**Cheshire and Warrington
Local Enterprise Partnership**

Cheshire and Warrington Labour Market Assessment 2023

**Final Report
Brennan Wilson Ltd**

Please Note: This report has been commissioned for the Cheshire and Warrington Local Enterprise Partnership by the Cheshire and Warrington Data and Labour Market Steering Group on behalf of the Employers' Skills and Education Board with support from the Department for Education.

Table of Contents

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 not having the information they require regarding: 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 report seeks to help address information failures 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.

The report 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 several 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 available 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 including skills bootcamps and their investments in specialist equipment and other facilities (including the Skills Development Fund and the Institute of Technology).

- The Pledge and our local schools to provide them 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 with over 20k job vacancies
- 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.
- Local housing associations and other organisations that provide support to people seeking work or to increase their wages

2. EXECUTIVE SUMMARY

As noted in the Introduction above a key issue in the labour market is that of information failure.

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. As the economy enters a downturn, a labour market legacy of the pandemic and other factors is increased long-term unemployment, increased structural economic inactivity and the need for local residents to increase their incomes. It is a key priority to tackle these issues urgently. Failure to do so will lead to increased social exclusion.
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. A key priority should be to support low and declining productivity sectors.
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, as it is for attainment of Level 3 at age 19. This failure to maximise the skills of our young people puts unnecessary constraints on economic growth.
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.

The underpinning evidence for these issues is discussed below.

2.1 Long-term unemployment and structural economic inactivity is an urgent priority

The economy is about to enter a downturn. Gross Domestic product (GDP) per capita is forecast to shrink by 0.2% in 2023. Whilst employment levels are forecast to be relatively stable at 32.8m in 2023 and 2024, LFS unemployment is forecast to increase to 4.1% in 2023 and 4.4% in 2024 - feeding though into increases in claimant unemployment over this time.

This expected economic downturn will be overlaid on weaknesses in the local labour market created by the pandemic and other factors:

- From the onset of the pandemic the economic inactivity rates for England and Cheshire and Warrington have seen a convergence. The Cheshire and Warrington economic inactivity rate for local residents has increased from 16.9% to 20.6%.
- The number of those aged 50-64 reporting as economically inactive has increased by over 40% in the last two years with the percentage of this age group being economically inactive rising from 20.5% at the onset of the pandemic to 29.1%.

- Consistent with this, retirement is now the most common reason given by Labour Force Survey (LFS) respondents for becoming economically inactive with over a quarter of the economically inactive responding in this way. This suggests that over 30,000 people in Cheshire and Warrington are now economically inactive due to retirement compared with less than 20,000 prior to the onset of the pandemic.
- Another way of consider economic inactivity is to analyse the data for those on out of work benefits who are inactive. The volume of those out of work, claiming Universal Credit (UC) with no work requirements, has increased for every age band, with the overall volume increasing from 9.5k to 18.5k. The highest percentage increases being for those aged 35-44 and those aged 55-65 where numbers have more than doubled.
- These increases can be entirely attributed to a growth in the number assigned to this DWP conditionality regime who already have UC claims of 2 years duration or above. The highest volume increase was for those with a claim duration of 3-4 years (3.5k increase). The numbers on this conditionality regime increased by more than tenfold for people whose claim duration exceeded 3 years.
- It is expected that some of those not currently required to seek work by the Department for Work and Pensions (DWP) will be required to do so as the DWP conditionality regime is tightened in 2023.
- The claimant rate in Cheshire and Warrington has risen from 2.3% pre-pandemic to 2.6%. This is both a lower current level and a lower rise than for England.
- However, there have been significant changes in the duration structure of claimant unemployment in Cheshire and Warrington. The numbers required to search for work that have claimed UC for 2 years or less *declined* between Feb 2020 and Jun 2022. By contrast, there have been very significant increases in the volumes that have claimed for over 2 years (doubling to over 4k), with the volume of those having claimed for 5 years or more having increased by over 500% in this time.

If these issues of long-term unemployment and structural economic inactivity are not urgently addressed, there is a high likelihood that the downturn will further worsen both. This will lead to increased levels of social exclusion.

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.

The population is set to age further, increasing the number of retirements and so driving replacement demand in the labour market. It is forecast that 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, Institute for Employment research – IER, 2016). Emerging evidence suggests that the pandemic may have accelerated replacement demand with record numbers of working age economically inactive declaring that they have retired.

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. 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 2022 being in the health sector at Level 4+ (Midwives; Nurses; Dental Nurses; Nursing Auxiliaries and Assistants; and Counsellors).

The estimated annual outflow of L3+ qualified residents (from LFS and Government population estimates) is 7,500. The estimated annual inflow of L3 qualified 19-year-olds is 6,000. The estimated annual L3 inflow from Further Education/Apprenticeships for adults resident in Cheshire and Warrington 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.

Skills are a prerequisite to productivity. This shortfall in higher level skills may, in part, explain why since the financial crash output growth has been achieved in the absence of productivity growth in Cheshire and Warrington. Without improving productivity, output will not be able to grow into the longer term. There remain considerable differences in productivity across the area, where GVA per hour worked is £12 higher in Cheshire East than in Warrington.

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

It was reported in the (pre-pandemic) Employer Skills Survey 2019 (ESS) 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). This is the most recent data.

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). 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.

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).

Specialised skills frequently sought by employers in Cheshire and Warrington tended to relate to finance, ICT and health/care. The three most sought after common skills were Communications, Management, and Customer Service.

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-focussed support to individuals to longer-term high-level skills programmes. 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. In terms of green jobs from January 2022 to January 2023 there were 667 unique postings green jobs, 158 in Cheshire East, 241 in Cheshire West and 268 in Warrington.

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 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.

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 free school meals (FSM) and non-FSM pupils that achieved the expected standard in reading, writing and maths at Key Stage 2 in 2018/19 had an attainment gap in Cheshire East, Cheshire West and Chester, and Warrington of 27 ppt, 26 ppt, and 27 ppt respectively, which was larger than that for England (21 ppt). This feeds through to the attainment of Level 2 at age 16 between those eligible and not eligible for free school meals (FSM) - this gap has been larger than England in all three local authorities since this data series started in 2004/5.

Generally higher proportions of FSM pupils secure a sustained destination in FE than non-FSM pupils and, conversely lower proportions of FSM pupils secure a destination in a school sixth form than non-FSM pupils.

For the last decade the gap between the proportion of non-FSM KS4 pupils sustaining a destination in education and the proportion of FSM pupils doing so has been larger than England for all three Cheshire and Warrington local authorities.

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 larger than England in the three Cheshire and Warrington local authorities every year since 2004/5. 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.

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. For secondary schools in Cheshire and Warrington in areas with the highest

IDACI measures, only 44% of places are graded as good or outstanding by Ofsted, compared with 73% for England.

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.

In 2021/22 four parliamentary constituencies in Cheshire and Warrington had average Attainment 8 scores below the English level. They were Ellesmere Port and Neston, Crewe and Nantwich, Eddisbury, and Warrington North.

The neighbourhoods with the lowest levels of young HE progression are concentrated in Ellesmere Port, Warrington and Crewe.

2.6 There are significant gender disparities in learning delivery

There are significant gender disparities in FE and apprenticeships undertaken by both adults and young people. There are high proportions of female starts in Retail and Commercial Enterprises, and in Health, Public Services and Care. Conversely, there are high proportions of male starts in Engineering and Manufacturing Technologies; Construction and the Built Environment; and Information and Communications Technology. In effect, these learning choices close off opportunities to half the population in many occupational areas. It is likely that these learning choices feed into the significant difference in male/female resident median weekly wages.

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[1]

The usual resident population in Cheshire and Warrington has increased from 902,000 in 2011 to 967,000 in 2021, an increase of 7.2%. This compares with a population growth of 6.3% for England and Wales in the same period.

Usual resident population in Cheshire and Warrington and its local authorities, 2011 and 2021				
	2011	2021	% change	Volume change
Warrington	202228	210900	4.3	8672
Cheshire East	370127	398800	7.7	28673
Cheshire West and Chester	329608	357200	8.4	27592
Cheshire and Warrington	901963	966900	7.2	64937
Source: Census 2021, ONS				

This population growth has not been uniformly distributed across the three local authorities. Cheshire East saw a population growth of 28,673 (7.7%), Cheshire West and Chester's population grew by 27,592 (8.4%) and Warrington's was 8,672 (4.3%).
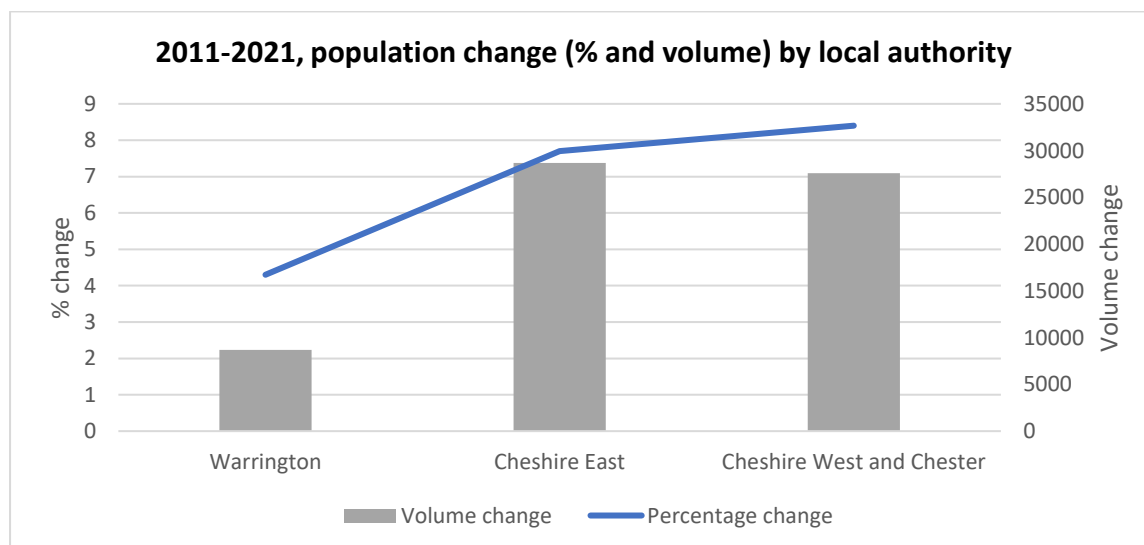
Source: Census 2021, ONS

---

[1] Data in this section is largely drawn from the 2021 Census and with population forecasts being taken Lightcast Analyst

As a proportion of total population, when compared with England, all three local authorities have lower populations aged under 15, lower working age populations and higher populations aged over 65, although Warrington is closer to the England proportions than the other local authorities.

Population by age in 2021, by local authority

Source: Census 2021, ONS
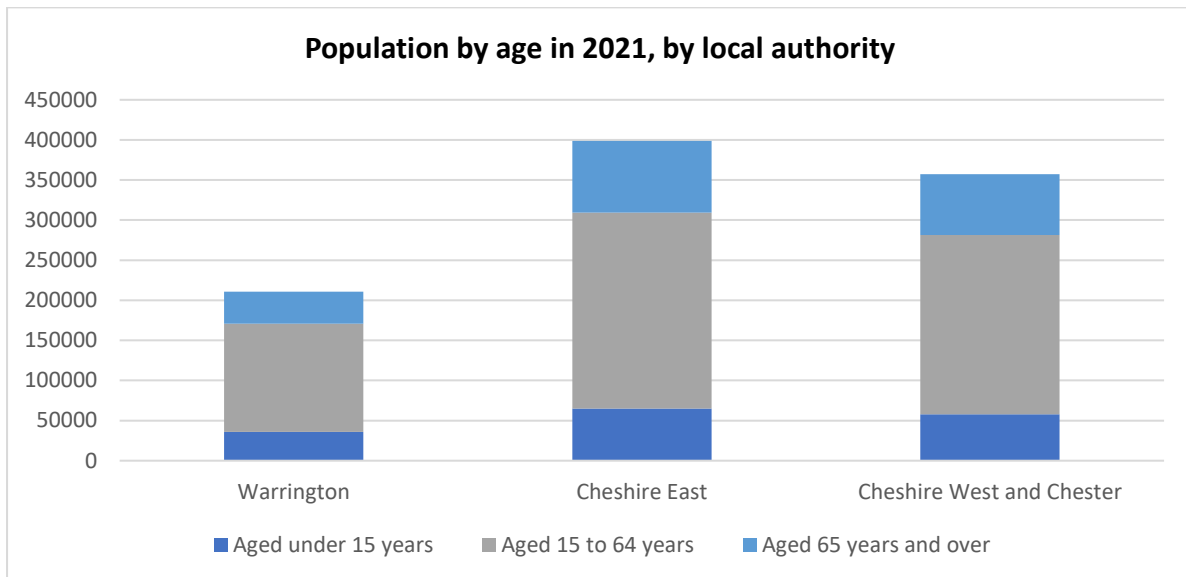
Population age (%), England and C&W local authorities
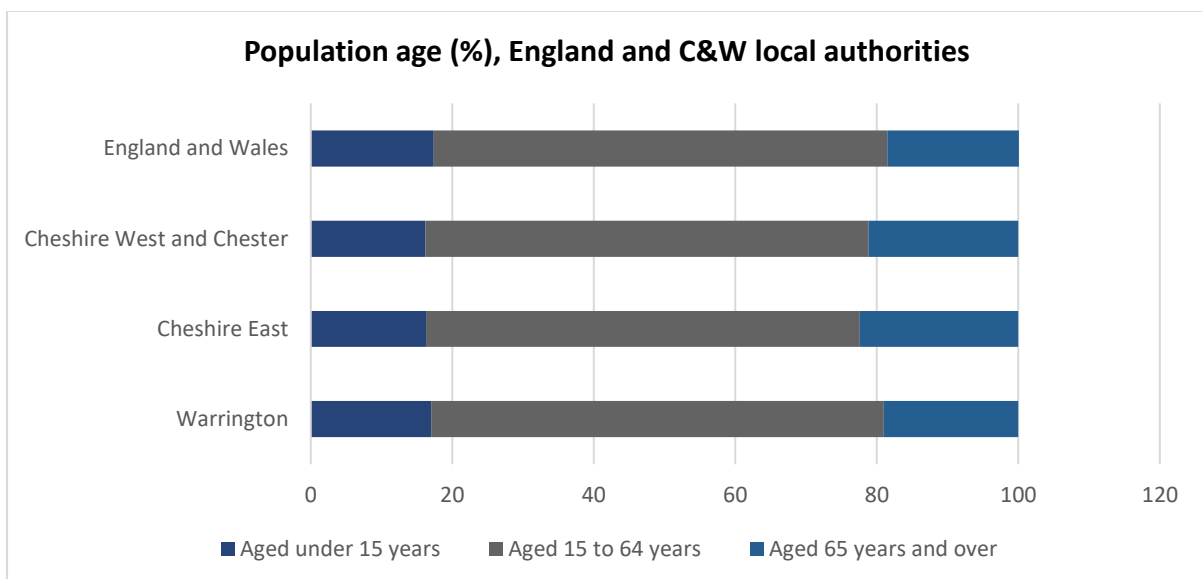
Source: Census 2021, ONS

Drilling down into the data reveals that Cheshire East and Cheshire West and Chester both have a lower proportion of the population than is the case for England for every 5-year age band from age 0-4 to age 40-44 and a higher proportion than England for every 5 year age ban from age 45-49 to age 90 and over.

C&W LA populations 5 year age band percentage compared with England

Age bands (top to bottom): Aged 4 and under…, Aged 5 to 9…, Aged 10 to 14…, Aged 15 to 19…, Aged 20 to 24…, Aged 25 to 29…, Aged 30 to 34…, Aged 35 to 39…, Aged 40 to 44…, Aged 45 to 49…, Aged 50 to 54…, Aged 55 to 59…, Aged 60 to 64…, Aged 65 to 69…, Aged 70 to 74…, Aged 75 to 79…, Aged 80 to 84…, Aged 85 to 89…, Aged 90 and over…

Legend: ■ Cheshire East ■ Cheshire West and Chester ■ Warrington

Source: Census 2021, ONS

The current age profile of the Cheshire and Warrington population being older than that for England is forecast to continue. In particular, by 2030, the population in Cheshire and Warrington aged 60-69 and aged over 80 is forecast to grow at a faster rate than for England.

Forecast % population change by 5 year age band, England and Cheshire and Warrington, 2022-2030
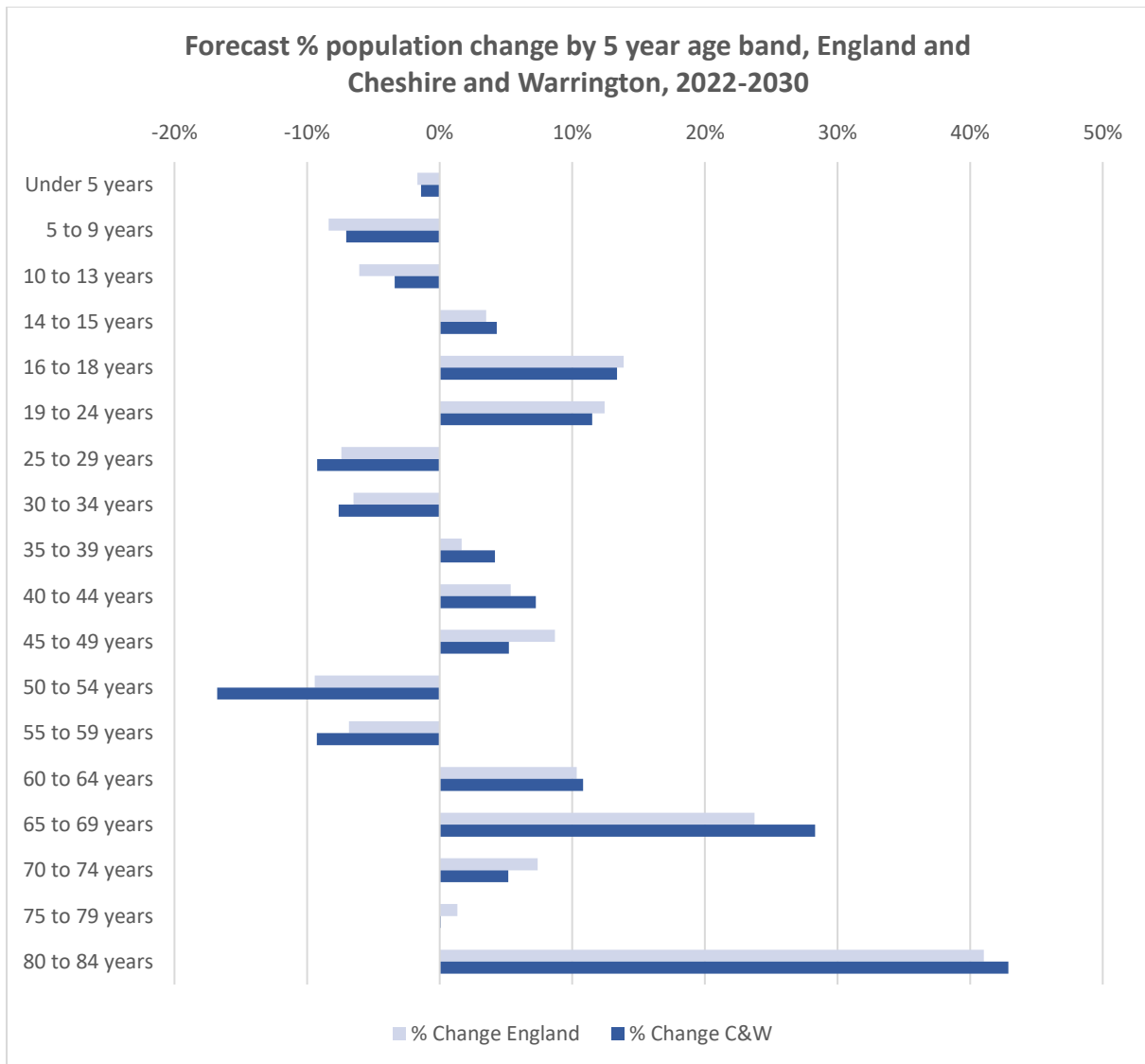
Source: Lightcast analyst

3.2 Economic activity, employment, unemployment, and benefits[2]

3.2.1 Economic activity, employment and unemployment overview

The table below presents data for economic activity, employment and unemployment for Cheshire and Warrington, the three local authorities, the North West and England. This shows that economic activity in Cheshire and Warrington was slightly below that for England (78.4% compared with 78.8%) with the economic activity rates for Cheshire East and Cheshire West and Chester (76.6% and 78.3% respectively) both being below the English rate and Warrington being higher (81.7%). The employment rate for Cheshire and Warrington was slightly higher than for England and the self-employment rate was slightly lower. The unemployment rate was lower in Cheshire and Warrington than in England.

---

[2] This subsection draws data from two key sources: 1) the Labour Force Survey (LFS)/Annual Population Survey (APS) which provides survey based estimates for employment rate, economic activity/inactivity, unemployment etc; 2) StatXplore which provides data on claimants and benefits based on DWP administrative data.

Employment and unemployment (Jul 2021-Jun 2022)							
	Cheshire and Warrington	Cheshire and Warrington (%)	Cheshire East (%)	Cheshire West and Chester (%)	Warrington (%)	NW (%)	England (%)
All People							
Economically Active†	451,500	78.4	76.6	78.3	81.7	76.6	78.8
In Employment†	437,400	76	73.4	76.8	79.3	73.3	75.7
Employees†	379,300	66.6	63.1	67.1	71.9	65.2	66.1
Self Employed†	56,000	9.2	9.9	9.6	7.4	7.8	9.4
Unemployed§	14,100	3.1	3.5	3.6	3.4	4.2	3.9
Males							
Economically Active†	234,100	82	80.4	82	84.9	80.9	82.8
In Employment†	226,600	79.5	77.3	79.9	82.4	77.1	79.5
Employees†	192,900	68.8	66.8	68.4	72.8	66.3	67.2
Self Employed†	31,600	10.2	9.7	11.2	9.6	10.5	12
Unemployed§	7,500	3.2	#	#	#	4.6	3.9
Females							
Economically Active†	217,400	74.9	73	74.8	78.4	72.3	74.9
In Employment†	210,800	72.6	69.6	73.8	76.2	69.5	72
Employees†	186,400	64.4	59.5	65.8	70.9	64.2	64.9
Self Employed†	24,400	8.2	10	8	5.3	5.1	6.8
Unemployed§	6,600	3	#	!	#	3.8	3.8
Source: ONS annual population survey, † - numbers are for those aged 16 and over, % are for those aged 16-64							

3.2.2   Economic Activity Rate

The economic activity rate measures the proportion of the working age population (16 to 64) who are active or potentially active members of the labour market. Pre-pandemic economic activity for Cheshire and Warrington had been consistently higher than for England. From the onset of the pandemic the economic activity rates for England and Cheshire and Warrington have seen a convergence, with the Apr 21 – Mar 22 economic activity rate for Cheshire and Warrington, at 79.4% being slightly higher than the English rate of 78.8% (and slightly lower than for England in the previous measurement period).

In the period from the onset of the pandemic, the economic activity rate in Warrington and Cheshire West and Chester has generally been above that of England whilst that for Cheshire East has generally been below England.

Economic Activity in England, C&W and its local authorities, 2018-2022
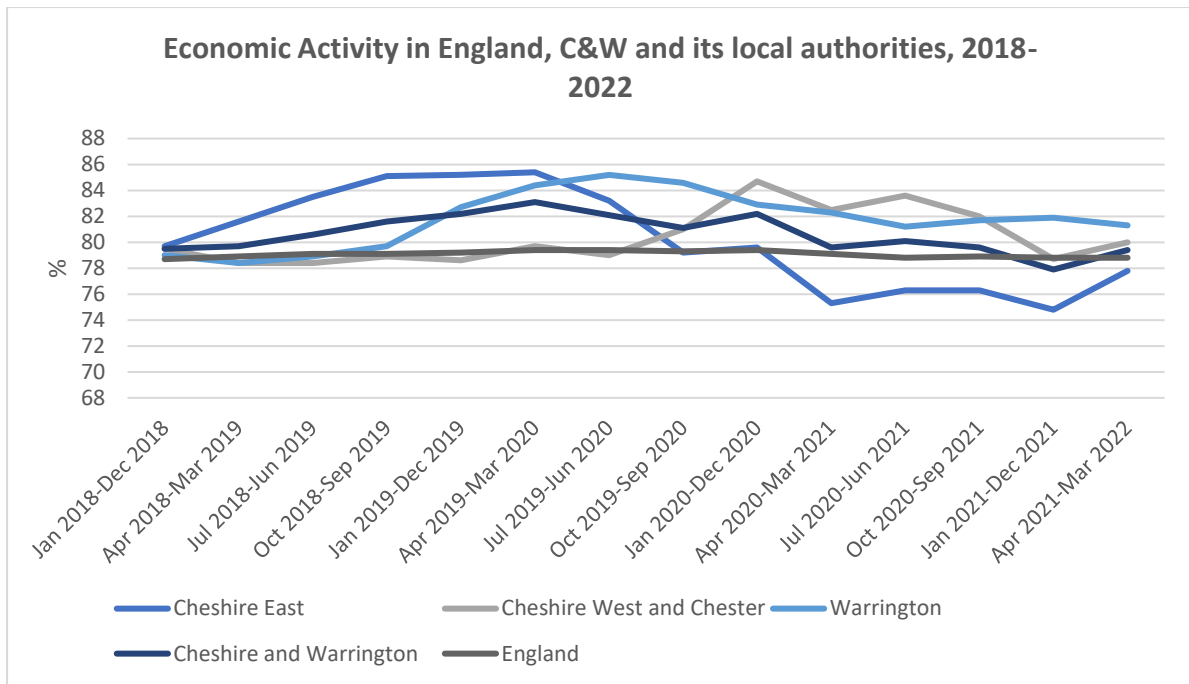
Source: ONS, annual population survey

3.2.3   Employment Rate

The headline employment rate is calculated by dividing the employment level for those aged from 16 to 64 by the population for that age group. The employment rate in Cheshire and Warrington has remained consistently higher than that for England with the Apr 21 – Mar 22 employment rate at 76.8% being 1.4% higher than the rate for England (75.4%). The employment rates in Warrington and Cheshire West and Chester have also been consistently higher than for England. However, whilst the pre-pandemic employment rate for Cheshire East was above England pre-pandemic it has now been reported as below the English level for five consecutive quarters and was 74.1% in Apr 21 – Mar 22.

Employment rate in England, Cheshire and Warrington and its local authorities, 2018-2022
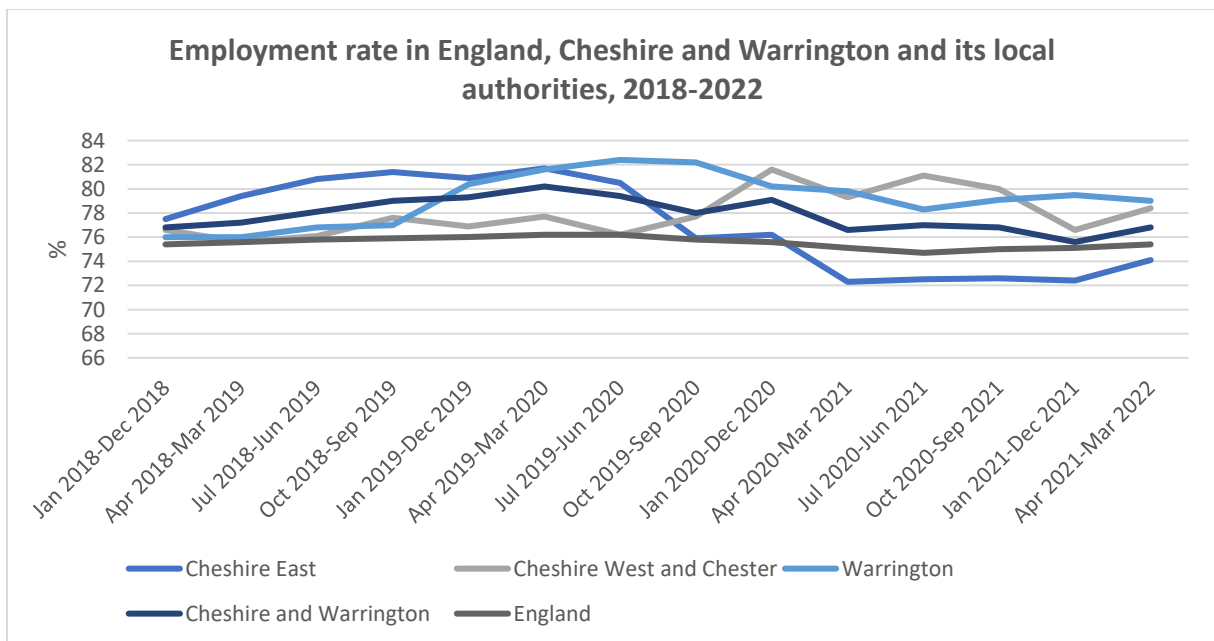
Source: ONS, annual population survey

As might be expected the profile of the percentage of those aged 16-64 who are employees is very similar to the profile of the employment rate, with the percentages for Cheshire and Warrington, Warrington and Cheshire West and Chester being consistently above that for England and the percentage for Cheshire East being below the English level for the last five consecutive quarters.

Percentage of those aged 16-64 who are employees, England, C&W and its local authorities, 2018-2022

Legend: Cheshire East, Cheshire West and Chester, Warrington, Cheshire and Warrington, England
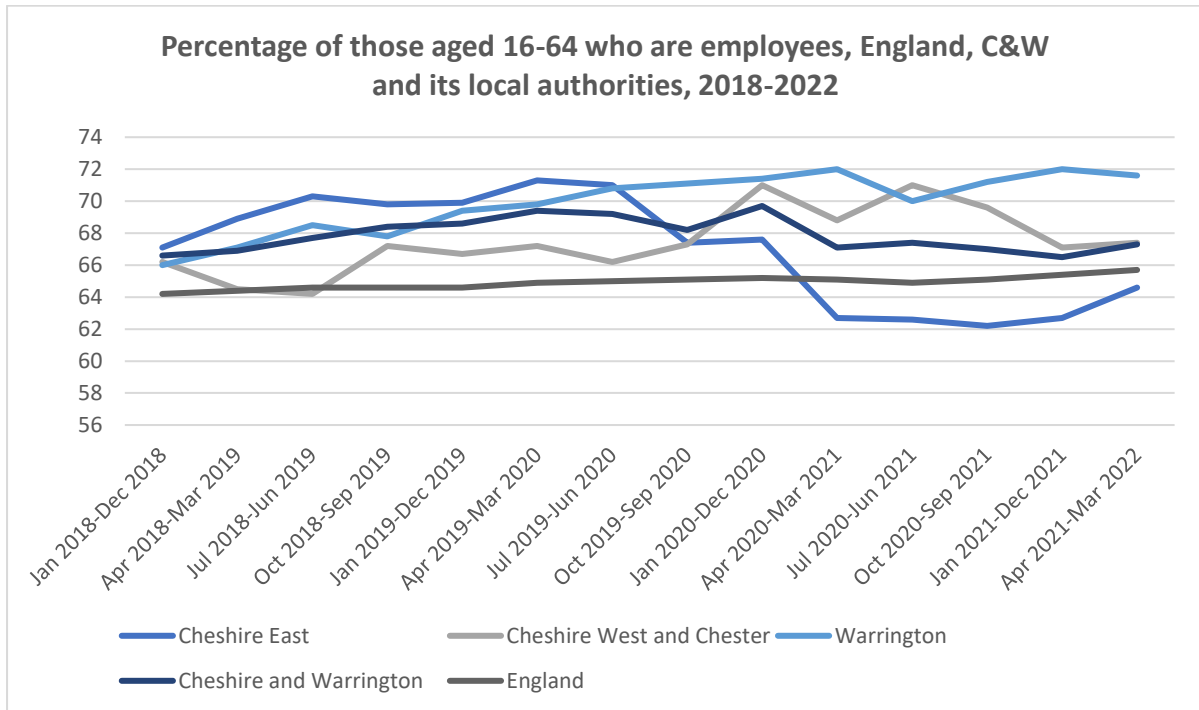
Source: ONS, annual population survey

By contrast the percentage of those aged 16-64 who are self-employed has generally been lower in Cheshire and Warrington than for England, although the most recently reported data (Apr 21 – Mar 22) saw a lowering of the gap between the two to 0.1% (9.5% England, 9.4% Cheshire and Warrington).

Percentage of 16-64 who are self employed, England, C&W and its local authorities, 2018-2022
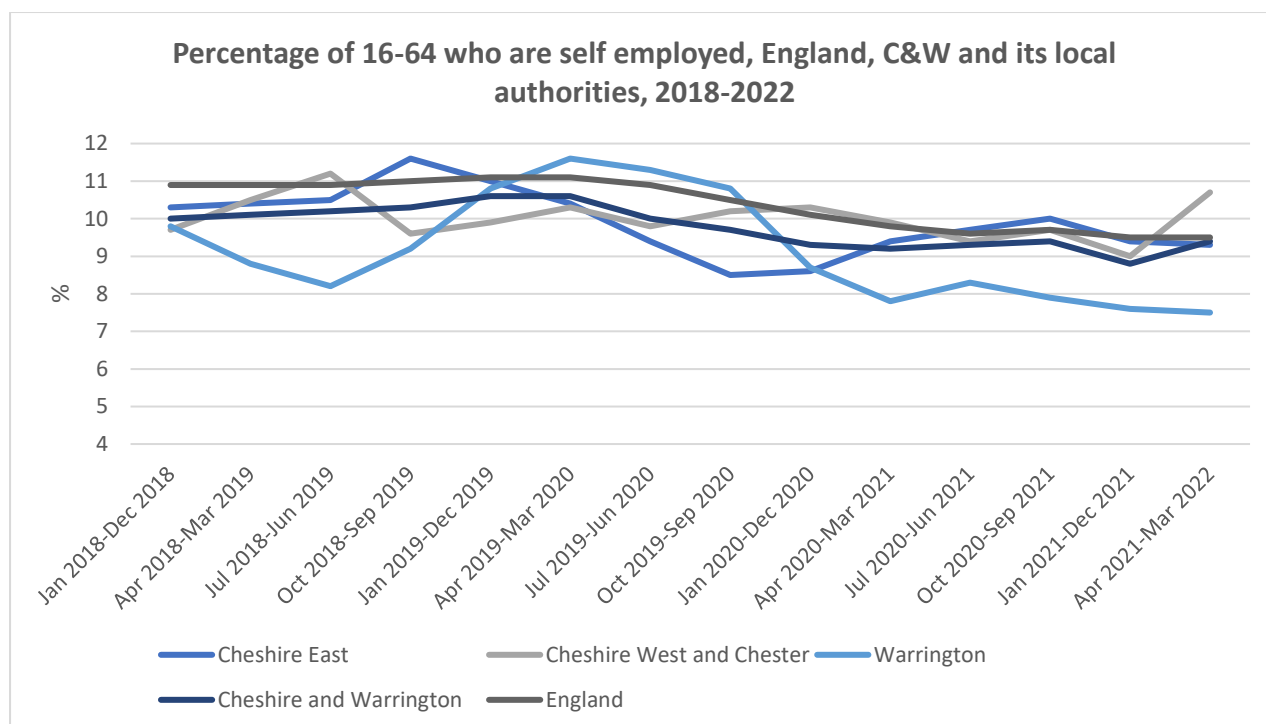
Source: ONS, annual population survey

3.2.4   Economic inactivity

Economic inactivity is defined as those who are not working, have not been looking for work within the last 4 weeks or who are unable to start work within the next 2 weeks. The economic inactivity rate is the mirror image of the economic activity rate reported above. From the onset of the pandemic the economic inactivity rates for England and Cheshire and Warrington have seen a convergence, with the Apr 21 – Mar 22 economic activity rate for Cheshire and Warrington, at 20.6% being slightly lower than the English rate of 21.2% (and slightly higher than for England in the previous measurement period). Since the first lockdown, the Cheshire and Warrington economic inactivity rate has increased from 16.9% to 20.6%. In the period from the onset of the pandemic, the economic inactivity rate in Warrington and Cheshire West and Chester has generally been below that of England whilst that for Cheshire East has generally been above England.

Economic inactivity rate (16-64), England, C&W and its local authorities, 2018-2022
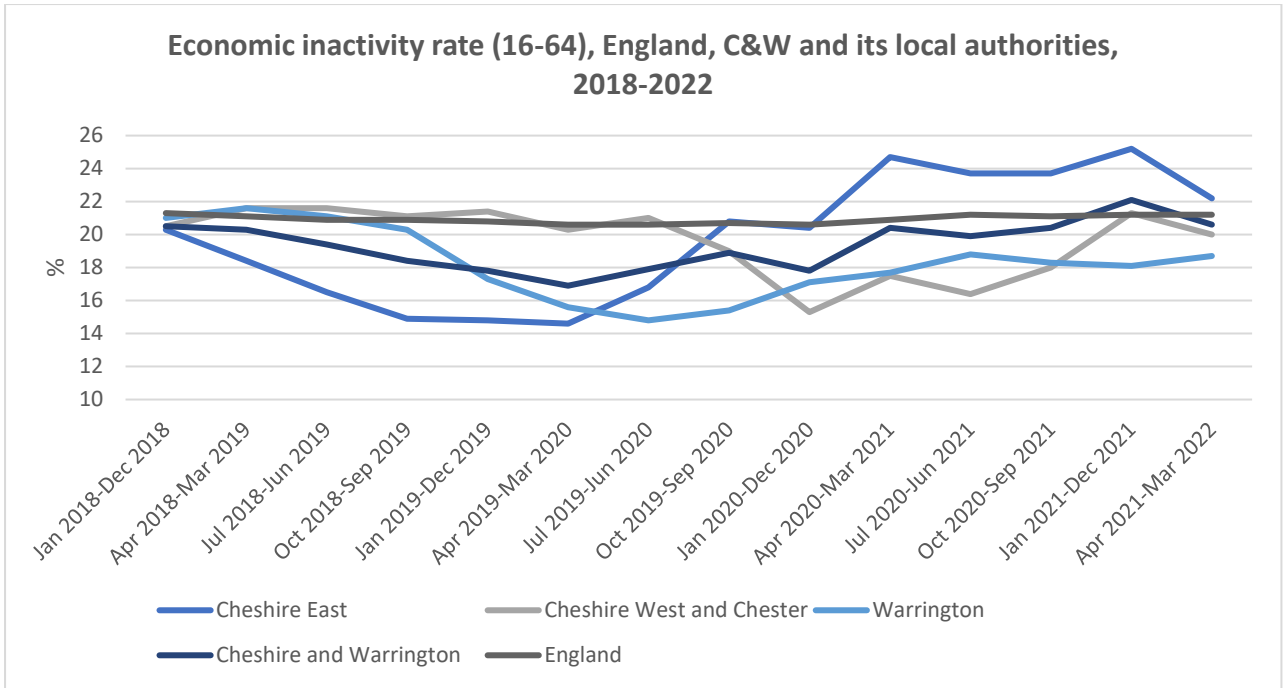
Source: ONS, annual population survey [from Nomis on 22 August 2022]

The percentage of the economically inactive in Cheshire and Warrington that want a job has generally, over time, been lower than for England in recent years although there has been a convergence with England over the last four quarters - driven by increases in this percentage in both Warrington and Cheshire East.

% of economically inactive that want a job, England, C&W and its local authorities, 2018-22
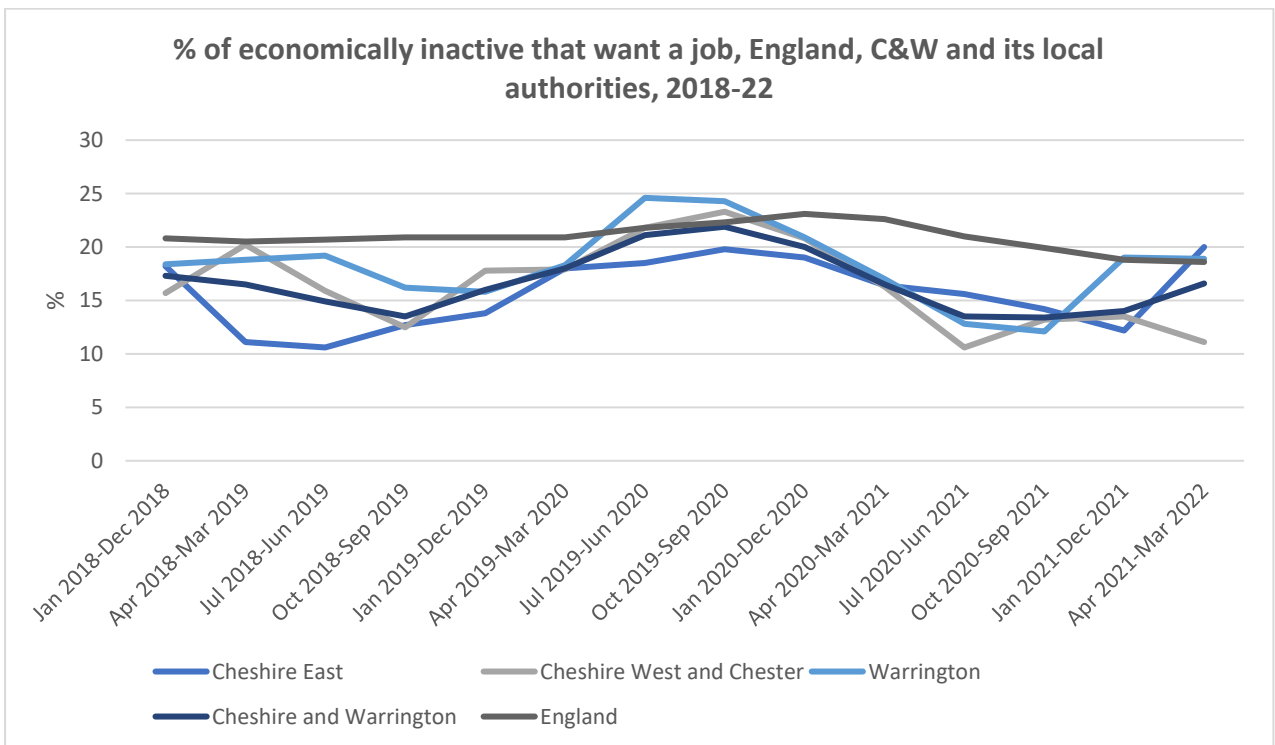
Source: ONS, annual population survey

The number of those aged 50-64 reporting as economically inactive has increased by over 40% in the last two years (between Apr 19-Mar 20 and Apr 21 – Mar 22) with the percentage of this age group being economically inactive rising from 20.5% at the onset of the pandemic to 29.1% for Apr 2021-Mar 2022. The economic inactivity of the 16–24-year-old age group also increased slightly in this time (37.7% to 38.9%). These two age groups were the primary drivers in the overall increase in economic inactivity in this time.

Economic inactivity by age, Cheshire and Warrington, 2018-2022
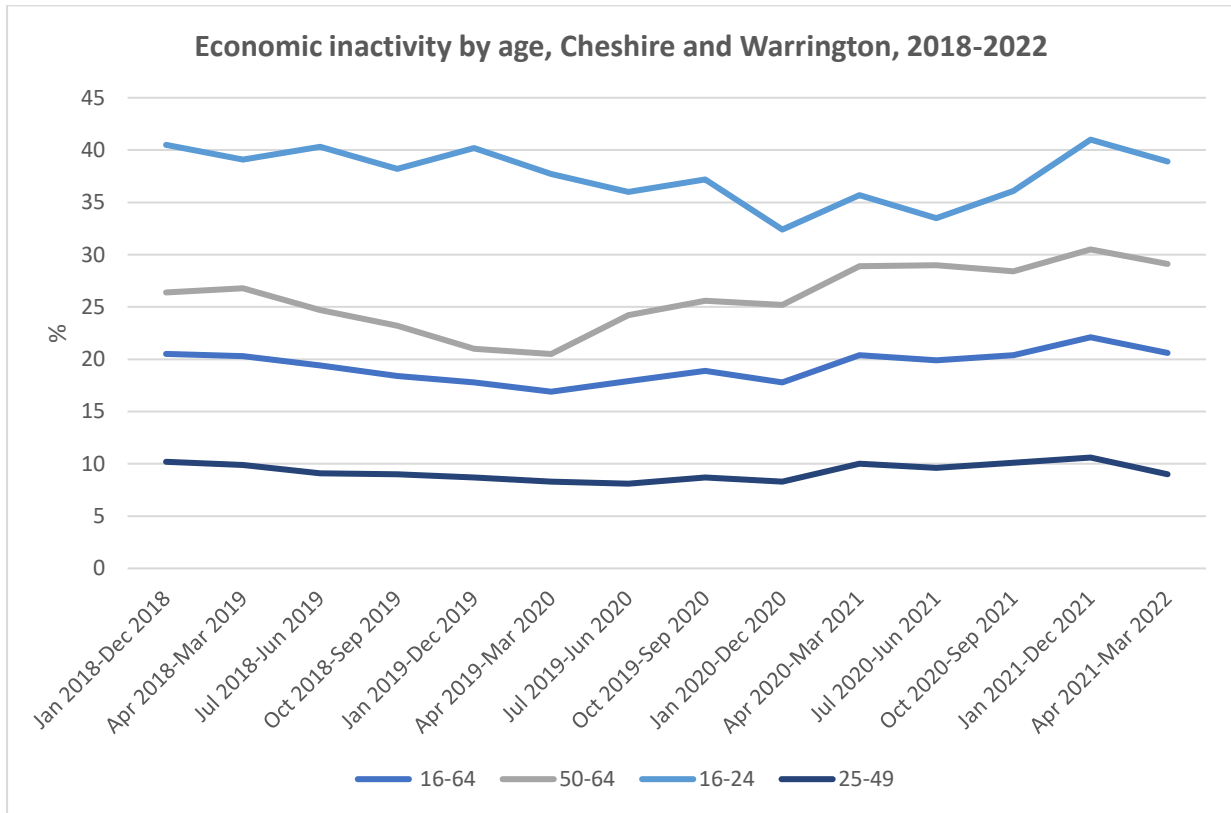
Source: ONS, annual population survey

Consistent with this, retirement is now the most common reason given by respondents for becoming economically inactive with over a quarter of the economically inactive responding in this way. This data suggests that over 30,000 people in Cheshire and Warrington are now economically inactive due to retirement compared with less than 20,000 prior to the onset of the pandemic. The second most common reason given for being economically inactive is being a student which is also consistent with the increase in economic inactivity of 16–24-year-olds reported above.

Reasons for economic inactivity in Cheshire and Warrington, 2018-2022

Legend:
— % of economically inactive student
— % of economically inactive looking after family/home
— % of economically inactive long-term sick
— % of economically inactive retired
— % of economically inactive other
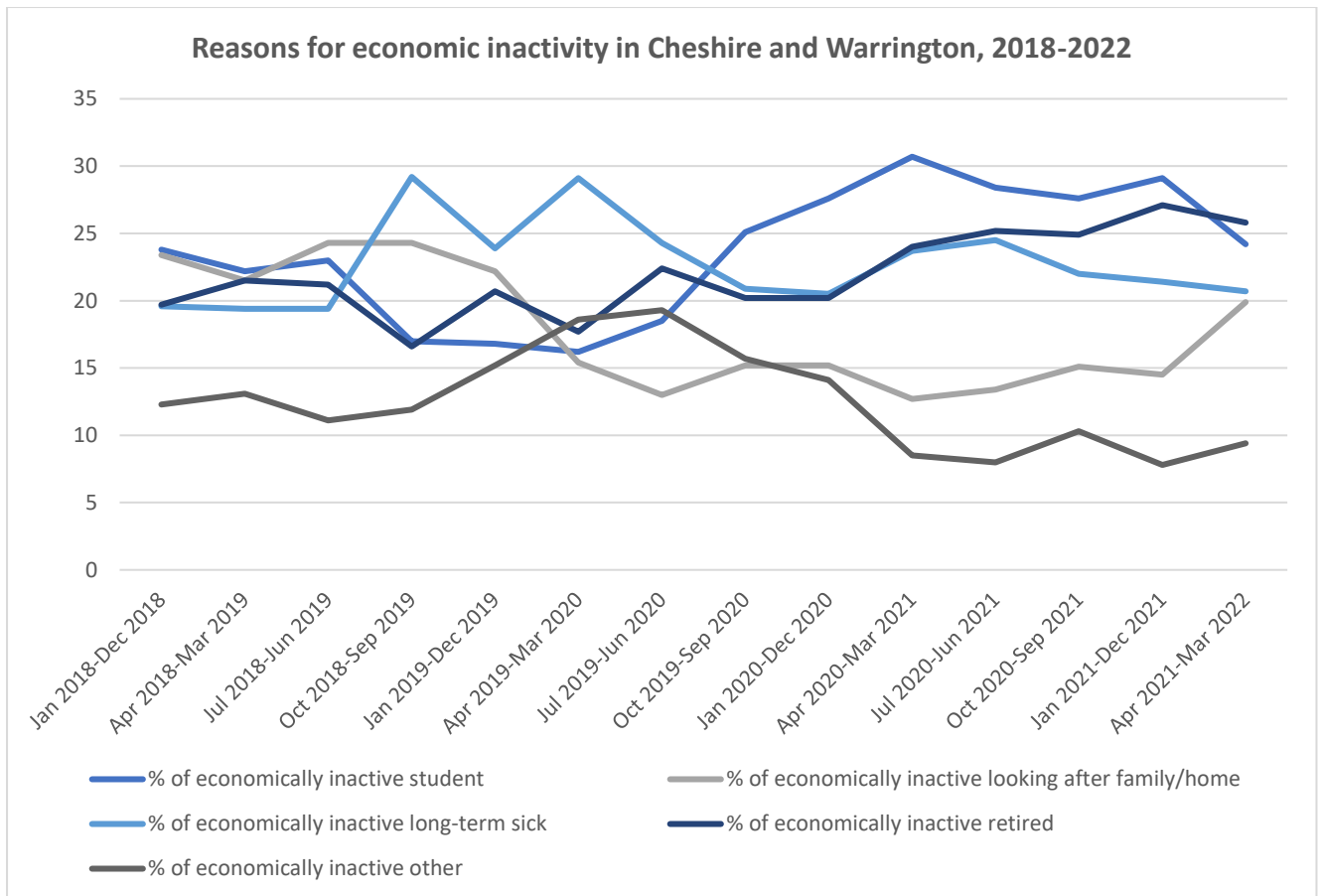
Source: ONS, annual population survey

3.2.5 Unemployment

The number of unemployed people in the UK is measured by the Labour Force Survey (LFS)/Annual Population Survey (APS) and includes people who meet the international definition of unemployment specified by the International Labour Organisation (ILO). This ILO definition defines unemployed people as being:

- without a job, have been actively seeking work in the past four weeks and are available to start work in the next two weeks
- out of work, have found a job and are waiting to start it in the next two weeks

The unemployment rate for Cheshire and Warrington has been consistently below the unemployment rate for England. The gap between the unemployment rates for Cheshire and Warrington increased from 0.6% pre-pandemic to 1% for Apr 21 – Mar 22. The unemployment rate has also been consistently below the unemployment rate for England for both Warrington and for Cheshire West and Chester. The unemployment rate for Cheshire East has usually been below that for England, although the rate for Apr 21- Mar 22 was slightly higher (4.8% compared with 4.3% for England).

Unemployment rate (16-64) for England, C&W and its local authorities, 2018-2022
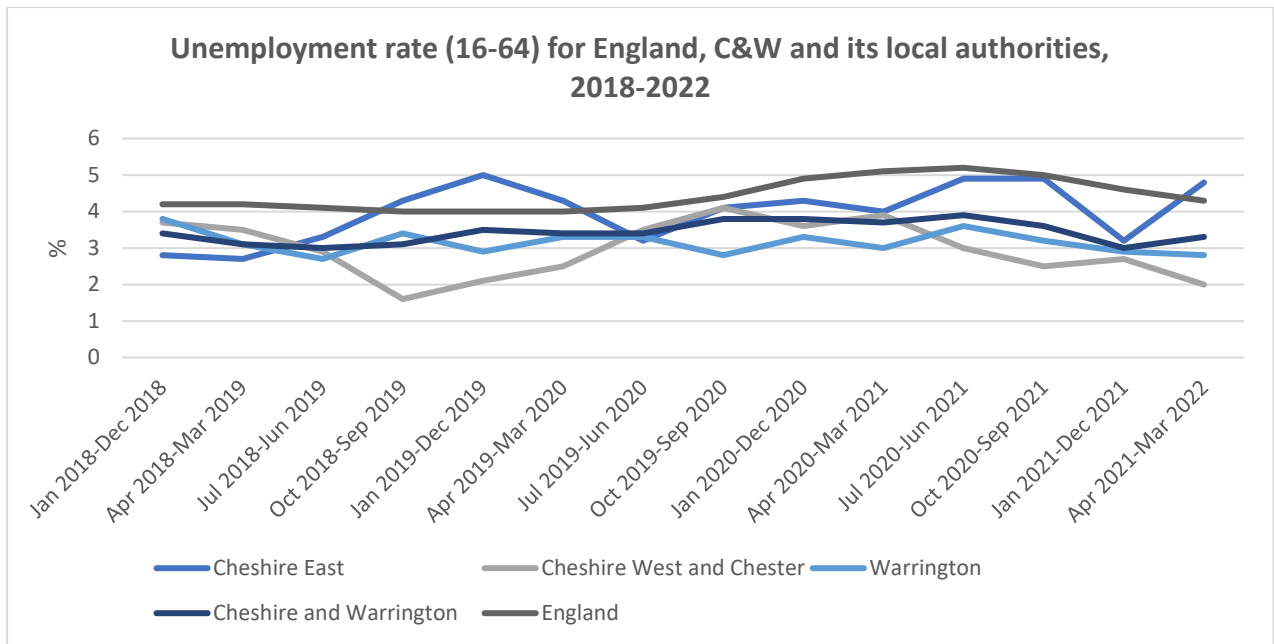
Source: ONS, annual population survey [from Nomis on 22 August 2022]

3.2.6   Claimant count and benefits

The Claimant Count is a measure of the number of people claiming benefits for unemployment related purposes taken from DWP administrative sources. Currently the Claimant Count is a composite of the number of people claiming Jobseeker's Allowance (JSA) and those claiming Universal Credit (UC) who are required to seek work to qualify for their benefits. Combining these two identifies all the people claiming benefit principally for the reason of being unemployed.

Taking February 2020 as the pre-pandemic position, the claimant rate in Cheshire and Warrington was 0.7% lower than in England (2.3% and 3% respectively). This gap had increased to 1.2% by July 2022 (2.6% and 3.8%). The claimant count increases varied by local authority between February 2020 and July 2022, with an increase of 19% in Cheshire East, 5% in Cheshire West and Chester and 14% in Warrington.

Claimant count and rate, England, C&W and C&W local authorities, 2018-2022
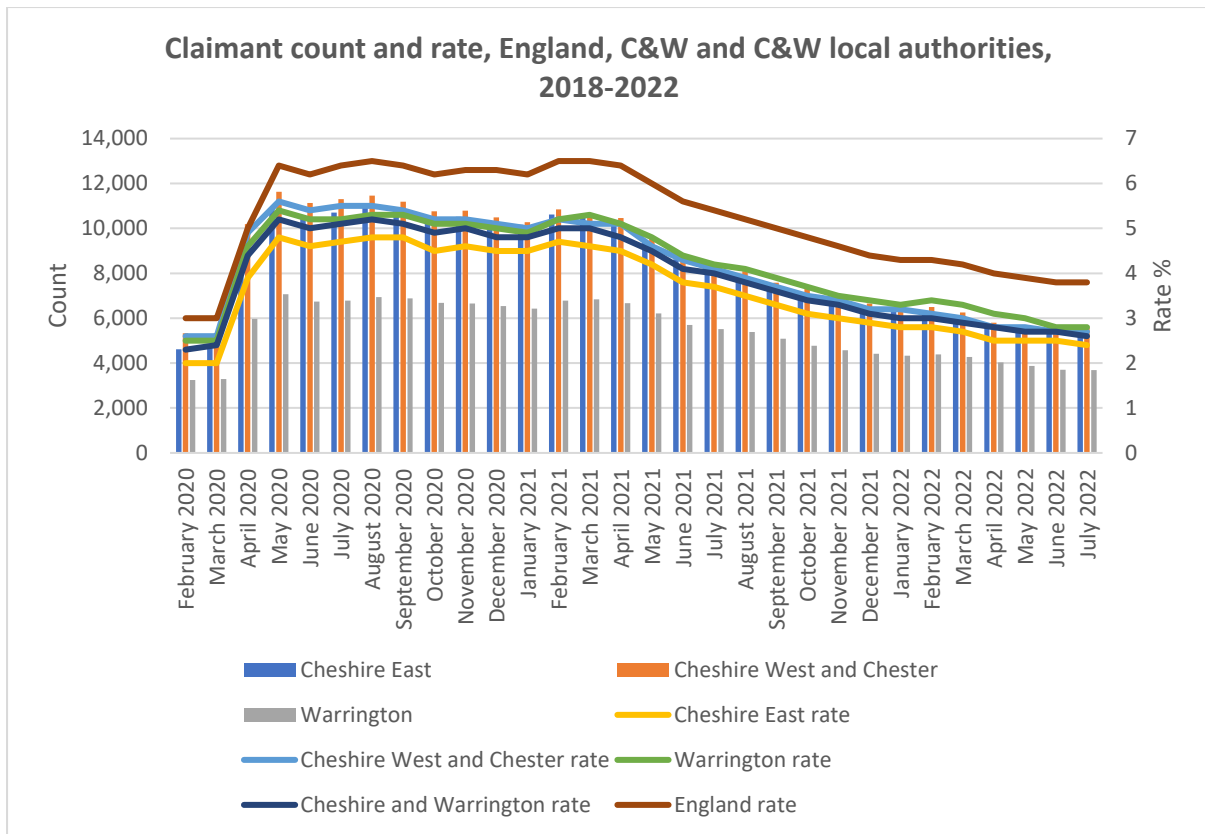
Source: NOMIS, Claimant count

The main benefit claimed by out of work claimants is Universal Credit (UC). Claimants of UC have a 'conditionality regime' applied to their claim. There are two main types of conditionality applied:

- Claimants are required to search for work – 'Searching for work'
- Claimants are not required to search for work – 'no work requirements'. Claimants are not required to searching for work if their circumstances (eg health condition or caring responsibilities) prevents them from doing so.

The map below provides estimates of the percentage of the working age population that are out of work and in receipt of UC in each ward in Cheshire and Warrington. The areas shaded red have the highest estimated rates. These are concentrated in Warrington, Ellesmere Port, Crewe and Winsford.

Claimants of UC (out of work) resident in Cheshire and Warrington, by ward, 2022

Estimated % of 16-64 popn UC out of work
- 1.17 - 2.77
- 2.77 - 3.15
- 3.15 - 3.57
- 3.57 - 4.13
- 4.13 - 4.76
- 4.76 - 5.76
- 5.76 - 7.32
- 7.32 - 9.65
- 9.65 - 12.24
- 12.24 - 18.44

Map by Brennan Wilson Ltd in QGIS. Data from StatXplore, OS, ONS and OpenStreetMap
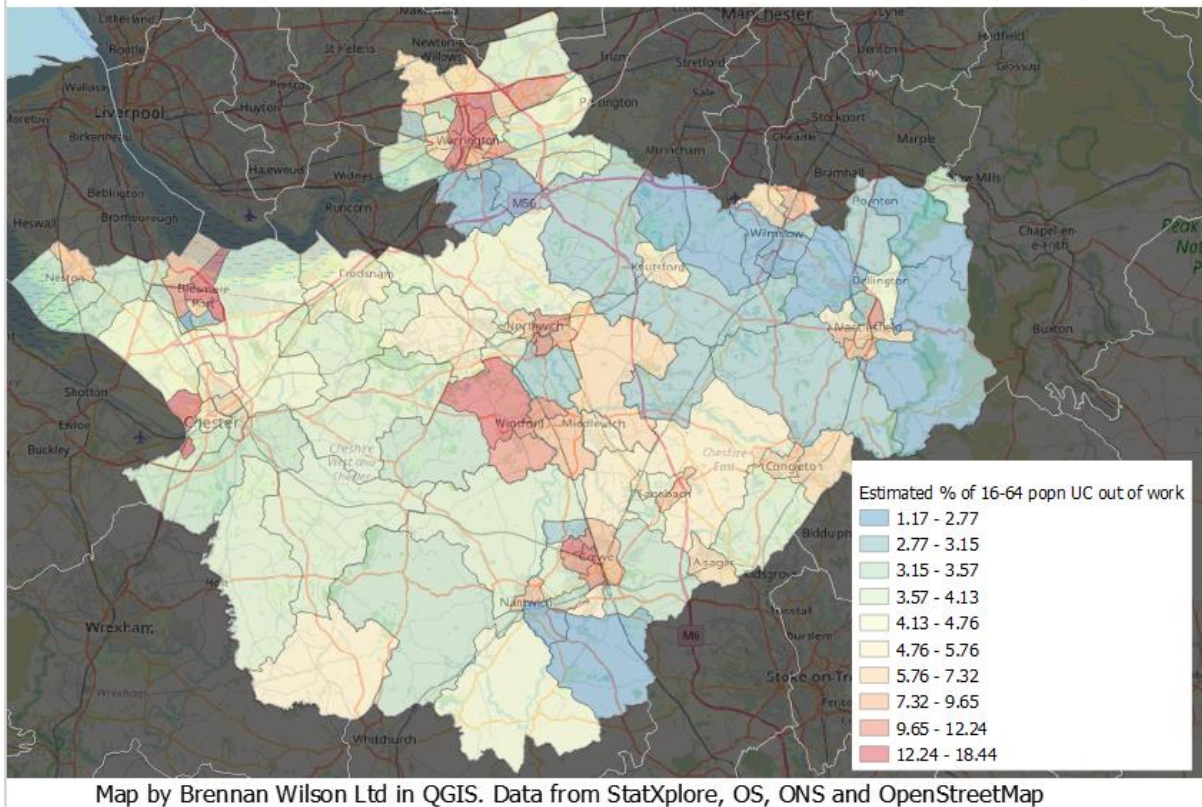
The charts below provides data on working age out of work UC claimants by conditionality regime between Feb 2020 and Feb 2022. The trend for those on UC searching for work mirrors the Claimant Count trend reported above.
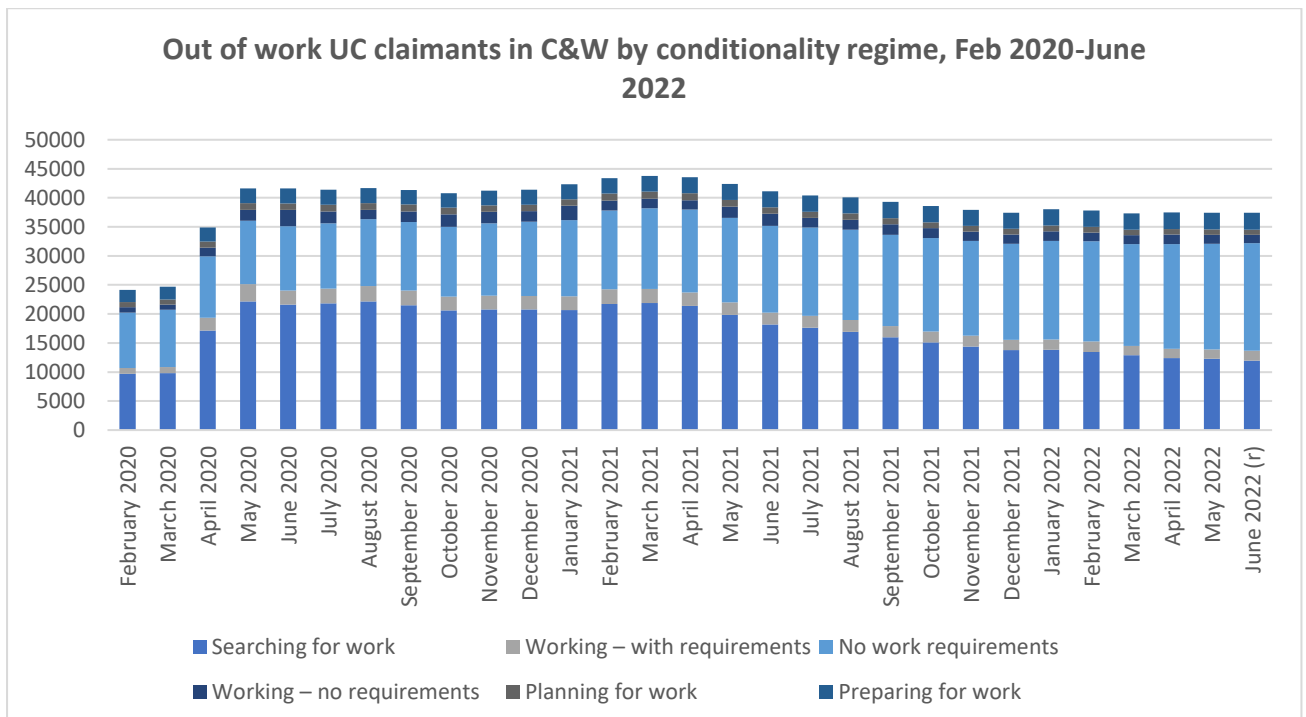
Source: StatXplore, People on UC

Claim duration analysis of the numbers of working age claiming UC who were required to search for work between Feb 2020 and June 2022 shows that the numbers that have claimed UC for 2 years or less *declined* between Feb 2020 and Jun 2022. By contrast, there have been very significant increases in the volumes that have claimed for over 2 years (doubling to over 4k), with the volume of those having claimed for 5 years or more having increased by over 500% in this time.

