

# Cheshire and Warrington Labour Market Assessment 2022

BRENNAN WILSON LTD

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## 1. INTRODUCTION

Cheshire and Warrington has a vision to become a growing, inclusive, sustainable, healthy place. Securing a skills and education system in Cheshire and Warrington that can rise to this challenge will 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.

Local labour and learning markets suffer from a range of information market failures. Examples include:

- Skills providers being unaware of things like: employer curriculum requirements; levels of forecast replacement demand in sectors and occupations; prevalence and types of skill shortage vacancies or skills gaps; spatial distribution of employment by sector etc.
- Individuals not having the information that they need about careers and learning options available to them.
- Employers not having information about things like workforce demographics or the local skills offer.

This document seeks to help address these issues and contains an analysis of the Cheshire and Warrington Labour Market, using data available at the end of 2021 and before. It brigades key intelligence on labour market demand and supply issues and draws on a body of evidence about the Cheshire and Warrington labour market which has been developed over the last two years. This analysis has been overseen by the Cheshire and Warrington Data and Labour Market Group under the leadership of the Cheshire and Warrington Employers' Skills and Education Board. The analysis includes detailed reports on employer demand; digital skills; the training infrastructure; young people; low carbon jobs; and the impact of Covid-19 on the Labour Market. These reports can be found [here](#).

Taken together these reports constitute a substantial body of analysis of the Cheshire and Warrington labour market. This intelligence is being used by:

- Our local colleges and training providers to help inform their curriculum planning and their investments in specialist equipment and other facilities (including the Skills Development Fund and the Institute of Technology).
- The Pledge to provide our local schools with the labour market intelligence they need to inspire and inform their students about new technologies and career opportunities and to set their lessons within the context of real-life business problems/challenges and to shape the plans for the Cheshire and Warrington Careers Hub.
- The Cheshire and Warrington Jobs Portal which, with over 20k job vacancies, has had over 95k unique monthly user visits over the last 10 months from people searching for job and apprenticeship opportunities.
- Job Centre Plus and the various local organisations that support the unemployed and economically inactive.
- Our Digital Skills Partnership to identify its' geographical and thematic priorities for action.
- The 17 Local Growth Fund skills investments that have recently started to deliver across Cheshire and Warrington.

## 2. EXECUTIVE SUMMARY

As noted in the Introduction above a key issue in the labour market is that of information failure. This report seeks to help address that issue by providing a comprehensive and referenced assessment of the labour market against the following headings:

**Analysis of the local landscape:** population; employment and unemployment; jobs GVA and business stock; industrial structure; occupational structure; earnings and income; and deprivation.

**Demand for labour and skills:** impact of Covid-19; economic development drivers; industry sector analysis; occupational analysis; sector earnings analysis; employer demand for skills; forecast future demand; and automation.

**Skills supply:** 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 in Cheshire and Warrington; and employer training.

**Supply and demand:** skills gaps and skill shortage vacancies; spatial alignment of skills supply with community demand; and future demand for skills.

In addition to information failures in the labour market, the following six key issues that can be addressed by local action have been identified from the body of labour market intelligence summarised in this report:

1. The labour market impacts caused by the global pandemic must be mitigated, and action continues to be needed to ensure a recovery that delivers growth and inclusion and meets employer demand including filling hard to fill vacancies, by linking the places with the highest levels of need to the (often adjacent) places with the highest levels of opportunity.
2. To meet current demand, we need to fill at least 20K vacancies, many at Level 3 +; and to meet future employer demand, Cheshire and Warrington needs 71,000 more adults qualified to Level 3+, and 75,000 more qualified to level 4+ by 2027 compared to 2017. Many of these roles will require higher technical and digital skills.
3. Employers in C&W are much more likely to have skills shortage vacancies in high skill roles and more likely to experience bottom line business impacts from this. A range of action is needed to support employers, including skills support and support to develop flexible employment offers.
4. 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%). This failure to maximise the skills of our young people puts unnecessary constraints on economic growth. Work is already planned to ensure that the first year of the Careers Hub will focus on schools with the highest numbers of young people eligible for FSM.
5. Where young people live in Cheshire and Warrington links to their level of attainment. Young people tend to do less well in Ellesmere Port, North Warrington and Crewe.
6. There are significant gender disparities in learning in ICT, Engineering, Health and Social Care, and Construction across all learning routes. This embeds a structural deficiency in the labour market where some occupations only draw on the talents of half of the population. Female participation in digital skills is too low at every level and for all ages.

The underpinning evidence for these issues is discussed below.

## 2.1 Covid-19 continues to have adverse impacts on the labour market

At the time of writing, the pandemic isn't over. Its impact on the labour market has been complex and will continue to be so. The immediate impact of the pandemic was significantly cushioned by the furlough scheme and other measures introduced by Government. Notwithstanding this, early in the pandemic there were significant volumes of redundancies, increases in claimant unemployment, increases of in-work benefit claims, and reductions in the business stock.

However, some key labour market indicators are now more positive:

- By the autumn of 2021, the number on payrolls in Cheshire and Warrington was 1.3% higher than was the case pre-pandemic (HMRC).
- In October 2021, the volume of UC claimants seeking work for a year or less in Cheshire and Warrington (DWP measure) was lower (5660) compared with February 2020 (8606)
- Even at the height of the pandemic, eleven wards had experienced jobs growth of more than 500 (2019 to 2020 BRES).
- By October 2021, job postings were at 146% of the February 2020 levels, indicating a high level of labour market churn.

Other labour market indicators continue to cause concern:

- In October 2021 the number of UC claimants seeking work in Cheshire and Warrington stood at 18,472 - 55% higher than the pre-pandemic level (DWP). The number of UC claimants seeking work for more than three years was more than three times higher than the pre-pandemic level and when JSA claimants are considered alongside UC, the long-term unemployment problem is even larger (DWP).
- In Jul 20- Jun 21, the employment rate in Cheshire and Warrington was 3% lower than pre-pandemic (LFS).
- In Jul 20 – Jun 21, the number of self-employed in Cheshire and Warrington had decreased by 8,700 (13%) compared to pre-pandemic levels (LFS).
- Between the summer of 2021 and early December 2021, workplace mobility data for Cheshire and Warrington (Google) hovered at around 30% below pre-pandemic levels, suggesting a long-term change in the nature of work.

## 2.2 The Cheshire and Warrington labour market needs more adult Level 3+ qualifications

The population of Cheshire and Warrington is relatively old. 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. This is why the working age population (aged 16-64) constitutes a lower percentage of the total population for Cheshire and Warrington and all three Local Authorities than is the case for England and the Northwest (ONS).

The population is set to age further, 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).

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 10,000.

### 2.3 Skill shortage vacancies are more prevalent than in England and constrain economic activity more

It is reported in the Employer Skills Survey 2019 that 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).

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. When asked about the technical/practical skills that they found difficult to obtain from applicants for all their skill shortage vacancies, a much higher proportion of Cheshire and Warrington employers (78% vs 63% in England) 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” (ESS2019). In Apr-Oct 2021, just less than half of the skills that had a high posting intensity in this period were for digital skills and most of the remainder related to health and care (EMSI Analyst).

Real-time data suggests that some employers are beginning to change job specifications to be more flexible (eg specifying that part-time working will be considered); although many are not doing so yet (C&W Jobs Portal).

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%) (ESS2019).

Analysis of job postings data (EMSI Burning Glass) at the end of 2021 shows that the key specialist skills sought by employers are for customer service and teamwork; the key baseline skills sought are communication and organisational; and the key digital skills are for Microsoft (Office and Excel) and SQL. The most sought certifications are for CSCS and various nursing and care qualifications.

Many hard to fill vacancies are seeking good digital and communication skills. Hard to fill vacancies with a high job posting intensity and high current volumes should be a priority for interventions from

skills and employment partners. These interventions will vary from intensive vacancy-focused support to individuals to longer-term high-level skills programmes. On this basis, the following occupational areas (identified from EMSI Analyst) should be considered priorities for action:

- Nurses
- Natural and Social Science Professionals
- Physiotherapists
- Teaching and Other Educational Professionals
- Chemical Scientists
- Electrical Engineers
- Design and Development Engineers
- Credit Controllers
- IT Engineers

Actions will include skills interventions such as on the job training but will also need to include supporting employers to review specifications for jobs and changing terms and conditions. The Jobs Portal includes a page<sup>1</sup> specifically for employers advising them on changes in the labour market and the need to change job specs and the Growth Hub can support on these issues.

#### 2.4 The gap between disadvantaged and non-disadvantaged young people is too big and constrains economic growth

By the age of 11 there is already an attainment gap between children classified as disadvantaged and those who are not. This attainment gap in Cheshire and Warrington is larger than for England. The percentage of disadvantaged and non-disadvantaged pupils that achieved the expected standard in reading, writing and maths at Key Stage 2 in 2018/19 had an attainment gap of 24-26 ppt in the three Cheshire and Warrington local authorities, higher than England which stood at 20ppt.

This attainment gap carries through to attainment at 16 (Key Stage 4, Attainment 8 measure). The gap has been higher in all three local authorities than in England every year for the past three and widened in all three in 2020/21. At age 16, the gap between disadvantaged pupils securing a sustained education destination compared to all other pupils in 2019/20 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, the Level 2 and Level 3 attainment gaps at age 19. The gap between the proportion eligible for free school meals that achieved a Level 2 and the proportion not eligible for Free School Meals achieving a Level 2 has been smaller in England than in the three Cheshire and Warrington local authorities every year since 2004/5. However, in the last year for which there is data the gap narrowed for all three local authorities. This was the first year of examination disruption due to the pandemic.

The position is similar for the attainment of Level 3 at age 19. In England, the gap in attainment of Level 3 for those eligible and those not eligible for FSM has been approximately 25% between 2004 and 2020. The three Cheshire and Warrington local authorities have all consistently had a gap more than England, usually greater than 5ppt in any given year. In 2020, where examinations were disrupted by the pandemic, the gap increased in Cheshire East and Warrington and narrowed in Cheshire West and Chester.

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<sup>1</sup> <https://www.candwopportunities.co.uk/employers/>

The Level 3 disadvantage attainment gap at 19 can, in part, be explained by what proportion of disadvantaged learners were entered for Level 3 programmes. The disadvantage gap on Level 3 entries was 28ppt for providers in Cheshire East, 12ppt for providers in Cheshire West and Chester, and 30ppt for providers in Warrington.

## 2.5 Where young people live links to their level of attainment and progression

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). The highest levels of deprivation occur in Ellesmere Port, areas to the northwest of Chester, parts of Warrington, parts of Winsford and areas of Crewe. Many of these areas are adjacent to areas of employment opportunity but continue to experience high levels of worklessness.

The indicators that are used in the IMD's Children and Young People Education sub-domain are: Key Stage 2 attainment; Key Stage 4 attainment; Secondary school absence; Staying on in education post 16; and entry to higher education. 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 in Cheshire and Warrington 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.

In 2020/21, 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. In 2019, four parliamentary constituencies – Ellesmere Port and Neston, Crewe and Nantwich, City of Chester, and Warrington South – scored below the English average on Progress 8.

## 2.6 There are significant gender disparities in learning delivery

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.

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 16-18 Level 3 Diploma starts in FE. However, there were significant variations in the gender split for starts on individual Sector Subject Areas (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.

Overall, 56% of starts by adults 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 is and to ensure that the future Shared Prosperity Fund investment does not repeat this gender disparity.

Female participation in FE Digital skills programmes was 29% at Level 2, 29% at Level 3 and 25% at Level 4+.

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.

### 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 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 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	460,800	479,100	939,900
Cheshire East	189,300	197,400	386,700
Cheshire West and Chester	167,600	176,200	343,800
Warrington	103,800	105,600	209,400

*Source: ONS, Population estimates - local authority based by five year age band, Nomis Oct 2021*

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

Population 16-64 for Cheshire and Warrington, constituent Local Authorities and England						
Area	Male		Female		Total	
	number	%	number	%	number	%
Cheshire and Warrington	278,500	60.4	286,400	59.8	564,900	60.1
Cheshire East	112,300	59.3	115,700	58.6	228,000	59.0
Cheshire West and Chester	100,900	60.2	106,100	60.2	207,000	60.2
Warrington	65,300	62.9	64,600	61.2	129,900	62.0
England	17,625,700	63.0	17,608,200	61.6	35,233,900	62.3
North West	2,279,000	62.6	2,293,900	61.5	4,572,900	62.1

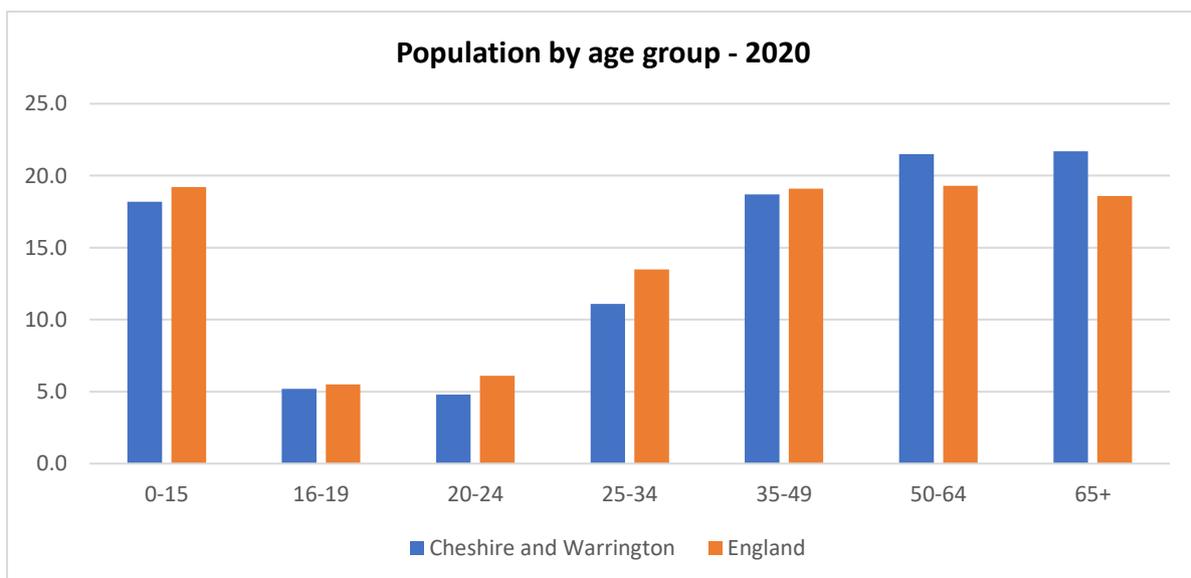
*Source: ONS, Population estimates - local authority based by five year age band, Nomis Oct 2021*

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.

<b>Ethnicity of the Population by Local Authority</b>		
<b>Local Authority</b>	<b>Ethnicity</b>	<b>Percentage</b>
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

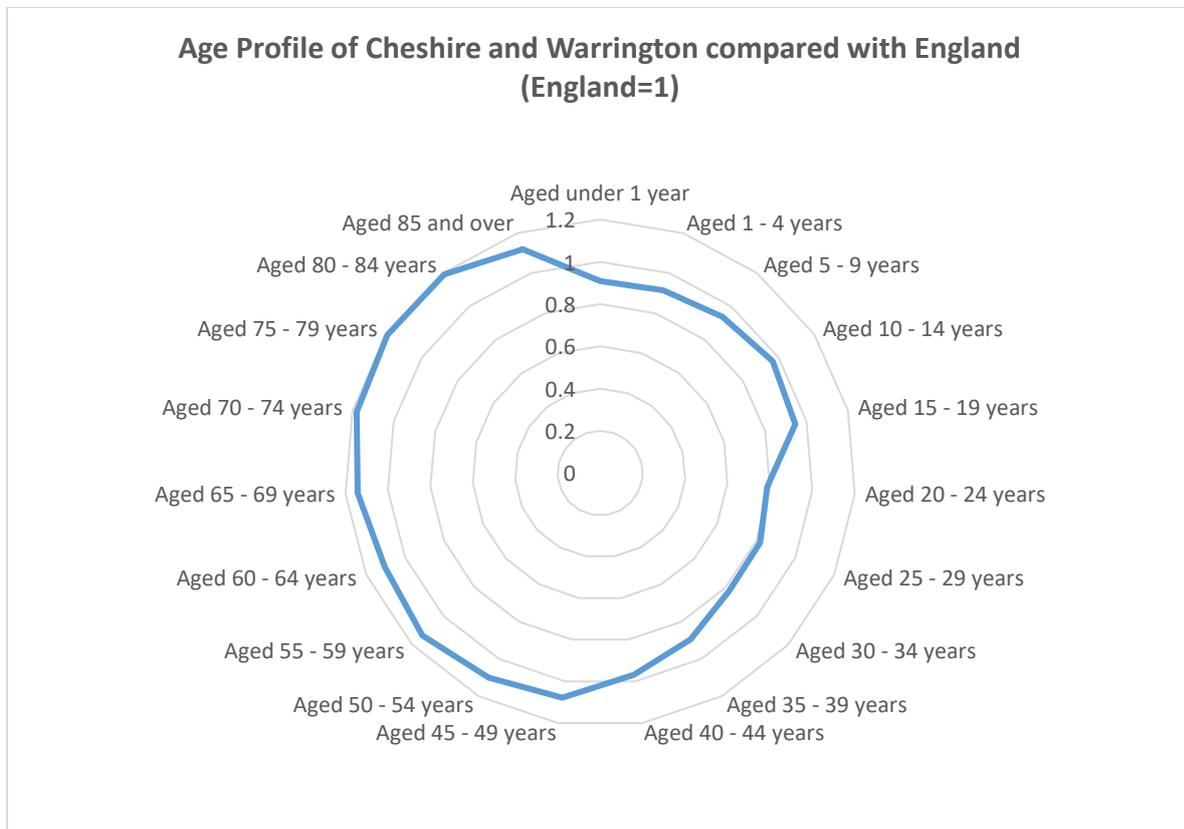
**Source: Race Disparity Unit/Census 2011**

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



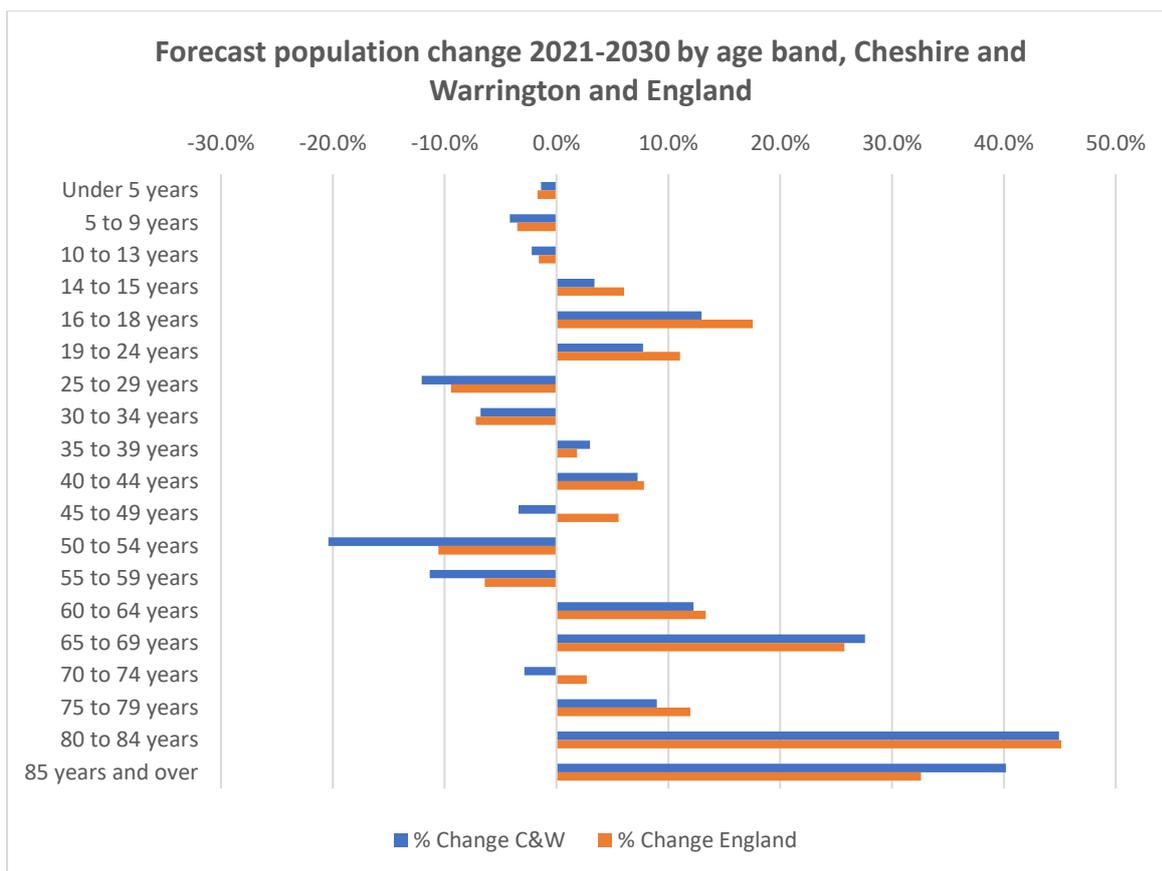
**Source: ONS Population Estimates**

In the diagram below, the England age profile would be a circle with a radius of 1. As can be seen, 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.



Source: ONS Population estimates 2021

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. The chart below illustrates the forecast changes to Cheshire and Warrington and England’s population by 2030 by age bands. It can be seen from this that 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 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.



Source: EMSI Analyst

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.

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 35,000 people over the decade.

Net Migration into Cheshire and Warrington, international and national, 2010-2020		
	Net International	Net National
Cheshire East	961	16,799
Cheshire West and Chester	1,418	11,149
Warrington	2,219	2,361
Cheshire and Warrington	4,598	30,309

Source: ONS, Local Area Migration Indicators

Directly following the Brexit referendum (2016-17), international migration figures showed a net outflow from Cheshire and Warrington. However, since mid-2017 there has been a small net inflow each year.

<b>International Migration to Cheshire and Warrington 2016-2020</b>								
	<b>2016-2017</b>		<b>2017-2018</b>		<b>2018-2019</b>		<b>2019-2020</b>	
	<b>Inflow</b>	<b>Outflow</b>	<b>Inflow</b>	<b>Outflow</b>	<b>Inflow</b>	<b>Outflow</b>	<b>Inflow</b>	<b>Outflow</b>
Cheshire East	1,515	1,652	1,540	1,662	1,392	1,001	1,240	1,267
Cheshire West and Chester	1,402	1,473	1,501	1,385	1,362	779	1,351	1,085
Warrington	964	1,021	1,055	885	926	568	796	786
C&W	3,881	4,146	4,096	3,932	3,680	2,348	3,387	3,138

*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 England and the Northwest 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 West and Chester and Warrington) than is the case for Great Britain.

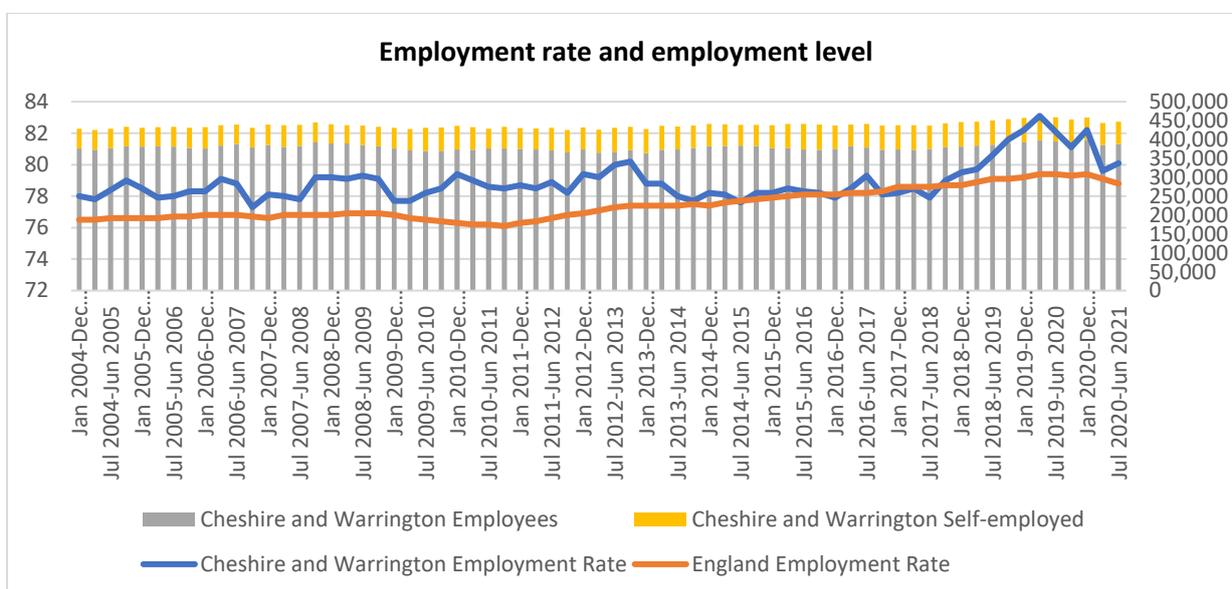
The percentage unemployed (International Labour Organisation definition – ILO) was lower in Cheshire and Warrington and its three constituent Local Authorities than was the case for England with unemployment standing at 4.1% for Cheshire and Warrington compared to 5.1% for England. The percentage in self-employment was slightly lower in Cheshire and Warrington than for England.

<b>Employment and unemployment (Jul 2020-Jun 2021), Cheshire and Warrington, England and NW</b>						
	Cheshire East	CWAC	Warrington	C&W	NW	England
<b>All People</b>						
Economically Active†	76.3	83.6	81.2	80.1	77.0	78.8
In Employment†	72.5	81.1	78.3	77.0	73.1	74.7
Employees†	62.6	71.0	70.0	67.4	64.6	64.9
Self Employed†	9.7	9.4	8.3	9.3	8.3	9.6
Unemployed§	4.1	3.4	3.8	3.9	4.9	5.1
<b>Males</b>						
Economically Active†	77.8	87.5	82.8	82.5	80.1	82.5
In Employment†	73.7	85.0	79.8	79.3	75.9	78.0
Employees†	63.2	73.4	70.4	68.6	64.7	65.4
Self Employed†	10.5	11.6	9.4	10.6	11.1	12.4
Unemployed§	#	#	#	3.9	5.1	5.3

<b>Females</b>						
Economically Active†	74.9	79.7	79.7	77.7	73.8	75.1
In Employment†	71.4	77.2	76.7	74.8	70.4	71.4
Employees†	62.1	68.7	69.6	66.2	64.6	64.3
Self Employed†	9.0	7.3	7.2	7.9	5.5	6.9
Unemployed§	#	#	#	3.8	4.7	4.8

**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 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)



**Source: LFS/APS, ONS (SAP Core Indicator)**

The chart above illustrates that 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%.

It can be seen from the table below that at 19.9%, Cheshire and Warrington LEP had a lower level of economic inactivity than the Northwest Region (23%) and England (21.2%). Economic inactivity was also lower than England in both Cheshire West and Chester (16.4%) and Warrington (18.8%). Economic inactivity was, however, higher than England and the NW in Cheshire East.

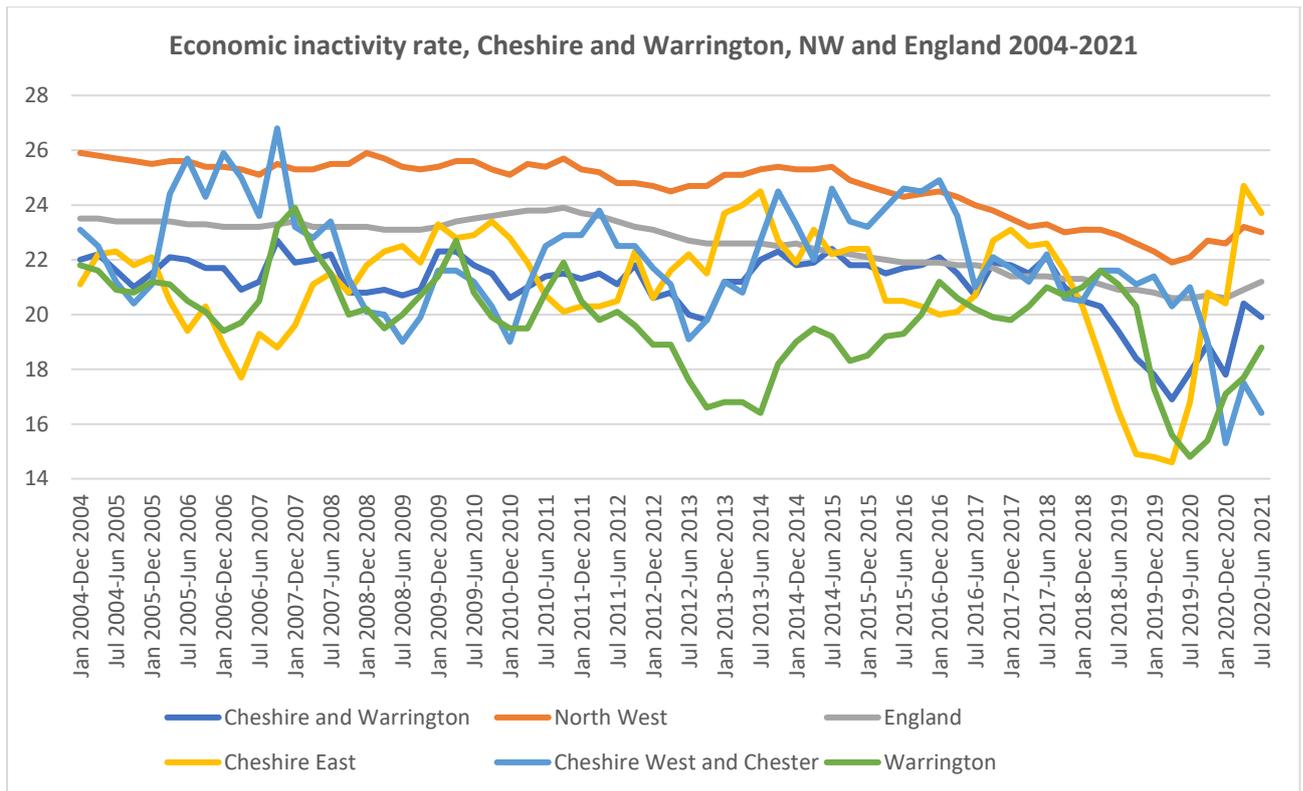
Compared with England, fewer people were economically inactive in Cheshire and Warrington because they were a student or because they had family responsibilities. On the other hand, significantly more were economically inactive due to retirement in Cheshire and Warrington than in England.

13.5% of those economically inactive in Cheshire and Warrington said that they wanted a job, which was significantly lower than the 21% saying this in England.

<b>Economic inactivity (Jul 2020-Jun 2021)</b>						
	Cheshire East	CWAC	Warrington	C&W	NW	England
Total	23.7	16.4	18.8	19.9	23.0	21.2
Student	28.4	#	25.8	23.9	26.1	28.9
Looking After Family/Home	13.4	20.4	17.5	16.4	18.6	19.8
Temporary Sick	!	!	!	!	1.8	2.0
Long-Term Sick	24.5	15.7	25.7	22.1	26.5	22.9
Discouraged	!	!	!	#	0.7	0.8
Retired	25.2	36.5	15.4	26.5	14.6	13.4
Other	8.0	#	12.1	9.3	11.7	12.3
Wants A Job	15.6	#	12.8	13.5	19.4	21.0
Does Not Want a Job	84.4	89.4	87.2	86.5	80.6	79.0
<b>Source: ONS annual population survey</b>						
# Sample size too small for reliable estimate ( <a href="#">see definitions</a> )						
! Estimate is not available since sample size is disclosive ( <a href="#">see definitions</a> )						
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						

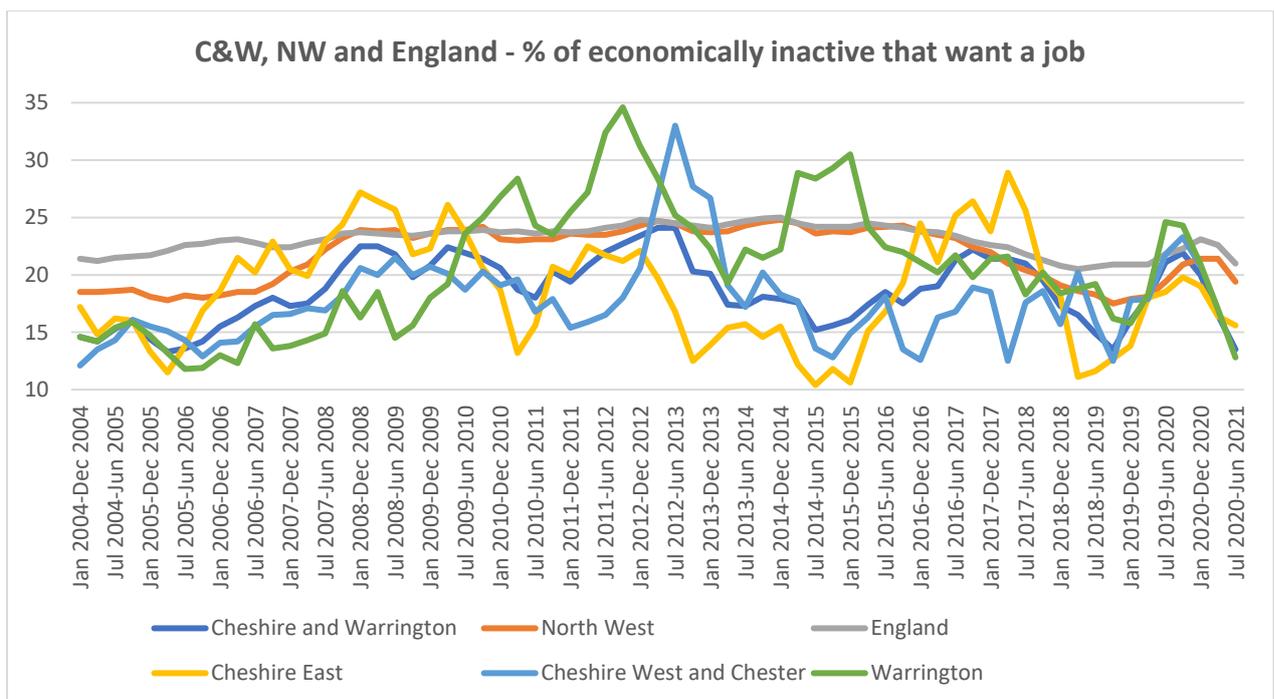
The economic inactivity rate in Cheshire and Warrington going into the pandemic was 16.9% (April 2019-March 2020). This increased to a peak of 20.4% (April 2020 – March 2021) before dropping back slightly to 19.9%. The gap between England and Cheshire and Warrington economic inactivity rates has decreased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



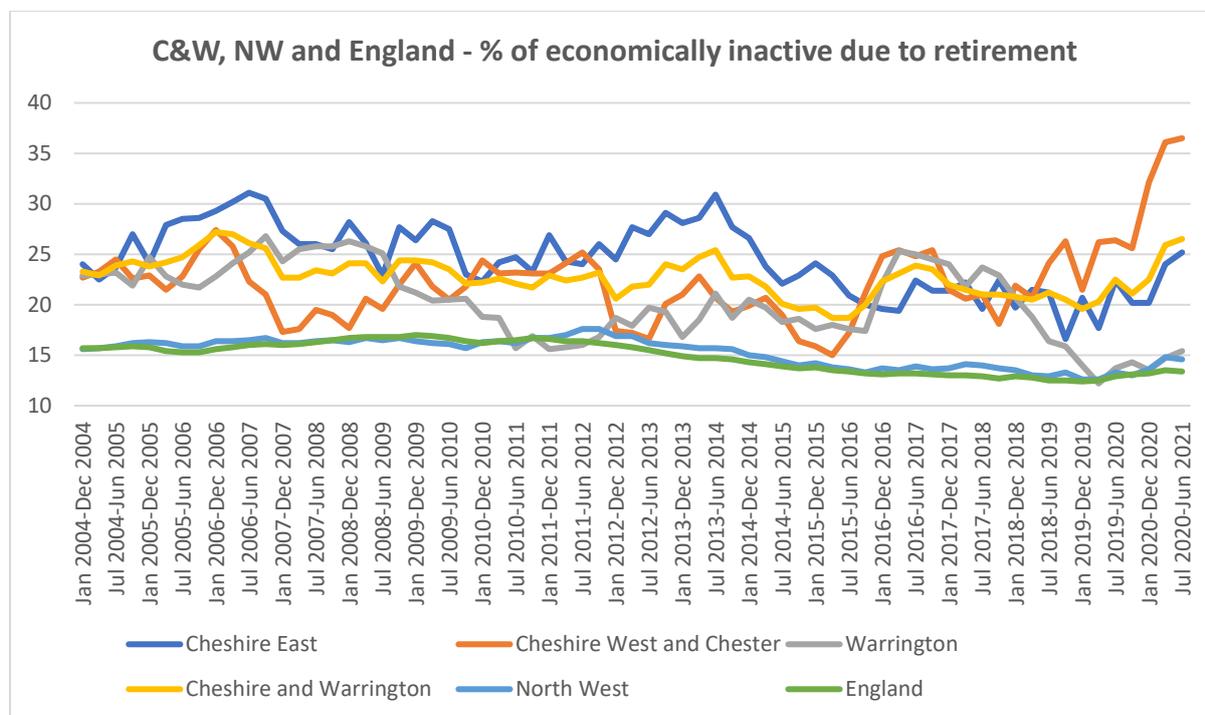
Source: NOMIS, Annual Population Survey

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. Together they seem to indicate that many of the economically inactive who previously said that they wanted a job have now retired. The first chart shows that 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).



Source: NOMIS, Annual Population Survey

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 retirement metric in England (13.4%). Every local authority in Cheshire and Warrington often exceeds the English measure, but the current retirement rate 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.



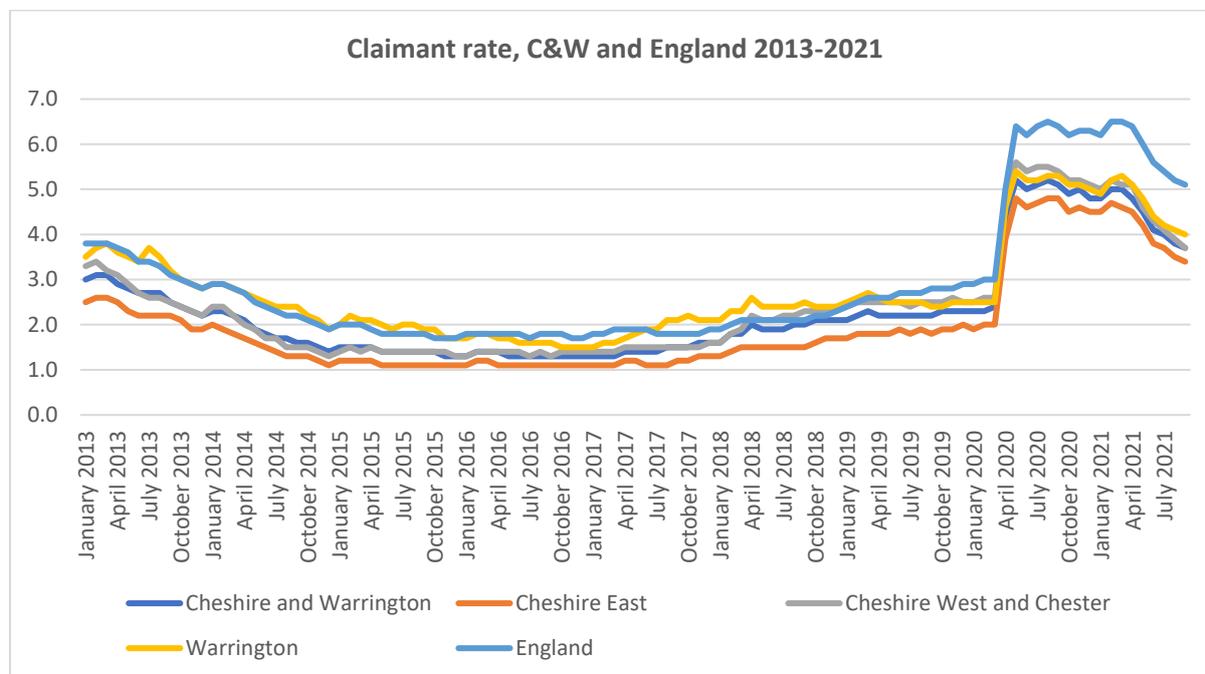
Source: NOMIS, Annual Population Survey

The percentage of the resident population claiming out of work benefits benefit is lower in Cheshire and Warrington and all three Local Authorities as compared with the Northwest region and England. This is the case for males and females.

Claimant rate as a percentage of residents aged 16-64, C&W, NW and England			
	Total	Male	Female
Cheshire East	3.2	3.7	2.7
Cheshire West and Chester	3.6	4.3	2.9
Warrington	3.7	4.4	3.1
Cheshire and Warrington	3.5	4.1	2.9
Northwest	5.4	6.5	4.2
England	4.9	5.6	4.1

Source: NOMIS, Nov 2021

The chart below illustrates the data over time for the Claimant rate for England, Cheshire and Warrington, and its constituent local authorities. The Cheshire and Warrington rate has increased from 2.3 % in February 2020 to 3.7% in September 2021. However, the rate of recovery 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



Source: NOMIS, Oct 2021

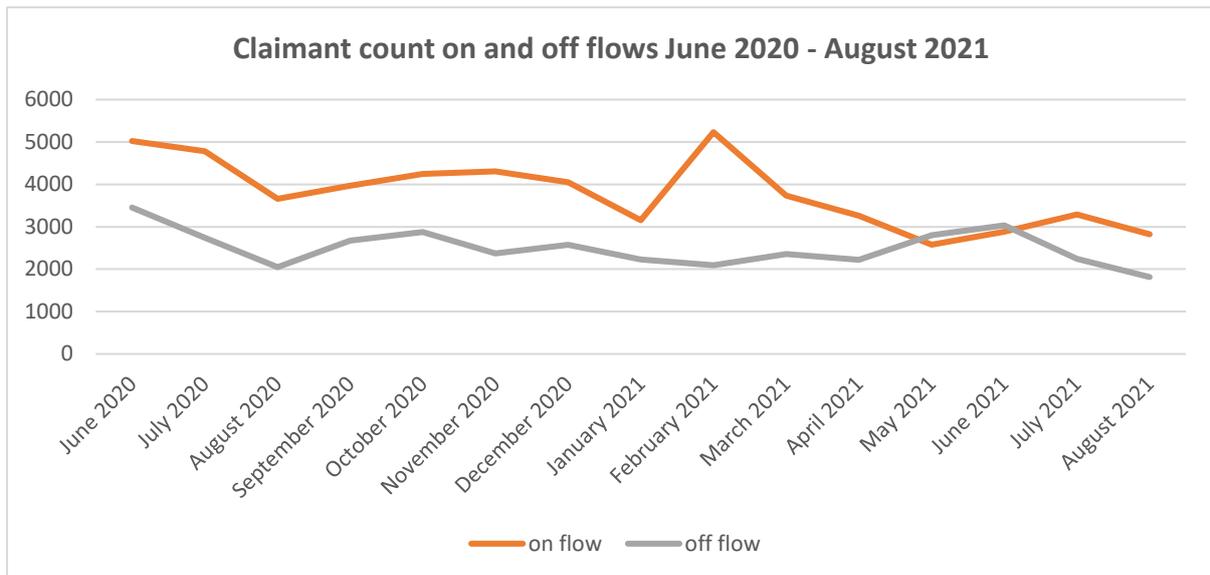
The table below presents information on the claimant count by age. A higher percentage of 18-24 and 18-21 year olds are claimants in Cheshire and Warrington than is the case for the population as a whole. This is also the case for England and the Northwest region. The claimant rate is lower in Cheshire and Warrington for every age band when compared with England and the Northwest.

Claimant count by age - not seasonally adjusted (October 2021)				
	Cheshire And Warrington (Level)	Cheshire And Warrington (%)	North West (%)	England (%)
Aged 16+	19,570	3.5	5.4	4.9
Aged 16 To 17	30	0.1	0.3	0.2
Aged 18 To 24	3,285	5.2	6.9	6.1
Aged 18 To 21	1,835	5.4	7.2	6.1
Aged 25 To 49	11,450	4.1	6.2	5.5
Aged 50+	4,810	2.4	3.8	3.8

Source: ONS Claimant count by sex and age

Note: % is number of claimants as a proportion of resident population of the same age

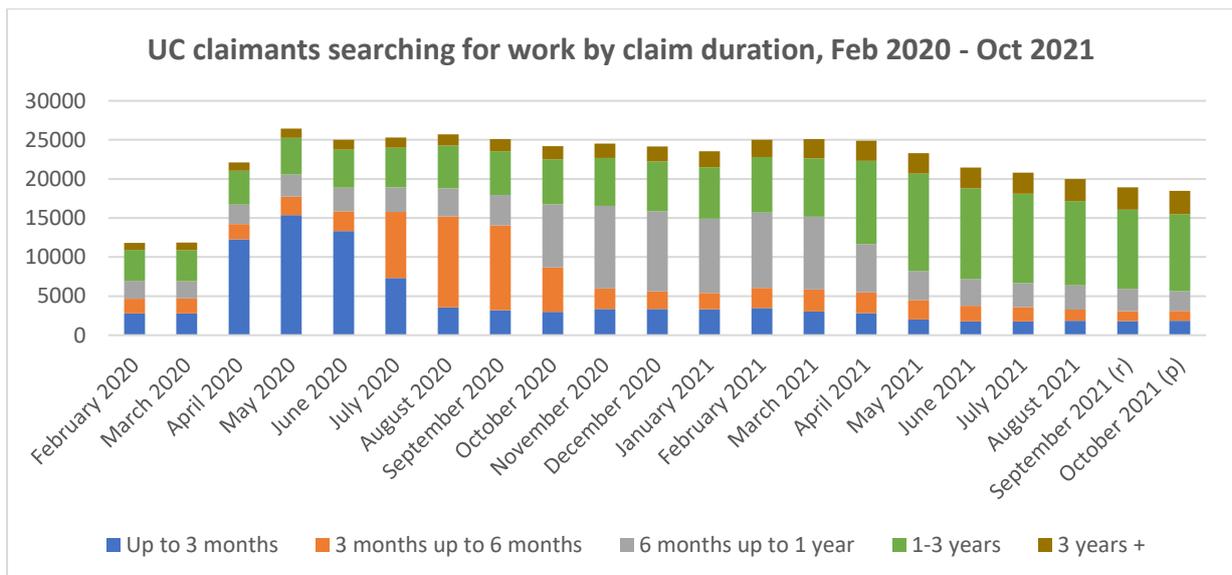
The chart below illustrates the on-flows and off-flows of claimants of out of work benefits from June 2020 to August 2021. Between March 2020 and May 2020, there was a very significant spike in on-flows to the claimant count because of the onset of the pandemic. This is not shown on the chart. With the exception of two months in the late spring/early summer 2021, claimant on-flows have exceeded claimant off-flows.



Source: StatXplore, Alternative Claimant Count On flows/Off flows

The chart below shows the volume of Universal Credit claimants in Cheshire and Warrington searching for work by the duration of their claim between February 2020 to October 2021. Claims 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 (2,073 increase) claiming for more than three years between these dates and a 150% increase in numbers (5,883 increase) claiming for between 1 and 3 years.

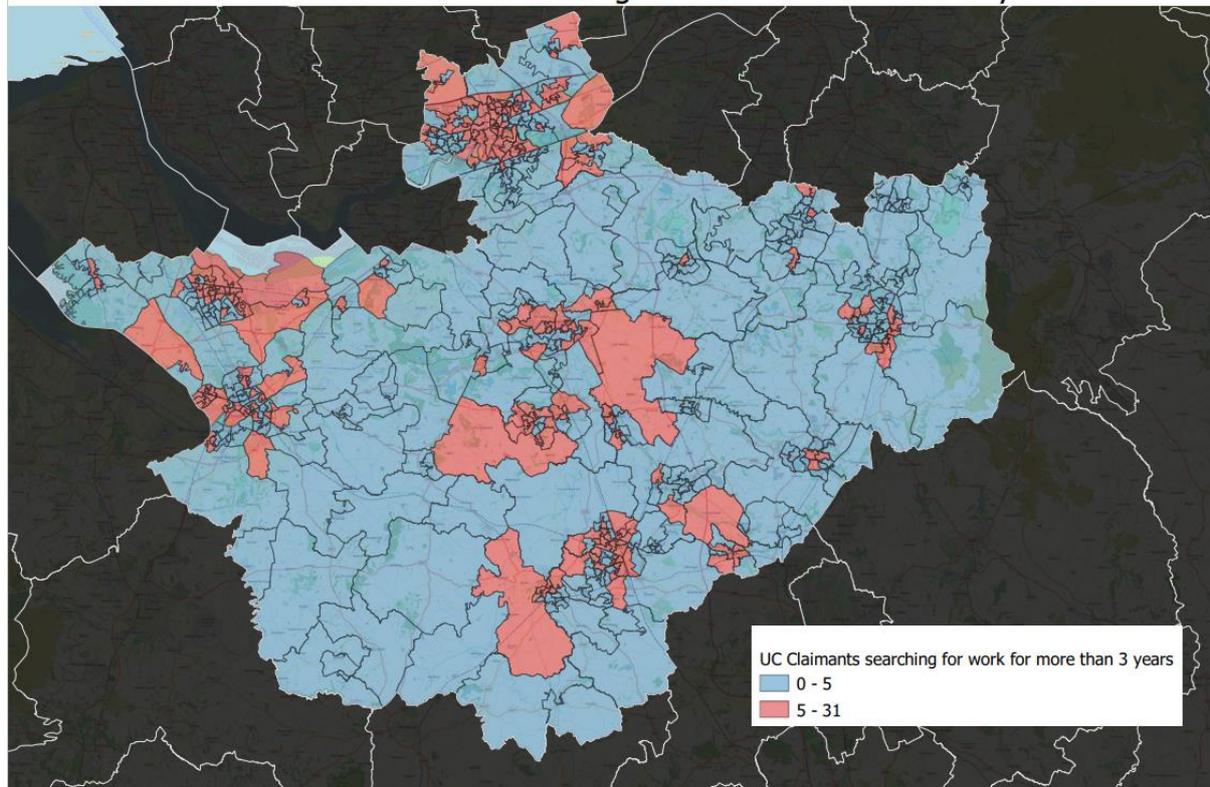


Source: StatXplore, November 2021

Half of the Lower Super Output Areas (LSOAs) in Cheshire and Warrington have more than 5 residents that have been claiming Universal Credit and searching for work for more than 3 years.

These neighbourhoods are shown on the map below in red. It can be seen from this that there are concentrations of such neighbourhoods in all of the LEP's major conurbations.

#### LSOAs with more than 5 claimants searching for work for more than 3 years



Map by Brennan Wilson Ltd in QGIS. Data from StatXplore, OS and StreetMap

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'.

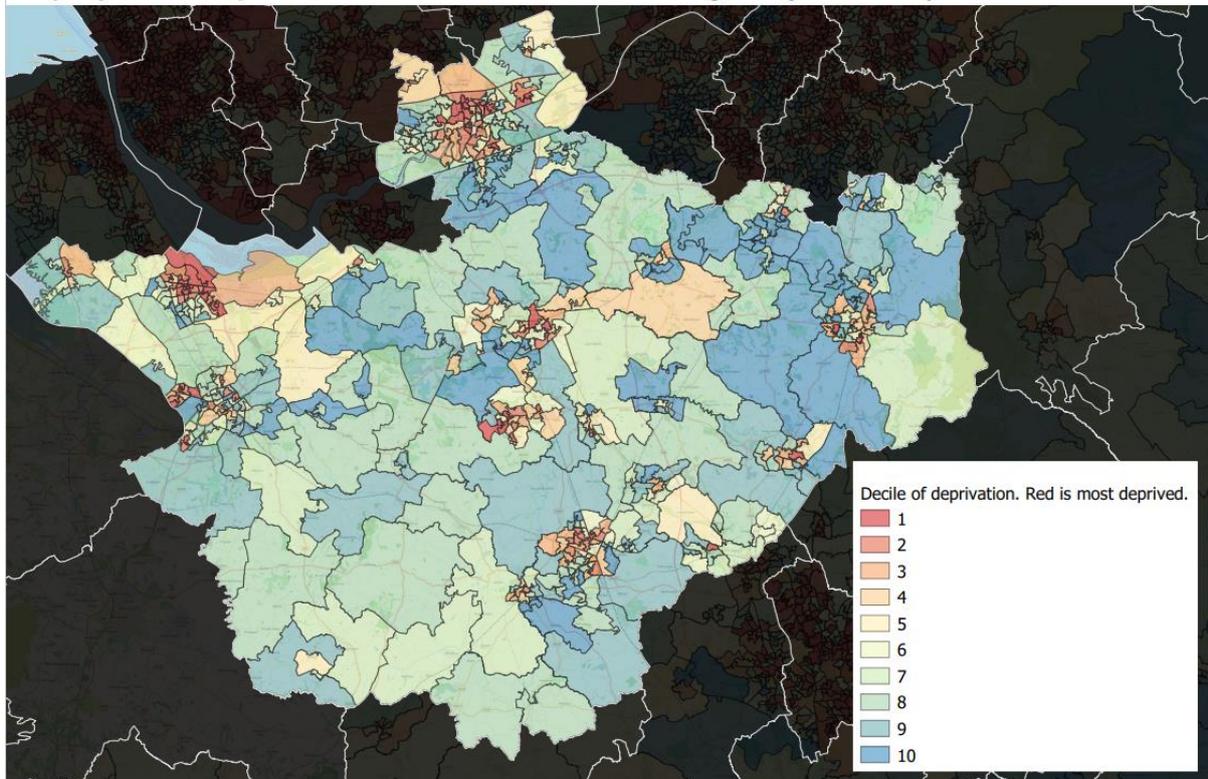
The Employment Deprivation Domain of IMD 2019 measures the proportion of the working-age population in an area involuntarily excluded from the labour market. This includes people who would like to work but are unable to do so due to unemployment, sickness or disability, or caring responsibilities. It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

deprivation are in Warrington, Ellesmere Port, Crewe and Chester with clusters also evident in Winsford, Northwich and Macclesfield.

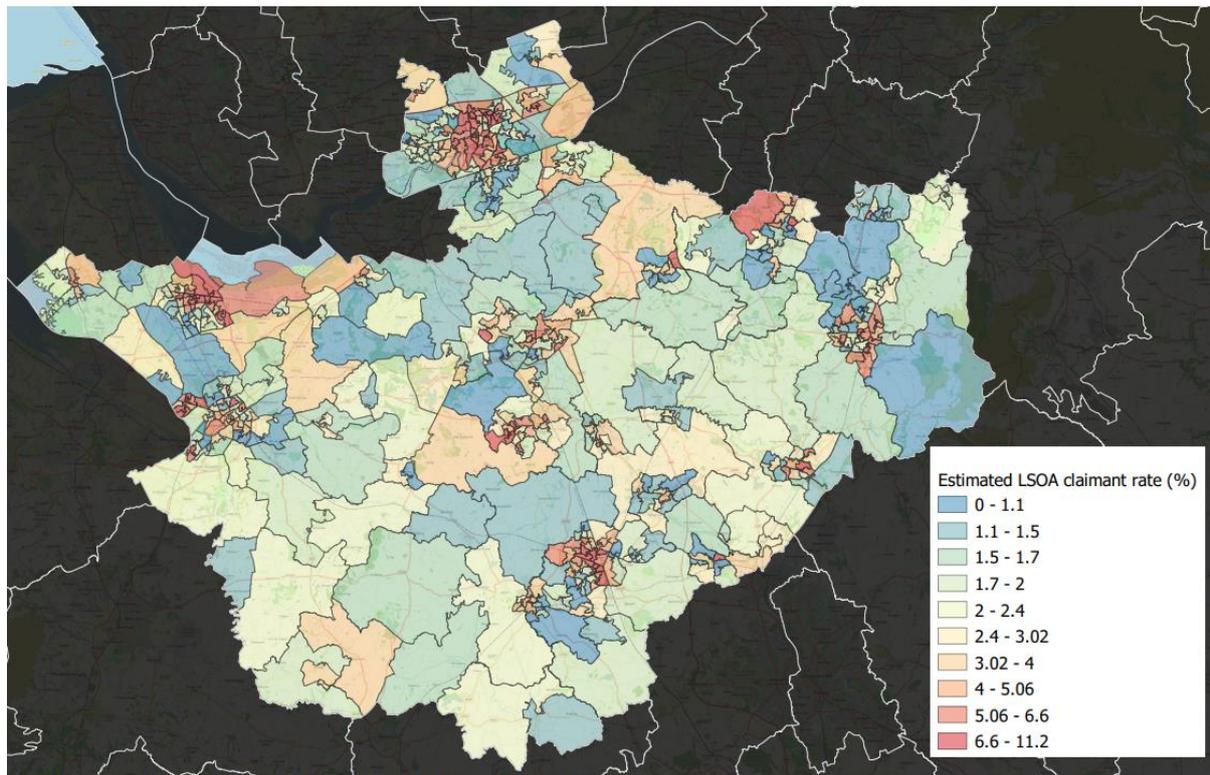
### Employment Deprivation in Cheshire and Warrington (IMD2019)



Map by Brennan Wilson Ltd in QGIS. Data from IMD2019, Streetmap and OS.

The map below shows LSOAs by estimated claimant rate (Sept 2021). The Employment Domain map and the estimated claimant rate map are very similar although it is clear that the pandemic has driven up claimant unemployment in communities adjacent to Manchester Airport.

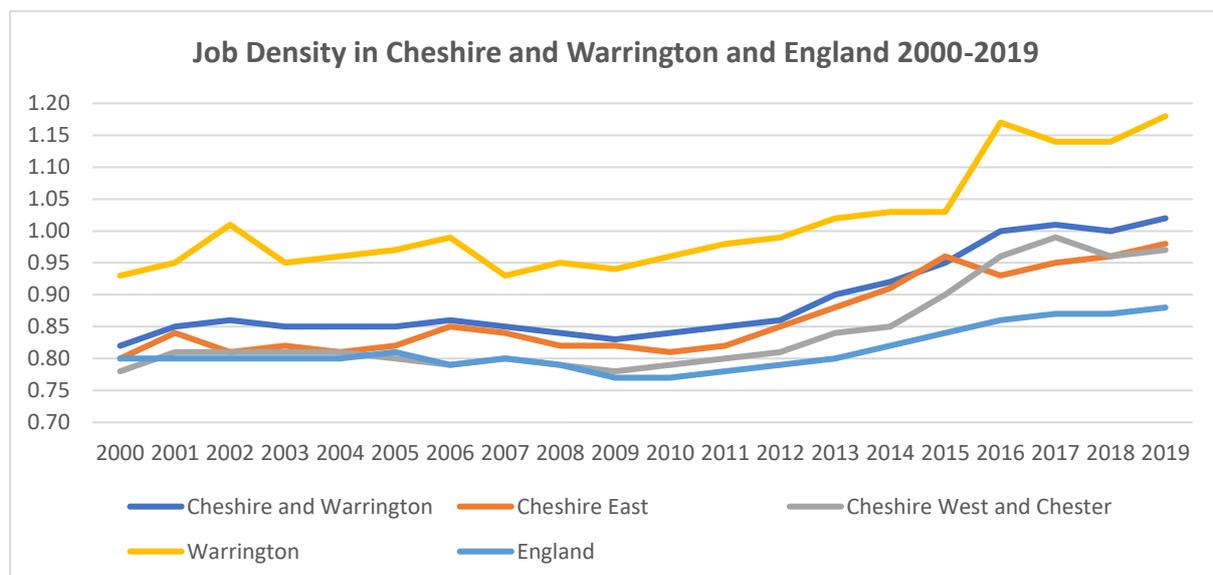
## Estimated claimant rate in Cheshire and Warrington by LSOA, September 2021



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

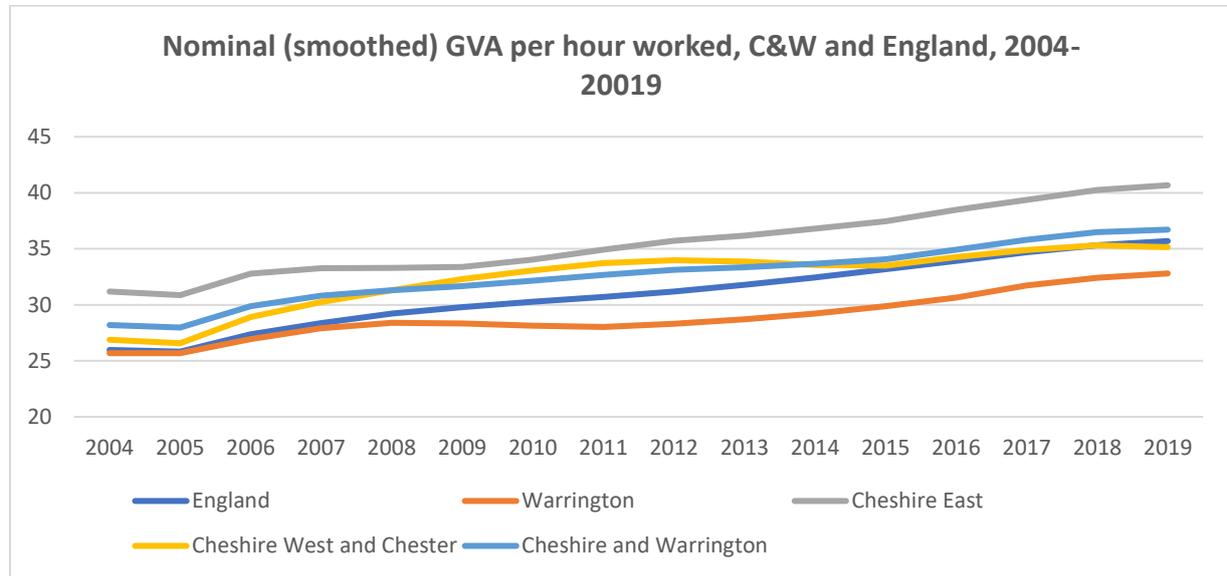
### 3.3 Jobs, GVA and business stock

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 steady increase in Jobs Density in Cheshire and Warrington, from 0.84 and peaking at 1.02 in 2019. For all this century, jobs density has been higher in Cheshire and Warrington than for England and has also been higher than England for all three local authorities for over a decade. Job density is particularly high in Warrington. A high jobs density signifies that a place is a net importer of labour from adjacent areas.



Source: NOMIS, ONS Jobs Density

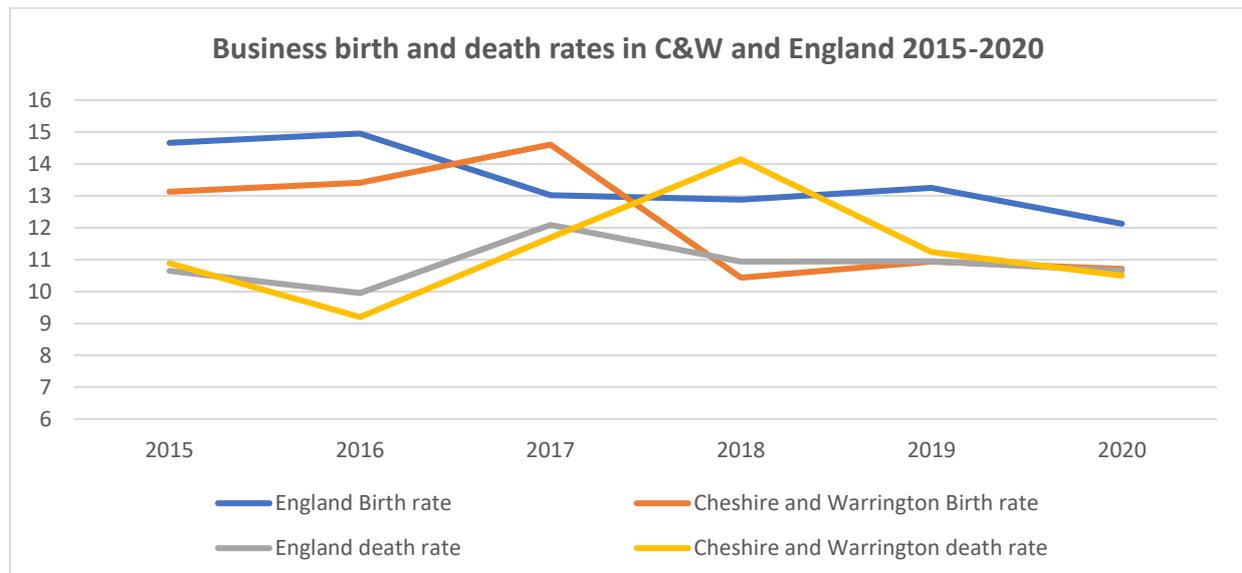
Labour productivity in Cheshire and Warrington (GVA per hour worked) is higher than for England and has been for every year between 2004 and 2019. Productivity in Cheshire East has consistently been higher than England. Productivity in Warrington has consistently been lower than in England. Productivity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



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

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 below.

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.



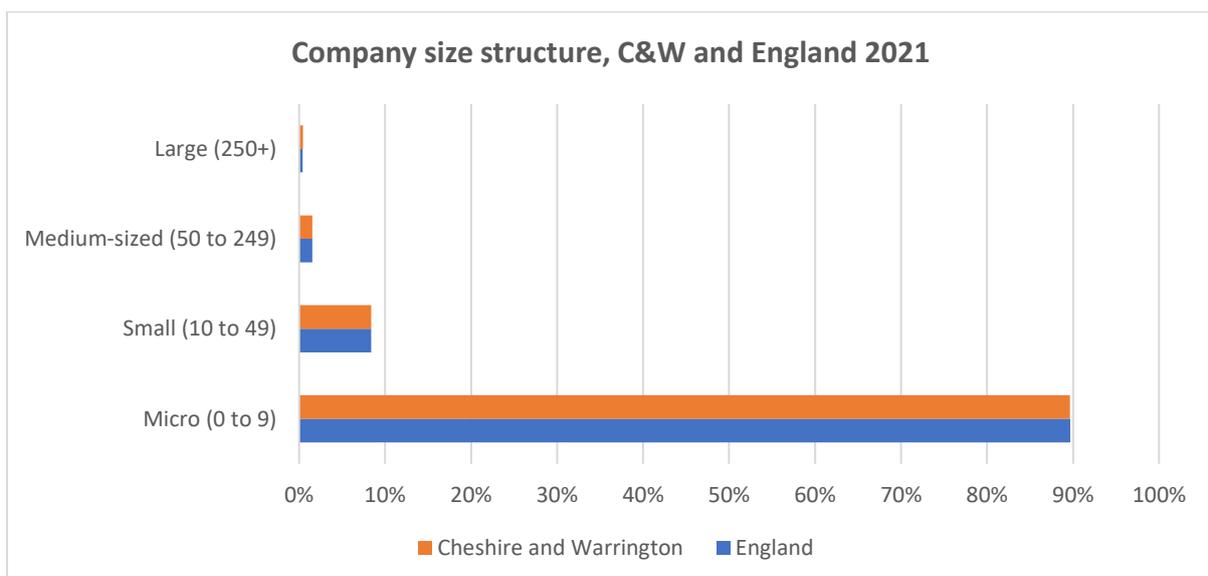
Source: ONS Business Demography, 2015 – 2020, Nov 21

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. 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.

<b>Businesses by size in Cheshire and Warrington and Local Authority, 2021</b>				
<b>Employment Sizeband</b>	<b>Cheshire East</b>	<b>Cheshire West and Chester</b>	<b>Warrington</b>	<b>Cheshire and Warrington</b>
Total	19,510	14,010	9,135	42,655
Micro (0 to 9)	17,535	12,510	8,225	38,270
Small (10 to 49)	1,625	1,220	710	3,555
Medium-sized (50 to 249)	275	220	150	645
Large (250+)	75	60	50	185

*Source: ONS, UK Business Counts 2021, NOMIS Nov 2021*

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.



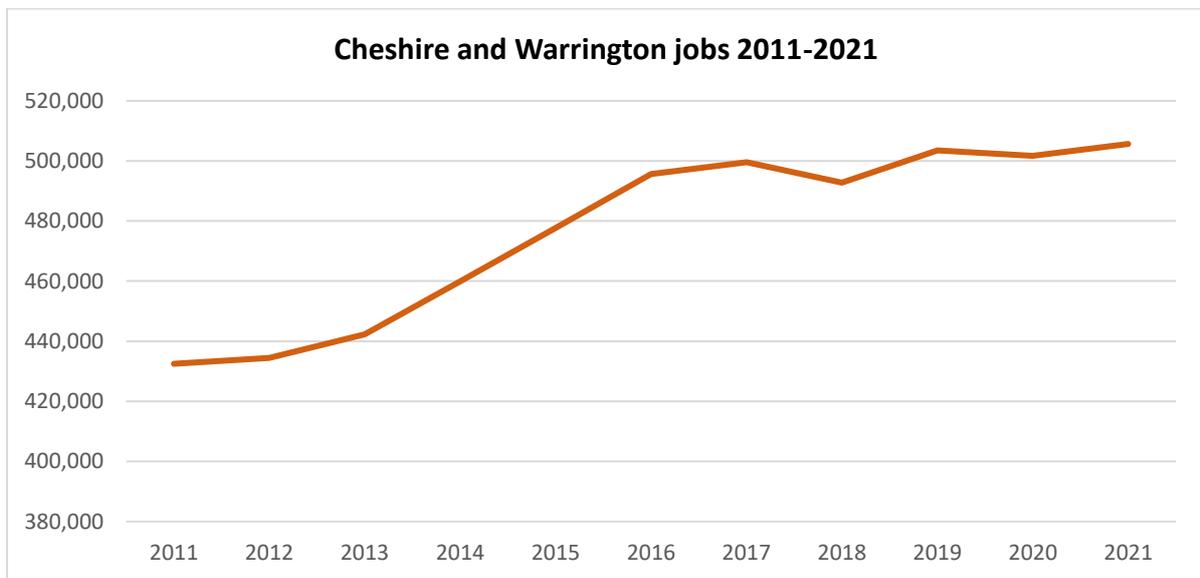
*Source: UK Business Counts 2021, NOMIS, November 2021*

In 2020 there were 495,000 'employee jobs' in Cheshire and Warrington<sup>2</sup>. This was a decrease of 8,000 (1.5%) compared to 2019. The proportion employed full-time in Cheshire and Warrington, at 69.1%, was higher than for England or the Northwest. Conversely, the proportion employed part-time was lower than for both England and the region.

<sup>2</sup> This is not a count of people employed, as individuals can have more than one job.

