

Cheshire and Warrington Labour Market Assessment

FINAL

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1. INTRODUCTION

The data that informs analysis of the labour market will always have been collected prior to the analysis taking place. Either labour market reporting provides a description of what has happened in the past, or it gives a description of a possible future based on what has happened in the past. At any time, it is important to understand this about labour market intelligence. This understanding is particularly pertinent at a time like this. The shock that Covid-19 is bringing to our economy is such that the only thing that can be said with any certainty is that every straight-line extrapolation of historic labour market data will be wrong.

However, good labour market intelligence becomes more, not less, important at a time like this. It is unarguable that the global pandemic has created a very significant labour market downturn, the worst effects of which must be mitigated. To do this, partners need to understand where the immediate opportunities in our local economy are and how they can best be exploited.

Cheshire and Warrington has a vision to become a growing, inclusive, sustainable, healthy place. To deliver this vision will require a local skills system that addresses itself to the longer-term opportunities as well as the ones that arise immediately. It takes many years to educate and train a workforce, many more of whom will need to be qualified to Level 4 and above; and it is clear from the analysis in this report that that is what Cheshire and Warrington requires.

Arguably, the need for a highly skilled workforce has become more urgent and pressing because of the pandemic. It is widely thought that one of the effects of Covid-19 will be to accelerate previously observed societal trends: for example, increasing digitisation and automation; permanently shifting some roles to more remote working; rapidly changing the character of our Town centres etc. These changes will bring with them an increased demand for skills at higher levels than might otherwise have obtained; and will require an urgency of action to address that demand.

Securing a skills and education system in Cheshire and Warrington that can rise to this challenge will obviously require the delivery of a curriculum that is responsive to current and future demand, which in turn requires entrepreneurial providers using high quality labour market information to shape that curriculum. But it requires more than that. It requires that the opportunity to upskill can be seized by all our people irrespective of where they live, what their current economic circumstances are, or what their gender is. So, this labour market analysis also considers market failures linked to place, disadvantage, and gender.

2. EXECUTIVE SUMMARY

2.1 The Cheshire and Warrington Context

The population profile of Cheshire and Warrington is old and getting older. Job density (and business density) is significantly higher than the national average. This means employer demand for skills must be met by a combination of the education and training of young people, the upskilling and reskilling of the adult workforce, inward commuting from adjacent areas and immigration.

Inward commuting is already high, and the broader context makes increased migration less likely, so the focus will increasingly be on the resident population, and the capacity of the local skills system to deliver what is required.

Whilst the population is ageing, the only age band under 60 that is forecast to grow over the next eight years by more than 10% is the 16-18-year-old population where a growth of 15% is forecast. This growth will put additional pressure on the capacity of the Further Education and skills system.

In 2019, there were over 43,000 businesses in Cheshire and Warrington, employing 500,000 people. There are five sectors that employed more than 40,000. They are: “Manufacturing”; “Wholesale and Retail Trade; Repair of Motor Vehicles and Motorcycles”; “Professional, Scientific and Technical Activities”; “Administrative and Support Service Activities”; and “Human Health and Social Work Activities”.

Sectoral strengths in the Cheshire and Warrington local economy (ie those sectors with the highest location quotients -LQs) include: “Wholesale and retail trade; repair of motor vehicles and motorcycles” (LQ of 1.18); “Professional, scientific and technical activities” (LQ of 1.51); “Financial and insurance activities” (LQ of 1.18); and “Water supply; sewerage, waste management and remediation activities” (LQ of 1.19).

Economic inactivity is increasing in Cheshire and Warrington because of the Covid-19 labour market downturn, with the proportions of the working age economically inactive describing themselves as ‘wanting a job’ or ‘retired’ both increasing. The 50+ claimant count is at record levels. 16-24 claimants of out of work benefits are also at record levels and are concentrated in areas with already elevated levels of deprivation.

2.2 Skills Demand

The sectors which added the most jobs between 2014 and 2019 were “Wholesale and retail trade; repair of motor vehicles and motorcycles” (+13,000 jobs) and “Professional, scientific and technical activities” (c18,000 jobs).

The skills associated with Cheshire and Warrington growth sectors carry a wage premium. Fourteen of the seventeen 2-digit SIC industry sectors that have grown more than 10% between 2015 and 2020 and currently employ more than 3,000 people in Cheshire and Warrington have an average wage higher than the current Cheshire and Warrington average of £28,7000. However, more than 20% of employees in Cheshire and Warrington earn less than the Real Living Wage.

Six ‘Digital occupations’ deliver a wage premium of over £15,000 in Cheshire and Warrington. These are: Information technology and telecommunications directors; IT specialist managers; IT project and programme managers; IT business analysts, architects and systems designers; Programmers and software development professionals; and Information technology and telecommunications professionals n.e.c.

Between 2014 and 2019, every 1-digit SOC occupational area grew in every local authority area with the single exception of “Elementary Occupations” in Warrington.

The greatest increase in the number of 4-digit SOC jobs between 2014 and 2019 was for: Book-keepers, payroll managers and wages clerks; Chartered and certified accountants; and Sales and retail assistants. Each of these occupational areas grew by more than 2,000 jobs in this period.

Data from job postings indicates that demand for skills in Nursing and Warehousing and, to a lesser extent in Accounting and SQL are higher than might be expected if demand in Cheshire and Warrington were to mirror the national picture.

Demand for skills is likely to be increased by key economic development initiatives that will drive demand for higher level technical skills. These include:

- The High-Speed Growth Corridor that runs from Crewe to Warrington. This includes significant opportunities around hub stations at Crewe (HS2) and Warrington Bank Quay (HS2 / Northern Powerhouse Rail). It will build on traditional strengths in high value manufacturing, engineering and logistics as well as growing financial and professional services in Crewe and Warrington.
- The digital infrastructure plan for Cheshire and Warrington which includes: enabling Gigabit Capable infrastructure; extended 4G rollout and the encouragement and promotion of the role of next generation mobile technology, including 5G trials; and driving adoption of digital connectivity by increasing participation/skills and take-up of services making sure people have the right skills required to realise the benefits and opportunities of enhanced digital connectivity
- The £1 billion Hynet Project, which has the potential to add £17 billion of GVA, create 5,000 new jobs by 2025 and save over 1 million tonnes of CO2 per annum: the equivalent of taking more than 600,000 cars off the road.
- Proposals for a £40m National Translational Technology Development Centre and a Catapult Quarter to enable stimulus and capacity building for the UK diagnostics sector.

If the sectoral pattern of redundancies in Cheshire and Warrington brought about by Covid-19 is similar to the national picture then the sectors worst affected to date (over 1,000 redundancies) in Cheshire and Warrington are likely to have been: Wholesale, retail & repair of motor vehicles; Accommodation & food services; Professional, scientific & technical activities; and, Administrative & support services.

It is widely anticipated by expert commentators (including the Office for Budget Responsibility) that there will be a spike in unemployment in the second quarter of 2021 following the end of the furlough scheme, driven by redundancies of previously furloughed workers. Those people at most risk of this are likely to be those on furlough at the end of September 2020. There was a higher proportion of female workers on furlough than male at the end of September 2020 in Cheshire and Warrington.

Sectors estimated to have at, or above, 3,000 employees on furlough in Cheshire and Warrington at the end of September 2020 were: Manufacturing; Wholesale and retail trade; Accommodation and food; Professional, scientific, and technical; Administrative and support services; and Arts, entertainment, and recreation.

2.3 Skills Supply

Residents of Cheshire and Warrington have higher skills and higher skilled occupations. However, the proportion of the workforce qualified to Level 3 or above is approximately 20 percentage points lower than in Germany. German levels would see over 100,000 more people in Cheshire and Warrington with this type of qualification. This equates to approximately 14,000 full Level 3 achievements per annum between now and 2028.

The delivery of substantial Level 3 qualifications for adults is low and declining across Further Education and apprenticeships in Cheshire and Warrington. In 2018/19, there were 6,049 substantial L3 starts across both routes. On current success rates that might equate to c4,500 achievements per annum. Compared to lower Levels of learning in FE, the take up of Certificates and Diplomas at Level 3 by adults (2016-2019) is low. For example, a ward with a rate of 9 learning aim starts per 1000 adult population would appear in the top decile for Level 3 Certificate and Diploma delivery and the bottom decile for Level 2 Certificate and Diploma delivery.

GCSEs in English and Maths are prerequisites for success at Level 3. There has been a 40% decline over three years in the number of adults starting GCSE English and Maths in Cheshire and Warrington.

Although a higher proportion of employers in Cheshire and Warrington provided training than their English counterparts, a lower proportion of employees received training in Cheshire and Warrington. Overall, 57% of employees received some form of training compared to 60% in England. The proportion of employees trained to a qualification was 9% in Cheshire and Warrington compared to 11% in England.

Too few disadvantaged 16-year olds progress to a sustained place in education; too few disadvantaged young people achieve Level 2 aged 19; and too few disadvantaged young people achieve a Level 3 aged 19. The attainment of Young People is linked to where they live: young people do less well in the parliamentary constituencies of Ellesmere Port and Neston and Crewe and Nantwich than elsewhere. 12% of children do not have satisfactory access to the internet.

There are very significant gender disparities in Level 3 delivery to young people across all routes (apprenticeship, vocational, academic). This further embeds a significant structural deficiency in the labour market where some occupations only draw on the talents of half of the population. For example, males started 75% of apprenticeships in Information and Communication Technologies, 98% in Construction, Planning and the Built Environment, 93% in Engineering and Manufacturing Technologies. Conversely 92% of Advanced Apprenticeships in Health, Public Services and Care were started by females.

The delivery of “digital skills” learning aims at all levels in FE has decreased by 19% from 2016/17 to 2018/19 (a 22% decrease for Level 3). The proportion of female participation in digital skills in Cheshire and Warrington is too low at every level, and across all ages, being as low as 25% for Level 4+ provision.

In 2018/19 Halton, Wirral, St Helens and Wigan each had in excess of 1,000 adult (19+) learners enrolled with Cheshire and Warrington providers. Funding for adult learning has now been devolved (from 2019/20) in all these places and these volumes are expected to have decreased significantly as a consequence in 2019/20.

10% of adult apprentices reported that they had a disability, learning difficulty or health problem. This is less than half the proportion of adult learners in Further Education. It is not clear why the difference between the two routes should be so marked.

In 2018/19, one fifth of all learning aims for adults in Cheshire and Warrington were funded by ESF. Only a quarter of ESF funded learning aims for adults were started by females.

2.4 Supply and Demand

High job posting intensity indicates market failure in the labour market and suggests that the following occupational areas should be considered priorities for action by skills and employment partners: Managers and directors in storage and warehousing; Programmers and software development professionals; IT business analysts, architects and systems designers; Web design and development professionals; Quantity surveyors; IT user support technicians; Book-keepers, payroll managers and wages clerks; Customer service occupations.

When asked in the Employer Skills Survey about the main causes of having a hard to fill vacancy, employers in Cheshire and Warrington were more likely than their English counterparts to identify: low number of applicants with the required skills; not enough people interested in doing this type of job; and a low number of applicants generally. Cheshire and Warrington employers were almost twice as likely to cite remoteness/poor public transport as a main cause of hard to fill vacancies as those in England (18% vs 10%). This is consistent with Cheshire and Warrington's scores for the 'Barriers to Housing and Services Domain' of the 2019 Index of Multiple Deprivation.

The Employer Skills Survey has found that employers in Cheshire and Warrington are much more likely to have skills shortage vacancies in high skill roles than their counterparts in England and say they are more likely to have bottom line impacts as a result of skills shortage vacancies than is the case in England.

Levels of replacement demand to 2027 are expected to vary significantly for different occupations, ranging from 22% to 42%. Occupational areas that are expected to experience replacement demand of more than 35% are: Caring personal service occupations; Other managers and proprietors; Health professionals; Corporate managers and directors; Business, media, and public service professionals; Teaching and educational professionals; Transport and mobile machine drivers and operatives. Providers should offer curriculum pathways that can lead to these occupations and careers and enterprises organisations should flag these types opportunities with young people.

In Cheshire and Warrington, there is an excellent alignment of FE provision with the most deprived areas for Adult Skills (as measured on IMD 2019), however, there are identified neighbourhoods in Crewe, Middlewich, Sandbach and Knutsford that might benefit from proactive outreach from providers; possibly with community learning providers linking to mainstream FE programmes. Analysis of learner participation by neighbourhood also suggests that digital skills participation should be promoted in several identified neighbourhoods.

Among those of working age, the economically inactive are the most likely to be internet non-users, particularly those adults on long-term sick leave or disabled. To address this, those areas most deprived as measured on the Employment Domain of the IMD2019 should be targeted for Digital Inclusion investment.

Demand for skills at Level 3 and above is forecast to increase 71,000 in Cheshire and Warrington, from 333,000 in 2017 to 404,000 qualified workers in 2027. Demand for skills at level 4 and above is forecast to increase by 75,000 from 216,000 to 291,000 between 2017 and 2027. This means that

Cheshire and Warrington needs approximately 7,500 per annum qualifying at Level 3. The age profile of the Cheshire and Warrington workforce means that inflows of young people into the workforce will be more than offset by outflows of older residents out of the workforce over the next few years. This means that the adult skills system will need to play a key role in delivering the new Level 3 and above qualifications that the economy needs. This presents a significant challenge to a system that is estimated to currently be delivering approximately 4,500 Level 3 qualifications to adults per annum in Cheshire and Warrington.

2.5 Skills Strengths and Issues

The table below summarises the key skills strengths and issues captured by the analysis.

| Cheshire and Warrington Labour Market Summary Strengths and Issues | |
|--|--|
| Skills Strengths | Skills Issues |
| <ul style="list-style-type: none"> The 16-18-year-old population is forecast to grow 15% by 2028. Most local growth sectors carry a wage premium as do digital occupations. Residents have higher skills, and work in higher skilled occupations, than England There is an excellent alignment of FE delivery with those out of work and with the most deprived areas A higher proportion of employers train their employees in C&W than is the case in England. More adults and young people travel into C&W to learn than travel out, particularly at L3+. Over 400 non-resident adults started L4+ Engineering programmes with C&W providers in the last three years. The overall FE achievement rate for C&W in 2018/19 was 87.8%, 1.8% higher than for England. The achievement rate for 19+ was 1.5% higher in C&W and, at 86%, the achievement rates for 16-18 year olds exceeded the national achievement rate of 82.6% by 3.4%. The overall apprenticeship achievement rate for Cheshire and Warrington residents in 2018/19, at 65.1%, was slightly higher than the overall national apprenticeship achievement rate of 64.7%. In 2019 CWLEP invested £5 million in the specialist equipment needed to deliver digital and STEM-related training and education. | <ul style="list-style-type: none"> Not enough people get the information they need to make informed decisions about the subjects to study and the careers to follow The population is old and getting older The employment rate is decreasing, and economic inactivity is increasing More than 20% of C&W employees earn less than the Real Living Wage Economic development and replacement demand will accelerate demand for L4+ skills. 75k more will be needed by 2027. Starts on substantial L3 qualifications for adults is low and declining. Starts on GCSE English and Maths for adults are declining. The current annual volume of adult L3 achievements (c4.5k) will not deliver the volume of people required for L3+ roles by 2027 (71k), and the number of L3+ people leaving the workforce will exceed the number of L3 19 yr olds joining the workforce. A lower proportion of employees receive training in C&W compared to England, and a lower proportion of C&W employees in receipt of training are training towards qualifications than is the case for their English counterparts. In 2018/19, the achievement rate for 16-18 L2 Apprenticeships was 61.7% - 4.1% lower than England. The achievement rate was lower with every type of provider in C&W. Significant redundancies are expected by Q2/3 2021. Women are at higher risk. Disadvantage and place of residence constrains the progression and achievement of some young people Gender disparities in learning embed significant structural problems in the labour market where some occupations only draw on the talents of half of the population. |

2.6 Conclusions

The data and analysis in this report has been subject to extensive discussion with key stakeholders through the Cheshire and Warrington Employers' Skills and Education Board (the employer-led Skills Advisory Panel for Cheshire and Warrington), the Cheshire and Warrington Digital Skills Partnership, and the Cheshire and Warrington Data and Labour Market Intelligence Steering Group, the following key issues for action have been identified:

- The labour market downturn that has been triggered by the global pandemic must be mitigated, and action needs to be taken to ensure a recovery that delivers growth and inclusion
- To meet future employer demand for technical, green, and digital skills, Cheshire and Warrington needs 71,000 more adults qualified to Level 3+, and 75,000 adults qualified to Level 4+ by 2027
- There are clear market failures that can be identified by hard to fill vacancies in specific occupations which can be addressed by local partners' action
- The gap between those in receipt of Free School Meals (FSM) and those not in receipt of FSM for progression to a sustained place in education at Key Stage 4 is too big (12-14%), as it is for attainment of Level 3 at age 19 (29-36%)
- Where young people live in Cheshire and Warrington links to their level of attainment
- There are large gender disparities that need to be addressed in Apprenticeships, Diplomas and A Levels in particular subject/occupational areas including digital.

3. ANALYSIS AND DEFINITION OF THE LOCAL LANDSCAPE

This chapter provides an overview of the Cheshire and Warrington Labour market, with sections on:

- Population
- Employment, unemployment, and benefits
- Jobs, GVA and business stock
- Industrial structure
- Occupational Structure
- Earnings and Income
- Deprivation

3.1 Population

The Office for National Statistics (ONS) estimates that Cheshire and Warrington has a population of 930,800 people with 380,800 resident in Cheshire East, 340,500 resident in Cheshire West and Chester and 209,500 resident in Warrington. Overall, the population in Cheshire and Warrington LEP is 51% female, 49% male; with a similar gender split being reflected in all three local authorities.

| Population Estimates for Cheshire and Warrington and constituent Local Authorities | | | |
|--|---------|---------|---------|
| | Male | Female | Total |
| Cheshire and Warrington | 456,300 | 474,500 | 930,800 |
| Cheshire East | 186,300 | 194,500 | 380,800 |
| Cheshire West and Chester | 165,900 | 174,600 | 340,500 |
| Warrington | 104,100 | 105,500 | 209,500 |

Source: Population estimates - local authority based by five-year age band, ONS Crown Copyright Reserved [from NOMIS April 2020]

The working age population (ie aged 16-64) constitutes a lower percentage of the total population for Cheshire and Warrington LEP and all three of its Local Authorities than is the case for Great Britain. This is also true for both the male and female working age population.

| Population aged 16-64 (2018) | | | | | | |
|------------------------------|-----------------------------|-------------------|-------------------------------|----------------|----------------|-------------------|
| | Cheshire And Warrington (%) | Cheshire East (%) | Cheshire West And Chester (%) | Warrington (%) | North West (%) | Great Britain (%) |
| All People Aged 16-64 | 60.5 | 59.3 | 60.6 | 62.5 | 62.3 | 62.7 |
| Males Aged 16-64 | 60.9 | 59.7 | 60.8 | 63.3 | 62.8 | 63.4 |
| Females Aged 16-64 | 60.1 | 58.9 | 60.5 | 61.7 | 61.8 | 62.0 |

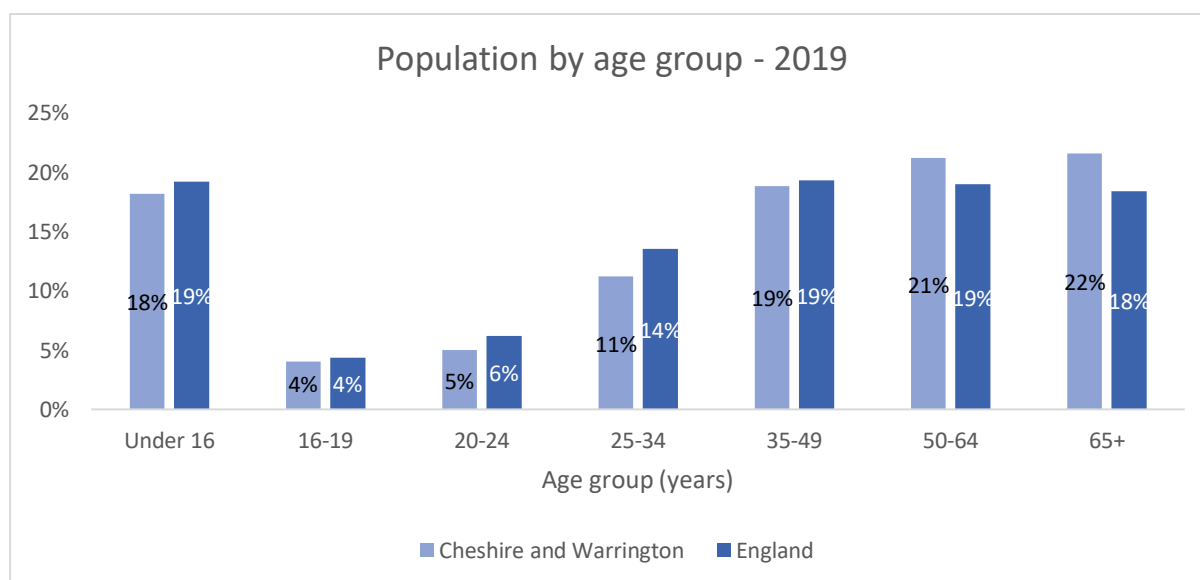
Source: ONS Population estimates - local authority based by five-year age band, Notes: % is a proportion of total population

There is no reliable information which is current on the ethnic makeup of the Cheshire and Warrington LEP population or of the populations of its constituent Local Authorities. The most recent available data on ethnicity is from the 2011 Census. This information is presented in the table below. The percentage identifying themselves as 'White' in the 2011 Census was 96.7% in Cheshire East, 97.4% in Cheshire West and Chester, and 95.9% in Warrington.

| Ethnicity of the Population by Local Authority | | |
|--|---------------------------------------|------------|
| Local Authority | Ethnicity | Percentage |
| Cheshire East | White | 96.7 |
| | Mixed/multiple ethnic groups | 1 |
| | Asian/Asian British | 1.6 |
| | Black/African/Caribbean/Black British | 0.4 |
| | Other ethnic group | 0.2 |
| Cheshire West and Chester | White | 97.4 |
| | Mixed/multiple ethnic groups | 0.9 |
| | Asian/Asian British | 1.2 |
| | Black/African/Caribbean/Black British | 0.3 |
| | Other ethnic group | 0.2 |
| Warrington | White | 95.9 |
| | Mixed/multiple ethnic groups | 1.1 |
| | Asian/Asian British | 2.4 |
| | Black/African/Caribbean/Black British | 0.3 |
| | Other ethnic group | 0.2 |

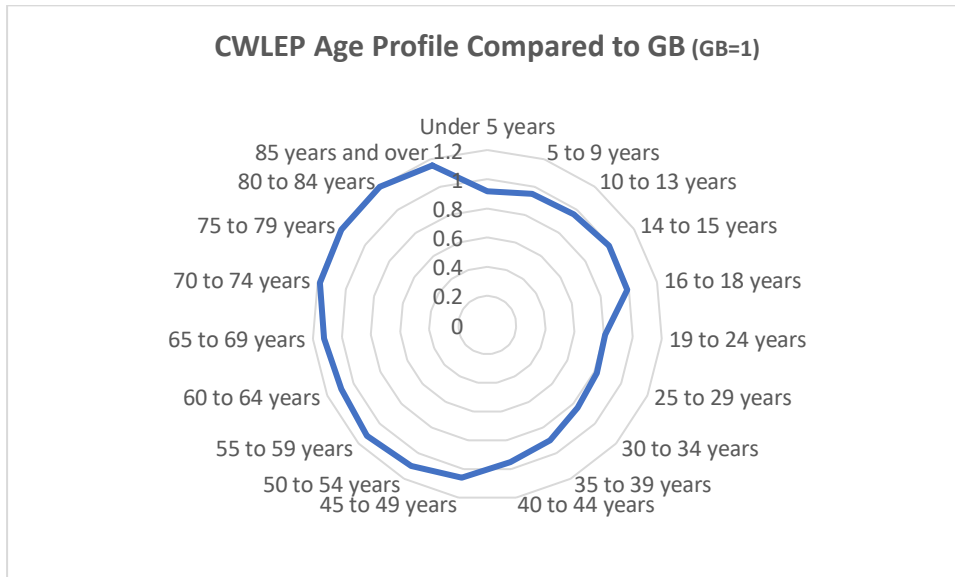
Source: Race Disparity Unit/Census 2011

The age profile of Cheshire and Warrington's population is older than for England as is shown in the chart below.



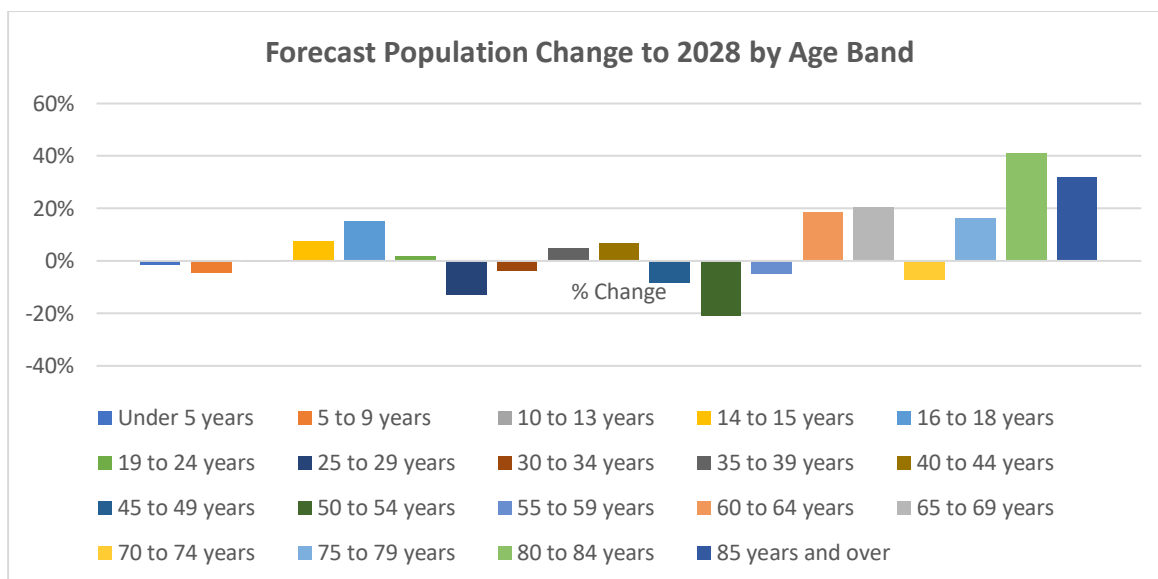
Source: SAP Core Indicators Data/ONS

The population of Cheshire and Warrington LEP also has an older profile than is to be found for Great Britain. This is illustrated in the diagram below. The Great Britain age profile would be a circle with a radius of 1. As can be seen from the diagram, Cheshire and Warrington’s age profile is skewed towards the older age groups. In particular, the proportion of those aged between 19-39 (for every 5 year age band in this range) is lower than the national, whereas the proportion of those aged 45 and above (for every 5 year age band in this range) is higher.



Source: EMSI Analyst/ONS

Not only is the age profile of Cheshire and Warrington older than for the country, but the area’s population is also forecast to age further. The chart below illustrates the forecast changes to the LEP’s population by 2028 by age bands. It can be seen from this that quite significant population increases are forecast for 5 of the 6 age bands over 60 (the exception being for those aged 70-74 years). Conversely the only age band forecast to grow by more than 10% for the under 60s is the 16–18-year-old population where a growth of 15% is forecast for 2028. This population growth of 16–18-year-olds will put pressure on the capacity of the Further Education system in Cheshire and Warrington.



Source: EMSI Analyst/ONS

This pattern of change over the next 8 years sees large outflows from the working age population which will not be fully offset by inflows of young people. This will mean that a significant proportion of employers’ future demand for skills will need to be met from either the existing resident adult population, or increased inward commuting, or increased migration, rather than solely from the in-flow of skilled young people. Inward commuting is already high, and the broader context makes increased migration less likely, so the focus will increasingly be on the resident population. This will put increased pressure on the capacity of the existing Further Education system in Cheshire and Warrington.

Over the last decade, net inward migration (local and international) has been positive but relatively small scale in all three local authority areas, amounting to less than 40,000 people over the decade. At the time of writing the future trade relationship with the European Union had not been agreed so it is difficult to establish whether similar migration patterns are likely to pertain in the future.

| Net Migration in Cheshire and Warrington, Local and International, 2010-2019 | | | |
|--|-------------------|-----------|-------|
| | Net International | Net Local | Total |
| Cheshire East | 1462 | 16366 | 17828 |
| Cheshire West and Chester | 1410 | 13135 | 14545 |
| Warrington | 3314 | 3599 | 6913 |
| Cheshire and Warrington | 6186 | 33100 | 39286 |

Source: ONS, Local Area Migration Indicators

3.2 Employment, unemployment, and benefits

The table below sets out the data for economic activity, employment, self-employment, and unemployment for Cheshire and Warrington and its three constituent Local Authorities, benchmarked against the same indicators for Great Britain and the North West Region. The percentage economically active, the percentage in employment and the percentage who are employees are all higher in Cheshire and Warrington and two of its three constituent Local

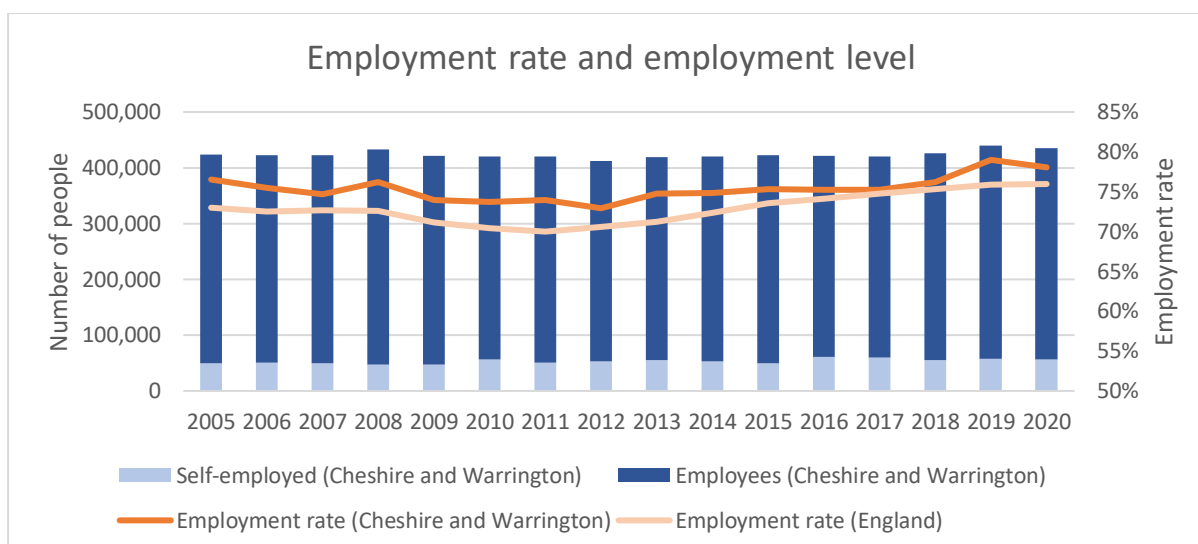
Authorities (Cheshire East and Warrington) than is the case for Great Britain. This applies for both males and females.

This is not the case for Cheshire West and Chester, where the economic activity rate is slightly lower than GB. The % of males that are employees, the % of females that are economically active and the % of females that are in employment in Cheshire West and Chester are all lower than GB.

The percentage unemployed (International Labour Organisation definition – ILO) is lower in the LEP and its three constituent Local Authorities than is the case for Great Britain with unemployment standing at 3.4% for the LEP compared to 4% for Great Britain. The percentage in self-employment is slightly lower in Cheshire and Warrington than for Great Britain. This is the case for both males and females.

| Employment and Unemployment (%), Jul 2019-Jun 2020 | | | | | | |
|---|--|--------------------------|--|-------------------|-----------------------|--------------------------|
| | Cheshire And Warrington | Cheshire East | Cheshire West and Chester | Warrington | North West | Great Britain |
| All People | | | | | | |
| Economically Active [†] | 82.3 | 83.6 | 79.0 | 85.1 | 78.3 | 79.4 |
| In Employment [†] | 79.5 | 80.7 | 76.4 | 82.3 | 75.2 | 76.2 |
| Employees [†] | 69.0 | 70.7 | 66.2 | 70.5 | 65.1 | 65.2 |
| Self Employed [†] | 10.3 | 10.0 | 9.9 | 11.5 | 9.9 | 10.8 |
| Unemployed [§] | 3.4 | 3.5 | 3.3 | 3.4 | 3.9 | 4.0 |
| Males | | | | | | |
| Economically Active [†] | 86.3 | 87.5 | 83.5 | 88.6 | 82.8 | 83.4 |
| In Employment [†] | 83.0 | 83.9 | 80.7 | 85.3 | 79.4 | 79.9 |
| Employees [†] | 69.5 | 72.8 | 65.2 | 70.8 | 65.6 | 65.6 |
| Self Employed [†] | 13.5 | 11.0 | 15.5 | 14.2 | 13.7 | 14.0 |
| Unemployed [§] | 3.8 | 4.1 | 3.4 | 3.7 | 4.0 | 4.2 |
| Females | | | | | | |
| Economically Active [†] | 78.3 | 79.9 | 74.4 | 81.6 | 73.8 | 75.3 |
| In Employment [†] | 75.9 | 77.6 | 72.0 | 79.2 | 71.0 | 72.6 |
| Employees [†] | 68.5 | 68.6 | 67.2 | 70.1 | 64.6 | 64.8 |
| Self Employed [†] | 7.2 | 9.0 | 4.3 | 8.8 | 6.2 | 7.5 |
| Unemployed [§] | 3.0 | 2.9 | 3.2 | 2.9 | 3.8 | 3.6 |
| Source: ONS annual population survey, [†] = numbers are for those aged 16 and over, % are for those aged 16-64, [§] = numbers and % are for those aged 16 and over. % is a proportion of economically active | | | | | | |

Between 2005 and 2020, the employment rate in Cheshire and Warrington has consistently been higher than England and has grown in this time from 76% to 79%. There has also been growth in the numbers of self-employed in the sub-region, rising from 49,000 in 2005 to 58,000 in 2020. With the onset of the pandemic the employment rate gap between Cheshire and Warrington has closed somewhat.



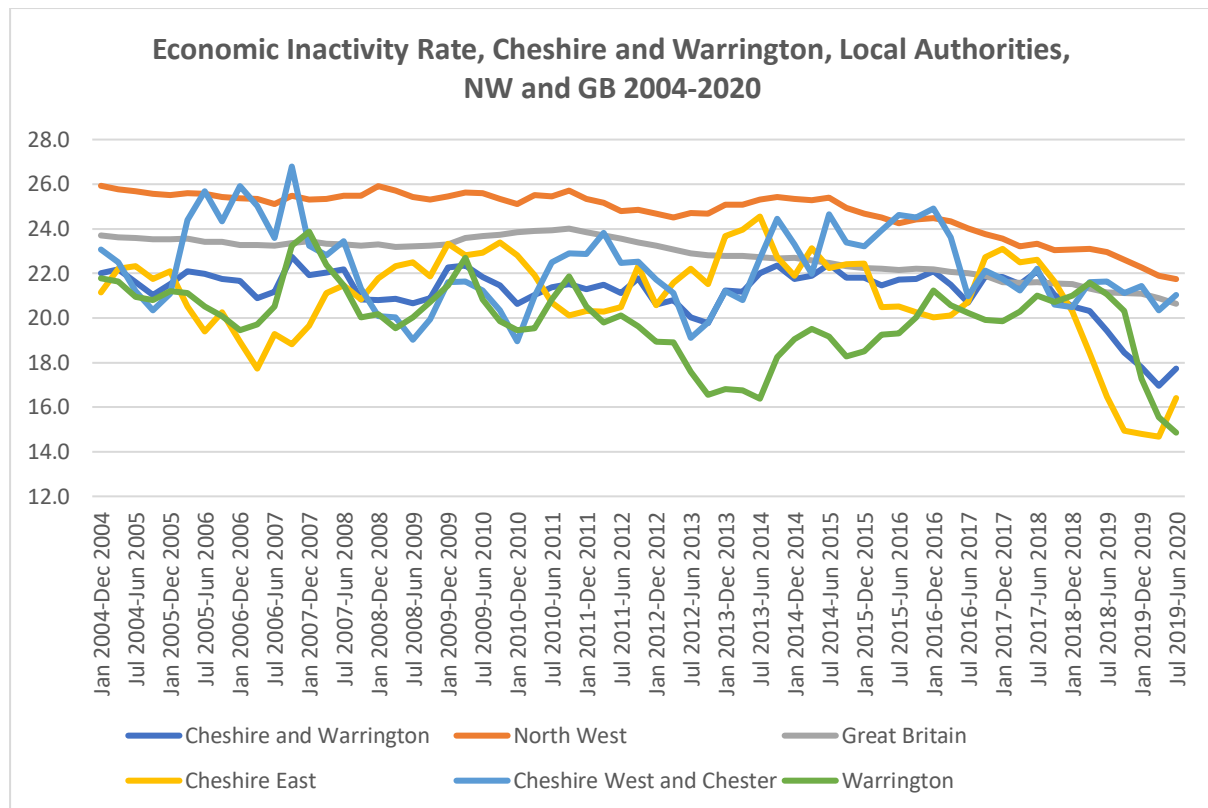
Source: SAP Core Indicators/APS (Oct 2019 – Sep 2020)

It can be seen from the table below that at 17.7%, Cheshire and Warrington LEP had a lower level of economic inactivity than the North West Region (21.7%) and Great Britain (20.6%). Economic inactivity was also lower than Great Britain in both Cheshire East (16.4%) and Warrington (14.9%). Economic inactivity was, however, slightly higher than Great Britain in Cheshire West and Chester (21%). Compared with Great Britain, fewer people were economically inactive in Cheshire and Warrington because they were a student; or because they had family responsibilities; or because they were long-term sick. On the other hand, significantly more were economically inactive due to retirement in Cheshire and Warrington LEP than in Great Britain. 20.8% of those economically inactive in the LEP area say that they want a job.

| Economic inactivity (Jul 2019-Jun 2020) | | | | | | |
|--|---------|-------------------|-------------------------------|----------------|----------------|-------------------|
| | C&W (%) | Cheshire East (%) | Cheshire West And Chester (%) | Warrington (%) | North West (%) | Great Britain (%) |
| All People | | | | | | |
| Total | 17.7 | 16.4 | 21.0 | 14.9 | 21.7 | 20.6 |
| Student | 23.9 | 18.9 | 24.4 | 32.4 | 24.6 | 26.3 |
| Looking After Family/Home | 18.8 | 15.1 | 22.7 | 17.1 | 21.4 | 21.5 |
| Temporary Sick | ! | ! | ! | ! | 2 | 1.8 |
| Long-Term Sick | 20.6 | 22.9 | 17.9 | 22.0 | 27.2 | 23.3 |
| Discouraged | ! | ! | ! | ! | 1 | 0.5 |
| Retired | 23.0 | 22.1 | 27.3 | 14.7 | 13.9 | 13.6 |
| Other | 11.9 | 18.1 | 6.1 | 13.2 | 10.4 | 12.9 |
| Wants A Job | 20.8 | 18.6 | 21.1 | 24.0 | 19.0 | 21.5 |
| Does Not Want A Job | 79.2 | 81.4 | 78.9 | 76.0 | 81.0 | 78.5 |
| <i>Source: ONS annual population survey, ! Estimate is not available since sample size is disclosive, Notes: numbers are for those aged 16-64, % is a proportion of those economically inactive, except total, which is a proportion of those aged 16-64</i> | | | | | | |

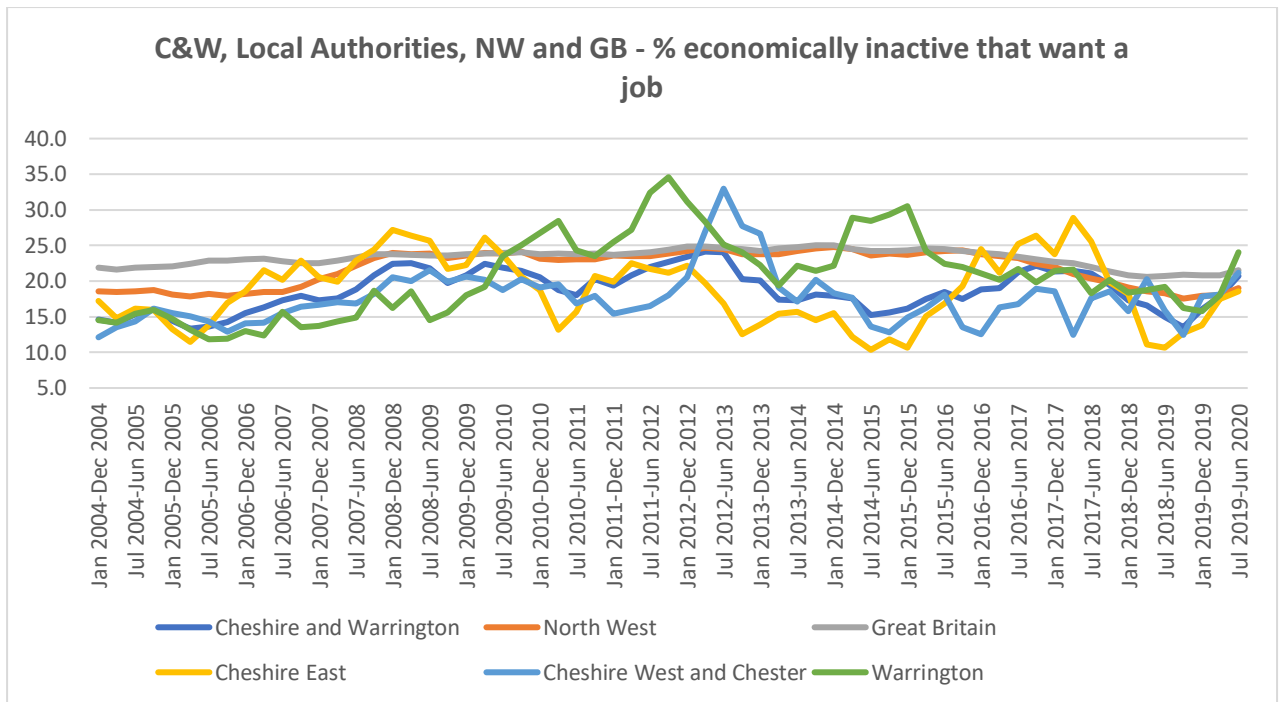
Following declines in economic activity in Cheshire and Warrington after the twelve months July 2017 to June 2018, the economic inactivity rate has started to increase in the 12-month period July 2019 to June 2020. The final quarter of this twelve months overlaps the onset of the pandemic.

Whilst the latest data confirms that the economic inactivity rate continues to be lower in Cheshire and Warrington than in the North West or Great Britain, the gap appears to be closing with a sharper uptick in the Cheshire and Warrington rate. This appears to be driven by increases in the economic inactivity rate in Cheshire East and Cheshire West and Chester.



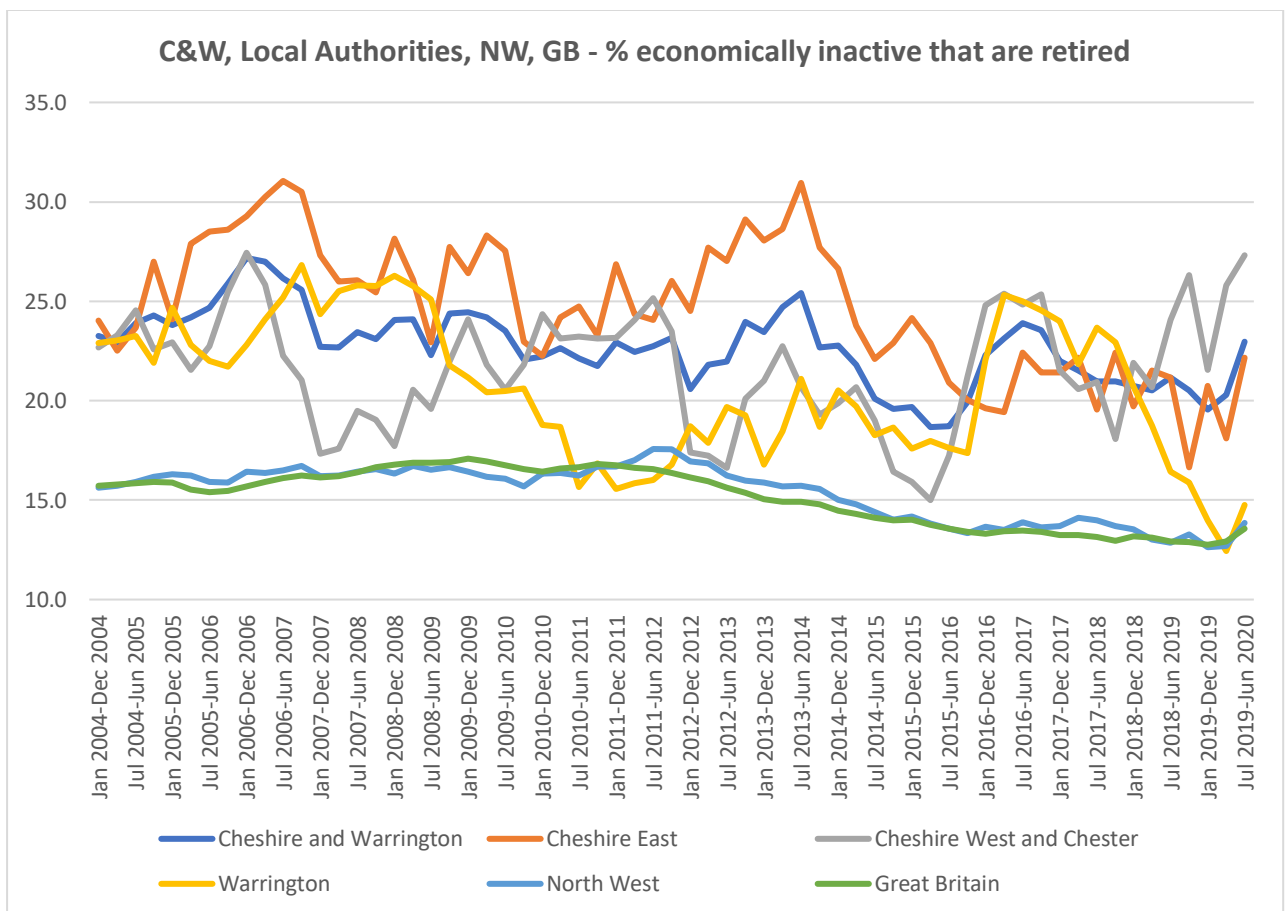
Source: NOMIS, Annual Population Survey

The two charts below provide data on the proportion of the economically inactive that want a job and the proportion of the economically inactive that say they have retired. Proportions for both have increased in Cheshire and Warrington. This together with the overall increase in economic inactivity suggests that there are some initial indications that some formerly employed people have moved straight from employment to inactivity during the pandemic – either with the intention of seeking work later or with the intention of retiring early.



Source: NOMIS, Annual Population Survey

The proportion economically inactive that want a job has increased in all three local authorities (graph above). Similarly, the proportion that state that they are now retired has increased in all three local authorities (graph below).



Source: NOMIS, Annual Population Survey

The percentage of households that are workless is lower in Cheshire and Warrington, Cheshire East, Cheshire West and Chester, and Warrington than is the case for either the North West Region or Great Britain.

| Workless Households (Jan-Dec 2019) | | | | | | |
|--|--------------------------------|----------------------|----------------------------------|-------------------|-------------------|----------------------|
| | Cheshire And Warrington | Cheshire East | Cheshire West And Chester | Warrington | North West | Great Britain |
| Percentage of Households that are Workless | 11.5 | 11.4 | 12.4 | 10 | 15.6 | 13.9 |

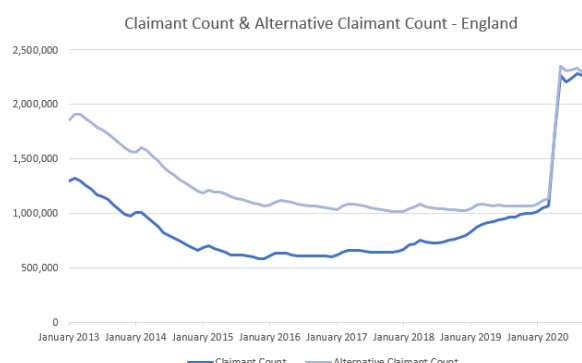
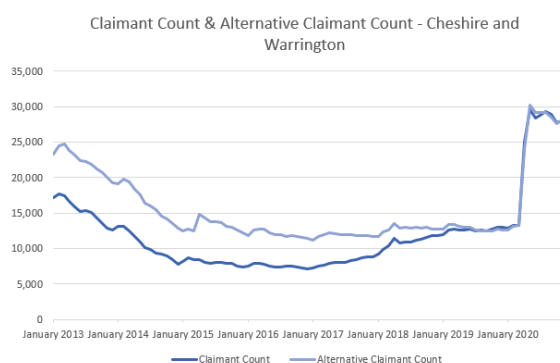
Source: ONS annual population survey - households by combined economic activity status

There is a similar picture for the claimant count as can be seen from the Table below. The percentage claiming benefit is lower in Cheshire and Warrington and all three Local Authorities as compared with the North West Region and Great Britain. This is also the case for the claimant count for males and females.

| Claimant Count September 2020 | | | |
|--------------------------------------|--------------|-------------|---------------|
| | Total | Male | Female |
| Cheshire and Warrington | 5.2 | 6.2 | 4.3 |
| Cheshire East | 4.9 | 5.7 | 4.1 |
| Cheshire West and Chester | 5.5 | 6.6 | 4.4 |
| Warrington | 5.3 | 6.3 | 4.3 |
| North West | 7.1 | 8.8 | 5.5 |
| Great Britain | 6.5 | 7.8 | 5.3 |

Source: NOMIS, Claimant Count

The charts below illustrate the data over time for the Claimant Count and Alternative Claimant Count for England and Cheshire and Warrington



Source: SAP Core Indicators/Claimant Count/Alternative Claimant Count

The Table below presents information on the claimant count by age. A higher percentage of 18-24 and 18-21 year olds are claimants in Cheshire and Warrington than is the case for the population as a whole. This is also the case for Great Britain and the North West Region. In the recession that has

been triggered by the Covid-19 crisis, it will be the young that will be most adversely affected in the jobs market. The level of youth unemployment in the LEP should be kept under close review.