On UC in C&W, out of work and searching for it, by claim duration, Feb 2020 - Jun 2022

Legend:
- Up to 3 months
- 3 months up to 6 months
- 6 months up to 1 year
- 1 year and up to 2 years
- 2 years and up to 3 years
- 3 years and up to 4 years
- 4 years and up to 5 years
- 5 years and over

Source: StatXplore, People on UC

% change in the claim duration of those in C&W on UC, searching for work, Feb 20 - Jun 22

Source: StatXplore, People on UC

Volume change in C&W in those claiming UC, searching for work, Feb 20 - Jun 22

Category	
Up to 3 months	
3 months up to 6 months	
6 months up to 1 year	
1 year and up to 2 years	
2 years and up to 3 years	
3 years and up to 4 years	
4 years and up to 5 years	
5 years and over	
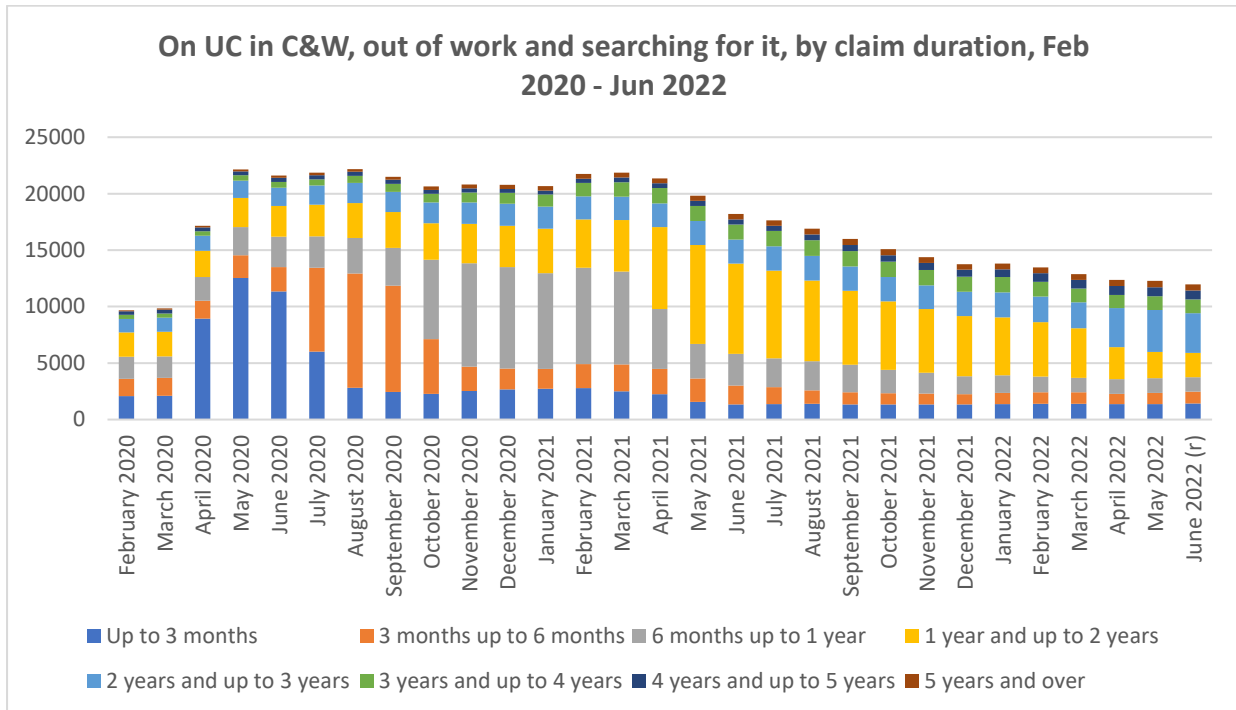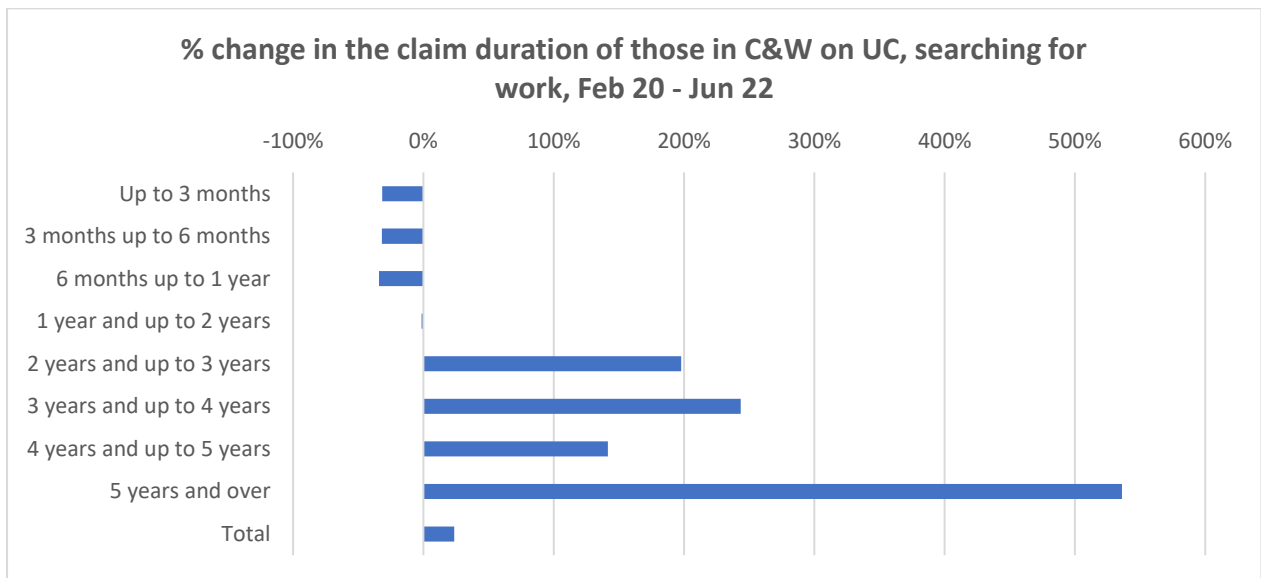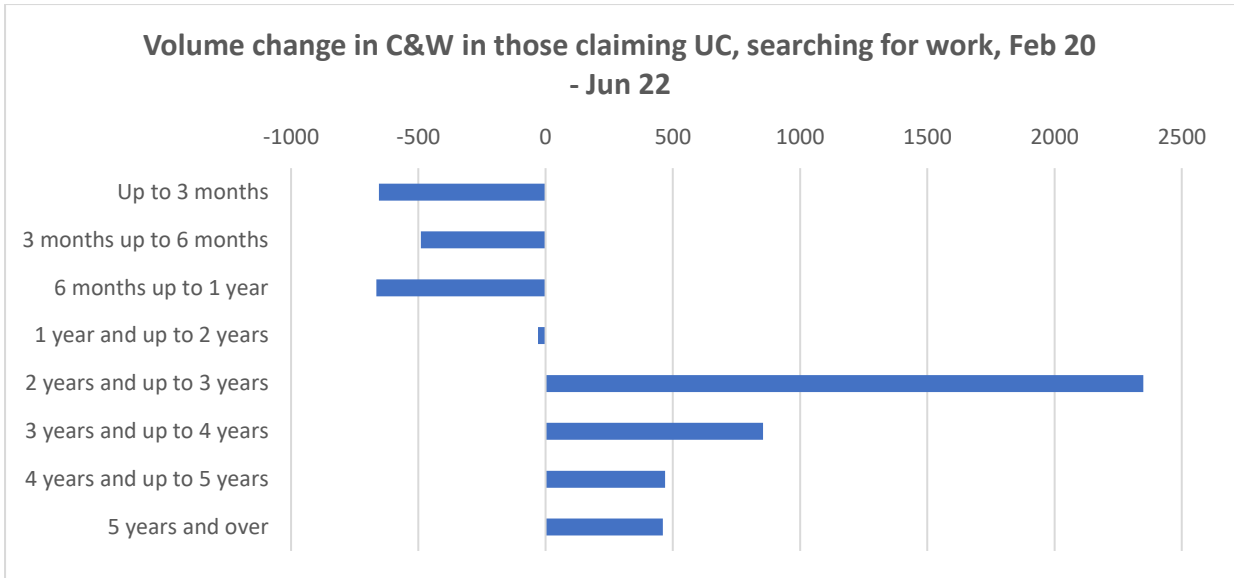
Source: StatXplore, People on UC

The two charts below show the volume and percentage change by age of those who were of working age and out of work, claiming UC with no work requirements. It can be seen from this that the volume in this category increased for every age band, with the overall volume increasing from 9,530 to 18,537, with the highest percentage increases being for those aged 35-44 and those aged 55-65 where numbers more than doubled in this period.

Working age people on UC, not in work with no work requirements, by age, Feb 20-Jun 22

Legend: 16-19, 20-24, 25-29, 30-34, 35-39, 40-44, 45-49, 50-54, 55-59, 60-65

Source: StatXplore, People on UC

% change Feb 2020- Jun 2022 in the numbers not in work, claiming UC with no requirements, by age
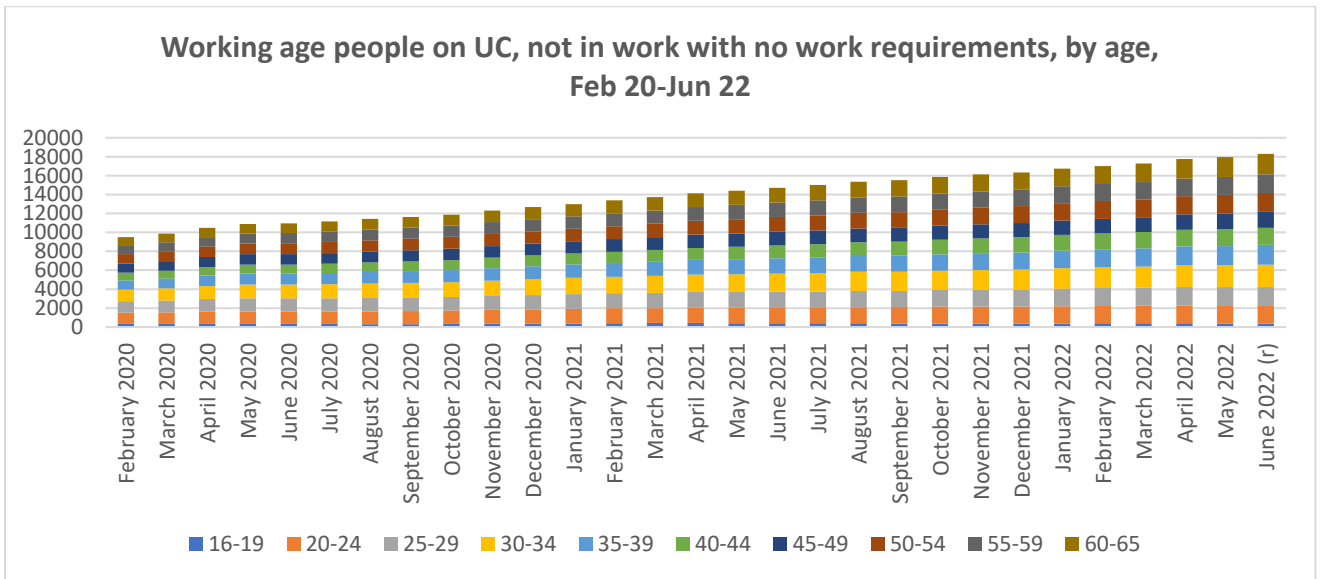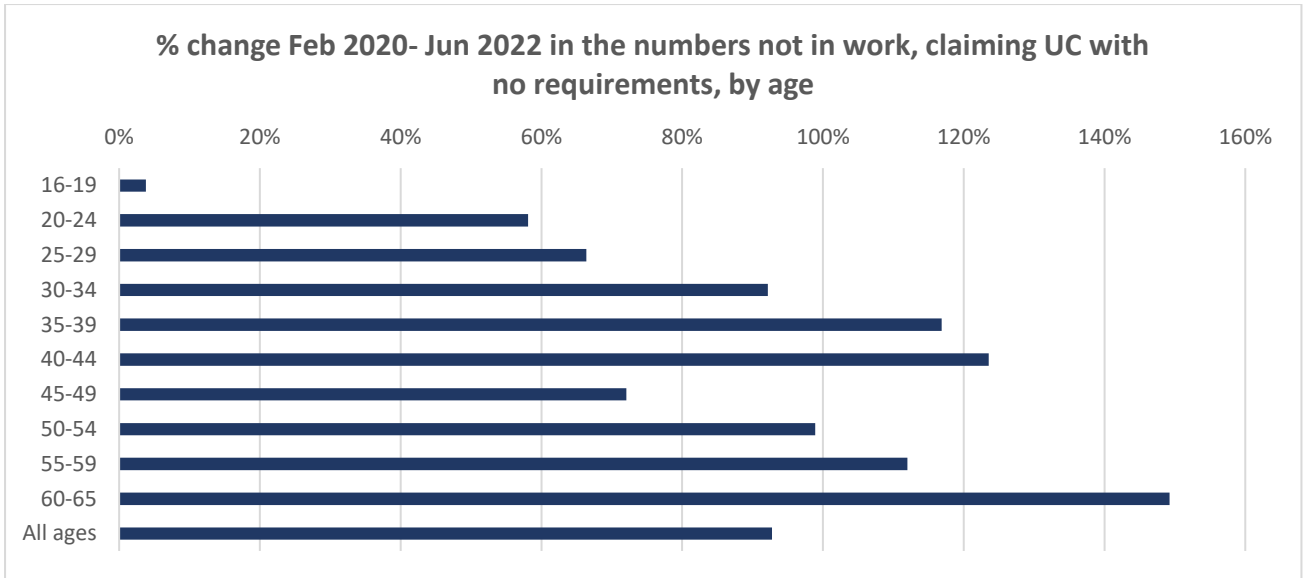
Source: StatXplore, People on UC

The charts below show the volume and percentage change by claim duration of those who were of working age and out of work, claiming UC with no work requirements between February 2020 and June 2022. The growth in this time can be entirely attributed to a growth in the number assigned to this conditionality regime with claims of 2 years duration or above. Volumes fell for those with a claim duration of 2 years or less. The highest volume increase was for those with a claim duration of 3-4 years (3.5k increase). The numbers on this conditionality regime increased by more than tenfold for people whose claim duration exceeded 3 years.

On UC in C&W, Out of work, no work requirements, by claim duration, Feb 2020-June 2022

Source: StatXplore, People on UC

Volume change of those on UC, out of work with no work requirements, by claim duration, Feb 20 - Jun 22

Claim duration	Volume change
Up to 3 months	≈ -100
3 months up to 6 months	≈ -300
6 months up to 1 year	≈ -450
1 year and up to 2 years	≈ -400
2 years and up to 3 years	≈ 2800
3 years and up to 4 years	≈ 3550
4 years and up to 5 years	≈ 2700
5 years and over	≈ 1250
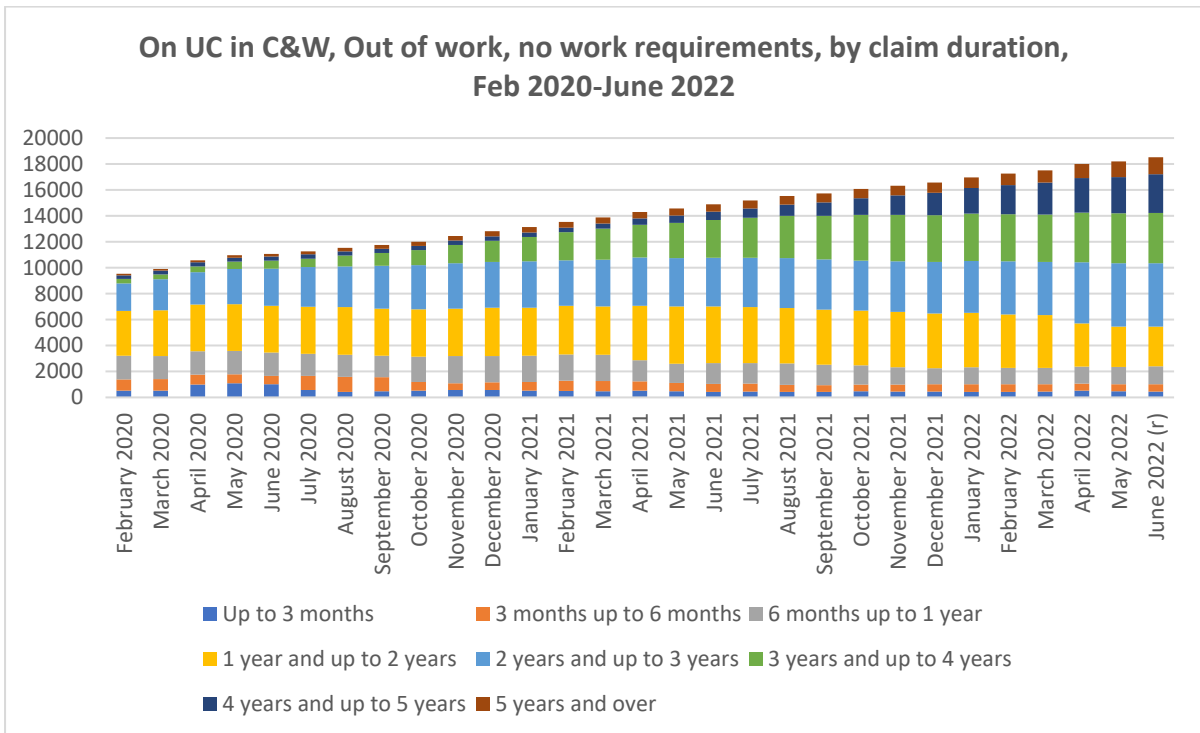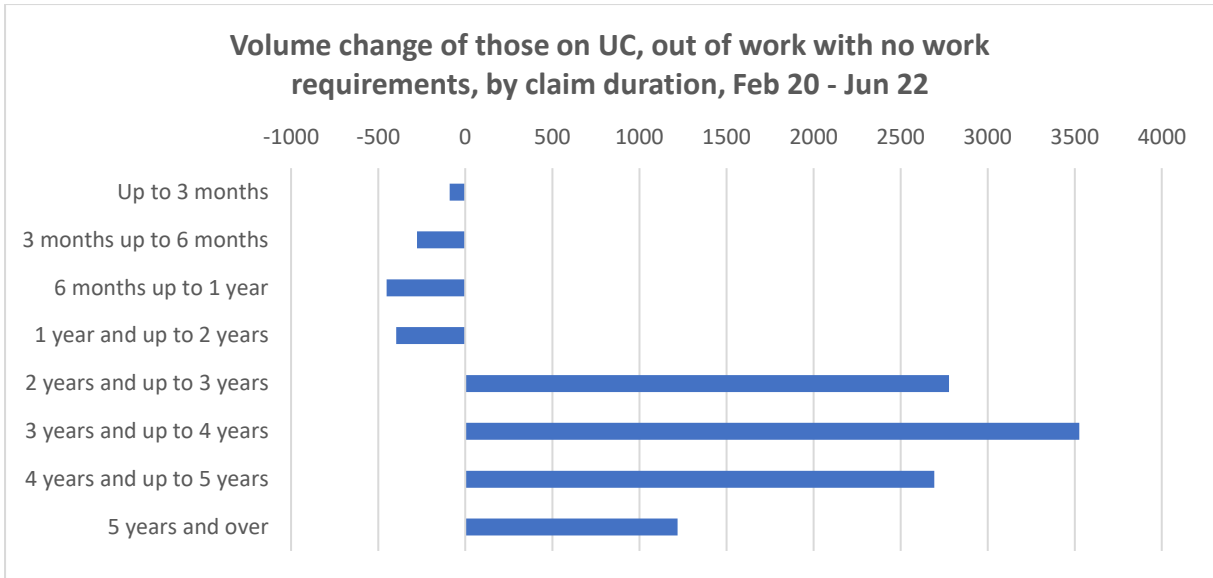
Source: StatXplore, People on UC

3.3 Jobs, productivity and business stock[3]

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 from 2010 there was a steady increase in Jobs Density in Cheshire and Warrington, from 0.84 and peaking at 1.02 in 2019 and then dropping back slightly to 0.99 in 2020. 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.

---

[3] This subsection draws data from NONIS (Jobs Density dataset and BRES); ONS subregional productivity data; ONS UK Business Counts; and Lightcast Analyst.

Job density in Cheshire and Warrington and England, 2001-2020
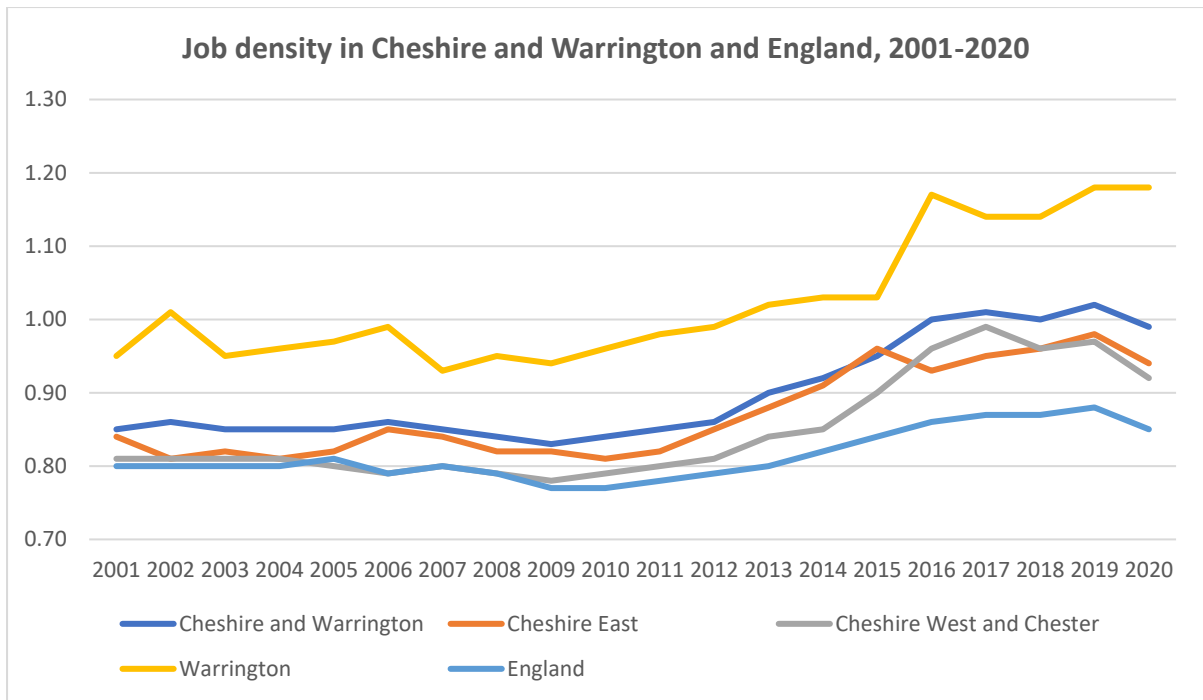
Source: NOMIS, ONS Jobs Density

Since the financial crisis, productivity in Cheshire (GVA per hour worked) has remained above the national average, but with a generally narrowing gap. In real-terms, productivity has remained below 2007 levels. Analysis undertaken by MetroDynamics for Cheshire and Warrington LEP demonstrates that output growth since the financial crash has been achieved in the absence of productivity growth. Without improving productivity, output will not be able to grow into the longer term. There remain considerable differences in productivity across the area, where GVA per hour worked is £12 higher in Cheshire East than in Warrington.

GVA per hour worked indices (current prices)
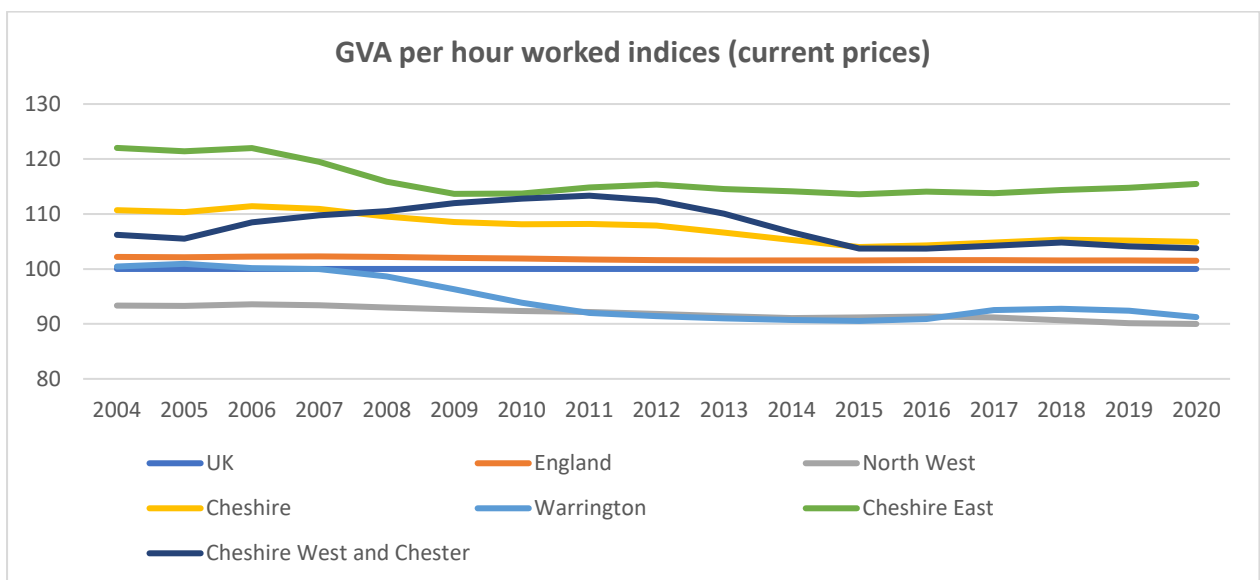
Source; ONS, Subregional productivity: labour productivity indices by UK ITL2 and ITL3 subregions

As part of developing an economic evidence base for Cheshire and Warrington LEP (September 2022)[4], Metrodynamics undertook analysis of sectoral productivity. Key points from this were:

- Manufacturing is one of three sectors in the sub-region more productive than GB. It remains over twice as productive with GVA per job of £156,736 and has the largest GVA of £6.8bn. However, productivity has fallen by 6% over the last five years.
- Information and communication, and retail and hospitality, which have similar levels of productivity to the national average, have become more productive over time. Both sectors support high numbers of jobs – 9.2% of the total job numbers overall. This rise in productivity in this large amount of the workforce may offset the decline in manufacturing productivity.
- Real estate, the highest productivity sector, has a GVA per job of £443,625, due to its relatively high economic output (£3.6bn) and low number of jobs (542,500).
- Finance and insurance, construction, agriculture and energy, logistics, and professional, scientific and technical activities have lower than average levels of productivity. There have also been relatively large falls in productivity in some of these sectors.

In, 2022 there were 42,025 businesses (VAT registered) in Cheshire and Warrington. This was a decline of 1.5% compared to the business count in 2021. 46% of businesses were in Cheshire East, 33% in Cheshire West and Chester, and 21% in Warrington. 90% of businesses in Cheshire and Warrington employed fewer than 10 people. Only 0.5% of businesses employed more than 250 people.

Businesses by size in Cheshire and Warrington and Local Authority, 2022				
Employment size band	Cheshire East	Cheshire West and Chester	Warrington	Cheshire and Warrington
Total	19,540	13,805	8,680	42,025
Micro (0 to 9)	17,545	12,255	7,735	37,535
Small (10 to 49)	1,645	1,270	750	3,670
Medium-sized (50 to 249)	275	215	145	635
Large (250+)	75	65	50	190
Source: ONS, UK Business Counts 2021, NOMIS Jan 2023				

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

---

[4] Link to follow

Company size structure, C&W and England, 2022

Legend: Micro (0 to 9), Small (10 to 49), Medium-sized (50 to 249), Large (250+)
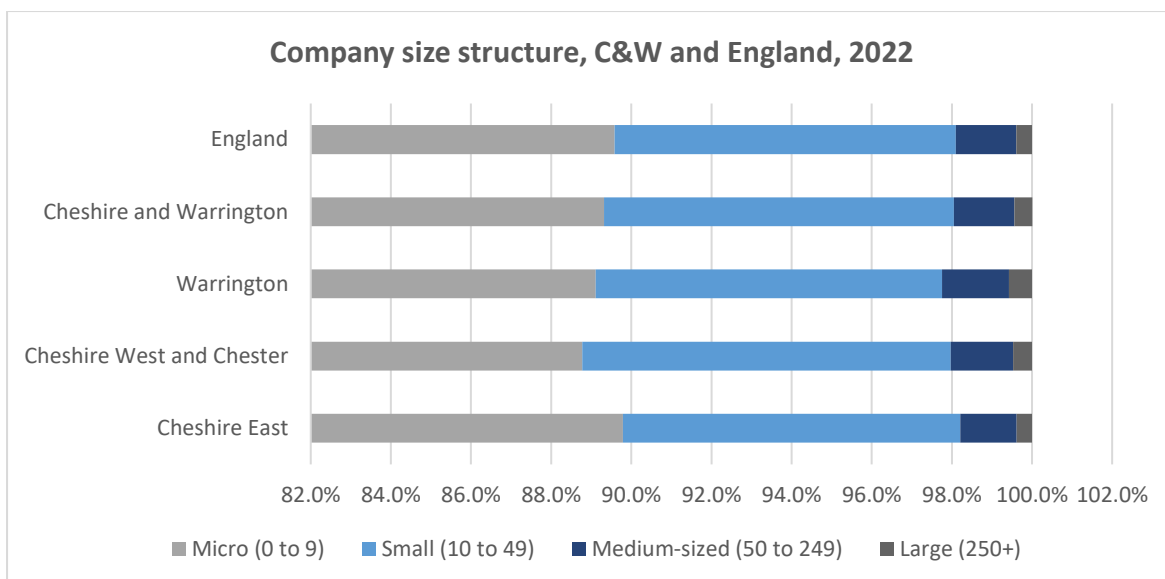
Source: ONS, UK Business Counts 2021, NOMIS Jan 2023

In 2021 there were 510,000 'employee jobs' in Cheshire and Warrington[5]. This was an increase of 15,000 (3%) compared to 2021.

Employee jobs in Cheshire and Warrington and local authorities, full-time and part-time, 2021			
Area	Employees	Full-time employees	Part-time employees
Cheshire East	197,750	137,444	60,306
Cheshire West and Chester	169,491	114,788	54,704
Warrington	143,116	103,045	40,071
Cheshire and Warrington	510,357	355,277	155,081
Source: BRES, NOMIS, Jan 2023			

The proportion employed full-time in Cheshire and Warrington, at 69.5%, was higher than for England or the Northwest. Conversely, the proportion employed part-time was lower than for both England and the region. At local authority level (table above), proportions employed full time were higher than for England in Cheshire East and Warrington, but lower in Cheshire West and Chester.

Employee jobs (2021)				
	Cheshire And Warrington (Employee Jobs)	Cheshire And Warrington (%)	North West (%)	England (%)
Total Employee Jobs	508,000	-	-	-
Full-Time	353,000	69.5	68.8	68.4
Part-Time	154,000	30.3	31.2	31.6
Source: BRES, NOMIS, Jan 2023				

---

[5] This is not a count of people employed, as individuals can have more than one job.

From 2012 to 2022, jobs increased by 17.5% in Cheshire and Warrington from 434,430 to 510,382. This change outpaced the national growth rate in this period which was 11.7%. This growth in employment helps explain why an already high Job Density continued to increase for most of this period.

Cheshire and Warrington jobs 2012-2022
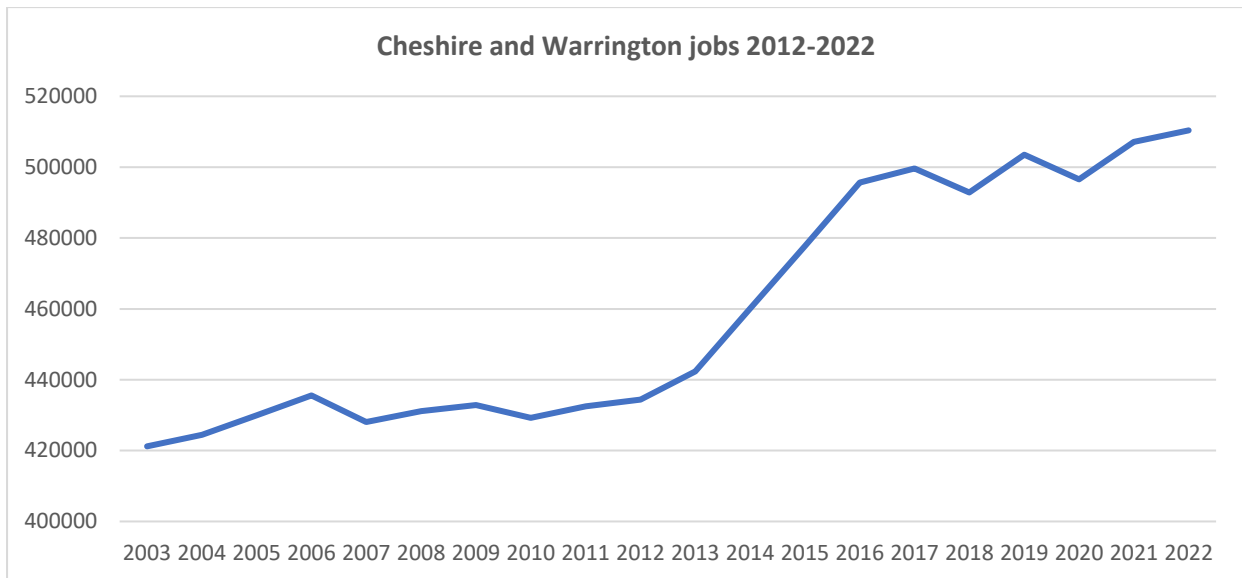
Source: Lightcast Analyst, Jan 2023

More than 20% of Lower Super Output Areas (LSOAs) in Cheshire and Warrington hosted more than 1,000 jobs in 2021. This is illustrated in the map below. As can be seen, high volume job areas (in red) are distributed extensively across the sub-region, with high-job LSOAs being connected to both conurbations and also areas adjacent to the motorway network.

Employee numbers by LSOA in Cheshire and Warrington, 2021

Map by Brennan Wilson Ltd in QGIS. Data from NOMIS (BRES), OpenStreetMap and ONS
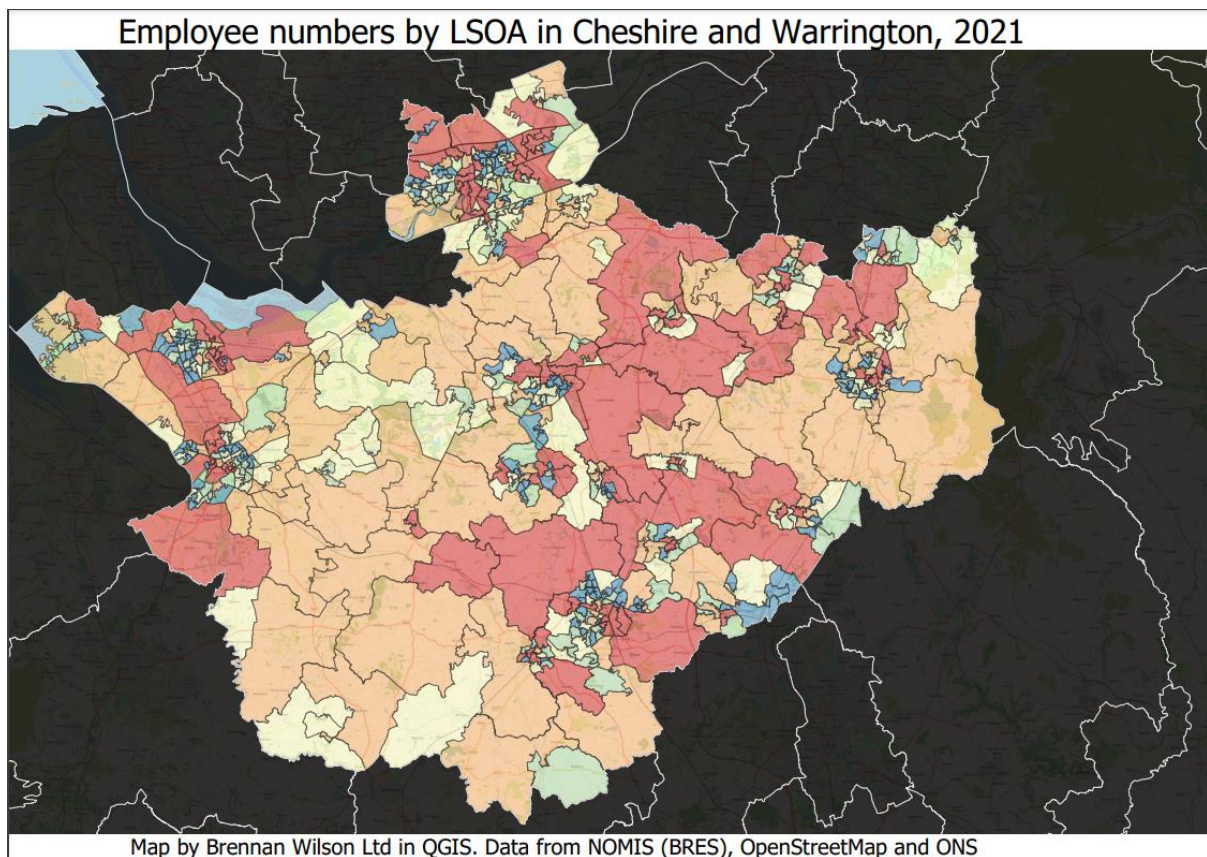
3.4 Industrial structure[6]

Compared with England, Cheshire and Warrington has a higher percentage of employees employed in the manufacturing sector; the construction sector; the professional, scientific and technical sector; the business administration and support services sector; the financial and insurance sector; and the transport and storge sector. On the other hand, a smaller proportion were employed in the information and communication sector, as well as the health, education and the public sectors.

Some of 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 than elsewhere.

% employed in industry sectors in C&W and England, 2021
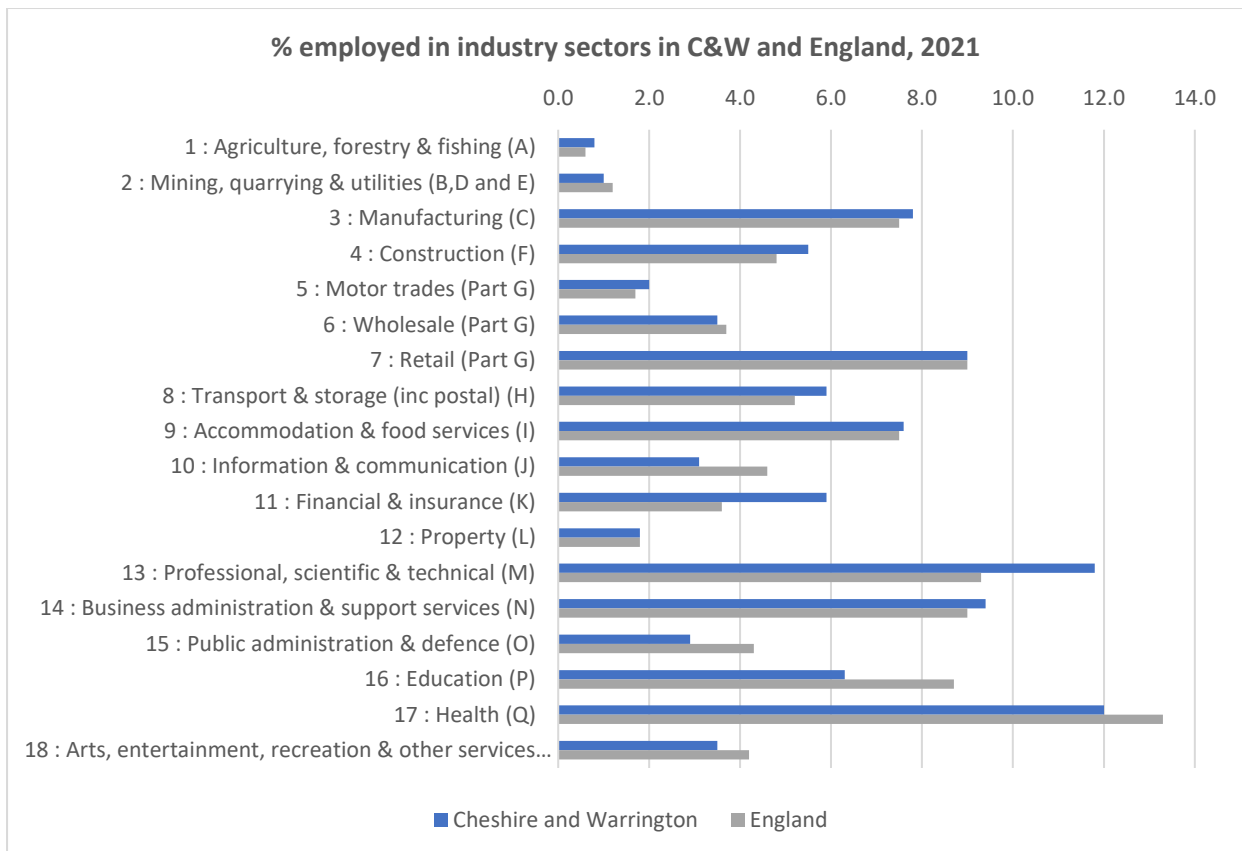
Source: BRES, NOMIS, Jan 2023

The table below provides data on the number of jobs in Cheshire and Warrington by industrial sector in 2021. There were 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

---

[6] This subsection draws data from NOMIS/BRES and Lightcast Analyst

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.

Employee Jobs By Industry, 2021				
	Cheshire And Warrington (Employee Jobs)	Cheshire And Warrington (%)	North West (%)	England (%)
B : Mining And Quarrying	450	0.1	0.1	0.1
C : Manufacturing	40,000	7.9	8.6	7.5
D : Electricity, Gas, Steam And Air Conditioning Supply	1,500	0.3	0.5	0.4
E : Water Supply; Sewerage, Waste Management And Remediation Activities	3,500	0.7	0.5	0.7
F : Construction	28,000	5.5	5.4	4.8
G : Wholesale And Retail Trade; Repair Of Motor Vehicles And Motorcycles	75,000	14.8	14.6	14.5
H : Transportation And Storage	30,000	5.9	5.4	5.2
I : Accommodation And Food Service Activities	39,000	7.7	7.9	7.5
J : Information And Communication	16,000	3.1	2.8	4.7
K : Financial And Insurance Activities	30,000	5.9	3.5	3.7
L : Real Estate Activities	9,000	1.8	2.0	1.9
M : Professional, Scientific And Technical Activities	60,000	11.8	8.9	9.3
N : Administrative And Support Service Activities	48,000	9.4	8.3	9.0
O : Public Administration And Defence; Compulsory Social Security	15,000	3.0	4.9	4.3
P : Education	32,000	6.3	7.9	8.8
Q : Human Health And Social Work Activities	61,000	12.0	15.0	13.4
R : Arts, Entertainment And Recreation	11,000	2.2	2.2	2.3
S : Other Service Activities	8,000	1.6	1.5	1.9
Source: BRES, NOMIS, Jan 2023				

The table below sets out data for those sub-sectors (2 digit SIC) that employed more than 5,000 people in Cheshire and Warrington in 2021 and had a location quotient (LQ) of 1 or higher in 2022. Location quotients are ratios that allow an area's distribution of employment by industry to be compared to distribution nationally. If an LQ is equal to 1, then the industry has the same share of its employment in a place as it does in the nation. An LQ greater than 1 indicates an industry with a greater share of the local area employment than is the case nationwide. For example, an LQ of 0.5 indicates half the level of employment in a sector compared with nationally, whereas an LQ of 2 indicates double the level of employment when compared with national levels.

The table allows easy identification of sub-sectors that have both economic weight in the local economy (ie employ significant numbers of people) and that offer a potential competitive advantage

for Cheshire and Warrington. There are five sub-sectors that employ >5k and have LQs over 1.5. They are:

- Manufacture of Basic Pharmaceutical Products and Pharmaceutical Preparations
- Legal and Accounting Activities
- Manufacture of Motor Vehicles, Trailers and Semi-trailers
- Financial Service Activities, Except Insurance and Pension Funding
- Employment Activities

Together these sub-sectors are of considerable importance to the Cheshire and Warrington economy, employing more than 90,000 people – almost 20% of the workforce. They provide strengths that can be built on as economic development priorities. The table also allows the reader to identify possible risks to the local economy. For example, with only 10 establishments delivering an LQ of over 7 in the 'Manufacture of Basic Pharmaceutical Products and Pharmaceutical Preparations' sub-sector, it is evident how only two or three firm failures in this sub-sector could significantly undermine the subregion's strength in this area.

It is not clear why such a high proportion of the workforce are employed in the 'Employment Activities' sub-sector in Cheshire and Warrington. This sub-sector includes activities of listing employment vacancies and referring or placing applicants for employment, where the individuals referred or placed are not employees of the employment agencies, supplying workers to clients' businesses for limited periods of time to supplement the workforce of the client, and the activities of providing other human resources. This type of employment is often insecure. This high LQ may reflect the employment practices of other sub-sectors, including those with high LQs in their own right – for example 'Warehousing and Support Activities for Transportation'.

Employment and Location Quotient of key sub-sectors, 2021			
	2022 Jobs	2021 Establishments	2022 LQ
Manufacture of Basic Pharmaceutical Products and Pharmaceutical Preparations	5010	10	7.30
Legal and Accounting Activities	37835	1183	2.86
Manufacture of Motor Vehicles, Trailers and Semi-trailers	6906	74	2.52
Financial Service Activities, Except Insurance and Pension Funding	15630	409	2.00
Employment Activities	26712	847	1.70
Warehousing and Support Activities for Transportation	14068	339	1.37
Wholesale and Retail Trade and Repair of Motor Vehicles and Motorcycles	10823	1510	1.26
Architectural and Engineering Activities; Technical Testing and Analysis	11416	2599	1.21
Activities of Head Offices; Management Consultancy Activities	15055	3642	1.15
Retail Trade, Except of Motor Vehicles and Motorcycles	51842	4460	1.13
Computer Programming, Consultancy and Related Activities	14602	2407	1.11
Construction of Buildings	8033	1681	1.11
Sports Activities and Amusement and Recreation Activities	7348	637	1.09
Wholesale Trade, Except of Motor Vehicles and Motorcycles	18357	1966	1.00
Services to Buildings and Landscape Activities	12608	1153	1.00
Source: Lightcast Analyst, Jan 2023			

In September 2022, Metrodynamics completed an 'Economic Evidence Base' for Cheshire and Warrington which has a finer-grained LQ analysis based on 2020 data. Key points from this are:

- The manufacture of pharmaceutical products has become the most specialised sub-sector
- Legal and accounting, and financial services, have experienced some of the highest jobs growth in the past five years and have increased in specialism
- There are a few sub-sectors that have significantly advanced up the rankings. Retail has become more concentrated, with wholesale moving up 30 places and experiencing an increase of almost a third in jobs. Retail trade has also moved into the top 20 ranking.
- Other manufacturing, which includes jewellery, musical instruments, sports equipment, medical and dental instruments, is another sub-sector that has advanced into the Top 20 (10th), after a doubling of the workforce in the past five years.
- Some sectors have declined in specialism since 2015. Manufacture of motor vehicles maintains its rank as the third highest specialised sector; it is 2.4 times more specialised than GB, but has had a fall in LQ. The repair of computers and personal households has seen the LQ fall by 0.9, as well as a 44% fall in the workforce. Accommodation has fallen out of the top 20.
- The manufacture of coke and refined petroleum products has fallen to the second most specialised sector, and has had a 10% decrease in employment. It is also important to note that this sub-sector is less likely to be a growth sector in the future as we continue to transition to net zero and pivot to alternative energy sources.

3.5 Occupational Structure[7]

It is possible to establish from the Annual Population Survey the occupations held by employees in Cheshire and Warrington and its three constituent local authorities. This data is presented in the table below. This shows that, when compared with England, the occupational profile in Cheshire and Warrington is slightly skewed towards higher skilled occupations, with a higher proportion employed in SOC major groups 1-3 and a lower proportion employed in SOC major groups 8-9.

However, this headline data disguises variation between the three local authorities. For SOC major groups 1-3, the Cheshire and Warrington proportion is pulled up by the proportion in Cheshire East which, at 57.9%, is 5.9% higher than England (52%). By contrast both Cheshire West and Chester (50.4%) and particularly Warrington (48%) are both lower than England. Similarly, whilst Cheshire East and Cheshire West and Chester both have lower proportions employed in SOC major groups 8-9 (13.1% and 12.8% respectively) than England (15.3%); the proportion in Warrington is higher at 18.1%.

---

[7] This subsection draws data from NOMIS (APS/LFS)

Employment by occupation England, C&W, and local authorities (Jul 2021-Jun 2022)						
	C&W	NW	England	Cheshire East	Cheshire West and Chester	Warrington
Soc 2020 Major Group 1-3	**52.8**	**48.9**	**52**	**57.9**	**50.4**	**48**
1 Managers, Directors and Senior Officials	11.6	9	10.6	15.3	10.4	7.5
2 Professional Occupations	26.1	24.5	26.1	27.9	23.5	26.7
3 Associate Professional Occupations	14.9	15.1	15.1	14.2	16.5	13.6
Soc 2020 Major Group 4-5	**17.8**	**19**	**18.7**	**14.9**	**22.5**	**15.6**
4 Administrative & Secretarial Occupations	10.6	11.2	10.2	8.6	13.8	9.1
5 Skilled Trades Occupations	7.1	7.8	8.4	6.2	8.7	6.4
Soc 2020 Major Group 6-7	**15.2**	**15.5**	**14.2**	**14.1**	**14.3**	**18.3**
6 Caring, Leisure and Other Service Occupations	9.4	8.1	7.8	8.9	9.5	10.2
7 Sales and Customer Service Occs	5.7	7.3	6.4	5	4.8	8.1
Soc 2020 Major Group 8-9	**14.2**	**16.6**	**15.2**	**13.1**	**12.8**	**18.1**
8 Process Plant & Machine Operatives	5.9	6.2	5.6	6.8	5	5.7
9 Elementary Occupations	8.3	10.3	9.5	6.2	7.7	12.4
Source: ONS annual population survey, **NOMIS,** numbers and % are for those of 16+, % is a proportion of all persons in employment						

3.6 Earnings and low pay[8]

3.6.1   Resident and workplace earnings

The table below sets out data for median gross weekly earnings of *residents* in the three local authorities in Cheshire and Warrington and for England. Median earnings for Warrington residents in 2021 exceeded the English median. This was the case for both males and females. Median earnings for Cheshire East residents in 2021 were below the English median. This was the case for both males and females. Median earnings for Cheshire West and Chester residents in 2021 were slightly below the English median, although median earnings for males were above England.

Median gross weekly earnings (£s) of all employed residents by gender and local authority, 2021			
	Male	Female	Total
Cheshire East	579.2	404.1	493.6
Cheshire West and Chester	637.3	411.7	507.9
Warrington	602.6	442.1	511.2
England	600.8	420.8	509.3
Source: annual survey of hours and earnings - resident analysis, NOMIS October 2022			

[8] This subsection draws data from NOMIS (ASHE) and StatXplore (UC in work claimant data)

Examining this dataset at the level of parliamentary constituency reveals that there were four parliamentary constituencies from ten where median gross weekly earnings for residents exceeded the English level (City of Chester, Congleton, Eddisbury, and Warrington South). Six parliamentary constituencies exceeded England for male median gross weekly earnings and four exceeded England for female median gross weekly earnings.

Whilst there are disparities between male and female earnings in England. These disparities seem to be more pronounced in a number of areas within Cheshire and Warrington, including in:

- Eddisbury
- Ellesmere Port and Neston
- Macclesfield
- Tatton

Further publication of Census 2021 data will enable a better understanding as to the factors (occupation, age, travel to work etc) that help determine this.

Median gross weekly earnings (£s) of all employed residents by gender and parliamentary constituency, 2021			
Area	Male	Female	Total
City of Chester	617.6	445.5	545.2
Congleton	570.3	415.5	516.2
Crewe and Nantwich	563.8	399.5	490
Eddisbury	754.5	449.4	600.9
Ellesmere Port and Neston	612	404.2	440.3
Macclesfield	632.8	405.2	483.5
Tatton	618.9	376.5	453.5
Warrington North	542.6	406.1	494.7
Warrington South	665.8	471.3	532.8
Weaver Vale	566	421.2	484.6
England	600.8	420.8	509.3
Source: annual survey of hours and earnings - resident analysis, NOMIS October 2022			

Between 2020 and 2021 there was volatility in median resident earnings levels across Cheshire and Warrington. Overall earnings saw a growth of 2.5% in Cheshire and Warrington, compared with 5% for England. On this measure, each of the local authorities performed differently with a decline in Cheshire East (-2%), stability in Cheshire West and Chester (+0.6%), and growth double that of England in Warrington (+10.3%). At parliamentary constituency level, there were reported large declines in Ellesmere Port and Neston (-12.7%) and Tatton (-14.5%); and growth in excess of England in Eddisbury (16.1%), Warrington North (8.8%), and Warrington South (12.2%). It is not clear what the impact of the pandemic might be on these data.

Percentage change in median gross weekly pay of residents 2020-2021

Region	Percentage change
Cheshire East	-2
Cheshire West and Chester	0.5
Warrington	10.3
Cheshire and Warrington	2.5
City of Chester	6
Congleton	-1.5
Crewe and Nantwich	2.3
Eddisbury	16
Ellesmere Port and Neston	-12.5
Macclesfield	-1
Tatton	-14.5
Warrington North	8.8
Warrington South	12
Weaver Vale	1
England	5.2

Source: annual survey of hours and earnings - resident analysis, NOMIS October 2022

Resident wages have generally been higher in Cheshire and Warrington than for England. For the last five years, resident wages in Cheshire East have been significantly higher than for England.

Median gross weekly pay of residents, in Cheshire and Warrington, its local authorities and England 2014-2022
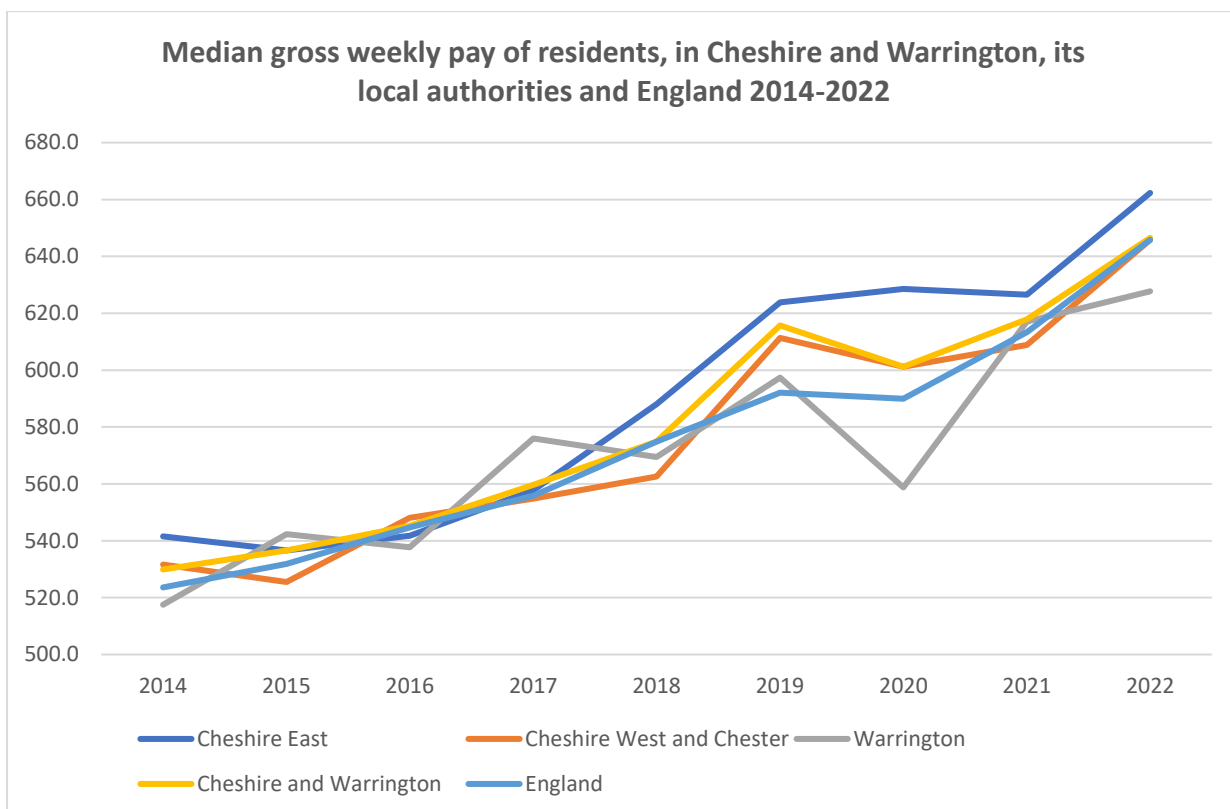
Source: annual survey of hours and earnings - resident analysis, NOMIS March 2023

The table below sets out the latest available data for median gross weekly earnings of *workplaces* in the three local authorities in Cheshire and Warrington and for England. Median earnings for Warrington workplaces in 2021 exceeded the English median. Median earnings for Cheshire East workplaces and Cheshire West and Chester workplaces in 2021 were below the English median.

Median gross weekly earnings (£s) of workplaces by gender and local authority, 2021			
Area	Male	Female	Total
Cheshire East	599.4	394.3	488.8
Cheshire West and Chester	600.1	418.9	490.5
Warrington	582.3	420.5	513.5
England	601	421.1	509.7
Source: annual survey of hours and earnings - workplace analysis, NOMIS October 2022			

Examining this dataset at the level of parliamentary constituency reveals that there were three parliamentary constituencies from ten where median gross weekly earnings for workplaces exceeded the English level (Weaver Vale, Ellesmere Port and Neston, and Warrington South). Five parliamentary constituencies exceeded England for male median gross weekly earnings and only two exceeded England for female median gross weekly earnings.
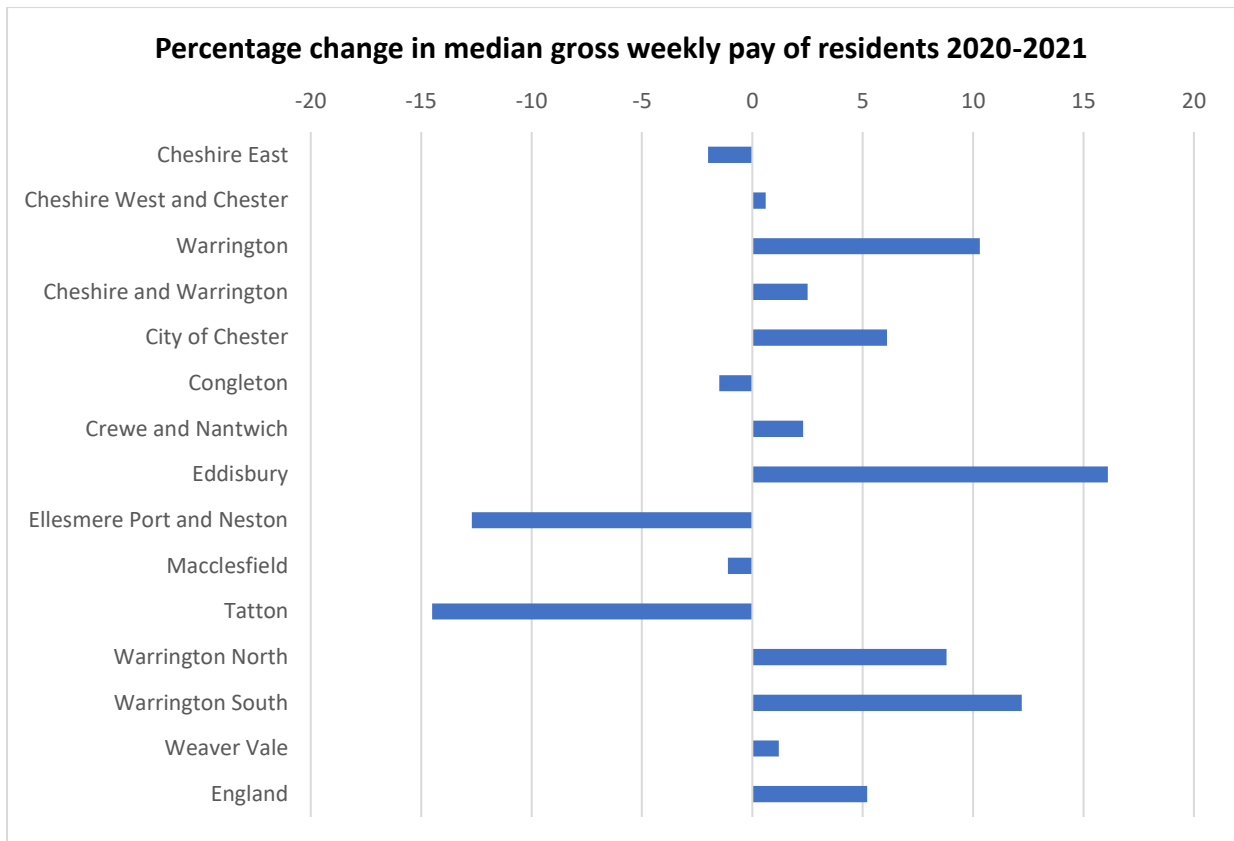
Median gross weekly earnings (£s) of workplaces by gender and parliamentary constituency, 2021			
Area	Male	Female	Total
City of Chester	549.9	458.2	480
Congleton	529.3	344.3	454.4
Crewe and Nantwich	639	386.4	507
Eddisbury	561.7	418.1	490.7
Ellesmere Port and Neston	687.3	399.6	528.8
Macclesfield	635	383.3	484.7
Tatton	580.8	421.7	505.1
Warrington North	666.4	483	581.5
Warrington South	513.7	355.2	439.5
Weaver Vale	613	406.8	519.6
England	601	421.1	509.7
Source: annual survey of hours and earnings - workplace analysis, NOMIS October 2022			

Weekly median workplace wages have been consistently lower in Cheshire and Warrington than in England, although in recent years there has been a convergence between weekly wages in England and those paid in Warrington.