<b>Employee Jobs 2020 in Cheshire and Warrington, the Northwest and England</b>				
	<b>Cheshire And Warrington (Employee Jobs)</b>	<b>Cheshire And Warrington (%)</b>	<b>North West (%)</b>	<b>England (%)</b>
Total Employee Jobs	495,000	-	-	-
Full-Time	342,000	69.1	67.7	68.1
Part-Time	153,000	30.9	32.3	31.9
<i>Source: NOMIS/BRES Nov 2021</i>				

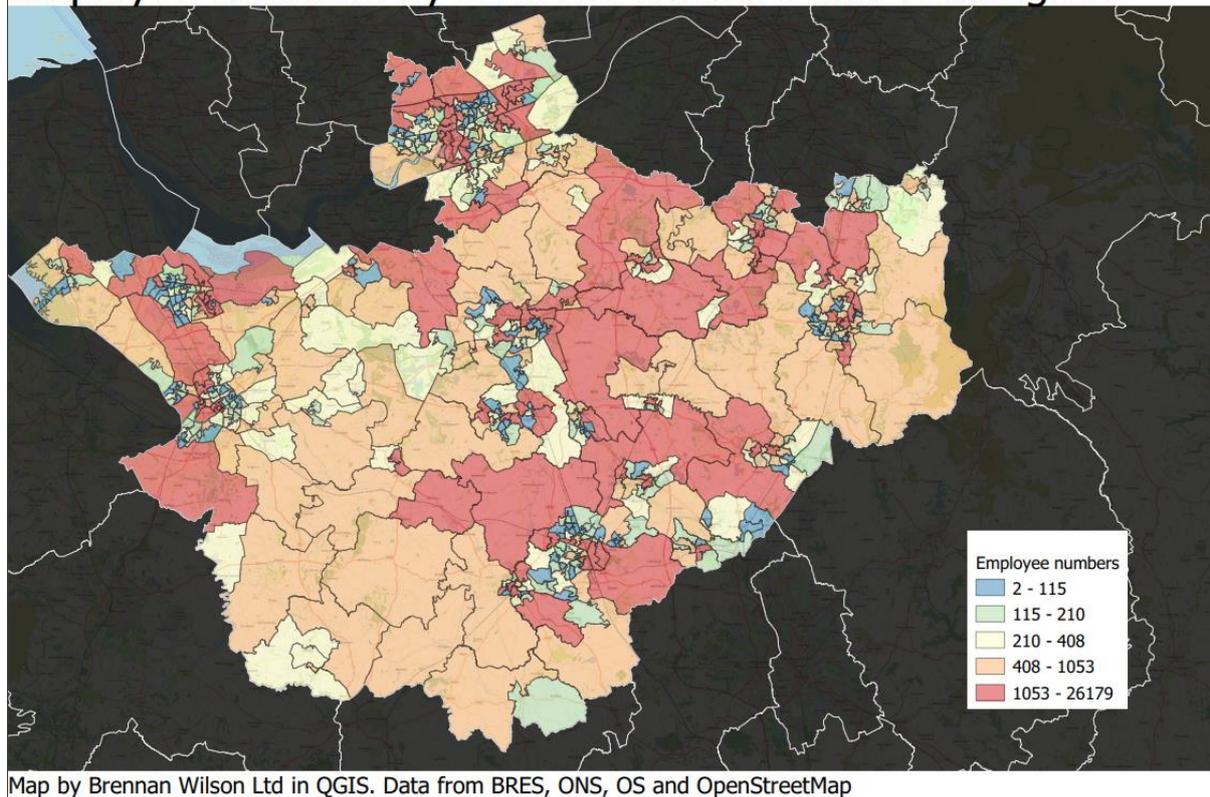
From 2011 to 2021, jobs increased by 16.9% in Cheshire and Warrington from 432,500 to 505,642. This change slightly outpaced the national growth rate in this period of 15.3% and helps explain why an already high Job Density continued to increase.



*Source: EMSI Analyst, November 2021*

More than 20% of Lower Super Output Areas (LSOAs) in Cheshire and Warrington host more than 1,000 jobs. This is illustrated in the map below. As can be seen, high volume job areas are distributed extensively across the sub-region, with high-job LSOAs being connected to both conurbations and adjacent to the motorway network.

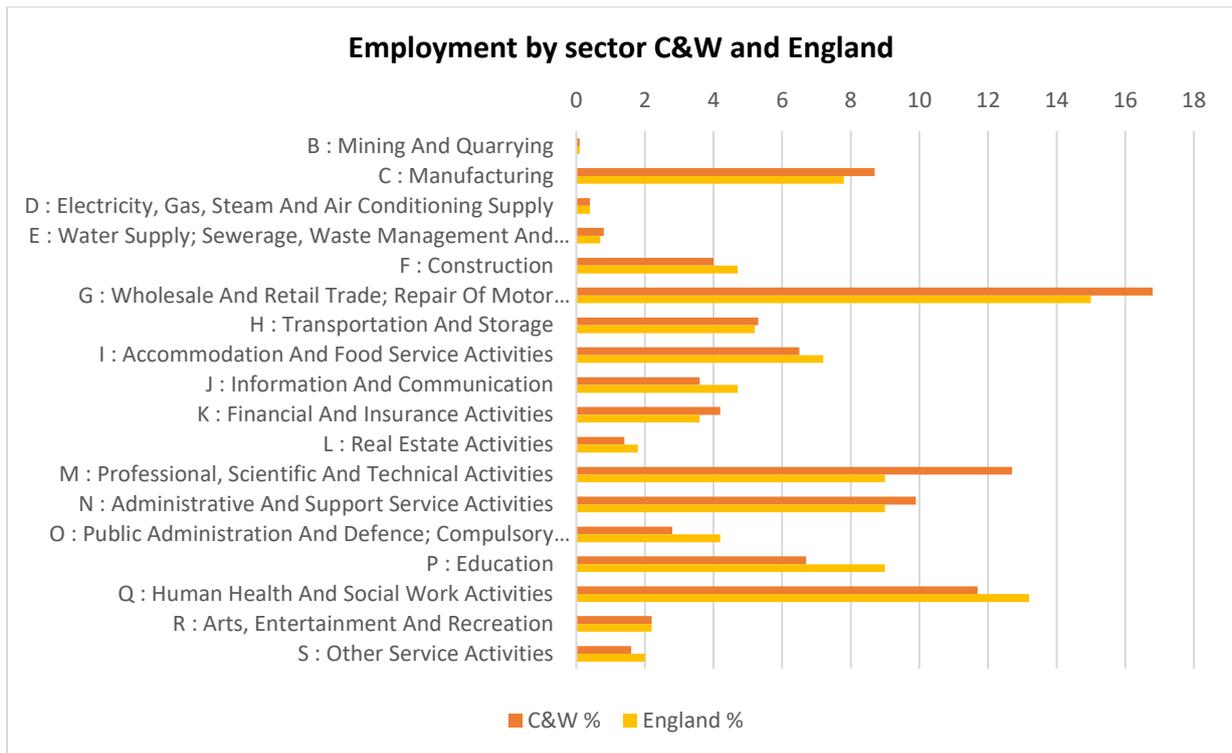
## Employee Numbers by LSOA in Cheshire and Warrington



### 3.4 Industrial structure

Compared with England, Cheshire and Warrington has a higher percentage of employees employed in the Manufacturing sector, in the Retail sector and in the Professional, scientific and technical sector. On the other hand, fewer employees were employed in Health, Education and the Public Sector.

This is consistent with Cheshire and Warrington having a high business density. The size of employment in sectors like Health and Education will largely be driven by the size of the population. This means that where the economy is bigger than might be expected (ie it has a high jobs density), such as in Cheshire and Warrington, the proportion of employment in the public sector will be lower.



Source: **NOMIS/BRES, November 2021**

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 in 2020. 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

Human Health and Social Work activities excepted; the remainder of these sectors all employed a higher proportion of the workforce than was the case for England.

<b>Employee Jobs by Industry 2020</b>				
	<b>Cheshire And Warrington (Employee Jobs)</b>	<b>Cheshire And Warrington (%)</b>	<b>North West (%)</b>	<b>England (%)</b>
B : Mining And Quarrying	450	0.1	0.1	0.1
C : Manufacturing	43,000	8.7	9.7	7.8
D : Electricity, Gas, Steam And Air Conditioning Supply	2,000	0.4	0.6	0.4
E : Water Supply; Sewerage, Waste Management And Remediation Activities	4,000	0.8	0.7	0.7
F : Construction	20,000	4.0	4.2	4.7
G : Wholesale And Retail Trade; Repair Of Motor Vehicles And Motorcycles	83,000	16.8	16.7	15.0
H : Transportation And Storage	26,000	5.3	5.0	5.2
I : Accommodation And Food Service Activities	32,000	6.5	6.8	7.2
J : Information And Communication	18,000	3.6	3.1	4.7
K : Financial And Insurance Activities	21,000	4.2	2.6	3.6
L : Real Estate Activities	7,000	1.4	1.6	1.8
M : Professional, Scientific And Technical Activities	63,000	12.7	8.9	9.0
N : Administrative And Support Service Activities	49,000	9.9	8.4	9.0
O : Public Administration And Defence; Compulsory Social Security	14,000	2.8	4.6	4.2
P : Education	33,000	6.7	8.5	9.0
Q : Human Health And Social Work Activities	58,000	11.7	14.4	13.2
R : Arts, Entertainment And Recreation	11,000	2.2	2.2	2.2
S : Other Service Activities	8,000	1.6	1.8	2.0
Source: ONS Business Register and Employment Survey : open access				
Notes: % is a proportion of total employee jobs excluding farm-based agriculture				
Employee jobs excludes self-employed, government-supported trainees and HM Forces				
Data excludes farm-based agriculture				

The table below provides information on jobs change, by sector, between 2011 and 2021 and the 2021 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 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.

By contrast there were absolute declines in the numbers employed in six sectors: Agriculture, Forestry and Fishing; Electricity, Gas, Steam and Air Conditioning Supply; Construction; Information and Communication; Public Administration and Defence and Compulsory Social Security; and Education.

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 1.13); “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).

<b>2011-2021 Job Change in Cheshire and Warrington’s Sectors</b>				
Description	2011 Jobs	2021 Jobs	% Change	2021 LQ
Agriculture, Forestry and Fishing	4,159	3,584	(14%)	0.80
Mining and Quarrying	342	843	147%	0.95
Manufacturing	42,192	42,491	1%	1.07
Electricity, Gas, Steam and Air Conditioning Supply	3,207	1,516	(53%)	0.68
Water Supply; Sewerage, Waste Management and Remediation Activities	2,855	4,324	51%	1.30
Construction	22,083	20,846	(6%)	0.82
Wholesale and Retail Trade; Repair of Motor Vehicles and Motorcycles	72,220	84,104	16%	1.13
Transportation and Storage	19,758	28,988	47%	1.14
Accommodation and Food Service Activities	29,880	34,952	17%	0.91
Information and Communication	15,014	14,220	(5%)	0.65
Financial and Insurance Activities	20,940	22,003	5%	1.26
Real Estate Activities	5,218	6,277	20%	0.68
Professional, Scientific and Technical Activities	41,316	65,746	59%	1.48
Administrative and Support Service Activities	38,707	46,873	21%	1.08
Public Administration and Defence; Compulsory Social Security	16,016	15,621	(2%)	0.68
Education	32,954	31,014	(6%)	0.72
Human Health and Social Work Activities	49,154	59,576	21%	0.90
Arts, Entertainment and Recreation	7,244	12,838	77%	1.09
Other Service Activities	9,239	9,827	6%	0.96
Total	432,500	505,642	17%	
<b>Source: EMSI Analyst, November 2021</b>				

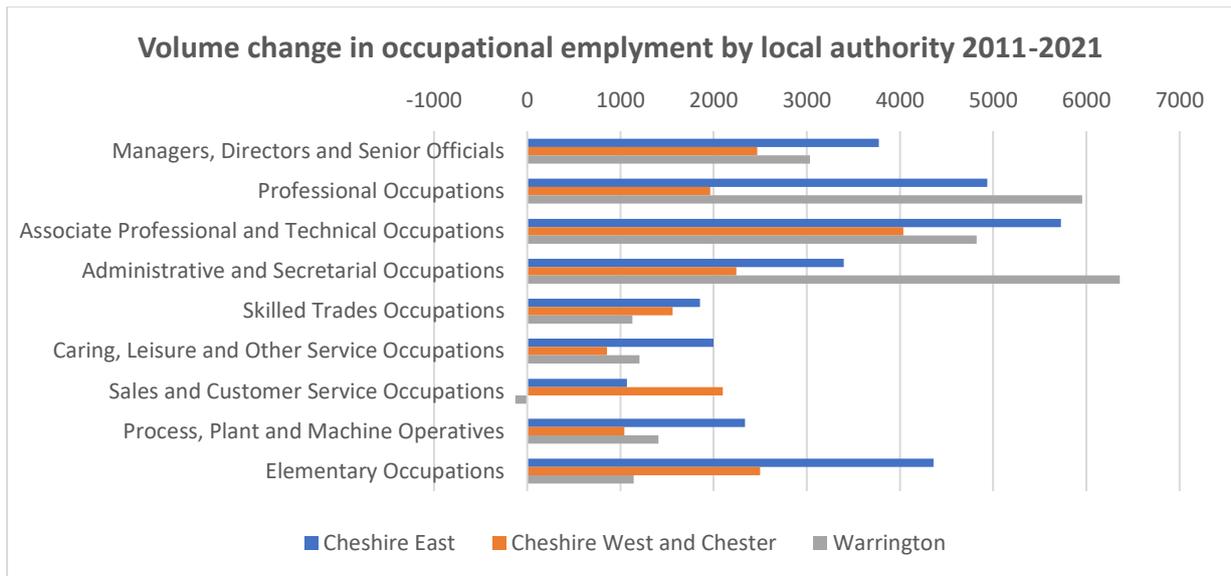
### 3.5 Occupational Structure

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 is very similar to the profile for England.

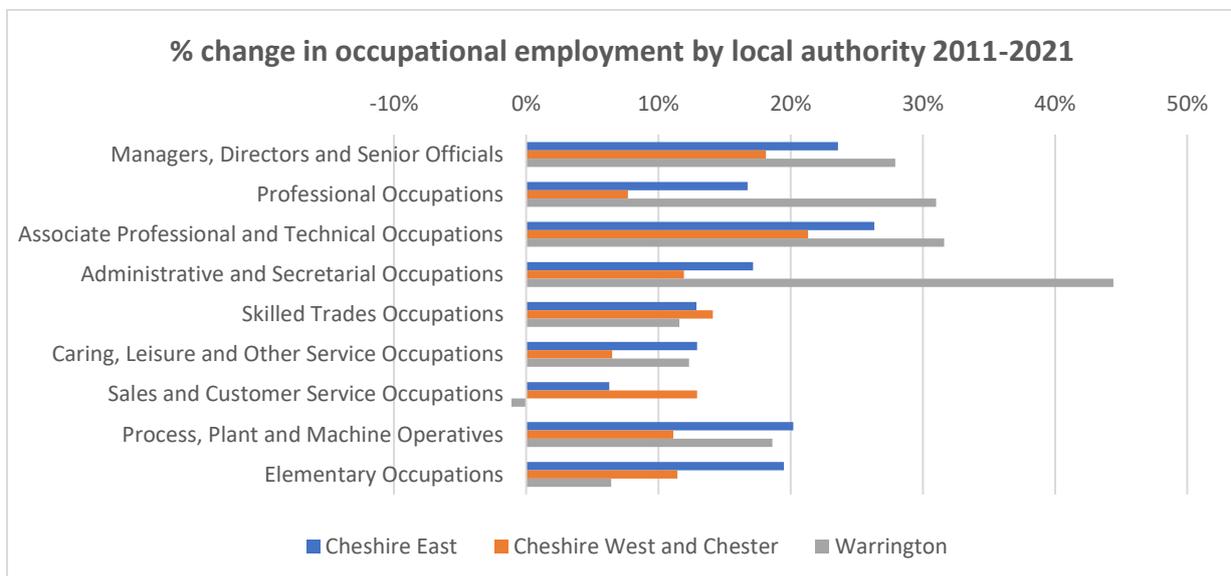
<b>Employment by occupation (Jul 2020-Jun 2021) as % of all persons (16+ residents) in employment</b>						
	Cheshire East	Cheshire West And Chester	Warrington	C&W	NW	England
<b>Soc 2010 Major Group 1-3</b>	<b>50.3</b>	<b>50.9</b>	<b>50.1</b>	<b>50.5</b>	<b>47.3</b>	<b>50.3</b>
1 Managers, Directors and Senior Officials	16.4	13.8	10.6	14.1	10.2	11.2
2 Professional Occupations	21.5	25.1	22.7	23.2	22.2	23.4
3 Associate Professional & Technical	12.4	12	16.7	13.3	14.7	15.6
<b>Soc 2010 Major Group 4-5</b>	<b>19.8</b>	<b>20.2</b>	<b>16.5</b>	<b>19.2</b>	<b>19.5</b>	<b>19.2</b>
4 Administrative & Secretarial	12.3	9.9	10.5	11	10.6	10.3
5 Skilled Trades Occupations	7.5	10.3	6	8.2	8.8	8.9
<b>Soc 2010 Major Group 6-7</b>	<b>14.4</b>	<b>15.9</b>	<b>16.5</b>	<b>15.5</b>	<b>16.8</b>	<b>15.9</b>
6 Caring, Leisure And Other Service Occupations	7.4	8.1	9.2	8.1	8.7	8.9
7 Sales And Customer Service Occs	7	7.7	7.3	7.4	8	7
<b>Soc 2010 Major Group 8-9</b>	<b>15.4</b>	<b>13</b>	<b>16.9</b>	<b>14.8</b>	<b>16.5</b>	<b>14.6</b>
8 Process Plant & Machine Operatives	4.2	6.8	6.3	5.7	6.3	5.5
9 Elementary Occupations	11.3	6.1	10.6	9.1	10.2	9
<b>Source: ONS annual population survey</b>						

The chart below illustrates the volume change in employment, by occupational area, in Cheshire and Warrington local authorities between 2011 and 2021. 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 “Sales and Customer Service” in Warrington, which declined by 129 jobs.



**Source: EMSI Analyst, November 2021**

The chart below illustrates the percentage change in employment, by occupational area, in Cheshire and Warrington local authorities between 2011 and 2021. All three local authorities have seen 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 occupational areas. 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%).



**Source: EMSI Analyst, November 2021**

The greatest increase in the number of jobs in Cheshire and Warrington, by job type, between 2011 and 2021 was for:

- Administrative Occupations: Finance
- Business, Finance and Related Associate Professionals
- Sales, Marketing and Related Associate Professionals

Each of these occupational areas grew by more than 4,000 jobs in this period.

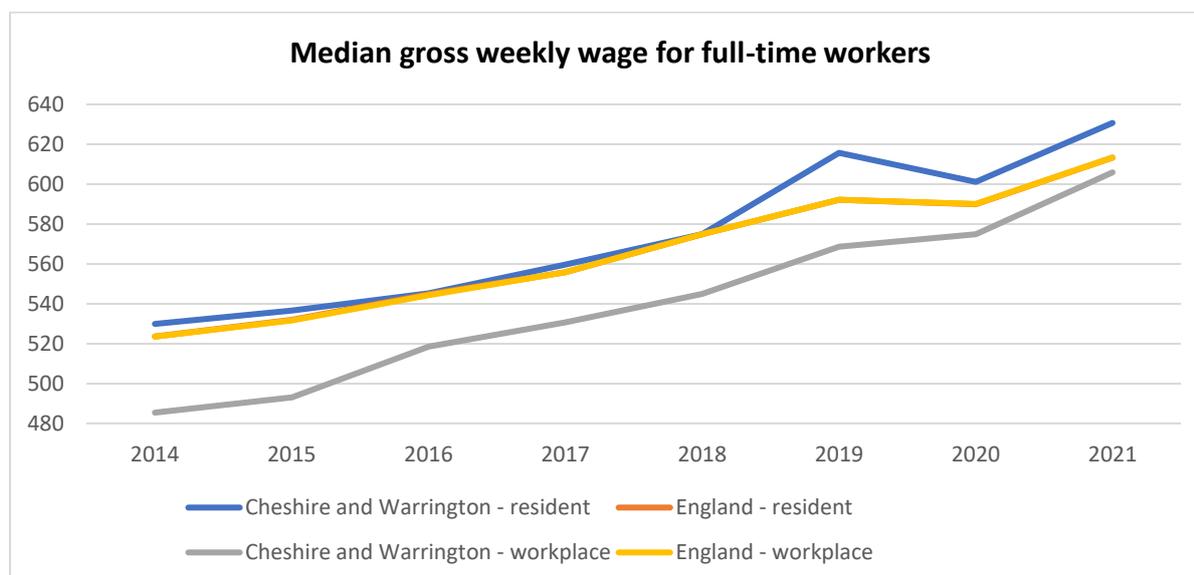
Change in Job Numbers 2011-2021 (3 digit SOC)				
	2011	2021	Change	% Change
Administrative Occupations: Finance	14,593	20,797	6,204	43%
Business, Finance and Related Associate Professionals	9,460	13,927	4,467	47%
Sales, Marketing and Related Associate Professionals	15,650	19,707	4,057	26%
Elementary Storage Occupations	10,255	13,983	3,727	36%
Functional Managers and Directors	12,687	16,104	3,417	27%
Business, Research and Administrative Professionals	9,698	12,983	3,286	34%
Caring Personal Services	17,499	20,382	2,884	16%
Other Administrative Occupations	14,015	16,843	2,828	20%
Nursing and Midwifery Professionals	8,317	10,748	2,431	29%
Food Preparation and Hospitality Trades	6,910	9,279	2,369	34%
Road Transport Drivers	12,547	14,865	2,318	18%

**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 eight years. On the other hand, Cheshire and Warrington workplace wages have been consistently lower than England and lower than resident's wages, although have 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.



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

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

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 overall and for male full-time workers than in England, but again lower for female workers.

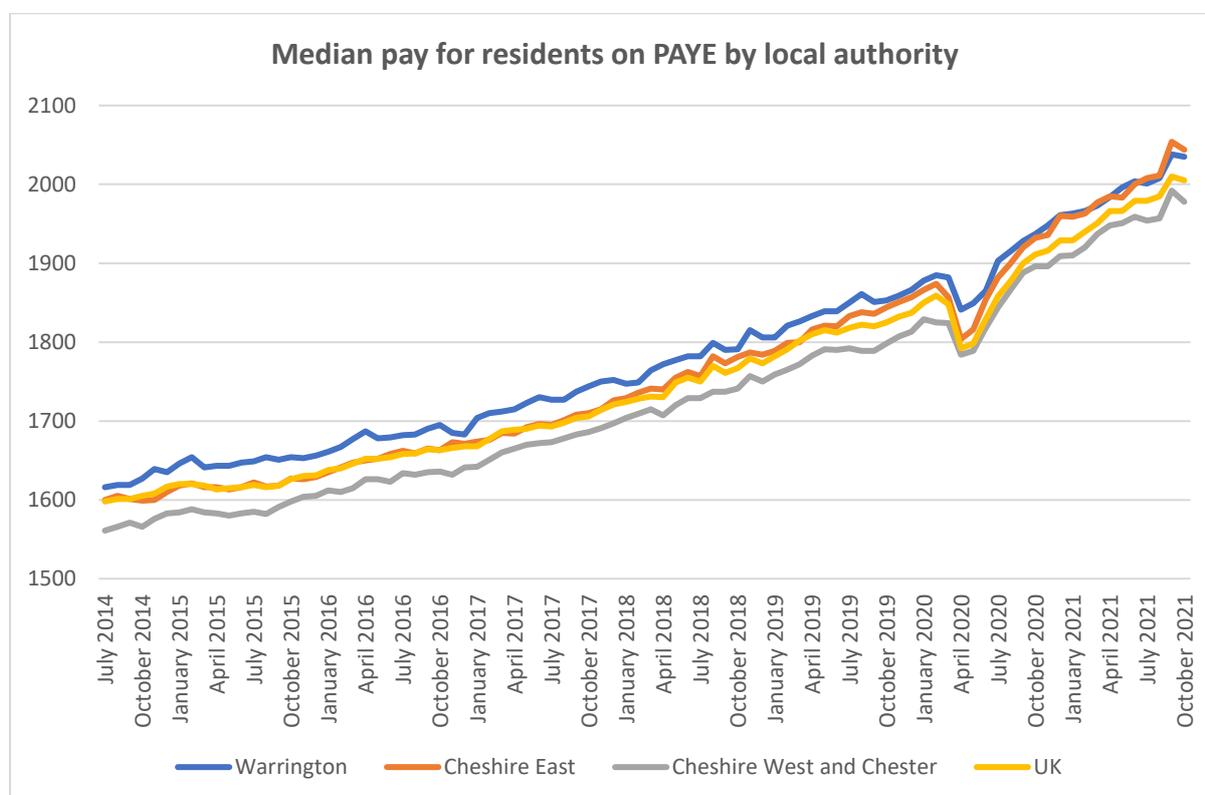
<b>Earnings by Place of residence (2021)</b>			
	<b>Male Full Time Workers</b>	<b>Female Full Time Workers</b>	<b>Full Time Workers</b>
<b>Median weekly pay - gross</b>			
Cheshire East	696.3	570.3	637.7
Cheshire West and Chester	675.0	538.2	619.7
Warrington	671.2	577.5	630.1
Cheshire and Warrington	681.4	555.8	630.7
North West	615.8	529.0	578.0
England	661.0	557.1	613.3
<b>Hourly pay - gross</b>			
Cheshire East	17.82	15.33	16.24
Cheshire West and Chester	17.37	14.28	15.87
Warrington	16.93	15.28	16.04
Cheshire and Warrington	17.37	14.74	16.04
England	16.45	14.84	15.77
North West	15.45	14.02	14.79
<b>Source: annual survey of hours and earnings - workplace analysis, ONS [Nomis on 29 Oct 2021]</b>			

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.

<b>Earnings by workplace (2021)</b>			
	<b>Male Full Time Workers</b>	<b>Female Full Time Workers</b>	<b>Full Time Workers</b>
<b>Median weekly pay - gross</b>			
Cheshire and Warrington	650.2	542.4	605.9
Cheshire East	653.2	518.6	596.8
Cheshire West and Chester	632.9	550.5	598.5
Warrington	665.4	575.4	624.6
Northwest	613.3	529.0	575.8
England	660.5	557.3	613.3
<b>Median hourly pay - gross</b>			
Cheshire and Warrington	16.01	14.39	15.37
Cheshire East	16.17	13.60	15.03
Cheshire West and Chester	15.79	14.69	15.35
Warrington	15.92	15.28	15.72
Northwest	15.33	14.13	14.74
England	16.44	14.85	15.77

**Source: annual survey of hours and earnings - workplace analysis, ONS [Nomis on 29 Oct 2021]**

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



**Source: ONS, Earnings and employment from Pay As You Earn Real Time Information, seasonally adjusted, Nov 16 2021**

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. As can be seen from the table below, 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.

<b>Median Hourly rate of pay (gross), by percentile, C&amp;W and local authorities, 2021</b>								
	<b>Cheshire and Warrington</b>		<b>Cheshire East</b>		<b>Cheshire West and Chester</b>		<b>Warrington</b>	
<b>Percentile</b>	<b>number</b>	<b>conf %</b>	<b>number</b>	<b>conf %</b>	<b>number</b>	<b>conf %</b>	<b>number</b>	<b>conf %</b>
10	9.62	0.8	9.62	1.2	9.61	1.6	9.60	1.9
20	10.81	1.3	10.76	1.9	10.83	2.2	10.81	2.7
25	11.45	1.5	11.26	2.1	11.49	2.7	11.52	2.5
30	12.10	1.7	11.94	2.9	12.28	2.9	12.09	3.2
40	13.68	1.7	13.59	2.9	13.81	2.8	13.70	3.8
60	17.69	3.1	17.33	4.0	17.67	5.0	18.51	6.5
70	20.44	3.2	19.63	5.2	20.24	5.1	21.75	5.6
75	22.02	3.4	21.11	6.5	21.66	5.6	23.00	6.8
80	23.79	4.2	23.53	7.6	23.42	6.3	25.02	7.7
90	28.73	8.5	28.81	17.0	27.36	19.0	-	-
Source: Annual Survey of Hours and Earnings - workplace analysis, ONS, November 2021 - These figures are missing.								

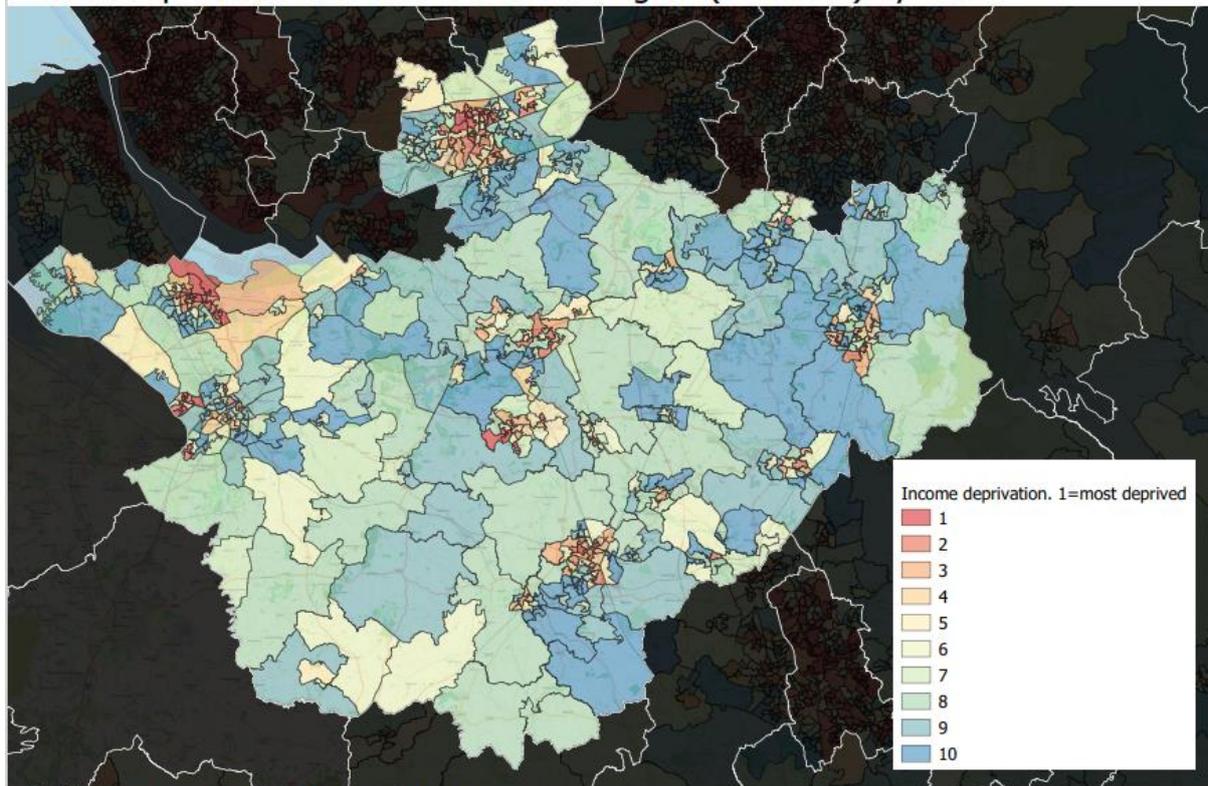
The Income Deprivation Domain of the Index of Multiple Deprivation 2019 measures the proportion of the population in an area experiencing deprivation relating to low income. The definition of low income used includes both those people that are out-of-work, and those that are in work but who have low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

## Income deprivation in Cheshire and Warrington (IMD2019) by LSOA

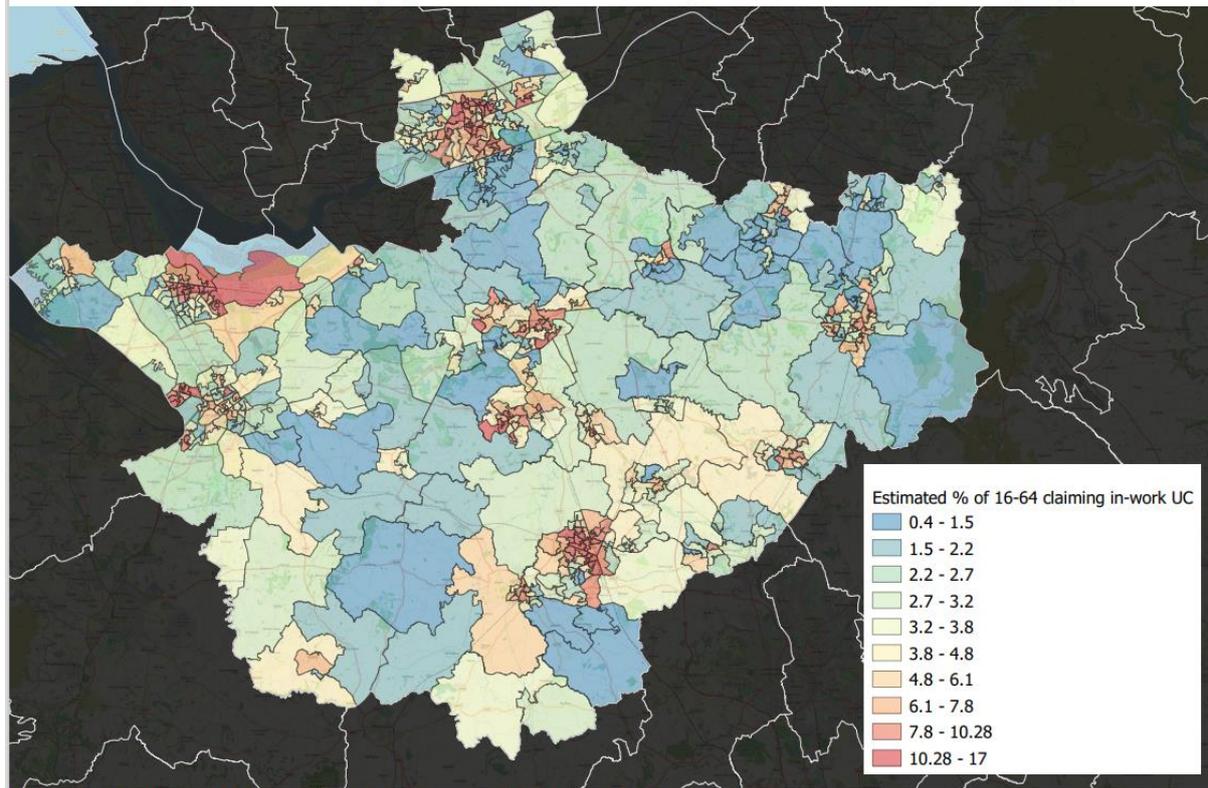


From the map the areas with the highest concentration of income deprivation in Cheshire and Warrington are in Warrington, Crewe, and Ellesmere Port, with other pockets in Winsford, Northwich, Macclesfield and Chester.

One key indicator of in-work deprivation is the rate of claims for in-work benefits. Overall, the number claiming Universal Credit whilst in-work in Cheshire and Warrington has roughly doubled from 14,670 (February 2020) to 29,491 (August 2021).

August 2021 data for those in work making claims to Universal Credit is mapped by LSOA below. Comparison of the spatial concentrations on this indicator compared to the IMD2019 Income deprivation might provide an insight into those areas where residents in work have been most adversely affected by the pandemic. The maps reveal a very similar picture across Cheshire and Warrington for both metrics. However, this comparison also suggests that that Crewe and some surrounding areas may have been disproportionately impacted by the pandemic.

Estimated proportion of 16-24 population in work claiming Universal Credit by LSOA, Aug 2021



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

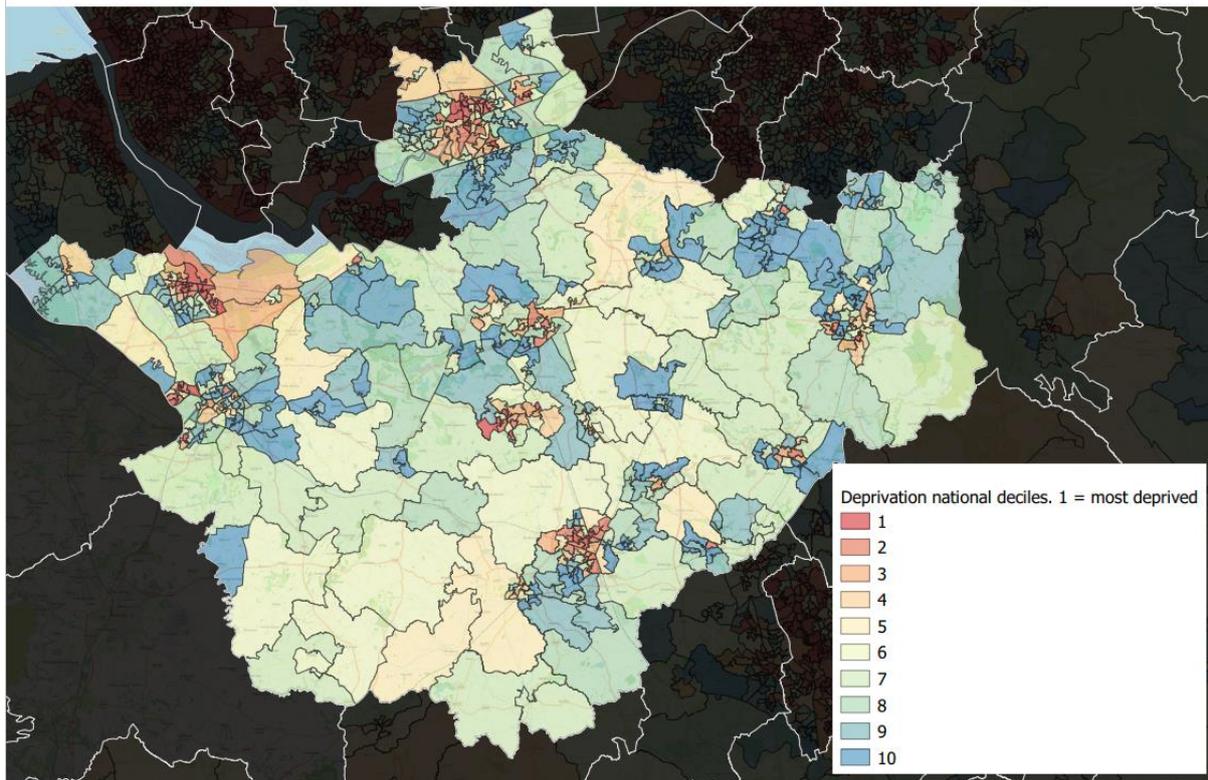
### 3.7 Deprivation

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.

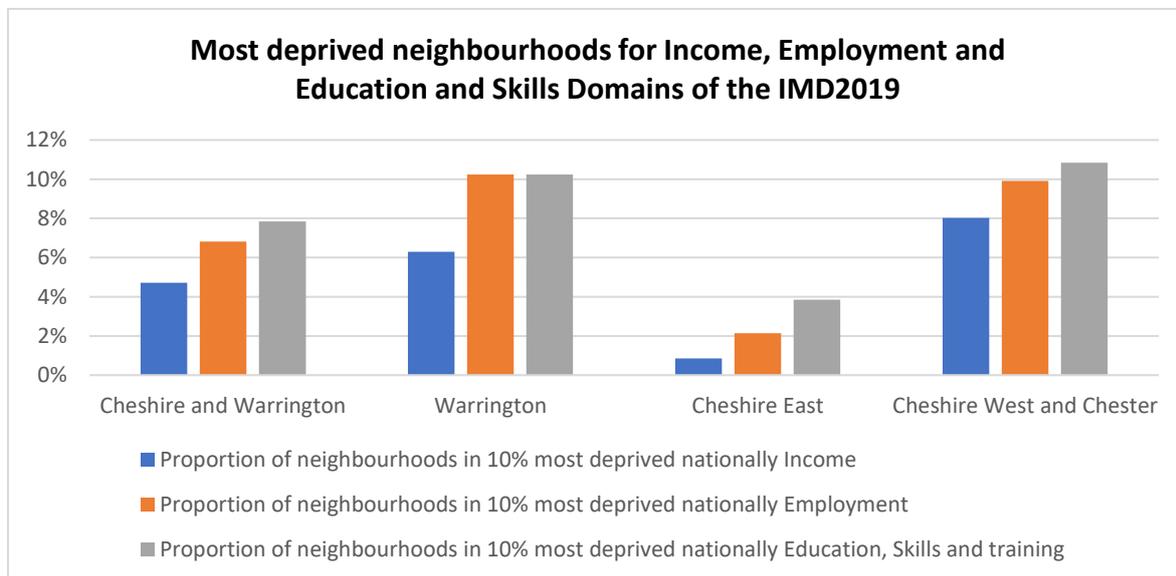
Each of these domains is based on a basket of indicators. As far as is possible, each indicator is based on data from the most recent time point available. The Index of Multiple Deprivation 2019 combines information from the seven domains to produce an overall relative measure of deprivation. The map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

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

## Index of Multiple Deprivation National Deciles in Cheshire and Warrington LSOAs



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

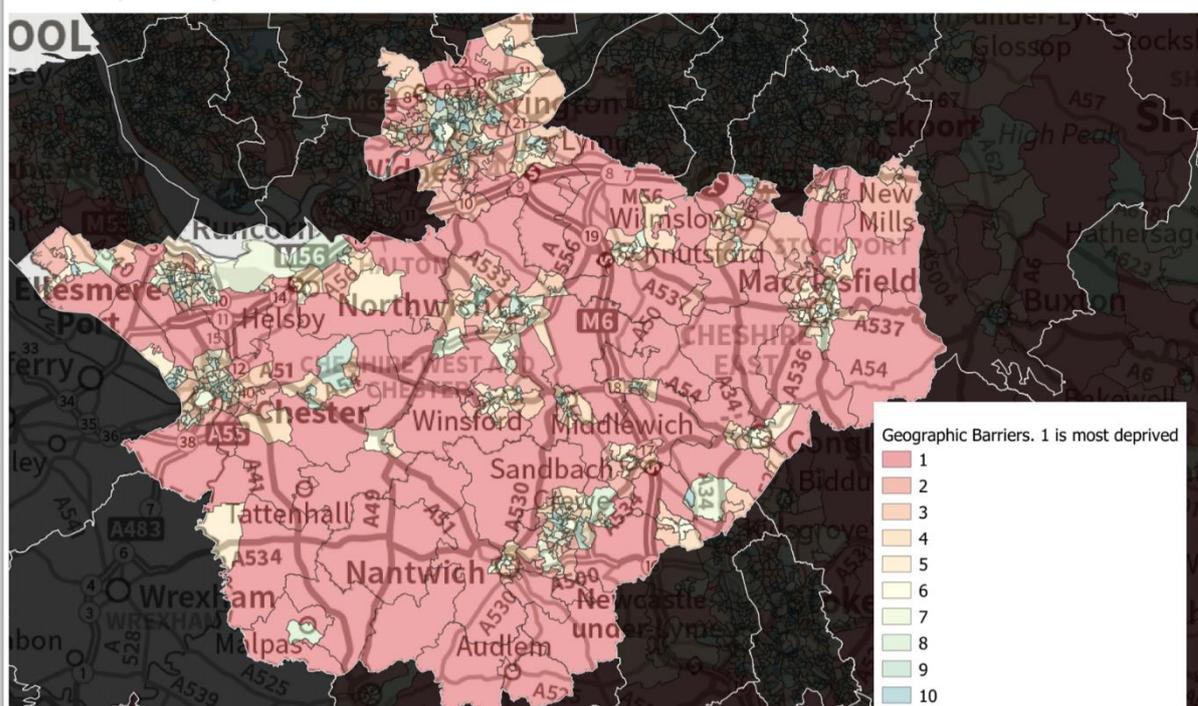
### 3.7.1 Geographic Barriers to Services

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 and work. 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



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

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 2020<sup>3</sup> 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.

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<sup>3</sup> 'The Supply of Education and Training in Cheshire and Warrington', Brennan Wilson Ltd, July 2020  
<https://cheshireandwarrington.com/media/cerjpage/report-d-the-supply-of-education-and-training-in-cheshire-and-warrington.pdf>

## 4. ANALYSIS OF DEMAND FOR LABOUR AND SKILLS

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

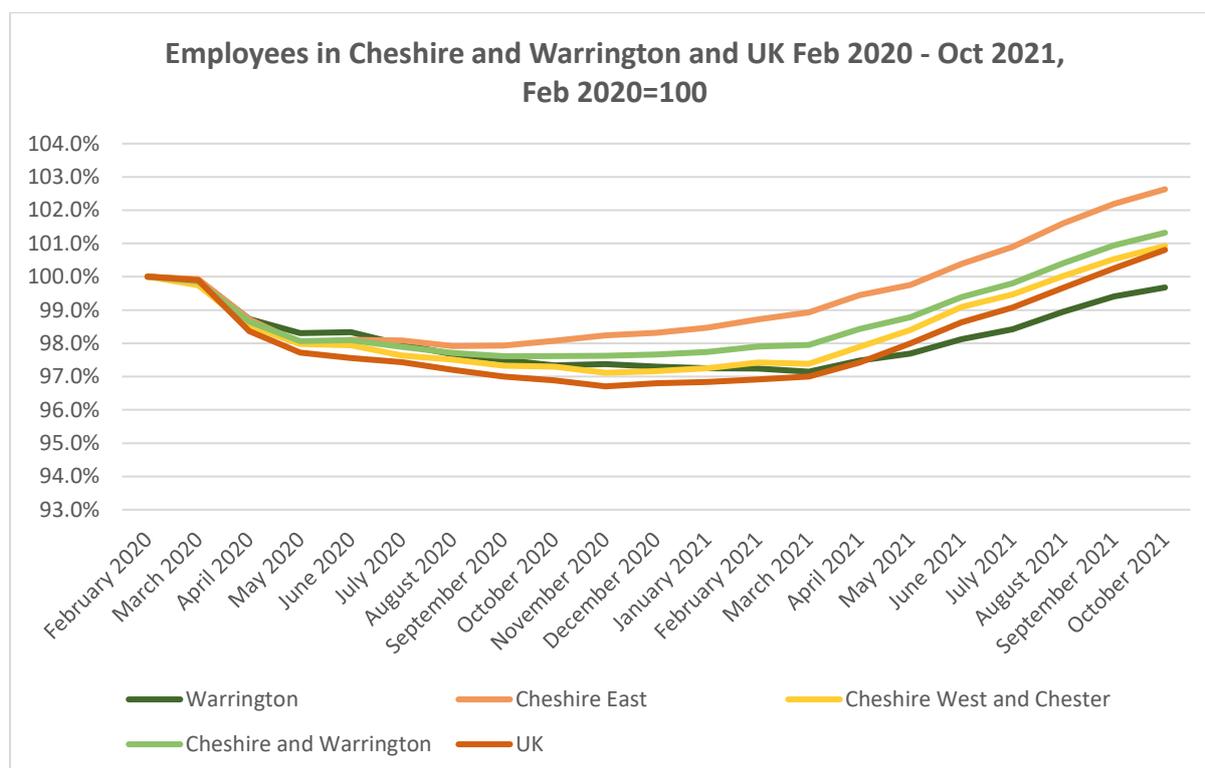
- The impact of Covid-19
- Economic Development Priorities
- Current employer demand for labour
- Current sector earnings
- Current employer demand for skills
- Future employer demand for labour
- Automation

### 4.1 The Impact of Covid-19

#### 4.1.1 Employees on Payroll

The initial impact of the pandemic on the number of payroll employees was more sharply felt in the UK than it was in Cheshire and Warrington or its three local authorities. The recovery in employment has also been faster in Cheshire and Warrington, Cheshire West and Chester and Cheshire East than for the UK. The recovery in Warrington has been slower than in the UK since the spring of 2021.

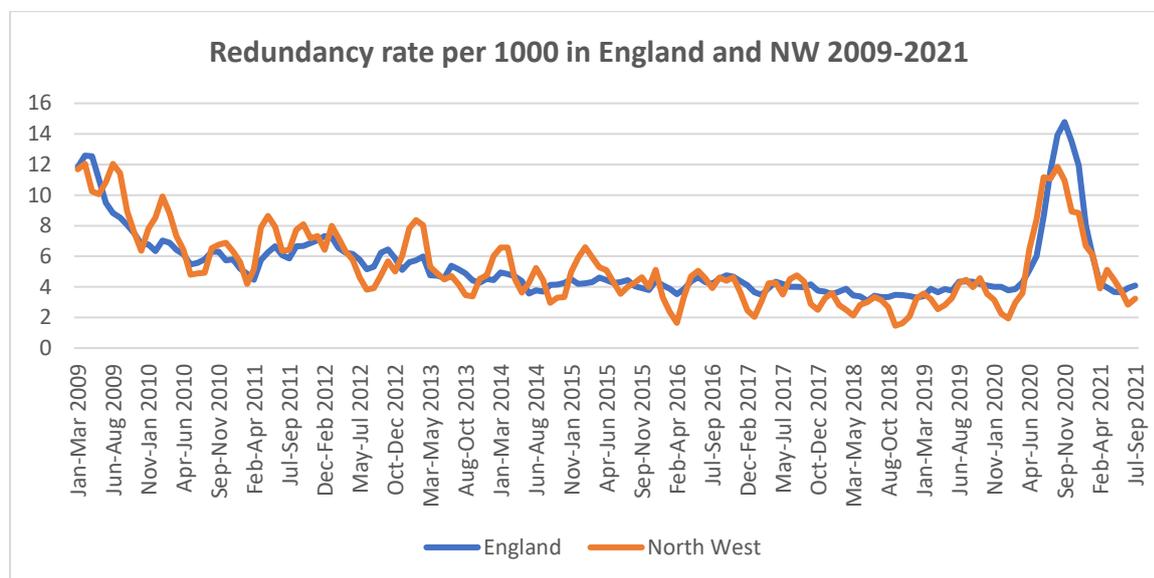
Numbers on payroll now exceed February 2020 levels in Cheshire East (102.6%), Cheshire and Warrington (101.3%), Cheshire West and Chester (100.9%) and the UK (100.8%). Numbers on payroll in Warrington in October 2021 were still slightly below the pre-pandemic level (99.7%).



Source: *Earnings and employment from Pay As You Earn Real Time Information, UK: November 2021*

### 4.1.2 Redundancies

The latest available data from the Labour Force Survey suggests that, following a significant spike in the redundancy rate in the Northwest and England in the September-November quarter of 2020, the redundancy rate had returned to pre-pandemic levels by July-September 2021. It also suggests that the Northwest fared slightly better than England following the onset of the pandemic.



Source: Labour Force Survey, November 2021, Rate per 1000

### 4.1.3 2019-2020 Job Change

Between 2019 and 2020 Cheshire and Warrington lost 9k jobs. As can be seen from the map below, this loss of jobs was not evenly distributed. 85 of 119 wards in Cheshire and Warrington experienced a decline in job numbers. The ten wards that lost more than 500 jobs in this year were:

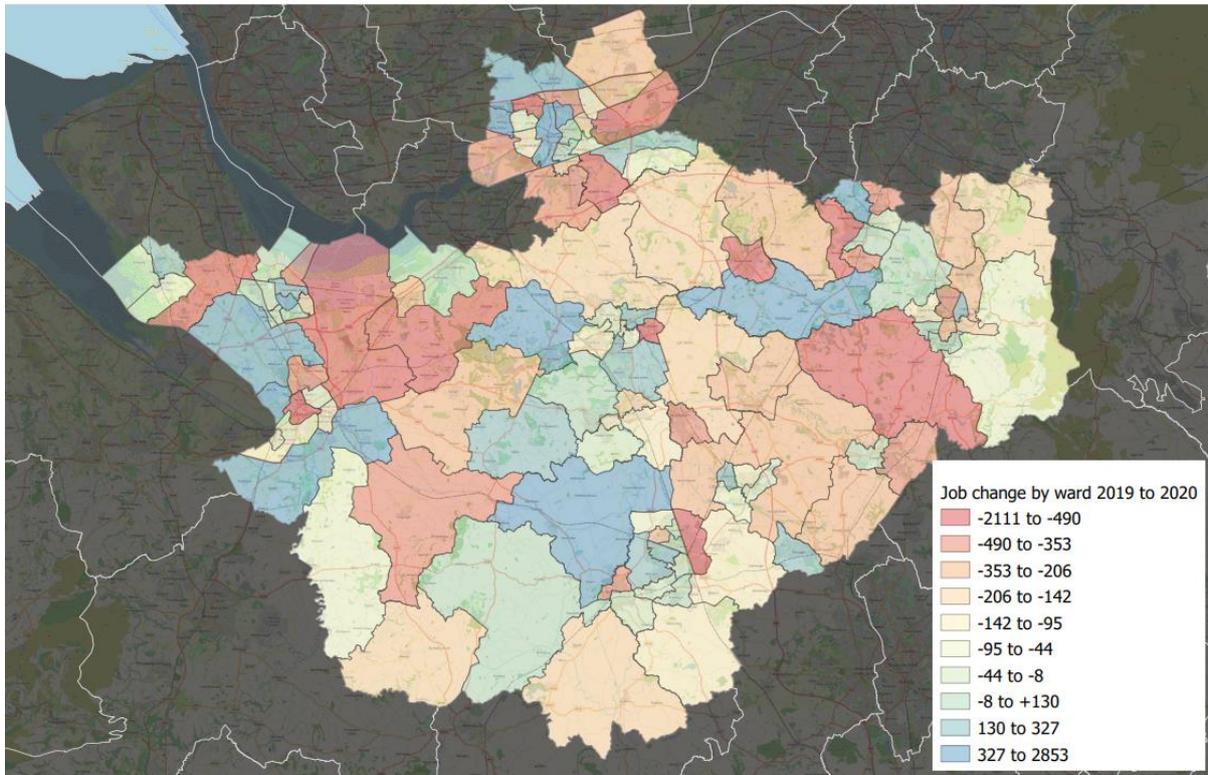
- Chester City & the Garden Quarter
- Crewe East
- Knutsford
- Gawsworth
- Goway Rural
- Rixton and Woolston
- Willaston & Thornton
- Wilmslow West and Chorley
- Westbrook, Grappenhall
- Rudheath, and Sandstone

By contrast, the eleven wards that experienced a growth in jobs of over 500 were:

- Chelford
- Great Sankey North and Whittle Hall
- Orford
- Bunbury
- Bewsey and Whitecross
- Blacon
- Christleton & Huntington
- Whitby Park

- Saughall & Mollington
- Wilmslow Lacey Green
- Burtonwood and Winwick

### Job volume change in Cheshire and Warrington 2019-2020, by ward



Map by Brennan Wilson Ltd in QGIS. Data from BRES (open access), OS, OpenStreetMap

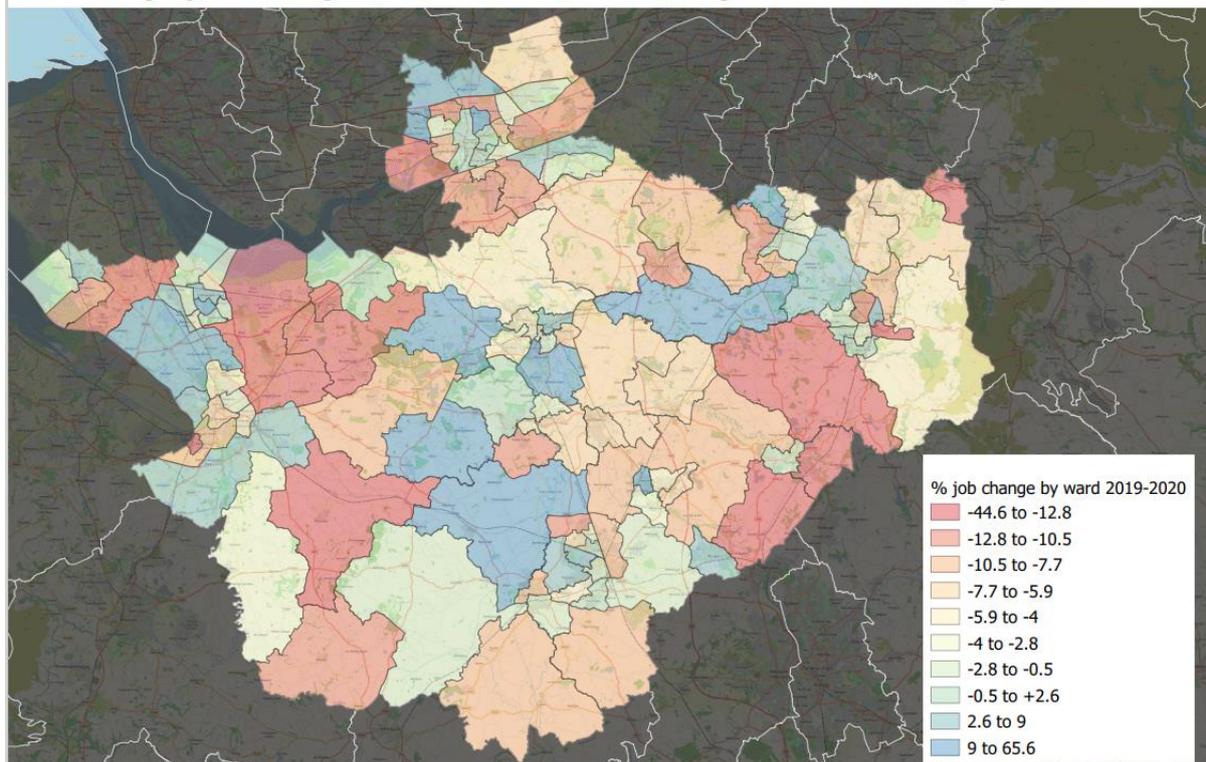
Unsurprisingly, some of the wards that experienced the largest volume declines in employment also experienced significant percentage declines. The wards that experienced more than a 15% decline in employment were:

- Gawsworth
- Sandstone
- Willaston & Thornton
- Gowy Rural
- Congleton East
- Disley
- Penketh and Cuardley
- Lache
- Tattenhall
- Odd Rode

Similarly, wards that experienced an increase in jobs of over 15% were:

- Orford
- Chelford
- Great Sankey North and Whittle Hall
- Whitby Park
- Davenham, Moulton & Kingsmead

## Percentage job change in Cheshire and Warrington 2019-2020, by ward



Map by Brennan Wilson Ltd in QGIS. Data from BRES (open access), OS, OpenStreetMap

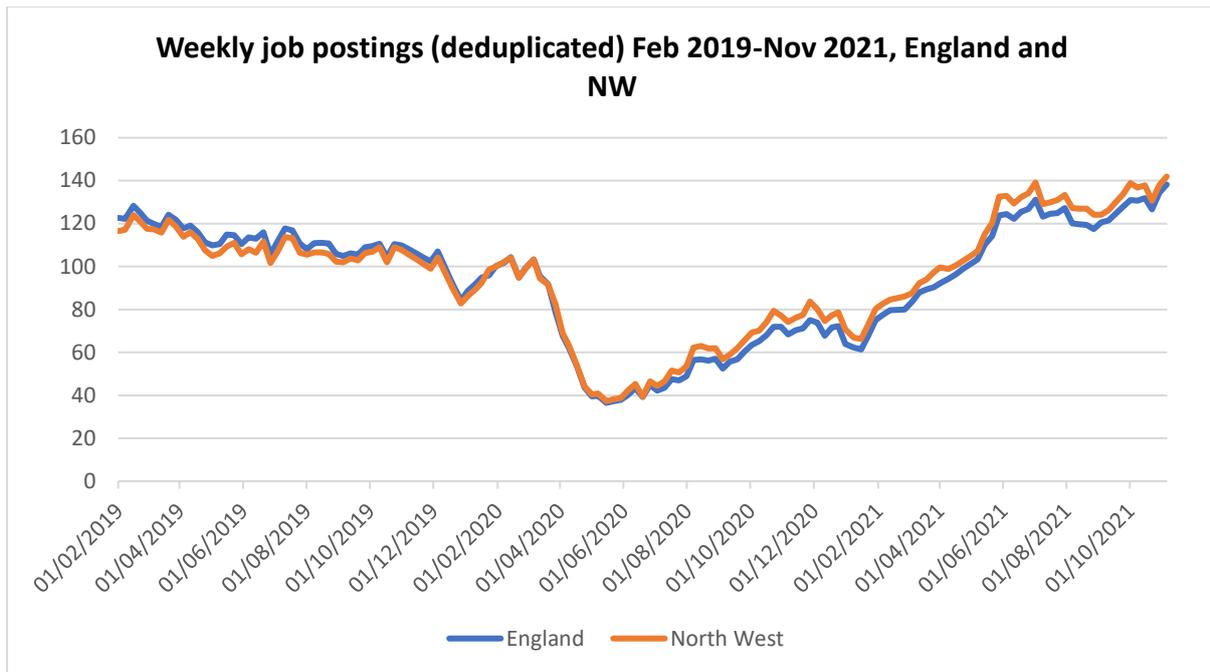
### 4.1.4 Job postings as an indicator of labour demand

The graphs below present data for England and the Northwest (ONS data<sup>4</sup>) 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.

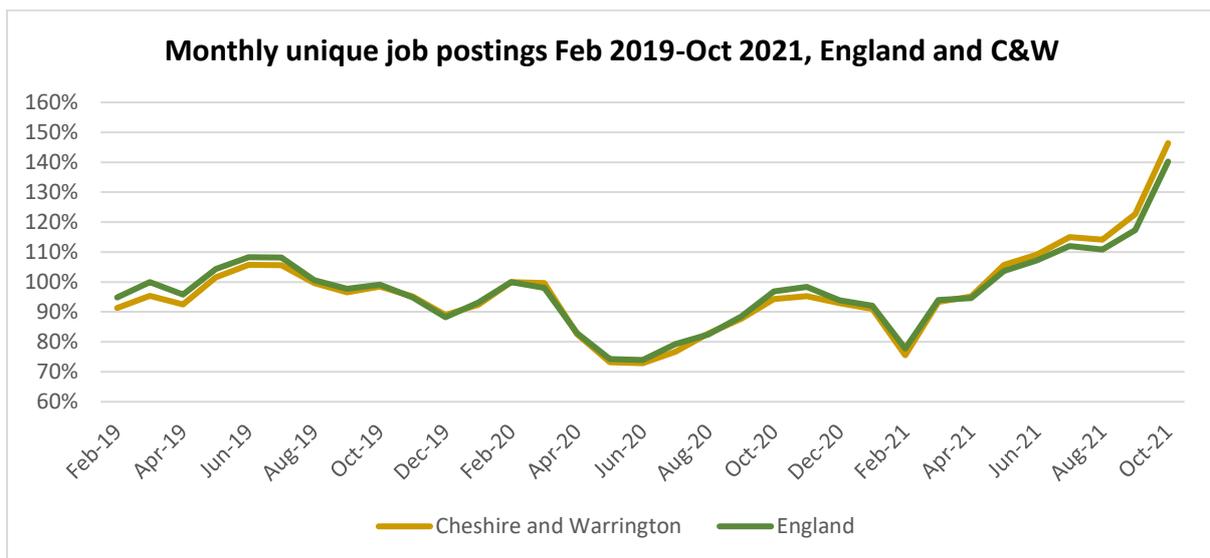
Since the Spring of 2021, job postings have continued to increase, with the latest data in both datasets suggesting that late 2021 volumes were about 40% higher than levels immediately prior to the pandemic. This increase in job postings indicates two things. Firstly, the onset of an economic recovery 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.<sup>5</sup>

<sup>4</sup> <https://www.ons.gov.uk/economy/economicoutputandproductivity/output/datasets/onlinejobadvertestimates>

<sup>5</sup> [https://www.theguardian.com/money/2021/nov/01/the-great-resignation-almost-one-in-four-workers-planning-job-change?CMP=Share\\_AndroidApp\\_Other](https://www.theguardian.com/money/2021/nov/01/the-great-resignation-almost-one-in-four-workers-planning-job-change?CMP=Share_AndroidApp_Other)



Source: ONS, Online Job Advert Estimates, November 2021



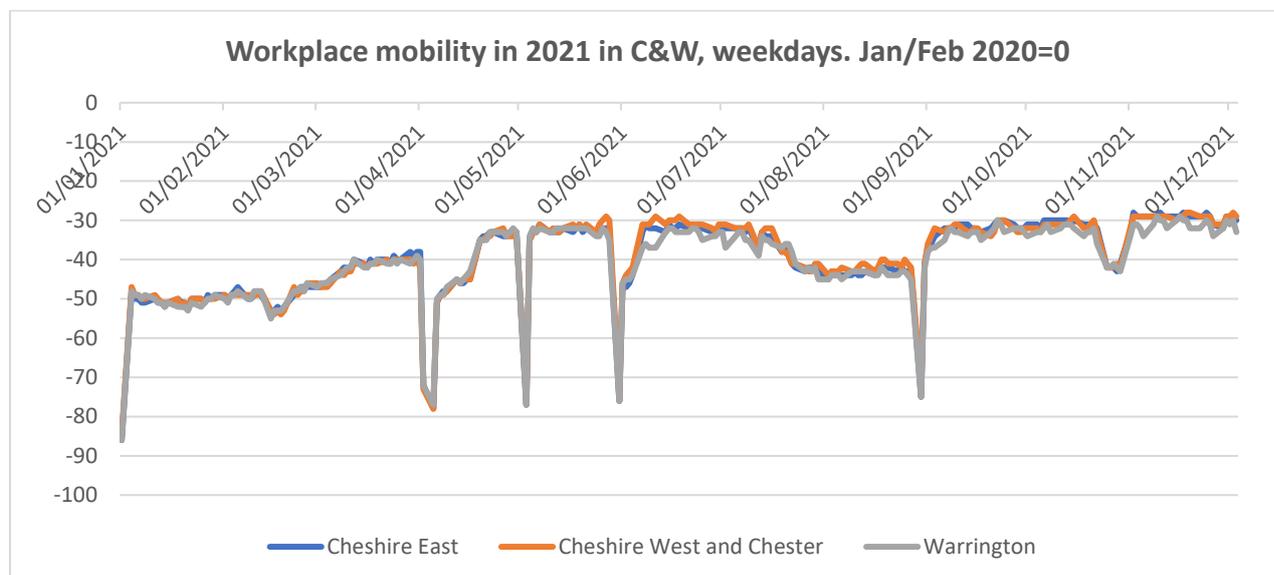
Source: EMSI Analyst, November 2021

#### 4.1.5 Workplace Mobility

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 workplaces in the three local authorities of Cheshire and Warrington. This data is benchmarked against the average for the two months directly preceding the pandemic. It can be seen from this that, by December 2021, weekday workplace mobility was about 30% lower than was the case pre-pandemic. This suggests that whilst employment data (for example the payroll and job postings data referred to above) indicates a healthy rebound in employment, the nature of that employment may have changed.

In particular, the workplace mobility data suggests that working from home has continued to be more prevalent than was the case prior to the pandemic. If this pattern becomes embedded, then there will likely be ramifications beyond the labour market with possible declines in demand for

office space and adverse impacts on segments of town centres' retail and hospitality offer. Some anecdotal evidence suggests that employee expectation of homeworking is now a feature of some parts of the labour market.



Source: Google Community Mobility reports, Dec 9<sup>th</sup> 2021

#### 4.1.6 Demand for labour since Spring 2021

As noted in section 4.1 above, the overall volume of job postings returned to pre-pandemic levels in April/May 2021 and were about 40% higher than was the case pre-pandemic by the end of 2021. 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 below.

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.

The table below 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 promote 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.

<b>Job roles with &gt;300 postings in C&amp;W Apr-Oct 2021 and &gt;30% growth compared to Apr-Oct 2019</b>					
	<b>Avg. Posting Intensity (Apr 2019 - Oct 2019)</b>	<b>Unique Postings from Apr 2019 - Oct 2019</b>	<b>Avg. Posting Intensity (Apr 2021 - Oct 2021)</b>	<b>Unique Postings from Apr 2021 - Oct 2021</b>	<b>Increase in unique postings 2019-2021 (%)</b>
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>					

One strategy that employers can adopt when they find a type of role difficult to fill is to offer higher wages. The table below compares the advertised salary for roles in the table above in 2019 to the advertised salary in 2021. Official statistics report that actual weekly pay (gross) in Cheshire in Warrington grew from £568.6 to £605.9 (6.6%) in this time<sup>6</sup>. 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.

<sup>6</sup> Annual Survey of Hours and Employment (workplace)

<b>2019-2021 advertised salary change for job roles with &gt;300 postings in C&amp;W Apr-Oct 2021 and &gt;30% growth compared to Apr-Oct 2019</b>			
	<b>2019 Median Advertised Salary</b>	<b>2021 Median Advertised Salary</b>	<b>% change in advertised salary</b>
Plumbers and Heating and Ventilating Engineers	32960	35008	6%
Civil Engineers	37504	40128	7%
Kitchen and Catering Assistants	17888	18752	5%
Elementary Storage Occupations	18656	20800	11%
Business and Financial Project Management Professionals	44992	45440	1%
Production Managers and Directors in Manufacturing	44992	45248	1%
Cleaners and Domestic	18144	19264	6%
Quality Assurance and Regulatory Professionals	40064	42624	6%
Sales and Retail Assistants	17472	19040	9%
Receptionists	18016	18880	5%
Electrical and Electronic Trades n.e.c.	31552	32448	3%
Managers and Directors in Storage and Warehousing	22976	23872	4%
IT Operations Technicians	24000	22976	-4%
Residential, Day and Domiciliary Care Managers and Proprietors	36032	37056	3%
Electricians and Electrical Fitters	34496	34944	1%
Other Administrative Occupations n.e.c.	19040	20544	8%
Care Workers and Home Carers	18784	20800	11%
Design and Development Engineers	35968	37504	4%
Nursing Auxiliaries and Assistants	19296	20448	6%
Business and Related Associate Professionals n.e.c.	27456	27584	0%
Chefs	23008	22848	-1%
<b>Source: EMSI Analyst, Nov 2021</b>			

There is no standard measure of churn for occupations. One way of thinking about churn is to compare the number of unique postings for an occupation type over a given time to the number of such roles in the economy. The table below does this by calculating a 'churn ratio' as the number of unique roles advertised (April-Oct)/the number of such roles in the economy at this time. For example, if an occupation has 500 unique job postings and there are 1,000 roles of this type, the 'churn ratio' would be 0.5. Many factors will affect this ratio including the extent to which agencies operate in this occupational area, the prevalence of short-term and zero hours contracts, the extent to which 'national' roles are coded to a local HQ postcode by the job postings data provider etc. For this reason, it is probably not particularly illuminating to compare the local churn ratio of one occupation with another.

However, some insight may be gained by considering the percentage change to the 'churn ratio' over time for the same occupation. The table below does this for all occupations (SOC four digit) in Cheshire and Warrington for April-October 2019/2021, where there were more than 300 unique postings in Apr-Oct 2021 and where the 'churn ratio' has grown by 30% or more compared to two years previously. This 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 Domestics
- Sales and Retail Assistants
- Production Managers and Directors in Manufacturing
- Quality Assurance and Regulatory Professionals

<b>Increase in churn 2-19-2021 in selected occupations (&gt;300 postings Apr-Oct 2021) in C&amp;W</b>				
	<b>2019 Churn ratio</b>	<b>2021 Churn Ratio</b>	<b>Change in Churn ratio 2019- 2021</b>	<b>% Change in Churn ratio 2019- 2021</b>
Plumbers and Heating and Ventilating Engineers	0.29	0.79	0.51	177%
Kitchen and Catering Assistants	0.15	0.27	0.12	81%
Civil Engineers	0.61	1.07	0.46	75%
Business and Financial Project Management Professionals	0.38	0.60	0.22	59%
Elementary Storage Occupations	0.17	0.26	0.10	59%
Cleaners and Domestics	0.17	0.26	0.09	52%
Sales and Retail Assistants	0.07	0.11	0.04	52%
Production Managers and Directors in Manufacturing	0.21	0.32	0.11	52%
Quality Assurance and Regulatory Professionals	0.37	0.55	0.18	50%
Receptionists	0.15	0.22	0.07	46%
Electrical and Electronic Trades n.e.c.	0.62	0.88	0.25	41%
IT Operations Technicians	0.37	0.52	0.15	40%
Managers and Directors in Storage and Warehousing	0.41	0.56	0.15	38%
Electricians and Electrical Fitters	0.25	0.34	0.09	37%
Residential, Day and Domiciliary Care Managers and Proprietors	0.97	1.32	0.35	36%
Other Administrative Occupations n.e.c.	0.14	0.19	0.05	34%
Care Workers and Home Carers	0.29	0.38	0.09	32%
Design and Development Engineers	0.50	0.65	0.15	30%
Nursing Auxiliaries and Assistants	0.20	0.26	0.06	30%
Chefs	0.42	0.55	0.12	30%
Business and Related Associate Professionals n.e.c.	0.47	0.61	0.13	28%
IT Specialist Managers	0.32	0.40	0.08	25%
Van Drivers	0.52	0.65	0.13	24%
Vocational and Industrial Trainers and Instructors	0.33	0.39	0.07	20%
Engineering Technicians	0.91	1.09	0.18	20%
Science, Engineering and Production Technicians n.e.c.	2.32	2.77	0.46	20%
<b>Source: EMSI Analyst, Nov 2021</b>				

## 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

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
- 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 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 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 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.

