates of 10.4%, a GP vacancy rate of 47.7% and a medical staff vacancy rate 6.4%.

### Post-16 Provision & Apprenticeships

Health and social care provides nearly a third of all apprenticeships across Wales, with over 19,500 starts last year, around 5,460 in North Wales. This investment in skills is vital to the sustainability of this crucial sector, addressing the recruitment and retention agenda of health and social care and meeting the government's agenda for the foundation economy. The Qualifications Wales review of Health, Social Care and Childcare in 2016 has brought wholesale change to the qualification landscape of the sector, providing more relevant and up-to-date qualifications in schools, colleges and work based learning. Most of these will be ready for delivery in September 2019, but the infrastructure to deliver these qualifications will need to be supported with the timely upskilling and CPD requirements for lecturers, teachers, tutors and assessor staff. There is a sustained demand by employers for domiciliary care staff trained at levels 2 and 3 in line with regulations.

A postgraduate programme in Adult Nursing was introduced by Bangor University in 2018. It offers graduates of life and social science a fast-track two-year route to registration with the Nursing and midwifery Council. However, even though these postgraduate courses meet the growing demand, according to the Deputy Director of Nursing at the Royal College of Nursing the numbers graduating still won't match up to the number of those leaving the profession. Since 2013, 2,218



nurses have left BCUHB (including retirement) whilst in the same period the replacement recruitment was 1,470.

### Brexit

There was a mixed response in the RSP survey to the implications of Brexit with 53% employers reporting that Brexit would not have any effect on their business. Conversely, the other 47% would be affected with implications being increased costs, uncertainty around funding, loss of skills and loss of staff. According to the Care Forum for Wales, the prospect of Brexit and barriers to overseas recruitment will further exacerbate the shortage of nurses and carers. The uncertainty is already leading to a loss of nursing home beds and the closure of care homes at a time when Wales is expected to more than double its over 85 year olds in the next 20 years.

### Issues that need to be addressed

- Recruitment and retention of workforce
- Perception of sector
- Retain and upskill leadership and management roles
- Increase digital skills

## Food and Farming

### Sector Snapshot

The food and farming industry employs approximately 15,400 people and supports 3,955 food and farming business units in the region.

The 2017 Welsh Government statistics note that employment in agriculture and the food manufacturing sector is almost entirely amongst micro businesses (90.6%).

Economic growth is a key aspiration of the Welsh Government Food and Drink Action plan 2014–2020 whilst also being recognised as a foundation sector in Welsh Government's *Prosperity for All: economic action plan*.

With such high volume of business falling into the micro and SME category, there are clearly challenges facing the sector. Potential challenges posed by Brexit require a whole supply chain solution in order to promote food security and business resilience.

According to the RSP survey, the top 5 challenges currently facing businesses in the food and farming industry are:

1. Economic/Financial challenges, e.g. reduced funding
2. Recruitment
3. Making a profit
4. Competition
5. Seasonality



### Growth

Emsi data shows a modest growth of 1.0% in the sector from 2019 until 2023. According to Working Futures, 1,000 job openings are projected for process, plant and machine operatives in food and farming in North Wales from 2014 to 2024, as well as 1,000 job openings for elementary occupations. There will be a 69.9% increase in those qualified at QCF level 4-6 in food and farming from 2014 to 2024 in North Wales. There will be a 16.1% increase at levels 7-8.

The food and farming industry is part of the North Wales Growth Deal; the Glynllifon Rural Economy Hub Project is planned for the Coleg Meirion-Dwyfor's Glynllifon campus. The Hub aims to support rural economic development, specifically to stimulate economic growth and create jobs. It will comprise a Food Enterprise Park, providing food grade units for both start-ups and established producers, and a Knowledge Centre, creating a pool of practical experience to support innovation and enterprise growth in the region. The project is expected to create at least 80 new jobs and support around 200 businesses. The total cost of the project is £13m.

The Llysfasi Carbon Neutral Farm is a project that aims to create a centre of excellence in productive farming and renewable energy technologies that will facilitate growth in the commercial agricultural sector in North Wales through the efficient use of digital precision primary food production. It will establish a strategic resource in North Wales for innovation in agricultural productivity and sustainability.

