

## Annex A

Annex A is based on data provided by DfE and aims to provide a high level assessment of the labour market and skills landscape. This Annex follows the guidance issued by the Department. For completeness, the text below pulls data and analysis from The Cheshire and Warrington Labour Market Assessment<sup>1</sup>. Where relevant, this is referenced in footnotes. Where additional data is cited that has been released since the production of The Cheshire and Warrington Labour Market Assessment or for some other reason, the data source is referenced in a footnote.

### 1. Local Landscape

#### Local Landscape - Summary<sup>2</sup>

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 13% is forecast by 2030. This growth will put additional pressure on the capacity of the Further Education and skills system.

Labour productivity in Cheshire and Warrington (GVA per hour worked) is higher than for England and has been for every year between 2004 and 2019. Productivity in Cheshire East has consistently been higher than England. Productivity in Warrington has consistently been lower than in England. Productivity in Cheshire West and Chester has been higher than England for every year between 2004 and 2017 but fell below England in 2018 and 2019

In, 2021 there were 42,655 businesses in Cheshire and Warrington. This was a decline of just below 1% compared to the business count in 2020. These business employed 495,000 people in 2021. 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 -LQ) include: “Wholesale and retail trade; repair of motor vehicles and motorcycles” (LQ of 1.13); “Professional, scientific and technical activities” (LQ of 1.48); “Financial and insurance activities” (LQ of 1.26); Transportation and Storage (LQ of 1.14); and “Water supply; sewerage, waste management and remediation activities” (LQ of 1.30).

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<sup>1</sup> The Labour Market Assessment can be found at this link <https://cheshireandwarrington.com/media/mtid1yv/cheshire-and-warrington-labour-market-assessment-report-january-2022.pdf>

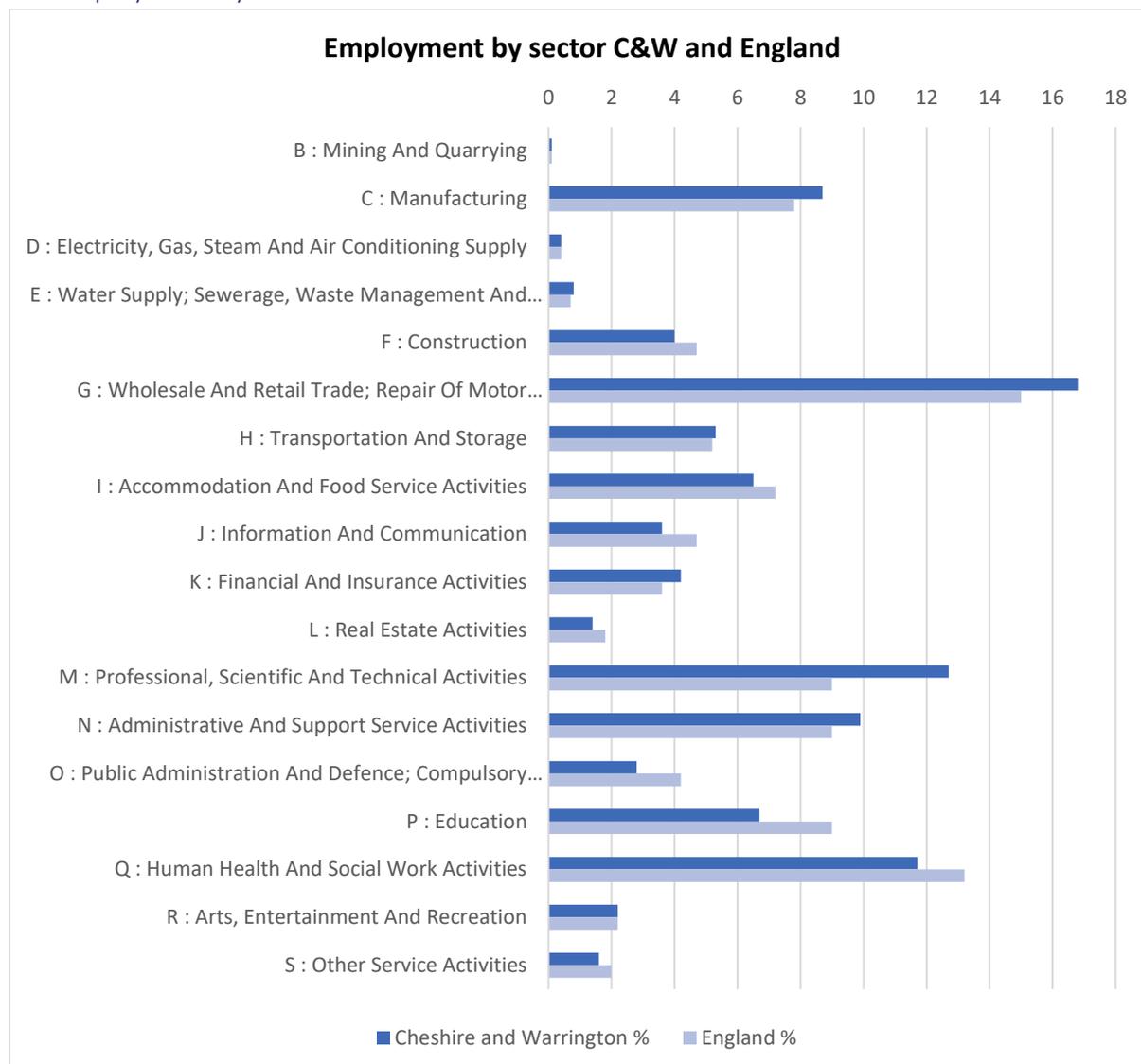
<sup>2</sup> Ibid, Section 3

Between 2004 and 2021, the employment rate in Cheshire and Warrington has usually been higher than England. Cheshire and Warrington entered the pandemic with an employment rate higher than that for England. This was still the case in the period Jul 2020 – June 2021, although the gap between the two had halved from 2.7% (Apr 2019-Mar 2020) to 1.3% (Jul 2020 – June 2021).

The proportion of the economically inactive in Cheshire and Warrington that wanted a job in July 2020 – June 2021 had declined to 13.5%, which was the second lowest recorded in this time series (the lowest being 13.3% in Apr 2005-Mar 2006). Conversely, the proportion of the economically inactive in Cheshire and Warrington that report themselves as retired at 26.5% is the second highest for this metric in the time series (highest being 27.2% in Jan 2006-Dec 2006). This is almost double the latest reported economically inactive due to retirement proportion in England (13.4%). Every local authority in Cheshire and Warrington often exceeds the English measure, but the current level in Cheshire West and Chester at 36.5% is a record for the time series and is over 10ppt higher than any reported for Cheshire West and Chester pre-pandemic going back to 2004.

The volume claiming Universal Credit and seeking work for 1 year or more increased from 4,856 in February 2020 to 12,812 in October 2021 – an increase of 164%. There was a 209% increase in the numbers seeking work and claiming UC for more than three years between these dates.

## 1.1 Employment by Sector



Source: NOMIS/BRES, November 2021

### Employment by Sector<sup>3</sup>

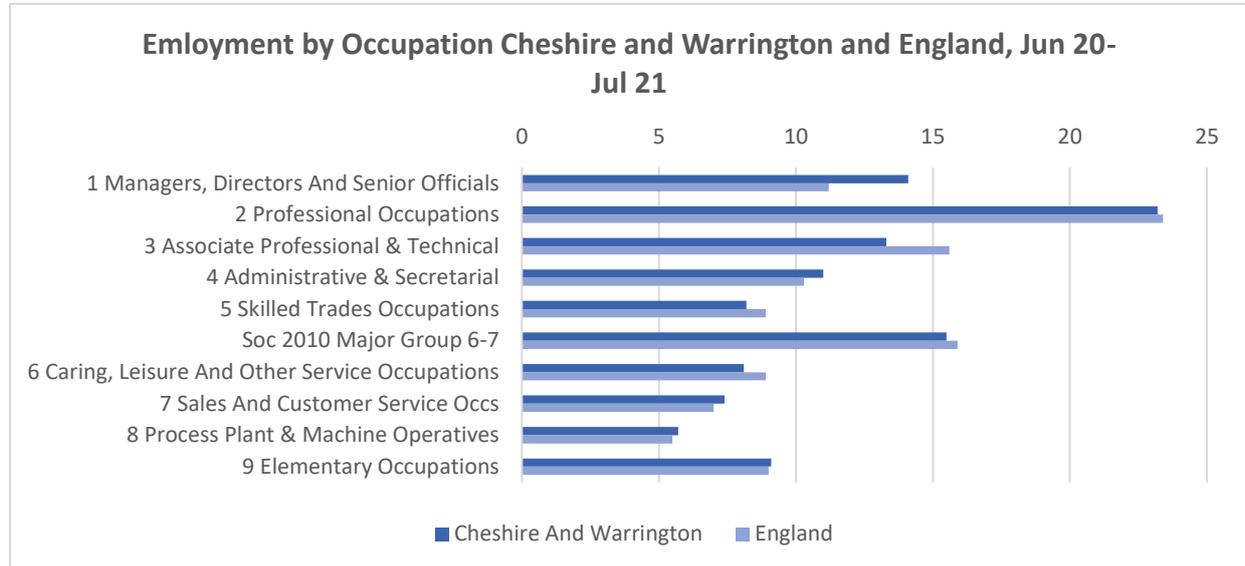
In, 2021 there were 42,655 businesses in Cheshire and Warrington. This was a decline of just below 1% compared to the business count in 2020. These business employed 495,000 people in 2021. 46% of businesses were in Cheshire East, 33% in Cheshire West and Chester, and 21% in Warrington. 90% of businesses in Cheshire and Warrington employed fewer than 10 people. Only 0.4% of businesses employed more than 250 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) include: “Wholesale and retail trade; repair of motor vehicles and motorcycles”

<sup>3</sup> Ibid, Section 3.4

(LQ of 1.13); “Professional, scientific and technical activities” (LQ of 1.48); “Financial and insurance activities” (LQ of 1.26); Transportation and Storage (LQ of 1.14); and “Water supply; sewerage, waste management and remediation activities” (LQ of 1.30).

## 1.2 Employment by Occupation



Source: NOMIS, APS Jun 20-Jul 21

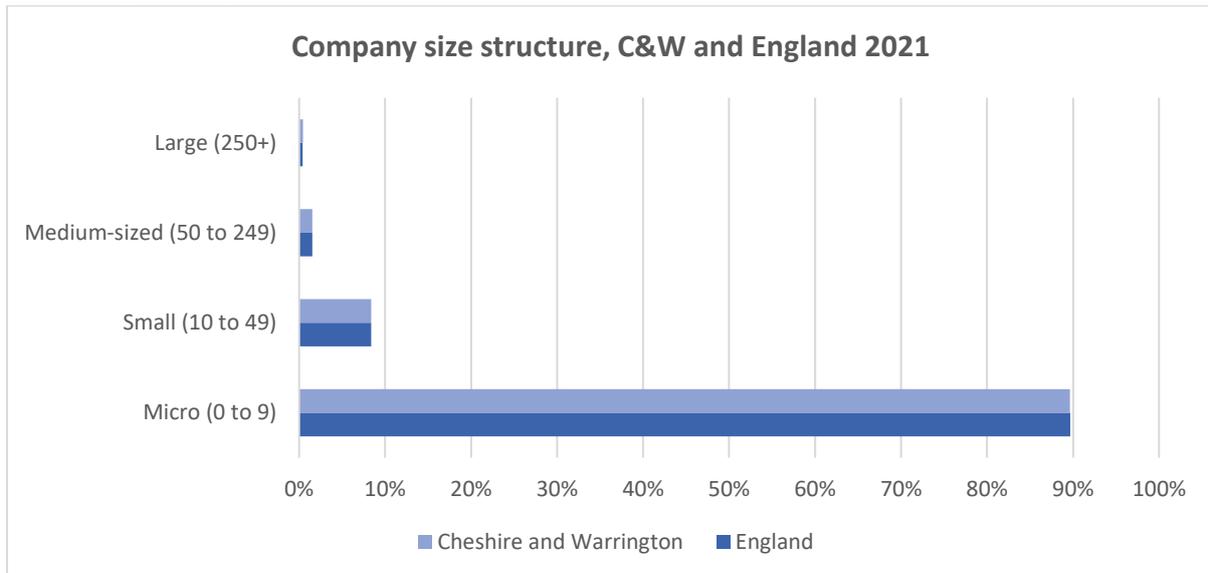
### Employment by Occupation<sup>4</sup>

The occupational profile for residents of Cheshire and Warrington is very similar to the profile for England. SOC Major Groups 1-3 employ 50.5% of residents in Cheshire and Warrington compared to 50.3% in England; SOC Major Groups 4-5 employ 19.2% in both England and Cheshire and Warrington; SOC Major Groups 6-7 employ 15.5% and 15.9% in Cheshire and Warrington and England respectively; and SOC Major Groups 8-9 employ 14.8% in Cheshire and Warrington and 14.6% in England.