#### 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 – Sector Analysis

This section drills down into the demand for Labour in individual industrial sectors.

#### 4.3.1 Focus on the Manufacturing Sector

The Manufacturing sector had over 2,000 employers employing 43,000 people in Cheshire and Warrington in 2020<sup>7</sup>. The sector employs a slightly higher percentage of the workforce than is the case nationally with a Location Quotient (LQ) of 1.07 in 2021<sup>8</sup>.

The following wards all employed over 1,000 people in the Manufacturing sector in 2020

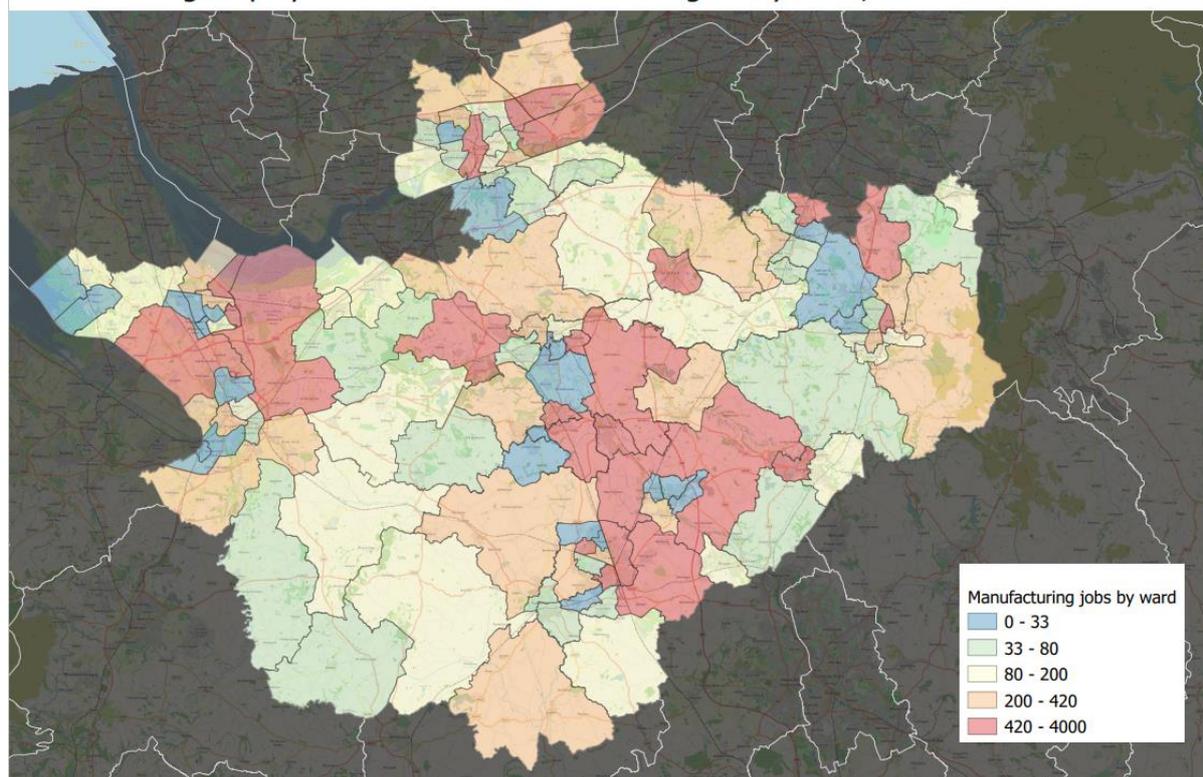
- Crewe St Barnabas
- Macclesfield Hurdsfield
- Westminster
- Crewe East
- Winsford Wharton
- Congleton West
- Poynton West and Adlington
- Bewsey and Whitecross
- Birchwood
- Rixton and Woolston
- Brereton Rural
- Haslington
- Gowy Rural

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<sup>7</sup> BRES, Nov 2021

<sup>8</sup> EMSI Analyst, Nov 2021

## Manufacturing employment in Cheshire and Warrington by ward, 2020



Map by Brennan Wilson Ltd in QGIS. Data from BRES (open access), OS and OpenStreetMap.

The composition of the Manufacturing sector in Cheshire and Warrington is shown in the table below which provides data on the 14 2-digit manufacturing sub sectors in Cheshire and Warrington that employed more than 1,000 people in 2021. Almost half of all the sector's employment was in four sub sectors:

- Manufacture of Motor Vehicles, Trailers and Semi-trailers
- Manufacture of Food Products
- Manufacture of Fabricated Metal Products, Except Machinery and Equipment
- Manufacture of Basic Pharmaceutical Products and Pharmaceutical Preparations

The average wage for a job in the sector in Cheshire and Warrington was £36,587<sup>9</sup>, with average wages ranging from £57,616 in the 'Manufacture of Coke and Refined Petroleum Products' subsector to £27,529 in the 'Manufacture of Wood and of Products of Wood and Cork, Except Furniture; Manufacture of Articles of Straw and Plaiting Materials' sub sector. At 491, the 'Manufacture of Fabricated Metal Products, Except Machinery and Equipment' subsector had the highest number of employers.

In 2021, there were four Manufacturing subsectors employing at least double the number of people that might be expected from national employment distribution. They were:

- Manufacture of Motor Vehicles, Trailers and Semi-trailers (LQ of 2.39)
- Manufacture of Basic Pharmaceutical Products and Pharmaceutical Preparations (LQ of 6.31)
- Manufacture of Chemicals and Chemical Products (LQ of 2.28)
- Manufacture of Coke and Refined Petroleum Products (LQ of 6.84)

<sup>9</sup> EMSI Analyst, Nov 2021

<b>Main Manufacturing subsectors in Cheshire and Warrington, 2021</b>				
Description	2021 Jobs	2021 Location Quotient	Avg. Wages Per Job	2020 Establishments
Manufacture of Motor Vehicles, Trailers and Semi-trailers	6123	2.39	£38,646	68
Manufacture of Food Products	5330	0.84	£28,559	106
Manufacture of Fabricated Metal Products, Except Machinery and Equipment	4442	0.99	£32,317	491
Manufacture of Basic Pharmaceutical Products and Pharmaceutical Preparations	4413	6.31	£48,904	9
Manufacture of Chemicals and Chemical Products	3416	2.28	£46,725	91
Manufacture of Computer, Electronic and Optical Products	2297	1.21	£37,784	91
Manufacture of Rubber and Plastic Products	1931	0.76	£27,663	77
Manufacture of Other Non-metallic Mineral Products	1847	1.32	£37,146	59
Repair and Installation of Machinery and Equipment	1817	0.85	£31,364	235
Manufacture of Machinery and Equipment n.e.c.	1755	0.60	£36,464	100
Manufacture of Wood and of Products of Wood and Cork, Except Furniture; Manufacture of Articles of Straw and Plaiting Materials	1513	1.22	£27,529	134
Manufacture of Paper and Paper Products	1469	1.67	£35,757	37
Printing and Reproduction of Recorded Media	1036	0.72	£29,969	147
Manufacture of Coke and Refined Petroleum Products	1015	6.84	£57,616	3
<b>Source: EMSI Analyst</b>				

The top ten occupations (4-digit SOC) employed in the Manufacturing sector in Cheshire and Warrington are set out in the table below. These account for 30% of all employment in the sector. Hourly wages for these occupations range from £9.88 (Packers, Bottlers, Canners and Fillers) to 20.79 (Sales Accounts and Business Development Managers).

<b>Top occupations in the Manufacturing sector in Cheshire and Warrington, 2021</b>			
	Employed in Industry (2021)	Median Hourly Wages (£)	Education Level
Production Managers and Directors in Manufacturing	2457	20.44	Honours, Bachelor's degree
Metal Working Production and Maintenance Fitters	1604	14.18	Level 3 NVQ; A Levels
Food, Drink and Tobacco Process Operatives	1511	9.95	Level 2 NVQ; GCSE at grades A*-C

Sales Accounts and Business Development Managers	1431	20.79	Honours, Bachelor's degree
Elementary Storage Occupations	1274	9.94	Level 1 NVQ; GCSE at grades D-G
Packers, Bottlers, Canners and Fillers	1109	9.88	Level 1 NVQ; GCSE at grades D-G
Assemblers (Vehicles and Metal Goods)	971	14.15	Level 2 NVQ; GCSE at grades A*-C
Chemical and Related Process Operatives	894	14.15	Level 2 NVQ; GCSE at grades A*-C
Production and Process Engineers	840	19.83	Honours, Bachelor's degree
Metal Machining Setters and Setter-operators	761	13.10	Level 3 NVQ; A Levels
<b>Source: EMSI Analyst</b>			

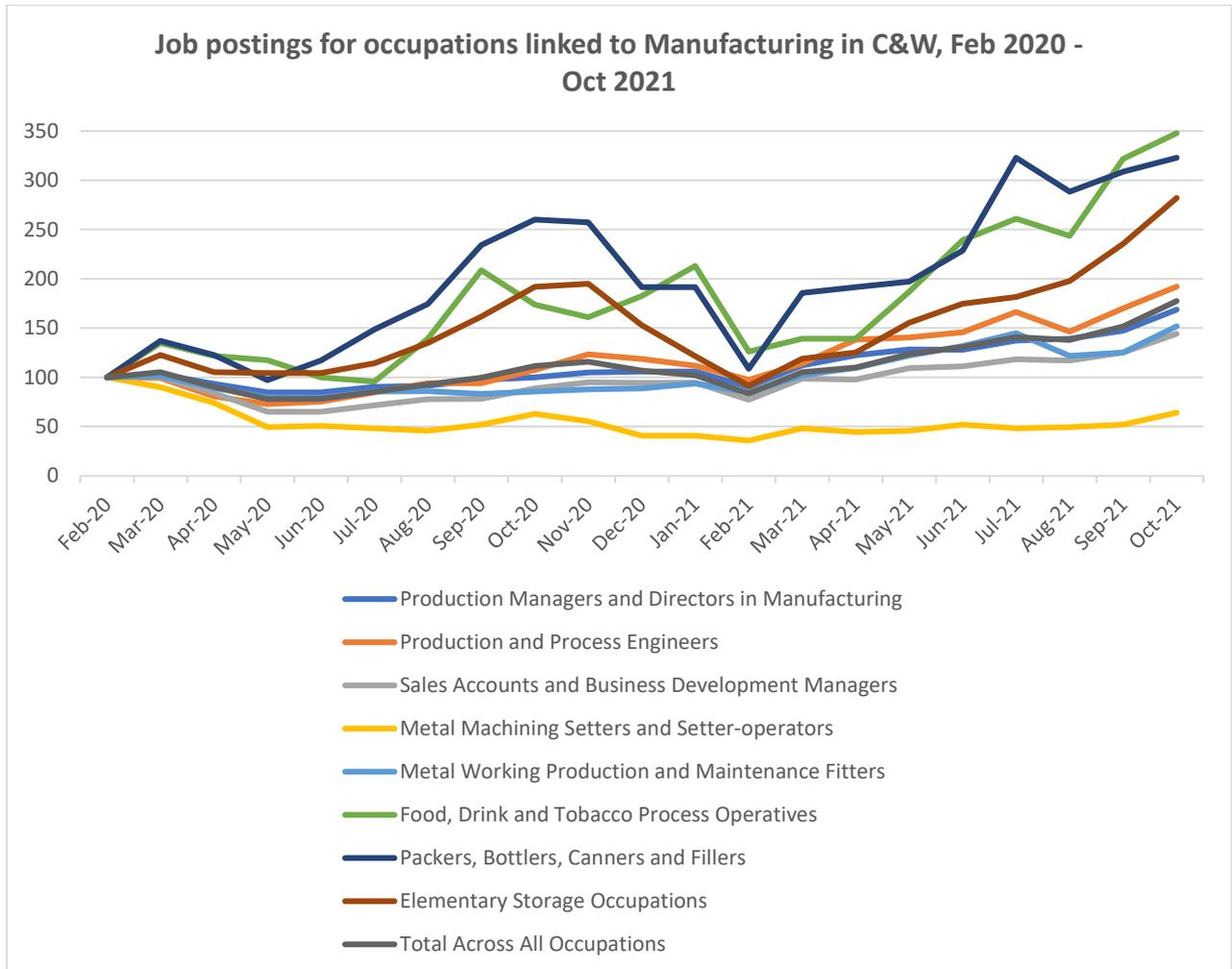
Analysis of EMSI Job postings for the occupations above in the period April 2021-October 2021 (table below) indicates that there was an average posting intensity for these roles of 7:1 in this period, which is the same as for the economy as a whole. Roles with a higher-than-average posting intensity (suggesting employers may find it harder to fill these roles) were:

- Production and Process Engineers
- Metal Working Production and Maintenance Fitters
- Elementary Storage Occupations

<b>Job postings for the top ten occupations in the Manufacturing sector in C&amp;W, Apr– Oct 2021</b>		
<b>Occupation</b>	<b>Avg. Posting Intensity (Apr 2021 - Oct 2021)</b>	<b>Unique Postings from Apr 2021 - Oct 2021</b>
Production Managers and Directors in Manufacturing	7 : 1	1497
Production and Process Engineers	9 : 1	683
Sales Accounts and Business Development Managers	7 : 1	4363
Metal Machining Setters and Setter-operators	7 : 1	123
Metal Working Production and Maintenance Fitters	8 : 1	2068
Food, Drink and Tobacco Process Operatives	6 : 1	181
Chemical and Related Process Operatives	4 : 1	14
Assemblers (Vehicles and Metal Goods)	0	0
Packers, Bottlers, Canners and Fillers	6 : 1	317
Elementary Storage Occupations	8 : 1	3691
<b>Source: EMSI Analyst</b>		

The graph below indexes job postings to pre-pandemic levels (Feb 2020=100) for the occupations above that have had more than 100 unique postings since April 2021. The highest increases in job postings were for:

- Food, Drink and Tobacco Process Operatives
- Chemical and Related Process Operatives
- Elementary Storage Occupations



Source: EMSI Analyst, Nov 2021

#### 4.3.2 Focus on the Construction Sector

The Construction sector had over 4,600 employers employing 21,000 people in Cheshire and Warrington in 2021 (BRES). The sector employed a lower percentage of the workforce than is the case nationally with a Location Quotient (LQ) of 0.82 in 2021<sup>10</sup>.

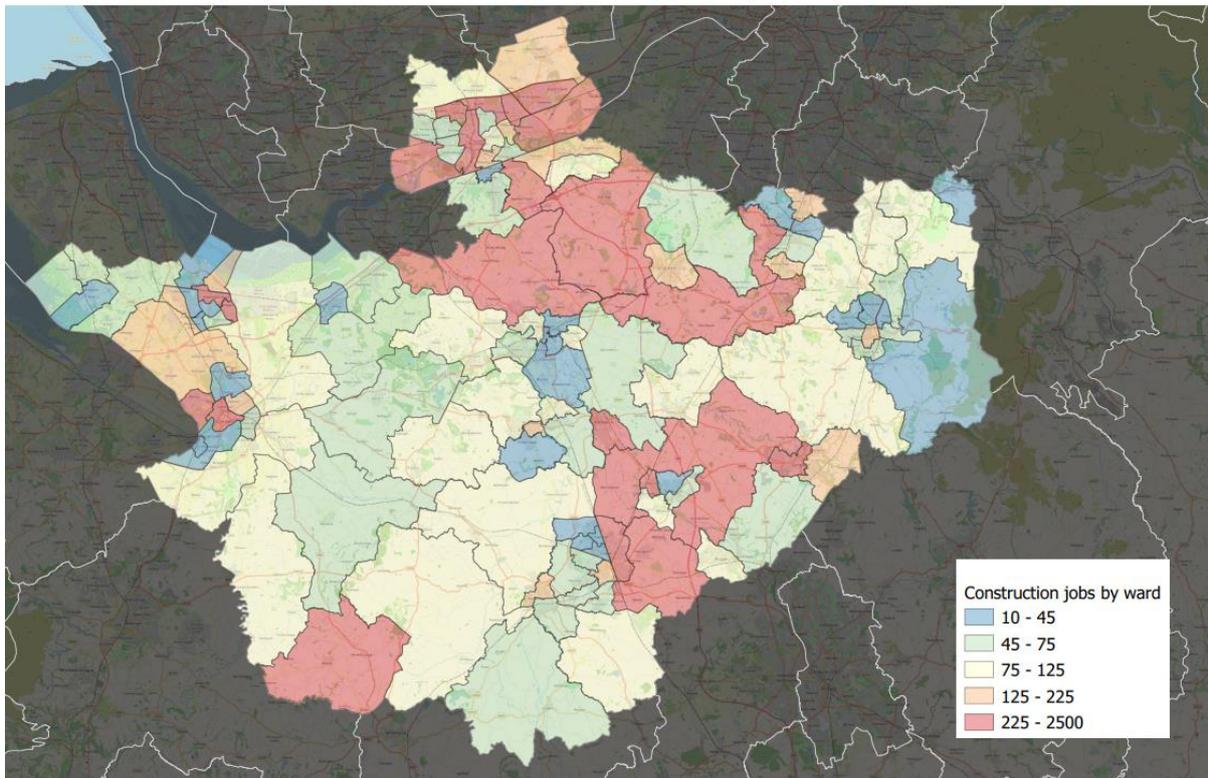
The following wards all had over 500 employed in the construction sector

- Birchwood
- Poulton North
- Bewsey and Whitecross
- Grappenhall

<sup>10</sup> EMSI Analyst, Nov 2021

- Haslington
- Central & Grange

### Construction employment in Cheshire and Warrington by ward, 2020



Map by Brennan Wilson Ltd in QGIS. Data from BRES (open access), OS and OpenStreetMap.

The composition of the Construction sector in Cheshire and Warrington is shown in the table below which provides data on the 2-digit construction sub sectors in Cheshire and Warrington.

The average wage for a job in the sector in Cheshire and Warrington was £35,690<sup>11</sup>, with average wages ranging from £31,478 in the ‘Specialised Construction Activities’ subsector to £40,922 in the ‘Civil Engineering’ sub sector. At 2,560 the ‘Specialised Construction Activities’ subsector had the highest number of employers.

In 2021, Construction of Buildings and Specialised Construction Activities subsectors employed a smaller proportion of the workforce than would be expected from the national distribution (LQs of 0.89 and 0.65 respectively). Whilst the Civil Engineering sub sector employed more (LQ of 1.37).

Construction subsectors in Cheshire and Warrington, 2021				
	2021 Jobs	Avg. Wages Per Job	2021 Location Quotient	2020 Establishments
Construction of Buildings	7224	£37,746	0.89	1712
Civil Engineering	4716	£40,922	1.37	392
Specialised Construction Activities	8907	£31,478	0.65	2560

*Source: EMSI Analyst, Nov 2021*

<sup>11</sup> EMSI Analyst, Nov 2021

The top ten occupations (4-digit SOC) employed in the Construction sector in Cheshire and Warrington are set out in the table below. These account for over 40% of all employment in the sector. Hourly wages for these occupations range from £9.96 (Elementary Construction Occupations) to £19.18 (Production Managers and Directors in Construction).

<b>Top occupations in the Construction sector in Cheshire and Warrington, 2021</b>			
	Employed in Industry (2021)	Median Hourly Wages	Education Level
Elementary Construction Occupations	1482	£9.96	Level 2 NVQ; GCSE at grades A*-C
Production Managers and Directors in Construction	1390	£19.18	Level 3 NVQ; A Levels
Electricians and Electrical Fitters	1369	£14.57	Level 3 NVQ; A Levels
Construction and Building Trades n.e.c.	689	£10.90	Level 3 NVQ; A Levels
Other Administrative Occupations n.e.c.	657	£10.89	Level 2 NVQ; GCSE at grades A*-C
Carpenters and Joiners	656	£11.13	Level 3 NVQ; A Levels
Plumbers and Heating and Ventilating Engineers	647	£13.42	Level 3 NVQ; A Levels
Construction Project Managers and Related Professionals	533	£18.96	Honours, Bachelor's degree
Construction Operatives n.e.c.	437	£11.06	Level 2 NVQ; GCSE at grades A*-C
Construction and Building Trades Supervisors	435	£15.41	Level 3 NVQ; A Levels
Book-keepers, Payroll Managers and Wages Clerks	434	£12.14	Level 2 NVQ; GCSE at grades A*-C
<b>Source: EMSI Analyst, Nov 2021</b>			

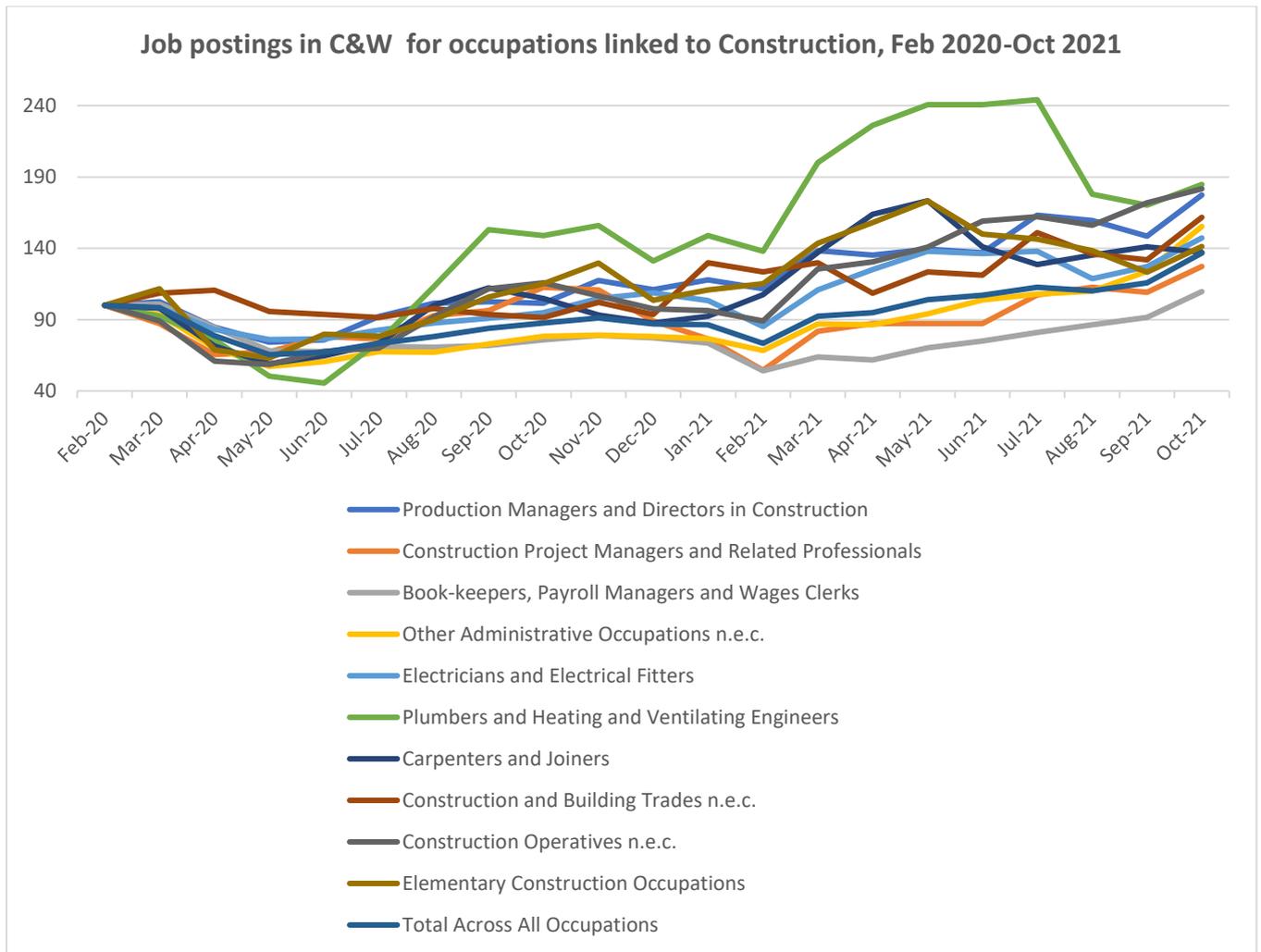
Analysis of EMSI Job postings for the occupations above in the period April 2021-October 2021 (table below) indicates that there was an average posting intensity for these roles of 7:1 in this period, which is the same as for the economy as a whole. Roles with a higher-than-average posting intensity (suggesting employers may find it harder to fill these roles) were:

- Book-keepers, Payroll Managers and Wages Clerks
- Electricians and Electrical Fitters

<b>Job postings for the top ten occupations in the Construction sector in C&amp;W, Apr– Oct 2021</b>		
Occupation	Avg. Posting Intensity (Apr 2021 - Oct 2021)	Unique Postings from Apr 2021 - Oct 2021
Production Managers and Directors in Construction	6 : 1	777
Construction Project Managers and Related Professionals	6 : 1	159
Book-keepers, Payroll Managers and Wages Clerks	8 : 1	3,643
Other Administrative Occupations n.e.c.	6 : 1	2,839
Electricians and Electrical Fitters	8 : 1	1,215
Plumbers and Heating and Ventilating Engineers	7 : 1	941
Carpenters and Joiners	5 : 1	463
Construction and Building Trades n.e.c.	5 : 1	169
Construction Operatives n.e.c.	5 : 1	788
Elementary Construction Occupations	5 : 1	647
Total Across All Occupations	7 : 1	11,641
<b>Source: EMSI Analyst, Nov 2021</b>		

The graph below indexes job postings to pre-pandemic levels (Feb 2020=100) for the occupations above. By October 2021, the highest increases in job postings were for:

- Production Managers and Directors in Construction
- Plumbers and Heating and Ventilating Engineers
- Construction Operatives n.e.c.



Source: EMSI Analyst, Nov 2021

#### 4.3.3 Focus on the Wholesale and Retail Trade and Repair of Motor Vehicles and Motorcycles Sector

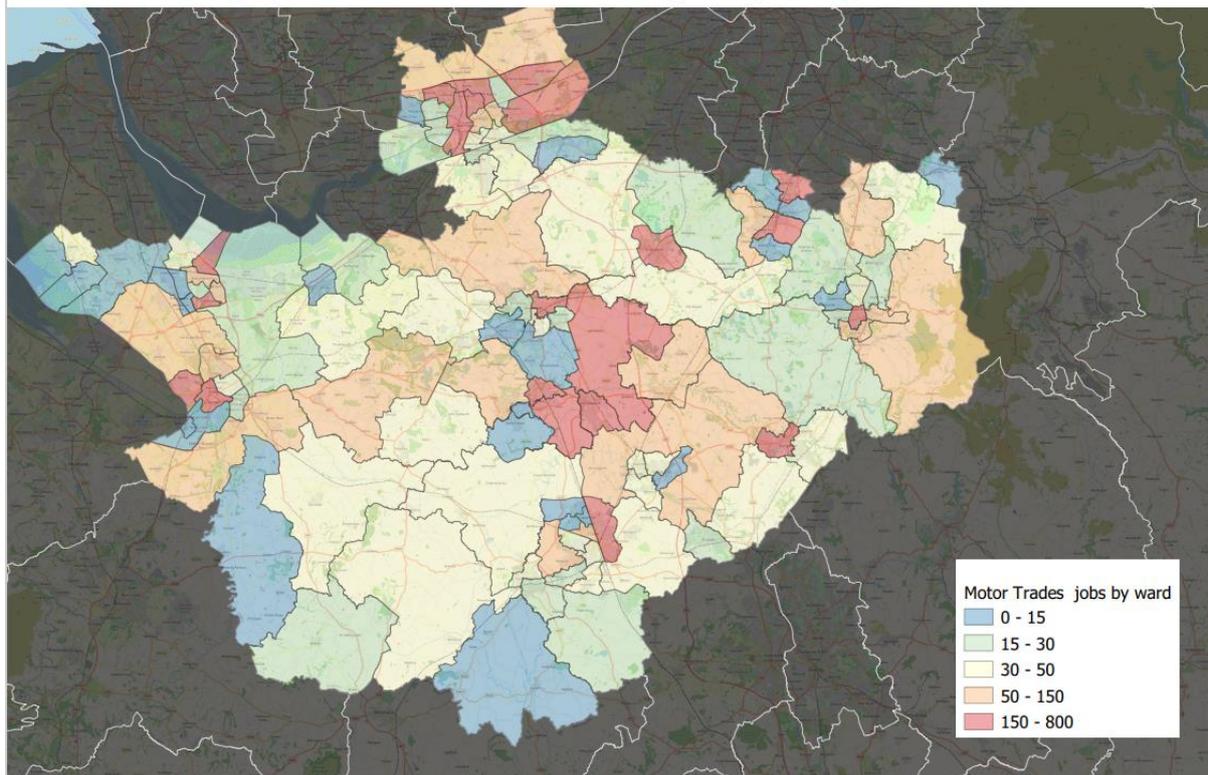
The sector had about 1,500 employers employing about 13,500 people in Cheshire and Warrington in 2021. The sector employed a higher percentage of the workforce than is the case nationally with a Location Quotient (LQ) of 1.42 in 2021<sup>12</sup>.

The following wards had employment of more than 600 in the Wholesale and Retail Trade and Repair of Motor Vehicles and Motorcycles sector:

- Blacon
- Bewsey and Whitecross
- Crewe East
- Rixton and Woolston

<sup>12</sup> EMSI Analyst, Nov 2021

### Motor Trades employment in Cheshire and Warrington by ward, 2020



Map by Brennan Wilson Ltd in QGIS. Data from BRES (open access), OS and OpenStreetMap.

The composition of the sector in Cheshire and Warrington is shown in the table below which provides data on the 3-digit sub sectors in Cheshire and Warrington.

The average wage for a job in the sector in Cheshire and Warrington was £30,282<sup>13</sup>, with average wages ranging from £27,041 in the ‘Maintenance and Repair of Motor Vehicles’ subsector to £34,883 in the ‘Sale of Motor Vehicles’ sub sector. At 782 the ‘Maintenance and Repair of Motor Vehicles’ subsector had the highest number of employers.

In 2021, ‘Sale, Maintenance and Repair of Motorcycles and Related Parts and Accessories’ subsector employed a smaller proportion of the workforce than would be expected from the national distribution (LQ of 0.61). Whilst the ‘Sale of Motor Vehicles’, ‘Maintenance and Repair of Motor Vehicles’, and the ‘Sale of Motor Vehicle Parts and Accessories’ sub sectors employed more (LQs of 1.34, 1.29 and 1.92 respectively).

<b>‘Wholesale and Retail Trade and Repair of Motor Vehicles and Motorcycles’ subsectors in Cheshire and Warrington, 2021</b>				
	2021 Jobs	Avg. Wages Per Job	2021 LQ	2020 Establishments
Sale of Motor Vehicles	4820	£34,883	1.34	469
Maintenance and Repair of Motor Vehicles	5182	£27,041	1.29	782
Sale of Motor Vehicle Parts and Accessories	3555	£28,485	1.92	197

<sup>13</sup> EMSI Analyst, Nov 2021

Sale, Maintenance and Repair of Motorcycles and Related Parts and Accessories	106	£34,054	0.61	32
<b>Source: EMSI Analyst</b>				

The top ten occupations (4-digit SOC) employed in the 'Wholesale and Retail Trade and Repair of Motor Vehicles and Motorcycles' sector in Cheshire and Warrington are set out in the table below. These account for about 20% of all employment in the sector. Hourly wages for these occupations range from £8.75 (Vehicle Valeters and Cleaners) to £13.11 (Managers and Directors in Retail and Wholesale).

<b>Top occupations in the 'Wholesale and Retail Trade and Repair of Motor Vehicles and Motorcycles' sector in Cheshire and Warrington, 2021</b>			
Description	Employed in Industry (2021)	Median Hourly Wages	Education Level
Vehicle Technicians, Mechanics and Electricians	2387	£11.83	Level 3 NVQ; A Levels
Vehicle and Parts Salespersons and Advisers	1104	£9.06	Level 3 NVQ; A Levels
Elementary Storage Occupations	659	£9.94	Level 1 NVQ; GCSE at grades D-G
Other Administrative Occupations n.e.c.	600	£10.89	Level 2 NVQ; GCSE at grades A*-C
Van Drivers	555	£9.51	Level 2 NVQ; GCSE at grades A*-C
Sales and Retail Assistants	533	£9.18	Level 2 NVQ; GCSE at grades A*-C
Vehicle Valeters and Cleaners	500	£8.75	Level 1 NVQ; GCSE at grades D-G
Managers and Directors in Retail and Wholesale	466	£13.11	Level 2 NVQ; GCSE at grades A*-C
Book-keepers, Payroll Managers and Wages Clerks	417	£12.14	Level 2 NVQ; GCSE at grades A*-C
Receptionists	361	£9.30	Level 2 NVQ; GCSE at grades A*-C
<b>Source: EMSI Analyst, Nov 2021</b>			

Analysis of EMSI Job postings for the occupations above in the period April 2021-October 2021 (table below) indicates that there was an average posting intensity for these roles of 7:1 in this period, which is the same as for the economy as a whole. Roles with a higher-than-average posting intensity (suggesting employers may find it harder to fill these roles) were:

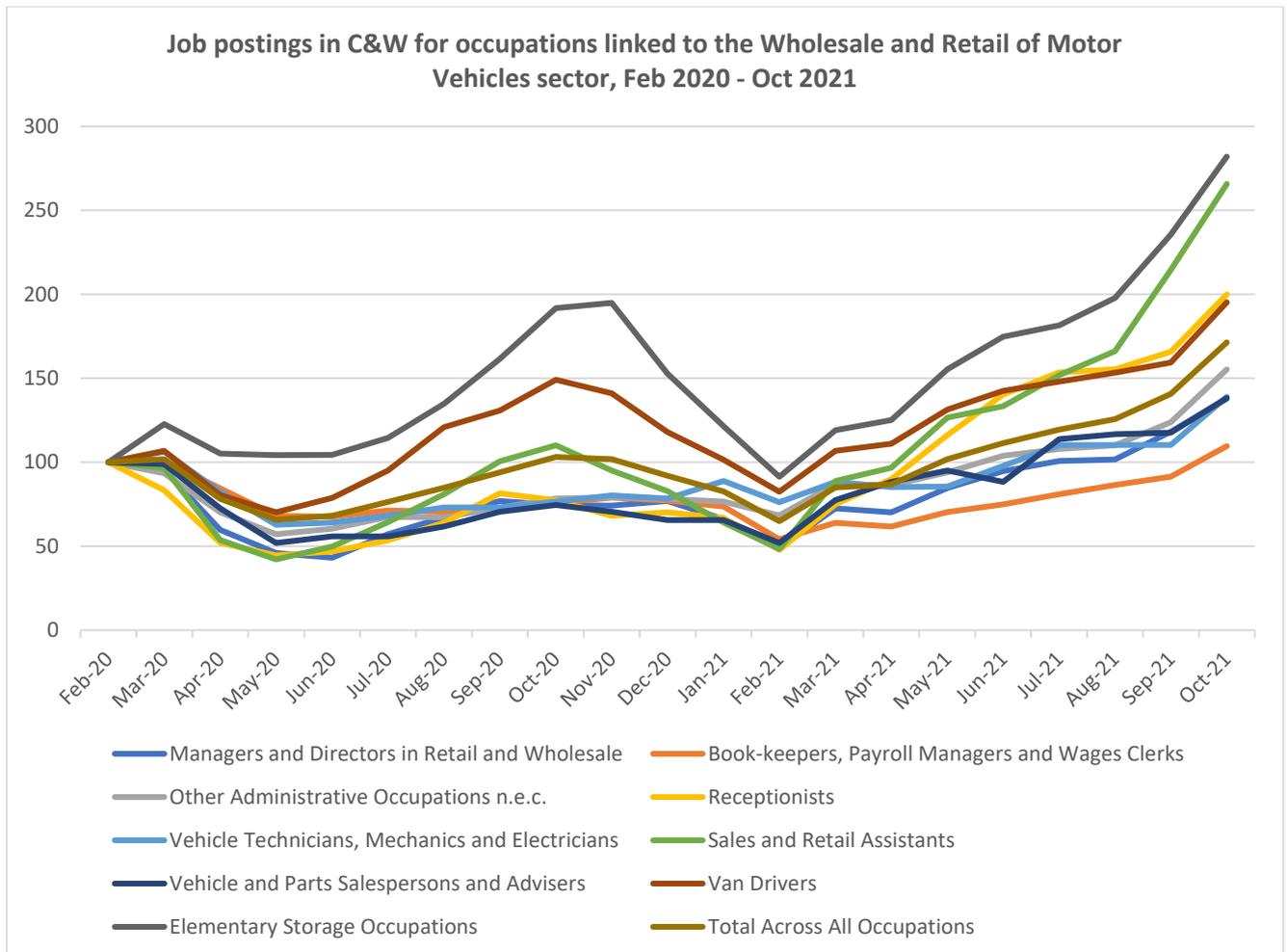
- Book-keepers, Payroll Managers and Wages Clerks
- Vehicle Technicians, Mechanics and Electricians
- Elementary Storage Occupations

**Job postings for the top ten occupations in the 'Wholesale and Retail Trade and Repair of Motor Vehicles and Motorcycles' sector in C&W, Apr– Oct 2021**

Occupation	Avg. Posting Intensity (Apr 2021 - Oct 2021)	Unique Postings from Apr 2021 - Oct 2021
Managers and Directors in Retail and Wholesale	6 : 1	764
Book-keepers, Payroll Managers and Wages Clerks	8 : 1	3,643
Other Administrative Occupations n.e.c.	6 : 1	2,839
Receptionists	4 : 1	1,072
Vehicle Technicians, Mechanics and Electricians	8 : 1	683
Sales and Retail Assistants	7 : 1	2,500
Vehicle and Parts Salespersons and Advisers	6 : 1	306
Van Drivers	6 : 1	3,114
Vehicle Valeters and Cleaners	3 : 1	90
Elementary Storage Occupations	8 : 1	3,691
<i>Source: EMSI Analyst, Nov 2021</i>		

The graph below indexes job postings to pre-pandemic levels (Feb 2020=100) for the occupations above that had >100 postings Apr-Oct 2021. By October 2021, the highest increases in job postings were for:

- Sales and Retail Assistants
- Van Drivers
- Elementary Storage Occupations



Source: EMSI Analyst, Nov 2021

#### 4.3.4 Focus on the Wholesale Trade (exc motor vehicles) sector

The sector had about 2,000 employers employing about 20,000 people in Cheshire and Warrington in 2021. The sector employed a slightly higher percentage of the workforce than is the case nationally with a Location Quotient (LQ) of 1.06 in 2021<sup>14</sup>.

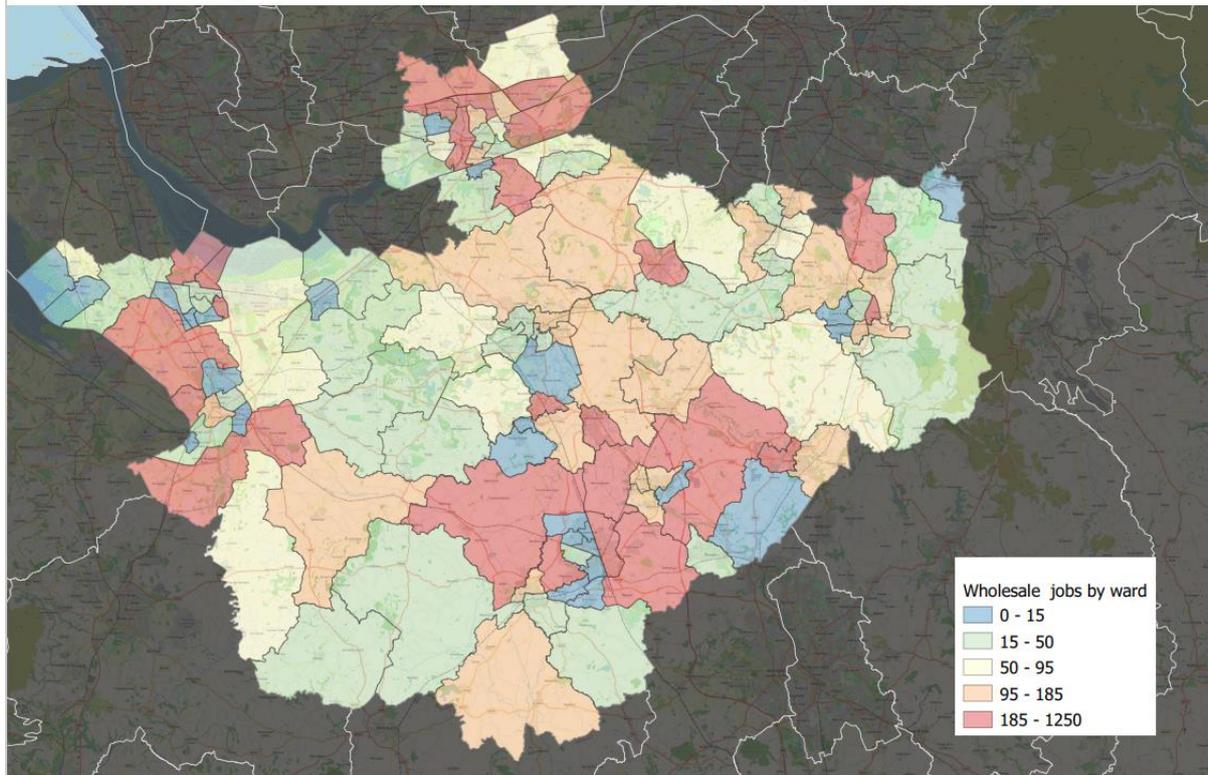
The following wards all had employment of more than 500 in the Wholesale Trade sector:

- Crewe East
- Birchwood
- Winsford Wharton
- Knutsford
- Bewsey and Whitecross
- Rixton and Woolston
- Westbrook
- Poplars and Hulme
- Wistaston
- Burtonwood and Winwick
- Bunbury
- Congleton West

<sup>14</sup> EMSI Analyst, Nov 2021

- Grappenhall

### Wholesale employment in Cheshire and Warrington by ward, 2020



Map by Brennan Wilson Ltd in QGIS. Data from BRES (open access), OS and OpenStreetMap.

The composition of the sector in Cheshire and Warrington is shown in the table below which provides data on the 3-digit sub sectors in Cheshire and Warrington.

The average wage for a job in the sector in Cheshire and Warrington was £32,575<sup>15</sup>, with average wages ranging from £29,017 in the 'Wholesale of Agricultural Raw Materials and Live Animals' subsector to £36,467 in the 'Wholesale of Information and Communication Equipment' sub sector. At 471, the 'Other Specialised Wholesale' subsector had the highest number of employers.

In 2021, 'Wholesale of Food, Beverages and Tobacco' and the 'Wholesale of Household Goods' subsectors employed a smaller proportion of the workforce than would be expected from the national distribution (LQs of 0.79 and 0.76 respectively). The 'Wholesale on a Fee or Contract Basis', 'Wholesale of Agricultural Raw Materials and Live Animals', and 'Other Specialised Wholesale' subsectors employed about what would be expected from national employment distribution. Whilst the 'Wholesale of Information and Communication Equipment' and the 'Non-specialised Wholesale Trades' subsectors employed more (LQs of 1.81 and 1.22 respectively).

Wholesale Trade (exc motor vehicles) subsectors in Cheshire and Warrington, 2021				
Description	2021 Jobs	Avg. Wages Per Job	2021 LQ	2020 Establishments
Wholesale on a Fee or Contract Basis	1047	£30,091	1.05	297
Wholesale of Agricultural Raw Materials and Live Animals	231	£29,017	0.98	46
Wholesale of Food, Beverages and Tobacco	2876	£29,317	0.79	204

<sup>15</sup> EMSI Analyst, Nov 2021

Wholesale of Household Goods	3256	£32,238	0.76	364
Wholesale of Information and Communication Equipment	2252	£36,467	1.81	108
Wholesale of Other Machinery, Equipment and Supplies	4138	£35,980	1.48	282
Other Specialised Wholesale	4848	£31,299	1.05	471
Non-specialised Wholesale Trade	1696	£31,303	1.22	204
<b>Source: EMSI Analyst, November 2021</b>				

The top ten occupations (4-digit SOC) employed in the 'Wholesale Trade (exc motor vehicles)' sector in Cheshire and Warrington are set out in the table below. These account for about 45% of all employment in the sector. Hourly wages for these occupations range from £9.18 (Sales and Retail Assistants) to £25.45 (Marketing and Sales Directors).

<b>Top occupations in the Wholesale Trade (exc motor vehicles) sector in Cheshire and Warrington 2021</b>			
	Employed in Industry (2021)	Median Hourly Wages	Education Level
Sales Accounts and Business Development Managers	1656	£20.79	Honours, Bachelor's degree
Elementary Storage Occupations	1568	£9.94	Level 1 NVQ; GCSE at grades D-G
Sales and Retail Assistants	1178	£9.18	Level 2 NVQ; GCSE at grades A*-C
Managers and Directors in Retail and Wholesale	957	£13.11	Level 2 NVQ; GCSE at grades A*-C
Business Sales Executives	850	£14.80	Level 3 NVQ; A Levels
Large Goods Vehicle Drivers	742	£12.00	Level 2 NVQ; GCSE at grades A*-C
Other Administrative Occupations n.e.c.	716	£10.89	Level 2 NVQ; GCSE at grades A*-C
Book-keepers, Payroll Managers and Wages Clerks	494	£12.14	Level 2 NVQ; GCSE at grades A*-C
Van Drivers	468	£9.51	Level 2 NVQ; GCSE at grades A*-C
Marketing and Sales Directors	463	£25.45	Honours, Bachelor's degree
<b>Source: EMSI Analyst, November 2021</b>			

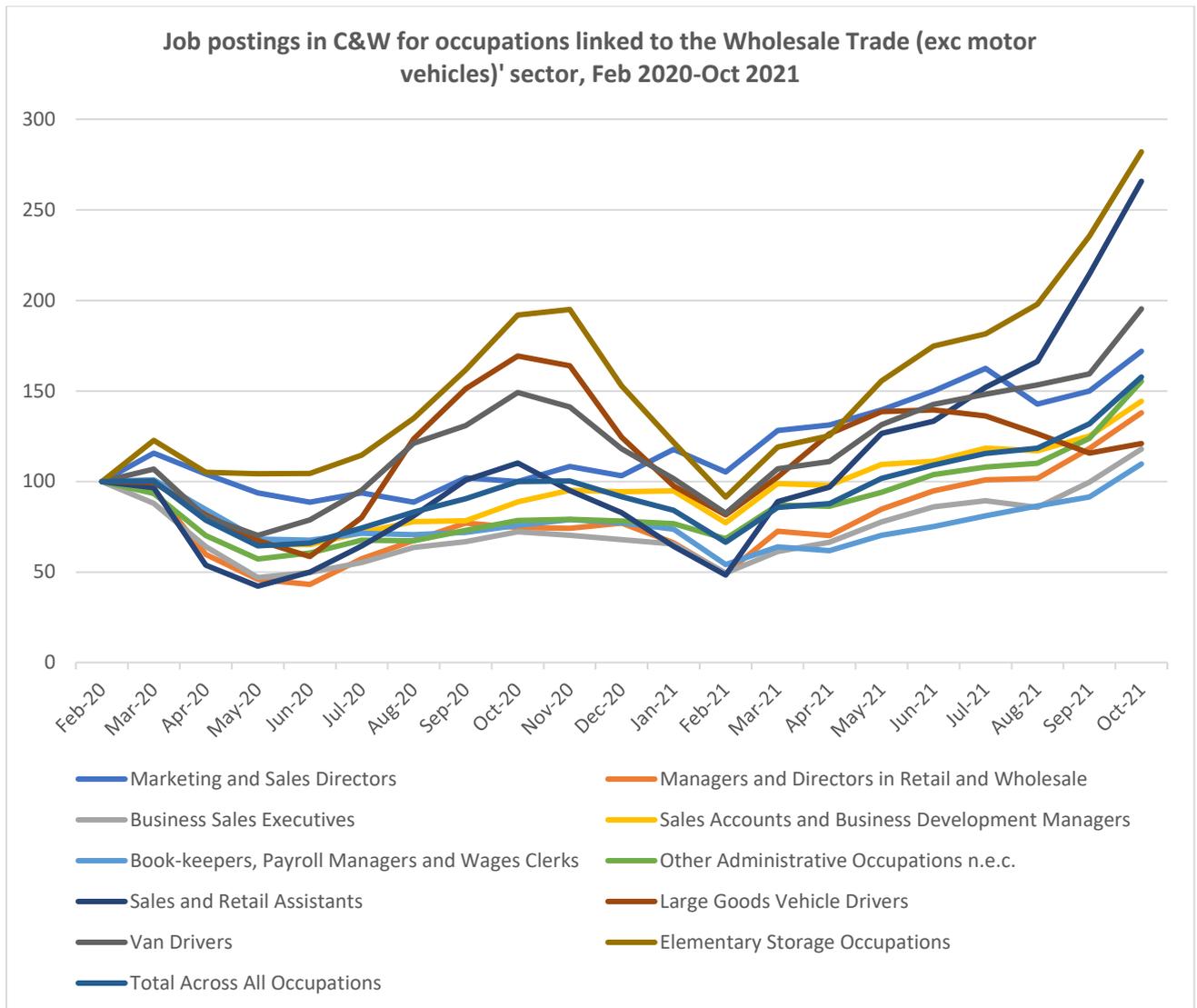
Analysis of EMSI Job postings for the occupations above in the period April 2021-October 2021 (table below) indicates that there was an average posting intensity for these roles of 7:1 in this period, which is the same as for the economy as a whole. Roles with a higher-than-average posting intensity (suggesting employers may find it harder to fill these roles) were:

- Book-keepers, Payroll Managers and Wages Clerks
- Elementary Storage Occupations

<b>Job postings for the top ten occupations in the 'Wholesale Trade (exc Motor Vehicles)' sector in C&amp;W, Apr– Oct 2021</b>		
Occupation	Avg. Posting Intensity (Apr 2021 - Oct 2021)	Unique Postings from Apr 2021 - Oct 2021
Marketing and Sales Directors	5 : 1	398
Managers and Directors in Retail and Wholesale	6 : 1	764
Business Sales Executives	7 : 1	2365
Sales Accounts and Business Development Managers	7 : 1	4363
Book-keepers, Payroll Managers and Wages Clerks	8 : 1	3643
Other Administrative Occupations n.e.c.	6 : 1	2839
Sales and Retail Assistants	7 : 1	2500
Large Goods Vehicle Drivers	5 : 1	780
Van Drivers	6 : 1	3114
Elementary Storage Occupations	8 : 1	3691
<b>Source: EMSI Analyst, November 2021</b>		

The graph below indexes job postings to pre-pandemic levels (Feb 2020=100) for the occupations above. By October 2021, the highest increases in job postings were for:

- Sales and Retail Assistants
- Van Drivers
- Elementary Storage Occupations



Source: EMSI Analyst, Nov 2021

#### 4.3.5 Focus on the Retail Trade (exc motor vehicles) sector

The sector had about 4,300 employers employing about 50,000 people in Cheshire and Warrington in 2021. The sector employed a slightly higher percentage of the workforce than is the case nationally with a Location Quotient (LQ) of 1.09 in 2021<sup>16</sup>.

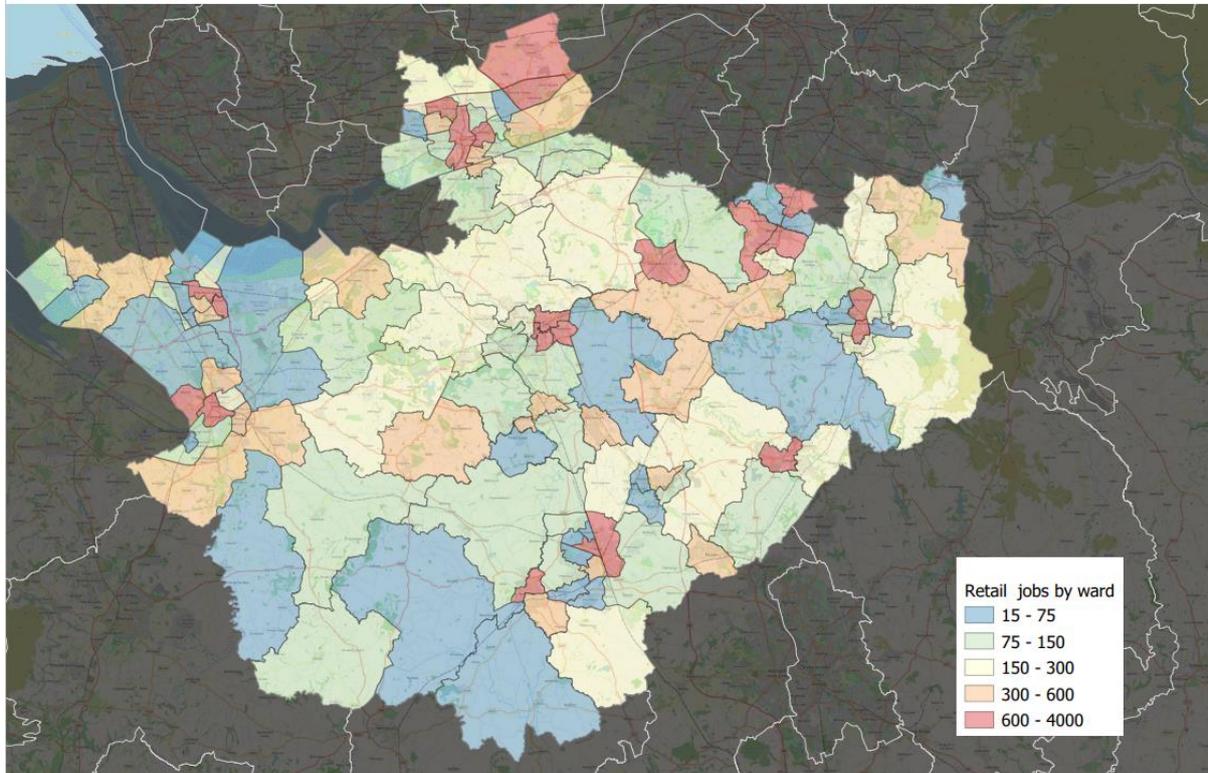
The following wards all had employment of more than 1000 in the Retail sector:

- Chester City & the Garden Quarter
- Bewsey and Whitecross
- Wolverham
- Rudheath
- Handforth
- Crewe East
- Westbrook
- Blacon
- Macclesfield Central

<sup>16</sup> EMSI Analyst, Nov 2021

- Nantwich North and West
- Fairfield and Howley
- Northwich Leftwich
- Congleton West

### Retail employment in Cheshire and Warrington by ward, 2020



Map by Brennan Wilson Ltd in QGIS. Data from BRES (open access), OS and OpenStreetMap.

The composition of the sector in Cheshire and Warrington is shown in the table below which provides data on the 3-digit sub sectors in Cheshire and Warrington.

The average wage for a job in the sector in Cheshire and Warrington was £17,727, with average wages ranging from £8,708 in the ‘Retail Sale Via Stalls and Markets’ subsector to £25,191 in the ‘Retail Trade Not in Stores, Stalls or Markets’ sub sector. At 1619, the ‘Retail Sale of Other Goods in Specialised Stores’ subsector had the highest number of employers.

In 2021, ‘Retail Sale in Non-specialised Stores’, ‘Retail Sale of Automotive Fuel in Specialised Stores’, ‘Retail Sale of Information and Communication Equipment in Specialised Stores’, ‘Retail Sale of Cultural and Recreation Goods in Specialised Stores’ subsectors employed a smaller proportion of the workforce than would be expected from the national distribution (LQs of 0.90, 0.90, 0.90, and 0.84 respectively). The ‘Retail Sale Via Stalls and Markets’ subsector employed about what would be expected from national employment distribution. Whilst the ‘Retail Sale of Food, Beverages and Tobacco in Specialised Stores’, ‘Retail Sale of Other Household Equipment in Specialised Stores’, ‘Retail Sale of Other Goods in Specialised Stores’, and ‘Retail Trade Not in Stores, Stalls or Markets’ subsectors employed more (LQs of 1.18, 1.23, 1.24, and 1.78 respectively).

<b>Retail subsectors in Cheshire and Warrington, 2021</b>				
	2021 Jobs	Avg. Wages Per Job	2021 LQ	2020 Establishments
Retail Sale in Non-specialised Stores	17077	£16,408	0.90	768
Retail Sale of Food, Beverages and Tobacco in Specialised Stores	3088	£13,989	1.18	422
Retail Sale of Automotive Fuel in Specialised Stores	611	£15,312	0.90	49
Retail Sale of Information and Communication Equipment in Specialised Stores	473	£17,633	0.90	75
Retail Sale of Other Household Equipment in Specialised Stores	4556	£20,610	1.23	552
Retail Sale of Cultural and Recreation Goods in Specialised Stores	1712	£15,799	0.84	277
Retail Sale of Other Goods in Specialised Stores	18402	£17,538	1.24	1619
Retail Sale Via Stalls and Markets	144	£8,708	1.02	20
Retail Trade Not in Stores, Stalls or Markets	4035	£25,191	1.78	523
<b>Source: EMSI Analyst, Nov 2021</b>				

The top ten occupations (4-digit SOC) employed in the Retail sector in Cheshire and Warrington are set out in the table below. These account for about two thirds of all employment in the sector. Hourly wages for these occupations range from £9.18 (Sales and Retail Assistants) to £13.11 (Managers and Directors in Retail and Wholesale).

<b>Top occupations in the Retail sector, 2021</b>			
	Employed in Industry (2021)	Median Hourly Wages	Education Level
Sales and Retail Assistants	17263	£9.18	Level 2 NVQ; GCSE at grades A*-C
Managers and Directors in Retail and Wholesale	3513	£13.11	Level 2 NVQ; GCSE at grades A*-C
Retail Cashiers and Check-out Operators	2562	£9.43	Level 2 NVQ; GCSE at grades A*-C
Sales Supervisors	2316	£11.52	Level 2 NVQ; GCSE at grades A*-C
Elementary Storage Occupations	2240	£9.94	Level 1 NVQ; GCSE at grades D-G
Shelf Fillers	1459	£9.00	Level 1 NVQ; GCSE at grades D-G
Pharmacy and Other Dispensing Assistants	1305	£9.46	Level 2 NVQ; GCSE at grades A*-C
Other Administrative Occupations n.e.c.	1301	£10.89	Level 2 NVQ; GCSE at grades A*-C
Customer Service Occupations n.e.c.	1017	£9.75	Level 2 NVQ; GCSE at grades A*-C
Van Drivers	744	£9.51	Level 2 NVQ; GCSE at grades A*-C
<b>Source: EMSI Analyst, Nov 2021</b>			

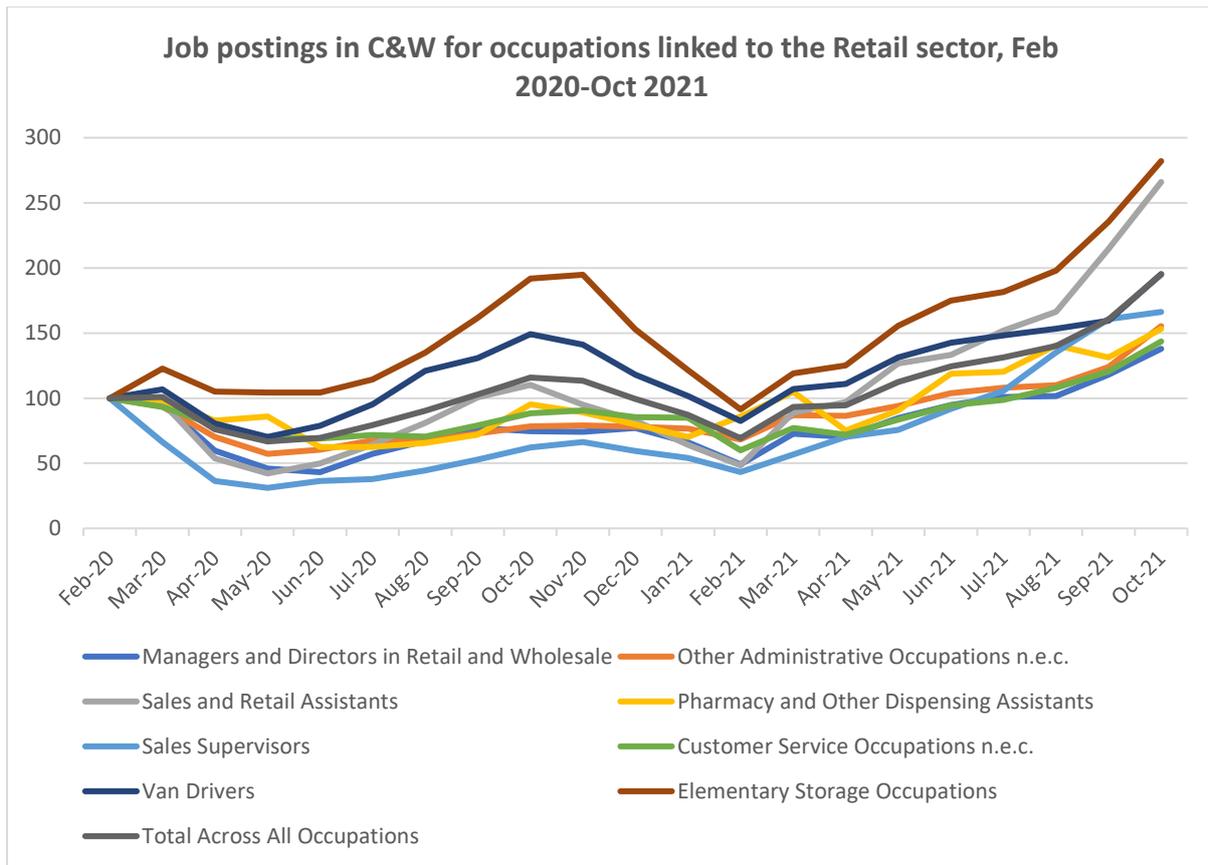
Analysis of EMSI Job postings for the occupations above in the period April 2021-October 2021 (table below) indicates that there was an average posting intensity for these roles of 7:1 in this period, which is the same as for the economy as a whole. Roles with a higher-than-average posting intensity (suggesting employers may find it harder to fill these roles) were:

- Customer Service Occupations n.e.c.
- Elementary Storage Occupations

<b>Job postings for the top ten occupations in the Retail sector Apr-Oct 2021</b>		
Occupation	Avg. Posting Intensity (Apr 2021 - Oct 2021)	Unique Postings from Apr 2021 - Oct 2021
Managers and Directors in Retail and Wholesale	6 : 1	764
Other Administrative Occupations n.e.c.	6 : 1	2839
Sales and Retail Assistants	7 : 1	2501
Retail Cashiers and Check-out Operators	7 : 1	5
Pharmacy and Other Dispensing Assistants	4 : 1	249
Sales Supervisors	6 : 1	264
Customer Service Occupations n.e.c.	8 : 1	1722
Van Drivers	6 : 1	3114
Shelf Fillers	0	0
Elementary Storage Occupations	8 : 1	3691
Total Across All Occupations	7 : 1	15149
<b>Source: EMSI Analyst, Nov 2021</b>		

The graph below indexes job postings to pre-pandemic levels (Feb 2020=100) for the occupations above. By October 2021, the highest percentage increases in job postings were for:

- Elementary Storage Occupations
- Sales and Retail Assistants
- Van Drivers



Source: EMSI Analyst, Nov 2021

#### 4.3.6 Focus on the Transportation & Storage sector

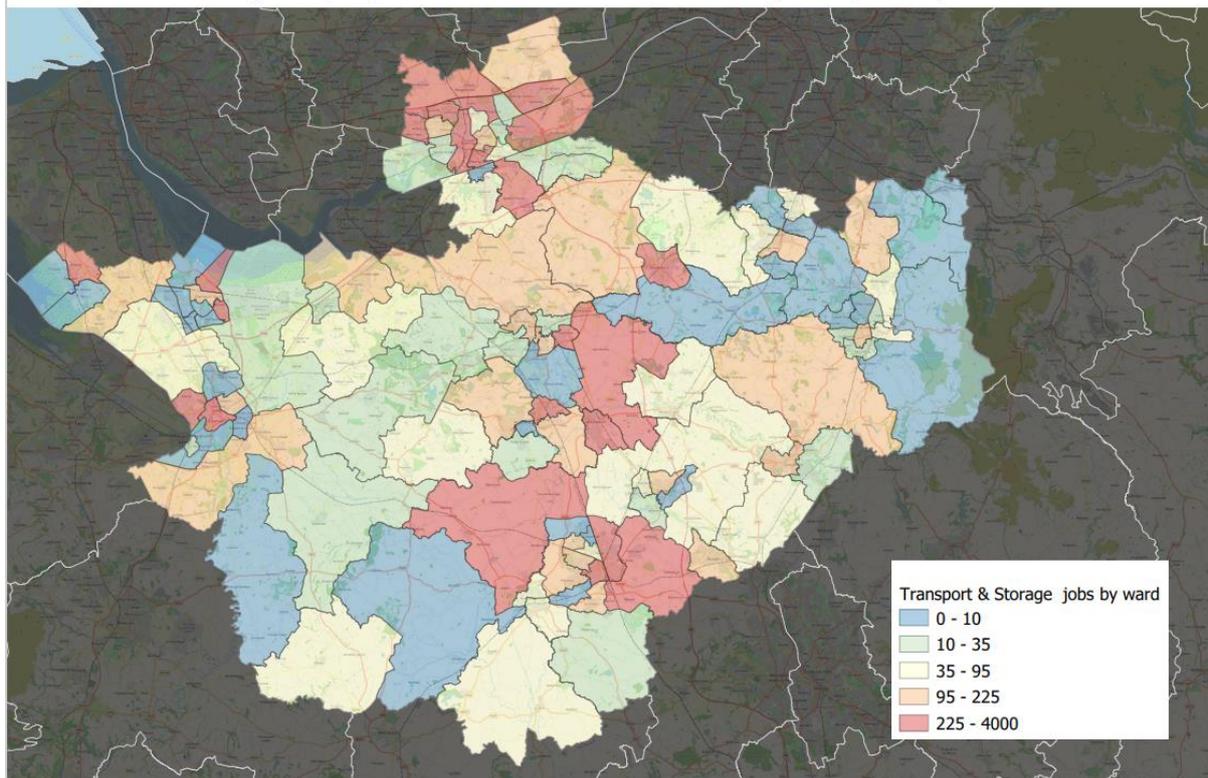
The sector had about 1,850 employers employing about 29,000 people in Cheshire and Warrington in 2021. The sector employed a slightly higher percentage of the workforce than is the case nationally with a Location Quotient (LQ) of 1.14 in 2021<sup>17</sup>.

The following wards all had employment of more than 1000 in the Transport & storage sector:

- Great Sankey North and Whittle Hall
- Crewe East
- Birchwood
- Grappenhall
- Bewsey and Whitecross
- Rudheath
- Middlewich
- Crewe South

<sup>17</sup> EMSI Analyst, Nov 2021

## Transport & Storage employment in Cheshire and Warrington by ward, 2020



Map by Brennan Wilson Ltd in QGIS. Data from BRES (open access), OS and OpenStreetMap.

The composition of the sector in Cheshire and Warrington is shown in the table below which provides data on the 2-digit sub sectors in Cheshire and Warrington.

The average wage for a job in the sector in Cheshire and Warrington was £30,313, with average wages ranging from £21,013 in the 'Water Transport' subsector to £36,152 in the 'Air Transport' sub sector. At 1104, the 'Land Transport and Transport Via Pipelines' subsector had the highest number of employers.

In 2021, the 'Water Transport' and 'Air Transport' subsectors employed a smaller proportion of the workforce than would be expected from the national distribution (LQs of 0.31 and 0.08 respectively). The 'Land Transport and Transport Via Pipelines' subsector employed about what would be expected from national employment distribution. Whilst the 'Warehousing and Support Activities for Transportation' and 'Postal and Courier Activities' subsectors employed more (LQs of 1.19 and 1.78 respectively).

Transport and Storage subsectors in Cheshire and Warrington, 2021				
Description	2021 Jobs	Avg. Wages Per Job	2021 LQ	2020 Establishments
Land Transport and Transport Via Pipelines	10238	£28,843	0.99	1104
Water Transport	79	£21,013	0.31	5
Air Transport	107	£36,152	0.08	8
Warehousing and Support Activities for Transportation	11093	£31,510	1.19	322
Postal and Courier Activities	7473	£30,563	1.78	413

*Source: EMSI Analyst, Nov 2021*

The top ten occupations (4-digit SOC) employed in the Transportation and Storage sector in Cheshire and Warrington are set out in the table below. These account for about two thirds of all employment in the sector. Hourly wages for these occupations range from £9.75 (Taxi and Cab Drivers and Chauffeurs) to £18.46 (Managers and Directors in Transport and Distribution).

<b>Top 10 occupations linked to the Transport and Storage sector in C&amp;W, 2021</b>			
	Employed in Industry (2021)	Median Hourly Wages	Education Level
Elementary Storage Occupations	5770	£9.94	Level 1 NVQ; GCSE at grades D-G
Large Goods Vehicle Drivers	4904	£12.00	Level 2 NVQ; GCSE at grades A*-C
Postal Workers, Mail Sorters, Messengers and Couriers	2460	£11.11	Level 1 NVQ; GCSE at grades D-G
Van Drivers	1440	£9.51	Level 2 NVQ; GCSE at grades A*-C
Fork-lift Truck Drivers	891	£11.94	Level 2 NVQ; GCSE at grades A*-C
Managers and Directors in Transport and Distribution	875	£18.46	Level 3 NVQ; A Levels
Other Administrative Occupations n.e.c.	797	£10.89	Level 2 NVQ; GCSE at grades A*-C
Managers and Directors in Storage and Warehousing	757	£13.37	Level 3 NVQ; A Levels
Packers, Bottlers, Canners and Fillers	740	£9.88	Level 1 NVQ; GCSE at grades D-G
Bus and Coach Drivers	738	£11.93	Level 2 NVQ; GCSE at grades A*-C
Taxi and Cab Drivers and Chauffeurs	458	£9.75	Level 2 NVQ; GCSE at grades A*-C
<i>Source: EMSI Analyst, Nov 2021</i>			

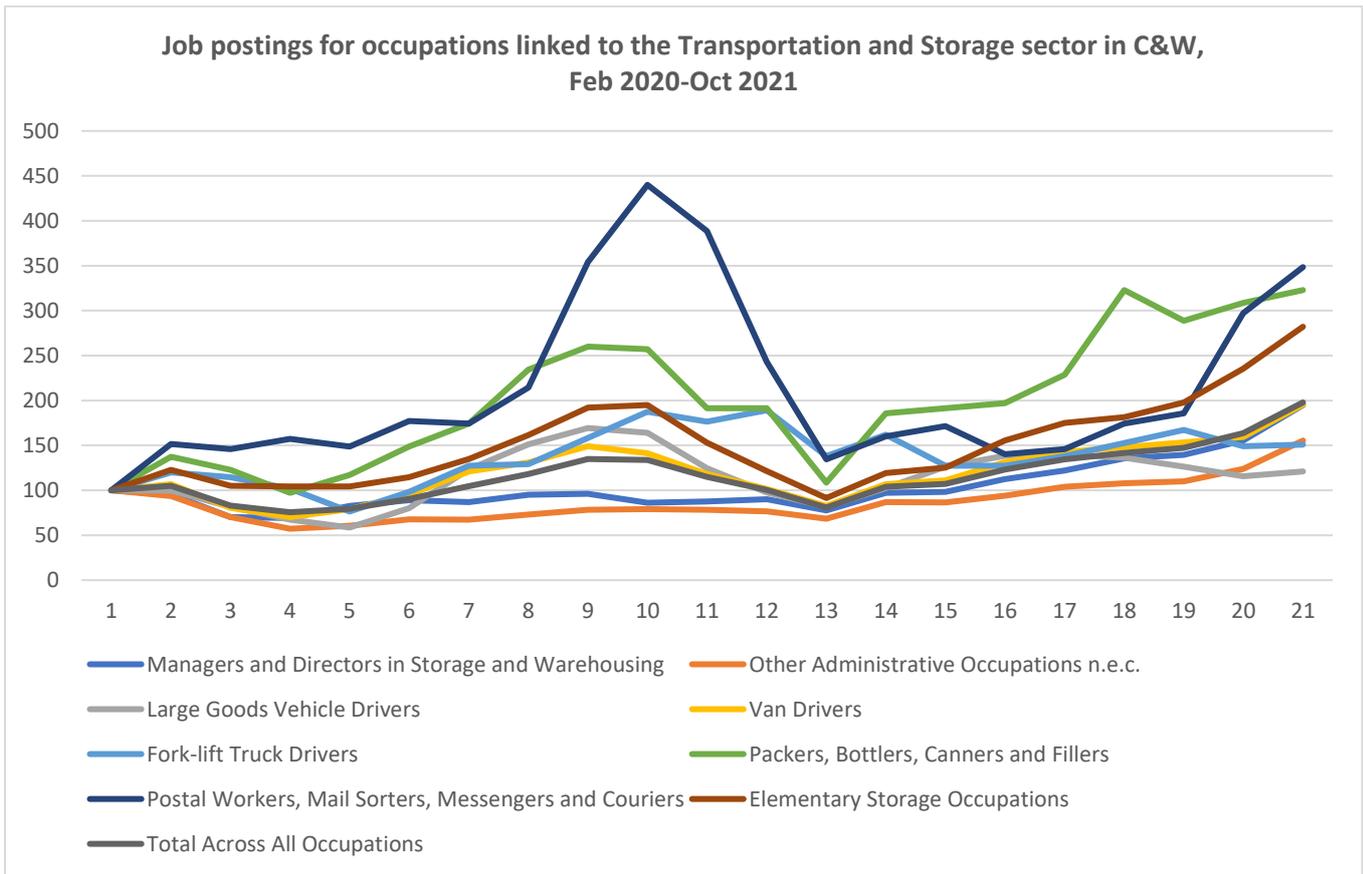
Analysis of EMSI Job postings for the occupations above in the period April 2021-October 2021 (table below) indicates that there was an average posting intensity for these roles of 7:1 in this period, which is the same as for the economy as a whole. Roles with a higher-than-average posting intensity (suggesting employers may find it harder to fill these roles) were confined to Elementary Storage Occupations.