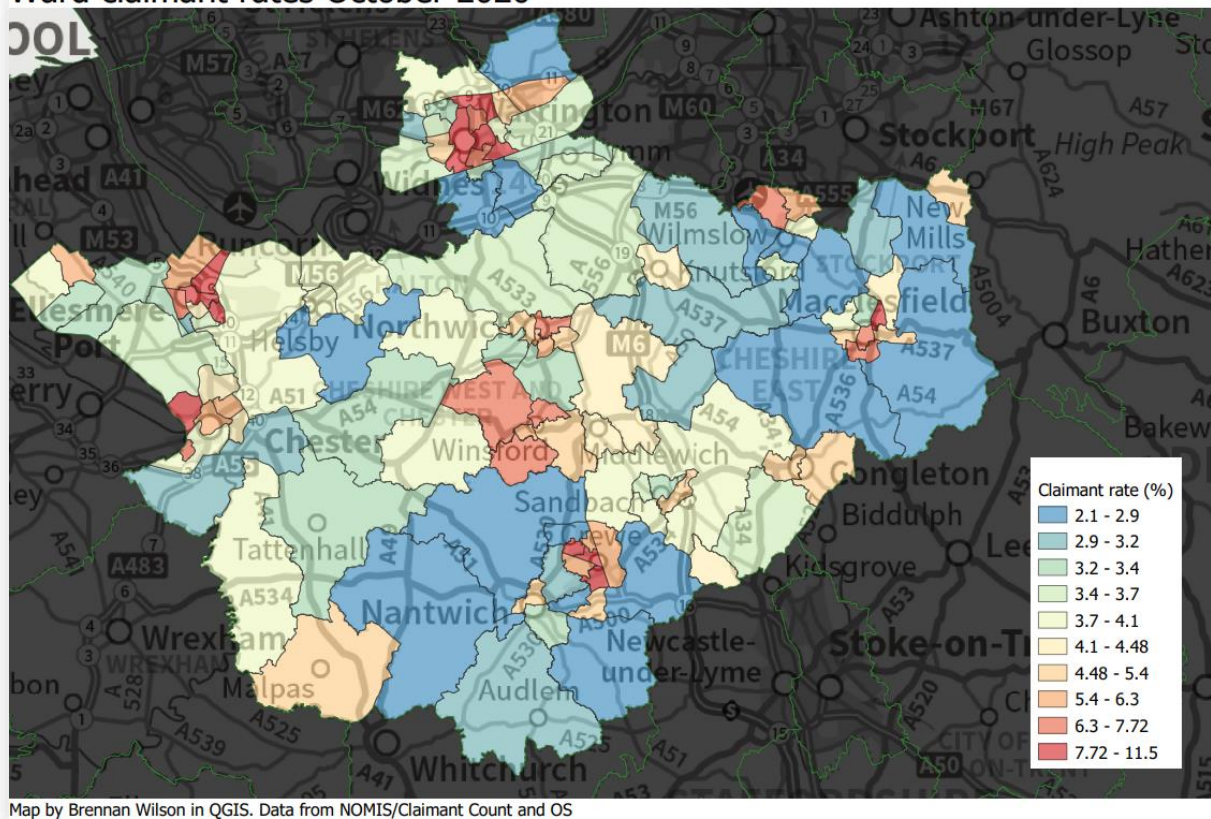
| Claimant count by age - not seasonally adjusted (September 2020) | | | | | | |
|---|------------------------------------|--------------------------|--------------------------------------|-----------------------|-----------------------|--------------------------|
| | Cheshire And Warrington (%) | Cheshire East (%) | Cheshire West And Chester (%) | Warrington (%) | North West (%) | Great Britain (%) |
| Aged 16+ | 5.2 | 4.9 | 5.5 | 5.4 | 7.1 | 6.5 |
| Aged 16 To 17 | 0.3 | 0.1 | 0.4 | 0.4 | 0.5 | 0.4 |
| Aged 18 To 24 | 9 | 9.1 | 8.9 | 9 | 10.4 | 9.4 |
| Aged 18 To 21 | 8.7 | 8.8 | 8.2 | 9.6 | 10.3 | 9.2 |
| Aged 25 To 49 | 5.8 | 5.5 | 6.2 | 5.9 | 8 | 7.1 |
| Aged 50+ | 3.6 | 3.4 | 3.7 | 3.8 | 5 | 4.9 |

Source: ONS Claimant count by sex and age, Note: % is number of claimants as a proportion of resident population of the same age

The map below presents information on the claimant rate by ward in October 2020. The wards with the highest rates (shaded dark red) are: Westminster; Central & Grange; Crewe Central; Wolverham; Blacon; Bewsey and Whitecross; Fairfield and Howley; Crewe South; Poplars and Hulme; Crewe St

Barnabas; Macclesfield Hurdsfield; and Latchford East.

Ward claimant rates October 2020

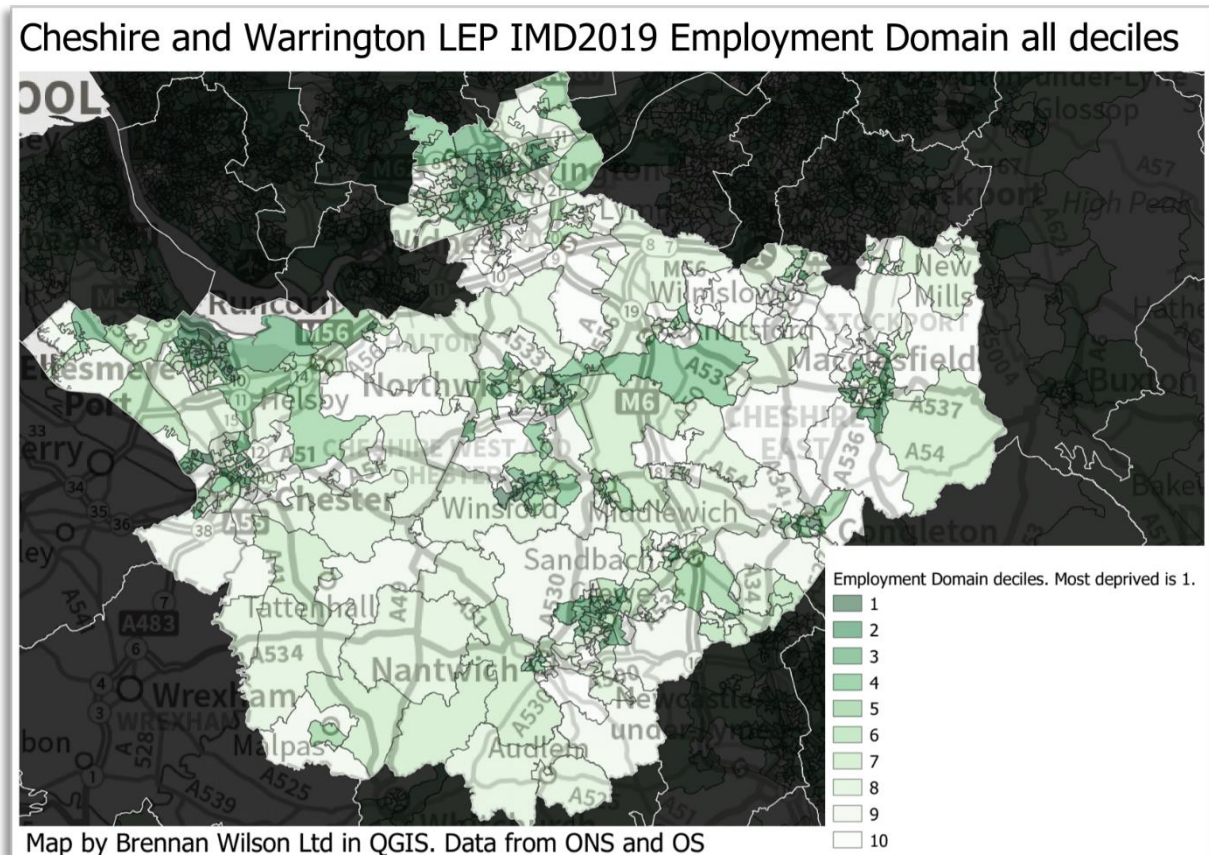


Periodically the Government publishes an Index of Multiple Deprivation. The most recent of these was published in 2019 (IMD 2019). The IMD 2019 provides data on the overall level of deprivation in Lower Super Output Areas (LSOAs). This is built up from analysis of a number of 'Domains' that focus on a particular characteristic of deprivation. One of these domains is the 'Employment Deprivation Domain'.

The Employment Deprivation Domain of IMD 2019 measures the proportion of the working-age population in an area involuntarily excluded from the labour market. This includes people who would like to work but are unable to do so due to unemployment, sickness or disability, or caring responsibilities. It is built up from six indicators:

- Claimants of Jobseeker's Allowance (both contribution-based and income-based), women aged 18 to 59 and men aged 18 to 64
- Claimants of Employment and Support Allowance (both contribution-based and income-based), women aged 18 to 59 and men aged 18 to 64
- Claimants of Incapacity Benefit, women aged 18 to 59 and men aged 18 to 64
- Claimants of Severe Disablement Allowance, women aged 18 to 59 and men aged 18 to 64
- Claimants of Carer's Allowance, women aged 18 to 59 and men aged 18 to 64
- Claimants of Universal Credit in the 'Searching for work' and 'No work requirements' conditionality groups.

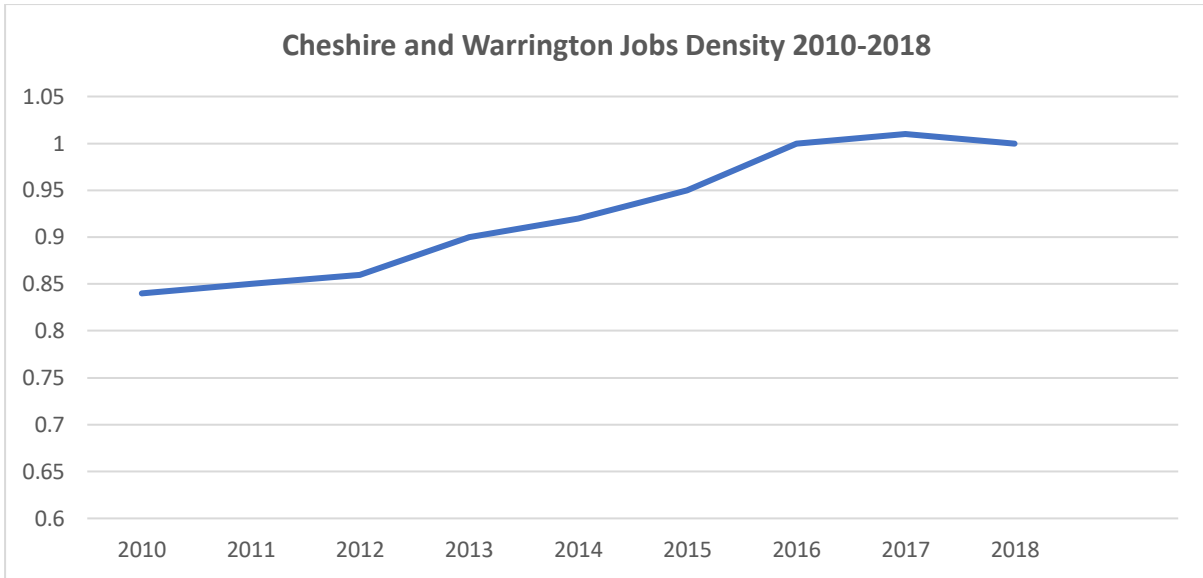
Data for Cheshire and Warrington LEP for the Employment Deprivation Domain of the 2019 Index of Deprivation is illustrated in the map below.



It is clear from the map above that the highest levels of employment deprivation are in Warrington, Ellesmere Port, Crewe and Chester with clusters also evident in Winsford, Northwich and Macclesfield.

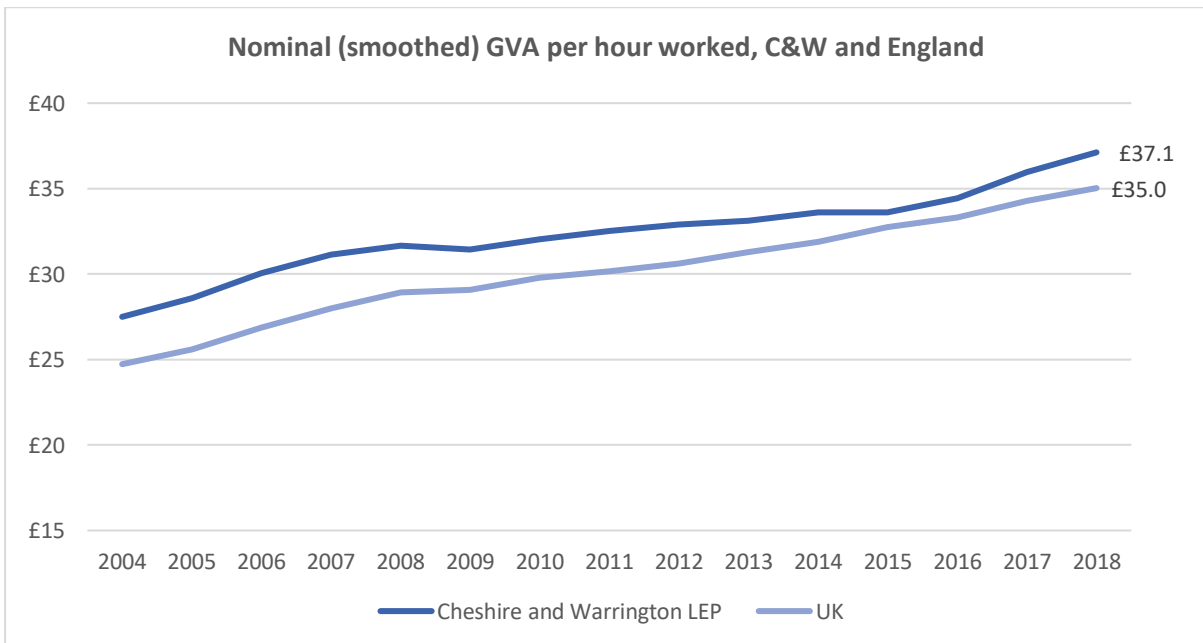
3.3 Jobs, GVA and business stock

Jobs density is defined as the number of jobs in an area divided by the resident population aged 16-64 in that area. For example, a job density of 1.0 would mean that there is one job for every resident aged 16-64. The graph below illustrates that between 2010 and 2017 there was a year on year increase in Jobs Density in Cheshire and Warrington, from 0.84 and peaking at 1.01 in 2017. 2018 saw a slight decline to a Jobs Density of 1. This figure is high and reflects the fact that Cheshire and Warrington is a net importer of labour.



Source: NOMIS, ONS Jobs Density

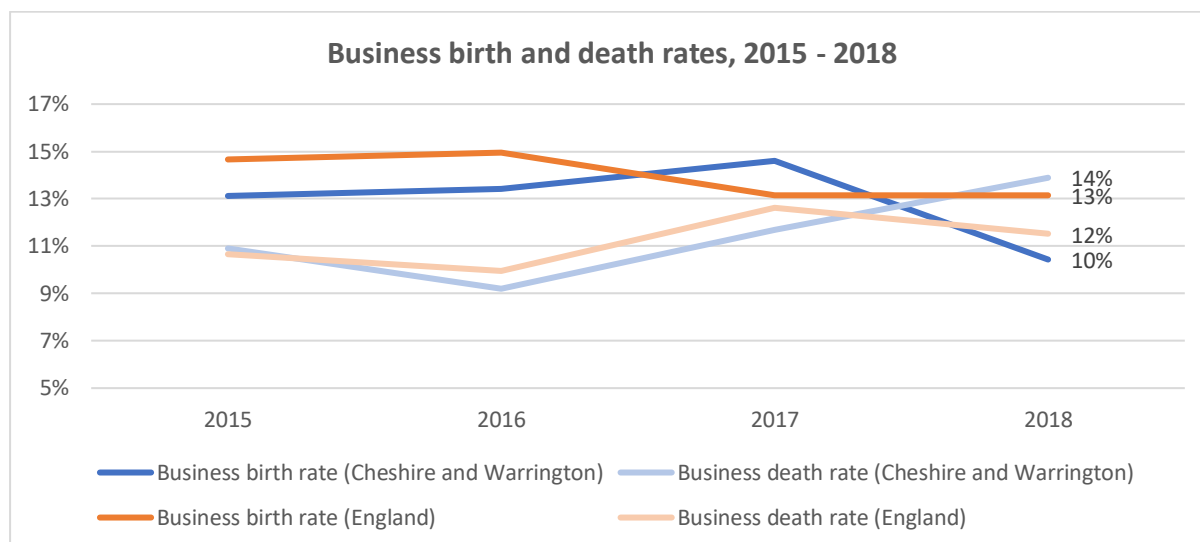
Labour productivity increased in 32 out of 44 enterprise regions in the UK between 2010 and 2018. As can be seen from the chart below this was the case for Cheshire and Warrington whose productivity (as measured by GVA per hour worked) has consistently been above that of the UK. In 2018, the Cheshire and Warring GVA per hour worked was 6% higher than for the UK (£37.10 compared with £35).



Source: SAP Core Indicators/ONS Subregional Productivity, 2004 - 2018 (published 2020)

Business birth and death rates are published by ONS. ONS advice on this data is that rates for geographies smaller than regions should be treated with caution since factors such as management companies or virtual offices can cause large volatility to the data year-on-year. However, LEP level data has been included in the SAP Core indicators so is reported below.

In 2018, at 14%, the ‘business death rate’ was higher in Cheshire and Warrington than in England where it was 13%. On the other hand, the ‘business birth rate’ in Cheshire and Warrington was 2 percentage points lower than England (10% compared to 12%). In the four years from 2015 to 2018, the business death rate in Cheshire and Warrington increased 3pp from 11% to 14% and the business birth rate in Cheshire and Warrington decreased 3pp from 13% to 10%.



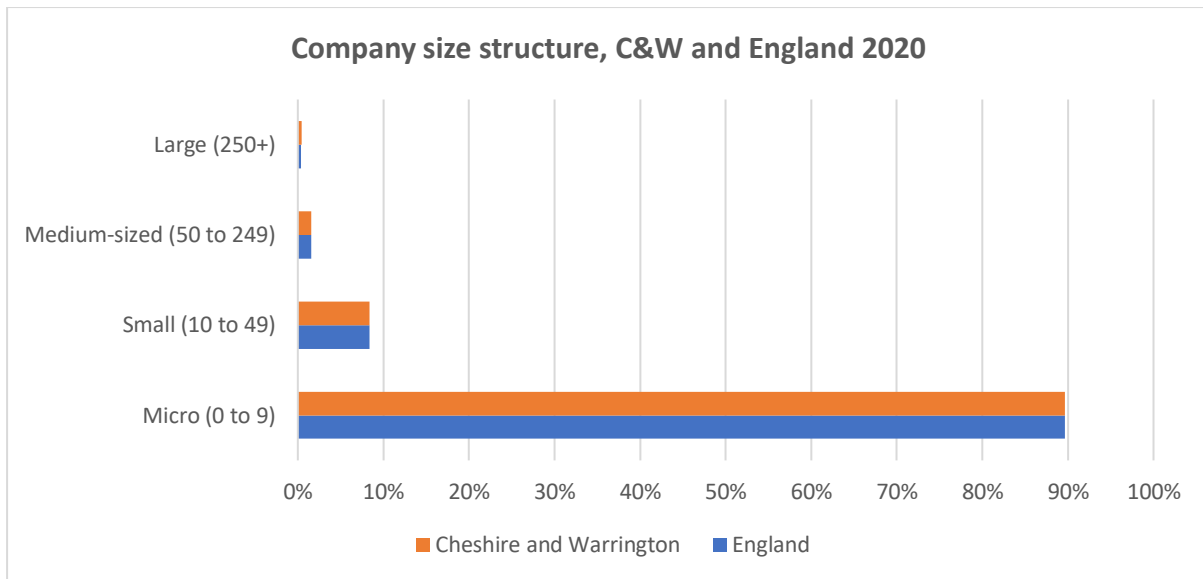
Source: SAP Core Indicators/ONS Business Demography, 2015 - 2018 (published 2019), 2020 SAP boundaries

In, 2020 there were over 43,000 businesses in Cheshire and Warrington. 45% of businesses were in Cheshire East, 33% in Cheshire West and Chester, and 22% in Warrington. 90% of businesses in Cheshire and Warrington employed fewer than 10 people. Only 0.4% of businesses employed more than 250 people.

| Businesses by size in Cheshire and Warrington, Local Authority and GB, 2020 | | | | | |
|---|-------------------------|---------------|---------------------------|------------|---------------|
| | Cheshire and Warrington | Cheshire East | Cheshire West and Chester | Warrington | Great Britain |
| Total | 43,005 | 19,475 | 14,130 | 9,405 | 2,674,520 |
| Micro (0 to 9) | 38,555 | 17,490 | 12,610 | 8,455 | 2,395,150 |
| Small (10 to 49) | 3,605 | 1,635 | 1,230 | 735 | 227,660 |
| Medium-sized (50 to 249) | 660 | 280 | 225 | 160 | 41,220 |
| Large (250+) | 185 | 70 | 65 | 50 | 10,490 |

Source: ONS, UK Business Counts 2020

The chart below sets out the data for the size structure of companies in Cheshire and Warrington and England. Proportions of micro, small, medium and large companies are the same for Cheshire and Warrington as England.



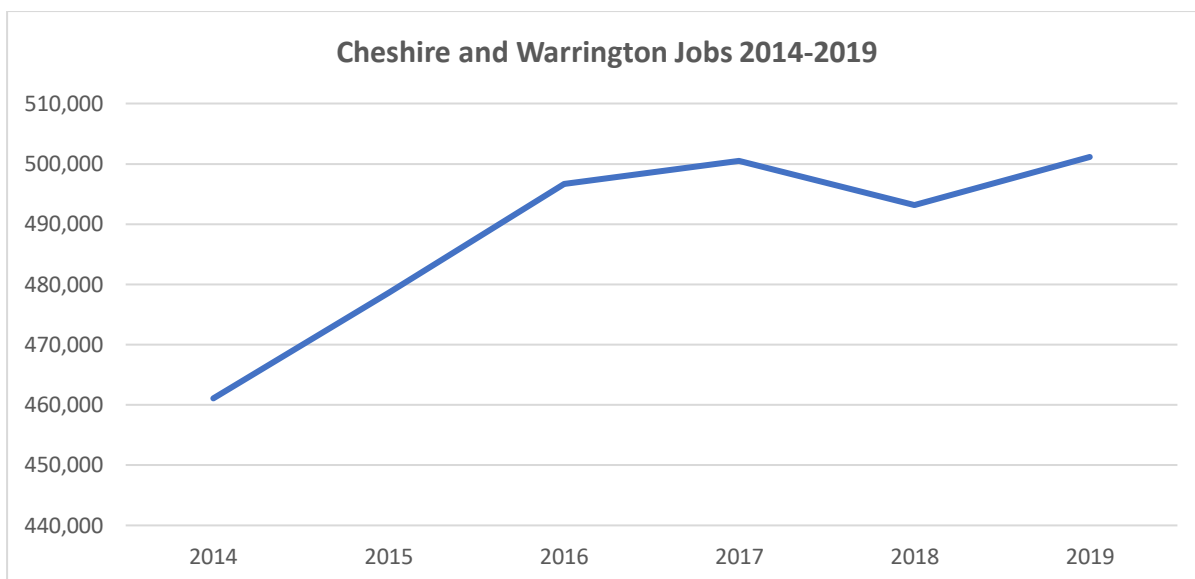
Source: SAP Core Indicators/ UK Business Counts 2020

In 2019, there were 500,000 ‘employee jobs’ in Cheshire and Warrington. This is not a count of people employed, as individuals can have more than one job. The proportion employed full-time in Cheshire and Warrington, at 69.4%, was higher than for England or the North West.

| Employee Jobs 2019 | | | | |
|---------------------|---|-----------------------------|----------------|-------------------|
| | Cheshire And Warrington (Employee Jobs) | Cheshire And Warrington (%) | North West (%) | Great Britain (%) |
| Total Employee Jobs | 500,000 | - | - | - |
| Full-Time | 347,000 | 69.4 | 68.1 | 67.8 |
| Part-Time | 153,000 | 30.6 | 31.9 | 32.2 |

Source: NOMIS, ONS Business Register and Employment Survey

From 2014 to 2019, jobs increased by 8.7% in Cheshire and Warrington from 461,077 to 501,129. This change slightly outpaced the national growth rate in this period of 8.4% and helps explain why an already high Job Density continued to increase.



Source: EMSI Analyst

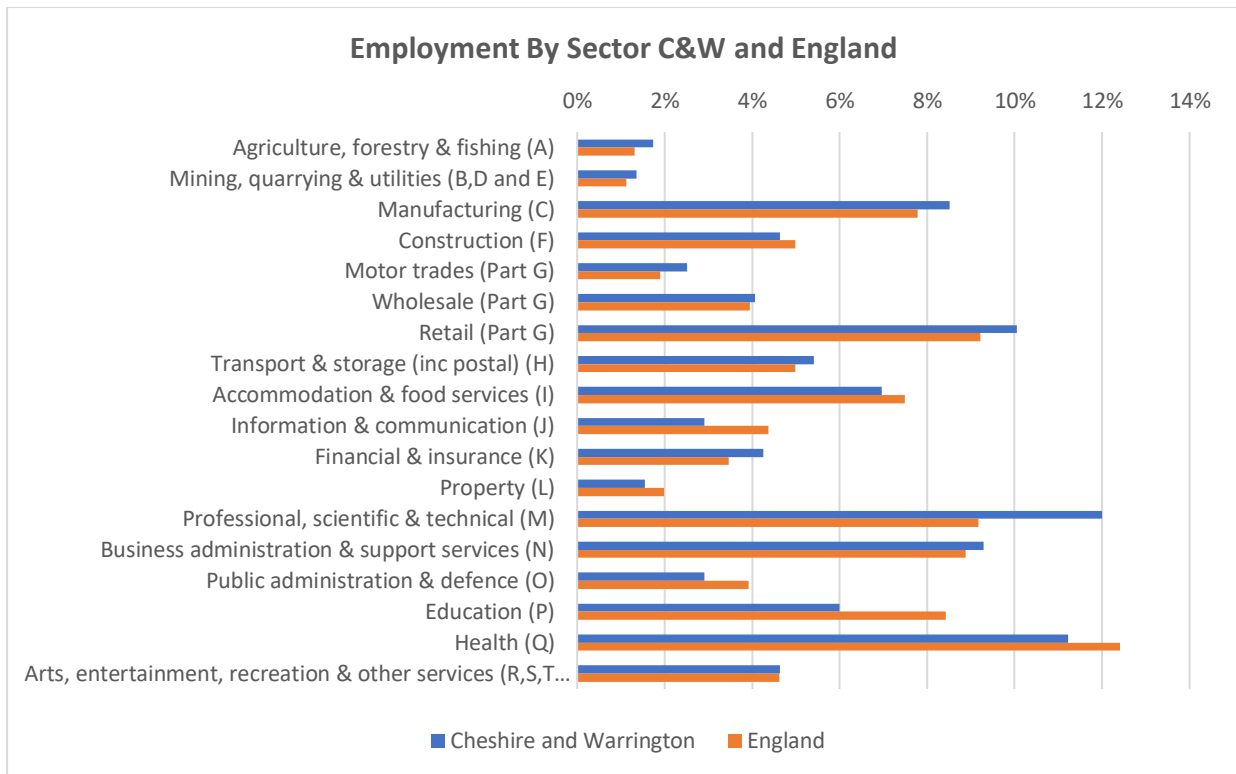
The change in the number of jobs between 2014 and 2019 in each local authority is set out in the Table below. Growth outpaced England (8.4%) in both Warrington (11.6%) and Cheshire West and Chester (9.8%). Jobs grew at 5.8% in this period in Cheshire East.

| Jobs Change in Cheshire and Warrington, and England 2014-2019 | | | | |
|---|------------|------------|-----------|----------|
| | 2014 Jobs | 2019 Jobs | Change | % Change |
| Cheshire and Warrington | 461,077 | 501,129 | 40,052 | 8.7% |
| Cheshire West and Chester | 157,556 | 172,921 | 15,365 | 9.8% |
| Cheshire East | 181,312 | 191,871 | 10,559 | 5.8% |
| Warrington | 122,210 | 136,337 | 14,127 | 11.6% |
| England | 24,296,192 | 26,338,115 | 2,041,923 | 8.4% |

Source: EMSI Analyst

3.4 Industrial structure

Compared with England, Cheshire and Warrington has a higher percentage of employees employed in the Manufacturing sector (12% compared to 9%), in the Retail sector (10% compared to 9%) and in the Professional, scientific and technical sector (12% compared to 9%). On the other hand, fewer employees were employed in the Construction sector (4% compared with 5%) and in the Health sector (11% compared with 12%).



Source: SAP Core Indicator Set, BRES

The Table below provides data on the number of jobs in Cheshire and Warrington by industrial sector. There are five sectors that had more than 40,000 jobs in Cheshire and Warrington. They were:

- Manufacturing
- Wholesale and Retail Trade; Repair of Motor Vehicles and Motorcycles
- Professional, Scientific and Technical Activities
- Administrative and Support Service Activities
- Human Health and Social Work Activities

| Employee Jobs by Industry 2019 | | | | |
|--|-----------------------|---------|----------------|-------------------|
| | Cheshire & Warrington | C&W (%) | North West (%) | Great Britain (%) |
| B : Mining And Quarrying | 700 | 0.1 | 0.1 | 0.2 |
| C : Manufacturing | 43,000 | 8.6 | 9.3 | 8 |
| D : Electricity, Gas, Steam And Air Conditioning Supply | 1,500 | 0.3 | 0.5 | 0.4 |
| E : Water Supply; Sewerage, Waste Management And Remediation Activities | 4,500 | 0.9 | 0.7 | 0.7 |
| F : Construction | 23,000 | 4.6 | 4.6 | 4.9 |
| G : Wholesale And Retail Trade; Repair Of Motor Vehicles And Motorcycles | 84,000 | 16.8 | 16.3 | 15 |
| H : Transportation And Storage | 28,000 | 5.6 | 5.6 | 4.9 |
| I : Accommodation And Food Service Activities | 35,000 | 7 | 6.9 | 7.7 |
| J : Information And Communication | 15,000 | 3 | 2.8 | 4.3 |
| K : Financial And Insurance Activities | 22,000 | 4.4 | 2.8 | 3.5 |
| L : Real Estate Activities | 7,000 | 1.4 | 1.5 | 1.7 |
| M : Professional, Scientific And Technical Activities | 61,000 | 12.2 | 8.8 | 8.8 |

| | | | | |
|--|--------|------|------|------|
| N : Administrative and Support Service Activities | 48,000 | 9.6 | 8.6 | 8.9 |
| O : Public Administration And Defence; Compulsory Social Security | 15,000 | 3 | 4.6 | 4.4 |
| P : Education | 31,000 | 6.2 | 8 | 8.7 |
| Q : Human Health And Social Work Activities | 57,000 | 11.4 | 14.2 | 13.1 |
| R : Arts, Entertainment And Recreation | 13,000 | 2.6 | 2.6 | 2.5 |
| S : Other Service Activities | 10,000 | 2 | 1.9 | 2 |

Source: NOMIS, ONS Business Register and Employment Survey

The Table below provides information on jobs change, by sector, between 2014 and 2019 and the 2019 Location Quotient for each sector. A 'Location Quotient' (LQ) measures the extent to which a sector is over or under-represented in an area. An LQ of 1 means that a sector has the same proportion employed locally as nationally, whereas an LQ of 2 means that the local area employs double the proportion of people in that sector compared to nationally.

The sectors which added the most jobs between 2014 and 2019 were "Wholesale and retail trade; repair of motor vehicles and motorcycles" with an increase of 13,286 jobs and "Professional, scientific and technical activities" with an increase of 17,864 jobs. Six sectors grew by more than 15% in this period: Wholesale and retail trade; repair of motor vehicles and motorcycles; Professional, scientific, and technical activities; Construction; Information and Communication; Water supply; sewerage, waste management and remediation activities; and Mining and quarrying.

Sectoral strengths in the Cheshire and Warrington local economy (ie those sectors with the highest location quotients) include: "Wholesale and retail trade; repair of motor vehicles and motorcycles" (LQ of 1.18); "Professional, scientific and technical activities" (LQ of 1.51); "Financial and insurance activities" (LQ of 1.18); and "Water supply; sewerage, waste management and remediation activities" (LQ of 1.19).

| 2014-2019 Job Change in Cheshire and Warrington's Largest Industry Sectors | | | |
|---|----------------|------------------|---------|
| | Change in Jobs | % Change in Jobs | 2019 LQ |
| Wholesale and retail trade; repair of motor vehicles and motorcycles | 13,286 | 18% | 1.18 |
| Professional, scientific and technical activities | 17,864 | 38% | 1.51 |
| Human health and social work activities | 575 | 1% | 0.83 |
| Administrative and support service activities | 2,039 | 5% | 1.02 |
| Manufacturing | 1,905 | 5% | 1.03 |
| Education | 965 | 3% | 0.80 |
| Accommodation and food service activities | (1,678) | (5%) | 0.86 |
| Transportation and storage | 2,124 | 9% | 1.03 |
| Construction | 3,641 | 19% | 0.96 |
| Financial and insurance activities | (2,079) | (9%) | 1.18 |
| Information and communication | 2,637 | 18% | 0.79 |
| Public administration and defence; compulsory social security | 69 | 0% | 0.66 |
| Arts, entertainment and recreation | 92 | 1% | 0.97 |
| Other service activities | (640) | (6%) | 0.95 |
| Real estate activities | (356) | (6%) | 0.75 |
| Water supply; sewerage, waste management and remediation activities | 915 | 25% | 1.19 |
| Agriculture, forestry and fishing | (1,421) | (28%) | 1.08 |

| | | | |
|---|------|------|------|
| Electricity, gas, steam and air conditioning supply | (82) | (5%) | 0.73 |
| Mining and quarrying | 196 | 46% | 0.74 |
| <i>Source: EMSI Analyst</i> | | | |

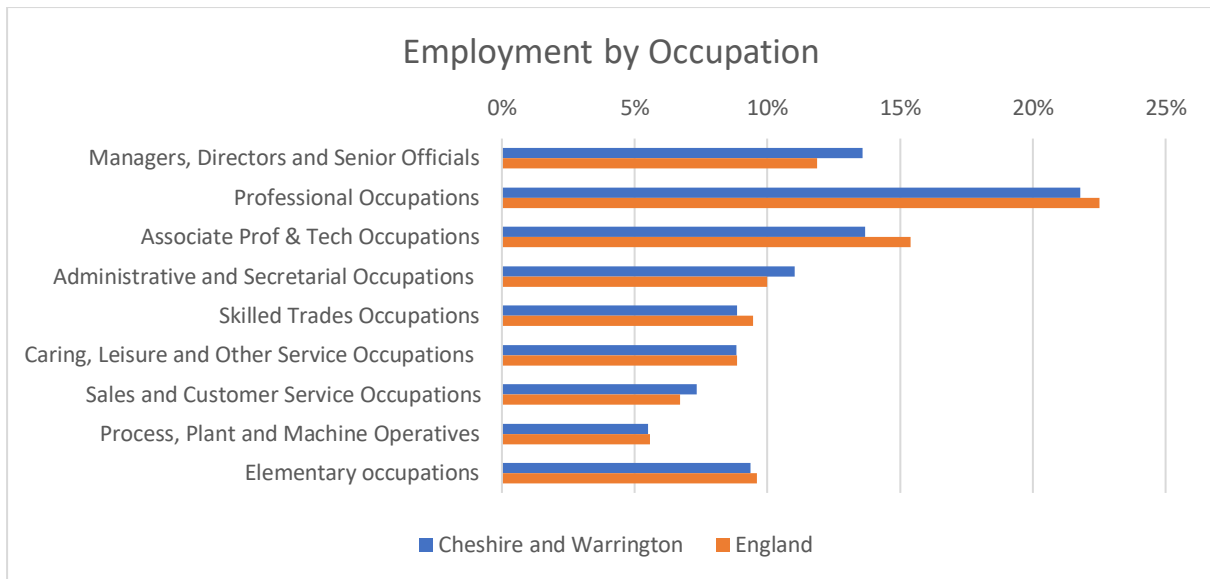
3.5 Occupational Structure

It is possible to establish from the Annual Population Survey the occupations held by residents in Cheshire and Warrington and the three constituent Local Authorities. This data is presented in the table below. It is important to note that this data is for all residents of Cheshire and Warrington, rather than for all those employed in Cheshire and Warrington.

This data shows that the occupational profile for residents of Cheshire and Warrington and all three Local Authorities is slightly skewed towards higher skilled, and generally higher paid, occupations. The proportion of LEP residents employed in SOC Major Groups 1-3 is 1.8% higher than for those same groups at Great Britain level. The proportion for these occupational groupings is higher in all three Local Authorities than for Great Britain.

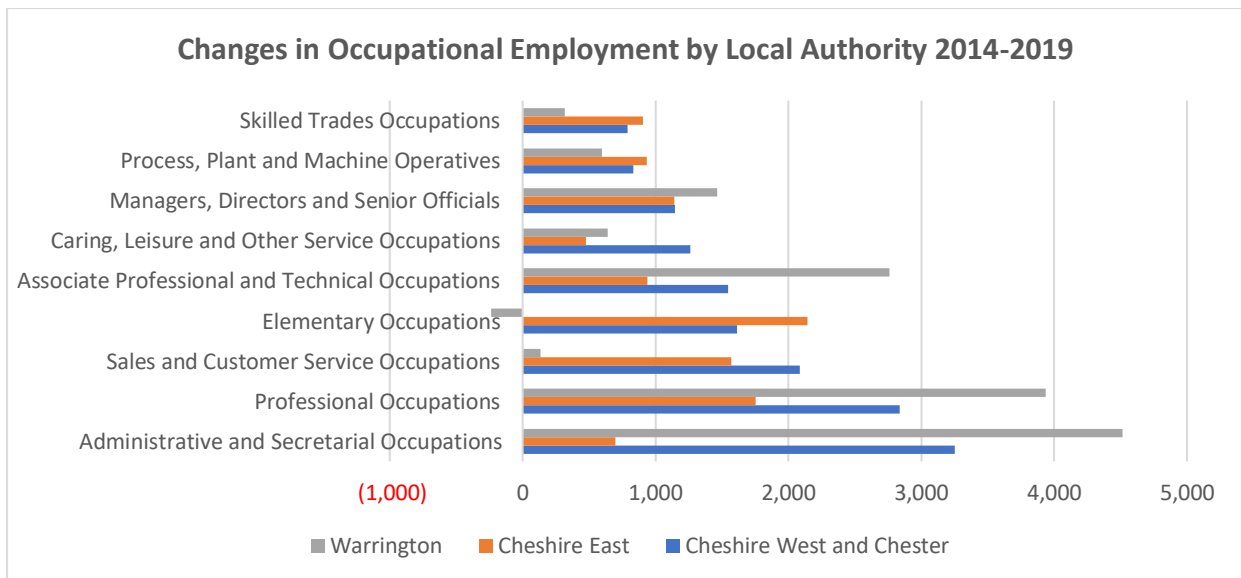
| Employment by occupation (Jul 2019-Jun 2020) | | | | | | |
|--|-----------------------------|-------------------|-------------------------------|----------------|----------------|-------------------|
| | Cheshire And Warrington (%) | Cheshire East (%) | Cheshire West And Chester (%) | Warrington (%) | North West (%) | Great Britain (%) |
| Soc 2010 Major Group 1-3 | 50.8 | 51 | 51.1 | 49.9 | 44.7 | 49 |
| 1 Managers, Directors and Senior Officials | 13.6 | 13.3 | 16.4 | 10.1 | 10.4 | 11.7 |
| 2 Professional Occupations | 22.2 | 24.5 | 19.3 | 22.3 | 20.5 | 22.2 |
| 3 Associate Professional & Technical | 14.7 | 12.8 | 15.5 | 17 | 13.6 | 15 |
| Soc 2010 Major Group 4-5 | 18.5 | 18.2 | 20.2 | 16.7 | 20.7 | 19.5 |
| 4 Administrative & Secretarial | 9.8 | 9.8 | 11.3 | 7.7 | 10.5 | 9.8 |
| 5 Skilled Trades Occupations | 8.7 | 8.3 | 8.9 | 8.8 | 10.1 | 9.7 |
| Soc 2010 Major Group 6-7 | 16.5 | 16.8 | 15.6 | 17.6 | 17.8 | 15.9 |
| 6 Caring, Leisure And Other Service Occupations | 9.5 | 10.8 | 7.5 | 10 | 9.6 | 9 |
| 7 Sales And Customer Service Occs | 7 | 5.9 | 8 | 7.4 | 8.1 | 6.9 |
| Soc 2010 Major Group 8-9 | 14.1 | 14.1 | 13.1 | 15.8 | 16.9 | 15.5 |
| 8 Process Plant & Machine Operatives | 5 | 3.6 | 5.3 | 7.1 | 6.2 | 5.8 |
| 9 Elementary Occupations | 9.1 | 10.4 | 7.8 | 8.6 | 10.6 | 9.7 |
| <i>Source: ONS annual population survey, Notes: Numbers and % are for those of 16+, % is a proportion of all persons in employment</i> | | | | | | |

Data for Oct 2019 to Sep 2020 is shown in the chart below for Cheshire and Warrington and England and confirms at headline level the data presented in more detail in the table above.



Source: SAP Core Indicators, NOMIS/APS Oct 2019 to Sept 2020

The chart below illustrates the change in employment, by occupational area, in Cheshire and Warrington local authorities between 2014 and 2019. It is evident from this that, in this time, every 1-digit SOC occupational area has grown in every local authority area with the single exception of “Elementary Occupations” in Warrington, which declined by 237 jobs.



Source: EMSI Analyst

The greatest increase in the number of jobs, by job type, between 2014 and 2019 was for:

- Book-keepers, payroll managers and wages clerks
- Chartered and certified accountants
- Sales and retail assistants

Each of these occupational areas grew by more than 2,000 jobs in this period.

Change in Job Numbers 2014-2019 (4 digit SOC)

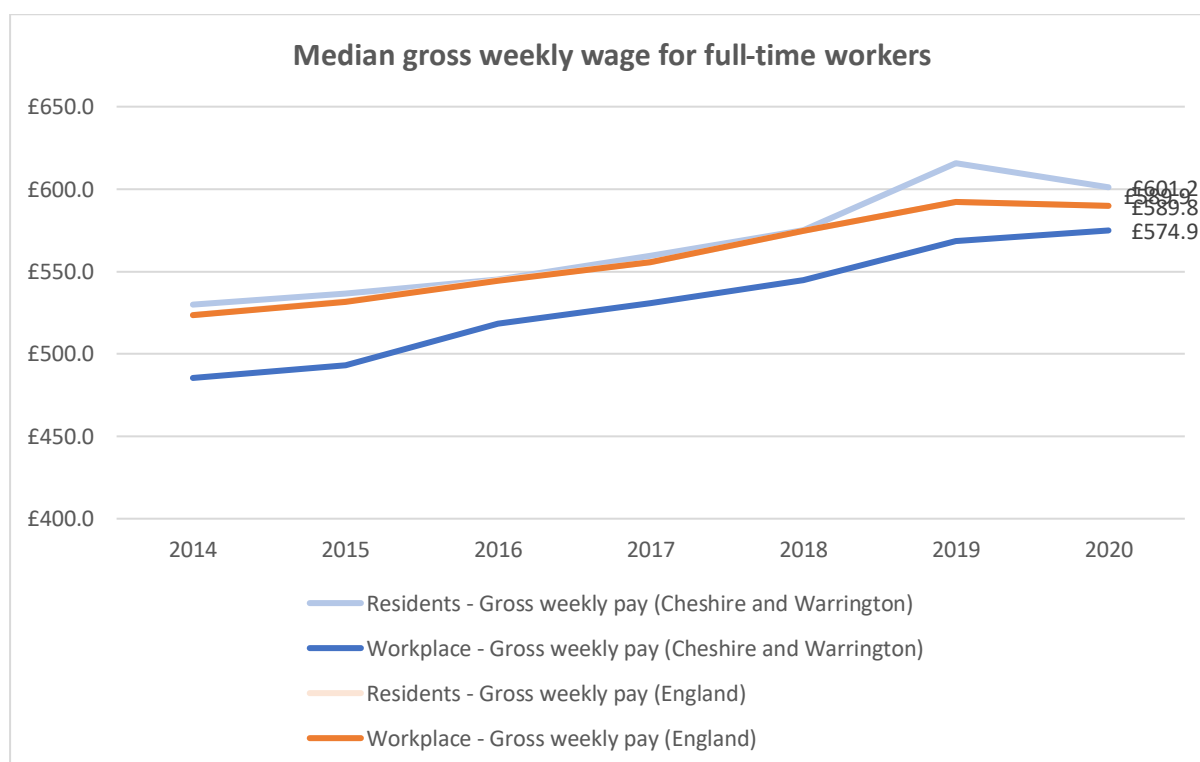
| | 2014 Jobs | 2019 Jobs | Change | % Change |
|--|--------------|--------------|--------|-------------|
| Book-keepers, payroll managers and wages clerks | 8,755 | 13,489 | 4,734 | 54% |
| Chartered and certified accountants | 3,525 | 6,651 | 3,126 | 89% |
| Sales and retail assistants | 20,601 | 22,700 | 2,099 | 10% |
| Cleaners and domestics | 9,553 | 11,485 | 1,932 | 20% |
| Elementary storage occupations | 10,003 | 11,630 | 1,627 | 16% |
| Other administrative occupations n.e.c. | 11,108 | 12,250 | 1,142 | 10% |
| Sales accounts and business development managers | 7,948 | 9,069 | 1,121 | 14% |
| Taxation experts | 801 | 1,807 | 1,006 | 126% |

Source: EMSI Analyst

3.6 Earnings and Income

The chart below sets out the data, over time, for the median gross weekly wage for full-time workers in Cheshire and Warrington and England. Wages have been slightly higher for residents of Cheshire and Warrington than England over the last six years. On the other hand, Cheshire and Warrington workplace wages have been consistently lower than England and lower than resident's wages.

The differences between the figures for residency and workplaces suggest that either residents commute for higher paid jobs outside of Cheshire and Warrington, or that non-residents commute to do lower paid jobs within Cheshire and Warrington, or a combination of the two. The job density in Cheshire and Warrington is high, and work done by Metro Dynamics for Cheshire and Warrington LEP from census 2011 data has established that the LEP is a net importer of Labour. It therefore seems probable that both explanations will apply to some extent.



Source: SAP Core Indicators/Annual Survey of Hours and Earnings

The two tables below provide information for Cheshire and Warrington LEP, and its three constituent Local Authorities, for earnings by place of residence and earnings by place of work.

The median Gross weekly pay for LEP residents was £601.2 which was higher than that for the Great Britain figure of £587.1. Both male and female full-time workers were paid more in Cheshire and Warrington than in Great Britain, although female and male residents of Warrington were both paid less than the Great Britain average.

When hourly rates are considered, the hourly rates in Cheshire and Warrington were higher overall and for male and female full-time workers than in Great Britain, although again female and male residents of Warrington were both paid less than their counterparts in Great Britain.

| Earnings by place of residence (2020) | | | | | | |
|--|---|-------------------------------|---|----------------------------|----------------------------|-------------------------------|
| | Cheshire And Warrington (Pounds) | Cheshire East (Pounds) | Cheshire West And Chester (Pounds) | Warrington (Pounds) | North West (Pounds) | Great Britain (Pounds) |
| Gross Weekly Pay | | | | | | |
| Male Full-Time | 636.2 | 661.4 | 632.6 | 614.3 | 588.6 | 622.9 |
| Female Full-Time | 551.7 | 573.5 | 539.3 | 511.0 | 519.1 | 544.3 |
| All Full-Time Workers | 601.2 | 627.4 | 601.2 | 559.2 | 560.3 | 587.1 |
| Hourly Pay - Excluding Overtime | | | | | | |
| Male Full-Time | 16.26 | 16.87 | 16.30 | 15.13 | 14.94 | 15.71 |
| Female Full-Time | 14.54 | 15.21 | 14.43 | 13.47 | 13.98 | 14.44 |
| All Full-Time Workers | 15.57 | 16.23 | 15.53 | 14.37 | 14.49 | 15.26 |
| <i>Source: ONS annual survey of hours and earnings - resident analysis</i> | | | | | | |

By contrast, when median earnings by place of work is considered, the overall levels for gross weekly earnings; the levels for male full-time weekly earnings; and the levels for female weekly earnings were all lower for Cheshire and Warrington than for Great Britain. The hourly rates for both male and female full-time workers were also below those for Great Britain. The official data is confirmed by EMSI analysis of publicly advertised job roles in Cheshire and Warrington. This reports that the average wage per job advertised in Cheshire and Warrington is £28,700 which was £1,600 below the national average wage of £30,300 per job.¹

| Earnings by place of work (2020) | | | | | | |
|---|---|-------------------------------|---|----------------------------|----------------------------|-------------------------------|
| | Cheshire And Warrington (Pounds) | Cheshire East (Pounds) | Cheshire West And Chester (Pounds) | Warrington (Pounds) | North West (Pounds) | Great Britain (Pounds) |
| Gross Weekly Pay | | | | | | |
| Male Full-Time | 613.3 | 620.0 | 580.1 | 621.4 | 585.5 | 622.9 |

¹ EMSI Analyst

| | | | | | | |
|---|-------|-------|-------|-------|-------|-------|
| Female Full-Time | 522.8 | 517.5 | 530.4 | 536.3 | 522.2 | 544 |
| All Full-Time Workers | 574.9 | 574.9 | 555.0 | 592.3 | 559.6 | 586.7 |
| Hourly Pay - Excluding Overtime | | | | | | |
| Male Full-Time | 15.20 | 15.83 | 14.55 | 15.05 | 14.84 | 15.7 |
| Female Full-Time | 14.07 | 13.75 | 14.28 | 14.34 | 14.01 | 14.42 |
| All Full-Time Workers | 14.73 | 14.91 | 14.47 | 14.95 | 14.45 | 15.24 |
| <i>Source: ONS annual survey of hours and earnings - workplace analysis</i> | | | | | | |

The Real Living Wage Foundation calculates each year the hourly rate that people need to receive based on living cost. The Real living Wage for 2020/2021 is £9.50. More than 20% of employees in Cheshire and Warrington earn less than the Real Living Wage with this also being the case in Warrington and Cheshire East. Slightly fewer than 20% earn below the Real Living Wage in Cheshire West and Chester.

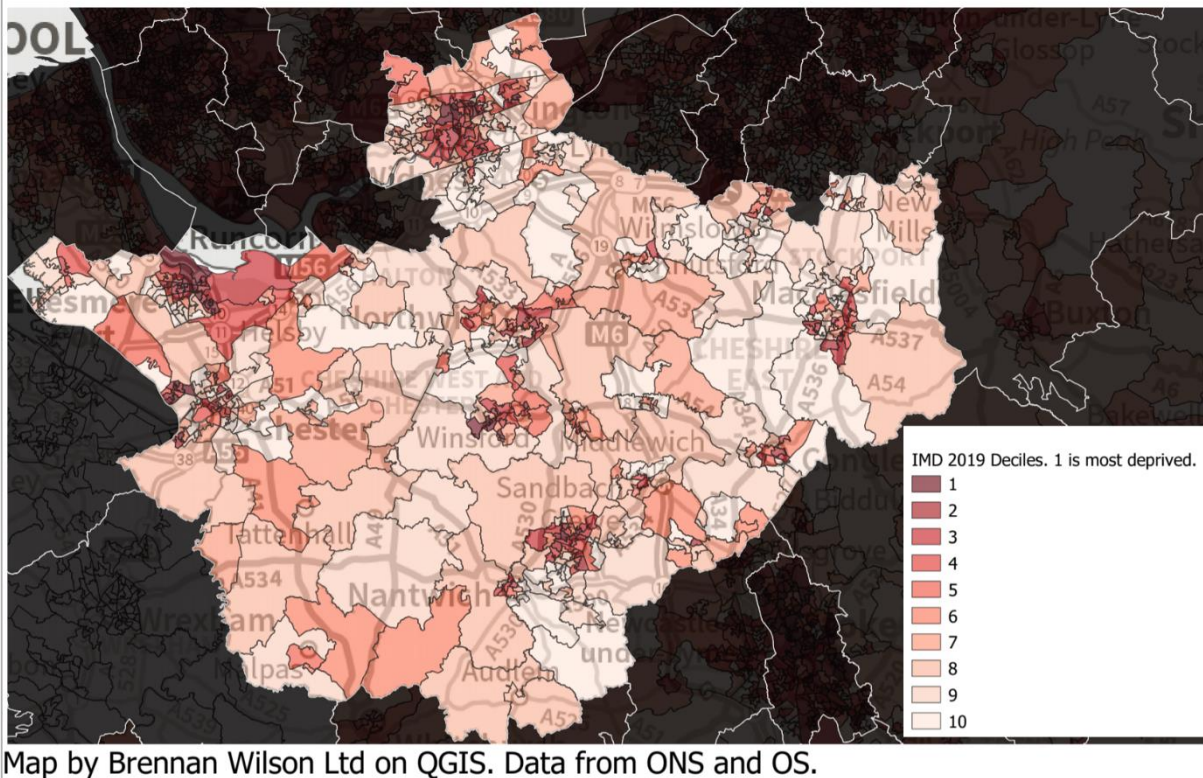
The Income Deprivation Domain of the Index of Multiple Deprivation 2019 measures the proportion of the population in an area experiencing deprivation relating to low income. The definition of low income used includes both those people that are out-of-work, and those that are in work but who have low earnings (and who satisfy the respective means tests).