Between 2011 and 2021, all three local authorities saw significant growth in SOC areas 1-3 with Warrington, in particular, seeing growth in jobs in SOCs 1-3 in excess of 25% in all three major groups. The highest percentage growth was in Associate Professional and Technical Occupations in Cheshire East (26%) and in Cheshire West and Chester (21%), and in Administrative and Secretarial Occupations in Warrington (44%).

<sup>4</sup> Ibid, Section 3.5

### 1.3 Enterprises by size

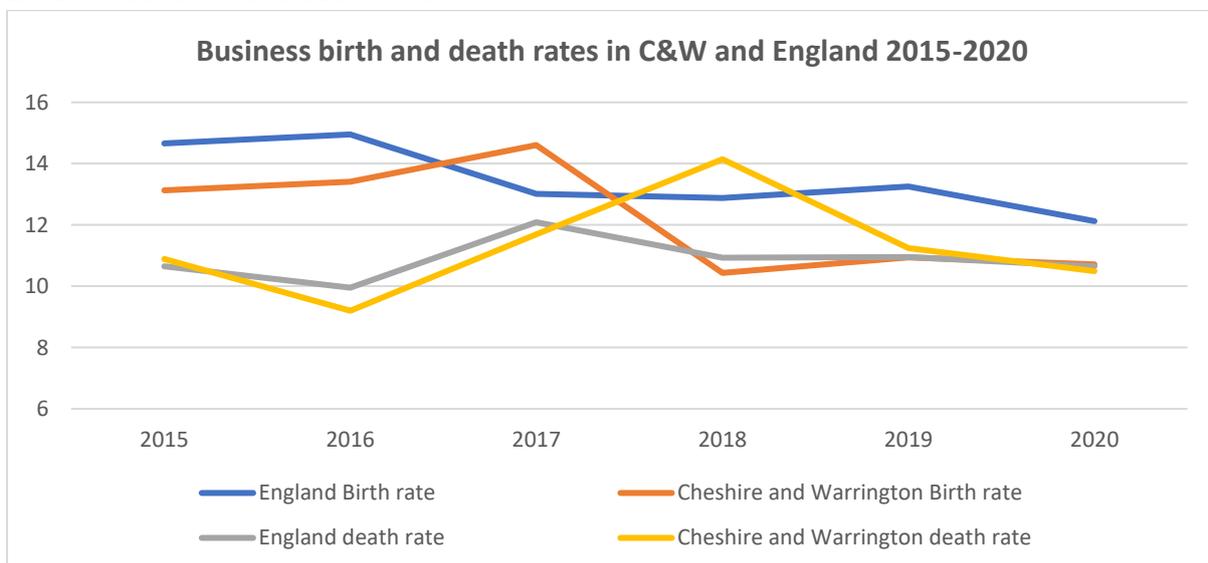


Source: UK Business Counts 2021

#### Enterprises by employment size band

The chart above 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.

### 1.4 Business birth and death rates



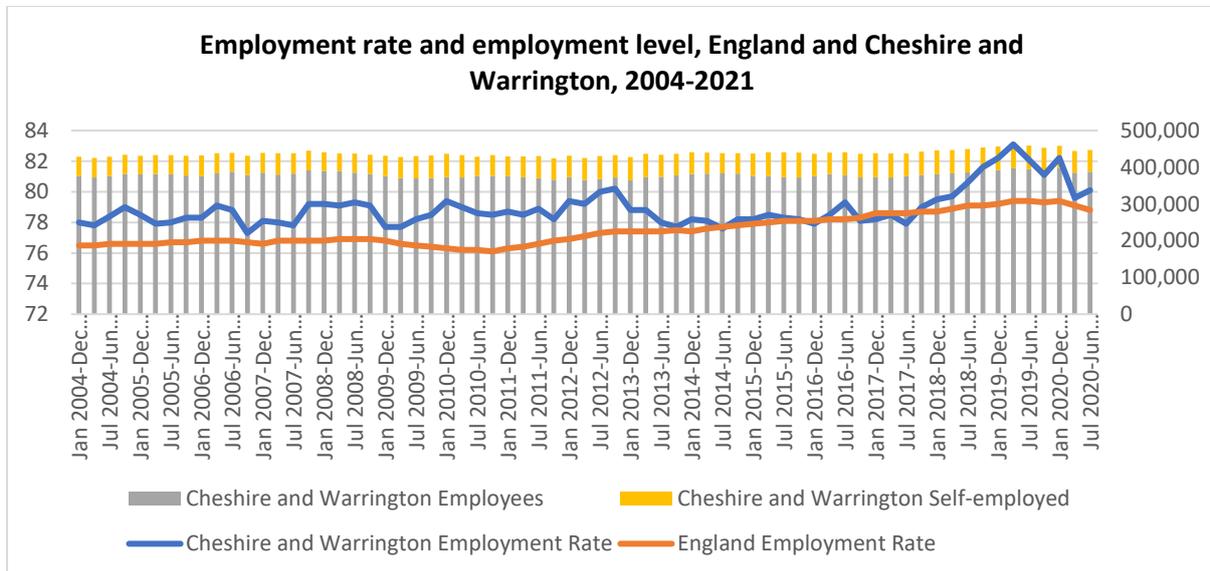
Source: ONS Business Demography, 2015 – 2020, Nov 21

#### Business birth and death rates

ONS publish data on business births and deaths. 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 above.

In 2020, at 10.5%, the ‘business death rate’ was the same in Cheshire and Warrington as in England. On the other hand, the ‘business birth rate’ in Cheshire and Warrington was 1.4 percentage points lower than England.



Source: LFS/APS, ONS

### Employment rate and level<sup>5</sup>

Between 2004 and 2021, the employment rate in Cheshire and Warrington has usually been higher than England. Cheshire and Warrington entered the pandemic with an employment rate higher than that for England. This was still the case in the period Jul 2020 – June 2021, although the gap between the two had halved from 2.7% (Apr 2019-Mar 2020) to 1.3% (Jul 2020 – June 2021).

The number of residents in employment in Cheshire and Warrington decreased by just over 2% from 397,200 in the year directly preceding the pandemic to 388,300 July 2020-June 2021. The number in self-employment went from a pre-pandemic 67,600 to 58,900 in the year July 2020-June 2021 – a decrease of just less than 13%.

The economic inactivity rate in Cheshire and Warrington going into the pandemic was 16.9% (April 2019-March 2020). This increased to a peak of 20.4% (April 2020 – March 2021) before dropping back slightly to 19.9%. The gap between England and Cheshire and Warrington economic inactivity rates has decreased from 3.4% to 1.3% during the pandemic.

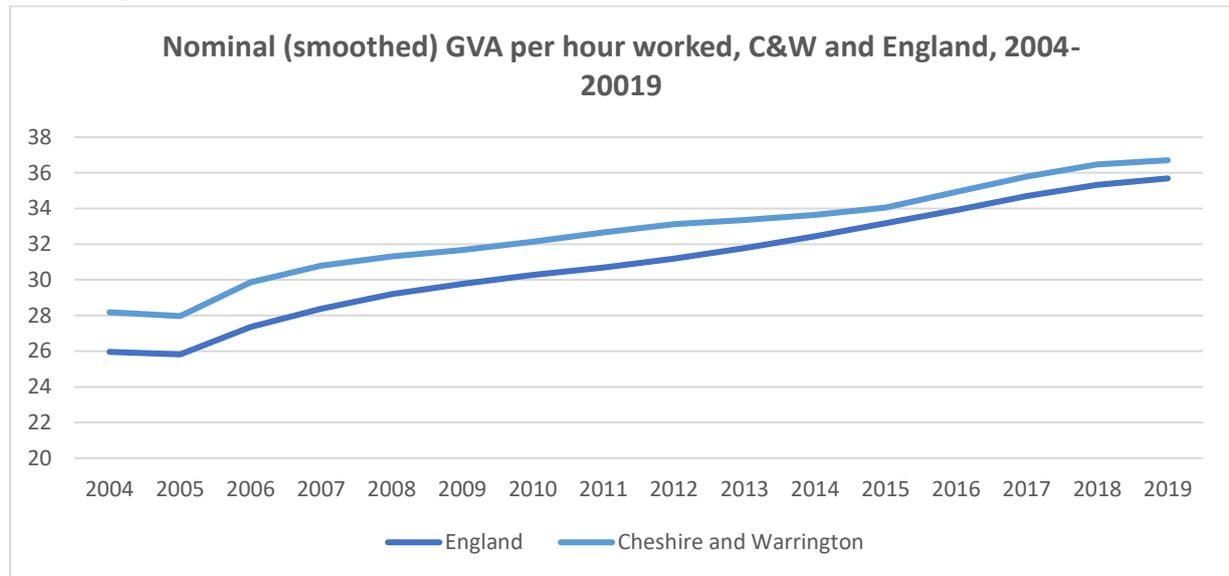
Both Warrington and Cheshire East have seen increases in economic inactivity over the pandemic, with Cheshire East in particular, showing a very marked rise from 14.6% to 23.7%. By contrast, economic inactivity in Cheshire West and Chester decreased during the pandemic.

Many of the economically inactive who previously said that they wanted a job have now retired. The proportion of the economically inactive in Cheshire and Warrington that wanted a job in July 2020 – June 2021 had declined to 13.5%, which was the second lowest recorded in this time series (the lowest being 13.3% in Apr 2005-Mar 2006). Conversely, the proportion of the economically inactive

<sup>5</sup>Ibid, Section 3.2

in Cheshire and Warrington that report themselves as retired at 26.5% is the second highest in the time series (the highest being 27.2% in Jan 2006-Dec 2006). This is almost double the percentage in England that are economically inactive due to retirement (13.4%). Every local authority in Cheshire and Warrington often exceeds the English measure, but the current level in Cheshire West and Chester at 36.5% is a record for the time series and is over 10ppt higher than any reported for Cheshire West and Chester pre-pandemic going back to 2004.

### 1.5 GVA per hour worked

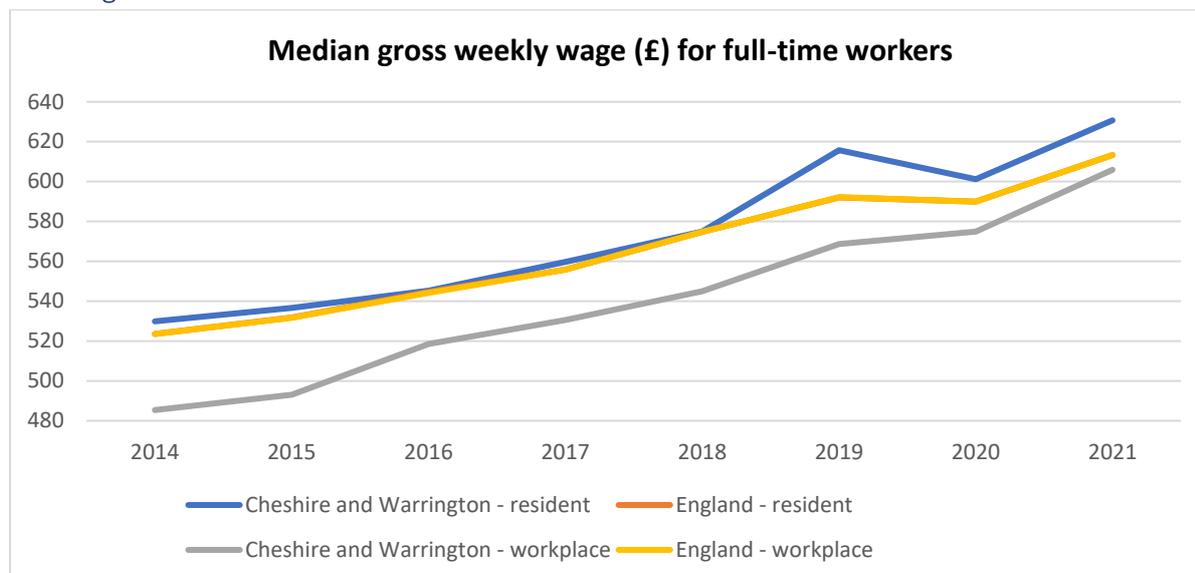


Source: ONS Subregional Productivity, 2004 - 2019

### Nominal GVA per hour worked

Labour productivity in Cheshire and Warrington (GVA per hour worked) is higher than for England and has been for every year between 2004 and 2019. Productivity in Cheshire East has consistently been higher than England. Productivity in Warrington has consistently been lower than in England. Productivity in Cheshire West and Chester has been higher than England for every year between 2004 and 2017 but fell below England in 2018 and 2019.