<b>Job postings for the top occupations linked to the Transportation and Storage sector, Apr-Oct 2021</b>		
Occupation	Avg. Posting Intensity (Apr 2021 - Oct 2021)	Unique Postings from Apr 2021 - Oct 2021
Managers and Directors in Transport and Distribution	5 : 1	216
Managers and Directors in Storage and Warehousing	7 : 1	1395
Other Administrative Occupations n.e.c.	6 : 1	2839
Large Goods Vehicle Drivers	5 : 1	780
Van Drivers	6 : 1	3114

Bus and Coach Drivers	3 : 1	101
Taxi and Cab Drivers and Chauffeurs	2 : 1	6
Fork-lift Truck Drivers	6 : 1	253
Packers, Bottlers, Canners and Fillers	6 : 1	317
Postal Workers, Mail Sorters, Messengers and Couriers	4 : 1	251
Elementary Storage Occupations	8 : 1	3691
Total Across All Occupations	7 : 1	12963
<b>Source: EMSI Analyst, Nov 2021</b>		

The graph below indexes job postings to pre-pandemic levels (Feb 2020=100) for the occupations above that had more than 250 unique postings between April and October 2021. By October 2021, the highest percentage increases in job postings were for:

- Packers, Bottlers, Canners and Fillers
- Postal Workers, Mail Sorters, Messengers and Couriers
- Elementary Storage Occupations



**Source: EMSI Analyst, Nov 2021**

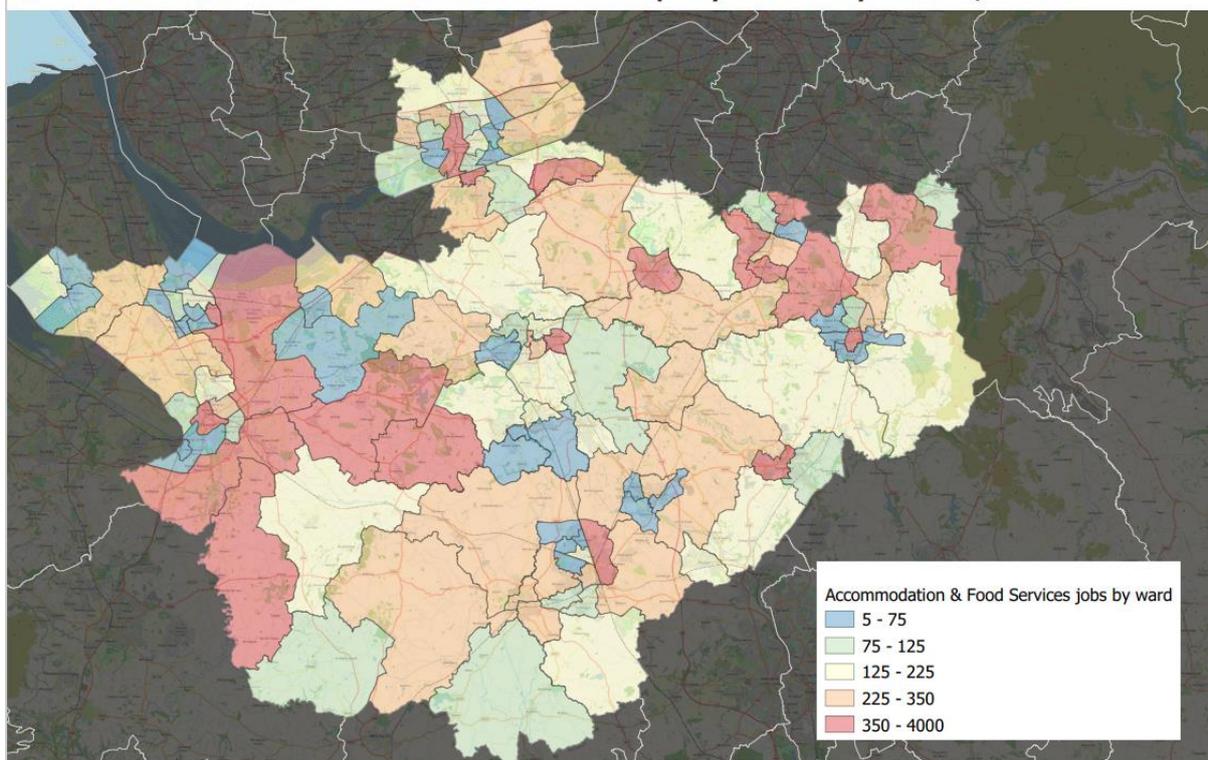
#### 4.3.7 Focus on the Accommodation & Food services sector

The sector had about 2,833 employers employing about 35,000 people in Cheshire and Warrington in 2021. The sector employed a slightly lower percentage of the workforce than is the case nationally with a Location Quotient (LQ) of 0.91 in 2021<sup>18</sup>.

The following wards all had employment of more than 600 in the Accommodation & food services sector:

- Chester City & the Garden Quarter
- Bewsey and Whitecross
- Wolverham
- Macclesfield Central
- Crewe East
- Rudheath
- Knutsford
- Congleton West
- Lymm South
- Poynton East and Pott Shrigley
- Farndon

#### Accommodation & Food Services employment by ward, 2020



Map by Brennan Wilson Ltd in QGIS. Data from BRES (open access), OS and OpenStreetMap

The composition of the sector in Cheshire and Warrington is shown in the table below which provides data on the 3-digit subsectors in Cheshire and Warrington.

<sup>18</sup> EMSI Analyst, Nov 2021

The average wage for a job in the sector in Cheshire and Warrington was £14,036, with average wages ranging from £11,754 in the 'Restaurants and Mobile Food Service Activities' subsector to £26,260 in the 'Other Accommodation' subsector. At 1324, the 'Restaurants and Mobile Food Service Activities' subsector had the highest number of employers.

In 2021, the 'Holiday and Other Short-stay Accommodation', 'Camping Grounds, Recreational Vehicle Parks and Trailer Parks', 'Other Accommodation', and 'Restaurants and Mobile Food Service Activities' subsectors employed a smaller proportion of the workforce than would be expected from the national distribution (LQs of 0.14, 0.53, 0.90 and 0.86 respectively). The 'Event Catering and Other Food Service Activities' and 'Beverage Serving Activities' subsectors employed about what would be expected from national employment distribution. Whilst the 'Hotels and Similar Accommodation' subsector employed slightly more (LQ of 1.07).

<b>Accommodation and Food services subsectors in C&amp;W, 2021</b>				
	2021 Jobs	Avg. Wages Per Job	2021 LQ	2020 Establishments
Hotels and Similar Accommodation	7086	£17,244	1.07	185
Holiday and Other Short-stay Accommodation	117	£15,958	0.14	42
Camping Grounds, Recreational Vehicle Parks and Trailer Parks	348	£23,527	0.53	27
Other Accommodation	172	£26,260	0.90	19
Restaurants and Mobile Food Service Activities	14832	£11,754	0.86	1324
Event Catering and Other Food Service Activities	4335	£15,194	0.95	440
Beverage Serving Activities	8062	£14,033	0.97	796
<b>Source: EMSI Analyst, Nov 2021</b>				

The top ten occupations (4-digit SOC) employed in the Accommodation and Food Services sector in Cheshire and Warrington are set out in the table below. These account for over three quarters of all employment in the sector. Hourly wages for these occupations range from £7.70 (Bar Staff) to £10.02 (Catering and Bar Managers).

<b>Top 10 occupations linked to the Accommodation and Food Services sector in C&amp;W, 2021</b>			
	Employed in Industry (2021)	Median Hourly Wages	Education Level
Kitchen and Catering Assistants	6664	£8.72	Level 2 NVQ; GCSE at grades A*-C
Waiters and Waitresses	4979	£7.42	Level 2 NVQ; GCSE at grades A*-C
Bar Staff	4840	£7.70	Level 2 NVQ; GCSE at grades A*-C
Chefs	4184	£8.96	Level 2 NVQ; GCSE at grades A*-C
Cleaners and Domestics	1605	£9.03	Level 1 NVQ; GCSE at grades D-G
Restaurant and Catering Establishment Managers and Proprietors	1483	£9.53	Level 3 NVQ; A Levels
Sales and Retail Assistants	1093	£9.18	Level 2 NVQ; GCSE at grades A*-C
Catering and Bar Managers	936	£10.02	Level 2 NVQ; GCSE at grades A*-C

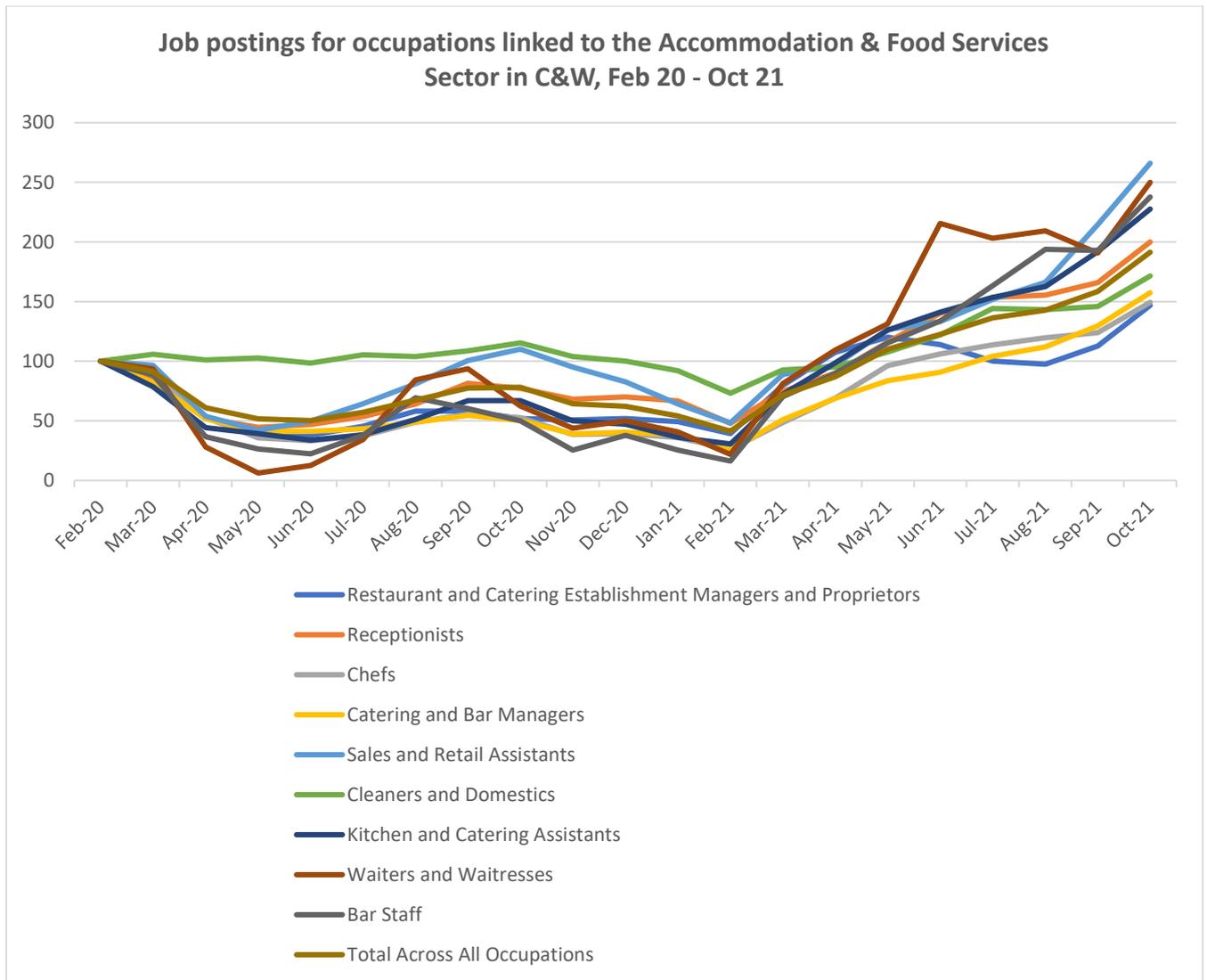
Cooks	743	£9.07	Level 2 NVQ; GCSE at grades A*-C
Receptionists	724	£9.30	Level 2 NVQ; GCSE at grades A*-C
<b>Source: EMSI Analyst</b>			

Analysis of EMSI Job postings for the occupations above in the period April 2021-October 2021 (table below) indicates that there was an average posting intensity for these roles of 6:1 in this period, which is lower than for the economy as a whole, which was 7:1. At 8:1, only Restaurant and Catering Establishment Managers and Proprietors had a posting intensity higher than the average indicating that these roles may have been slightly harder to fill in this period.

<b>Job postings for the top occupations linked to the Accommodation &amp; Food Services sector, Apr-Oct 2021</b>		
Occupation	Avg. Posting Intensity (Apr 2021 - Oct 2021)	Unique Postings from Apr 2021 - Oct 2021
Restaurant and Catering Establishment Managers and Proprietors	8 : 1	280
Receptionists	4 : 1	1072
Chefs	7 : 1	2756
Cooks	3 : 1	109
Catering and Bar Managers	7 : 1	488
Sales and Retail Assistants	7 : 1	2501
Cleaners and Domestic	6 : 1	2675
Kitchen and Catering Assistants	6 : 1	2688
Waiters and Waitresses	5 : 1	223
Bar Staff	6 : 1	554
Total Across All Occupations	6 : 1	13346

The graph below indexes job postings to pre-pandemic levels (Feb 2020=100) for the occupations above that had more than 250 unique postings between April and October 2021. By October 2021, the highest percentage increases in job postings compared to pre-pandemic levels were for:

- Sales and Retail Assistants
- Kitchen and Catering Assistants
- Waiters and Waitresses
- Bar Staff



Source: EMSI Analyst, Nov 2021

#### 4.3.8 Focus on the Information & Communication sector

The sector had about 3,400 employers employing about 14,000 people in Cheshire and Warrington in 2021. The sector employed a lower percentage of the workforce than is the case nationally with a Location Quotient (LQ) of 0.65 in 2021<sup>19</sup>.

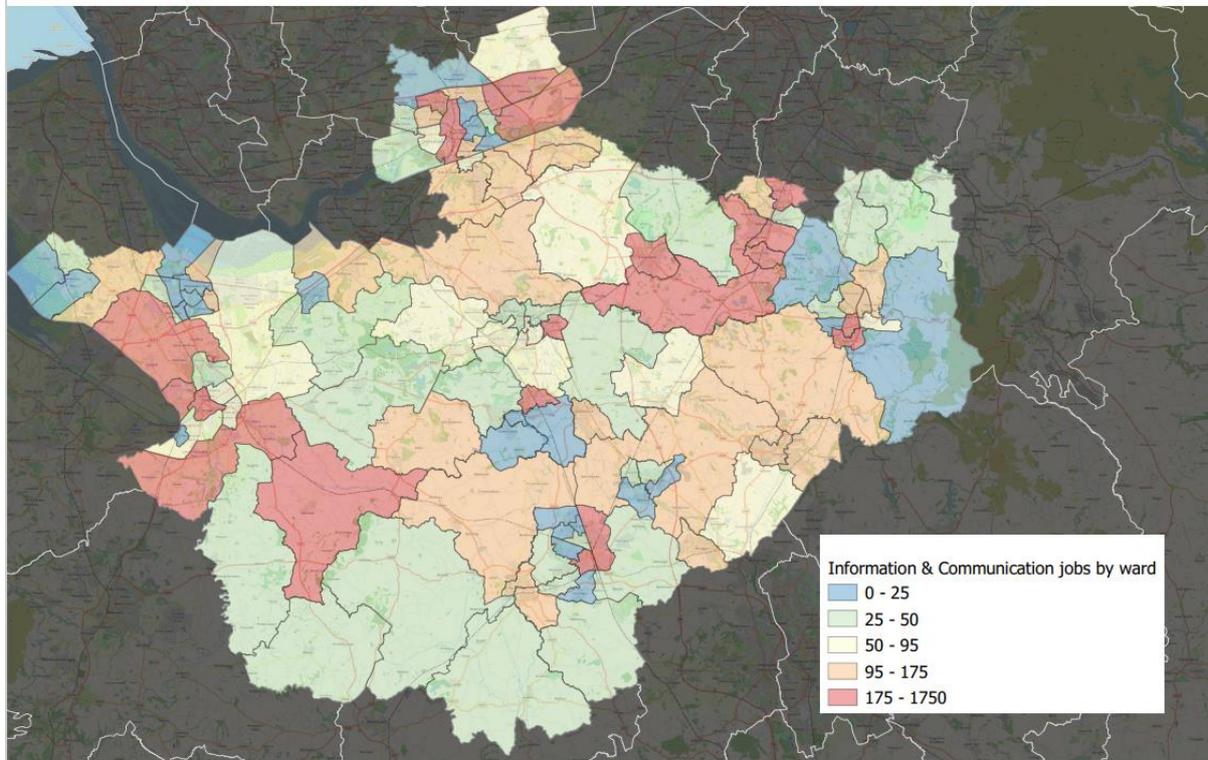
The following wards all had employment of more than 500 in the Information & communication sector:

- Birchwood
- Knutsford
- Westbrook
- Crewe East
- Chester City & the Garden Quarter
- Christleton & Huntington
- Wilmslow West and Chorley
- Wilmslow East

<sup>19</sup> EMSI Analyst, Nov 2021

- Poulton North
- Bewsey and Whitecross

## Information & Communication employment by ward, 2020



Map by Brennan Wilson Ltd in QGIS. Data from BRES (open access), OS and OpenStreetMap

The composition of the sector in Cheshire and Warrington is shown in the table below which provides data on the 2-digit subsectors in Cheshire and Warrington.

The average wage for a job in the sector in Cheshire and Warrington was £37,318, with average wages ranging from £23,757 in the 'Information Service Activities' subsector to £38,836 in the 'Computer Programming, Consultancy and Related Activities' subsector. At 2703, the 'Computer Programming, Consultancy and Related Activities' subsector had the highest number of employers. When Location Quotients are considered, every subsector of the Information and Communication Sector is underrepresented in Cheshire and Warrington

Information & Communication subsectors in C&W, 2021				
	2021 Jobs	Avg. Wages Per Job	2021 Location Quotient	2020 Establishments
Publishing Activities	1059	£28,157	0.53	132
Motion Picture, Video and Television Programme Production, Sound Recording and Music Publishing Activities	1038	£36,120	0.52	177
Programming and Broadcasting Activities	14	£29,858	0.02	22
Telecommunications	2739	£37,523	0.78	191

Computer Programming, Consultancy and Related Activities	9073	£38,836	0.74	2703
Information Service Activities	298	£23,757	0.22	134
<b>Source: EMSI Analyst, Nov 2021</b>				

The top ten occupations (4-digit SOC) employed in the Information & Communications sector in Cheshire and Warrington are set out in the table below. These account for over half of all employment in the sector. Hourly wages for these occupations range from £12.88 (IT User Support Technicians) to £35.09 (Information Technology and Telecommunications Directors).

<b>Top 10 occupations linked to the Information &amp; Communication sector in C&amp;W, 2021</b>			
	Employed	Median Hourly Wages	Education Level
Programmers and Software Development Professionals	2022	£21.46	Honours, Bachelor's degree
Information Technology and Telecommunications Professionals n.e.c.	1232	£20.42	Honours, Bachelor's degree
IT Specialist Managers	840	£23.90	Honours, Bachelor's degree
Sales Accounts and Business Development Managers	714	£20.79	Honours, Bachelor's degree
IT Business Analysts, Architects and Systems Designers	634	£22.31	Honours, Bachelor's degree
IT Project and Programme Managers	461	£24.78	Honours, Bachelor's degree
Information Technology and Telecommunications Directors	434	£35.09	Honours, Bachelor's degree
Web Design and Development Professionals	385	£14.77	Honours, Bachelor's degree
IT Operations Technicians	374	£15.42	Level 3 NVQ; A Levels
IT User Support Technicians	358	£12.88	Level 3 NVQ; A Levels
<b>Source: EMSI Analyst, Nov 2021</b>			

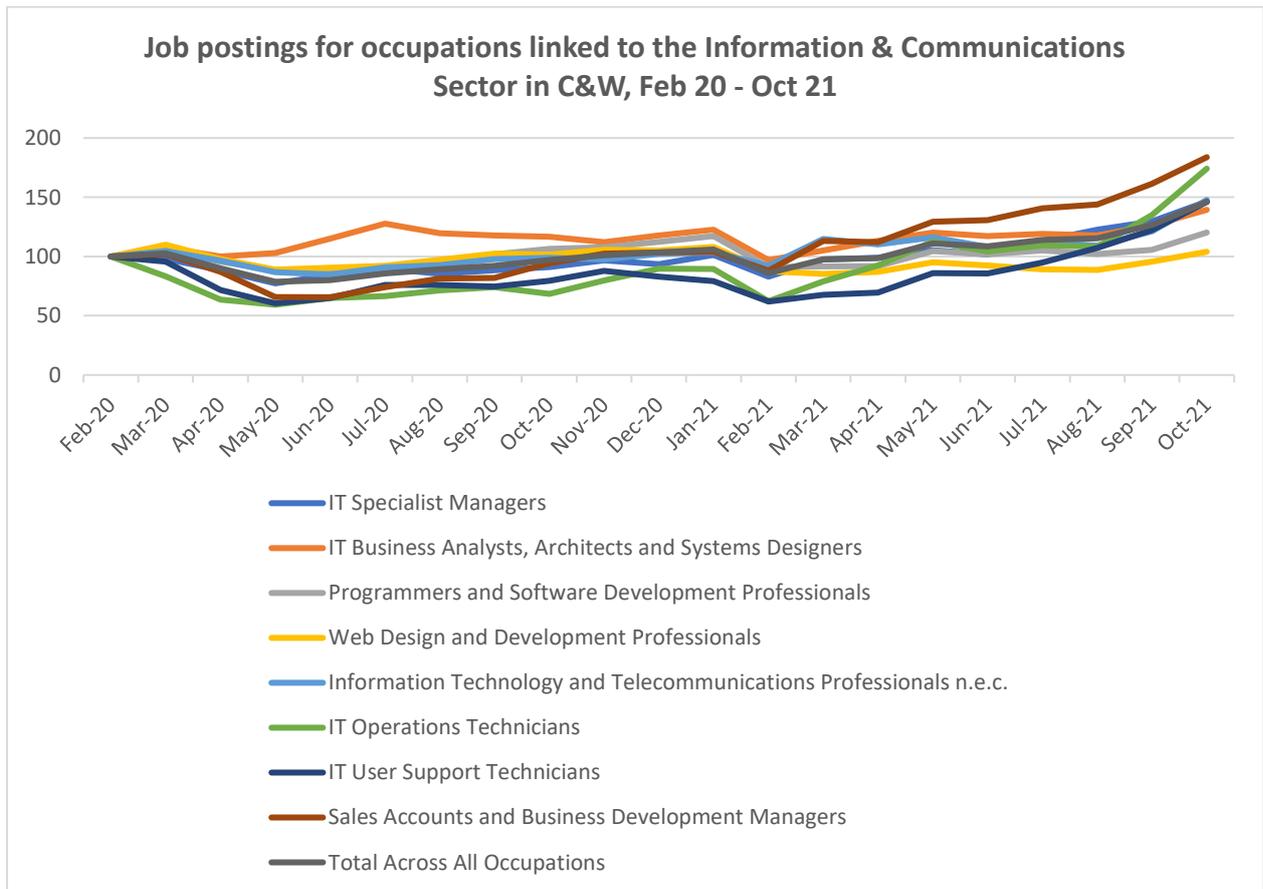
Analysis of EMSI Job postings for the occupations above in the period April 2021-October 2021 (table below) indicates that there was an average posting intensity for these roles of 8:1 in this period, which is higher than for the economy as a whole, which was 7:1. This suggests that the sector has more difficulty filling roles than average, with the highest posting intensity of 9:1 being for Programmers and Software Development Professionals .

<b>Job postings for the top occupations linked to the Information &amp; Communications sector, Apr-Oct 2021</b>		
Occupation	Avg. Posting Intensity (Apr 2021 - Oct 2021)	Unique Postings from Apr 2021 - Oct 2021
Information Technology and Telecommunications Directors	5 : 1	15
IT Specialist Managers	7 : 1	1216
IT Project and Programme Managers	7 : 1	171

IT Business Analysts, Architects and Systems Designers	8 : 1	605
Programmers and Software Development Professionals	9 : 1	2985
Web Design and Development Professionals	8 : 1	1126
Information Technology and Telecommunications Professionals n.e.c.	7 : 1	1395
IT Operations Technicians	8 : 1	920
IT User Support Technicians	8 : 1	863
Sales Accounts and Business Development Managers	6 : 1	4307
Total Across All Occupations	8 : 1	13603
<b>Source: EMSI Analyst, November 2021</b>		

The graph below indexes job postings to pre-pandemic levels (Feb 2020=100) for the occupations above that had more than 200 unique postings between April and October 2021. By October 2021, the highest percentage increases in job postings compared to pre-pandemic levels were for:

- IT Operations Technicians
- IT User Support Technicians
- Sales Accounts and Business Development Managers



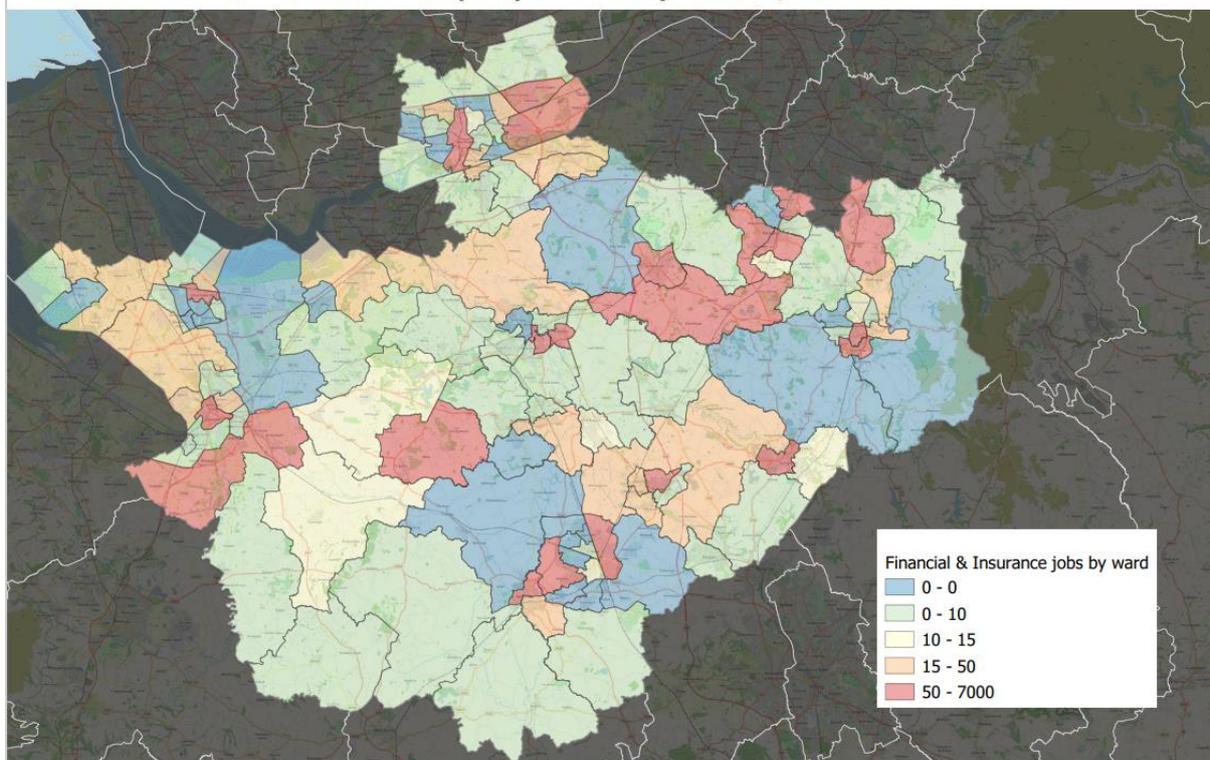
#### 4.3.9 Focus on the Financial & Insurance sector

The sector had 1,119 employers employing about 22,000 people in Cheshire and Warrington in 2021. The sector employed a higher percentage of the workforce than is the case nationally with a Location Quotient (LQ) of 1.26 in 2021<sup>20</sup>.

The following wards all had employment of more than 500 in the Financial & insurance sector:

- Christleton & Huntington
- Chelford
- Wilmslow East
- Rudheath
- Crewe East
- Chester City & the Garden Quarter
- Bewsey and Whitecross
- Wistaston

#### Financial & Insurance employment by ward, 2020



Map by Brennan Wilson Ltd in QGIS. Data from BRES (open access), OS and OpenStreetMap

The composition of the sector in Cheshire and Warrington is shown in the table below which provides data on the 2-digit subsectors in Cheshire and Warrington.

The average wage for a job in the sector in Cheshire and Warrington was £33,757, with average wages ranging from £28,712 in the 'Insurance, Reinsurance and Pension Funding, Except Compulsory Social Security' subsector to £35,624 in the 'Financial Service Activities, Except Insurance and Pension Funding' subsector. At 645, the 'Activities Auxiliary to Financial Services and Insurance Activities' subsector had the highest number of employers.

<sup>20</sup> EMSI Analyst, Nov 2021

In 2021, the 'Insurance, Reinsurance and Pension Funding, Except Compulsory Social Security' and 'Activities Auxiliary to Financial Services and Insurance Activities' subsectors employed a smaller proportion of the workforce than would be expected from the national distribution (LQs of 0.48 and 0.86 respectively). By contrast, the 'Financial Service Activities, Except Insurance and Pension Funding' subsector employed significantly more (LQ of 1.81).

<b>Finance &amp; Insurance subsectors in C&amp;W, 2021</b>				
	2021 Jobs	Avg. Wages Per Job	2021 Location Quotient	2020 Establishments
Financial Service Activities, Except Insurance and Pension Funding	14682	£35,624	1.81	451
Insurance, Reinsurance and Pension Funding, Except Compulsory Social Security	909	£28,712	0.48	23
Activities Auxiliary to Financial Services and Insurance Activities	6412	£30,291	0.86	645

**Source: EMSI Analyst, Nov 2021**

The top ten occupations (4-digit SOC) employed in the Finance & Insurance sector in Cheshire and Warrington are set out in the table below. These account for over half of all employment in the sector. Hourly wages for these occupations range from £10.83 (Call and Contact Centre Occupations) to £26.72 (Financial Managers and Directors).

<b>Top 10 occupations linked to the Finance &amp; Insurance sector in C&amp;W, 2021</b>			
Description	Employed in Industry (2021)	Median Hourly Wages	Education Level
Bank and Post Office Clerks	2892	£11.17	Level 2 NVQ; GCSE at grades A*-C
Finance and Investment Analysts and Advisers	1614	£16.78	Honours, Bachelor's degree
Financial Institution Managers and Directors	1401	£18.40	Honours, Bachelor's degree
Financial Accounts Managers	1177	£17.46	Honours, Bachelor's degree
Financial Administrative Occupations n.e.c.	946	£10.87	Level 2 NVQ; GCSE at grades A*-C
Financial Managers and Directors	911	£26.72	Honours, Bachelor's degree
Other Administrative Occupations n.e.c.	848	£10.89	Level 2 NVQ; GCSE at grades A*-C
Business and Financial Project Management Professionals	714	£23.18	Honours, Bachelor's degree
Customer Service Occupations n.e.c.	680	£9.75	Level 2 NVQ; GCSE at grades A*-C
Call and Contact Centre Occupations	512	£10.83	Level 3 NVQ; A Levels

**Source: EMSI Analyst, Nov 2021**

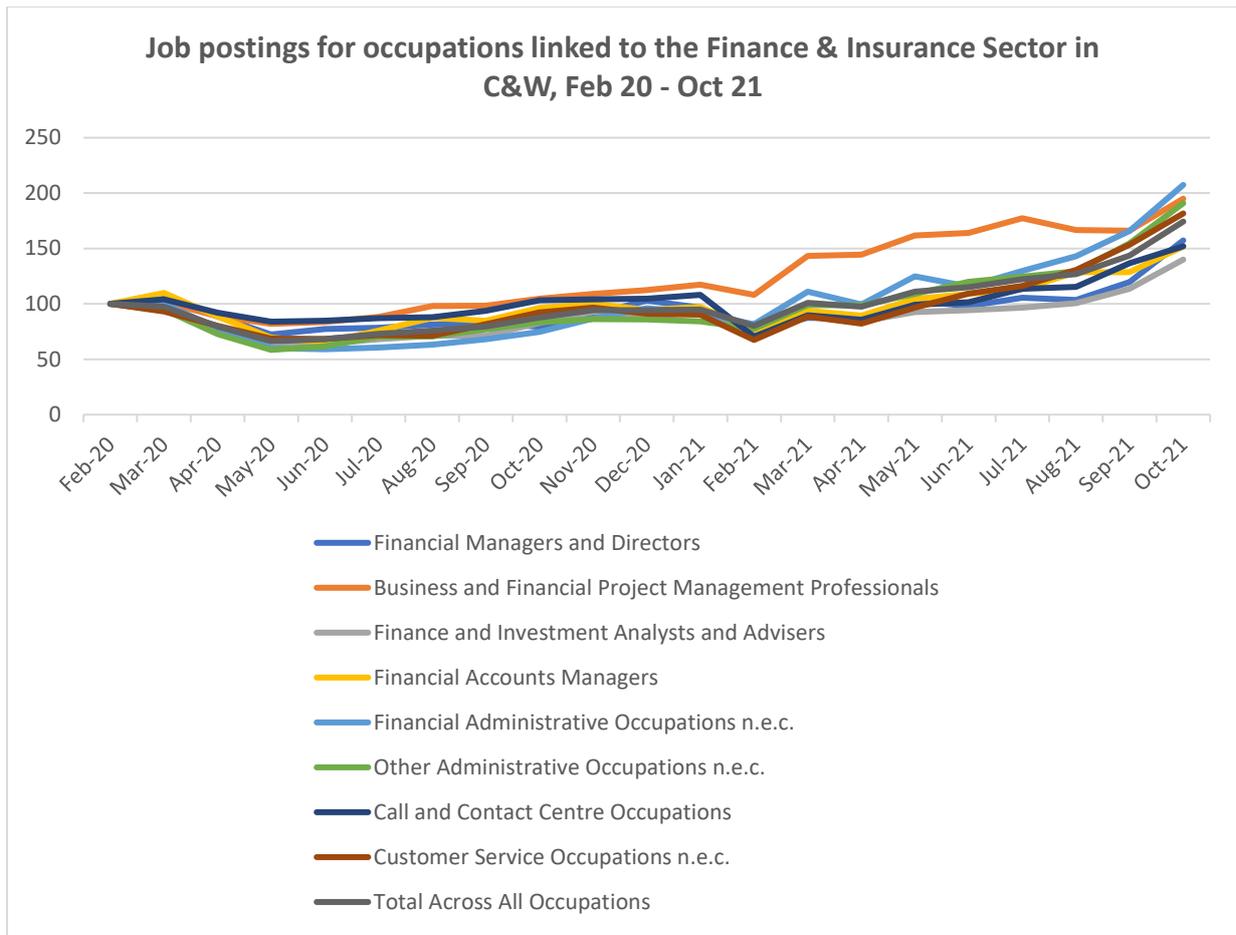
Analysis of EMSI Job postings for the occupations above in the period April 2021-October 2021 (table below) indicates that there was an average posting intensity for these roles of 7:1 in this period, which is the same as for the economy as a whole. The occupations that had the highest posting intensities (indicating employers may find it more difficult to recruit to these type of roles were:

- Financial Institution Managers and Directors
- Customer Service Occupations n.e.c.

<b>Job postings for the top occupations linked to the Finance &amp; Insurance sector, Apr-Oct 2021</b>		
Occupation	Avg. Posting Intensity (Apr 2021 - Oct 2021)	Unique Postings from Apr 2021 - Oct 2021
Financial Managers and Directors	7 : 1	618
Financial Institution Managers and Directors	8 : 1	46
Business and Financial Project Management Professionals	7 : 1	1984
Finance and Investment Analysts and Advisers	7 : 1	2200
Financial Accounts Managers	7 : 1	342
Bank and Post Office Clerks	5 : 1	25
Financial Administrative Occupations n.e.c.	7 : 1	1296
Other Administrative Occupations n.e.c.	6 : 1	2803
Call and Contact Centre Occupations	7 : 1	382
Customer Service Occupations n.e.c.	8 : 1	1675
Total Across All Occupations	7 : 1	11371
<b>Source: EMSI Analyst, Nov 2021</b>		

The graph below indexes job postings to pre-pandemic levels (Feb 2020=100) for the occupations above that had more than 200 unique postings between April and October 2021. By October 2021, the highest percentage increases in job postings compared to pre-pandemic levels were for:

- Business and Financial Project Management Professionals
- Financial Administrative Occupations n.e.c.
- Other Administrative Occupations n.e.c.



Source: EMSI Analyst, Nov 2021

#### 4.3.10 Focus on the Professional, Scientific & Technical sector

The sector had about 9,900 employers employing about 65,000 people in Cheshire and Warrington in 2021. The sector employed a higher percentage of the workforce than is the case nationally with a Location Quotient (LQ) of 1.48 in 2021<sup>21</sup>.

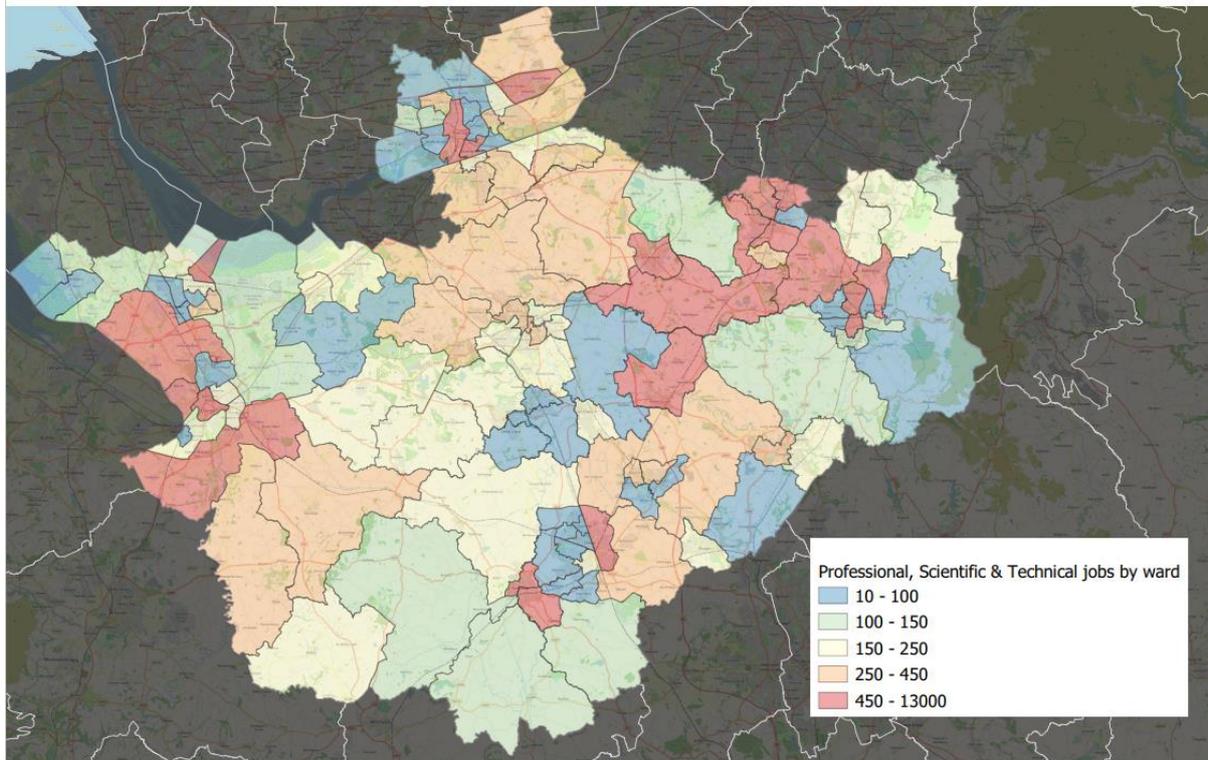
The following wards all had employment of more than 1000 in the Professional, scientific & technical sector:

- Bewsey and Whitecross
- Birchwood
- Chester City & the Garden Quarter
- Chelford
- Wilmslow Lacey Green
- Blacon
- Macclesfield Central
- Knutsford
- Wilmslow West and Chorley
- Latchford West
- Macclesfield Tytherington
- Wilmslow East

<sup>21</sup> EMSI Analyst, Nov 2021

- Crewe East

## Professional, Scientific & Technical employment by ward, 2020



Map by Brennan Wilson Ltd in QGIS. Data from BRES (open access), OS and OpenStreetMap

The composition of the sector in Cheshire and Warrington is shown in the table below which provides data on the 2-digit subsectors in Cheshire and Warrington.

The average wage for a job in the sector in Cheshire and Warrington was £34,279, with average wages ranging from £23,700 in the 'Veterinary Activities' subsector to £45,738 in the 'Scientific Research and Development' subsector. At 3842, the 'Activities of Head Offices; Management Consultancy Activities' subsector had the highest number of employers.

In 2021, the 'Scientific Research and Development' and 'Advertising and Market Research' subsectors employed a smaller proportion of the workforce than would be expected from the national distribution (LQs of 0.35 and 0.71 respectively). By contrast, the 'Legal and Accounting Activities', 'Activities of Head Offices; Management Consultancy Activities', 'Architectural and Engineering Activities; Technical Testing and Analysis', 'Other Professional, Scientific and Technical Activities', and 'Veterinary Activities' subsectors employed more (LQs of 1.72, 1.52, 1.81, 1.15, and 1.06 respectively).

Professional, Scientific and Technical subsectors in C&W, 2021				
	2021 Jobs	Avg. Wages Per Job	2021 LQ	2020 Establishments
Legal and Accounting Activities	19796	£32,625	1.72	1198
Activities of Head Offices; Management Consultancy Activities	19861	£33,722	1.52	3842
Architectural and Engineering Activities; Technical Testing and Analysis	17923	£38,416	1.81	2868
Scientific Research and Development	916	£45,738	0.35	122

Advertising and Market Research	1821	£33,040	0.71	397
Other Professional, Scientific and Technical Activities	3833	£28,686	1.15	1337
Veterinary Activities	1597	£23,700	1.06	163
<b>Source: EMSI Analyst, Nov 2021</b>				

The top ten occupations (4-digit SOC) employed in the Professional, Scientific and Technical sector in Cheshire and Warrington are set out in the table below. These account for over a third of all employment in the sector. Hourly wages for these occupations range from £10.89 (Other Administrative Occupations n.e.c.) to £26.72 (Financial Managers and Directors).

<b>Top 10 occupations linked to the Professional, Scientific and Technical sector in C&amp;W, 2021</b>			
	Employed in Industry (2021)	Median Hourly Wages	Education Level
Book-keepers, Payroll Managers and Wages Clerks	6787	£12.14	Level 2 NVQ; GCSE at grades A*-C
Chartered and Certified Accountants	3460	£19.35	Honours, Bachelor's degree
Other Administrative Occupations n.e.c.	2684	£10.89	Level 2 NVQ; GCSE at grades A*-C
Sales Accounts and Business Development Managers	2247	£20.79	Honours, Bachelor's degree
Management Consultants and Business Analysts	2225	£18.48	Honours, Bachelor's degree
Financial Managers and Directors	1450	£26.72	Honours, Bachelor's degree
Personal Assistants and Other Secretaries	1213	£10.93	Level 2 NVQ; GCSE at grades A*-C
Taxation Experts	1158	£21.45	Honours, Bachelor's degree
Marketing Associate Professionals	1143	£14.13	Honours, Bachelor's degree
Financial Accounts Managers	1076	£17.46	Honours, Bachelor's degree
<b>Source: EMSI Analyst, Nov 2021</b>			

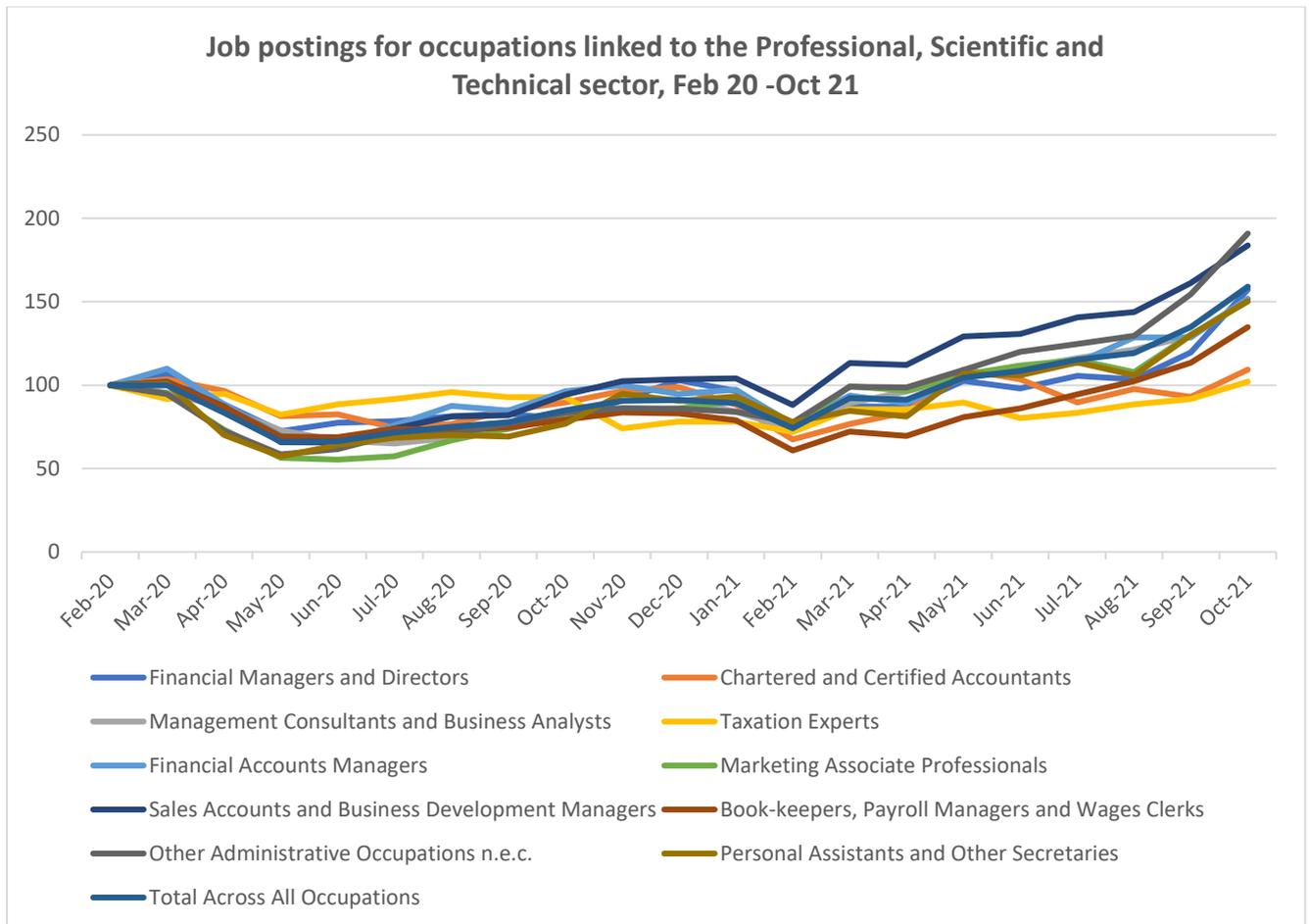
Analysis of EMSI Job postings for the occupations above in the period April 2021-October 2021 (table below) indicates that there was an average posting intensity for these roles of 7:1 in this period, which is the same as for the economy as a whole. The occupations that had the highest posting intensities (indicating employers may find it more difficult to recruit to these type of role were:

- Management Consultants and Business Analysts
- Book-keepers, Payroll Managers and Wages Clerks

<b>Job postings for the top occupations linked to the Professional, Scientific and Technical sector, Apr-Oct 2021</b>		
Occupation	Avg. Posting Intensity (Apr 2021 - Oct 2021)	Unique Postings from Apr 2021 - Oct 2021
Financial Managers and Directors	7 : 1	618
Chartered and Certified Accountants	7 : 1	208
Management Consultants and Business Analysts	8 : 1	1032
Taxation Experts	6 : 1	196
Financial Accounts Managers	7 : 1	342
Marketing Associate Professionals	6 : 1	1366
Sales Accounts and Business Development Managers	6 : 1	4307
Book-keepers, Payroll Managers and Wages Clerks	8 : 1	3579
Other Administrative Occupations n.e.c.	6 : 1	2803
Personal Assistants and Other Secretaries	4 : 1	396
Total Across All Occupations	7 : 1	14847
<b>Source: EMSI Analyst, Nov 2021</b>		

The graph below indexes job postings to pre-pandemic levels (Feb 2020=100) for the occupations above that had more than 200 unique postings between April and October 2021. By October 2021, the highest percentage increases in job postings compared to pre-pandemic levels were for:

- Sales Accounts and Business Development Managers
- Other Administrative Occupations n.e.c.



Source: EMSI Analyst, Nov 2021

#### 4.3.11 Focus on the Administration & Support Services sector

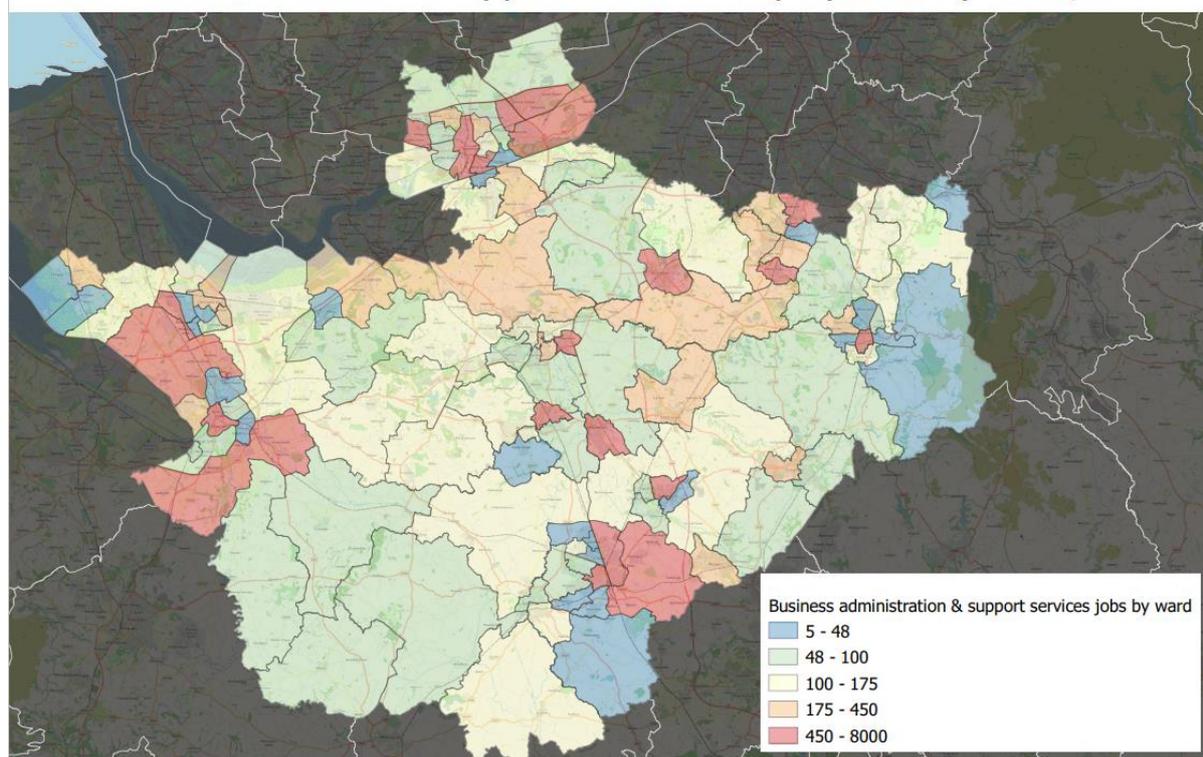
The sector had about 4,800 employers employing about 47,000 people in Cheshire and Warrington in 2021. The sector employed a slightly higher percentage of the workforce than is the case nationally with a Location Quotient (LQ) of 1.08 in 2021<sup>22</sup>.

The following wards all had employment of more than 1000 in the Business administration & support services sector:

- Bewsey and Whitecross
- Great Sankey North and Whittle Hall
- Birchwood
- Crewe East
- Chester City & the Garden Quarter
- Handforth
- Haslington
- Saughall & Mollington
- Crewe South
- Christleton & Huntington
- Rixton and Woolston
- Ledsham & Manor

<sup>22</sup> EMSI Analyst, Nov 2021

## Business administration & support services employment by ward, 2020



Map by Brennan Wilson Ltd in QGIS. Data from BRES (open access), OS and OpenStreetMap

The composition of the sector in Cheshire and Warrington is shown in the table below which provides data on the 2-digit subsectors in Cheshire and Warrington.

The average wage for a job in the sector in Cheshire and Warrington was £24,340, with average wages ranging from £17,929 in the 'Services to Buildings and Landscape Activities' subsector to £31,214 in the 'Travel Agency, Tour Operator and Other Reservation Service and Related Activities' subsector. At 2196, the 'Office Administrative, Office Support and Other Business Support Activities' subsector had the highest number of employers.

In 2021, the 'Rental and Leasing Activities' and 'Security and Investigation Activities' subsectors employed a smaller proportion of the workforce than would be expected from the national distribution (LQs of 0.78 and 0.65 respectively). The Services to Buildings and Landscape Activities' and 'Office Administrative, Office Support and Other Business Support Activities' subsectors employed about what would be expected from national employment distribution. Whilst the 'Employment Activities' and 'Travel Agency, Tour Operator and Other Reservation Service and Related Activities' subsectors employed slightly more (LQs of 1.29 and 1.24).

Administration and support services subsectors in C&W, 2021				
	2021 Jobs	Avg. Wages Per Job	2021 LQ	2020 Establishments
Rental and Leasing Activities	2144	£30,969	0.78	390
Employment Activities	19324	£26,515	1.29	873
Travel Agency, Tour Operator and Other Reservation Service and Related Activities	1990	£31,214	1.24	170
Security and Investigation Activities	2273	£19,352	0.65	147

Services to Buildings and Landscape Activities	11648	£17,929	1.00	1049
Office Administrative, Office Support and Other Business Support Activities	9494	£26,052	1.05	2196
<b>Source: EMSI Analyst, Nov 2021</b>				

The top ten occupations (4-digit SOC) employed in the Administration & Support Services sector in Cheshire and Warrington are set out in the table below. These account for over a third of all employment in the sector. Hourly wages for these occupations range from £9.03 (Cleaners and Domestic) to £23.31 (Human Resource Managers and Directors).

<b>Top 10 occupations linked to the Administration &amp; support services sector in C&amp;W, 2021</b>		
Description	Employed in Industry (2021)	Median Hourly Wages
Cleaners and Domestic	4334	£9.03
Human Resources and Industrial Relations Officers	3002	£14.54
Other Administrative Occupations n.e.c.	1667	£10.89
Security Guards and Related Occupations	1621	£10.05
Elementary Storage Occupations	1495	£9.94
Gardeners and Landscape Gardeners	1424	£10.36
Care Workers and Home Carers	977	£9.68
Book-keepers, Payroll Managers and Wages Clerks	971	£12.14
Human Resource Managers and Directors	923	£23.31
Debt, Rent and Other Cash Collectors	907	£9.09
<b>Source: EMSI Analyst, Nov 2021</b>		

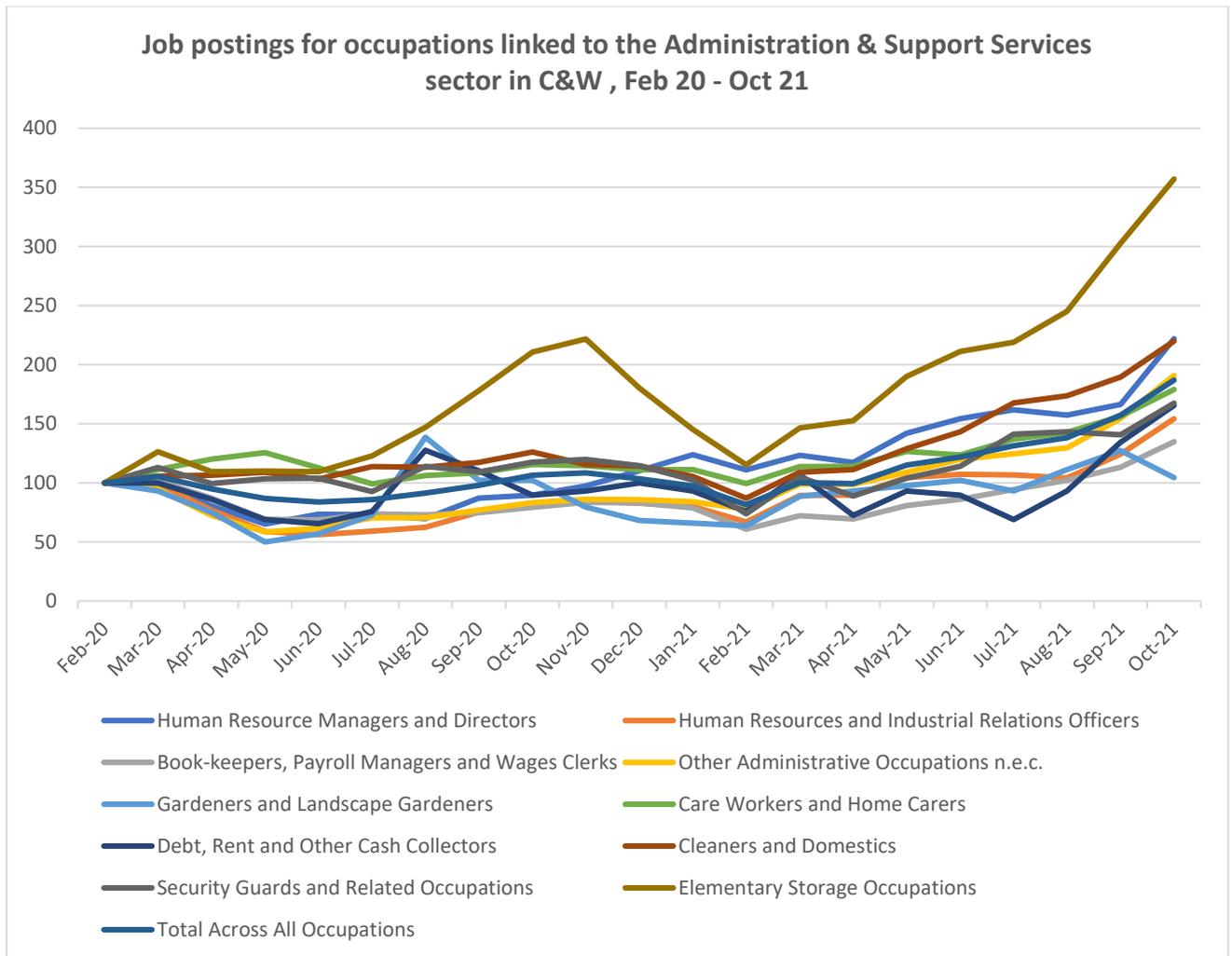
Analysis of EMSI Job postings for the occupations above in the period April 2021-October 2021 (table below) indicates that there was an average posting intensity for these roles of 7:1 in this period, which is the same as for the economy as a whole. The occupations that had the highest posting intensities (indicating employers may find it more difficult to recruit to these type of role) were:

- Book-keepers, Payroll Managers and Wages Clerks
- Debt, Rent and Other Cash Collectors
- Elementary Storage Occupations

<b>Job postings for the top occupations linked to the Administration &amp; support services sector, Apr-Oct 2021</b>		
Occupation	Avg. Posting Intensity (Apr 2021 - Oct 2021)	Unique Postings from Apr 2021 - Oct 2021
Human Resource Managers and Directors	7 : 1	735
Human Resources and Industrial Relations Officers	7 : 1	2261
Book-keepers, Payroll Managers and Wages Clerks	8 : 1	3579
Other Administrative Occupations n.e.c.	6 : 1	2803
Gardeners and Landscape Gardeners	4 : 1	129
Care Workers and Home Carers	9 : 1	4340
Debt, Rent and Other Cash Collectors	10 : 1	89
Cleaners and Domestic	6 : 1	2653
Security Guards and Related Occupations	5 : 1	742
Elementary Storage Occupations	8 : 1	3698
Total Across All Occupations	7 : 1	21029
<b>Source: EMSI Analyst, Nov 2021</b>		

The graph below indexes job postings to pre-pandemic levels (Feb 2020=100) for the occupations above that had more than 200 unique postings between April and October 2021. By October 2021, the highest percentage increases in job postings compared to pre-pandemic levels were for:

- Human Resource Managers and Directors
- Cleaners and Domestic
- Elementary Storage Occupations



Source: EMSI Analyst, Nov 2021

#### 4.3.12 Focus on the Public Administration & Defence sector

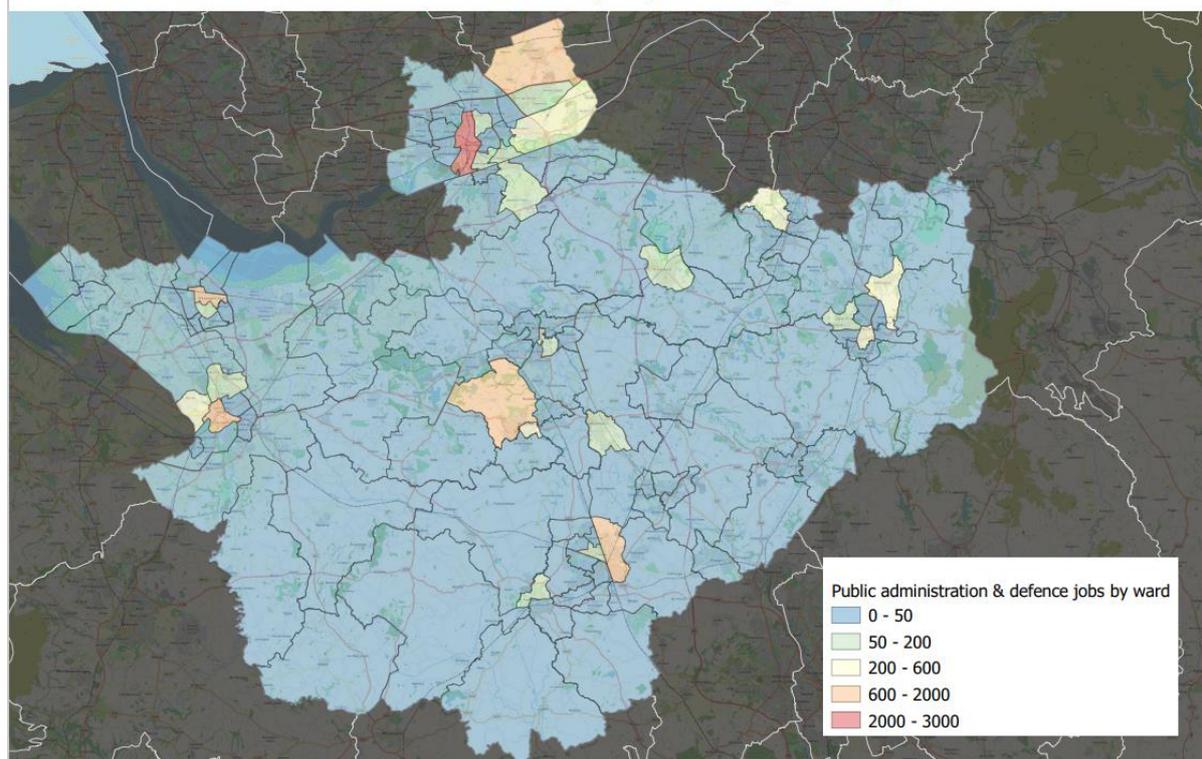
The sector had about 350 employers employing about 16,000 people in Cheshire and Warrington in 2021. The sector employed a lower percentage of the workforce than is the case nationally with a Location Quotient (LQ) of 0.68 in 2021<sup>23</sup>.

The following wards all had employment of more than 600 in the Public administration & defence sector:

- Bewsey and Whitecross
- Winsford Over & Verdin
- Crewe East
- Central & Grange
- Chester City & the Garden Quarter
- Culcheth, Glazebury and Croft
- Wilmslow Lacey Green
- Bollington

<sup>23</sup> EMSI Analyst, Nov 2021

## Public administration & defence employment by ward, 2020



Map by Brennan Wilson Ltd in QGIS. Data from BRES (open access), OS and OpenStreetMap

The composition of the sector in Cheshire and Warrington is shown in the table below which provides data on the 3-digit subsectors in Cheshire and Warrington.

The average wage for a job in the sector in Cheshire and Warrington was £31,738, with average wages ranging from £24,877 in the 'Compulsory Social Security Activities' subsector to £34,693 in the 'Provision of Services to the Community as a Whole' subsector. At 260, the 'Administration of the State and the Economic and Social Policy of the Community' subsector had the highest number of employers. All subsectors employed a smaller proportion of the local workforce than would be expected from the national distribution of employment.

Public administration & defence subsectors in C&W, 2021				
Description	2021 Jobs	Avg. Wages Per Job	2021 LQ	2020 Establishments
Administration of the State and the Economic and Social Policy of the Community	9326	£29,866	0.65	260
Provision of Services to the Community as a Whole	6195	£34,693	0.81	85
Compulsory Social Security Activities	100	£24,877	0.11	2

*Source: EMSI Analyst, Nov 2021*

The top ten occupations (4-digit SOC) employed in the Public administration & defence sector in Cheshire and Warrington are set out in the table below. These account for 40% of all employment in the sector. Hourly wages for these occupations range from £10.89 (Other Administrative Occupations n.e.c.) to £22.86 (Solicitors).

<b>Top 10 occupations linked to the Public administration &amp; defence sector in C&amp;W, 2021</b>			
Description	Employed in Industry (2021)	Median Hourly Wages	Education Level
Police Officers (Sergeant and Below)	1771	£20.69	Level 3 NVQ; A Levels
National Government Administrative Occupations	1300	£13.05	Level 2 NVQ; GCSE at grades A*-C
Local Government Administrative Occupations	791	£13.15	Level 3 NVQ; A Levels
Other Administrative Occupations n.e.c.	580	£10.89	Level 2 NVQ; GCSE at grades A*-C
Fire Service Officers (Watch Manager and Below)	447	£16.81	Level 2 NVQ; GCSE at grades A*-C
Public Services Associate Professionals	408	£17.21	Level 3 NVQ; A Levels
Prison Service Officers (Below Principal Officer)	310	£15.95	Level 3 NVQ; A Levels
Solicitors	277	£22.86	Honours, Bachelor's degree
Legal Associate Professionals	268	£11.82	Honours, Bachelor's degree
Protective Service Associate Professionals n.e.c.	217	£18.52	Level 3 NVQ; A Levels
<b>Source: EMSI Analyst, Nov 2021</b>			

Analysis of EMSI Job postings for the occupations above in the period April 2021-October 2021 (table below) indicates that there was an average posting intensity for these roles of 6:1 in this period, which is lower than for the economy as a whole. The occupations that had the highest posting intensities (indicating employers may find it more difficult to recruit to these type of role) were:

- Prison Service Officers (Below Principal Officer)
- Protective Service Associate Professionals n.e.c.

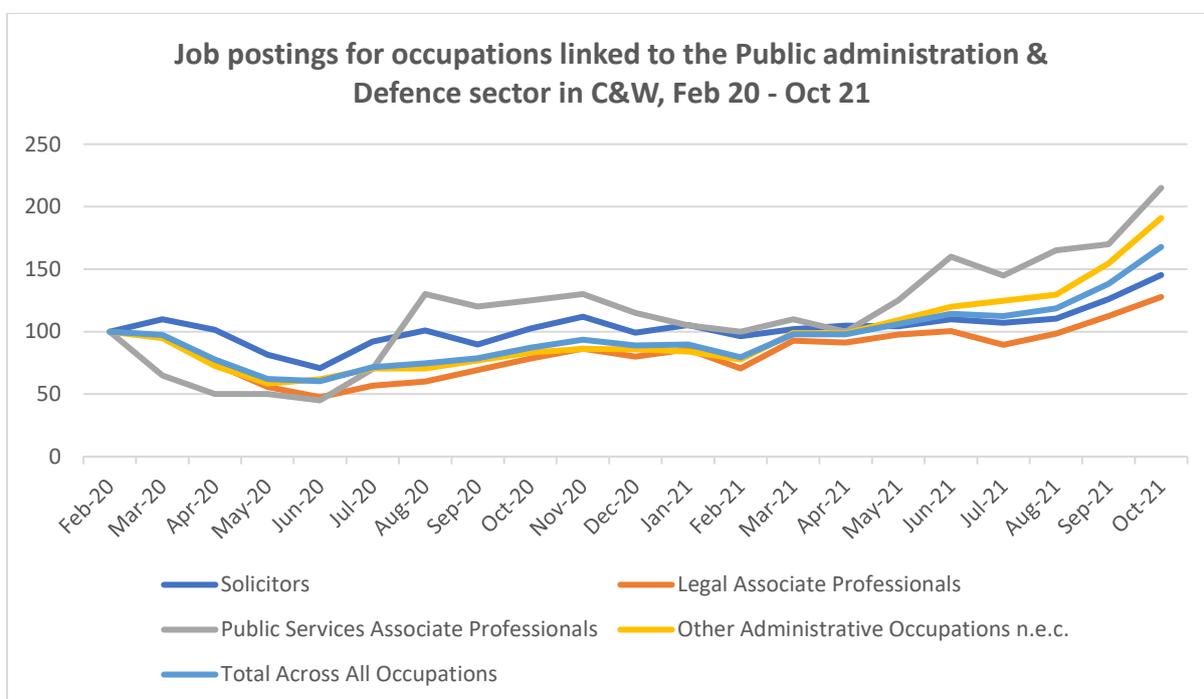
Although the volume of postings for roles like this was very low in this period.