The indicators used in this domain are:

- Adults and children in Income Support families
- Adults and children in income-based Jobseeker's Allowance families
- Adults and children in income-based Employment and Support Allowance families
- Adults and children in Pension Credit (Guarantee) families
- Adults and children in Universal Credit families where no adult is classed within the 'Working - no requirements' conditionality group
- Adults and children in Working Tax Credit and Child Tax Credit families not already counted, that is those who are not in receipt of Income Support, income-based Jobseeker's Allowance, income-based Employment and Support Allowance, Pension Credit (Guarantee), and whose equivalised income (excluding housing benefit) is below 60 per cent of the median before housing costs
- Asylum seekers in England in receipt of subsistence support, accommodation support, or both

The IMD 2019 Income Domain is mapped below.

Cheshire and Warrington LEP IMD 2019 Income Domain all deciles



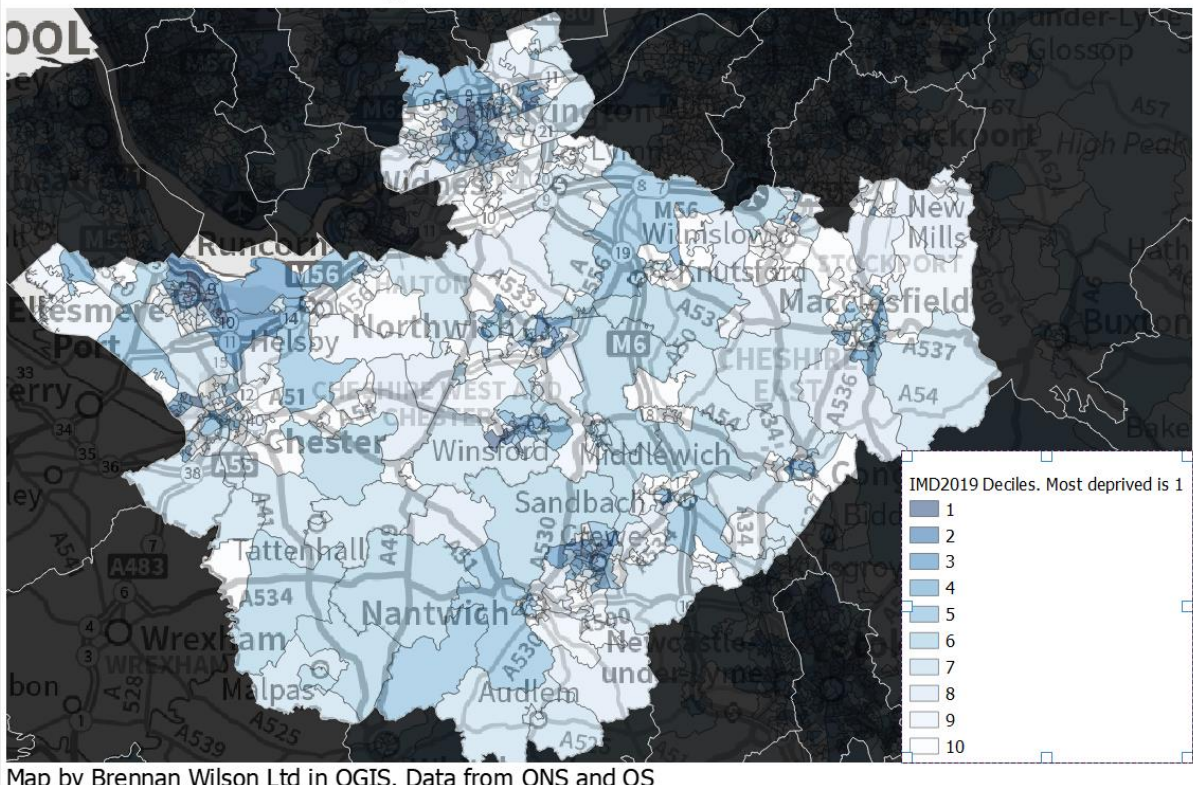
From the map the areas with the highest concentration of income deprivation in Cheshire and Warrington are in Warrington, Crewe, and Ellesmere Port, with other pockets in Winsford, Northwich, Macclesfield and Chester.

3.7 Deprivation

The Indices of Deprivation 2019 provide a set of relative measures of deprivation for small geographical areas (Lower-layer Super Output Areas). LSOAs normally have a population of about 1,500 people. The approach is based on seven different domains of deprivation: Income Deprivation; Employment Deprivation; Education, Skills and Training Deprivation; Health Deprivation and Disability; Crime; Barriers to Housing and Services; and Living Environment Deprivation.

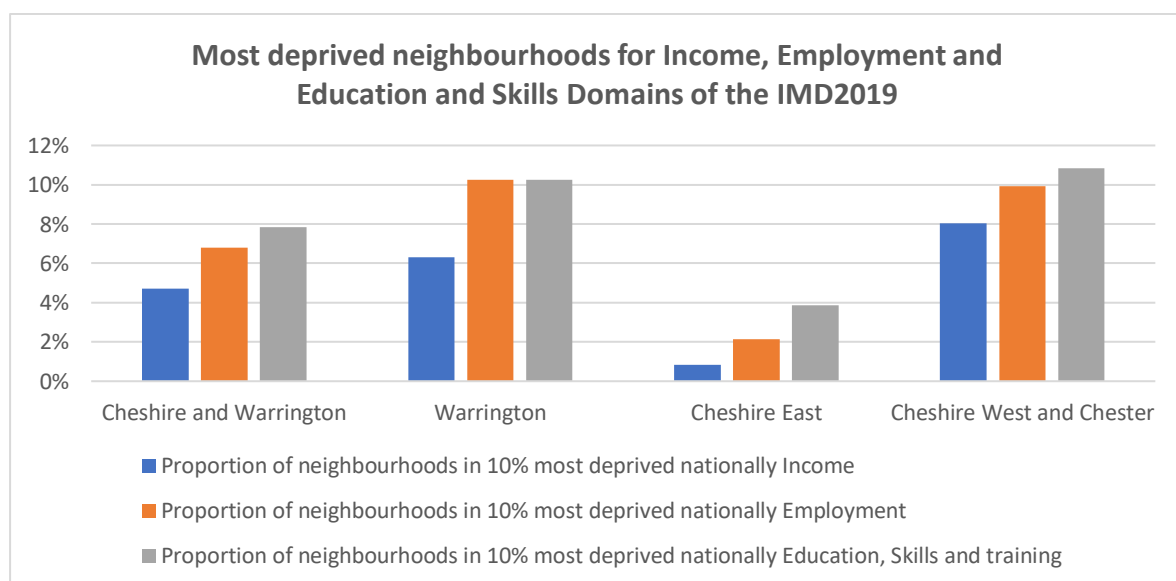
Each of these domains is based on a basket of indicators. As far as is possible, each indicator is based on data from the most recent time point available. The Index of Multiple Deprivation 2019 combines information from the seven domains to produce an overall relative measure of deprivation. The map below shows the data for LSOAs in Cheshire and Warrington LEP.

Cheshire and Warrington LEP IMD2019 all deciles



It is clear from the map that there are concentrations of deprivation in Warrington, Crewe and Ellesmere Port, with further pockets in Chester, Winsford, Northwich and Macclesfield.

The chart below provides data on the proportion of neighbourhoods in the most deprived decile for three Domains of the IMD2019 – Income; Employment; and Education and Skills.



Source: SAP Core Indicators/IMD2019

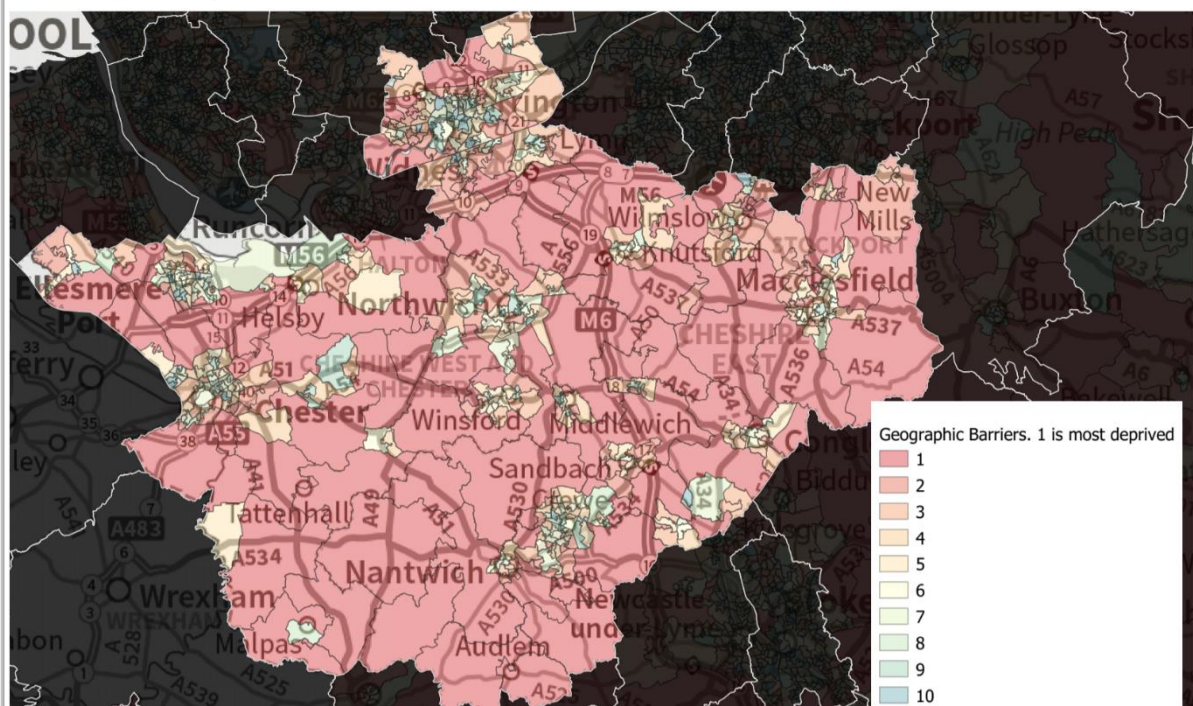
3.7.1 Geographic Barriers to Services

The Barriers to Housing and Services Domain of the 2019 Index of Multiple Deprivation measures the physical and financial accessibility of housing and local services. The indicators fall into two sub-domains: 'geographical barriers', which relate to the physical proximity of local services, and 'wider barriers' which includes issues relating to access to housing, such as affordability.

The 'geographical barriers' subdomain may give an indication of the places from which residents may find it difficult to access learning. It is built from the following indicators:

- Road distance to a post office: A measure of the mean road distance to the closest post office for people living in the Lower-layer Super Output Area
- Road distance to a primary school: A measure of the mean road distance to the closest primary school for people living in the Lower-layer Super Output Area
- Road distance to a general store or supermarket: A measure of the mean road distance to the closest supermarket or general store for people living in the Lower-layer Super Output Area
- Road distance to a GP surgery: A measure of the mean road distance to the closest GP surgery for people living in the Lower-layer Super Output Area.

Cheshire and Warrington LEP Geographical Barriers Subdomain of the 2019 Index of Multiple Deprivation



It is clear from the map that the extensive rural environment of Cheshire and Warrington is reflected in a high proportion of LSOAs falling into the most deprived national decile on this Subdomain.

3.8 The Delivery of Learning and Skills to Residents of Cheshire and Warrington

This section summarises a report commissioned by Cheshire and Warrington LEP in the Summer of 2020² on the 'Supply of Education and Training in Cheshire and Warrington'.

The colleges based in Cheshire and Warrington are Cheshire College South and West, Reaseheath College, Priestley College, Sir John Deane's College, Warrington & Vale Royal College and Macclesfield College.

There were 40 providers funded by the Education and Skills Funding Agency (ESFA) and identified in the National Achievement Rate Tables (NARTs) that delivered further education (excluding apprenticeships and Higher Education) in Cheshire and Warrington in 2018/19. The overall achievement rate for Cheshire and Warrington in 2018/19 was 87.8%, 1.8% higher than for delivery across the country which stood at 86%.

There are 34 providers recorded in the NARTs as having delivered further education (FE) to adults in Cheshire and Warrington in 2018/19. Achievement rates for adults aged 19+ in FE in 2018/19 were 1.5% higher in Cheshire and Warrington than for national (90.6% compared to 89.1%).

There are 12 providers recorded in the NARTs as having delivered FE to young people (16-18) in Cheshire and Warrington in 2018/19. At 86%, Achievement Rates for 16-18-year olds learning in Cheshire and Warrington exceeded the national achievement rate of 82.6% by 3.4%.

465 providers delivered apprenticeships to residents of Cheshire and Warrington in 2018/19. These providers delivered 6,440 apprenticeship starts in 2018/19 with 3,393 employers. On average (mean), each employer started 1.9 apprentices. The median for apprenticeship starts with an employer was 1. In 2018/19 there were 62 employers with over 10 apprenticeship starts in the year and six of those had over 30 starts. The highest number of starts with a single employer in 2018/19 was 48.

The overall apprenticeship achievement rate for Cheshire and Warrington residents in 2018/19, at 65.1%, was slightly higher than the overall national apprenticeship achievement rate of 64.7%.

In 2018/19, there were a total of 1,354 Cheshire and Warrington residents aged 16-18 enrolled with providers outside of Cheshire and Warrington. 422 of these were Cheshire East Residents, 111 were Cheshire West and Chester residents, and 821 were Warrington residents.

In 2018/19 373 young people resident in Cheshire and Warrington enrolled with providers in Halton; 190 with providers in St Helens; 180, with providers in Wigan; 177 with providers in Stockport; 146 with providers in Wirral; and 122 with providers in Manchester.

In 2018/19, 2,952 16-18 learners resident outside of Cheshire and Warrington were enrolled with Cheshire and Warrington based providers – 1,675 with providers in Cheshire East; 454 with providers in Cheshire West and Chester; and 823 with providers in Warrington.

Halton, Staffordshire, Shropshire, and Wirral all had in excess of 200 young people enrolled with Cheshire and Warrington providers in 2018/19.

² 'The Supply of Education and Training in Cheshire and Warrington', Brennan Wilson Ltd, July 2020
<http://www.871candwep.co.uk/content/uploads/2020/10/Report-D-The-Supply-of-Education-and-Training-in-Cheshire-and-Warrington.pdf>

The devolution of the Adult Education Budget in 2018/19 to the Liverpool City Region and Greater Manchester Combined Authorities is likely to make a significant impact on the volumes of adults from these places learning with Cheshire and Warrington providers. This is because not all Cheshire and Warrington providers will continue to be funded for delivering learning to residents of these areas.

In 2018/19, there were 9,766 Cheshire and Warrington adult (19+) resident learners enrolled with providers based outside of the LEP area. 3,654 were residents of Cheshire East; 3,028 were residents of Cheshire West and Chester; and 3,084 were residents of Warrington.

In 2018/19 over 500 adult residents of Cheshire and Warrington enrolled with providers in each of Manchester, Liverpool, Stockport, and St Helens.

There were 14,845 adult residents of other local authorities enrolled with Cheshire and Warrington based providers in 2018/19. 4,499 were enrolled with providers in Cheshire East; 3,914 were enrolled with providers in Cheshire West and Chester; and 6,432 were enrolled with providers in Warrington.

Halton, Wirral, St Helens, and Wigan each had in excess of 1,000 adult (19+) learners enrolled with Cheshire and Warrington providers. Funding for adult learning has now been devolved (from 2019/20) in all these places.

Since 2017, Ofsted has judged 2 Cheshire and Warrington-based providers to be 'Outstanding', 8 to be 'Good' and 3 as 'Requires Improvement'. In addition, 12 new providers have been subject to a monitoring visit by the inspectorate and deemed to be making 'Reasonable Progress'.

In 2019, Cheshire and Warrington LEP decided to invest £5m of Local Growth Fund in the specialist equipment needed to deliver digital and STEM-related training and education. This resulted in 5 small, 2 medium and 6 large projects being supported.

4. ANALYSIS OF SKILLS DEMAND

This chapter provides an overview of the factors that drive the skills demanded by employers. It has sections on:

- The impact of Covid-19
- Infrastructure Priorities
- Current employer demand for labour
- Current sector earnings
- Current employer demand for skills
- Future employer demand for labour
- Automation

4.1 The Impact of Covid-19

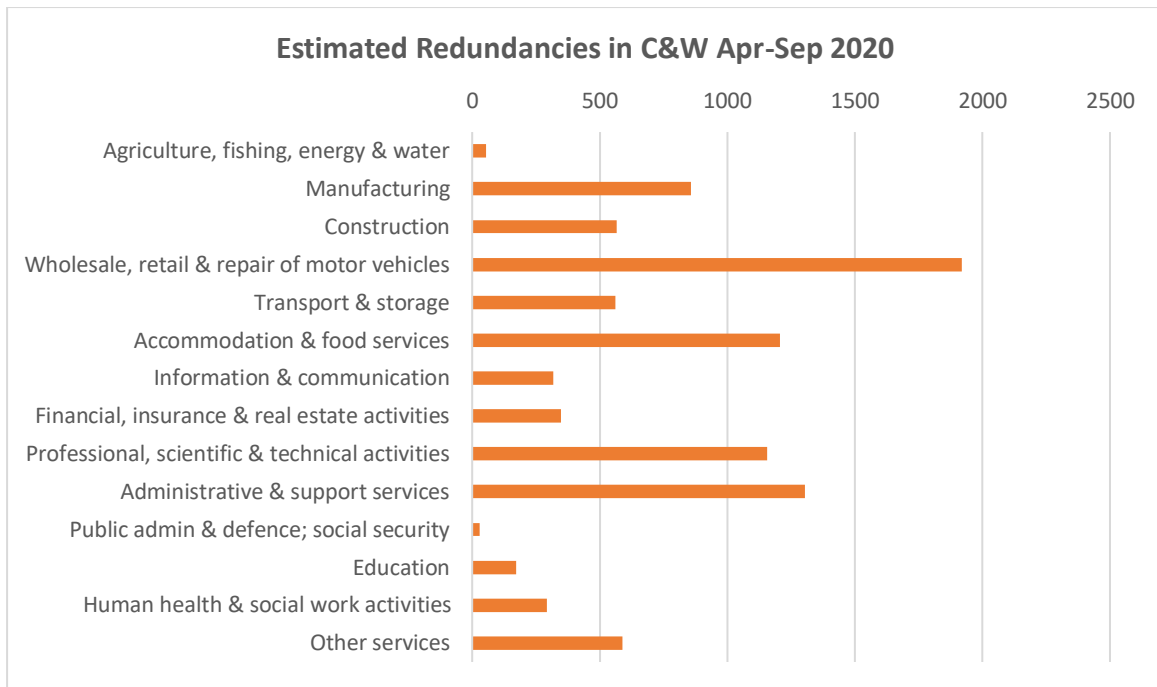
4.1.1 Redundancies to date

There is no data currently available regarding the level of redundancies by industry in Cheshire and Warrington because of the Covid-19 pandemic. The chart below provides estimates of what may have happened in our sectors between April and September 2020. These estimates have been calculated by applying the national sectoral redundancy rates for April to June and July to September³ to the numbers employed in these sectors locally. Whilst this approach should not be regarded as providing precision, it does allow the reader to understand how redundancies may have been experienced in the sub-region if local experience mirrors the national position.

From these estimates, the sectors worst affected (over 1,000 redundancies) in Cheshire and Warrington are likely to have been:

- Wholesale, retail & repair of motor vehicles
- Accommodation & food services
- Professional, scientific & technical activities
- Administrative & support services

³ Labour Force Survey, ONS, November 2020 release
<https://www.ons.gov.uk/employmentandlabourmarket/peoplenotinwork/redundancies#datasets>



Source: Brennan Wilson Ltd analysis of LFS and BRES data

4.1.2 Places and sectors at risk of future redundancies

Most labour market analysts believe that the Government’s job retention scheme has been effective, to a degree, in shielding companies and workers from redundancy. Therefore, most forecasters, including the Office for Budgetary Responsibility (OBR), believe that unemployment will peak in the second quarter of 2021, once furlough has ended in March 2021. If it is the case that furlough is shielding employees from redundancy, it follows that those still on furlough will be at high risk of redundancy once the job retention scheme ends.

The table below sets out the proportion of employees furloughed, by Parliamentary Constituency and gender, at the end of September 2020. At this time, every parliamentary constituency in Cheshire and Warrington had a take up rate of furlough at or below the national rate of 8% except for Tatton. The take up rate in Tatton, at 10%, was twice that in Crewe and Nantwich (5%). It is also noteworthy that the take up rate of furlough by female employees in Cheshire and Warrington tended to be the same or higher than the take up rate for male employees.

| Furloughed employments by parliamentary constituency and gender as of 30 September 2020 | | | | | | |
|---|------------------------|--------------|------------------------|--------------|------------------------|--------------|
| | Female | | Male | | Total | |
| | Employments furloughed | Take up-rate | Employments furloughed | Take-up rate | Employments furloughed | Take-up rate |
| England | 1038000 | 8% | 981300 | 8% | 2019300 | 8% |
| North West | 123200 | 7% | 120500 | 7% | 243700 | 7% |
| City of Chester | 1800 | 8% | 1700 | 7% | 3500 | 8% |
| Congleton | 1900 | 8% | 1600 | 7% | 3500 | 8% |
| Crewe and Nantwich | 1600 | 6% | 1400 | 5% | 3000 | 5% |
| Eddisbury | 1700 | 8% | 1300 | 6% | 3000 | 7% |
| Ellesmere Port and Neston | 1500 | 7% | 1400 | 7% | 2900 | 7% |
| Macclesfield | 1800 | 8% | 1700 | 8% | 3600 | 8% |
| Tatton | 2300 | 11% | 1700 | 9% | 4000 | 10% |
| Warrington North | 1800 | 7% | 1500 | 6% | 3300 | 7% |
| Warrington South | 2100 | 8% | 1800 | 6% | 4000 | 7% |
| Weaver Vale | 1600 | 7% | 1300 | 6% | 2900 | 7% |

Source: HMRC CJRS Statistics, November 2020

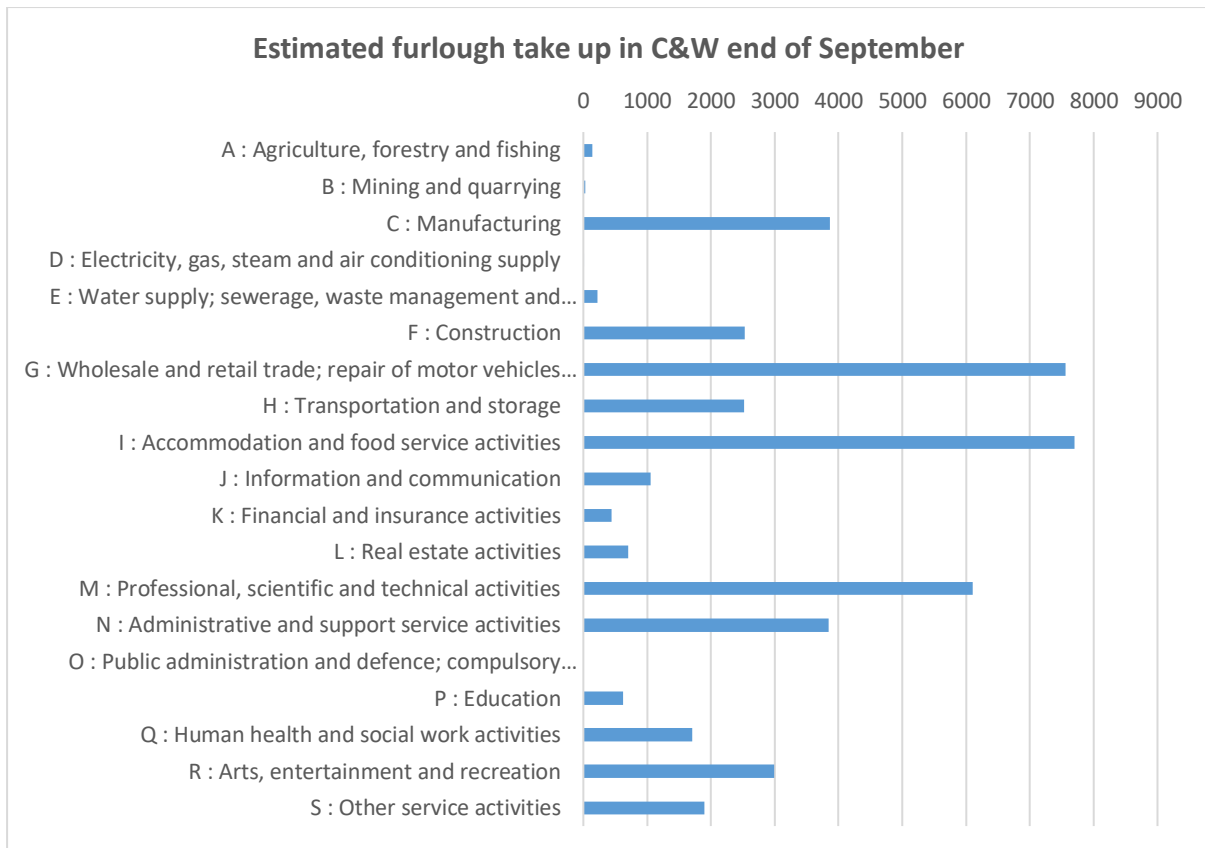
Data is available from HMRC on the take up of furlough nationally by different industrial sectors at the end of September 2020. From this, the three sectors with the highest take up rates nationally are:

- Arts, entertainment, and recreation - 23% of employees
- Accommodation and food services - 22% of employees
- Other service activities - 19% of employees

Whilst there is no data available on take up of furlough by sector of employees in Cheshire and Warrington, it is possible to generate a sectoral estimate of take up of furlough in Cheshire and Warrington by applying the national sectoral take up rates to the numbers of people employed in each sector in Cheshire and Warrington. This may slightly overstate the numbers furloughed in Cheshire and Warrington because the overall take up rate locally is slightly lower than the national take up rate. On the other hand, the national data for end of September will understate actual levels of furlough take up nationally because that data is still incomplete.

This modelling allows us to understand which sectors are likely to have a high risk of redundancies in the area when the furlough scheme winds down at the end of March 2021. Sectors estimated to have at, or above, 3,000 employees on furlough at the end of September in Cheshire and Warrington were:

- Manufacturing
- Wholesale and retail trade
- Accommodation and food
- Professional, scientific, and technical
- Administrative and support services
- Arts, entertainment, and recreation



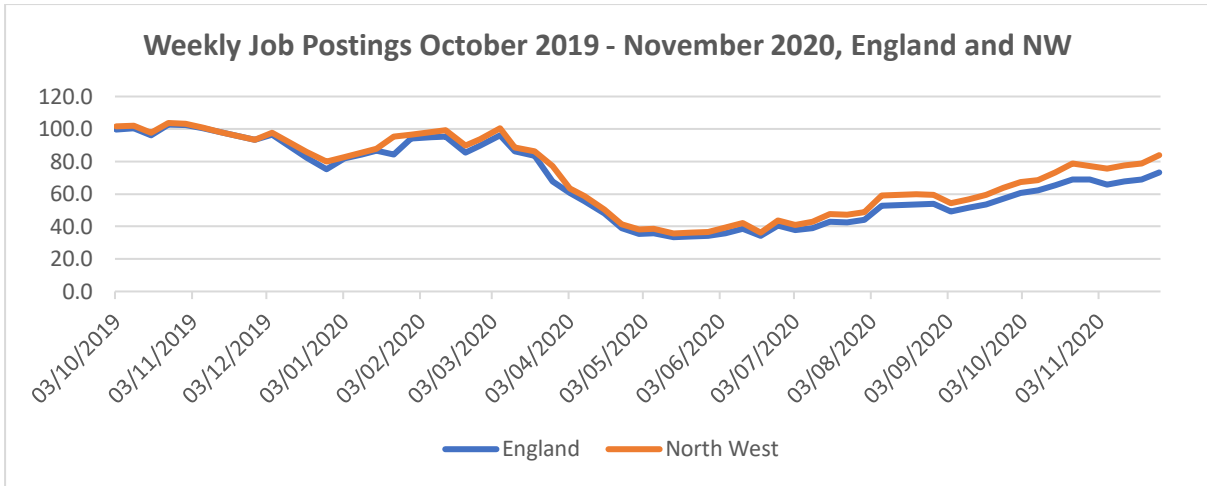
Source: Brennan Wilson Analysis of BRES and HMRC data

4.1.3 The impact on the demand for labour and the local economy

The Office for National Statistics publish experimental job advert indices covering the UK job market⁴. The graph below presents data for England and the North West. The 2019 average is indexed at 100. Postings in both England and the North West plunged to below 40% of their 2019 volumes in June 2020. Since then, there has been a gradual increase in the rate of job postings, with the North West labour market seemingly slightly more buoyant than England (84% of 2019 in the NW compared to 79% in England at the end of November 2020). The gradual increase in postings continued through the most recent national lockdown.

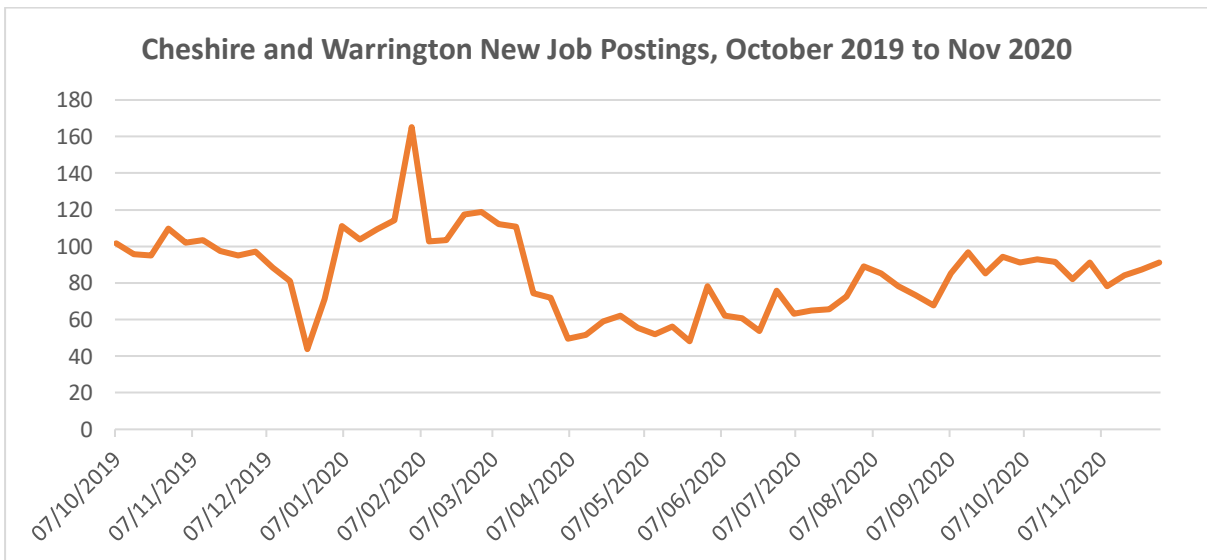
4

<https://www.ons.gov.uk/economy/economicoutputandproductivity/output/datasets/onlinejobadvertestimate>



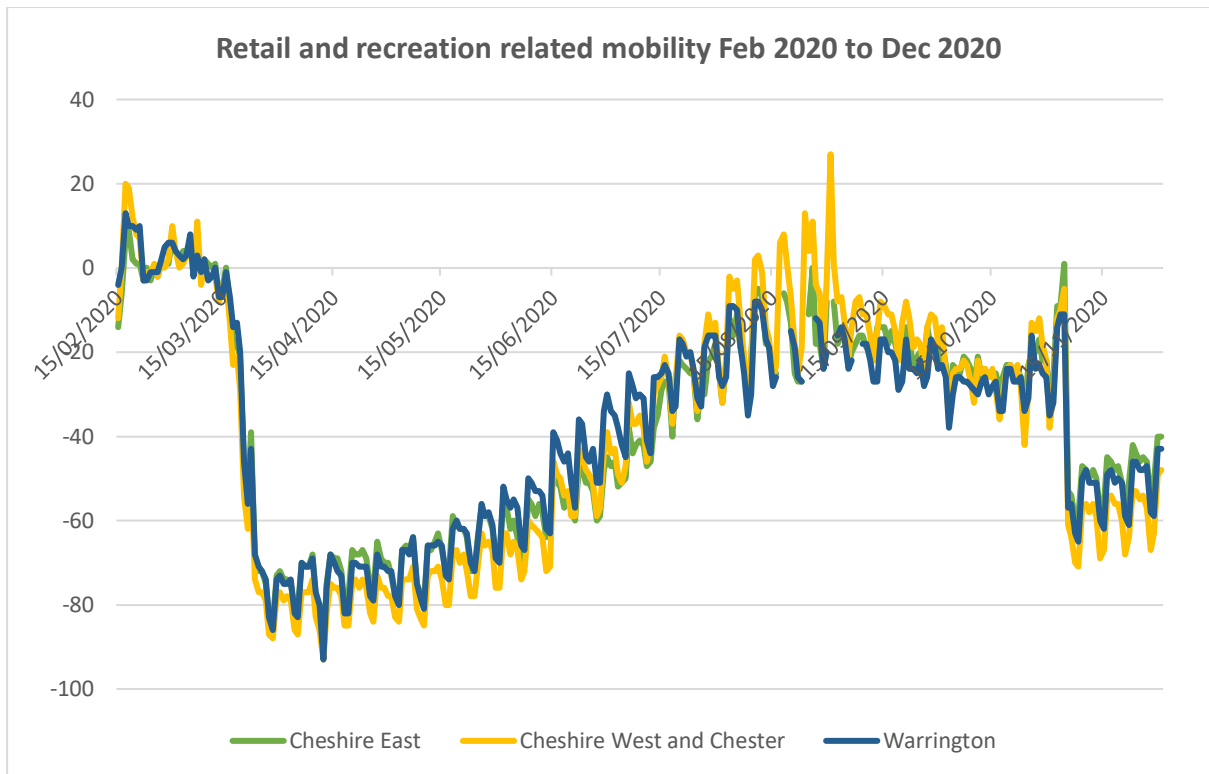
Source: ONS, Online Job Advert Estimates

A similar, slightly more encouraging, pattern can be seen in EMSI job postings data for Cheshire and Warrington. The rate of posting for new job roles dipped below 50% of the 2019 rate in April 2020 and May 2020. Whilst there is some volatility in the data, a steady increase in the rate of posting has been observed with the rate growing to 91% of the 2019 average rate at the end of November 2020.



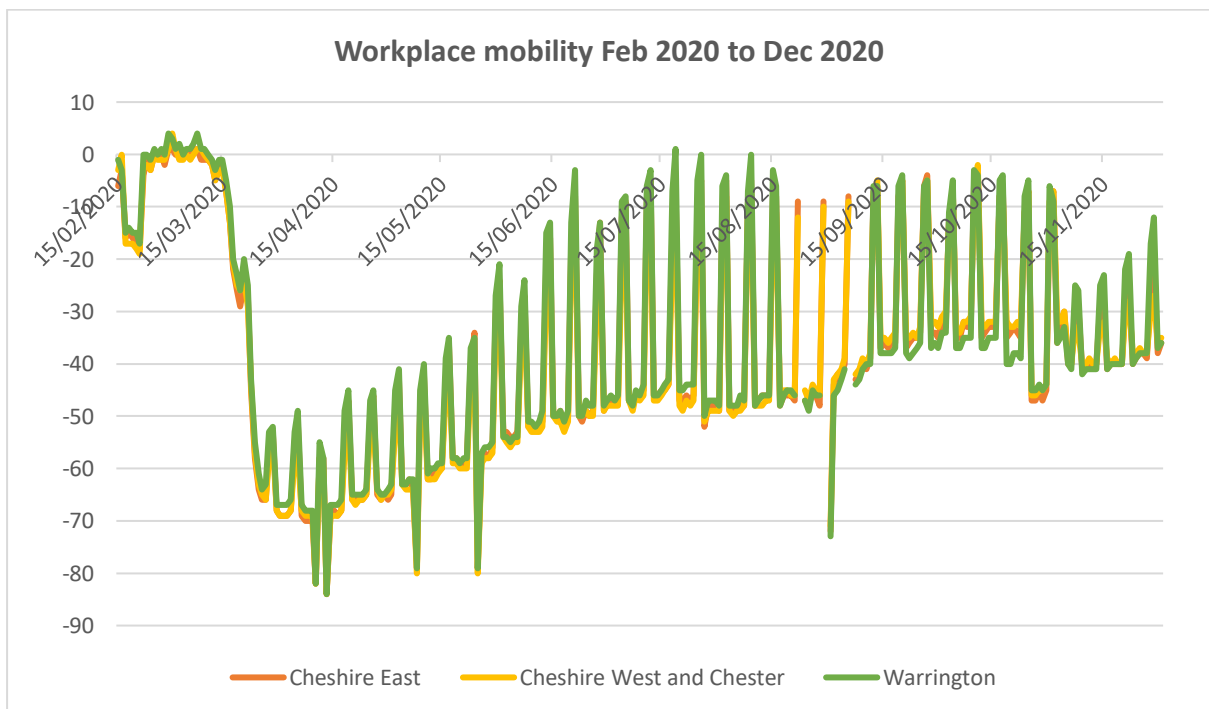
Source: EMSI

Daily mobility data can help us understand how Covid-19 has impacted on different forms of economic activity. The chart below shows Google mobility data for retail and recreation activity in the three local authorities of Cheshire and Warrington. After a sharp decline at the start of the pandemic, levels of mobility gradually increased, peaking at the end of the “Eat out to help out” initiative before gradually declining into October 2020 and then suffering another sharp decrease with the onset of the second national lockdown.



Source: Google Community Mobility reports

Workplace mobility also saw a dramatic reduction at the onset of the pandemic in Cheshire and Warrington, with weekday levels falling by as much as 84% in the middle of April 2020. Workplace mobility levels have plateaued from the start of September 2020 at about 40% lower than pre-pandemic levels, with a 36% reduction obtaining at the start of December.



Source: Google Community Mobility Reports

4.1.4 The impact on apprenticeships

In October 2020, the DfE reported that there had been 58,160 apprenticeship starts reported between 23 March and 31 July 2020, a decrease of 46% compared with 107,750 reported for this period at the same point in October 2019. This decrease may not be wholly attributable to Covid-19 since DfE reported in April 2020 that starts for 2019/20 (ie pre-pandemic) were down on the same point in the previous year, with starts in all months (except September) in 2019/20 reported as being lower than those reported at the same point in 2018/19.

For apprenticeship starts between March 23rd and July 31st, 2020:

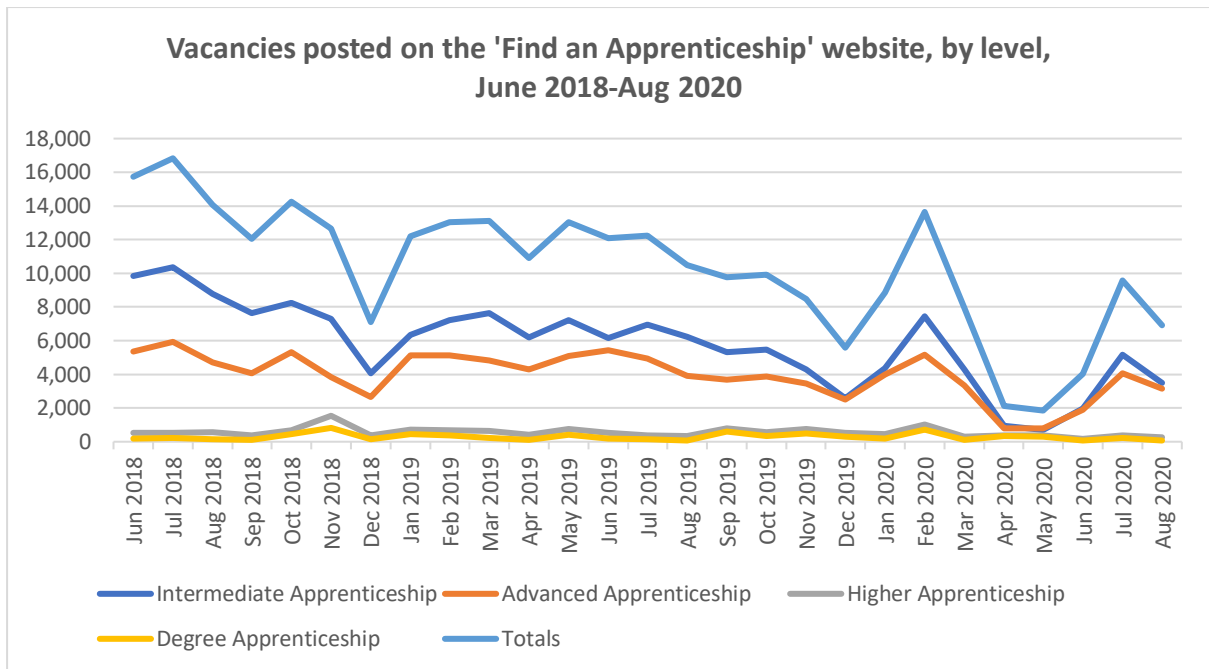
- Learners aged 25 and over made up 62.2 per cent of starts; this was 54.6 per cent in the previous year.
- Intermediate apprenticeships accounted for 25.9 per cent of starts; this was 36.4 per cent in 2018/19.
- Higher apprenticeships accounted for 31.5 per cent of starts; this was 17.6 per cent in 2018/19.
- Business, Administration and Law, and Health, Public Services and Care were the dominant sector subject areas comprising 68.1 per cent of starts in 2019/20. These were also the main sector subject areas the previous year, but they represented a smaller proportion of starts (62.3 per cent).

Data on commitments to start an apprentice in 2020 published by DfE includes commitments from non-levy payers, whereas the same data published in 2019 excluded non-levy payers. It is therefore not possible to use this data to provide a meaningful insight on how Covid-19 may have impacted on Apprenticeship delivery to date in 2020/21.

The graph below illustrates data from the DfE's 'Find an Apprenticeship' website on the number of apprenticeship vacancies posted, by level, between June 2018 and August 2020. Whilst this website only captures a subset of all apprenticeship vacancies, it provides an insight on apprenticeship activity nationally.

The first national lockdown in March 2020 precipitated a very large decline in the number of apprenticeship vacancies posted nationally with total postings declining from 13,660 in February 2020 to 1,850 postings in May 2020. By August 2020, postings had risen to 6,920, which compares with 10,490 postings in August 2019. It is not clear how much of this August-to-August decline of 3,570 postings can be attributed to the impact of the pandemic rather other factors.

There has been a long-term decline in the number of apprenticeship starts following the introduction of the apprenticeship levy and the Government's 'reform' of apprenticeships introduced in the latter half of the last decade. This is illustrated in the chart below by comparing August 2018 and August 2019 (ie pre-pandemic) which saw total postings fall from 14,060 to 10,490 - a decline of 3,570 postings – exactly the same as the decline in the following August 2019 -August 2020 pandemic-hit year.



Source: DfE, FE data library

4.2 Economic Development Priorities

A key driver of demand for labour in Cheshire and Warrington will be the plans for major economic development initiatives in the medium term. Some of the most significant of these are detailed briefly below.

4.2.1 Levelling Up

There are plans to exploit the opportunities offered by the arrival of HS2 services at Crewe and Northern Powerhouse Rail (NPR) and HS2 at Warrington. The LEP is proposing to create a High-Speed Growth Corridor that runs from Crewe to Warrington. This includes significant opportunities around hub stations at Crewe (HS2) and Warrington Bank Quay (HS2 / NPR). It will build on traditional strengths in high value manufacturing, engineering and logistics as well as growing financial and professional services in Crewe and Warrington. The proposals have the potential to deliver 39,000 new homes, 6m sq ft of new office space, 9,000 new jobs and a £280+ million of investment.

4.2.2 Digital Infrastructure

Detailed work is nearing completion to develop a digital infrastructure plan for Cheshire and Warrington which includes:

- Enabling Gigabit Capable infrastructure
- Extended 4G rollout and the encouragement and promotion of the role of next generation mobile technology, including 5G trials
- Driving adoption of digital connectivity by increasing participation/skills and take-up of services making sure people (citizens and businesses) have the right skills required to realise the benefits and opportunities of enhanced digital connectivity.

4.2.3 Decarbonisation and Nuclear

Cheshire and Warrington is recognised as being a leader in the drive to deliver low carbon energy and clean growth, with decades of industry-leading experience in energy distribution systems, fuels and nuclear engineering and design.

The LEP has identified both the incentive and opportunity to be a world leader in developing and applying low carbon technologies driving economic growth and delivering a reduction in carbon emissions. The initial focus is the industrial cluster centred around Ellesmere Port, one of the UK's largest, covering 100km² and consuming approximately 5% of the UK's energy for industrial processes, heat, and transport. It includes some of Cheshire's major manufacturing employers covering oil refining, glass manufacture, nuclear fuel enrichment, chemical production and automotive manufacture. Government has recognised the potential with over £25 million provided in the last year alone to support project development.

Central to the LEP's plans is the £1 billion Hynet Project, which has the potential to add £17 billion of GVA, create 5,000 new jobs by 2025 and save over 1 million tonnes of CO₂ per annum; the equivalent of taking more than 600,000 cars off the road.

The nuclear sector supports over 6,000 jobs in Cheshire and Warrington including a significant concentration of design and engineering expertise at Birchwood, Warrington and at Capenhurst. From engineering design, construction, operation, and decommissioning there are huge opportunities to boost the capacity and capability for R&D into next generation and fusion and small modular reactors, and in doing so delivering more highly skilled, productive jobs.

4.2.4 Life Sciences

The LEP is working with the Medicines Discovery Catapult, to exploit the area's critical mass of expertise and infrastructure in the development/commercialisation of novel complex medicines. The Catapult has developed proposals for a £40m National Translational Technology Development Centre and a Catapult Quarter to enable stimulus and capacity building for the UK diagnostics sector. This builds upon its success in delivering the COVID19 lab testing platform and proven national impact across adjacent sectors of new medicines and biomarkers. It also complements government's recent investment through Strength in Places Fund into the Liverpool School of Tropical Medicine and Alderley Park-based Anti-Microbial Research Centre.

4.3 Current Employer Demand for Labour

EMSI provide an estimate for annual openings for four-digit SOC categories. Annual openings are the amount of newly created jobs in addition to job churn for an occupation each year. This includes retirement, promotions and changing employment. This is EMSI's estimate of labour market demand for an occupation. This section provides information drawn from the EMSI data on the estimated level of current demand in each occupational major group.

4.3.1 Employer Demand for Labour – Managers Directors and Senior Officials

The table below provides information about those occupations that belong to the major group of 'Managers Directors and Senior Officials' that have an estimated number of annual openings more than 75. This major group covers occupations whose tasks consist of planning, directing, and coordinating resources to achieve the efficient functioning of organisations and businesses. Working proprietors in small businesses are included. Most occupations in this major group will require a significant amount of knowledge and experience of the production processes, administrative

procedures or service requirements associated with the efficient functioning of organisations and businesses.

The three areas with estimated levels of annual demand higher than 200 are:

- Production managers and directors in manufacturing
- Financial managers and directors
- Managers and directors in retail and wholesale

| Annual Openings for Managers Directors and Senior Officials in 2019-2020 | | |
|---|--|-------------------------|
| SOC | Description | Average Annual Openings |
| 1121 | Production managers and directors in manufacturing | 228 |
| 1122 | Production managers and directors in construction | 99 |
| 1131 | Financial managers and directors | 208 |
| 1132 | Marketing and sales directors | 156 |
| 1135 | Human resource managers and directors | 133 |
| 1139 | Functional managers and directors n.e.c. | 83 |
| 1162 | Managers and directors in storage and warehousing | 104 |
| 1190 | Managers and directors in retail and wholesale | 372 |
| 1223 | Restaurant and catering establishment managers and proprietors | 79 |
| 1251 | Property, housing and estate managers | 125 |
| 1259 | Managers and proprietors in other services n.e.c. | 152 |
| Source: EMSI Analyst | | |

4.3.2 Employer Demand for Labour – Professional Occupations

The table below provides information about those occupations that belong to the major group of ‘Professional Occupations’ that have an estimated number of annual openings more than 75. This major group covers occupations whose main tasks require a high level of knowledge and experience in the natural sciences, engineering, life sciences, social sciences, humanities, and related fields. The main tasks consist of the practical application of an extensive body of theoretical knowledge, increasing the stock of knowledge by means of research and communicating such knowledge by teaching methods and other means. Most occupations in this major group will require a degree or equivalent qualification, with some occupations requiring postgraduate qualifications and/or a formal period of experience-related training.

The areas with estimated levels of annual demand c200 or more are:

- Programmers and software development professionals
- Information technology and telecommunications professionals n.e.c.
- Medical practitioners
- Nurses
- Secondary education teaching professionals
- Primary and nursery education teaching professionals
- Chartered and certified accountants

| Annual Openings for Professional Occupations in 2019-2020 | | |
|---|--|-------------------------|
| SOC | Description | Average Annual Openings |
| 2133 | IT specialist managers | 149 |
| 2135 | IT business analysts, architects and systems designers | 112 |
| 2136 | Programmers and software development professionals | 285 |
| 2139 | Information technology and telecommunications professionals n.e.c. | 197 |
| 2211 | Medical practitioners | 209 |
| 2231 | Nurses | 577 |
| 2314 | Secondary education teaching professionals | 275 |
| 2315 | Primary and nursery education teaching professionals | 327 |
| 2319 | Teaching and other educational professionals n.e.c. | 84 |
| 2421 | Chartered and certified accountants | 496 |
| 2423 | Management consultants and business analysts | 169 |
| 2424 | Business and financial project management professionals | 174 |
| 2434 | Chartered surveyors | 79 |
| Source: EMSI Analyst | | |

4.3.3 Employer Demand for Labour - Associate Professional and Technical Occupations

The table below provides information about those occupations that belong to the major group of 'Associate Professional and Technical Occupations' that have an estimated number of annual openings more than 75. This major group covers occupations whose main tasks require experience and knowledge of principles and practices necessary to assume operational responsibility and to give technical support to Professionals and to Managers, Directors and Senior Officials.

The main tasks involve the operation and maintenance of complex equipment; legal, business, financial and design services; the provision of information technology services; providing skilled support to health and social care professionals; serving in protective service occupations; and managing areas of the natural environment. Culture, media, and sports occupations are also included in this major group. Most occupations in this major group will have an associated high-level vocational qualification, often involving a substantial period of full-time training or further study. Some additional task-related training is usually provided through a formal period of induction.

There are two occupational areas where estimated annual openings are more than 200. These are:

- Financial accounts managers
- Sales accounts and business development managers

| Annual Openings for Associate Professional and Technical Occupations in 2019-2020 | | |
|---|---|-------------------------|
| SOC | Description | Average Annual Openings |
| 3131 | IT operations technicians | 84 |
| 3239 | Welfare and housing associate professionals n.e.c. | 78 |
| 3312 | Police officers (sergeant and below) | 84 |
| 3442 | Sports coaches, instructors and officials | 87 |
| 3534 | Finance and investment analysts and advisers | 145 |
| 3535 | Taxation experts | 133 |
| 3538 | Financial accounts managers | 210 |
| 3539 | Business and related associate professionals n.e.c. | 87 |
| 3541 | Buyers and procurement officers | 89 |
| 3542 | Business sales executives | 161 |
| 3543 | Marketing associate professionals | 156 |
| 3545 | Sales accounts and business development managers | 477 |
| 3562 | Human resources and industrial relations officers | 168 |
| 3563 | Vocational and industrial trainers and instructors | 109 |
| Source: EMSI Analyst | | |

4.3.4 Employer Demand for Labour - Administrative and Secretarial Occupations

Occupations within this major group undertake general administrative, clerical, and secretarial work, and perform a variety of specialist client-orientated administrative duties. The main tasks involve retrieving, updating, classifying and distributing documents, correspondence and other records held electronically and in storage files; typing, word-processing and otherwise preparing documents; operating other office and business machinery; receiving and directing telephone calls to an organisation; and routing information through organisations. Most job holders in this major group will require a good standard of general education. Certain occupations will require further additional vocational training or professional occupations to a well-defined standard.