### The Workforce

According to Welsh Government priority sector statistics, in North Wales in 2017, there were approximately 15,400 people working in the food and farming industry, which represents 30% of the total workforce in food and farming in Wales. In North Wales in 2017, Gwynedd had the highest number of people working in the industry, at 3,600 people, followed by Wrexham at 3,500 people.

According to our survey, 46% of respondents in the food and farming industry said that their workforce need and use the Welsh language at work; 38% said that their workforce didn't need and use Welsh at work; and 15% said only as a social skill with colleagues.

### Skills Challenges

The majority of respondents (67%) in the food and farming industry reported experiencing skills challenges, with these challenges being most prevalent within Skilled Trades Occupations; Professional Occupations; and Process, Plant and Machine Operatives. The top 3 skills challenges in food and farming are:

1. Specialist skills or knowledge needed to perform the role
2. Problem Solving
3. Knowledge of how your organisation works

### Recruitment





58% of employers in food and farming reported experiencing difficulties in recruiting for specific roles. Amongst the specific roles mentioned were: Quality Assurance and Technical Managers and Automation Engineers; Engineering, Technical, Health and Safety and HR; and skilled Horticulturists.

Staff retention wasn't an issue for 71% of businesses in the food and farming industry. For those with staff retention issues, the main reasons given were 'Not enough people interested in doing this type of work'; and 'Travel to work on public transport a problem/too difficult'.

### Post-16 Provision & Apprenticeships

22% of respondents in food and farming reported employing apprentices. For those not employing apprentices, the main factors listed were that: 'Apprenticeship frameworks do not meet business needs'; and 'Unsure of process in relation to offering one'.

In 2017/18, in North Wales there were 110 apprenticeship programmes in agriculture, 225 in food and drink manufacturing.

### Brexit

Brexit is predicted to have a significant impact on the agricultural industry, and this poses a huge challenge for the sector in the future. The main challenges posed by the prospect of Brexit, as chosen by respondents in the food and farming industry, are increased costs, exporting/importing difficulties, funding, loss of staff and loss of skills.


### Priorities to be addressed

- Upskilling the sector in line with the digitalisation potential to mainstream digital connectivity and digital skills that will deliver efficiency savings, smarter decisions, potential new growth and diversification.

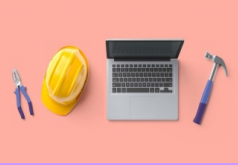




### Sector Matrix

The below matrix brings together all challenges, needs, provision and priorities for our key sectors:

Themes	Occupational / Recruitment need	Welsh Language Skills	STEM Skills (including digital)	Low Carbon Skills	Provision & Apprenticeships	Priorities
<b>Sectors</b>						
<b>Energy &amp; Environment</b> 	Professional occupations; Associate professional occupations; Skilled trade occupations  Good quality project managers and Health & Safety operatives  Specialist engineers  Conservation managers	Medium	High	High	Focus on high quality craft & technical skills at Level 3+  Important to ensure progression routes for individuals with clear entry point at level 2 and upwards to a higher levels.	Increase STEM learners and achievement rate  Upskill workforce with new technology  Expand provision and increase apprenticeship opportunities in response to replacement demand issues



<p><b>Construction</b></p> 	<p>Skilled trade; Associate professional</p> <p>Architects</p> <p>Surveyors</p> <p>Construction managers roles</p>	<p>Low</p>	<p>High</p>	<p>High</p>	<p>Continued focus at level 2 full time with progression to level 3 and level 4 + WBL provision.</p>	<p>Upskill current workforce and new entrants with digital skills and SMART technologies, especially our small and micro businesses;</p> <p>Replacement demand is an issue within this sector and promoting apprenticeship opportunities for young entrants is key;</p> <p>Update the perception of the sector and encouragement of more female entrants.</p>
<p><b>Advanced Manufacturing</b></p> 	<p>Professional &amp; Associate professional</p> <p>Project managers; quality control specialists;</p> <p>Process Engineers</p>	<p>Low</p>	<p>High</p>	<p>High</p>	<p>Increased demand at level 3+ with particular need for Postgraduate routes (MEng qualifications)</p>	<p>Succession planning is needed in light of the age profile of the current workforce and replacement demand;</p> <p>Need to encourage apprenticeships, especially higher-level apprenticeships and degree apprenticeships with clear progression routes.</p>