<b>Job postings for the top occupations linked to the Public administration &amp; defence sector, Apr-Oct 2021</b>		
Occupation	Avg. Posting Intensity (Apr 2021 - Oct 2021)	Unique Postings from Apr 2021 - Oct 2021
Solicitors	5 : 1	675
Police Officers (Sergeant and Below)	0	0
Fire Service Officers (Watch Manager and Below)	6 : 1	47
Prison Service Officers (Below Principal Officer)	9 : 1	21
Protective Service Associate Professionals n.e.c.	11 : 1	34
Legal Associate Professionals	6 : 1	890
Public Services Associate Professionals	5 : 1	101

National Government Administrative Occupations	2 : 1	7
Local Government Administrative Occupations	5 : 1	16
Other Administrative Occupations n.e.c.	6 : 1	2803
Total Across All Occupations	6 : 1	4594
<b>Source: EMSI Analyst, Nov 2021</b>		

The graph below indexes job postings to pre-pandemic levels (Feb 2020=100) for the occupations above that had more than 100 unique postings between April and October 2021. By October 2021, the highest percentage increases in job postings compared to pre-pandemic levels were for:

- Solicitors
- Other Administrative Occupations n.e.c.



**Source: EMSI Analyst, Nov 2021**

#### 4.3.13 Focus on the Education sector

The sector had about 1,200 employers employing about 31,000 people in Cheshire and Warrington in 2021. The sector employed a lower percentage of the workforce than is the case nationally with a Location Quotient (LQ) of 0.72 in 2021<sup>24</sup>.

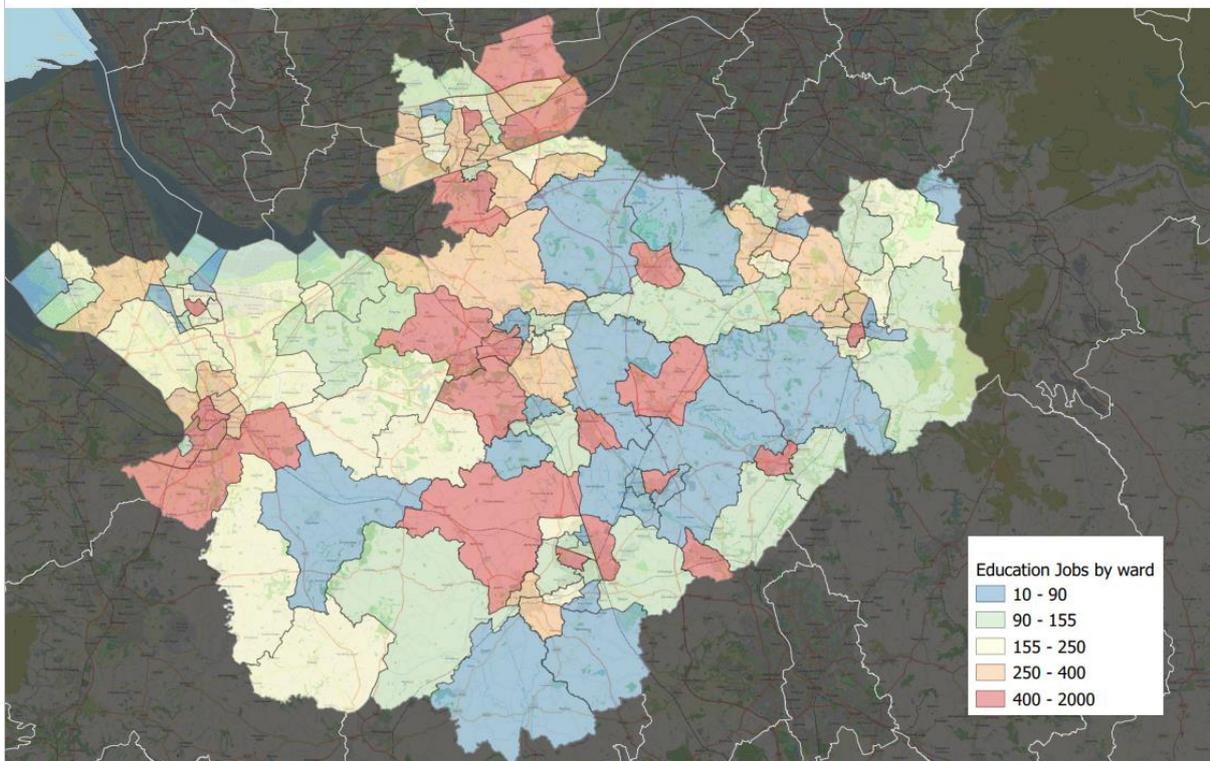
The following wards all had employment of more than 500 in the Education sector:

- Chester City & the Garden Quarter
- Whitby Park
- Crewe West
- Hartford & Greenbank

<sup>24</sup> EMSI Analyst, Nov 2021

- Christleton & Huntington
- Bunbury
- Orford
- Winsford Over & Verdin
- Macclesfield Central
- Middlewich
- Crewe East
- Rixton and Woolston
- Knutsford
- Alsager
- Weaver & Cuddington

### Education employment by ward, 2020



Map by Brennan Wilson Ltd in QGIS. Data from BRES (open access), OS and OpenStreetMap

The composition of the sector in Cheshire and Warrington is shown in the table below which provides data on the 3-digit subsectors in Cheshire and Warrington.

The average wage for a job in the sector in Cheshire and Warrington was £ £25,435, with average wages ranging from £13,231 in the 'Pre-primary education' subsector to £34,118 in the 'Higher Education' subsector. At 458, the 'Other Education' subsector had the highest number of employers. In 2021, all subsectors employed a smaller proportion of the local workforce than would be expected from the national distribution .

<b>Education subsectors in C&amp;W, 2021</b>				
Description	2021 Jobs	Avg. Wages Per Job	2021 Location Quotient	2020 Establishments
Pre-primary Education	847	£13,231	0.68	106
Primary Education	14481	£23,863	0.88	363
Secondary Education	10593	£27,176	0.87	130
Higher Education	2323	£34,118	0.28	19
Other Education	2562	£23,253	0.60	458
Educational Support Activities	208	£28,371	0.41	87

*Source: EMSI Analyst, Nov 2021*

The top ten occupations (4-digit SOC) employed in the Education sector in Cheshire and Warrington are set out in the table below. These account for about two thirds of all employment in the sector. Hourly wages for these occupations range from £9.08 (School Midday and Crossing Patrol Occupations) to £35.70 (Senior Professionals of Educational Establishments).

<b>Top 10 occupations linked to the Education sector in C&amp;W, 2021</b>			
Description	Employed in Industry (2021)	Median Hourly Wages	Education Level
Primary and Nursery Education Teaching Professionals	5198	£23.05	Honours, Bachelor's degree
Teaching Assistants	4469	£10.14	Level 2 NVQ; GCSE at grades A*-C
Secondary Education Teaching Professionals	4282	£24.42	Level 5 NVQ; Masters
Educational Support Assistants	1670	£9.91	Level 2 NVQ; GCSE at grades A*-C
School Midday and Crossing Patrol Occupations	1087	£9.08	Level 2 NVQ; GCSE at grades A*-C
Further Education Teaching Professionals	1018	£20.04	Level 5 NVQ; Masters
Senior Professionals of Educational Establishments	894	£35.70	Honours, Bachelor's degree
Teaching and Other Educational Professionals n.e.c.	807	£16.62	Honours, Bachelor's degree
Higher Education Teaching Professionals	795	£27.62	Level 5 NVQ; Masters
Special Needs Education Teaching Professionals	760	£22.89	Honours, Bachelor's degree

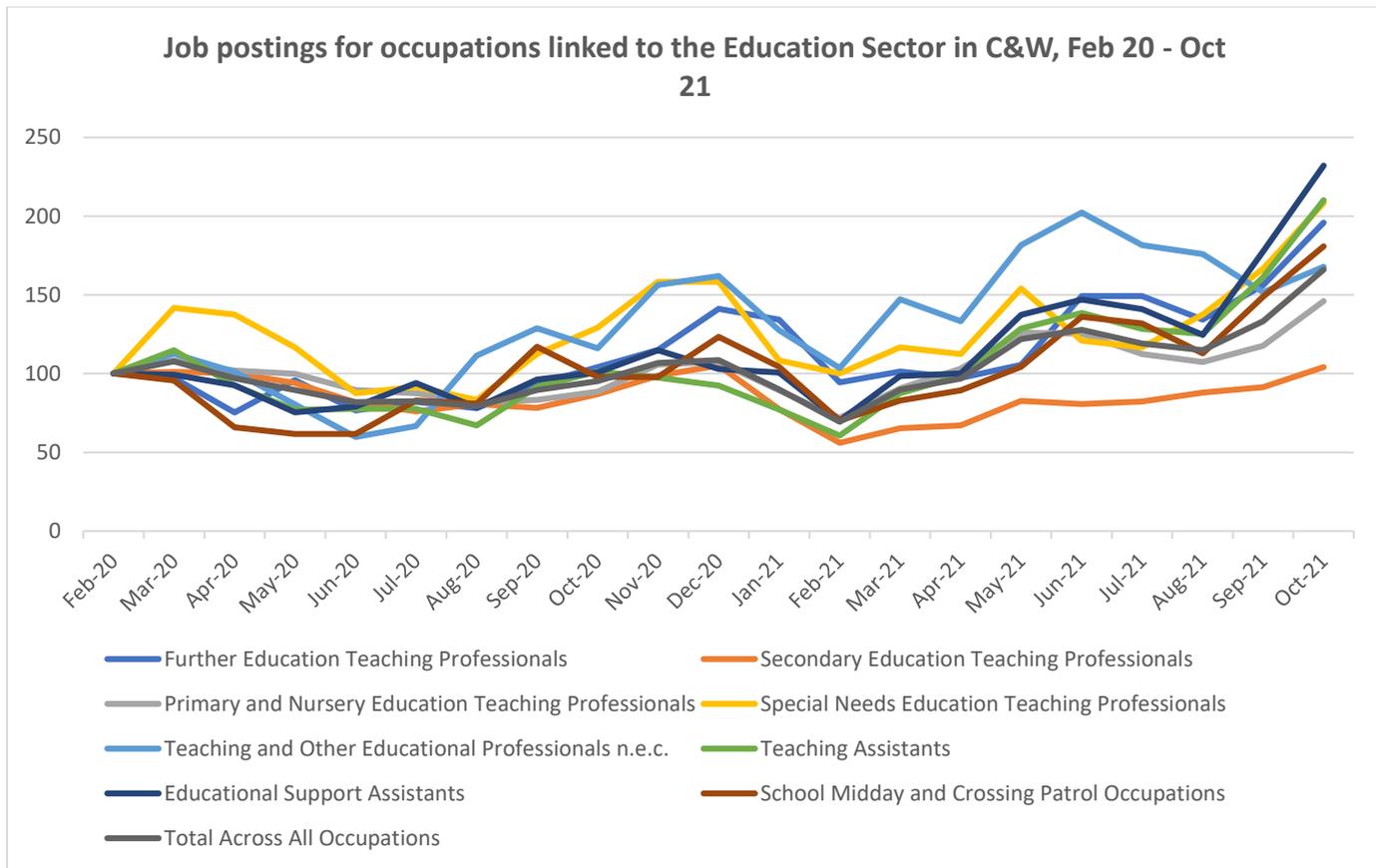
*Source: EMSI Analyst, Nov 2021*

Analysis of EMSI Job postings for the occupations above in the period April 2021-October 2021 (table below) indicates that there was an average posting intensity for these roles of 7:1 in this period, which is the same as for the economy as a whole. However, the 'Teaching and Other Educational Professionals n.e.c.' occupation had a very high posting intensity of 13:1, indicating that employers may find it more difficult to recruit to this type of role

<b>Job postings for the top occupations linked to the Education sector, Apr-Oct 2021</b>		
Occupation	Avg. Posting Intensity (Apr 2021 - Oct 2021)	Unique Postings from Apr 2021 - Oct 2021
Higher Education Teaching Professionals	4 : 1	3
Further Education Teaching Professionals	6 : 1	293
Secondary Education Teaching Professionals	7 : 1	637
Primary and Nursery Education Teaching Professionals	7 : 1	2059
Special Needs Education Teaching Professionals	6 : 1	100
Senior Professionals of Educational Establishments	4 : 1	2
Teaching and Other Educational Professionals n.e.c.	13 : 1	426
Teaching Assistants	7 : 1	1658
Educational Support Assistants	5 : 1	618
School Midday and Crossing Patrol Occupations	7 : 1	173
Total Across All Occupations	7 : 1	5969
<b>Source: EMSI Analyst, Nov 2021</b>		

The graph below indexes job postings to pre-pandemic levels (Feb 2020=100) for the occupations above that had more than 100 unique postings between April and October 2021. By October 2021, the highest percentage increases in job postings compared to pre-pandemic levels were for:

- Special Needs Education Teaching Professionals
- Teaching Assistants
- Educational Support Assistants



Source: EMSI Analyst, Nov 2021

#### 4.3.14 Focus on the Health sector

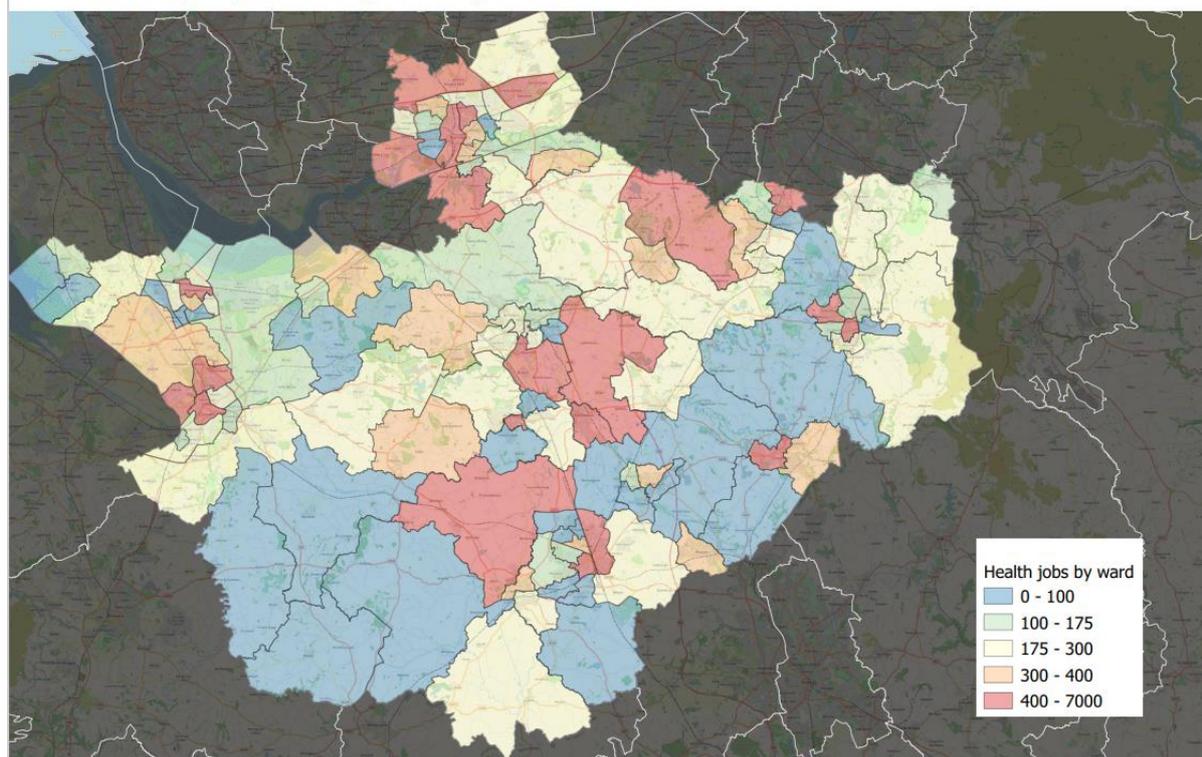
The sector had about 2,400 employers employing about 60,000 people in Cheshire and Warrington in 2021. The sector employed a lower percentage of the workforce than is the case nationally with a Location Quotient (LQ) of 0.9 in 2021<sup>25</sup>.

The following wards all had employment of more than 1000 in the Health sector:

- Upton
- Bunbury
- Bewsey and Whitecross
- Broken Cross and Upton
- Orford
- Burtonwood and Winwick
- Chester City & the Garden Quarter
- Crewe East
- Mobberley

<sup>25</sup> EMSI Analyst, Nov 2021

## Health employment by ward, 2020



Map by Brennan Wilson Ltd in QGIS. Data from BRES (open access), OS and OpenStreetMap

The composition of the sector in Cheshire and Warrington is shown in the table below which provides data on the 2-digit subsectors in Cheshire and Warrington.

The average wage for a job in the sector in Cheshire and Warrington was £25,543, with average wages ranging from £17,494 in the 'Social Work Activities Without Accommodation' subsector to £29,639 in the 'Human Health Activities' subsector. At 1250, the 'Human Health Activities' subsector had the highest number of employers. When Location Quotients are considered all three subsectors employed numbers at or below the levels that would be expected from national proportions.

Health subsectors in C&W, 2021				
	2021 Jobs	Avg. Wages Per Job	2021 LQ	2020 Establishments
Human Health Activities	35391	£29,639	0.91	1250
Residential Care Activities	12026	£21,714	1.00	427
Social Work Activities Without Accommodation	12159	£17,494	0.79	753

**Source: EMSI Analyst, Nov 2021**

The top ten occupations (4-digit SOC) employed in the Health sector in Cheshire and Warrington are set out in the table below. These account for about 60% of all employment in the sector. Hourly wages for these occupations range from £9.03 (Cleaners and Domestic) to £32.67 (Medical Practitioners).

<b>Top 10 occupations linked to the Health sector in C&amp;W, 2021</b>			
	Employed in Industry (2021)	Median Hourly Wages	Education Level
Care Workers and Home Carers	9988	£9.68	Level 2 NVQ; GCSE at grades A*-C
Nurses	9031	£18.11	Honours, Bachelor's degree
Nursing Auxiliaries and Assistants	4644	£10.68	Level 3 NVQ; A Levels
Medical Practitioners	3284	£32.67	Honours, Bachelor's degree
Nursery Nurses and Assistants	1938	£8.72	Level 2 NVQ; GCSE at grades A*-C
Cleaners and Domestic	1637	£9.03	Level 1 NVQ; GCSE at grades D-G
Other Administrative Occupations n.e.c.	1590	£10.89	Level 2 NVQ; GCSE at grades A*-C
Receptionists	1589	£9.30	Level 2 NVQ; GCSE at grades A*-C
Senior Care Workers	1004	£10.80	Level 3 NVQ; A Levels
Medical Secretaries	961	£10.98	Level 3 NVQ; A Levels
<b>Source: EMSI Analyst, Nov 2021</b>			

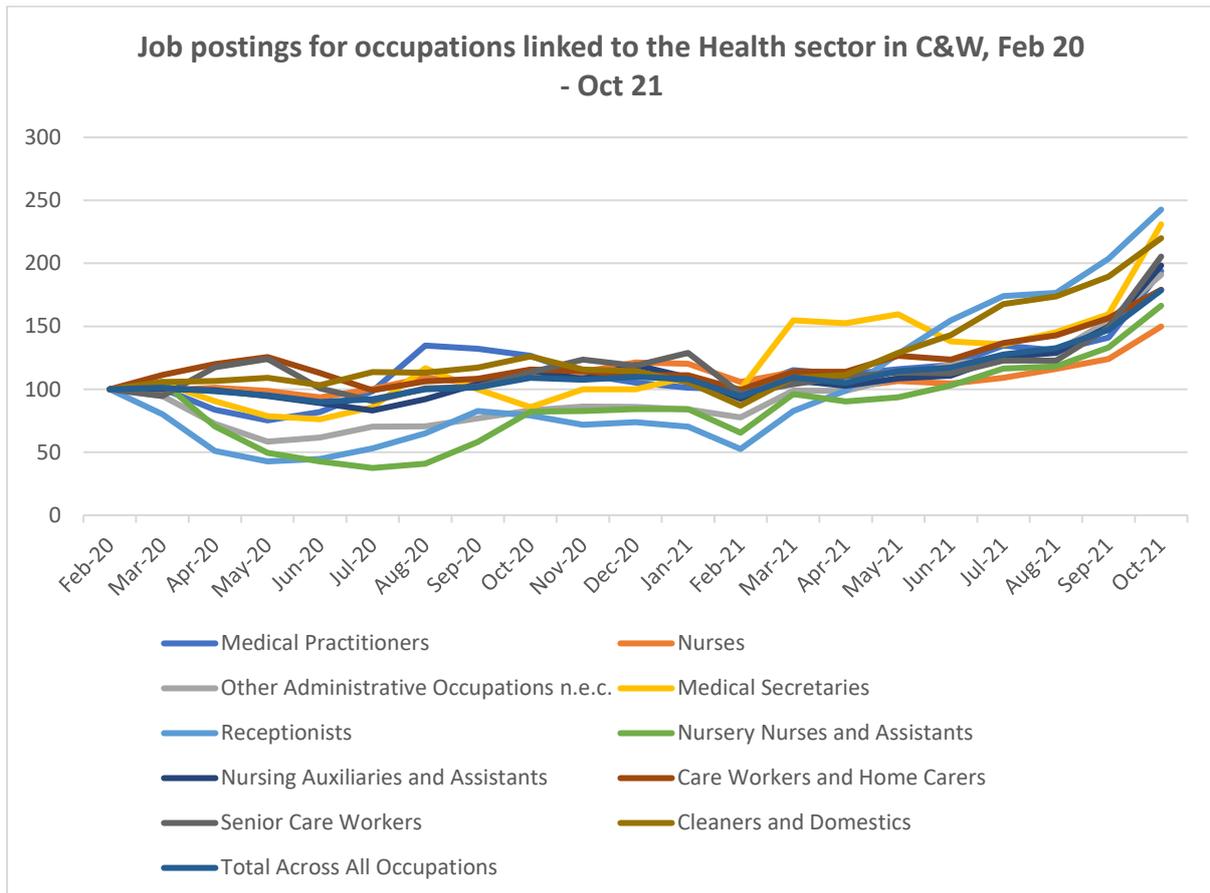
Analysis of EMSI Job postings for the occupations above in the period April 2021-October 2021 (table below) indicates that there was an average posting intensity for these roles of 10:1 in this period, which is significantly higher than for the economy as a whole which had a posting intensity of 7:1. This suggests that employers in this sector found it harder to recruit to roles than elsewhere. The occupations in the sector with the highest job posting intensity were:

- Nurses
- Care Workers and Home Carers
- Senior Care Workers

<b>Job postings for the top occupations linked to the Health sector, Apr-Oct 2021</b>		
Occupation	Avg. Posting Intensity (Apr 2021 - Oct 2021)	Unique Postings from Apr 2021 - Oct 2021
Medical Practitioners	6 : 1	968
Nurses	15 : 1	6254
Other Administrative Occupations n.e.c.	6 : 1	2803
Medical Secretaries	4 : 1	227
Receptionists	4 : 1	1057
Nursery Nurses and Assistants	4 : 1	697
Nursing Auxiliaries and Assistants	7 : 1	1416
Care Workers and Home Carers	9 : 1	4340
Senior Care Workers	10 : 1	606
Cleaners and Domestic	6 : 1	2653
Total Across All Occupations	10 : 1	21021
<b>Source: EMSI Analyst, Nov 2021</b>		

The graph below indexes job postings to pre-pandemic levels (Feb 2020=100) for the occupations above that had more than 100 unique postings between April and October 2021. By October 2021, the highest percentage increases in job postings compared to pre-pandemic levels were for:

- Medical Secretaries
- Receptionists
- Senior Care Workers
- Cleaners and Domestics



Source: EMSI Analyst, Nov 2021

#### 4.3.15 Focus on the Arts, Entertainment and Recreation sector

The sector had about 1,100 employers employing about 13,000 people in Cheshire and Warrington in 2021. The sector employed a slightly higher percentage of the workforce than is the case nationally with a Location Quotient (LQ) of 1.09 in 2021<sup>26</sup>.

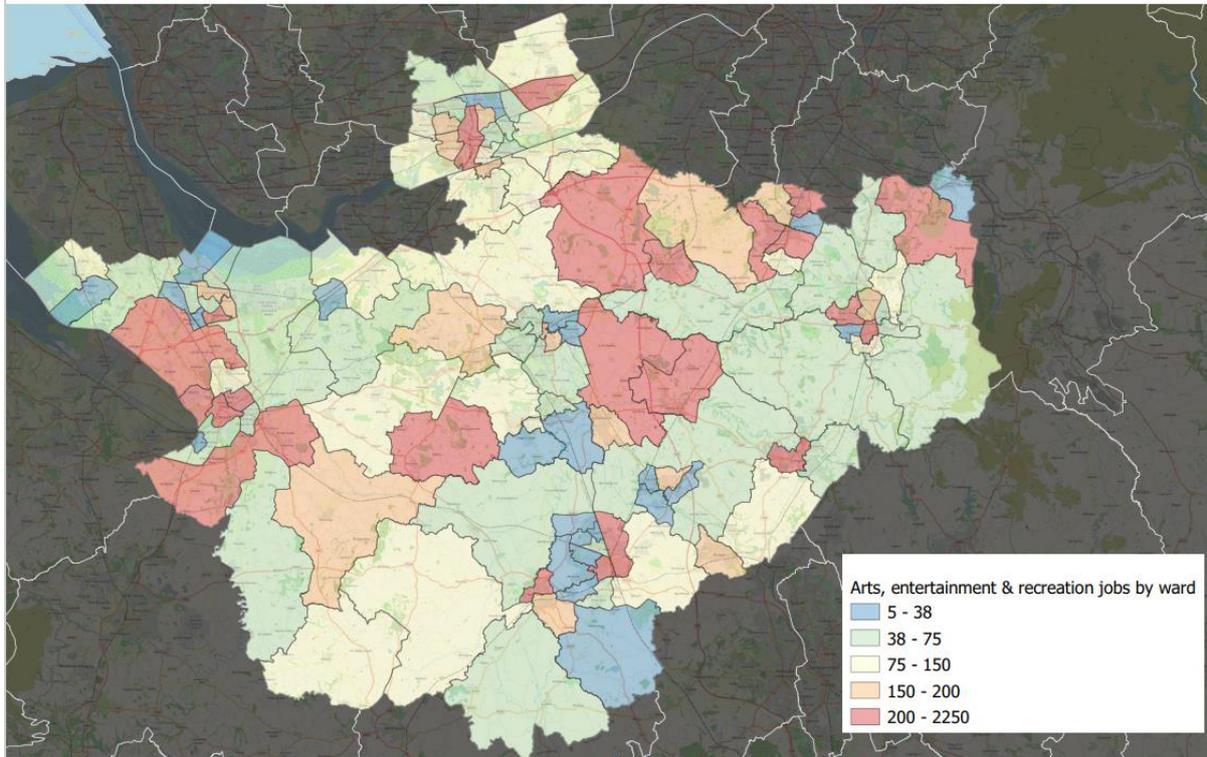
The following wards all had employment of more than 600 in the Arts, entertainment and recreation sector:

- Chester City & the Garden Quarter
- Bewsey and Whitecross
- Birchwood
- Wilmslow West and Chorley
- Crewe East

<sup>26</sup> EMSI Analyst, Nov 2021

- Saughall & Mollington

## Arts, entertainment & recreation employment by ward, 2020



Map by Brennan Wilson Ltd in QGIS. Data from BRES (open access), OS and OpenStreetMap

The composition of the sector in Cheshire and Warrington is shown in the table below which provides data on the 2-digit subsectors in Cheshire and Warrington.

The average wage for a job in the sector in Cheshire and Warrington was £22,731, with average wages ranging from £19,565 in the ‘Gambling and Betting Activities’ subsector to £33,037 in the ‘Creative, Arts and Entertainment Activities’ subsector. At 655, the ‘Sports Activities and Amusement and Recreation Activities’ subsector had the highest number of employers.

In 2021, the ‘Gambling and Betting Activities’ subsector employed a smaller proportion of the workforce than would be expected from the national distribution (LQs of 0.87). The ‘Creative, Arts and Entertainment Activities’ subsector employed about what would be expected from national employment distribution. Whilst the ‘Libraries, Archives, Museums and Other Cultural Activities’ and ‘Sports Activities and Amusement and Recreation Activities’ subsectors employed more (LQs of 1.08 and 1.16 respectively).

Arts, entertainment & recreation subsectors in C&W, 2021				
	2021 Jobs	Avg. Wages Per Job	2021 LQ	2020 Establishments
Creative, Arts and Entertainment Activities	1762	£33,037	0.98	257
Libraries, Archives, Museums and Other Cultural Activities	1811	£24,480	1.08	90
Gambling and Betting Activities	1145	£19,565	0.87	121
Sports Activities and Amusement and Recreation Activities	8120	£20,740	1.16	655

*Source: EMSI Analyst, Nov 2021*

The top ten occupations (4-digit SOC) employed in the Health sector in Cheshire and Warrington are set out in the table below. These account for over 40% of all employment in the sector. Hourly wages for these occupations range from £7.42 (Waiters and Waitresses) to £14.49 (Leisure and Sports Managers).

<b>Top 10 occupations linked to the Arts, entertainment &amp; recreation sector in C&amp;W, 2021</b>			
	Employed in Industry (2021)	Median Hourly Wages	Education Level
Sports Coaches, Instructors and Officials	1006	£11.90	Level 3 NVQ; A Levels
Sports and Leisure Assistants	901	£9.91	Level 2 NVQ; GCSE at grades A*-C
Kitchen and Catering Assistants	588	£8.72	Level 2 NVQ; GCSE at grades A*-C
Leisure and Sports Managers	556	£14.49	Level 3 NVQ; A Levels
Fitness Instructors	509	£10.22	Level 3 NVQ; A Levels
Other Administrative Occupations n.e.c.	496	£10.89	Level 2 NVQ; GCSE at grades A*-C
Animal Care Services Occupations n.e.c.	467	£8.72	Level 2 NVQ; GCSE at grades A*-C
Bar Staff	368	£7.70	Level 2 NVQ; GCSE at grades A*-C
Waiters and Waitresses	346	£7.42	Level 2 NVQ; GCSE at grades A*-C
Catering and Bar Managers	344	£10.02	Level 2 NVQ; GCSE at grades A*-C
<b>Source: EMSI Analyst, Nov 2021</b>			

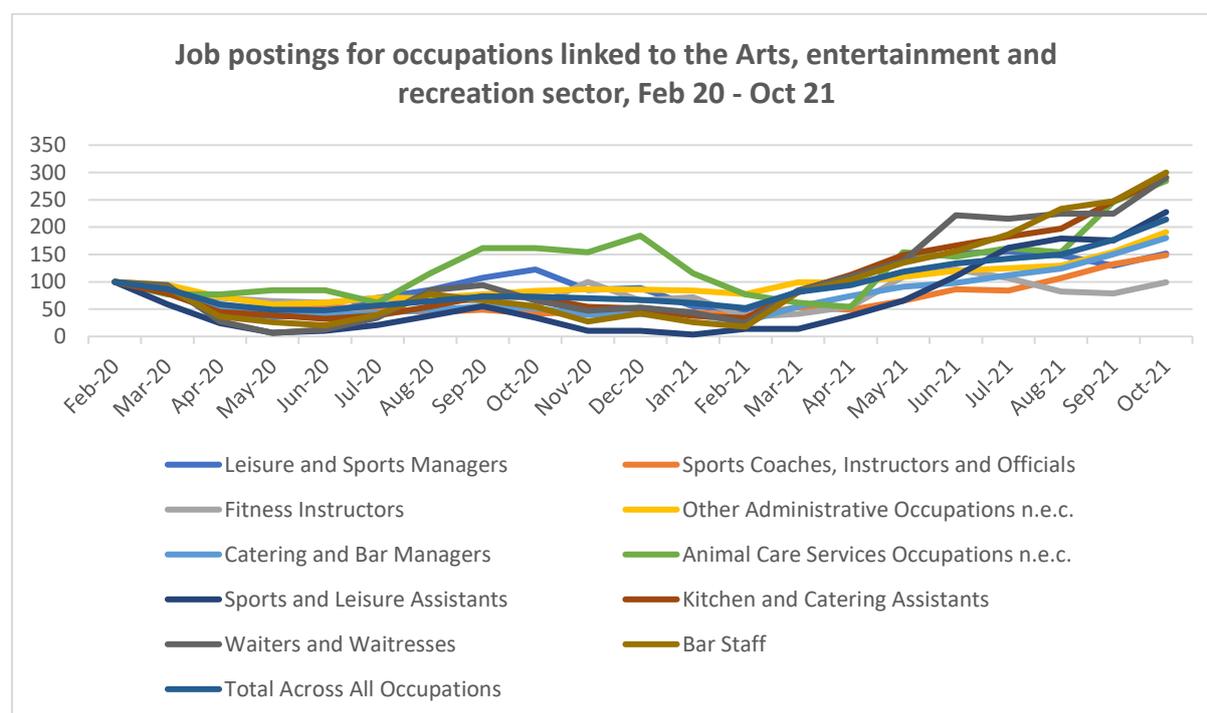
Analysis of EMSI Job postings for the occupations above in the period April 2021-October 2021 (table below) indicates that there was an average posting intensity for these roles of 6:1 in this period, which is lower than for the economy as a whole which had a posting intensity of 7:1. There were no occupational areas with a job postings intensity above the economy average which suggests that employers found recruitment to these sort of roles relatively unchallenging.

<b>Job postings for the top occupations linked to the Arts, entertainment &amp; recreation sector, Apr-Oct 2021</b>		
Occupation	Avg. Posting Intensity (Apr 2021 - Oct 2021)	Unique Postings from Apr 2021 - Oct 2021
Leisure and Sports Managers	3 : 1	119
Sports Coaches, Instructors and Officials	4 : 1	138
Fitness Instructors	4 : 1	444
Other Administrative Occupations n.e.c.	6 : 1	2803
Catering and Bar Managers	7 : 1	483
Animal Care Services Occupations n.e.c.	5 : 1	83
Sports and Leisure Assistants	3 : 1	138
Kitchen and Catering Assistants	6 : 1	2635
Waiters and Waitresses	5 : 1	217
Bar Staff	6 : 1	547

Total Across All Occupations	6 : 1	7607
<i>Source: EMSI Analyst, Nov 2021</i>		

The graph below indexes job postings to pre-pandemic levels (Feb 2020=100) for the occupations above that had more than 100 unique postings between April and October 2021. By October 2021, the highest percentage increases in job postings compared to pre-pandemic levels were for:

- Animal Care Services Occupations n.e.c.
- Sports and Leisure Assistants
- Kitchen and Catering Assistants
- Waiters and Waitresses
- Bar Staff



*Source: EMSI Analyst, Nov 2021*

#### 4.4 Current Employer Demand for Labour- Occupational Analysis

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.

##### 4.4.1 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 four areas with estimated levels of annual demand higher than 150 are:

- Managers and Directors in Retail and Wholesale
- Production Managers and Directors in Manufacturing
- Financial Managers and Directors
- Human Resource Managers and Directors

<b>Annual Openings for Managers Directors and Senior Officials in 2021-2022</b>		
SOC	Description	Avg. Annual Openings
1190	Managers and Directors in Retail and Wholesale	286
1121	Production Managers and Directors in Manufacturing	203
1131	Financial Managers and Directors	194
1135	Human Resource Managers and Directors	170
1132	Marketing and Sales Directors	135
1122	Production Managers and Directors in Construction	114
1162	Managers and Directors in Storage and Warehousing	110
1139	Functional Managers and Directors n.e.c.	95
<i>Source: EMSI Analyst, Dec 2021</i>		

The table below sets out the skills being sought by employers in Cheshire and Warrington for Managers and directors in retail and wholesale roles.

<b>Managers and directors in retail and wholesale: Specialised, Baseline and Digital Skills required 2016-21</b>					
<b>Specialised</b>		<b>Baseline</b>		<b>Digital</b>	
Store Management	1,263	Leadership	346	Microsoft Excel	32
Retail Industry Knowledge	563	Communication Skills	307	Microsoft Office	32
Key Performance Indicators (KPIs)	306	Organisational Skills	262	Facebook	6
Customer Service	274	Planning	147	SAP	6
Budgeting	196	People Management	140	Microsoft Outlook	5
Cost Control	176	Creativity	105	C++	4
Sales	172	Problem Solving	91	Supply Chain Software	4
Staff Management	169	Presentation Skills	83	.NET	3
Merchandising	159	Computer Literacy	64	Adobe Photoshop	3
Sales Goals	154	Building Effective Relationships	49	Enterprise Resource Planning (ERP)	3
<i>Source: EMSI Burning Glass</i>					

The table below sets out the skills being sought by employers In Cheshire and Warrington for Production managers and directors in manufacturing roles.

<b>Production managers and directors in manufacturing: Specialised, Baseline and Digital Skills required 2016-21</b>					
<b>Specialised</b>		<b>Baseline</b>		<b>Digital</b>	
Production Management	590	Communication Skills	553	Microsoft Excel	158
Key Performance Indicators (KPIs)	447	Planning	487	Microsoft Office	120
Budgeting	425	Leadership	423	Enterprise Resource Planning (ERP)	82
Teamwork / Collaboration	249	Problem Solving	294	SAP	58
Quality Management	217	Organisational Skills	287	Microsoft Powerpoint	36
Scheduling	179	People Management	280	Microsoft Word	33
Customer Service	177	Detail-Orientated	201	Revit	17
Project Management	173	Microsoft Excel	158	Facebook	13
Quality Assurance and Control	172	Computer Literacy	152	ISO 9000	13
Lean Manufacturing	168	Building Effective Relationships	130	SQL	12
<i>Source: EMSI Burning Glass</i>					

The table below sets out the skills being sought by employers in Cheshire and Warrington for Financial managers and directors roles.

<b>Financial managers and directors: Specialised, Baseline and Digital Skills required 2016-21</b>					
<b>Specialised</b>		<b>Baseline</b>		<b>Digital</b>	
Finance	2,408	Microsoft Excel	1,135	Microsoft Excel	1,135
Accounting	1,952	Communication Skills	1,088	SAP	242
Budgeting	1,576	Planning	561	Enterprise Resource Planning (ERP)	221
Balance Sheet	904	Detail-Orientated	447	Microsoft Office	203
Financial Reporting	702	Building Effective Relationships	393	Pivot Tables	112
Account Reconciliation	677	Organisational Skills	369	Facebook	108
Key Performance Indicators (KPIs)	532	Decision Making	331	Microsoft Powerpoint	107
Financial Controls	467	Problem Solving	278	Accounting Software	96
Statutory Accounts	358	Analytical Skills	220	Oracle	90
External Auditing	356	Leadership	217	SQL	55
<i>Source: EMSI Burning Glass</i>					

The table below sets out the skills being sought by employers in Cheshire and Warrington for Human resource managers and directors roles

Human resource managers and directors: Specialised, Baseline and Digital Skills required 2016-2021					
Specialised		Baseline		Digital	
Employee Relations	225	Communication Skills	344	Microsoft Excel	87
Performance Management	130	Organisational Skills	189	Microsoft Office	86
HR Policies	115	Planning	173	Microsoft Word	28
Teamwork / Collaboration	111	People Management	130	Microsoft Powerpoint	18
Staff Management	106	Building Effective Relationships	124	Facebook	16
Budgeting	102	Detail-Orientated	101	Microsoft Outlook	16
Stakeholder Management	97	Creativity	89	LinkedIn	14
Business Development	89	Microsoft Excel	87	Prince	13
Key Performance Indicators (KPIs)	84	Microsoft Office	86	C++	11
Employee Engagement	82	Leadership	83	Customer Relationship Management (CRM)	10
<b>Source: EMSI Burning Glass</b>					

#### 4.4.2 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 150 or more are:

- Nurses
- Primary and Nursery Education Teaching Professionals
- Chartered and Certified Accountants
- Secondary Education Teaching Professionals
- Management Consultants and Business Analysts

Annual Openings for Professional Occupations in 2021/22		
SOC	Description	Avg. Annual Openings
2231	Nurses	468
2315	Primary and Nursery Education Teaching Professionals	196
2421	Chartered and Certified Accountants	191
2314	Secondary Education Teaching Professionals	179
2423	Management Consultants and Business Analysts	172
2211	Medical Practitioners	148
2424	Business and Financial Project Management Professionals	136
2136	Programmers and Software Development Professionals	119
2133	IT Specialist Managers	84
<i>Source: EMSI Analyst, Dec 2021</i>		

The table below sets out the skills being sought by employers in Cheshire and Warrington for nursing roles.

Nurses: Specialised, Baseline and Digital Skills required 2016-21					
Specialised		Baseline		Digital	
Nursing Home	5,169	Communication Skills	4,732	Microsoft Excel	142
Working With Patient And/Or Condition: Mental Health	4,503	Planning	1,316	Microsoft Office	80
Care Planning	4,418	Organisational Skills	1,242	Microsoft Access	39
Dementia knowledge	3,497	Leadership	1,200	C++	29
Patient Care	2,186	Mentoring	1,197	JavaScript Object Notation (JSON)	29
Midwifery	1,977	Time Management	824	Primavera	25
Elder Care	1,738	Research	606	Word Processing	21
Staff Management	1,589	Building Effective Relationships	505	Change Management Process	16
Teamwork / Collaboration	1,459	Problem Solving	440	Microsoft Powerpoint	16
Home Management	1,310	English	428	Microsoft Word	16
<i>Source: EMSI Burning Glass</i>					

The table below sets out the skills being sought by employers in Cheshire and Warrington for Primary and nursery education teaching professional roles.

Primary and nursery education teaching professionals: Specialised, Baseline and Digital Skills required 2016-21					
Specialised		Baseline		Digital	
Teaching	3,654	Creativity	857	C++	45
Lesson Planning	267	People Management	571	Microsoft Excel	32
Teamwork / Collaboration	205	Planning	541	Adobe Indesign	16

Child Care	131	Communication Skills	484	Adobe Photoshop	16
Faculty Training	105	Organisational Skills	237	Adobe Acrobat	15
External Auditing	76	English	147	Adobe Creative Suite	15
Staff Management	62	Writing	95	Adobe Illustrator	14
Autism Diagnosis / Treatment / Care	60	Energetic	67	Microsoft Powerpoint	8
Child Protection	51	Building Effective Relationships	62	A/B testing	4
Child Development	43	Positive Disposition	59	HTML5	4
<b>Source: EMSI Burning Glass</b>					

The table below sets out the skills being sought by employers in Cheshire and Warrington for Chartered and certified accountants roles.

<b>Chartered and certified accountants: Specialised, Baseline and Digital Skills required 2016-21</b>					
<b>Specialised</b>		<b>Baseline</b>		<b>Digital</b>	
Accounting	8,982	Microsoft Excel	3,606	Microsoft Excel	3,606
Budgeting	2,890	Communication Skills	2,504	SAP	571
Balance Sheet	2,871	Detail-Orientated	1,358	Microsoft Office	444
Account Reconciliation	2,444	Organisational Skills	893	Enterprise Resource Planning (ERP)	428
Financial Accounting	1,504	Planning	852	Pivot Tables	384
Accruals	1,454	Meeting Deadlines	529	Facebook	363
VAT Returns	1,368	Written Communication	468	Accounting Software	338
Statutory Accounts	1,135	Problem Solving	452	Oracle	256
Financial Reporting	1,019	Microsoft Office	444	Microsoft Word	202
Variance Analysis	883	Analytical Skills	423	Quickbooks	187
<b>Source: EMSI Burning Glass</b>					

The table below sets out the skills being sought by employers in Cheshire and Warrington for Secondary education teaching professional roles.

<b>Secondary education teaching professionals: Specialised, Baseline and Digital Skills required 2016-21</b>					
<b>Specialised</b>		<b>Baseline</b>		<b>Digital</b>	
Teaching	5,576	English	1,020	Microsoft Excel	107
Physics	378	Creativity	851	Facebook	20
Lesson Planning	364	Planning	693	Oracle	9
Biology	359	People Management	648	C++	3
Chemistry	358	Communication Skills	530	Java Message Service (JMS)	3

External Auditing	298	Organisational Skills	212	Microsoft C#	3
History	220	French	207	Agile Development	2
Teamwork / Collaboration	206	Spanish	185	F#	2
Music	142	Energetic	181	Prince	2
Religious Education	90	Bilingual	123	Software Development	2
<b>Source: EMSI Burning Glass</b>					

The table below sets out the skills being sought by employers in Cheshire and Warrington for Management consultants and business analyst roles.

<b>Management consultants and business analysts: Specialised, Baseline and Digital Skills required 2016-21</b>					
<b>Specialised</b>		<b>Baseline</b>		<b>Digital</b>	
Business Analysis	2,622	Communication Skills	1,862	SQL	1,331
SQL	1,331	Microsoft Excel	1,302	Microsoft Excel	1,302
Stakeholder Management	1,021	Planning	896	SQL Server Reporting Services (SSRS)	519
Business Process	914	Problem Solving	807	SQL Server	498
Teamwork / Collaboration	760	Detail-Orientated	720	Microsoft Office	474
Data Analysis	721	Organisational Skills	517	Software Development	388
Project Management	703	Writing	489	SAP	363
Business Intelligence	685	Microsoft Office	474	Enterprise Resource Planning (ERP)	337
Data Warehousing	509	Analytical Skills	447	Transact-SQL	305
SQL Server Reporting Services (SSRS)	504	Building Effective Relationships	446	Microsoft Sql Server Integration Services (SSIS)	303
<b>Source: EMSI Burning Glass</b>					

#### 4.4.3 Employer Demand for Labour - Assoc 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:

- Sales Accounts and Business Development Managers
- Human Resources and Industrial Relations Officers

<b>Annual Openings for Associate Professional and Technical Occupations in 2021/22</b>		
SOC	Description	Avg. Annual Openings
3545	Sales Accounts and Business Development Managers	410
3562	Human Resources and Industrial Relations Officers	241
3538	Financial Accounts Managers	134
3539	Business and Related Associate Professionals n.e.c.	125
3542	Business Sales Executives	124
3534	Finance and Investment Analysts and Advisers	123
3543	Marketing Associate Professionals	122
<i>Source: EMSI Analyst, Dec 2021</i>		

The table below sets out the skills being sought by employers in Cheshire and Warrington for Sales accounts and business development manager roles.

<b>Sales accounts and business development managers: Specialised, Baseline and Digital Skills required 2016-21</b>					
<b>Specialised</b>		<b>Baseline</b>		<b>Digital</b>	
Sales	672	Communication Skills	586	Microsoft Excel	135
Product Management	523	Planning	334	Microsoft Office	129
Sales Management	435	Creativity	275	Scrum	67
Budgeting	391	Building Effective Relationships	269	Software Development	61
Business Development	352	Organisational Skills	246	Microsoft Powerpoint	56
Project Management	280	Problem Solving	166	Agile Development	43
Customer Service	233	Detail-Orientated	156	Customer Relationship Management (CRM)	41
Product Sales	214	Writing	145	User Interface (UI) Design	31
Teamwork / Collaboration	209	Research	135	Microsoft Project	29
Product Development	183	Microsoft Excel	133	Microsoft Word	24
<i>Source: EMSI Burning Glass</i>					

The table below sets out the skills being sought by employers in Cheshire and Warrington for Human resources and industrial relations officer roles.

Human resources and industrial relations officers: Specialised, Baseline and Digital Skills required 2016-21					
Specialised		Baseline		Digital	
Sales	1,126	Communication Skills	2,801	Microsoft Excel	1,086
Business Development	1,012	Organisational Skills	1,584	Microsoft Office	724
Employee Relations	1,009	Detail-Orientated	1,376	Microsoft Word	370
Social Media	906	Microsoft Excel	1,086	LinkedIn	233
Teamwork / Collaboration	880	Building Effective Relationships	916	Microsoft Powerpoint	233
Customer Service	829	Microsoft Office	724	SAP	161
Key Performance Indicators (KPIs)	798	Writing	663	Facebook	126
HR Policies	714	Planning	498	Customer Relationship Management (CRM)	123
Recruiting	642	Problem Solving	475	Microsoft Outlook	117
Onboarding	568	Creativity	436	SAP HR	63

*Source: EMSI Burning Glass*

#### 4.4.4 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 of c150 or more are:

- Other Administrative Occupations n.e.c.
- Book-keepers, Payroll Managers and Wages Clerks
- Receptionists

Annual Openings for Administrative and Secretarial Occupations in 2021/22		
SOC	Description	Avg. Annual Openings
4159	Other Administrative Occupations n.e.c.	556
4122	Book-keepers, Payroll Managers and Wages Clerks	443
4216	Receptionists	147
4129	Financial Administrative Occupations n.e.c.	144
4123	Bank and Post Office Clerks	136
4161	Office Managers	112
4215	Personal Assistants and Other Secretaries	100
4133	Stock Control Clerks and Assistants	91

4151	Sales Administrators	80
4131	Records Clerks and Assistants	75
<b>Source: EMSI Analyst, Dec 2021</b>		

The table below sets out the skills being sought by employers in Cheshire and Warrington for Other administrative occupation roles.

<b>Other administrative occupations n.e.c: Specialised, Baseline and Digital Skills required 2016-21</b>					
<b>Specialised</b>		<b>Baseline</b>		<b>Digital</b>	
Customer Service	2,803	Communication Skills	5,500	Microsoft Excel	4,101
Administrative Support	2,186	Organisational Skills	4,206	Microsoft Office	2,379
Secretarial Skills	2,003	Microsoft Excel	4,101	Microsoft Word	1,241
Teamwork / Collaboration	1,862	Detail-Orientated	3,659	Microsoft Powerpoint	611
Data Entry	1,186	Microsoft Office	2,379	Microsoft Outlook	514
Business Administration	1,046	Computer Literacy	1,538	Customer Relationship Management (CRM)	355
Scheduling	824	Microsoft Word	1,241	SAP	313
Customer Contact	702	Planning	1,226	Word Processing	206
General Office Duties	694	English	1,222	Facebook	150
Invoicing	650	Typing	1,102	Microsoft Sharepoint	137
<b>Source: EMSI Burning Glass</b>					

The table below sets out the skills being sought by employers in Cheshire and Warrington for Book-keepers, payroll managers and wages clerks roles.

<b>Book-keepers, payroll managers and wages clerks: Specialised, Baseline and Digital Skills required</b>					
<b>Specialised</b>		<b>Baseline</b>		<b>Digital</b>	
Accounting	4,113	Microsoft Excel	4,420	Microsoft Excel	4,420
Payroll Processing	3,324	Communication Skills	3,074	Microsoft Office	862
Invoice Processing	2,806	Detail-Orientated	2,540	SAP	811
Account Reconciliation	1,955	Organisational Skills	1,790	Microsoft Word	413
Bank Reconciliation	1,654	Microsoft Office	862	Pivot Tables	273
Customer Checkout	1,592	Meeting Deadlines	657	Oracle	256
Accounts Payable / Accounts Receivable	1,190	Building Effective Relationships	603	Enterprise Resource Planning (ERP)	231
Bookkeeping	1,078	Time Management	512	Accounting Software	225
Teamwork / Collaboration	1,056	Problem Solving	470	Microsoft Outlook	122
SAP	811	Written Communication	456	Facebook	103
<b>Source: EMSI Burning Glass</b>					

The table below sets out the skills being sought by employers in Cheshire and Warrington for Receptionist roles.

<b>Receptionists: Specialised, Baseline and Digital Skills required 2016-21</b>					
<b>Specialised</b>		<b>Baseline</b>		<b>Digital</b>	
Administrative Support	3222	Communication Skills	1,396	Microsoft Excel	335
Customer Service	1229	Organisational Skills	854	Microsoft Office	322
Teamwork / Collaboration	445	Detail-Orientated	552	Microsoft Word	178
Secretarial Skills	419	Computer Literacy	388	Microsoft Outlook	111
Customer Contact	239	Microsoft Excel	335	Microsoft Powerpoint	41
Taking Messages	228	Microsoft Office	322	Facebook	38
Appointment Setting	227	Multi-Tasking	284	Word Processing	26
Surgery	219	English	253	Customer Relationship Management (CRM)	22
Administrative Functions	188	Typing	238	BRIO	12
Sales	146	Telephone Skills	237	SAP	12
<b>Source: EMSI Burning Glass</b>					

#### 4.4.5 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. Only the Chef category has estimated annual openings more than 150.

<b>Annual Openings for Skilled Trades Occupations in 2021/22</b>		
SOC	Description	Avg. Annual Openings
5434	Chefs	164
5113	Gardeners and Landscape Gardeners	139
5231	Vehicle Technicians, Mechanics and Electricians	137
5241	Electricians and Electrical Fitters	102
5223	Metal Working Production and Maintenance Fitters	88
<b>Source: EMSI Analyst, Dec 2021</b>		

The table below sets out the skills being sought by employers in Cheshire and Warrington for Chef roles.

Chefs: Specialised, Baseline and Digital Skills required 2016-21					
Specialised		Baseline		Digital	
Cooking	7,797	Organisational Skills	1,262	Microsoft Excel	110
Teamwork / Collaboration	1,113	Communication Skills	1,244	Facebook	66
Food Safety	1,015	Detail-Orientated	814	Microsoft Office	9
Food Preparation	893	Creativity	740	LINUX	8
Budgeting	670	English	617	Google Analytics	7
Cleaning	635	Planning	358	Microsoft C#	7
Stock Control	470	Multi-Tasking	344	Google AdWords	6
Hazard Analysis Critical Control Point (HACCP)	352	People Management	319	Microsoft Word	6
Customer Service	339	Leadership	229	SQL	6
Cost Control	214	Presentation Skills	229	Apple Macintosh	4
<i>Source: EMSI Burning Glass</i>					

#### 4.4.6 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 150 or more are:

- Care Workers and Home Carers
- Nursing Auxiliaries and Assistants
- Teaching Assistants

Annual Openings for Caring, Leisure and Other Service Occupations in 2021/22		
SOC	Description	Avg. Annual Openings
6145	Care Workers and Home Carers	496
6141	Nursing Auxiliaries and Assistants	244
6125	Teaching Assistants	187
6221	Hairdressers and Barbers	111
6121	Nursery Nurses and Assistants	100
6126	Educational Support Assistants	83
6222	Beauticians and Related Occupations	77

Source: EMSI Analyst, Dec 2021

The table below sets out the skills being sought by employers in Cheshire and Warrington for Care workers and home carer roles.

<b>Care workers and home carers: Specialised, Baseline and Digital Skills required 2016-21</b>					
<b>Specialised</b>		<b>Baseline</b>		<b>Digital</b>	
Working With Patient And/Or Condition: Mental Health	2,175	Communication Skills	3,208	Microsoft Office	144
Care Planning	1,763	Organisational Skills	930	Microsoft Excel	109
Autism Diagnosis / Treatment / Care	1,692	Leadership	848	Facebook	35
Nursing Home	1,567	Planning	576	Microsoft Outlook	35
Teamwork / Collaboration	1,455	Creativity	556	Microsoft Word	21
Dementia knowledge	1,285	Writing	528	Solomon	17
Senior Care	1,113	Positive Disposition	522	Microsoft Access	16
Cleaning	1,081	Listening	503	Microsoft Windows	16
Medication Administration	1,053	Written Communication	462	Microsoft C#	15
Meal Preparation	1,041	English	440	F#	11

Source: EMSI Burning Glass

The table below sets out the skills being sought by employers in Cheshire and Warrington for Nursing auxiliaries and assistant roles.

<b>Nursing auxiliaries and assistants: Specialised, Baseline and Digital Skills required 2016-21</b>					
<b>Specialised</b>		<b>Baseline</b>		<b>Digital</b>	
Working With Patient And/Or Condition: Mental Health	414	Communication Skills	1,065	Microsoft Excel	88
Patient Care	362	Organisational Skills	276	Microsoft Office	64
Care Planning	313	Writing	173	SAP	26
Teamwork / Collaboration	243	Positive Disposition	139	Microsoft Powerpoint	22
Nursing Home	236	Leadership	134	Facebook	19
Phlebotomy	223	Listening	111	Microsoft Word	19
Dementia knowledge	203	Detail-Orientated	102	Microsoft Access	11
Rehabilitation	202	English	97	Solomon	9
Cleaning	160	Microsoft Excel	88	Word Processing	6
Toileting	131	Planning	87	Enterprise Resource Planning (ERP)	4

Source: EMSI Burning Glass

The table below sets out the skills being sought by employers in Cheshire and Warrington for Teaching assistant roles.

<b>Teaching assistants: Specialised, Baseline and Digital Skills required 2016-21</b>					
<b>Specialised</b>		<b>Baseline</b>		<b>Digital</b>	
Teaching	6217	Communication Skills	1,096	Microsoft Excel	110
Autism Diagnosis / Treatment / Care	928	Creativity	687	Microsoft Office	8
Child Care	720	People Management	488	Facebook	7
Working With Patient And/Or Condition: Attention Deficit Hyperactivity Disorder (ADHD)	357	Planning	433	Microsoft C#	7
External Auditing	356	Organisational Skills	338	F#	6
Working With Patient And/Or Condition: Mental Health	329	English	259	LinkedIn	6
Lesson Planning	297	Writing	124	Oracle	6
Teamwork / Collaboration	254	Energetic	122	Microsoft Word	5
Faculty Training	232	Microsoft Excel	110	Solomon	4
Dyslexia Diagnosis / Treatment	194	Building Effective Relationships	85	Microsoft Office 365	2
<i>Source: EMSI Burning Glass</i>					

#### 4.4.7 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 150 or more:

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

Annual Openings for Sales and Customer Service Occupations in 2021/22		
SOC	Description	Avg. Annual Openings
7111	Sales and Retail Assistants	738
7219	Customer Service Occupations n.e.c.	189
7220	Customer Service Managers and Supervisors	114
7130	Sales Supervisors	110
7211	Call and Contact Centre Occupations	97
7112	Retail Cashiers and Check-out Operators	86

*Source: EMSI Analyst, Dec 2021*

The table below sets out the skills being sought by employers in Cheshire and Warrington for Sales and retail assistant roles.

Sales and retail assistants: Specialised, Baseline and Digital Skills required 2016-21					
Specialised		Baseline		Digital	
Sales	2,222	Communication Skills	1,173	Microsoft Excel	145
Customer Service	1,894	Organisational Skills	478	Microsoft Office	121
Retail Industry Knowledge	1,529	Detail-Orientated	270	Facebook	71
Retail Sales	966	Creativity	228	SAP	28
Teamwork / Collaboration	660	Computer Literacy	225	Microsoft Word	25
Product Sales	571	Listening	206	Social Media Platforms	21
Sales Goals	541	English	188	Microsoft Outlook	18
Merchandising	533	Positive Disposition	169	Customer Relationship Management (CRM)	16
Product Knowledge	380	Problem Solving	158	Microsoft Access	16
Customer Contact	330	Building Effective Relationships	152	Adobe Photoshop	13

*Source: EMSI Burning Glass*

The table below sets out the skills being sought by employers in Cheshire and Warrington for Customer service occupations roles.

Customer service occupations n.e.c.: Specialised, Baseline and Digital Skills required 2016-21					
Specialised		Baseline		Digital	
Customer Service	13,775	Communication Skills	6,022	Microsoft Excel	1,731
Customer Contact	3,430	Detail-Orientated	3,136	Microsoft Office	1,487
Teamwork / Collaboration	2,273	Organisational Skills	2,493	Microsoft Word	551
Sales	1,728	Computer Literacy	1,746	Customer Relationship Management (CRM)	441
Retail Industry Knowledge	955	Microsoft Excel	1,731	SAP	359

Key Performance Indicators (KPIs)	886	Listening	1,555	Microsoft Outlook	285
Social Media	691	Problem Solving	1,504	Microsoft Powerpoint	226
Product Sales	575	Microsoft Office	1,487	Salesforce	121
Data Entry	569	English	1,473	Facebook	103
Customer Relationship Management (CRM)	441	Building Effective Relationships	981	Enterprise Resource Planning (ERP)	89
<b>Source: EMSI Burning Glass</b>					

#### 4.4.8 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 the three occupations that belong to this group that have an estimated number of annual openings more than 75.

<b>Annual Openings for Process, Plant and Machine Operatives in 2021/22</b>		
SOC	Description	Avg. Annual Openings
8211	Large Goods Vehicle Drivers	322
8212	Van Drivers	230
8222	Fork-lift Truck Drivers	99
<b>Source: EMSI Analyst, Dec 2021</b>		

The table below sets out the skills being sought by employers in Cheshire and Warrington for Large goods vehicle driver roles.

<b>Large goods vehicle drivers: Specialised, Baseline and Digital Skills required 2016-21</b>					
<b>Specialised</b>		<b>Baseline</b>		<b>Digital</b>	
Haulage	748	Communication Skills	919	Facebook	19
Customer Service	538	Articulate	356	Microsoft C#	19
Product Sales	199	English	213	Microsoft Excel	16
Forklift Operation	162	Organisational Skills	164	F#	7
Teamwork / Collaboration	135	Positive Disposition	148	Microsoft Office	7
Heavy Lifting	117	Planning	112	Microsoft Outlook	6
Logistics	107	Detail-Orientated	72	Quickbooks	6
Key Performance Indicators (KPIs)	92	Building Effective Relationships	63	DOM	4
Customer Contact	71	Written Communication	52	Epic Systems	4
Accounting	54	Leadership	49	Java Message Service (JMS)	4
<b>Source: EMSI Burning Glass</b>					

The table below sets out the skills being sought by employers in Cheshire and Warrington for Van driver roles.

<b>Van drivers: Specialised, Baseline and Digital Skills required 2016-21</b>					
<b>Specialised</b>		<b>Baseline</b>		<b>Digital</b>	
Customer Service	692	Communication Skills	676	C++	142
Forklift Operation	389	Organisational Skills	459	Microsoft Excel	33
Product Sales	309	English	268	Lotus Domino	25
Teamwork / Collaboration	288	Detail-Orientated	264	Microsoft Office	22
Heavy Lifting	252	Planning	124	Microsoft C#	14
Customer Contact	198	Positive Disposition	123	Facebook	11
Sorting	159	Problem Solving	107	F#	8
C++	142	Meeting Deadlines	66	SAP	8
Logistics	127	Physical Demand	65	Java Message Service (JMS)	6
Motor Vehicle Operation	81	Leadership	56	Microsoft Word	5

*Source: EMSI Burning Glass*

#### 4.4.9 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 150 or more are:

- Elementary Storage Occupations
- Kitchen and Catering Assistants
- Cleaners and Domestic
- Waiters and Waitresses
- Bar Staff

<b>Annual Openings for Elementary Occupations in 2021/22</b>		
SOC	Description	Avg. Annual Openings
9260	Elementary Storage Occupations	625
9272	Kitchen and Catering Assistants	405
9233	Cleaners and Domestic	344
9273	Waiters and Waitresses	219
9274	Bar Staff	169
9134	Packers, Bottlers, Canners and Fillers	129
9211	Postal Workers, Mail Sorters, Messengers and Couriers	119

9241	Security Guards and Related Occupations	103
9120	Elementary Construction Occupations	79
<b>Source: EMSI Analyst, Dec 2021</b>		

The table below sets out the skills being sought by employers in Cheshire and Warrington for Elementary storage occupation roles.

<b>Elementary storage occupations: Specialised, Baseline and Digital Skills required 2016-21</b>					
<b>Specialised</b>		<b>Baseline</b>		<b>Digital</b>	
Forklift Operation	749	Detail-Orientated	966	Microsoft Excel	272
Sorting	646	Communication Skills	813	Microsoft Office	174
Teamwork / Collaboration	598	Organisational Skills	507	SAP	135
Cleaning	505	Computer Literacy	431	Microsoft Word	72
Key Performance Indicators (KPIs)	411	English	358	Enterprise Resource Planning (ERP)	30
Customer Service	350	Leadership	333	Facebook	23
Heavy Lifting	330	Physical Demand	292	Microsoft C#	23
Logistics	312	Microsoft Excel	272	Microsoft Powerpoint	19
Stock Control	287	Planning	192	Microsoft Outlook	18
Sales	264	Problem Solving	187	SQL	17
<b>Source: EMSI Burning Glass</b>					

The table below sets out the skills being sought by employers in Cheshire and Warrington for Kitchen and catering assistant roles.

<b>Kitchen and catering assistants: Specialised, Baseline and Digital Skills required 2016-21</b>					
<b>Specialised</b>		<b>Baseline</b>		<b>Digital</b>	
Teamwork / Collaboration	1,426	Communication Skills	1,710	Microsoft Excel	116
Cleaning	1,144	Listening	1,008	Facebook	53
Customer Service	1,067	Organisational Skills	636	Microsoft Office	12
Food Preparation	1,003	Verbal / Oral Communication	367	BRIO	10
Cooking	526	Detail-Orientated	324	Computer Aided Draughting/Design (CAD)	9
Food Safety	413	Presentation Skills	259	Microsoft Word	7
Sales	252	Multi-Tasking	254	Microsoft C#	6
Cash Handling	249	Leadership	236	F#	5
Restaurant Experience	219	English	209	Solomon	5
Food Service Experience	192	Positive Disposition	179	AutoCAD	4
<b>Source: EMSI Burning Glass</b>					

The table below sets out the skills being sought by employers in Cheshire and Warrington for Cleaners and domestic roles.

<b>Cleaners and domestics: Specialised, Baseline and Digital Skills required 2016-21</b>					
<b>Specialised</b>		<b>Baseline</b>		<b>Digital</b>	
Cleaning	4,190	Communication Skills	556	Facebook	20
Housekeeping	702	Detail-Orientated	474	Microsoft Excel	14
Customer Service	349	English	273	BRIO	11
Equipment Cleaning	301	Organisational Skills	200	Microsoft C#	10
Ironing	252	Verbal / Oral Communication	105	Microsoft Word	5
Facility Management	230	Written Communication	105	Solomon	5
Teamwork / Collaboration	210	Energetic	95	DOM	4
Health and Safety Standards	206	Time Management	84	Microsoft Office	4
Laundry	104	Positive Disposition	72	Software Development	4
Machinery Cleaning	99	Leadership	39	AWS Elastic Compute Cloud (EC2)	3
<b>Source: EMSI Burning Glass</b>					

The table below sets out the skills being sought by employers in Cheshire and Warrington for Waiter and waitress roles.

<b>Waiters and waitresses: Specialised, Baseline and Digital Skills required 2016-21</b>					
<b>Specialised</b>		<b>Baseline</b>		<b>Digital</b>	
Customer Service	283	Communication Skills	353	Facebook	16
Teamwork / Collaboration	248	Organisational Skills	131	Microsoft Excel	16
Guest Services	136	Energetic	102	Microsoft Office	8
Cleaning	65	Verbal / Oral Communication	102	Microsoft C#	5
Staff Management	65	English	91	LinkedIn	2
Product Knowledge	60	Multi-Tasking	89	Microsoft Azure	2
Cash Handling	52	Detail-Orientated	60	Microsoft Exchange	2
Customer Contact	51	Positive Disposition	59	Microsoft Sharepoint	2
Sales	48	Leadership	40	Software as a Service (SaaS)	2
Upselling Products and Services	47	Creativity	36	Windows Server	2
<b>Source: EMSI Burning Glass</b>					

The table below sets out the skills being sought by employers in Cheshire and Warrington for Bar staff roles.

<b>Bar staff: Specialised, Baseline and Digital Skills required 2016-21</b>					
<b>Specialised</b>		<b>Baseline</b>		<b>Digital</b>	
Teamwork / Collaboration	358	Communication Skills	386	Microsoft Excel	12
Bartending	277	English	149	Facebook	10
Customer Service	212	Listening	148	F#	5
Guest Services	110	Organisational Skills	106	Microsoft Office	3
Upselling Products and Services	96	Energetic	71	CorelDRAW	1
Description and Demonstration of Products	65	Creativity	70	Microsoft C#	1
Product Knowledge	64	Detail-Orientated	64	SQL	1
Cash Handling	61	Multi-Tasking	51		
Cleaning	60	Verbal / Oral Communication	51		
Sales	46	Leadership	40		
<b>Source: EMSI Burning Glass</b>					

#### 4.5 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. The occupational category with the greatest variance across local authorities is Skilled Trades, where the median ranges from £25,537 in Cheshire West and Chester to £27,608 in Warrington

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

<b>Median Wages by Occupation and Local Authority 2021</b>			
Description	Cheshire East	Cheshire West and Chester	Warrington
Managers, Directors and Senior Officials	£40,671	£39,704	£40,914
Professional Occupations	£37,955	£38,097	£37,914
Associate Professional and Technical Occupations	£31,186	£31,489	£31,833
Administrative and Secretarial Occupations	£19,465	£19,500	£19,888
Skilled Trades Occupations	£26,017	£25,537	£27,608
Caring, Leisure and Other Service Occupations	£15,687	£15,539	£15,784
Sales and Customer Service Occupations	£15,832	£15,794	£16,203
Process, Plant and Machine Operatives	£26,560	£25,617	£25,763
Elementary Occupations	£13,987	£14,122	£15,069
<b>Source: EMSI Analyst, Dec 2021</b>			

The table below presents information on those 2-digit SIC industry sectors that have grown more than 10% between 2016 and 2021 (average growth was 2%) and currently employ more than 3,000

people in Cheshire and Warrington, ranked by the average wages per job. Nine of these thirteen sectors have an average wage higher than the Cheshire and Warrington average of £27,900

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
- Financial Service Activities, Except Insurance and Pension Funding

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

<b>High Employment Sectors (2-digit SIC) with recent Growth in Cheshire and Warrington</b>			
	2021 Jobs	2016 - 2021 % Change	Avg. Wages Per Job
Manufacture of Basic Pharmaceutical Products and Pharmaceutical Preparations	4413	36%	£48,904
Architectural and Engineering Activities; Technical Testing and Analysis	17923	44%	£38,416
Construction of Buildings	7224	33%	£37,746
Financial Service Activities, Except Insurance and Pension Funding	14682	17%	£35,624
Activities of Head Offices; Management Consultancy Activities	19861	32%	£33,722
Wholesale Trade, Except of Motor Vehicles and Motorcycles	20344	28%	£32,575
Postal and Courier Activities	7473	45%	£30,563
Wholesale and Retail Trade and Repair of Motor Vehicles and Motorcycles	13663	64%	£30,282
Other Professional, Scientific and Technical Activities	3833	16%	£28,686
Office Administrative, Office Support and Other Business Support Activities	9494	17%	£26,052
Residential Care Activities	12026	13%	£21,714
Sports Activities and Amusement and Recreation Activities	8120	21%	£20,740
Other Personal Service Activities	5948	46%	£17,356
<b>Source: EMSI Analyst, Dec 2021</b>			

#### 4.6 Skills Sought by Employers

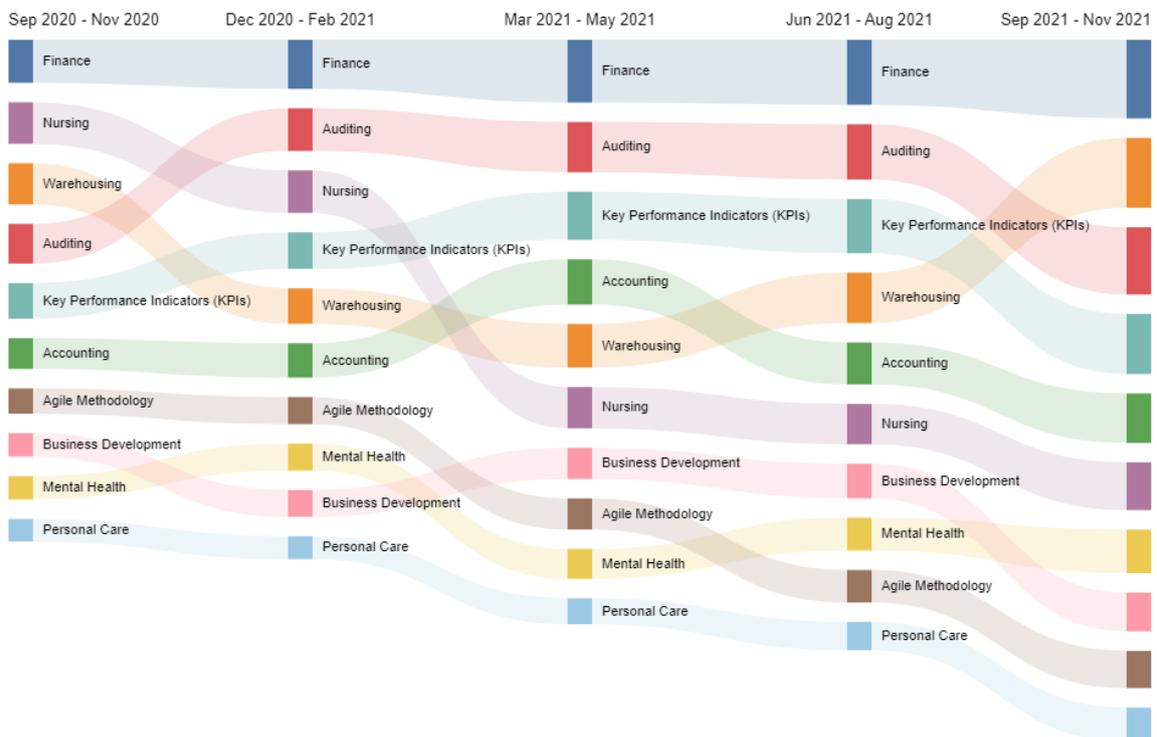
The Table below sets out the skills sought by employers in job postings where the 'posting intensity' between April and October 2021 for those skills exceeds 9. The average posting intensity for all skills sought is 7. A higher posting intensity suggests that employers are having greater difficulty than average in sourcing that skill in the jobs market. Just less than half of the skills that had a high posting intensity in this period were for digital skills and most of the remainder related to health and care.