## 1.6 Wages



**Source:** Annual Survey of Hours and Earnings

### Median gross weekly wage for full-time workers<sup>6</sup>

The chart above 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 eight years. On the other hand, Cheshire and Warrington workplace wages have been consistently lower than England and lower than resident's wages, although the median has demonstrated a recent convergence with English pay.

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 Census 2011 data shows that, at that time, the LEP was a net importer of Labour. It therefore seems probable that both explanations will apply to some extent.

The median Gross weekly pay for Cheshire and Warrington residents was £630.7 which was higher than that for the England figure of £613.3. Male full-time workers were paid more in Cheshire and Warrington than in England, females slightly less. Whilst pay for females exceeded that of England in both Cheshire East and Warrington, the overall figure for females was brought down by female wages in Cheshire West and Chester.

When hourly rates are considered, the hourly rates in Cheshire and Warrington were higher than in England overall and for male full-time workers, but again lower for female workers.

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 England. The hourly rates for both male and female full-time workers were also below those for England.

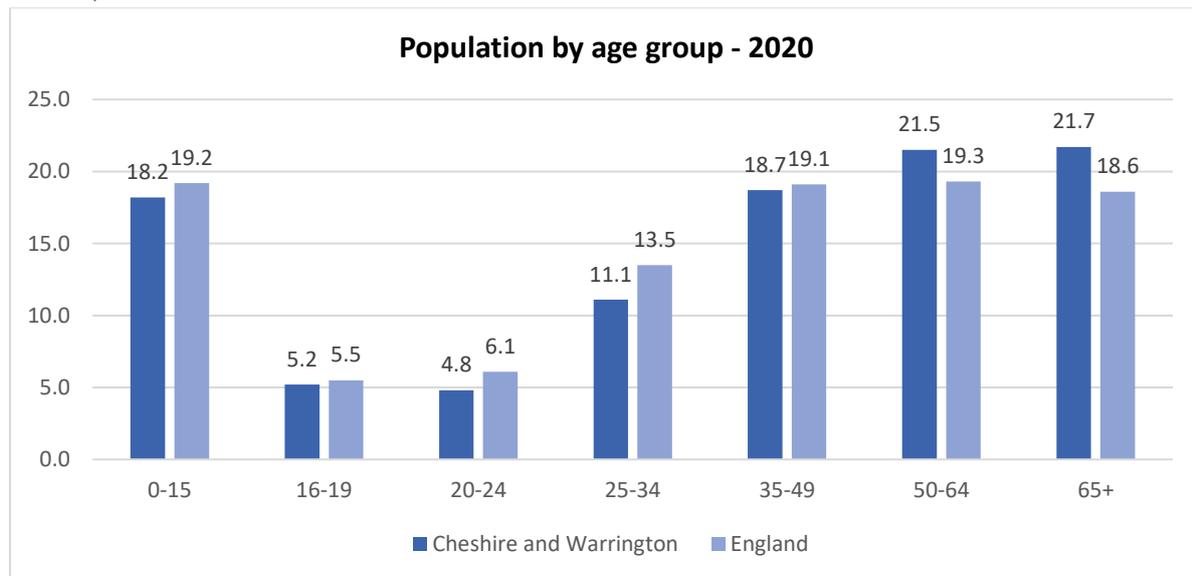
ONS publishes data on earnings and employment statistics from Pay As You Earn (PAYE) Real Time Information (RTI) made available by HMRC. This data does not cover all residents – it only includes residents on PAYE – but it provides a good basis to understand changes to the levels of wages in an

<sup>6</sup> Ibid, Section 3.6

area. It shows that the impact of the pandemic in depressing wages seemed to have ended by August 2020.

The Real Living Wage Foundation calculates each year the hourly rate that people need to receive based on living costs. The Real living Wage for 2021/2022 is £9.90. More than 10% of employees in Cheshire and Warrington earn less than the Real Living Wage with this also being the case in all three local authorities.

## 1.7 Population



**Source: ONS Population Estimates**

### Population by age group<sup>7</sup>

The Office for National Statistics (ONS) estimates that Cheshire and Warrington has a population of 939,900 people with 386,700 resident in Cheshire East, 343,800 resident in Cheshire West and Chester and 209,400 resident in Warrington. Overall, the population in Cheshire and Warrington is 51% female, 49% male; with a similar gender split being reflected in all three local authorities. The working age population (ie aged 16-64) constitutes a lower percentage of the total population for Cheshire and Warrington and all three of its Local Authorities than is the case for England. This is also true for both the male and female working age population.

Cheshire and Warrington's age profile is skewed towards the older age groups. In particular, the proportion of those aged between 0 and 44 (for every age band in this range) is lower than England, whereas the proportion of those aged 45 and above (for every age band in this range) is higher.

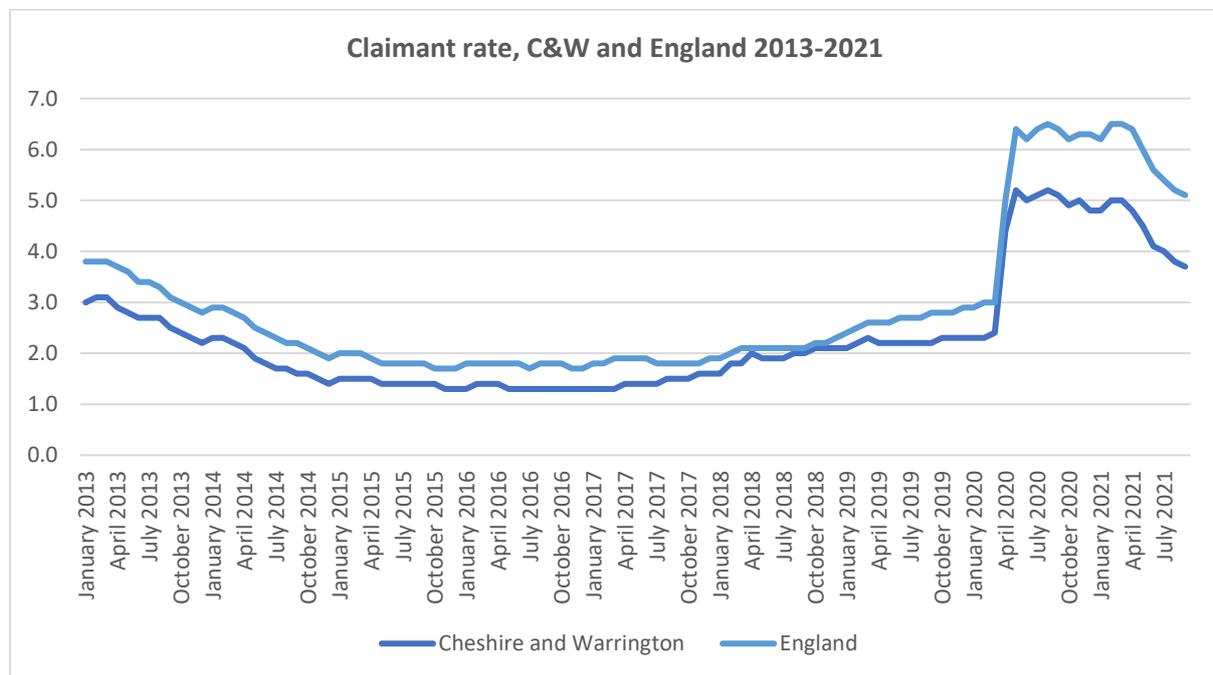
Not only is the age profile of Cheshire and Warrington older than for the country, but the area's population is also forecast to further age, as is that of England. Quite significant population increases are forecast in Cheshire and Warrington for 5 of the 6 age bands over 60 (the exception being for those aged 70-74 years). Conversely the only age band forecast to grow by more than 10% for the under 60s in Cheshire and Warrington is the 16-18-year-old population where a growth of 13% is

<sup>7</sup> Ibid, Section 3.1

forecast for 2030. This population growth of 16–18-year-olds will put pressure on the capacity of the Further Education system in Cheshire and Warrington.

This pattern of change over the next 10 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 inflow 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.

### 1.8 Claimant Rate



Source: NOMIS, Oct 2021

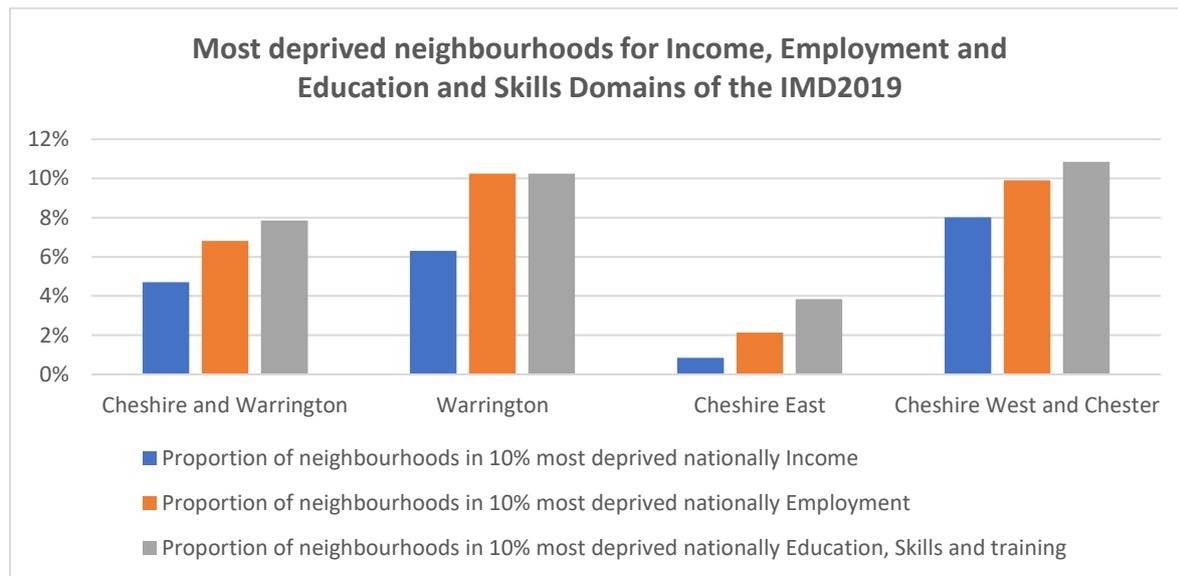
#### Claimant Rate<sup>8</sup>

The Cheshire and Warrington claimant rate has increased from 2.3 % in February 2020 to 3.7% in September 2021. However, the rate of recovery from the pandemic’s impact on the labour market (by this measure) has been faster in Cheshire and Warrington than in England, with Cheshire and Warrington going from being 0.7% below the English rate at the onset of the pandemic to 1.4% below England by September 2021. The claimant rate is lower in Cheshire and Warrington for every age band when compared with England and the Northwest.

<sup>8</sup> Ibid, Section 3.2

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 England and the Northwest region.

Claims of Universal Credit by those seeking work increased from 11,819 in February 2020 to a peak of 26,453 in May 2020 and were at 18,478 by October 2021 – an increase of 56% over the duration of the pandemic to October 2021. It is notable that the number of people claiming for less than a year decreased between February 2020 and October 2021, whilst the volume claiming for 1 year or more increased from 4,856 in February 2020 to 12,812 in October 2021 – an increase of 164%. There was a 209% increase in the numbers claiming for more than three years between these dates and a 150% increase in numbers claiming for between 1 and 3 years.



**Source: SAP Core Indicators/IMD2019**

### 1.9 Deprivation

#### Income, Employment and Education deprivation<sup>9</sup>

The most deprived Lower Super Output Areas (LSOAs) in Cheshire and Warrington, as measured by the 2019 Index of Multiple Deprivation (IMD2019), are concentrated in Warrington, Crewe and Ellesmere Port, with further pockets in Chester, Winsford, Northwich and Macclesfield.

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

A high proportion of C&W LSOAs fall into the most deprived national decile for the ‘geographical barriers’ subdomain of IMD2019.

<sup>9</sup> Ibid, Section 3.7

## 2. Skills Supply

### Skills Supply – Summary<sup>10</sup>

Residents of Cheshire and Warrington have slightly higher skills and slightly higher skilled occupations than is the case for England. 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.

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 (ESFA localities datacube). 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 learners to succeed at Level 3. Between 2016 and 2019 there was 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.