<p><b>Creative &amp; Digital</b></p> 	<p>Professional; Associate professional; Skilled occupations</p> <p>Higher-level IT and technical skills; Coders; Programmers; IT analysts</p>	<p>High</p>	<p>High</p>	<p>Medium</p>	<p>Continued focus on level 3+ skills with clear entry access point and progression routes</p> <p>Appetite to explore shared apprenticeships, especially in Coding/ Software development</p>	<p>Industry has indicated their appetite to help shape some of the course content and consider shared apprenticeship opportunities;</p> <p>Post-16 provision needs to reflect the current employer demand, rapid changes in technology and an increased and diverse offer of digital skills across all sectors, in order to keep up-to-date with how quickly industry 4.0 is currently utilising these skills;</p> <p>Careers information and guidance for young people is crucial to understanding the transferrable skills developed and navigate career choices in a more holistic way.</p>
<p><b>Tourism &amp; Hospitality</b></p>	<p>Skilled trade occupations</p> <p>Sales and customer services</p>	<p>High</p>	<p>High</p>	<p>High</p>	<p>Continued focus on levels 2 &amp; 3 courses in Tourism and Professional Cookery,</p>	<p>Recruitment is a crucial issue for the sector and this could be exacerbated by Brexit;</p> <p>Outdated perception of the sector could be one of the</p>



	<p>Elementary occupations</p> <p>Chefs; Front of house; Food &amp; beverage assistants</p>				<p>and clear pathway into apprenticeships</p>	<p>biggest barriers to growth and there is a need to raise awareness of the breadth of career opportunities and raise aspiration;</p> <p>Need to promote the value of apprenticeship opportunities.</p>
<p>Health &amp; Social Care</p>	<p>Caring occupations</p> <p>Professional occupations</p> <p>Management</p> <p>Domiciliary care workers</p> <p>Care home managers</p> <p>Nurses</p>	<p>High</p>	<p>Medium</p>	<p>Medium</p>	<p>Continued focus on levels 2 and 3 provision &amp; WBL provision to respond to employer need and registration of domiciliary care workers which starts in September 2020.</p>	<p>Recruitment and retention of workforce and need to upskill the workforce for statutory requirements;</p> <p>Recruitment and retention of the workforce, including updating the perception of the sector;</p> <p>Retain and upskill Leadership and Management roles;</p> <p>Increase and update digital skills</p>
<p>Food &amp; Farming</p>	<p>Skilled trade occupations</p>	<p>Medium</p>	<p>Medium (Agritech)</p>	<p>High</p>	<p>Diversification is key and frameworks for WBL should reflect the rapidly changing</p>	<p>Upskilling the sector in line with the digitalisation potential to mainstream digital connectivity and digital skills that will deliver</p>





	<p>Professional occupations</p> <p>Plant &amp; machine operatives</p>				<p>technology used in agriculture and diversification agenda.</p>	<p>efficiency savings, smarter decisions, potential new growth and diversification</p>
<p><b>Financial &amp; Professional</b></p> 	<p>Sales &amp; customer services</p> <p>Admin &amp; secretarial</p> <p>Managers; professional &amp; associate professional</p>	<p>Medium</p>	<p>High</p>	<p>Medium</p>	<p>Increase needed at level 3+</p> <p>Upskill and train via short courses</p>	<p>The current supply of higher-level skills cannot meet the demand. Increasing the opportunities for businesses and individuals to upskill, train and retrain via short courses at levels 4+ with professional examinations and status is required to fill current vacancies.</p>