The table below provides information about those occupations that belong to the major group of 'Administrative and Secretarial Occupations' that have an estimated number of annual openings more than 75. The occupations with estimated levels of current annual demand 200 or more are:

- Book-keepers, payroll managers and wages clerks
- Other administrative occupations n.e.c.
- Personal assistants and other secretaries

| Annual Openings for Administrative and Secretarial Occupations in 2019-2020 | | |
|---|---|-------------------------|
| SOC | Description | Average Annual Openings |
| 4112 | National government administrative occupations | 132 |
| 4113 | Local government administrative occupations | 78 |
| 4122 | Book-keepers, payroll managers and wages clerks | 881 |
| 4123 | Bank and post office clerks | 152 |
| 4129 | Financial administrative occupations n.e.c. | 161 |
| 4131 | Records clerks and assistants | 119 |
| 4133 | Stock control clerks and assistants | 146 |
| 4151 | Sales administrators | 90 |
| 4159 | Other administrative occupations n.e.c. | 634 |
| 4161 | Office managers | 179 |
| 4211 | Medical secretaries | 84 |
| 4215 | Personal assistants and other secretaries | 263 |
| 4216 | Receptionists | 331 |
| Source: EMSI Analyst | | |

4.3.5 Employer Demand for Labour - Skilled Trades Occupations

This major group covers occupations whose tasks involve the performance of complex physical duties that normally require a degree of initiative, manual dexterity, and other practical skills. The main tasks of these occupations require experience with, and understanding of, the work situation, the materials worked with and the requirements of the structures, machinery and other items produced. Most occupations in this major group have a level of skill commensurate with a substantial period of training, often provided by means of a work-based training programme.

The table below provides information about those occupations that belong to the major group of 'Skilled Trades Occupations' that have an estimated number of annual openings more than 75. The occupations with estimated levels of current annual demand 200 or more are:

- Teaching assistants
- Nursing auxiliaries and assistants
- Care workers and home carers

| Annual Openings for Skilled Trades Occupations in 2019-2020 | | |
|---|--|-------------------------|
| SOC | Description | Average Annual Openings |
| 5113 | Gardeners and landscape gardeners | 78 |
| 5223 | Metal working production and maintenance fitters | 138 |
| 5231 | Vehicle technicians, mechanics and electricians | 186 |
| 5241 | Electricians and electrical fitters | 132 |
| 5434 | Chefs | 221 |
| 5435 | Cooks | 81 |
| 6121 | Nursery nurses and assistants | 147 |
| 6125 | Teaching assistants | 289 |
| 6126 | Educational support assistants | 87 |
| 6139 | Animal care services occupations n.e.c. | 126 |
| 6141 | Nursing auxiliaries and assistants | 309 |
| 6145 | Care workers and home carers | 738 |
| 6146 | Senior care workers | 77 |
| 6221 | Hairdressers and barbers | 155 |
| 6222 | Beauticians and related occupations | 86 |
| Source: EMSI Analyst | | |

4.3.6 Employer Demand for Labour - Caring, Leisure and Other Service Occupations

This major group covers occupations whose tasks involve the provision of a service to customers, whether in a public protective or personal care capacity. The main tasks associated with these occupations involve the care of the sick, the elderly and infirm; the care and supervision of children; the care of animals; and the provision of travel, personal care, and hygiene services. Most occupations in this major group require a good standard of general education and vocational training. To ensure high levels of integrity, some occupations require professional qualifications or registration with professional bodies or relevant background checks. The table below provides information about those occupations that belong to this group that have an estimated number of annual openings more than 75. The occupations with estimated levels of current annual demand 200 or more are:

- Teaching assistants
- Nursing auxiliaries and assistants
- Care workers and home carers

| Annual Openings for Caring, Leisure and Other Service Occupations in 2019-2020 | | |
|--|---|-------------------------|
| SOC | Description | Average Annual Openings |
| 6125 | Teaching assistants | 289 |
| 6126 | Educational support assistants | 87 |
| 6139 | Animal care services occupations n.e.c. | 126 |
| 6141 | Nursing auxiliaries and assistants | 309 |
| 6145 | Care workers and home carers | 738 |
| 6146 | Senior care workers | 77 |
| 6221 | Hairdressers and barbers | 155 |
| 6222 | Beauticians and related occupations | 86 |
| Source: EMSI Analyst | | |

4.3.7 Employer Demand for Labour - Sales and Customer Service Occupations

This major group covers occupations whose tasks require the knowledge and experience necessary to sell goods and services, accept payment in respect of sales, replenish stocks of goods in stores, provide information to potential clients and additional services to customers after the point of sale. The main tasks involve knowledge of sales techniques, a degree of knowledge regarding the product or service being sold, familiarity with cash and credit handling procedures and a certain amount of record keeping associated with those tasks. Most occupations in this major group require a general education and skills in interpersonal communication. Some occupations will require a degree of specific knowledge regarding the product or service being sold but are included in this major group because the primary task involves selling.

The table below provides information about those occupations that belong to this group that have an estimated number of annual openings more than 75. There are two occupational areas with estimated levels of current annual demand 200 or more:

- Sales and Retail Assistants
- Customer service occupations n.e.c

| Annual Openings for Sales and Customer Service Occupations in 2019-2020 | | |
|---|---|-------------------------|
| SOC | Description | Average Annual Openings |
| 7111 | Sales and retail assistants | 1154 |
| 7112 | Retail cashiers and check-out operators | 189 |
| 7114 | Pharmacy and other dispensing assistants | 84 |
| 7122 | Debt, rent and other cash collectors | 82 |
| 7130 | Sales supervisors | 187 |
| 7211 | Call and contact centre occupations | 81 |
| 7219 | Customer service occupations n.e.c. | 224 |
| 7220 | Customer service managers and supervisors | 125 |

Source: EMSI Analyst

4.3.8 Employer Demand for Labour - Process, Plant and Machine Operatives

This major group covers occupations whose main tasks require the knowledge and experience necessary to operate and monitor industrial plant and equipment; to assemble products from component parts according to strict rules and procedures and to subject assembled parts to routine tests; and to drive and assist in the operation of various transport vehicles and other mobile machinery. Most occupations in this major group do not specify that a particular standard of education should have been achieved but will usually have a period of formal experience-related training. Some occupations require licences issued by statutory or professional bodies.

The table below provides information about those occupations that belong to this group that have an estimated number of annual openings more than 75. There are two occupational areas with estimated levels of current annual demand 200 or more:

- Large goods vehicle drivers
- Van drivers

| Annual Openings for Process, Plant and Machine Operatives in 2019-2020 | | |
|--|--|-------------------------|
| SOC | Description | Average Annual Openings |
| 8111 | Food, drink and tobacco process operatives | 87 |
| 8211 | Large goods vehicle drivers | 380 |
| 8212 | Van drivers | 219 |
| 8222 | Fork-lift truck drivers | 145 |
| <i>Source: EMSI Analyst</i> | | |

4.3.9 Employer Demand for Labour - Elementary Occupations

This major group covers occupations which require the knowledge and experience necessary to perform mostly routine tasks, often involving the use of simple hand-held tools and, in some cases, requiring a degree of physical effort. Most occupations in this major group do not require formal educational qualifications but will usually have an associated short period of formal experience-related training.

The table below provides information about those occupations that belong to this group that have an estimated number of annual openings more than 75. The occupations with estimated levels of current annual demand 200 or more are:

- Cleaners and domestics
- Elementary storage occupations
- Kitchen and catering assistants
- Waiters and waitresses
- Bar staff

| Annual Openings for Elementary Occupations in 2019-2020 | | |
|---|---|-------------------------|
| SOC | Description | Average Annual Openings |
| 9134 | Packers, bottlers, canners and fillers | 156 |
| 9211 | Postal workers, mail sorters, messengers and couriers | 110 |
| 9233 | Cleaners and domestics | 555 |
| 9241 | Security guards and related occupations | 104 |
| 9244 | School midday and crossing patrol occupations | 85 |
| 9251 | Shelf fillers | 97 |
| 9260 | Elementary storage occupations | 596 |
| 9272 | Kitchen and catering assistants | 465 |
| 9273 | Waiters and waitresses | 266 |
| 9274 | Bar staff | 276 |
| <i>Source: EMSI Analyst</i> | | |

4.4 Current Sector Earnings

The table below provides information on the median hourly wage by occupation and local authority. This indicates that the median hourly wage tends to be very similar by occupation across the three local authorities although it tends to be slightly higher in Warrington than elsewhere (there was a higher hourly median wage in six occupational areas in Warrington).

This data from job postings is consistent with the official data on earnings by workplace that is reported above (section 3.6), which also shows higher rates of pay for Warrington-based workplaces (although residents of Warrington receive the lowest rates of pay in Cheshire and Warrington).

| Median Hourly Wages by Occupation and Local Authority | | | |
|--|---------------------------|---------------|------------|
| | Cheshire West and Chester | Cheshire East | Warrington |
| Professional Occupations | £21.04 | £20.82 | £20.74 |
| Managers, Directors and Senior Officials | £19.31 | £19.84 | £19.80 |
| Associate Professional and Technical Occupations | £15.82 | £15.76 | £15.98 |
| Skilled Trades Occupations | £11.98 | £12.14 | £12.81 |
| Administrative and Secretarial Occupations | £11.25 | £11.22 | £11.43 |
| Process, Plant and Machine Operatives | £11.19 | £11.44 | £11.18 |
| Caring, Leisure and Other Service Occupations | £9.42 | £9.45 | £9.47 |
| Sales and Customer Service Occupations | £9.34 | £9.40 | £9.46 |
| Elementary Occupations | £8.95 | £8.88 | £9.13 |
| Source: EMSI Analyst | | | |

The table below presents information on those 2-digit SIC industry sectors that have grown more than 10% between 2015 and 2020 and currently employ more than 3,000 people in Cheshire and Warrington, ranked by the average wages per job. Fourteen of these seventeen sectors have an average wage higher than the Cheshire and Warrington average of £28,7000

The high employment sectors with average wages above £40,000 are:

- Manufacture of chemicals and chemical products
- Scientific research and development
- Waste collection, treatment, and disposal activities; materials recovery
- Activities auxiliary to financial services and insurance activities

This type of information can be used to inform discussions with young people about their career and learning choices.

| High Employment Sectors (2-digit SIC) with recent Growth in Cheshire and Warrington | | | |
|--|------------------------|-----------|----------------------|
| | Avg. Wages Per Job (£) | 2020 Jobs | 2015 - 2020 % Change |
| Manufacture of chemicals and chemical products | 47,160 | 4149 | 17% |
| Scientific research and development | 45,213 | 4566 | 83% |
| Waste collection, treatment and disposal activities; materials recovery | 45,180 | 3638 | 16% |
| Activities auxiliary to financial services and insurance activities | 43,615 | 6006 | 27% |
| Architectural and engineering activities; technical testing and analysis | 39,880 | 14804 | 33% |
| Activities of head offices; management consultancy activities | 38,922 | 13679 | 30% |
| Financial service activities, except insurance and pension funding | 36,652 | 12747 | 17% |
| Construction of buildings | 34,981 | 7003 | 19% |
| Civil engineering | 34,446 | 3983 | 16% |
| Wholesale trade, except of motor vehicles and motorcycles | 30,964 | 22640 | 19% |
| Land transport and transport via pipelines | 29,763 | 9736 | 24% |
| Legal and accounting activities | 29,304 | 27698 | 95% |
| Specialised construction activities | 29,187 | 11974 | 11% |
| Wholesale and retail trade and repair of motor vehicles and motorcycles | 29,143 | 12339 | 45% |
| Manufacture of fabricated metal products, except machinery and equipment | 28,438 | 5564 | 19% |
| Human health activities | 28,390 | 33159 | 16% |
| Warehousing and support activities for transportation | 27,801 | 11203 | 18% |
| Source: EMSI Analyst | | | |

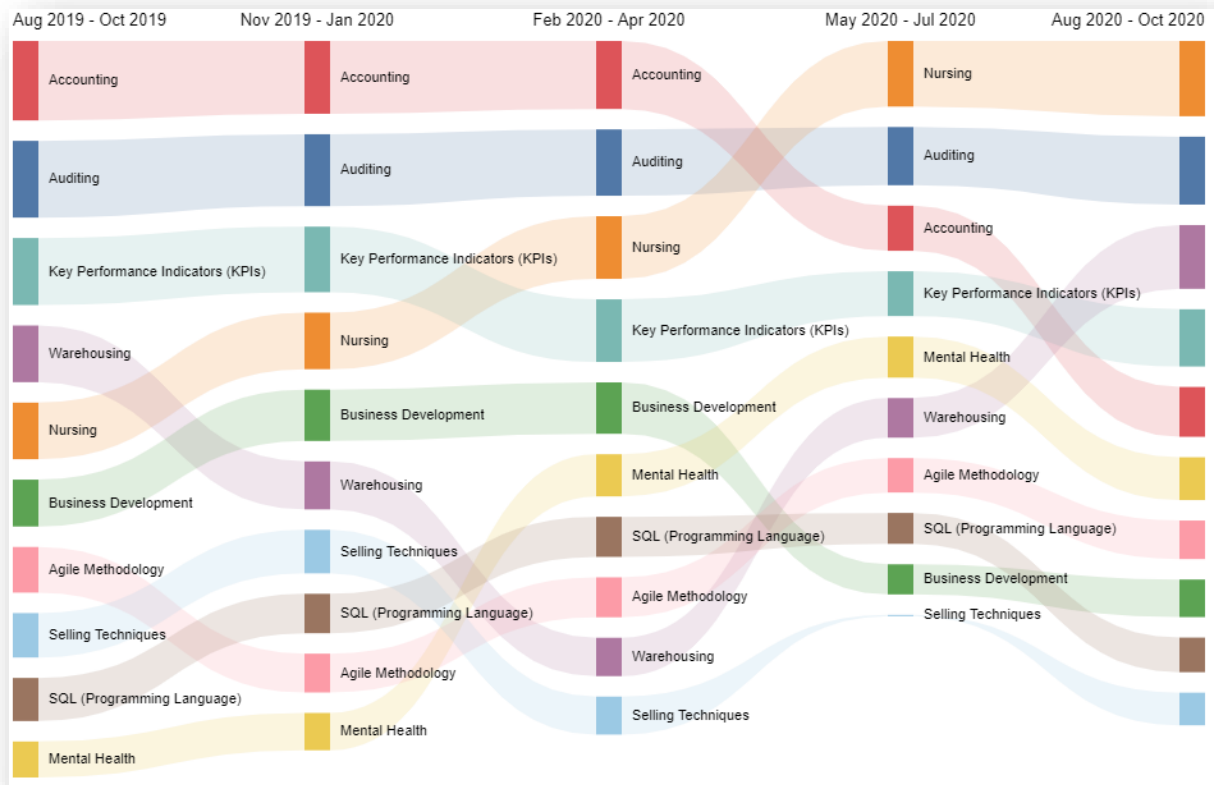
4.5 Skills Sought by Employers

The Table below sets out the top 'hard' skills sought by employers in job postings. The demand for skills in Nursing and Warehousing and, to a lesser extent in Accounting and SQL are higher than might be expected if demand in Cheshire and Warrington were to mirror the national picture.

| Top 'Hard Skills' Sought by Cheshire and Warrington Employers | | |
|--|-----------------|------------------|
| Top Hard Skills | Unique Postings | National Average |
| Accounting | 11,482 | 11,033 |
| Auditing | 11,105 | 11,498 |
| Key Performance Indicators (KPIs) | 10,055 | 8,696 |
| Nursing | 8,944 | 7,052 |
| Warehousing | 8,019 | 6,031 |
| Business Development | 6,996 | 8,215 |
| Selling Techniques | 6,611 | 6,447 |
| Agile Software Development | 6,601 | 8,130 |
| SQL (Programming Language) | 6,506 | 6,002 |
| Forecasting | 5,888 | 5,716 |
| Source: EMSI Analyst | | |

The chart below illustrates the demand for skills by employers, over time, in Cheshire and Warrington as expressed in online job postings. The impact of the pandemic is clear both in the overall decline and then uptick in the demand for labour over the year; and also, in the relative ranking of skills sought – for example the requirement for Nursing skills moving from fifth to first in this time period.

Top Skills Sought by Employers in Cheshire and Warrington, by Quarter

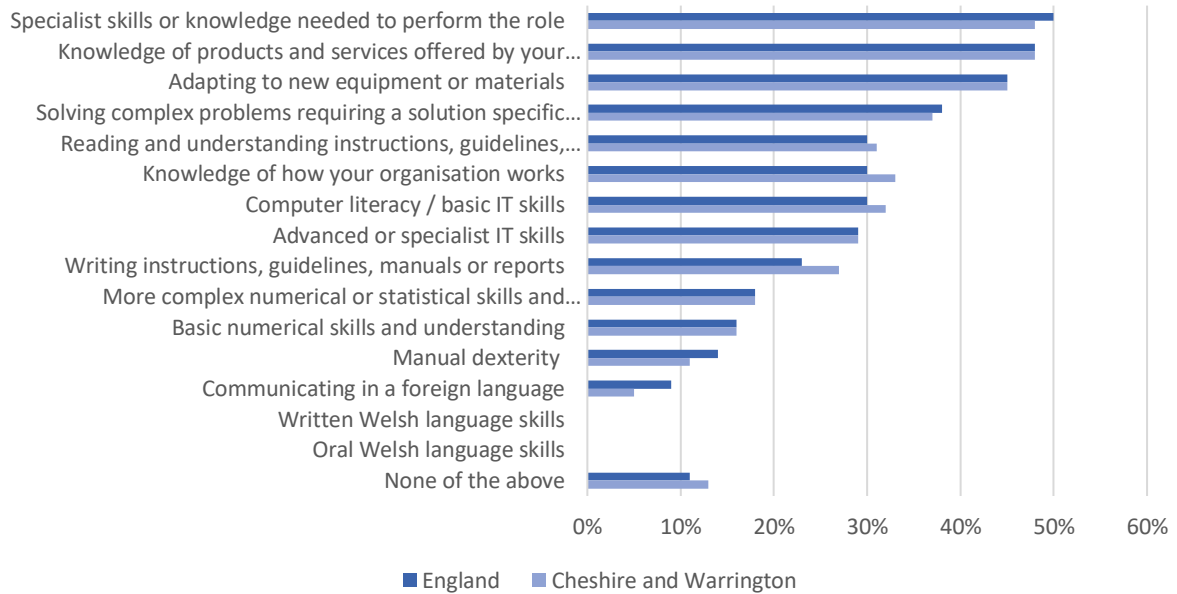


Source: EMSI Analyst

Analysis of skills sought in job postings as reported above provides a timely insight into employer demand for skills. A less timely, pre-pandemic snapshot of employer demand for skills is also available from the 2019 Employer Skills Survey.

This data is summarised in the graph below

Skills that will need developing in the workforce C&W and England, 2019

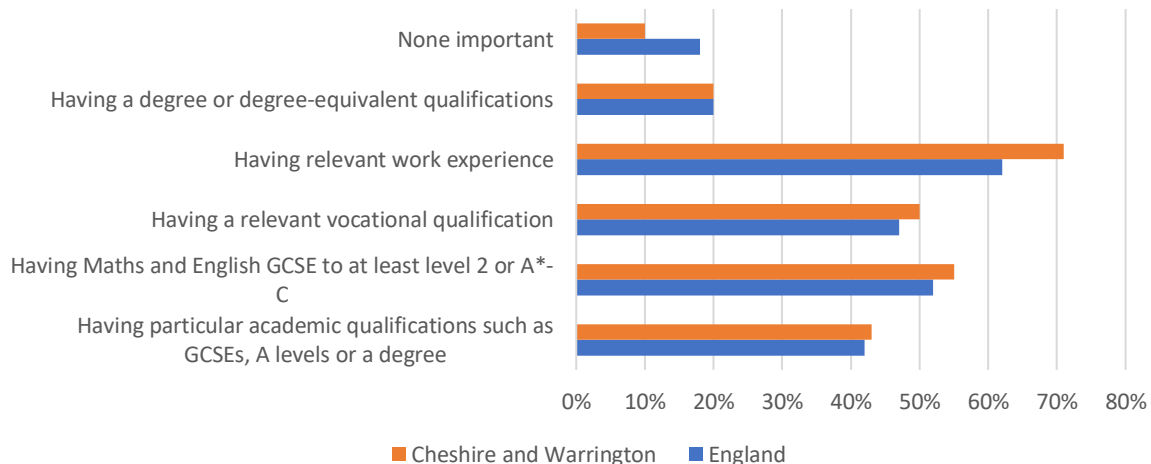


Source: SAP Core Indicators, ESS 2019

In seeking appropriately skilled employees, employers in Cheshire and Warrington place a slightly higher premium than employers in England on the importance of:

- Relevant work experience
- A relevant vocational qualification
- Maths and English GCSE
- A particular academic qualification

Critical or significant factors for job candidates



Source: ESS 2019

4.6 Future Demand for Labour

Working Futures 2017-2027 (a model commissioned by Government from the Institute of Employment Research at Warwick University) is a quantitative assessment of future employment prospects for UK and is the most comprehensive and detailed model of the UK labour market available. It projects the future size and shape of the labour market by considering employment prospects by industry, occupation, qualification level, gender, and employment status. Its focus has been to develop quantitative projections, concentrating on anticipating changing skill needs (as measured by occupation and formal qualifications), in the context of changes in general economic circumstances. These assessments are based on a well-established labour market model that provides consistent results across industry sectors and geographic areas, together with procedures to develop projections by skill, covering both demand and supply. The core purpose of Working Futures is to inform policy development and strategy around skills, careers, and employment.

Working Futures considers demand for labour driven by two factors: growth demand and replacement demand. Growth demand is the demand for labour because of the overall volume employed in an occupational sector growing (or declining). Replacement demand is the demand for labour arising from people leaving employment in the sector (eg through retirement). In general, an older age profile in an occupational sector will give rise to higher levels of replacement demand.

At the best of times, a ten-year labour market forecasting model will not consistently deliver accurate forecasts across its many dimensions. This is even more so of a model which was published a month before the declaration of a global pandemic by the World Health Organisation and in a Brexit transition year.

The full impact of Covid-19 on the Labour Market remains unknown. It is clear there will be a very significant labour market downturn; that a number of previously observed trends are likely to be accelerated (eg automation or town centre decline); and that changes to working practices (eg working from home) may become embedded. The pandemic has almost certainly invalidated a central assumption of the Working Futures forecast – that there will be slow but steady GDP growth of 1.1% per annum between 2017 and 2027.

Working Futures also makes the following assumptions about Brexit:

- there is no “cliff-edge” moment, as the UK obtains a transitional deal with the EU;
- the UK agrees a bespoke deal with the EU;
- the UK secures an ability to reduce EU migration;
- the UK can remain in the single market for goods but not services (so there is no longer financial services passporting); and
- there are likely to be some continued payments for access to the EU from the UK

At the time of writing, it remains to be seen which, if any, of these assumptions will hold.

However, Working Futures has not lost all its utility. Over time it may be useful as a statement of a pandemic-free counterfactual. What is also useful in the Working Futures model is its forecasting of levels of replacement demand. Even if some occupational areas decline, they will continue to generate replacement demand and the pandemic is likely to have a limited impact on the scale of replacement demand in an occupational sector. It is on this basis that Working Futures data is reported.

With these (many) caveats, the table below lists the industrial sectors that the Working Futures model forecasts will grow most and least between 2017 and 2027.

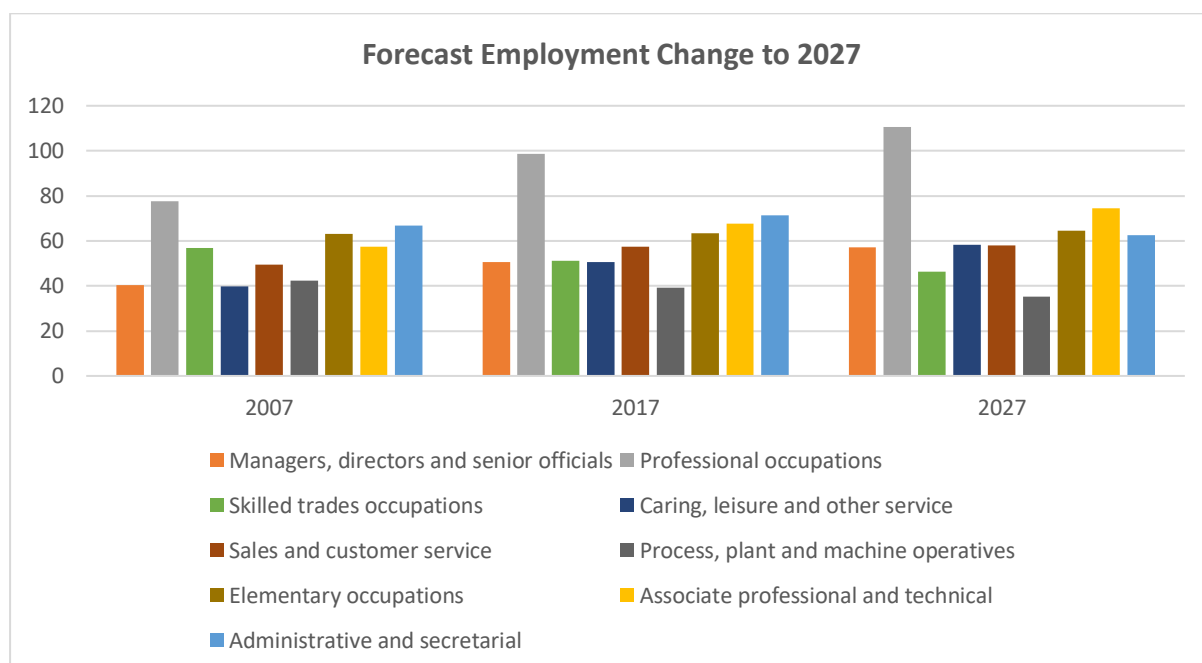
| Forecast Sectoral Growth in Cheshire and Warrington | | | |
|---|------------------------|---|------------------------|
| Sectors with highest forecast growth (2017-2027) | | Sectors with lowest forecast growth (2017-2027) | |
| 1) | Real estate | 1) | Agriculture |
| 2) | Health and social work | 2) | Rest of manufacturing |
| 3) | Arts and entertainment | 3) | Food drink and tobacco |
| 4) | Information technology | 4) | Transport and storage |
| 5) | Professional services | 5) | Education |

Source: SAP Core Indicators, Working Futures 2017-2027, IER

The Chart below illustrates the Working Futures forecast change to occupational employment (1-digit SOC) between 2017 and 2027 in Cheshire and Warrington. It can be seen from this that the forecast is for growth in the following occupational areas:

- Managers, Directors and Senior Officials
- Professional Occupations
- Caring, Leisure and Other Service Occupations
- Associate Professional and Technical Occupations

Decline in the overall numbers employed is forecast for Skilled Trades; Process, Plant and Machine Operatives; and Administrative and Secretarial Occupations.



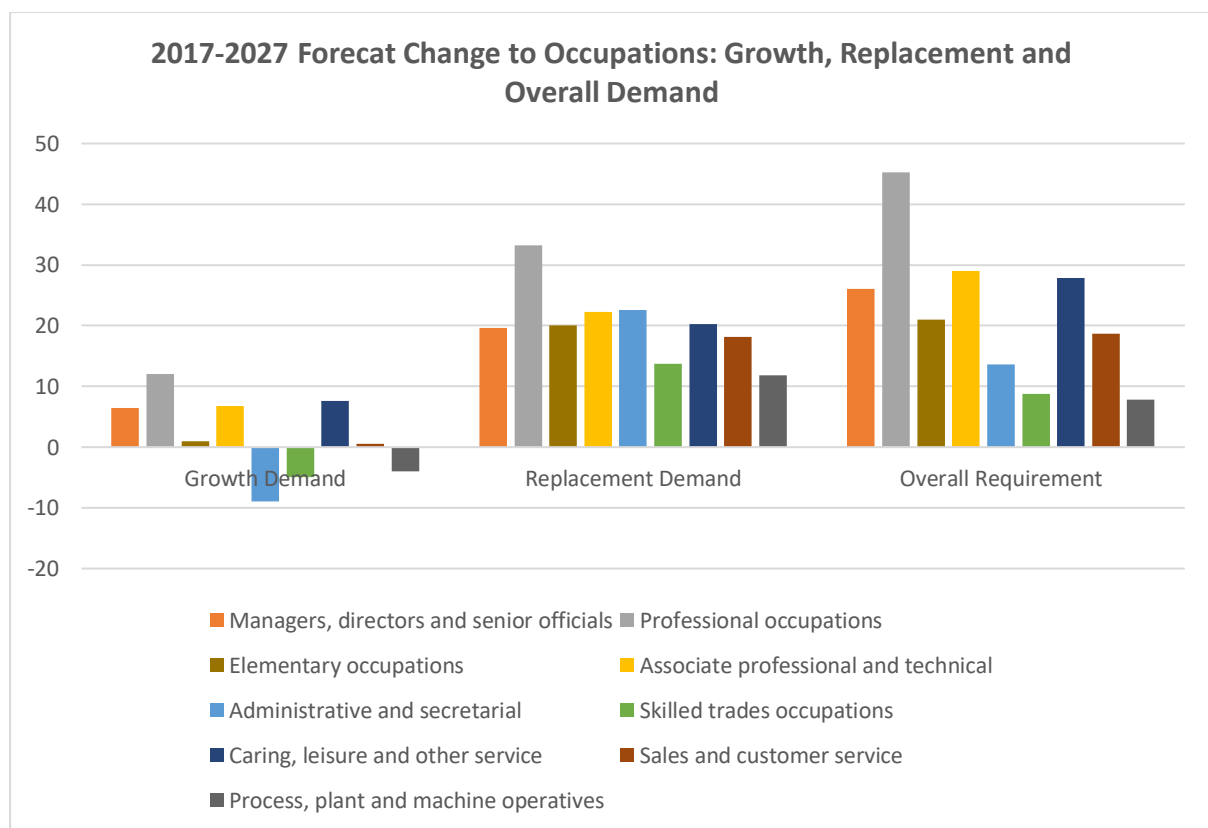
Source: Working Futures 2017-2027 LEP Tables, IER

As noted in the discussion above, Working Futures provides forecasts for both growth (“expansion”) demand for labour and replacement demand for labour. The chart below illustrates these different

components of the forecast demand for labour. Replacement demand is driven by the numbers that leave an occupation and need to be replaced (eg because of retirement). It can be seen from the chart below that in Cheshire and Warrington, replacement demand invariably drives demand for labour at a higher rate than the growth (or decline) of the overall number of jobs in an occupation.

For every main occupational group, replacement demand to 2027 will exceed 10,000 jobs in Cheshire and Warrington. Replacement demand will exceed 20,000 in the following occupations:

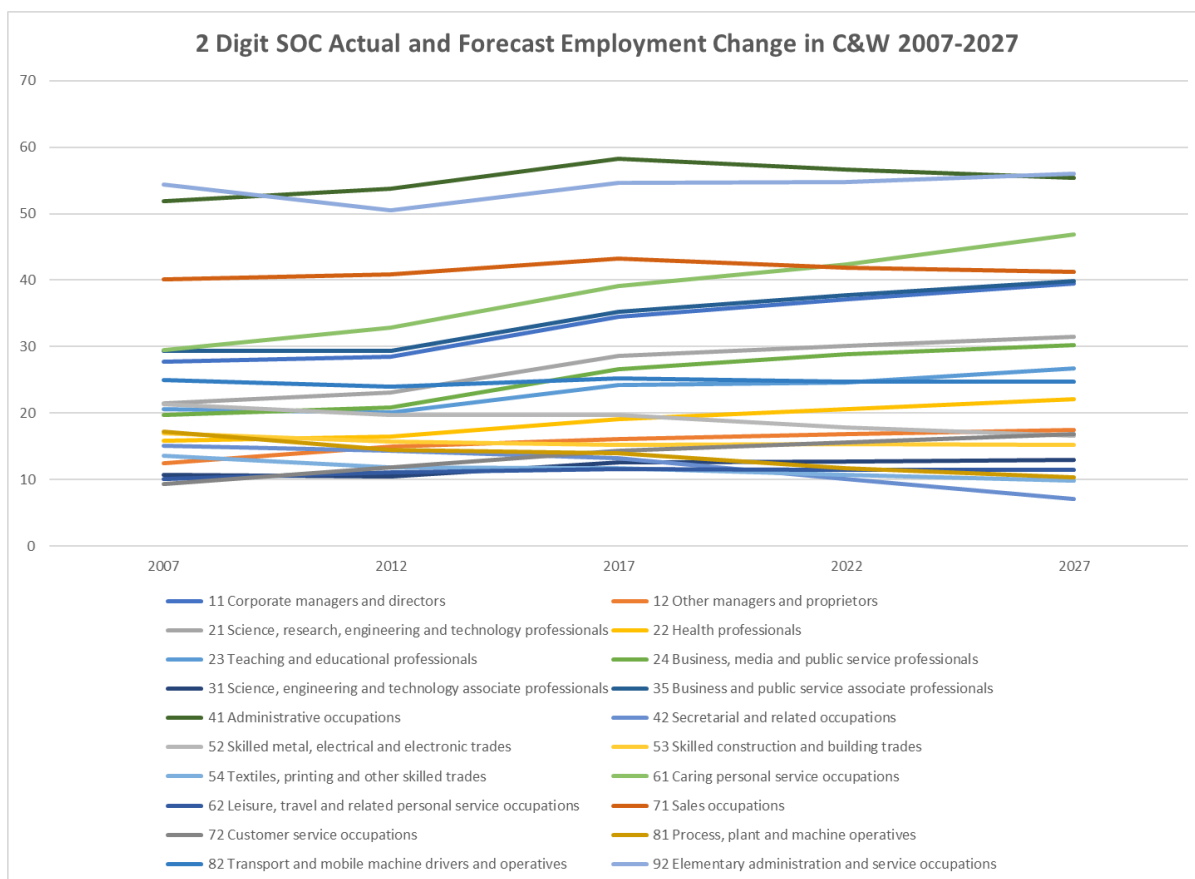
- Professional Occupations
- Caring, Leisure and Other Service Occupations
- Associate Professional and Technical Occupations
- Elementary Occupations
- Caring, Leisure and Other Service Occupations
- Administrative and Secretarial Occupations



Source: Working Futures 2017-2027 LEP Tables, IER

The chart below disaggregates the overall Working Futures forecast down to 2-digit SOC occupations in Cheshire and Warrington. It can be seen from this that the model forecasts significant increases for some occupational types including:

- Caring personal service occupations
- Health and social care associate professionals
- Customer service occupations
- Health professionals
- Corporate managers and directors



Source: Working Futures 2017-2027 LEP Tables, IER

The following occupations have been excluded from the above chart as they employed fewer than 10,000 people in Cheshire and Warrington in 2017:

- Health and social care associate professionals
- Protective service occupations
- Culture, media and sports occupations
- Elementary trades and related occupations

The table below summarises those occupations forecast to grow most and least.

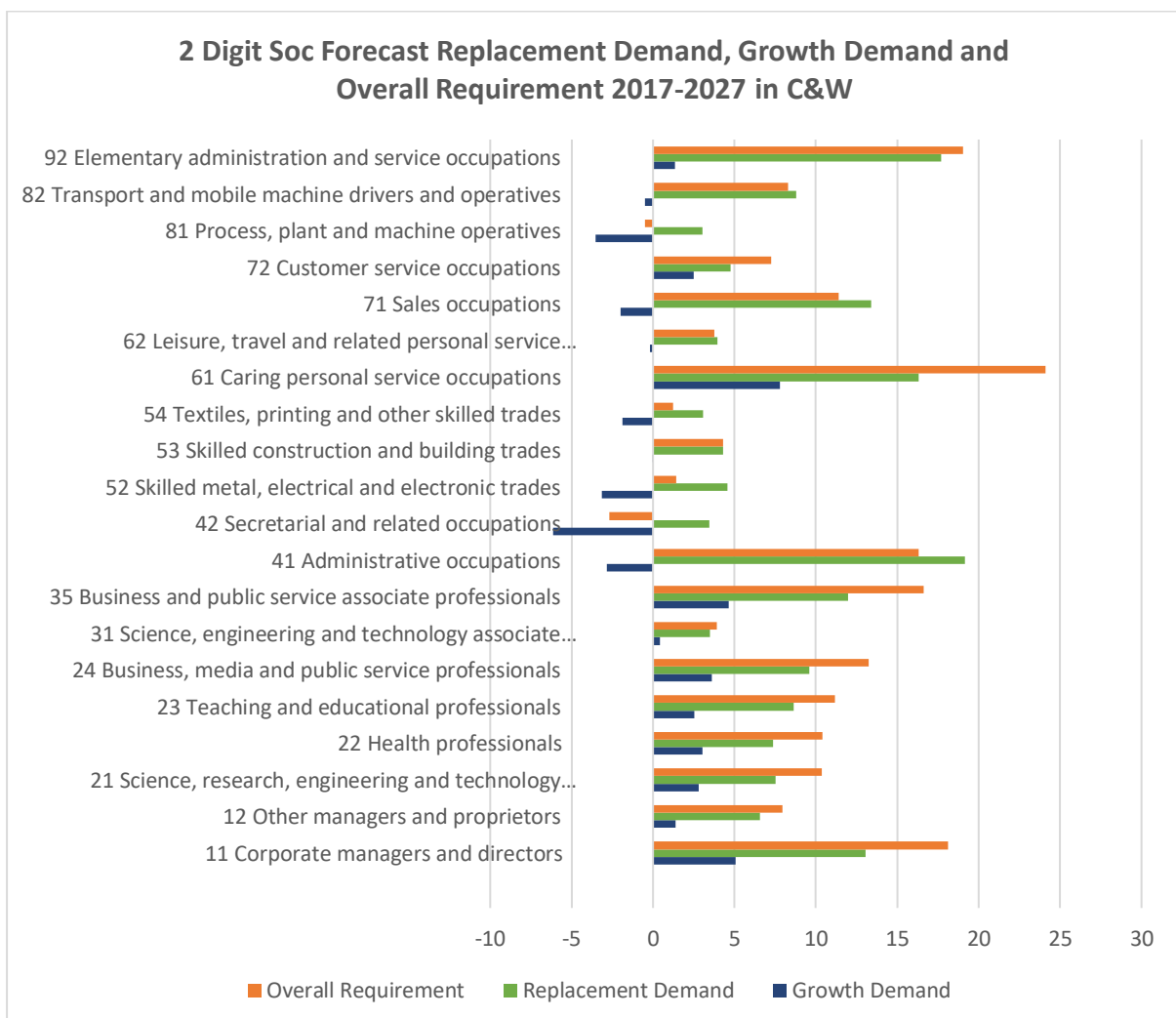
| Forecast Occupational Growth Cheshire and Warrington LEP | | | |
|--|--|---|---|
| Occupations with highest forecast growth (2017-2027) | | Occupations with lowest forecast growth (2017-2027) | |
| 1) | Caring personal service occupations | 1) | Secretarial and related occupations |
| 2) | Health and social care associate professionals | 2) | Process, plant, and machine operatives |
| 3) | Customer service occupations | 3) | Skilled metal, electrical and electronic trades |
| 4) | Health professionals | 4) | Textiles, printing, and other skilled trades |
| 5) | Corporate managers and directors | 5) | Administrative occupations |

Source: SAP Core Indicators, Working Futures 2017-2027, IER

As noted above, Covid-19 has largely invalidated the growth demand elements of the Working Futures forecasts. However, the forecast for the replacement demand to be experienced in the different occupational groups will be more reliable. The chart below provides information on the forecasts for replacement demand for the 2-digit SOC areas in Cheshire and Warrington (green bars).

Replacement demand to 2027 in Cheshire and Warrington is forecast to exceed 10,000 jobs in the following occupational areas:

- Elementary administration and service occupations
- Sales occupations
- Caring personal service occupations
- Administrative occupations
- Corporate managers and directors



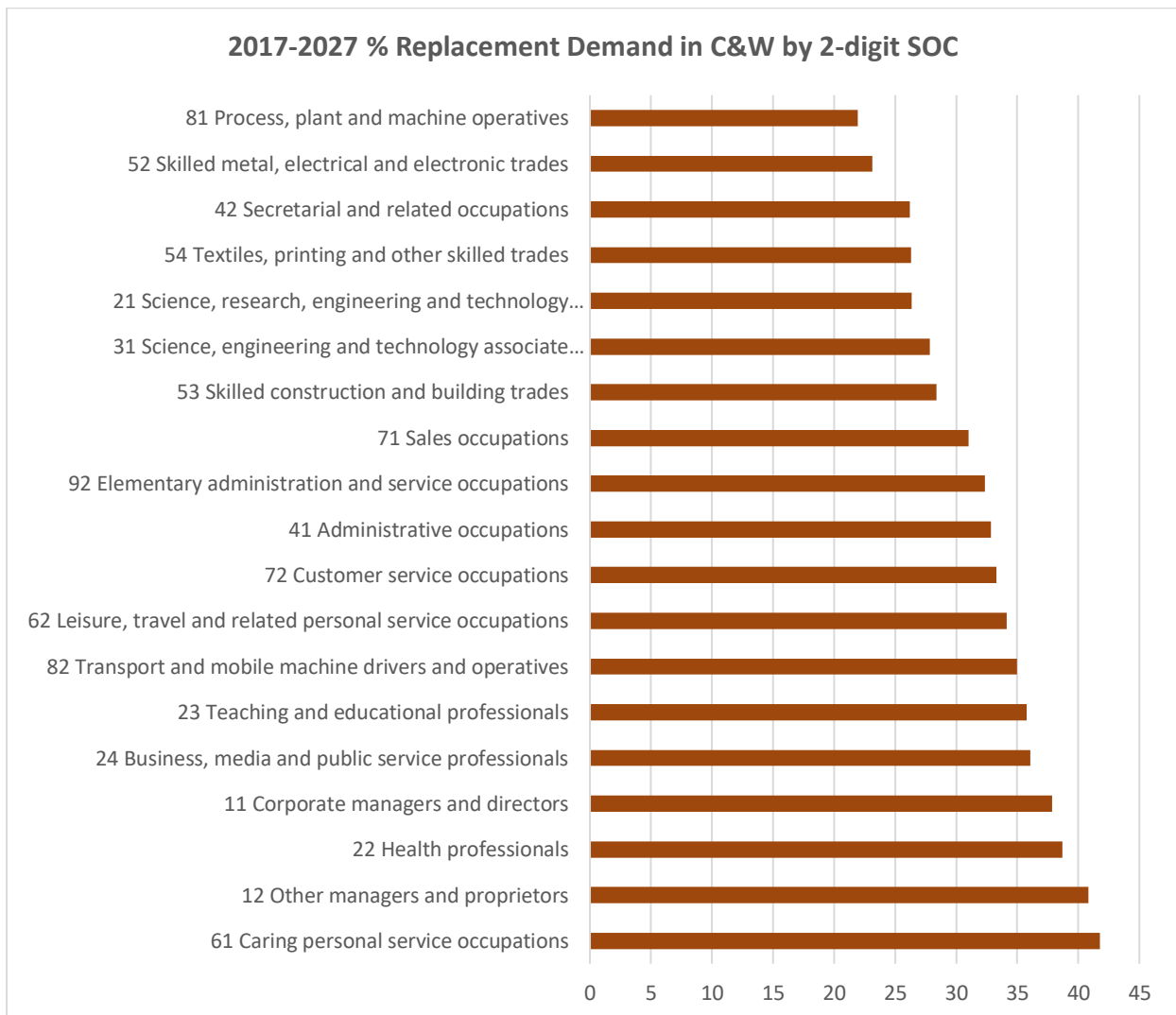
Source: Working Futures 2017-2027 LEP Tables, IER

The chart below presents information on the percentage of the current workforce in each 2-digit occupation that it is forecast will need to be replaced by 2027 because of replacement demand in that occupation. Levels of replacement demand are expected to vary significantly for different

occupations, ranging from 22% to 42%. Occupational areas that are expected to experience replacement demand of more than 35% are:

- Caring personal service occupations
- Other managers and proprietors
- Health professionals
- Corporate managers and directors
- Business, media, and public service professionals
- Teaching and educational professionals
- Transport and mobile machine drivers and operatives

Only the last of these is exposed to high risk of automation.



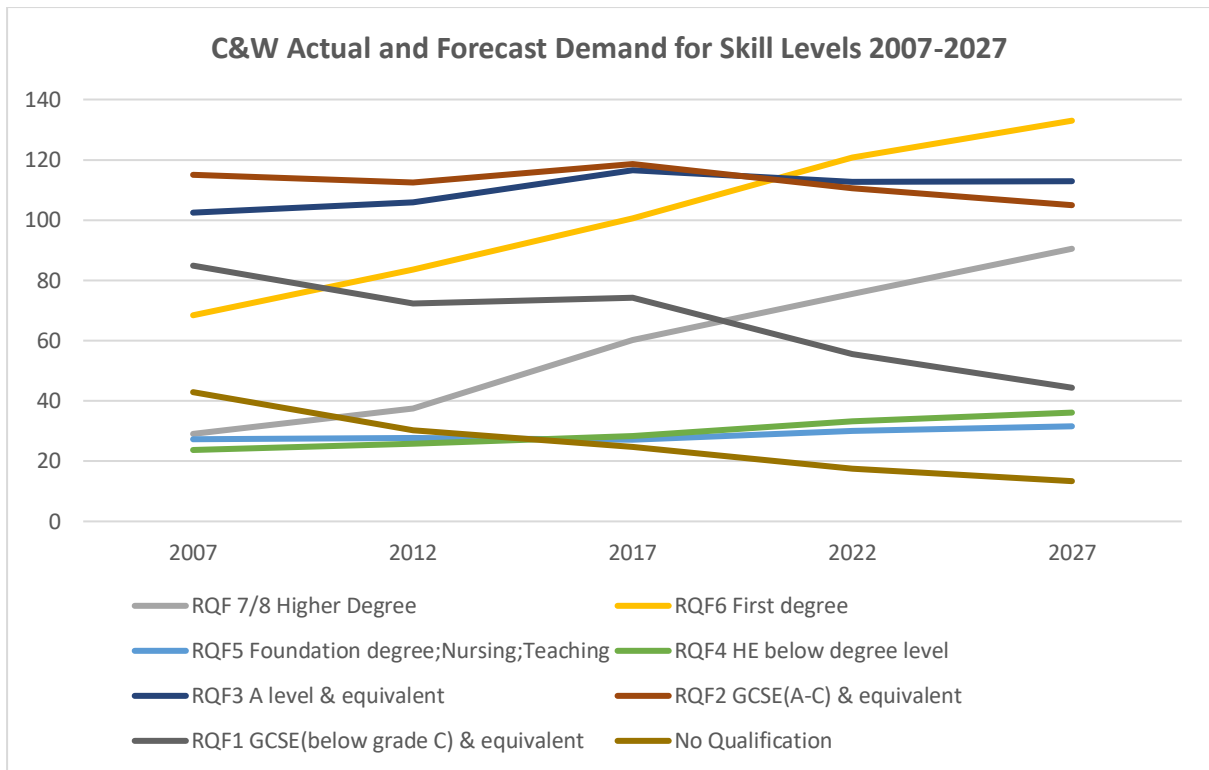
Source: Working Futures 2017-2027 LEP Tables, IER

EMSI use the IER Working Futures model to build forecasts at the four-digit SOC level for future employer demand for labour. As with any other forecast, the usual caveats apply. Specifically, the long-term impact of the pandemic on occupational structure is unknown. For example, if the operational norms of the hospitality sector are changed long-term then the forecasts in the table

below for the demand for waiters and waitresses or bar staff will not be reliable. The table below provides information on EMSI's estimates of average annual openings for four digit SOC areas where demand is expected to exceed 200 per annum.

| Occupations with estimated average annual openings more than 200, 2020-2028 | | |
|--|--|-------------------------|
| SOC | Description | Average Annual Openings |
| 7111 | Sales and retail assistants | 933 |
| 4122 | Book-keepers, payroll managers and wages clerks | 735 |
| 6145 | Care workers and home carers | 580 |
| 4159 | Other administrative occupations n.e.c. | 566 |
| 9260 | Elementary storage occupations | 543 |
| 9233 | Cleaners and domestics | 518 |
| 2231 | Nurses | 414 |
| 2421 | Chartered and certified accountants | 407 |
| 9272 | Kitchen and catering assistants | 398 |
| 3545 | Sales accounts and business development managers | 394 |
| 8211 | Large goods vehicle drivers | 351 |
| 1190 | Managers and directors in retail and wholesale | 299 |
| 4216 | Receptionists | 280 |
| 2315 | Primary and nursery education teaching professionals | 272 |
| 9274 | Bar staff | 258 |
| 2314 | Secondary education teaching professionals | 252 |
| 6125 | Teaching assistants | 244 |
| 4215 | Personal assistants and other secretaries | 239 |
| 9273 | Waiters and waitresses | 239 |
| 6141 | Nursing auxiliaries and assistants | 229 |
| Source: EMSI Analyst | | |

Working Futures also provides a forecast for the overall demand for different skill levels in the Cheshire and Warrington labour market. The chart below provides the forecast for different skill level requirements to 2027. Demand for skills at Levels 4 to 8 (higher technical to doctorate) are forecast to significantly increase, demand for skills at Level 3 are forecast to be stable, and demand for skills below Level 3 are forecast to decline. Demand at Level 3 and above is forecast to increase from 333,000 in 2017 to 404,000 qualified workers in 2027.



Source: IER Working Futures 2017-2027, LEP Tables

The table below provides estimates of average Annual Openings for Level 4+ technical occupations in Cheshire and Warrington between 2020 and 2028. These estimates are based on the IER Working Futures model. Average Annual Openings are calculated from annual forecast replacement demand plus annual forecast growth demand. A Level 4 qualification will be a pre-requisite for all the occupations identified below. All but two of these occupations deliver a current wage premium over the Cheshire and Warrington median of £28,700. Many of them will also require technical and professional qualifications higher than Level 4. It is estimated that the total annual openings in Level 4+ technical roles in Cheshire and Warrington will exceed 2,000 pa.

| Av. Annual Openings>20 for Level 4+ Technical Roles in Cheshire and Warrington 2020-2028 | | | |
|--|--|----------------------|------------------|
| SOC | Description | Avg. Annual Openings | Median Wages (£) |
| 1121 | Production managers and directors in manufacturing | 186 | 42723 |
| 2136 | Programmers and software development professionals | 159 | 43555 |
| 2139 | Information technology and telecommunications professionals n.e.c. | 107 | 41746 |
| 2133 | IT specialist managers | 105 | 45115 |
| 2135 | IT business analysts, architects, and systems designers | 75 | 44907 |
| 2434 | Chartered surveyors | 67 | 40082 |
| 2112 | Biological scientists and biochemists | 66 | 38210 |
| 2126 | Design and development engineers | 58 | 44886 |
| 2436 | Construction project managers and related professionals | 57 | 36109 |
| 2127 | Production and process engineers | 56 | 45011 |
| 3111 | Laboratory technicians | 50 | 22110 |
| 2129 | Engineering professionals n.e.c. | 45 | 40061 |
| 3421 | Graphic designers | 43 | 26562 |
| 2134 | IT project and programme managers | 42 | 53851 |
| 1136 | Information technology and telecommunications directors | 41 | 63690 |
| 2122 | Mechanical engineers | 40 | 44387 |
| 3422 | Product, clothing, and related designers | 35 | 33176 |
| 2121 | Civil engineers | 33 | 36296 |
| 2433 | Quantity surveyors | 33 | 45448 |
| 2431 | Architects | 28 | 38355 |
| 2137 | Web design and development professionals | 28 | 32406 |
| 1181 | Health services and public health managers and directors | 27 | 58344 |
| 2142 | Environment professionals | 26 | 39021 |
| 2111 | Chemical scientists | 25 | 43077 |
| 2219 | Health professionals n.e.c. | 25 | 42682 |
| 2461 | Quality control and planning engineers | 22 | 41454 |
| 2113 | Physical scientists | 21 | 45926 |
| 2150 | Research and development managers | 20 | 50211 |
| Source: EMSI Analyst | | | |

4.7 Automation

Automation will transform the world of work in the next few years. Automation will threaten some existing occupations, will create new occupations, will transform other occupations, and will leave some occupations largely untouched. To help get a better understanding on the possible impact of automation, EMSI have developed an 'Automation Index'.