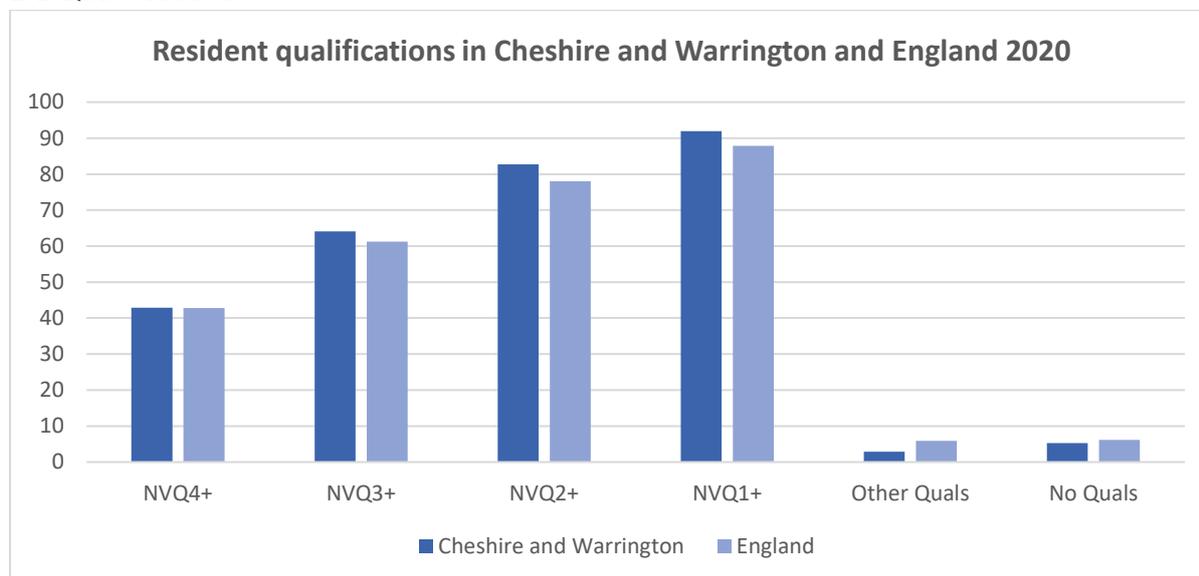
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<sup>10</sup> Ibid, Section 5

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.

## 2.1 Qualifications



**Source: ONS annual population survey (Jan-Dec 2020), % is of resident population of area aged 16-64**

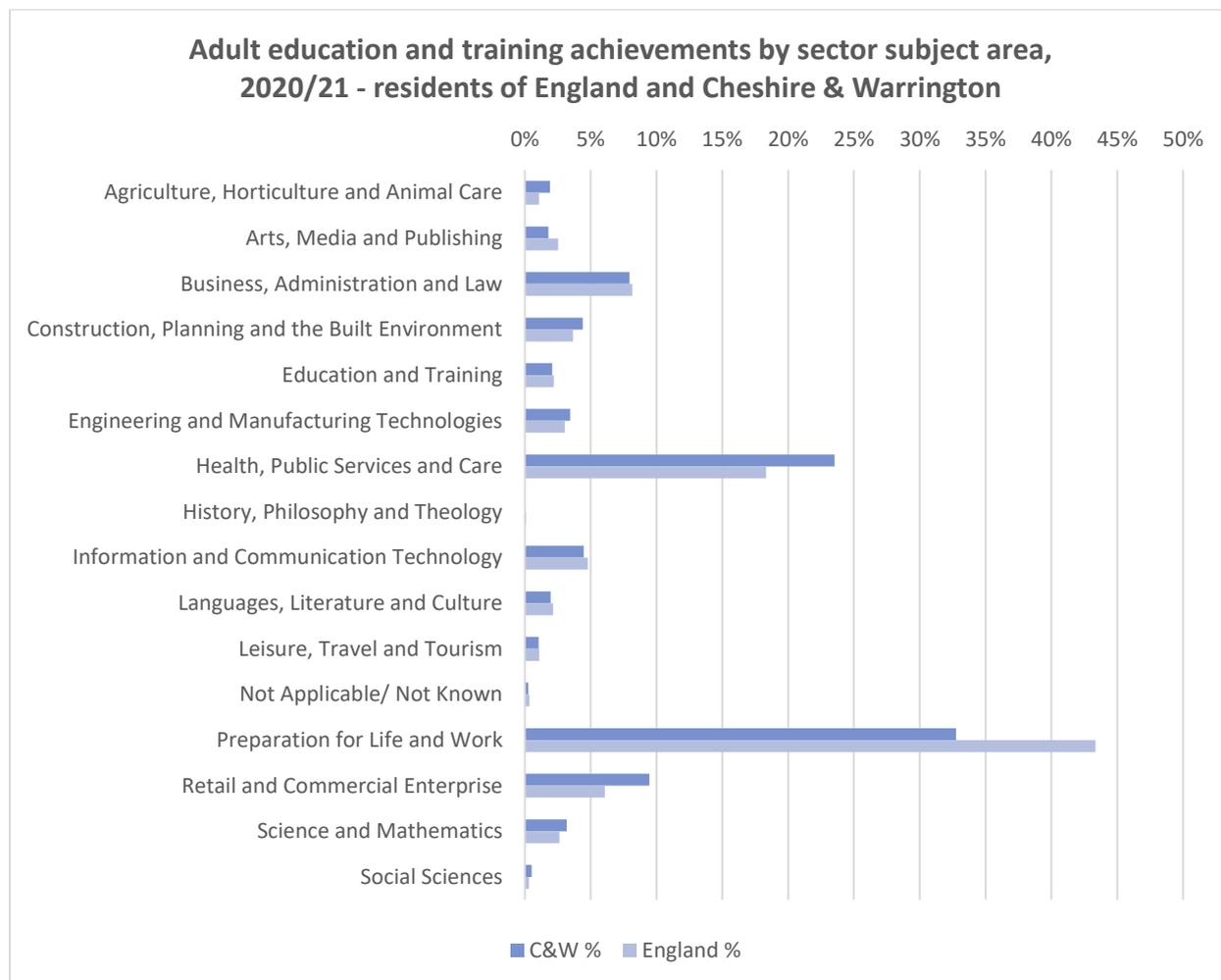
### Qualifications levels<sup>11</sup>

The percentage of the population qualified to Level 4+ (L4+) in Cheshire and Warrington is slightly higher than the English percentage. However, this disguises variation across the three local authorities, with Cheshire West and Chester having a higher proportion qualified to L4+ than England, whilst the proportions qualified at this level are lower than England in Cheshire East and Warrington. The proportion qualified to Level 3 and above (L3+) is higher than England in Cheshire and Warrington, Cheshire East and Cheshire West and Chester, although the proportion is lower in Warrington.

The most deprived areas for the IMD2019 Adult Skills Subdomain can be found in Warrington, Crewe, Ellesmere Port and Winsford, with further pockets in and around Chester, Northwich, and Macclesfield.

<sup>11</sup> Ibid, Section 5.3

## 2.2 Adult Education



**Source: Further Education and Skills, underpinning data, DFE**

### Further Education and Training Achievements<sup>12</sup>

There were 363 Learning Providers that delivered one or more FE learning aims to adults in Cheshire and Warrington LEP between 2016 and 2019. In 2019/20, over 25% of AEB investment was pepper-potted across more than 200 providers, which equated to an average investment of less than £10k per provider (ESFA Localities data cube) for this part of the budget.

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.

In the period 2016-2019, 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. It is important that future Shared Prosperity Fund investment does not repeat this gender disparity.

The volume and sector subject area split of learning aim achievements for 2020/21 is set out in the chart above. 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

<sup>12</sup> Ibid, Section 5.4

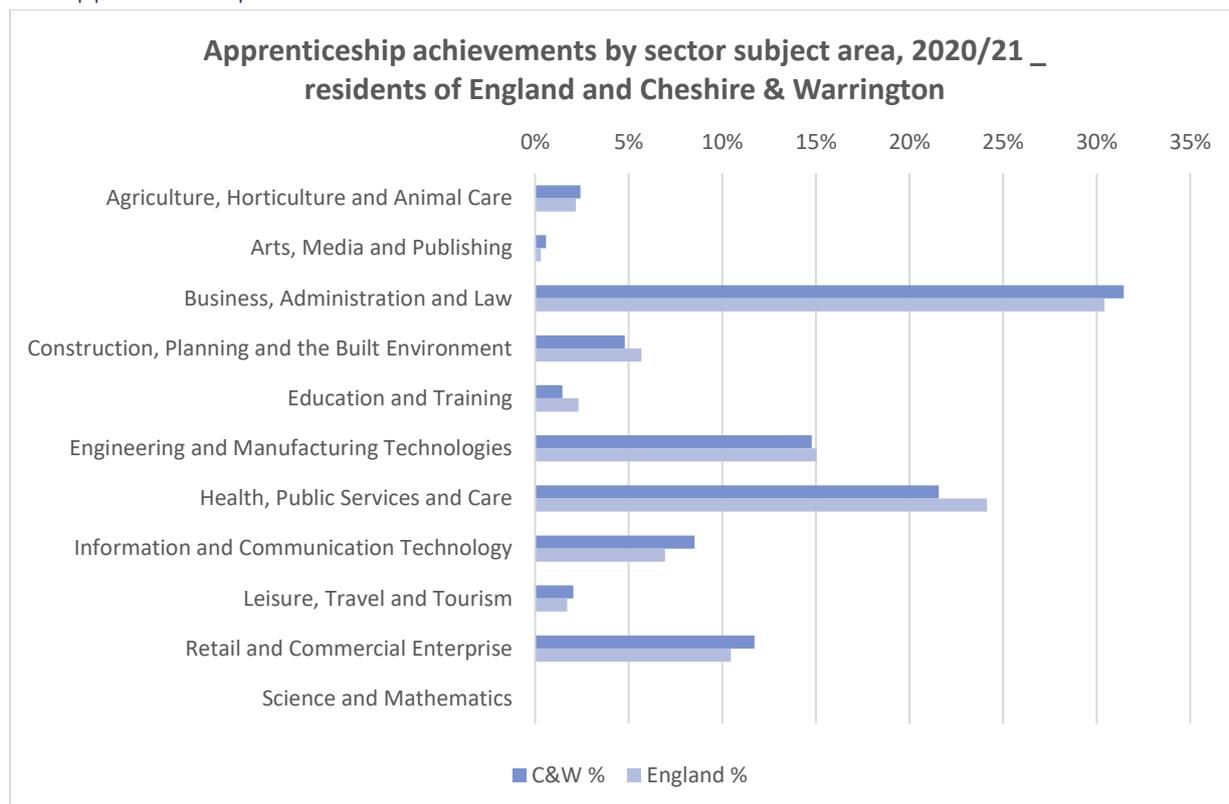
Academy programme (ie a skills programme linked to a specific employment vacancy) might enrol at the same time on four or five short units of learning/learning aims (eg safe handling, customer service, employability etc) which, in total, constitute their programme of learning. Conversely an Access to Higher Education Diploma will have several quite substantial modules, but it will be recorded as a single 'learning aim'. In the chart above, for example, the very high volume of learning aim achievements in 'Preparation for Life and Work' will reflect the volume of delivery of English, Maths and ESOL; but will also, in part, reflect that learners will undertake short learning aims classified as being in this SSA alongside other learning aims which may be more substantial.

Gender disparities are apparent in the volume of achievements in several vocational areas including 'Health, Public Services and Care' and 'Leisure, Travel and Tourism' (high proportions of female learners); and in 'Engineering and Manufacturing Technologies' and 'Construction, Planning and the Built Environment' (high proportions of male learners).

The most recently published 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%, 1.5% higher than the national rate of 89.1% (National Achievement Rate Tables - NARTs). Both the pass rate and the retention rate were higher than the national figures. The achievement rate for residents 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.

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.

## 2.3 Apprenticeships



**Source: DfE, Apprenticeship Achievements Underlying data**

### Apprenticeship Achievements<sup>13</sup>

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 (ESFA localities data cube).

For young people, there was 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 in Cheshire West and Chester. There were large drops in young people's apprenticeship starts in Business, Administration and Law, and Retail and Commercial Enterprise.

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%.

There were significant gender disparities in FE and apprenticeships by learners aged 16-18 in 2018/19. There were high proportions of female starts in Retail and Commercial Enterprises, and in

<sup>13</sup> Ibid, Section 5.4

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. There is a similar picture for adults. Only 14% of adult apprenticeships in Health, Public Services and Care were started by males. Similarly, only 11% of adult apprentices in Engineering and Manufacturing Technologies were female and only 5% of adult apprentices in Construction, Planning and the Built Environment were female.