Median gross weekly pay in workplaces in Cheshire and Warrington, its local authorities and England 2014-2022
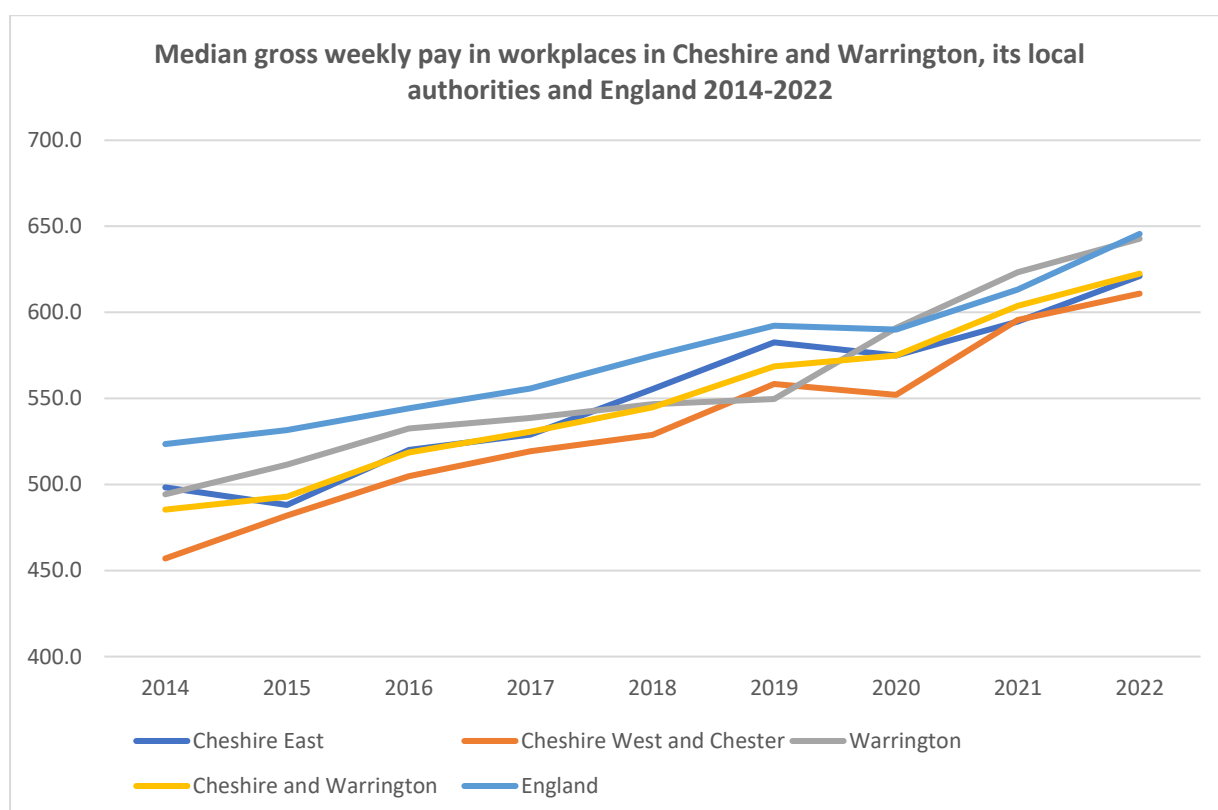
3.6.2   Low wages

The real Living Wage is an hourly rate of pay set independently and updated annually (not the UK government's National Living Wage). It is calculated according to the basic cost of living in the UK, and employers choose to pay the Living Wage on a voluntary basis. According to the Living Wage

Foundation, since 2011 the campaign has impacted over 390,000 employees and delivered over £2bn extra to some of the lowest paid workers in the UK.

As of September 2022, Real Living Wage increased to £10.90 in UK. As can be seen from the table below, nine months before this, in 2021, slightly fewer than 30% of employed residents in Cheshire and Warrington earned below the 2022 Real Living Wage with this proportion being above 30% in Cheshire East. A higher proportion of residents earned below the Real Living Wage in Cheshire and Warrington than was the case for England. It is unclear whether wage growth in 2022 will enable a significant proportion of these people to achieve the 2022 Real Living wage.

Low pay in C&W and its local authorities, hourly pay – bottom three percentiles, 2021				
Area	10th percentile	20th percentile	25th percentile	30th percentile
Cheshire East	8.98	9.81	10.19	10.81
Cheshire West and Chester	9.07	9.89	10.27	10.9
Warrington	9.14	10.12	10.64	11.18
Cheshire and Warrington	9.06	9.9	10.32	10.92
England	9.60	10.85	11.51	12.27
Source: annual survey of hours and earnings - resident analysis, NOMIS October 2022				

'

In 2021, more than 30% of residents received below the 2022 Real Living wage in half of Cheshire and Warrington's ten parliamentary constituencies. Crewe and Nantwich, Tatton and Ellesmere Port and Neston had the lowest hourly pay (ie the lowest hourly rate for the 30th percentile).

Low pay in C&W and its parliamentary constituencies, hourly pay – bottom three percentiles, 2021				
Area	10 percentile	20 percentile	25 percentile	30 percentile
Cheshire and Warrington	9.06	9.9	10.32	10.92
City of Chester	9.01	9.96	10.75	11.73
Congleton	8.91	9.83	10.21	10.76
Crewe and Nantwich	8.92	9.43	9.82	10.02
Eddisbury	9.5	10.27	11.03	11.59
Ellesmere Port and Neston	9	9.89	10.1	10.35
Macclesfield	9.32	10.2	10.81	11.23
Tatton	8.91	9.58	10.04	10.42
Warrington North	9.14	10.11	10.51	10.98
Warrington South	9.13	10.15	10.7	11.45
Weaver Vale	9.02	9.58	10.11	10.79
Source: annual survey of hours and earnings - resident analysis, NOMIS October 2022				

3.6.3   Universal credit claims by those in work

Individuals in work on low pay are eligible to claim Universal Credit. Historically, the low paid were eligible for tax credit (working tax credit/child tax credit) and some people are still in receipt of that although spatial data for this is not available.

The wards with the ten highest estimated rates of UC in work claimants are: Crewe Central (Cheshire East), Central & Grange (Cheshire West and Chester), Crewe St Barnabas (Cheshire East), Wolverham (Cheshire West and Chester), Poplars and Hulme (Warrington), Westminster (Cheshire West and

Chester), Fairfield and Howley (Warrington), Blacon (Cheshire West and Chester), Bewsey and Whitecross (Warrington), Latchford East (Warrington), Crewe South (Cheshire East).

Claimants of UC (in work) resident in Cheshire and Warrington, by ward, 2022

Estimated % of 16-64 on UC in work
- 1.3 - 1.98
- 1.98 - 2.59
- 2.59 - 2.9
- 2.9 - 3.34
- 3.34 - 3.91
- 3.91 - 4.44
- 4.44 - 5.4
- 5.4 - 6.83
- 6.83 - 8.83
- 8.83 - 13.33

Map by Brennan Wilson Ltd in QGIS. Data from StatXplore, OS, ONS and OpenStreetMap
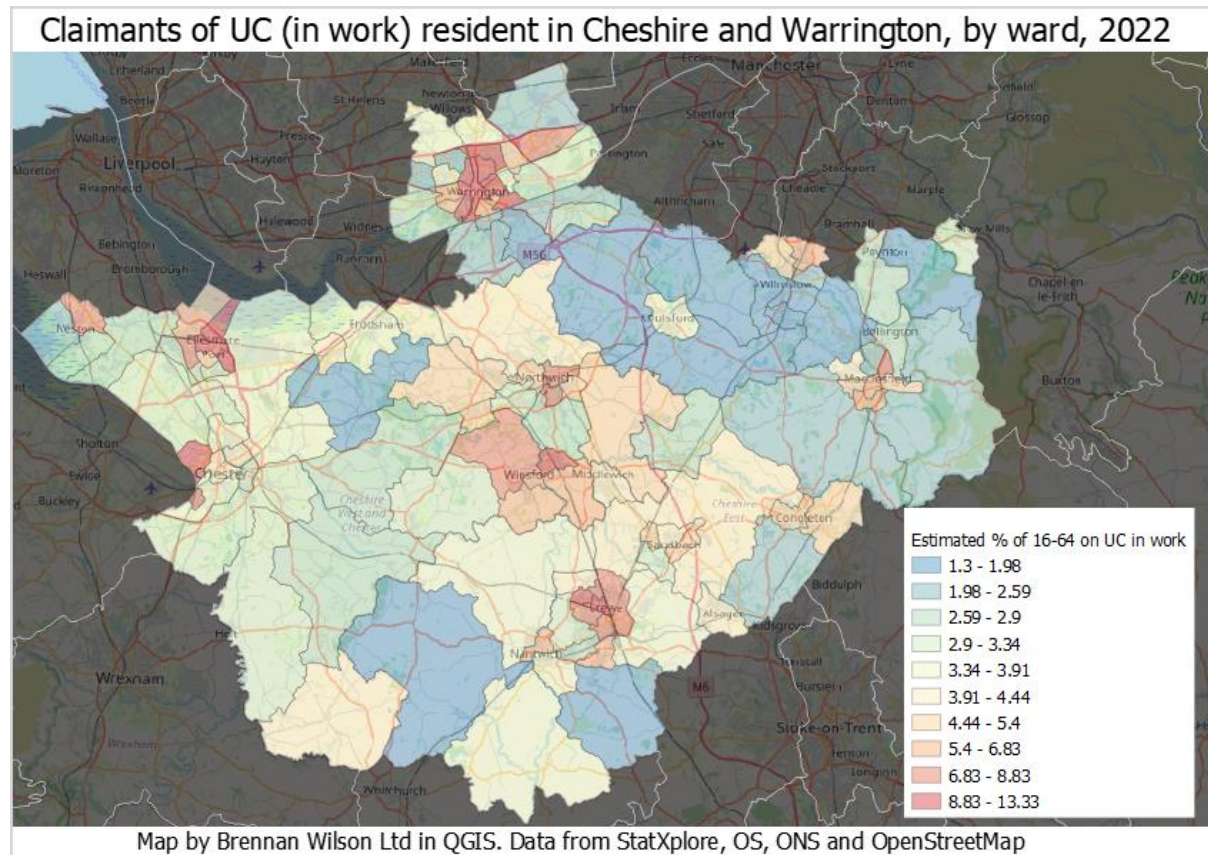
The volume of people in work claiming UC increased from c14.5k pre-pandemic to a high of c30.5k during the pandemic and was c28.5k in June 2022, an increase of 95% between Feb 2020 and June 2022.

People in work on UC in C&W, Feb 2020-Jun 2022
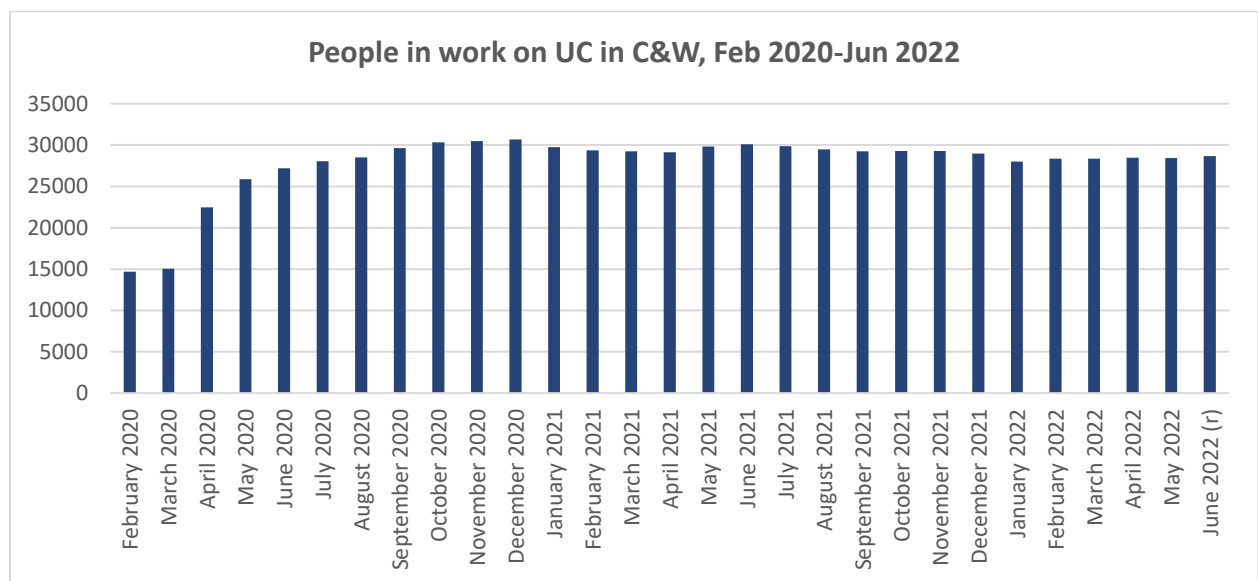
Source: StatXplore, People on UC

Every local authority saw an increase of those in work claiming UC between February 2020 and June 2022. Cheshire East saw an increase of 109%, Cheshire West and Chester an increase of 91%, and Warrington an increase of 84%.

Numbers receiving UC who are in work by local authority, Feb 20 - Jun 22
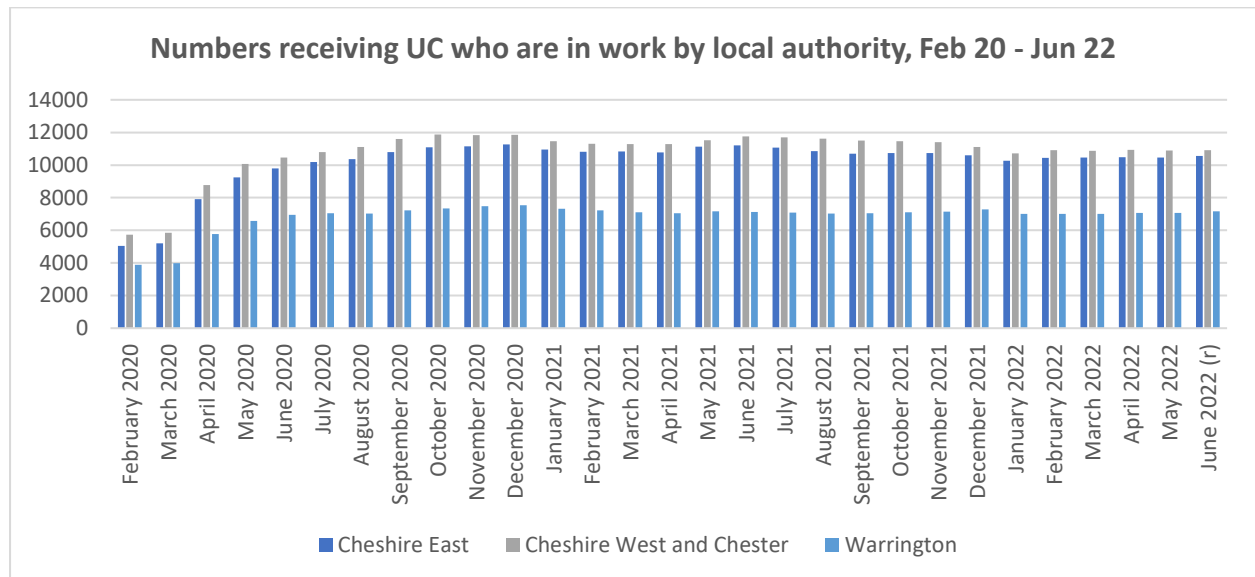
Source: StatXplore, People on UC

There has been an increase in the numbers in work claiming UC between February 2020 and June 2022 for every age band, with the increase for every age band over 35 being over double in this time. The highest percentage increase has been 145% for those aged 60-65 (an increase of 666). The highest volume increase has been 2,733 for those aged 35-39 (an increase of 117%).

People claiming UC, in work in C&W, by age, Feb 2020 - July 2022
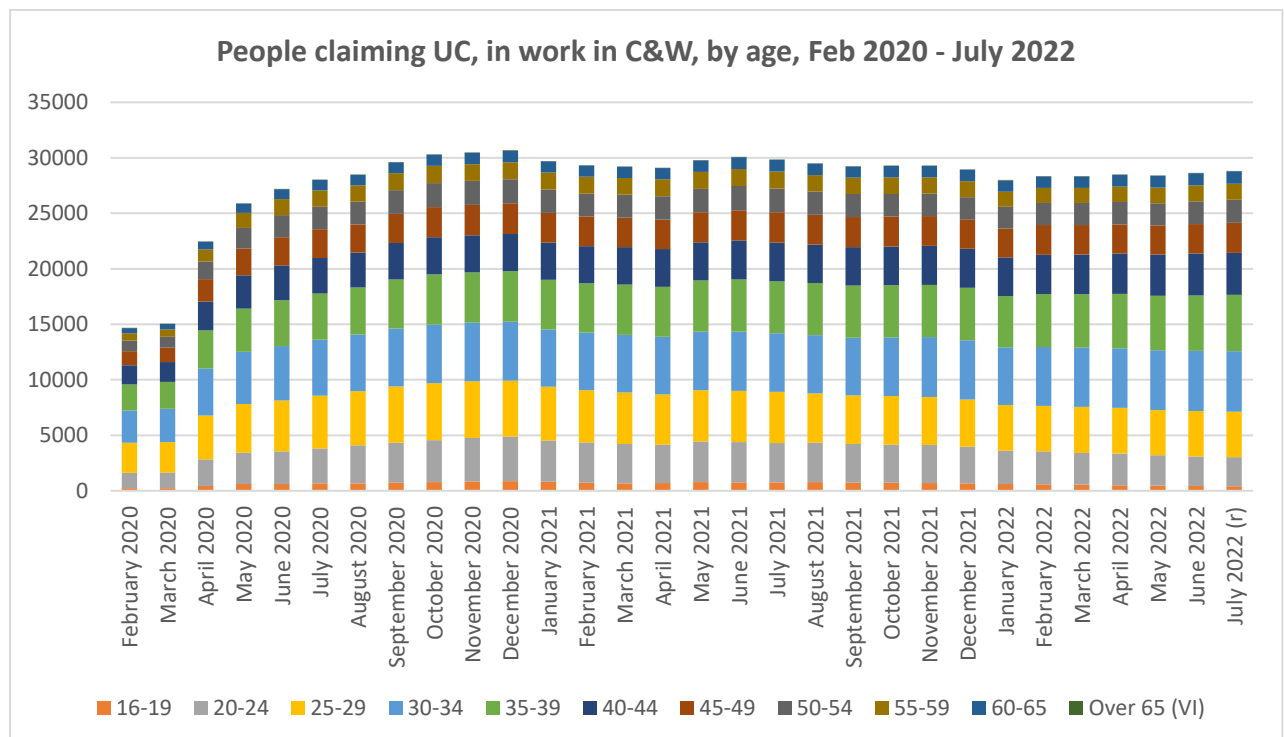
Source: StatXplore, People on UC

3.7 Deprivation[9]

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 (IMD2019) combines information from the seven domains to produce an overall relative measure of deprivation. The map below shows the IMD2019 data for LSOAs in Cheshire and Warrington.

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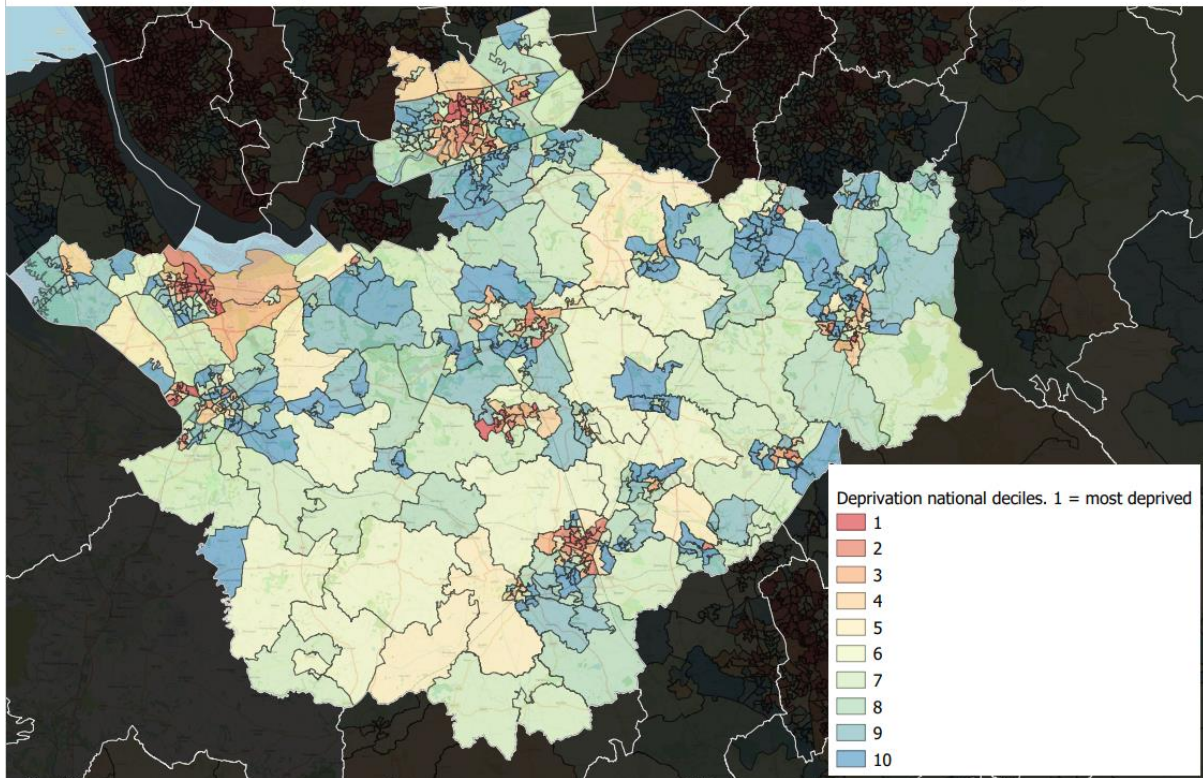
Map by Brennan Wilson Ltd in QGIS. Data from ONS, OS and OpenStreetMap

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. In every local authority and for Cheshire and Warrington as a whole, the proportion of neighbourhoods classed as most deprived for Education, Skills and Training is higher (or the same) as the proportion classed as most deprived for Employment and for Income.

[9] This subsection draws data from IMD2019

Most deprived neighbourhoods for Income, Employment and Education and Skills Domains of the IMD2019

Legend:
- Proportion of neighbourhoods in 10% most deprived nationally Income
- Proportion of neighbourhoods in 10% most deprived nationally Employment
- Proportion of neighbourhoods in 10% most deprived nationally Education, Skills and training
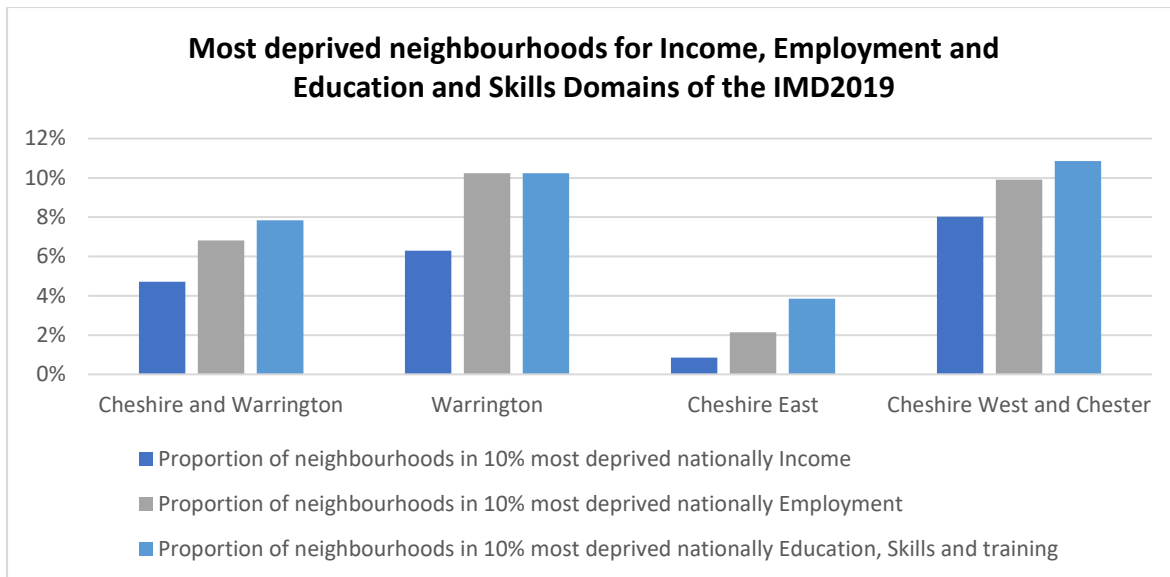
Source: SAP Core Indicators/IMD2019

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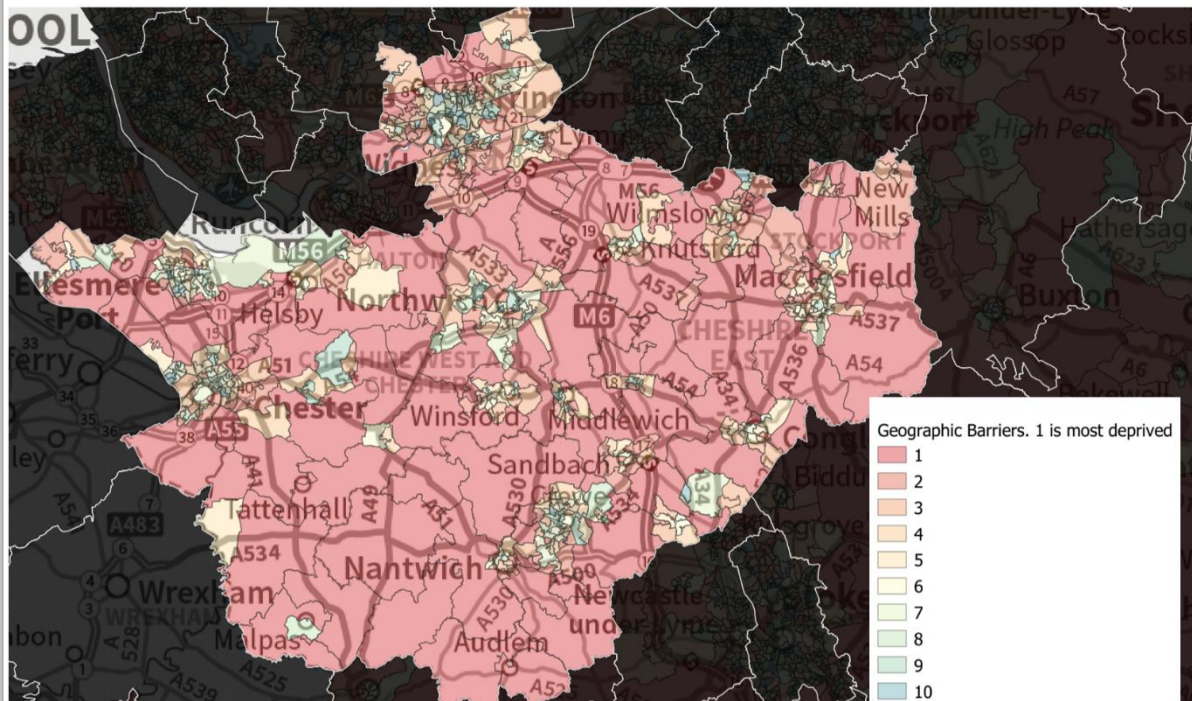
Map by Brennan Wilson Ltd in QGIS. Data from ONS and OS

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[10]

This section summarises a report commissioned by Cheshire and Warrington LEP in the Summer of 2020[11] on the 'Supply of Education and Training in Cheshire and Warrington'. The achievement data quoted is from the official National Achievement Rate Tables, publication of which was interrupted by the pandemic and is therefore quite dated.

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%.

---

[10] This section draws data from the NARTS, DfE

[11] 'The Supply of Education and Training in Cheshire and Warrington', Brennan Wilson Ltd, July 2020 https://cheshireandwarrington.com/media/cerjpape/report-d-the-supply-of-education-and-training-in-cheshire-and-warrington.pdf

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.

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:

- Economic Outlook
- Current employer demand for labour
- Current sector earnings
- Current employer demand for skills
- Economic Development Priorities
- Future employer demand for labour
- Automation

4.1 Economic Outlook[12]

The most recent forecast from the OBR was published in March 2023. Some of the key indicators in the forecast for the economy and the labour market are set out in the table below. GDP per capita is forecast to shrink by 0.2% this year. Productivity is forecast to remain stable in 2023 (0.1% growth). Whilst employment levels are forecast to be relatively stable at 32.8m in 2023 and 2024, LFS unemployment is forecast to increase to 4.1% in 2023 and 4.4% in 2024 - feeding though into increases in claimant unemployment over this time. The CPI inflation rate is forecast to outturn at 6.1% in 2023. By contrast, average earnings are forecast to outturn 5% for 2023.

Key indicators from the OBR March 2023 forecast							
	Outturn	Forecast					
	2021	2022	2023	2024	2025	2026	2027
UK economy							
Gross domestic product (GDP)	7.6	4.0	-0.2	1.8	2.5	2.1	1.9
GDP per capita	7.2	3.4	-0.8	1.3	2.0	1.7	1.5
GDP level (Q4 2019=100)	95.4	99.3	99.1	100.9	103.3	105.5	107.5
Inflation							
CPI	2.6	9.1	6.1	0.9	0.1	0.5	1.6
RPI	4.0	11.6	8.9	1.6	1.0	1.7	2.8
Labour market							
Employment (million)	32.4	32.7	32.8	32.8	33.1	33.4	33.7
Productivity per hour	1.0	0.4	0.1	1.0	1.3	1.2	1.1
Wages and salaries	6.5	7.4	5.0	1.9	2.4	2.5	3.0
Average earnings[4]	5.5	6.2	5.0	1.8	1.7	1.9	2.5
LFS unemployment (per cent)	4.5	3.7	4.1	4.4	4.3	4.2	4.1
Unemployment (million)	1.5	1.3	1.4	1.5	1.5	1.5	1.5
Source: Office for Budget Responsibility, Mar 2023, Percentage change on a year earlier							

The OBR forecast LFS unemployment rate is set out in the chart below. Rising to a high of 4.4% in 2024 from the current level of 3.6%, unemployment is not forecast to drop to current levels before 2028, remaining above 4% from the second half of 2023 onwards.

---

[12] Data in this section is drawn from the OBR March 2023 forecast

OBR March 2023 forecast unemployment rate
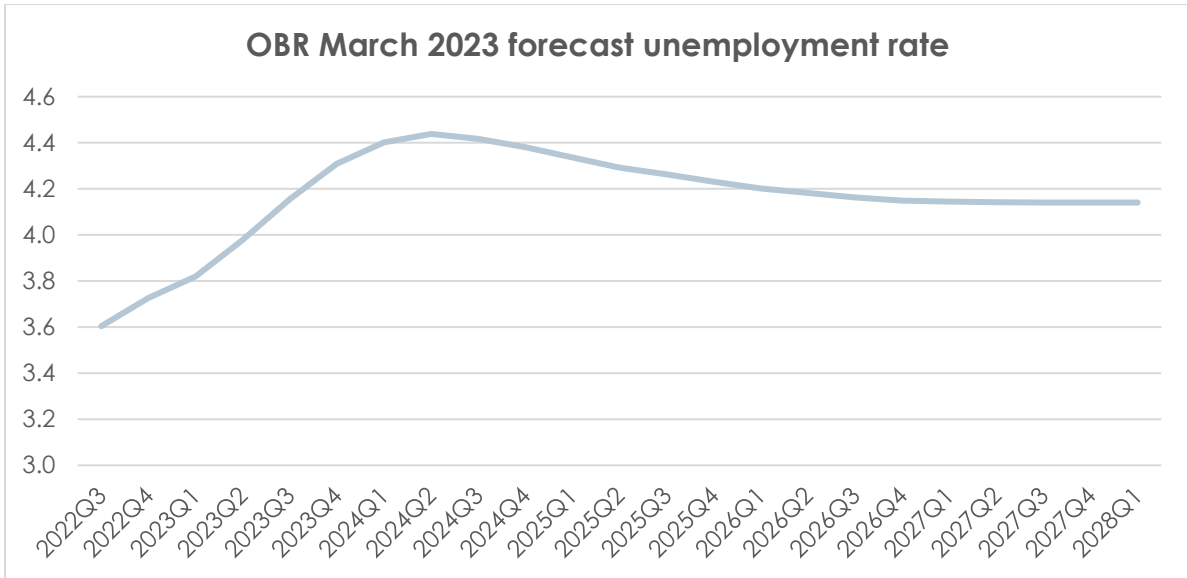
Source: Office for Budget Responsibility

4.2 Current employer demand for labour[13]

4.2.1   Employees on Payroll

The chart below presents data from real-time pay as you earn (PAYE) data published by HMRC/ONS. It covers the period directly prior to the pandemic to November 2022 and presents data for Cheshire and Warrington, its three local authorities, and the UK. Data are indexed to Feb 2020=100. By the late summer of 2021, the number of payrolled employees exceeded the pre-pandemic position in Cheshire and Warrington, Cheshire East, Cheshire West and the UK. It is notable, and of some concern, that volumes of payrolled employees had still not returned to their pre-pandemic levels in Warrington by November 2022.

---

[13] Data in this subsection is drawn from HMRC real time PAYE statistics; NOMIS (BRES); Google Community Mobility Reports; and Lightcast Analyst.

Payrolled employees in C&W local authorities and the UK, Feb 2020 - Nov 2022

Legend: Warrington, Cheshire East, Cheshire West and Chester, UK, Cheshire and Warrington
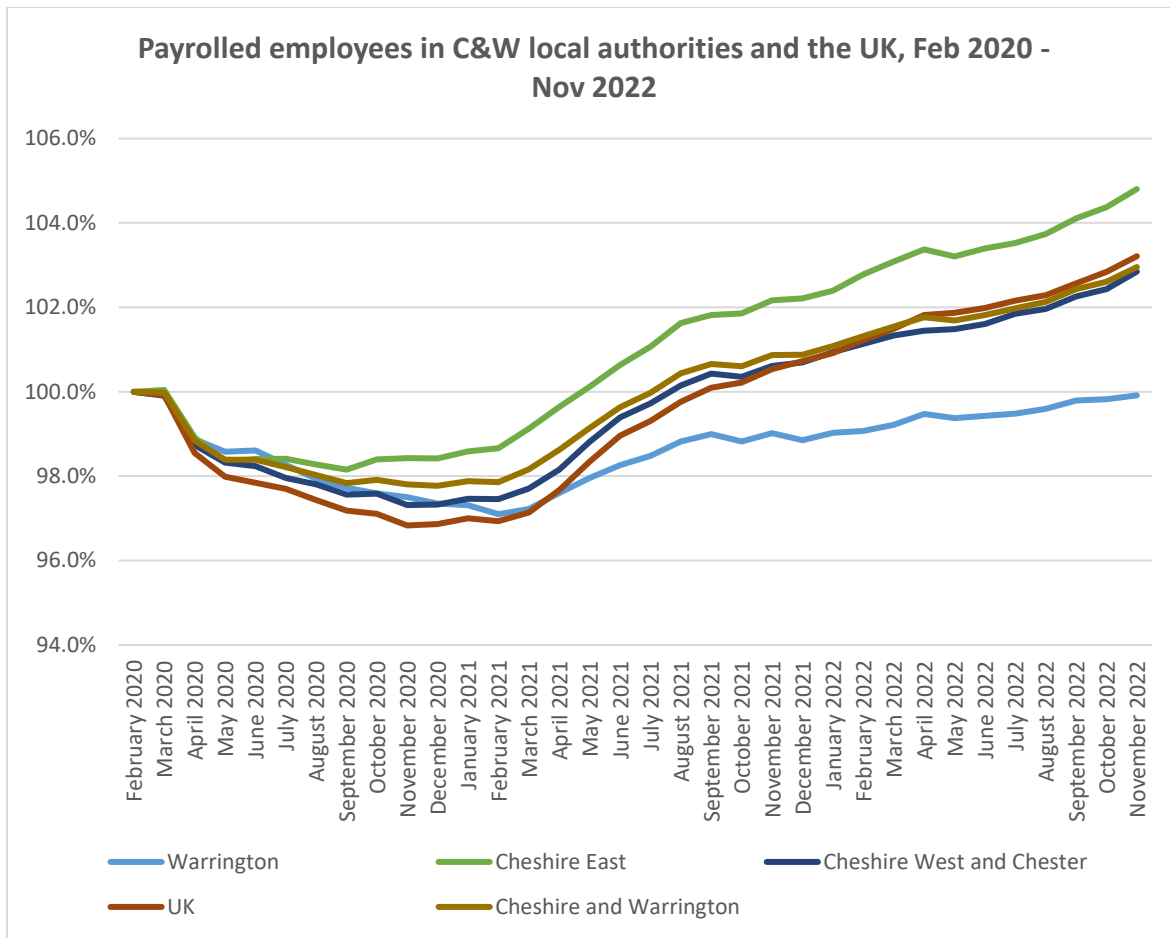
Source: Earnings and employment from Pay As You Earn Real Time Information, UK: Dec 2022, ONS

4.2.2 Employment Change

BRES data reflects that the employment level in Cheshire and Warrington had recovered to above the pre-pandemic level by 2021, with 4,000 more in employment in 2021 when compared with 2019. As can be seen from the map below, this recovery was not evenly distributed. 32 wards experienced employment increases, 31 saw decreases and almost half experienced no change. There were 13 wards where employment grew by 1,000 or more. They were:

- Chelford
- Wistaston
- Birchwood
- Great Sankey North and Whittle Hall
- Orford
- Broken Cross and Upton
- Bunbury
- Crewe South
- Macclesfield Hurdsfield
- Blacon
- Christleton & Huntington
- Saughall & Mollington
- Westbrook

Conversely, 10 wards lost 1,000 jobs or more. They were:

- Chester City & the Garden Quarter
- Wilmslow Lacey Green
- Crewe East
- Handforth
- Knutsford
- Wilmslow East
- Rudheath
- Willaston & Thornton
- Culcheth, Glazebury and Croft
- Rixton and Woolston

Employment change in Cheshire and Warrington, by ward, 2019-2021

Map by Brennan Wilson Ltd in QGIS. Data from BRES, OS, OpenStreetMap
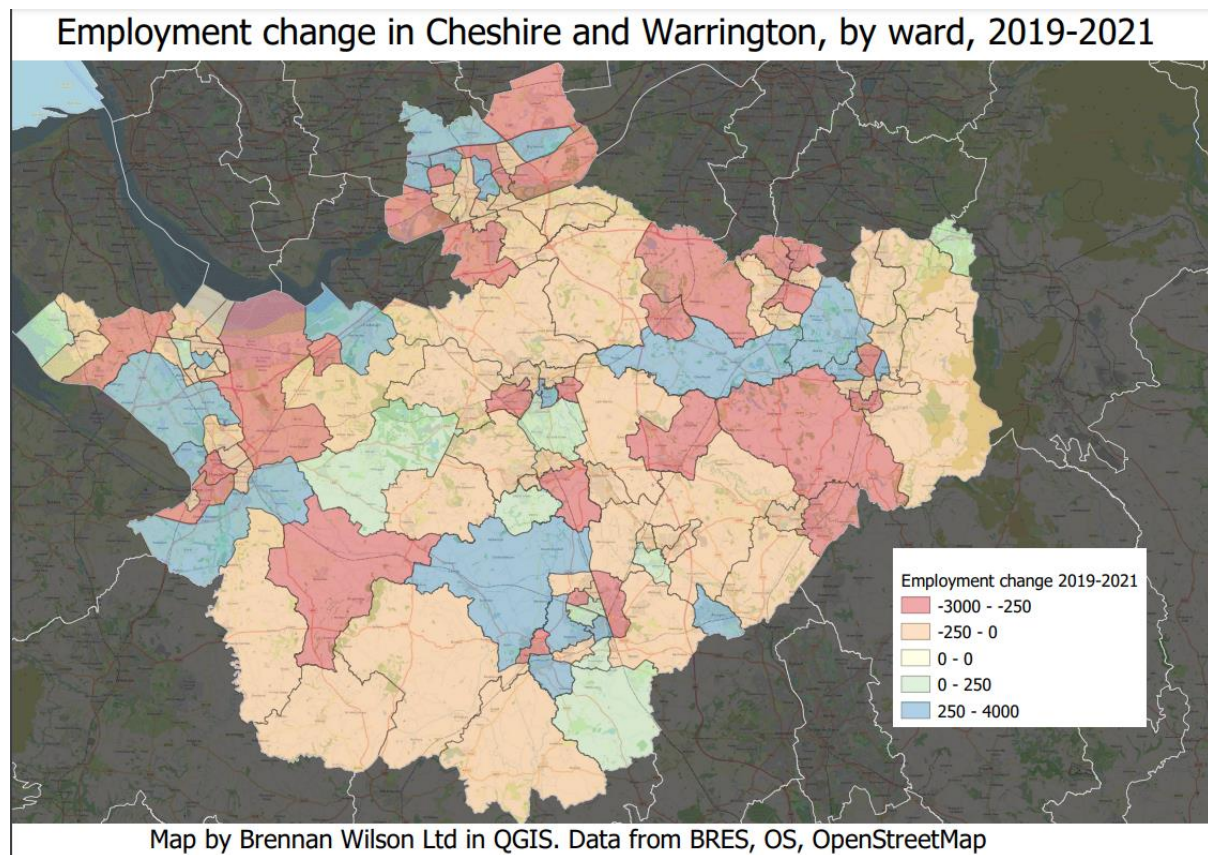
4.2.3   Workplace mobility

During the pandemic, Google published daily mobility data to help us understand how Covid-19 impacted on different forms of economic activity. The last published data of this kind is for the middle of October 2022.

The chart below shows Google mobility data for workplaces in the three local authorities of Cheshire and Warrington for the middle of October 2022. This data is benchmarked against the average for the two months directly preceding the pandemic. It can be seen from this that weekday workplace mobility was 25-27% 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 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. This new pattern of working seems to have become embedded to some extent. There will likely be ramifications of this 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 in some occupations.

Change in workplace mobility, pre-pandemic to October 2022
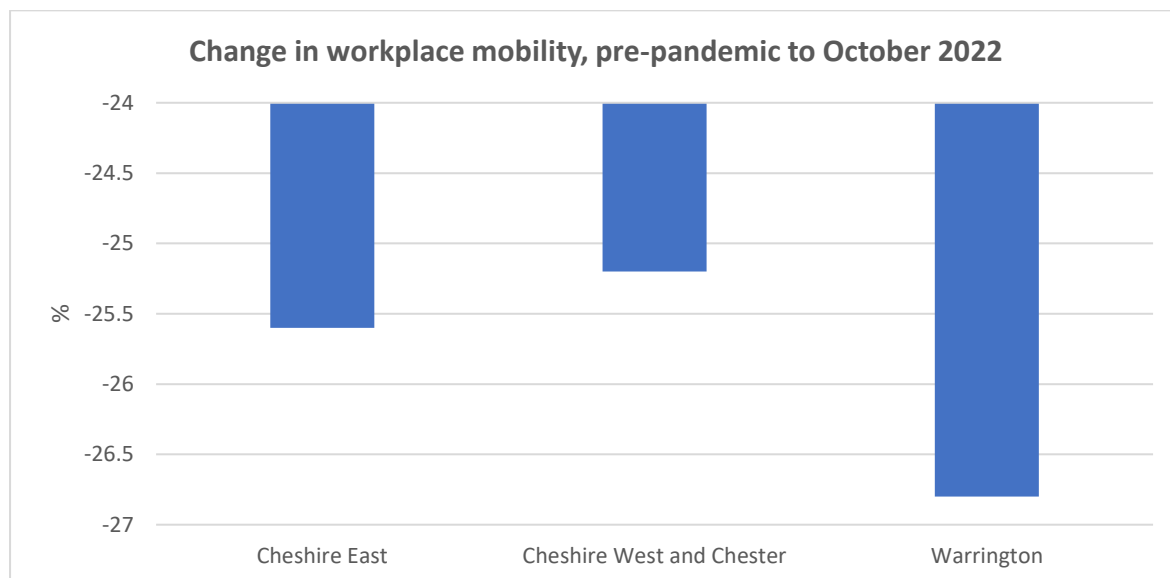
Source: Google Community Mobility reports, accessed Jan 2023

4.2.4   Vacancies

There was a surge in employer demand aligned with the opening up of the labour market following the end of lockdown. However, current levels of economic activity are, on many indicators, still below pre-pandemic levels, and the OBR has forecast a downturn in 2023.

The trend data for job posting intensity would seem to indicate that the labour market is loosening which would be consistent with an economic slow-down. A declining posting intensity for all job vacancies would suggest that employers are finding it progressively easier to appoint to roles. The posting intensity in Cheshire and Warrington halved between Jan 2022 and Dec 2022, declining from 4 to 2.

Trend in job posting intensity in Cheshire and Warrington, 2022	
Month	Posting Intensity
Dec 2022	2 : 1
Nov 2022	3 : 1
Oct 2022	3 : 1
Sep 2022	3 : 1
Aug 2022	3 : 1
Jul 2022	3 : 1
Jun 2022	3 : 1
May 2022	3 : 1
Apr 2022	3 : 1
Mar 2022	3 : 1
Feb 2022	3 : 1
Jan 2022	4 : 1
Source: Lightcast Analyst, Jan 2023	

The table below considers the number of employers competing for roles, by 1-digit SOC, between Jan 2016 and Dec 2022. The three occupational areas with the most employers seeking to appoint during this time were

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

Number of employers competing for roles, by 1-digit SOC, Jan 2016 - Dec 2022	
Occupation	Number of Employers Competing
Managers, Directors and Senior Officials	5521
Professional Occupations	7035
Associate Professional and Technical Occupations	7585
Administrative and Secretarial Occupations	5459
Skilled Trades Occupations	4649
Caring, Leisure and Other Service Occupations	3741
Sales and Customer Service Occupations	6274
Process, Plant and Machine Operatives	2223
Elementary Occupations	4173
Source: Lightcast Analyst, Jan 2023	

These occupational areas have also, in general, been those with the highest volume of unique job postings over the last five years, with demand for roles in 'Professional Occupations' in Cheshire and Warrington being significantly higher than for any other occupational area in this period.
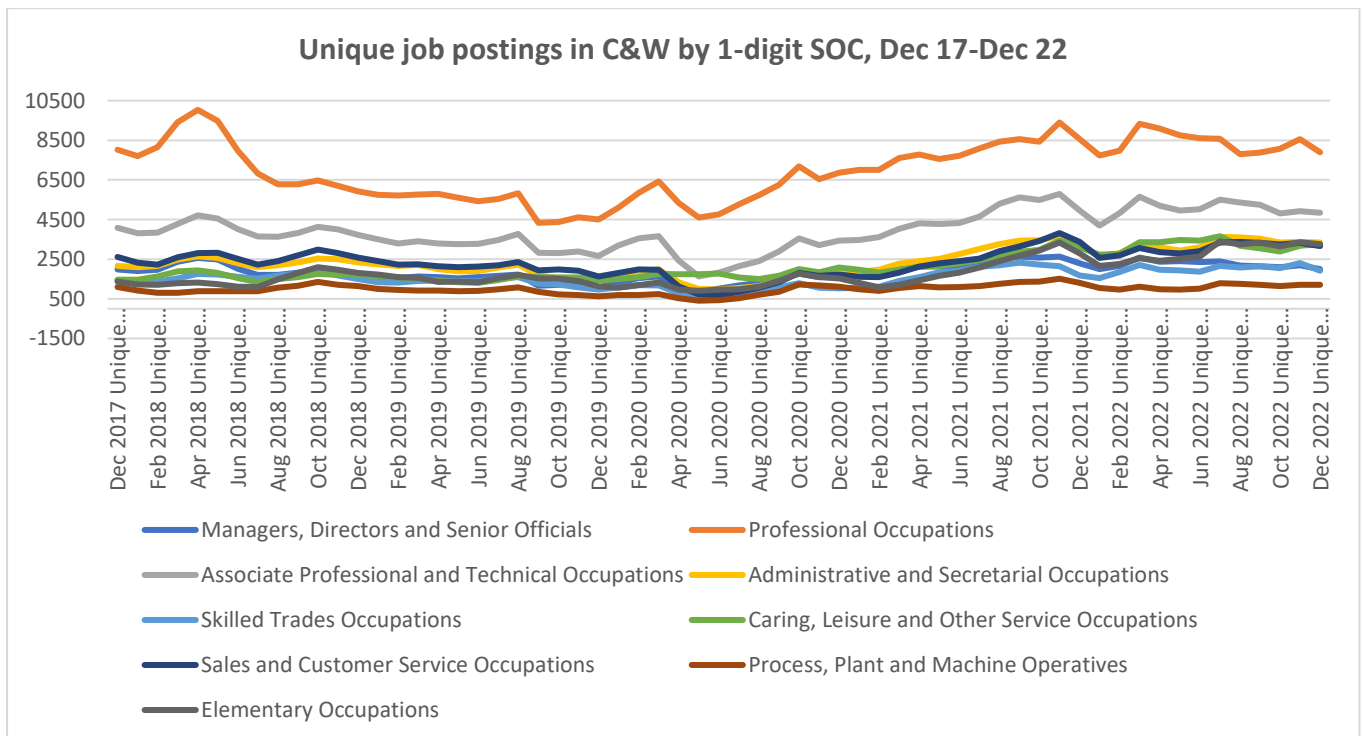
Source: Lightcast Analyst, Jan 2023

However, in the same time, the volumes of roles posted in Cheshire and Warrington classified as 'Professional' has slightly declined in this five year period. By contrast the volume of roles posted as

being in 'Caring, Service and Other occupations' and as 'Elementary Occupations' has more than doubled over the same time. It is unclear to what extent this reflects an increase in the number of roles available in the Labour Market as opposed to an increase in the propensity of employers to use web-based routes to fill these types of vacancy.

% change in job postings in C&W by 1-digit SOC, Dec 17 - Dec 22
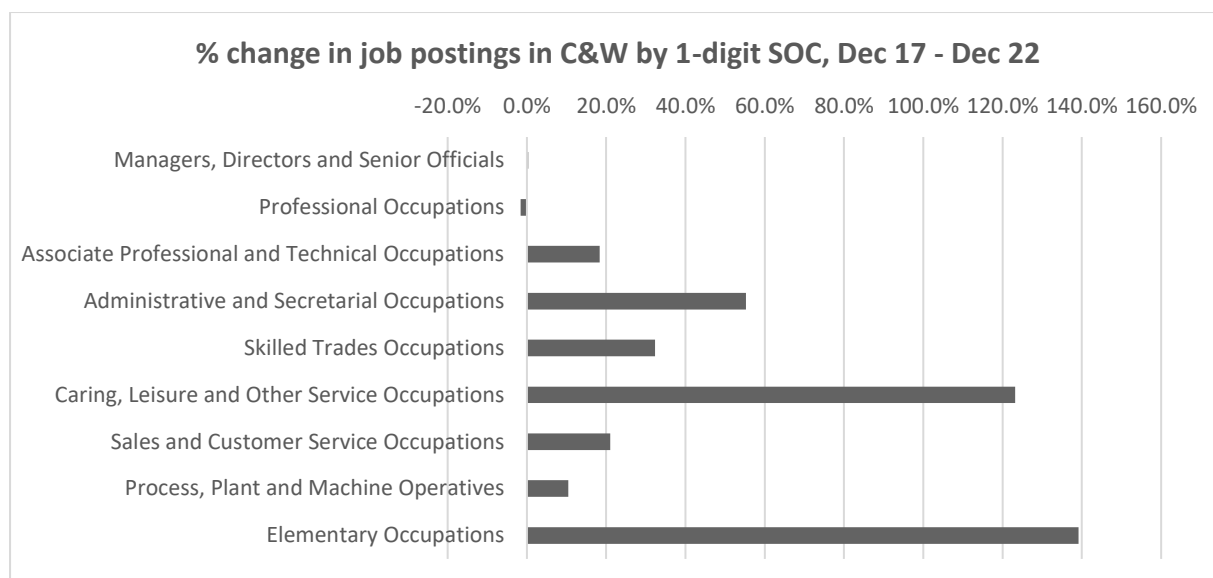
Source: Lightcast Analyst, Jan 2023

Overall the posting intensity for roles in Cheshire and Warrington in 2022 was 3, with this being the case for most types of occupation, although posting intensity for Administrative and Secretarial Occupations and Skilled Trades Occupations was 2, which suggests that employers found it slightly easier to appoint to this type of role.

Unique job postings in Cheshire and Warrington, by occupation, 2022			
Occupation	2022 Unique Postings	Avg. Posting Intensity (Jan 2016 - Dec 2022)	Median Annual Wages
Managers, Directors and Senior Officials	11600	3 : 1	39055
Professional Occupations	41863	3 : 1	37921
Associate Professional and Technical Occupations	25674	3 : 1	29716
Administrative and Secretarial Occupations	16632	2 : 1	20135
Skilled Trades Occupations	10078	2 : 1	25021
Caring, Leisure and Other Service Occupations	15751	3 : 1	15925
Sales and Customer Service Occupations	15180	3 : 1	16258
Process, Plant and Machine Operatives	5527	3 : 1	25667
Elementary Occupations	14226	3 : 1	14408
Source: Lightcast Analyst, Jan 2023			

The most sought-after occupations (4-digit SOC) in Cheshire and Warrington between 2016 and 2022 were:

- Nurses
- Sales Related Occupations n.e.c.
- Programmers and Software Development Professionals

Job types sought by employers in Cheshire and Warrington, 2016-2022		
Occupation (SOC)	Total Postings	Unique Postings
Nurses	146629	30698
Sales Related Occupations n.e.c.	60804	28840
Programmers and Software Development Professionals	70393	27321
Care Workers and Home Carers	77749	24342
Customer Service Occupations n.e.c.	55975	22476
Other Administrative Occupations n.e.c.	48996	21235
Book-keepers, Payroll Managers and Wages Clerks	27825	14708
Human Resources and Industrial Relations Officers	29710	12650
Chartered and Certified Accountants	25743	12071
IT Business Analysts, Architects and Systems Designers	28827	12063
Source: Lightcast Analyst, Jan 2023		

It is possible to drill down into the job postings data to the level of individual job title. Doing so (table below) confirms the message from the table above. Roles in health and care dominate the most frequently sought job titles.

Job titles sought by employers in Cheshire and Warrington, 2016-2022	
Job Title	Unique Postings (Jan 2016 - Dec 2022)
Support Workers	9390
Registered General Nurses	5247
Care Assistants	5199
Customer Service Advisors	5144
Warehouse Operatives	4744
Health Care Assistants	3956
Registered Nurses	3717
Staff Nurses	3428
Administrators	3425
Cleaners	3290
Quantity Surveyors	3154
Sales Executives	3084
Account Assistants	2904
Teaching Assistants	2740
Apprentices	2686
Management Accountants	2667
Recruitment Consultants	2509
Production Operatives	2370
HGV Class 1 Drivers	2346
Source: Lightcast Analyst, Jan 2023	

It is sometimes possible to ascertain from job postings the industry (2-digit SIC) of the employer seeking to appoint. Between 2016 and 2022, there were just less than 450k postings where it was possible to do so. From these, over 40% of employers were classified as belonging to the 'Employment Activities' SIC. In other words, recruitment for jobs in Cheshire and Warrington is dominated by employment agencies. The data suggests this is also the case for England as a whole.

Unique job postings in Cheshire and Warrington by industry (2-digit SIC), 2016-2022	
	Unique Postings (Jan 2016 - Dec 2022)
Employment Activities	200198
Human Health Activities	38526
Retail Trade, Except of Motor Vehicles and Motorcycles	21369
Activities of Head Offices; Management Consultancy Activities	18062
Financial Service Activities, Except Insurance and Pension Funding	14454
Food and Beverage Service Activities	13783
Residential Care Activities	12490
Education	9590
Architectural and Engineering Activities; Technical Testing and Analysis	9471
Wholesale Trade, Except of Motor Vehicles and Motorcycles	9095
Public Administration and Defence; Compulsory Social Security	8795
Computer Programming, Consultancy and Related Activities	8290
Office Administrative, Office Support and Other Business Support Activities	8016
Wholesale and Retail Trade and Repair of Motor Vehicles and Motorcycles	7210
Construction of Buildings	6071
Accommodation	5780
Real Estate Activities	5449
Source: Lightcast Analyst, Jan 2023	

4.3 Advertised earnings[14]

Consistent with the finding above that the most sought after roles in Cheshire and Warrington were in Professional and Associate Professional occupational areas, the most frequently advertised salary in Cheshire and Warrington (where salary range was published – about half of all postings) was for roles paying above £40,000 per annum.

---

[14] Data in this subsection is drawn from Lightcast Analyst

Advertised salary in job postings in Cheshire and Warrington, 2016-2022

Salary band	
£7,000-£9,999	
£10,000-£12,999	
£13,000-£15,999	
£16,000-£18,999	
£19,000-£21,999	
£22,000-£24,999	
£25,000-£27,999	
£28,000-£30,999	
£31,000-£33,999	
£34,000-£36,999	
£37,000-£39,999	
£40,000-£500,000	
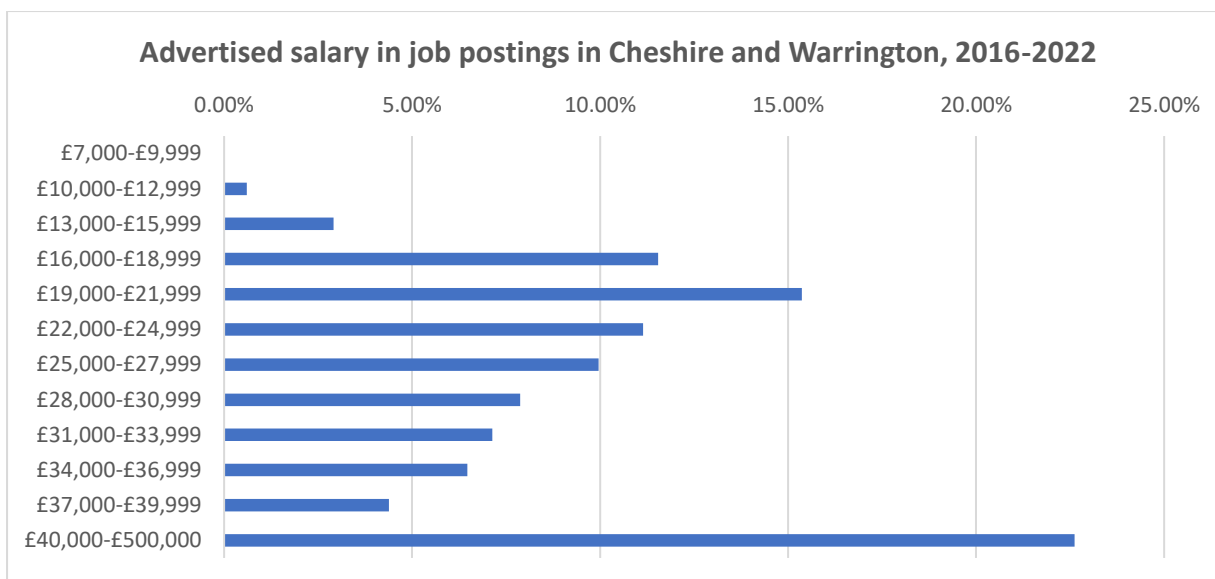
Source: Lightcast Analyst, Jan 2023

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 was Skilled Trades, where the median ranges from £24,576 in Cheshire West and Chester to £26,264 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).

Median advertised salary for roles in Cheshire and Warrington, by local authority, 2022			
Occupation	Cheshire East	Cheshire West and Chester	Warrington
Managers, Directors and Senior Officials	£39,421	£38,113	£39,597
Professional Occupations	£37,820	£37,928	£38,048
Associate Professional and Technical Occupations	£29,580	£29,496	£30,141
Administrative and Secretarial Occupations	£20,020	£19,939	£20,457
Skilled Trades Occupations	£24,588	£24,576	£26,264
Caring, Leisure and Other Service Occupations	£15,942	£15,796	£16,065
Sales and Customer Service Occupations	£16,035	£16,170	£16,758
Process, Plant and Machine Operatives	£26,210	£25,189	£25,382
Elementary Occupations	£13,931	£13,961	£15,553
Total Across All Occupations	£25,818	£25,225	£26,433
Source: Lightcast Analyst, Jan 2023			

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 3%) and currently employ more than 2,000 people in Cheshire and Warrington, ranked by the average wages per job. Ten of these fifteen sectors have an average wage higher than the Cheshire and Warrington average of £ £28,495

The high employment sectors with average wages above £35,000 are:

- Manufacture of Basic Pharmaceutical Products and Pharmaceutical Preparations
- Manufacture of Chemicals and Chemical Products
- Computer Programming, Consultancy and Related Activities
- Construction of Buildings

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

High employment sectors (2-digit SIC) with recent growth in Cheshire and Warrington			
	Avg. Wages Per Job	2022 Jobs	2016 - 2022 % Change
Manufacture of Basic Pharmaceutical Products and Pharmaceutical Preparations	£57,682	5010	55%
Manufacture of Chemicals and Chemical Products	£49,112	3899	19%
Computer Programming, Consultancy and Related Activities	£43,015	14602	49%
Construction of Buildings	£36,573	8033	48%
Financial Service Activities, Except Insurance and Pension Funding	£33,763	15630	25%
Wholesale Trade, Except of Motor Vehicles and Motorcycles	£32,313	18357	15%
Other Manufacturing	£31,811	2084	191%
Human Health Activities	£30,836	38080	15%
Legal and Accounting Activities	£30,477	37835	41%
Wholesale and Retail Trade and Repair of Motor Vehicles and Motorcycles	£28,609	10823	30%
Employment Activities	£24,449	26712	28%
Veterinary Activities	£23,199	2459	96%
Activities of Membership Organisations	£21,223	3194	10%
Services to Buildings and Landscape Activities	£18,672	12608	15%
Sports Activities and Amusement and Recreation Activities	£17,467	7348	10%
Source: Lightcast Analyst, Jan 2023			

4.4 Current employer demand for skills[15]

Some job postings specify the education level required for a role but the vast majority of postings do not (over 80%). This failure to specify a level will either be because no specific education level is required or because the level is implicit in the nature of the role (eg an employer seeking to appoint a 'research scientist' is likely to be seeking Masters/Phd qualified applicants but may not specify this in the job posting). Where a level was specified, the most frequently sought level of qualification was Bachelor's degree or equivalent.