Skills with a high posting intensity in Cheshire and Warrington Apr-Oct 2021		
Skill or Qualification	Avg. Unique (Apr 2021 - Oct 2021)	Avg. Posting Intensity (Apr 2021 - Oct 2021)
Nursing	1450	14.8
Compassion	951	12.3
.NET Framework	541	11.9
C# (Programming Language)	644	11.2
SQL (Programming Language)	938	10.4
Learning Disabilities	573	10.3
JavaScript (Programming Language)	711	10.0
Personal Care	976	9.7
Pharmaceuticals	1017	9.7
Cascading Style Sheets (CSS)	481	9.5
Mental Health	1152	9.3
Chartered Institute Of Management Accountants (CIMA)	444	9.2
Agile Methodology	1183	9.2
Risk Analysis	957	9.1

**Source: EMSI Analyst, Dec 2021**

The chart below illustrates the demand for skills by employers, over time, in Cheshire and Warrington as expressed in online job postings. The timeframe covers most of the pandemic. It is notable that the skills that related to health and care in the overall top ten (Nursing, Mental Health, Personal Care) also feature as skills that employers were having difficulty filling.

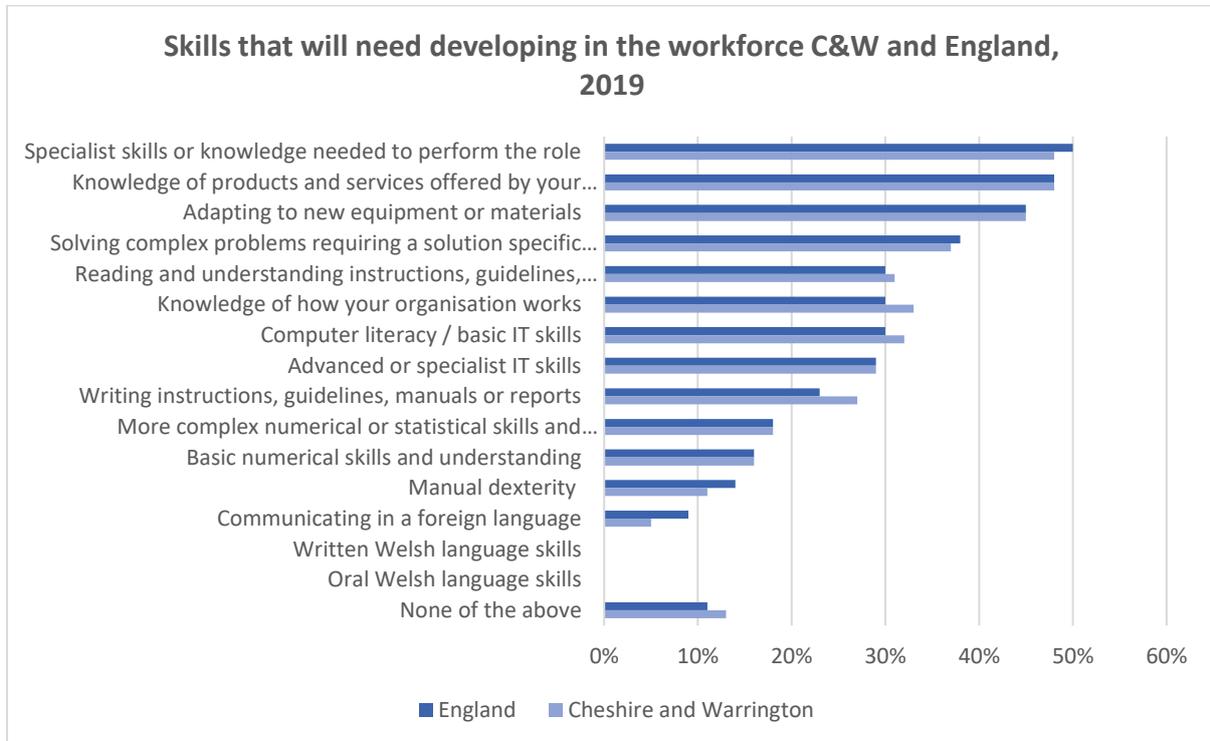
**Top Skills Sought by Employers in Cheshire and Warrington, by Quarter Sep 2020 – Nov 2021**



**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.

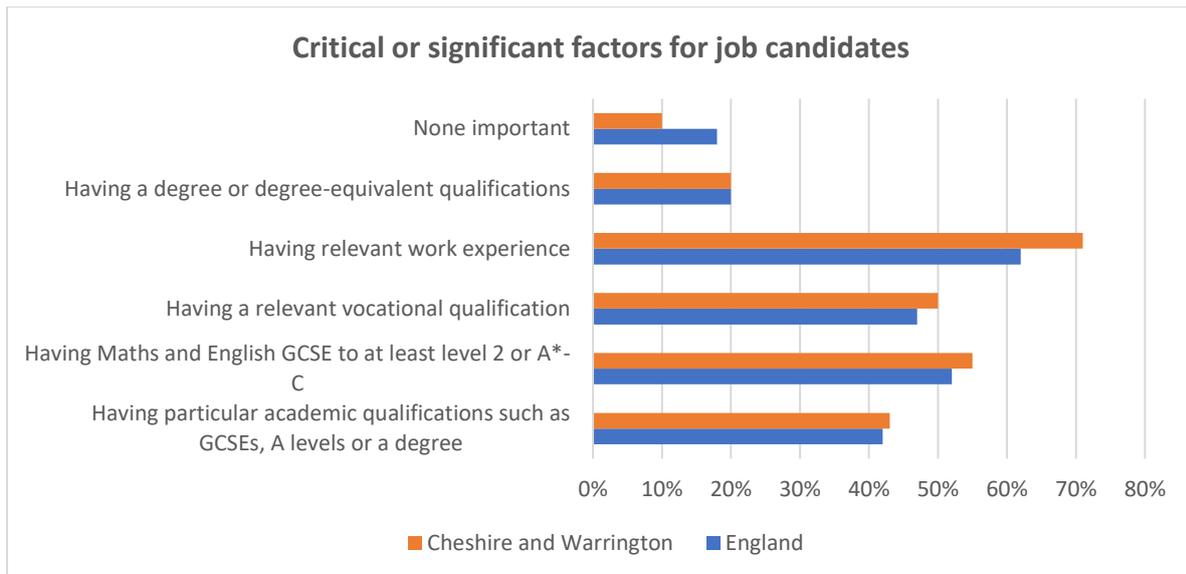
This data is summarised in the graph below



**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



Source: ESS 2019

#### 4.7 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, or Brexit, on the Labour Market remains unknown. It is clear there has been a very significant labour market downturn, followed by a significant labour market rebound such that payroll numbers now exceed pre-pandemic levels. The pandemic may also have accelerated a number of previously observed trends such as automation or town centre decline. Google workplace mobility data reported above suggests that changes to working practices (eg working from home) may become embedded. The pandemic has clearly 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, discussion with European partners about the terms of Brexit continue and the assumption about the single market for goods has not held.

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 or Brexit 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.

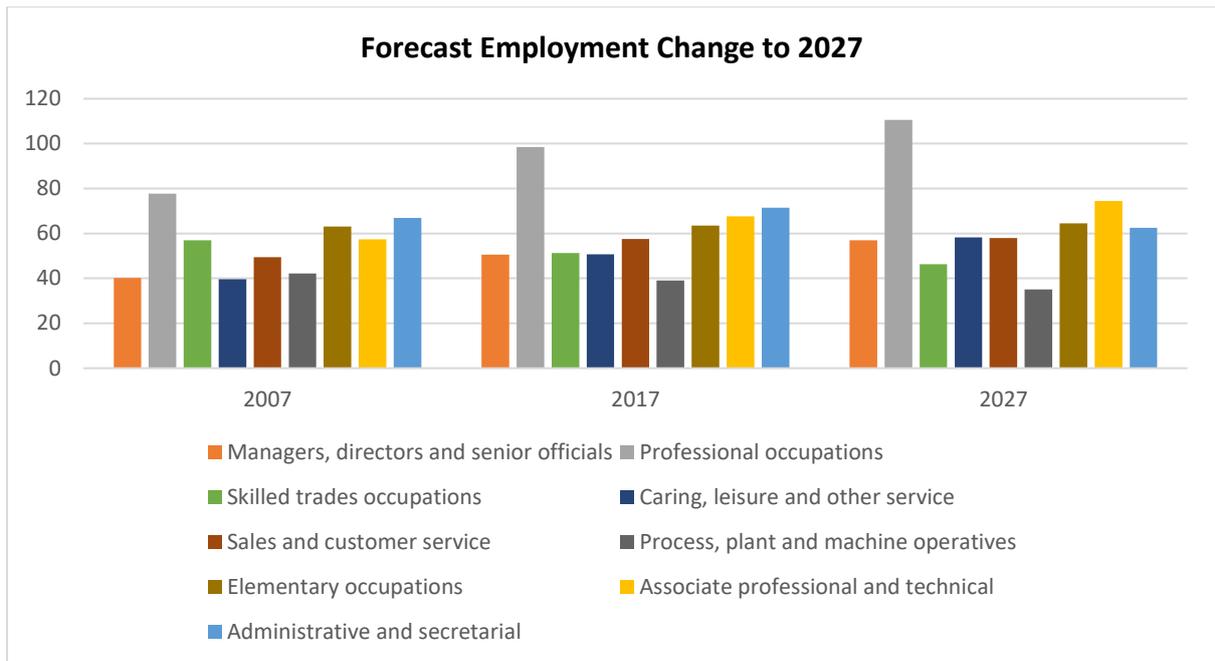
With these (many) caveats, the table below lists the industrial sectors that the Working Futures model forecasts will grow most and least between 2017 and 2027.

<b>Forecast Sectoral Growth in Cheshire and Warrington</b>			
<b>Sectors with highest forecast growth (2017-2027)</b>		<b>Sectors with lowest forecast growth (2017-2027)</b>	
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
<b>Source: SAP Core Indicators, Working Futures 2017-2027, IER</b>			

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.

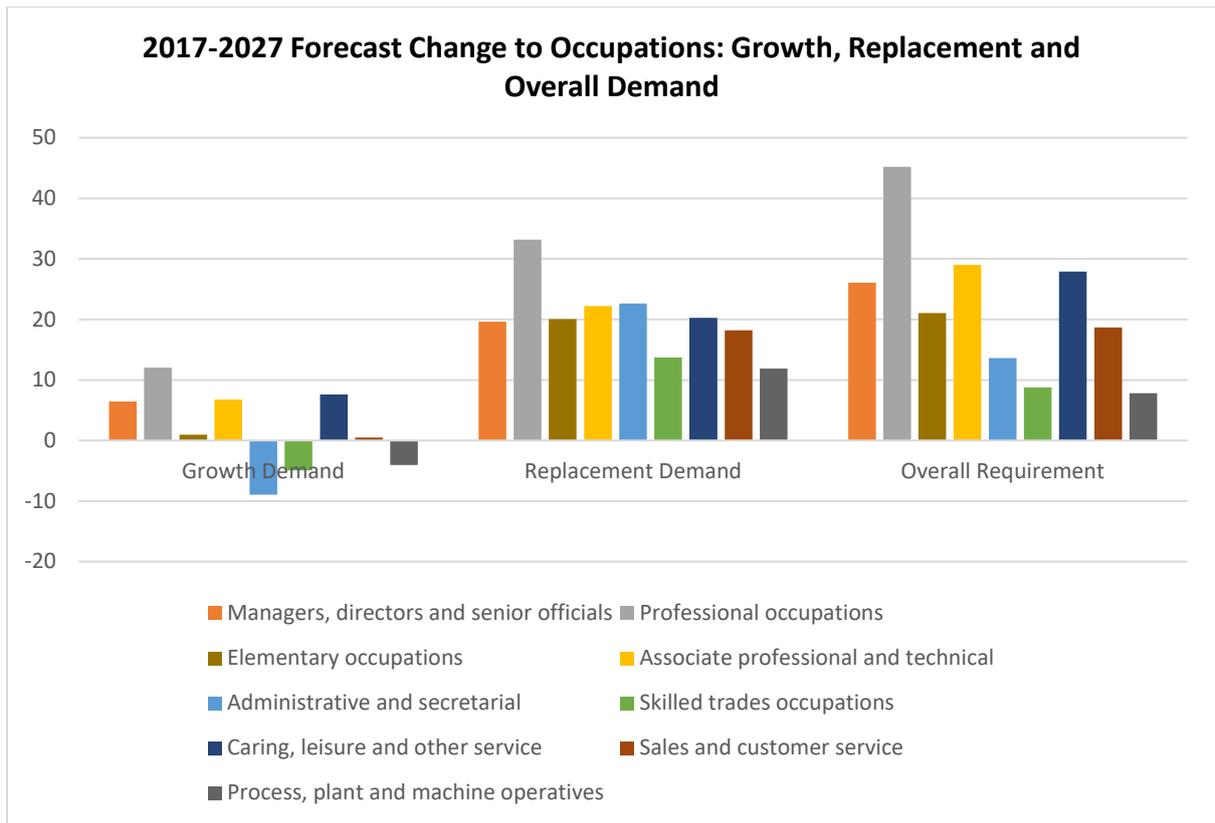


**Source: Working Futures 2017-2027 LEP Tables, IER**

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:

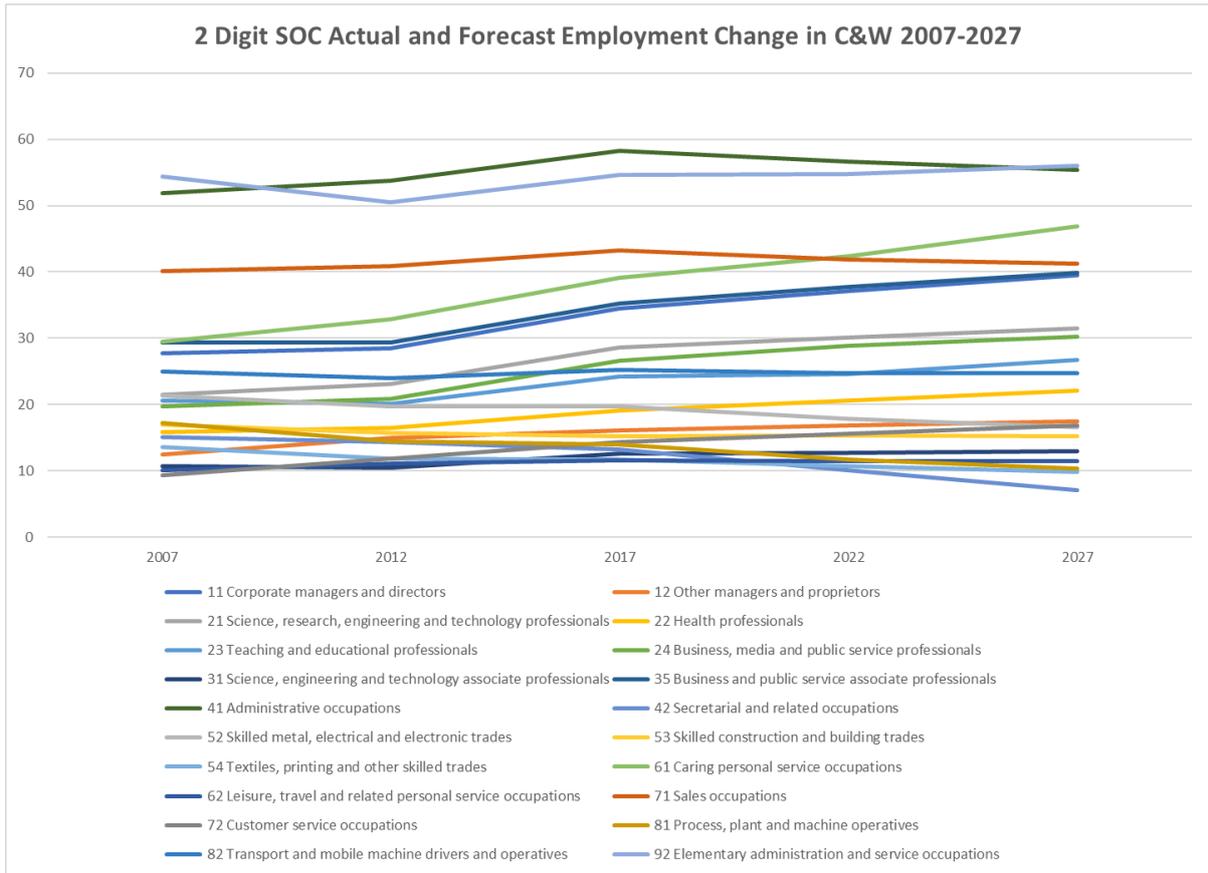
- Professional Occupations
- Caring, Leisure and Other Service Occupations
- Associate Professional and Technical Occupations
- Elementary Occupations
- Caring, Leisure and Other Service Occupations
- Administrative and Secretarial Occupations



**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.

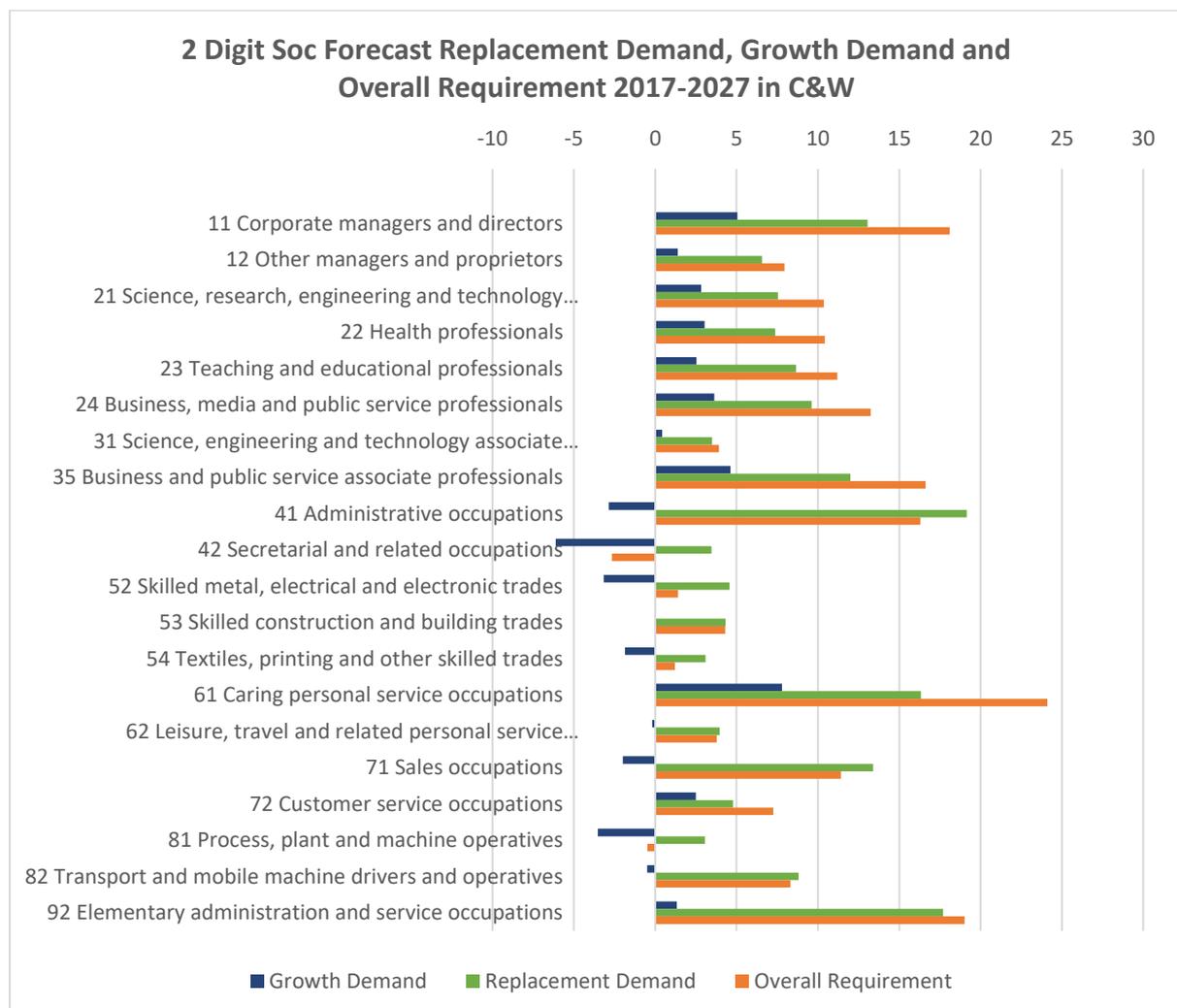
Forecast Occupational Growth Cheshire and Warrington LEP			
Occupations with highest forecast growth (2017-2027)		Occupations with lowest forecast growth (2017-2027)	
1)	Caring personal service occupations	1)	Secretarial and related occupations
2)	Health and social care associate professionals	2)	Process, 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 and Brexit have 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



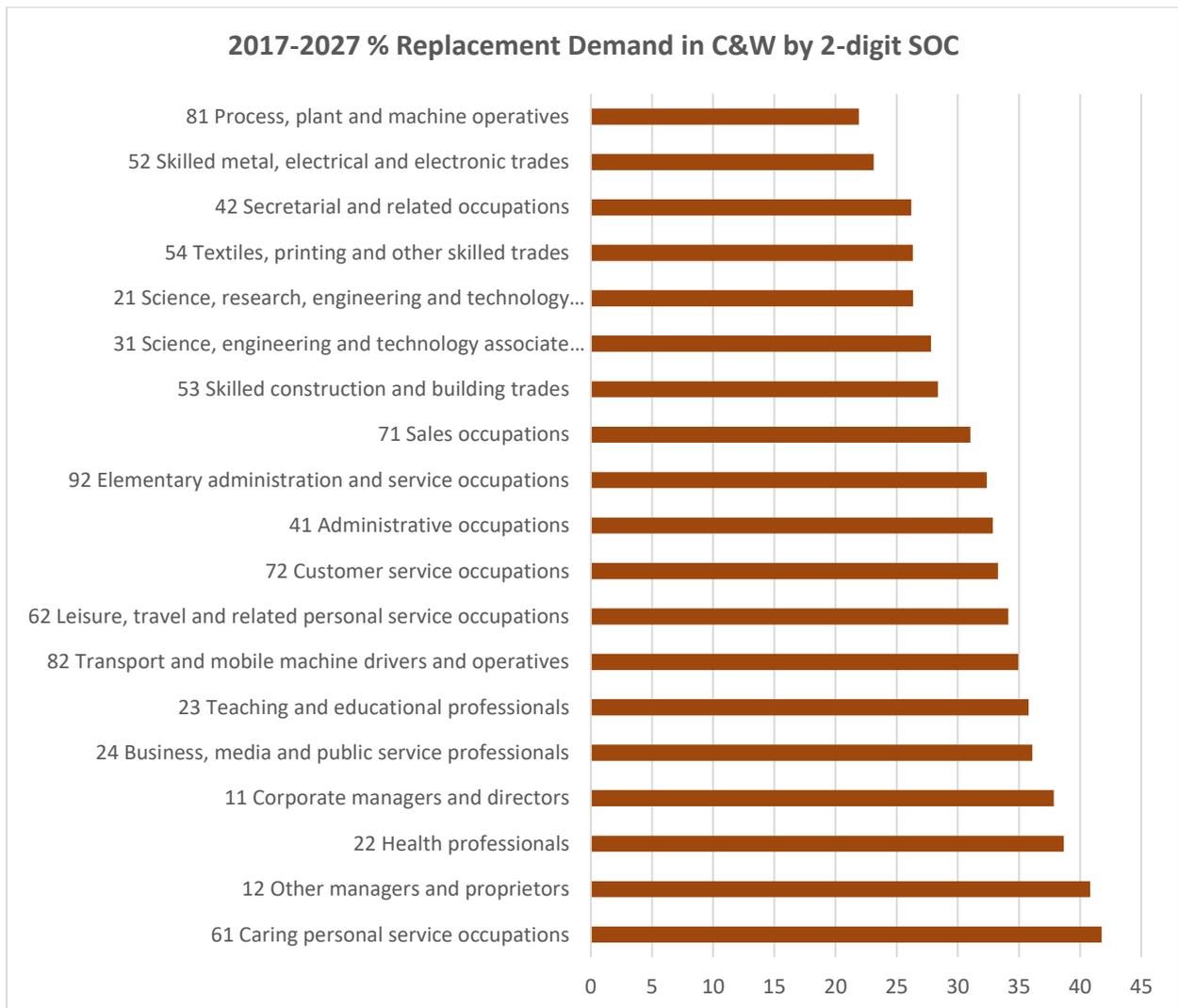
Source: Working Futures 2017-2027 LEP Tables, IER

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.



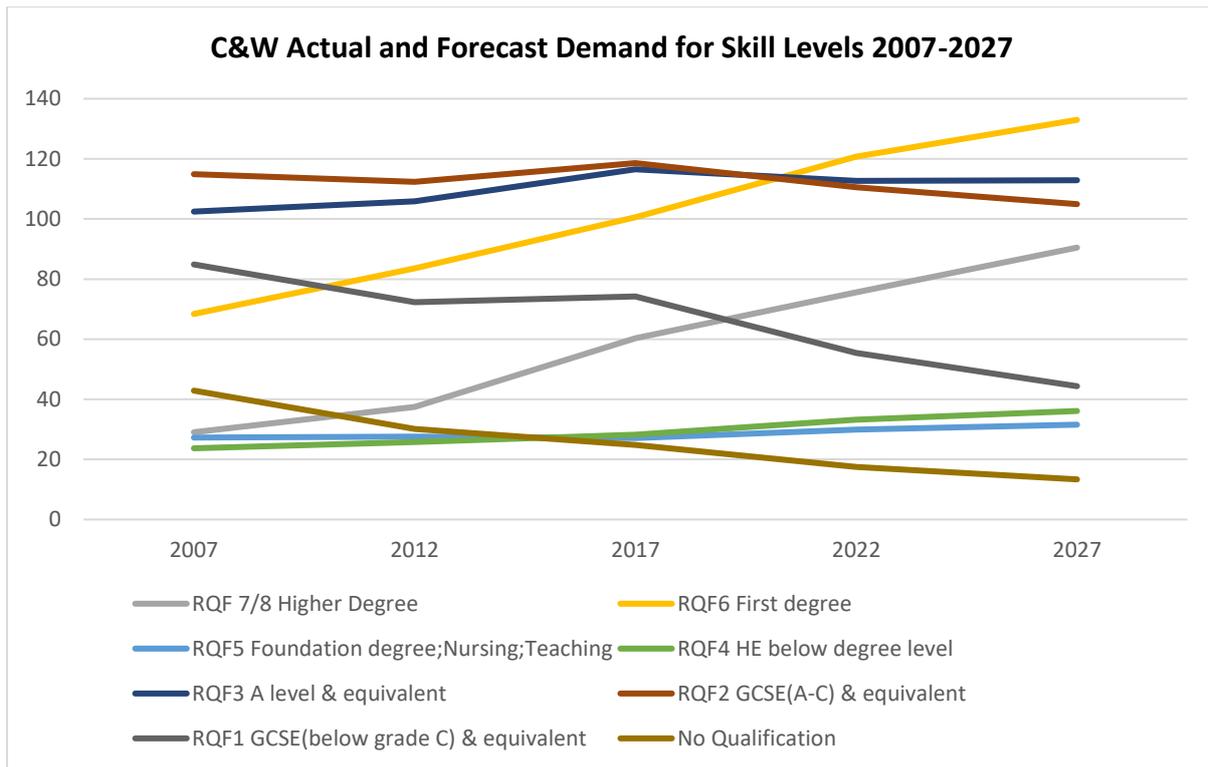
**Source: Working Futures 2017-2027 LEP Tables, IER**

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. 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.

<b>Occupations with estimated average annual openings more than 200, 2021-2028</b>		
SOC	Description	Avg. Annual Openings
7111	Sales and Retail Assistants	684
9260	Elementary Storage Occupations	534
4159	Other Administrative Occupations n.e.c.	508
6145	Care Workers and Home Carers	463
2231	Nurses	421
4122	Book-keepers, Payroll Managers and Wages Clerks	401
9272	Kitchen and Catering Assistants	360
3545	Sales Accounts and Business Development Managers	360
9233	Cleaners and Domestic	330
8211	Large Goods Vehicle Drivers	293
1190	Managers and Directors in Retail and Wholesale	255
6141	Nursing Auxiliaries and Assistants	223
<b>Source: EMSI Analyst, December 2021</b>		

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+ occupations in Cheshire and Warrington between 2021 and 2028. These estimates are from EMSI and 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 (or above) will be a prerequisite for all the occupations identified below. All but one of these occupations deliver a current wage premium over the Cheshire and Warrington median of £27,900.

Average annual openings > 100 for Level 4+ occupations in Cheshire and Warrington 2021-2028			
SOC	Description	Avg. Annual Openings	Median Wages
2231	Nurses	421	£30,270
3545	Sales Accounts and Business Development Managers	360	£45,487
3562	Human Resources and Industrial Relations Officers	196	£26,822
2315	Primary and Nursery Education Teaching Professionals	194	£32,279
1121	Production Managers and Directors in Manufacturing	184	£38,892
1131	Financial Managers and Directors	179	£48,263
2421	Chartered and Certified Accountants	173	£35,849
2314	Secondary Education Teaching Professionals	168	£38,006
1135	Human Resource Managers and Directors	147	£45,430
2423	Management Consultants and Business Analysts	146	£34,957
2211	Medical Practitioners	138	£58,513
1132	Marketing and Sales Directors	125	£67,217
2424	Business and Financial Project Management Professionals	124	£45,586
3538	Financial Accounts Managers	123	£33,660
3543	Marketing Associate Professionals	115	£27,296

2136	Programmers and Software Development Professionals	112	£39,622
3534	Finance and Investment Analysts and Advisers	110	£32,234
<b>Source: EMSI Analyst, December 2021</b>			

## 4.8 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 employed more than 1,000 people in Cheshire and Warrington in 2021 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 "Fork-lift Truck Drivers". Between them these three occupational categories employ just less than 6,000 people in Cheshire and Warrington.

<b>Main Occupations in Cheshire and Warrington at Risk of Automation</b>		
	2021 Jobs	Automation Index
Elementary Construction Occupations	2124	93%
Construction Operatives n.e.c.	1519	85%
Fork-lift Truck Drivers	2237	85%
Kitchen and Catering Assistants	10013	83%
Bar Staff	5545	80%
Caretakers	1115	80%
Cleaners and Domestic	10431	79%
Packers, Bottlers, Canners and Fillers	3520	79%
Waiters and Waitresses	5788	74%
Assemblers (Vehicles and Metal Goods)	1208	73%
<b>Source: EMSI Analyst, December 2021</b>		

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**

SOC	Description	2021 Jobs	Automation Index
2136	Programmers and Software Development Professionals	4233	0%
2436	Construction Project Managers and Related Professionals	1092	0%
1122	Production Managers and Directors in Construction	2423	0%
3563	Vocational and Industrial Trainers and Instructors	2268	0%
2423	Management Consultants and Business Analysts	3335	0%
3421	Graphic Designers	1293	1%
3520	Legal Associate Professionals	1327	1%
1131	Financial Managers and Directors	4671	1%
1150	Financial Institution Managers and Directors	1628	1%
1115	Chief Executives and Senior Officials	1128	1%

*Source: EMSI Analyst, December 2021*

## 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

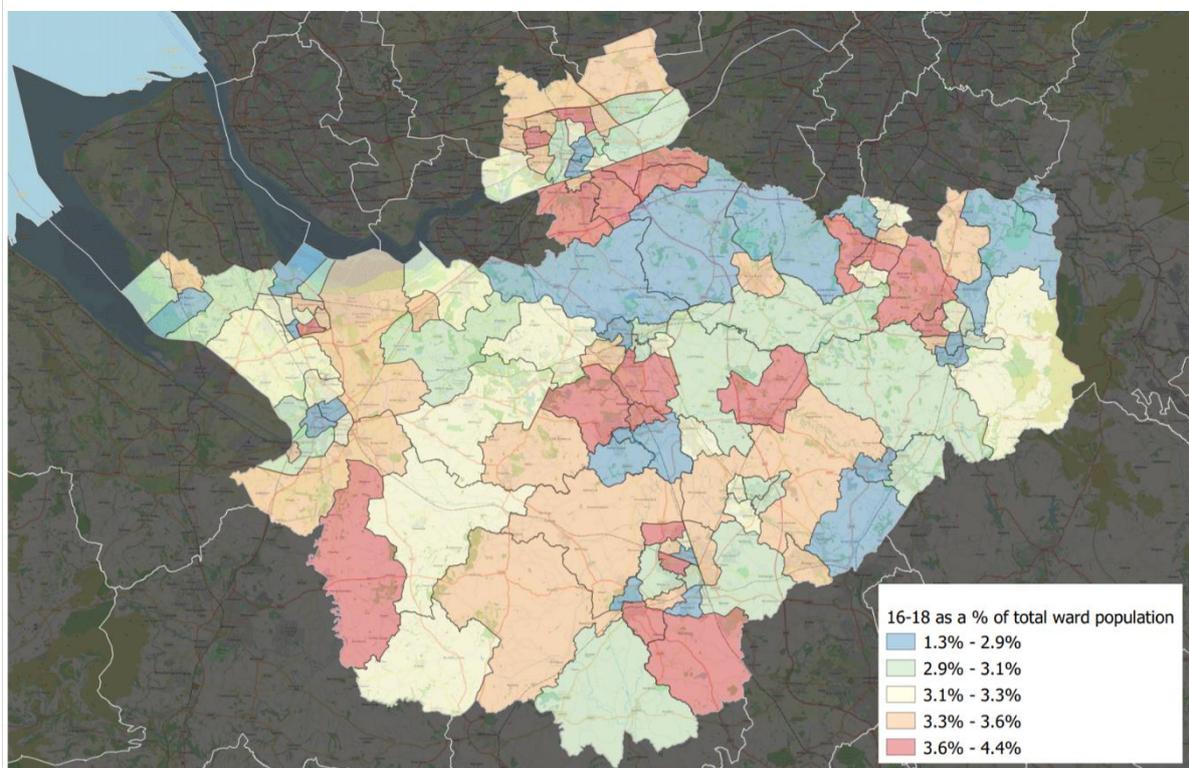
### 5.1 Young People in Cheshire and Warrington

#### 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).

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

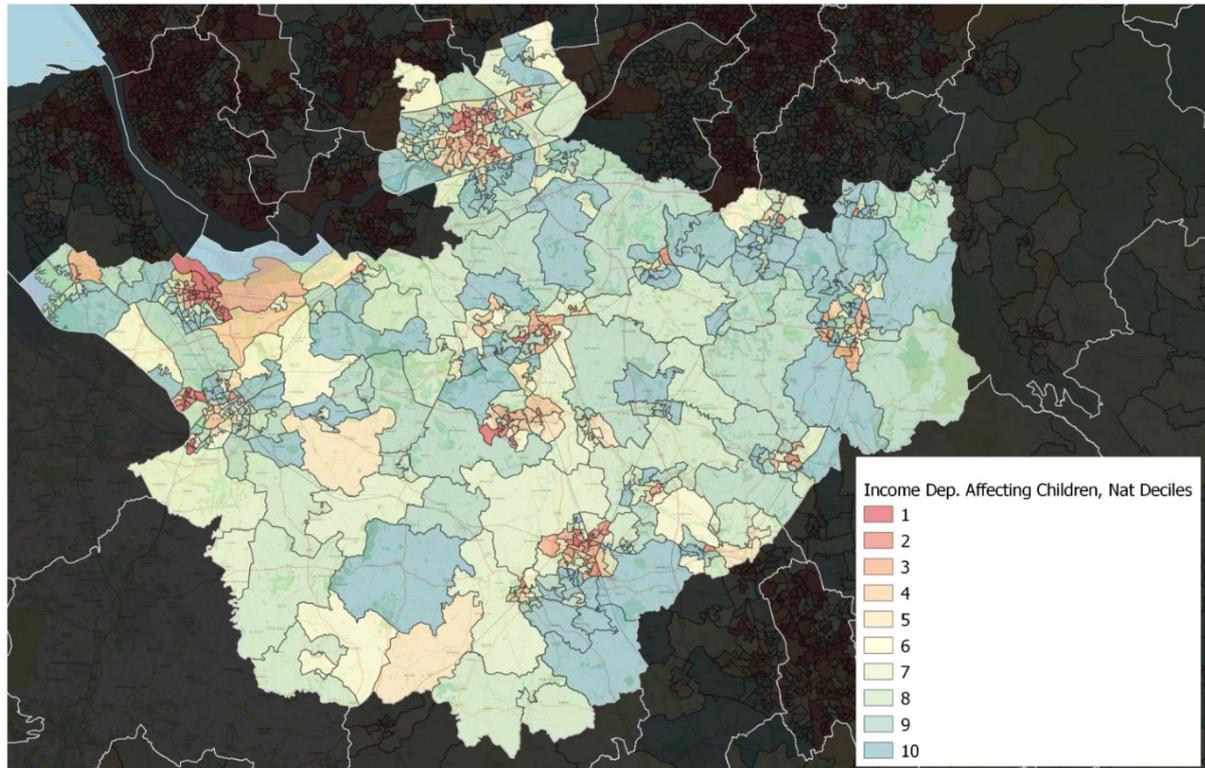
The Income Deprivation affecting Children Index (IDACI) measures the proportion of all children aged 0 to 15 living in income deprived families. It is a subset of the Income Deprivation domain of

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 QGIS. Data from the Index of Multiple Deprivation (2019), OS and OpenStreetMap

In 2021, 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 higher than England. Participation in apprenticeships was below the English rate in Cheshire East and Warrington, but above it in Cheshire West and Chester. 2.2% of the cohort in Cheshire East were in employment with study, compared to 0.6% following this route in England.

Proportion of 16-17 year olds recorded in education and training, March 2021					
	England	NW	Cheshire East	Cheshire West and Chester	Warrington
Number of 16-17 year olds known to the LA1			7530	6570	4680
Full time education and training	87.4%	85.2%	89.7%	90.0%	88.9%
Apprenticeship	3.8%	5.0%	3.6%	4.2%	3.6%
Work based learning	1.1%	1.5%	0.8%	0.4%	0.1%
Part time education	0.1%	0.1%	0.1%	0.0%	0.0%
Employment combined with study	0.6%	0.7%	2.2%	1.1%	0.7%
Other	0.2%	0.3%	0.1%	0.3%	0.5%
Total	93.2%	92.7%	96.4%	96.0%	93.9%
Participation rate, change in year in percentage points (March to March) <sup>2</sup>	0.6	0.7	1.0	-0.1	0.8

**Source: DfE, accessed Dec 2021**

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 Northwest.

Proportion of 16-17 year olds recorded in education and training, March 2021						
	% 16 year olds participating			% 17 year olds participating		
	Female	Male	Total	Female	Male	Total
England	96.7%	94.9%	95.8%	92.2%	88.9%	90.6%
North West	96.5%	94.3%	95.4%	91.8%	88.4%	90.0%
Cheshire East	98.2%	96.7%	97.5%	96.3%	94.4%	95.3%
Cheshire West and Chester	97.3%	96.7%	97.0%	95.8%	94.1%	95.0%
Warrington	96.1%	95.9%	96.0%	92.8%	90.5%	91.6%

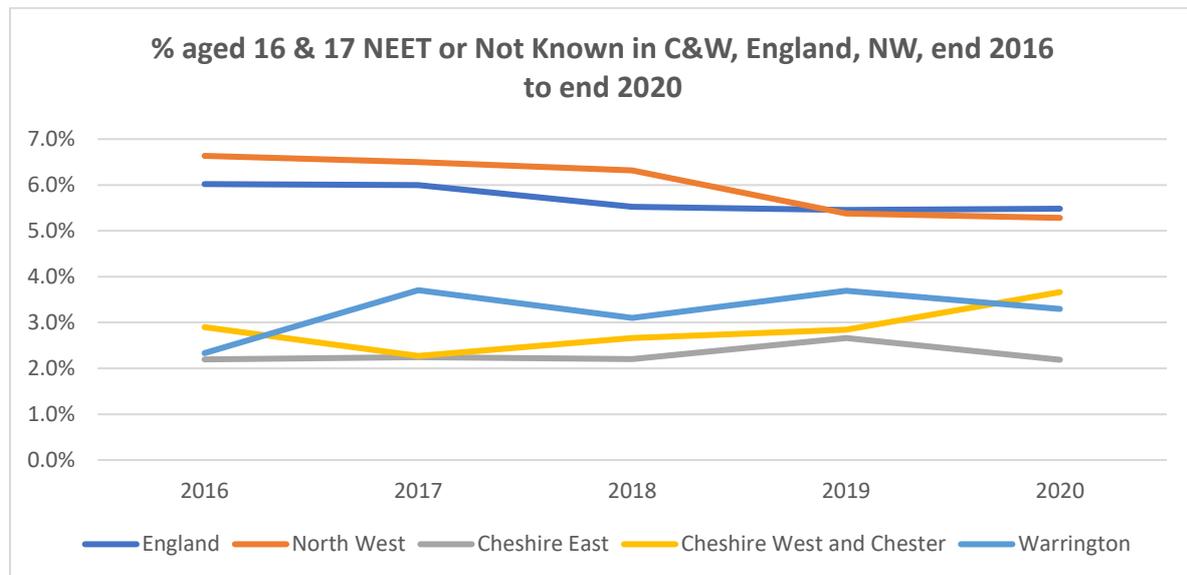
**Source: DfE, accessed Dec 2021**

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 Northwest. This is mainly because the proportion that were Not Known was higher in England and the Northwest. The percentage that were NEET in 2020 was similar in the three local authorities and England.

Proportion of 16 and 17 year olds not in education, employment or training (NEET) or whose activity is not known in each local authority			
	Proportion NEET or not known	of which known to be NEET	of which activity not known
England	5.5%	2.8%	2.7%
North West	5.3%	3.4%	1.9%
Cheshire East	2.2%	2.2%	0.0%
Cheshire West and Chester	3.7%	3.2%	0.5%
Warrington	3.3%	2.9%	0.3%

**Source: DfE, accessed Dec 2021**

The NEET/Not Known rate in the three Local Authorities has consistently been below the English and Northwest rate, although the gap has closed over time.



Source: DfE, December 2021

### 5.1.2 Young People’s Education and Progression

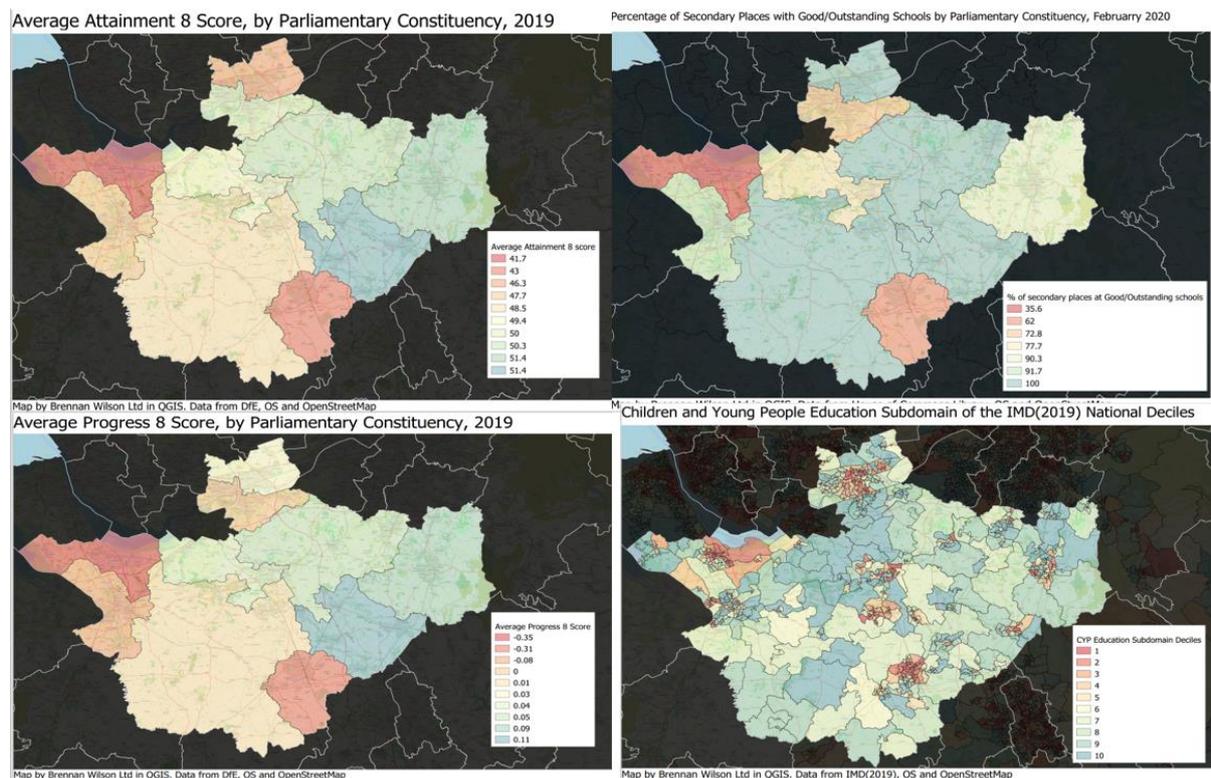
The Education, Skills and Training Domain of the Index of Multiple Deprivation (2019) measures the lack of attainment and skills in the local population. The indicators fall into two sub-domains: one relating to children and young people and one relating to adult skills. The indicators that are used 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 Baccaureate (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). In 2019, 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 2020/21, the average Attainment 8 score of all pupils in England was 50.9. Three parliamentary constituencies in Cheshire and Warrington had an average Attainment 8 score that fell below this average. They were:

- Crewe and Nantwich
- Ellesmere Port and Neston
- Warrington North

Average Attainment 8 Score, by Parliamentary Constituency, 2020/21	
Parliamentary Constituency	Average Attainment 8 score
City of Chester	51.5
Congleton	53.9
Crewe and Nantwich	46.8
Eddisbury	51.4
Ellesmere Port and Neston	49.4
Macclesfield	54.1
Tatton	55.2
Warrington North	49.5

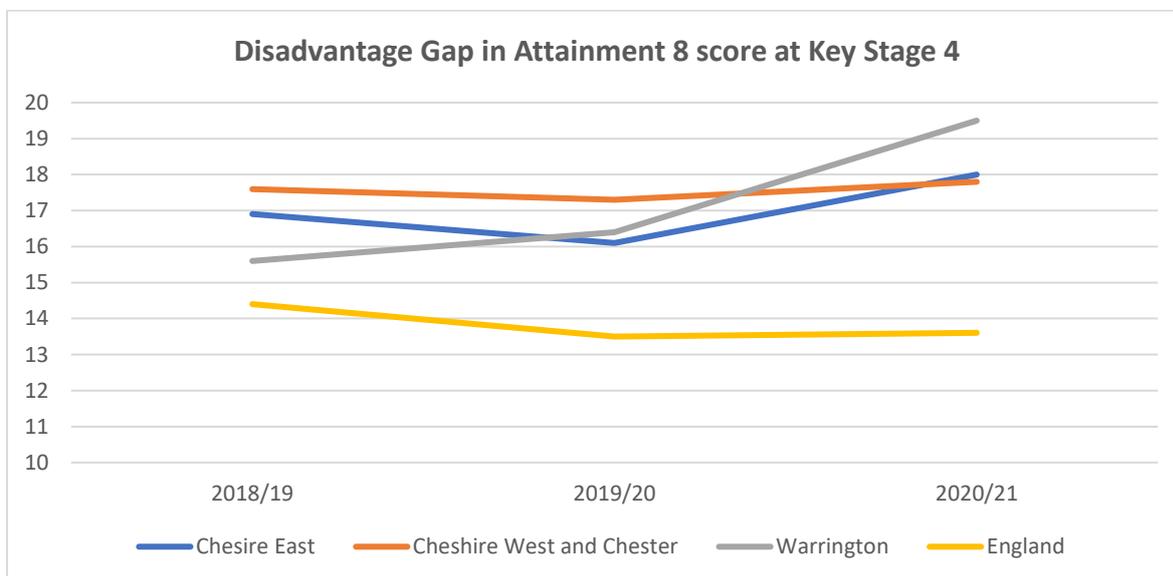
Warrington South	53
Weaver Vale	51.9
<i>Source: DfE</i>	

The table below shows the percentage of disadvantaged and non-disadvantaged pupils that achieved the expected standard in reading, writing and maths at Key Stage 2 (age 11) in 2018/19 (which is the latest available data at the time of writing). It can be seen from this that the ppt gap in the three Cheshire and Warrington local authorities was already at 24-26, higher than England which stood at 20ppt.

<b>Disadvantaged attainment gap at Key Stage 2 in Cheshire and Warrington and England, % of pupils reaching the expected standard in reading, writing and maths</b>			
	Disadvantaged	Non-disadvantaged	Ppt gap
England	51	72	20
Cheshire East	46	71	26
Cheshire West and Chester	46	70	24
Warrington	53	79	26

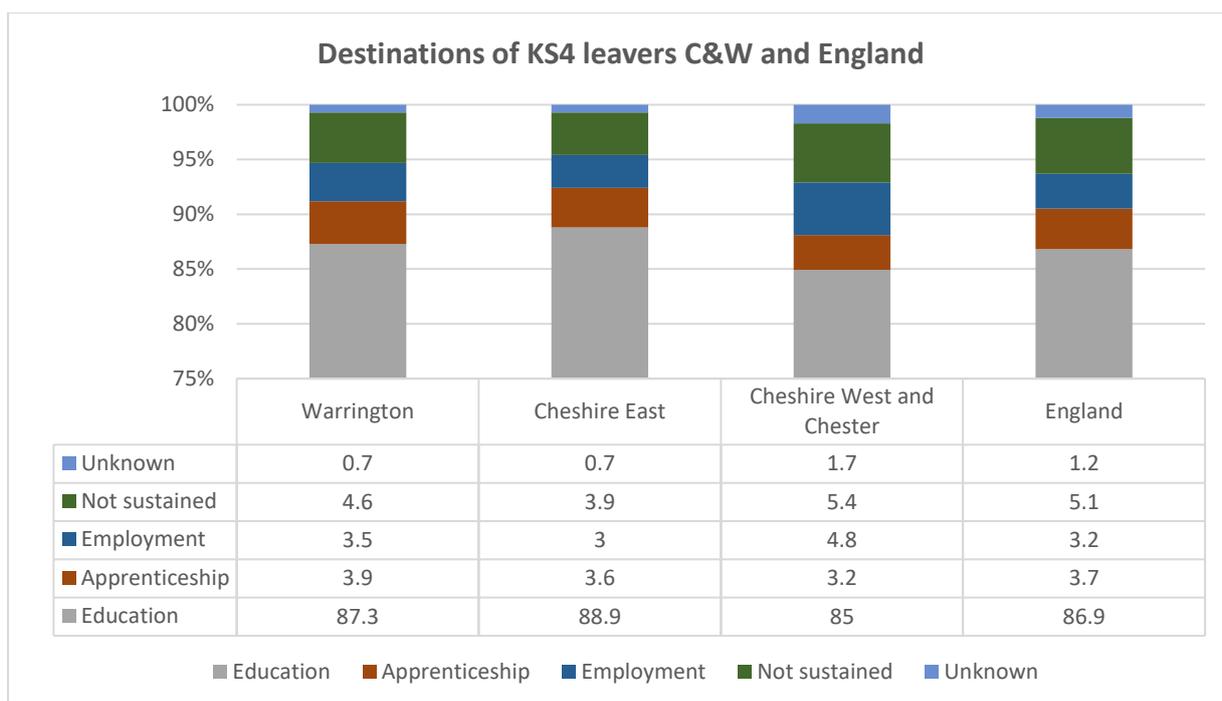
*Source: National curriculum assessments: key stage 2, 2019 (revised) underlying data, <https://www.gov.uk/government/statistics/national-curriculum-assessments-key-stage-2-2019-revised>*

The chart below presents data on the attainment gap (as captured by the Attainment 8 measure) between disadvantaged and non-disadvantaged young people at Key Stage 4 in all three local authorities and England. The gap has been higher in all three local authorities than in England every year for the past three and widened in all three in 2020/21.



*Source: DfE, Key stage 4 performance, 2020/21*

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 below). The percentage securing a sustained destination was lower than England in Cheshire West and Chester.



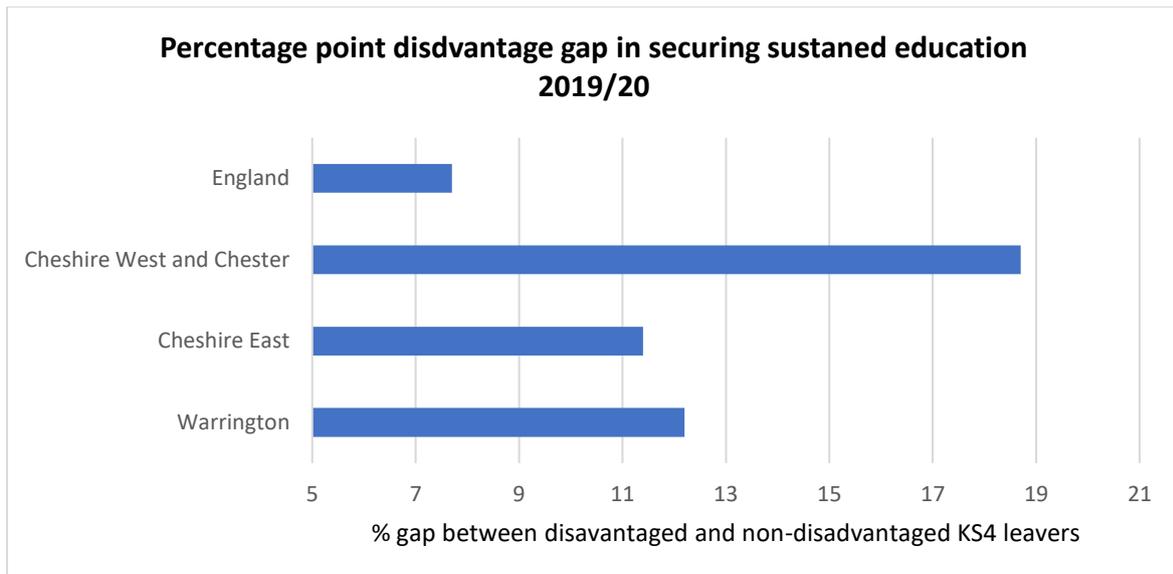
**Source: DfE, accessed December 2021**

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%).

Destinations of Deprived Key Stage 4 leavers 2019/20						
	Overall % sustained destination	Of which			Not sustained	Unknown
		Education	Apprenticeship	Employment		
Warrington	87.2	77.5	3.8	5.9	11	1.8
Cheshire East	88.8	79.4	3.8	5.5	10.6	0.6
Cheshire West and Chester	81.9	70.4	3.4	8	15	3.2
England	88.1	81.2	2.7	4.1	10.3	1.6

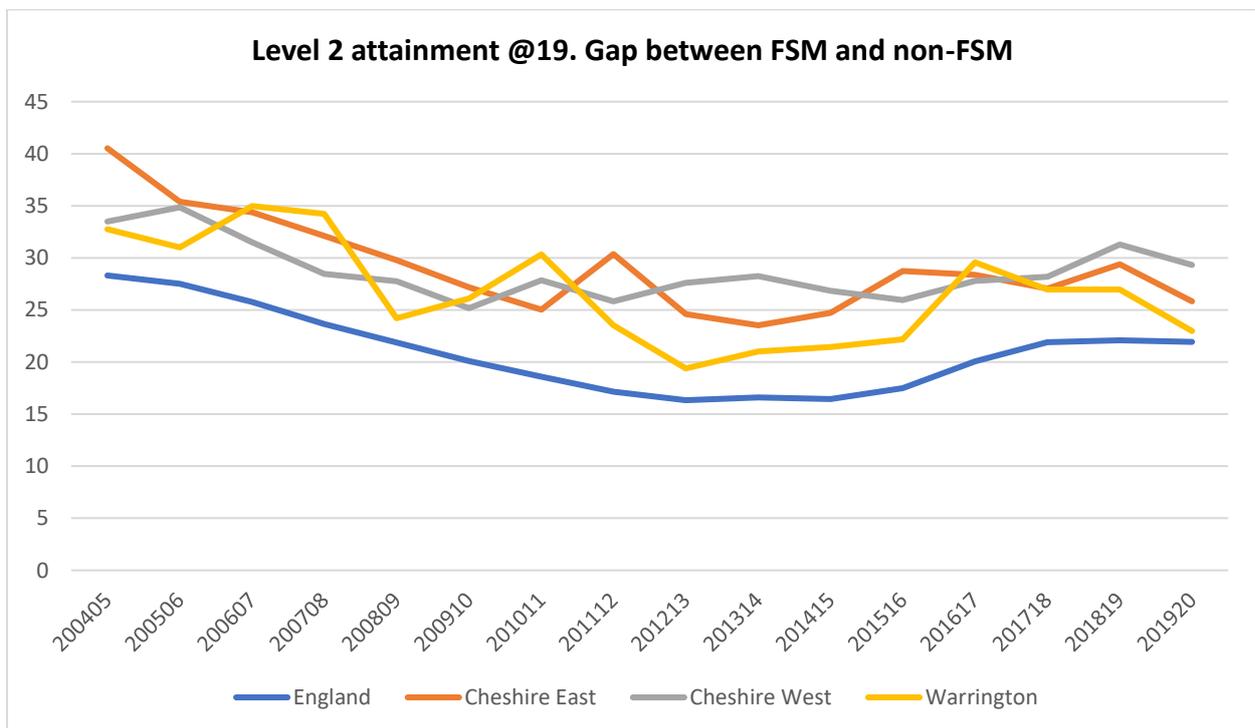
**Source: DfE, accessed 2019/20**

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%.



**Source: DfE, accessed December 2021**

This may help explain, in part, why, at 19, the gap between the proportion eligible for free school meals that achieved a Level 2 and the proportion not eligible for Free School Meals achieving a Level 2 has been smaller in England than in the three C&W local authorities every year since 2004/5. However, in the last year for which there is data the gap narrowed for all three local authorities. This was the first year of examination disruption due to the pandemic.

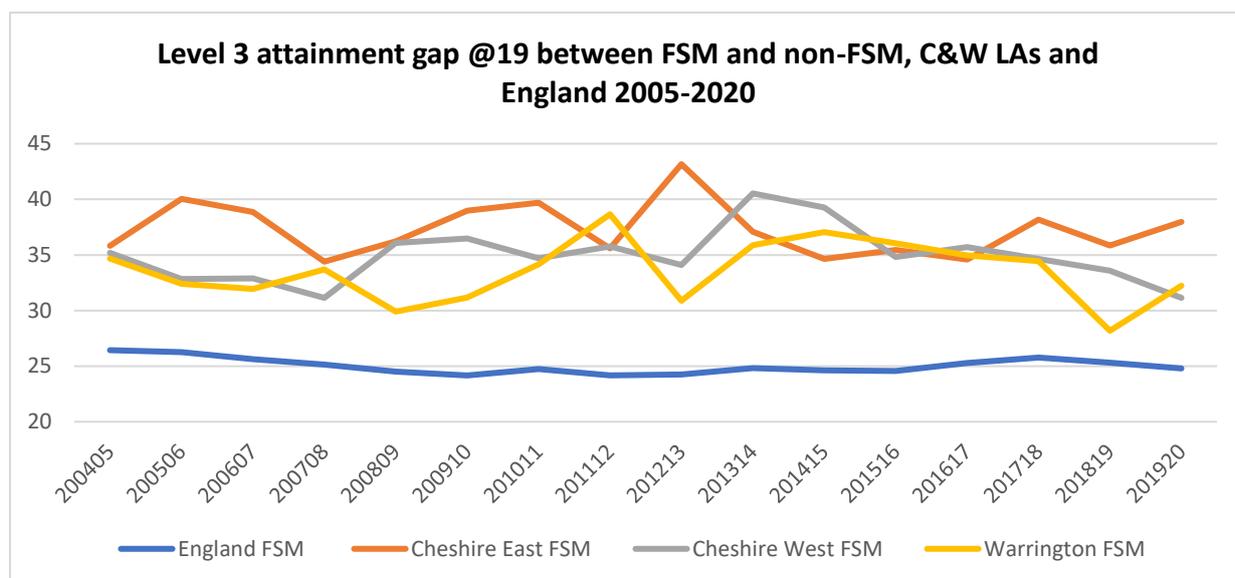


**Source: DfE**

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. In 2020, the proportion from Cheshire West and Chester fell 1ppt below England. 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 2020, including for 2020.

The graph below presents data for this gap for 2005 to 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 5ppt in any given year. In 2020, where examinations were disrupted by the pandemic, the gap increased in Cheshire East and Warrington and narrowed in Cheshire West and Chester.

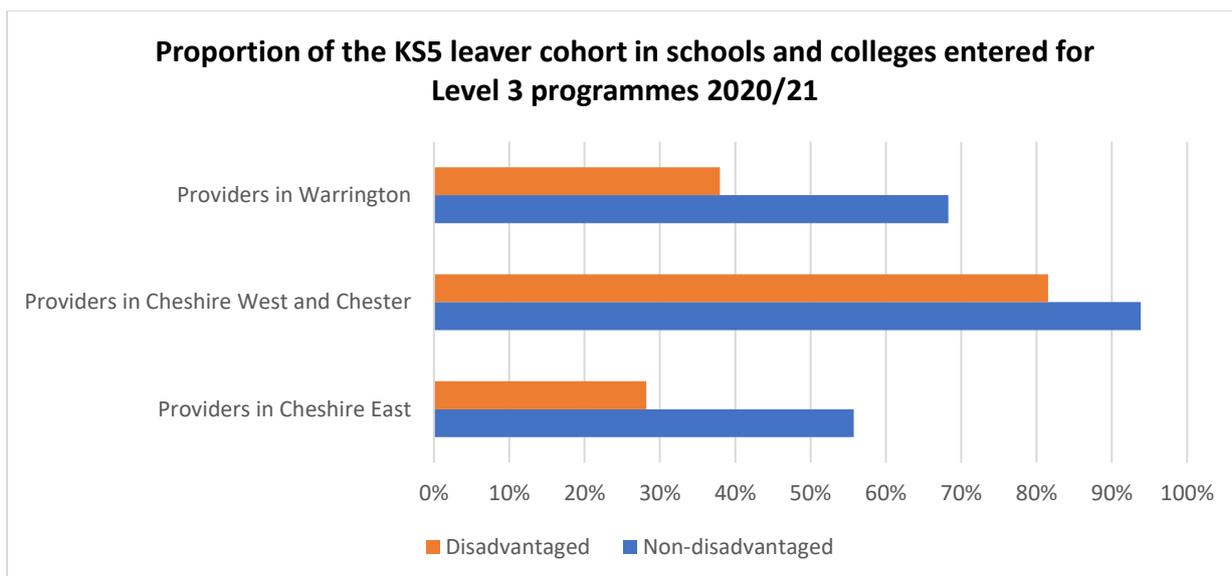


Source: DfE

The Level 3 disadvantage attainment gap can, in part, be explained by what proportion of disadvantaged learners were entered for Level 3 programmes. Obviously, if learners aren't entered for Level 3 qualifications, they can't achieve a Level 3. The chart below illustrates the proportion of KS5 leavers (disadvantaged/non-disadvantaged) that were entered for Level 3 programmes in 2020/21 in schools and colleges based in the three Cheshire and Warrington local authorities.

In Warrington 38% of the 358 disadvantage learners in providers there were entered for Level 3 programmes. In Cheshire West and Chester 82% of the 184 disadvantage learners in providers there were entered for Level 3 programmes. In Cheshire East 28% of the 774 disadvantage learners in providers there were entered for Level 3 programmes.

The disadvantage gap for disadvantaged and non-disadvantaged learners on Level 3 entries was 28ppt for providers in Cheshire East, 12ppt for providers in Cheshire West and Chester, and 30ppt for providers in Warrington.



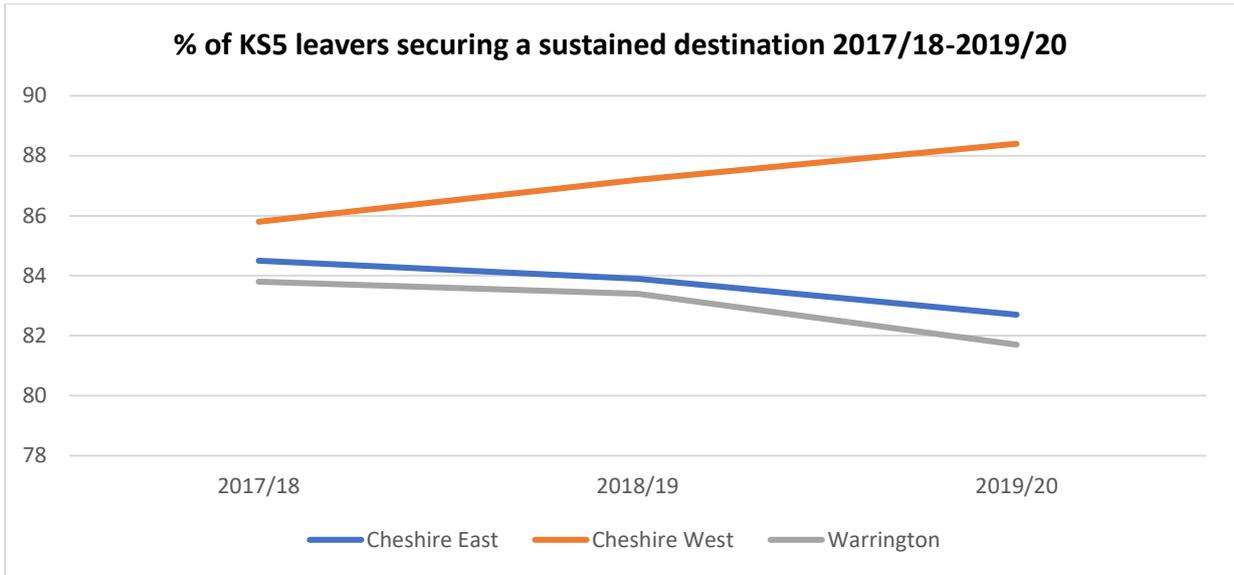
**Source: A level and other 16 to 18 results underpinning data, DfE**

In 2019/20 80.7 % of Key Stage 5 leavers secured a sustained education, training or employment destination in England. All three Cheshire and Warrington local authorities had higher rates of progression than this (Warrington - 81.7%, Cheshire East - 82.7%, and Cheshire West and Chester - 88.4%). Seven of the ten parliamentary constituencies in Cheshire and Warrington had higher percentages securing a sustained destination. Young people in Ellesmere Port and Neston progressed at a rate only slightly below (0.1%) the national average, with rates falling to 78% in Eddisbury and 73.9% in Warrington North.

Percentage of Key Stage 5 leavers securing a sustained destination by parliamentary constituency, 2019/20	
Parliamentary Constituency	% Securing a sustained destination
City of Chester	88.1
Congleton	91.5
Crewe and Nantwich	82.3
Eddisbury	78
Ellesmere Port and Neston	81.6
Macclesfield	83.2
Tatton	90.3
Warrington North	73.9
Warrington South	86.6
Weaver Vale	88.6

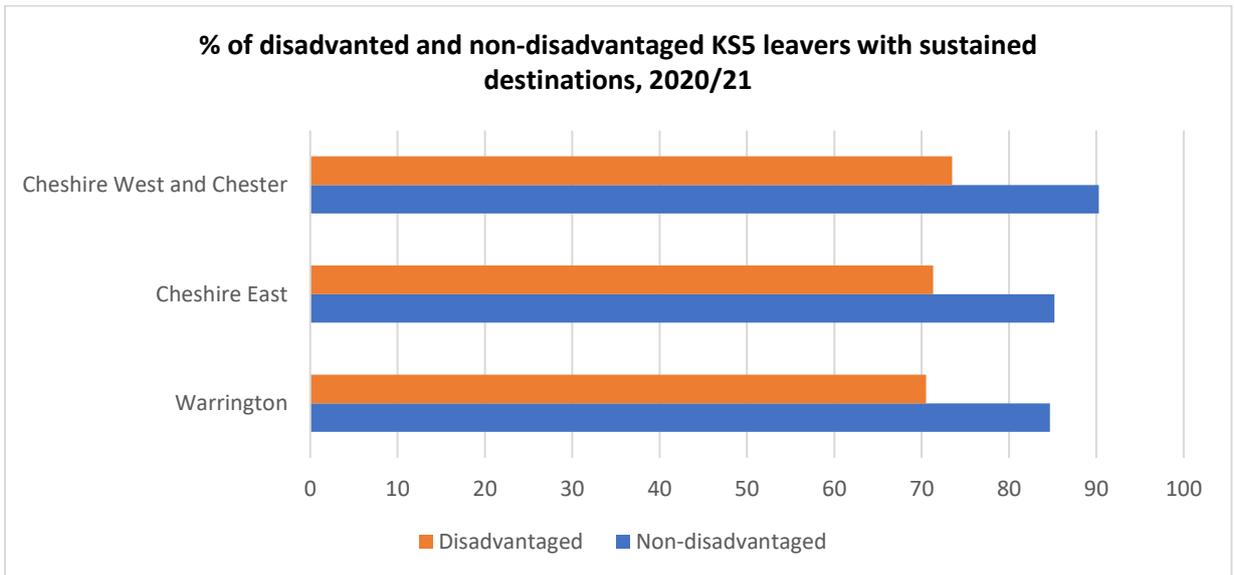
**Source: 16-18 destination measures, AY 2019/20, DfE**

Considered over three years, the proportion of KS5 leavers that secured a sustained destination shows a declining trend in Cheshire East and Warrington, and an increasing trend in Cheshire West and Chester.