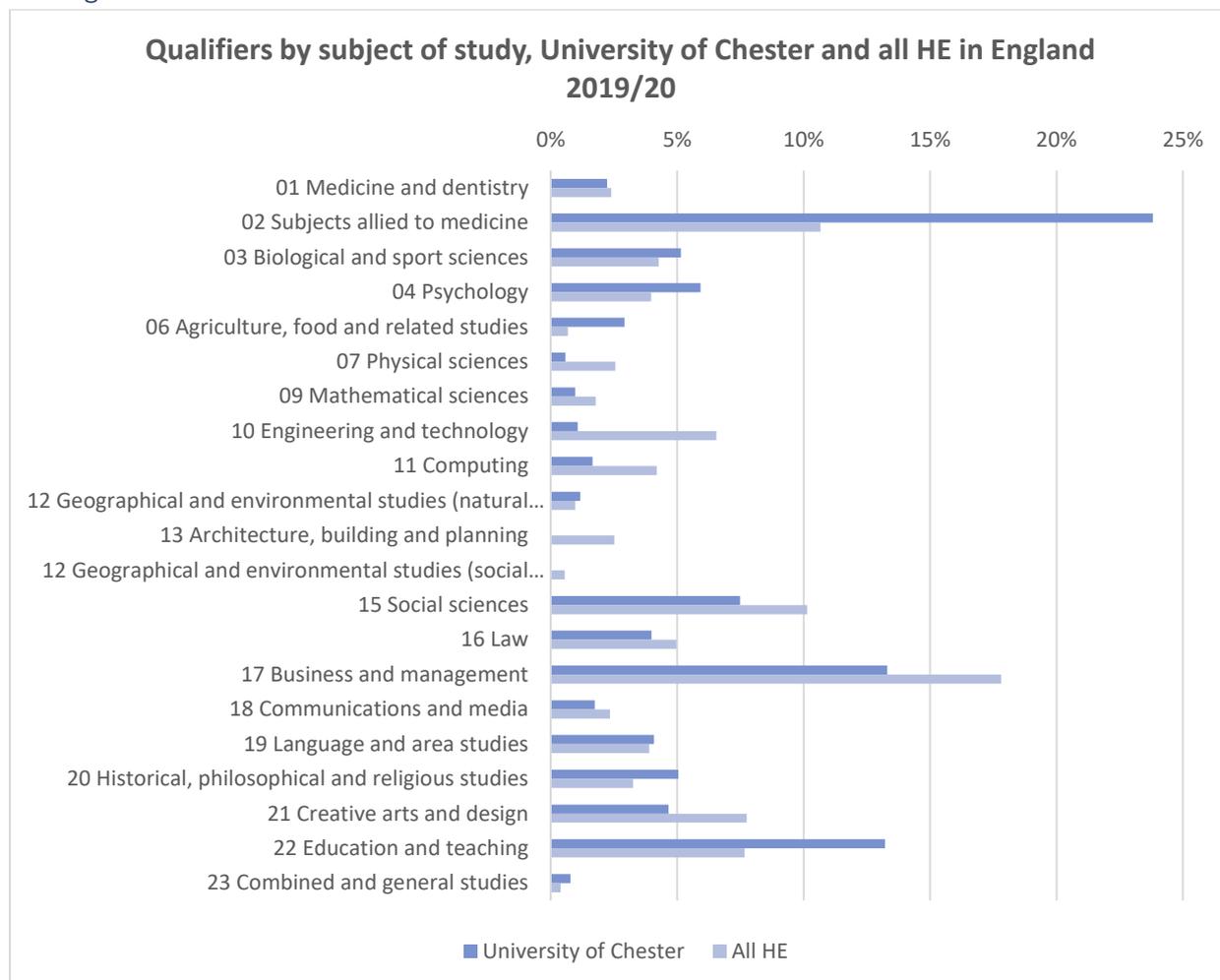
10% of adult apprentices reported that they had a disability, learning difficulty or health problem. This is less than half the proportion of adult learners in Further Education. It is not clear why the difference between the two routes should be so marked.

The table above illustrate that differences in the proportions of apprenticeship achievements in Cheshire and Warrington compared to England tends mostly to mirror the differences in the respective industrial structures (LQs reported above).

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 16-18 residents than for England as a whole. 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%). The achievement rate for 24+ apprenticeships was higher overall and higher for all Levels in Cheshire and Warrington than national.

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

## 2.4 Higher Education



**Source: HESA, [www.hesa.ac.uk](http://www.hesa.ac.uk), published under the [Creative Commons Attribution 4.0 International \(CC BY 4.0\)](https://creativecommons.org/licenses/by/4.0/) licence**

### HE Qualifiers<sup>14</sup>

The data in the chart above reflects students studying at the University of Chester, rather than students who are domiciled in Cheshire and Warrington. Since the Level 6 and above labour market is national (or international), and providers recruit to their specialisms and areas of excellence, it would be surprising to find an exact alignment between a HE provider’s delivery and local economic demand. The chart tells us that there were higher proportions of qualifiers at the University of Chester compared with all HE in subjects allied to medicine, biological sciences, psychology, agriculture, and education.

In 2019/20, there were 13.5k enrolments at the University of Chester with more than twice as many women as men enrolled. The highest volume of enrolments at the University of Chester were in subjects allied to medicine (21%), business and management (15%) and education and teaching (10%).

<sup>14</sup> Ibid, Section 5.4

In 2018/19, 6,875 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+ class-room based learning aim starts by adults in Further Education.

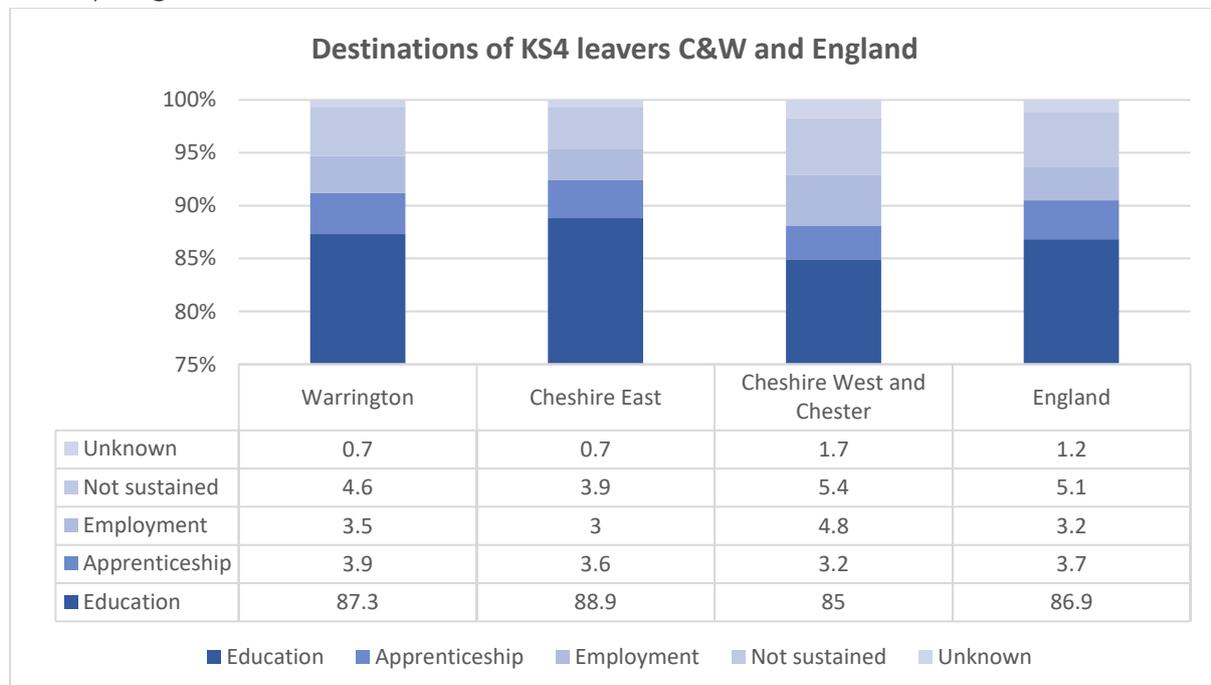
The main class-room based Level 4+ qualifications for adults delivered in Further Education were Certificates, Diplomas and 'Other Non-Regulated' (these can be Degrees and Foundation Degrees awarded by universities) learning aims. Between 2016 and 2019, 2,951 such learning aims were delivered. Level 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 of 17% in 'Other Non-Regulated' starts.

Eight FE 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 College), 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 by C&W residents 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.

## 2.5 Key Stage 4



**Source: DfE, accessed December 2021**

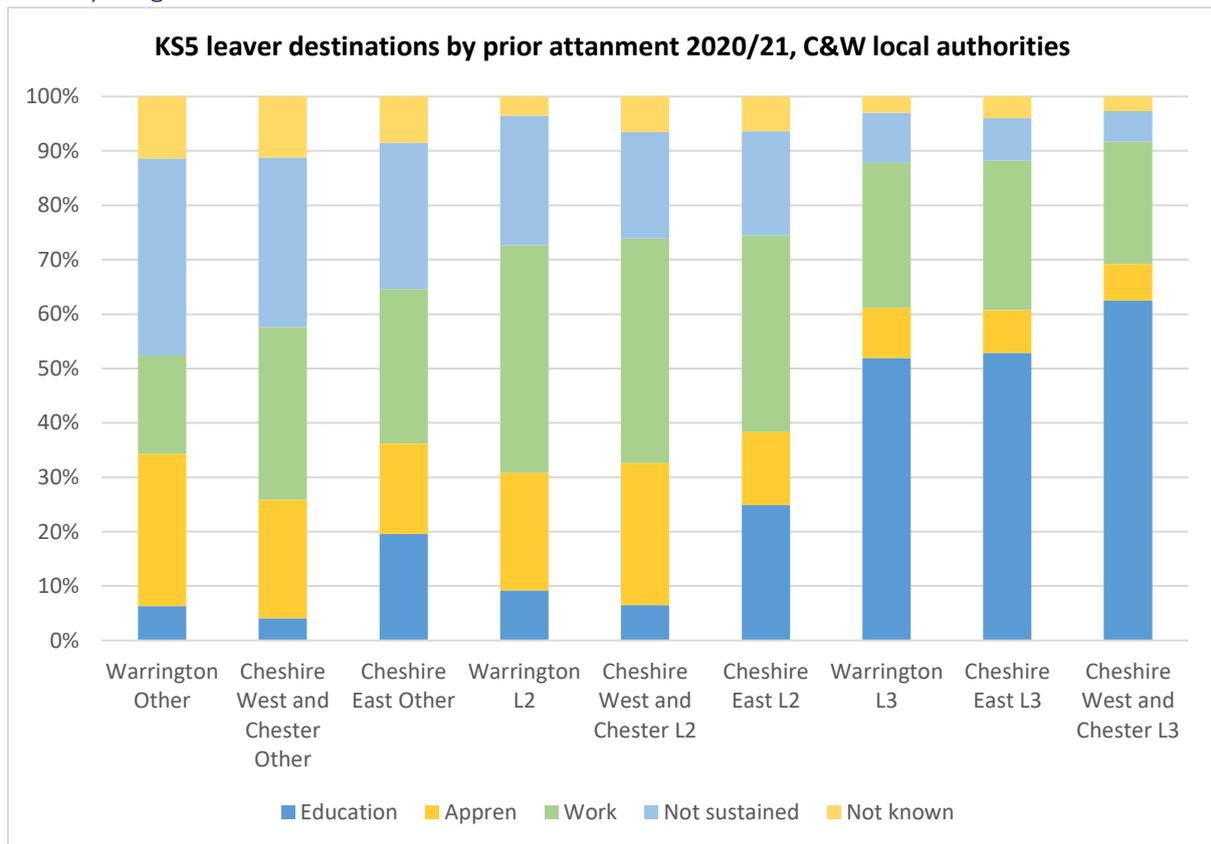
### KS4 Destinations<sup>15</sup>

In 2019/20, a slightly higher percentage of Key Stage 4 leavers secured a sustained destination in Cheshire East and Warrington than in England (chart above). The percentage securing a sustained destination was lower than England in Cheshire West and Chester.

The 2019/20 data reveals that the proportion of disadvantaged pupils at Key Stage 4 who secure a sustained education destination was lower in Cheshire East (79.4%), Cheshire West and Chester (70.4%) and Warrington (77.5%) than for England (81.2%). The gap between disadvantaged pupils securing a sustained education destination compared to all other pupils was larger for all three local authorities (11.4% Cheshire East, 12.2% Warrington, 18.7% Cheshire West and Chester) than the English figure of 7.7%..

This may help explain, in part, why the proportion of C&W 19-year-olds eligible for free school meals that achieved a Level 3 has been at or below the English proportion for this cohort between 2005 and 2020. 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 5 percentage points above the English figure in any given year.