---

[15] Data in this subsection is drawn from Lightcast Analyst and the 2019 Employer Skills Survey

Education level sought from applicants in job postings in Cheshire and Warrington, 2016-2022		
Education Level	Unique Postings	% of Total
No Education Listed	589726	82%
Up to GCSEs or equivalent	41459	6%
A-levels or equivalent	26268	4%
Foundation/HNC/HND or equivalent	17266	2%
Bachelor's or equivalent	58744	8%
Master's or equivalent	20767	3%
Ph.D. or equivalent	4957	1%
Source: Lightcast Analyst, Jan 2023		

For those roles that did specify an educational level, 60% were seeking applicants qualified at Level 4 or above. By contrast, fewer than a quarter were seeking applicants qualified to Level 2 or below.
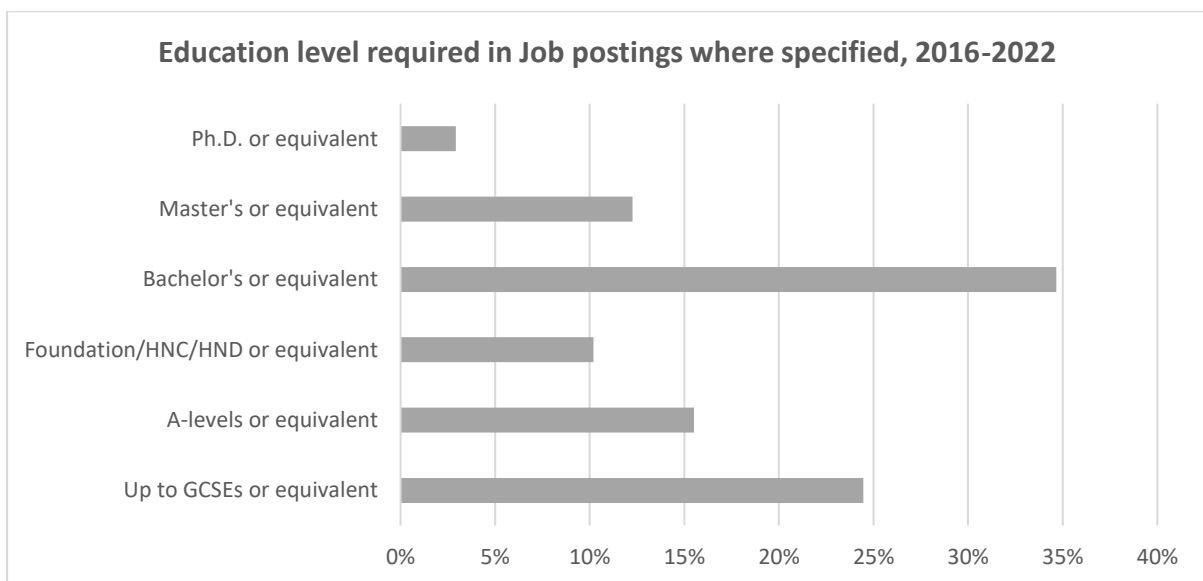
Source: Lightcast Analyst, Jan 2023

Specialised skills frequently sought by employers in Cheshire and Warrington tended to relate to finance, ICT and health/care. The three most sought after common skills were Communications, Management, and Customer Service.

Most common skills sought by employers in job postings in Cheshire and Warrington, 2016-2022			
Specialised skills		**Common skills**	
Skill	*Frequency in Postings*	*Skill*	*Frequency in Postings*
Finance	5.5%	Communications	26.0%
Accounting	4.6%	Management	18.1%
Marketing	4.4%	Customer Service	17.8%
Key Performance Indicators (KPIs)	4.0%	Sales	13.1%
Auditing	3.7%	Detail Oriented	8.4%
Invoicing	3.3%	Planning	6.8%
Warehousing	3.1%	Leadership	6.0%
Nursing	3.0%	Self-Motivation	5.8%
Sales Prospecting	2.9%	Operations	5.4%
Agile Methodology	2.8%	Problem Solving	5.2%
SQL (Programming Language)	2.6%	Enthusiasm	4.9%
Business Development	2.3%	Microsoft Excel	4.4%
Customer Relationship Management	2.2%	Teaching	4.3%
JavaScript (Programming Language)	2.0%	Mathematics	3.9%
Procurement	2.0%	Interpersonal Communications	3.8%
Risk Analysis	2.0%	Innovation	3.4%
Mental Health	1.9%	Microsoft Office	3.3%
Selling Techniques	1.9%	Time Management	3.3%
C# (Programming Language)	1.8%	Writing	2.9%
Personal Care	1.8%	Presentations	2.8%
Source: Lightcast Analyst, Jan 2023			

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

This data is summarised in the graph below.

Skills that will need developing in the workforce C&W and England, 2019
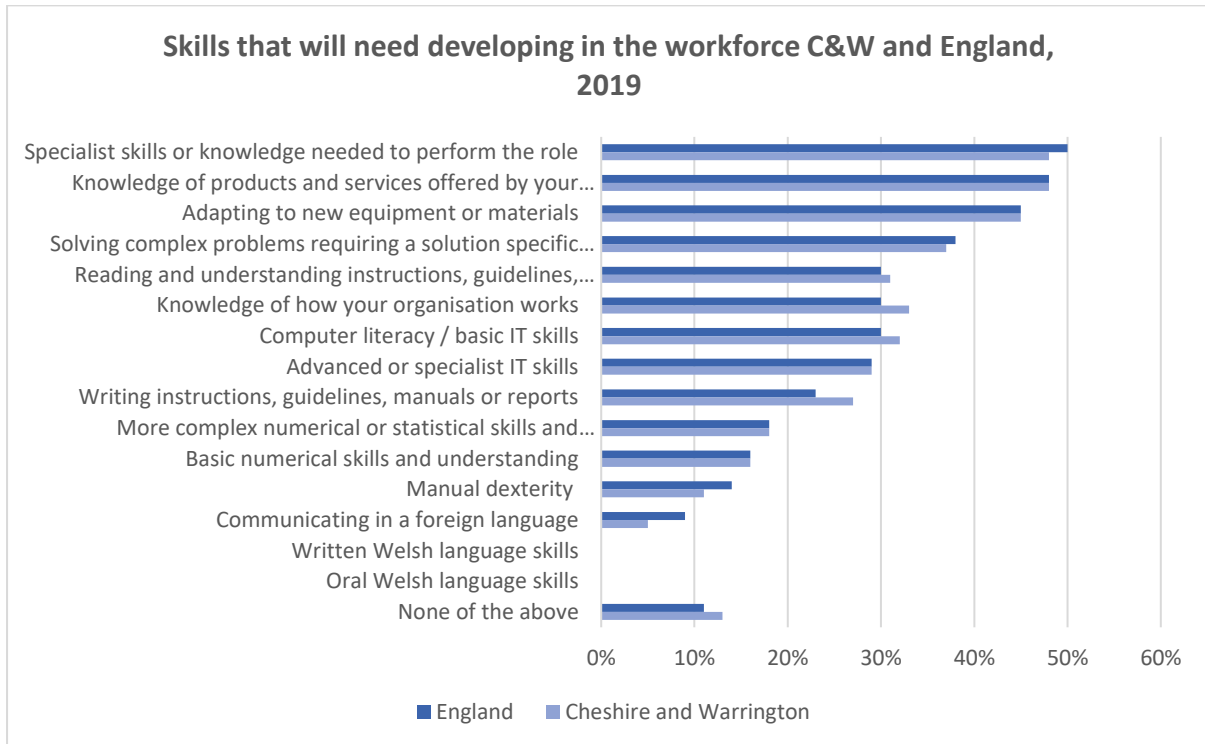
Source: SAP Core Indicators, ESS 2019

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

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

Critical or significant factors for job candidates
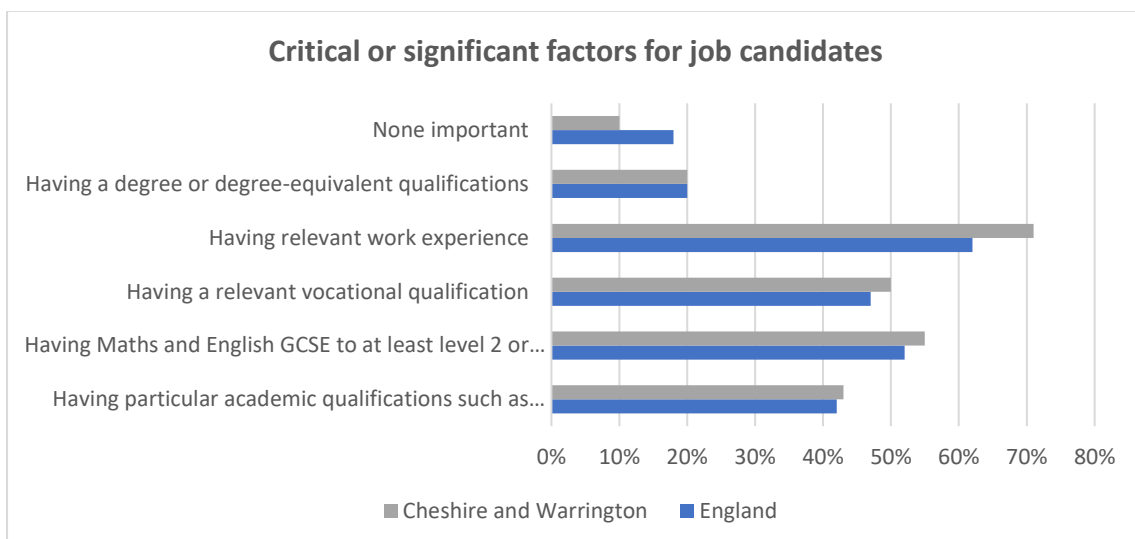
Source: ESS 2019

4.5 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 on the Cheshire and Warrington jobs portal and described briefly below.

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

4.5.2 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.

4.5.3 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.

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

Central to the 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_2 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.

4.5.4 Life Sciences

Work is underway 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.

4.6 Future Demand for Labour[16]

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. 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 has clearly not been borne out by events.

However, Working Futures has not lost all its utility. Over time it may be useful as a statement of a possible pandemic-free/no Brexit 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 mostly on this basis that Working Futures data is reported below.

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.

---

[16] Forecast data in this subsection is drawn from Working Futures (Warwick University, IER) and Lightcast Analyst forecasts for average annual openings. The Lightcast figures provide a greater level of disaggregation than Working Futures (ie 4 digit SOC rather than 2-digit SOC) but it is understood that Lightcast draws on the Working Futures forecasts so the two sources should be consistent with each other.

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

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

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

Decline in the overall numbers employed is forecast for Skilled Trades; Process, Plant and Machine Operatives; and Administrative and Secretarial Occupations.
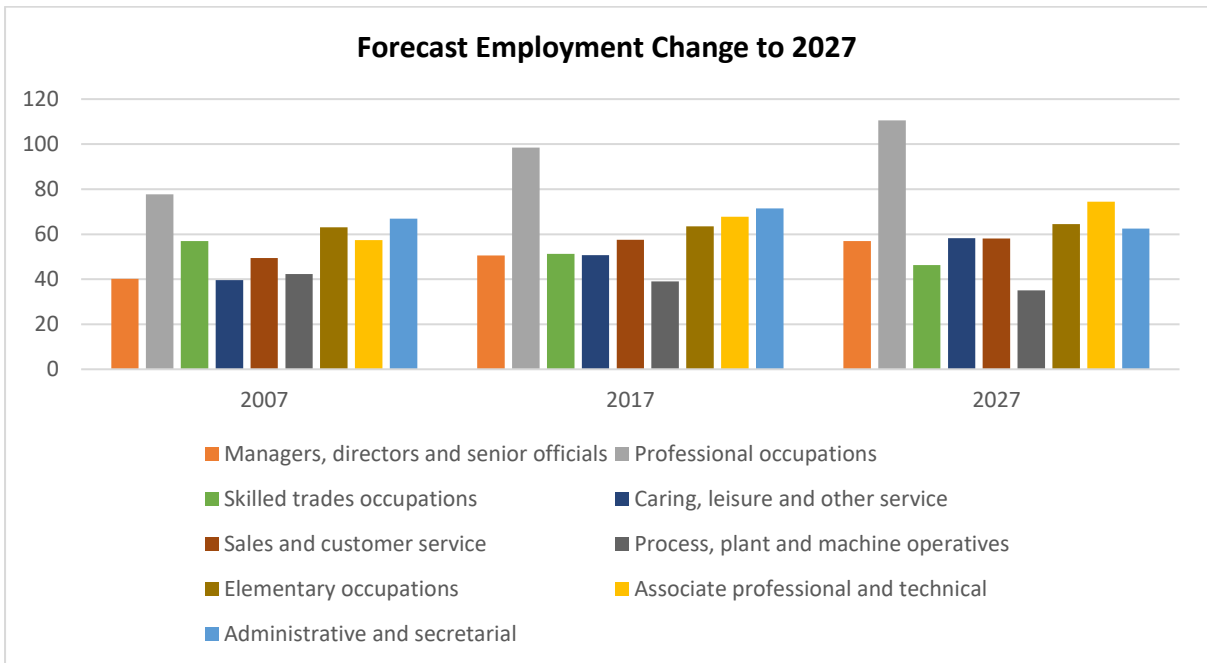
Source: Working Futures 2017-2027 LEP Tables, IER

As noted in the discussion above, Working Futures provides forecasts for both growth ("expansion") demand for labour and replacement demand for labour. The chart below illustrates these different components of the forecast demand for labour. Replacement demand is driven by the numbers that leave an occupation and need to be replaced (eg because of retirement). It can be seen from the

chart below that in Cheshire and Warrington, replacement demand invariably drives demand for labour at a higher rate than the growth (or decline) of the overall number of jobs in an occupation.

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

- Professional Occupations
- Caring, Leisure and Other Service Occupations
- Associate Professional and Technical Occupations
- Elementary Occupations
- Administrative and Secretarial Occupations
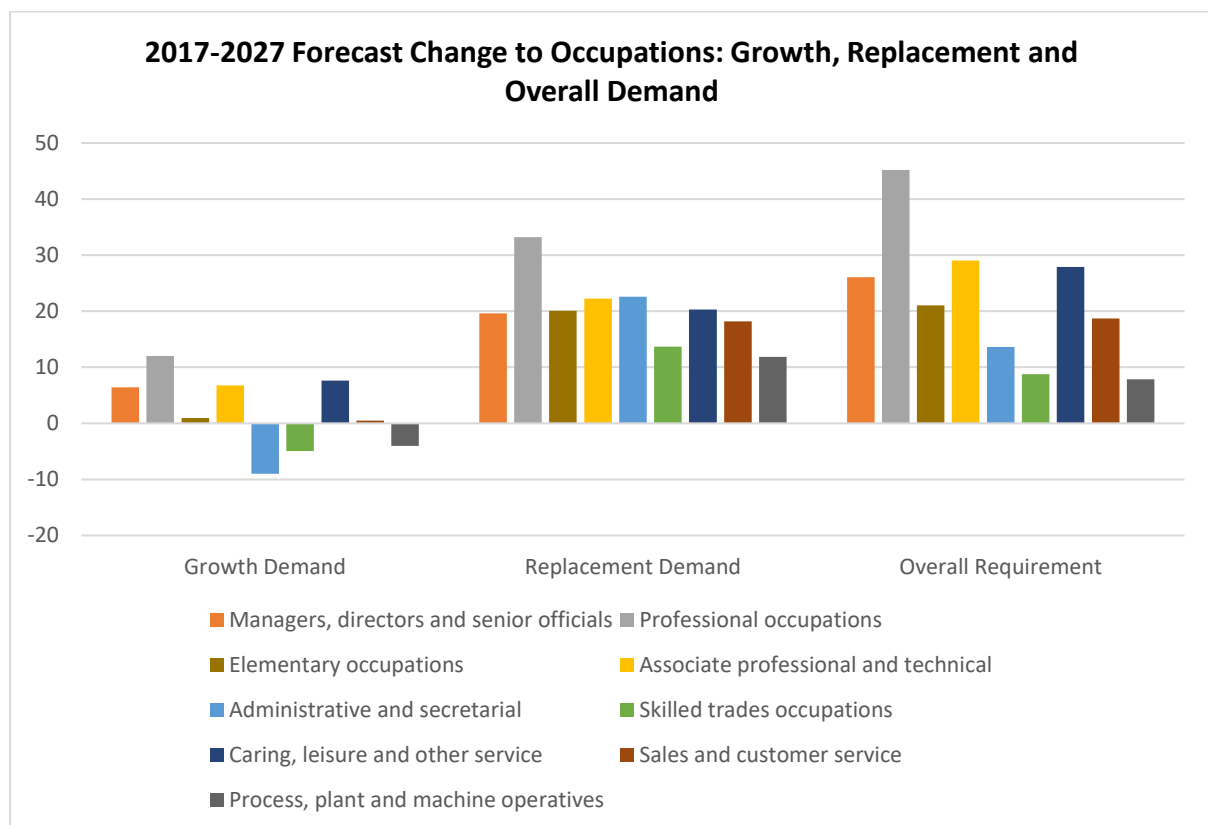
Source: Working Futures 2017-2027 LEP Tables, IER

The chart below disaggregates the overall Working Futures forecast (actual data for 2017 and before) 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
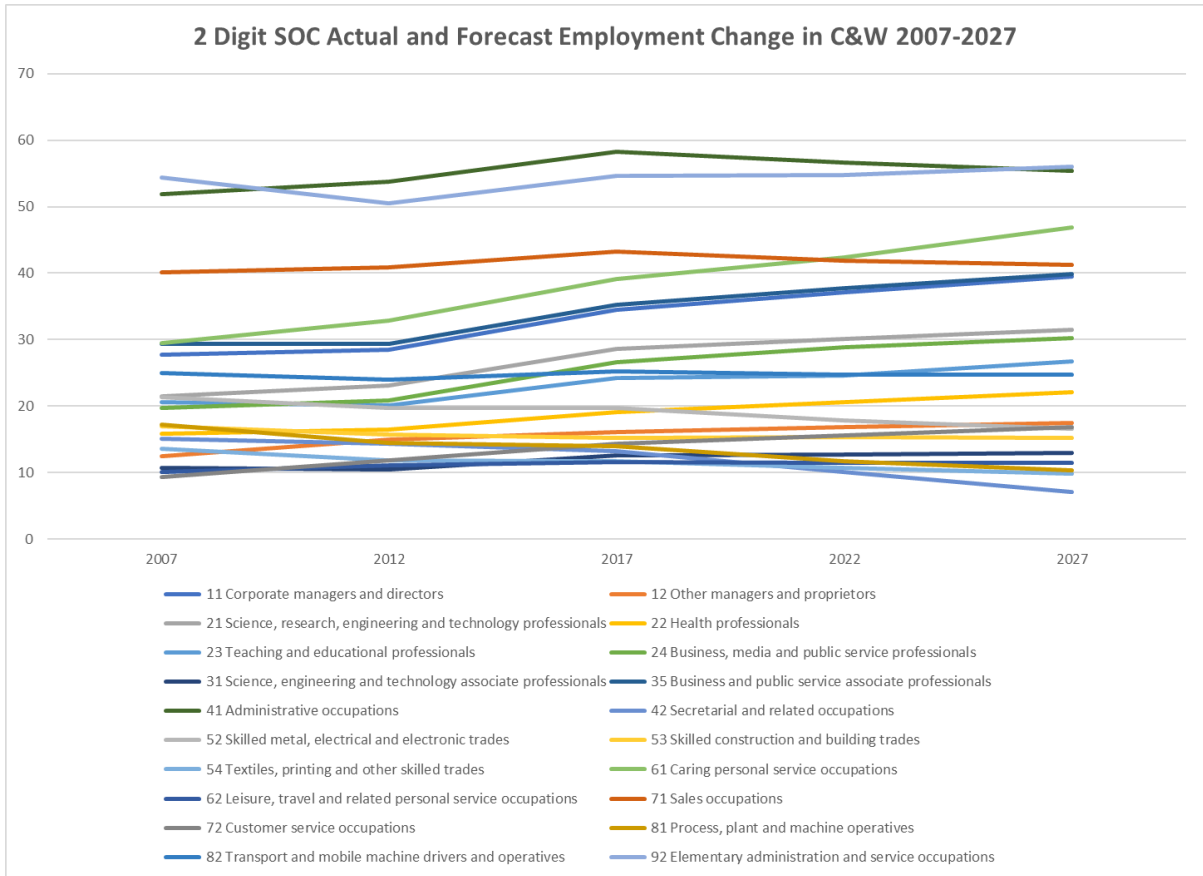
Source: Working Futures 2017-2027 LEP Tables, IER

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

- 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 in Cheshire and Warrington			
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.

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

2 Digit Soc Forecast Replacement Demand 2017-2027 in C&W
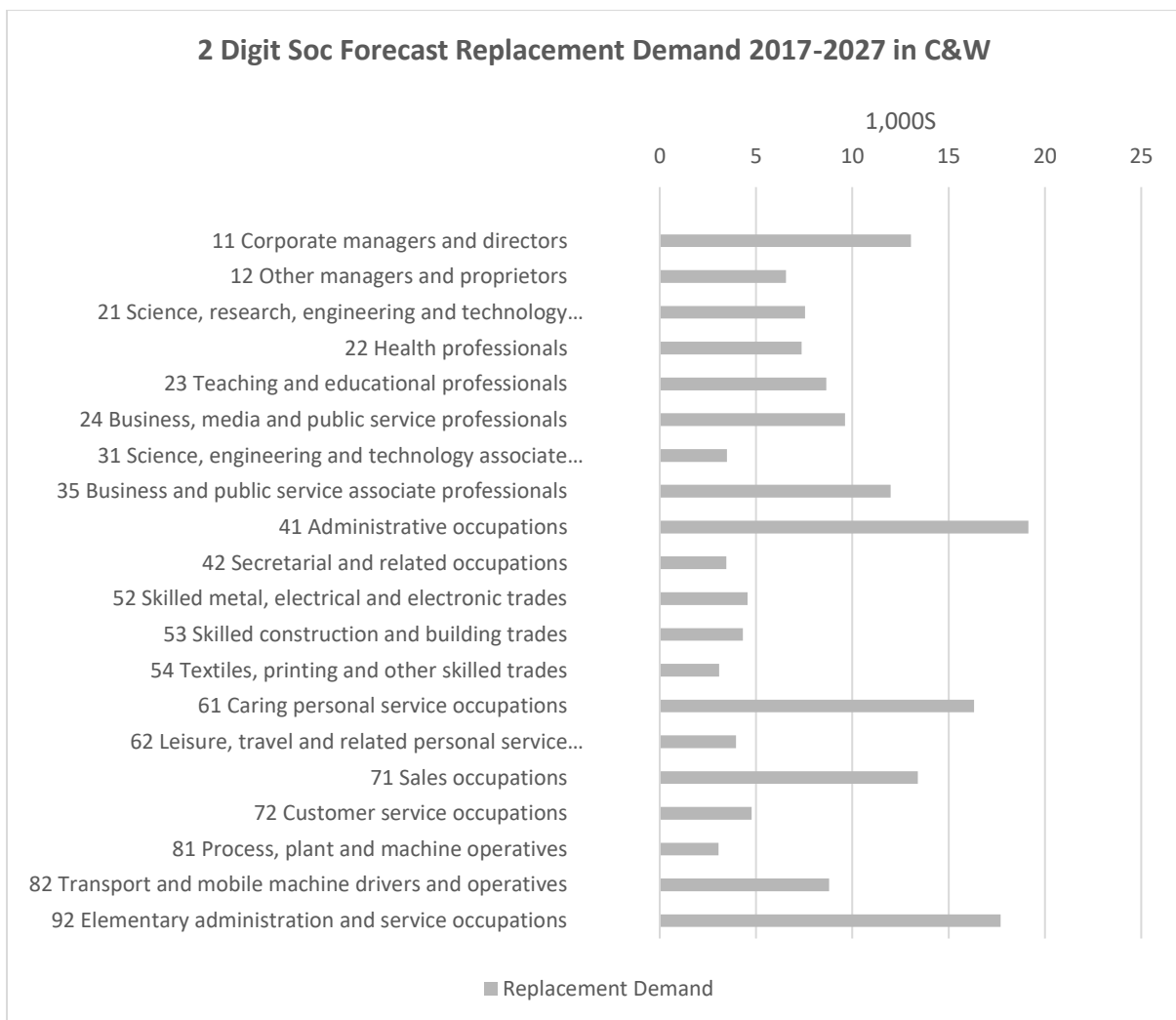
Source: Working Futures 2017-2027 LEP Tables, IER

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.

2017-2027 % Replacement Demand in C&W by 2-digit SOC

Occupation	Value
81 Process, plant and machine operatives	~22
52 Skilled metal, electrical and electronic trades	~23
42 Secretarial and related occupations	~26
54 Textiles, printing and other skilled trades	~26
21 Science, research, engineering and technology…	~26
31 Science, engineering and technology associate…	~27
53 Skilled construction and building trades	~28
71 Sales occupations	~31
92 Elementary administration and service occupations	~32
41 Administrative occupations	~33
72 Customer service occupations	~33
62 Leisure, travel and related personal service occupations	~34
82 Transport and mobile machine drivers and operatives	~35
23 Teaching and educational professionals	~36
24 Business, media and public service professionals	~36
11 Corporate managers and directors	~38
22 Health professionals	~39
12 Other managers and proprietors	~41
61 Caring personal service occupations	~42

Source: Working Futures 2017-2027 LEP Tables, IER

Lightcast 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 and the expected recession on occupational structure is unknown. The table below provides information on Lightcast's estimates of average annual openings for four-digit SOC areas where demand is expected to exceed 200 per annum. The occupations with the highest expected volume of average annual openings are: Book-keepers, Payroll Managers and Wages Clerks; Sales and Retail Assistants; Elementary Storage Occupations; and, Other Administrative Occupations n.e.c..

Occupations with estimated average annual openings more than 200, 2023-2030		
SOC	Description	Avg. Annual Openings
4122	Book-keepers, Payroll Managers and Wages Clerks	758
7111	Sales and Retail Assistants	602
9260	Elementary Storage Occupations	543
4159	Other Administrative Occupations n.e.c.	519
2231	Nurses	460
6145	Care Workers and Home Carers	417
2421	Chartered and Certified Accountants	343
9233	Cleaners and Domestics	316
3545	Sales Accounts and Business Development Managers	306
9272	Kitchen and Catering Assistants	284
6141	Nursing Auxiliaries and Assistants	254
8211	Large Goods Vehicle Drivers	234
3562	Human Resources and Industrial Relations Officers	227
1190	Managers and Directors in Retail and Wholesale	211
1131	Financial Managers and Directors	202
2315	Primary and Nursery Education Teaching Professionals	202
Source: Lightcast Analyst, Jan 2023		

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.

C&W Actual and Forecast Demand for Skill Levels 2007-2027

Legend:
- RQF 7/8 Higher Degree
- RQF6 First degree
- RQF5 Foundation degree;Nursing;Teaching
- RQF4 HE below degree level
- RQF3 A level & equivalent
- RQF2 GCSE(A-C) & equivalent
- RQF1 GCSE(below grade C) & equivalent
- No Qualification
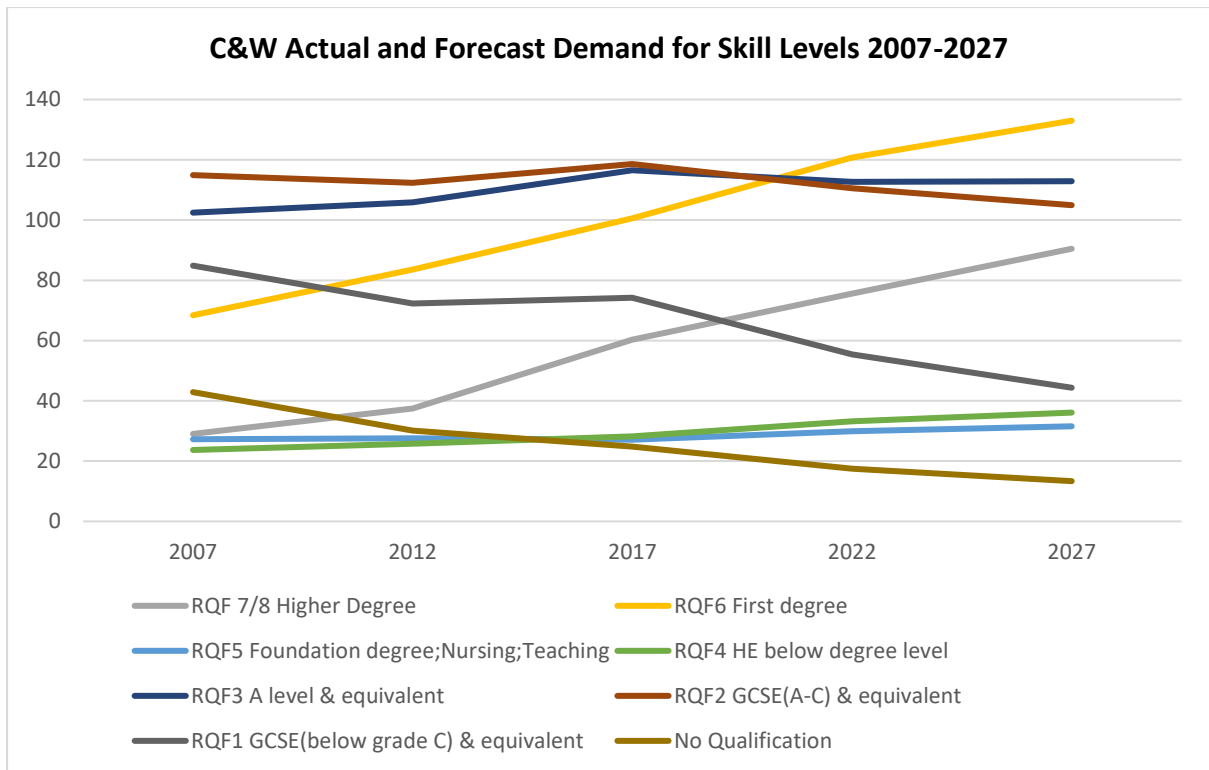
Source: IER Working Futures 2017-2027, LEP Tables

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 Lightcast 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 £28,495.

Average annual openings > 100 for Level 4+ occupations in Cheshire and Warrington, 2023-2030			
SOC	Description	Avg. Annual Openings	Median Wages
2231	Nurses	460	£30,828
2421	Chartered and Certified Accountants	343	£39,558
3545	Sales Accounts and Business Development Managers	306	£42,119
3562	Human Resources and Industrial Relations Officers	227	£27,529
1131	Financial Managers and Directors	202	£51,534
2315	Primary and Nursery Education Teaching Professionals	202	£30,812
2314	Secondary Education Teaching Professionals	177	£40,089
3538	Financial Accounts Managers	162	£33,638
2136	Programmers and Software Development Professionals	158	£42,865
1135	Human Resource Managers and Directors	148	£45,799
2211	Medical Practitioners	147	£53,766
1121	Production Managers and Directors in Manufacturing	141	£41,611
2424	Business and Financial Project Management Professionals	120	£46,134
2423	Management Consultants and Business Analysts	118	£36,349
1132	Marketing and Sales Directors	117	£70,919
3535	Taxation Experts	111	£33,886
3543	Marketing Associate Professionals	102	£25,780
Source: Lightcast Analyst, Jan 2023			

4.7 Automation

Automation is transforming the world of work. Automation threatens 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, Lightcast has developed an 'Automation Index' which covers occupations in the UK.

Lightcast'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 are expected to employ more than 1,000 people in Cheshire and Warrington in 2023 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 over 6,000 people in Cheshire and Warrington, which is slightly more than might be expected from national employment shares.

Main occupations in Cheshire and Warrington at risk of automation				
Description	2023 Jobs	Automation Index	2023 LQ	Education Level
Elementary Construction Occupations	2235	93%	1.01	Level 2
Construction Operatives n.e.c.	1599	85%	1.20	Level 2
Fork-lift Truck Drivers	2301	85%	1.19	Level 2
Kitchen and Catering Assistants	9372	83%	0.89	Level 2
Bar Staff	5939	80%	1.06	Level 2
Caretakers	1207	80%	0.85	Level 2
Cleaners and Domestics	10309	79%	0.90	Level 1
Packers, Bottlers, Canners and Fillers	3649	79%	1.15	Level 1
Waiters and Waitresses	5345	74%	0.85	Level 2
Assemblers (Vehicles and Metal Goods)	1224	73%	1.66	Level 2
Carpenters and Joiners	1298	73%	0.79	Level 3
Taxation Experts	2298	72%	3.46	Honours degree
Elementary Process Plant Occupations n.e.c.	1316	71%	0.84	Level 1
Pharmacy and Other Dispensing Assistants	1357	71%	1.10	Level 2
Source: Lightcast Analyst, Mar 2023				

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.

SOC	Description	2023 Jobs	Education Level	Automation Index
Main occupations in Cheshire and Warrington least at risk from automation				
2136	Programmers and Software Development Professionals	4915	Honours, Bachelor's degree	0%
2436	Construction Project Managers and Related Professionals	1065	Honours, Bachelor's degree	0%
1122	Production Managers and Directors in Construction	2415	Level 3	0%
3563	Vocational and Industrial Trainers and Instructors	2421	Honours, Bachelor's degree	0%
2423	Management Consultants and Business Analysts	3262	Honours, Bachelor's degree	0%
3421	Graphic Designers	1188	Honours, Bachelor's degree	1%
3520	Legal Associate Professionals	1323	Honours, Bachelor's degree	1%
1131	Financial Managers and Directors	5041	Honours, Bachelor's degree	1%
1150	Financial Institution Managers and Directors	1704	Honours, Bachelor's degree	1%
1115	Chief Executives and Senior Officials	1126	Honours, Bachelor's degree	1%
1259	Managers and Proprietors in Other Services n.e.c.	2675	Level 3	1%
1133	Purchasing Managers and Directors	1233	Honours, Bachelor's degree	1%
2137	Web Design and Development Professionals	1027	Honours, Bachelor's degree	1%
Source: Lightcast Analyst, Jan 2023				

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
- Young people in the labour market
- Adult skills in Cheshire and Warrington
- Employer training

5.1 Young People in Cheshire and Warrington[17]

This sub-section discusses the following issues:

- 16-18 population
- Income deprivation affecting children
- Economic inactivity of 16-19 year olds
- Participation of 16/17 year olds in education and training
- 16/17 year olds Not in Employment, Education or Training (NEET)

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

In 2022 there were approximately 32,000 people aged 16,17 and 18 resident in Chesire and Warrington. The map below shows the percentage of the population aged 16-18 by ward. Red is high, blue is low.

Estimated share of ward population held by 16-18 year olds, Cheshire and Warrington

Estimated % of 16-18 yr olds
- 1.34 - 2.748
- 2.748 - 3.056
- 3.056 - 3.174
- 3.174 - 3.282
- 3.282 - 3.38
- 3.38 - 3.52
- 3.52 - 3.626
- 3.626 - 3.768
- 3.768 - 4.012
- 4.012 - 4.46

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

---
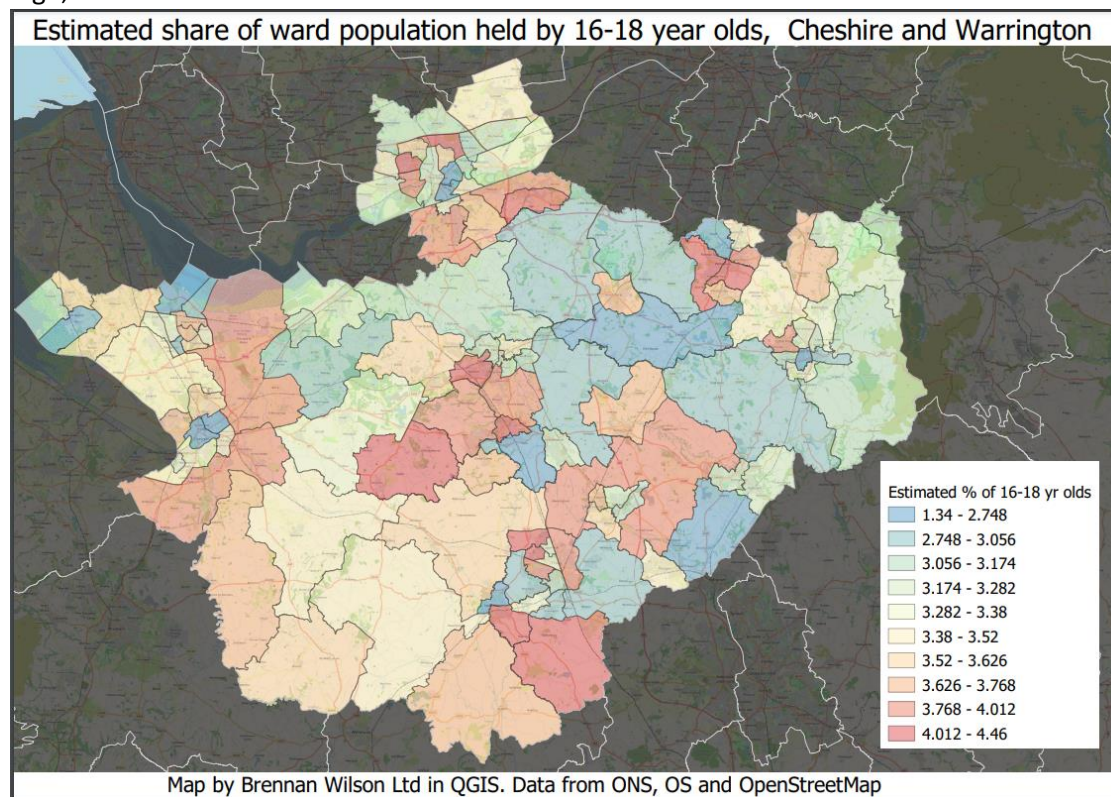
[17] Data in this subsection is drawn from IMD2019; ONS population forecasts; NOMIS (APS/LFS); DfE (NEET statistics, KS2/4/5 attainment/attainment at age 16/19, KS4/5 destinations; and, OfS (TUNDRA data).

The wards with the highest percentage of population aged 16-18 were: Wilmslow East; Nantwich South and Stapeley; Lymm South; Leighton; Chapelford and Old Hall; Tarporley; Poplars and Hulme; Winsford Wharton; Hartford & Greenbank; and, Crewe St Barnabas

Conversely, the wards with the lowest percentage 16-18 population were: Chester City & the Garden Quarter; Little Neston; Macclesfield Central; Winsford Gravel; Fairfield and Howley; Nantwich North and West; Chelford; Latchford West; Netherpool; and, Newton & Hoole.

The 16-19 population is forecast to grow between 2022 and 2032 from 39,767 in 2022 to 45,170 in 2032, peaking at 45,700 in 2030. This is a growth of 14% in Cheshire and Warrington. All local authorities will see a forecast growth of this population segment with a growth of 18% in Cheshire West and Chester, 12% in Cheshire East and 9% in Warrington.
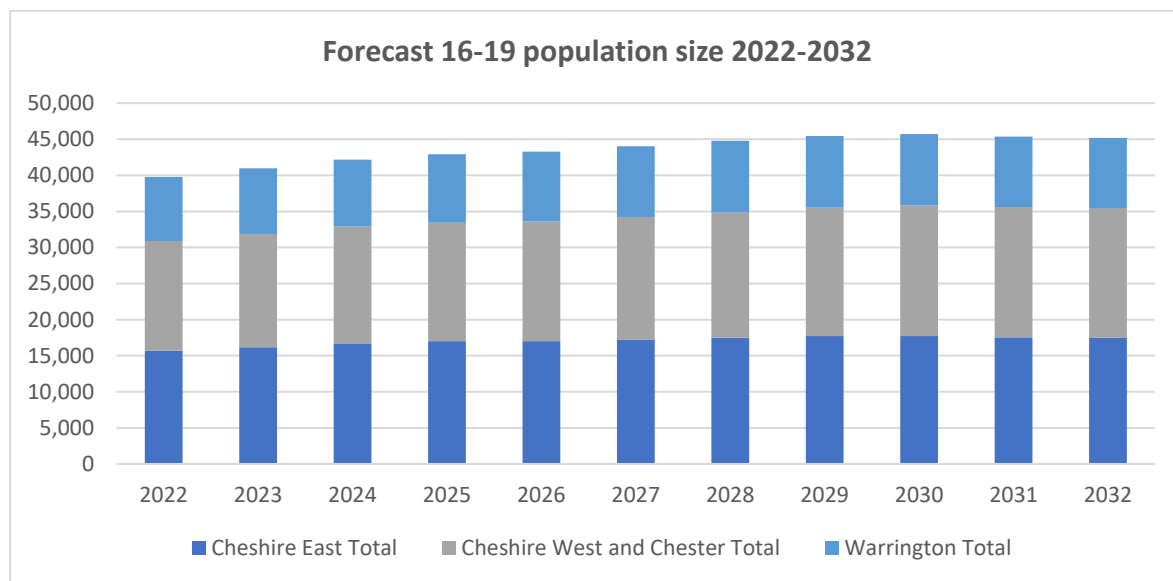
Source: ONS

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

Income Dep. Affecting Children, Nat Deciles
1
2
3
4
5
6
7
8
9
10
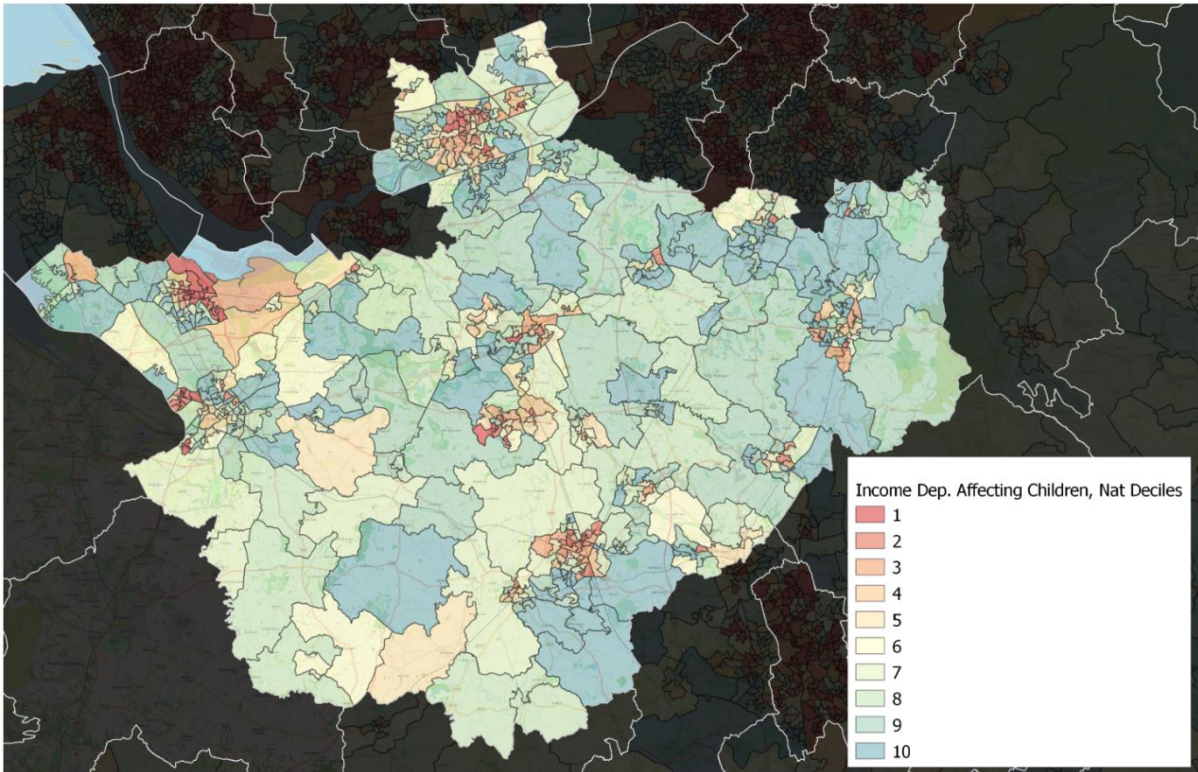
Map by Brennan Wilson Ltd in QGIS. Data from the Index of Multiple Deprivation (2019), OS and OpenStreetMap

The chart below shows the different types of economic activity undertaken by young people aged 16-19 in Cheshire and Warrington between the years April 2019-March 2020 and July 2021-Jun 2022, so spanning the period of the pandemic. This data is survey data so is subject to margins of error. Notwithstanding that, the data seems to indicate an increase in economic inactivity for this age group. This is to be expected of this age group in a labour market downturn as increasing numbers sought to remain in education during lockdown.
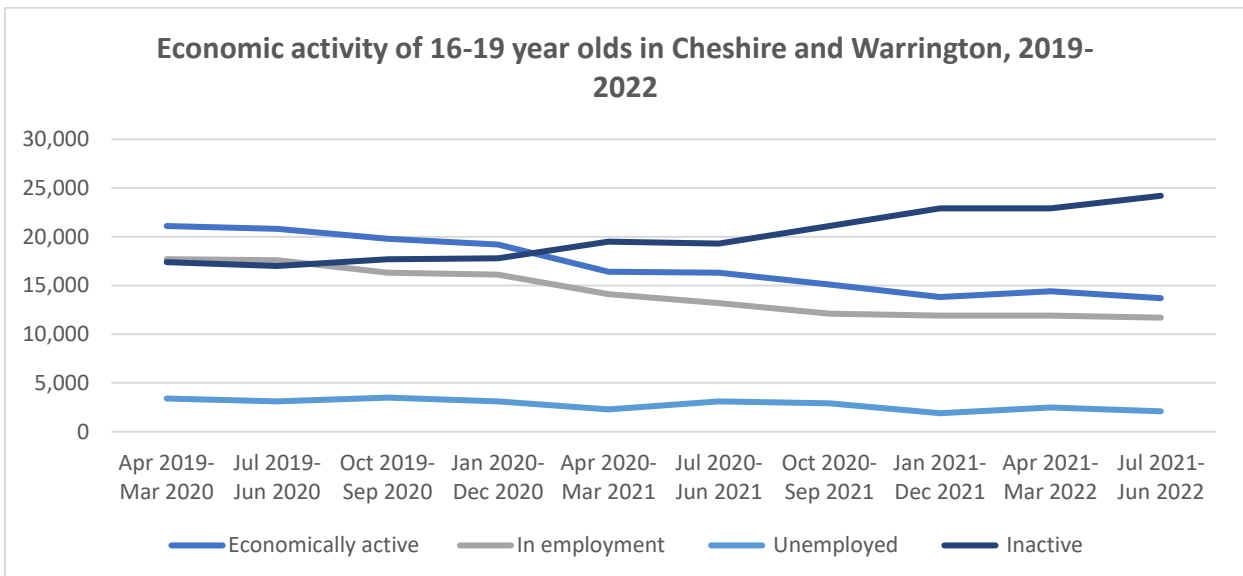
Source: NOMIS APS

In recent years, participation in education and training by 16 and 17 year olds has tracked above English levels for all three local authorities in Cheshire and Warrington. However, participation levels declined by over 3% between 2021 and 2022 to 92.6% in Cheshire West and Chester to fall below the English level of 92.9%. This was the eighth sharpest decline nationally by a local authority between 2021 and 2022 for the proportion of 16/17 year olds participating.
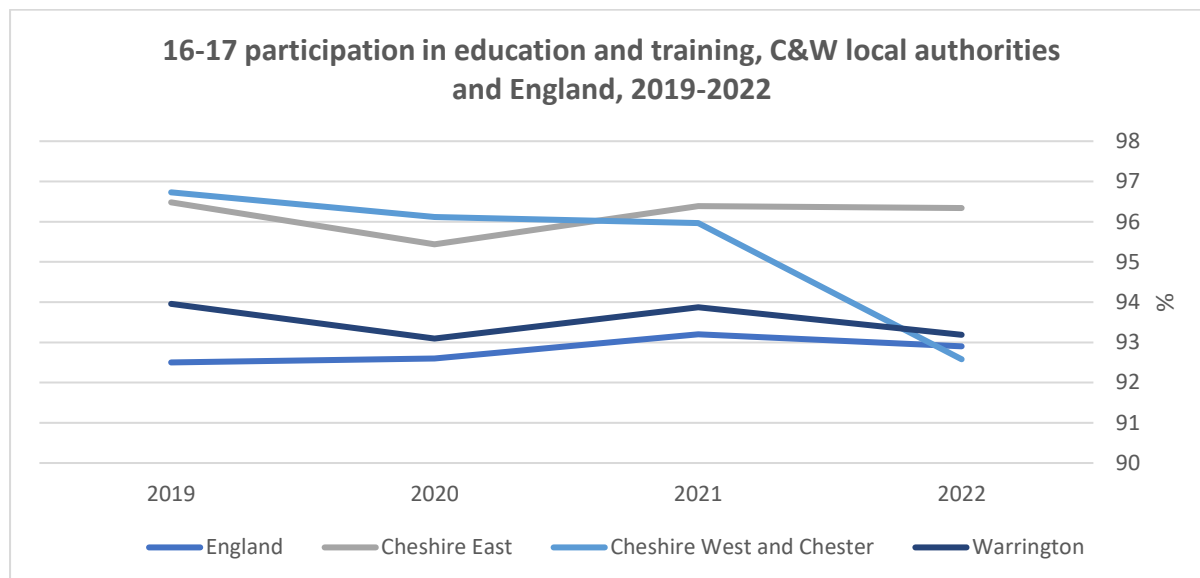
16-17 participation in education and training, C&W local authorities and England, 2019-2022

Source: DfE, 16-17 year olds recorded in education and training and NEET by local authority, 2022

Participation rates for females and males aged 16 and 17 were similar in 2022 and 2021 in England and Cheshire East. This was also the case in Warrington, with the exception of the participation of females aged 17 which saw a 1.7% decline in participation. Between 2022 and 2021, all categories declined in Cheshire West and Chester with declines exceeding 5% for both males and females aged 17. This level of decline suggests that one or more providers of education and training to residents of Cheshire West and Chester changed either their recruitment practice of 16 year olds in, or after September 2021, or their approach to retention/progression thereafter, or both.

The chart below sets out the type of participation of 16-17 year olds in Cheshire and Warrington compared with England in 2022. Participation in full time education was at higher levels than England (86.6%) in both Cheshire East and Warrington (88.6% and 87.9% respectively), but lower in Cheshire West and Chester (86.4%). Conversely participation rates in Apprenticeships were lower than England for Cheshire East and Warrington, but higher in Cheshire West and Chester.

It is not clear why those classified as being in employment participating with study is five times the level of England in Cheshire East or double the England level in Cheshire West and Chester. At 3.1%, the proportion of 16-17 year olds participating in this way in Cheshire East is the fourth highest in England.

Data for 16/17 participation and NEET is held by local authorities. Individual local authorities may be able to disaggregate this data by place of residence (eg town/ward) or characteristic (eg parent) to a greater extent than is possible from the national data published by Government.
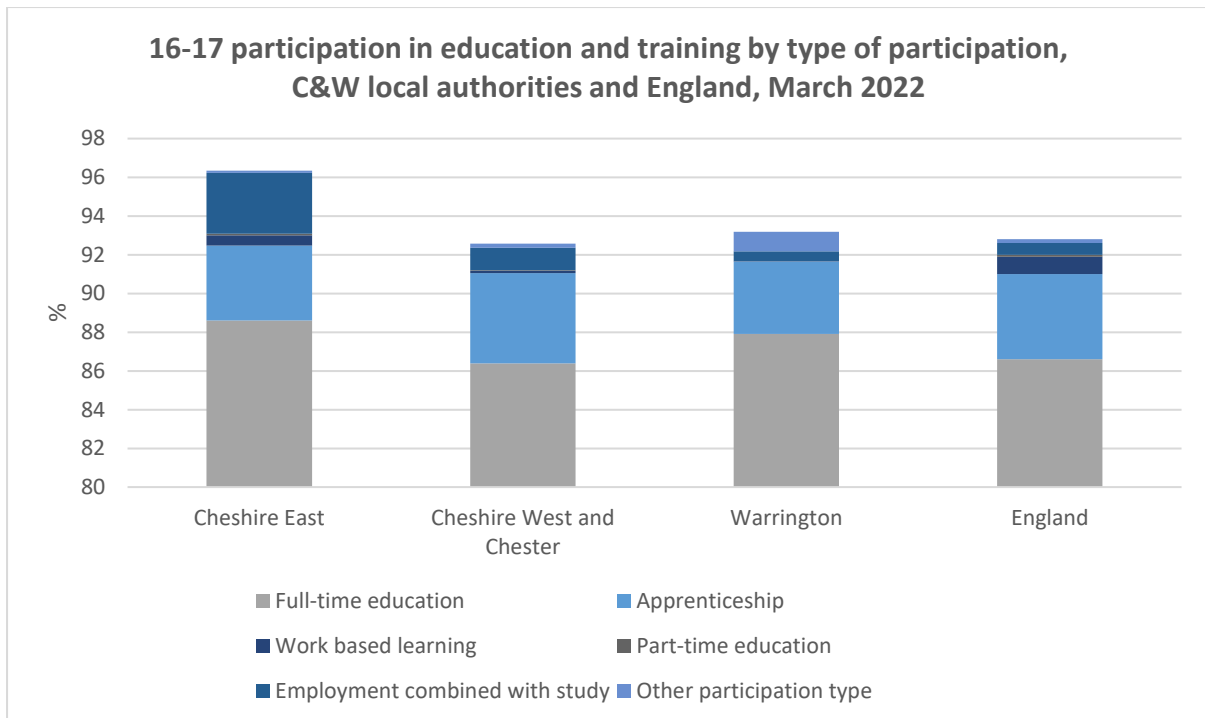
16-17 participation in education and training by type of participation, C&W local authorities and England, March 2022

Legend:
- Full-time education
- Apprenticeship
- Work based learning
- Part-time education
- Employment combined with study
- Other participation type

Source: DfE, 16-17 year olds recorded in education and training and NEET by local authority, 2022

The key indicator of NEET/not known at ages 16-17 was lower than England for every local authority in Cheshire and Warrington in 2022. However, compared to 2021 the gap between England and every local authority narrowed, most markedly in Cheshire West and Chester, where the gap narrowed by 1.7% such that the rate in Cheshire West and Chester was 4.6% in 2022 (3.7% in 2021), compared with 4.7% in 2022 in England (5.5% in 2021)

NEET/Not known in C&W local authorities and England, March 2022					
	Cohort size	NEET/Not known %	NEET %	Not known %	Annual Change in NEET/Not known ppt
England	7463	4.7	2.6	2.2	-0.8
Cheshire East	6912	2.0	1.9	0.1	-0.2
Cheshire West and Chester	4807	4.6	3.0	1.6	0.9
Warrington		2.8	2.7	0.2	-0.4
Source: DfE, 16-17 year olds recorded in education and training and NEET by local authority, 2022					

The three year NEET/Not known trend (2020-2022) has been decreasing year on year in both Cheshire East and Warrington. By contrast, the three year trend in NEET/not known in Cheshire West and Chester has seen year-on-year increases.
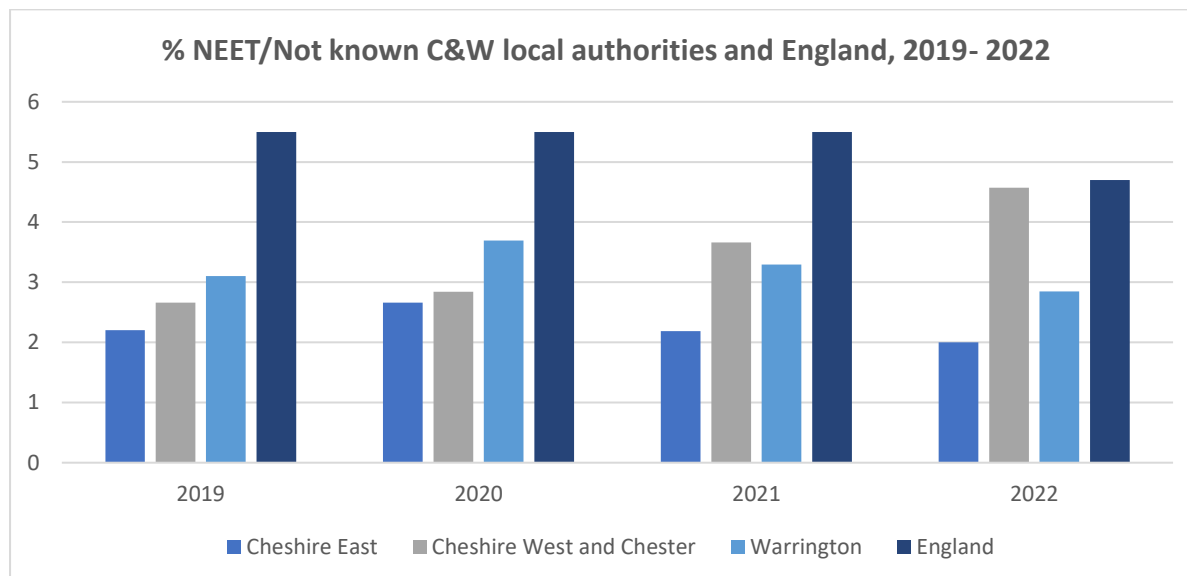
Source: DfE, 16-17 year olds recorded in education and training and NEET by local authority, 2022

5.1.2 Young People's Education and Progression

This sub-section discusses the following:

- The impact of the pandemic on young people's education
- Educational deprivation
- Key stage 2 attainment
- Key stage 4 attainment and destinations/progression
- Key stage 5 attainment and destinations/progression

5.1.2.1 Overview

Publication of statistics by the Department for Education was disrupted by the pandemic with impacts on both examinations and teacher assessments, and the statistics associated with those. The pandemic also had an impact on children's learning. Research on the impact of the pandemic on education in England[18] found that:

- Most students were reported to have some learning losses, while some had severe learning losses and some had learning gains.
- Learning losses appeared to be most prevalent in maths and literacy
- Experiences of teaching and learning during the pandemic were diverse, but disadvantage and deprivation appear to be most associated with less effective learning and overall learning losses
- Learning experiences were diverse: there were differential experiences both between and within groups

---

[18] https://www.gov.uk/government/publications/learning-during-the-pandemic/learning-during-the-pandemic-review-of-research-from-england

A key finding of this review of the literature was that:

> *"Overall, there is overwhelming research indicating a large disparity in the remote learning experiences of the most and least disadvantaged students. Deprivation and disadvantage seem to be most associated with poorer learning experiences and learning losses during the pandemic, with students in the poorest families, whose parents have lower levels of education, those who are eligible for FSM, and pupil premium students, being worse affected compared with their counterparts."*

The Education, Skills and Training Domain of the Index of Multiple Deprivation (2019) measures the attainment and skills in local populations. The measure comprises 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 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.

Children and Young People Education Subdomain of the IMD(2019) National Deciles
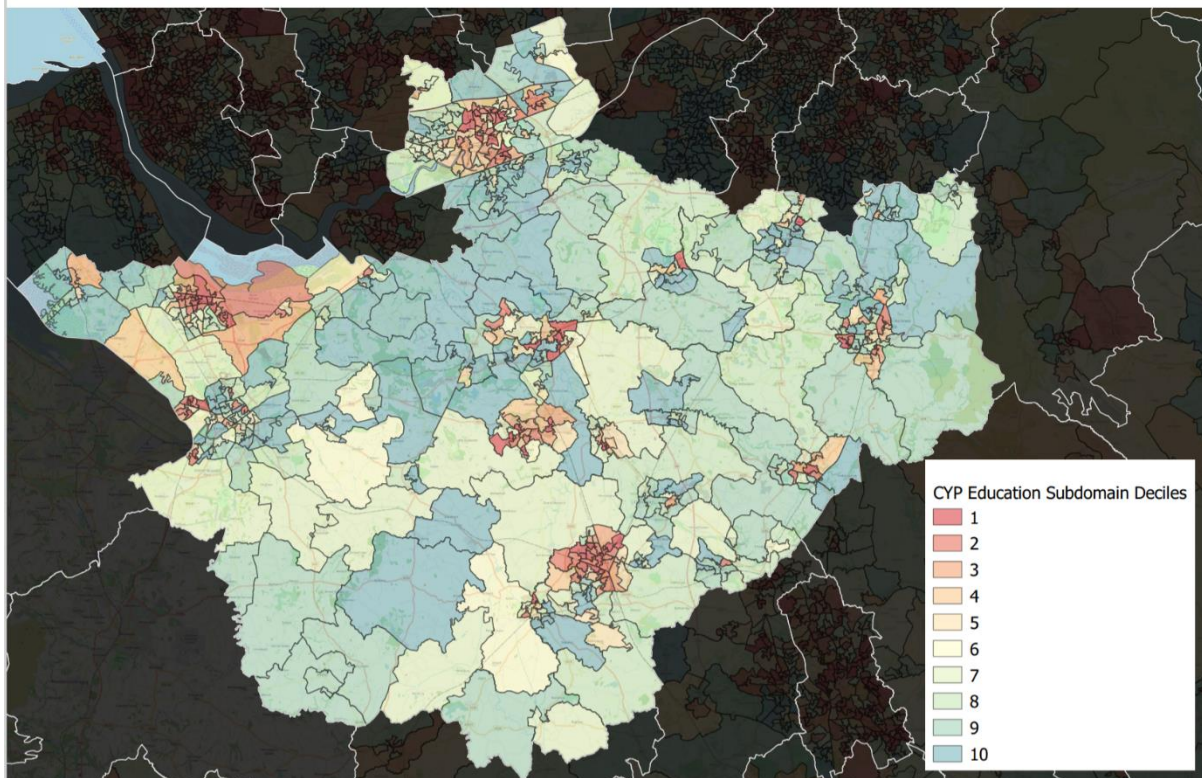
Map by Brennan Wilson Ltd in QGIS. Data from IMD(2019), OS and OpenStreetMap

5.1.2.2 Key Stage 2

The chart below provides the data available for the percentage of 11 yr olds achieving the expected standard in reading, writing and mathematics in England and the C&W local authorities. In line with the above cited research, every area considered below experienced a decline in 2021/22 when compared with the pre-pandemic position in 2018/19 (no data was published for 2019/20 and 2020/21). In 2020/21 all Cheshire and Warrington local authorities were at or above the English level on this measure.
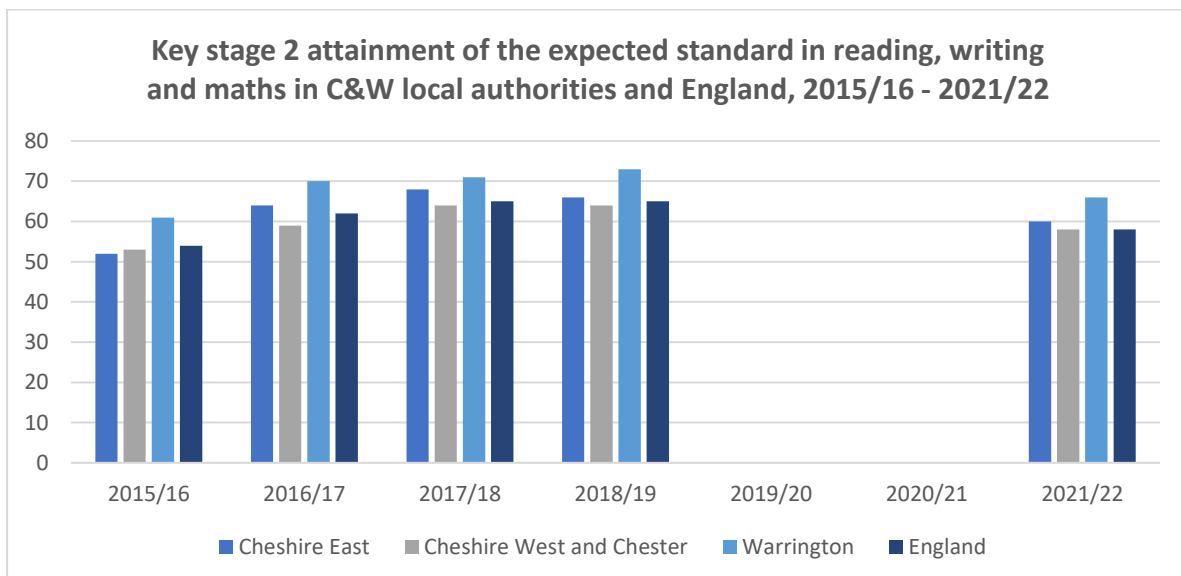
Source: Key stage 2 attainment, DfE

The chart below takes the data for 2018/19 above and disaggregates it for children on Free School Meals (FSM) and those not on FSM (this disaggregation is not available for 2021/22). There was a gap in the attainment of children on FSM and not on FSM in all three local authority areas and in England. The gap in all of Cheshire East, Cheshire West and Chester, and Warrington (27 ppt, 26 ppt, and 27 ppt respectively) was larger than that for England (21 ppt).
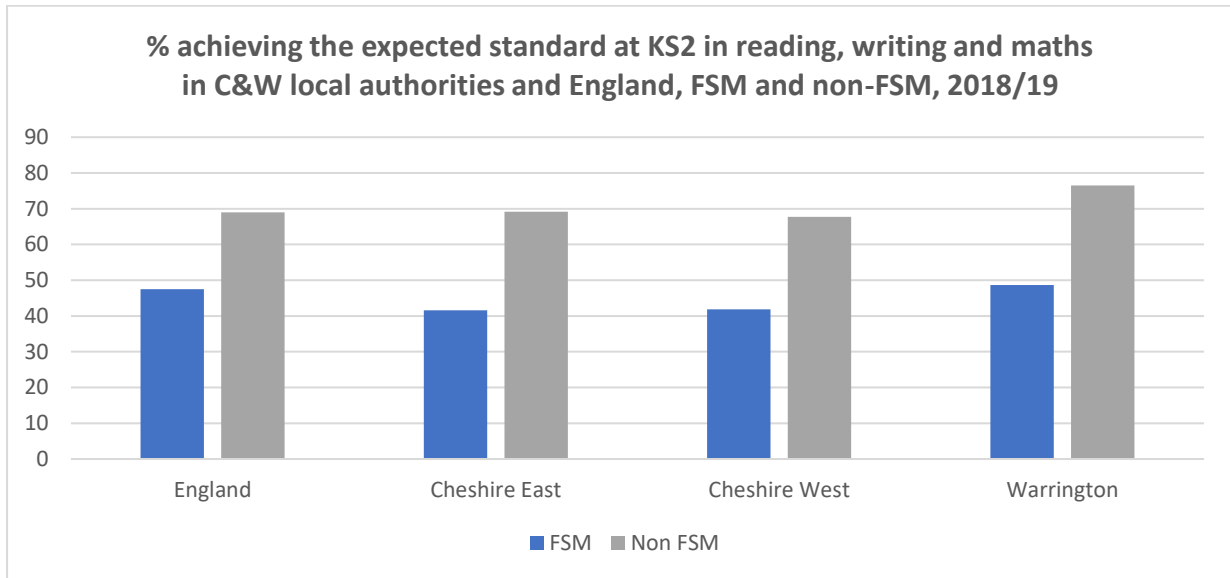
Source: Key stage 2 attainment, DfE

Analysis undertaken by Metrodynamics for Cheshire and Warrington LEP suggests that the attainment of children in Cheshire and Warrington on Free School Meals tends to be most problematic in schools with low numbers on FSM. Conversely, there are some primary schools with larger FSM cohorts where FSM children do better. The former schools might be able to identify good practice from the latter.