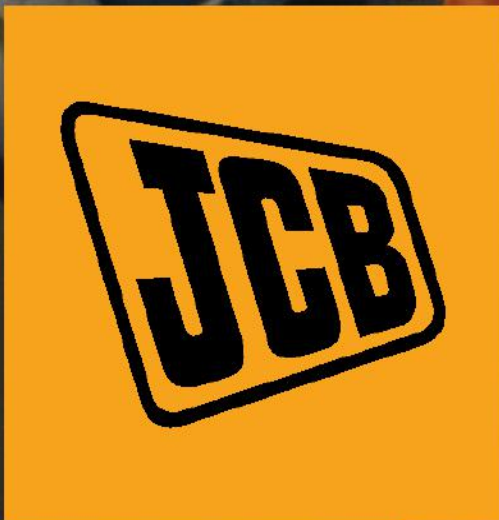
## Skills Challenges

This section will bring all the key messages from previous sections together to outline how we can convert our key challenges into opportunities for our regional skills system.

Some key themes and opportunities are emerging, which, if we are able to address collectively as a region, will ensure a step change in our system and will ultimately set us on the journey towards a more responsive and sustainable skills system.

### Snapshot of North Wales Skills Challenges

- Stubborn Economic Inactivity rates;
- Growth (GVA) is not dispersed evenly across the region;
- Inclusive growth is not extended across the region with pockets of deprivation across the region, and below Wales average earnings in some counties which leads to in-work poverty;
- Demography of the region with a higher than average number of over 65 year old leads to replacement demand issues, especially in some sectors;
- Skills under-utilisation is higher in this region which could reflect the mismatch in our labour market;
- Graduate retention, especially in rural areas;
- Lack of STEM including take-up of STEM subjects post GCSEs;
- Changing skill set requirements such as digital skills and SMART Technology due to technological drivers;
- Work-ready & employability skills;
- Current workforce not 'agile' or resilient to deal with shocks to the economy;
- Perception of sector is a barrier to recruitment and retention;
- Fit for purpose qualifications;
- Need to drive innovation and enterprise skills;
- Brexit implications on some of our key sectors.







## Our Priorities and Actions: Where do we want to be in 2022?

This section brings together our vision, priorities and actions for the region. In considering the evidence, data and what employers and stakeholders have told us, we have identified priorities for the region.

These priorities form our recommendations; a more detailed action plan will follow in autumn 2019.

### Our vision

Our long-term vision is closely aligned to the North Wales Growth Vision:

**“To create an inclusive, and outward looking skills system, which is agile, resilient and can adapt to opportunities and challenges in our region”.**

### Our priorities and recommendations

The following priorities and recommendations have been made with this vision in mind and will dictate the RSP's activity over the next three years. The priorities are captured in three of the most pertinent themes identified throughout the Plan. These are: **building our future workforce and attracting talent; employability skills to ensure inclusivity; promotion of apprenticeship opportunities; and targeting perceptions and progression in careers.** Underpinning all these issues and priorities is the need for more robust LMI.

### Priority 1: Building our future workforce and attracting talent

Building a future skills pipeline workforce is a key priority for us. As our analysis demonstrates, and as we consider the future growth opportunities in our economy, we need to ensure and future-proof our system to consider the following:

1. Ensuring that training provision and facilities meet current and future needs of businesses, individuals and the wider economy;
2. Reduce skills shortages facing businesses in growth sectors by growing and attracting talent;
3. Develop innovation skills for business growth.

What do we need to do?

- Align RSP activities to deliver on skills pipeline issues for our major capital investments in the area, including the North Wales Growth Deal.
- Deliver on the Skills and Employment Programme projects that form part of the wider Growth Vision for North Wales.



- Develop digital skills and a digital-savvy workforce who are able to harness and exploit opportunities in the economy by building on the work of the North Wales Digital Skills project.
- To extend and better equip the future North Wales workforce in STEM by establishing, and maintaining, a North Wales STEM Framework that will enhance and extend learners experience of STEM and promote STEM-based careers in North Wales. This should be a collaborative process, with both private and public sectors working together with the support of local and national government. Linked to this, there is an appetite to develop a series of world-Class STEM hubs across the region.
- Proactively support and seek out opportunities to promote Welsh language skills across our growth sectors.
- Develop and deliver skills interventions to address problems and grasp opportunities arising from Brexit by producing a risk assessment of Brexit implications on our sectors.
- Address the high volume of opportunities generated by replacement demand in sectors such as Construction, Energy & Environment, Advanced Manufacturing, and Health & Social Care.
- Strengthen our employer engagement strategy and work and establish more robust data flow and sharing between partners and Welsh Government. Opportunity to consider the best method of consulting with our sectors on their skills needs.
- Improve the quality and accessibility of regional LMI.
- Develop a talent and retention offer with our HE and wider partners to ensure talent attraction and retention of our graduates to encourage innovation and enterprise growth in the region.