### 2.6 Key Stage 5



Source: DfE, KS5 destinations

<sup>15</sup> Ibid Section 5.1

## KS5 Destinations<sup>16</sup>

In 2019/20, the proportion of leavers at Key stage 5 that were able to secure a sustained destination was lower in Warrington than England for every level of prior attainment (chart above) and higher in Cheshire East than for England. In Cheshire West and Chester it was higher for learners with prior attainment at Levels 2 and 3 and lower at Level 1.

The most common destination for KS5 leavers with qualifications below L2 tended to be 'failure to secure a destination'; the most common destination for Level 2 KS5 leavers was to secure sustained employment; and the most common destination for Level 3 KS5 leavers was a sustained education destination.

The national Office for Students publishes TUNDRA data on HE participation rates for Lower Layer Super Output Areas (LSOAs). Many areas of Cheshire and Warrington 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.

### 2.7 FE and Apprenticeship Destinations

Destinations for adult FE and skills learners 2018/19 (%)						
	Cheshire and Warrington			England		
	Sustained employment	Sustained learning	Any learning	Sustained employment	Sustained learning	Any learning
Total	66	18	34	60	24	42
All Level 2 (excluding Basic Skills)	73	14	30	73	15	33
All Level 3	65	40	48	62	41	51
Basic Skills	58	32	53	50	38	58
Below Level 2 (excluding Basic Skills)	61	9	27	49	16	35
Level 4 and Level 5	77	15	23	78	15	26
Other	27	n/a	27	37	26	42

*Source: DfE*

<sup>16</sup> Ibid,, Section 5.1

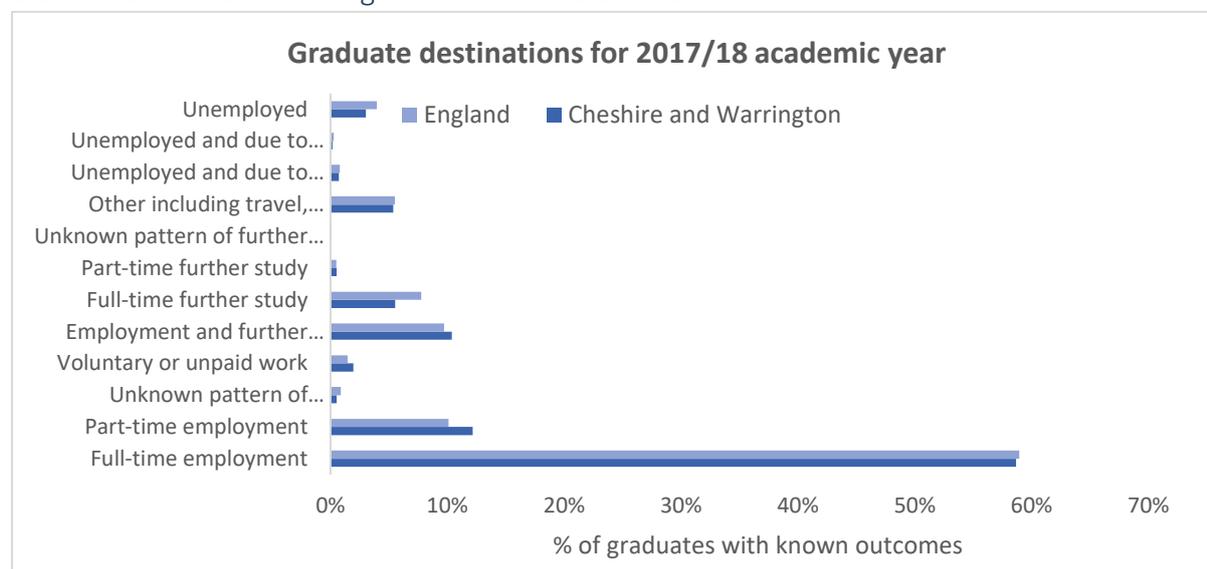
Apprenticeship destinations (all age) 2019/20 (%)				
		Sustained employment	Sustained learning	Any learning
<b>Cheshire and Warrington LEP</b>	All Apprenticeships	90	16	23
	Advanced Apprenticeship	91	12	18
	Higher (Level 4) Apprenticeship	94	16	20
	Higher (Level 5+) Apprenticeship	93	4	11
	Intermediate Apprenticeship	88	21	29
<b>England</b>	All Apprenticeships	89	18	25
	Advanced Apprenticeship	90	13	19
	Higher (Level 4) Apprenticeship	93	21	26
	Higher (Level 5+) Apprenticeship	91	7	14
	Intermediate Apprenticeship	89	23	31

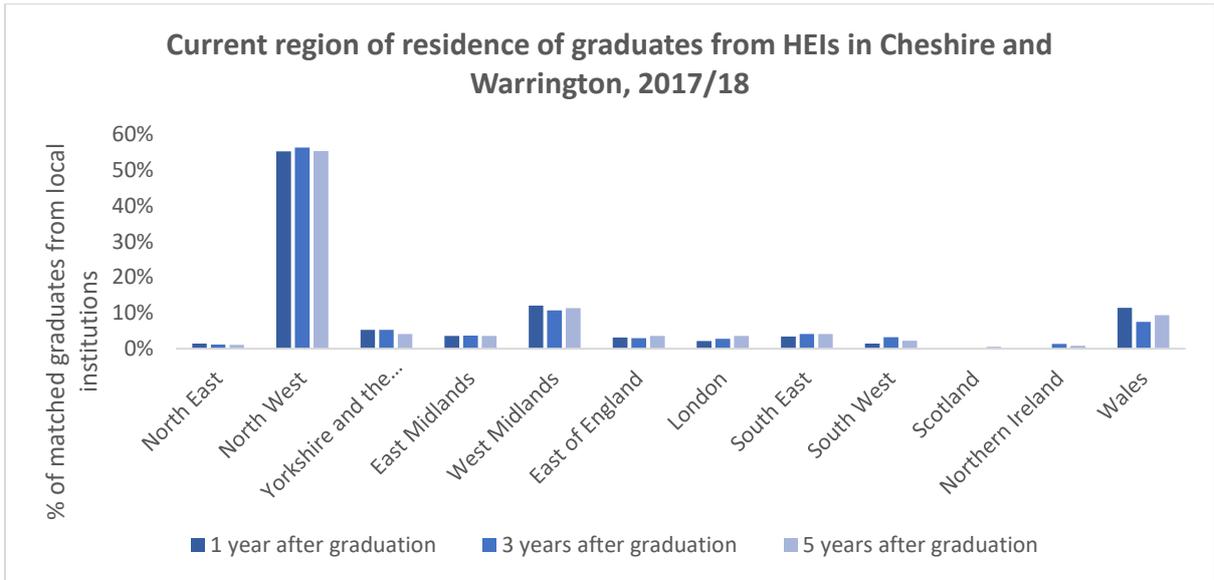
*Source: SAP Core Indicators/DfE*

### FE and Apprenticeship Destinations

Compared with England, a higher proportion of Cheshire and Warrington adult FE learners secure sustained employment on leaving FE and a higher proportion progress to sustained learning. The pattern of sustained destinations following participation in apprenticeships is slightly higher in Cheshire and Warrington compared to England.

### 2.8 HE Destinations and Region of Residence after Graduation



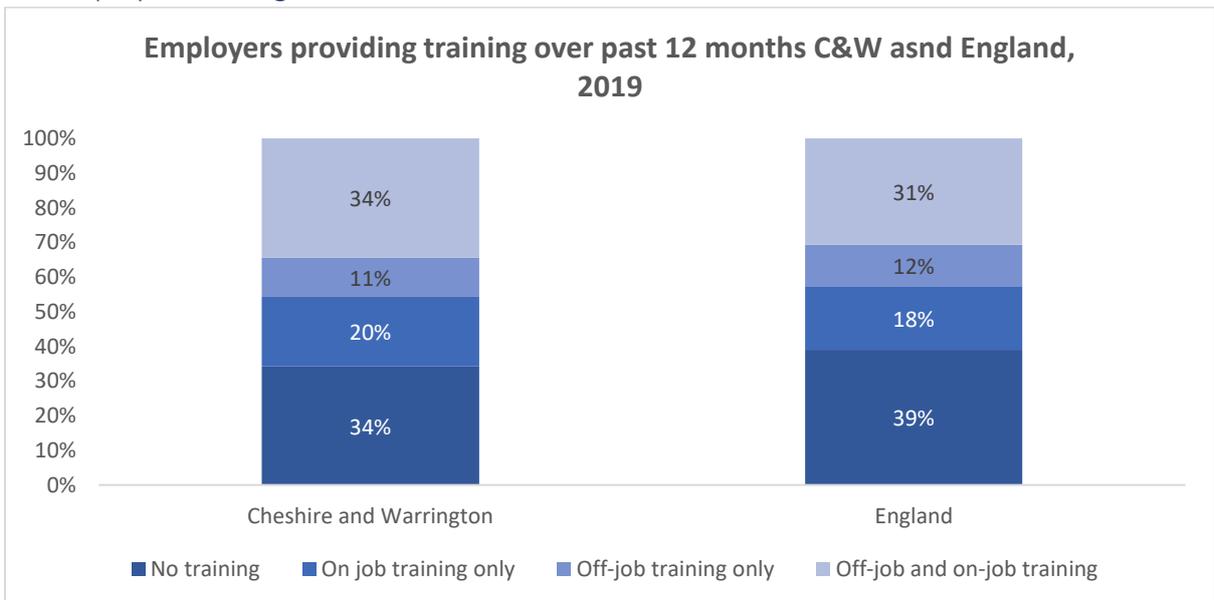


#### HE Destinations and Region of Residence after Graduation

Information about the destinations of 2016/17 graduates in 2017/18 is provided in the first chart above. 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.

The second chart above illustrates 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.

#### 2.9 Employer Training



### Employer Training<sup>17</sup>

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 (chart above).

However, 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. 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.

Employers in Cheshire and Warrington were less likely to fund or arrange external training for their staff than is the case in England. Those employers in Cheshire and Warrington that do 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.

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).

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).

### 3. Skills Demand

#### Skills Demand - Summary<sup>18</sup>

The sectors which added the most jobs between 2011 and 2021 were "Wholesale and retail trade; repair of motor vehicles and motorcycles" with an increase of 11,884 jobs and "Professional, scientific and technical activities" with an increase of 24,430 jobs. Nine sectors grew by more than the average of 17% in this period: Mining and Quarrying; Water Supply; Sewerage, Waste Management and Remediation Activities; Transportation and Storage; Real Estate Activities; Professional, Scientific and Technical Activities; Administrative and Support Service Activities; Human Health and Social Work Activities; and Arts, Entertainment and Recreation.

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<sup>17</sup> Ibid, Section 5.5

<sup>18</sup> Ibid Section 4

The high employment sectors with average wages above £35,000 are: Manufacture of Basic Pharmaceutical Products and Pharmaceutical Preparations; Architectural and Engineering Activities; Technical Testing and Analysis; Construction of Buildings; and Financial Service Activities.

A higher posting intensity for skills suggests that employers are having greater difficulty than average in sourcing that skill in the jobs market. Just less than half of the skills that had a high posting intensity in the period April-Oct 2021 were for digital skills and most of the remainder related to health and care. The five skill areas with the highest posting intensities in this period were: Nursing; Compassion; .NET Framework; C# (Programming Language); and SQL (Programming Language).

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.

### 3.1 Sector growth forecasts

Cheshire and Warrington LEP	
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: IER Working Futures 2017-2027, LEP tables*

#### Sector Growth Forecasts

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 unclear. A number of previously observed trends seem to have been accelerated (eg automation, town centre decline etc). Furthermore, workplace mobility data (Google) suggests that working from home may have become embedded in a large number of roles. 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.

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.

**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. It is proposed 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). This 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.

**Digital Infrastructure** - The digital infrastructure plan for Cheshire and Warrington 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 (citizens and businesses) have the right skills required to realise the benefits and opportunities of enhanced digital connectivity.

**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 100km<sup>2</sup> 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 significant investment to support project development.

Central to the 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 CO<sub>2</sub> 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.

**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 is working 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.

### 3.2 Occupational growth forecasts

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

Source: IER Working Futures 2017-2027, LEP tables

#### Occupational Growth Forecasts<sup>19</sup>

Working Futures has not lost all its utility following the pandemic. 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.

Replacement demand is driven by the numbers that leave an occupation and need to be replaced (eg because of retirement). In the Working Futures model for Cheshire and Warrington, replacement demand invariably drives demand for labour at a higher rate than the forecast 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; and Administrative and Secretarial Occupations.