5.1.2.3 Key Stage 3/4

Nationally, 82% of pupils are taught in secondary schools that are graded good or outstanding by Ofsted. Only two of Cheshire and Warrington's ten parliamentary constituencies have a lower proportion of children taught in 'Good' or 'Outstanding' secondary schools – Crewe and Nantwich (81%) and Ellesmere Port and Neston (69%).

It can be seen from the chart below that a higher proportion of secondary school places in IDACI quintiles 1-3 in Cheshire and Warrington are rated as good or outstanding when compared with England. The proportion in IDACI 4 schools graded as 'good' or 'outstanding' in Cheshire and Warrington is slightly below England (72% compared with 78%). However, at IDACI 5 (the highest levels of deprivation) only 44% of places are graded as good or outstanding in Cheshire and Warrington, compared with 73% for England.

Percentage of secondary pupils in Ofsted graded 'Good' or 'Outstanding' provision by IDACI quintile
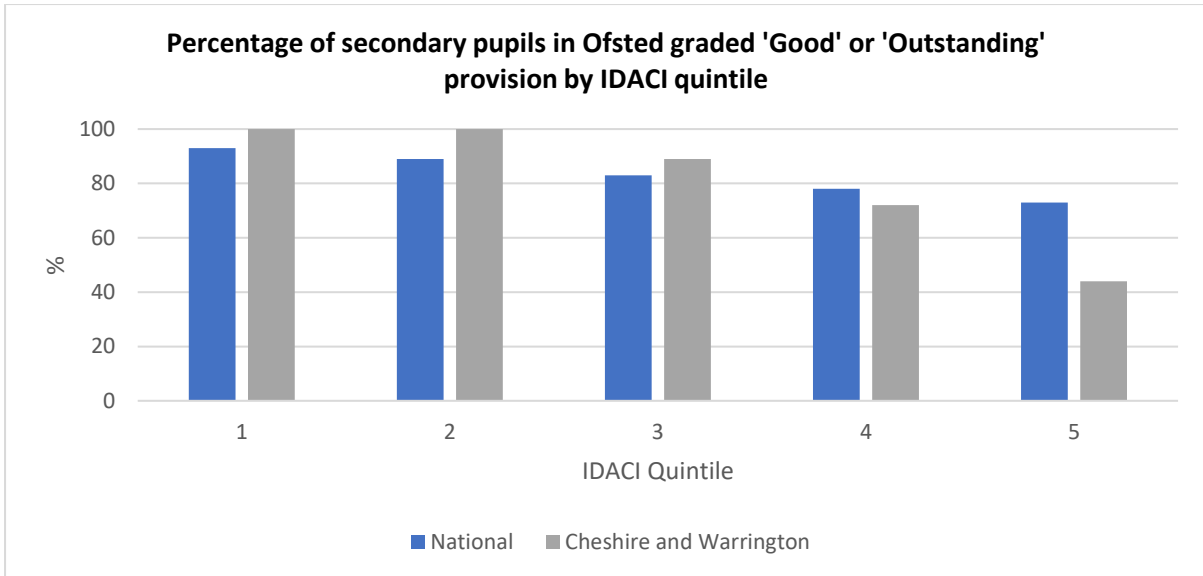
Ofsted: Management Information, State funded schools inspections and outcomes as at 30 September 2022

5.1.2.4 Key Stage 4 attainment

For the last five years the attainment by 16 year olds in Cheshire and Warrington who are not on FSM has been at or above the level for England whereas the attainment of those on FSM has been below England.

Attainment of Level 2 at 16, C&W local authorities and England, by FSM status, 2004/5 to 2020/21
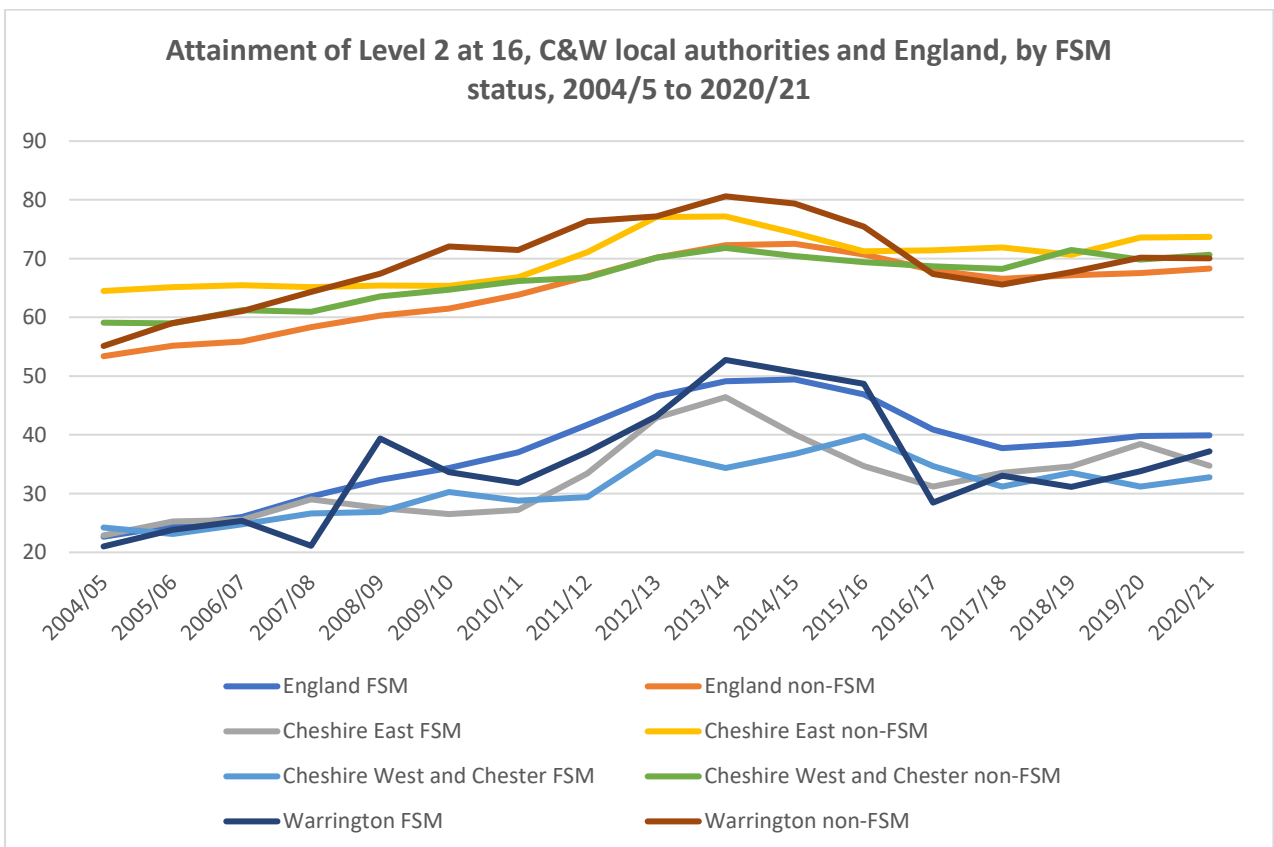
Source: DfE Attainment SFR

If the difference in attainment of Level 2 at age 16 between those eligible and not eligible for FSM (the 'FSM L2 attainment gap at 16') is considered over time, it is clear that the gap has been larger in all three local authorities than England since this data series started in 2004/5.
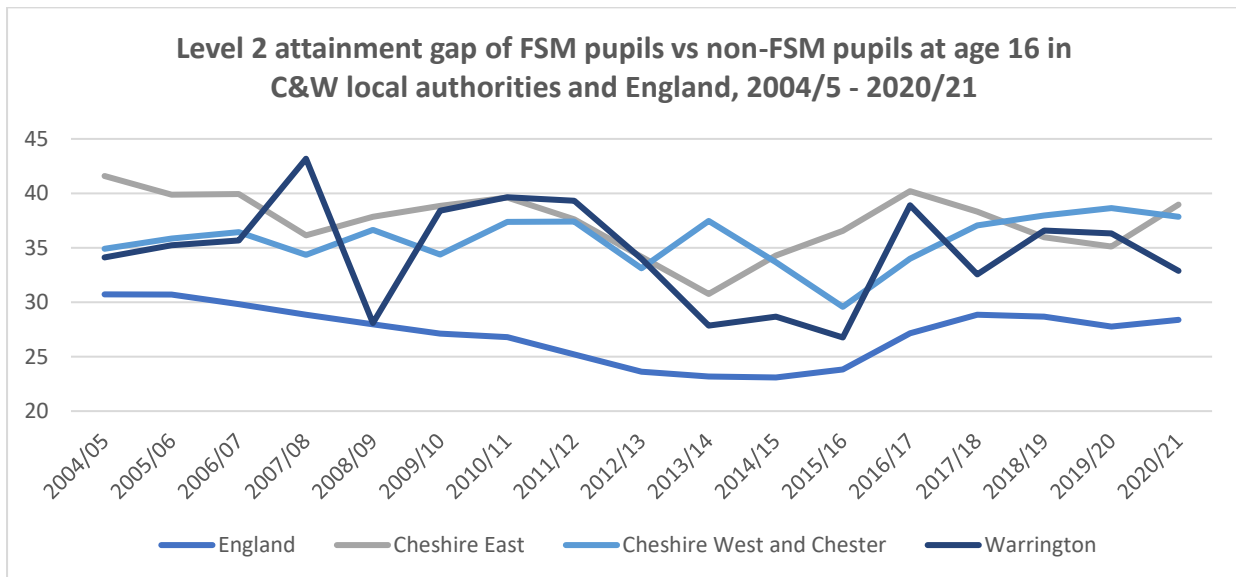
Source: DfE Attainment SFR

In 2021/22, the average national Attainment 8 score was 48.8. Four parliamentary constituencies in Cheshire and Warrington had average Attainment 8 scores below this. They were:

- Ellesmere Port and Neston (43.4)
- Crewe and Nantwich (43.9)
- Eddisbury (46.8)
- Warrington North (48)
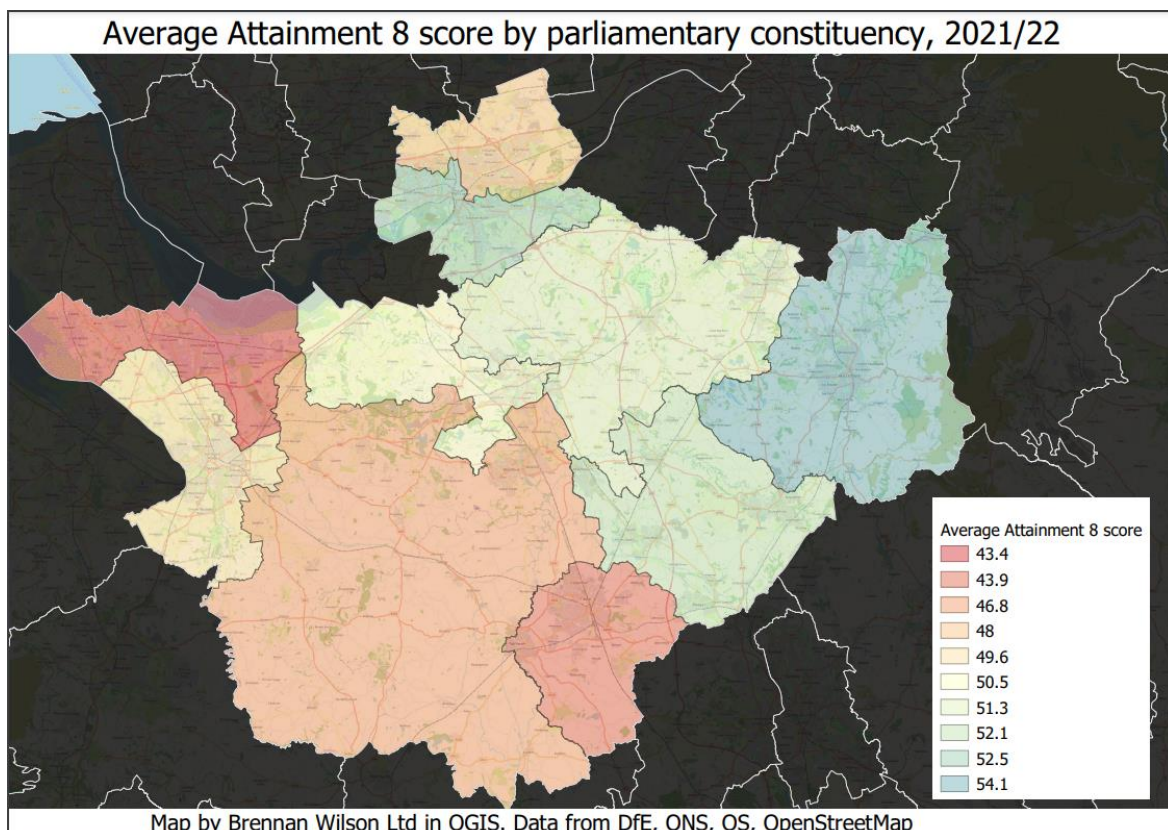
Generally, pupils not eligible for FSM have tended to perform better in the Cheshire and Warrington local authorities than in England (although Cheshire West and Chester dipped slightly below England in 2021/22). Conversely, pupils eligible for FSM have always done less well in the three Cheshire and Warrington local authorities compared with England.
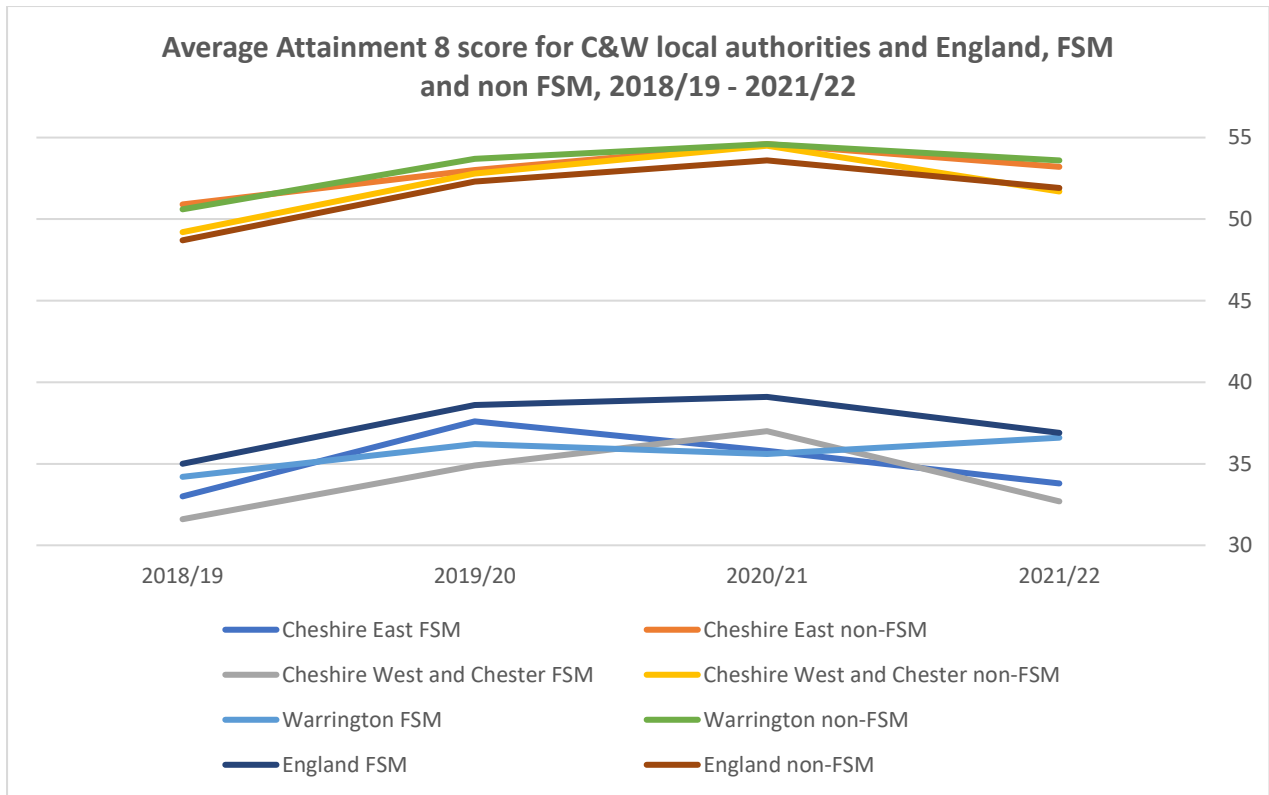
Source: KS4 achievement, DfE

If the difference in the average Attainment 8 score at age 16 between those eligible and not eligible for FSM is considered over time, it is clear that the gap has been larger in all three local authorities than in England since 2018/19.
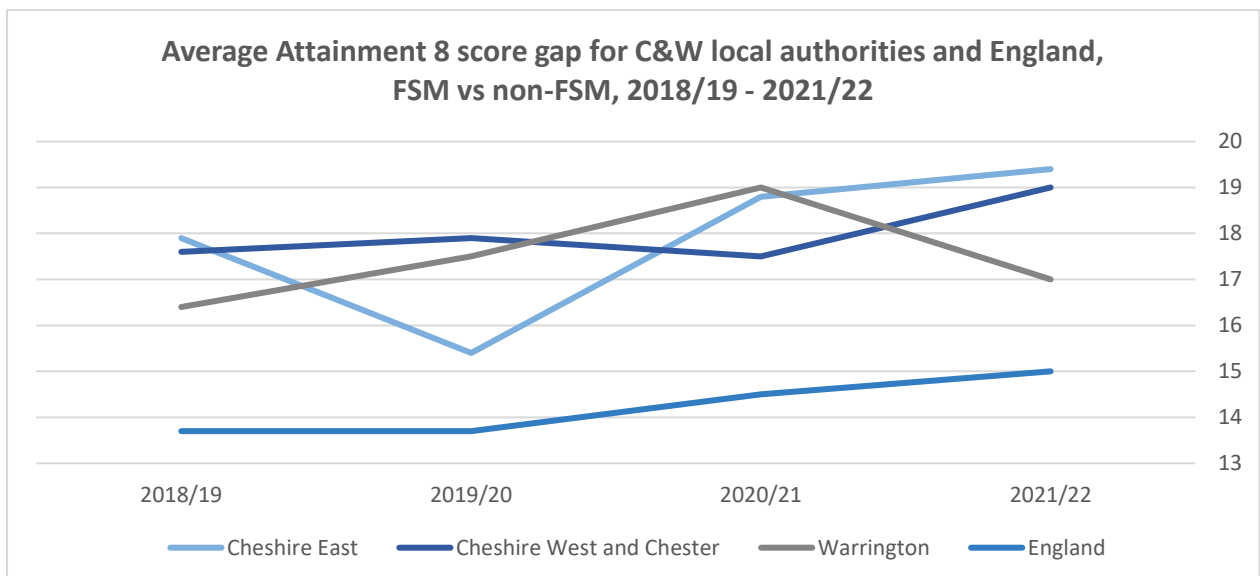
Source: KS4 achievement, DfE

5.1.2.5 Key Stage 4 destinations

For the past five years the percentage of Key Stage 4 securing a sustained destination in the following year in Cheshire East and Warrington has been above that of England. Conversely, it has been below the English level in Cheshire West and Chester in this time.
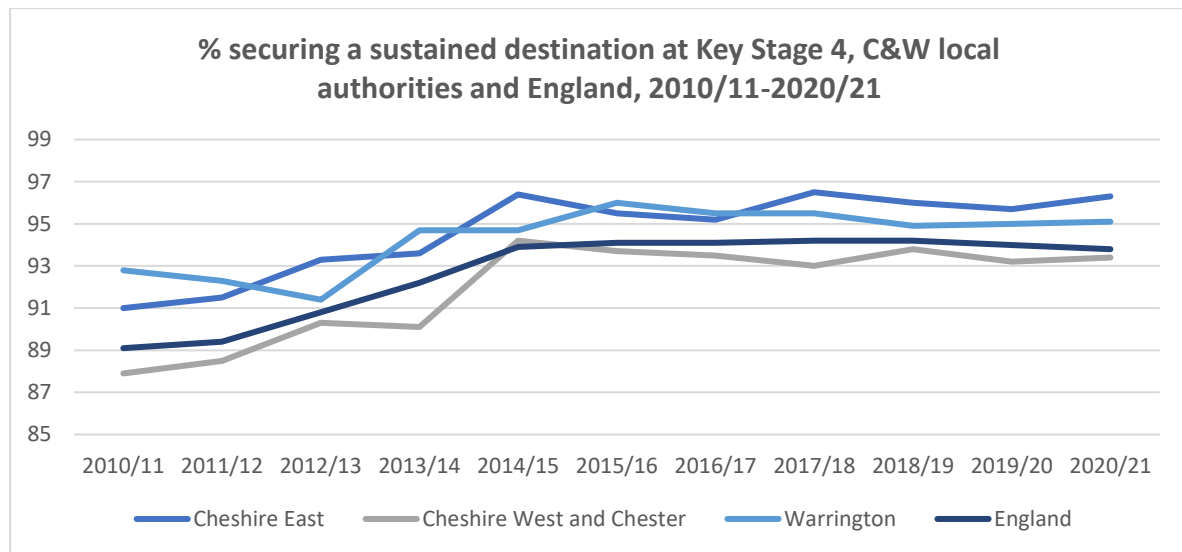
Source: Key Stage 4 destination measures, DfE

When the proportion securing some form of sustained destination is considered at the level of parliamentary constituency, it is clear that over the past decade, the parliamentary constituency consistently securing the highest proportions is Congleton with higher rates than all other parliamentary constituencies in Cheshire and Warrington and consistently higher rates than for England. Conversely, the City of Chester has, for the past decade had lower rates than all other parliamentary constituencies in Cheshire and Warrington and consistently lower rates than for England.
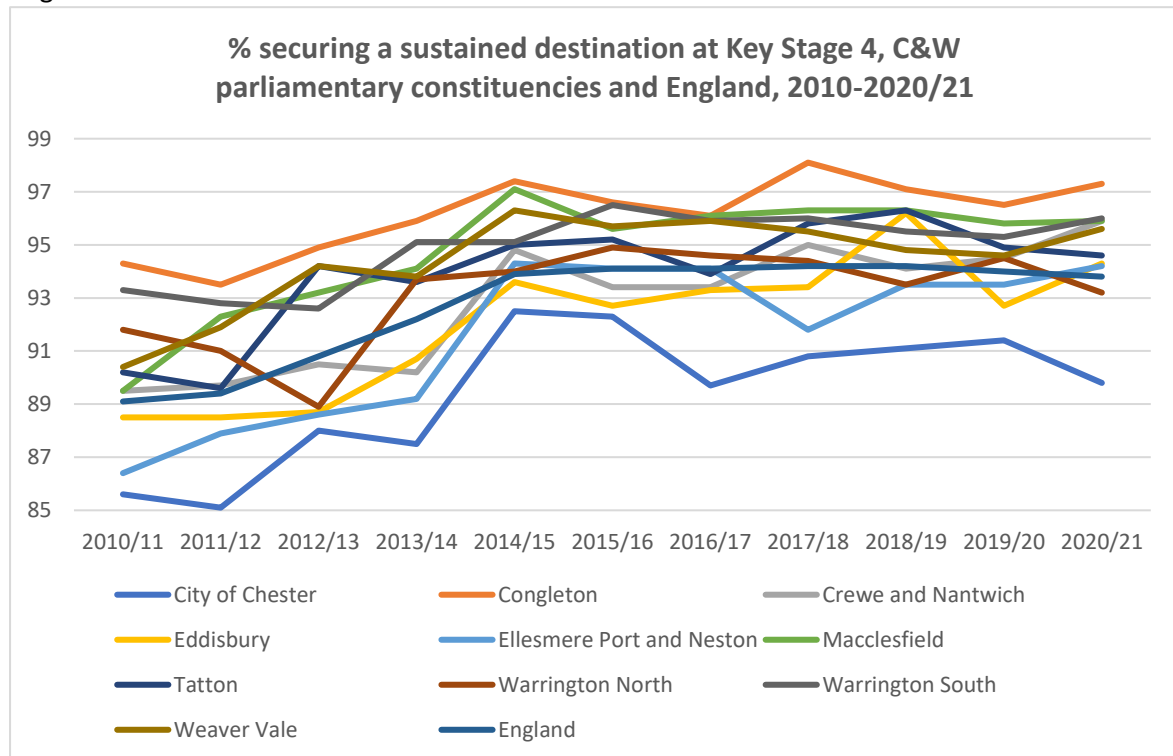
Source: Key Stage 4 destination measures, DfE

In 2020/21 the rate for securing some form of sustained destination at Key Stage 4 in England was 93.8%. The City of Chester and Warrington North both had lower rates than England (89.8% and 93.2% respectively).

Percentage at KS4 securing a sustained destination by parliamentary constituency, 2020/21

% securing a sustained destination

	89.8
	93.2
	94.2
	94.3
	94.6
	95.6
	95.9
	96
	97.3

Map by Brennan Wilson Ltd in QGIS. Data from DfE, ONS, OS, and OpenStreetMap
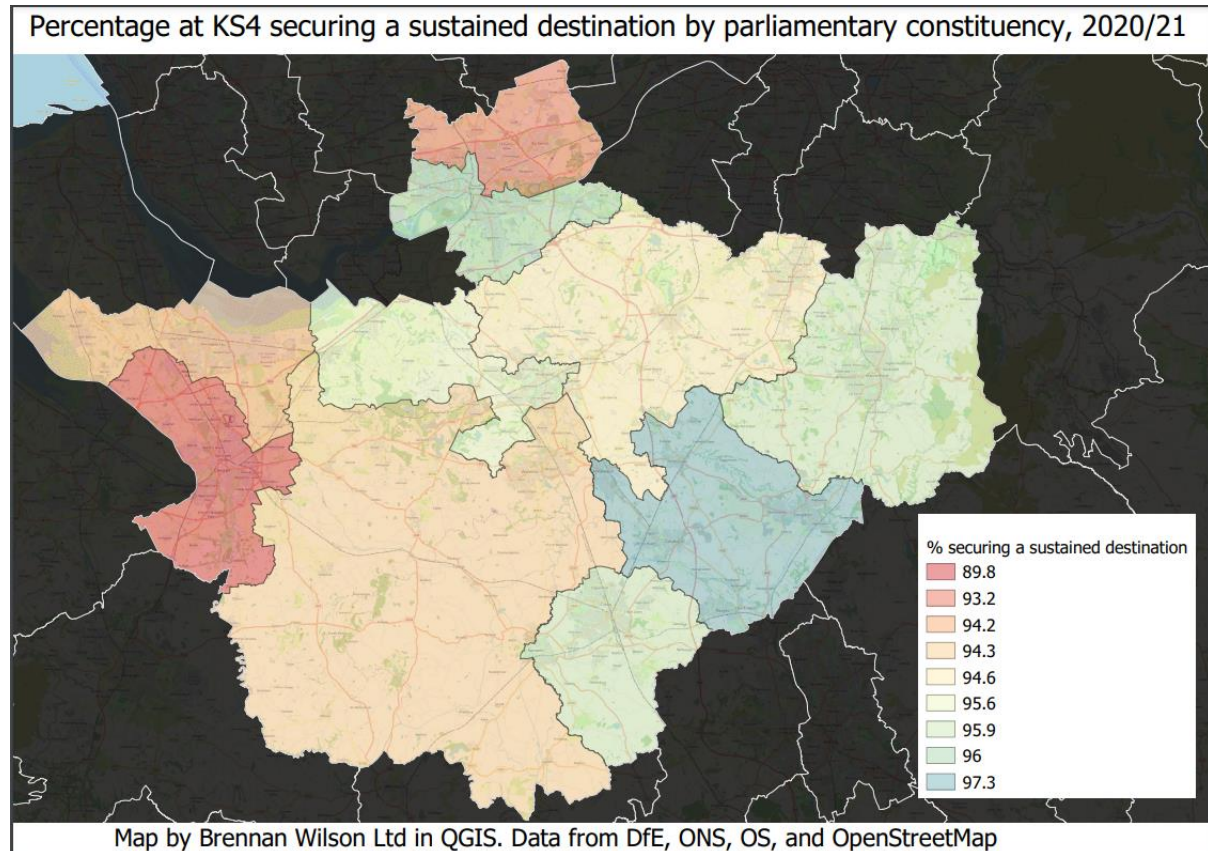
The table below summarises the headline data for Key Stage 4 sustained destinations in 2021/22 in the three Cheshire and Warrington local authorities and England, by FSM status and type of destination. Generally higher proportions of FSM pupils secure a sustained destination in FE than non-FSM pupils and, conversely lower proportions of FSM pupils secure a destination in a school sixth form than non-FSM pupils.

Destinations at Key Stage 4 in C&W local authorities and England, by FSM status and type of destination, 2021/22								
	FE	School 6th Form	6th Form Col	Other edu	Apprenticeship	Work	Not sustained	Unknown
Cheshire East FSM	56	23	2.6	0.5	1.6	6.3	8.9	1
Cheshire East non-FSM	36.4	49.3	5.2	0.7	3	2.4	2.4	0.6
Cheshire West and Chester FSM	50.3	22.1	5.8	1	0.8	3.5	11.8	4.8
Cheshire West and Chester non-FSM	29.9	41.2	16.8	0.8	3.1	2.9	3.7	1.7
Warrington FSM	42.4	8.4	28.2	1.1	1.5	5.7	12.2	0.4
Warrington non-FSM	29.2	20.3	42.2	0.1	1.8	2.4	3.4	0.5
England non-FSM	34.2	41.7	13.8	0.5	2.6	2.3	3.8	2.3
England FSM	46.6	25	10.4	0.6	1.4	3	10.9	5.2
Source: Key Stage 4 destination measures, DfE								

For the past decade, non-FSM pupils in Cheshire East and Warrington have been more successful than their English counterparts in securing a sustained destination. In the last five years, non-FSM pupils in Cheshire West and Chester have had a lower rate of securing a sustained destination than has been the case for England. For FSM pupils there has been variable performance compared with England in Cheshire East and Warrington with rates exceeding those for England on a handful of years for each authority over the past decade. Cheshire West and Chester have had lower rates of sustained destinations for FSM pupils than England for every year bar one in the last decade.

% at KS4 securing an overall sustained destination, C&W local authorities and England, by FSM status, 2010/11-2020/21
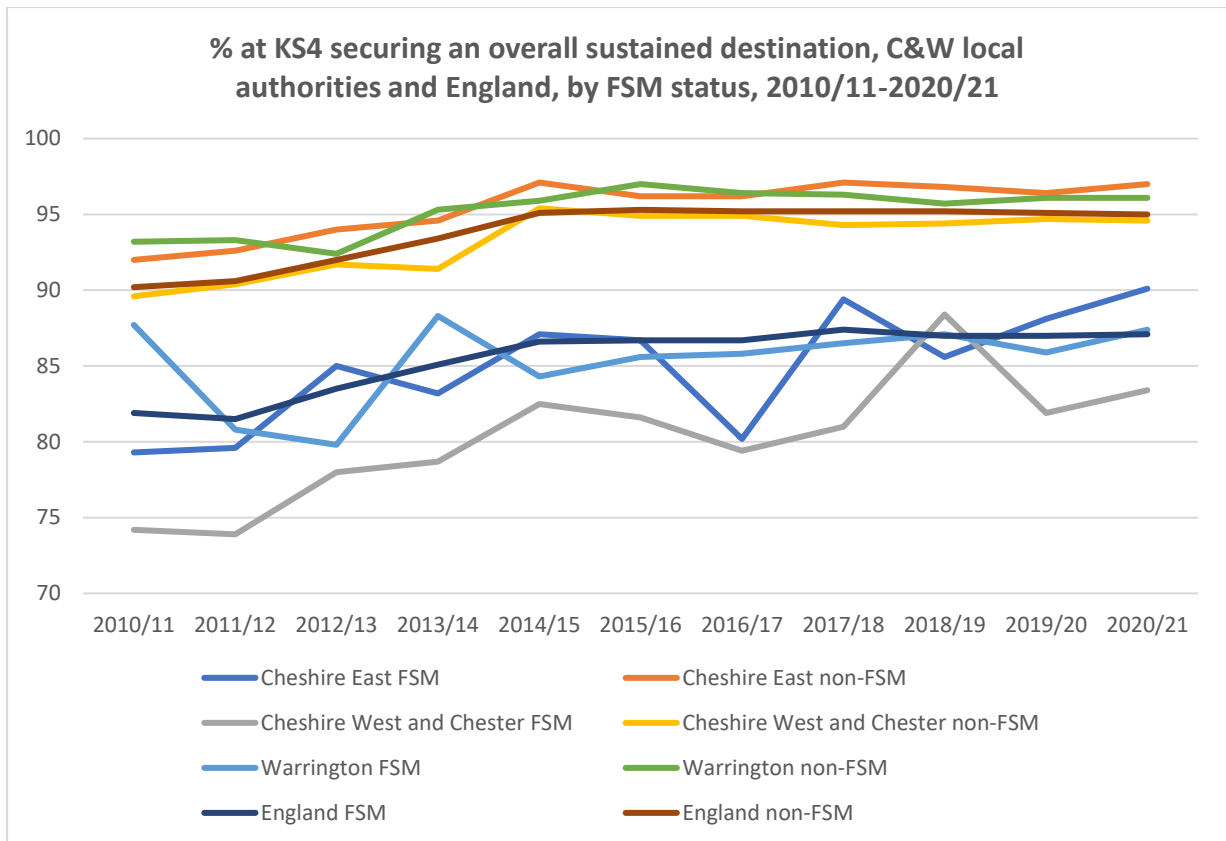
Source: Key Stage 4 destination measures, DfE

For the past five years the proportion of non-FSM pupils that have secured a sustained education destination has been higher than for England in Warrington and Cheshire East. Conversely, the proportion has been lower in Cheshire West and Chester. The proportion of FSM pupils securing a sustained destination in education following Key stage 4 has been lower in Cheshire and Warrington than in England for the last decade.

% securing a sustained education destination at Key Stage 4 in C&W local authorities and England, by FSM status, 2010/11 - 2020/21
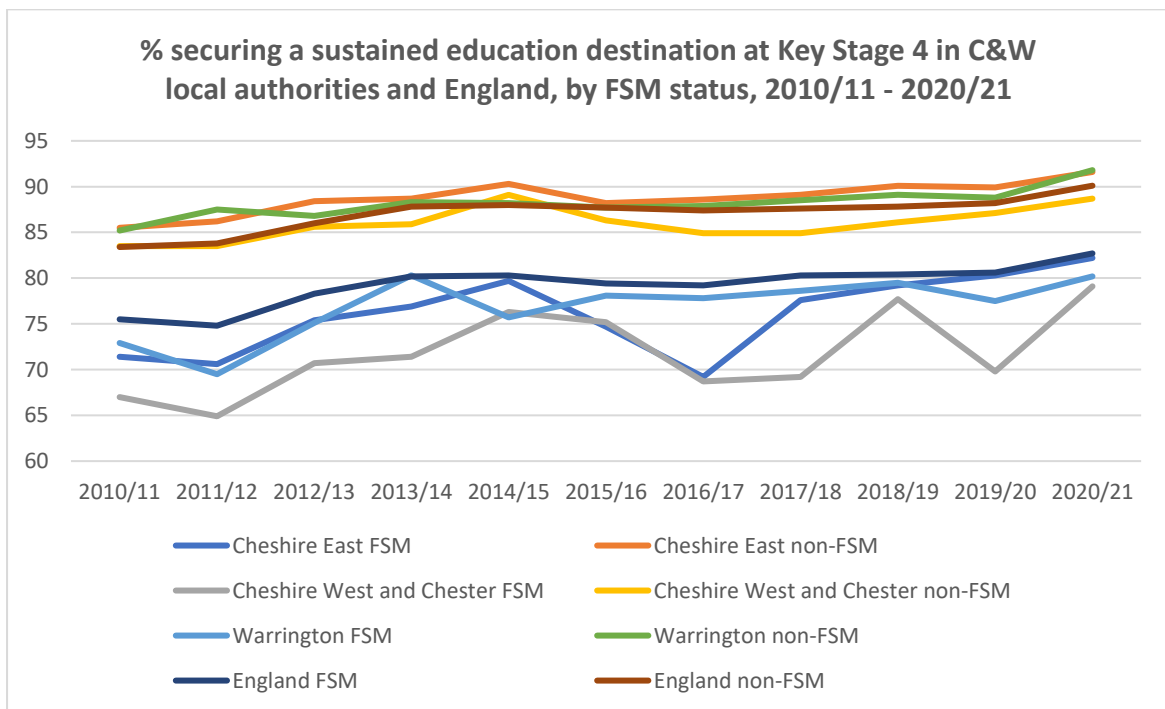
Source: Key Stage 4 destination measures, DfE

For the last decade the gap between the proportion of non-FSM KS4 pupils sustaining a destination in education and the proportion of FSM pupils doing so has been larger than England for all three Cheshire and Warrington local authorities.

ppt gap in securing a sustained education destination at Key Stage 4 in C&W local authorities and England, by FSM status, 2010/11-2020/21
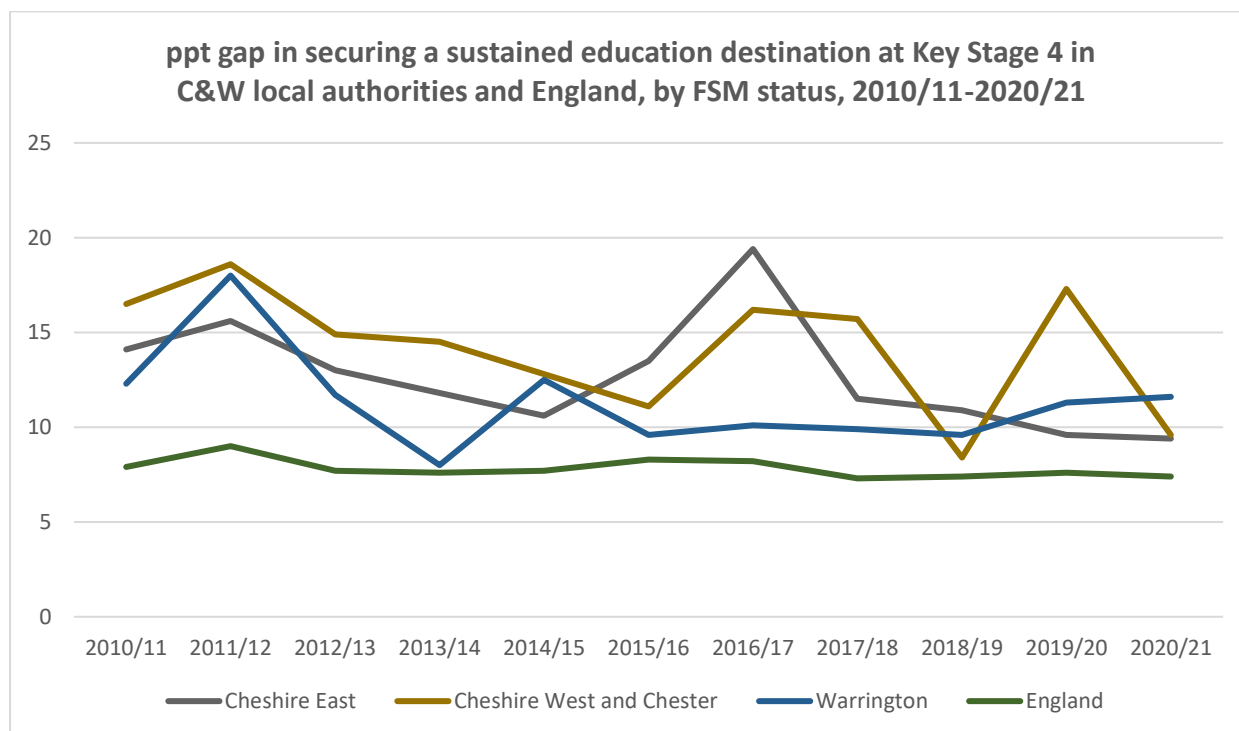
Source: Key Stage 4 destination measures, DfE

Since the introduction by national Government of reforms to apprenticeships in the middle of the last decade, the proportion of Key Stage 4 leavers able to secure a destination as an apprentice has shown a declining trend in both England and the three local authorities of Cheshire and Warrington. That decline has been most pronounced in Warrington which has moved from having a higher rate of progression than England and the highest rate of the three local authorities in 2015/16, to having a lower rate of progression than England and the lowest rate of progression of the three local authorities in 2020/21. Between 2015/16 and 2020/21 the rate of progression to a sustained apprenticeship in Warrington has declined by over two thirds from 6.1% to 1.8%.

Apprenticeships as a sustained destination at Key Stage 4 in the C&W local authorities and England, 2010/11-2020/21
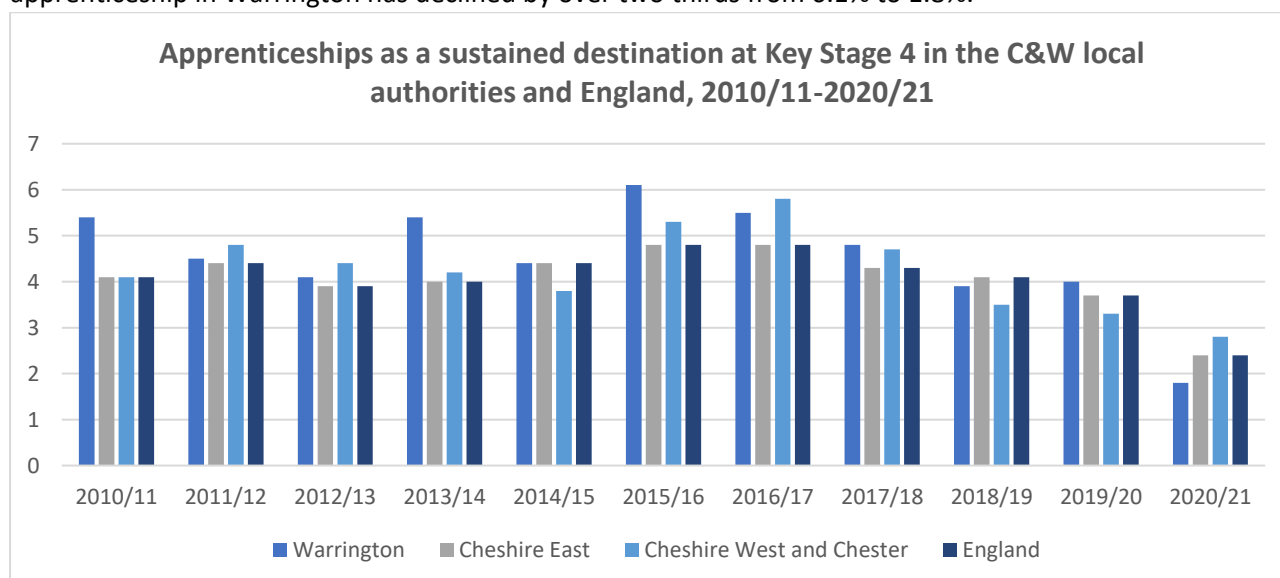
Source: Key Stage 4 destination measures, DfE

5.1.2.6 Key Stage 5 attainment

Generally 19 year olds in Cheshire and Warrington who were not FSM eligible have achieved better at Level 2 than their counterparts in England over the past one and a half decades. By contrast, those eligible for FSM generally had lower levels of attainment than their English counterparts in this time period, although FSM 19 year olds in Warrington had a slightly higher achievement rate than their English counterparts in 2020/21.
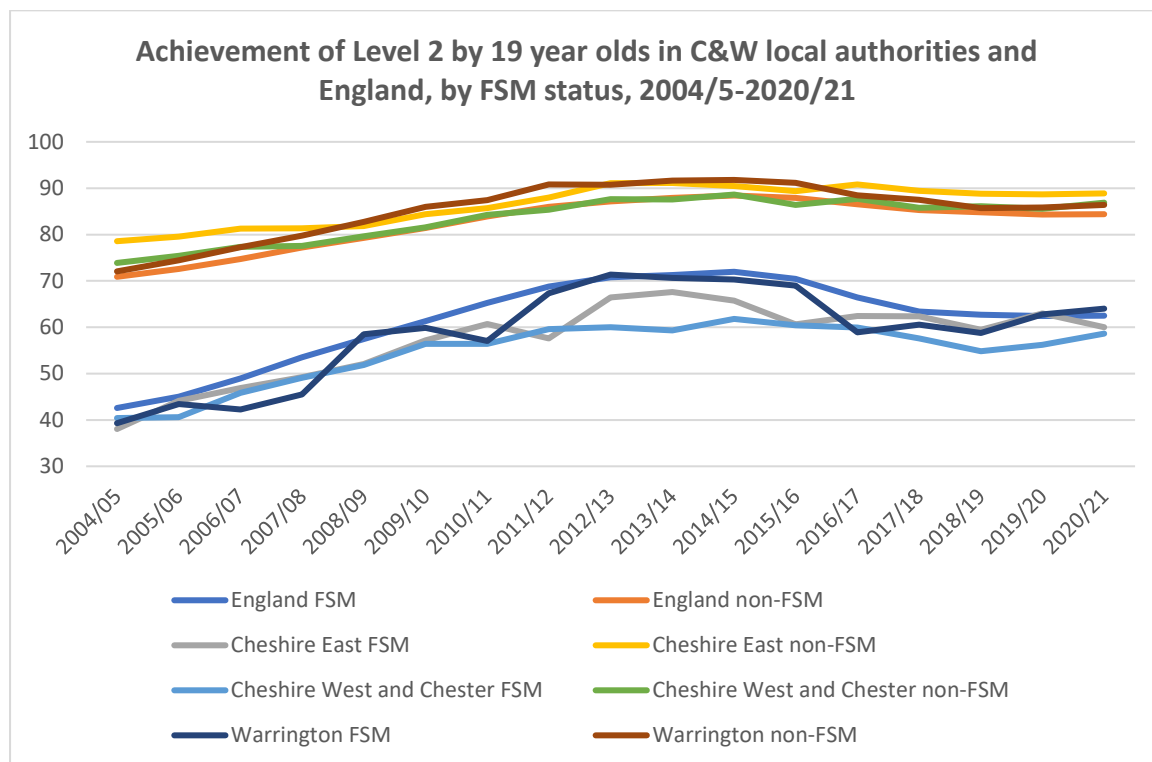
Source: DfE Attainment SFR

All three Cheshire and Warrington local authorities have had a bigger Level 2 achievement at 19 gap than England since this data started to be collected (2004/5). Recent years have seen an encouraging convergence towards the English level in Warrington.
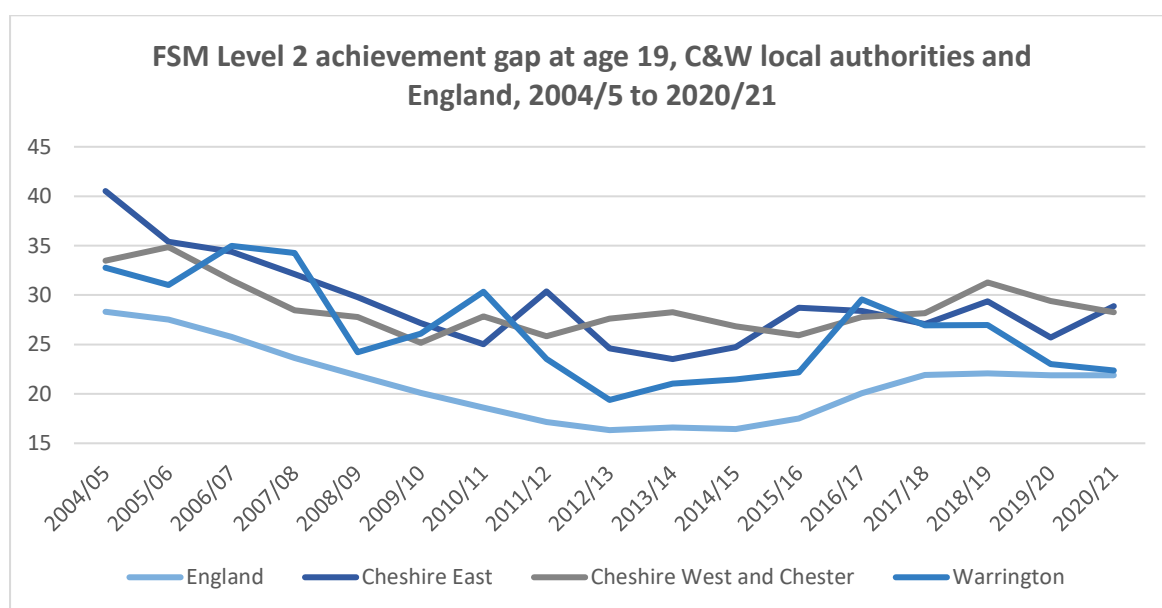
Source: DfE Attainment SFR

Generally 19 year olds in Cheshire and Warrington who were not FSM eligible have achieved better at Level 3 than their counterparts in England since 2004/5, although achievement for this cohort has dipped below that of England in Cheshire West and Chester in the last couple of years. By contrast, those eligible for FSM generally had lower levels of attainment than their English counterparts in this time period.

Attainment of Level 3 at age 19 in C&W local authorities and England, by FSM status, 2004/5-2020/21
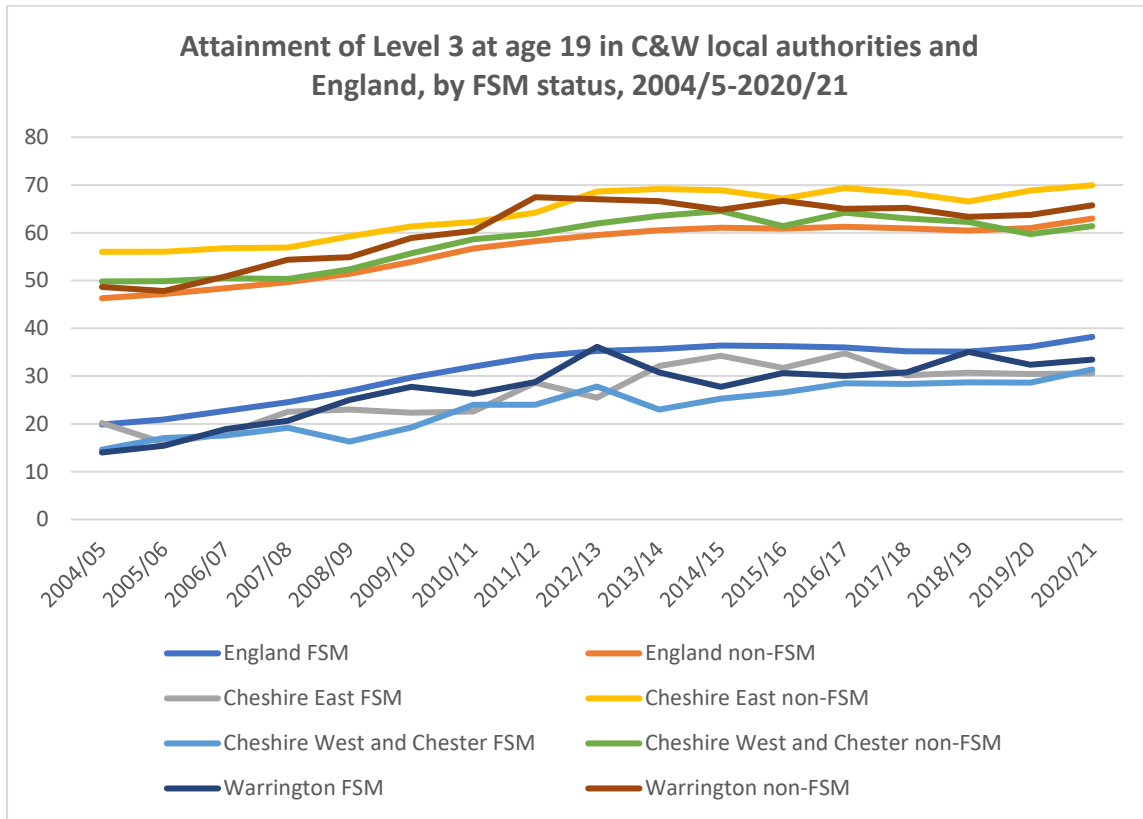
Source: DfE Attainment SFR

The difference in achievement of Level 3 at age 19 between FSM and non-FSM young people is known as the FSM Level 3 achievement gap. The chart below illustrates that all three Cheshire and Warrington local authorities have had a bigger gap than England since this data started to be collected (2004/5).

FSM achievement gap for Level 3 at age 19, C&W local authorities and England, 2004/5-2020/21
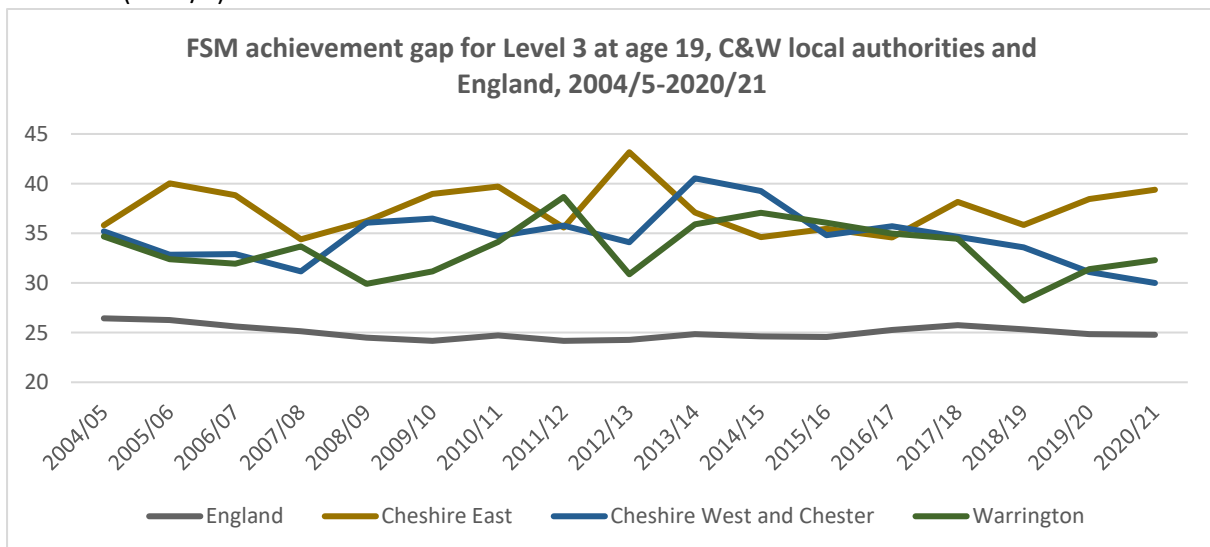
Source: DfE Attainment SFR

5.1.2.7 Key Stage 5 destinations

The map below presents data for the overall percentage of Key Stage 5 leavers securing a sustained destination by parliamentary constituency in 2020/21. Three constituencies had sustained destination rates lower than England in 2020/21 (79.1%):

- Warrington North
- Eddisbury
- Crewe and Nantwich

Percentage securing a sustained destination at Key Stage 5, 2020-21

% securing a sustained destination

- 72.2
- 78.6
- 78.8
- 83.4
- 83.9
- 86.7
- 87.3
- 87.4
- 87.9
- 90

Map by Brennan Wilson Ltd in QGIS. Data from DfE, OS, ONS and OpenStreetMap
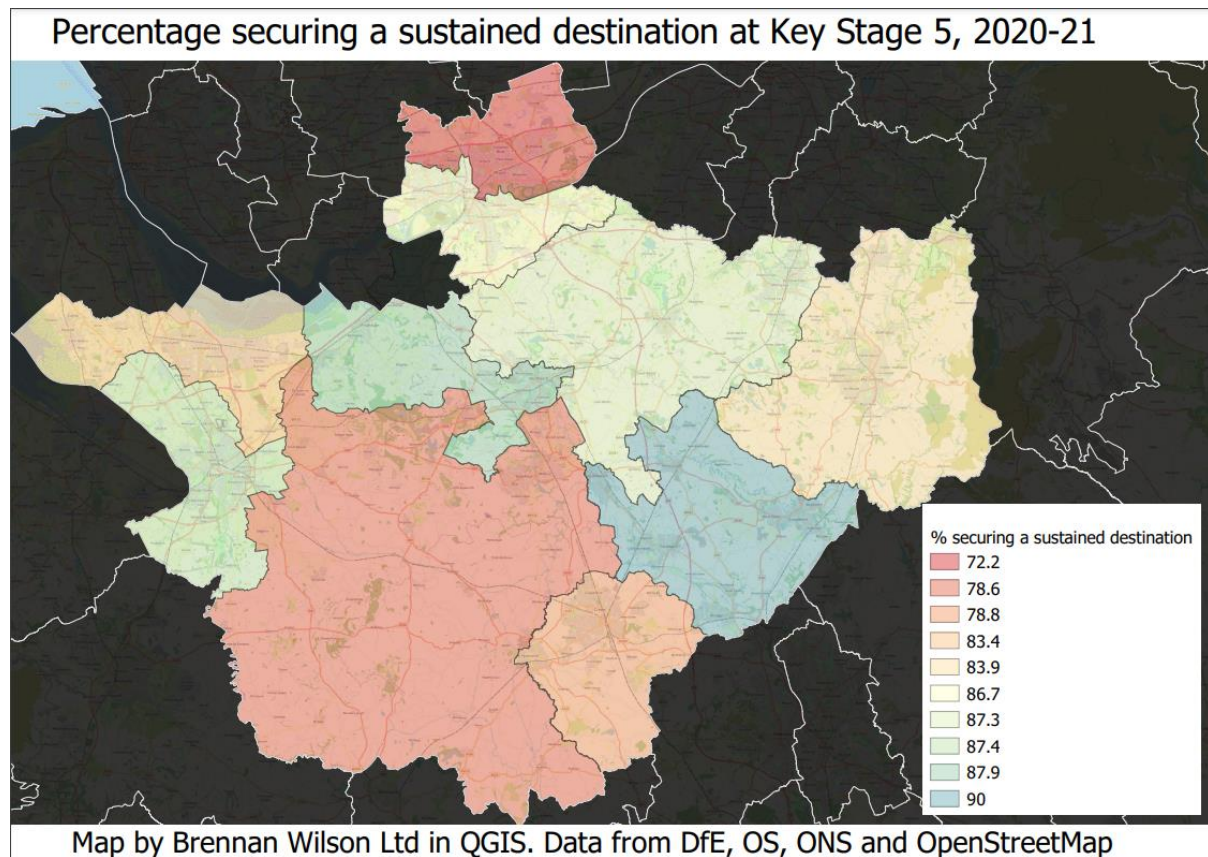
The chart below presents the data for the percentage of Key Stage 5 leavers that secured a sustained destination in Cheshire and Warrington and England, 2017/18 to 2020/21. Generally, the three Cheshire and Warrington local authorities have tracked above the English level for the percentage of non-disadvantaged young people securing a sustained destination, Cheshire East and Warrington have also tracked England for disadvantaged young people securing a destination. However, in the last two years, the percentage of disadvantaged young people able to secure a destination in Cheshire West and Chester has increased significantly by over 15 percentage points from 68.4% in 2018/19 to 83.6% in 2020/21.

% of Key Stage 5 leavers securing a sustained destination in C&W local authorities and England, by disadvantaged status, 2017/18-2020/21

Legend:
- Cheshire East disadvantaged
- Cheshire East not disadvantaged
- Cheshire West and Chester disadvantaged
- Cheshire West and Chester not disadvantaged
- Warrington disadvantaged
- Warrington not disadvantaged
- England disadvantaged
- England not disadvantaged

Source: Key Stage 5 destination measures, DfE

The difference in the percentage of disadvantage Key Stage 5 leavers securing a sustained destination and the percentage of non-disadvantaged doing so is known as the disadvantaged destination gap. The chart below illustrates that the gap in Cheshire East and Warrington been at or above that for England. Data for the most recent year shows that the gap for Cheshire West and Chester has fallen to almost half of that for of England (7.6% compared with 13.3%) .

Destinations of KS5 leavers, disadvantage gap in C&W local authorities and England, 2017/18-2020/21

Legend:
- Cheshire East
- Cheshire West and Chester
- Warrington
- England
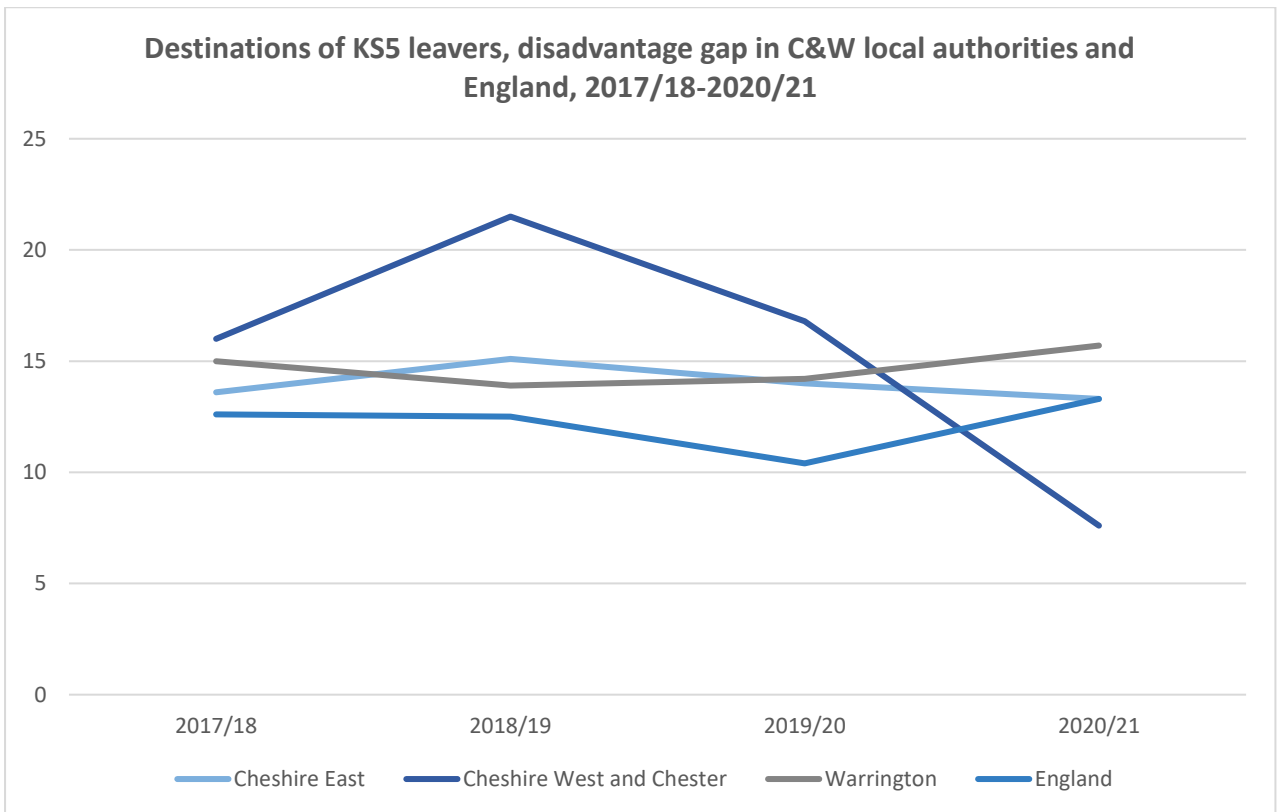
Source: Key Stage 5 destination measures, DfE

The proportions of disadvantaged Level 3 learners that progress to a degree have been lower for every year in Cheshire East and Warrington than in England. However, in Cheshire West and Chester the proportion of this cohort that progressed to a degree has shown a marked increase of 23.7ppt from 38.8% in 2015/16 to 62.5% in 2018/19, 4.7% higher than the English level for this cohort was in this year.