EMSI's UK Automation Index uses data from different sources to assess the proportion of working time spent in each occupation performing tasks which are at "high risk" of disruption through automation and other technological change anticipated over the next 20 to 30 years. Estimates of how much time is spent performing those tasks are constructed using the frequencies for different Work Activities in the US ONET database, and mapped across to UK SOC. The relationship between

different 38 task categories and Frey and Osborne’s estimates of the “probability of computerisation” is used to classify each task category as high, middle, or low risk, depending on the significance and direction of that relationship. The index is directly applicable as the amount of working time which could be disrupted by technological change; it ranges between 0% (no working time spent performing tasks at high risk) to 100% (all working time spent performing tasks at high risk).

The table below provides information on the top 10 4-digit SOC occupation types that employ more than 1,000 people in Cheshire and Warrington that can be considered at greatest risk from automation. The three most ‘at risk’ occupations are “Elementary construction occupations”, “Construction operatives n.e.c.” and “Caretakers”.

| Main Occupations in Cheshire and Warrington at Risk of Automation | | |
|--|------------------|-----------|
| | Automation Index | 2019 Jobs |
| Elementary construction occupations | 93% | 1745 |
| Construction operatives n.e.c. | 85% | 1434 |
| Caretakers | 80% | 1397 |
| Assemblers (vehicles and metal goods) | 73% | 1474 |
| Carpenters and joiners | 73% | 1273 |
| Taxation experts | 72% | 1807 |
| Elementary process plant occupations n.e.c. | 71% | 1312 |
| Pharmacy and other dispensing assistants | 71% | 1475 |
| Farm workers | 65% | 1184 |
| Construction and building trades n.e.c. | 64% | 1259 |
| Source: EMSI Analyst | | |

By contrast, the table below provides information about those 4-digit SOC occupations that are at least risk of automation as measured by EMSI’s Automation Index.

| Main Occupations in Cheshire and Warrington Least at Risk from Automation | | |
|--|------------------|-----------|
| | Automation Index | 2019 Jobs |
| Construction project managers and related professionals | 0% | 1175 |
| Production managers and directors in construction | 0% | 1988 |
| Legal associate professionals | 1% | 1161 |
| Financial institution managers and directors | 1% | 1547 |
| Mechanical engineers | 1% | 1100 |
| Design and development engineers | 2% | 1571 |
| Quality assurance and regulatory professionals | 2% | 1326 |
| Business and related associate professionals n.e.c. | 2% | 1912 |
| Production and process engineers | 2% | 1653 |
| Managers and directors in transport and distribution | 2% | 1240 |
| Teaching and other educational professionals n.e.c. | 2% | 1525 |
| IT user support technicians | 2% | 1429 |
| Source: EMSI Analyst | | |

5. SKILLS SUPPLY

This chapter considers the skills and skills acquisition of the current and future workforce and the factors that impinge on skills acquisition. It has sections on:

- Young people in Cheshire and Warrington
- The supply of skills to young people
- Adult skills in Cheshire and Warrington
- The supply of skills to adults
- Employer training

5.1 Young People in Cheshire and Warrington

The sections below on young people and the supply of skills to young people are a summary of a detailed report on this issue produced for the LEP in the Summer of 2020⁵.

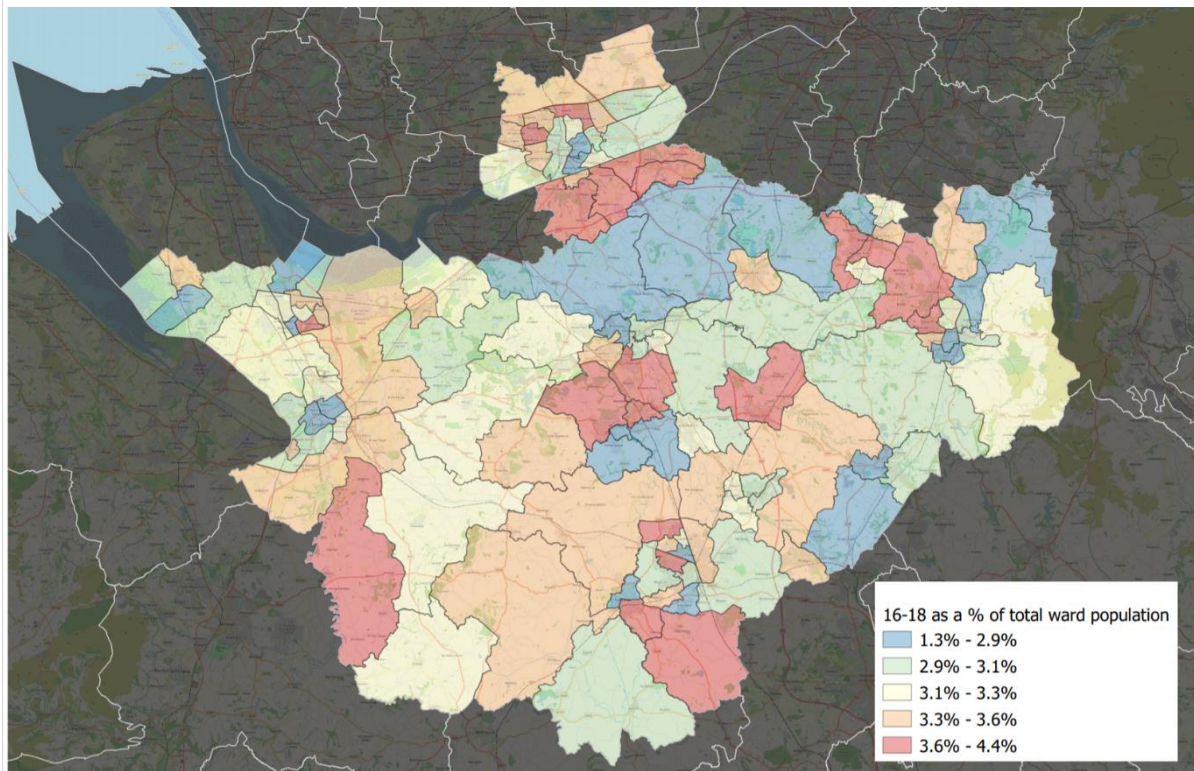
5.1.1 Young People – Population, Deprivation, and Participation in Employment and Education

The map below illustrates the estimated population density of 16-18 year olds, by ward, in Cheshire and Warrington in 2020. This is calculated by taking the 2018 ONS estimate of 14-16 year olds as a percentage of estimated total ward population in 2018.

The estimated population of 16-18 year olds is highest in the following wards: Leighton, Prestbury and Wilmslow (Cheshire East); Appleton, and Poplars and Hulme (Warrington); and, Farndon, and Winsford Wharton (Cheshire West and Chester). The estimated population of 16-18 year olds is lowest in the following wards: Shavington, Macclesfield Central, and Mobberley (Cheshire East); Fairfield and Howley (Warrington); and, Little Neston, Newton & Hoole, Winsford Gravel, and Chester City & the Garden Quarter (Cheshire West and Chester).

⁵ 'Young People, Learning and Skills in Cheshire and Warrington', Brennan Wilson Ltd, June 2020
<http://www.871candwep.co.uk/data-and-labour-market-information/>

16-18 year olds as a percentage of total population, by ward, in 2020



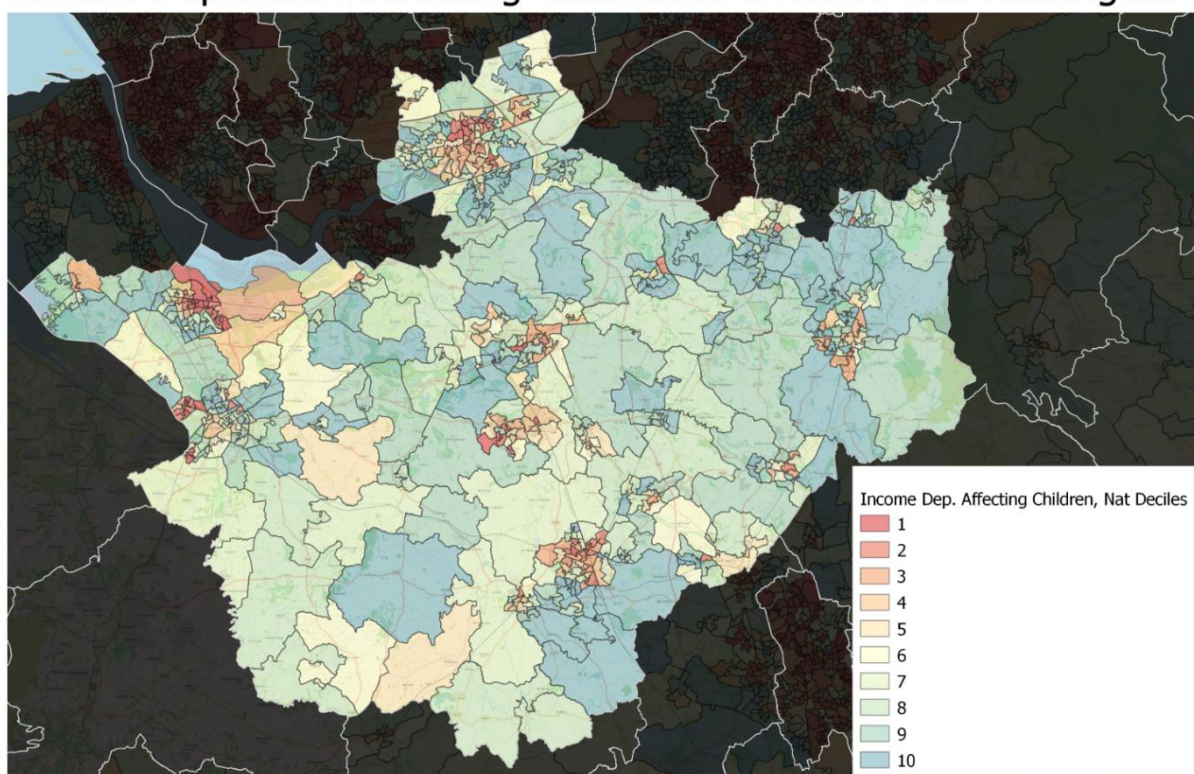
Map by Brennan Wilson Ltd in QGIS. Data from ONS, OS and OpenStreetMap

The Income Deprivation affecting Children Index (IDACI) measures the proportion of all children aged 0 to 15 living in income deprived families. It is a subset of the Income Deprivation domain of the Index of Multiple Deprivation (2019) which measures the proportion of the population in an area experiencing deprivation relating to income.

The map below shows the Lower Super Output Areas of Cheshire and Warrington categorised according to their IDACI scores. Areas shaded dark red are in the most deprived decile nationally. Areas shaded blue are in the least deprived decile nationally.

The highest levels of deprivation occur in Ellesmere Port, areas to the north West of Chester, parts of Warrington, parts of Winsford and areas of Crewe.

Income Deprivation Affecting Children in Cheshire and Warrington



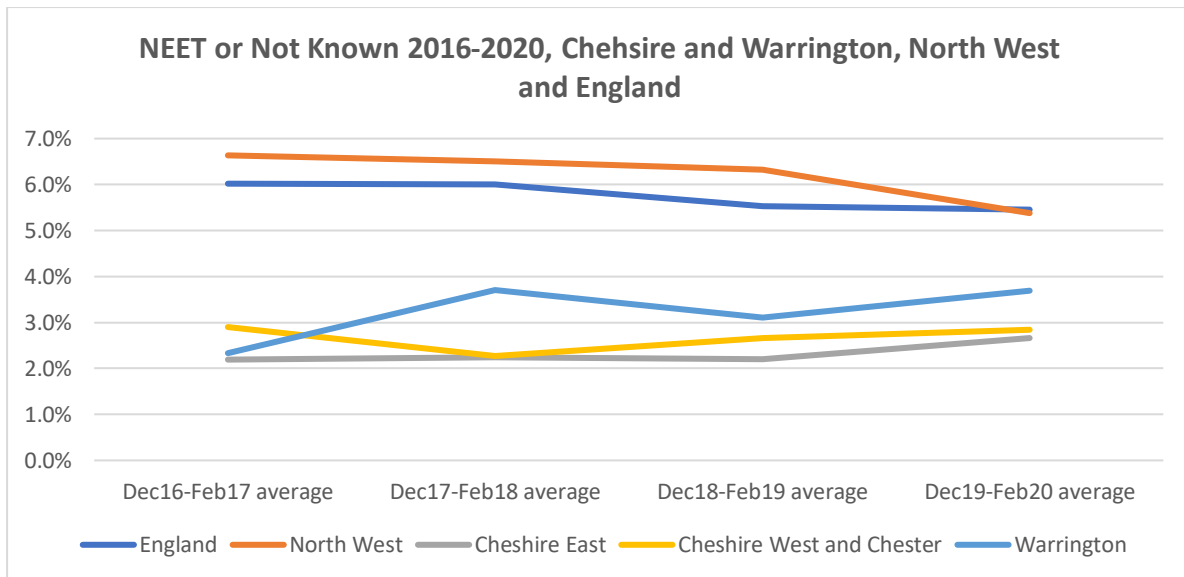
Map by Brennan Wilson Ltd in OGIS. Data from the Index of Multiple Deprivation (2019), OS and OpenStreetMap

The total participation rate in education by 16 and 17 year olds in all three Local Authorities was higher than for England and the region. In all three local authorities, participation in full time education and training was slightly higher than England, and participation in apprenticeships was at or below the English rate. Over 3% of the cohort in both Cheshire East and Cheshire West and Chester were in employment with study, compared to 0.7% following this route in England.

In Cheshire and Warrington, 16 year olds had a higher participation rate in education than 17 year olds and females had a higher participation rate than males. Participation rates by gender and age were higher in all three local authorities than for England and the North West.

The proportion of 16 and 17 year olds who were NEET or Not Known in 2020 was significantly lower in all three local authorities than was the case for England and the North West. This is because the proportion that were Not Known is higher in England and the North West. The percentage that were NEET in 2020 was similar in the three local authorities and England, with Cheshire East and Cheshire West and Chester slightly below, and Warrington slightly above the English rate of 2.7%.

Whilst the NEET/Not Known rate in the three Local Authorities has consistently been below the English and North West rate, the gap has closed over time with slight increases in the rate in Cheshire and Warrington and slight decreases in the rate in England and the North West.



Source: DfE

5.1.2 Young People's Education and Progression

The Education, Skills and Training Domain of the Index of Multiple Deprivation (2019) measures the lack of attainment and skills in the local population. The indicators fall into two sub-domains: one relating to children and young people and one relating to adult skills. The indicators that are used in the Children and Young People Education sub-domain are:

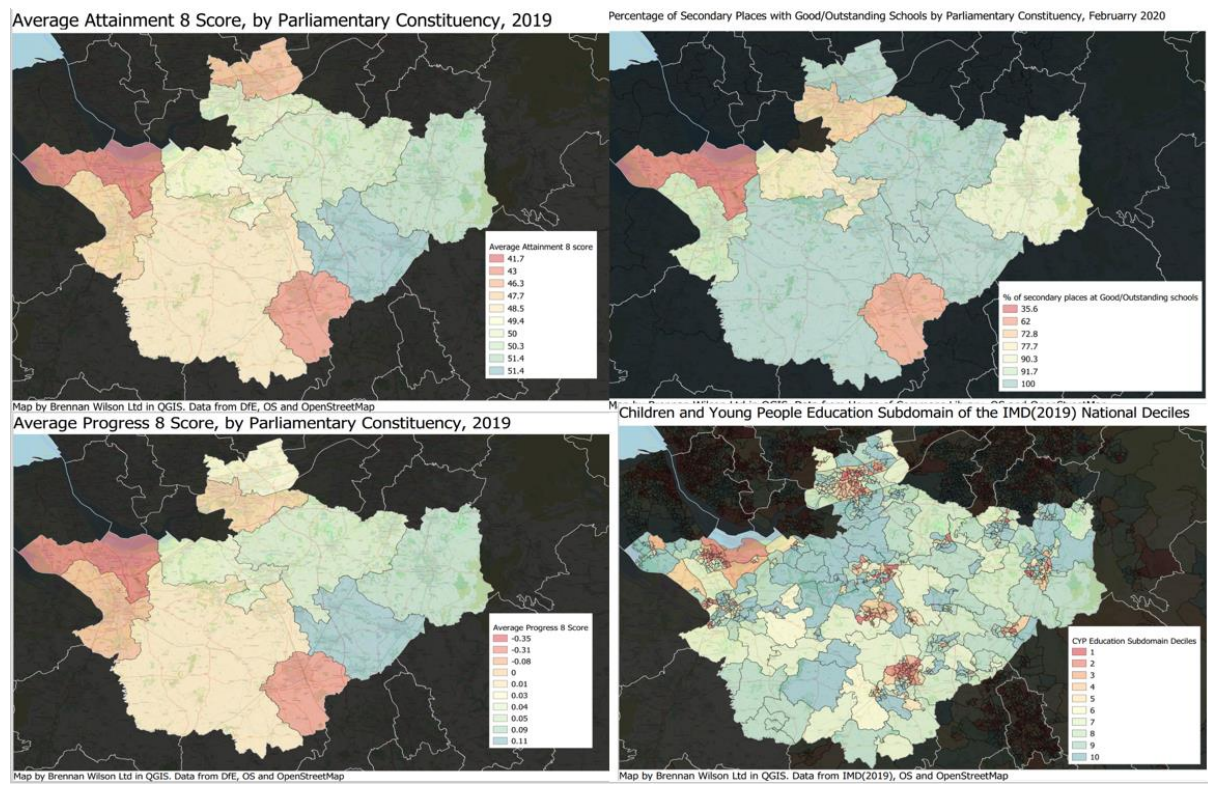
- Key Stage 2 attainment: The scaled score of pupils taking Mathematics, English reading and English grammar, punctuation and spelling Key Stage 2 exams
- Key Stage 4 attainment: The average capped points score of pupils taking Key Stage 4 (GCSE or equivalent) exams
- Secondary school absence: The proportion of authorised and unauthorised absences from secondary school
- Staying on in education post 16: The proportion of young people not staying on in school or non-advanced education above age 16
- Entry to higher education: A measure of young people aged under 21 not entering higher education

The map below (bottom right) illustrates the distribution of scores from the Children and Young People Education Subdomain in Cheshire and Warrington. Lower Super Output Areas (LSOAs) in the most deprived national decile are shaded dark red. Those in the least deprived are shaded blue. It can be seen from the map that the areas that are deprived on this indicator are clustered in Ellesmere Port, Warrington, and Crewe with additional clusters in Winsford, Nantwich, Chester, and Macclesfield.

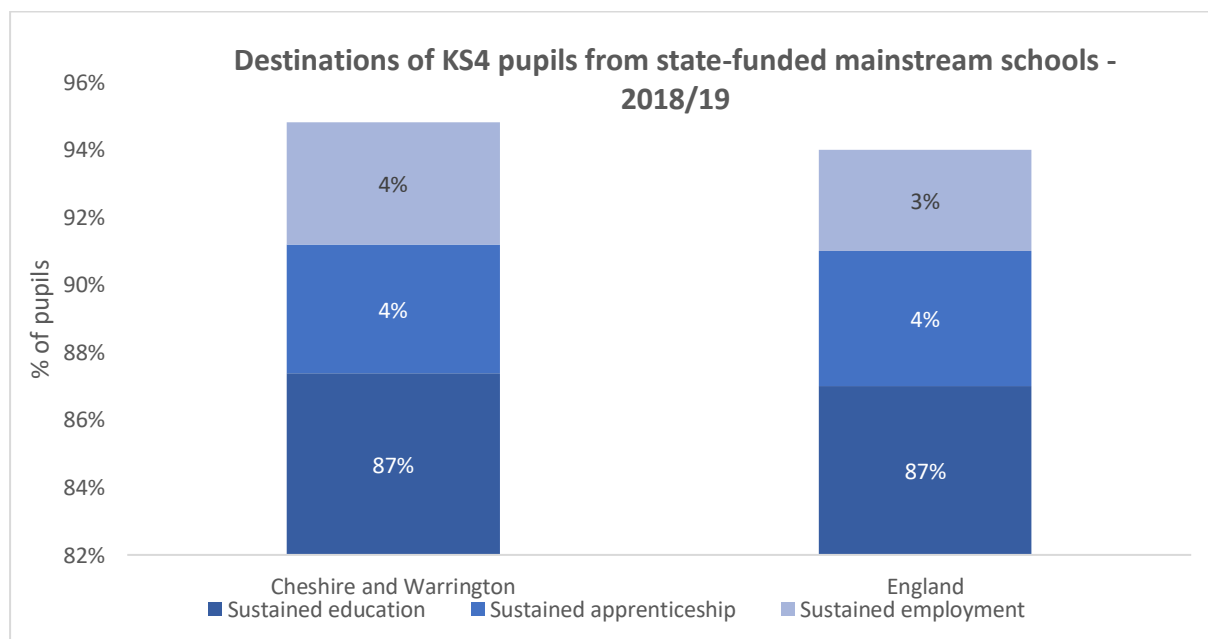
There are six parliamentary constituencies where the percentage taught in schools rated 'Outstanding' or 'Good' by Ofsted is higher than for England (which is 80%), including four constituencies where 100% of students are taught in such providers - Congleton, Eddisbury, Tatton, and Warrington North. By contrast, only 35.6% of secondary school places in Ellesmere Port and Neston are with 'Good' or 'Outstanding' providers (map below upper right).

Five parliamentary constituencies in Cheshire and Warrington had a higher proportion than England (24.9%) of pupils achieving grade 4 or above in all components of the English Baccalaureate (EBacc)

and five were below, with 16.6% achieving on this measure in Crewe and Nantwich and 36.7% achieving in Weaver Vale. Three parliamentary constituencies – Ellesmere Port and Neston, Crewe and Nantwich, and Warrington North – scored below the English average for Attainment 8 at Key Stage 4 (map below, upper left). Four parliamentary constituencies – Ellesmere Port and Neston, Crewe and Nantwich, City of Chester, and Warrington South – scored below the English average on Progress 8 (map below, bottom left).

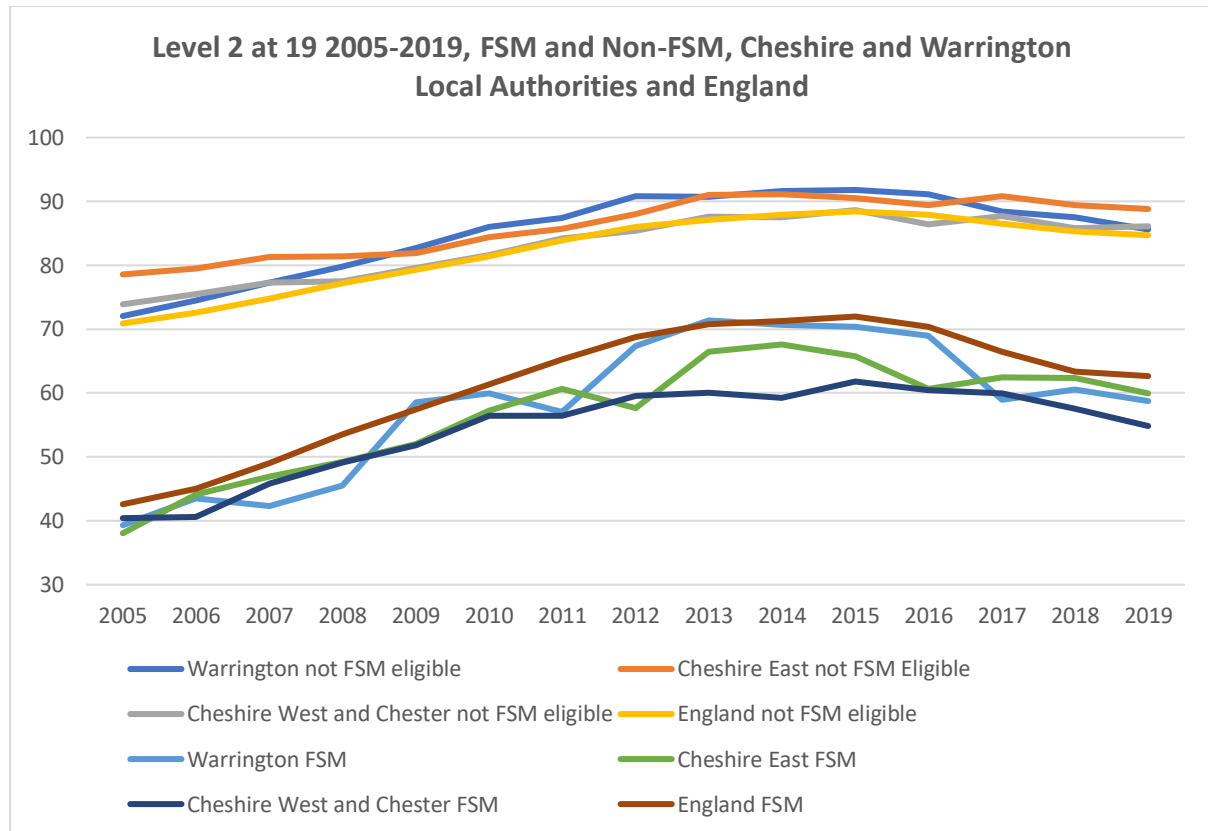


In 2018/19, a slightly higher percentage of Key Stage 4 leavers secure a sustained destination in Cheshire and Warrington than in England (chart below).



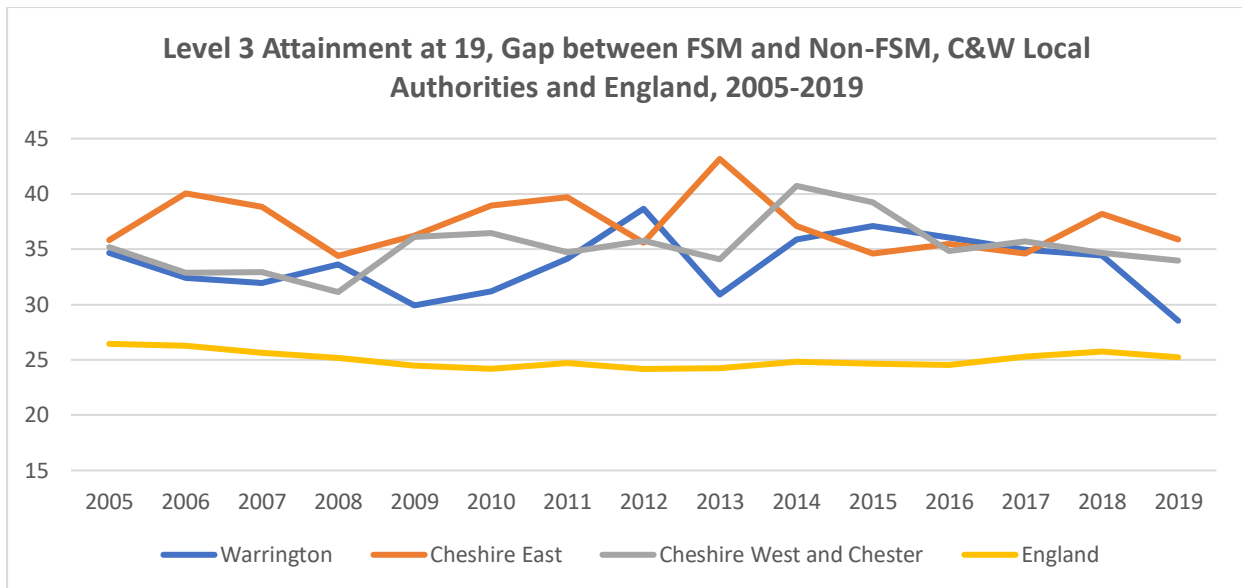
Source: SAP Core Indicators/DfE

The 2017/18 data reveals that the proportion of disadvantaged pupils at Key Stage 4 who secure a sustained *education destination* was lower in Cheshire East (78%), Cheshire West and Chester (72%) and Warrington (78%) than for England (81%). The gap between disadvantaged pupils securing a sustained education destination compared to all other pupils was larger for all three local authorities (12%, 14%, 12%) than the English figure of 7%. This may help explain, in part, why the proportion of 19 year olds eligible for free school meals that achieved a Level 2 has been at or below the English proportion for this cohort between 2005 and 2019.



Source: DfE

Similarly, the proportion of 19-year-olds not eligible for free school meals from Cheshire and Warrington Local Authorities that achieved a Level 3 has been at or above the English proportion for this cohort between 2005 and 2019. By contrast, the proportion of 19-year-olds eligible for free school meals that achieved a Level 3 has been at or below the English proportion for this cohort for most years between 2005 and 2019. The graph below presents data for this gap for 2005 to 2019. In England, the gap in attainment of Level 3 for those eligible and those not eligible for FSM has been approximately 25% in this period. The three Cheshire and Warrington local authorities have all consistently had a gap more than England, usually greater than 5ppt in any given year.

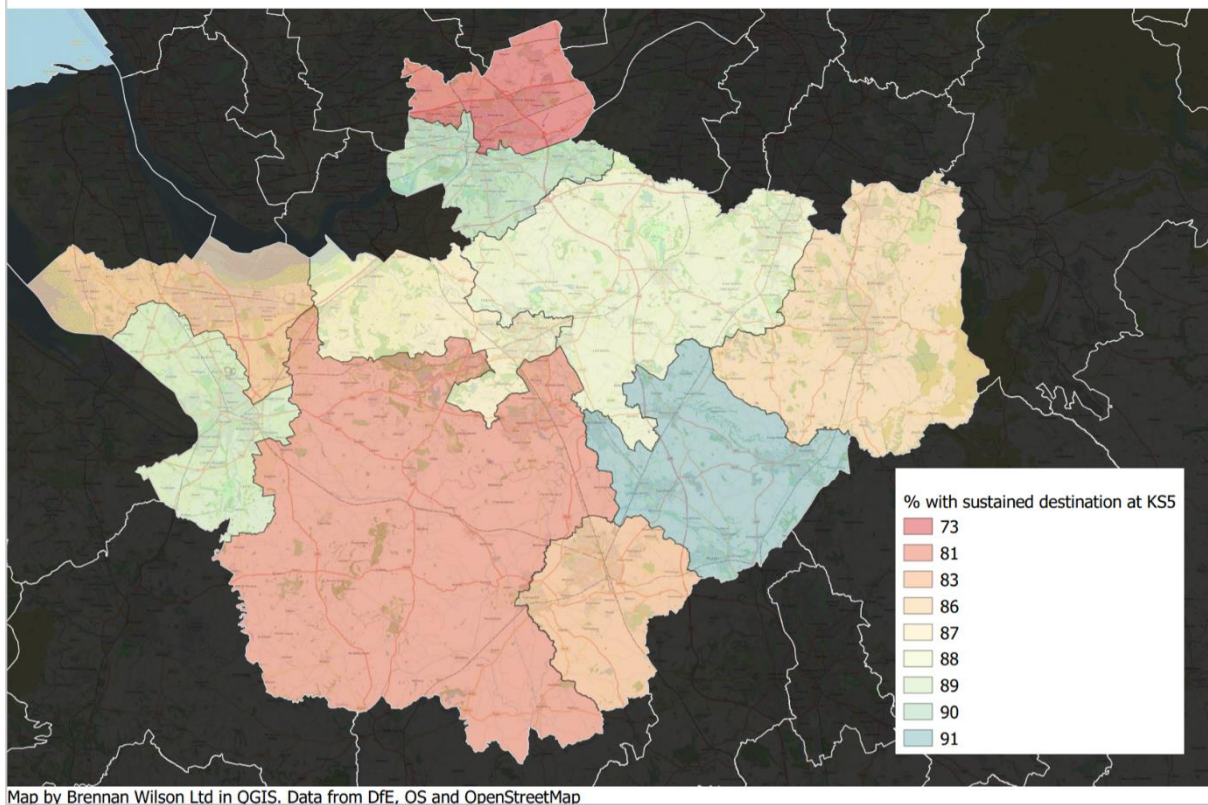


Source: DfE

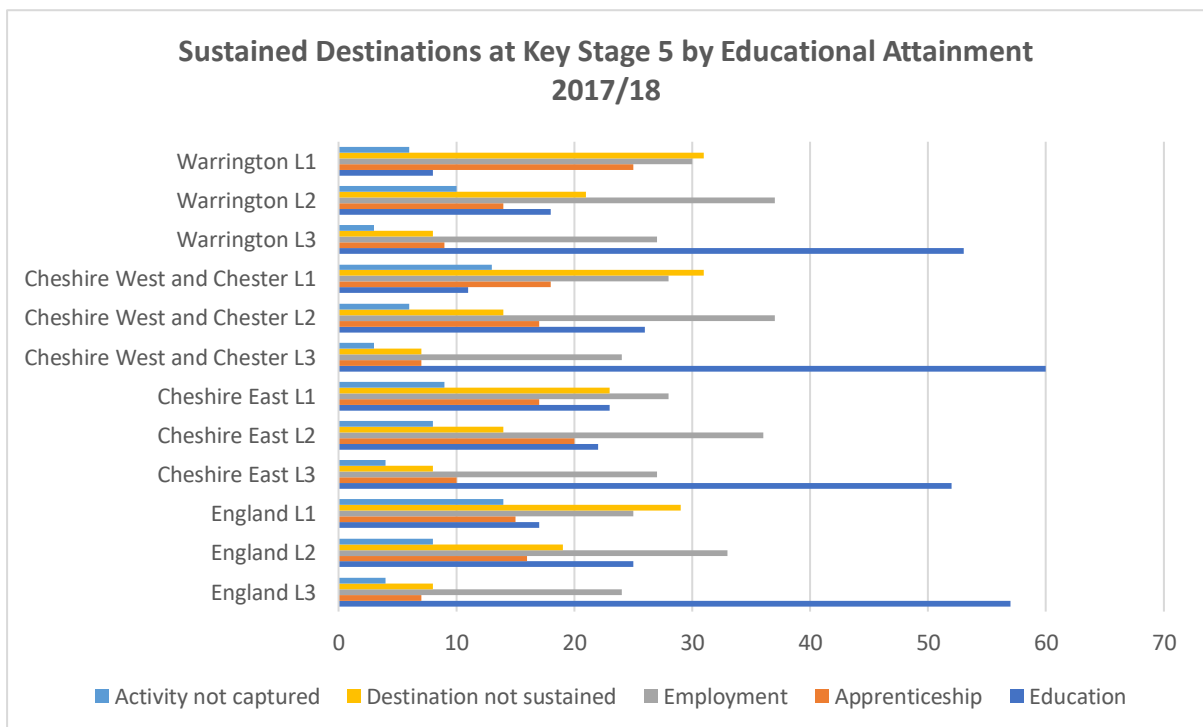
In 2019, 14.1% of A Level students secured a minimum of AAB at A level in England. Six of Cheshire and Warrington’s parliamentary constituencies failed to achieve this proportion, with no students achieving these grades in the Warrington North constituency.

The percentage of Key Stage 5 (KS5) leavers securing any sustained destination was higher than England (81%) for all three Cheshire and Warrington local authorities. The percentage securing employment as a sustained destination was also higher than England in all three local authorities. Nine of the ten parliamentary constituencies had percentages that secured any sustained destination that were the same or higher than the English. However, in Warrington North only 73% of 18 year olds were able to secure a sustained destination.

Percentage Securing a Sustained Destination at Key Stage 5 by Parliamentary Constituency 2017/18



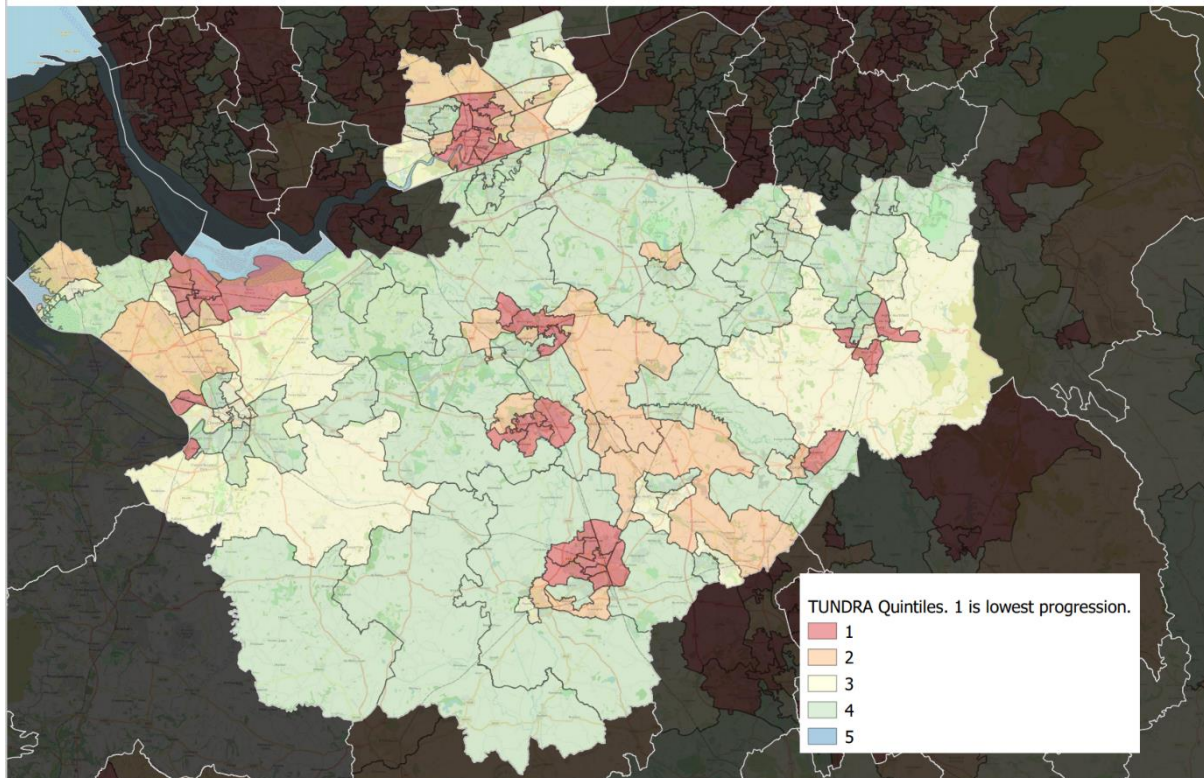
When the destinations for Cheshire and Warrington’s KS5 leavers are considered by their prior educational attainment, the most common destination for Level 1 KS5 leavers tends to be ‘failure to secure a destination’; the most common destination for Level 2 KS5 leavers is to secure sustained employment; and the most common destination for Level 3 KS5 leavers is a sustained education destination.



Source: DfE

The map below provides TUNDRA national quintile data on HE participation rates for Middle Layer Super Output Areas (MSOAs) in Cheshire and Warrington. Many areas perform reasonably well regarding progression to Higher Education. The areas with the lowest levels of HE participation are in Warrington, Ellesmere Port, Crewe, Winsford, Nantwich and parts of Macclesfield.

Progression to Higher Education by Young People in Middle Layer Super Output Areas by TUNDRA Quintiles



Map by Brennan Wilson Ltd in QGIS. Data from OS, OpenStreetMap and Office for Students

5.1.3 Young People and the Labour Market

In 2019, the CEC published its third “State of the Nation” report presenting the data gathered by the Compass tool and revealing how career guidance is developing in England’s schools and colleges. This report included data disaggregated to the level of England’s 38 LEPs and so can provide an insight into the practice of schools in Cheshire and Warrington.

58% of schools in Cheshire and Warrington completed Compass in 2018/19. This is the 30th highest school response rate for a LEP area in England. The average number of Gatsby benchmarks achieved by schools in Cheshire and Warrington was 2.3. This was the lowest for any LEP area in England and compared with a national average of 3 benchmarks achieved. The highest average of benchmarks achieved in a LEP area was 4.2 (Tees Valley and Buckinghamshire). The context for this is that Cheshire and Warrington was late to gain Enterprise Coordinators to cover the whole of the sub region. It is understood that in the last academic year all of the mainstream secondary schools and FE colleges have signed up to the network and all special schools and alternative provision providers are being targeted to sign up by the end of this calendar year. The infrastructure and engagement is now stronger and it is anticipated that the sub region may rise quickly, and possibly report results above the national average by the end of this academic year.

The Cheshire and Warrington Pledge conduct an annual “Yoursay” survey of young people. Key findings of the 2020 survey include:

- Most respondents (50%) felt that they had received enough information about apprenticeships. For all other categories, more respondents felt that they had not received enough information than felt that they had.
- A clear majority (55%) of respondents agreed with the statement “the advice or support given to you from school, helped you, or would be helpful, in choosing a career.”
- More respondents (40%) disagreed with the statement “The careers advice I received at school has helped me decide on whether University or Apprenticeship Degrees are my best option” than agreed with it (32%). Just over a quarter (28%) did not know.

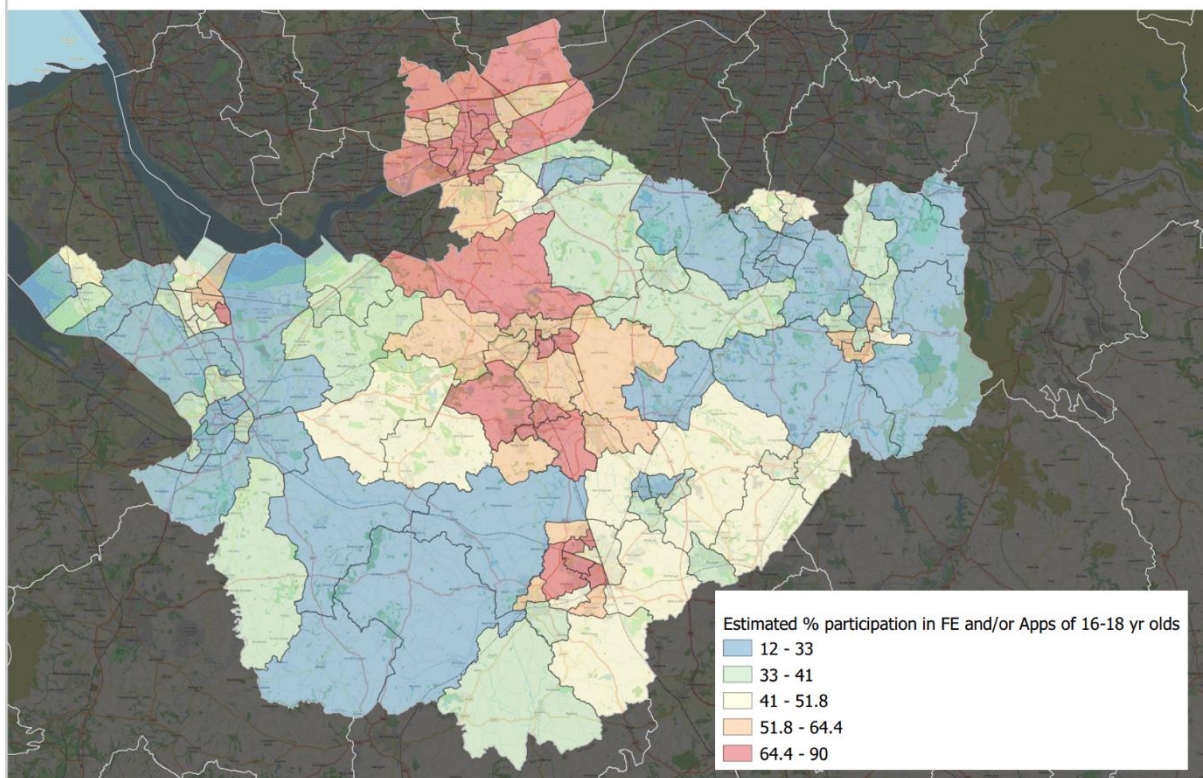
5.2 The Supply of Skills to Young People

5.2.1 Young People aged 16-18 Participation in Learning - Overview

It is estimated that in 2018/19 in Cheshire and Warrington, 54% of those aged 16-18 in learning attended a College or Sixth Form College, 32% attended a School Sixth Form and 14% were apprentices. The areas with the highest levels of participation in FE and apprenticeships combined run in a band through the centre of Cheshire and Warrington going from Warrington in the north, through Winsford, to Crewe in the South.

It is likely that the areas with lower levels of 16-18 participation in FE and apprenticeships had higher levels of participation in school sixth forms but there is no way of quantifying that from the publicly available data at this level of spatial disaggregation.

Participation of 16-18 year olds in Further Education and Apprenticeships by ward

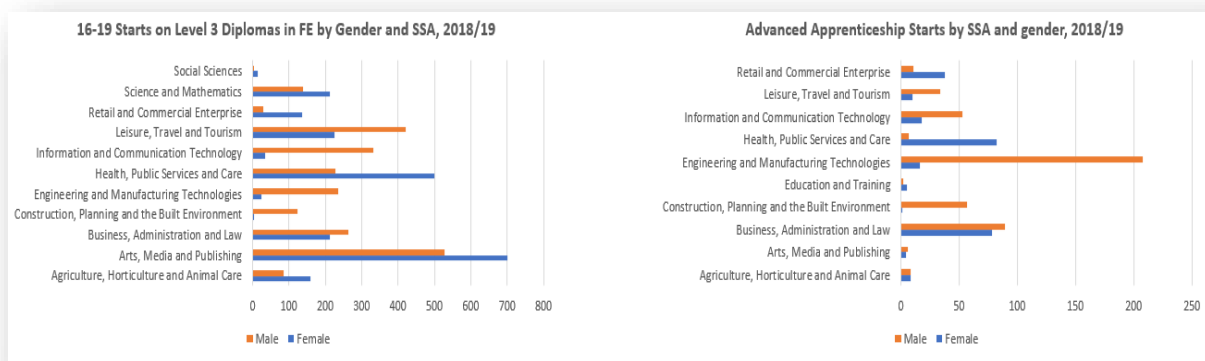


Map by Brennan Wilson Ltd in QGIS. Data from ESFA Localities datacube (residency), ONS, OS and OpenStreetMap

There was a 7.6% decline in the number of 16-18 year olds enrolled in FE between 2016/17 and 2018/19 and a commensurate decline in learning aim starts.

There was also a decline of 29% in the number of apprentices aged 16-18 in this time, with a large decline (44%) in apprenticeship starts at Level 2. Every local authority suffered a decline in 16-18 participation in apprenticeships, the largest percentage decline being 32% in Cheshire West and Chester. There were large drops in apprenticeship starts in Business, Administration and Law, and Retail and Commercial Enterprise.

There were significant gender disparities in FE and apprenticeships by learners aged 16-18 in the subjects taken in 2018/19. There were high proportions of female starts in Retail and Commercial Enterprises, and in Health, Public Services and Care. There were high proportions of male starts in Engineering and Manufacturing Technologies; Construction and the Built Environment; and Information and Communications Technology.



Source: ESFA Localities datacube (residency)

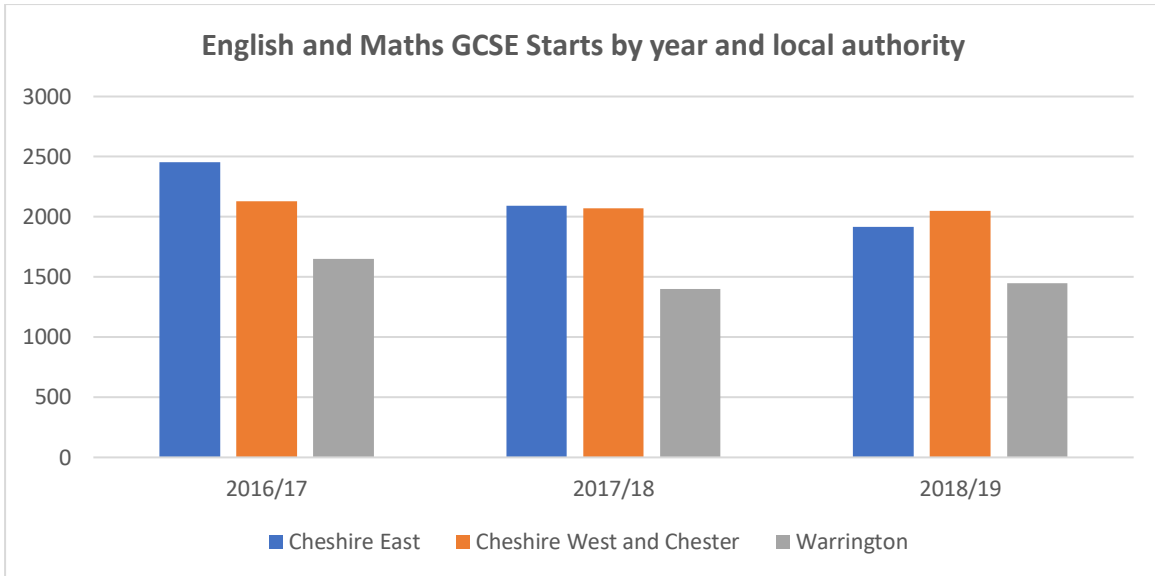
The 16-18 FE achievement rate for all types of provider at all levels in Cheshire and Warrington in 2018/19 was 85.6% which was higher than that for England (82.6%). The Cheshire and Warrington wards with an estimated 16-18 achievement rate below 70% in 2018/19 were Wolverham; Neston; Wilmslow Dean Row; Blacon; Central & Grange; Culcheth, Glazebury and Croft; Macclesfield South; Odd Rode; Wilmslow Lacey Green; Disley; and Lache

The apprenticeship achievement rate for residents of Cheshire and Warrington aged 16-18 in all providers in 2018/19 was 65.3% which was 2.9% lower than the rate for England. The apprenticeship achievement rate for every type of provider was lower for Cheshire and Warrington residents than for England as a whole.

5.2.2 Young People aged 16-18 Participation in Learning at Level 2

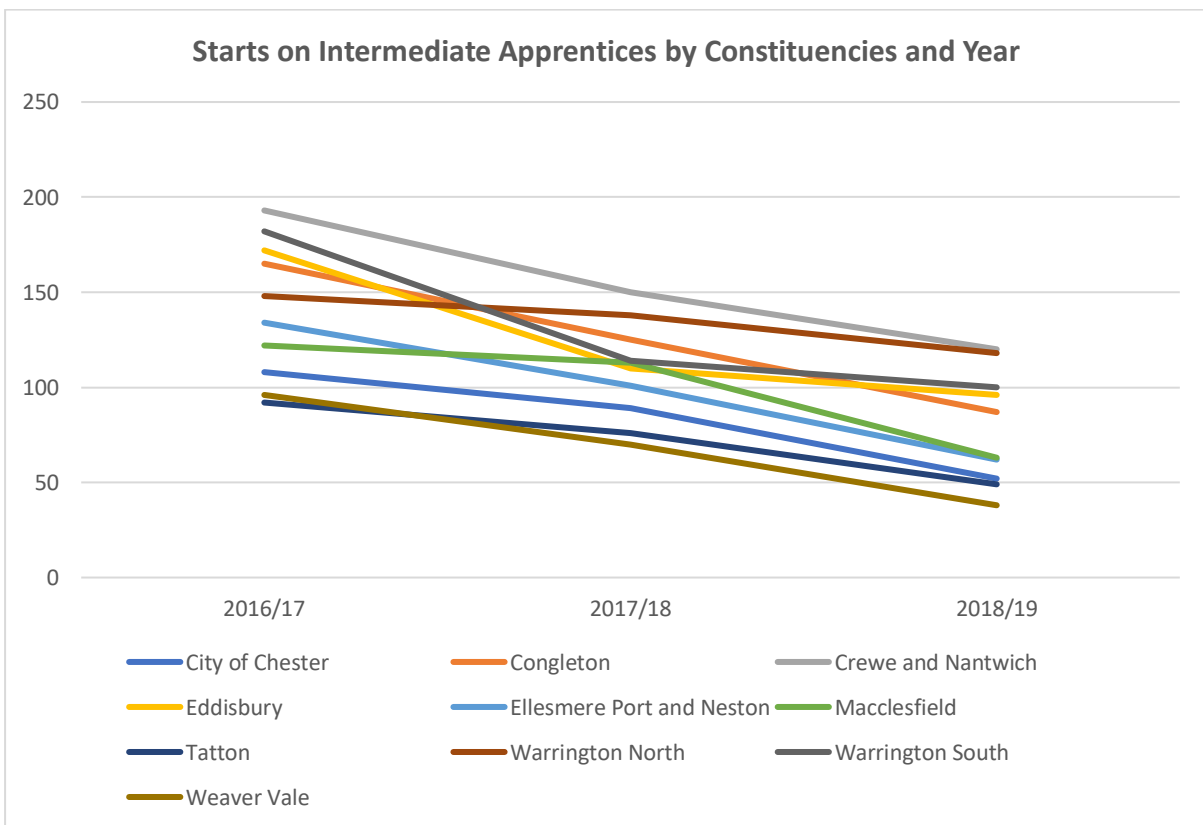
62% of all Level 2 learning aims taken by FE learners aged 16-18 between 2016/17 and 2018/19 were GCSE English and Maths, a further 15% were Diplomas and 10% were Certificates.