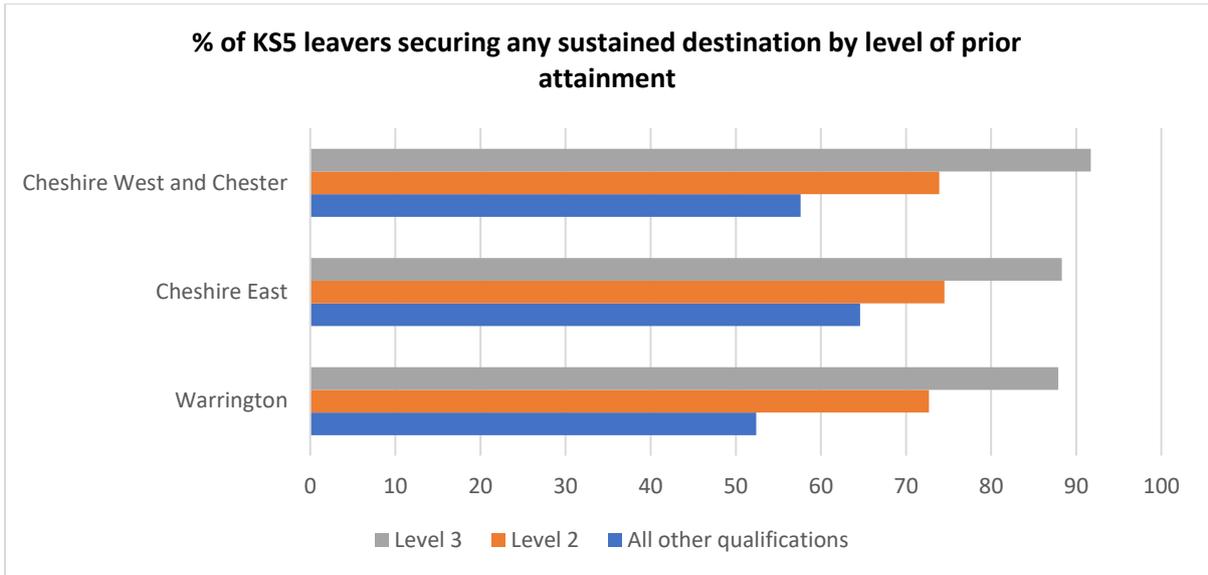
Source: 16-18 destination measures, AY 2019/20, DfE

Leavers at Key Stage 5 who were categorised as disadvantaged at Key Stage 4 are less likely to secure a sustained destination than the non-disadvantaged. As can be seen from the chart below, in Warrington the gap is 14.2ppt, in Cheshire East the gap is 13.9ppt, and in Cheshire West and Chester the gap is 16.8ppt.



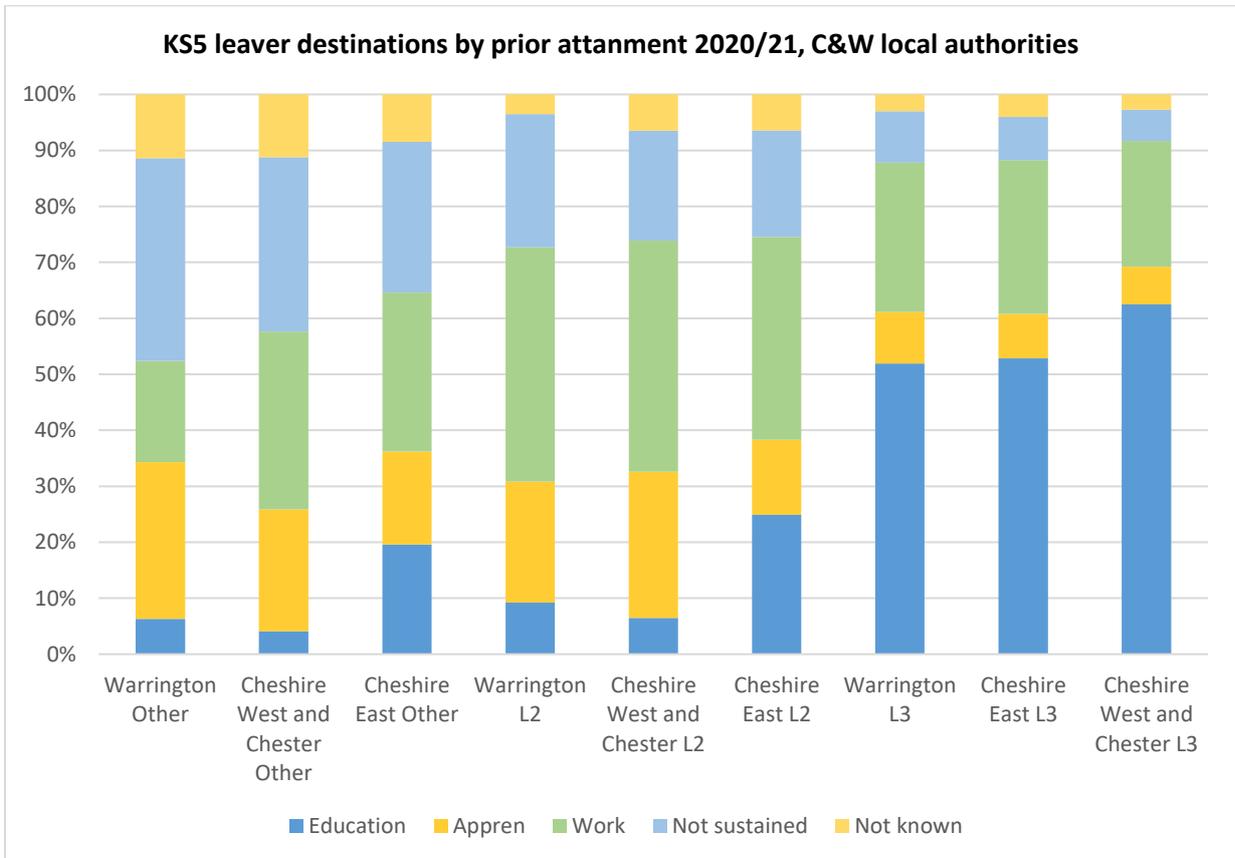
Source: 16-18 destination measures, AY 2019/20, DfE

In all three local authorities, the likelihood of securing any sustained destination is higher the higher the level of prior attainment.



Source: 16-18 destination measures, AY 2019/20, DfE

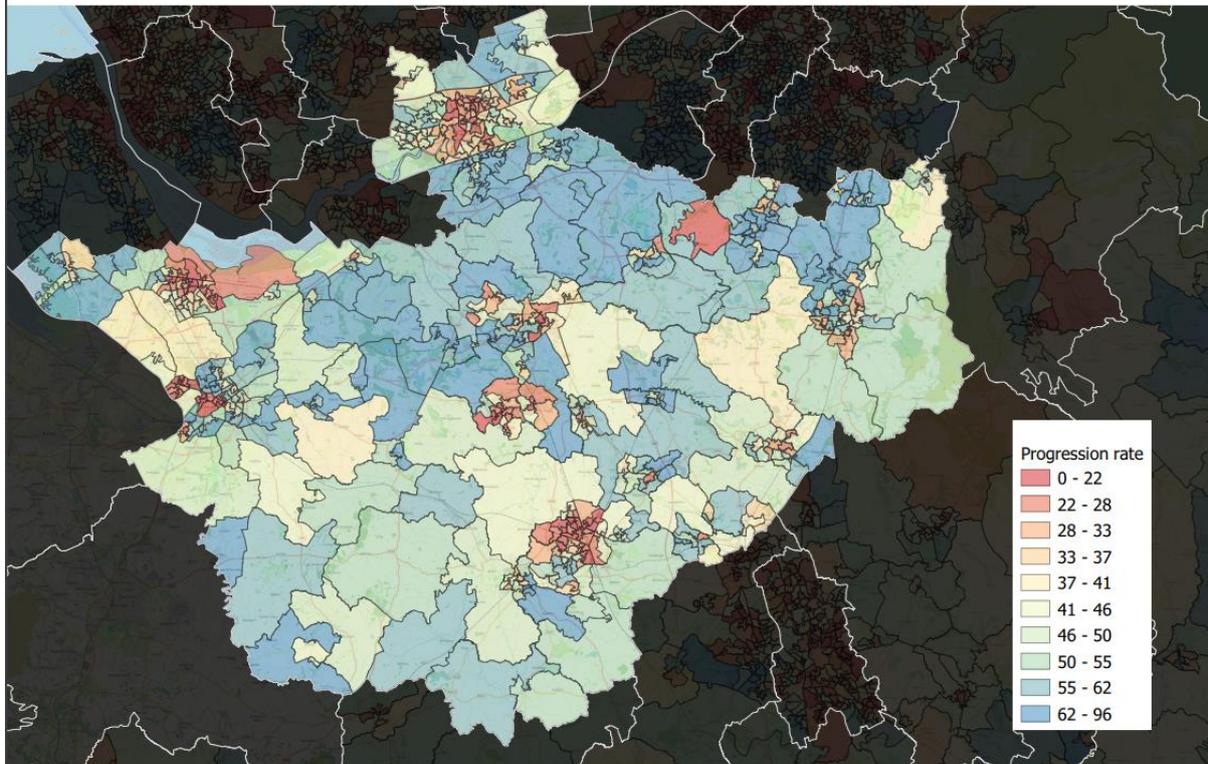
When the destinations for Cheshire and Warrington’s 2020/21 KS5 leavers are considered by their prior educational attainment, the most common destination for KS5 leavers with qualifications below L2 tends to be ‘failure to secure a destination’; the most common destination for Level 2 KS5 leavers is to secure sustained employment; and the most common destination for Level 3 KS5 leavers is a sustained education destination.



Source: 16-18 destination measures, AY 2019/20, DfE

The map below provides TUNDRA HE progression rate data for Lower Layer Super Output Areas (LSOAs) in Cheshire and Warrington<sup>27</sup>. 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 rate of young people to higher education (TUNDRA) in Cheshire and Warrington



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

### 5.1.3 Young People and the Labour Market

In 2021, the Careers and Enterprise Company (CEC) published a “LEP Report” presenting data gathered by the Compass tool to benchmark self-assessment of activity in the Cheshire and Warrington schools using Compass against the self-assessment of activity in English schools using the tool. 82.35% of schools in Cheshire and Warrington had completed Compass which was slightly higher than the English proportion of 81.4%. This is a significant progression from the position reported in the previously published Cheshire and Warrington Labour Market Assessment where only 58% of schools were using Compass in 2018/19.

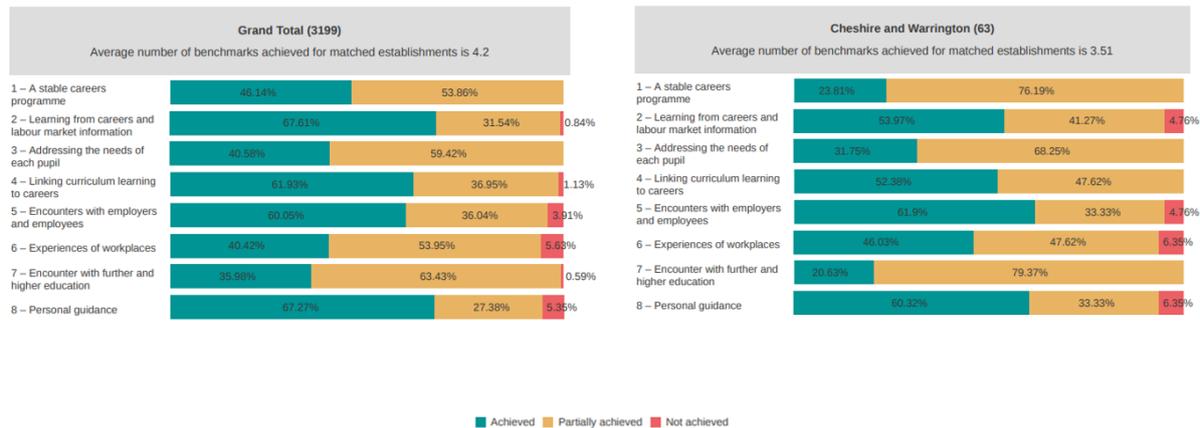
The figure below illustrates performance of institutions against the Gatsby benchmarks. The average number of benchmarks achieved by institutions in Cheshire and Warrington was 3.51 which was lower than the English average number of 4.2, but an improvement on the 2018/19 reported average for Cheshire and Warrington of 2.3.

A lower percentage of institutions assessed themselves as having achieved the benchmark in Cheshire and Warrington than in England for six of the eight benchmarks. The two benchmarks where there was a higher rate of achievement in Cheshire and Warrington than in England were for:

<sup>27</sup> Released by the Office for Students in March 2021 measuring young progression between 2012 and 2016.

- Benchmark 5 – Encounters with employers and employees
- Benchmark 6 – Experiences of workplaces

## Achievement of Gatsby Benchmarks – National and Cheshire and Warrington



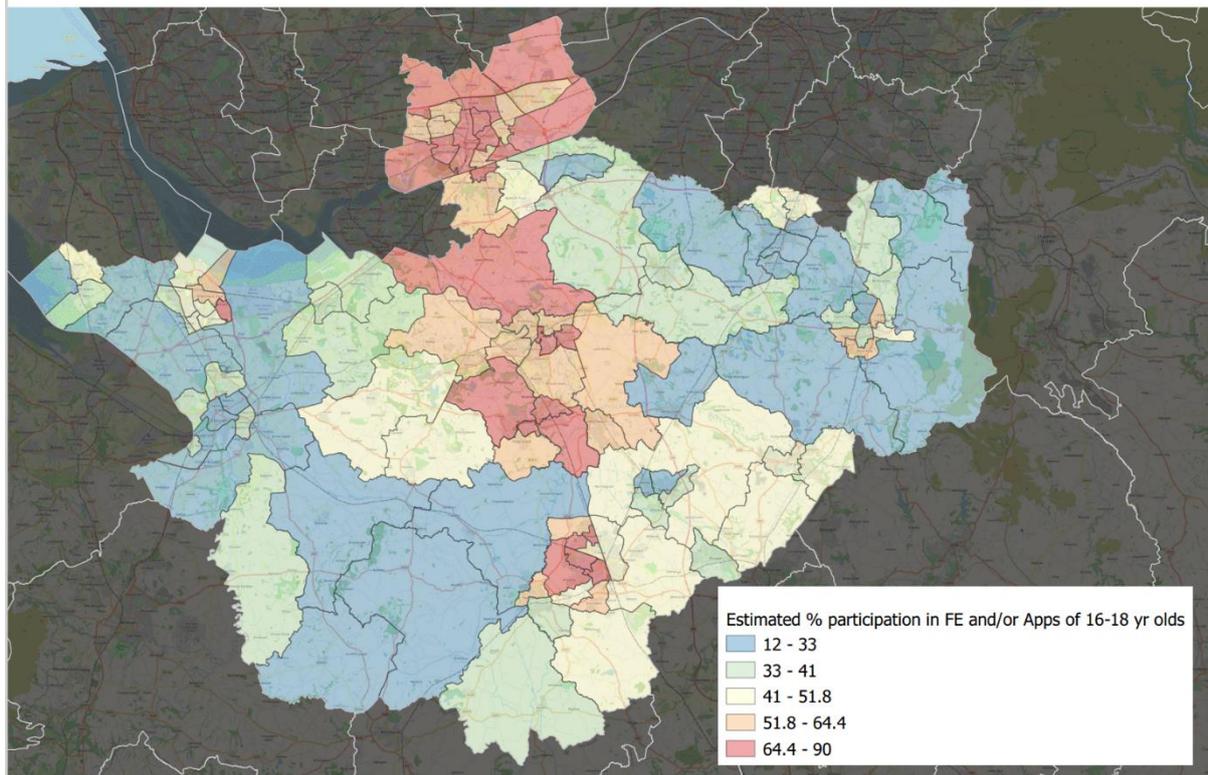
## 5.2 The Supply of Skills to Young People

### 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

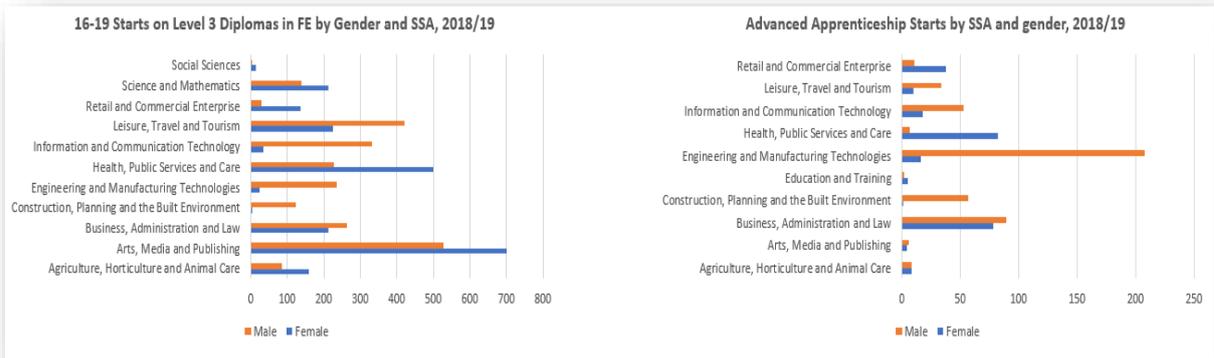


Map by Brennan Wilson Ltd in QGIS. Data from ESFA Localities datacube (residency), ONS, OS and OpenStreetMap

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)**

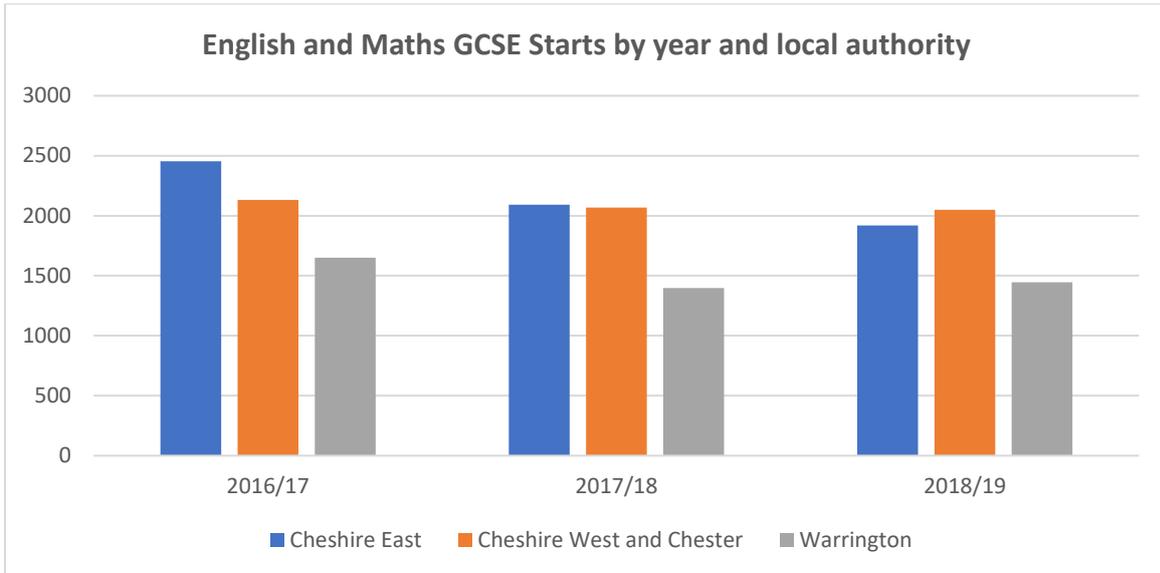
The 16-18 FE achievement rate for all types of provider at all levels in Cheshire and Warrington in 2018/19 was 85.6% which was higher than that for England (82.6%). The Cheshire and Warrington wards with an estimated 16-18 achievement rate below 70% in 2018/19 were Wolverham; Neston; Wilmslow Dean Row; 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

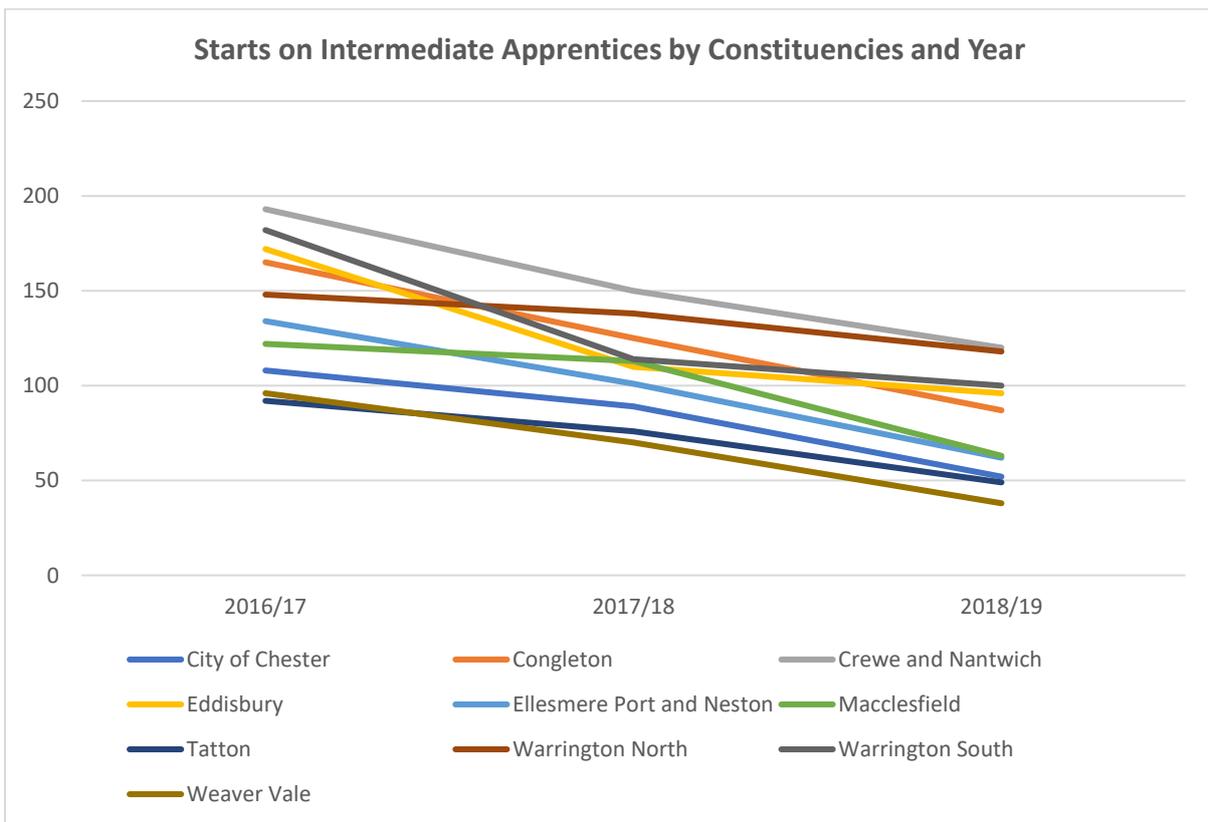
62% of all Level 2 learning aims taken by FE learners aged 16-18 between 2016/17 and 2018/19 were GCSE English and Maths, a further 15% were Diplomas and 10% were Certificates.

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; Farnon; 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 England<sup>28</sup>.

### 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.

<b>Advanced Apprenticeship Starts by year and Local Authority, 2016-2019</b>			
<b>Local Authority</b>	<b>2016/17</b>	<b>2017/18</b>	<b>2018/19</b>
<b>Cheshire East</b>	370	310	308
<b>Cheshire West and Chester</b>	304	298	233
<b>Warrington</b>	210	218	191
<b>Grand Total</b>	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.

<sup>28</sup> <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

The percentage of the population qualified to Level 4+ (L4+) in Cheshire and Warrington is very similar to 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.

Qualifications of the 16-64 resident population (Jan 2020-Dec 2020)						
	Cheshire and Warrington	Northwest	England	Cheshire East	Cheshire West and Chester	Warrington
NVQ4+	42.9	38.6	42.8	41.2	45.4	42
NVQ3+	64.1	57.9	61.2	65.4	65.9	58.9
NVQ2+	82.7	76.6	78	84.6	82.7	79.5
NVQ1+	91.9	87.2	87.9	93.2	91.8	89.6
Other Quals	2.9	5.1	5.9	#	#	5.7
No Quals	5.3	7.6	6.2	4.5	6.5	4.7
<i>Source: ONS annual population survey (Jan-Dec 2020), % is a proportion of resident population of area aged 16-64</i>						

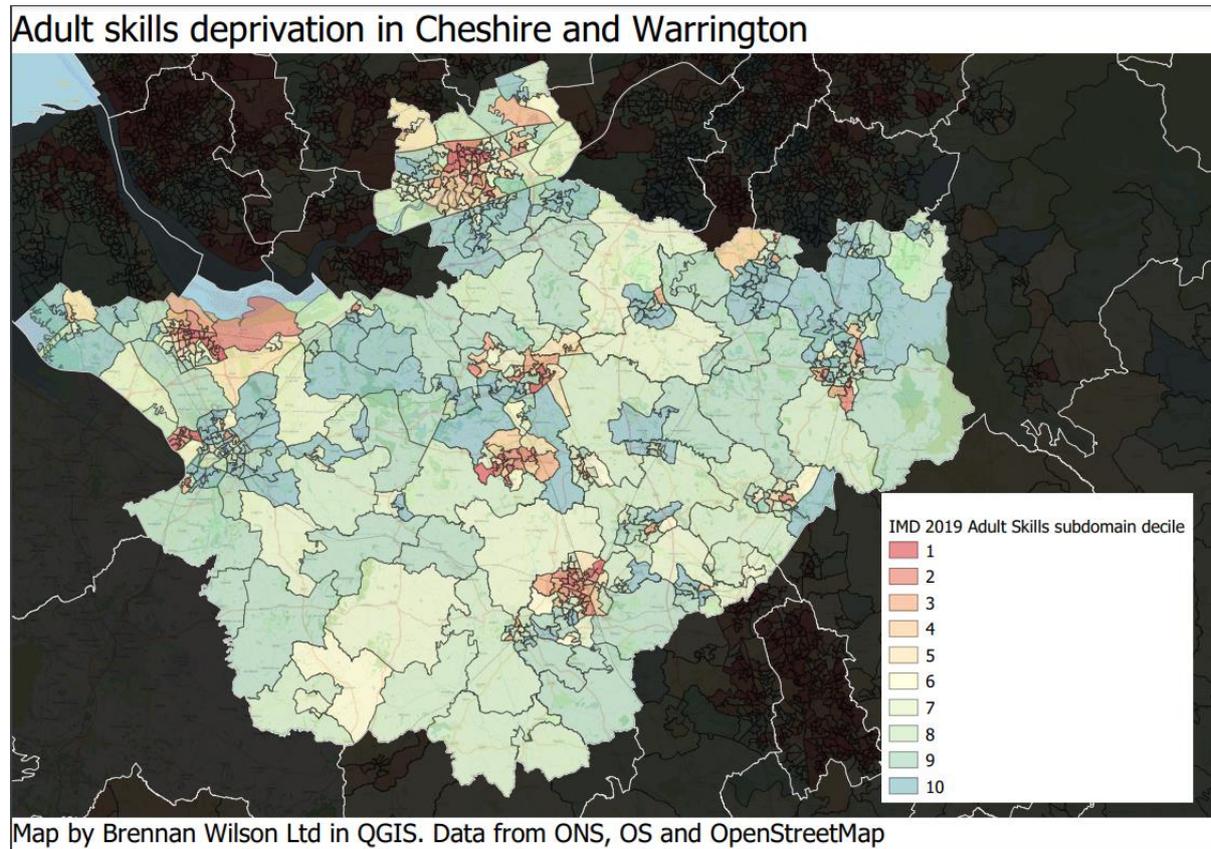
The Education, Skills and Training Domain of the IMD 2019 measures the lack of attainment and skills in the local population. The indicators fall into two sub-domains: one relating to children and young people and one relating to adult skills. These two sub-domains are designed to reflect the 'flow' 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

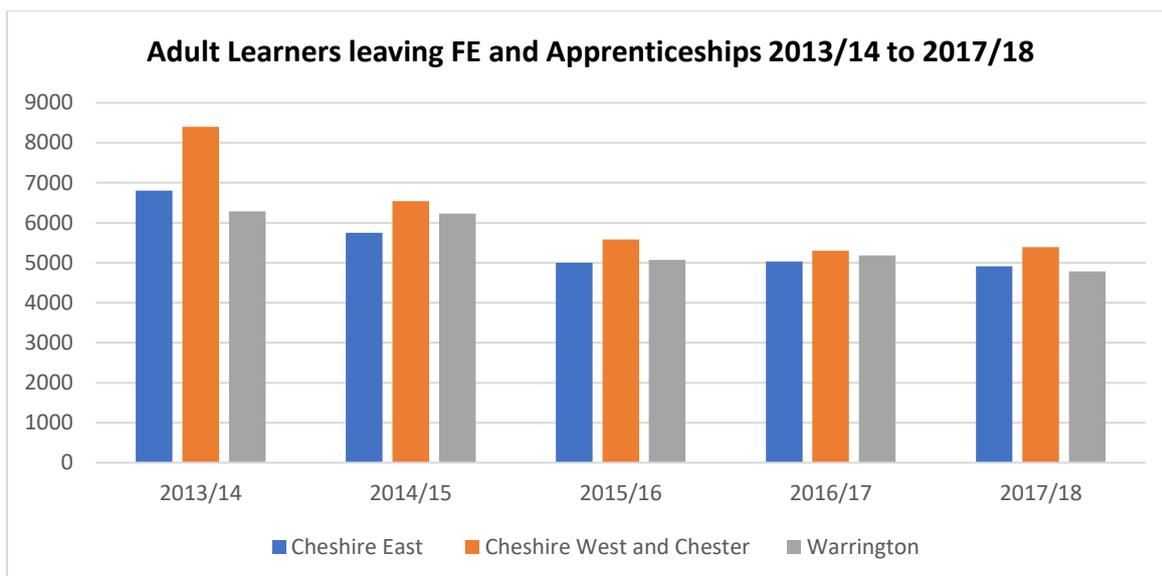
Sections below on the supply of skills to adults draw heavily on a detailed report on this issue produced for the LEP in the Spring of 2020<sup>29</sup>.

### 5.4.1 Adult Participation in Skills

There has been a significant decline in adult participation in further education and apprenticeships over the last decade. The table below illustrates the decline that took place in the numbers leaving adult further education and adult apprenticeships in the five years 2013/14 to 2017/18 in the three local authorities of Cheshire and Warrington. Participation declined in all three local authorities, with leavers declining by almost 3,000 in Cheshire West and Chester, almost 2,000 on Cheshire East and 1,500 in Warrington.

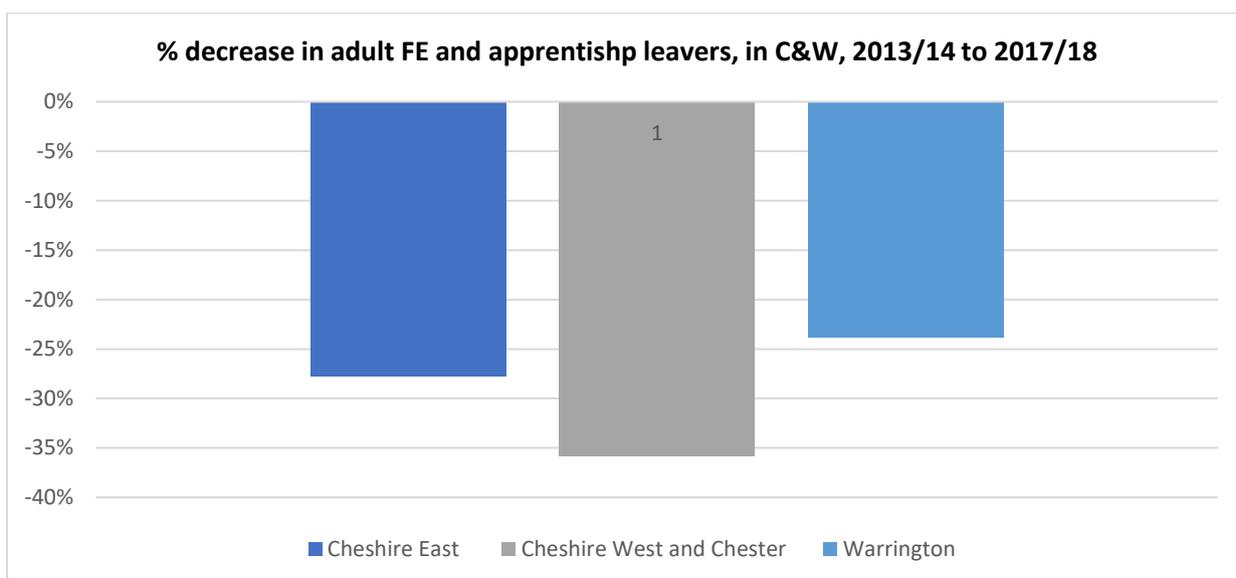
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<sup>29</sup> 'The Adult Workforce and Skills Delivery in Cheshire and Warrington', Brennan Wilson Ltd, May 2020  
<https://cheshireandwarrington.com/media/2kadkil2/report-b-the-adult-workforce-and-skills-delivery-in-cheshire-and-warrington.pdf>



Source: LEO underpinning data, DfE, accessed Dec 2021

This equates to a decline in leavers of 28% in this period in Cheshire East, 36% in Cheshire West and Chester, and 24% in Warrington.



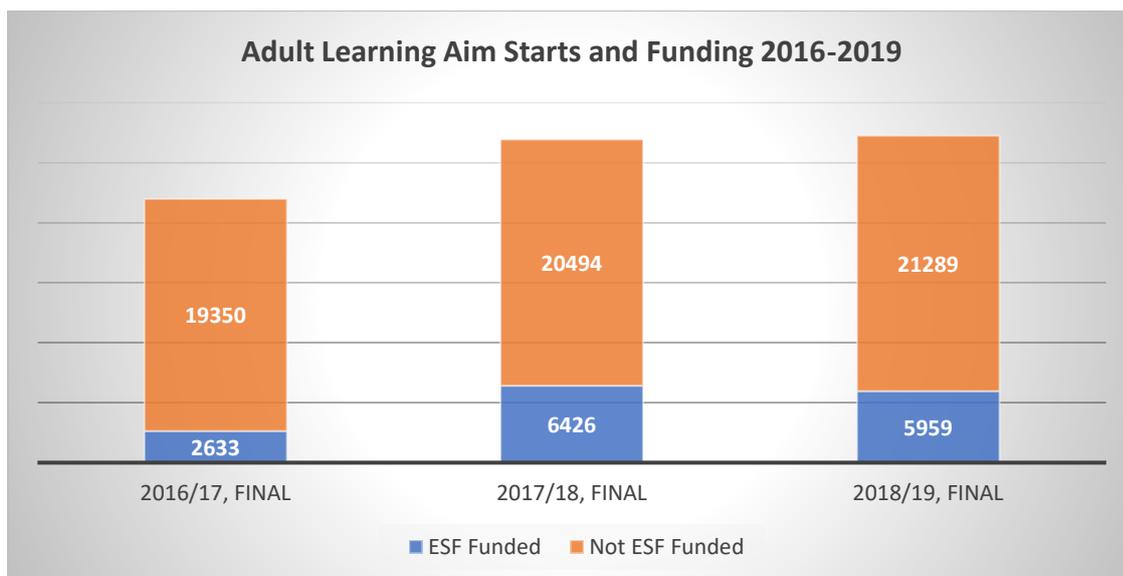
Source: LEO underpinning data, DfE, accessed Dec 2021

#### 5.4.2 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.

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.

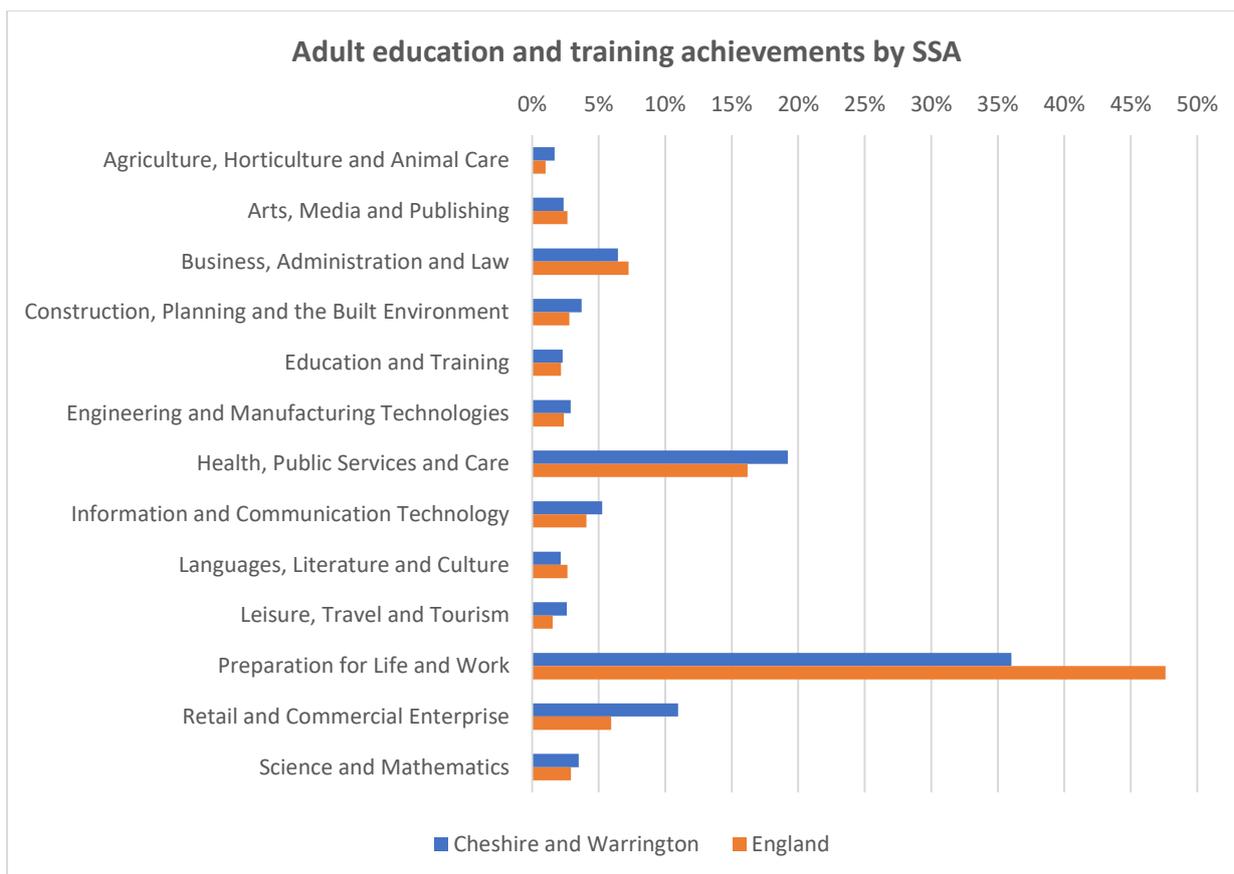


**Source: ESFA Localities data cube (residency)**

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 is 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.

Following the onset of the pandemic, the Government ceased publication of National Achievement Rate tables (NARTS) for institutions. This means that the latest available NARTS data is for 2018/19. This is reported below.

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.

#### 5.4.3 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.

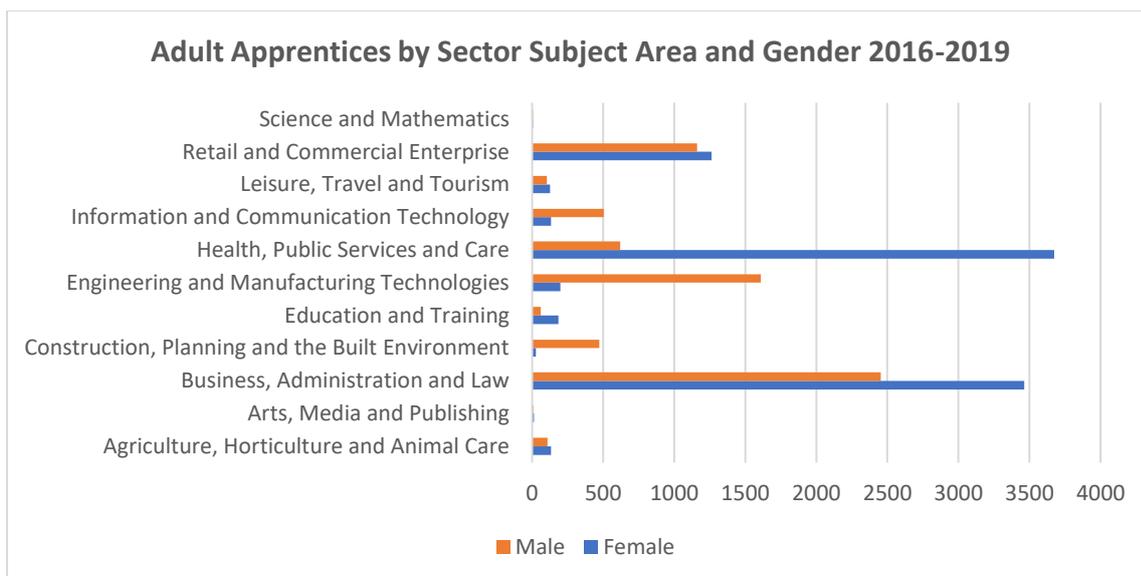
Apprenticeship Starts, all Ages, 2016-2019				
Age at Start	2016/17	2017/18	2018/19	Total
16-18	2273	1964	1574	5811
19-24	2729	1990	1920	6639
25+	3943	2800	2944	9687
Total	8945	6754	6438	22137

**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.

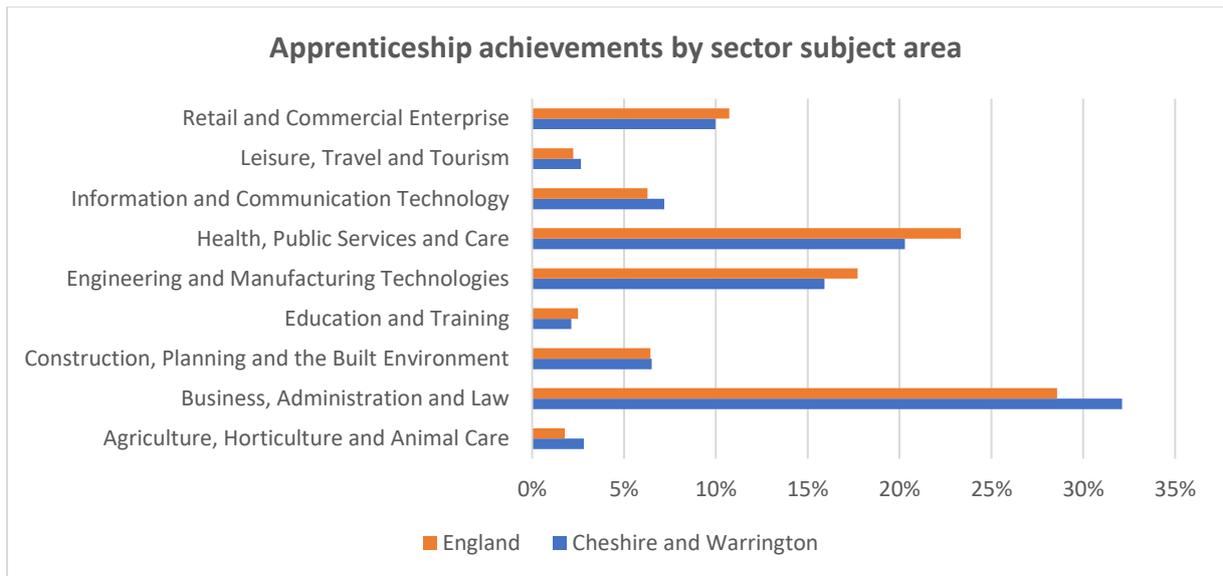


**Source: ESFA Localities data cube (residency)**

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.

Following the onset of the pandemic, the Government ceased publication of National Achievement Rate tables (NARTS) for institutions. This means that the latest available NARTS data is for 2018/19. 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%)<sup>30</sup>. 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.

<sup>30</sup> <https://www.gov.uk/government/collections/sfa-national-success-rates-tables#national-achievement-rates-tables-2018-to-2019>



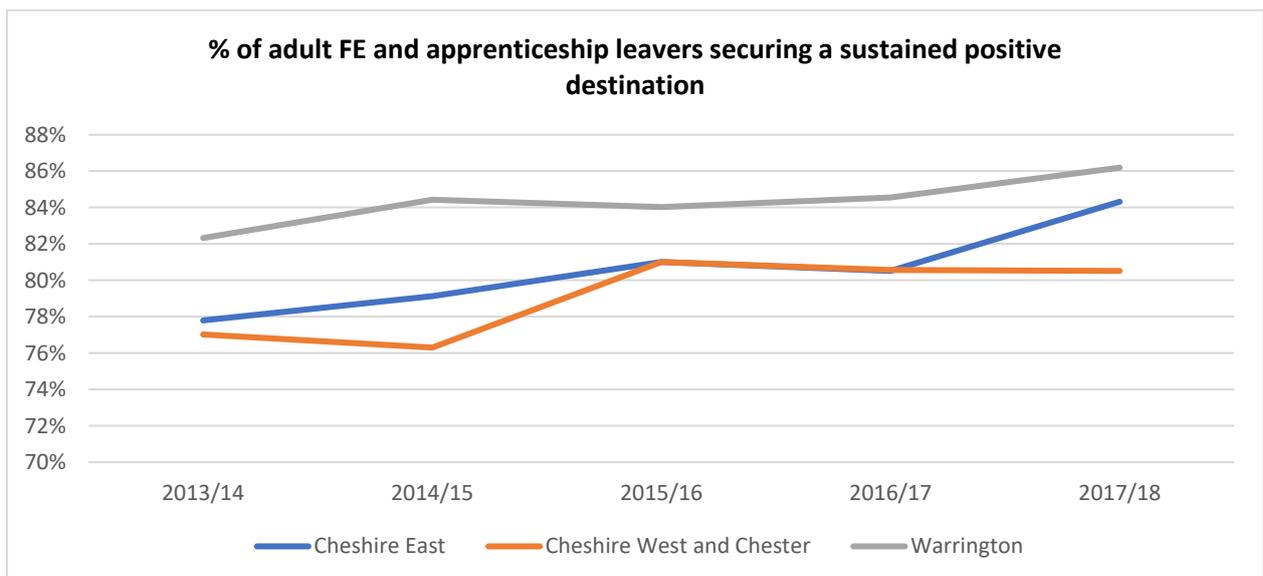
Source: SAP Core Indicators

#### 5.4.4 Destinations of Adult Learners

The FE outcome-based success measures present statistics on the employment, earnings and learning outcomes of FE learners. The most recent data covers learners that achieved apprenticeships, adult (19+) FE and Skills learners and completers of traineeships in 2017/18, and tracks their outcomes in the following academic year, 2018/19. The data uses the longitudinal education outcomes (LEO) study, which looks at how learners move through education and into the labour market by bringing together:

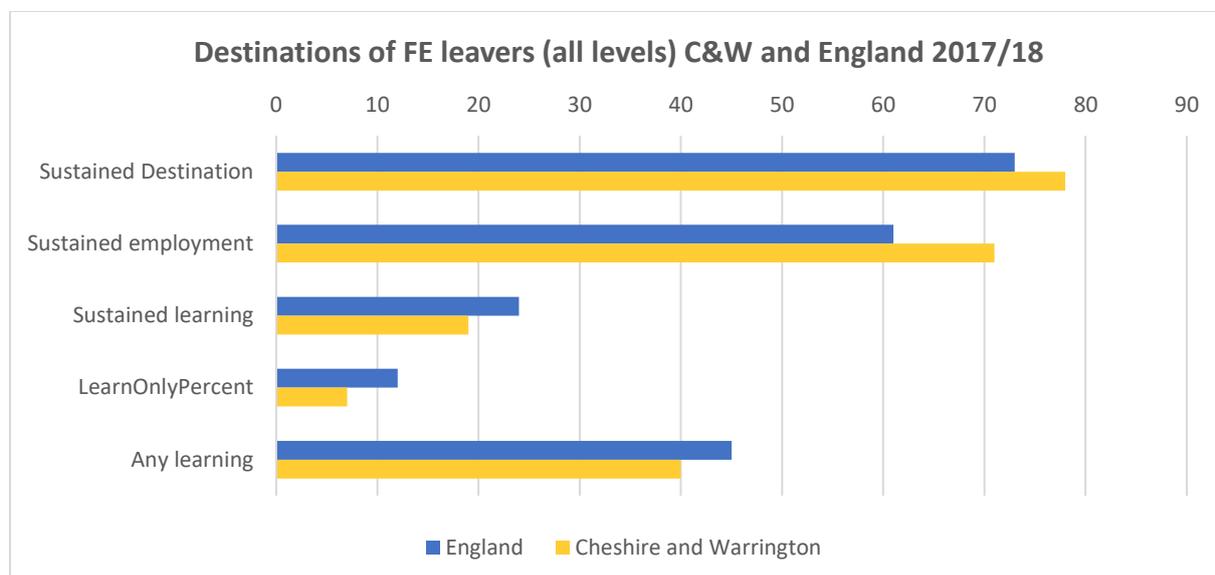
- schools, further and higher education information from the Department for Education (DfE)
- employment information from HM Revenue and Customs (HMRC)
- benefit histories from the Department of Work and Pensions (DWP)

Data shows an increase in the percentage gaining a sustained positive outcome for all three local authorities between 2013/14 and 2017/18.



Source: LEO underpinning data, DfE, accessed Dec 2021

Adult learners leaving FE in 2017/18 in Cheshire and Warrington were more likely to secure a sustained destination in learning than their English counterparts and more likely to secure sustained employment. On the other hand, they were less likely to secure a sustained learning destination or progress to any further learning.



Source: LEO underpinning data, DfE, accessed Dec 2021

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.

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

The table below provides data on sustained destinations following participation in apprenticeships. The pattern of sustained destinations following participation in apprenticeships is slightly higher in Cheshire and Warrington compared to England.

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*

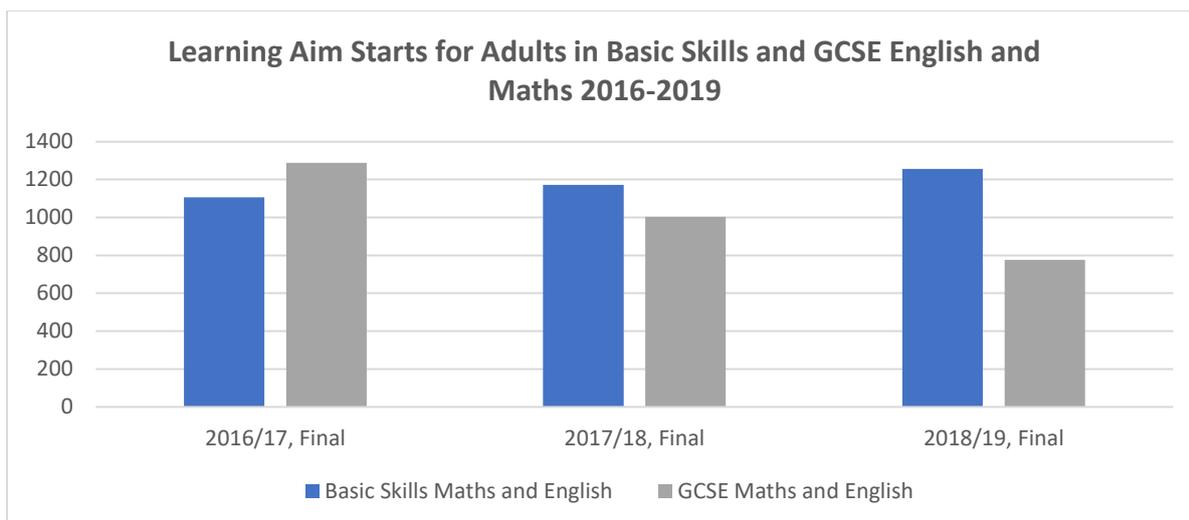
The table below shows the wages being earned by those leavers of FE/apprenticeships in Cheshire and Warrington and England in 2017/18 who sustained employment following their learning. In general, apprenticeships delivered a better return than college-based learning, and wages were mostly higher for English residents than for residents of Cheshire and Warrington.

Wages for those in sustained employment after leaving FE/apprenticeships, 2017/18						
	<i>England</i>			<i>Cheshire &amp; Warrington</i>		
	25 <sup>th</sup> Percentile	Median	75 <sup>th</sup> Percentile	25 <sup>th</sup> Percentile	Median	75 <sup>th</sup> Percentile
Advanced Apprenticeship	£14,880	£19,170	£25,110	£14,960	£18,920	£24,550
Higher (Level 4) Apprenticeship	£18,800	£23,360	£29,340	£17,980	£21,460	£25,680
Higher (Level 5+) Apprenticeship	£20,260	£26,700	£34,230	£20,570	£25,600	£31,270
Intermediate Apprenticeship	£12,750	£17,010	£21,640	£13,350	£17,310	£21,510
Full level 2 (FE)	£8,180	£13,230	£19,430	£7,940	£12,920	£19,200
Full level 3 (FE)	£8,560	£13,210	£18,790	£11,080	£14,510	£18,920
Level 4 (FE)	£12,590	£17,680	£21,650	£16,520	£18,630	£21,540

*Source: LEO underpinning data, DfE, accessed Dec 2021*

#### 5.4.5 Adult Basic Skills

For English and Maths GCSE, there was 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)**

#### 5.4.6 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).

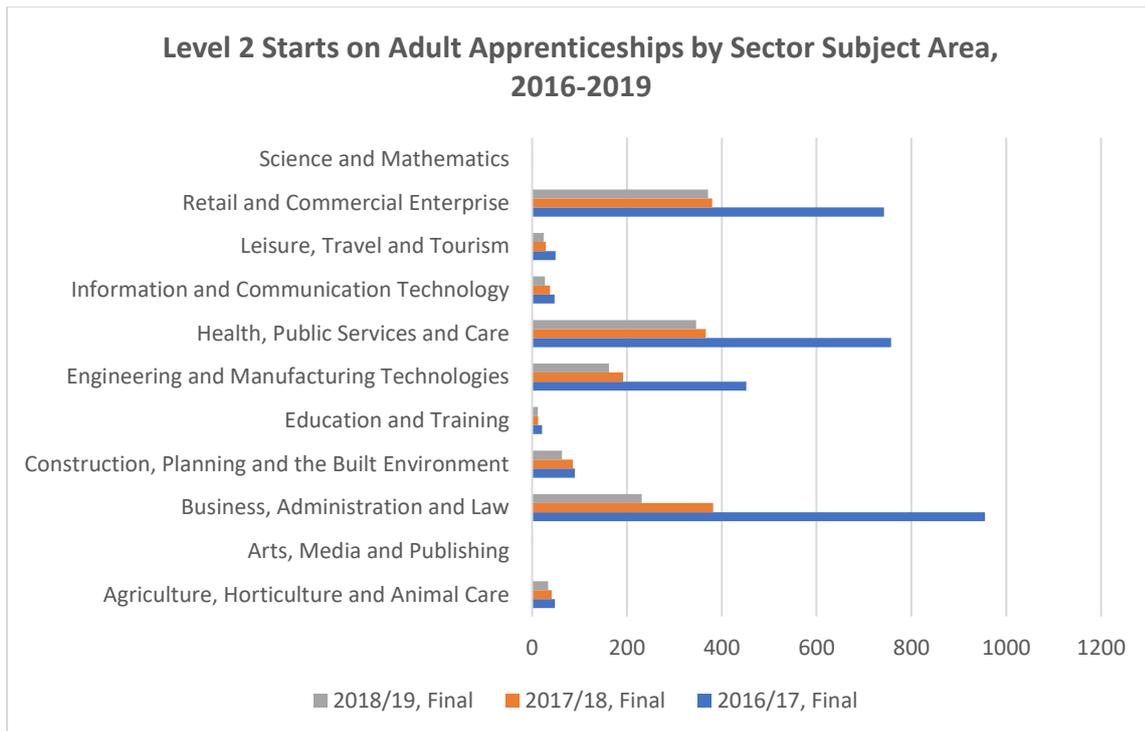
ESF accounted for the funding of 16% of all Level 2 learning aims for adults between 2016 and 2019.

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.

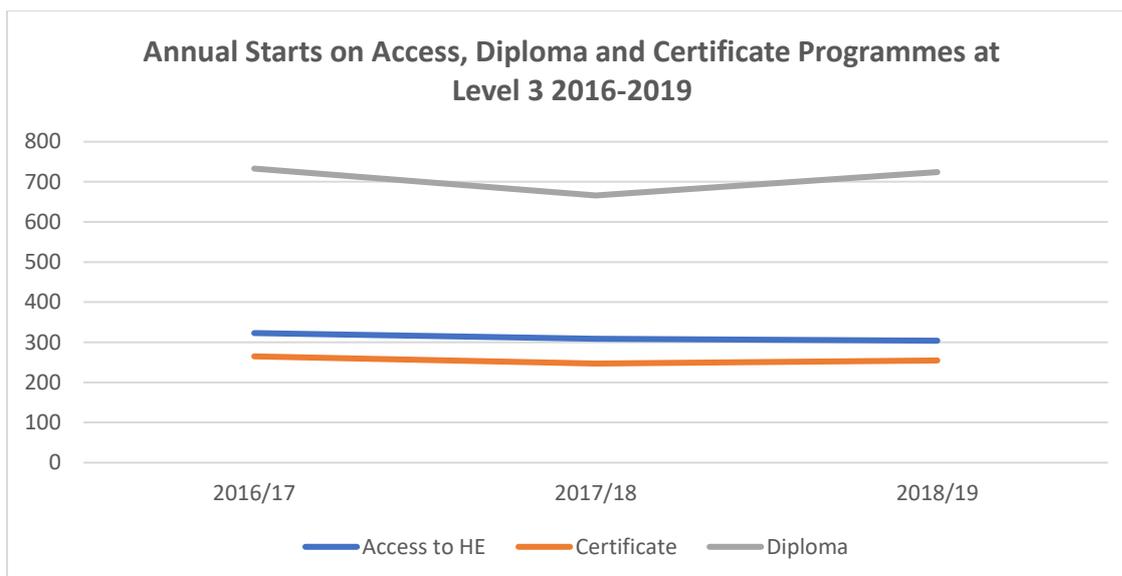


There is a very close alignment between the spatial distribution of adult apprenticeship achievements at Level 2 and the spatial distribution of income deprivation (as measured by the Income Deprivation Domain of IMD 2019) in Cheshire and Warrington.

#### 5.4.7 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) was 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.

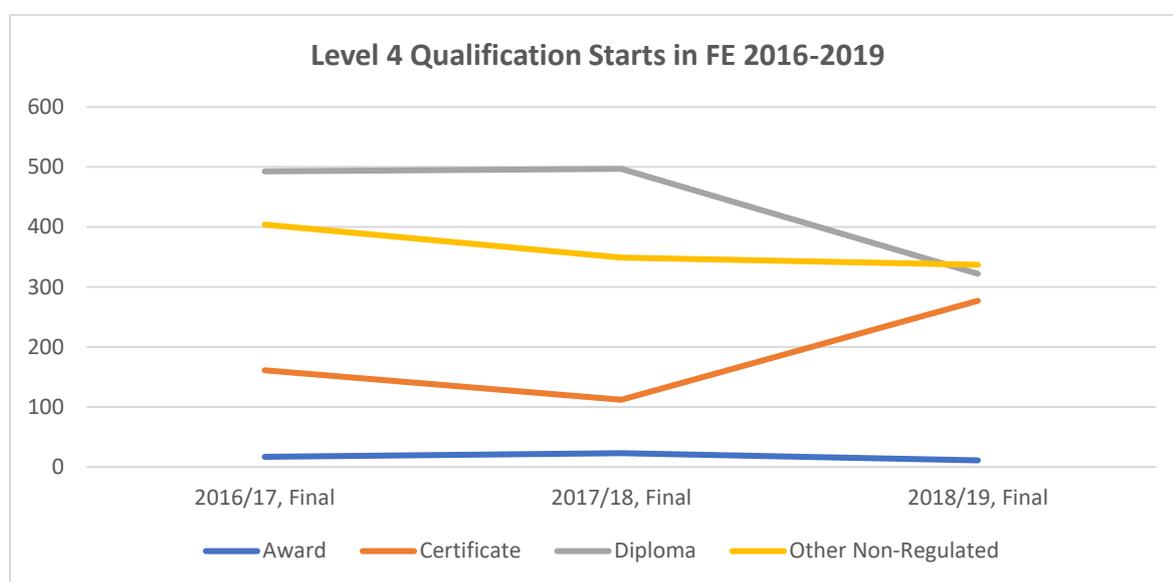
There is a close alignment between the distribution of apprenticeship achievements at Level 3 and the distribution of income deprivation. Like the overall achievement measure, there are a few areas, for example around the centre of Chester, where this does not appear to be the case. There could be

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.

#### 5.4.8 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.

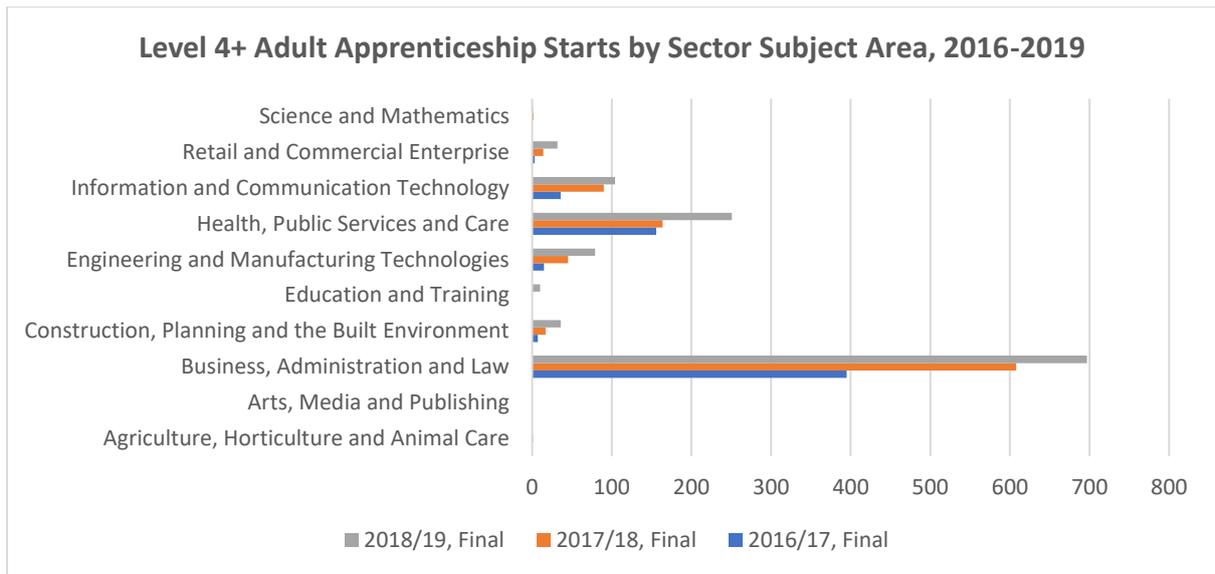


Source: ESFA Localities data cube (residency)

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.



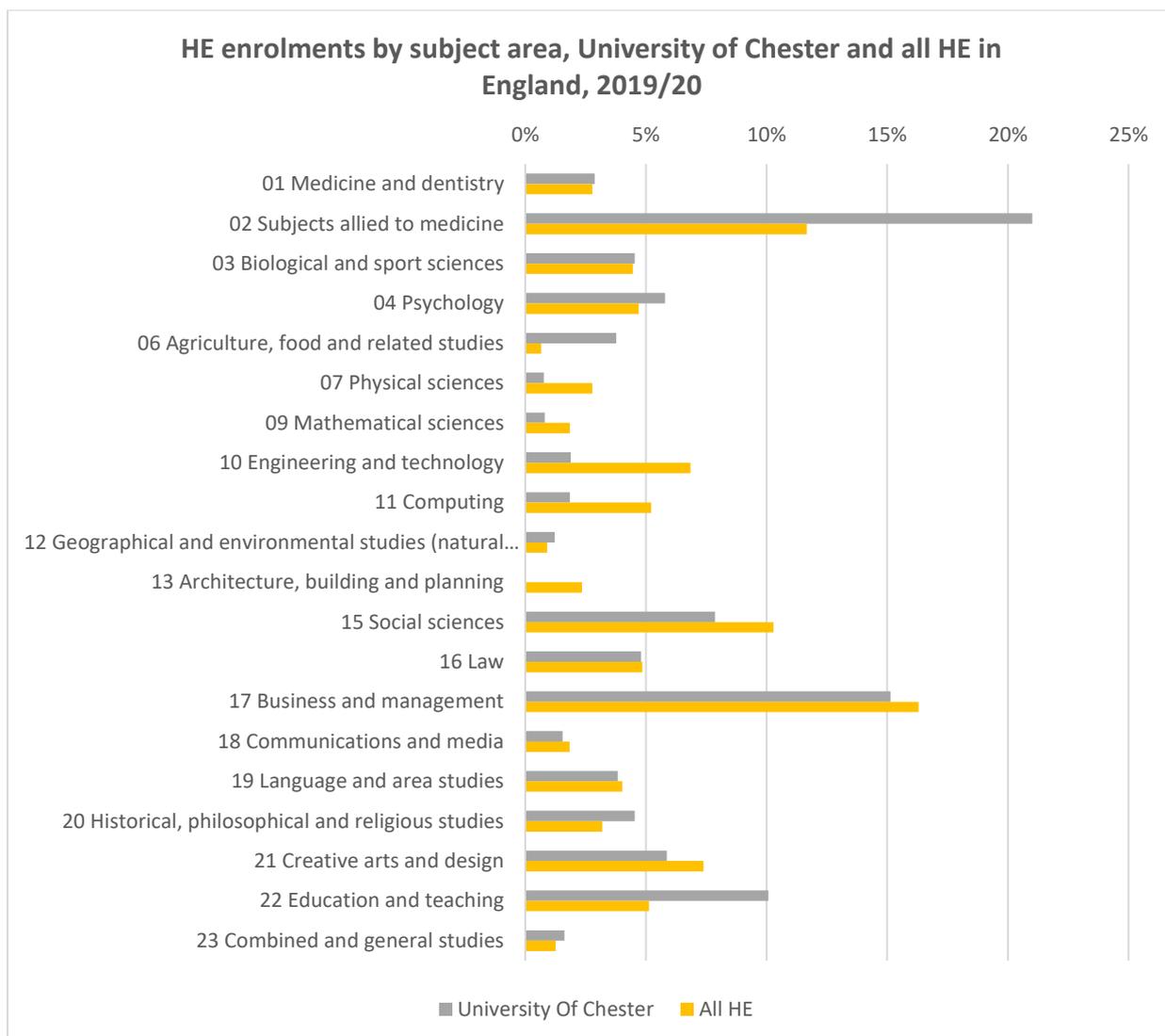
**Source: ESFA Localities datacube (residency)**

In 2019/20, there were 13.5k enrolments at the University of Chester with more than twice as many women as men enrolled.

Enrolments at the University of Chester, 2019/20				
Female	Male	Other	Not known	Total
9,285	4,255	5	0	13,545

**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**

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%).



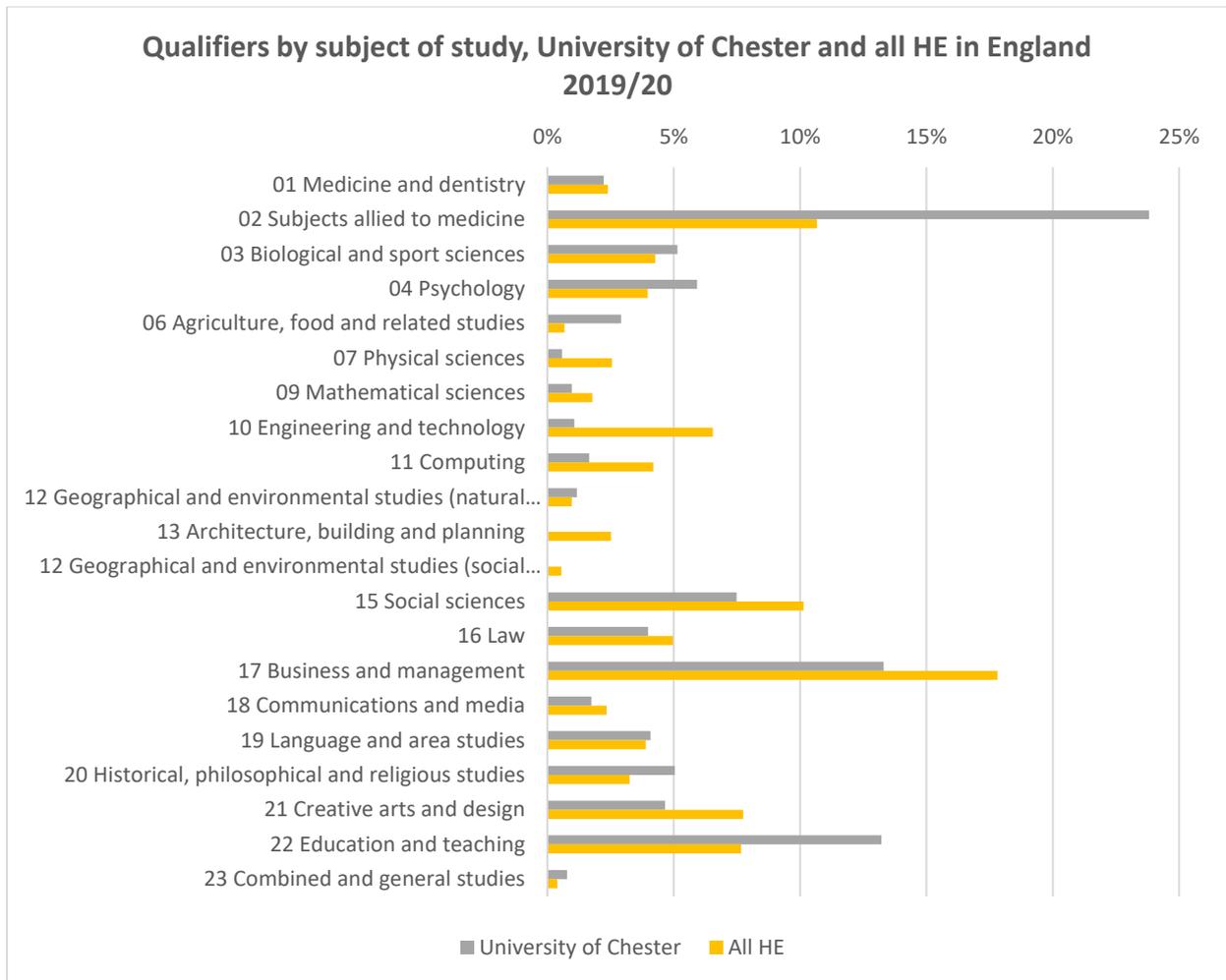
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Over 80% of undergraduate programmes at the University of Chester were first degree programmes in 2019/20.