% of level 3 cohort progressing to a degree in C&W local authorities and England, by disadvantaged status, 2015/16 - 2018/19
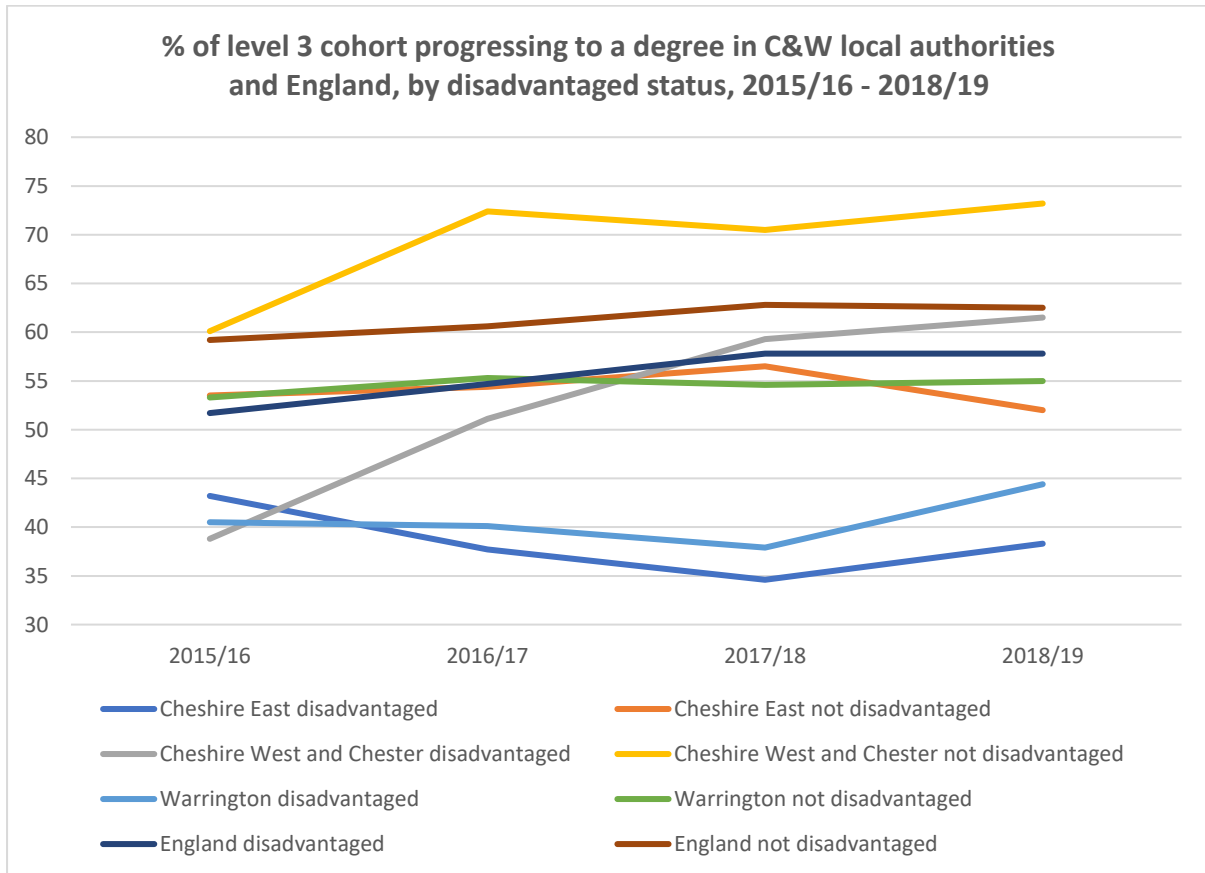
Source: Key Stage 5 destination measures, DfE

The gap between the proportion of disadvantaged KS5 leavers and the proportion of not disadvantaged KS5 leavers being able to secure a degree place has been larger in the Cheshire and Warrington local authorities than for England in every year that this data has been available. In 2018/19, the gap was more than double that for England in all three local authorities. However, it should be noted that whilst the gap in Cheshire West and Chester in 2018/19 was larger than for England, this is in the context of higher progression rates in Cheshire West and Chester than in England for both disadvantaged and not disadvantaged cohorts.

% of level 3 cohort progressing to a degree, disadvantage gap, C&W local authorities and England, 2015/16

Legend: Cheshire East, Cheshire West and Chester, Warrington, England
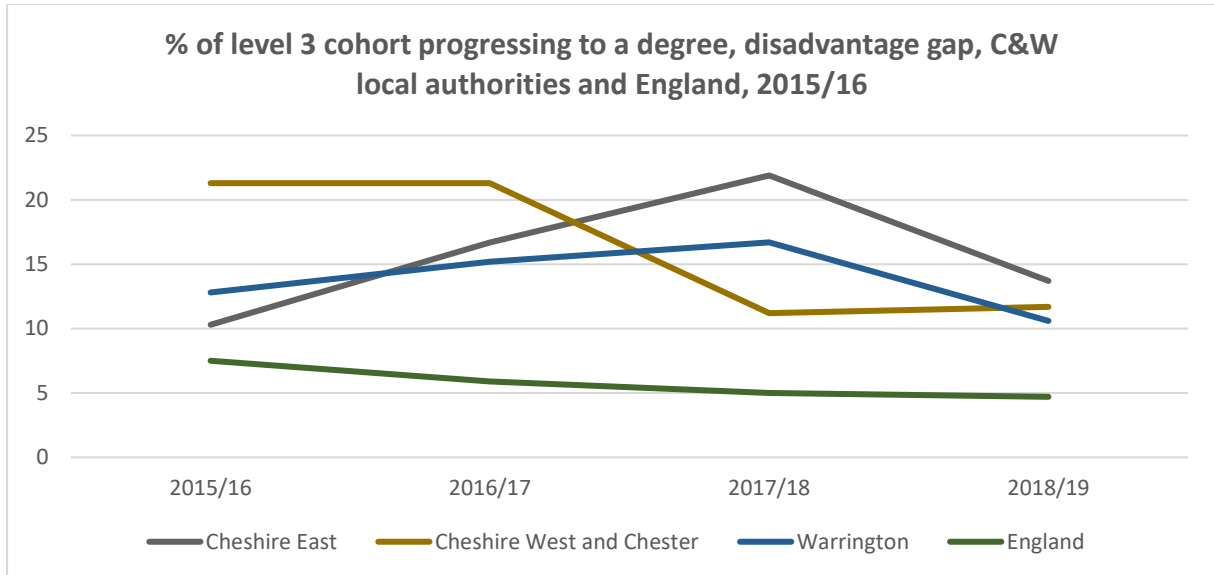
Source: Key Stage 5 destination measures, DfE

TUNDRA (tracking underrepresentation by area) is an area-based measure that uses tracking of state-funded mainstream school pupils in England to calculate young participation in Higher Education. It is an official statistic. TUNDRA classifies local areas across England into five equal groups – or quintiles - based on the proportion of 16 year old state-funded mainstream school pupils who participate in higher education aged 18 or 19 years. Quintile one shows the lowest rate of participation. Quintile five shows the highest rate of participation.

The most recently available data from this dataset was published in March 2021. This uses the data based on Key Stage 4 pupils from the 2012 to 2016 cohorts.

The TUNDRA data is mapped below for Cheshire and Warrington. The LSOAs with the lowest levels of young HE progression are concentrated in Ellesmere Port, Warrington and Crewe.

Young people's progression to higher education by Lower Layer Super Output Area

TUNDRA Quintile
1
2
3
4
5

Map by Brennan Wilson Ltd in QGIS. Data from OfS, OS, ONS, and OpenStreetMap
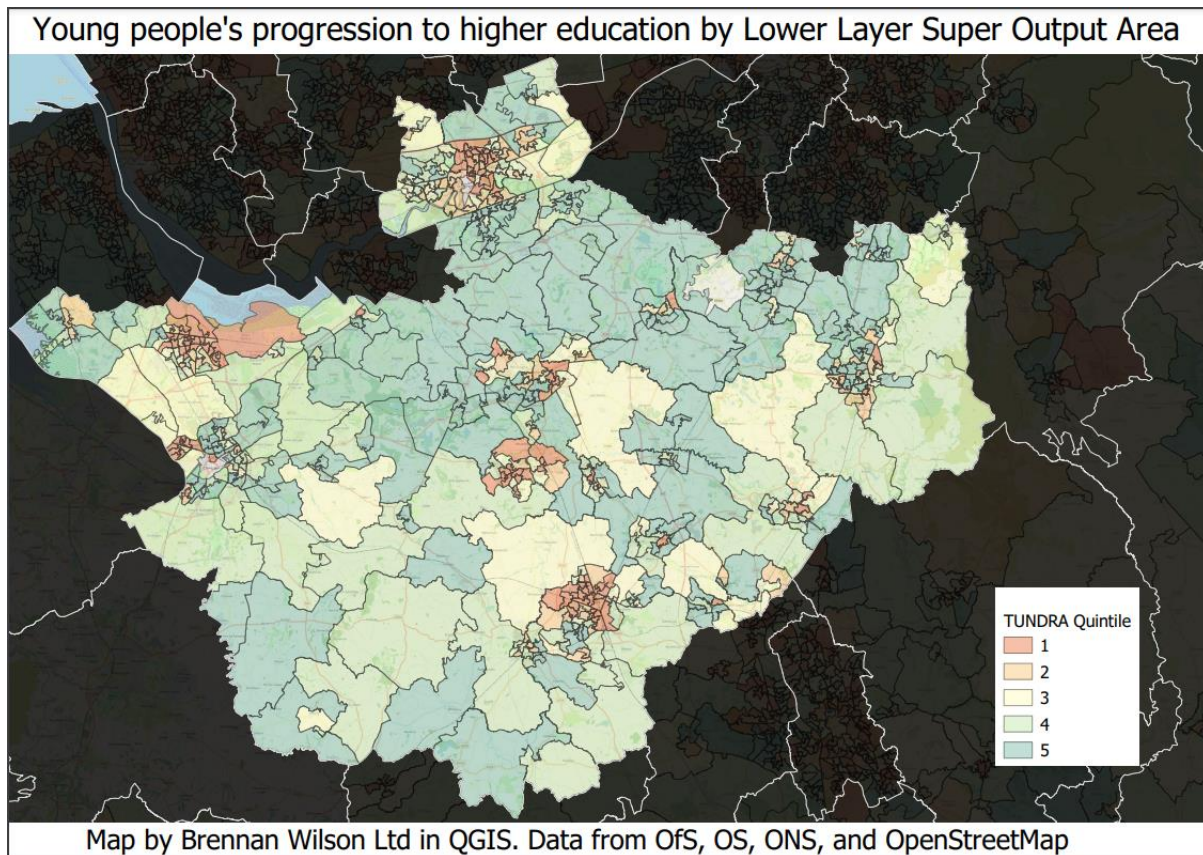
5.2 The Supply of Skills to Young People[19]

This sub section draws data from the ESFA localities datacube (and, to a lesser extent the Schools Census) to discuss the following issues:

- Patterns of 16-18 participation (school, FE, apprenticeship) in Cheshire and Warrington
- Participation of 16-18 learners in Level 2 programmes
- Participation of 16-18 learners in Level 3 programmes

5.2.1   Young People aged 16-18 participation in learning - overview

It is estimated that 54% of those aged 16-18 in learning in 2020/21 in Cheshire and Warrington attended a College or Sixth Form College, 33% attended a School Sixth Form and 13% were apprentices. It is notable that in 2020/21, of the 7, 370 students on roll in schools in Cheshire and Warrington in Years 12,13 and 14, the percentage eligible for FSM was 7% compared with 18% known to be eligible for FSM in Years 7-11.

Between 2018/19 and 2020/21 the overall numbers of 16-18 learners in FE has hovered around the 12k mark. Numbers have remained stable at local authority level as well, with roughly 4k FE learners in each local authority in 2020/21. This relatively stable pattern for 16-18 learner numbers in FE was also reflected in the data for 16-18 year olds resident in parliamentary constituencies where the trend was either flat or showed minor increases between 2018/19 and 2020/21.

---

[19] Data in this section is drawn from the ESFA localities datacube, and the School Census.

The map below takes the volume of 16-18 residents participating in FE and calculates an estimated ward participation rate in FE based on estimates of the size of the ward 16-18 population that have been published by the Office for National Statistics (ONS). It can be seen from this map that the areas with the highest proportions of participation in FE run in a band through the centre of Cheshire and Warrington going from Warrington in the north, through Winsford, to Crewe in the South.

The wards with the highest proportions of 16-18 FE enrolment in 2020/21 were: Winsford Dene; Fairfield & Howley; Appleton; Penketh & Cuerdley; Westminster; Stockton Heath; Poplars & Hulme; Latchford East; Wistaston; and, Orford. High participation at ward level suggests a high degree of proximity, or a high degree of accessibility (eg good transport links)

Estimated percentage of the 16-18 population enrolled in FE, 2020/21

% of 16-18 popn in FE
9.4 - 18.5
18.5 - 23.1
23.1 - 25.8
25.8 - 29.6
29.6 - 31.8
31.8 - 39.9
39.9 - 44.7
44.7 - 54
54 - 58.6
58.6 - 72.2

Map by Brennan Wilson Ltd in QGIS. Data from Localities datacube, ONS, OS and OpenStreetMap
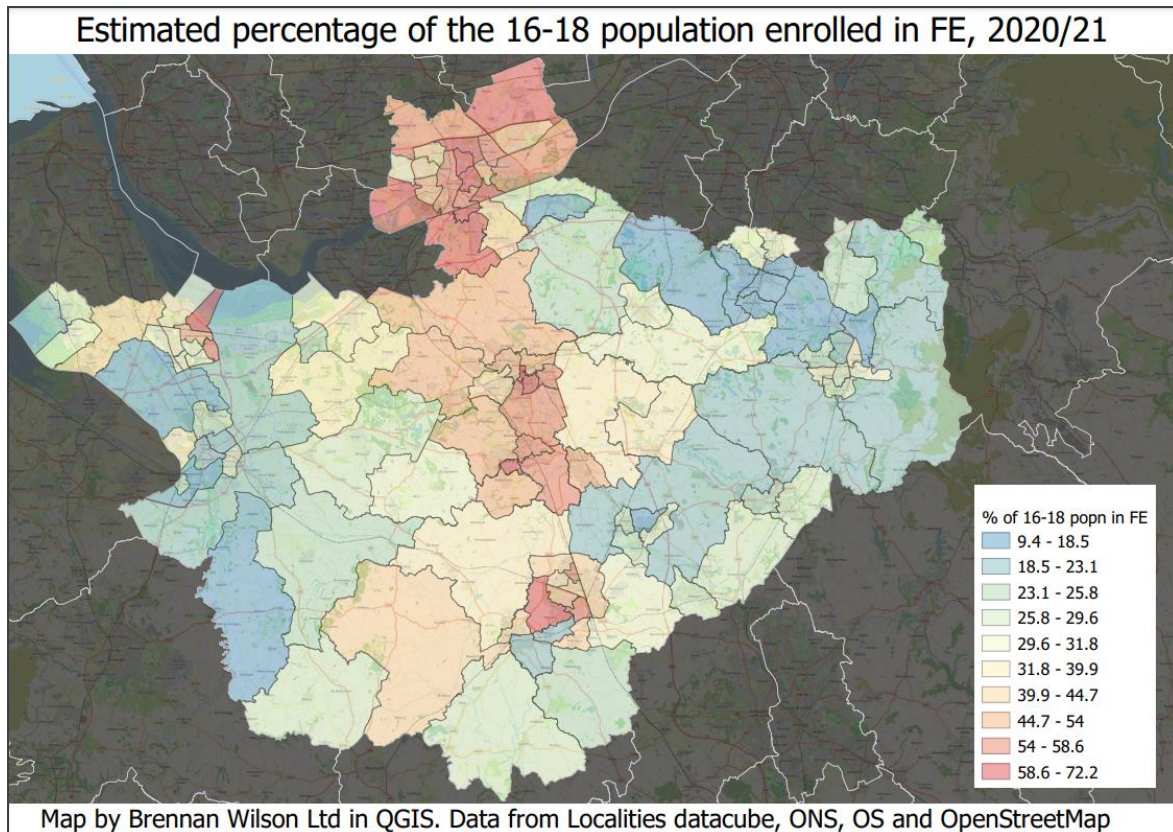
In Cheshire and Warrington between 2018/19 and 2020/21, the number of 16-18 starts on Intermediate Apprenticeships declined by 35% and for Advanced Apprenticeships by 27%.

16-18 apprenticeship starts by C&W residents, by Level, 2018/19 - 2020/21
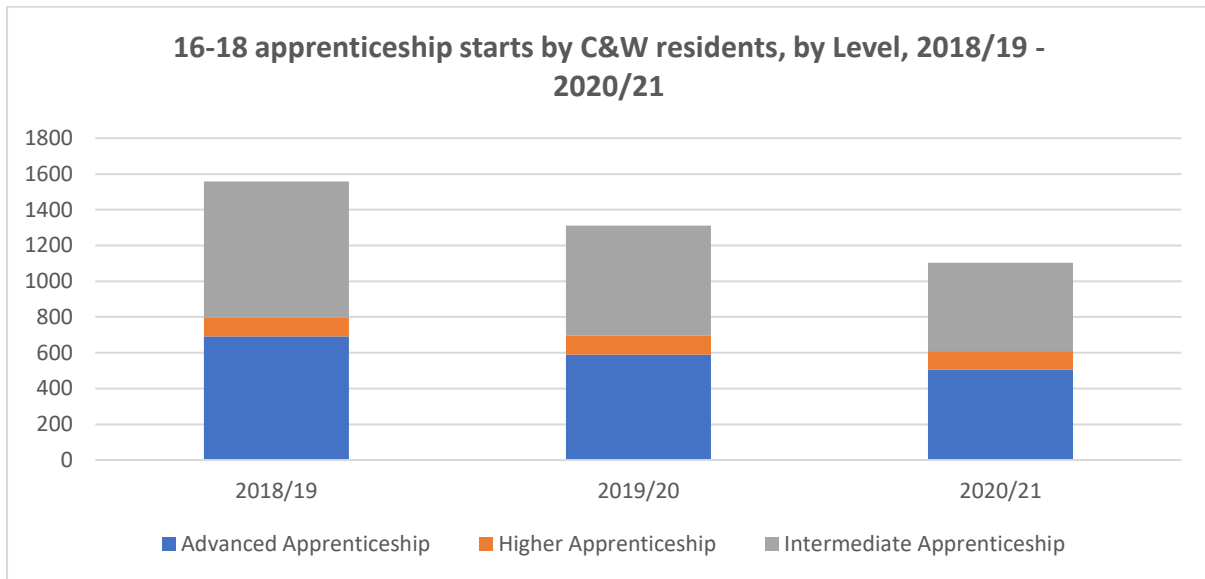
Source: starts analysis, ESFA localities datacube (residency), 2020/21

In 2020/21, the wards with the highest proportions of 16-18 year olds on apprenticeships were: Burtonwood & Winwick; Whitby Park; Rudheath; Macclesfield Hurdsfield; Whitby Groves; Winsford Gravel; Congleton East; Strawberry; Odd Rode; and, Congleton West.

Estimated percentage of 16-18 population on an Apprenticeship, 2020/21

Map by Brennan Wilson Ltd in QGIS. Data from Localities datacube, ONS, OS, and OpenStreetMap
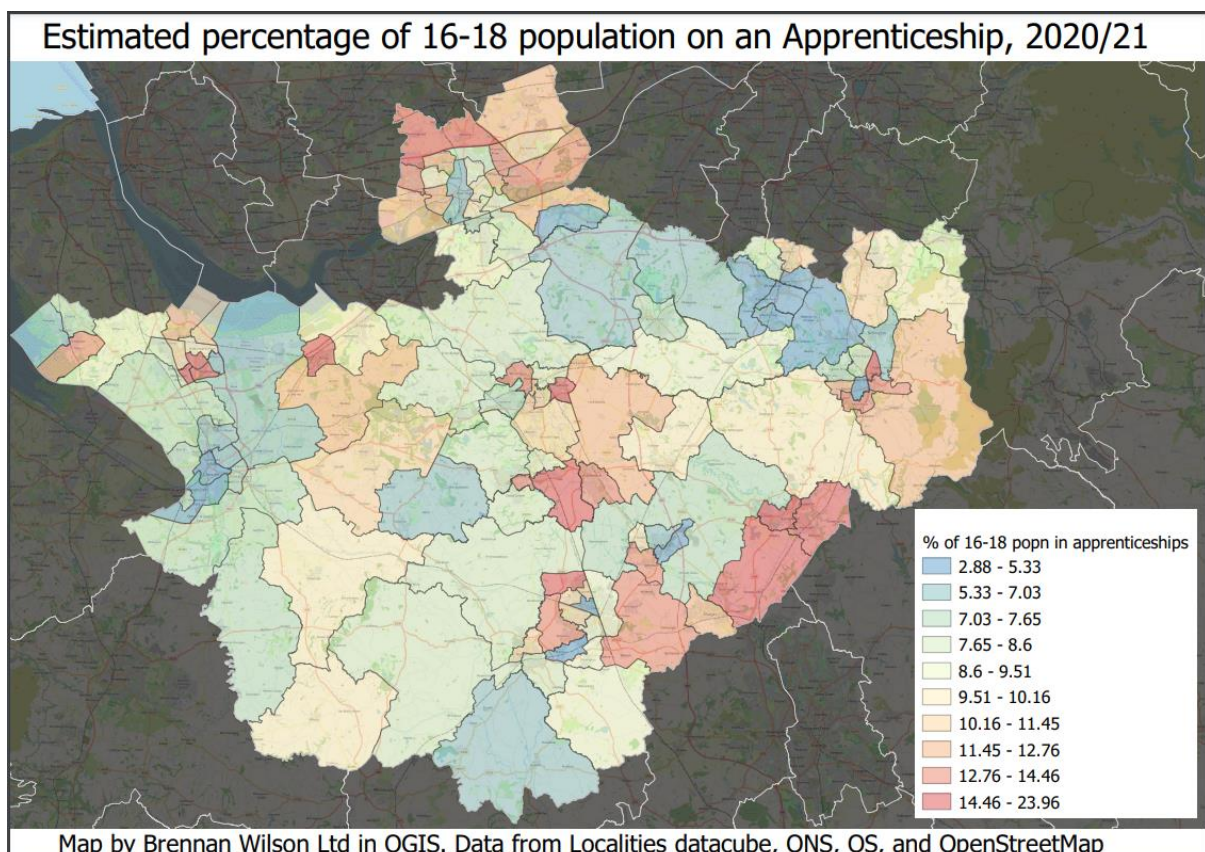
5.2.2 Young People aged 16-18 participation in learning at Level 2

The delivery of learning aims in FE at Level 2 to 16-18 year olds has remained relatively stable at headline level with a decline of 3% from 2018/19 to 2020/21.

16-18 learning aim starts in FE at Level 2 in C&W, 2018/19-2020/21
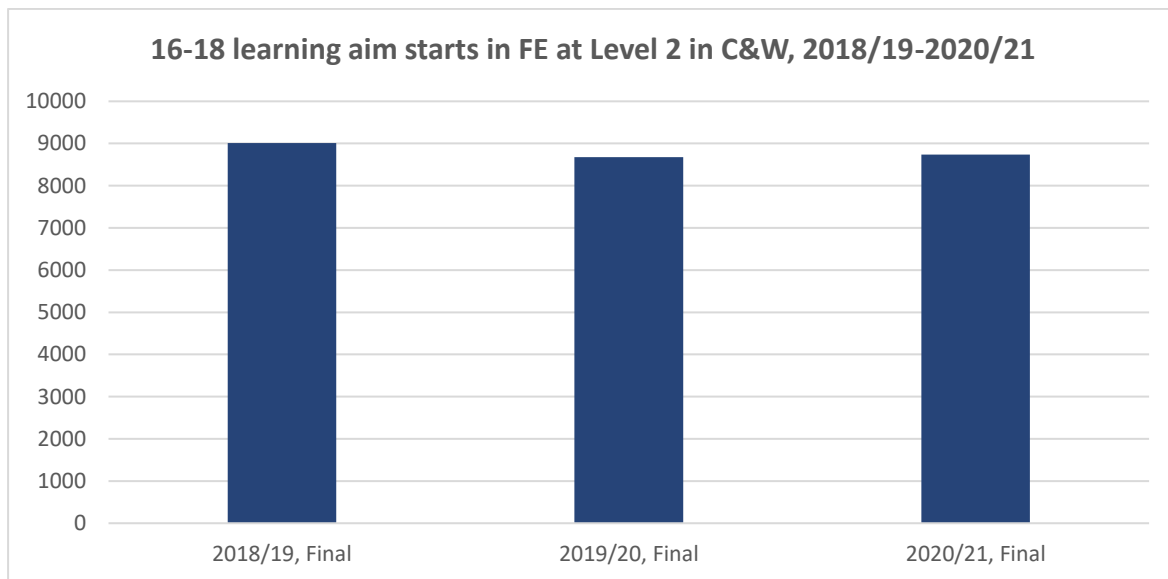
Source: starts analysis, ESFA localities datacube (residency), 2020/21

In 2020/21, just over half of all learning aims in FE at Level 2 were delivered to 16 year olds, with the proportion delivered to 18 year olds falling to 1 in 7. Over half of these learning aims were GCSE Maths and English, although volumes of this type of qualification declined by 13% between 2018/19 and 2020/21, which may reflect a decline in the number of entrants to post-16 FE without English and Maths.

Males accounted for 97% of all FE learning aim starts at Level 2 in Construction, 90% in ICT, and 75% of starts in Engineering and Manufacturing Technologies. Conversely, females accounted for 85% of starts in Retail and Commercial Enterprise and almost two thirds of starts in Agriculture, Horticulture and Animal Care.

16-18 learning aim starts in FE in C&W at L2, by gender and SSA, 2020/21

SSA	Female	Male
Agriculture, Horticulture and Animal Care	~830	~440
Arts, Media and Publishing	~110	~160
Business, Administration and Law	~50	~70
Construction, Planning and the Built Environment	~20	~440
Engineering and Manufacturing Technologies	~90	~290
Health, Public Services and Care	~290	~120
Information and Communication Technology	~10	~70
Languages, Literature and Culture	~720	~1370
Leisure, Travel and Tourism	~40	~120
Preparation for Life and Work	~110	~130
Retail and Commercial Enterprise	~490	~80
Science and Mathematics	~1220	~1420

Source: starts analysis, ESFA localities datacube (residency), 2020/21

The number of starts on Level 2 (Intermediate) apprenticeships by residents of Cheshire and Warrington aged 16-18 declined by 35% between 2018/19 and 2020/21 from 763 to 494. The decline in Cheshire East was 25%, Cheshire West and Chester 33%, and Warrington 52%. By parliamentary constituency declines were in the range of 11% (Weaver Vale and Macclesfield) to 56% (Warrington North). By age this decline was 27% for those aged 16, 29% for those aged 17 and 39% for those aged 18.

In 2020/21, every intermediate apprenticeship start in Construction, Planning and the Built Environment was by a male. 97% of starts in Engineering and Manufacturing Technologies were by males. 91% of starts in Health, Public Services and Care and two thirds of starts in Retail and Commercial Enterprise were by females.

16-18 intermediate apprenticeships in C&W by SSA and gender, 2020/21
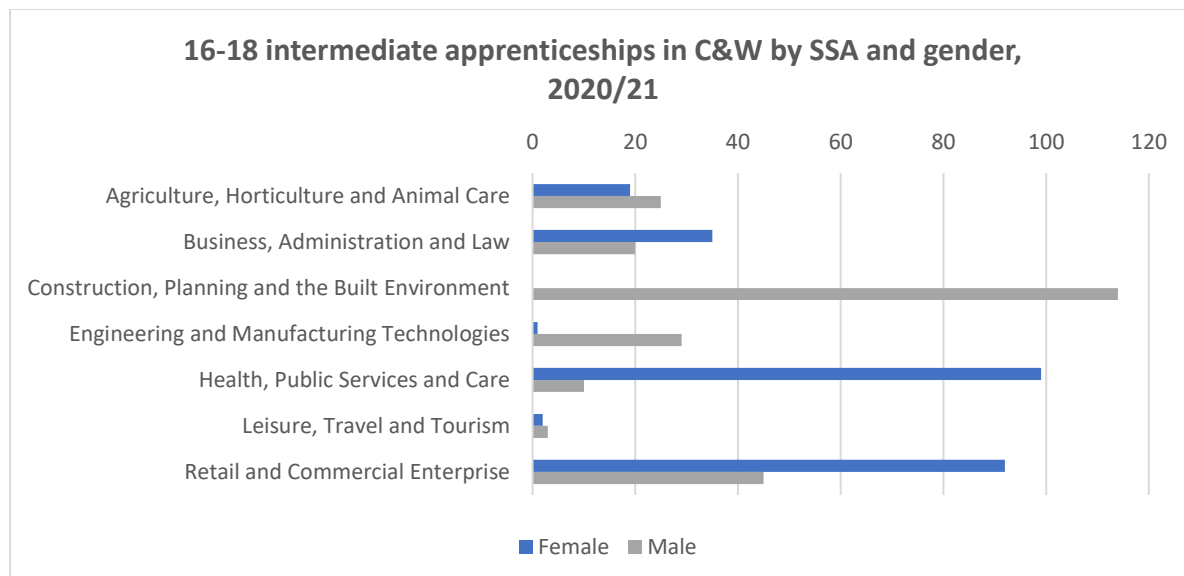
Source: starts analysis, ESFA localities datacube (residency), 2020/21

5.2.3   Young People aged 16-18 participation in learning at Level 3

The volume of 'academic' learning aim starts at Level 3 in FE by Cheshire and Warrington residents aged 16-18 between 2018/19 and 2020/21 remained broadly stable, with a slight decrease of 4% in this time.

16-18 starts on A and AS Level learning aims in FE in C&W, 2018/19 - 2020/21
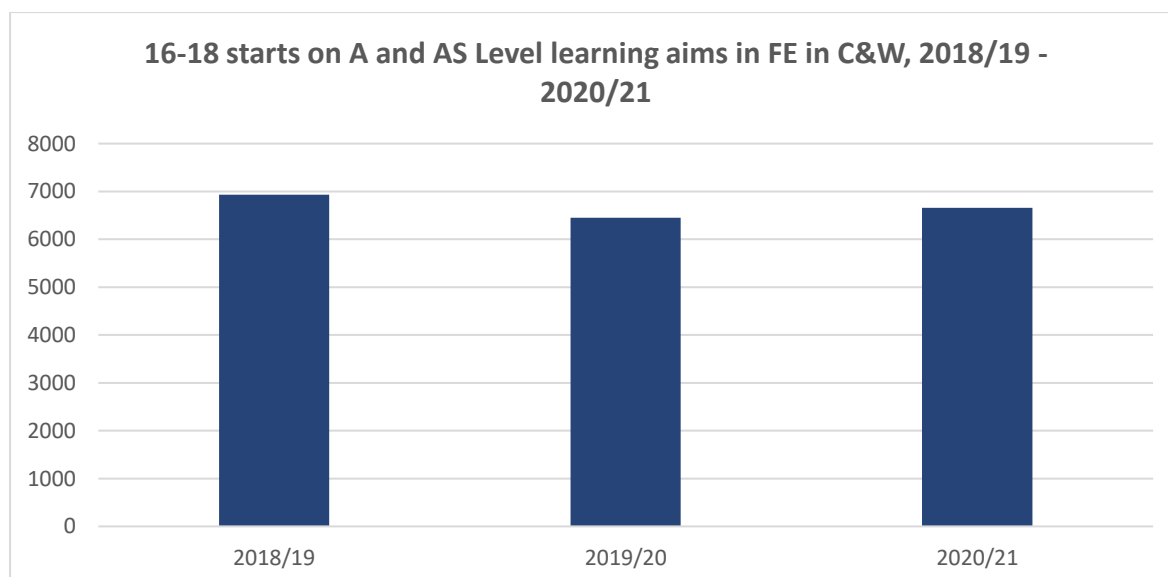
Source: starts analysis, ESFA localities datacube (residency), 2020/21

16 year olds, who accounted for 83% of such starts in 2020/21. This was a 6% increase in 2020/21 compared with 2018/19. By contrast, the number of 17 and 18 year olds starting academic aims fell quite sharply in this time (decreases of 34% and 40% respectively).

For academic learning aims at Level 3 in 2020/21, 80% of starts in Languages, Literature and Culture, 68% of starts in History, Philosophy and Theology and 67% of starts in Arts, Media and Publishing were by females. Conversely, 94% of starts in Engineering and Manufacturing Technologies and 85% of starts in Information and Communication Technology were by males.

16-18 A and AS Level learning aims in FE in C&W, by SSA and gender, 2020/21
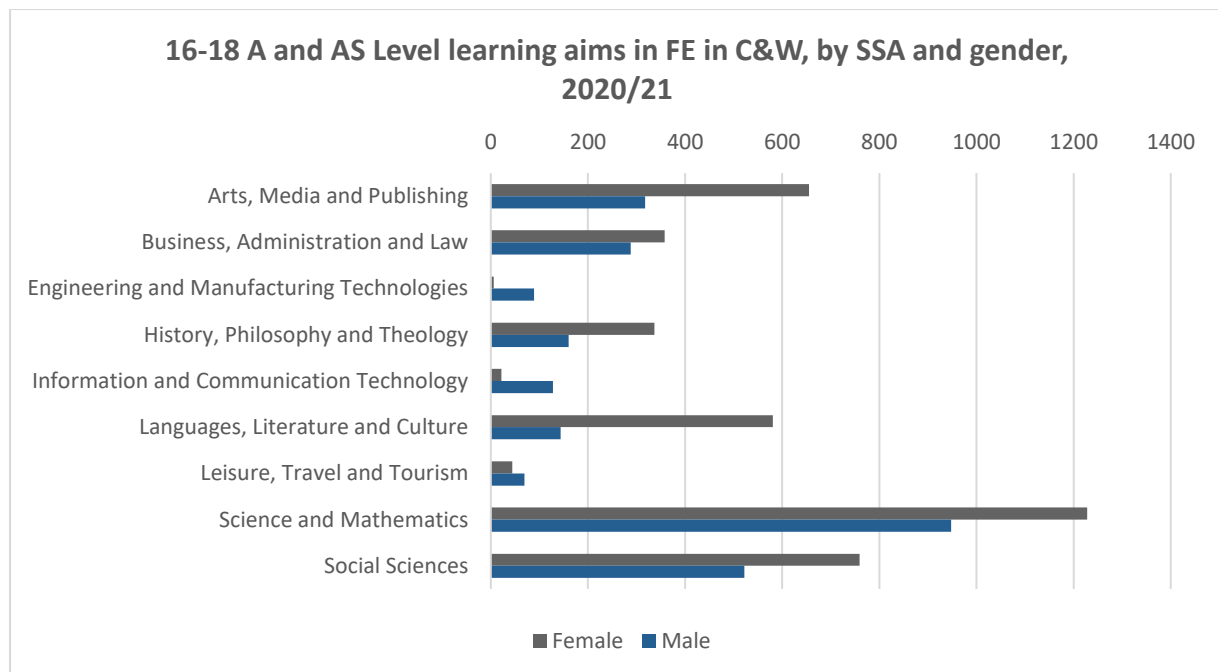
Source: starts analysis, ESFA localities datacube (residency), 2020/21

The volume of 'vocational' learning aim starts at Level 3 (eg Diplomas, T-levels and Certificates) by Cheshire and Warrington residents aged 16-18 between 2018/19 and 2020/21 saw a decrease of 9%.

The majority (51%) of these were by 16 year olds, which is considerably lower than for the percentage of starts on academic programmes by 16 year olds (83%). A third of Level 3 vocational starts in FE in 2020/21 by residents of Cheshire and Warrington aged 16-18 were by 17 year olds.

For 'vocational learning aims at Level 3 in 2020/21, 86% of starts in Retail and Commercial Enterprise, 78% of starts in Social Sciences and 67% of starts in Agriculture, Horticulture and Animal Care were by females. Conversely, 91% of starts in Engineering and Manufacturing Technologies; 93% of starts in Construction, Planning and the Built Environment; and 87% of starts in Information and Communication Technology were by males.

16-18 L3 vocational learning aims in FE in C&W, by SSA and gender, 2020/21

Chart showing Female and Male values by SSA category:
- Agriculture, Horticulture and Animal Care
- Arts, Media and Publishing
- Business, Administration and Law
- Construction, Planning and the Built Environment
- Engineering and Manufacturing Technologies
- Health, Public Services and Care
- Information and Communication Technology
- Leisure, Travel and Tourism
- Preparation for Life and Work
- Retail and Commercial Enterprise
- Science and Mathematics
- Social Sciences

(X-axis: 0, 200, 400, 600, 800, 1000, 1200)

■ Female ■ Male

Source: starts analysis, ESFA localities datacube (residency), 2020/21

The number of starts on Level 3 (Advanced) apprenticeships by residents of Cheshire and Warrington aged 16-18 declined by 27% between 2018/19 and 2020/21 from 692 to 506. The decline in Cheshire East was 32%, Cheshire West and Chester 17%, and Warrington 32%. Nine of ten parliamentary constituencies in Cheshire and Warrington also experienced declines in the range of 5% (Eddisbury) to 33% (Warrington North). Weaver Vale saw an increase of 7.5%. The decline in advanced apprenticeship starts was not experienced uniformly by age with the decline being 28% for those aged 17 and 34% for those aged 18, but starts at age 16 showing a very slight increase of 1%.

In 2020/21, 97% of advanced apprenticeship starts in Health, Public Services and Care, 87% of starts in Education and Training and 75% of starts in Arts, Media and Publishing were by females. Conversely, 96% of starts in Engineering and Manufacturing Technologies; 94% of starts in Construction, Planning and the Built Environment; 78% of starts in Leisure, Travel and Tourism; and 70% of starts in Information and Communication Technology were by males.

16-18 avanced apprenticeships by gender and SSA, 2020/21

Chart showing Female and Male values by SSA category:
- Agriculture, Horticulture and Animal Care
- Arts, Media and Publishing
- Business, Administration and Law
- Construction, Planning and the Built Environment
- Education and Training
- Engineering and Manufacturing Technologies
- Health, Public Services and Care
- Information and Communication Technology
- Leisure, Travel and Tourism
- Retail and Commercial Enterprise

(X-axis: 0, 20, 40, 60, 80, 100, 120, 140)

■ Female ■ Male

Source: starts analysis, ESFA localities datacube (residency)

5.3 Young People and the labour market

The Future Skills Questionnaire (FSQ) was launched in September 2021, allowing students to self-report on their career readiness and essential skills. There are 4 versions of the FSQ tailored to points of key transition across secondary, covering Career Knowledge and Skills (CKS) and Essential Skills (ES). There is also a version designed for young people with SEND.

Below is reported the overall score for the Careers Knowledge and Skills (CKS) and Essential Skills (ES) sections at national level and for the Cheshire and Warrington Careers Hub. The scores are defined as:

- CKS total score: The average proportion of CKS questions with a positive response
- ES total score: The average proportion of ES questions with a positive response

Total score for each version	Career Knowledge and Skills	Essential Skills
Starting Secondary Hub	44%	71%
Starting Secondary National	45%	71%
Transition from KS3 Hub	48%	60%
Transition from KS3 National	48%	60%
GCSE Years Hub	58%	64%
GCSE Years National	60%	66%
Post-16 Study Hub	73%	71%
Post-16 Study National	71%	73%
Total score for whole SEND version (not split by CKS/ES)		
SEND Hub	61%	
SEND National	62%	

Source: Cheshire and Warrington CEC

It is apparent from these scores that the positions nationally and for the Cheshire and Warrington Careers Hub are very similar. Slightly fewer young people at KS4 and KS5 in the Cheshire and Warrington Hub have the essential skills compared with their national counterparts.

In another survey, parents of secondary school students in Cheshire and Warrington were asked a range of questions about careers-related issues. Over half of parents surveyed expected to find out about career and education options from the following sources:

- Employer visits / talks in school
- Careers fairs
- Open days
- School communications (e.g., email, letters, apps)

Where C&W parents expect to find out about career and education options for their child
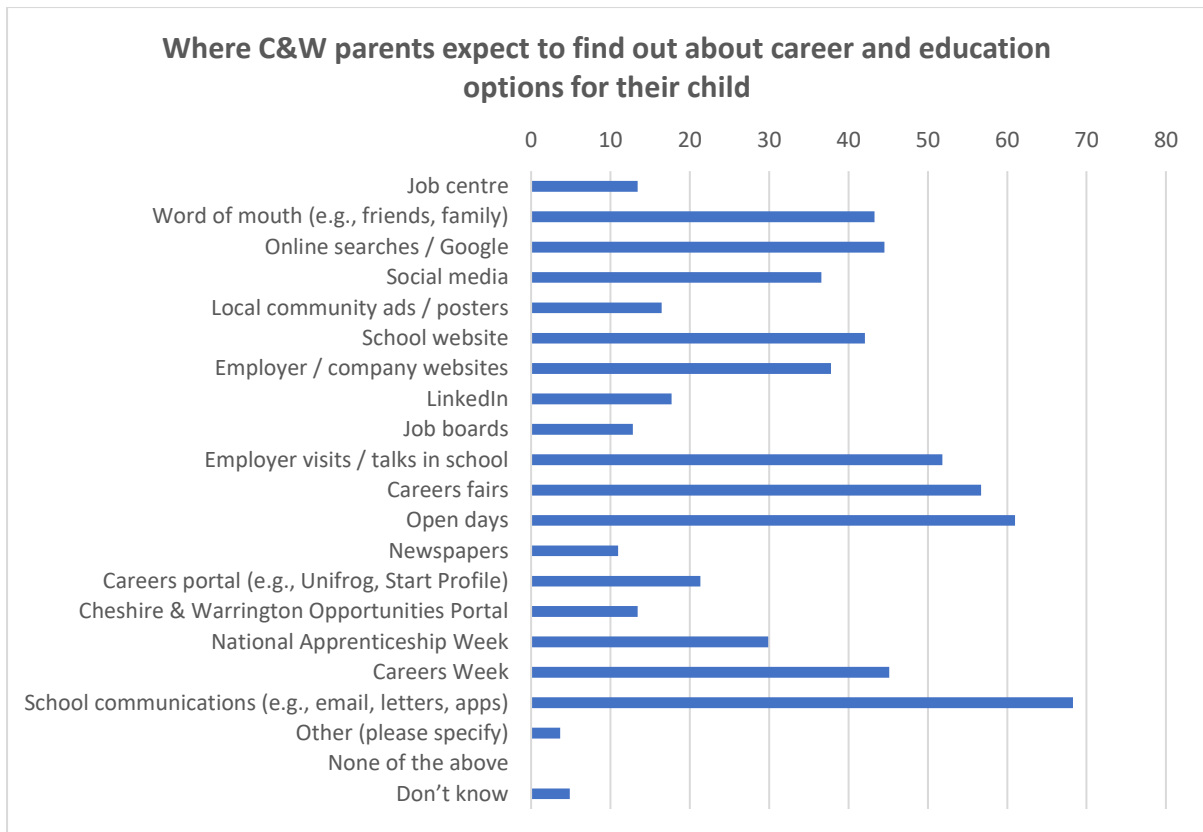
Source: Cheshire and Warrington CEC

In the same survey, parents were asked about the information about future career and education choices that they needed. Over 60% said that they needed information on:

- What education options are available (e.g., college, Sixth-Form / University)
- What vocational options are available (e.g., Apprenticeships, T-Levels)
- What subjects / qualifications my child needs for next steps
- Careers and job opportunities available in my local area
- What key skills employers are looking for
- How to gain work experience

Information about future career and education choices that parents say they need

Category	Value
What education options are available (e.g., college,…	~64
What vocational options are available (e.g.,…	~72
My child's performance / grades at school	~50
What subjects / qualifications my child needs for next…	~81
How to apply for college / Sixth-Form / University	~55
Funding support available e.g., Student loans for…	~45
Careers and job opportunities available in my local…	~66
Careers and job opportunities available across the UK	~46
Careers and job opportunities available overseas	~30
What key skills employers are looking for	~60
How to gain work experience	~62
How to access extra-curricular activity to build…	~57
Writing a CV	~49
How to apply for jobs	~44
How to prepare for a job interview	~54
Other (please specify)	~4
Don't know	~3

Source: Cheshire and Warrington CEC

5.4 Adult Skills in Cheshire and Warrington[20]

This sub-section discusses the following issues:

- The attainment of adults
- Adult participation in FE and apprenticeships
- The destinations of adult learners
- Adult learning below Level 2
- Adult learning (FE and apprenticeships) at Level 2
- Adult learning (FE and apprenticeships) at Level 3
- Adult learning (FE and apprenticeships) at Level 4+

5.4.1 Adult attainment

The proportion of working age residents qualified at Level 4 and above is slightly higher in Cheshire and Warrington than in England. However, this headline statistic disguises variation across Cheshire and Warrington's three local authorities with Cheshire West and Chester (43.6%) having a similar proportion to England (43.2%), but Cheshire East having a higher proportion (45.5%) and Warrington having a lower proportion (41.6%).

The proportion of the working age population with no qualifications is lower in Cheshire and Warrington than is the case for England. At local authority level, this proportion is lower than England for all three local authorities.

---

[20] Data in this subsection is drawn from NONIS (APS/LFS), IMD2019, ESFA localities datacube, and DfE (FE outcome success measures)

Qualifications (Jan 2021-Dec 2021), percentage of those aged 16-64					
	Cheshire and Warrington	North West	England	Cheshire East	Cheshire West and Chester	Warrington
NVQ4+	43.9	38.6	43.2	45.5	43.6	41.6
NVQ3+	62.3	58.2	61.4	64.5	60.7	61
NVQ2+	82.1	77.2	78.1	82.1	81.7	82.4
NVQ1+	90.6	87.2	87.7	92	89.1	90.7
Other Quals	4.3	5.2	5.9	3.5	4.8	4.7
No Quals	5.1	7.5	6.4	4.4	6.1	4.6
Source: ONS annual population survey, % are for those of aged 16-64, % is a proportion of resident population of area aged 16-64						

Whilst the % of those qualified to Level 4 and above sits slightly higher in Cheshire and Warrington than England, the gap between the two has narrowed since 2017.
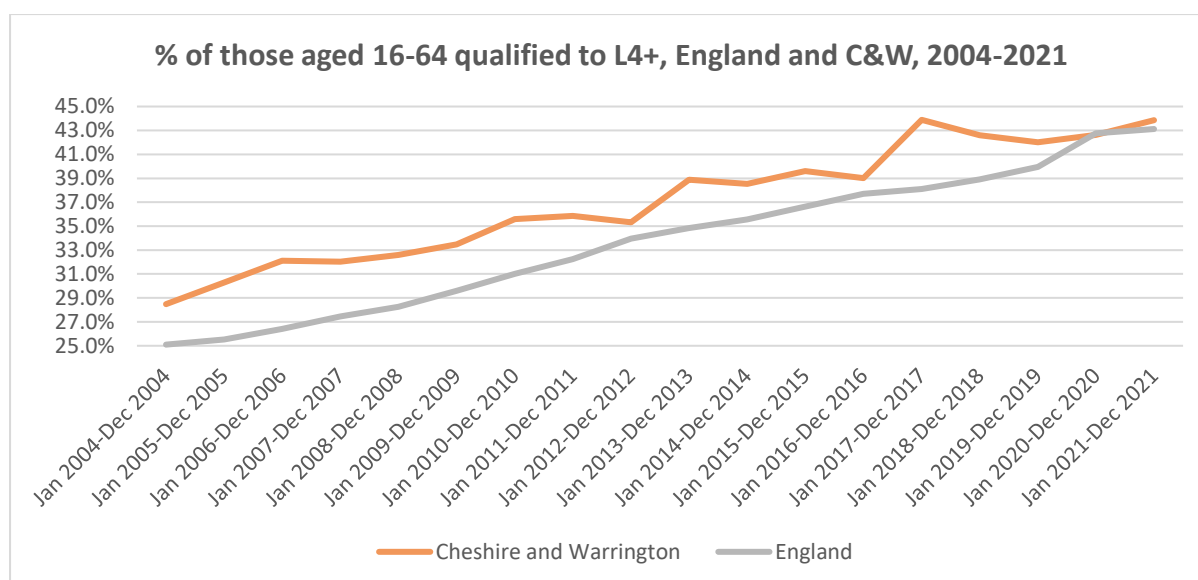
Source: ONS annual population survey

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.

Adult skills deprivation in Cheshire and Warrington, Index of Multiple Deprivation 2019

Map by Brennan Wilson Ltd in QGIS. Data from IMD2019, OS, and OpenStreetMap
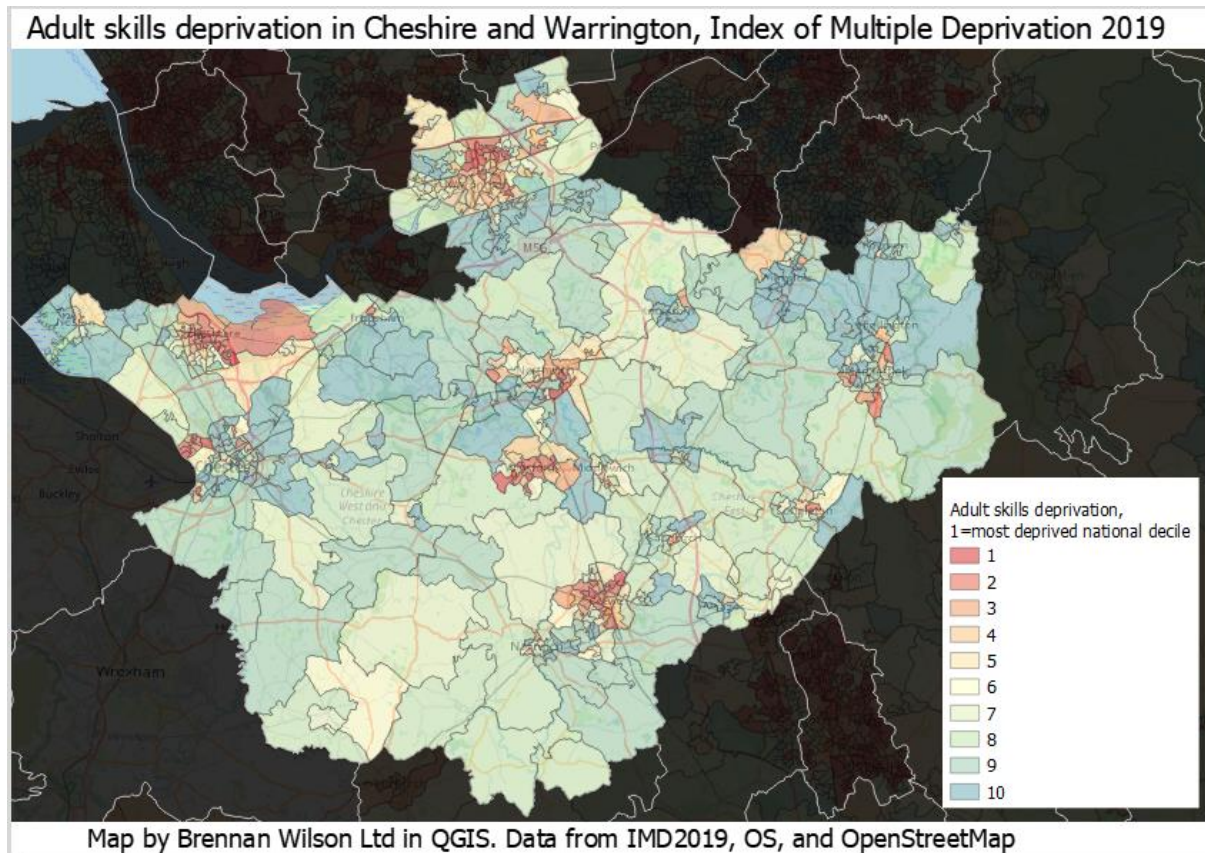
5.4.2 Adult Participation in Skills

There has been a significant decline in adult participation in further education and apprenticeships over the last decade. In the five years 2013/14 to 2017/18 , 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. This reduction in learner numbers was concurrent with a reduction in budgets for adult learning in FE and, in particular, the cessation of state funding for adult Level 3 learning in FE and its replacement with a Student Loans regime.

The total number of learning aim enrolments by adults resident in Cheshire and Warrington in FE in 2020/21 was 27,467. This was a decrease of more than a third from the 2018/19 FE figure of 41,457. Much, but possibly not all, of this recent decline can be attributed to the impact of the pandemic. FE enrolments will have been seriously constrained at the end of the 2019/20 academic year as well as for the 2020/21 academic year.

Enrolments in FE by adults resident in Cheshire and Warrington, 2018/19-2020/21
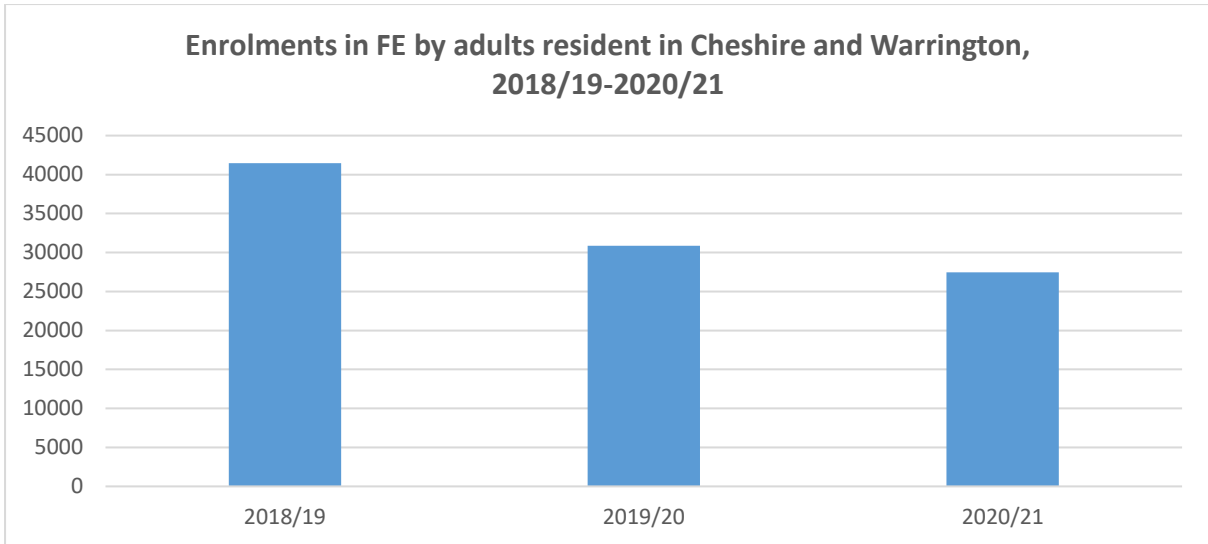
Source: ESFA Localities datacube (residency)

The largest percentage reductions in FE were in 'Leisure, Travel and Tourism' at 85% (2.2k reduction in enrolments) and in 'Arts, Media and Publishing' at 69% (2k reduction in enrolments). Industries linked to these two sectors were particularly badly hit at the height of the pandemic.

In 2020/21, the Adult Skills budget accounted for almost half of all FE enrolments, with a further fifth being funded by the European Social Fund (ESF).

The level of learning aims enrolled on by adult residents of Cheshire and Warrington between 2018/19 and 2020/21 is set out in the chart below. In 2020/21, almost 10,000 enrolments were at Level 2 with a further 8,000 being below Level 2. The decline in enrolments between 2018/19 and 2020/21 at Level 2, Level 3 and Level 4+ (-11%, -17%, -5% respectively) was less than the overall decline in enrolments of 34%.

Learning aims with no assigned Level are primarily a feature of Community Learning provision (although some are delivered through ESF). This accounts for the decline of 58% in this type of enrolment between 2018/19 and 2020/21.

Enrolments in FE by adults resident in Cheshire and Warrington, by Level, 2018/19-2020/21
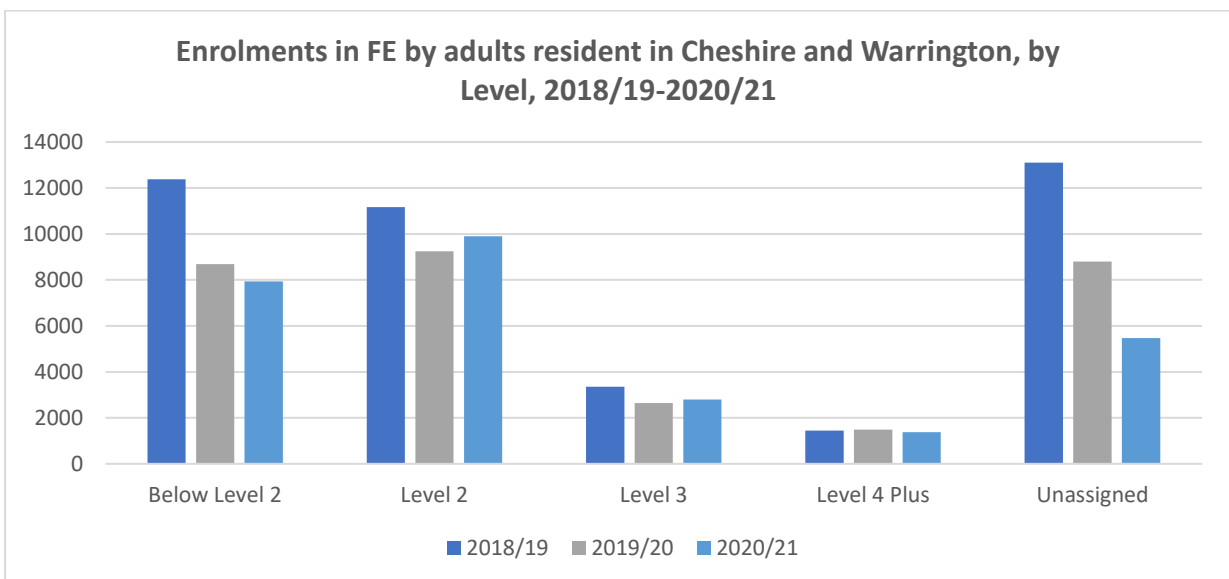
Source: ESFA Localities datacube (residency)

In 2020/21, the higher the level of learning by adults in FE, the higher was the proportion of learners that were employed on the first day of learning, with this going from 20% of learners on learning aims below Level 2 to 62% of learners on learning aims at Level 4+.

Employment status on first day of learning of Cheshire and Warrington residents in FE, by learning aim level, 2020/21

- Employed
- Self-employed
- Not Collected
- Not in paid employment ,not looking for work and/or not available for work
- Not in paid employment, looking for work and available to start work
- Not known
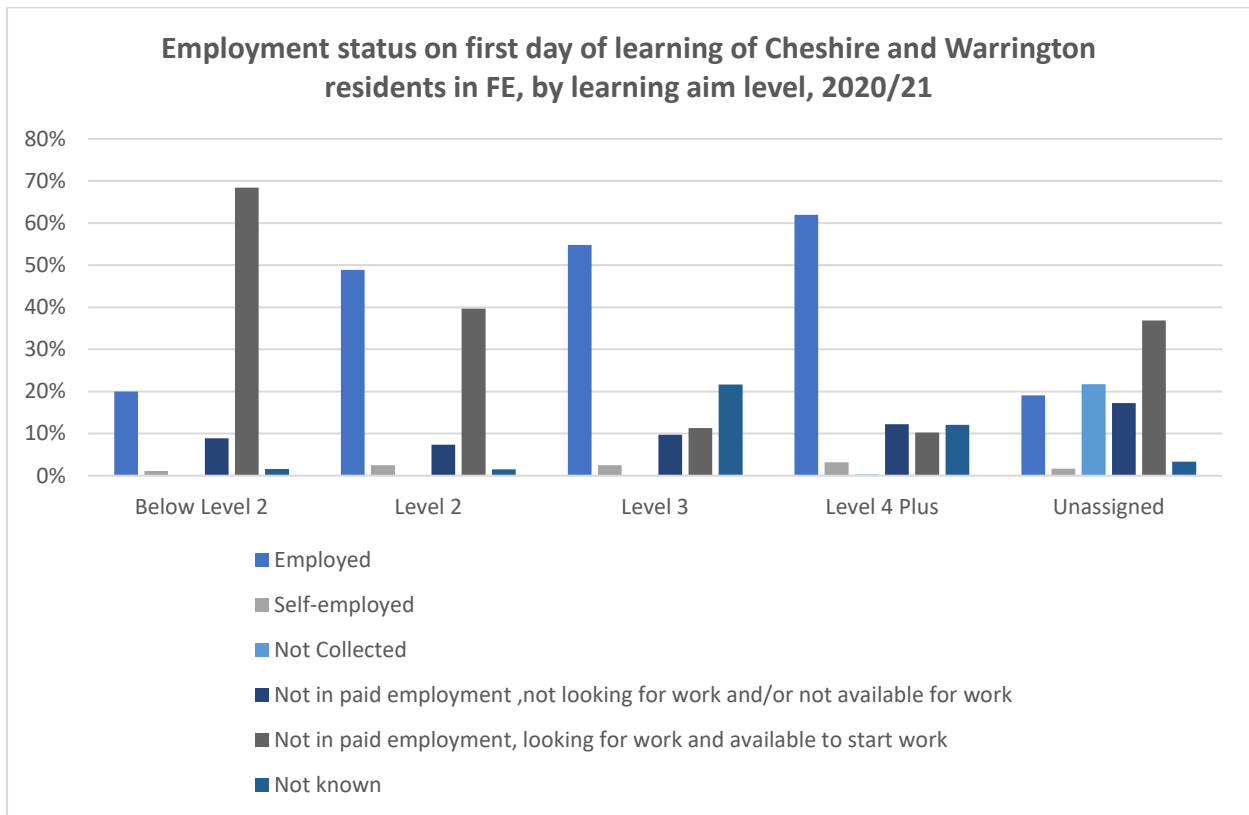
Source: ESFA Localities datacube (residency)

Apprenticeship starts by adults declined by almost 500 (4,670 to 4,194) between 2018/19 and 2019/20 but recovered partially to 4,407 in 2020/21 - a decline of 6% on 2018/19.