The number of GCSE English and Maths starts declined by 13% between 2016 and 2019. This suggests that fewer learners without English and Maths GCSEs enrolled in FE in 2018/19 than in 2016/17. Between 2016/17 and 2018/19 FE 16-18 starts in GCSE English and Maths declined in every local authority – by 22% in Cheshire East, by 4% in Cheshire West and Chester and by 12% in Warrington.



Source ESFA Localities data cube (residency)

The overall decline in 16-18 Level 2 (Intermediate) apprenticeship starts in Cheshire and Warrington of 44% was mirrored in each of the local authorities with a decline of 46% in Cheshire East, a decline of 50% in Cheshire West and Chester and a decline of 34% in Warrington. This decline in starts in Intermediate Apprenticeships was also experienced in all ten parliamentary constituencies.



Source: ESFA Localities data cube (residency)

Most SSAs of Intermediate Apprentices showed a significant gender disparity. 99% of starts in Construction, Planning and Building Services, and 94% of starts in Engineering and Manufacturing Technologies were by males. 78% of starts in Health, Public Services and Care, and 65% of starts in Retail and Commercial Enterprises were by females.

The wards with an estimated 16-18 FE Level 2 achievement rate below 70% are: Wolverham; Lymm South; Wybunbury; Central & Grange; Handbridge Park; Helsby; Macclesfield South; Neston; High Legh; Wilmslow Lacey Green; Macclesfield Hurdsfield; Northwich Winnington & Castle; Blacon; Birchwood; Farndon; Great Boughton; Odd Rode; Sandstone; and Winsford Swanlow.

In 2018/19, the achievement rate for Intermediate Apprenticeships for residents of Cheshire and Warrington aged 16-18 was 61.7% which was 4.1% lower than for England. The achievement rate was lower with every type of provider in Cheshire and Warrington compared with England⁶.

5.2.3 Young People aged 16-18 Participation in Learning at Level 3

Learning aim starts at Level 3 declined by 20% between 2016/17 and 2018/19. This decline in starts is directly linked to the changed status of AS Levels in the 16-18 curriculum. A decline in starts was experienced in all three local authorities – 25% in Cheshire East, 33% in Cheshire West and Chester and 7% in Warrington.

In 2018/19, 58% of A Levels in FE were started by females. This proportion rose to 67% for A Levels in Arts, Media and Publishing, and 78% for A levels in Languages, Literature and Culture. Conversely, 92% of A levels in Engineering and Manufacturing Technologies, and 85% of A levels in Information and Communication Technologies were started by males.

In 2018/19, males accounted for 52% of Level 3 Diploma starts. However, there were significant variations in the gender split for starts on individual SSAs. Males accounted for 65% of starts in Leisure, Travel and Tourism; 91% of starts in Information and Communications Technologies; 90% of starts in Engineering and Manufacturing Technologies; and 98% of starts in Construction, Planning and the Built Environment. By contrast, females accounted for 83% of the starts in Retail and Commercial Enterprise; 69% of the starts in Health, Public Services and Care; and 60% of the starts in Science and Mathematics.

For the three academic years 2016/17 to 2018/19, starts on Level 3 Apprenticeships by young people aged 16-18 declined 17%. Starts in every local authority declined – 17% in Cheshire East, 23% in Cheshire West and Chester and 9% in Warrington.

| Advanced Apprenticeship Starts by year and Local Authority, 2016-2019 | | | |
|--|----------------|----------------|----------------|
| Local Authority | 2016/17 | 2017/18 | 2018/19 |
| Cheshire East | 370 | 310 | 308 |
| Cheshire West and Chester | 304 | 298 | 233 |
| Warrington | 210 | 218 | 191 |
| Grand Total | 884 | 826 | 735 |
| <i>Source: ESFA Localities data cube (residency)</i> | | | |

There are significant gender disparities as evidenced by the proportion of males and females that started Advanced Apprenticeships overall and in different SSAs in 2018/19. Overall, 65% of starts were by males, with males starting 75% of apprenticeships in Information and Communication Technologies, 98% in Construction, Planning and the Built Environment, 93% in Engineering and Manufacturing Technologies. Conversely 92% of Advanced Apprenticeships in Health, Public Services and Care were started by females.

⁶ <https://www.gov.uk/government/statistics/national-achievement-rates-tables-2018-to-2019>

The wards with an estimated 16-18 Level 3 FE achievement rate below 70% are: Wilmslow Dean Row; Lache; Strawberry; Culcheth, Glazebury and Croft; Wilmslow East; Poynton West and Adlington; Burtonwood and Winwick; Disley; Ledsham & Manor; Macclesfield Tytherington; Odd Rode; Westbrook; Winsford Swanlow; Blacon; and Crewe Central.

In 2018/19, the Level 3 Apprenticeship achievement rate for 16-18 residents of Cheshire and Warrington, at 71.1%, was 1.2% lower than for England. The achievement rate at Level 3 for Cheshire and Warrington residents was lower with both Independent Training Providers and Colleges compared to England.

5.3 Adult Skills in Cheshire and Warrington

As might be expected from the occupational profile of Cheshire and Warrington residents reported in Chapter 3, the skills profile is also skewed to higher skills compared with Great Britain. 42.1% of LEP residents are qualified at or above NVQ Level 4 compared to 40.3% for Great Britain and 36.1% for the North West Region. All three constituent Local Authorities have a higher proportion of residents qualified at NVQ 4 and above than Great Britain and the North West. Similarly, the LEP (20.7%) and all three Local Authorities have a lower proportion qualified below level 2 than is the case in the region (25.5%) or for Great Britain (24.4%).

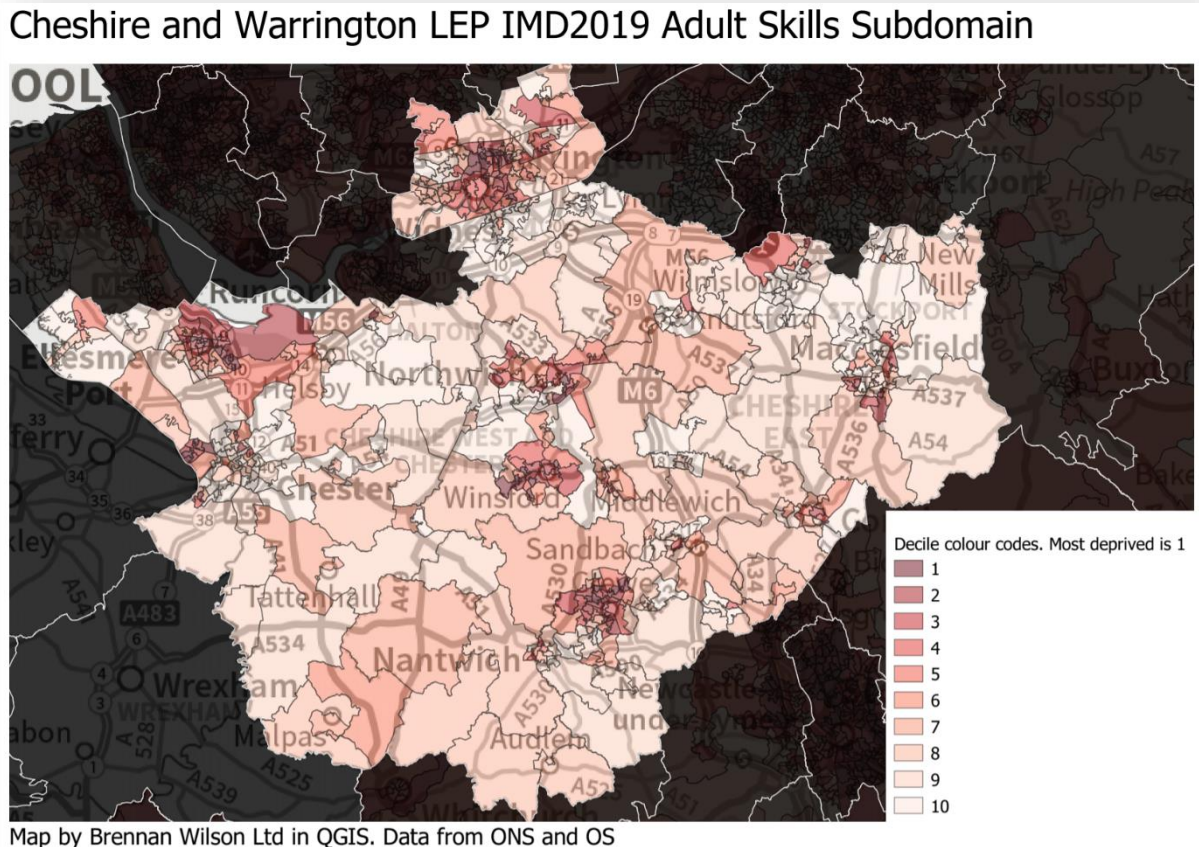
| Qualifications (Jan 2019-Dec 2019) | | | | | | |
|---|-----------------------------|-------------------|-------------------------------|----------------|----------------|-------------------|
| | Cheshire And Warrington (%) | Cheshire East (%) | Cheshire West And Chester (%) | Warrington (%) | North West (%) | Great Britain (%) |
| NVQ4 and Above | 42.1 | 41.9 | 43.0 | 41.0 | 36.1 | 40.3 |
| NVQ3 and Above | 60.7 | 59.6 | 61.6 | 61.1 | 55.2 | 58.5 |
| NVQ2 and Above | 79.3 | 77.7 | 81.2 | 79.1 | 74.5 | 75.6 |
| NVQ1 and Above | 88.2 | 86.8 | 89.7 | 88.2 | 85.0 | 85.6 |
| Other Qualifications | 5.4 | 6.8 | 3.7 | 5.9 | 6.3 | 6.7 |
| No Qualifications | 6.4 | 6.4 | 6.6 | 5.9 | 8.7 | 7.7 |
| Source: ONS annual population survey. Numbers and % are for those of aged 16-64, % is a proportion of resident population of area aged 16-64 | | | | | | |

The Education, Skills and Training Domain of the IMD 2019 measures the lack of attainment and skills in the local population. The indicators fall into two sub-domains: one relating to children and young people and one relating to adult skills. These two sub-domains are designed to reflect the 'flow' and 'stock' of educational disadvantage within an area, respectively. That is, the 'children and young people' sub-domain measures the attainment of qualifications and associated measures ('flow'), while the 'skills' sub-domain measures the lack of qualifications in the resident working-age adult population ('stock').

The Adult Skills sub-domain index is constructed by combining two indicators:

- Adult skills: The proportion of working-age adults with no or low qualifications, women aged 25 to 59 and men aged 25 to 64
- English language proficiency: The proportion of working-age adults who cannot speak English or cannot speak English well, women aged 25 to 59 and men aged 25 to 64

The map below illustrates the Adult Skills Subdomain scores for Lower Super Output Areas in Cheshire and Warrington LEP. The map illustrates the most deprived areas for this Subdomain can be found in Warrington, Crewe, Ellesmere Port and Winsford, with further pockets in and around Chester, Northwich, and Macclesfield.



5.4 The Supply of Skills to Adults

The sections below on the supply of skills to adults are a summary of a detailed report on this issue produced for the LEP in the Spring of 2020⁷.

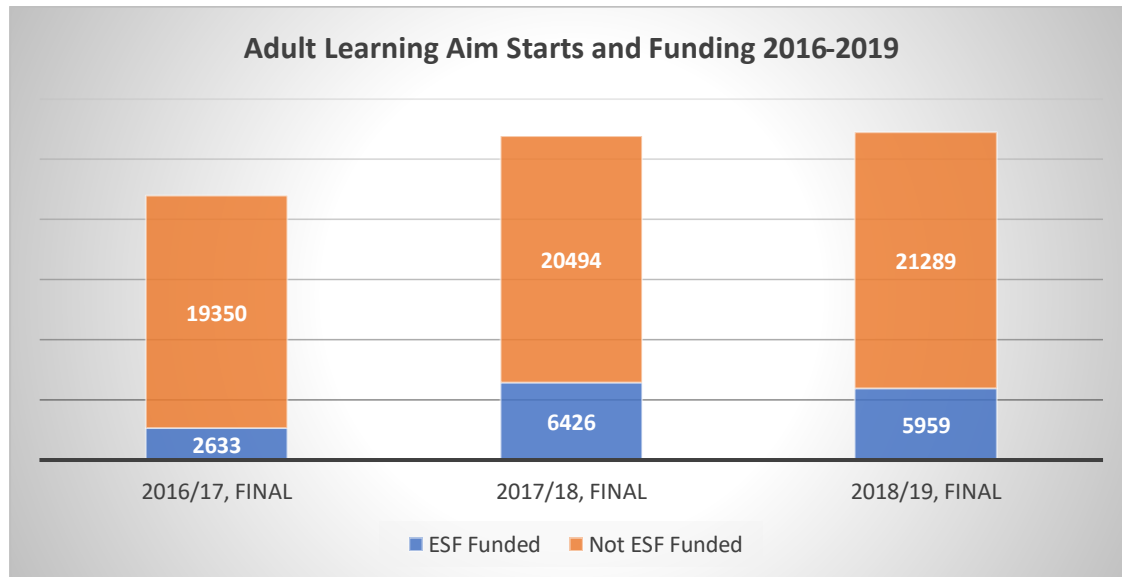
5.4.1 Adult Further Education Participation and Achievement Overview

There were 363 Learning Providers that delivered one or more learning aims to adults in Cheshire and Warrington LEP between 2016 and 2019.

Between 2016 and 2019, starts on non-European Social Fund (ESF) funded learning aims grew 10% from 19,350 in 2016/17 to 21,289 in 2018/19. 41% of all starts between 2016 and 2019 were below Level 2 and a further 37% were at Level 2.

⁷ 'The Adult Workforce and Skills Delivery in Cheshire and Warrington', Brennan Wilson Ltd, May 2020
<http://www.871candwep.co.uk/content/uploads/2020/10/Report-B-The-Adult-Workforce-and-Skills-Delivery-in-Cheshire-and-Warrington.pdf>

In 2018/19, ESF funded starts accounted for 22% of the total. The Government has declared its intention to replace ESF investment with a new fund called the Shared Prosperity Fund. Details on how this fund will be invested, or what it will be invested in, are still to be announced; so, it is not clear whether the new fund will continue to fund almost a quarter of all adult learning aims in Cheshire and Warrington.

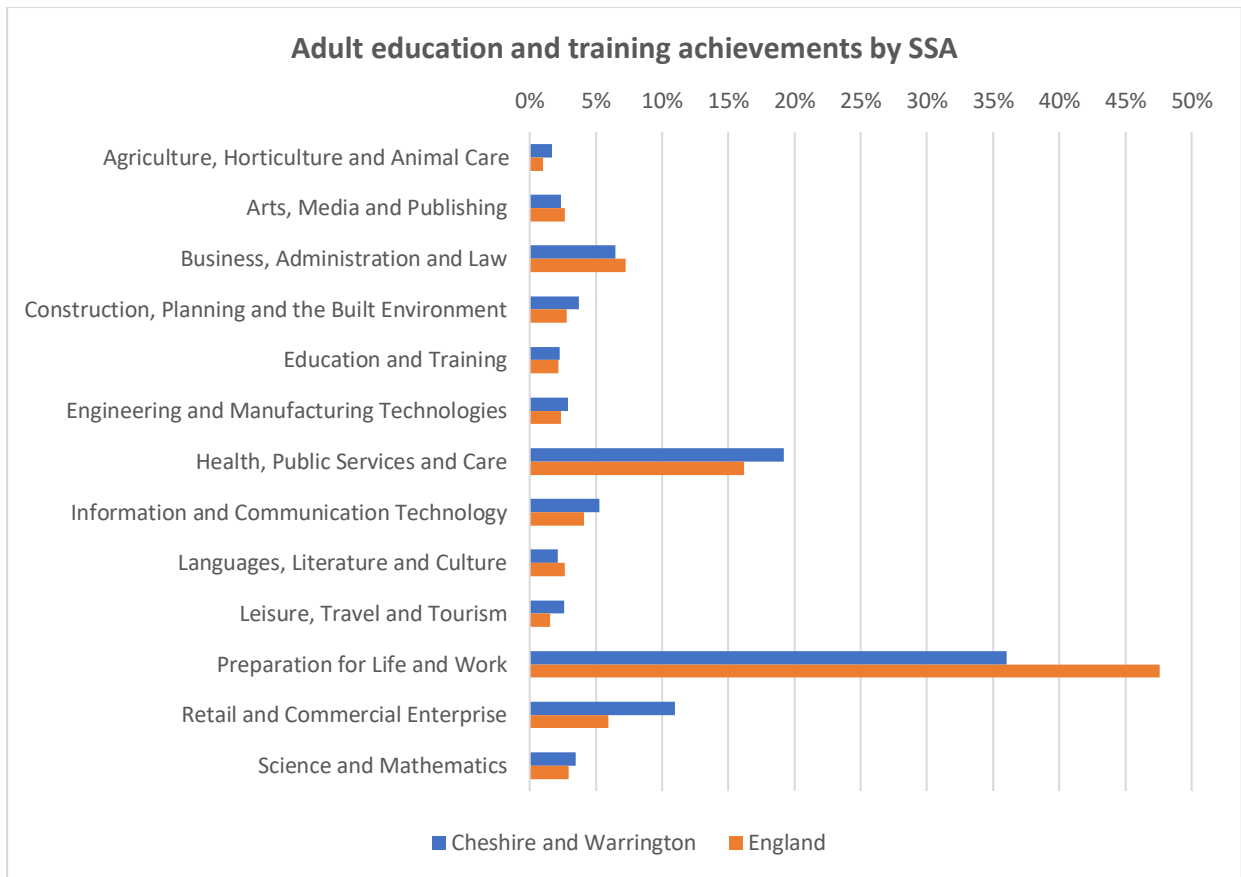


Source: ESFA Localities data cube (residency)

Overall, 56% of starts not funded by ESF were associated with female learners and 44% with male learners. The general population of Cheshire and Warrington splits 51% female, 49% male. However, only 24% of ESF-funded starts were by females. More work is required to understand the reasons for this and to ensure that the ‘Accelerate’ programme and future Shared Prosperity Fund investment does not repeat this gender disparity.

The percentage of total learning aim achievements for 2018/19 in each Sector Subject Area, for Cheshire and Warrington and for England, is set out in the chart below. This has been defined as a ‘core indicator’ by Government. In interpreting data that aggregates all learning aims, it is important to understand that not all learning aims are equal. For example, an unemployed person on a Sector Work Based Academy programme (ie a skills programme linked to a specific employment vacancy) might enrol at the same time on four or five short units of learning/learning aims (eg safe handling, customer service, employability etc) which, in total, constitute their programme of learning. Conversely an Access to Higher Education Diploma will have several quite substantial modules, but it will be recorded as a single ‘learning aim’.

In the chart below, for example, the very high volume of learning aim achievements in ‘Preparation for Life and Work’ will, in part, be because learners will undertake this type of short learning aim alongside other learning aims which may be more substantial.



Source: SAP Core Indicators

It is often helpful to be clear about what type of learning aims, or qualification types, are being considered, rather than just talk about ‘learning aims’ as all being equivalent to each other. Much of the analysis in this report refines the consideration of learning aims in this way. This prevents brigading, say, a Level 2 Award in First Aid together with a Level 2 Diploma in Health and Social Care. The latter qualification should provide an individual with the foundations needed for employment in the health and social care sector, the former qualification obviously does not do this.

The Overall Achievement Rate for 19+ Learners in Education and Training (ie in ESFA funded provision, normally classroom based, excluding apprenticeships) for learners resident in Cheshire and Warrington (all institutions) stood at 90.6% in Cheshire and Warrington LEP, 1.5% higher than the national rate of 89.1% (Table below). Both the pass rate and the retention rate were higher than the national figures. The achievement rate in General FE colleges was very slightly lower (0.3%) in Cheshire and Warrington than was the case nationally with this being attributable to a lower (0.5%) retention rate. Whilst volumes in Other Public (eg Local Authorities) and Private Sector providers were lower than those delivered in colleges, the achievement rate in both exceeded the national benchmarks, significantly so in the case of Other Public (9.3% higher). This had the effect of pulling up the overall achievement rate for residents in Cheshire and Warrington.

| Education & Training Overall Achievement Rates for 19+ Learners in CWLEP and National | | | | | | | |
|---|--------|----------------------------|----------|-------------|----------|------------------|----------|
| Institution Type | Cohort | Overall Achievement Rate % | | Pass Rate % | | Retention Rate % | |
| | | CWLEP | National | CWLEP | National | CWLEP | National |
| All Institution Type | 17370 | 90.6 | 89.1 | 96.3 | 95.1 | 94.1 | 93.7 |
| General FE and Tertiary College | 10540 | 89.6 | 89.9 | 95.1 | 94.9 | 94.2 | 94.7 |
| Other Public Funded | 3160 | 96.5 | 87.2 | 98.7 | 93.9 | 97.8 | 92.9 |
| Private Sector Public Funded | 3260 | 89.8 | 88.3 | 98.7 | 97.2 | 91 | 90.9 |
| Sixth Form College | 80 | 78.6 | 88.1 | 94.3 | 95.1 | 83.3 | 92.6 |
| Specialist College | 330 | 80.1 | 87.3 | 90.5 | 93.7 | 88.6 | 93.2 |

Source: 2018/19 National Achievement Rates Tables

Analysis of FE learner achievement by ward suggests that there does not appear to be a straightforward relationship between deprivation and overall FE adult achievement rates.

5.4.2 Adult Apprenticeships Participation and Achievement Overview

In line with national reductions, there was a decline of 28% in apprenticeship starts by LEP residents between 2016/17 and 2018/19; with a 31% reduction in starts by 16-18 year olds; a 30% reduction in 19-24 year old apprentices; and a 24% reduction in 25+ apprentices.

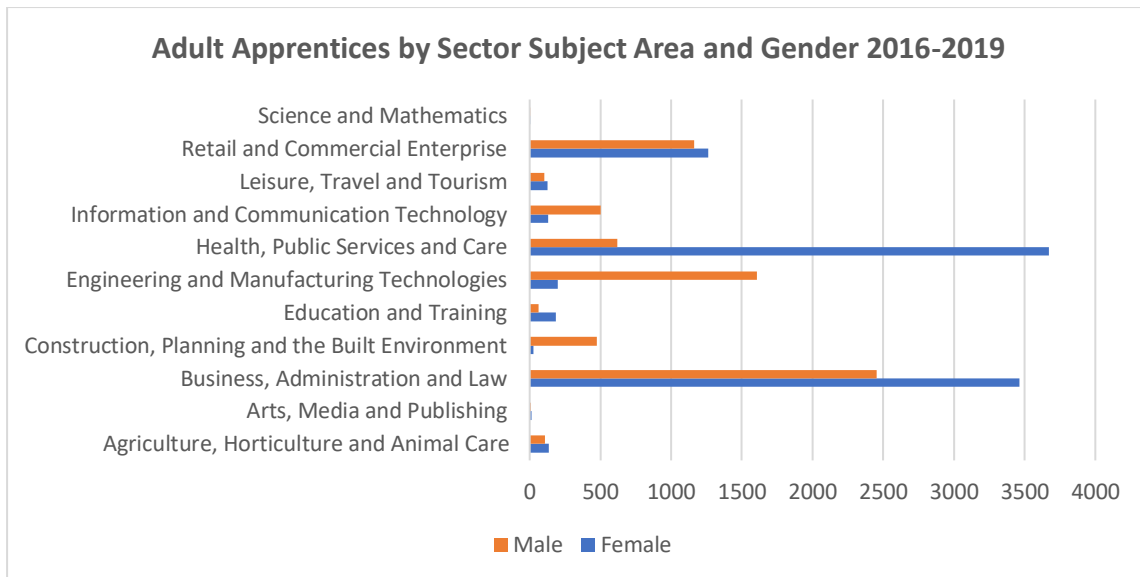
| Apprenticeship Starts, all Ages, 2016-2019 | | | | |
|--|---------|---------|---------|-------|
| Age at Start | 2016/17 | 2017/18 | 2018/19 | Total |
| 16-18 | 2273 | 1964 | 1574 | 5811 |
| 19-24 | 2729 | 1990 | 1920 | 6639 |
| 25+ | 3943 | 2800 | 2944 | 9687 |
| Total | 8945 | 6754 | 6438 | 22137 |

Source: ESFA Localities data cube (residency)

For adults, the most significant decline was 60% in Level 2 apprenticeships. Level 3 adult apprenticeships declined by 18%. By contrast adult apprenticeship volumes at Level 4+ almost doubled (98% increase) over this period.

The decline in adult apprenticeship starts was not uniform across all sector subject areas. In fact, there was an increase of adult apprentices in Information and Communication Technology and in Agriculture, Horticulture and Animal Care. On the other hand, adult apprenticeships in Retail and Commercial Enterprise declined by 40%; Health, Public Services and Care declined by 32%; Engineering and Manufacturing Technologies declined by 38%; and adult apprenticeships in Business, Administration and Law declined by 21%. The decline in adult apprenticeship starts has not been uniform across parliamentary constituencies. For example, in Eddisbury, there was a decline in adult apprenticeship starts of over 35% whereas starts declined at half that rate in Congleton, where the decline between 2016 and 2019 was 17%.

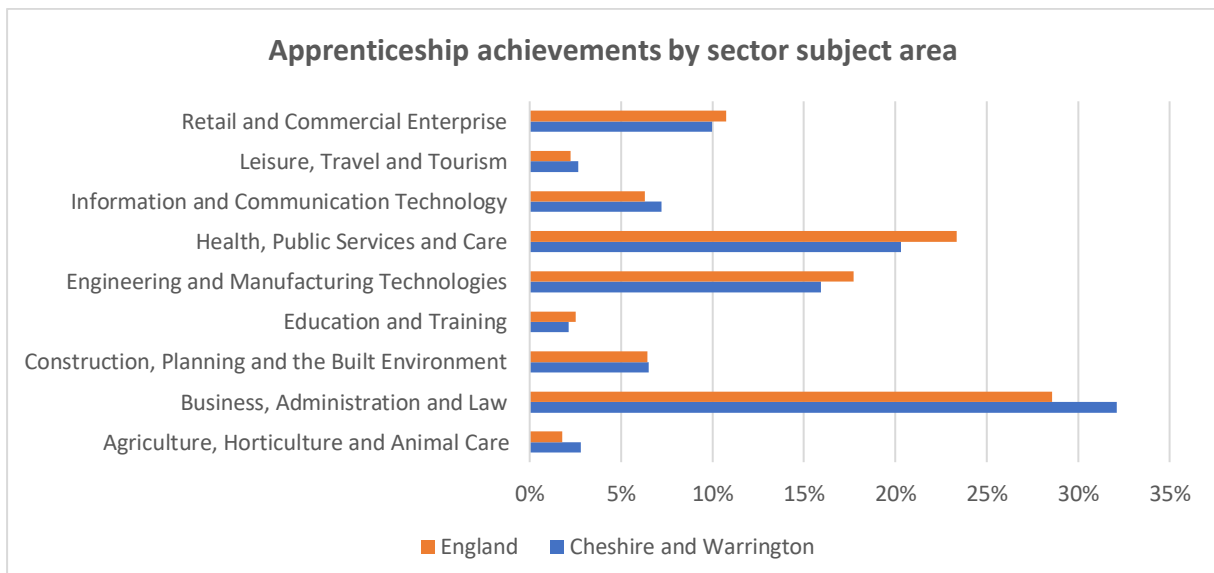
There are highly gendered occupational areas in adult apprenticeships. Only 14% of adult apprenticeships in Health, Public Services and Care were started by males. Similarly, only 11% of apprentices in Engineering and Manufacturing Technologies were female and only 5% of apprentices in Construction, Planning and the Built Environment were female.



Source: ESFA Localities data cube (residency)

10% of adult apprentices reported that they had a disability, learning difficulty or health problem. This is less than half the proportion of adult learners in Further Education. It is not clear why the difference between the two routes should be so marked.

The achievement rate for 19-23 apprenticeships in Cheshire and Warrington in 2018/19 was very slightly lower than the National (67.6% vs 67.7%)⁸. The achievement rate for 24+ apprenticeships was higher overall and higher for all Levels in Cheshire and Warrington than national. 2019/20 apprenticeship achievements in Cheshire and Warrington by Sector Subject Area are shown in the chart below. The main SSAs in Cheshire and Warrington were ‘Business, Administration and Law’; ‘Engineering and Manufacturing Technologies’; ‘Health, Public Service and Care’; and ‘Retail and Commercial Enterprise’. The pattern of delivery broadly mirrors England.



Source: SAP Core Indicators

⁸ <https://www.gov.uk/government/collections/sfa-national-success-rates-tables#national-achievement-rates-tables-2018-to-2019>

5.4.3 Destinations of Adult Learners

The table below shows that, compared with England, a higher proportion of C&W adult FE learners secure sustained employment on leaving FE; but a lower proportion progress to sustained learning. A higher proportion secure sustained employment in C&W for every category of learner.

| Destinations for adult FE and skills learners | | | | | | |
|---|-----------------------------|--------------------|--------------|----------------------|--------------------|--------------|
| | Cheshire and Warrington LEP | | | England | | |
| | Sustained employment | Sustained learning | Any learning | Sustained employment | Sustained learning | Any learning |
| All FE & Skills Learners | 71% | 19% | 40% | 61% | 24% | 45% |
| Level 1 | 64% | 13% | 37% | 50% | 15% | 40% |
| Level 1 ESOL | 63% | 29% | 47% | 43% | 42% | 65% |
| Level 1 English & Maths | 60% | 22% | 52% | 54% | 31% | 54% |
| Level 2 | 78% | 14% | 36% | 75% | 14% | 36% |
| Full Level 2 | 73% | 38% | 54% | 66% | 32% | 47% |
| Level 2 ESOL | 77% | 32% | 48% | 56% | 33% | 52% |
| Level 2 English & Maths | 70% | 36% | 59% | 68% | 37% | 56% |
| Full Level 3 | 67% | 38% | 50% | 65% | 42% | 52% |
| Level 3 Other | 84% | 37% | 48% | 77% | 24% | 38% |
| Level 4 | 92% | 13% | 15% | 82% | 14% | 25% |
| Level 5 | 100% | - | - | 81% | 12% | 21% |
| Level 6 | - | - | - | 79% | 13% | 19% |
| Other | - | 43% | 57% | 30% | 37% | 50% |

Source: SAP Core Indicators/DfE

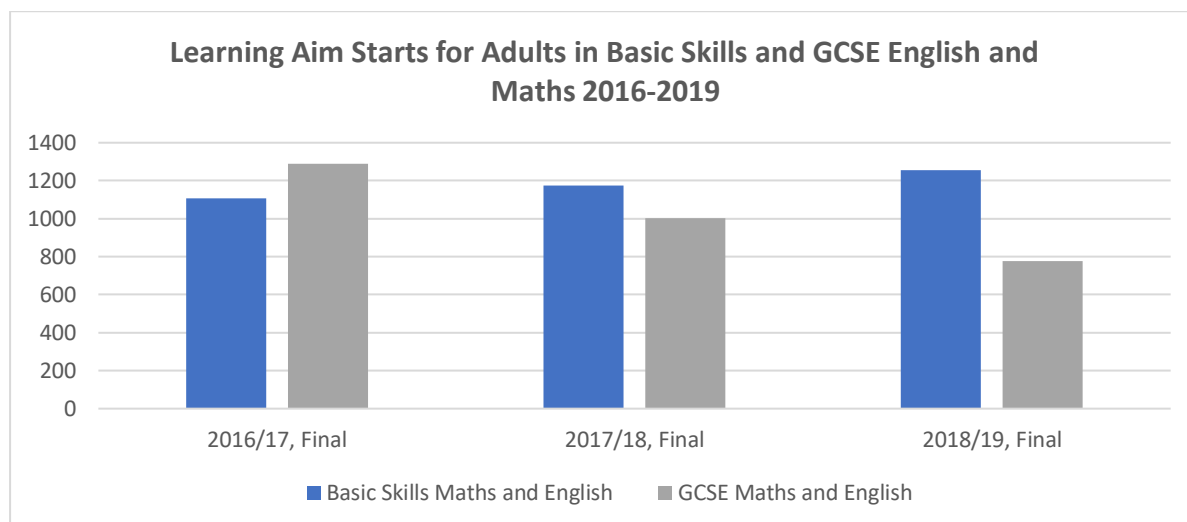
The table below provides data on sustained destinations following participation in apprenticeships. The pattern in C&W and England is very similar.

| Apprenticeship destinations (all age) 2018/19 | | | | |
|---|----------------------------------|----------------------|--------------------|--------------|
| | | Sustained employment | Sustained learning | Any learning |
| Cheshire and Warrington LEP | All Apprenticeships | 92% | 16% | 25% |
| | Advanced Apprenticeship | 93% | 12% | 20% |
| | Higher (Level 4) Apprenticeship | 94% | 23% | 27% |
| | Higher (Level 5+) Apprenticeship | 91% | 6% | 24% |
| | Intermediate Apprenticeship | 91% | 19% | 29% |
| England | All Apprenticeships | 91% | 16% | 25% |
| | Advanced Apprenticeship | 91% | 13% | 20% |
| | Higher (Level 4) Apprenticeship | 93% | 18% | 25% |
| | Higher (Level 5+) Apprenticeship | 93% | 7% | 19% |
| | Intermediate Apprenticeship | 90% | 20% | 29% |

Source: SAP Core Indicators/DfE

5.4.4 Adult Basic Skills

For English and Maths GCSE, there has been a 40% decline in starts by adults between 2016/17 and 2018/19. This decline is of concern because a grade 4 or above in English and Maths GCSEs is often a prerequisite for entry to Level 3 programmes. By contrast with GCSEs, starts in Basic Skills (English and Maths) increased by 14% over the same period.



Source: ESFA Localities data cube (residency)

5.4.5 Adult Level 2 Skills

Over the three years between 2016/17 and 2018/19 there were 24,567 FE learning aims started at Level 2 by adult residents of Cheshire and Warrington. Certificates accounted for 44% of funding earned (38% of starts); Diplomas accounted for 23% of funding earned (6% of starts); GCSE (English and Maths) accounted for 18% of the funding earned (12% of the starts); and QCF Units and Awards combined accounted for 8% of the funding (39% of starts).

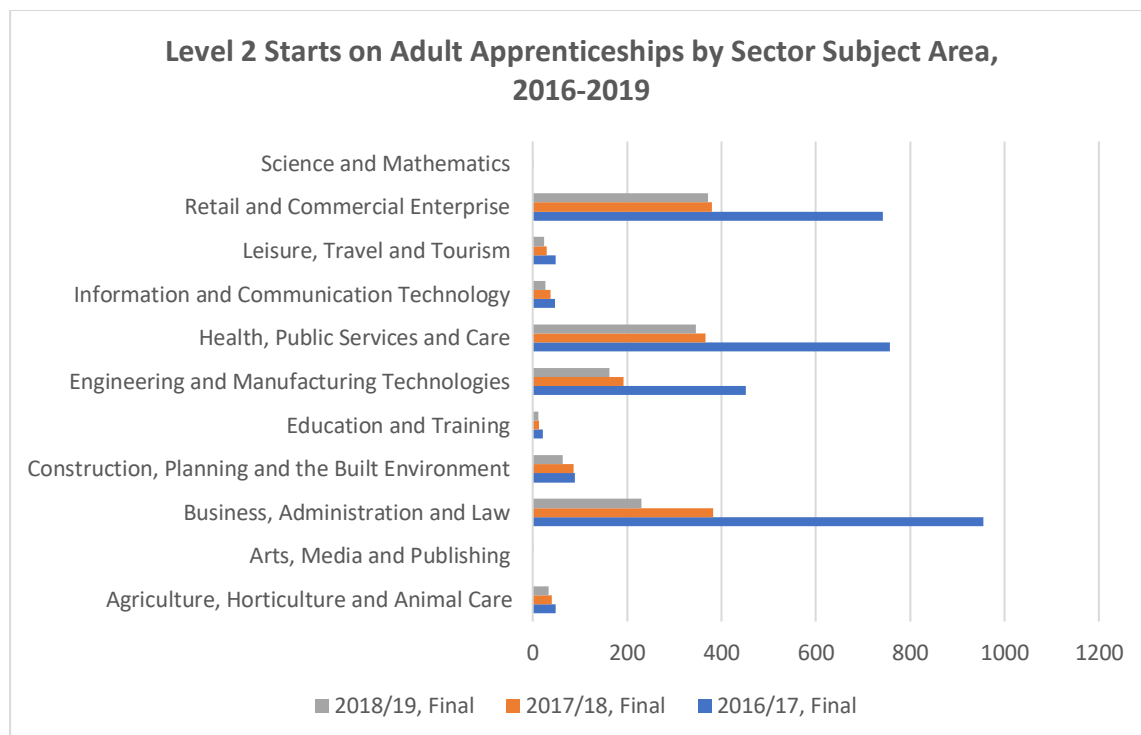
ESF accounted for the funding of 16% of all Level 2 learning aims for adults between 2016 and 2019.

Level 2 Diploma volumes undertaken by adults showed a growth of 7.5% from 2016/17 to 2018/19. Level 2 Certificates undertaken by adults saw a growth of 44%. Between 2016 and 2019, Health, Public Services and Care accounted for 37% of all starts in Level 2 Certificates and Diplomas by adults. This was more than twice the next sector subject areas of Retail and Commercial Enterprises at 16% and Business, Administration and Law at 14%. No other sector subject area accounted for more than 10% of starts for Level 2 Certificates and Diplomas.

There seems to be a good alignment between the areas which have the highest take up of FE adult Level 2 Certificates and Diplomas and the areas with the highest levels of employment deprivation, as measure by the Employment Deprivation Domain of IMD 2019. However, providers may wish to consider proactively targeting Level 2 starts by adults in the following areas: the LSOA containing Willaston CoE Primary School; the LSOA containing Old Hall St in Malpas; the LSOA containing Barclays Technology Centre south of Knutsford; the LSOA on east of Crewe containing residences bounded by West St and Middlewich Rd and south of the Legends Sports Centre; and the LSOA containing Barnaby Rd Play area south of Poynton.

There does not appear to be a relationship between deprivation and achievement rates for Level 2 certificates and diplomas undertaken by adults.

There was a 60% decline in Level 2 adult apprenticeship starts between 2016/17 and 2018/19. Every Sector Subject Area experienced a significant reduction in adult apprenticeship starts, but the Sector Subject Areas with the largest number of adult apprentices were also the areas that saw the largest percentage reduction in starts.

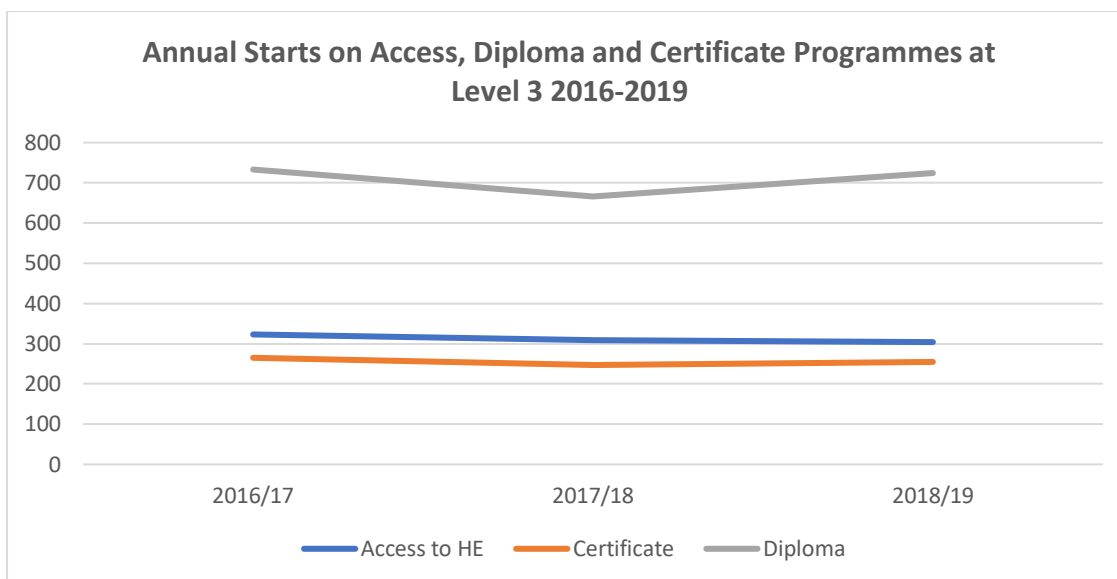


There is a very close alignment between the spatial distribution of adult apprenticeship achievements at Level 2 and the spatial distribution of income deprivation (as measured by the Income Deprivation Domain of IMD 2019) in Cheshire and Warrington.

5.4.6 Adult Level 3 Skills

Between 2016 and 2019, there were 6,586 Level 3 Learning Aim starts by adults. 'Other Non-Regulated' qualifications accounted for 30% of all the learning aim starts by adults. The more substantial qualifications of Diplomas, Access to HE and Certificates accounted for 58% of all learning aims undertaken by adults (32%, 14% and 12% respectively). Awards accounted for 10% of all starts with about half of these being for some sort of first aid qualification (Emergency First Aid at Work 213 starts, Paediatric First Aid 65 starts, and First Aid at work 53 starts)

Whilst there was a growth of 5% in all learning aims at level 3 undertaken by adults, there was a slight decline of 3% in starts on Level 3 Certificates, Diplomas and Access to HE programmes between 2016/17 and 2018/19. Starts on all three qualification types declined. The decline in starts was sharpest on Access to HE programmes at 6%.



Source: ESFA Localities data cube (residency)

Compared to other Levels of learning, the take up of Certificates and Diplomas at Level 3 by adults (2016-2019) is low. For example, a ward with a rate of 9 learning aim starts per 1000 adult population would appear in the top decile for Level 3 Certificate and Diploma delivery and the bottom decile for Level 2 Certificate and Diploma delivery.

Between 2016 and 2019 there was 2,890 starts on Level 3 Certificates and Diplomas. Starts in Retail and Commercial Enterprise, Health, Public Services and Care and Business, Administration and Law accounted for over half of all such starts.

Considering the areas of highest need as defined by the areas that are most deprived on the Income Deprivation Domain of the IMD 2019, it is suggested that the following areas should be considered for proactive outreach to encourage engagement by adults in substantial Level 3 qualifications: the LSOA containing Neston Town Centre; LSOAs on the south of Winsford including the one containing Oaklands school and the one covering St Johns; low income LSOAs in Northwich including the LSOA covering Northwich Town Centre; LSOAs in Middlewich including the one directly to the east of Cledford Primary school and the one adjacent to it containing Middlewich High School; the LSOA on east of Crewe containing residences bounded by West St and Middlewich Rd and south of the Legends Sports Centre; in Sandbach, the LSOA containing residences north and south of the High St; and in Knutsford, the LSOA containing residences adjacent to St. John's Wood

Between 2016 and 2019, just less than half of starts on Access to HE programmes were in Health, Public Services and Care, and over a quarter were in Social Sciences.

In the three academic years spanning 2016-2019 there was an 18% decline in Level 3 apprenticeship starts. The Sector Subject Areas experiencing the largest percentage reductions in Level 3 adult apprenticeship starts over the three years were Health, Public Services and Care and Retail and Commercial Enterprise with 30% and 29% reductions respectively.

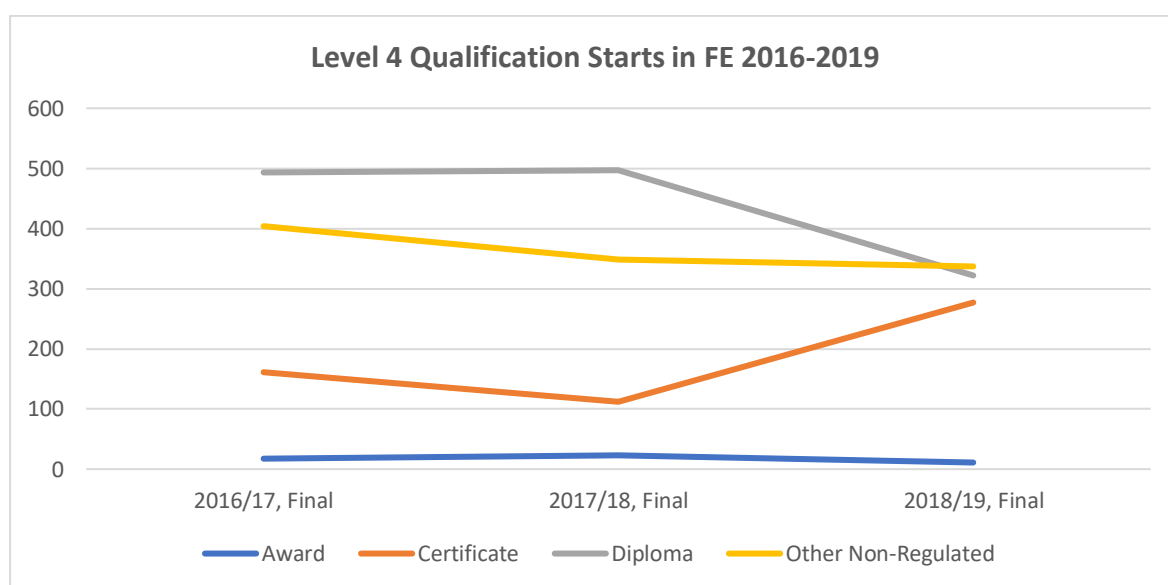
There is a close alignment between the distribution of apprenticeship achievements at Level 3 and the distribution of income deprivation. Like the overall achievement measure, there are a few areas, for example around the centre of Chester, where this does not appear to be the case. There could be

a variety of different reasons for this. For example, where individuals are employed in these areas, they may be disproportionately employed in sectors with a low take-up of apprenticeships.

5.4.7 Adult Level 4+ Skills

In 2018/19, 5,350 adult residents of Cheshire and Warrington secured a qualification from a Higher Education Institution; 1,200 adult residents started a Level 4+ Apprenticeship programme; and there were 949 Level 4+ learning aim starts by adults in Further Education.

The main Level 4+ qualifications for adults delivered in Further Education were Certificates, Diplomas and 'Other Non-Regulated' (these can be Degrees and Foundation Degrees) learning aims. Between 2016 and 2019, 2,951 such learning aims were delivered. Level 4+ starts declined 12% from 1080 in 2016/17 to 949 in 2018/19. In this period, starts on Level 4+ Certificates increased by 72%, whilst there were decreases of 35% in Level 4+ Diplomas and 17% in 'Other Non-Regulated' starts.

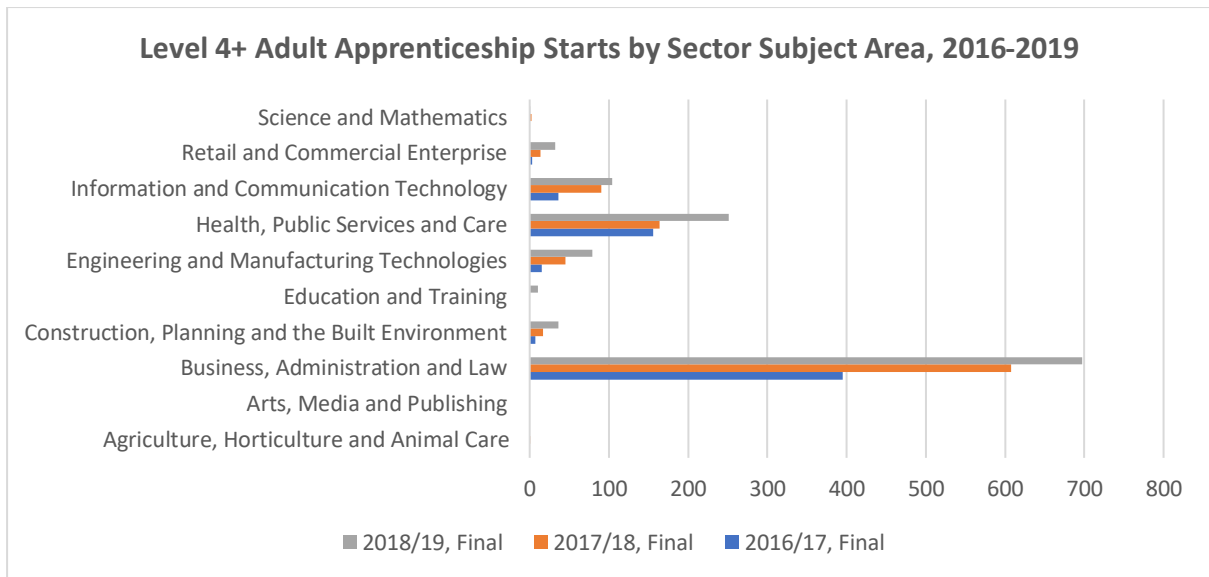


Source: ESFA Localities data cube (residency)

Eight providers delivered 20 or more Level 4+ non-regulated learning aims to Cheshire and Warrington adult residents between 2016 and 2019. Only two of these providers were Cheshire-based (Cheshire College South and West and Reaseheath), although Cheshire College South and West delivered more than 1 in 5 of all such starts.

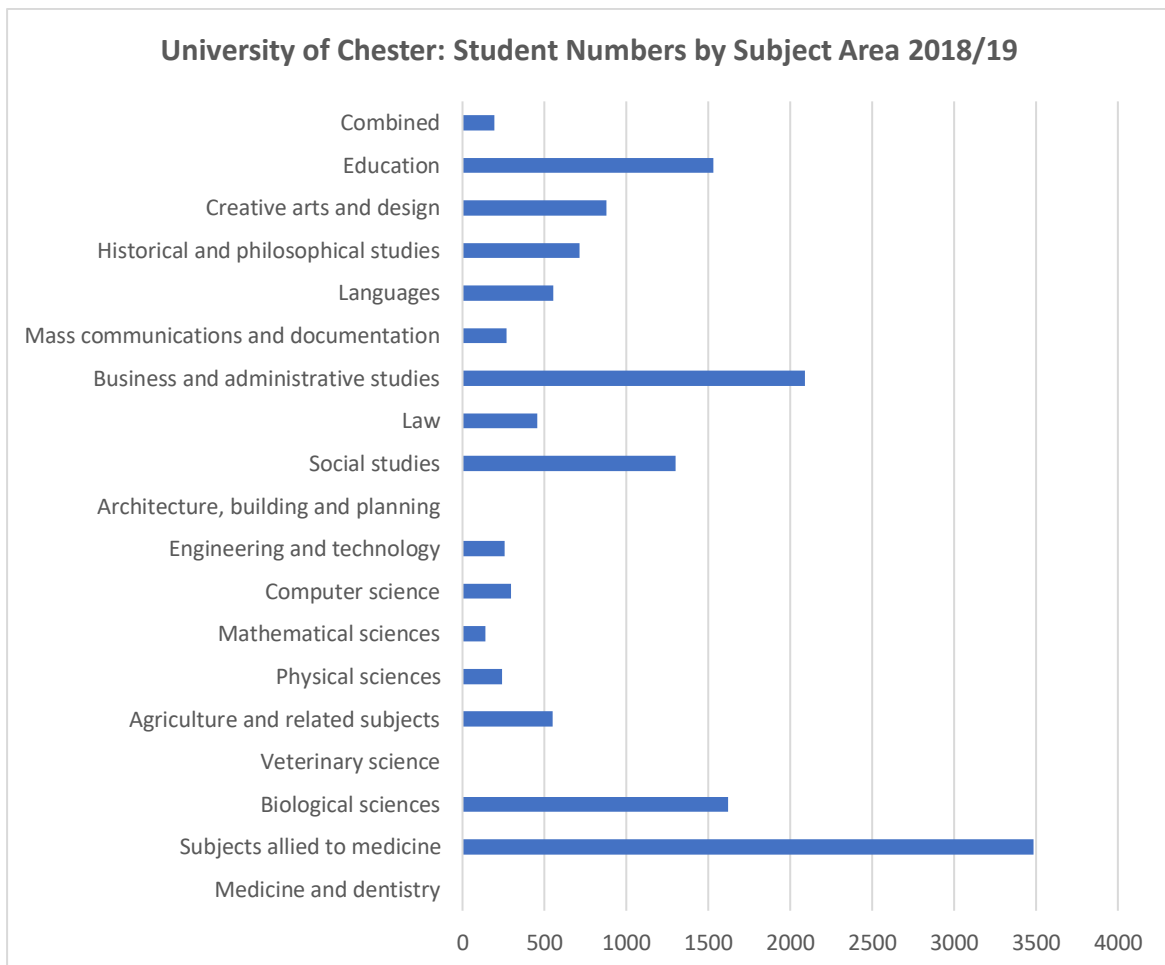
Level 4+ Certificates and Diplomas were overwhelmingly delivered by providers headquartered in Cheshire and Warrington LEP, with Warrington & Vale Royal College and Cheshire College South and West both having delivered over 400 starts between 2016/17 and 2018/19. The most popular qualifications of this type were linked to Human Resource Management.