### Priority 2: Skills development for an inclusive North Wales

Employability skills and progression into the workplace are key for an inclusive North Wales. As a region, we want to encourage our young people to develop the right skillsets to be successful within our region. We also want to encourage our young people to develop the right skillsets to be successful within our region. We also want to ensure that we encourage, promote and support adult learners to upskill and reskill to meet the needs of the economy and to promote lifelong learning as a key pillar of the plan. There is a regional aspiration to reduce the full range of labour inequalities and improved results in terms of job access, quality and sustainability for those who are furthest away from the labour market. Further work needs to be done to equip individuals with the desired employability/soft skills needed to gain meaningful employment. We need to consider the following:

1. How we shape programmes to help unemployed people and economically inactive adults to move into work, sustain and progress into employment;
2. Forecast labour market opportunities and shape support for people to access pipeline of new job opportunities, particularly in growth sectors;
3. Improve progression of low-paid workers up the career ladder.

What do we need to do?

- Establish clear remit for our North Wales Advisory Group & Employability Group to ensure the implementation of an employability pathway in the region, which focusses on aligning opportunities and pipeline, particularly in our growth sectors.



- Gain an understanding of the basic employability skills needs of employers and how these can be met.
- Promote lifelong learning, and support adult learners to reskill and upskill throughout their lives including part time and distance learning options.
- Boost programmes which include work experience and industry placements to help develop employability skills and transition into work
- Work with Welsh Government, employers and Grŵp Llandrillo Menai to develop the pilot for the 'Personal Learning Account', which aims to support employed adults earning under the Welsh median income to gain higher-level skills, switch career or progress to a higher level.
- Promote skills and employability programmes such as placements and paid internships

### Priority 3: Promote career perception, pathways and apprenticeship opportunities

The perception of sectors has been highlighted as one of the key concerns across all of our growth sectors. Employers tell us that they have difficulties recruiting, and perception is one of the barriers. Providers inform us that they struggle to recruit onto some courses due to poor perception of that sector by learners, teachers and parents. There is also a lack of understanding about different learner progression routes, and this needs to be tackled if we are to respond to employer challenges. Apprenticeships are seen as a good route into employment, and could provide a viable response to replacement demand in some sectors. As a region we've got more to do to promote this option and opportunities with schools, learners and businesses. Businesses also flagged that apprenticeship frameworks are not always 'fit for purpose'. We will need to consider the following:

1. How we change the perception of our growth sectors;
2. Support more individuals to follow apprenticeship progression routes through provision of high quality information and guidance;
3. Promotion of apprenticeship opportunities, including progression to higher-level and degree apprenticeships;
4. Improve employers awareness and access to apprenticeships.

What do we need to do?

- Develop an Apprenticeship Strategy for the region that aims to raise awareness of apprenticeship opportunities and will include clear pathways and progression to higher-level and degree apprenticeships, especially in STEM and Digital subjects.





- Work with Careers Wales and our partners to ensure that learners are aware of apprenticeship opportunities in our region.
- Work with our partners to target perception of our growth sectors and share intelligence with relevant stakeholders.

Underpinning the above priorities and recommendations is the need to ensure robust intelligence. There is a wealth of intelligence/employer views collected across the region by providers, Careers Wales, DWP and Business Wales. As a region, we need to ensure smarter working practices that share relevant information effectively across partners.

### Conclusion

The next stage will be for the RSP to develop these priorities and recommendations into a more specific and detailed action plan, which will be a shared delivery plan for the region for the next three years. The priorities articulated here will be further refined and delivered in a number of different ways, to make the most of resource capacity and partnership working.