Apprenticeship starts by adults resident in Cheshire and Warrington, 2018/19-2020/21
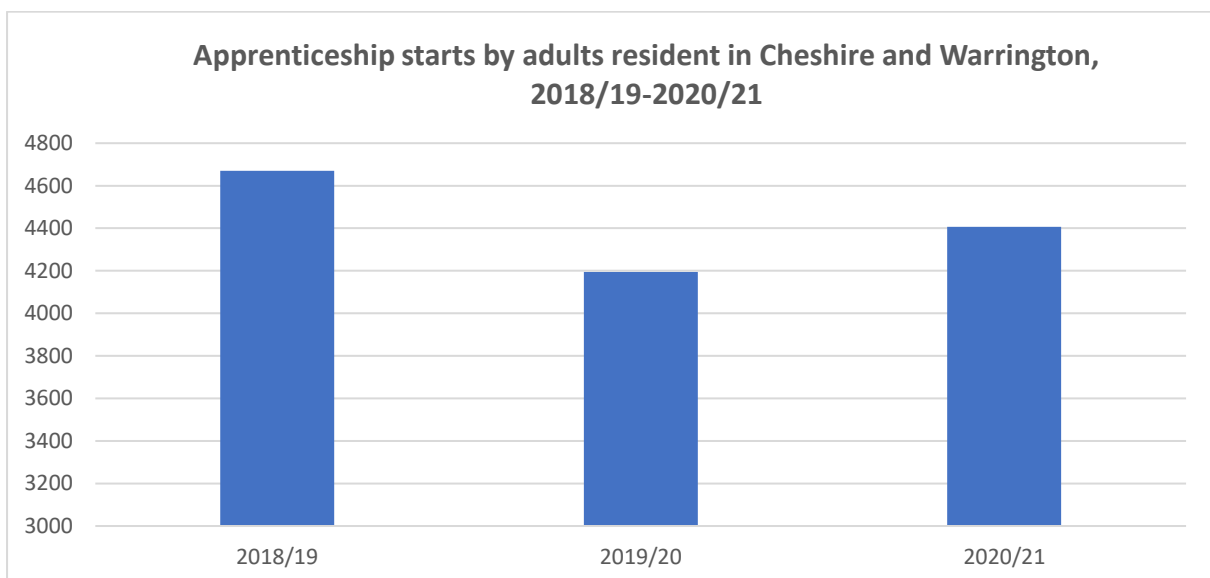
Source: ESFA Localities datacube (residency)

Between 2018/19 and 2020/21 apprenticeship starts by adults at Level 2 decreased by 30% (1,230 to 855) and at Level 3 the decrease was 17% (2,259 to 1,880). By sharp contrast starts at Level 4+ increased by 42% in this period from 1,181 to 1,672. In 2020/21 19% of starts were at Level 2, 43% were at Level 3, and 38% were at Level 4+.

Starts on apprenticeships by adults resident in Cheshire and Warrington, by Level, 2018/19-2020/21
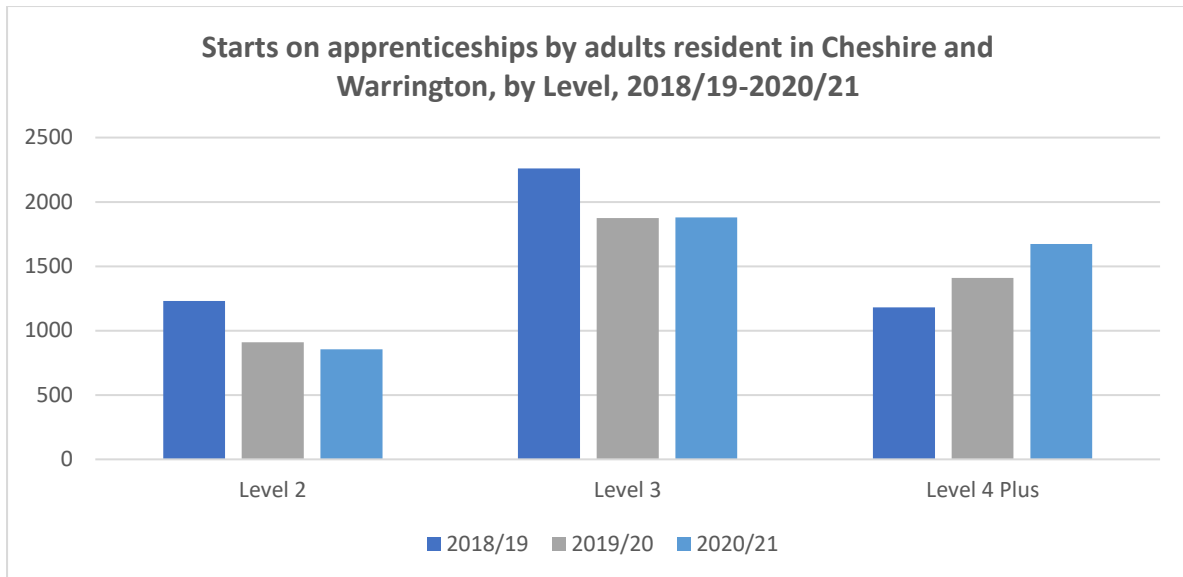
In 2020/21, more than a quarter (26%) of adult apprentices were already qualified at Level 4 or above, and over half were already qualified at Level 3+. This suggests that adult apprenticeships are an important vehicle for employer-led adult retraining.

Prior attainment of adult residents of Cheshire and Warrington that started an apprenticeship in 2020/21
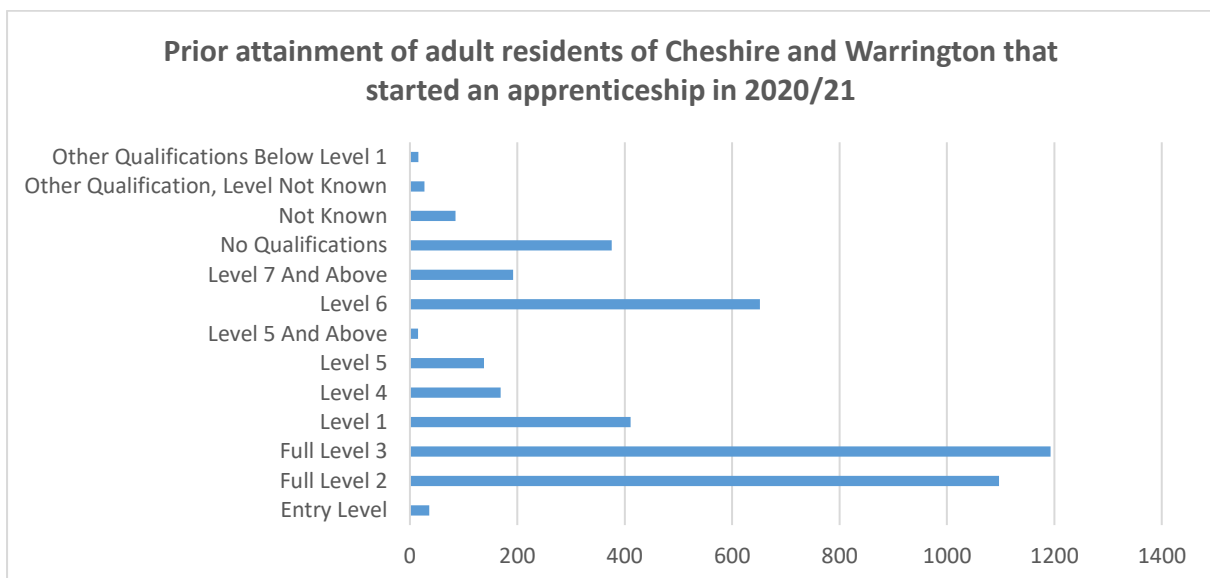
Source: ESFA Localities datacube (residency)

5.4.3   Destinations of Adult Learners

In 2019/20, the proportion of adult FE and apprenticeship learners that sustained a positive destination in England fell to the lowest point measured since this data series began. This national decline was tracked in both the Northwest and Cheshire and Warrington, although both experienced sharper decreases than England between 2018/19 and 2018/20. This fall was driven by a decrease in the proportion of learners moving into sustained employment and is likely to be partially due to the reference period for employment destinations overlapping with the start of the first COVID-19 lockdown. There was also a 4% decrease on this measure between 2017/18 and 2018/19 in Cheshire and Warrington which cannot be attributed to the pandemic. Notwithstanding this, in 2019/20, leavers in Cheshire and Warrington were more likely to secure a sustained destination than their counterparts in England or the Northwest. This continued a differential that has previously obtained.
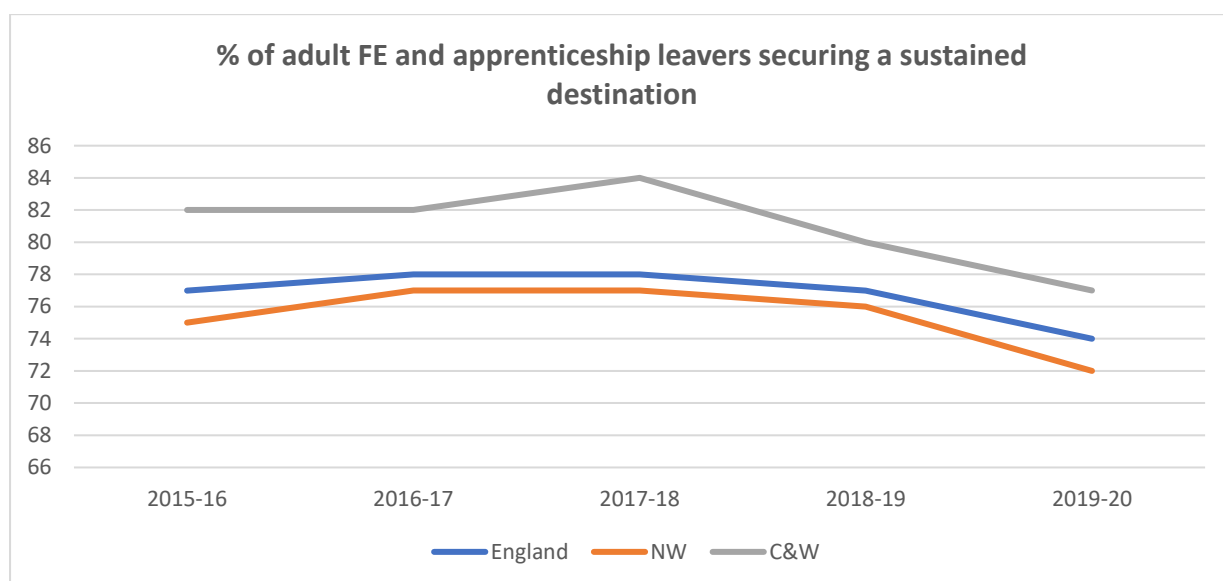
Source: FE outcome success measures, DfE, accessed Jan 2023

5.4.4   Adult learning below Level 2

Enrolments by adults resident in Cheshire and Warrington on learning aims below Level 2 in FE declined by 43% between 2018/19 and 2020/21 (a decline of 4,140). This was a higher percentage decline than the overall decline in FE enrolments which was 34%.

In 2020/21, there were 115 providers responsible for delivering 5,498 enrolments to adults resident in Cheshire and Warrington on learning aims below Level 2. Both Cheshire College South and West, and Cheshire West and Chester Council delivered more than 1,000 enrolments at this level in this year, and between them these two providers were responsible for the delivery of half of all such enrolments in Cheshire and Warrington.

In 2020/21, the wards with the highest proportion of the working age population enrolled on programmes below Level 2 were Crewe Central; Central & Grange; Crewe South; Westminster; Wolverham; Winsford Wharton; Winsford Over & Verdin; Blacon; Lache; and, Winsford Dene.

In 2020/21, 30% of all learning aims below Level 2 in FE enrolled on by adults resident in Cheshire and Warrington were ESOL, a further 8% were for English or Maths. The highest volume of enrolments was on 'Non regulated Adult skills formula funded provision, Entry Level, Preparation for

Work, Up to 2 hrs', a very short learning aim which is highly like to be delivered on work-focussed provision such a Sector Work Based Academies.

Over two thirds (68%) of learning aim enrolments at this level in 2020/21 were from adults not in employment. As might be expected, more than half of all enrolments on learning aims below Level 2 were from learners qualified below Level 2. Over 10% of enrolments came from learners qualified at Level 4 or above. This may reflect the fact that a number of learners that require support to learn English as a second language are likely to be otherwise well qualified.

5.4.5   Adults learning at Level 2

Enrolments by adults resident in Cheshire and Warrington on learning at Level 2 in FE declined by 16% between 2018/19 and 2020/21 (a decline of 1,465). This was a lower percentage decline than the overall decline in FE enrolments which was 34%. The wards with the highest proportion of the working age population enrolled on programmes at Level 2 in 2020/21 were Westminster; Central & Grange; Sutton Villages; Poplars & Hulme; Whitby Groves; Bewsey & Whitecross; Wolverham; Winsford Gravel; Blacon; and, Neston.

In 2020/21, there were 181 providers responsible for delivering 7,854 enrolments to adults resident in Cheshire and Warrington on learning aims at Level 2. Both Cheshire College South and West, and Warrington & Vale Royal College delivered more than 1,000 enrolments at this Level in this year, and between them these two providers were responsible for the delivery of over a third (35%) of all such enrolments.

Over a third of learning aim enrolments at this level were in the 'Health, Public Services and Care' SSA in 2020/21. The only other SSAs with in excess of 500 enrolments in 2020/21 were 'Preparation for Life and Work'; 'Retail and Commercial Enterprise' and 'Business, Administration and Law'. Between 2018/19 and 2020/21, enrolments in Retail and Commercial Enterprise (-576 enrolments, -37%); Leisure, Travel and Tourism (-286 enrolments, -75%) and 'Engineering and Manufacturing Technologies (-280 enrolments, -45%) saw the sharpest declines.

There were significant gender disparities by Sector Subject Area. In 2020/21, there were more females enrolled on FE learning aims in Health, Public Services and Care (2,451) than there were males enrolled across all sector subject areas (2,291).

Sector Subject area of enrolments at Level 2 in FE by adult residents of Cheshire and Watrrington, 2020/21

Source: ESFA Localities datacube (residency)

Well over half (58%) of learning aim enrolments at Level 2 in 2020/21 were from adults that were employed, although only a quarter of all enrolments on learning aims at Level 2 were from learners qualified below Level 2. 45% of enrolments came from learners qualified at Level 3 or above, with 16% being qualified at degree level or above.

Starts on adult apprenticeships at Level 2 by residents of Cheshire and Warrington declined by almost a third (30%) between 2018/19 and 2020/21. This was similar to the 34% decline in enrolments in FE at level 2 but significantly higher than the 6% decline for all apprenticeship starts in this period.

Apprenticeship starts at Level 2 by adults resident in Cheshire and Warrington show significant gender disparities in in four SSAs. 89% of the apprenticeship starts in 'Health, Public Service and Care' (which was the SSA with, by far, the largest number of starts) were by females. Similarly, two thirds of the starts in 'Business, Administration and Law' were by females. Conversely, 83% of the starts in 'Engineering and Manufacturing Technologies' and 94% of the starts in 'Construction, Planning and the Built Environment' were by males.

Apprenticeship starts at Level 2 by adults resident in Cheshire and Warrington, by SSA and gender, 2020/21
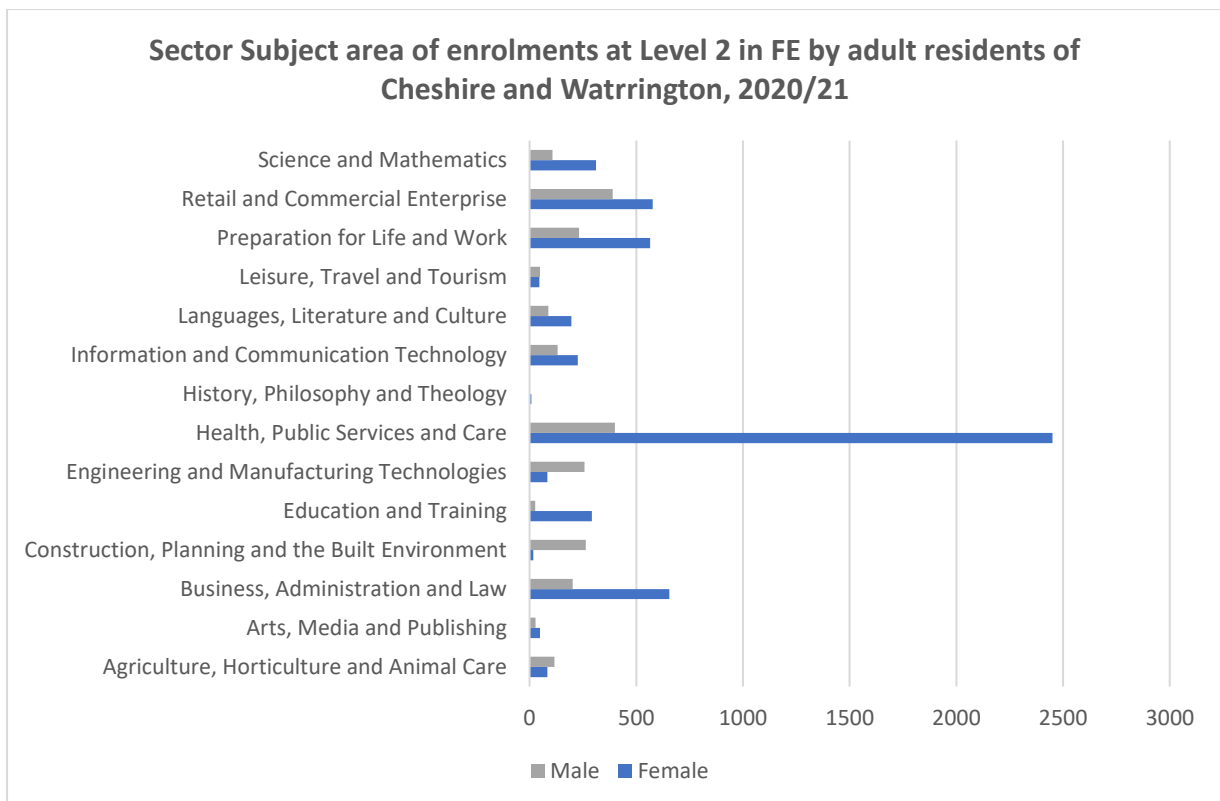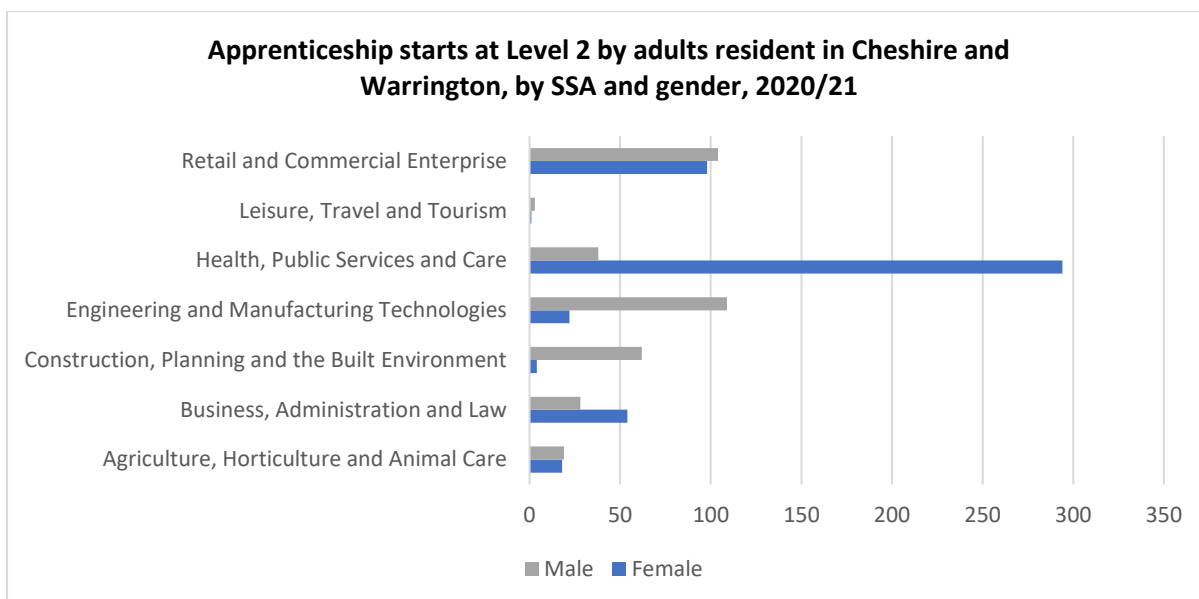

Source: ESFA Localities datacube (residency)

5.4.6   Adults learning at Level 3

Enrolments by adults resident in Cheshire and Warrington on learning aims at Level 3 in FE declined by 16% between 2018/19 and 2020/21 (a decline of 513). This was a lower percentage decline than the overall decline in FE enrolments which was 34%. The wards with the highest proportion of the working age population enrolled on programmes in 2020/21 at Level 3 were Grappenhall; Saughall & Mollington; Orford; Tattenhall; Poplars & Hulme; Burtonwood & Winwick; Central & Grange; Great Sankey South; Latchford East; and, Ledsham & Manor.

In 2020/21, there were 119 providers responsible for delivering 2,718 enrolments to adults resident in Cheshire and Warrington on learning aims at Level 3, only 10 of these were delivered by a subcontractor. More than half of the total enrolments were delivered by four providers: Cheshire College South and West; Warrington & Vale Royal College; Blackpool and the Fylde College; and, Macclesfield College.

The SSAs with the highest number of learning aim enrolments at Level 3 in 2020/21 were 'Health, Public Services and Care'; 'Engineering and Manufacturing Technologies'; and 'Retail and Commercial Enterprise'. Whilst the period 2018/19-2020/21 saw an overall decline of 16% in enrolments at Level 3, this was not seen in every SSA. In particular, enrolments increased in 'Business Administration and Law' and in 'Engineering and Manufacturing Technologies'. The learning aims with most enrolments were in a bespoke engineering programme and in Access to Health Professions.

99.5% of enrolments in 'Construction, Planning and the Built Environment', and 96% of enrolments in 'Engineering and Manufacturing Technologies' were by males. Conversely 93% of enrolments in 'Retail and Commercial Enterprise'; 86% of enrolments in Health, Public Services and Care'; 83% of enrolments in Social Sciences; 82% of enrolments in 'Education and Training'; and 72% of enrolments in 'Business, Administration and Law' were by females.

Enrolments on L3 learning aims in FE by adult residents of Cheshire and Warrington, by Gender, 2020/21
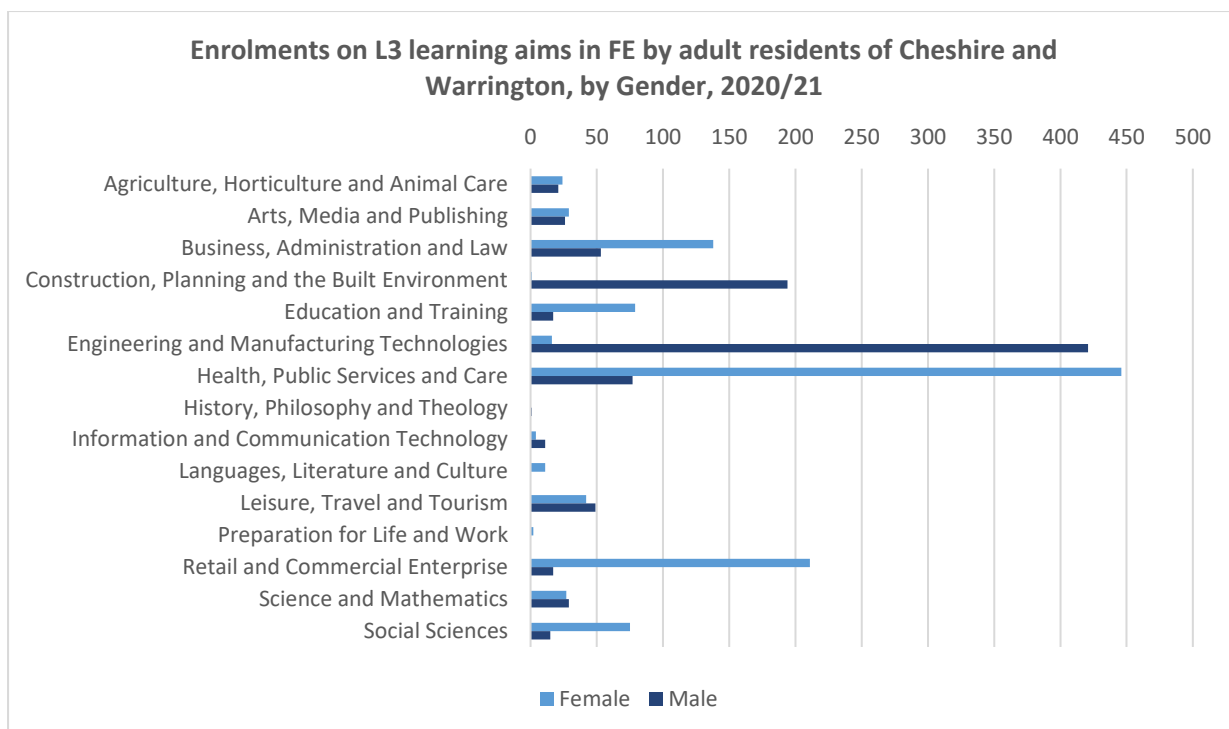
Source: ESFA Localities datacube (residency)

The numbers of enrolments at Level 3 in FE that were that were employed or self-employed learners (1523) were almost three times the numbers by those not in paid employment (587). Over half of enrolments at Level 3 in FE by adults resident in Cheshire and Warrington (53%) were by those qualified below Level 3.

Starts on adult apprenticeships at Level 3 by residents of Cheshire and Warrington declined by almost a 17% between 2018/19 and 2020/21. This was similar to the 16% decline in adult enrolments in FE at Level 3 but significantly higher than the 6% decline for all adult apprenticeship starts in this period. The overall decline in starts between 2018/19 and 2020/21 was not uniformly mirrored across SSAs, with increases recorded for 'Arts, Media and Publishing', 'Education and Training', and 'Information and Communication Technology'.

In 2020/21 the two SSAs with the highest number of starts on apprenticeships at Level 3 by adults resident in Cheshire and Warrington were 'Health, Public Services and Care' (which was the SSA with the highest volume of FE L3 enrolments in 2020/21) and 'Business, Administration and Law'. Approximately half of all starts were in four standards: Team Leader or Supervisor; Lead Adult Care Worker; Early Years Educator; and, Business Administrator.

Apprenticeship starts at Level 3 by adults resident in Cheshire and Warrington show significant gender disparities. For example, 86% of the apprenticeship starts in 'Health, Public Service and Care' (which was the SSA with the largest number of starts), were by females. Similarly, over 60% of the starts in 'Business, Administration and Law' and over 80% of starts in 'Education and Training' were by females. Conversely, 92% of the starts in 'Engineering and Manufacturing Technologies'; 89% of the starts in 'Construction, Planning and the Built Environment'; and 63% of the starts in 'Information and Communication Technology' were by males.

Starts on Level 3 apprenticeships by adults resident in Cheshire and Warrington, by gender and SSA, 2020/21

Legend: ■ Female ■ Male

Categories (top to bottom):
- Agriculture, Horticulture and Animal Care
- Arts, Media and Publishing
- Business, Administration and Law
- Construction, Planning and the Built Environment
- Education and Training
- Engineering and Manufacturing Technologies
- Health, Public Services and Care
- Information and Communication Technology
- Leisure, Travel and Tourism
- Retail and Commercial Enterprise

Source: ESFA Localities datacube (residency)

5.4.7 Adults learning at Level 4+ in FE and apprenticeships

Enrolments by adults resident in Cheshire and Warrington on learning aims at Level 4+ in FE declined by 5% between 2018/19 and 2020/21 (a decline of 69). This was a significantly lower percentage decline than the overall decline in FE enrolments which was 34%. Enrolments at Cheshire College South and West, Warrington & Vale Royal College, Reaseheath College and the LTE group accounted for over half (58%) of all enrolments.

The learning aims with the highest number of enrolments by residents of Cheshire and Warrington in 2020/21were across a range of Sector Subject Areas. In total, there were 203 enrolments related to "Counselling", 14% of all enrolments.

The gender of adults resident in Cheshire and Warrington that enrolled on learning aims in FE at Level 4+ in 2020/21 was skewed towards females – accounting for almost two thirds of the total (Female 63%/Male 37%). 86% of enrolments in 'Construction, Planning and the Built Environment'; 79% of enrolments in 'Engineering and Manufacturing Technologies'; 85% of enrolments in 'Information and Communications Technology'; and 80% of enrolments in 'Leisure, Travel and Tourism' were by males. Conversely 100% of enrolments in 'Retail and Commercial Enterprise'; 86% of enrolments in 'Health, Public Services and Care'; 75% of enrolments in 'Education and Training'; and 74% of enrolments in 'Agriculture, Horticulture and Animal Care' were by females.
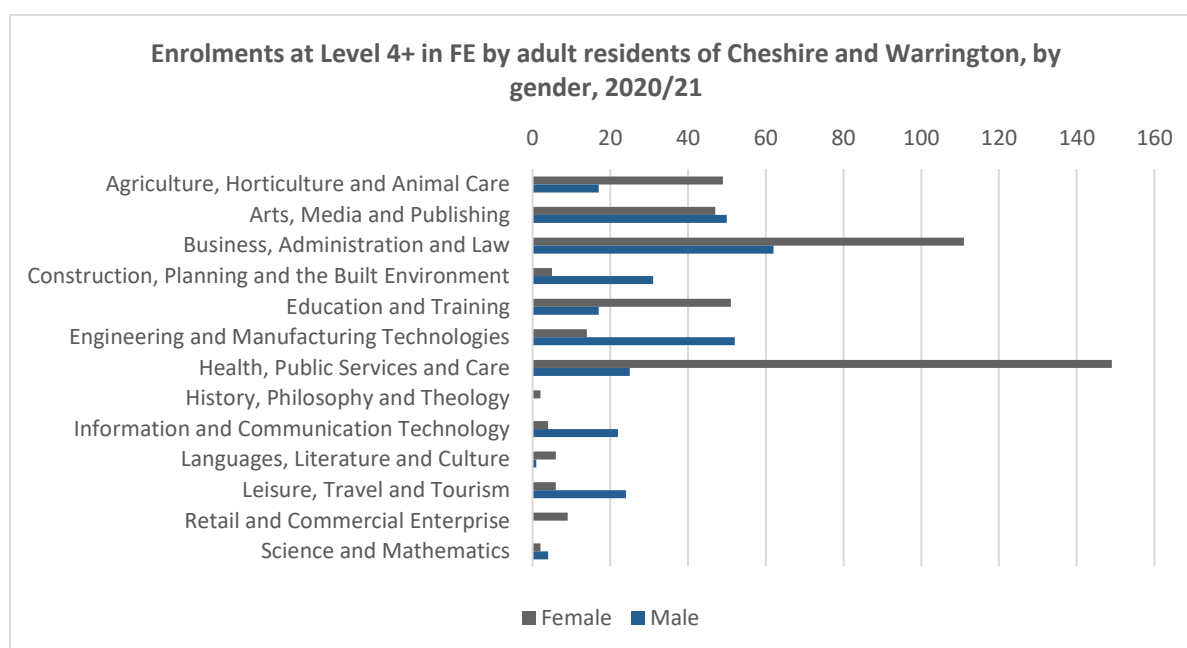
Source: ESFA Localities datacube (residency)

Starts on adult apprenticeships at Level 4+ by residents of Cheshire and Warrington increased by 42% between 2018/19 and 2020/21. This was in contrast to both a decline in enrolments in FE at level 4+ and an overall decline in adult apprenticeship starts of 6%. The rate of increase in Cheshire East (55%) was much higher than for both Cheshire West and Chester (32%) and Warrington (15%). The overall increase in starts between 2018/19 and 2020/21 was experienced across all relevant SSAs.

In 2020/21 the two SSAs with the highest number of starts on apprenticeships at Level 4+ by adults resident in Cheshire and Warrington were 'Business, Administration and Law' and 'Health, Public Services and Care'. These accounted for more than three quarters (76%) of all starts. These were also the two highest SSAs for enrolments by adults in FE at Level 4+.

77% of the apprenticeship starts in 'Health, Public Service and Care' were by females. Conversely, 83% of the starts in 'Construction, Planning and the Built Environment' and 73% of the starts in 'Information and Communication Technologies' were by males.

Apprenticeship starts at Level 4+ by adult residents of Cheshire and Warrington, by SSA and gender, 2020/21
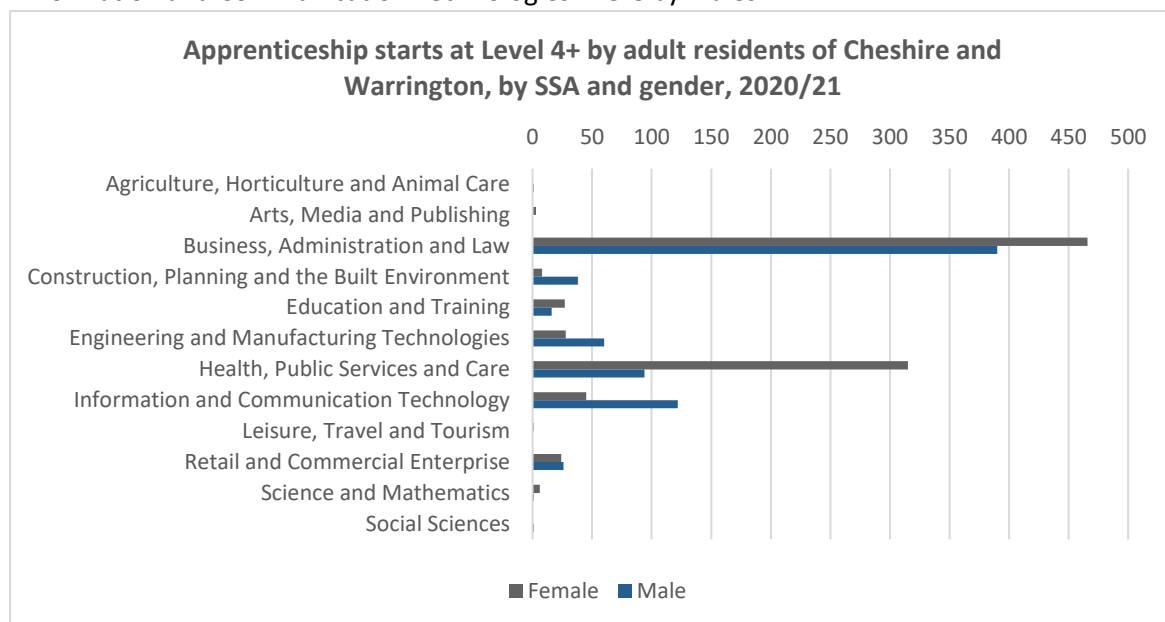
Source: ESFA Localities datacube (residency)

5.5 Employer Training[21]

This sub-section discusses the contribution of employers to workforce development. It draws heavily on the Employer Skills Survey 2019 (ESS 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 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.

---

[21] This subsection draws on data from the ESS (2019),

Employers providing training over past 12 months C&W asnd England, 2019

Legend: No training | On job training only | Off-job training only | Off-job and on-job training
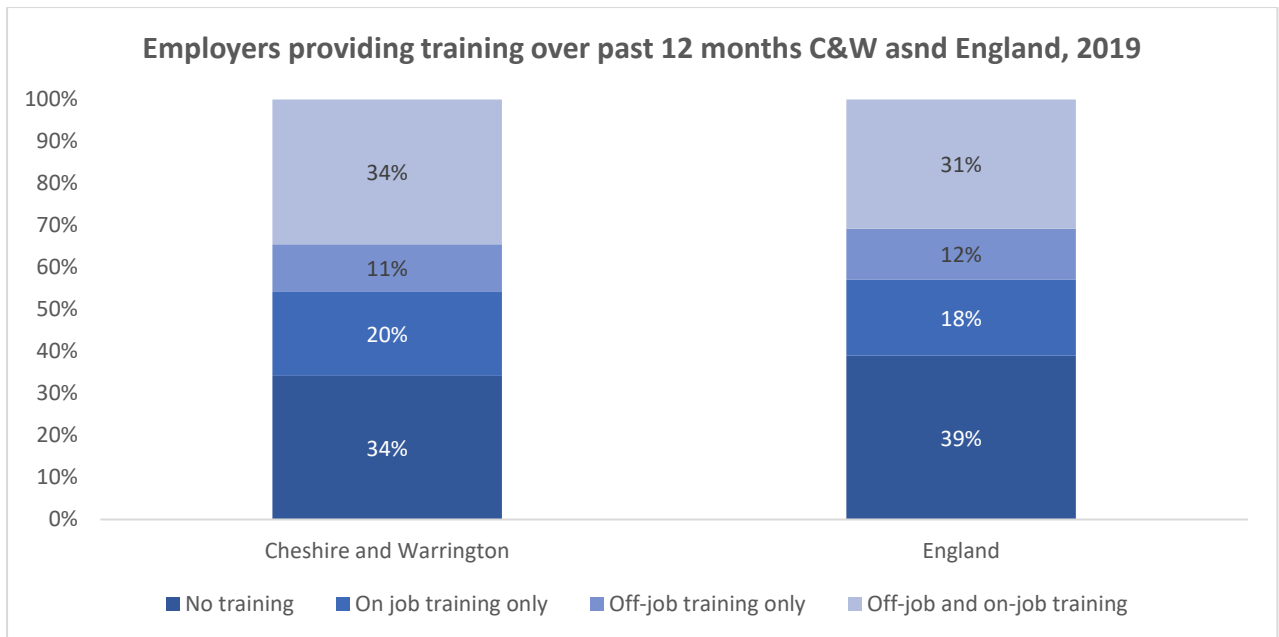
Source: SAP Core Indicators/ESS 2019

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.

Headline Employee Trained Indicators, C&W and England, 2019

Legend: Cheshire and Warrington | England
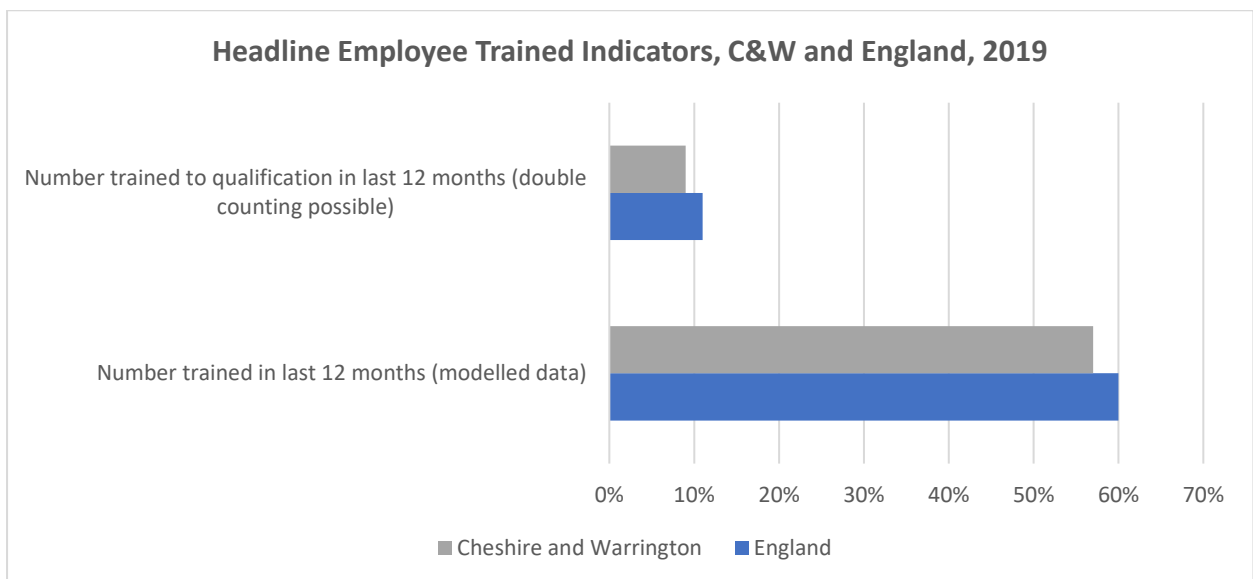
Source: ESS 2019

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

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

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

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

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.

Density of Occupation skill types receiving training
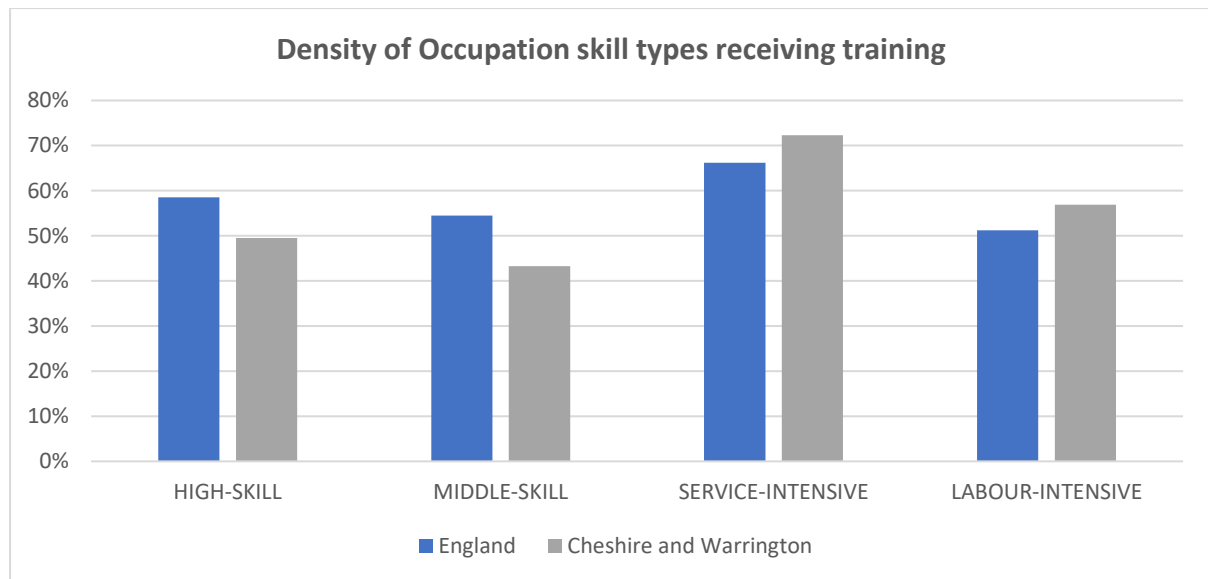
Source: ESS 2019

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.

Training provided by employers that train
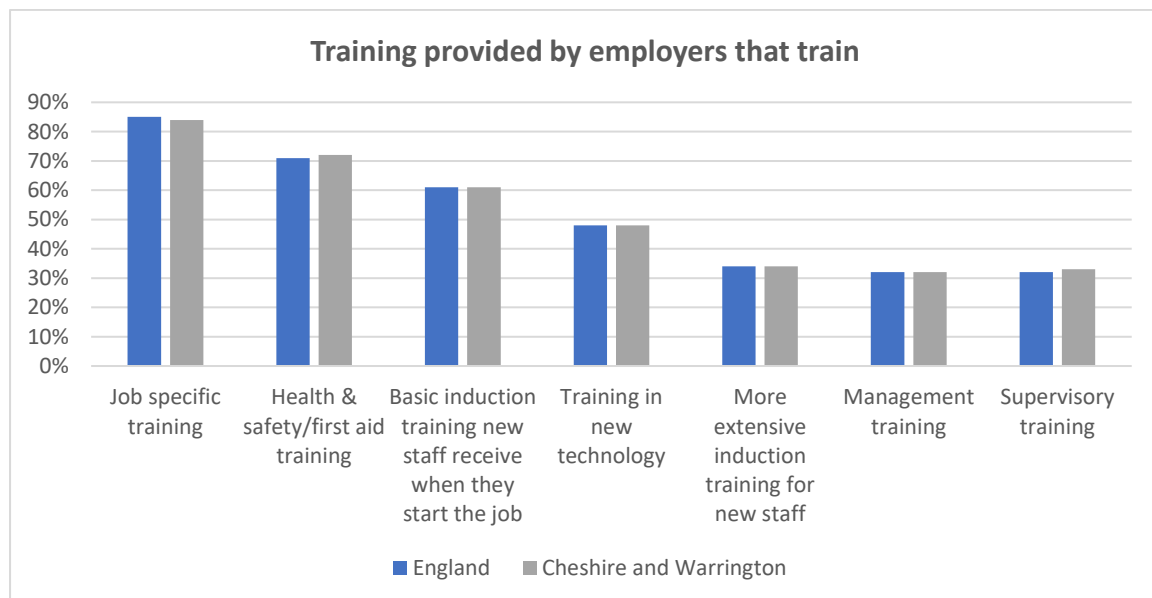
Source: ESS 2019

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%).

Do employers that train support self-directed or on-line learning?
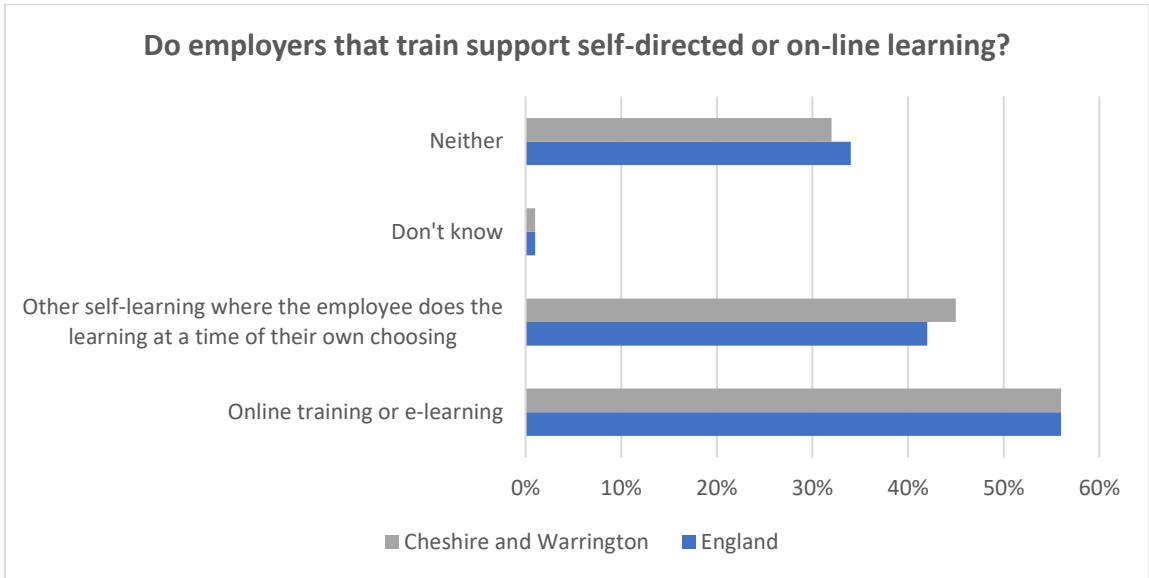
Source: ESS 2019

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

Do employers that train fund or arrange external training for staff?
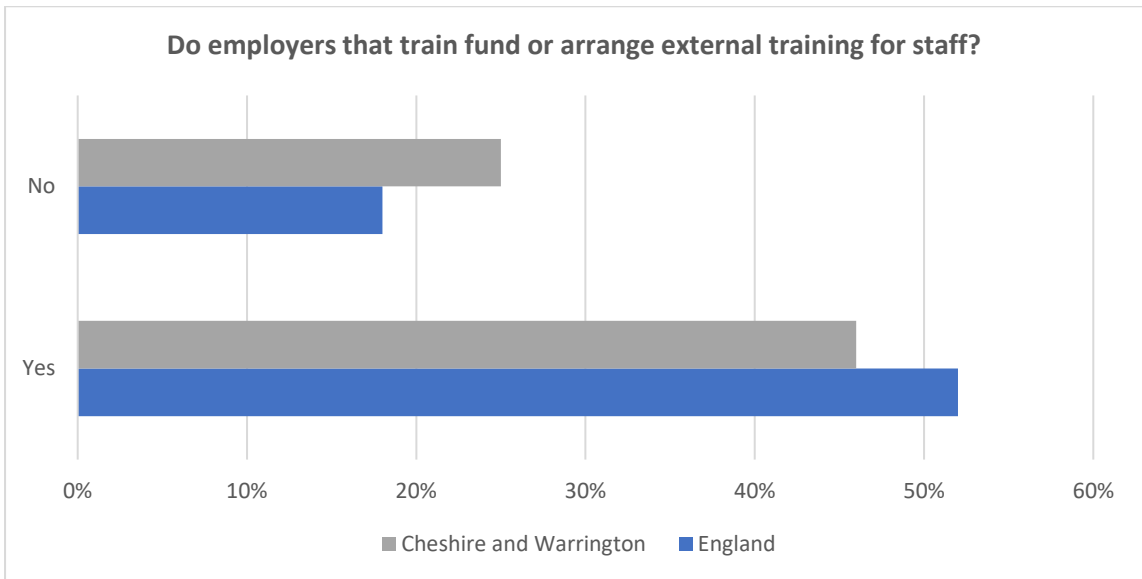
Source: ESS 2019

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 universties or other HEIs.

External training sources used in past 12 months		
Base: All who provide off-the-job training and external training		
	England	Cheshire and Warrington
Other commercial organisations, for example consultants or private training providers	77%	74%
Regulatory bodies	29%	37%
Any of your suppliers	28%	27%
Further Education Colleges	23%	23%
Other non-profit making organisations, for example employer associations, voluntary organisations	20%	18%
Universities or other Higher Education institutions	13%	16%
Your customers	7%	2%
Government Institutions e.g. councils/local authorities, NHS	1%	4%
Source: ESS 2019		

A slightly higher proportion of employers that provide off the job training in Cheshire and Warrington will use both public and private providers than is the case in England. Over 90% of employers that provide off the job training will use non-public providers and 30% of such employers will use public providers.
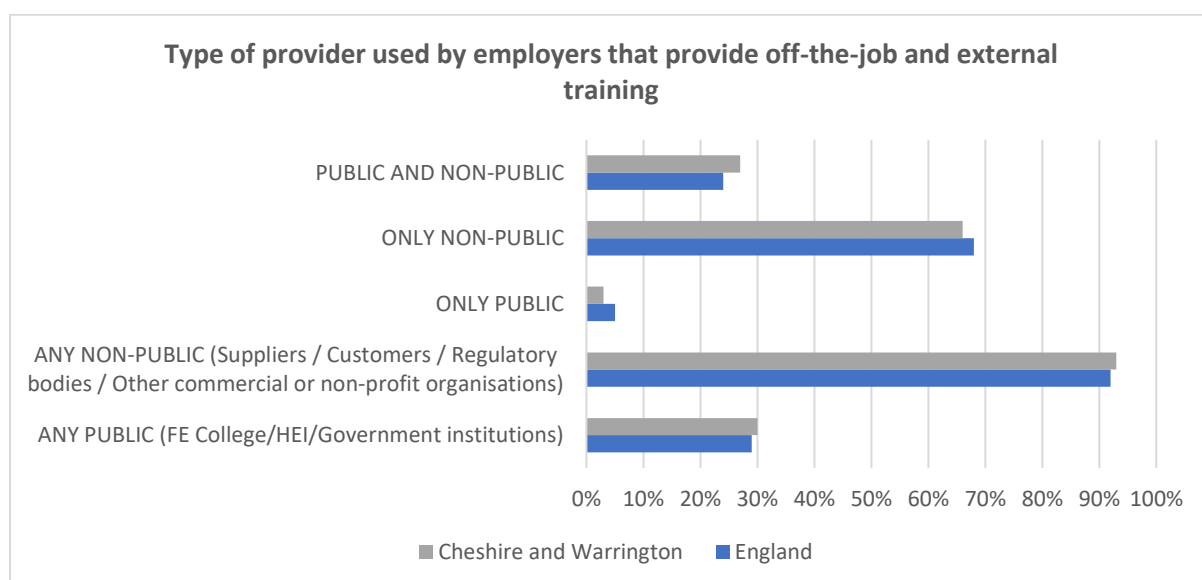
Source: ESS 2019

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

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

Whilst a lower proportion of employers in Cheshire and Warrington offer no training than is the case in England (34% in C&W, 41% in England), a higher proportion do not train off-the-job (36% C&W, 29% England).
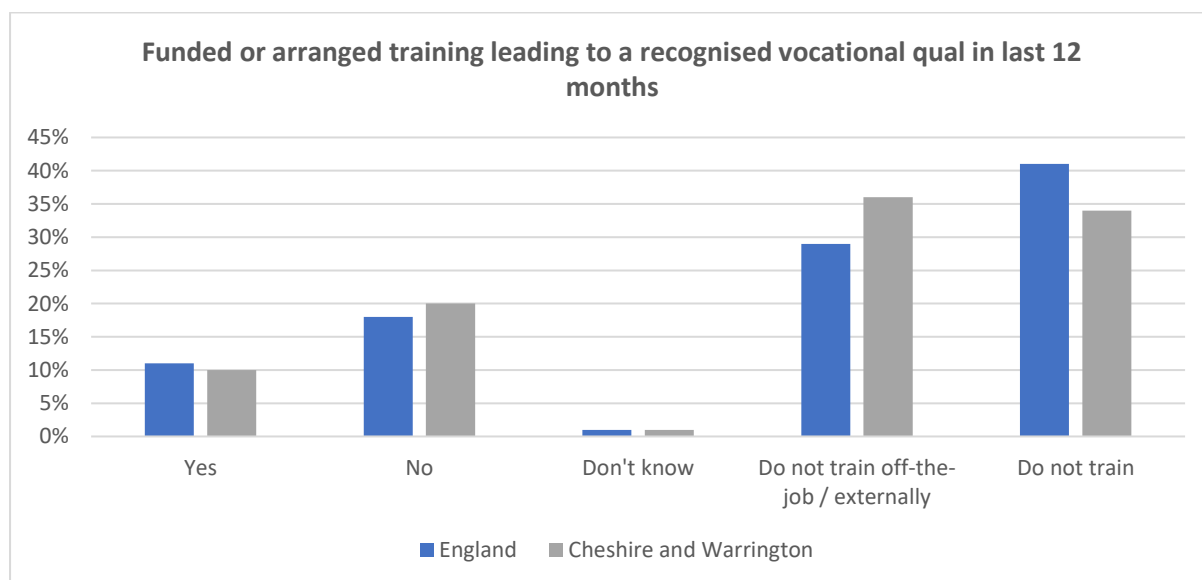
Source: ESS 2019

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

Summary of apprenticeship offerings		
Base: All establishments (Module A)		
	England	Cheshire and Warrington
Currently have apprentices	11%	9%
Currently offer apprenticeships but have none currently	8%	10%
SUMMARY: Currently have / offer apprenticeships	19%	19%
Do not currently have / offer apprenticeships but have previously offered in the last 3 years	8%	8%
Do not have or offer apprenticeships and have not in the last 3 years	74%	73%
SUMMARY: Do not currently have / offer apprenticeships""	81%	81%
Currently or have in the last three years offered apprenticeships	26%	27%
Source: ESS 2019		

6 SUPPLY AND DEMAND

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

- Skill levels in the resident population compared to levels of skills required by employers
- 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 Resident skills supply and employer demand[22]

The chart below summarises the data for the current qualification levels of Cheshire and Warrington's resident working age population. This gives the skill profile of Cheshire and Warrington's pool of available labour. This labour pool supports employment in Cheshire and Warrington and also in adjoining subregions, notably Greater Manchester and the Liverpool City Region.

44% of Cheshire and Warrington residents are qualified to Level 4 or above. This is higher than England and the Northwest (43% and 39% respectively). Current levels of Level 4+ attainment reflect a convergence of the Cheshire and Warrington and English proportions, where the gap between the two has been wider in previous years. 5% of Cheshire and Warrington residents have no qualifications, compared with 6% for England and 8% for the Northwest.
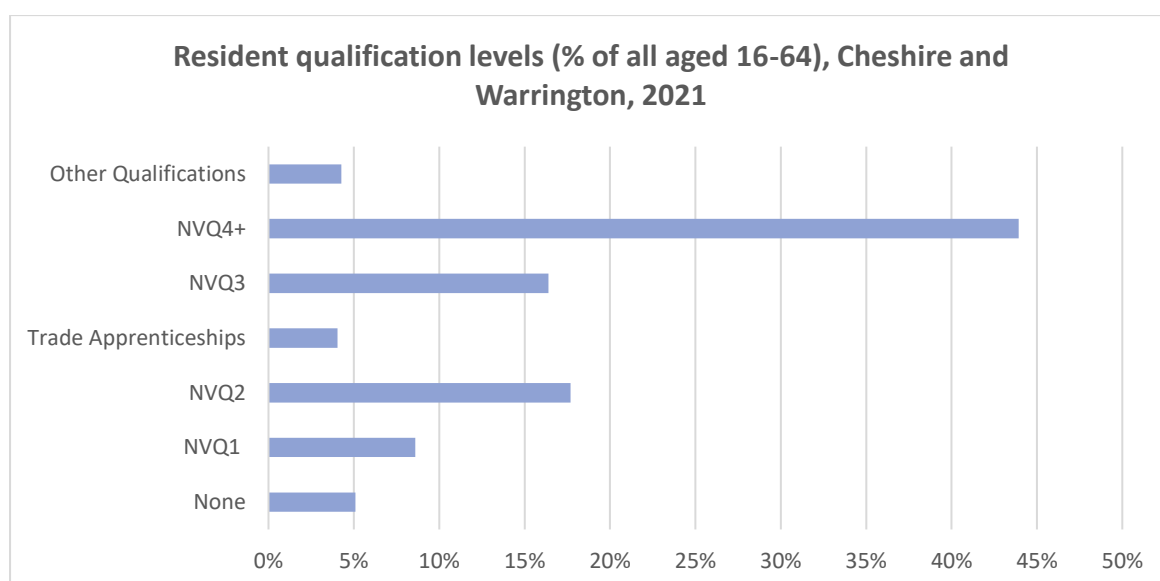
Source: APS, ONS, Nov 2022

In the Lightcast Analyst system each four-digit soc occupation has an education level assigned to it. The data for the qualification levels are taken from the median worker's qualification level in the Labour Force Survey. This data for all occupations in Cheshire and Warrington is presented in the chart below. From this, it can be seen that half of all jobs in Cheshire and Warrington (49%) require skills at Level 2 or below. This compares with 36% of Cheshire and Warrington residents that are qualified at Level 2 or below (chart above). Conversely, 32% of jobs in Cheshire and Warrington require Level 4+, whereas 44% of residents hold Level 4+. In volume terms there are about 30k more

---

[22] This subsection draws data from NOMIS (APS/LFS) and Lightcast Analyst.

C&W residents qualified to L4+ than there are L4+ roles. However, many L4+ residents work in adjacent subregions – which is why resident wages are higher than workplace wages.

% of occupations in Cheshire and Warrington requiring skill levels, 2022
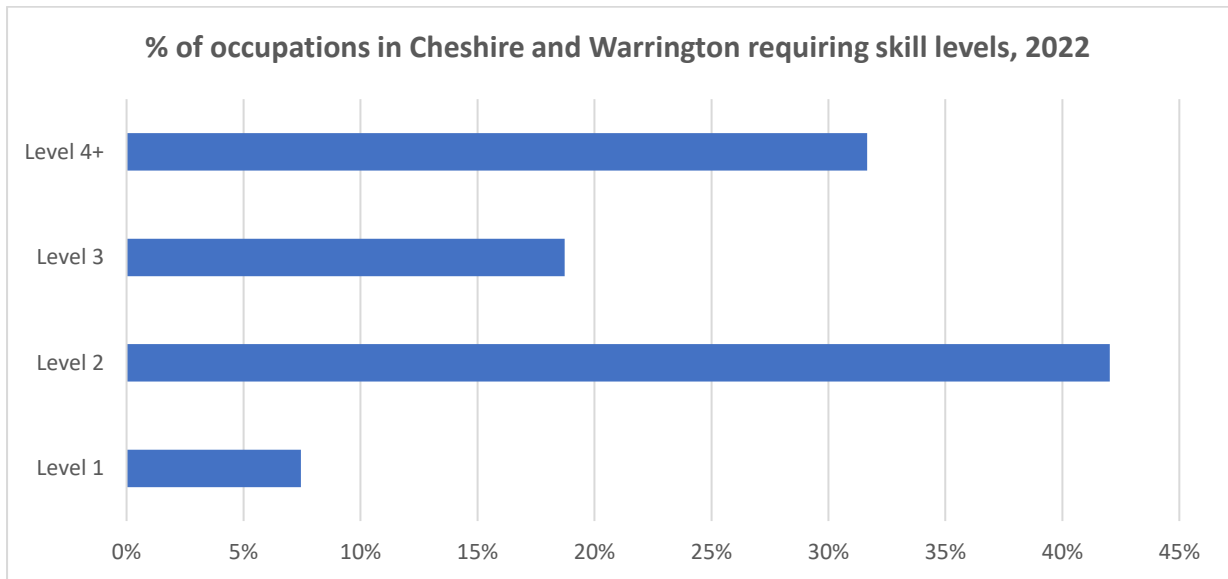
Source: Lightcast Analyst, Nov 2022

Whilst this estimated % of jobs in Cheshire and Warrington requiring education at Level 4 and above is lower than the percentage of the resident population qualified to this level, the percentage of jobs in Cheshire and Warrington where employers specify that a Level 4 is required stands at 60% of all jobs for the 18% of employers that have been explicit in this way.

Education level required in job postings in C&W (where specified), 2016-2022
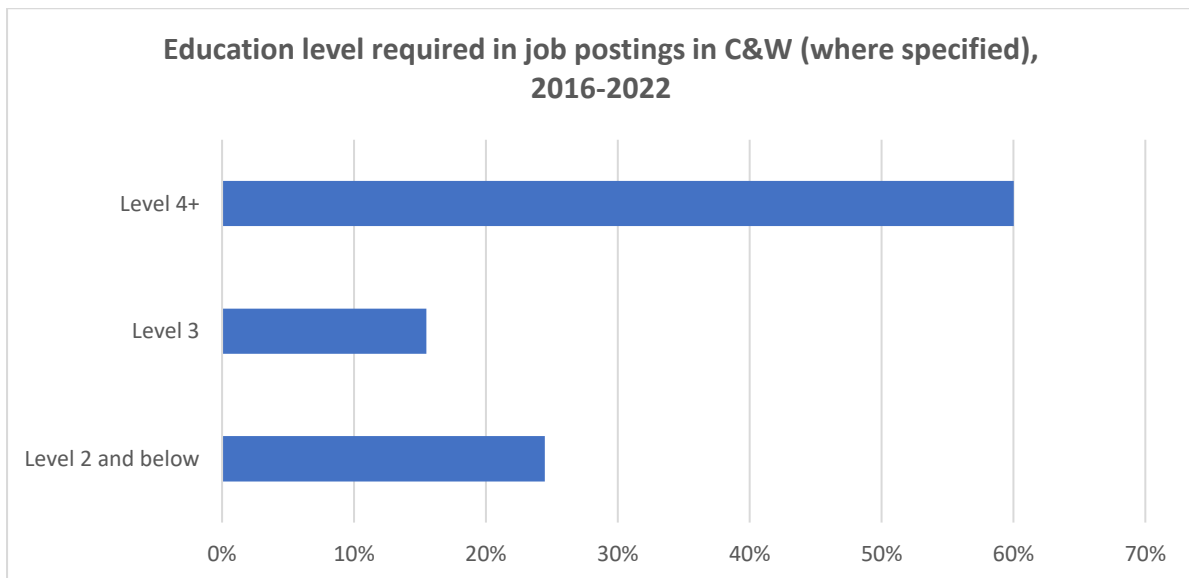
Source: Lightcast Analyst, Nov 2022

6.2 Skills gaps and skill shortage vacancies[23]

This subsection discusses skills gaps and skills shortage vacancies – drawing primarily on ESS 2019 but also drawing on more recent jopb posting intensity data from Lightcast.