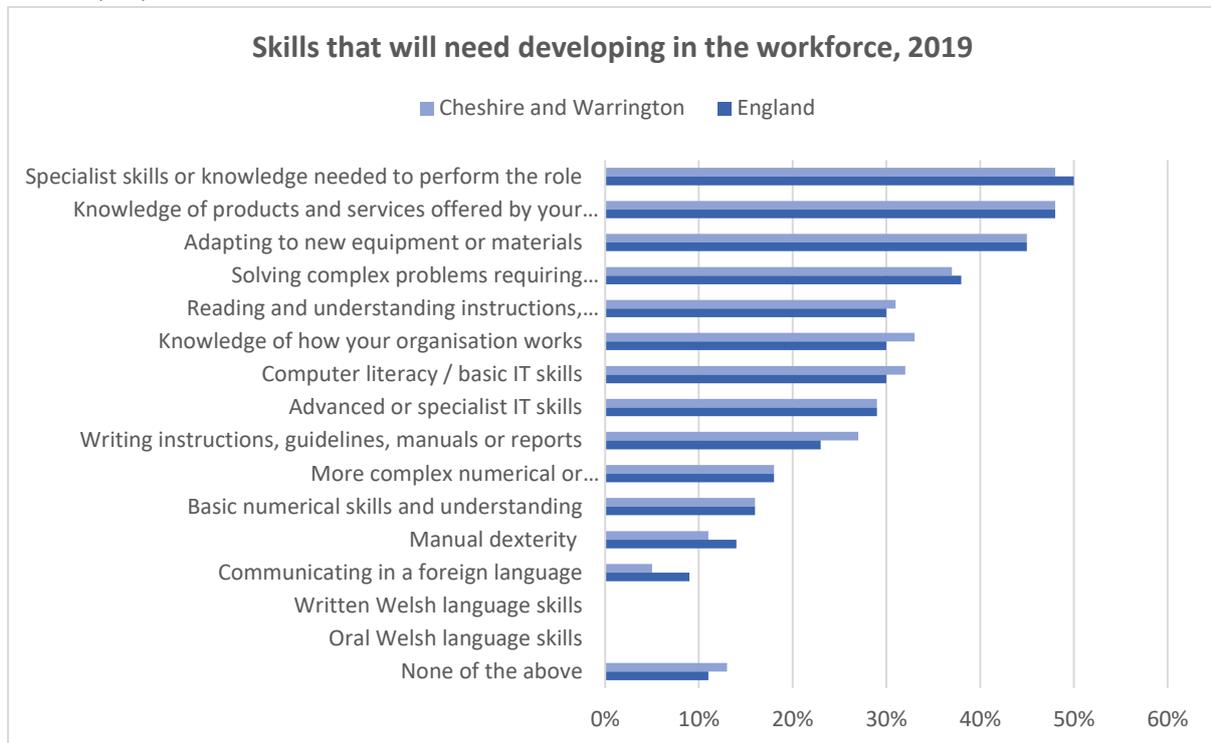
Levels of replacement demand are expected to vary significantly for different occupations, ranging from 22% to 42%. Occupational areas that are expected to experience replacement demand of more than 35% are: Caring personal service occupations; Other managers and proprietors; Health professionals; Corporate managers and directors; Business, media, and public service professionals; Teaching and educational professionals; and Transport and mobile machine drivers and operatives. Only the last of these is exposed to a high risk of automation.

Working Futures also provides a forecast for the overall demand for different skill levels in the Cheshire and Warrington labour market. Demand for skills at Levels 4 to 8 (higher technical to doctorate) are forecast to significantly increase by 75k jobs, demand for skills at Level 3 are forecast

<sup>19</sup> Ibid, Section 4

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.

### 3.3 Employer skill needs



Source: *Employer Skills Survey, 2019 (ESS2019)*

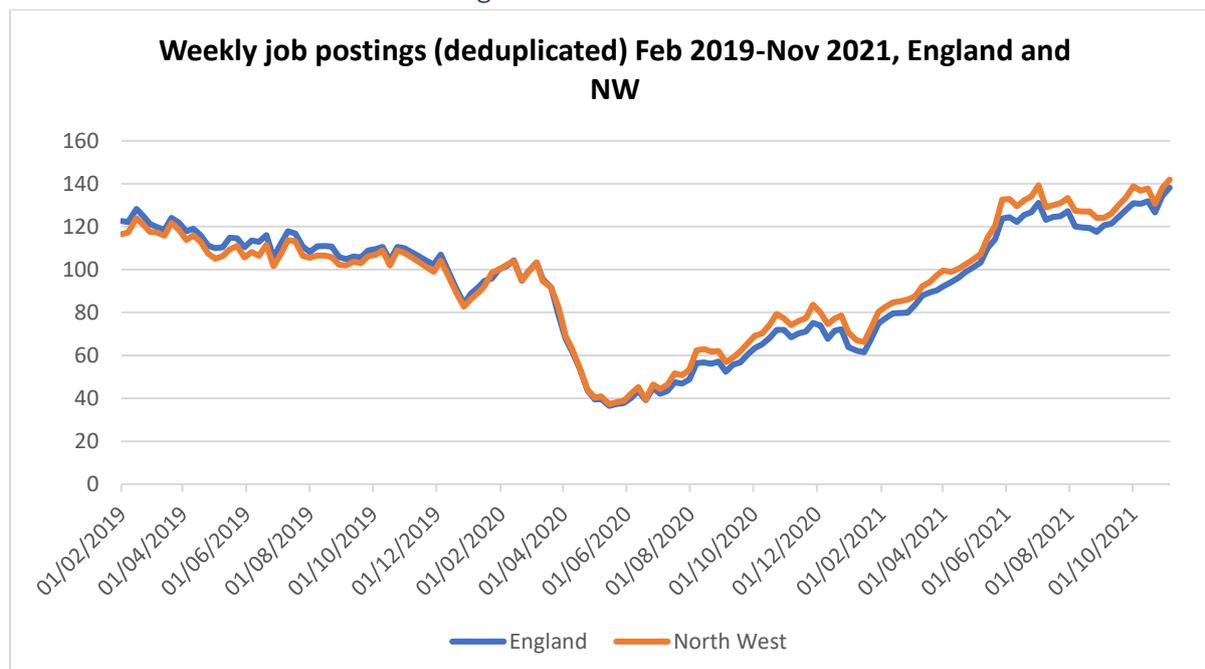
#### Skills that need developing<sup>20</sup>

A pre-pandemic snapshot of employer demand for skills is available from the 2019 Employer Skills Survey. The data is presented above. The Employer Skills Survey 2019 suggests that, when 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; and a particular academic qualification.

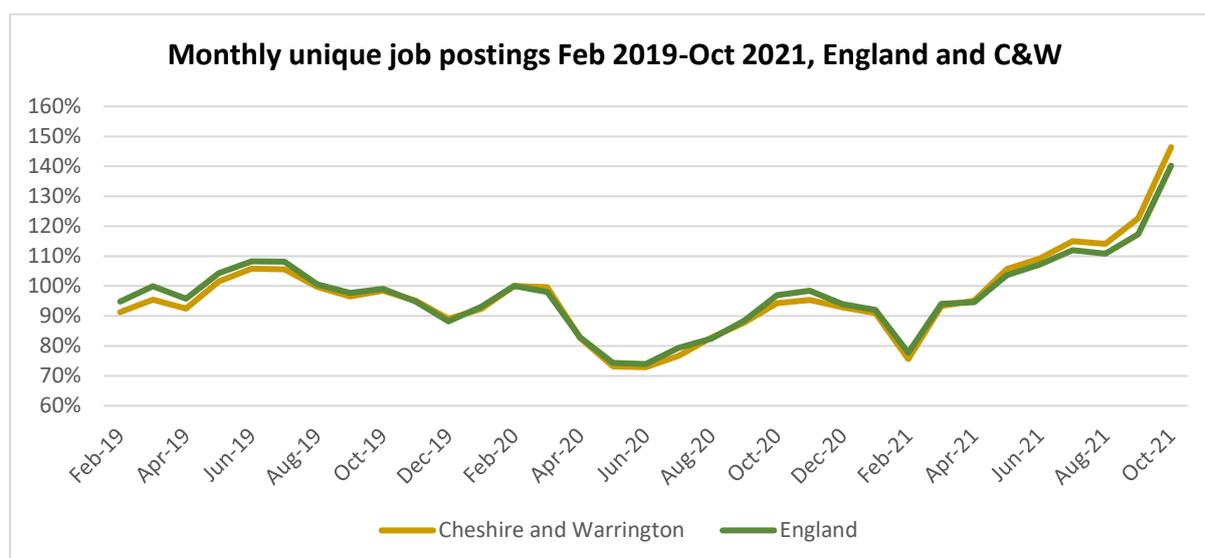
A higher posting intensity for skills suggests that employers are having greater difficulty than average in sourcing that skill in the jobs market. Just less than half of the skills that had a high posting intensity in the period April-Oct 2021 were for digital skills and most of the remainder related to health and care. The five skill areas with the highest posting intensities in this period were: Nursing; Compassion; .NET Framework; C# (Programming Language); and SQL (Programming Language).

<sup>20</sup> *ibid*, Section 4

### 3.4 Recent Vacancies and Job Postings



Source: ONS, Online Job Advert Estimates, November 2021



Source: EMSI Analyst, November 2021

Job roles with >300 postings in C&W Apr-Oct 2021 and >30% growth compared to Apr-Oct 2019					
	Avg. Posting Intensity (Apr 2019 - Oct 2019)	Unique Postings from Apr 2019 - Oct 2019	Avg. Posting Intensity (Apr 2021 - Oct 2021)	Unique Postings from Apr 2021 - Oct 2021	Increase in unique postings 2019-2021 (%)
Plumbers and Heating and Ventilating Engineers	4 : 1	352	7 : 1	941	167%
Civil Engineers	5 : 1	782	7 : 1	1434	83%
Kitchen and Catering Assistants	5 : 1	1472	6 : 1	2688	83%
Elementary Storage Occupations	6 : 1	2277	8 : 1	3691	62%

Business and Financial Project Management Professionals	5 : 1	1250	7 : 1	2010	61%
Production Managers and Directors in Manufacturing	5 : 1	981	7 : 1	1497	53%
Cleaners and Domestic	4 : 1	1763	6 : 1	2675	52%
Quality Assurance and Regulatory Professionals	5 : 1	555	9 : 1	842	52%
Sales and Retail Assistants	5 : 1	1659	7 : 1	2500	51%
Receptionists	4 : 1	731	4 : 1	1072	47%
Electrical and Electronic Trades n.e.c.	6 : 1	715	7 : 1	996	39%
Managers and Directors in Storage and Warehousing	8 : 1	1006	7 : 1	1395	39%
IT Operations Technicians	7 : 1	675	8 : 1	936	39%
Residential, Day and Domiciliary Care Managers and Proprietors	6 : 1	691	10 : 1	957	38%
Electricians and Electrical Fitters	5 : 1	886	8 : 1	1215	37%
Other Administrative Occupations n.e.c.	5 : 1	2111	6 : 1	2839	34%
Care Workers and Home Carers	7 : 1	3247	9 : 1	4348	34%
Design and Development Engineers	6 : 1	630	10 : 1	835	33%
Nursing Auxiliaries and Assistants	6 : 1	1075	7 : 1	1416	32%
Business and Related Associate Professionals n.e.c.	6 : 1	1328	7 : 1	1735	31%
Chefs	5 : 1	2115	7 : 1	2756	30%
<b>Source: EMSI Analyst, Nov 2021</b>					

### Recent Vacancies and Job Postings

The graphs above present data for England and the Northwest (ONS data ) and for England and Cheshire and Warrington (EMSI data). The February 2020 average/February number (ie directly preceding the onset of the pandemic) is indexed at 100 for both datasets. From the ONS data, postings in both England and the Northwest plunged to below 40% of their pre-pandemic volumes in June 2020. The EMSI data also suggests a low for postings in June 2020, although with a less dramatic decline in volumes. From this low there was an increase in the rate of job postings, with a return to pre-pandemic levels of job postings in Cheshire and Warrington, Northwest and England being achieved by April/May 2021.

Since the Spring of 2021, job postings have continued to increase, with the latest data in both datasets suggesting that late 2021 volumes were about 40% higher than levels immediately prior to the pandemic. This increase in job postings indicates two things. Firstly, the onset of an economic recovery and an increase in jobs, following the downturn triggered by lockdown. Secondly, that churn in the labour market is currently higher than is typically the case. A November 2021 survey of 6,000 workers by the recruitment firm Randstad UK found that 69% of them were feeling confident about moving to a new role in the next few months, with 24% planning a change within three to six months. The company said it would normally expect up to 11% of workers to move jobs every year.