By contrast with adult Apprenticeships at lower Levels, starts on Level 4+ Adult apprenticeships almost doubled between 2016/17 and 2018/19. The most significant volume increases in this period were in Business, Administration and Law which increased from 395 starts to 697 starts; Health, Public Services and Care which increased from 156 to 251; Information and communications Technology which increased from 36 to 104; and Engineering and Manufacturing Technologies that increased from 15 to 79.



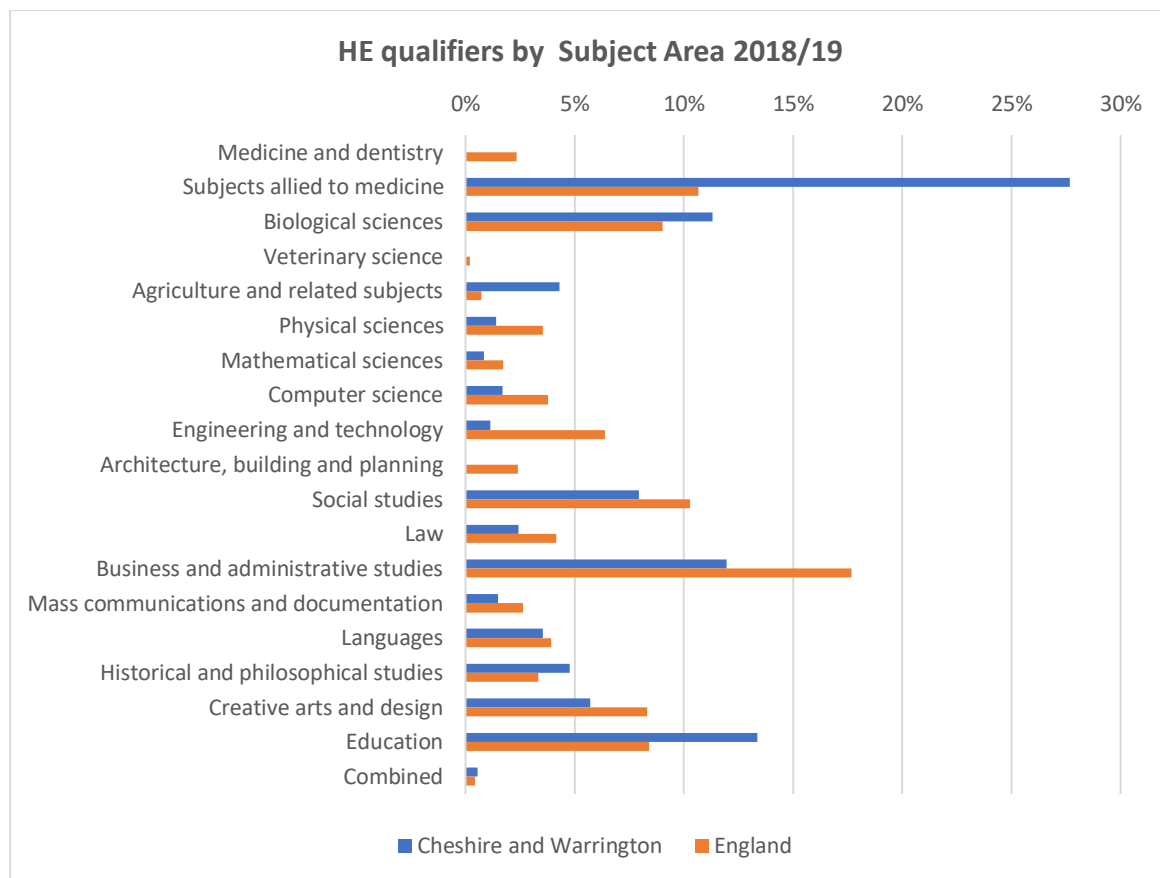
Source: ESFA Localities datacube (residency)

The University of Chester has a reasonably broad spread of courses. In 2018/19, subject areas with over 1,000 students included Education (1,530), Business and Administrative Studies (2,090), Social Studies (1,300), Biological Sciences (1,620), and Subjects Allied to Medicine (3,485).



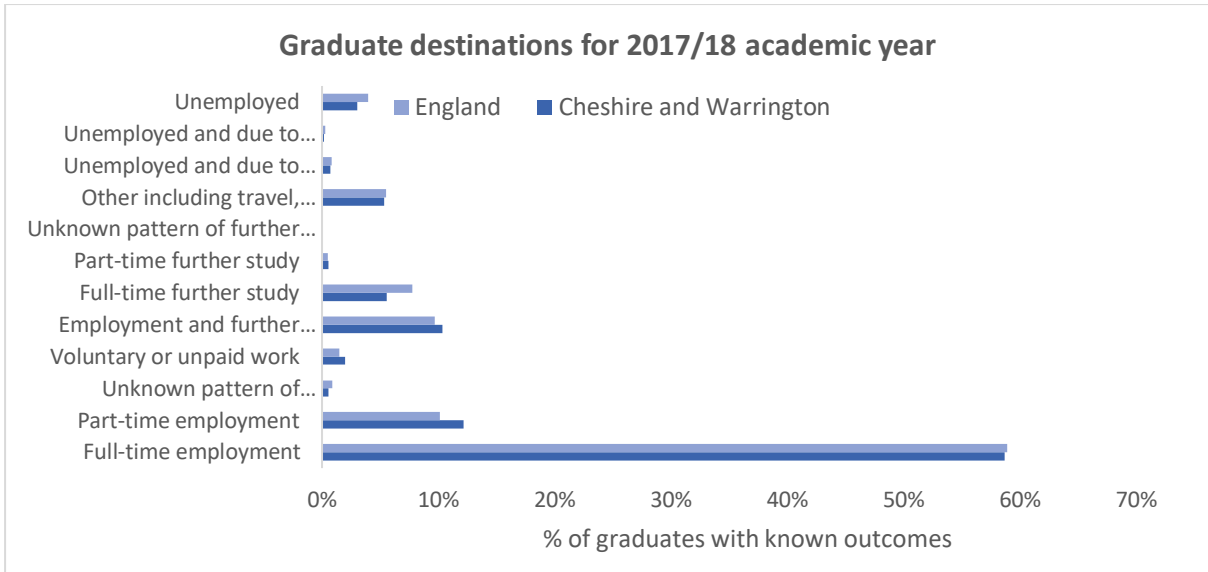
Source: HESA

In 2018/19 there were 5,350 achievements by Cheshire and Warrington adult residents in Higher Education Institutions. The subject areas with the highest number of achievements were Education (715), Creative Art and Design (305), Business and Administrative Studies (640), Social Sciences (425), Biological Sciences (605) and Subjects Allied to Medicine (1480).



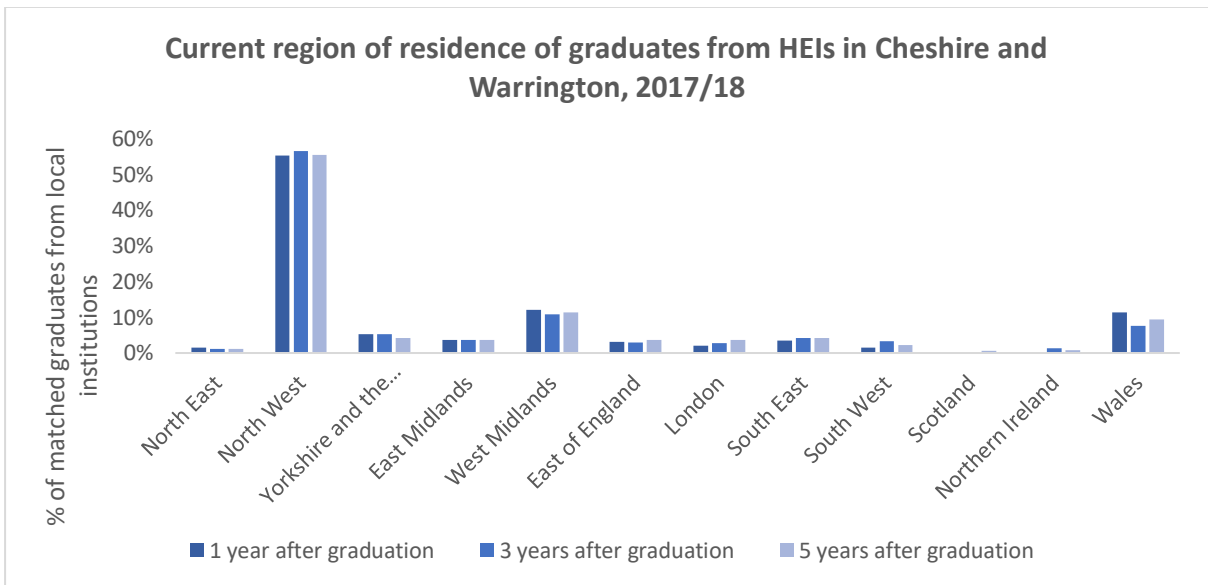
Source: SAP Core Indicators/HESA

Information about the destinations of 2016/17 graduates in 2017/18 is provided in the chart below. This data reflects students studying at providers in Cheshire and Warrington, rather than students who are domiciled here. Graduates from Cheshire and Warrington were slightly less likely to be unemployed; to be employed full time; and to be engaged in full-time further study. Conversely, they were more likely to be combining employment with further study, and more likely to be employed part-time.



Source: SAP Core Indicators/HESA

It is evident from the chart below, which illustrates data on graduate residence, that most graduates from Cheshire and Warrington will still be resident in the North West region 1 year, 3 years and 5 years after graduation.

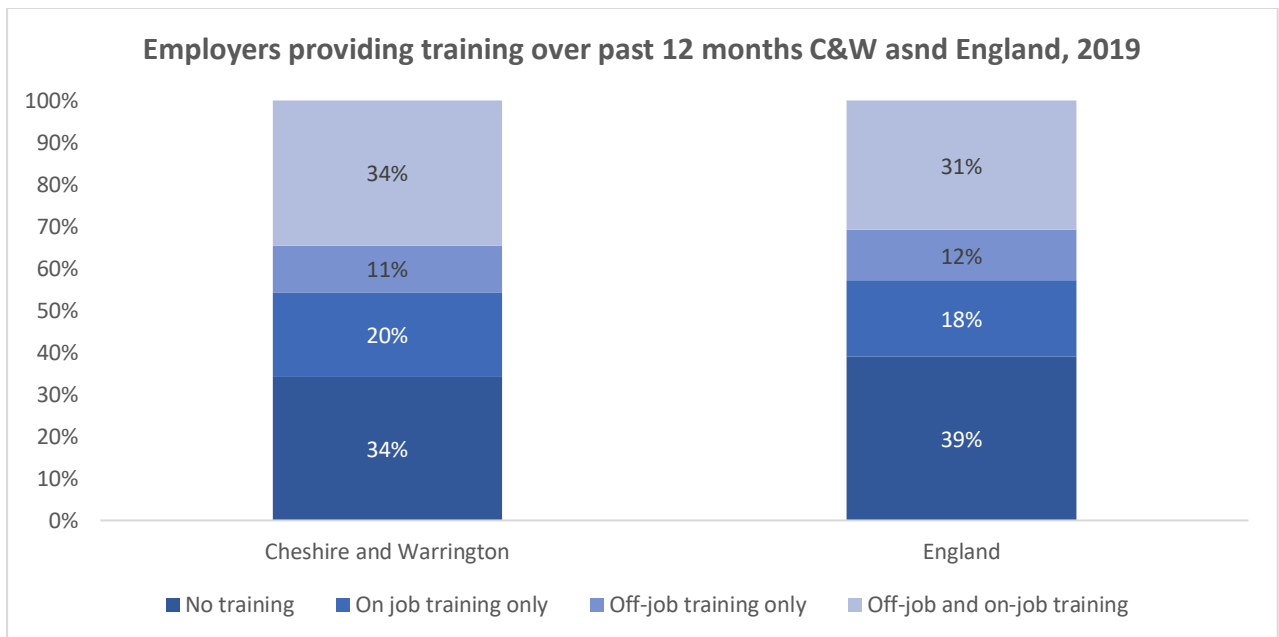


Source: SAP Core Indicators/HESA

5.5 Employer Training

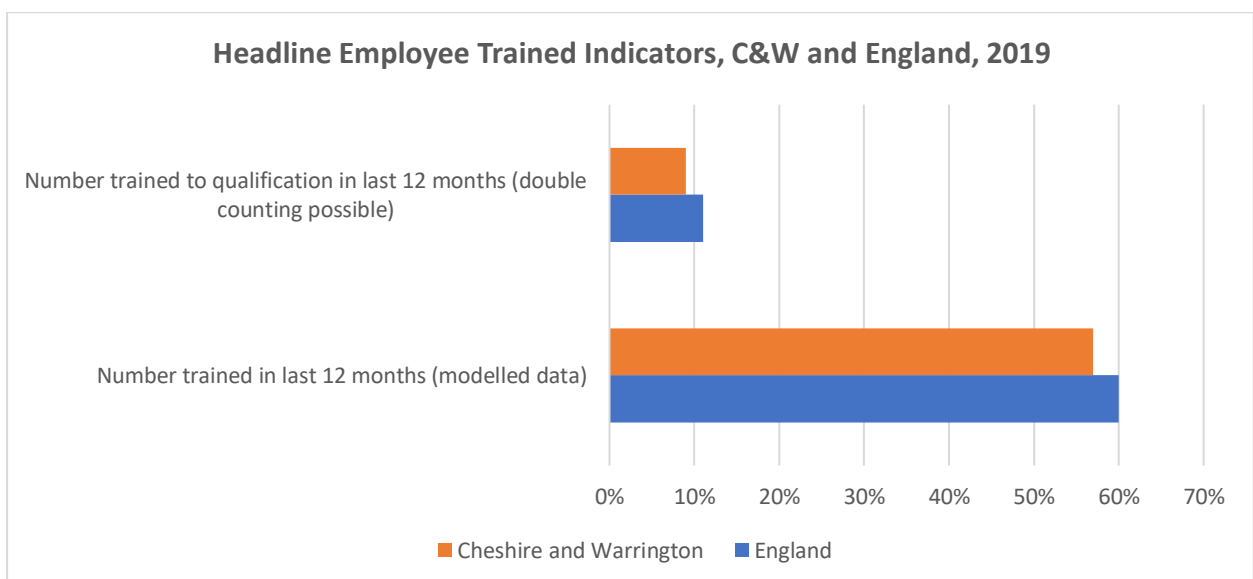
The Employer Skills Survey 2019 (ESS 2019) is an important source of intelligence for understanding the skills challenges faced by employers, both in terms of their existing workforce and when recruiting, and how they respond to these challenges through investment in training and workforce development. With over 81,000 employers participating in the 2019 wave, it is one of the world’s largest business surveys. 1312 employers in Cheshire and Warrington participated in the 2019 survey. Survey fieldwork for the latest wave took place between June and December 2019. While the findings still provide an important source of labour market intelligence, the Covid-19 outbreak in early 2020 means that the economic landscape has changed significantly since survey fieldwork was conducted.

When asked (ie between June 2019 and Dec 2019) employers in Cheshire and Warrington were more likely to have provided training over the previous 12 months than was the case in England, with a higher percentage providing some sort of training, a higher percentage providing off-the-job training and a higher percentage providing on-the-job training.



Source: SAP Core Indicators/ESS 2019

Although a higher proportion of employers in Cheshire and Warrington provided training than their English counterparts, a lower proportion of employees received training in Cheshire and Warrington. Overall, 57% of employees received some form of training compared to 60% in England. The proportion of employees trained to a qualification was 9% in Cheshire and Warrington compared to 11% in England.



Source: ESS 2019

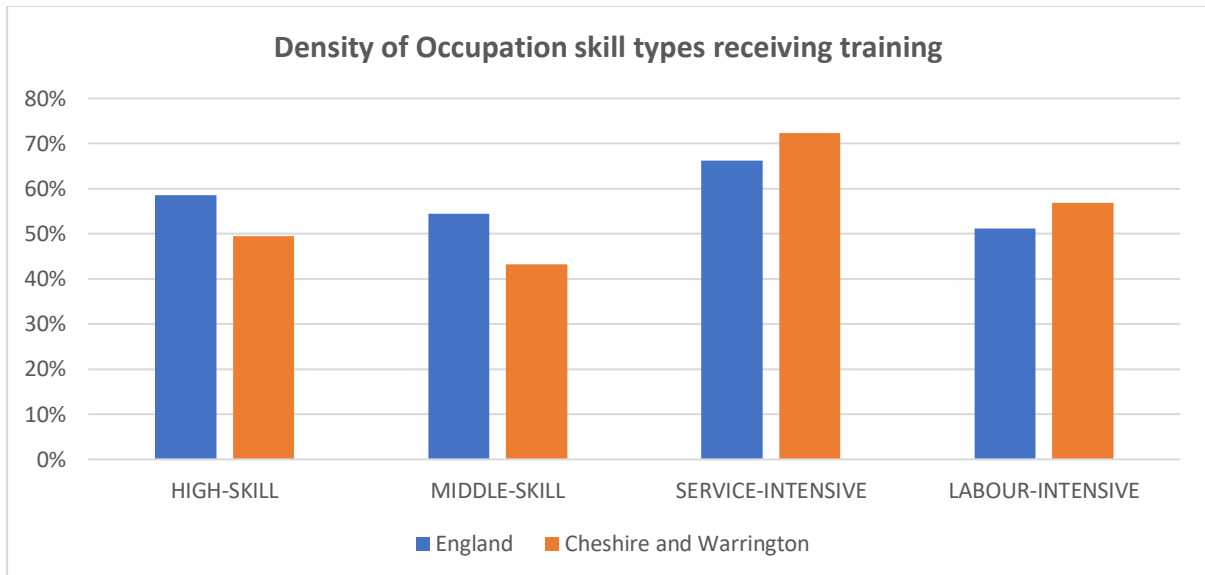
The reasons for not providing training in Cheshire and Warrington and England are set out in the table below. For both geographies, by far the main reason for not providing training is that staff are already proficient. Proportions giving other reasons are similar in both areas, including 6% of respondents saying that no training was available in the relevant subject area.

| Reasons for not providing training | | |
|--|---------|-----|
| Base: All non-trainers (excluding don't know responses) | | |
| | England | C&W |
| All our staff are fully proficient / no need for training | 70% | 69% |
| No training available in relevant subject area | 6% | 6% |
| Training is not considered to be a priority for the establishment | 6% | 9% |
| No money available for training | 5% | 4% |
| Any staff training has been arranged AND funded elsewhere | 5% | 6% |
| No particular reason | 3% | 3% |
| Managers have lacked the time to organise training | 3% | 4% |
| No new staff (only train new staff) | 3% | 3% |
| Employees are too busy to undertake training and development | 2% | 1% |
| Business not operating long enough / new business (inc. takeover transition) | 2% | 1% |
| Employees are too busy to give training | 2% | 2% |
| External courses are too expensive | 1% | 1% |
| Trained staff will be poached by other employers | 1% | 1% |
| The courses interested in are not available locally | 1% | 1% |
| Source: ESS 2019 | | |

In line with the finding above that a smaller percentage of employees received training in Cheshire and Warrington, the density of training in most occupational areas tended to be at, or below, English levels, except for training for 'Elementary staff' and training for 'Caring, leisure and other staff' which were higher.

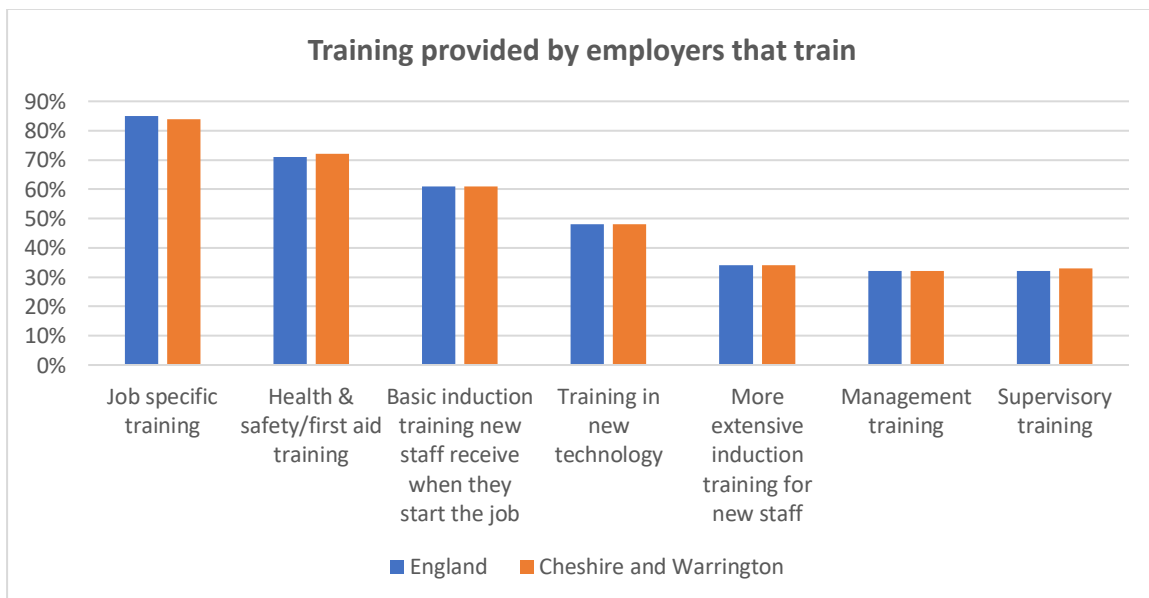
| Density of occupation types receiving training | | |
|---|---------|-------------------------|
| Base: All employment (excluding modelled data) | | |
| | England | Cheshire and Warrington |
| Managers | 46% | 47% |
| Professionals | 72% | 57% |
| Associate professionals | 66% | ** |
| Administrative/clerical staff | 52% | 36% |
| Skilled trades occupations | 58% | 55% |
| Caring, leisure and other service staff | 76% | 88% |
| Sales and customer services staff | 60% | 61% |
| Machine operatives | 46% | ** |
| Elementary staff | 54% | 58% |
| Source: ESS 2019, **=data suppressed | | |

Grouping occupations into high-skill, middle-skill, service-intensive, and labour-intensive types reveals that the proportions of those trained in high skill and middle skill occupations in Cheshire and Warrington was lower than for England, whereas the proportions of those trained in service-intensive and labour-intensive occupations was higher in Cheshire and Warrington.



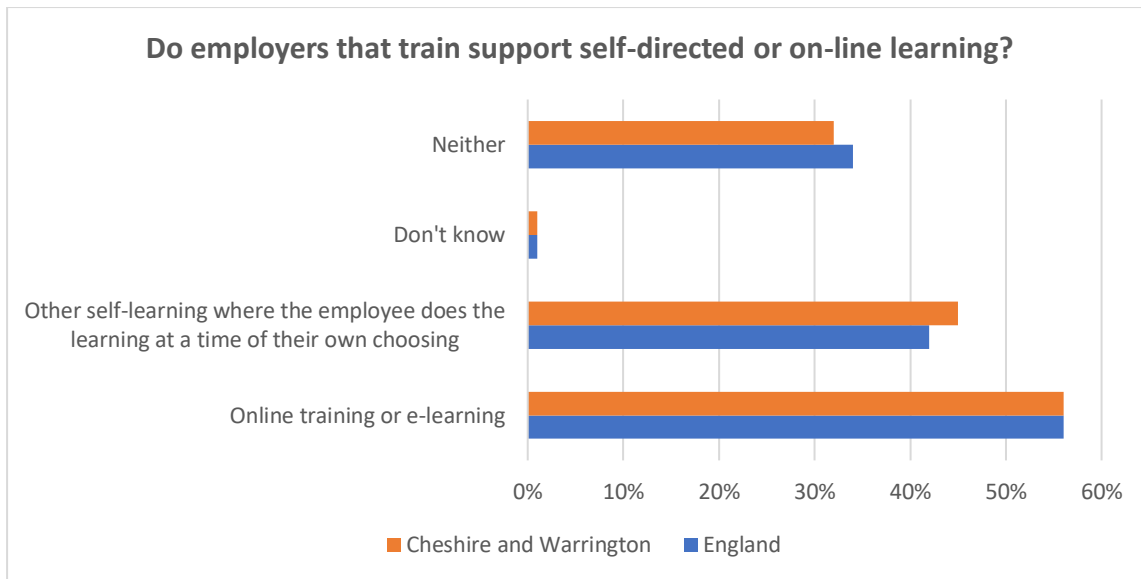
Source: ESS 2019

The types of training provided in Cheshire and Warrington is very similar to England, with over 50% of employers that do provide training doing so for job-specific, health and safety and induction reasons.



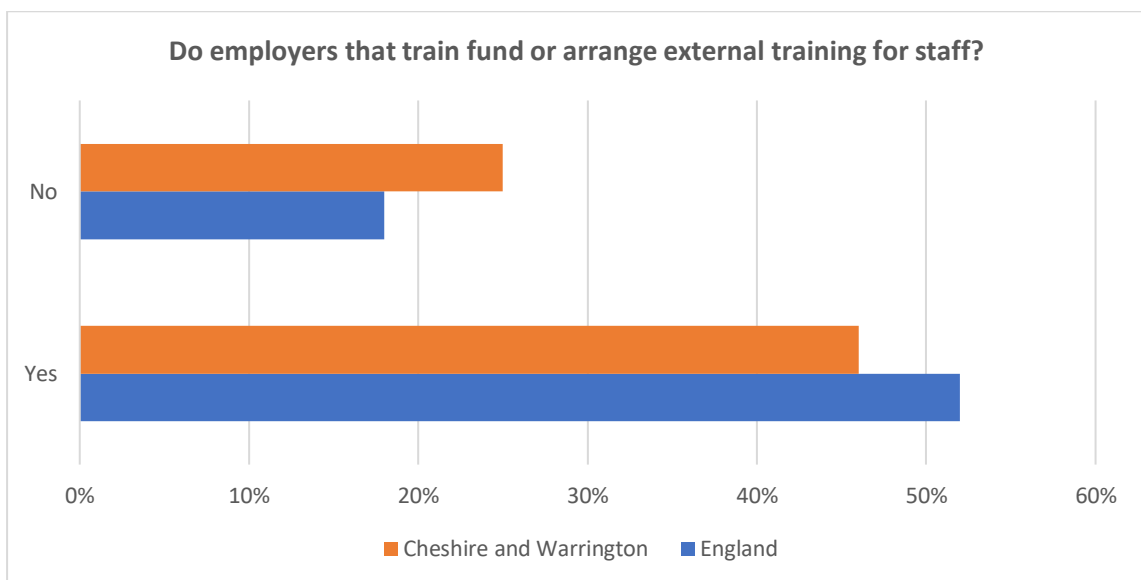
Source: ESS 2019

Of those employers that support training, 56% of them in both Cheshire and Warrington and England support e-learning. A higher proportion of these Cheshire and Warrington employers support other forms of self-directed learning than is the case in England (45% to 42%).



Source: ESS 2019

Employers in Cheshire and Warrington are less likely to fund or arrange external training for their staff than is the case in England.



Source: ESS 2019

Those employers in Cheshire and Warrington that provide off the job training make use of different types of training providers in a similar way to employers in England as a whole. About three quarters of employers use commercial organisations in both England and Cheshire and Warrington and about a quarter use colleges in both geographies. Employers in Cheshire and Warrington are more likely to source external training from regulatory bodies or government institutions than is the case for employers across England, and are slightly more likely to use universities or other HEIs.

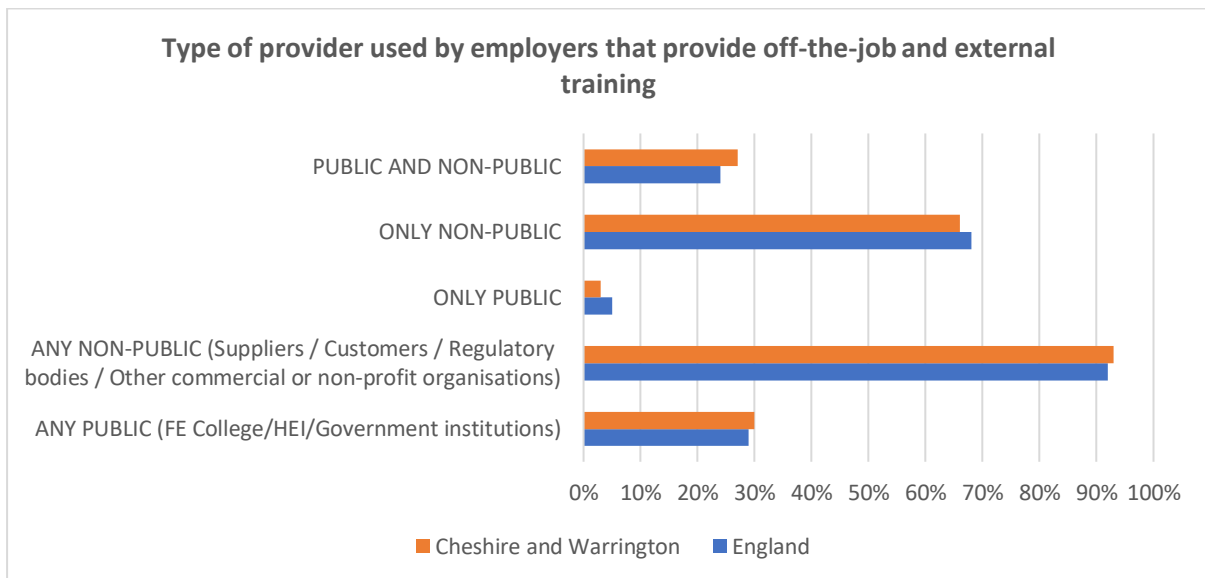
External training sources used in past 12 months

Base: All who provide off-the-job training and external training

| | England | Cheshire and Warrington |
|---|---------|-------------------------|
| Other commercial organisations, for example consultants or private training providers | 77% | 74% |
| Regulatory bodies | 29% | 37% |
| Any of your suppliers | 28% | 27% |
| Further Education Colleges | 23% | 23% |
| Other non-profit making organisations, for example employer associations, voluntary organisations | 20% | 18% |
| Universities or other Higher Education institutions | 13% | 16% |
| Your customers | 7% | 2% |
| Government Institutions e.g. councils/local authorities, NHS | 1% | 4% |

Source: ESS 2019

A slightly higher proportion of employers that provide off the job training in Cheshire and Warrington will use both public and private providers than is the case in England. Over 90% of employers that provide off the job training will use non-public providers and 30% of such employers will use public providers.

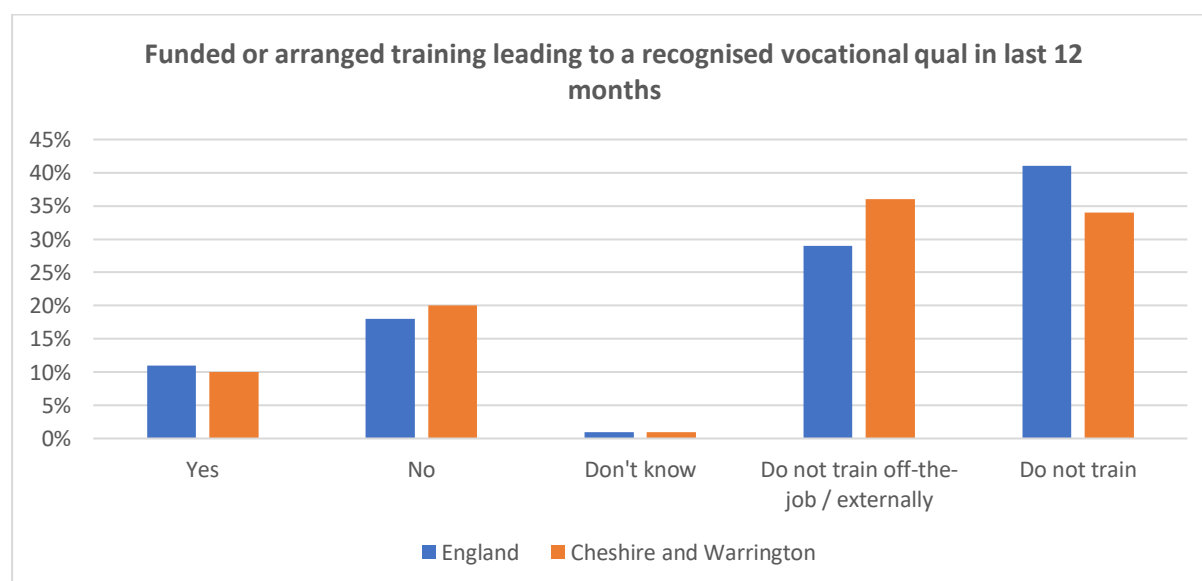


Source: ESS 2019

Employers in Cheshire and Warrington are slightly less likely to train at Level 4 and above than is the case in England (12% in Cheshire and Warrington compared to 14% in England) and are slightly more likely to offer training that does not lead to nationally recognised qualifications (58% compared to 55% in England).

| Level of qualification employees have trained to | | |
|---|---------|-------------------------|
| Base: All establishments providing training | | |
| | England | Cheshire and Warrington |
| Level 1 | 7% | 7% |
| Level 2 | 13% | 13% |
| Level 3 | 15% | 14% |
| Level 4 or 5 | 9% | 9% |
| Level 6+ | 7% | 6% |
| TRAIN TO LEVEL 3,4 or 5 | 19% | 18% |
| LEVEL 4+ | 14% | 12% |
| Train towards nationally recognised qualifications but don't know to what level | 12% | 10% |
| Train but not towards nationally recognised qualifications | 55% | 58% |
| Train but don't know if train towards nationally recognised qualifications | 2% | 2% |
| Source: ESS 2019 | | |

Whilst a lower proportion of employers in Cheshire and Warrington offer no training than is the case in England (34% in C&W, 41% in England), a higher proportion do not train off-the-job (36% C&W, 29% England).



Source: ESS 2019

The proportion of employers in Cheshire and Warrington that have an apprentice, at 9%, was slightly lower than for England (11%). However, the proportion who normally have an apprentice but did not at the time of the survey was slightly higher in Cheshire and Warrington (10% vs 8%). Overall, the proportion of employers that normally have or offer apprenticeships is just less than 1 in 5 for both Cheshire and Warrington and England (19% for both).

Summary of apprenticeship offerings

Base: All establishments (Module A)

| | England | Cheshire and Warrington |
|---|---------|-------------------------|
| Currently have apprentices | 11% | 9% |
| Currently offer apprenticeships but have none currently | 8% | 10% |
| SUMMARY: Currently have / offer apprenticeships | 19% | 19% |
| Do not currently have / offer apprenticeships but have previously offered in the last 3 years | 8% | 8% |
| Do not have or offer apprenticeships and have not in the last 3 years | 74% | 73% |
| SUMMARY: Do not currently have / offer apprenticeships"" | 81% | 81% |
| Currently or have in the last three years offered apprenticeships | 26% | 27% |
| Source: ESS 2019 | | |

6 SUPPLY AND DEMAND

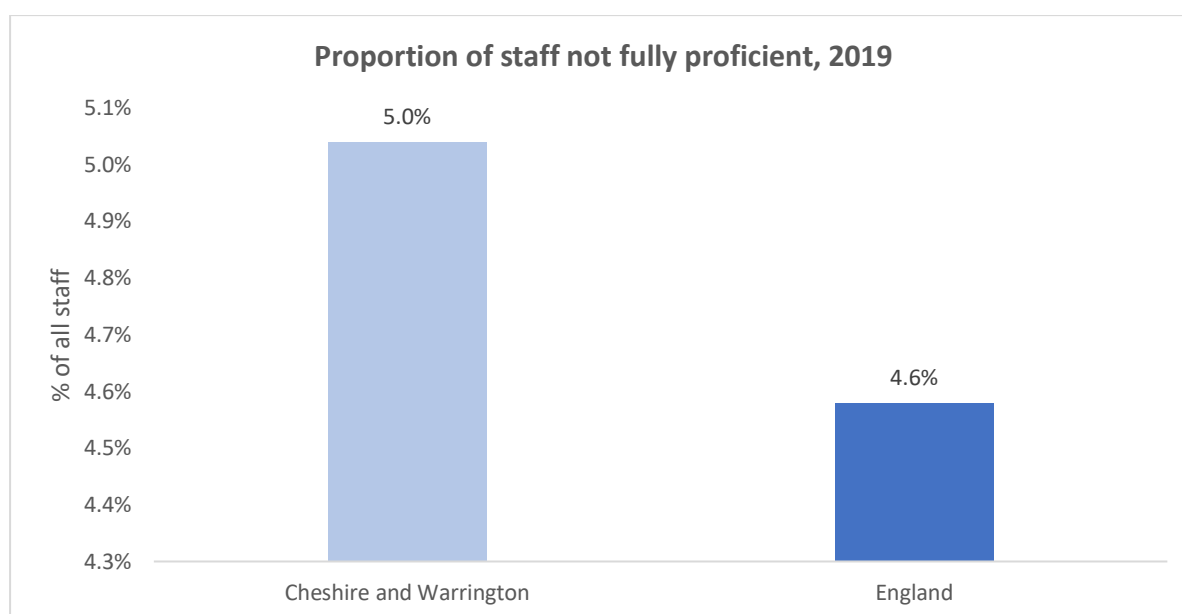
This chapter considers the alignment of the current and future skills offer with the demand for skills from employers and the spatial demand for skills. It has the following sections:

- Skills Gaps in the current workforce and hard-to-fill/skill shortage vacancies
- Spatial alignment of skills supply with community demand
- Future alignment of skills with employer demand

6.1 Skills gaps and skill shortage vacancies

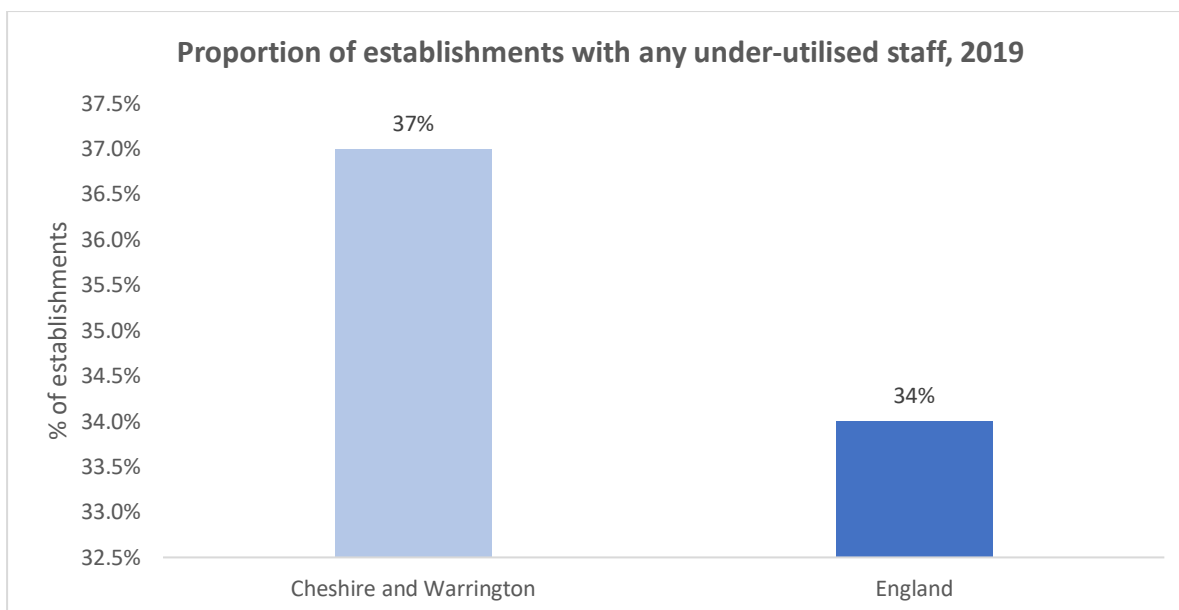
6.1.1 Skills Gaps

In the Employers Skills Survey 2019, employers were asked about the proportion of the workforce that were lacking in full proficiency – skills gaps. The survey finding was that a slightly higher proportion of the workforce lacked proficiency in Cheshire and Warrington than in England (5% compared to 4.6%). This was the eleventh highest rate of skill gaps for LEPs in the country.



Source: SAP Core Indicators/ESS 2019

In the same survey, employers were also asked about staff utilisation. The proportion of employers that had any under-utilised staff in Cheshire and Warrington stood at 37% compared to 34% in England. This was the third highest rate of underutilisation in the country.

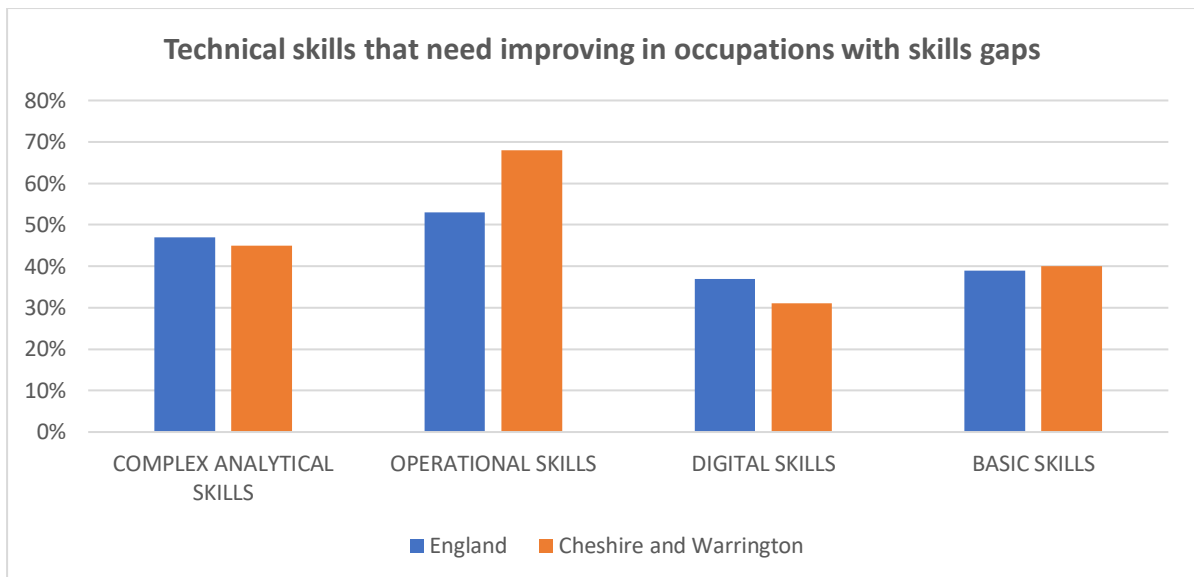


Source: SAP Core Indicators/ESS 2019

Employers were asked about the technical/practical skills that need improving to address skills gaps in the workforce. There are some differences in responses from employers in Cheshire and Warrington compared with England. In particular, the need for staff to acquire specialist skills or knowledge needed to perform the role; gain knowledge of products and services offered; and gain knowledge of how their organisation works was all higher in Cheshire and Warrington than for England.

| Technical / practical skills that need improving in occupations with skills gaps | | |
|--|---------|-------------------------|
| | England | Cheshire and Warrington |
| Specialist skills or knowledge needed to perform the role | 53% | 62% |
| Knowledge of products and services offered | 42% | 56% |
| Solving complex problems requiring a solution specific to the situation | 40% | 36% |
| Knowledge of how your organisation works | 40% | 47% |
| Adapting to new equipment or materials | 36% | 27% |
| Reading and understanding instructions, guidelines, manuals, or reports | 34% | 34% |
| Computer literacy / basic IT skills | 28% | 25% |
| Writing instructions, guidelines, manuals or reports | 24% | 20% |
| Basic numerical skills and understanding | 24% | 23% |
| More complex numerical or statistical skills and understanding | 23% | 19% |
| Advanced or specialist IT skills | 21% | 18% |
| Manual dexterity | 17% | 17% |
| Communicating in a foreign language | 17% | 13% |
| None of the above | 7% | 6% |
| Don't know | 1% | 1% |
| Source: ESS 2019 | | |

Overall, the need for staff with skills gaps to improve proficiency on operational skills was significantly higher in Cheshire and Warrington than in England (68% compared to 53%); the need to improve basic skills was slightly higher; whilst the need to improve complex analytical skills and digital skills were both slightly lower.

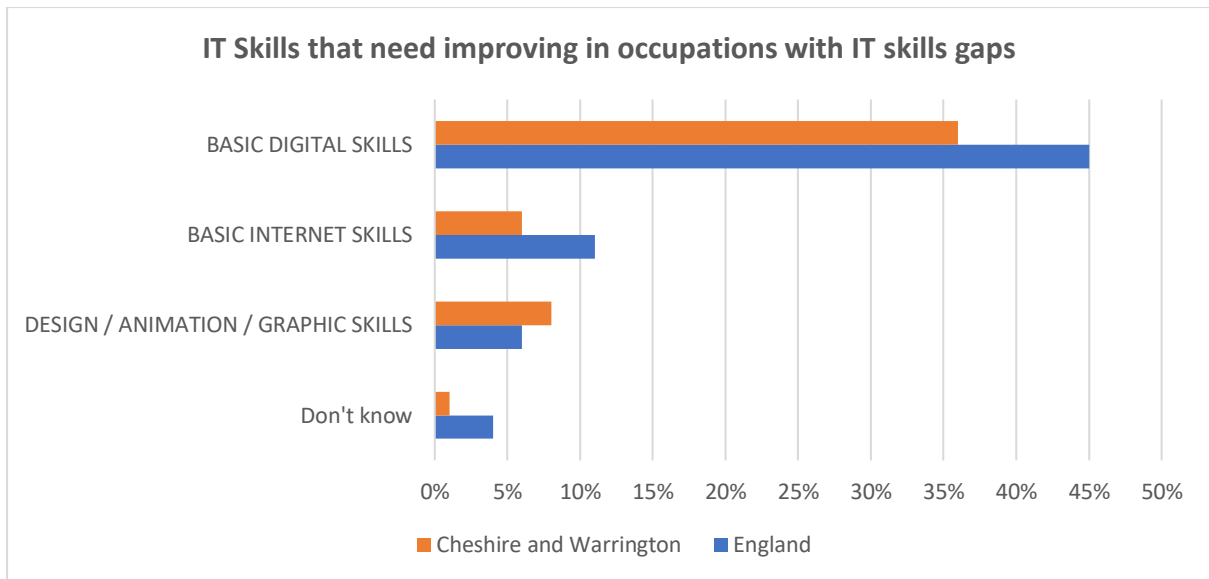


Source: ESS 2019

When the IT skills that need improving in occupations with IT skill gaps are considered there is a lower level of basic and foundation IT skills that need improving in Cheshire and Warrington compared with England, and a higher level of skills associated with specialist software or hardware/internal systems.

| IT skills that need improving in occupations with IT skills gaps | | |
|--|---------|-------------------------|
| | England | Cheshire and Warrington |
| Basic Microsoft Office skills | 33% | 26% |
| Specialist software or hardware /internal systems | 25% | 30% |
| Foundation digital skills | 19% | 13% |
| Advanced Microsoft Office skills | 18% | 17% |
| Communicating via email | 7% | 1% |
| Data analysis / analytics / data science skills | 6% | 4% |
| Application ('app') programming and development skills | 6% | 5% |
| Graphic design / design engineering skills | 5% | 4% |
| Skills using new or updated company software or systems | 4% | 4% |
| Using the internet to find solutions to problems | 3% | 4% |
| Building and maintaining IT systems and networks | 3% | 5% |
| Completing transactions online | 3% | 0% |
| Web development skills | 3% | 1% |
| Accounting / finance software or systems | 3% | 6% |
| EPOS / till systems | 2% | 2% |
| Social media / digital marketing skills | 2% | 7% |
| Being safe and legal online | 2% | 2% |
| Multimedia production skills | 1% | 3% |
| Database skills | 1% | 1% |
| Animation skills | 1% | *% |
| Cloud-based and other storage systems skills | *% | 1% |
| Other | 7% | 4% |
| Don't know | 4% | 1% |
| Source: ESS 2019 | | |

Overall, for those occupations with IT skills that needed improving, a lower proportion needed to improved basic digital and basic internet skills in Cheshire and Warrington compared to England, whilst a higher proportion needed to improve Design/Animation/Graphic skills in Cheshire and Warrington compared with England.