Profile of undergraduate qualifications at the University of Chester, 2019/20					
First degree	Foundation degree	HNC/HND	Professional graduate certificate in education	Other undergraduate	Total undergraduate
2,640	85	0	0	565	3,290

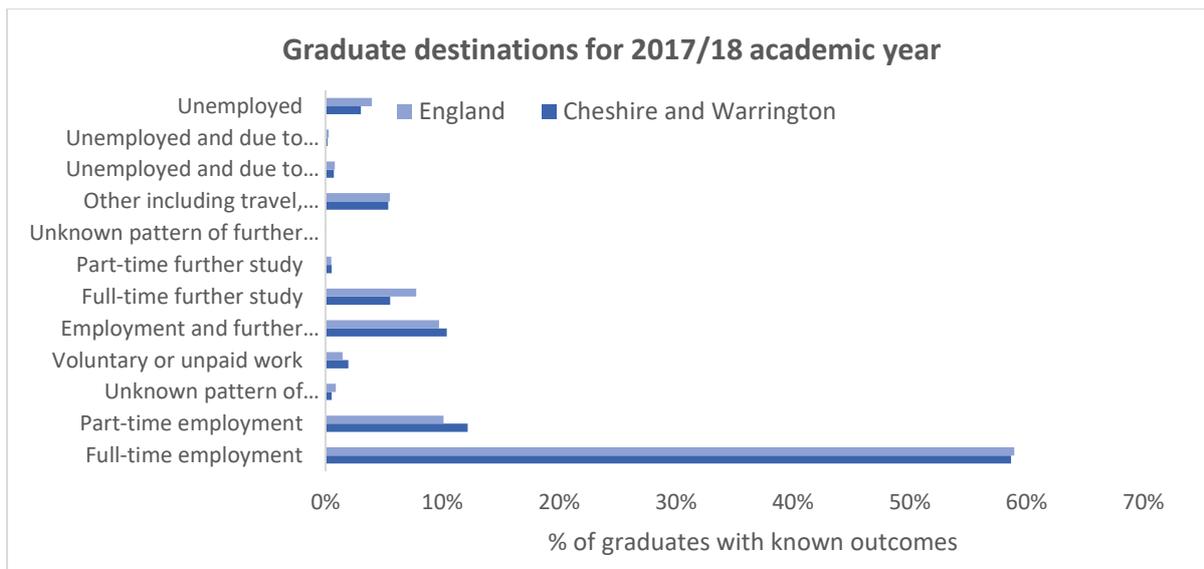
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The profile of qualifiers by subject of study at the University of Chester in 2019/20 was very similar to the profile of enrolments that year with the highest volumes being in subjects allied to medicine, business and management, and education and teaching.



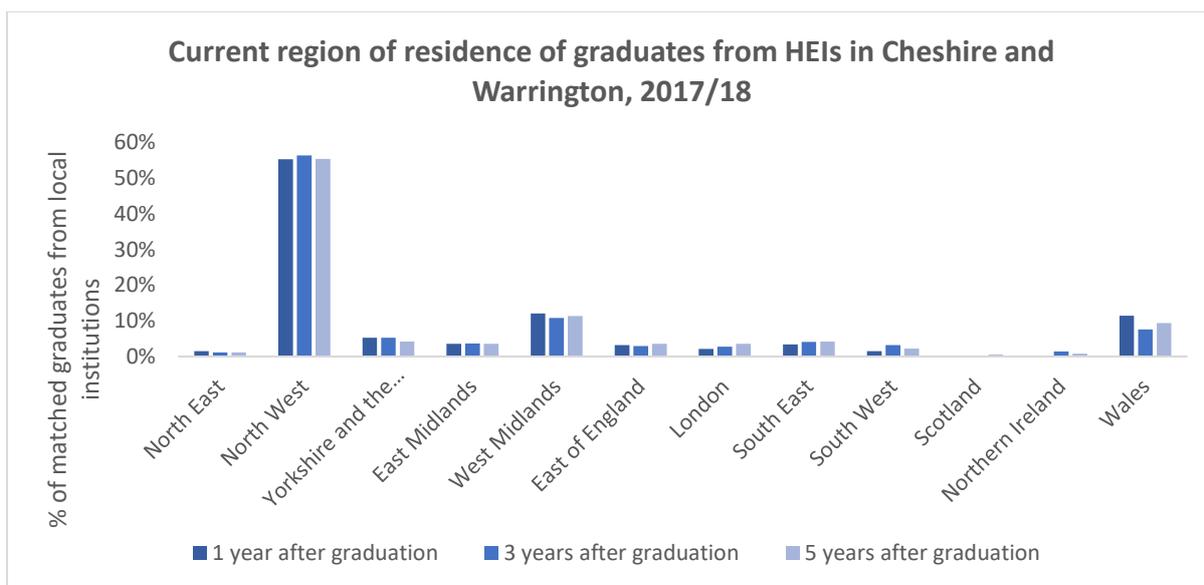
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Information about the destinations of 2016/17 graduates in 2017/18 is provided in the chart below. This data reflects students studying at providers in Cheshire and Warrington, rather than students who are domiciled here. Graduates from Cheshire and 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 Northwest region 1 year, 3 years and 5 years after graduation.

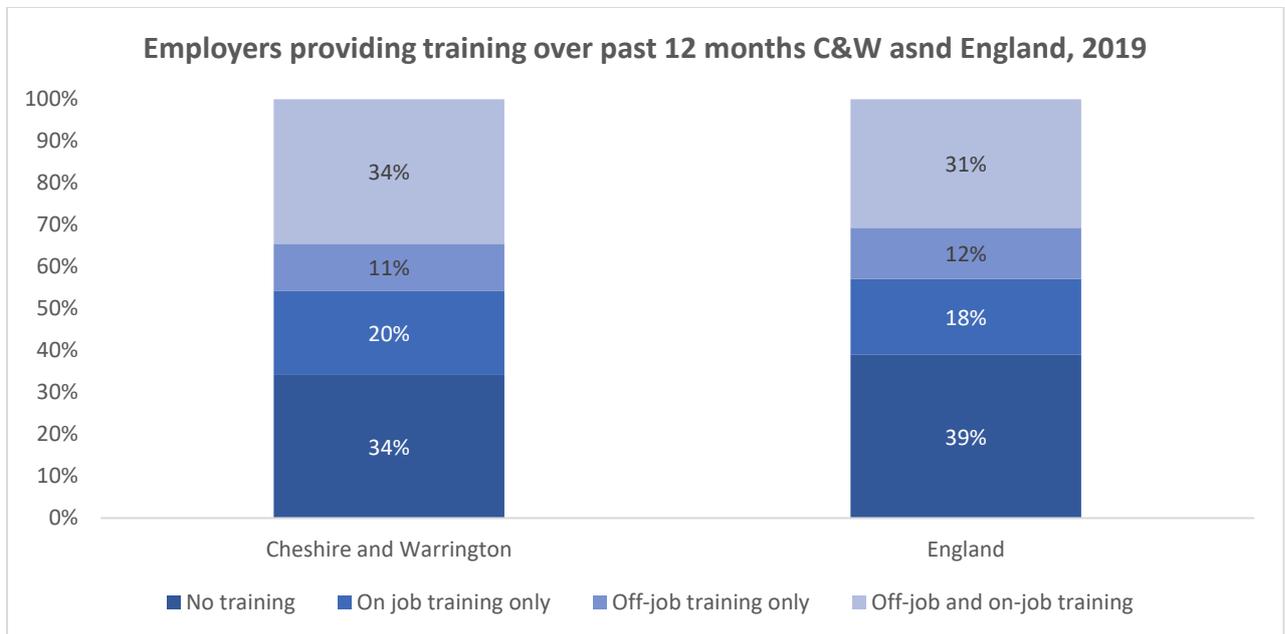


Source: SAP Core Indicators/HESA

### 5.5 Employer Training

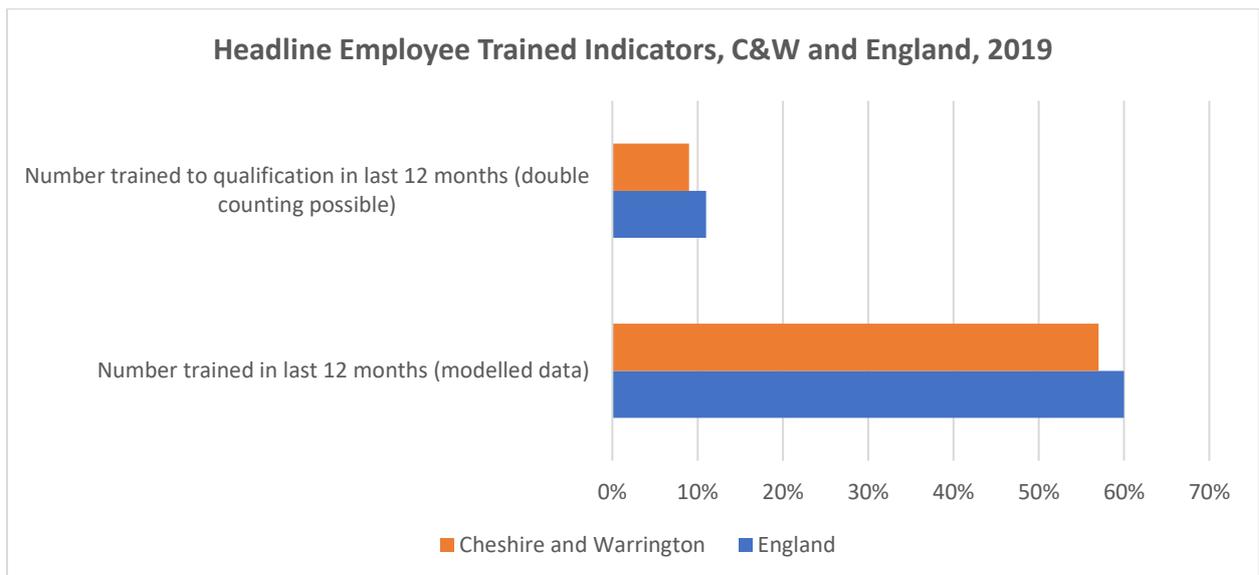
The Employer Skills Survey 2019 (ESS 2019) is an important source of intelligence for understanding the skills challenges faced by employers, both in terms of their existing workforce and when recruiting, and how they respond to these challenges through investment in training and workforce development. 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

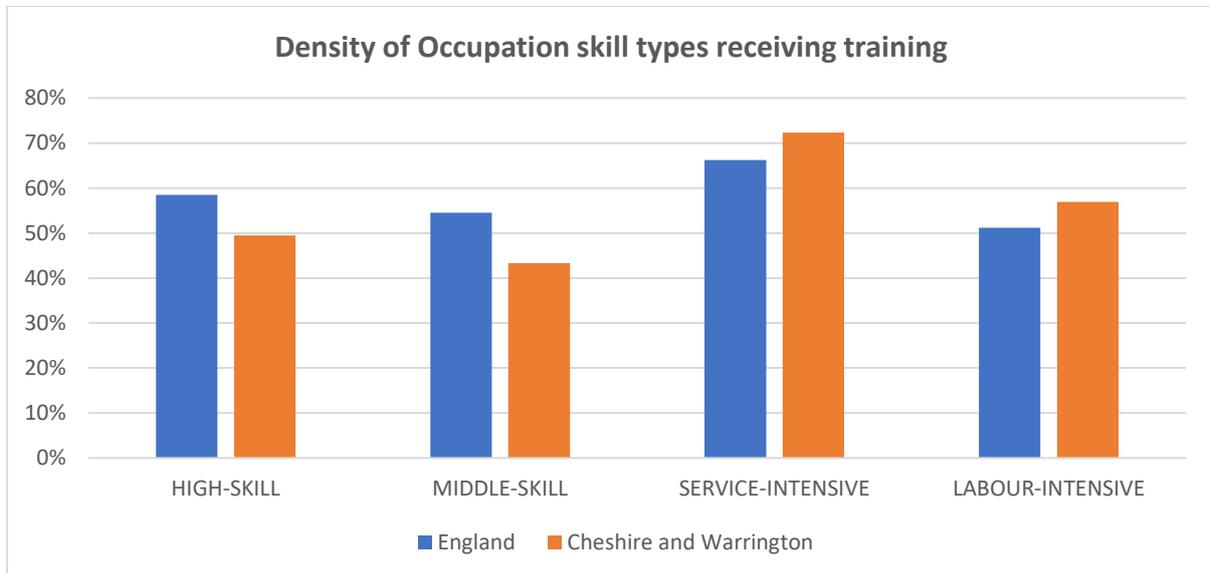
The reasons for not providing training in Cheshire and Warrington and England are set out in the table below. For both geographies, by far the main reason for not providing training is that staff are already proficient. Proportions giving other reasons are similar in both areas, including 6% of respondents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

<b>Reasons for not providing training</b>		
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%
<b>Source: ESS 2019</b>		

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.

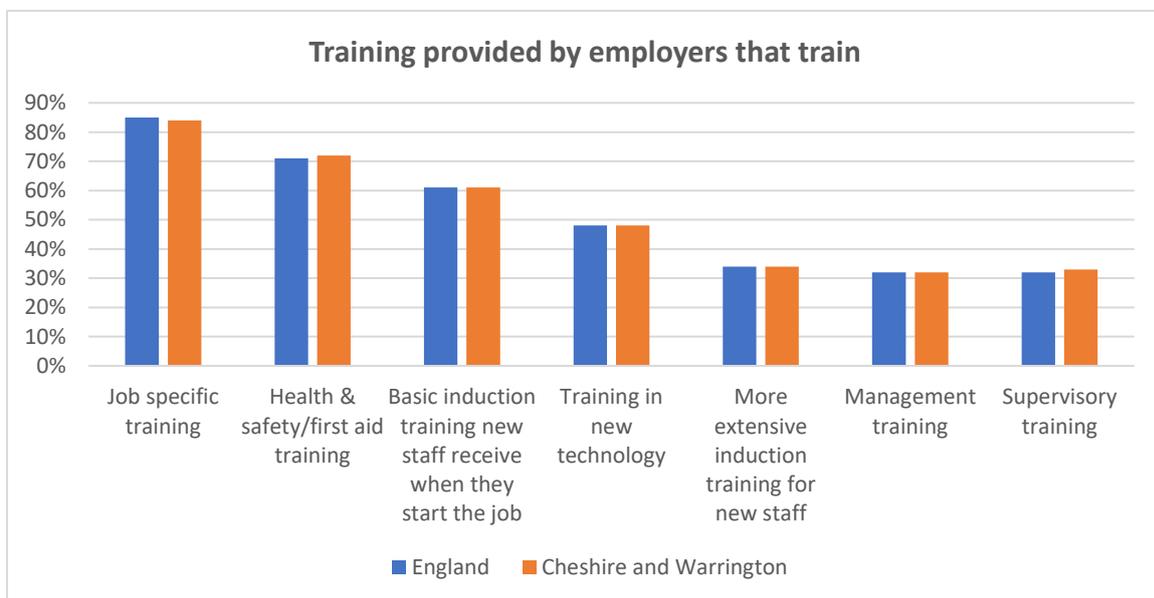
<b>Density of occupation types receiving training</b>		
Base: All employment (excluding modelled data)		
	England	Cheshire and Warrington
Managers	46%	47%
Professionals	72%	57%
Associate professionals	66%	**
Administrative/clerical staff	52%	36%
Skilled trades occupations	58%	55%
Caring, leisure and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

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.



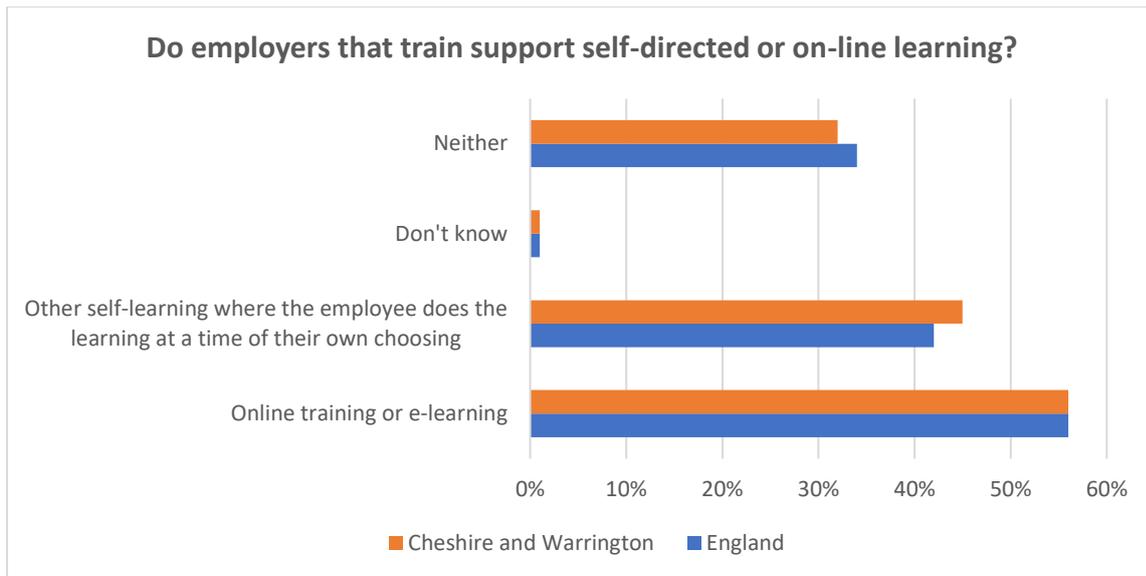
Source: ESS 2019

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.



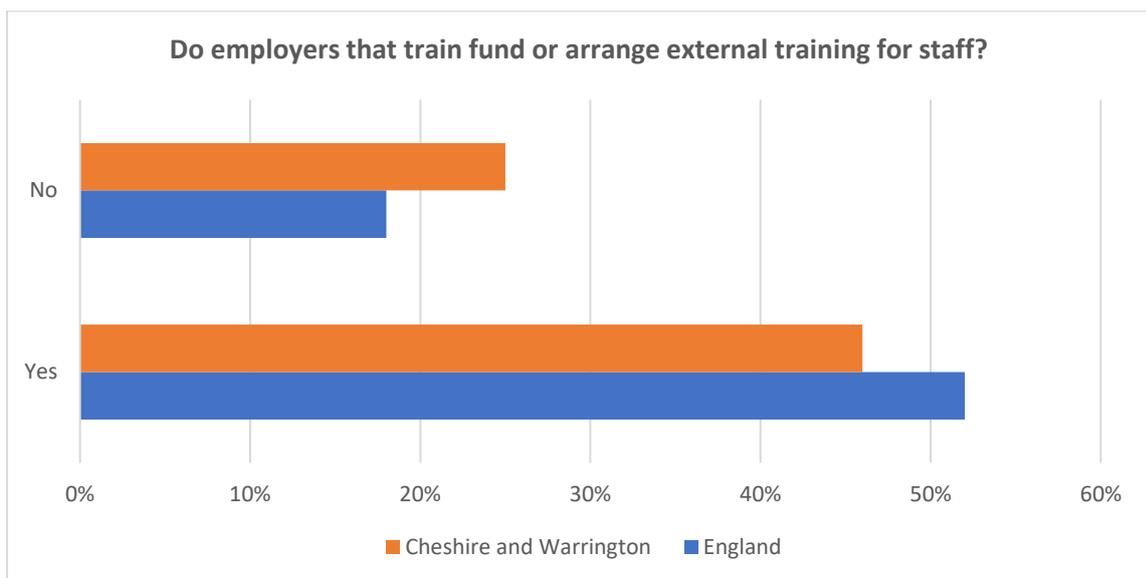
Source: ESS 2019

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.

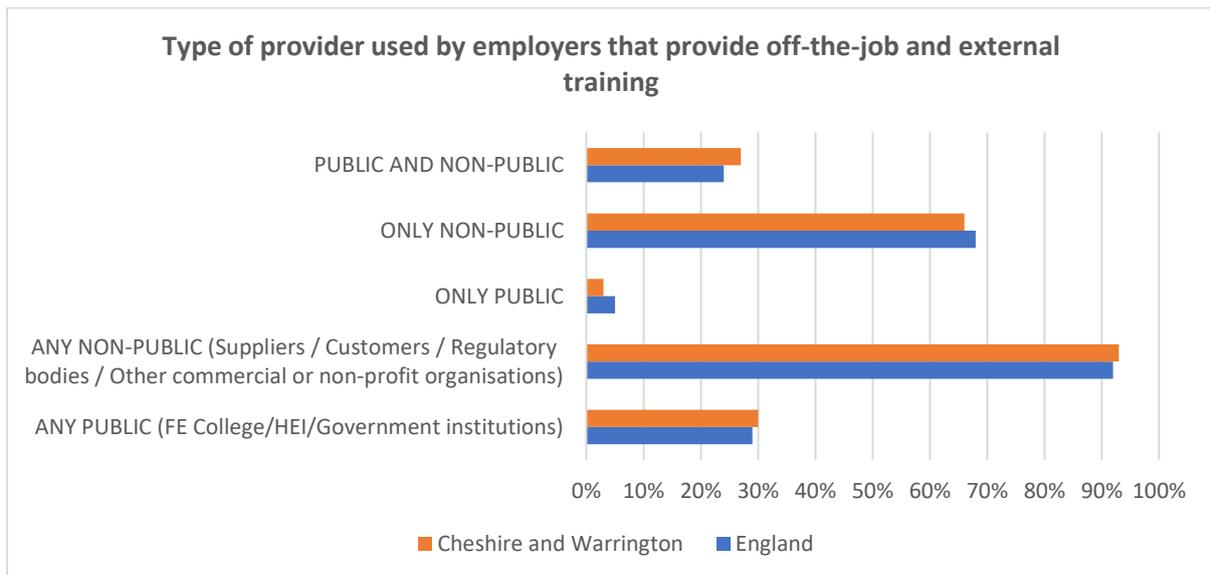
### External training sources used in past 12 months

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.

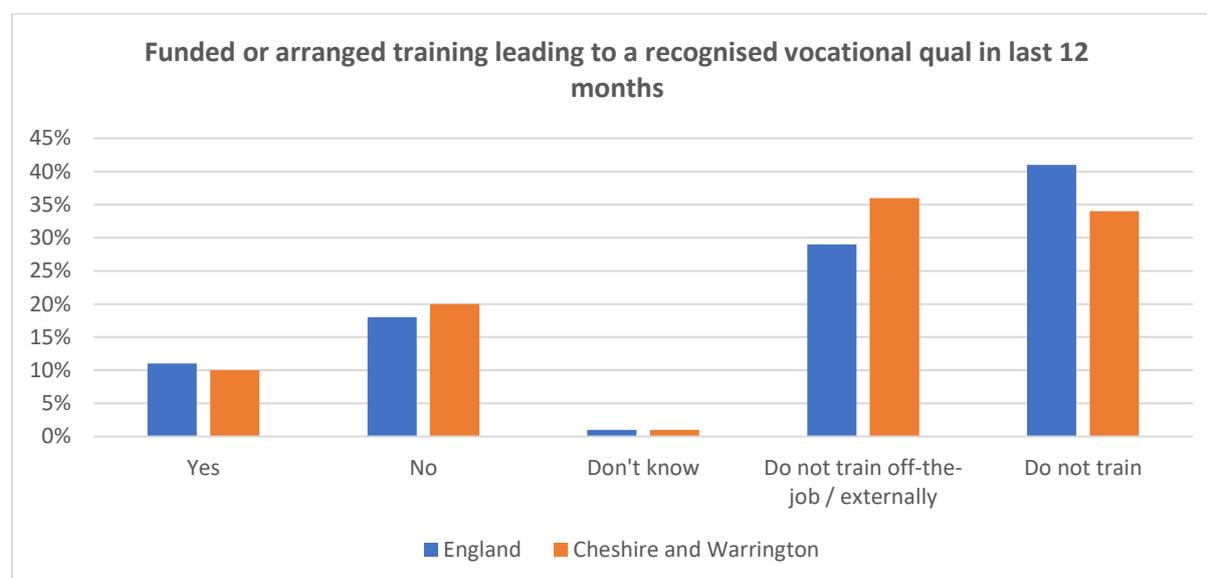


**Source: ESS 2019**

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%
<b>Source: ESS 2019</b>		

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

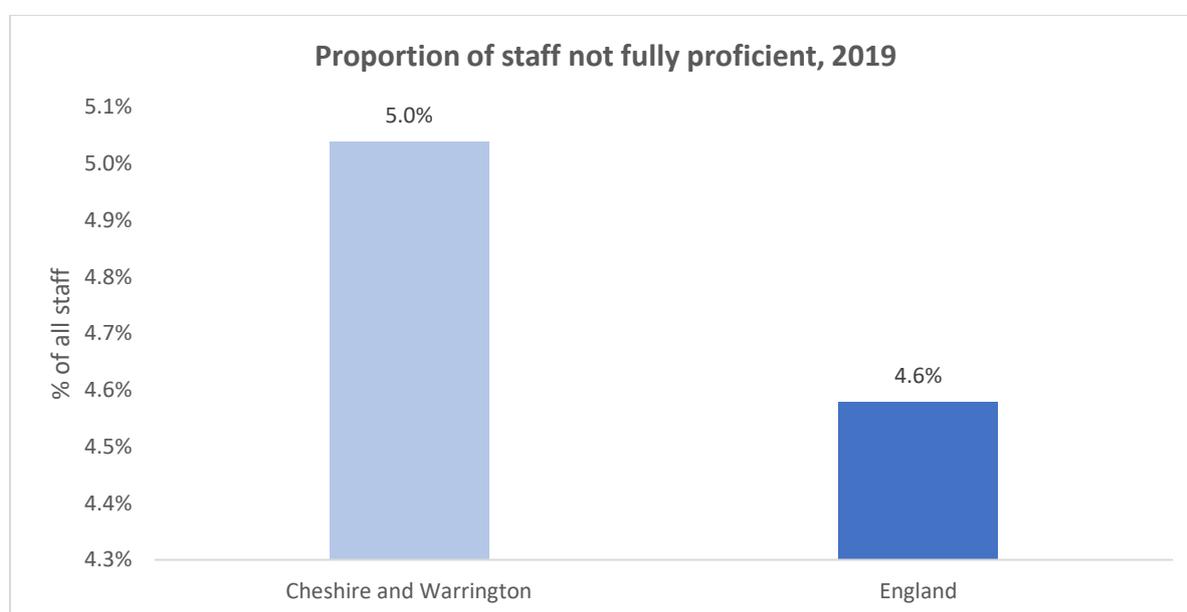
This chapter considers the alignment of the current and future skills offer with the demand for skills from employers and the spatial demand for skills. It has the following sections:

- 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

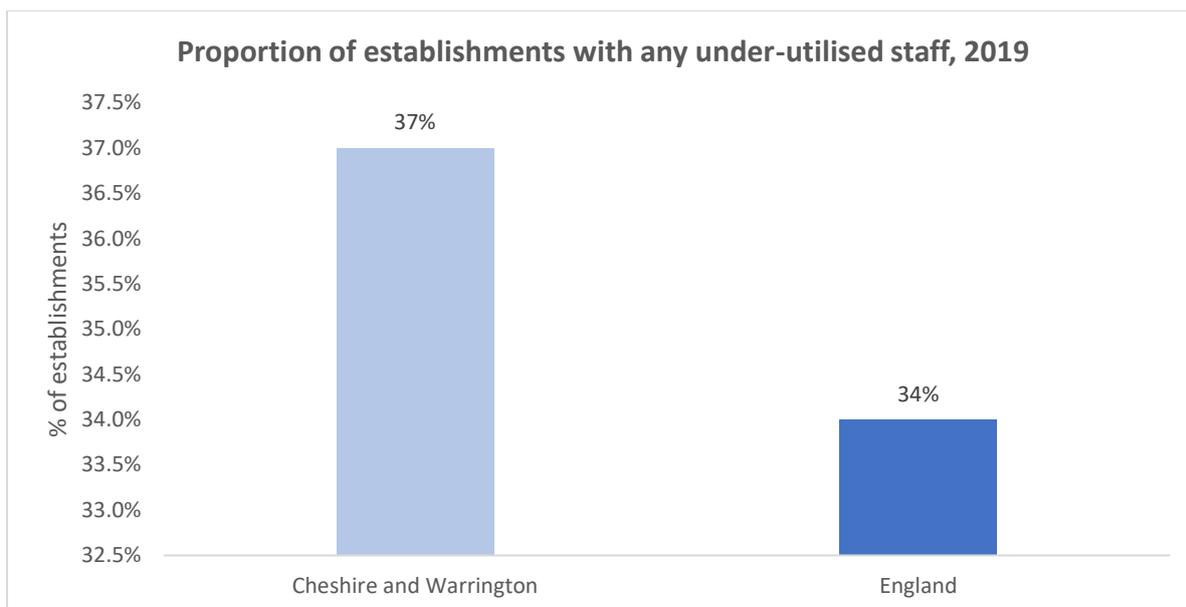
#### 6.1.1 Skills Gaps

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.

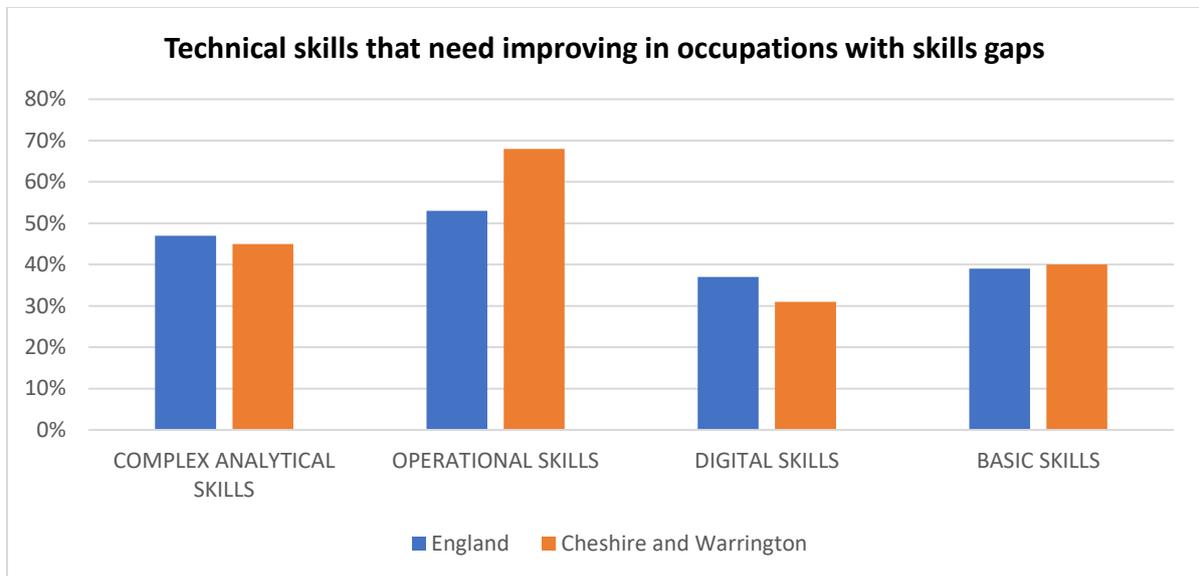


**Source: SAP Core Indicators/ESS 2019**

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.

<b>Technical / practical skills that need improving in occupations with skills gaps</b>		
	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%
<b>Source: ESS 2019</b>		

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.

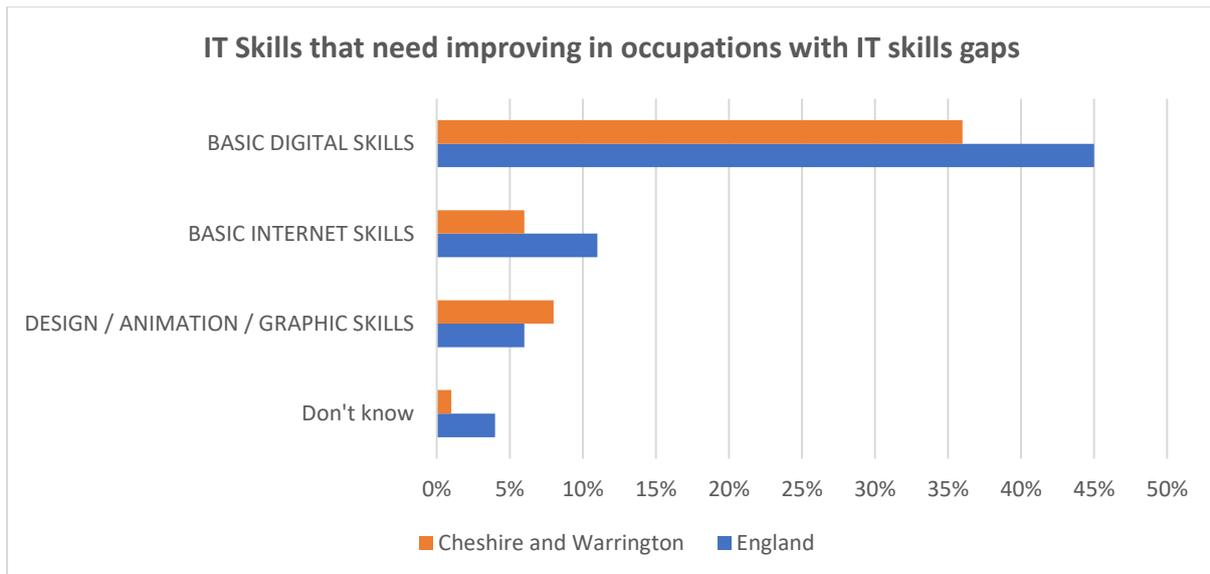


Source: ESS 2019

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%
<b>Source: ESS 2019</b>		

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

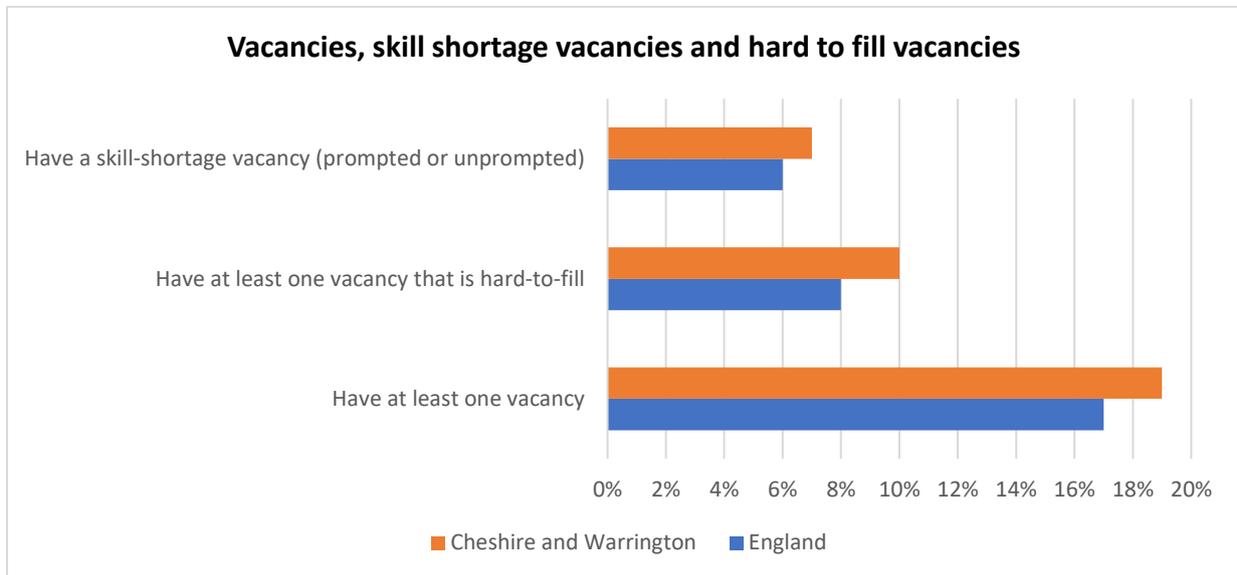
Employers in Cheshire and Warrington were less likely to recruit workers who are non-UK nationals than their English counterparts.

<b>Actions taken to overcome lack of proficiency among staff</b>		
	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**

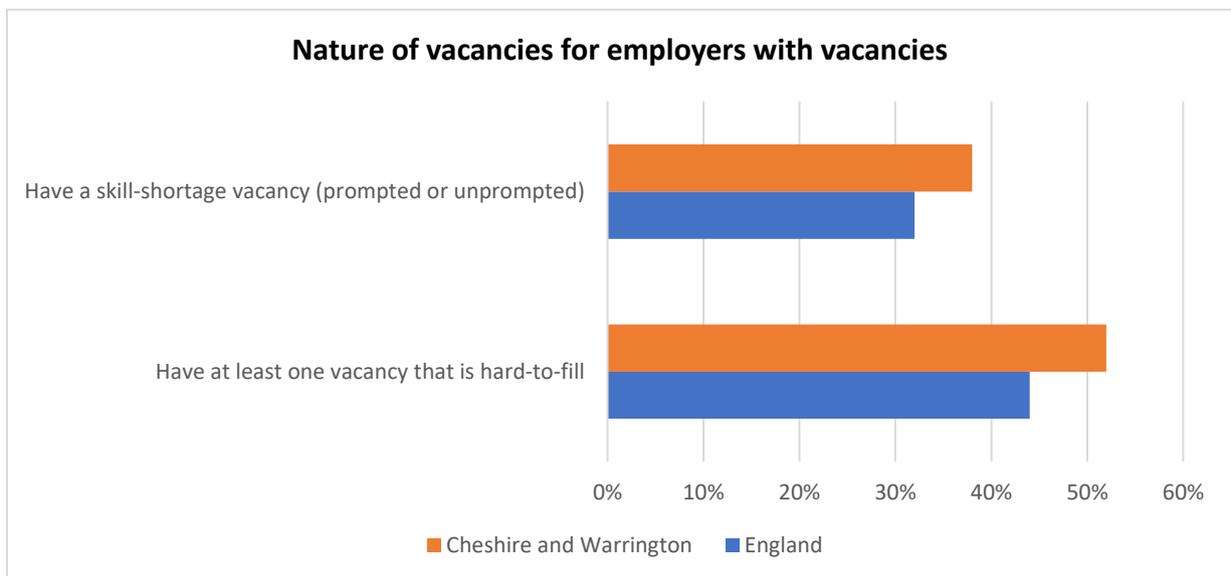
### 6.1.2 Skills Shortage Vacancies

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%)



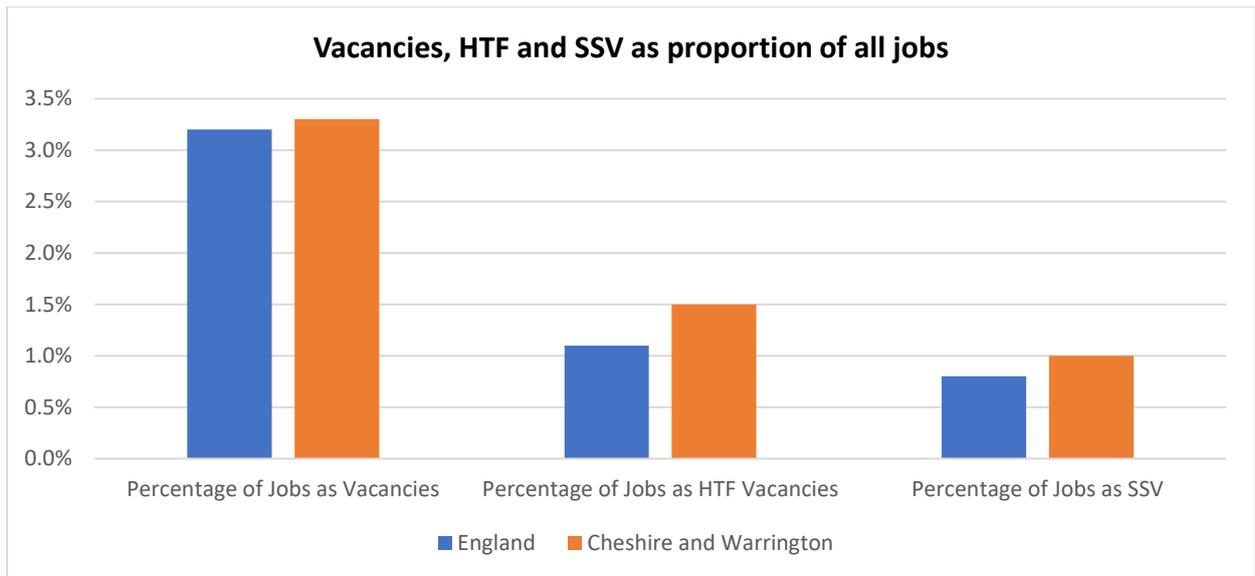
Source: ESS 2019

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).



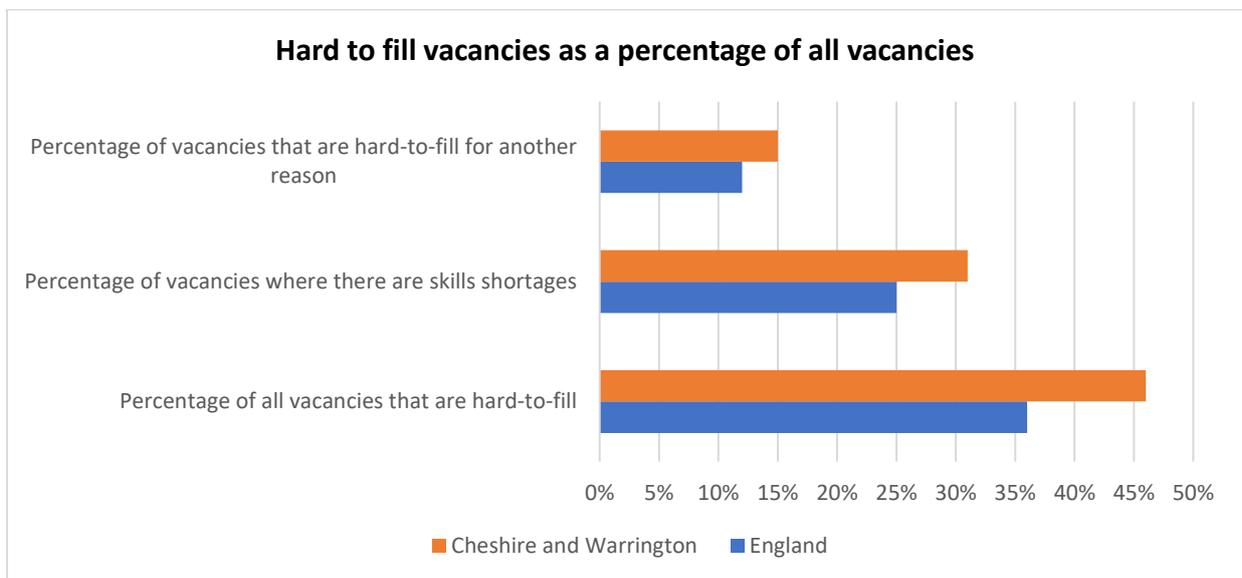
Source: ESS 2019

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.



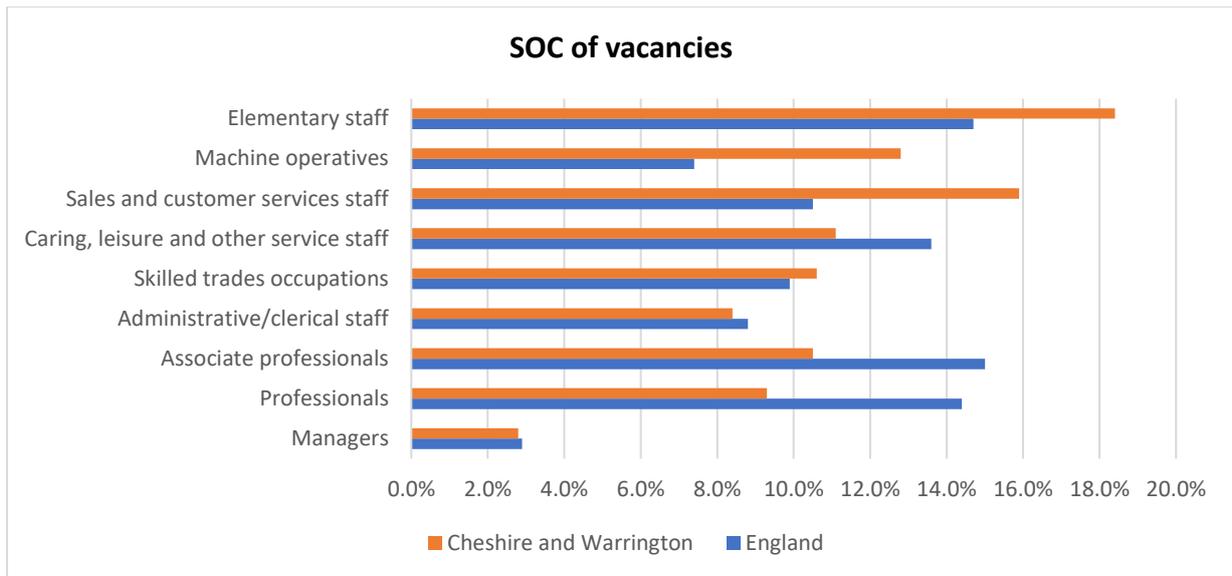
Source: ESS 2019

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%).



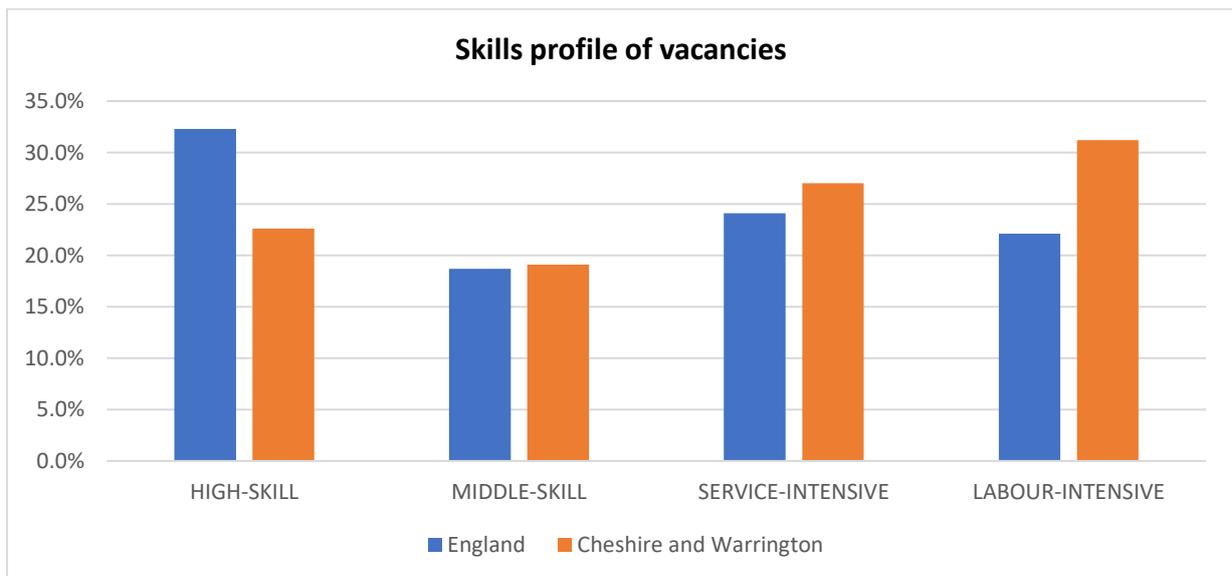
Source: ESS 2019

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.



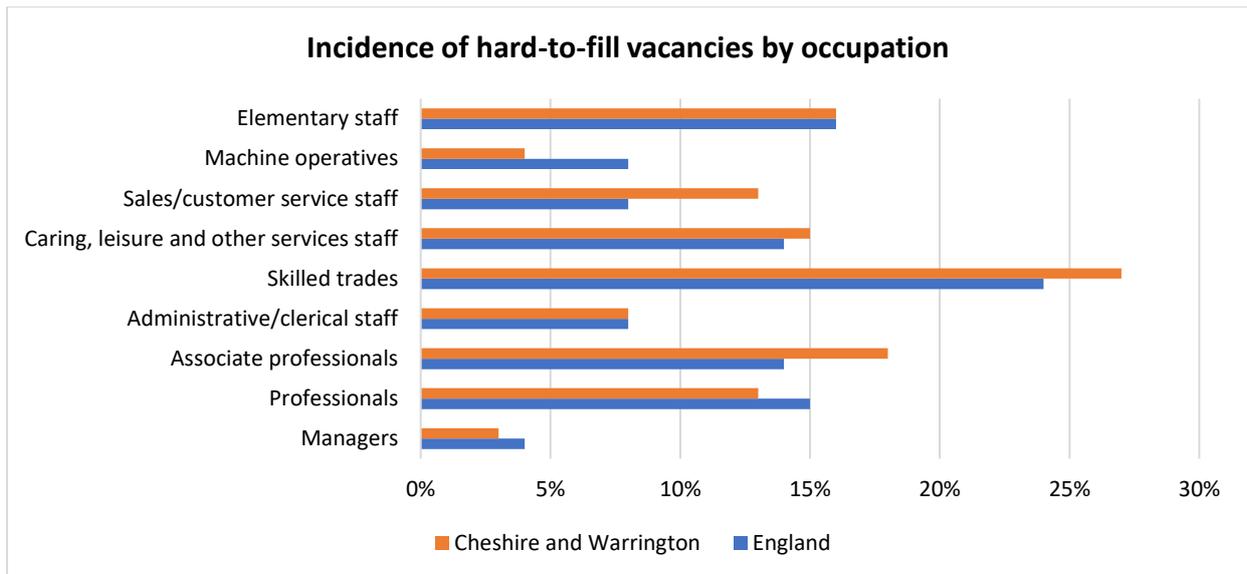
**Source: ESS 2019**

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.

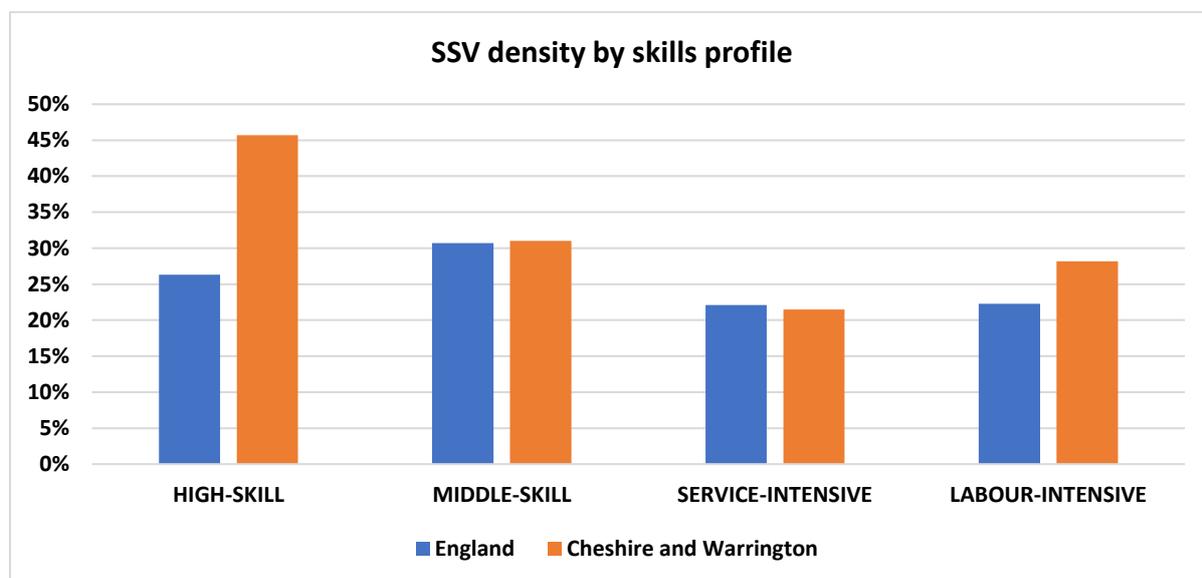
<b>Main causes of having a hard to fill vacancy (unprompted) (employer base)</b>		
	England	Cheshire and Warrington
Low number of applicants with the required skills	39%	41%
Not enough people interested in doing this type of job	21%	23%
Low number of applicants generally	18%	22%
Lack of work experience 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%
<b>Source: ESS 2019, Employer Base</b>		

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.

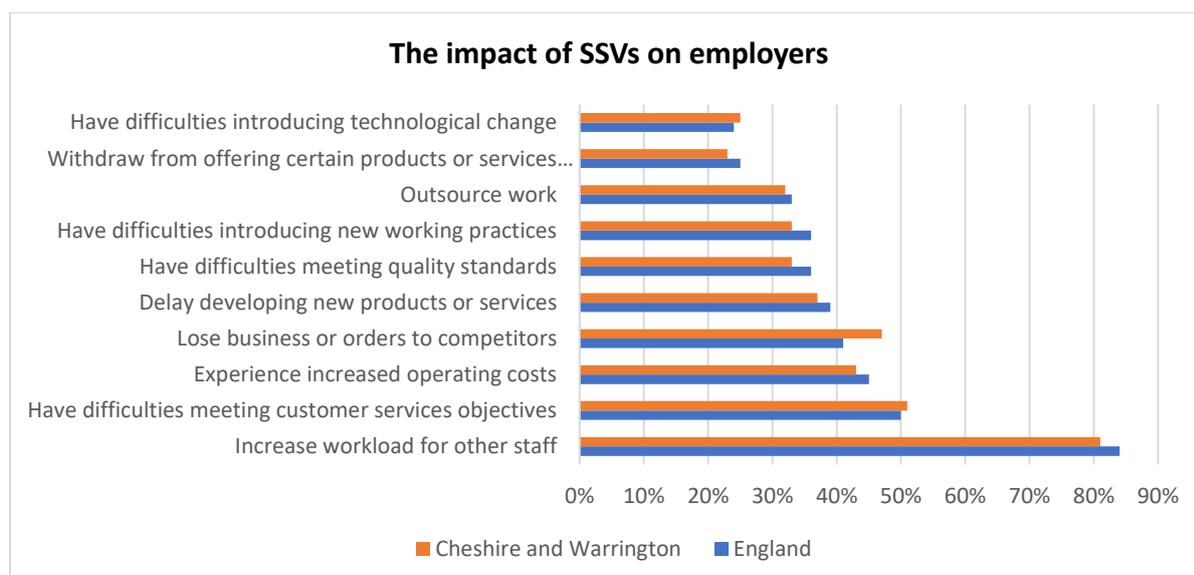


*Source: ESS 2019*

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”.

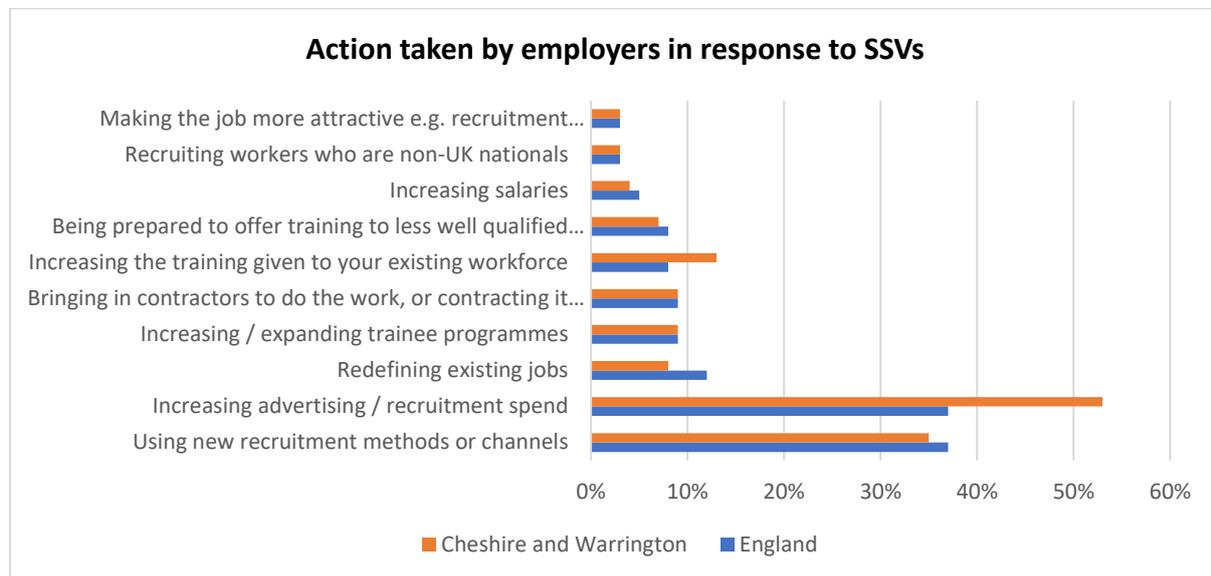
Technical / practical skills found difficult to obtain from applicants (all skill-shortage vacancy base)		
	England	Cheshire and Warrington
Specialist skills or knowledge needed to perform the role	63%	78%
Solving complex problems requiring a solution specific to the situation	39%	34%
Knowledge of products 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%
<i>Source: ESS 2019</i>		

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 Apr 2021 and Nov 2021, where there were more than 200 unique job postings in Cheshire and Warrington. 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:

- 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
- IT Engineers

<b>Hard to fill Vacancies (4-digit SOC Occupations&gt;200 unique postings) in Cheshire and Warrington, Apr-Nov 2021</b>			
Occupation (4-digit SOC)	Job Postings	Posting Intensity	Median Wages
Nurses	7806	13.3	£30,270
Natural and Social Science Professionals n.e.c.	565	12.1	£38,011
Physiotherapists	343	11.8	£28,471
Teaching and Other Educational Professionals n.e.c.	464	11.3	£21,338
Chemical Scientists	293	10.7	£31,161
Electrical Engineers	440	10.3	£50,353
Design and Development Engineers	967	9.2	£40,001
Credit Controllers	403	9.1	£21,417
IT Engineers	425	9.0	£28,138
Business and Related Research Professionals	366	8.9	£32,123
Senior Care Workers	766	8.9	£20,628
Care Workers and Home Carers	5440	8.7	£15,526
Residential, Day and Domiciliary Care Managers and Proprietors	1157	8.6	£34,878
Book-keepers, Payroll Managers and Wages Clerks	4219	8.3	£21,662
IT User Support Technicians	938	8.2	£29,715
Quantity Surveyors	689	8.2	£46,488
Programmers and Software Development Professionals	3194	8.1	£39,622
Metal Working Production and Maintenance Fitters	2310	8.0	£32,704
<b>Source: EMSI Analyst, Dec 2021</b>			

## 6.2 Spatial alignment of skills supply with community demand

### 6.2.1 Alignment of FE Delivery with need and deprived areas

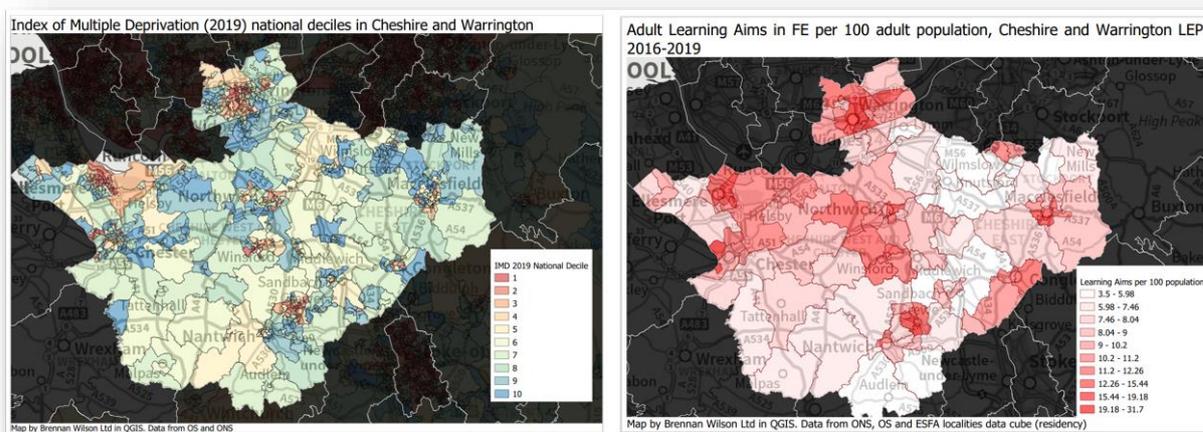
21% of the LEP working age population is qualified below level 2 compared to 38% of FE learners. 41% of FE learners were out of work seeking employment compared with a LEP unemployment rate of 3.4%.<sup>31</sup> This suggests that learning providers in Cheshire and Warrington were effective at targeting activities towards those most in need of skills support.

<b>Prior attainment of adult learners in FE 2016-2019</b>		
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
<b>Source: ESFA Localities data cube (residency)</b>		

<sup>31</sup> The Adult Workforce and Skills in Cheshire and Warrington, Brennan Wilson Ltd, 2020  
<https://cheshireandwarrington.com/media/2kadkil2/report-b-the-adult-workforce-and-skills-delivery-in-cheshire-and-warrington.pdf>

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.

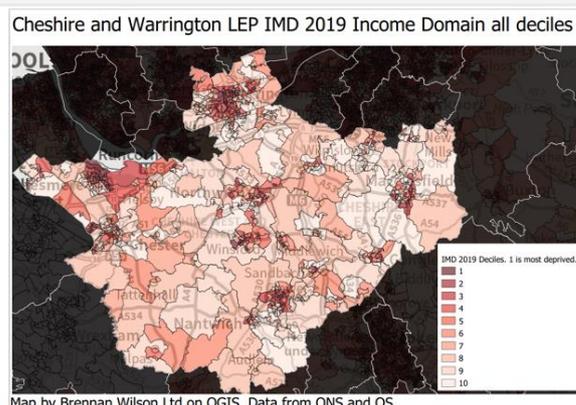
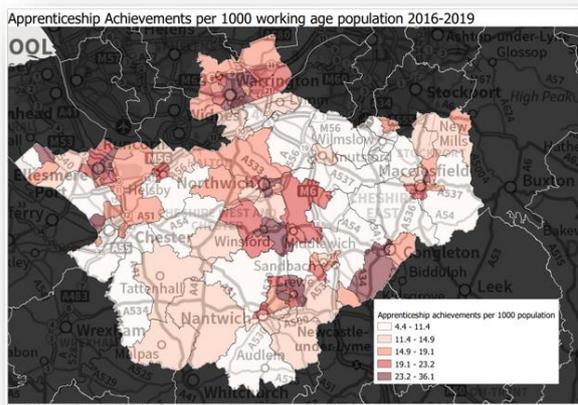
<b>Prior Attainment of Adult Apprentices 2016-2019</b>		
<b>Prior Attainment</b>	<b>Apprentices</b>	<b>Percentage</b>
Below Level 2	4627	29%
Level 2	5988	37%
Level 3	3851	24%
Level 4+	1568	10%
<i>Source: ESFA Localities data cube (residency)</i>		

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.



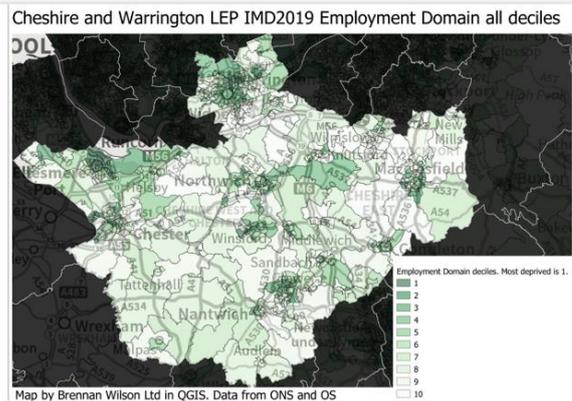
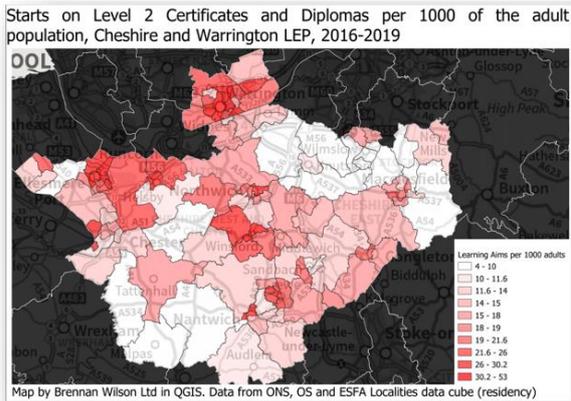
### 6.2.3 FE Level 2 attainment in areas of employment deprivation

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:

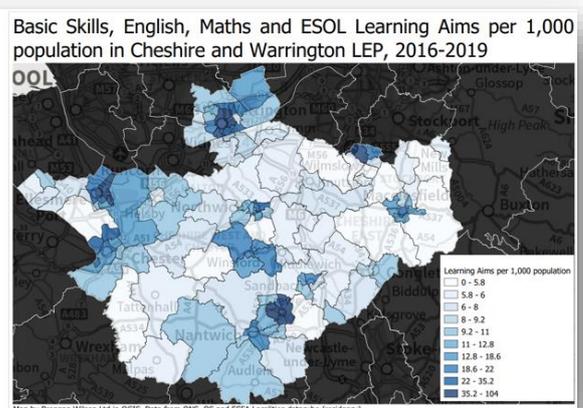
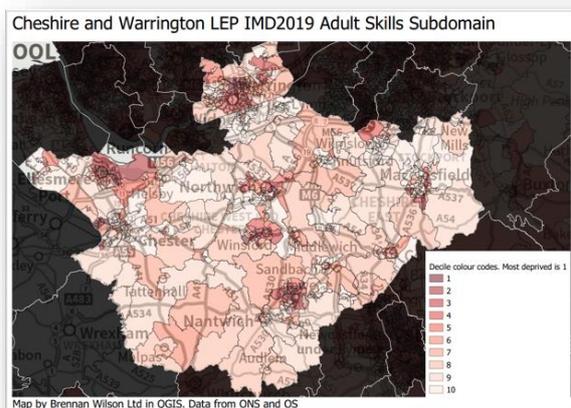
- The LSOA containing Willaston CoE Primary School
- The LSOA containing Old Hall St in Malpas
- The LSOA containing Barclays Technology Centre south of Knutsford
- The LSOA on east of Crewe containing residences bounded by West St and Middlewich Rd and south of the Legends Sports Centre
- The LSOA containing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

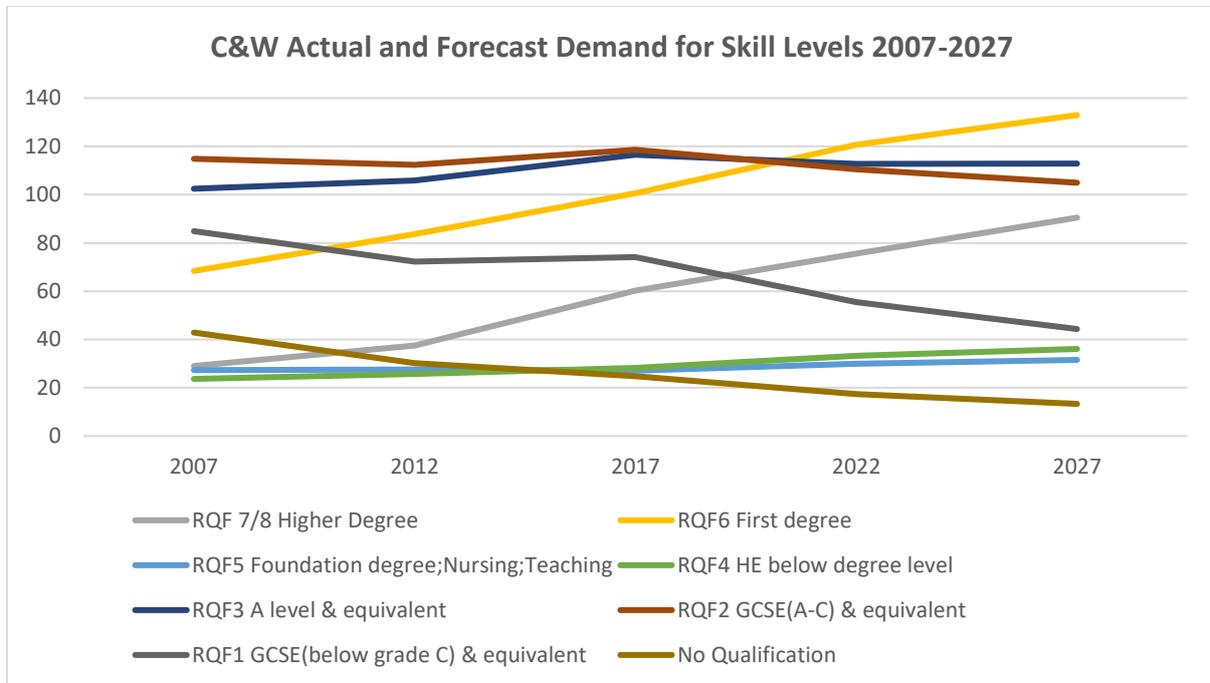
- **Crewe:** the LSOA containing residences bounded by West St and Middlewich Rd and south of the Legends Sports Centre
- **Middlewich:** the LSOA containing residences west of Lewin St and Booth Lane
- **Sandbach:** the LSOA containing residences north and south of the High St
- **Knutsford:** the LSOA 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 graph above refers to the actual and forecast demand for skills at a certain level at particular points in time eg the graph tells us that the IER forecasts demand for people with a first degree will be 133k in 2027 (121k in 2022, 101k in 2017 etc). So, this analysis is related to the stock of skills required at points in time. The difference between the requirement for L3+ skills between 2017 and 2027 is 71k.

However, the above analysis doesn't address the flow of skills out of the workforce. The table below summarises what the IER forecasts say about that for L3+ in C&W (IER Table RD T1)

IER Forecasts for L3+ in C&W 2017-2027	
Demand Type	2017-27 Change
Net Change	71k
Replacement Demand	129k
Total Demand	200k

Source: IER Working Futures 2017-2027, LEP Tables

In other words, IER assessment of Replacement Demand at L3+ is for c13k per annum and total demand of c20k per annum at L3+.

The IER forecast is based on the qualification profile required by employees rather than residents, so the outflows of L3+ qualified residents from population forecasts will not mirror the outflows of L3+ qualified employees in the IER forecasts. In any case, the IER technical manual accompanying their forecasts says “The estimates published in the various reports are therefore based on the heroic assumption that the general patterns of age structure and rates of flow are common across all sectors and regions” ....

With the above caveats, this gives us the following:

1. Estimated annual outflow of L3+ qualified residents (from LFS and ONS population estimates)	7,500
2. Estimated annual inflow of L3 qualified 19-year-olds (from DfE SFR and ONS population estimates)	6,000
3. Estimated annual L3 inflow from FE/Apprenticeships for adults (6k starts in the residency datacube for 2018/19 with a 75% achievement rate assumption)	4,500
4. Estimated net inflow of L3+ qualified into workforce (3+2-1)	3,000
5. IER forecast of annual replacement demand at L3+	13,000
6. Estimated annual shortfall of L3 qualified inflow to meet IER replacement demand (5-4)	10,000
7. IER forecast of annual total demand at L3+	20,000
8. Estimated annual shortfall of L3 qualified inflow to meet IER ‘total demand’ (7-4)	17,000

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+ occupations in Cheshire and Warrington between 2021 and 2028. These estimates are from EMSI and 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 (or above) will be a pre-requisite for all the occupations identified below. All bar two of these occupations deliver a current wage premium over the Cheshire and Warrington median of £27,900.

**Average annual openings > 100 for Level 4+ occupations in Cheshire and Warrington 2021-2028**

SOC	Description	Avg. Annual Openings	Median Wages
2231	Nurses	421	£30,270
3545	Sales Accounts and Business Development Managers	360	£45,487
3562	Human Resources and Industrial Relations Officers	196	£26,822
2315	Primary and Nursery Education Teaching Professionals	194	£32,279
1121	Production Managers and Directors in Manufacturing	184	£38,892
1131	Financial Managers and Directors	179	£48,263
2421	Chartered and Certified Accountants	173	£35,849
2314	Secondary Education Teaching Professionals	168	£38,006
1135	Human Resource Managers and Directors	147	£45,430
2423	Management Consultants and Business Analysts	146	£34,957
2211	Medical Practitioners	138	£58,513
1132	Marketing and Sales Directors	125	£67,217
2424	Business and Financial Project Management Professionals	124	£45,586
3538	Financial Accounts Managers	123	£33,660
3543	Marketing Associate Professionals	115	£27,296
2136	Programmers and Software Development Professionals	112	£39,622
3534	Finance and Investment Analysts and Advisers	110	£32,234

**Source: EMSI Analyst, December 2021**