To better understand the demand for labour in Cheshire and Warrington detailed analysis has been undertaken of all occupations (four-digit SOC) that have had unique job postings more than 300 between April 2021 and October 2021. This amounts to 45 occupations. Data for job postings for these occupations in this period has been compared to the period April 2019 to October 2019. 21

occupations have experienced a growth in job postings of 30% or over in these two years. These occupations appear, ranked by percentage increase, in the table above.

An increase in the volume of job advertisements for a particular occupation can indicate increased 'churn' in that occupation (ie more people are leaving jobs of that type) or growth in that occupation (ie there is a growth in the absolute number of jobs of this type in the economy). It is known from real-time pay-roll data reported above that the actual volume of pay-rolled employments in Cheshire and Warrington increased by c3% over pre-pandemic levels and this will account for some of the increase in job posting activity. However, it seems likely that much of the observed increase in job postings can be attributed to churn.

Analysis in the Cheshire and Warrington Labour Market Assessment (2022) suggests that churn has increased most in the following occupations:

- Plumbers and Heating and Ventilating Engineers
- Kitchen and Catering Assistants
- Civil Engineers
- Business and Financial Project Management Professionals
- Elementary Storage Occupations
- Cleaners and Domestic
- Sales and Retail Assistants
- Production Managers and Directors in Manufacturing
- Quality Assurance and Regulatory Professionals

The table above also contains information regarding the average posting intensity of job postings for each occupation. This is a measure of how often, on average, a role is advertised. When average posting intensity increases for a particular type of job, this means that employers are making more effort to fill such roles, which may indicate they are becoming harder to fill. Every occupation except two has seen an increase in posting intensity over the two-year period considered.

One strategy that employers can adopt when they find a type of role difficult to fill is to offer higher wages. Official statistics (ASHE) report that actual weekly pay (gross) in Cheshire in Warrington grew from £568.6 to £605.9 (6.6%) 2019 to 2021 . Only Elementary Storage Occupations, Sales and Retail Assistants, Other Administrative Occupations n.e.c., and Care Workers and Home Carers saw increases in advertised pay rates between 2019 and 2021 much above this.

#### 4. Mapping Skills Supply and Demand

##### Mapping Skills Supply and Demand - Summary<sup>21</sup>

The population of Cheshire and Warrington is set to age, increasing the number of retirements and so driving replacement demand in the labour market (ONS). Health, education and business professionals; corporate managers and directors, and other managers and proprietors; and caring personal service occupations will all have replacement demand in excess of 35% between 2017 and 2027 (Working Futures, IER). Emerging evidence suggests that the pandemic may have accelerated replacement demand with record numbers of working age economically inactive declaring that they have retired (LFS).

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<sup>21</sup> Ibid, Section 6

Replacement demand in the Cheshire and Warrington labour market will drive a demand for higher level skills, with demand for skills at Levels 4 to 8 (higher to doctorate) forecast to significantly increase, demand for skills at L3 are forecast to be stable, and demand for skills below L3 are forecast to decline. Demand at L3+ and above is forecast to increase from a stock of 333,000 in 2017 to a stock of 404,000 in 2027. (Working Futures, IER). Real-time data is supporting this analysis, with the five roles with the highest job posting intensity in Cheshire and Warrington at the end of 2021 being at Level 4+ (Nurses; Natural and Social Science Professionals; Physiotherapists; Teaching and Other Educational Professionals; Chemical Scientists; and Electrical Engineers).

The estimated annual outflow of L3+ qualified residents (from LFS and ONS population estimates) is 7,500. The estimated annual inflow of L3 qualified 19-year-olds (from DfE SFR and ONS population estimates) is 6,000. The estimated annual L3 inflow from FE/Apprenticeships for adults (ESFA Localities data cube) is 4,500. This gives an estimated net inflow of L3+ qualified into workforce of 3,000. The IER forecast of annual replacement demand at L3+ is 13,000. This means that there is an estimated annual shortfall of L3 qualified inflow to meet IER forecast replacement demand of c10,000.

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.

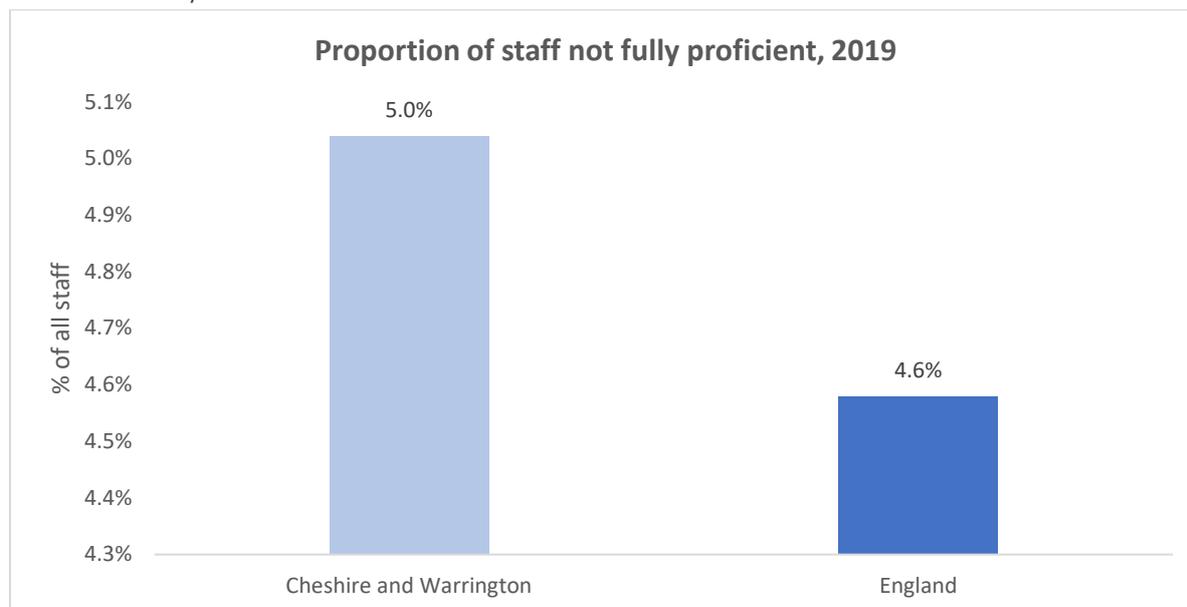
The Employer Skills Survey has found that employers in Cheshire and Warrington are much more likely to have skills shortage vacancies in high skill roles than their counterparts in England and say they are more likely to have bottom line impacts as a result of skills shortage vacancies than is the case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

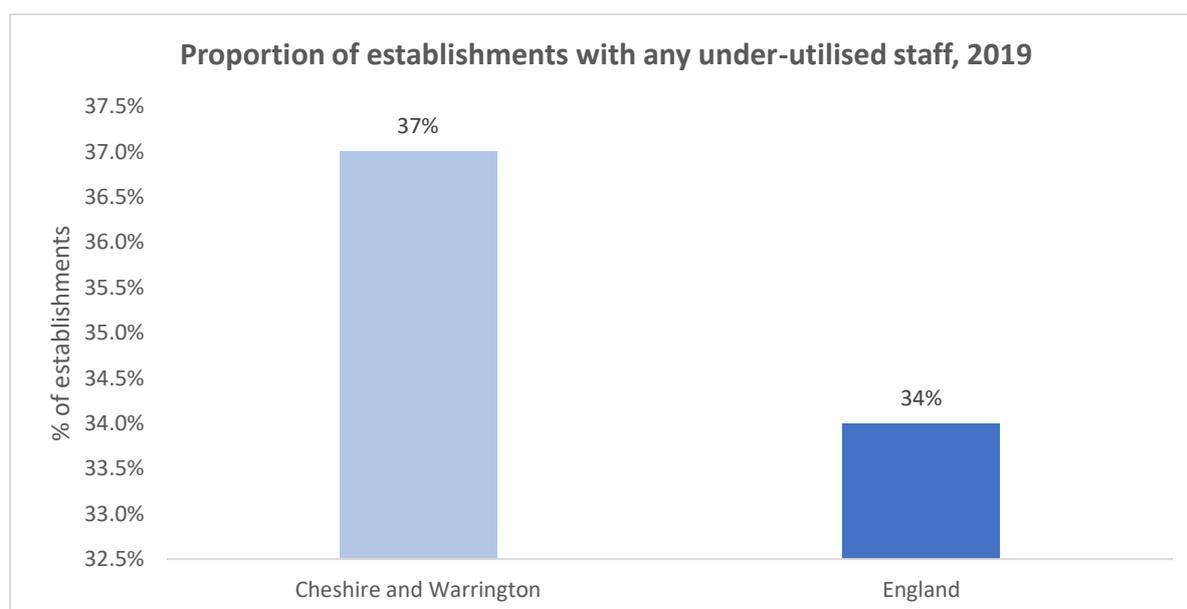
In Cheshire and Warrington, there is an excellent alignment of FE provision with the most deprived areas for Adult Skills (as measured on IMD 2019), however, there are identified neighbourhoods in Crewe, Middlewich, Sandbach and Knutsford that might benefit from proactive outreach from providers; possibly 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.

#### 4.1 Proficiency of the workforce



Source: ESS2019



Source: ESS2019

#### Proficiency of the workforce<sup>22</sup>

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. In the same survey, employers were 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.

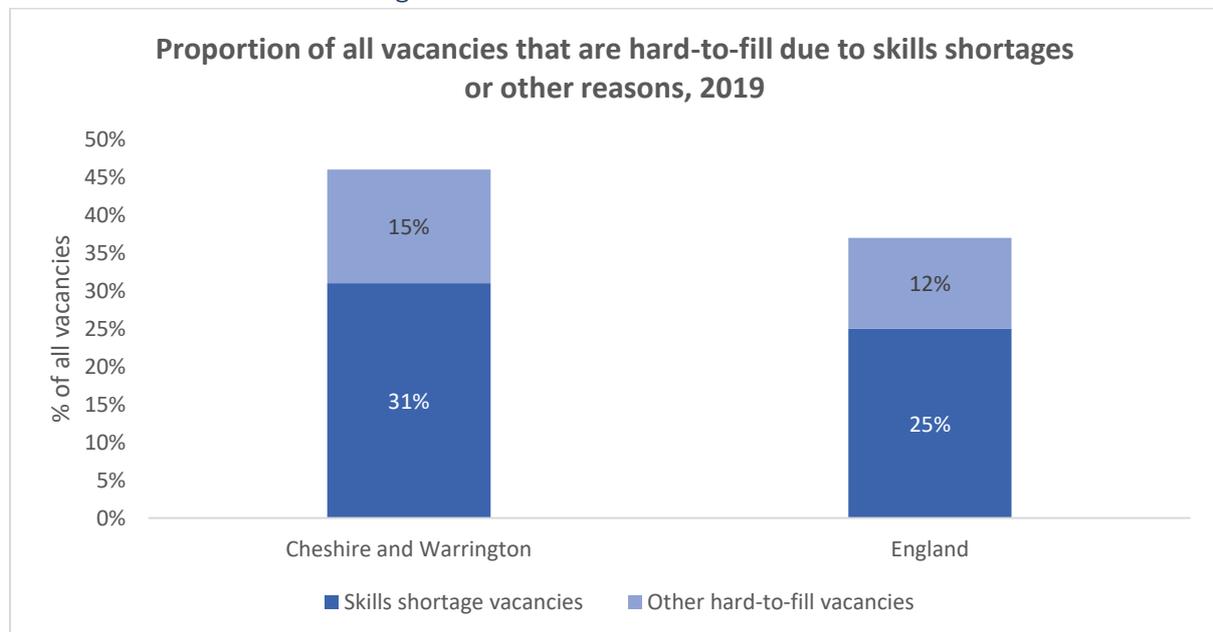
<sup>22</sup> Ibid, Section 6

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. 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.

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. Specifically, 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.

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; and increase recruitment activity / spend. Employers in Cheshire and Warrington were less likely to recruit workers who are non-UK nationals than their English counterparts.

#### 4.2 Hard to fill and skill shortage vacancies.



Source: ESS2019

Hard to fill and skill-shortage vacancies<sup>23</sup>

<sup>23</sup> Ibid, Section 6

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%). 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).

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. 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%).

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. Overall, 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.

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).

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; 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 (see deprivation section 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.

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 than in England.

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".

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%).

One indication that employers are having difficulty recruiting to a type of occupation is the frequency with which they advertise for a particular role. This frequency is known as 'posting intensity'. For those role-types with a high average posting intensity and high current volumes, this suggests vacancies for these roles are hard to fill. On this basis, the following occupational areas should be considered priorities for action by skills and employment partners: Nurses; Natural and Social Science Professionals n.e.c.; Physiotherapists; Teaching and Other Educational Professionals n.e.c.; Chemical Scientists; Electrical Engineers; Design and Development Engineers; Credit Controllers; and IT Engineers.