Source: ESS 2019

In the ESS 2019, employers were asked about the actions they have taken to overcome a lack of proficiency amongst staff. Broadly, responses from employers in Cheshire and Warrington were akin to those made by employers in England as a whole. However, the following were more likely in Cheshire and Warrington than in England:

- More staff appraisals / performance reviews
- Implementation of mentoring / buddying scheme
- Changing working practices
- Increase recruitment activity / spend

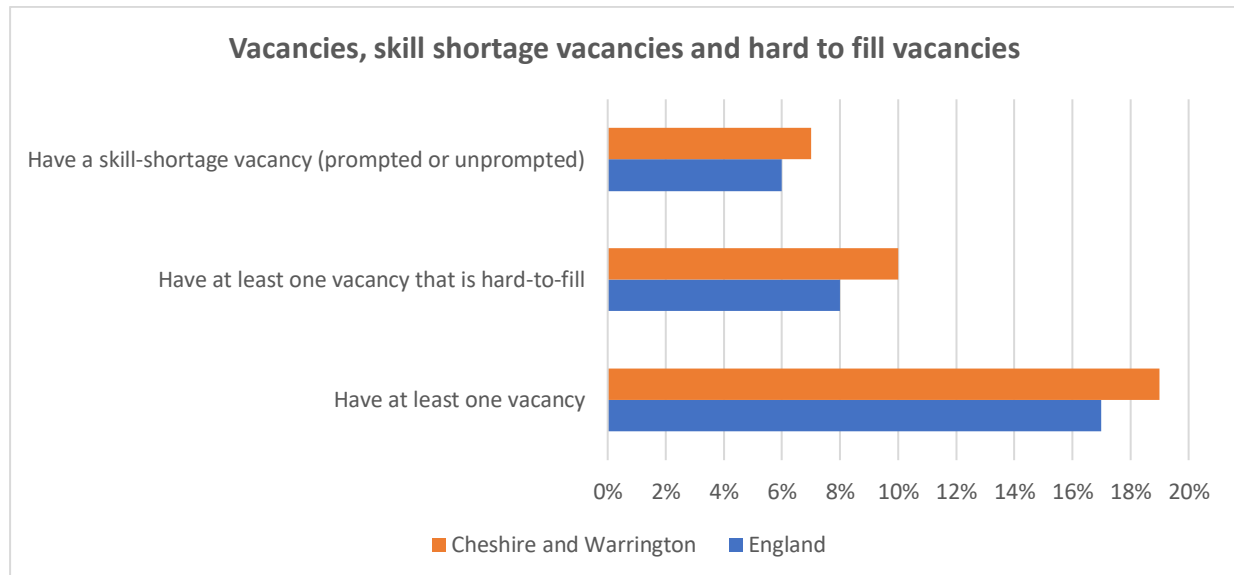
Employers in Cheshire and Warrington were less likely to recruit workers who are non-UK nationals than their English counterparts.

| Actions taken to overcome lack of proficiency among staff | | |
|--|---------|-------------------------|
| | England | Cheshire and Warrington |
| Increase training activity / spend or increase / expand trainee programmes | 65% | 66% |
| More supervision of staff | 56% | 55% |
| More staff appraisals / performance reviews | 46% | 49% |
| Implementation of mentoring / buddying scheme | 45% | 54% |
| Reallocating work | 36% | 35% |
| Changing working practices | 28% | 31% |
| Increase recruitment activity / spend | 20% | 25% |
| Recruiting workers who are non-UK nationals | 9% | 6% |
| Other | 2% | 2% |
| Nothing | 18% | 19% |
| Don't know | 1% | 0% |

Source: ESS 2019

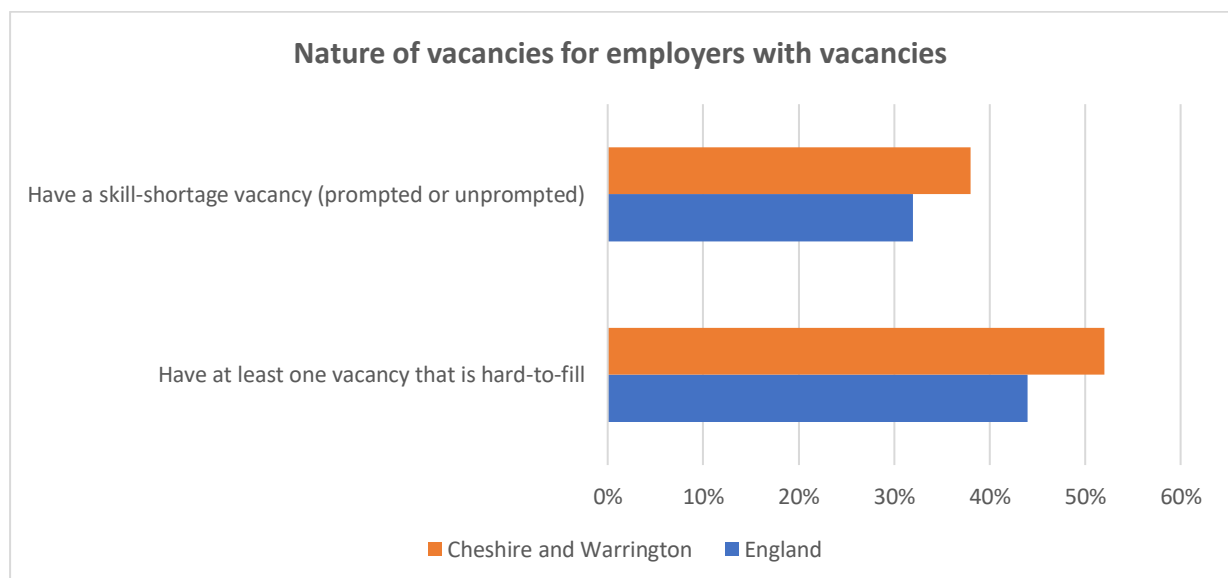
6.1.2 Skills Shortage Vacancies

One of the key issues explored in the ESS 2019 is the issue of vacancies, hard to fill vacancies and, in particular, skill shortage vacancies. When the survey was undertaken (June-December 2019), employers in Cheshire and Warrington were more likely than their English counterparts to have at least one vacancy (19% vs 17%); to have at least one hard to fill vacancy (10% vs 8%); and to have a skill shortage vacancy (7% vs 6%)



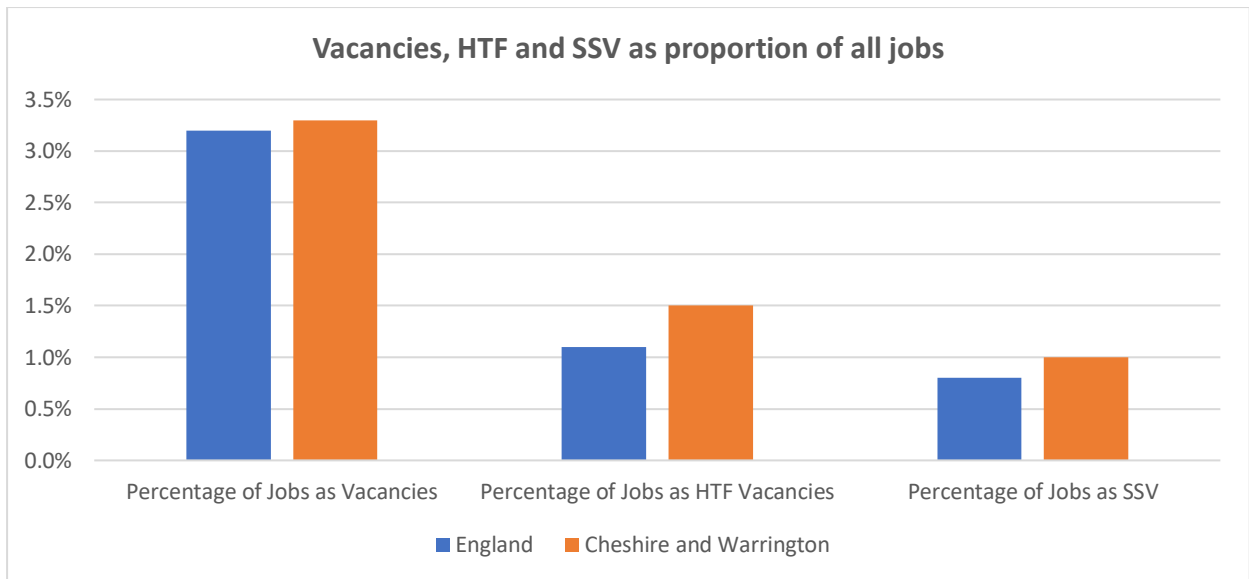
Source: ESS 2019

Of employers with at least one vacancy, 52% in Cheshire and Warrington had at least one vacancy that was hard to fill (England 44%) and 38% had at least one that was hard to fill because a skills shortage (32% England).



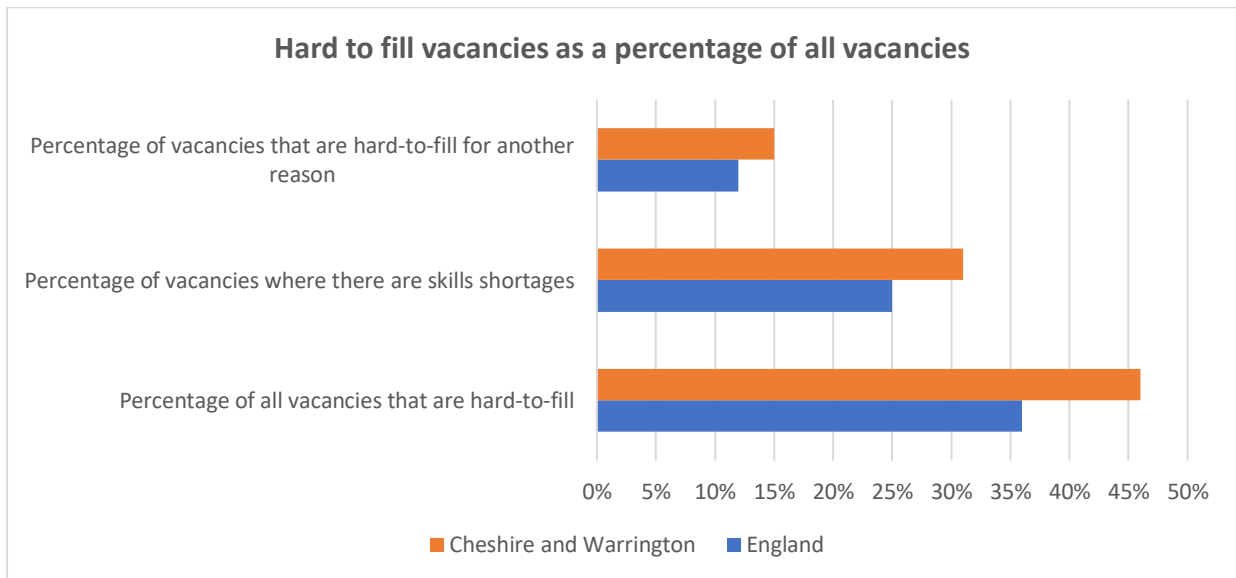
Source: ESS 2019

When vacancies, hard to fill vacancies and skill shortage vacancies are considered as a proportion of all jobs, the proportion was slightly higher in Cheshire and Warrington for all three categories than was the case for England.



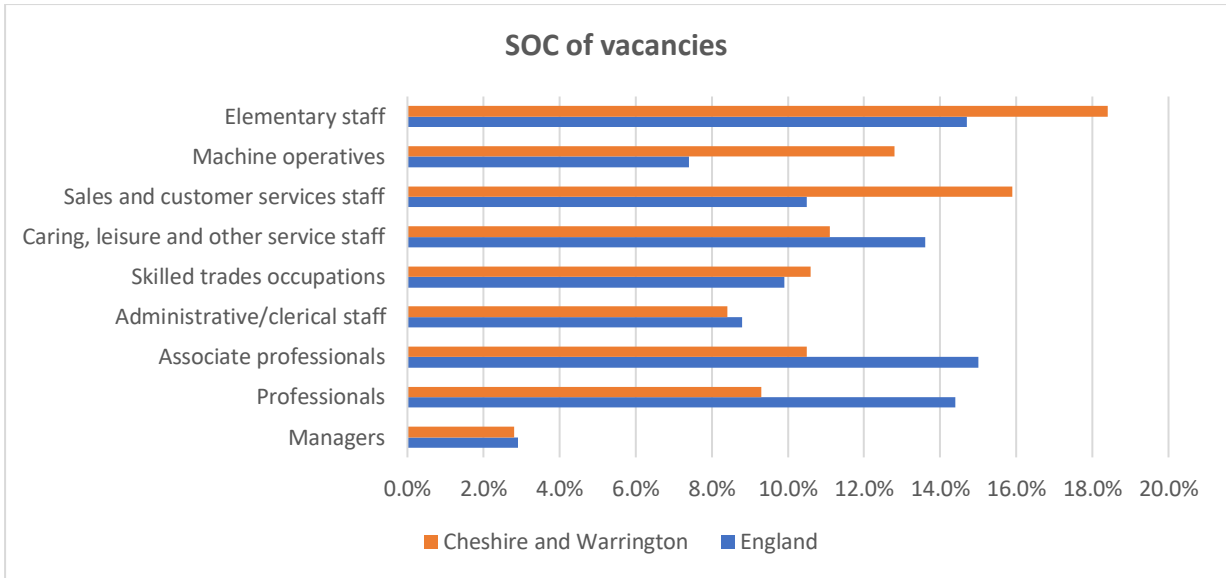
Source: ESS 2019

46% of all vacancies in Cheshire and Warrington were hard to fill (England 36%), 31% were skill shortage vacancies (England 25%) and 15% were hard to fill for another reason (England 12%).



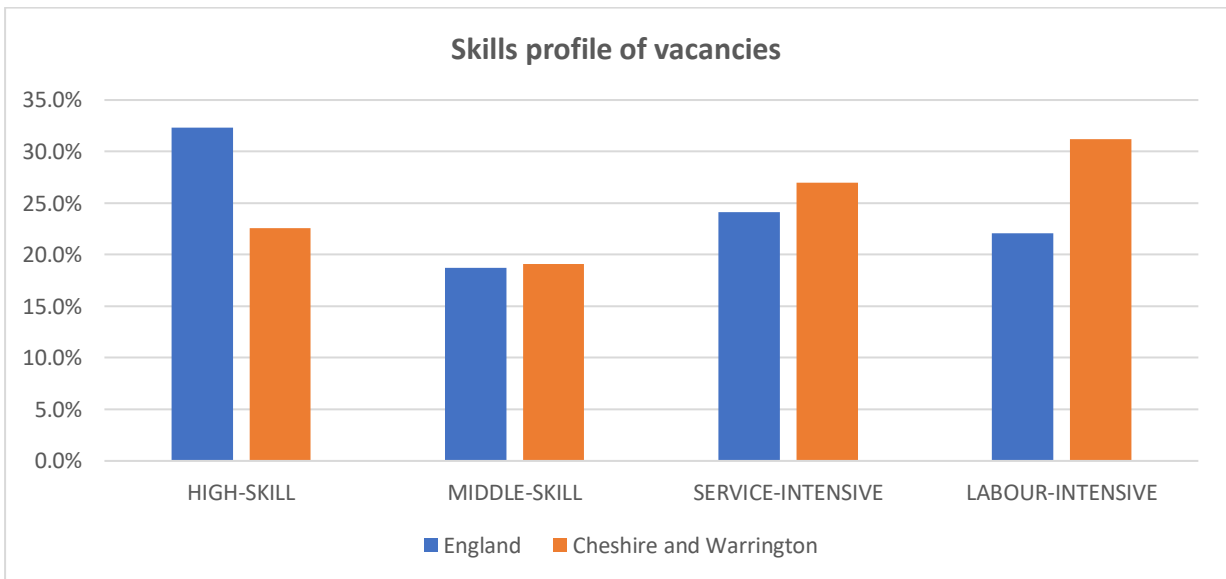
Source: ESS 2019

As a percentage of all vacancies, elementary staff, machine operatives and sales and customer service accounted for the three highest proportions in the Cheshire and Warrington vacancies pool. This contrasts with England where the highest number of vacancies were also for elementary staff in England, but the next highest volumes were for Associate Professionals and Professionals.



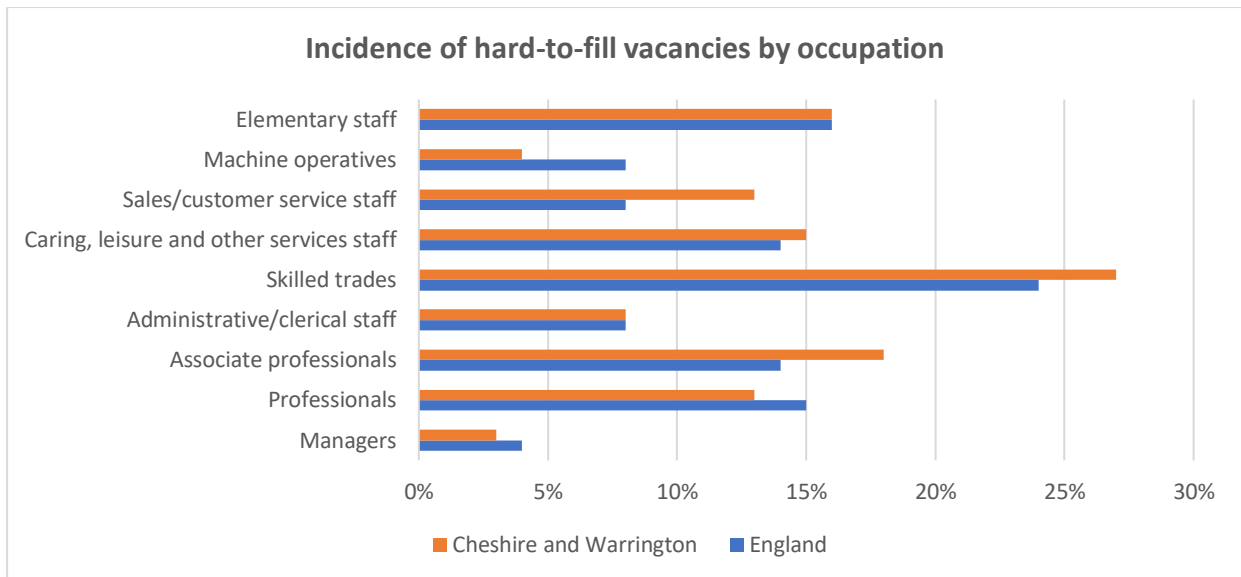
Source: ESS 2019

The graph below illustrates the contrast in the volumes of vacancies in different occupational categories in Cheshire and Warrington and England. There were higher proportions of vacancies for service-intensive and labour-intensive roles in Cheshire and Warrington compared with England and a lower proportion of vacancies were in high-skill roles locally.



Source: ESS 2019

However, when hard to fill vacancies (rather than all vacancies) are considered by occupational type, a different picture emerges with the two occupational areas of skilled trades and associate professional accounting for 45% of all hard to fill vacancies in Cheshire and Warrington (38% in England).



Source: ESS 2019

When asked about the main causes of having a hard to fill vacancy, employers in Cheshire and Warrington were more likely than their English counterparts to identify:

- Low number of applicants with the required skills
- Not enough people interested in doing this type of job
- Low number of applicants generally

Cheshire and Warrington employers were almost twice as likely to cite remoteness/poor public transport as a main cause of hard to fill vacancies as those in England (18% vs 10%). This is consistent with Cheshire and Warrington’s scores for the ‘Barriers to Housing and Services Domain’ of the 2019 Index of Multiple Deprivation (section 3.7.2 above) which measures the physical and financial accessibility of housing and local services. It is highly probable that if local services are difficult to access similar difficulties will be encountered accessing local employment opportunities.

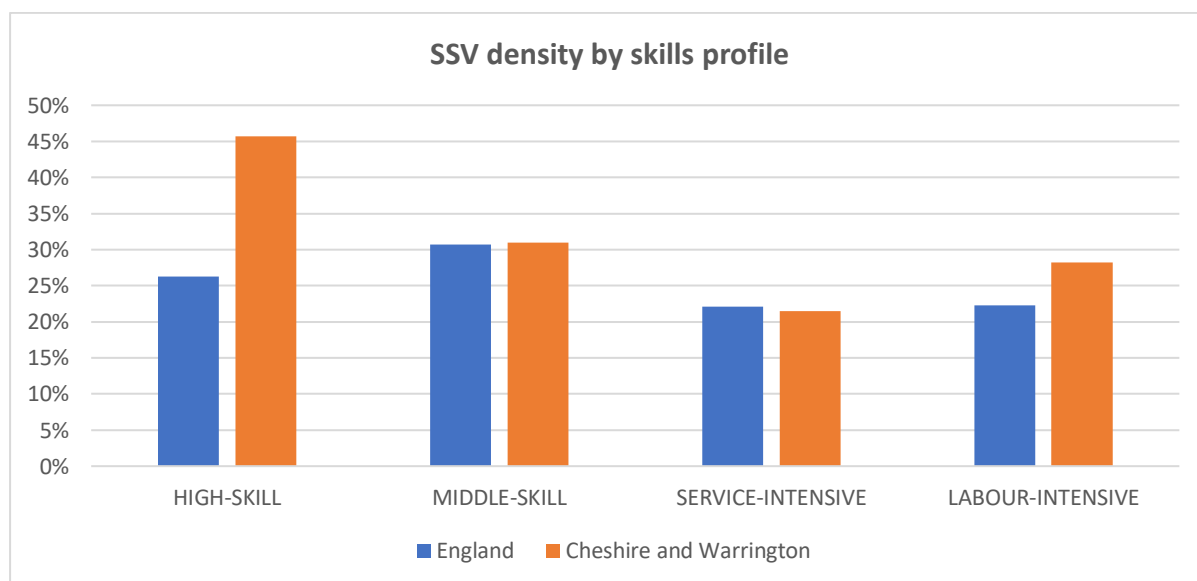
| Main causes of having a hard to fill vacancy (unprompted) (employer base) | | |
|--|---------|-------------------------|
| | England | Cheshire and Warrington |
| Low number of applicants with the required skills | 39% | 41% |
| Not enough people interested in doing this type of job | 21% | 23% |
| Low number of applicants generally | 18% | 22% |
| Lack of work experience the company demands | 17% | 17% |
| Low number of applicants with the required attitude, motivation or personality | 14% | 20% |
| Poor terms and conditions (e.g. pay) offered for post | 14% | 11% |
| Lack of qualifications the company demands | 13% | 7% |
| Job entails shift work/unsociable hours | 10% | 10% |
| Remote location/poor public transport | 10% | 18% |
| Too much competition from other employers | 7% | 6% |
| Low number of suitable applicants inc. Age of applicants | 2% | 1% |
| Not full-time/permanent | 2% | n/a |
| Poor career progression / lack of prospects | 2% | 1% |
| Seasonal work | 1% | 1% |
| Poor recruitment channels/mechanisms (inc. lack/cost of advertising) | 1% | n/a |
| Brexit (e.g. fewer EU applicants) | 1% | 0% |
| High turnover of staff / problems with staff retention | 1% | 0% |
| Benefits trap | n/a | 0% |
| Lack of funding for the position | n/a | 0% |
| Difficulty with work permits/immigration issues for non-EU staff | n/a | 0% |
| Other | 7% | 6% |
| No particular reason | n/a | n/a |
| Don't know | 2% | 1% |
| Source: ESS 2019, Employer Base | | |

The table below shows the 'density' of skill shortage vacancies by occupations. This is the proportion of vacancies for each occupation that were identified by respondents as being attributable to skill shortage vacancies. It is clear from this that much higher proportions of vacancies in Professional and associate professional are skill shortage vacancies in Cheshire and Warrington than is the case for England.

| Density of skill-shortage vacancies by occupation | | |
|---|---------|-------------------------|
| | England | Cheshire and Warrington |
| Managers | 23% | ** |
| Professionals | 33% | 45% |
| Associate professionals | 20% | 48% |
| Administrative/clerical staff | 12% | 9% |
| Skilled trades occupations | 47% | 48% |
| Caring, leisure and other service staff | 29% | 21% |
| Sales and customer services staff | 14% | 22% |
| Machine operatives | 31% | ** |
| Elementary staff | 18% | 13% |

Source: ESS 2019, **=data suppressed

Some cells in the table above have been suppressed because of small sample size. To address this, the chart below groups occupations by their different skills profiles. It can be seen from this that the proportion of vacancies that were attributable to skill shortages were much higher (46% vs 26%) in Cheshire and Warrington in high-skill roles and somewhat higher (28% vs 22%) for labour-intensive roles.

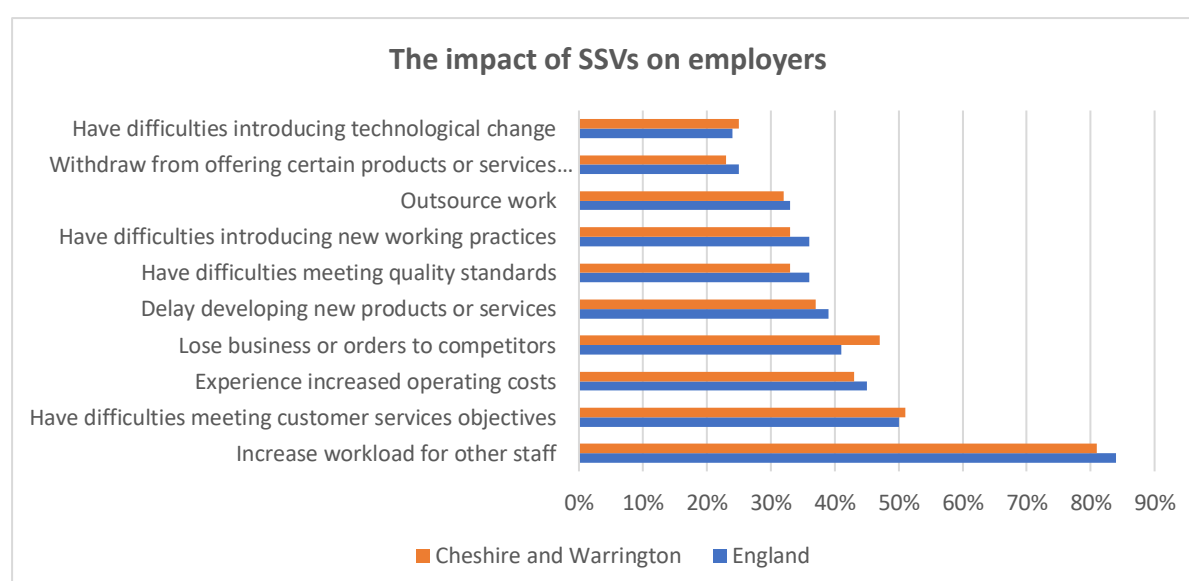


Source: ESS 2019

Employers were asked about the technical/practical skills that they found difficult to obtain from applicants for all their skill shortage vacancies. For 11 of the 13 categories of skill types discussed, employers in Cheshire and Warrington found these skill-types less difficult to obtain from applicants than their counterparts in England. However, a much higher proportion of Cheshire and Warrington employers (78% vs 63%) found it difficult to obtain “Specialist skills or knowledge needed to perform the role” and a slightly higher proportion found it difficult to obtain “Advanced or specialist IT skills”.

| Technical / practical skills found difficult to obtain from applicants (all skill-shortage vacancy base) | | |
|--|---------|-------------------------|
| | England | Cheshire and Warrington |
| Specialist skills or knowledge needed to perform the role | 63% | 78% |
| Solving complex problems requiring a solution specific to the situation | 39% | 34% |
| Knowledge of products and services offered by your organisation and organisations like yours | 37% | 33% |
| Knowledge of how your organisation works | 31% | 24% |
| Reading and understanding instructions, guidelines, manuals or reports | 30% | 19% |
| Writing instructions, guidelines, manuals or reports | 25% | 15% |
| Basic numerical skills and understanding | 23% | 21% |
| More complex numerical or statistical skills and understanding | 23% | 20% |
| Adapting to new equipment or materials | 21% | 13% |
| Computer literacy / basic IT skills | 20% | 15% |
| Manual dexterity - for example, to mend, repair, assemble, construct or adjust things | 18% | 16% |
| Advanced or specialist IT skills | 17% | 18% |
| Communicating in a foreign language | 17% | 12% |
| Source: ESS 2019 | | |

A higher proportion of Cheshire and Warrington employers felt that the impact of skill shortage vacancies on their business would be to lose business or orders to competitors than was the case in England (47% vs 41%).



Source: ESS 2019

In response to skill shortage vacancies, employers in Cheshire and Warrington were slightly more likely than their counterparts in England to increase the training given to other staff (13% vs 8%). They were much more likely to increase advertising/recruitment spend (53% vs 37%).



Source: ESS 2019

Average posting Intensity is a measure used by EMSI to establish how much effort employers need to make to fill a vacancy. An average posting intensity of 3: 1 for an occupation means that, on average, an employer will post a job vacancy three times. It is a reasonable inference that the higher the average posting intensity, the more difficulty employers have in filling that type of role. Between 2016 and 2020 the average posting intensity for all types of jobs in Cheshire and Warrington was 5:1.

The table below sets out the 4-digit soc occupations which have had the highest 'average posting intensity' for vacancies between 2016 and 2020. For those roles with a high posting intensity and high current volumes, this suggests a market failure in the labour market that skills and employment partners should consider developing interventions to address. These interventions will vary from intensive vacancy-focussed support to individuals to longer-term high-level skills programmes. On this basis, the following occupational areas should be considered priorities for action by skills and employment partners:

- Managers and directors in storage and warehousing
- Programmers and software development professionals
- IT business analysts, architects and systems designers
- Web design and development professionals
- Quantity surveyors
- IT user support technicians
- Book-keepers, payroll managers and wages clerks
- Customer service occupations n.e.c.

| Hard to fill Vacancies (4-digit SOC Occupations) in Cheshire and Warrington, 2016-2020 | | | | |
|---|--|---|--|---------------------|
| Occupation | Avg. Posting Intensity (Jan 2016 - Aug 2020) | Latest 30 Days Unique Postings (Active) | Latest 30 Days Unique Postings % Change (Active) | Median Annual Wages |
| Caretakers | 11 : 1 | 53 | 83% | 20384 |
| Managers and directors in storage and warehousing | 10 : 1 | 278 | 13% | 27747 |
| Restaurant and catering establishment managers and proprietors | 8 : 1 | 34 | 0% | 23296 |
| Programmers and software development professionals | 8 : 1 | 898 | 10% | 43555 |
| Other skilled trades n.e.c. | 8 : 1 | 10 | -17% | 23587 |
| Travel agents | 8 : 1 | 19 | 19% | 19365 |
| IT business analysts, architects and systems designers | 7 : 1 | 167 | -2% | 44907 |
| Web design and development professionals | 7 : 1 | 364 | 9% | 32406 |
| Quantity surveyors | 7 : 1 | 199 | 9% | 45448 |
| IT user support technicians | 7 : 1 | 171 | -1% | 29120 |
| Credit controllers | 7 : 1 | 64 | -25% | 23816 |
| Book-keepers, payroll managers and wages clerks | 7 : 1 | 795 | 5% | 25730 |
| IT engineers | 7 : 1 | 62 | 5% | 31782 |
| Customer service occupations n.e.c. | 7 : 1 | 266 | 26% | 20738 |
| School midday and crossing patrol occupations | 7 : 1 | 53 | 56% | 18720 |
| <i>Source: EMSI Analyst (excludes occupations with fewer than 300 unique postings)</i> | | | | |

6.2 Spatial alignment of skills supply with community demand

6.2.1 Alignment of FE Delivery with need and deprived areas

21% of the LEP working age population is qualified below level 2 compared to 38% of FE learners. 41% of FE learners were out of work seeking employment compared with a LEP unemployment rate of 3.4%.⁹ This suggests that learning providers in Cheshire and Warrington were effective at targeting activities towards those most in need of skills support.

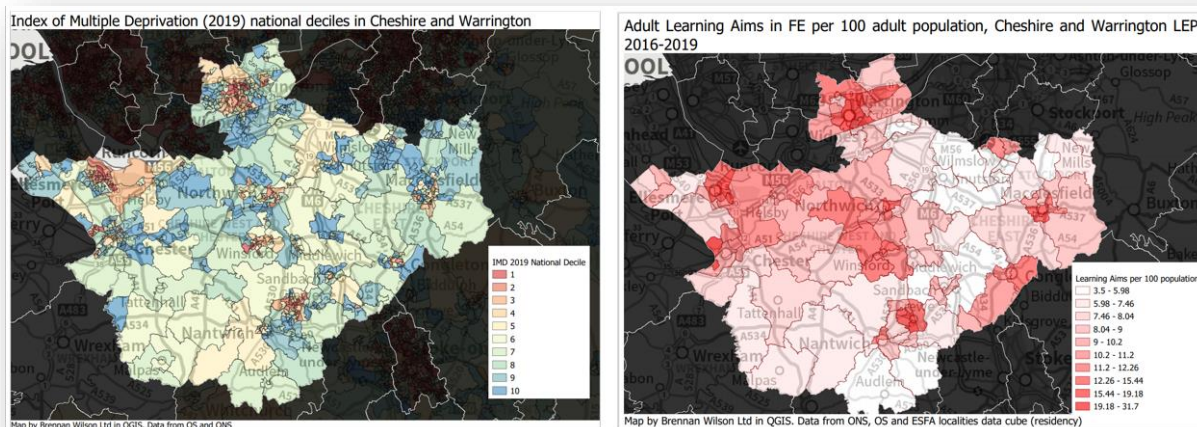
⁹ The Adult Workforce and Skills in Cheshire and Warrington, Brennan Wilson Ltd, 2020
<http://www.871candwep.co.uk/content/uploads/2020/10/Report-B-The-Adult-Workforce-and-Skills-Delivery-in-Cheshire-and-Warrington.pdf>

| Prior attainment of adult learners in FE 2016-2019 | | |
|--|---------------------|----------------------------|
| Prior Attainment Level of Learner | Learning Aim Starts | Percentage of Total Starts |
| Below Level 2 | 28287 | 38 |
| Full Level 2 | 16448 | 22 |
| Full Level 3 | 11815 | 15 |
| Level 4 and above | 10726 | 13 |
| Not Known | 7395 | 10 |
| Other Qualification, Level Not Known | 1480 | 2 |

Source: ESFA Localities data cube (residency)

The ESFA localities data cube records the ward of residence of the learner associated with each learning aim. The Office for National Statistics regularly provides estimates for ward populations (aged 16-64). It is therefore possible to estimate how many learning aims per 100 of the working population have been started in each ward. The map below (right) does this for the period 2016-2019.

The darker the shade of red on the map, the higher the number of learning aims per 100 population in that ward. One indicator of how responsive the skills system is, is that high levels of activity are aligned with high levels of need. Comparing this map to the map of the main Index of Multiple Deprivation (below left), suggests that, overall, there is an excellent alignment of provision with the most deprived areas.



Detailed inspection of the maps suggest that the following small areas might benefit from proactive outreach from providers:

- **Crewe:** the LSOA containing residences bounded by West St and Middlewich Rd and south of the Legends Sports Centre
- **Middlewich:** the LSOA containing residences west of Lewin St and Booth Lane
- **Sandbach:** the LSOA containing residences north and south of the High St
- **Knutsford:** the LSOA containing residences adjacent to St. John's Wood

6.2.2 Apprenticeships and pay progression

29% of adult apprentices are qualified below Level 2 which is slightly higher than the figure for the general population which stands at 21%. Only 34% of apprentices have a prior qualification level at Level 3 or above compared to 61% in the general population. This suggests that apprenticeships may be well positioned to help fill the well documented labour market gap in technical skills at levels 3 and 4.

| Prior Attainment of Adult Apprentices 2016-2019 | | |
|---|-------------|------------|
| Prior Attainment | Apprentices | Percentage |
| Below Level 2 | 4627 | 29% |
| Level 2 | 5988 | 37% |
| Level 3 | 3851 | 24% |
| Level 4+ | 1568 | 10% |

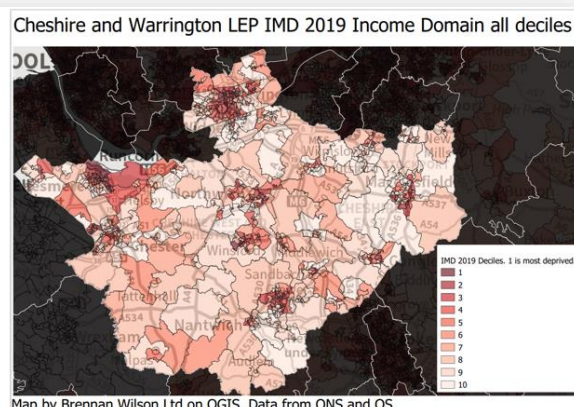
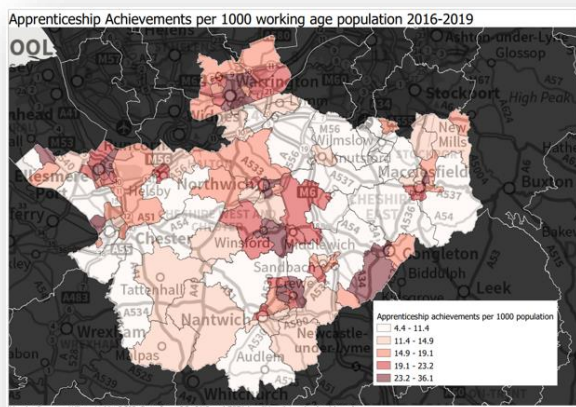
Source: ESFA Localities data cube (residency)

From the ESFA Localities data cube (residency), it is possible to quantify how many apprenticeship frameworks or standards have been achieved in each ward. The Office of National Statistics publish ward-level population estimates by age, the 16-64 population can be calculated for each ward. It is therefore possible to calculate, for each ward, an estimate of how many apprenticeship standards or frameworks have been achieved per 1000 of the working age population. The map below (left) does this for the period spanning the three academic years 2016/17, 2017/18 and 2018/19. The darker the shading, the more achievements per 1000 of the population there has been.

Apprenticeships are a key mechanism for those in work to increase their skills and progress. It is to be hoped, therefore, that the highest concentrations of apprenticeship achievements should be found in those areas with the highest concentrations of people who are in work in low paid employment. The Income Deprivation Domain of the Index of Multiple Deprivation 2019 measures the proportion of the population in an area experiencing deprivation relating to low income (map below right). The definition of low income used includes both those people that are out-of-work, and those that are in work but who have low earnings.

It is therefore appropriate to consider the extent to which the areas with highest concentrations of achievements of apprenticeship standards and frameworks are coincident with the areas of highest income deprivation by considering the two maps below. There is a relatively close alignment between the distribution of apprenticeship achievements and the distribution of income deprivation. There are a few areas, for example around the centre of Chester, where this does not appear to be the case. There could be a variety of different reasons for this. For example, where individuals are employed in these areas, they may be disproportionately employed in sectors with a low take-up of apprenticeships.

Areas such as this should be considered for proactive outreach by providers of classroom-based learning.



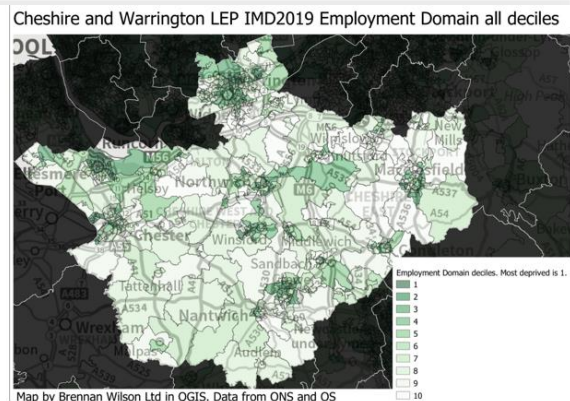
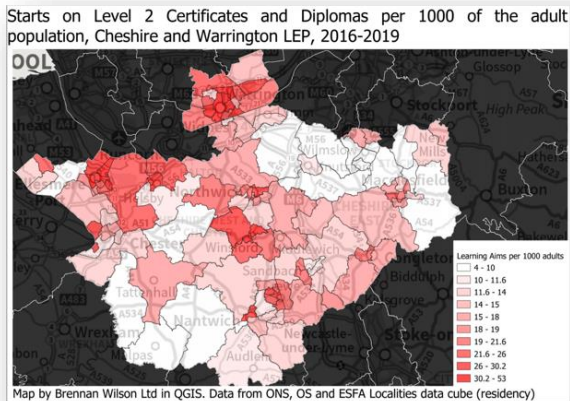
6.2.3 FE Level 2 attainment in areas of employment deprivation

It is possible to establish how many certificates and diplomas at Level 2 in FE have been started per 1000 of the adult population in each ward. The map below (left) does this for the period 2016-2019. The darker the shade of red indicates a higher level of starts per 1000 of population.

A full Level 2 is generally regarded as providing the minimum qualification required to sustain employment. This is the rationale for the Government continuing to fund Level 2 qualifications for adults without a level 2, whilst having reduced, or withdrawn, funding for other types of adult skills provision. It is appropriate to consider whether full Level 2 learning is reaching all areas suffering Employment Deprivation as measured through the Employment Domain of the Index of Multiple Deprivation (map below right).

Overall, there seems to be a good alignment between the areas which have the highest take up of substantial adult level 2 qualifications by adults and the areas with the highest levels of employment deprivation. Considering the Lower Super Output Areas (LSOAs) that have average or higher levels of employment deprivation (compared to England) against the wards with low levels per 1000 adult population for Level 2 starts suggests that providers may wish to consider proactively targeting Level 2 starts by adults in the following areas:

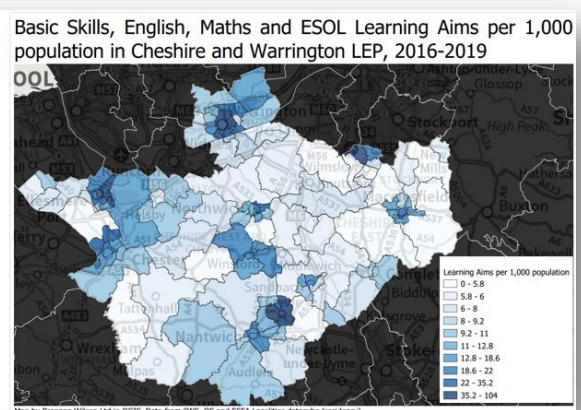
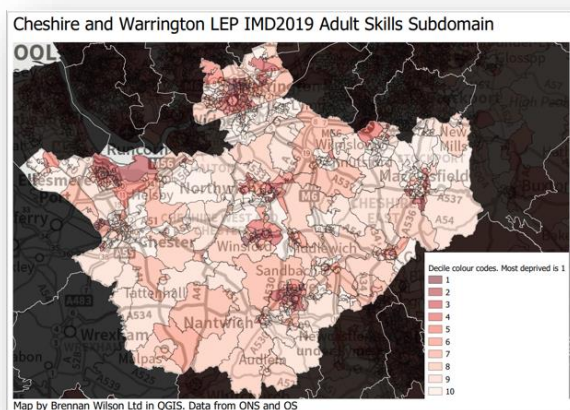
- The LSOA containing Willaston CoE Primary School
- The LSOA containing Old Hall St in Malpas
- The LSOA containing Barclays Technology Centre south of Knutsford
- The LSOA on east of Crewe containing residences bounded by West St and Middlewich Rd and south of the Legends Sports Centre
- The LSOA containing Barnaby Rd Play area south of Poynton



6.2.4 The demand for English and Maths

The darker the shade of blue on the map below (right), the higher the number of learning aims (in Basic Skills, Maths and English GCSE and ESOL) per 1000 population in that ward. It is appropriate to compare this map to the map of the Adult Skills Subdomain of IMD 2019 below (left). This is because the key indicators that go to make up this Subdomain are related to the need for support with basic skills or English as a second language. Comparing the two maps suggests that, overall, there is an excellent alignment of provision with the most deprived areas for Adult Skills. Inspection of the two maps suggest that the same small areas as identified in 6.2.1 above might benefit from proactive outreach from providers, namely:

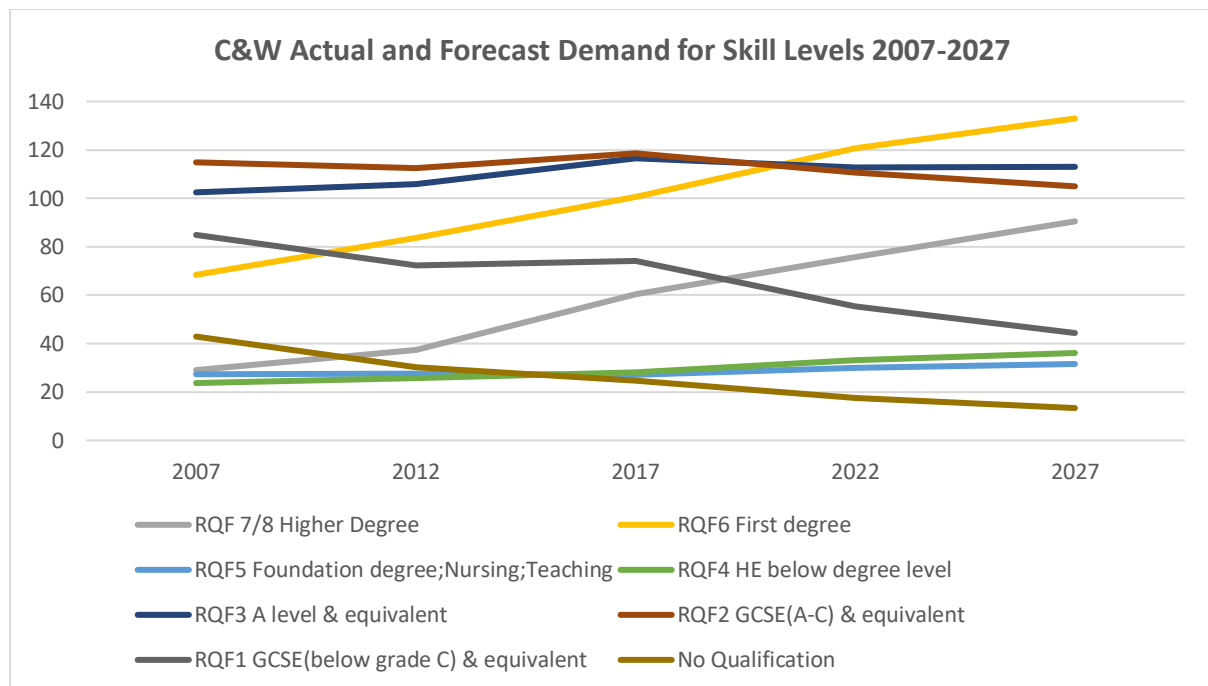
- **Crewe:** the LSOA containing residences bounded by West St and Middlewich Rd and south of the Legends Sports Centre
- **Middlewich:** the LSOA containing residences west of Lewin St and Booth Lane
- **Sandbach:** the LSOA containing residences north and south of the High St
- **Knutsford:** the LSOA containing residences adjacent to St. John’s Wood



6.3 Future Demand for Skills

Working Futures provides a forecast for the overall demand for different skill levels in the Cheshire and Warrington labour market. The chart below provides the forecast for different skill level

requirements to 2027. Demand for skills at Levels 4 to 8 (higher technical to doctorate) are forecast to significantly increase, demand for skills at Level 3 are forecast to be stable, and demand for skills below Level 3 are forecast to decline. Demand at Level 4 and above is forecast to increase 75,000 from 333,000 in 2017 to 404,000 qualified workers in 2027.



Source: Working Futures 2017-2027

If Cheshire and Warrington were to have the same level of skills attainment as currently pertains in Germany, the proportion of the workforce qualified at Level 3+ would be 20 percentage points higher. That equates to approximately an additional 100,000 people qualified to Level 3+.

The age profile of the Cheshire and Warrington workforce means that inflows of young people into the workforce will be more than offset by outflows of older residents out of the workforce over the next few years. This means that the adult skills system will need to play a key role in delivering the new L3+ qualifications that the economy needs. This presents a significant challenge to a system that is estimated to currently be delivering approximately 4,500 Level 3 qualifications to adults per annum.

Considering the areas of highest need as defined by the areas that are most deprived on the Income Deprivation Domain of the IMD 2019, it is suggested that the following areas should be considered for proactive outreach to encourage engagement by adults in substantial Level 3 qualifications: the LSOA containing Neston Town Centre; LSOAs on the south of Winsford including the one containing Oaklands school and the one covering St Johns; low income LSOAs in Northwich including the LSOA covering Northwich Town Centre; LSOAs in Middlewich including the one directly to the east of Cledford Primary school and the one adjacent to it containing Middlewich High School; the LSOA on east of Crewe containing residences bounded by West St and Middlewich Rd and south of the Legends Sports Centre; in Sandbach, the LSOA containing residences north and south of the High St; and in Knutsford, the LSOA containing residences adjacent to St. John’s Wood

The table below provides estimates of average Annual Openings for Level 4+ 'technical' occupations in Cheshire and Warrington between 2020 and 2028. These estimates are based on the IER Working Futures model. Average Annual Openings are calculated from annual forecast replacement demand plus annual forecast growth demand. A Level 4 qualification will be a pre-requisite for all the occupations identified below. All but two of these occupations deliver a current wage premium over the Cheshire and Warrington median of £28,700. Many of them will also require technical and professional qualifications higher than Level 4. It is estimated that the total annual openings in Level 4+ technical roles in Cheshire and Warrington will exceed 2,000 pa.

| Av. Annual Openings>20 for Level 4+ Technical Roles in Cheshire and Warrington 2020-2028 | | | |
|--|--|----------------------|------------------|
| SOC | Description | Avg. Annual Openings | Median Wages (£) |
| 1121 | Production managers and directors in manufacturing | 186 | 42723 |
| 2136 | Programmers and software development professionals | 159 | 43555 |
| 2139 | Information technology and telecommunications professionals n.e.c. | 107 | 41746 |
| 2133 | IT specialist managers | 105 | 45115 |
| 2135 | IT business analysts, architects, and systems designers | 75 | 44907 |
| 2434 | Chartered surveyors | 67 | 40082 |
| 2112 | Biological scientists and biochemists | 66 | 38210 |
| 2126 | Design and development engineers | 58 | 44886 |
| 2436 | Construction project managers and related professionals | 57 | 36109 |
| 2127 | Production and process engineers | 56 | 45011 |
| 3111 | Laboratory technicians | 50 | 22110 |
| 2129 | Engineering professionals n.e.c. | 45 | 40061 |
| 3421 | Graphic designers | 43 | 26562 |
| 2134 | IT project and programme managers | 42 | 53851 |
| 1136 | Information technology and telecommunications directors | 41 | 63690 |
| 2122 | Mechanical engineers | 40 | 44387 |
| 3422 | Product, clothing, and related designers | 35 | 33176 |
| 2121 | Civil engineers | 33 | 36296 |
| 2433 | Quantity surveyors | 33 | 45448 |
| 2431 | Architects | 28 | 38355 |
| 2137 | Web design and development professionals | 28 | 32406 |
| 1181 | Health services and public health managers and directors | 27 | 58344 |
| 2142 | Environment professionals | 26 | 39021 |
| 2111 | Chemical scientists | 25 | 43077 |
| 2219 | Health professionals n.e.c. | 25 | 42682 |
| 2461 | Quality control and planning engineers | 22 | 41454 |
| 2113 | Physical scientists | 21 | 45926 |
| 2150 | Research and development managers | 20 | 50211 |
| Source: EMSI Analyst | | | |

7. CONCLUSIONS

The purpose of this report has been to understand the key features of the local labour market, identify needs and opportunities, and assess how well the skills system in Cheshire and Warrington is responding to those needs and opportunities. A robust understanding of these issues is important because it should inform a collective partnership view of the action that employers, providers and other stakeholders need to take to ensure that skills and employment delivery in Cheshire and Warrington contributes to the growing, inclusive, sustainable, and healthy place that we all aspire to.

This report is clear that in some respects the skills system is working well in Cheshire and Warrington. For example, there is an excellent alignment of classroom-based Further Education delivery to adults with those that most need such support (eg those without work) and in the places where many of those people live (eg lower super output areas with high levels of deprivation). This overview of FE delivery is substantiated by a more detailed analysis that demonstrates, for example, that there is an excellent alignment of the delivery of English and Maths support to adults with the LSOAs that need such support because of their scores on the Adult Skills subdomain of the IMD 2019.

It is also clear that some parts of the skills system are not working as well as they should in Cheshire and Warrington. For example, in 2018/19, the achievement rate for Intermediate Apprenticeships for residents of Cheshire and Warrington aged 16-18 was 61.7% which was 4.1% lower than for England. The achievement rate was lower with every type of provider in Cheshire and Warrington compared with England. However, whilst action on this is clearly desirable, there are limited things that *local* partners can do. Much of the delivery to Cheshire and Warrington residents rests with national providers and the responsibility to support and challenge providers on the quality of their delivery sits with national agencies.

In using the analysis in this report to identify priority issues, the following tests have been applied:

- If the issue that has been identified is effectively addressed, will this make a significant contribution to delivering our vision for a growing, inclusive, sustainable, healthy place?
- Is there action that local partners can take that can make a substantial impact on the issue identified?

Using this approach, alongside extensive discussion with key stakeholders through the Cheshire and Warrington Employers' Skills and Education Board (the employer-led Skills Advisory Panel for Cheshire and Warrington), the Cheshire and Warrington Digital Skills Partnership, and the Cheshire and Warrington Data and Labour Market Intelligence Steering Group, the following key issues for action have been identified:

- The labour market downturn that has been triggered by the global pandemic must be mitigated, and action needs to be taken to ensure a recovery that delivers growth and inclusion
- To meet future employer demand for technical, green, and digital skills, Cheshire and Warrington needs 71,000 more adults qualified to Level 3+, and 75,000 more qualified to level 4+ by 2027
- There are clear market failures that can be identified by hard to fill vacancies in specific occupations which can be addressed by local partners' action
- The gap between those young people in receipt of free school meals (FSM) and those not in receipt of FSM for progression to a sustained place in education at Key Stage 4 is too big (12-14%), as it is for attainment of Level 3 at age 19 (29-36%)

- Where young people live in Cheshire and Warrington links to their level of attainment
- There are large gender disparities that need to be addressed in Apprenticeships, Diplomas and A Levels in particular subject/occupational areas including in digital skills.