6.2.1   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.
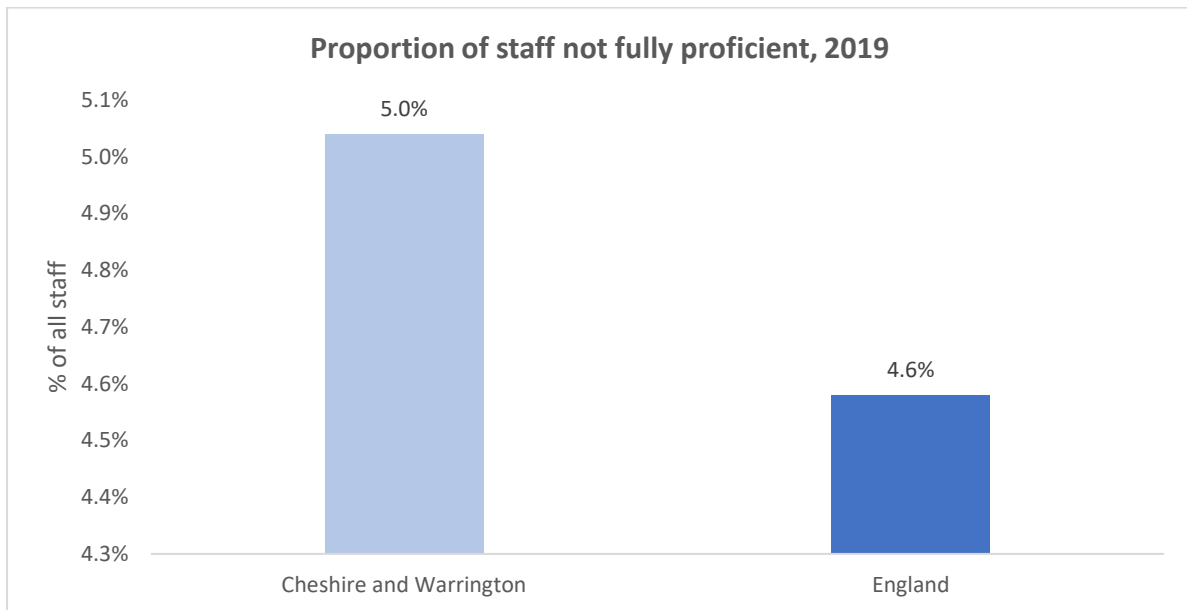
Source: SAP Core Indicators/ESS 2019

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.

---

[23] This subsection draws data from ESS 2019, and Lightcast Analyst

Proportion of establishments with any under-utilised staff, 2019
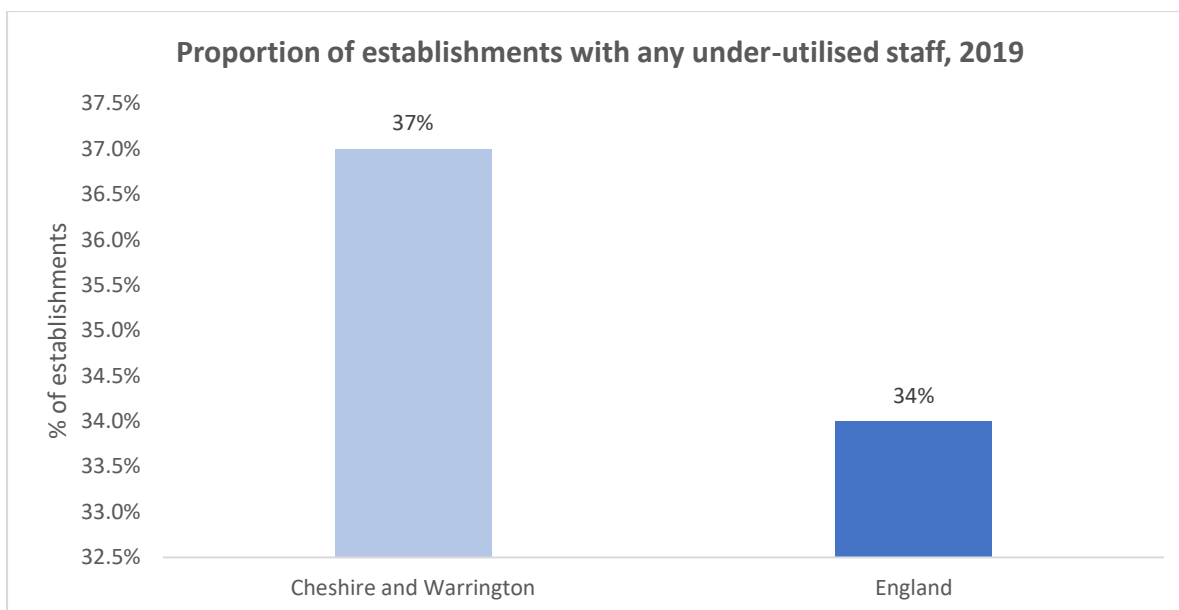
Source: SAP Core Indicators/ESS 2019

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

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

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

Technical skills that need improving in occupations with skills gaps

Skill	England	Cheshire and Warrington
Complex Analytical Skills	47%	45%
Operational Skills	53%	68%
Digital Skills	37%	31%
Basic Skills	39%	40%
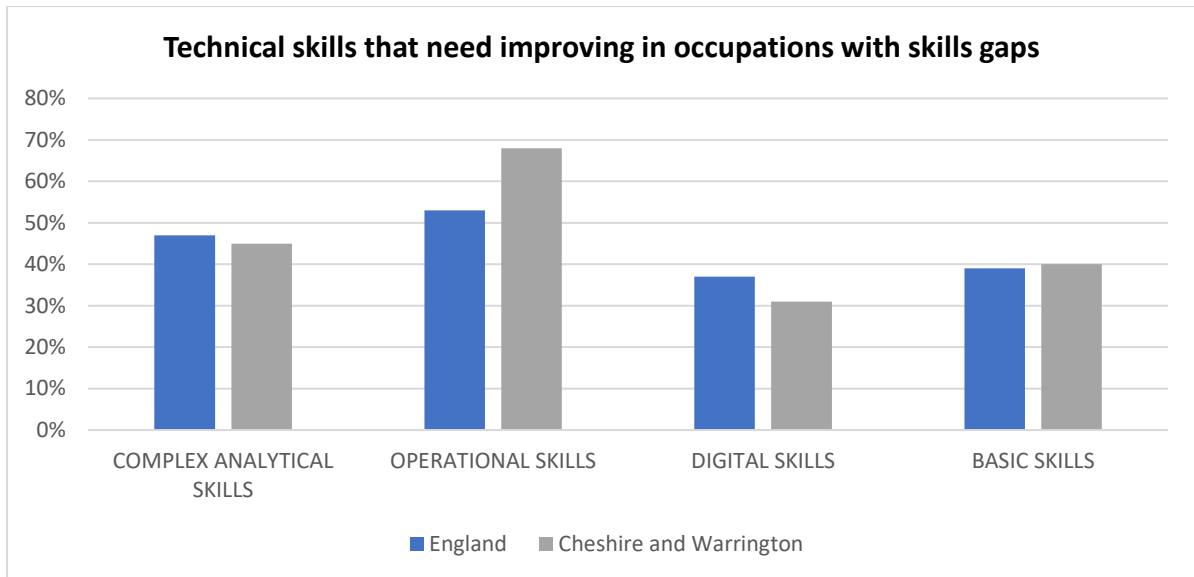
Source: ESS 2019

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. The pandemic may have significantly changed employer requirements and expectations in this area.

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

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

IT Skills that need improving in occupations with IT skills gaps

Skill	Cheshire and Warrington	England
BASIC DIGITAL SKILLS	36%	45%
BASIC INTERNET SKILLS	6%	11%
DESIGN / ANIMATION / GRAPHIC SKILLS	8%	6%
Don't know	1%	4%

■ Cheshire and Warrington ■ England
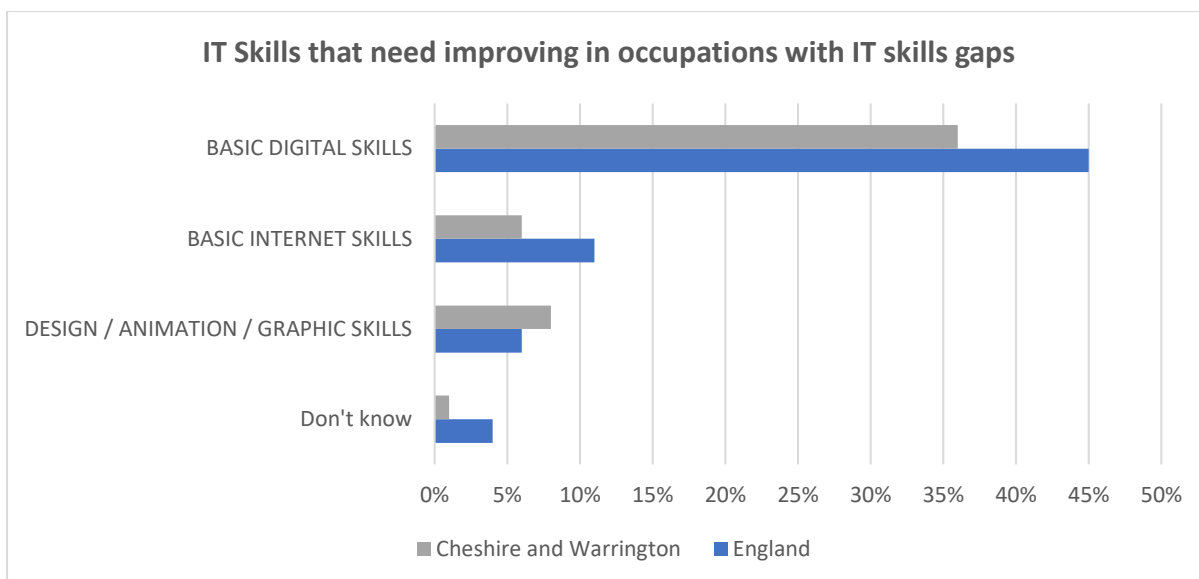
Source: ESS 2019

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

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

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

Actions taken to overcome lack of proficiency among staff		
	England	Cheshire and Warrington
Increase training activity / spend or increase / expand trainee programmes	65%	66%
More supervision of staff	56%	55%
More staff appraisals / performance reviews	46%	49%
Implementation of mentoring / buddying scheme	45%	54%
Reallocating work	36%	35%
Changing working practices	28%	31%
Increase recruitment activity / spend	20%	25%
Recruiting workers who are non-UK nationals	9%	6%
Other	2%	2%
Nothing	18%	19%
Don't know	1%	0%
Source: ESS 2019		

6.2.2 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%)
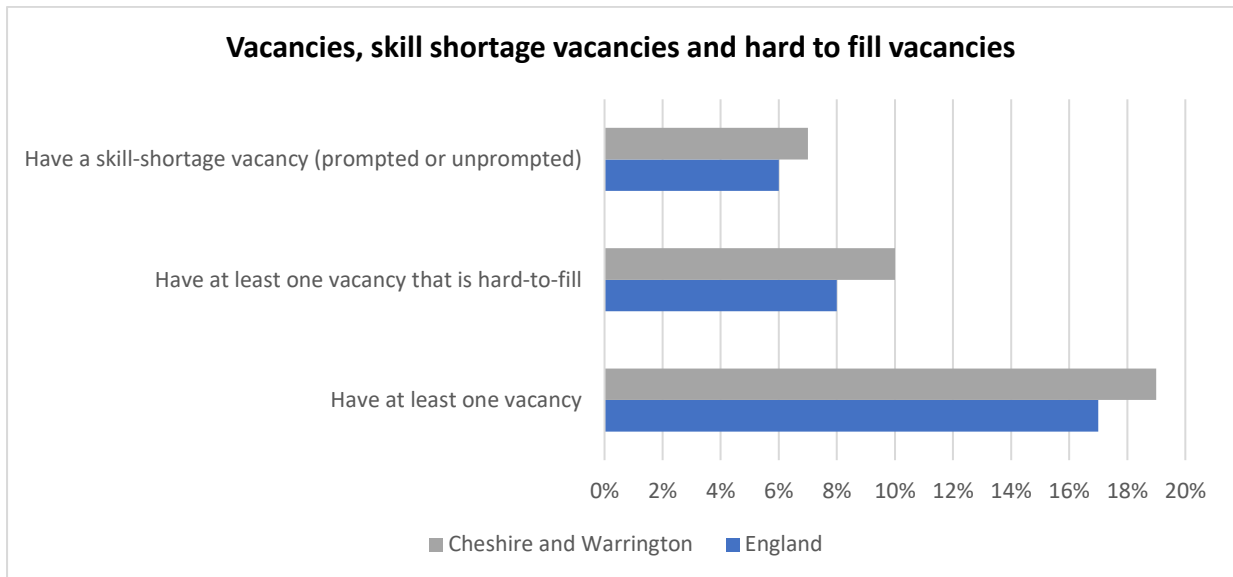
Source: ESS 2019

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).
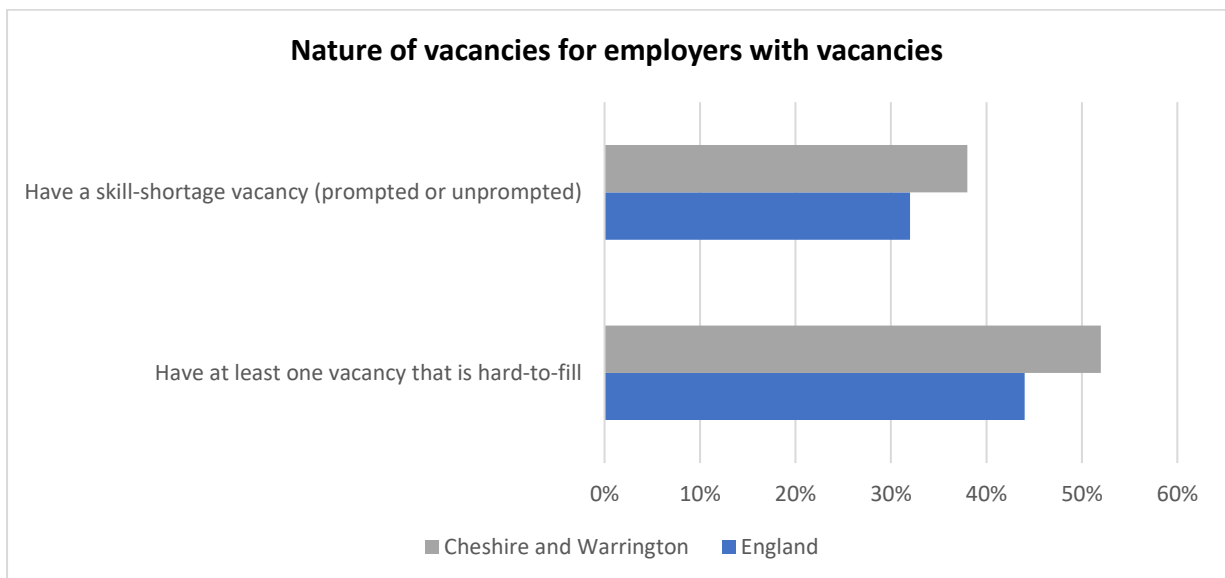
Source: ESS 2019

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.

Vacancies, HTF and SSV as proportion of all jobs
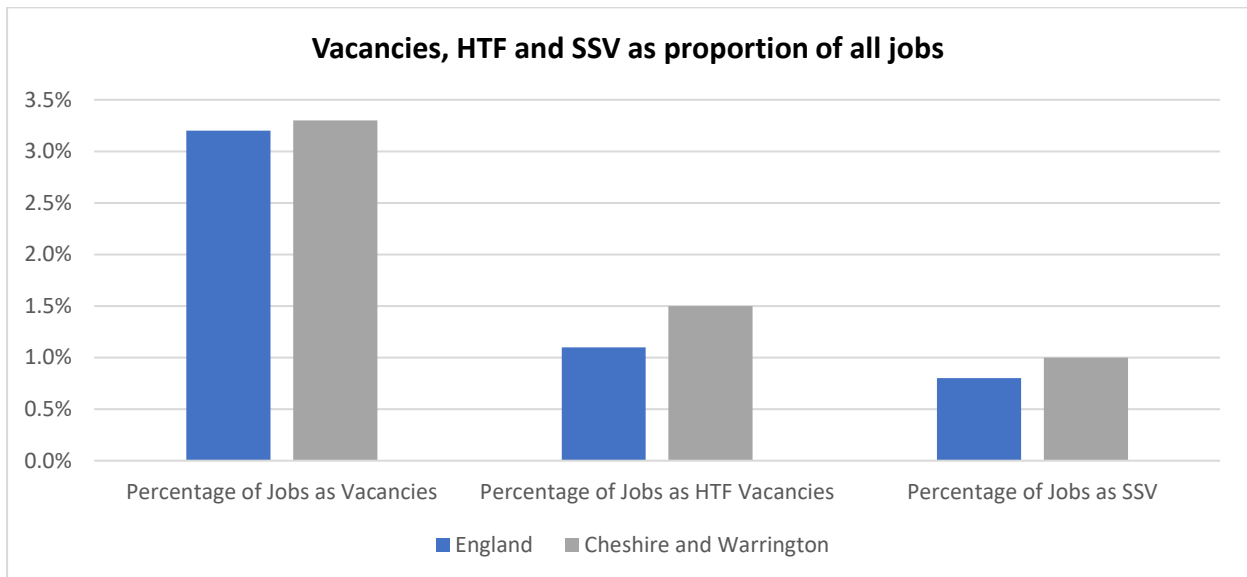
Source: ESS 2019

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%).

Hard to fill vacancies as a percentage of all vacancies
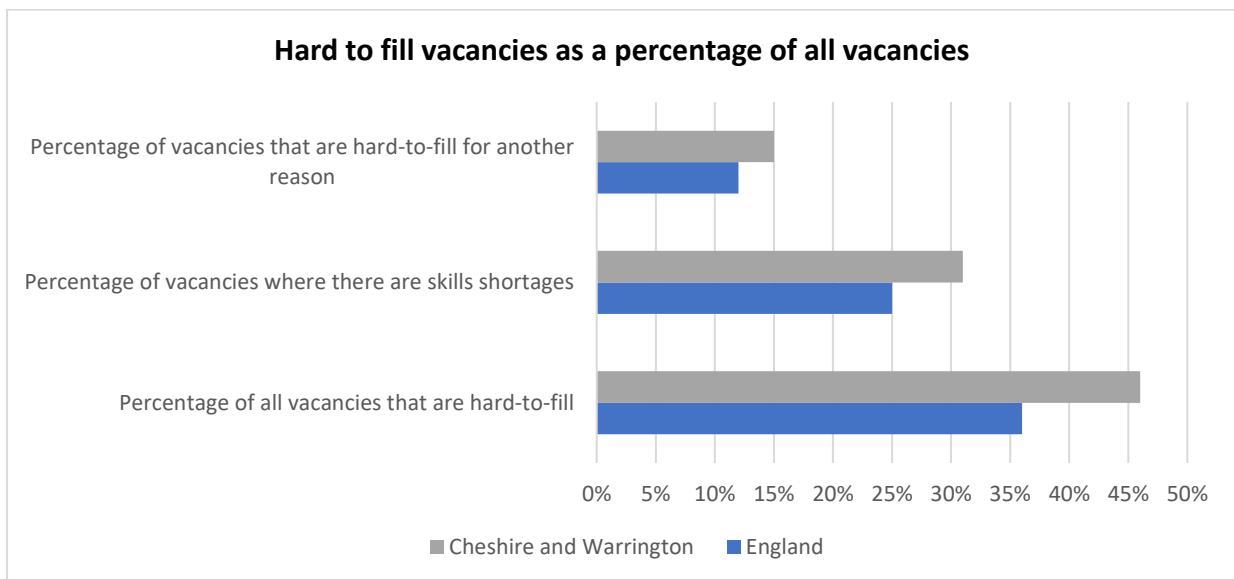
Source: ESS 2019

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.
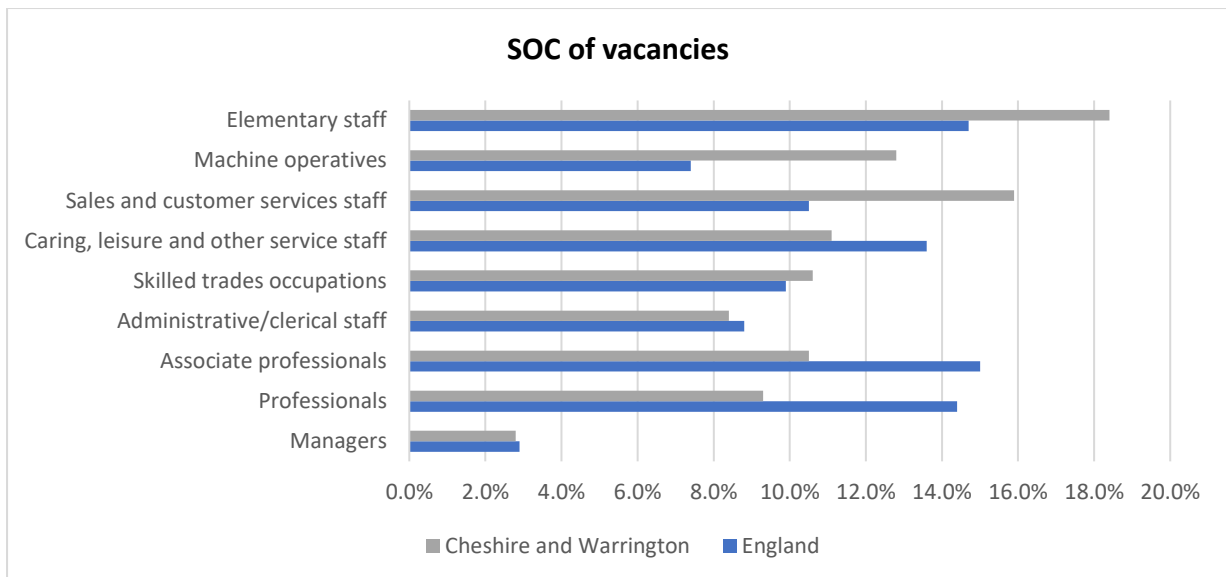
SOC of vacancies

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.

Skills profile of vacancies
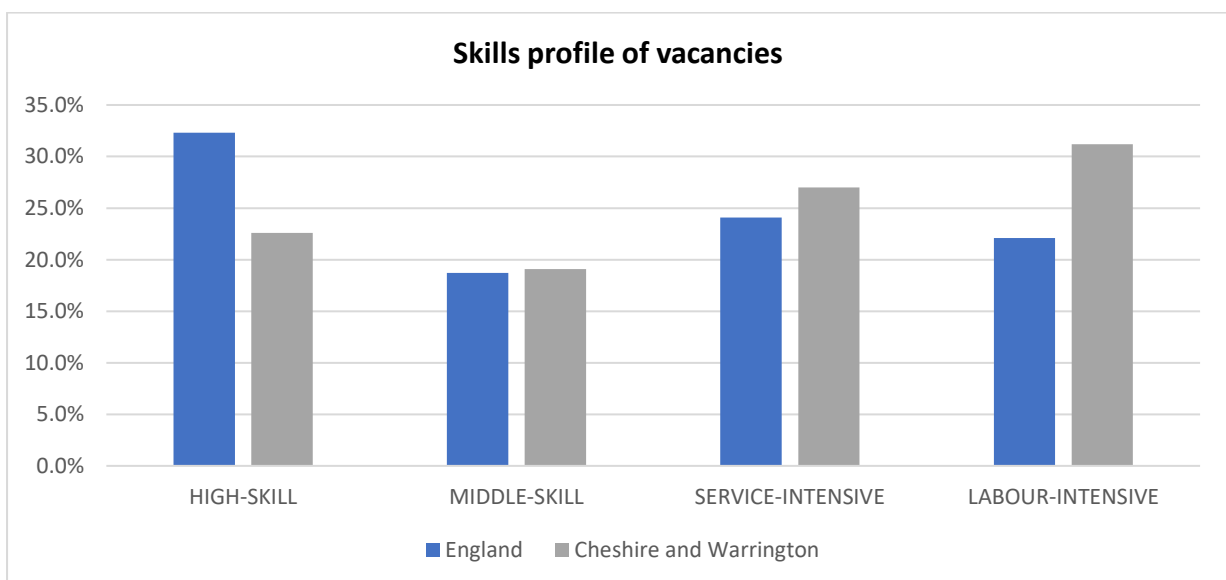
Source: ESS 2019

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).

Incidence of hard-to-fill vacancies by occupation
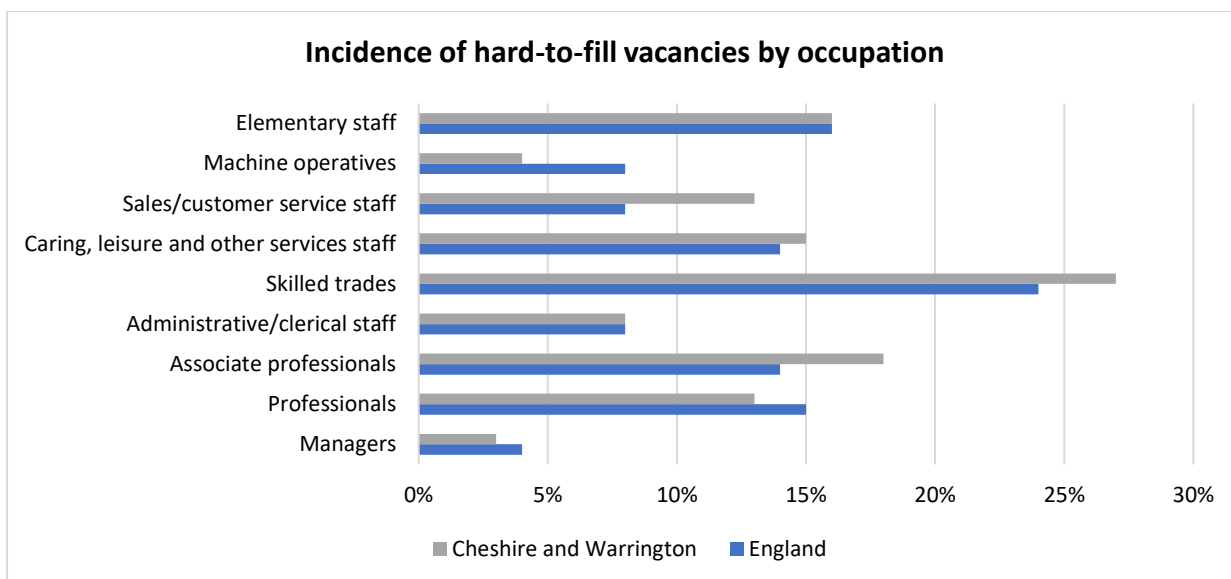
Source: ESS 2019

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 which measures the physical and financial accessibility of housing and local services. It is highly probable that if local services are difficult to access similar difficulties will be encountered accessing local employment opportunities.

Main causes of having a hard to fill vacancy (unprompted) (employer base)		
	England	Cheshire and Warrington
Low number of applicants with the required skills	39%	41%
Not enough people interested in doing this type of job	21%	23%
Low number of applicants generally	18%	22%
Lack of work experience the company demands	17%	17%
Low number of applicants with the required attitude, motivation or personality	14%	20%
Poor terms and conditions (e.g. pay) offered for post	14%	11%
Lack of qualifications the company demands	13%	7%
Job entails shift work/unsociable hours	10%	10%
Remote location/poor public transport	10%	18%
Too much competition from other employers	7%	6%
Low number of suitable applicants inc. Age of applicants	2%	1%
Not full-time/permanent	2%	n/a
Poor career progression / lack of prospects	2%	1%
Seasonal work	1%	1%

Poor recruitment channels/mechanisms (inc. lack/cost of advertising)	1%	n/a
Brexit (e.g. fewer EU applicants)	1%	0%
High turnover of staff / problems with staff retention	1%	0%
Benefits trap	n/a	0%
Lack of funding for the position	n/a	0%
Difficulty with work permits/immigration issues for non-EU staff	n/a	0%
Other	7%	6%
No particular reason	n/a	n/a
Don't know	2%	1%
Source: ESS 2019, Employer Base		

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

Density of skill-shortage vacancies by occupation		
	England	Cheshire and Warrington
Managers	23%	**
Professionals	33%	45%
Associate professionals	20%	48%
Administrative/clerical staff	12%	9%
Skilled trades occupations	47%	48%
Caring, leisure and other service staff	29%	21%
Sales and customer services staff	14%	22%
Machine operatives	31%	**
Elementary staff	18%	13%
*Source: ESS 2019, **=data suppressed*		

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

SSV density by skills profile
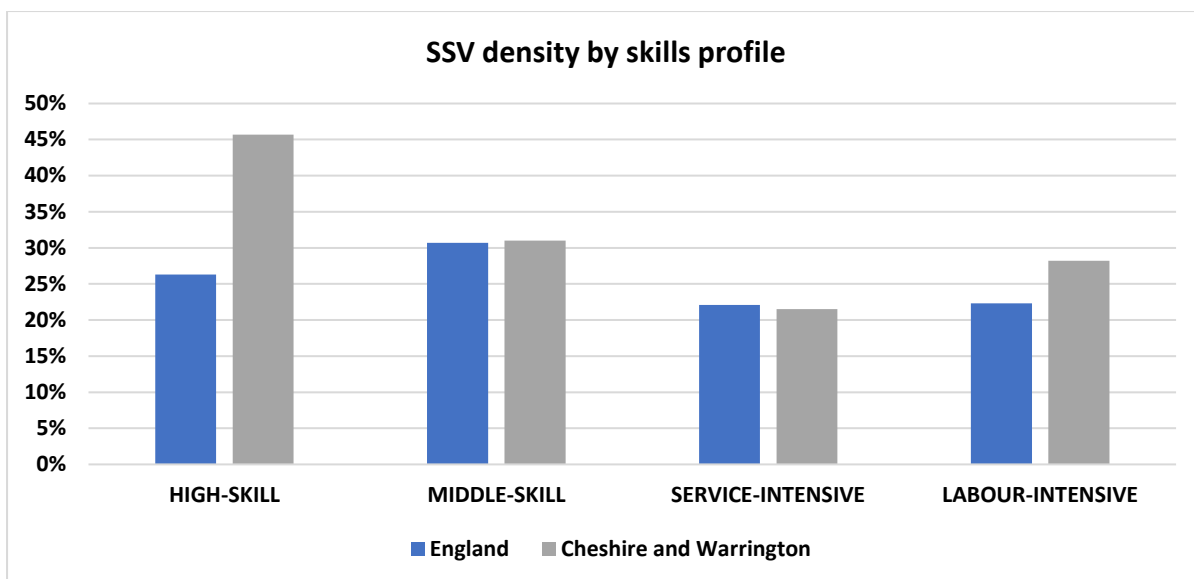
Source: ESS 2019

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

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

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

The impact of SSVs on employers
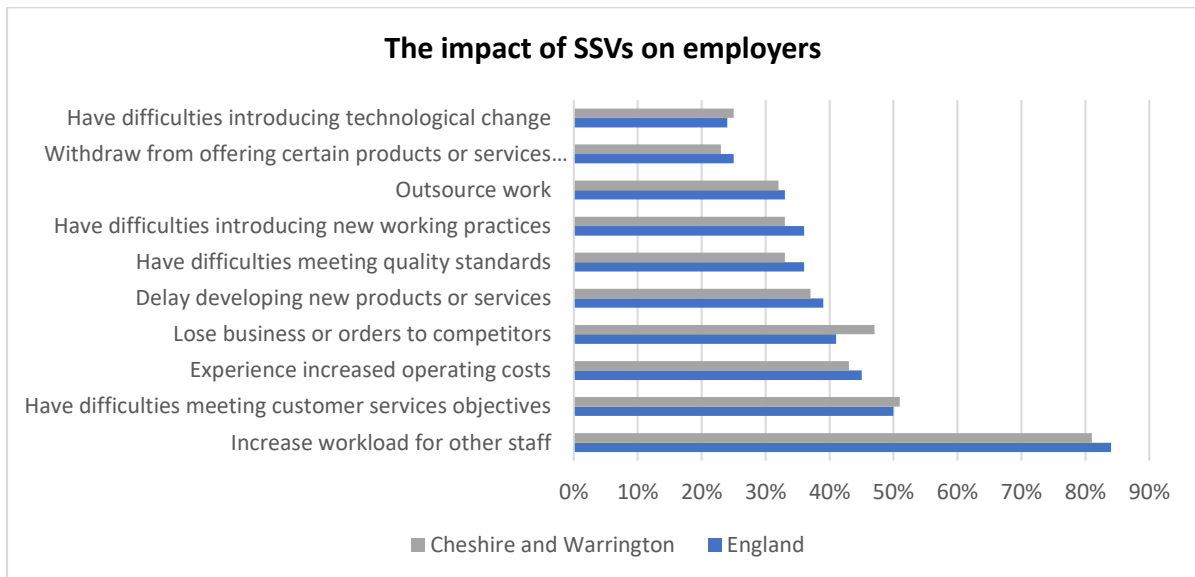
Source: ESS 2019

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%).

Action taken by employers in response to SSVs

Source: ESS 2019

Average posting Intensity is a measure used by Lightcast to establish how much effort employers need to make to fill a vacancy. An average posting intensity of 3 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. In 2022 the average posting intensity for all jobs was 3.

The table below sets out the 4-digit soc occupations where there were more than 100 unique job postings in Cheshire and Warrington, which have had average posting intensity above 4 for

vacancies in 2022. For those roles with a high posting intensity and high current volumes, this suggests a market failure in the labour market.

There are a number of possible causes for this type of market failure. Roles may be difficult to access, may be shift-based, may not be offered part-time and so on. Sometimes a high posting intensity for an occupation will reflect a high level of churn or job insecurity in that occupation.

In some cases, roles will have a high job posting intensity and be hard to fill because applicants do not have the skills required. It is for these roles that skills and employment partners should consider developing interventions to address the issue. These interventions will vary from intensive vacancy-focussed support to individuals, to the delivery of longer-term high-level skills programmes.

On this basis, the following occupational areas should be considered to assess whether a skills intervention might assist in ameliorating recruitment difficulties:

- Midwives
- Nurses
- Dental Nurses
- Nursing Auxiliaries and Assistants
- Counsellors
- Driving Instructors
- Health Associate Professionals n.e.c.
- Health Services and Public Health Managers and Directors
- Medical Secretaries

It is notable that almost all of the hardest to fill, high volume vacancies in 2022 were in the health sector. Anecdotally, levels of churn are high for some occupations in this sector.

Hard to fill Vacancies (4-digit SOC Occupations>100 unique postings) in Cheshire and Warrington, 2022		
	Postings	Intensity
Midwives	134	8.7
Nurses	6375	7.2
Dental Nurses	114	6.1
Nursing Auxiliaries and Assistants	1915	5.6
Counsellors	167	5.5
Driving Instructors	173	5.2
Health Associate Professionals n.e.c.	643	5.2
Health Services and Public Health Managers and Directors	839	5.1
Medical Secretaries	169	5.0
Psychologists	305	4.7
Therapy Professionals n.e.c.	165	4.5
Speech and Language Therapists	135	4.5
Care Workers and Home Carers	7033	4.3
Elementary Storage Occupations	3027	4.2
Prison Service Officers (Below Principal Officer)	230	4.0
Source: Lightcast Analyst, Jan 2023		

6.3 Alignment of skills supply with community demand[24]

37% of Cheshire and Warrington adult residents that enrolled on an FE learning aim in 2020/21 were qualified below Level 2. This compares with 18% of the overall working age population of Cheshire and Warrington that is not qualified to Level 2. This shows, as might be expected given Government policy and funding priorities, that FE delivery is disproportionately focussed on the lower qualified.

Prior attainment of adults resident in Cheshire and Warrington in FE, 2020/21

Category	Value (approx)
No Qualifications	~5700
Below Level 2	~4200
Level 2	~5400
Level 3	~4400
Level 4	~950
Level 5	~700
Level 6	~2100
Level 7+	~950
Not Known	~2300
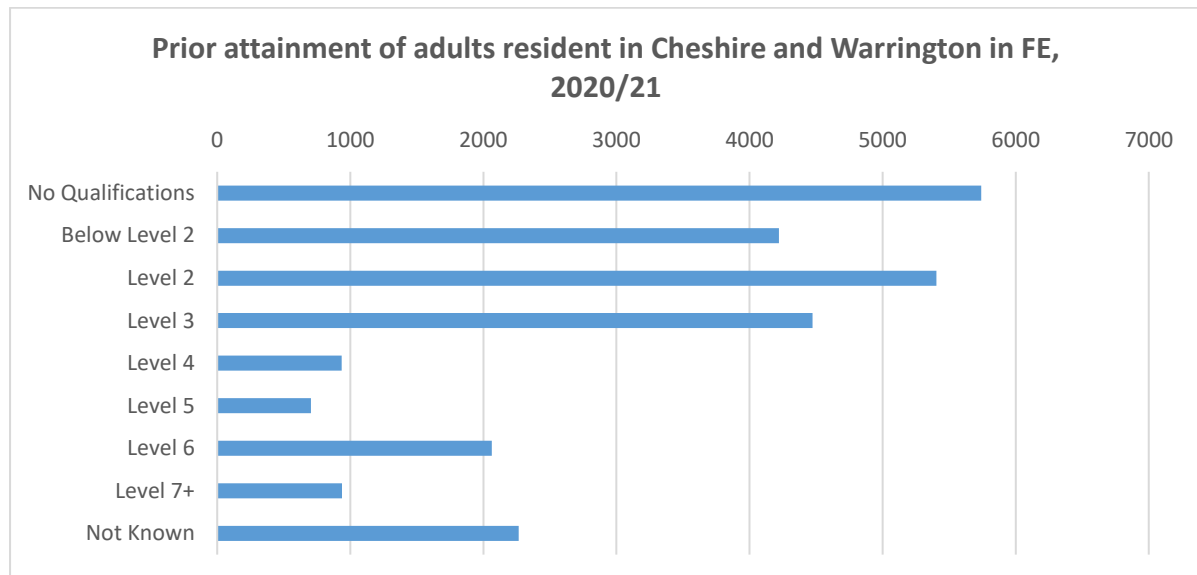
Source: ESFA Localities datacube (residency)

LFS unemployment in Cheshire and Warrington stands at 3.3%. By contrast, in 2020/21, there were more enrolments in FE by adults resident in Cheshire and Warrington from those not in employment (14.5k) than those employed/self-employed (10.3k). This demonstrates that FE delivery is disproportionately focused on those without employment.

Employment status on the first day of learning in FE of adult residents of Cheshire and Warrington, 2020-21

Category	Value (approx)
Employed	~9500
Self-employed	~700
Not Collected	~2000
Not in paid employment, not looking for work and/or not available for work	~3400
Not in paid employment, looking for work and available to start work	~6100
Not known	~2000
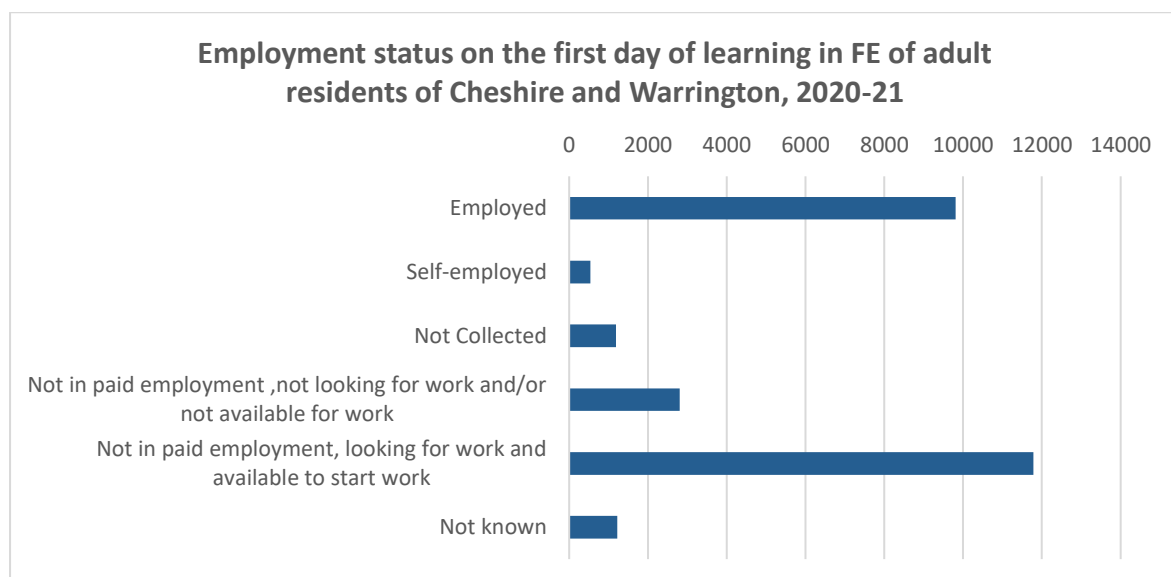
Source: ESFA Localities datacube (residency)

---

[24] This subsection draws data from ESFA localities datacube; ONS and StatXplore

Whilst individuals will enrol on courses for many reasons, there are fewer policy drivers that underpin government investment in FE. These include supporting social inclusion and cohesion by providing skills for life (eg English, Maths, baseline digital skills, English for speakers of other languages etc); supporting people without work to secure employment by acquiring relevant skills; and, supporting people to progress in employment by securing the relevant skills.

The population of Universal Credit (UC) claimants includes those in low paid employment and those out of work seeking employment and is, therefore, a reasonable proxy for those for whom public investment in FE is intended to benefit.

The two maps below illustrate FE learning aim enrolment density by ward in Cheshire and Warrington (on the left) and UC claimant density by ward in Cheshire and Warrington (on the right). It can be seen from this that there is a good alignment of areas with high FE enrolment with areas that have high numbers of UC claimants. Six of the ten wards with the highest density of FE enrolments also appear in the top ten wards with highest UC claimant density. Every ward in the top two deciles for UC claimant density appears in the top three deciles for FE enrolment density.

Enrolments in FE by adults resident in Cheshire and Warrington, 2020/21

Claimants of Universal Credit (in and out of work) resident in Cheshire and Warrington, by ward, 2022
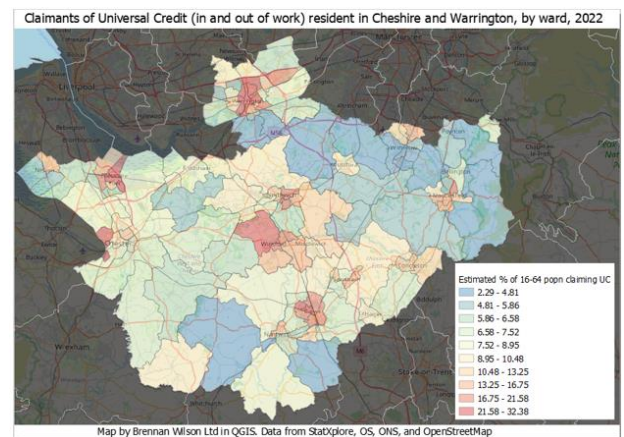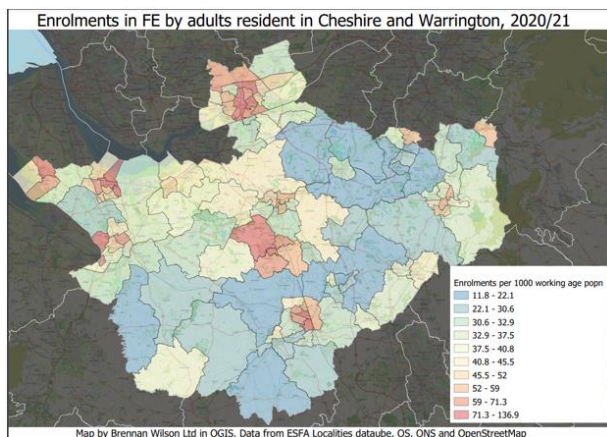
6.4 Future Demand for Skills[25]

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.

---

[25] This subsection draws on data from IER, ONS, ESFA localities datacube, DfE (L3 @19), Lightcast Analyst

C&W Actual and Forecast Demand for Skill Levels 2007-2027
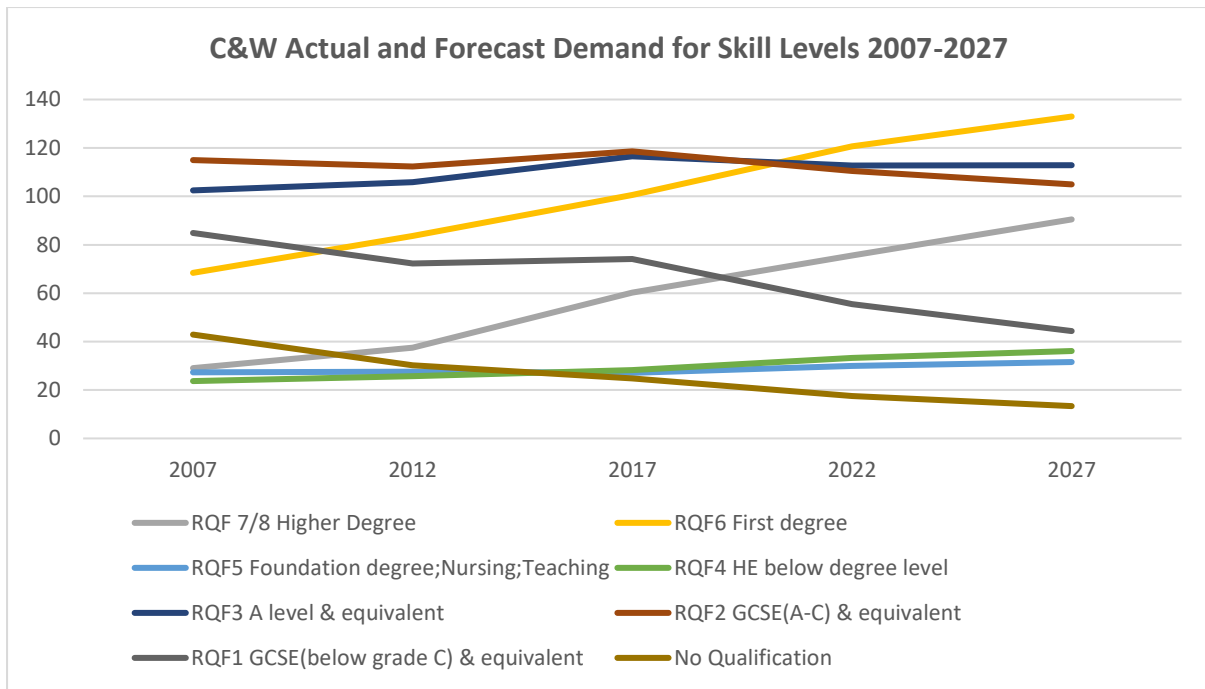
Source: Working Futures 2017-2027

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 90,000 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 supporting in-work progression 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. Employment support services encouraging the economically inactive back into employment will also have a role.

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 Lightcast 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 £28,495.

Average annual openings > 100 for Level 4+ occupations in Cheshire and Warrington, 2023-2030			
SOC	Description	Avg. Annual Openings	Median Wages
2231	Nurses	460	£30,828
2421	Chartered and Certified Accountants	343	£39,558
3545	Sales Accounts and Business Development Managers	306	£42,119
3562	Human Resources and Industrial Relations Officers	227	£27,529
1131	Financial Managers and Directors	202	£51,534
2315	Primary and Nursery Education Teaching Professionals	202	£30,812
2314	Secondary Education Teaching Professionals	177	£40,089
3538	Financial Accounts Managers	162	£33,638
2136	Programmers and Software Development Professionals	158	£42,865
1135	Human Resource Managers and Directors	148	£45,799
2211	Medical Practitioners	147	£53,766
1121	Production Managers and Directors in Manufacturing	141	£41,611
2424	Business and Financial Project Management Professionals	120	£46,134
2423	Management Consultants and Business Analysts	118	£36,349
1132	Marketing and Sales Directors	117	£70,919
3535	Taxation Experts	111	£33,886
3543	Marketing Associate Professionals	102	£25,780
Source: Lightcast Analyst, Jan 2023			

ANNEX 1 - FOCUS ON INDUSTRY SECTORS

Focus on Manufacturing

The Manufacturing sector employed 42,000 people in Cheshire and Warrington in 2022. The sector employed a slightly higher percentage of the workforce than is the case nationally with a Location Quotient (LQ) of 1.08 in 2022. The average wage per job in the sector was £38,000 and it contributed 17.5% to Cheshire and Warrington's GVA.

The following wards all employed over 1,000 people in the Manufacturing sector in 2021:

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

Manufacturing employment in Cheshire and Warrington, by ward, 2021

Numbers employed
- 0 - 25
- 25 - 80
- 80 - 220
- 220 - 350
- 350 - 4000

Map by Brennan Wilson Ltd in QGIS. Data from NOMIS/BRES, OS, OpenStreetmap
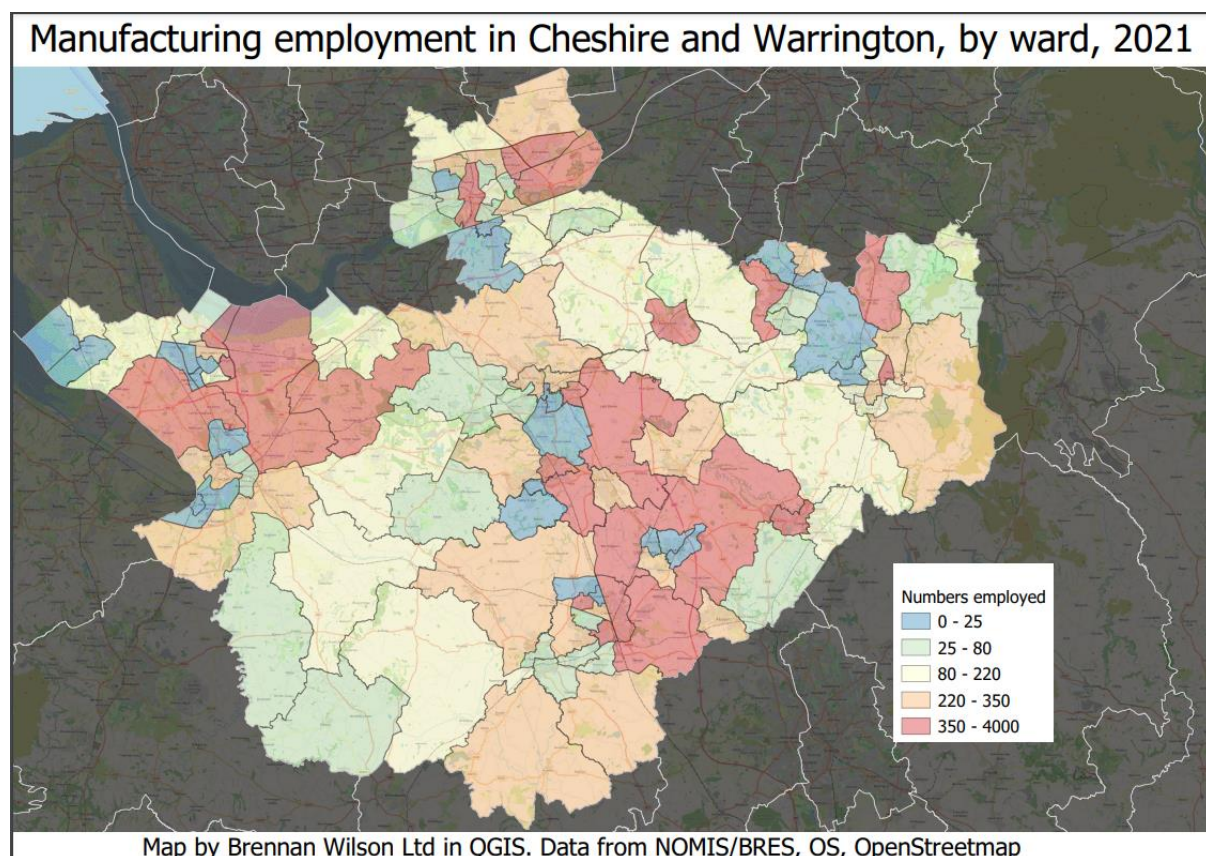
The composition of the Manufacturing sector in Cheshire and Warrington is shown in the table below which provides data on the 12 2-digit manufacturing sub sectors in Cheshire and Warrington that employed more than 1,000 people in 2022. Almost half of all the sector's employment was in four sub sectors:

- 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 wages ranged from £57,682 in the 'Manufacture of Coke and Refined Petroleum Products' subsector to £27,853 in the 'Printing and Reproduction of Recorded Media' subsector. At 456, the 'Manufacture of Fabricated Metal Products, Except Machinery and Equipment' subsector had the highest number of employers.

In 2022, there were three Manufacturing subsectors employing more than 1,000 people with 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 2.52)
- Manufacture of Basic Pharmaceutical Products and Pharmaceutical Preparations (LQ of 7.30)
- Manufacture of Chemicals and Chemical Products (LQ of 2.92)

Main Manufacturing subsectors in Cheshire and Warrington, 2022				
	2022 LQ	2022 Jobs	Avg. Wage Per Job (£)	2021 Establishments
Manufacture of Motor Vehicles, Trailers and Semi-trailers	2.52	6906	36955	74
Manufacture of Basic Pharmaceutical Products and Pharmaceutical Preparations	7.30	5010	57682	10
Manufacture of Food Products	0.70	4517	31801	114
Manufacture of Fabricated Metal Products, Except Machinery and Equipment	0.85	4146	30129	456
Manufacture of Chemicals and Chemical Products	2.92	3899	49112	93
Other Manufacturing	1.83	2084	31811	119
Repair and Installation of Machinery and Equipment	0.91	1885	29154	255
Manufacture of Machinery and Equipment n.e.c.	0.62	1710	36679	93
Manufacture of Rubber and Plastic Products	0.71	1673	28550	74
Manufacture of Other Non-metallic Mineral Products	0.94	1415	41012	54
Printing and Reproduction of Recorded Media	0.94	1257	27853	138
Manufacture of Paper and Paper Products	1.25	1049	37612	32
Source: Lightcast Analyst, Jan 2023				

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 £9.86 (Packers, Bottlers, Canners and Fillers) to £22.36 (Production Managers and Directors in Manufacturing).

Top occupations in the Manufacturing sector in Cheshire and Warrington, 2022			
	Employed in Industry (2022)	Median Hourly Wages	Education Level
Production Managers and Directors in Manufacturing	2488	22.36	Bachelor's degree
Metal Working Production and Maintenance Fitters	1710	14.87	Level 3
Sales Accounts and Business Development Managers	1455	21.42	Bachelor's degree
Food, Drink and Tobacco Process Operatives	1328	9.94	Level 2
Elementary Storage Occupations	1285	10.51	Level 1
Packers, Bottlers, Canners and Fillers	1082	9.86	Level 1
Assemblers (Vehicles and Metal Goods)	1051	16.66	Level 2
Chemical and Related Process Operatives	944	15.74	Level 2
Production and Process Engineers	909	19.64	Bachelor's degree
Vehicle Technicians, Mechanics and Electricians	731	13.2	Level 3
Source: Lightcast Analyst, Jan 2023			

Analysis of EMSI Job postings for the occupations above in 2022 (table below) indicates that there was an average posting intensity for these roles of 3:1 in this period, which is the same as for the economy as a whole. Elementary Storage Occupations had a higher-than-average posting intensity (suggesting employers may find it harder to fill these roles).

Job postings for top occupations in the Manufacturing sector in Cheshire and Warrington, 2022		
Occupation	Unique Postings 2022	Avg. Posting Intensity
Production Managers and Directors in Manufacturing	844	2 : 1
Production and Process Engineers	461	2 : 1
Sales Accounts and Business Development Managers	558	2 : 1
Metal Working Production and Maintenance Fitters	512	2 : 1
Vehicle Technicians, Mechanics and Electricians	1248	3 : 1
Food, Drink and Tobacco Process Operatives	67	2 : 1
Chemical and Related Process Operatives	136	2 : 1
Assemblers (Vehicles and Metal Goods)	82	2 : 1
Packers, Bottlers, Canners and Fillers	318	3 : 1
Elementary Storage Occupations	3027	4 : 1
Source: Lightcast Analyst, Jan 2023		

Focus on Construction

The Construction sector employed 20,000 people in Cheshire and Warrington in 2022. The sector employed a lower percentage of the workforce than is the case nationally with a Location Quotient (LQ) of 0.81 in 2022. The average wage per job in the sector was £34,000 and it contributed 8% to Cheshire and Warrington's GVA.

The following wards all employed over 500 people in the Construction sector in 2021:

- Birchwood
- Poulton North
- Bewsey and Whitecross
- Crewe East
- Wilmslow West and Chorley
- Wolverham
- Grappenhall
- Brereton Rural
- Middlewich
- Central & Grange
- Penketh and Cuerdley
- Alderley Edge

Map by Brennan Wilson Ltd in QGIS. Data from BRES/NOMIS, OS and OpenStreetmap
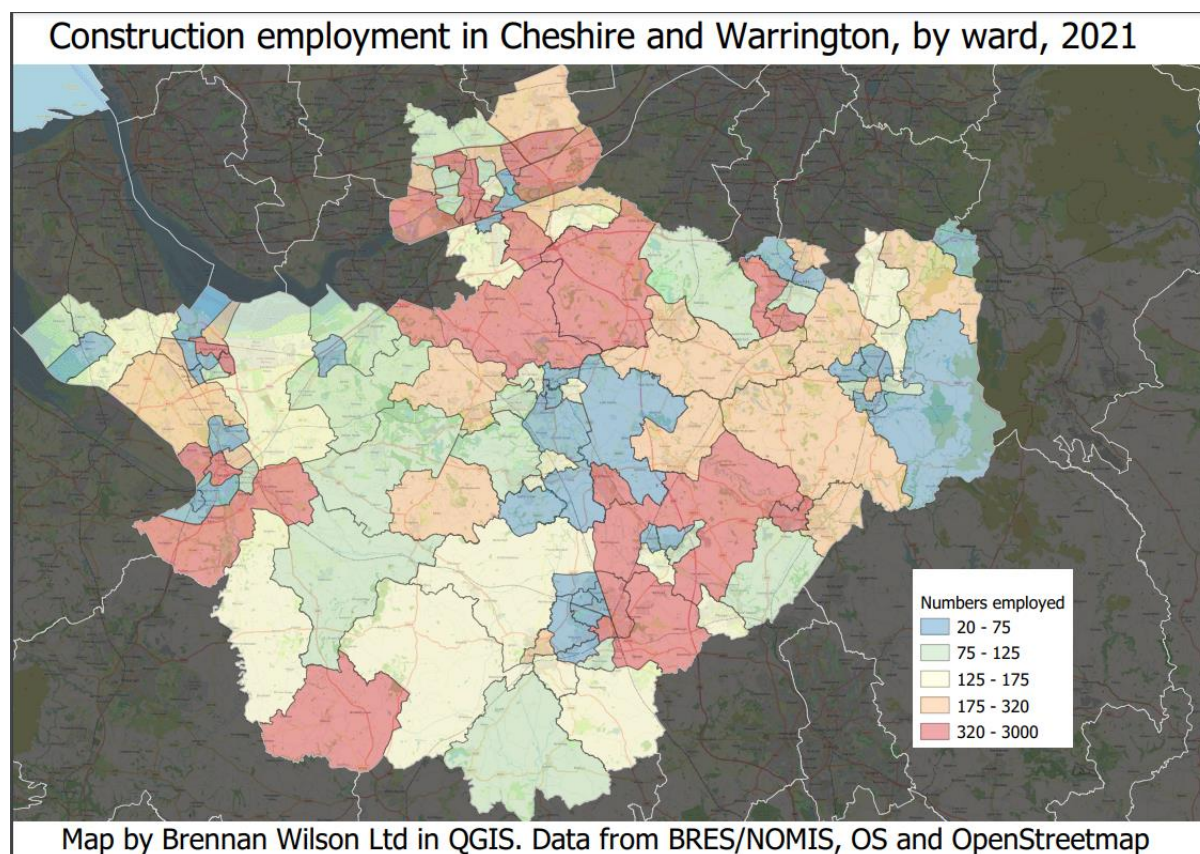
The composition of the Construction sector in Cheshire and Warrington is shown in the table below which provides data on the 2-digit construction sub sectors in Cheshire and Warrington.

The average wage for a job in the sector in Cheshire and Warrington was £33,816[26], with average wages ranging from £28,786in the 'Specialised Construction Activities' subsector to £38,419in the 'Civil Engineering' sub sector. At 2,579 the 'Specialised Construction Activities' subsector had the highest number of employers.

In 2022, Specialised Construction Activities subsector employed a smaller proportion of the workforce than would be expected from the national distribution (LQs of 0.59). Whilst the Civil Engineering, and the Construction of Buildings subsectors employed more (LQ of 1.04 and 1.11 respectively).

Construction subsectors in Cheshire and Warrington, 2022				
Description	2022 LQ	2022 Jobs	Avg. Wages Per Job	2021 Establishments
All Construction	0.81	19943	33816	4627
Construction of Buildings	1.11	8033	36573	1681
Civil Engineering	1.04	4083	38419	368
Specialised Construction Activities	0.59	7827	28786	2579
Source: Lightcast Analyst, Jan 2023				

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 £10 (Elementary Construction Occupations) to £20.44 (Production Managers and Directors in Construction).

Top occupations in the Construction sector in Cheshire and Warrington, 2022			
Description	Employed in Industry (2022)	Median Hourly Wages (£)	Education Level
Elementary Construction Occupations	1492	10	Level 2
Production Managers and Directors in Construction	1432	20.44	Level 3
Electricians and Electrical Fitters	1321	15.07	Level 3
Carpenters and Joiners	786	12.34	Level 3
Plumbers and Heating and Ventilating Engineers	684	15.23	Level 3
Construction and Building Trades n.e.c.	659	11.47	Level 3
Other Administrative Occupations n.e.c.	598	11.29	Level 2
Construction Project Managers and Related Professionals	542	14.28	Bachelor's degree
Construction Operatives n.e.c.	434	11.23	Level 2
Construction and Building Trades Supervisors	411	16.27	Level 3 NVQ; A Levels
Source: Lightcast Analyst, Jan 2023			

---

[26] EMSI Analyst, Nov 2021

Analysis of EMSI Job postings for the occupations above in 2022 (table below) indicates that there was an average posting intensity for these roles of 2:1 in this period, which is lower than for the economy as a whole, suggesting employers may have found it easier than average to fill these type of roles.

Job postings for top occupations in the Construction sector in Cheshire and Warrington, 2022		
Occupation	Unique Postings 2022	Avg. Posting Intensity
Production Managers and Directors in Construction	439	2 : 1
Construction Project Managers and Related Professionals	492	2 : 1
Other Administrative Occupations n.e.c.	4821	2 : 1
Electricians and Electrical Fitters	642	2 : 1
Plumbers and Heating and Ventilating Engineers	399	2 : 1
Carpenters and Joiners	269	2 : 1
Construction and Building Trades n.e.c.	285	2 : 1
Construction and Building Trades Supervisors	167	2 : 1
Construction Operatives n.e.c.	239	2 : 1
Elementary Construction Occupations	933	2 : 1
Source: Lightcast Analyst, Jan 2023		

Focus on Motor Trades

The Motor trades sector employed 11,000 people in Cheshire and Warrington in 2022. The sector employed a higher percentage of the workforce than is the case nationally with a Location Quotient (LQ) of 1.26 in 2022. The average wage per job in the sector was £29,000 and it contributed 2% to Cheshire and Warrington's GVA.

The following wards all employed over 300 people in the Motor trades sector in 2021:

- Crewe East
- Blacon
- Bewsey and Whitecross
- Rixton and Woolston
- Westbrook
- Winsford Wharton
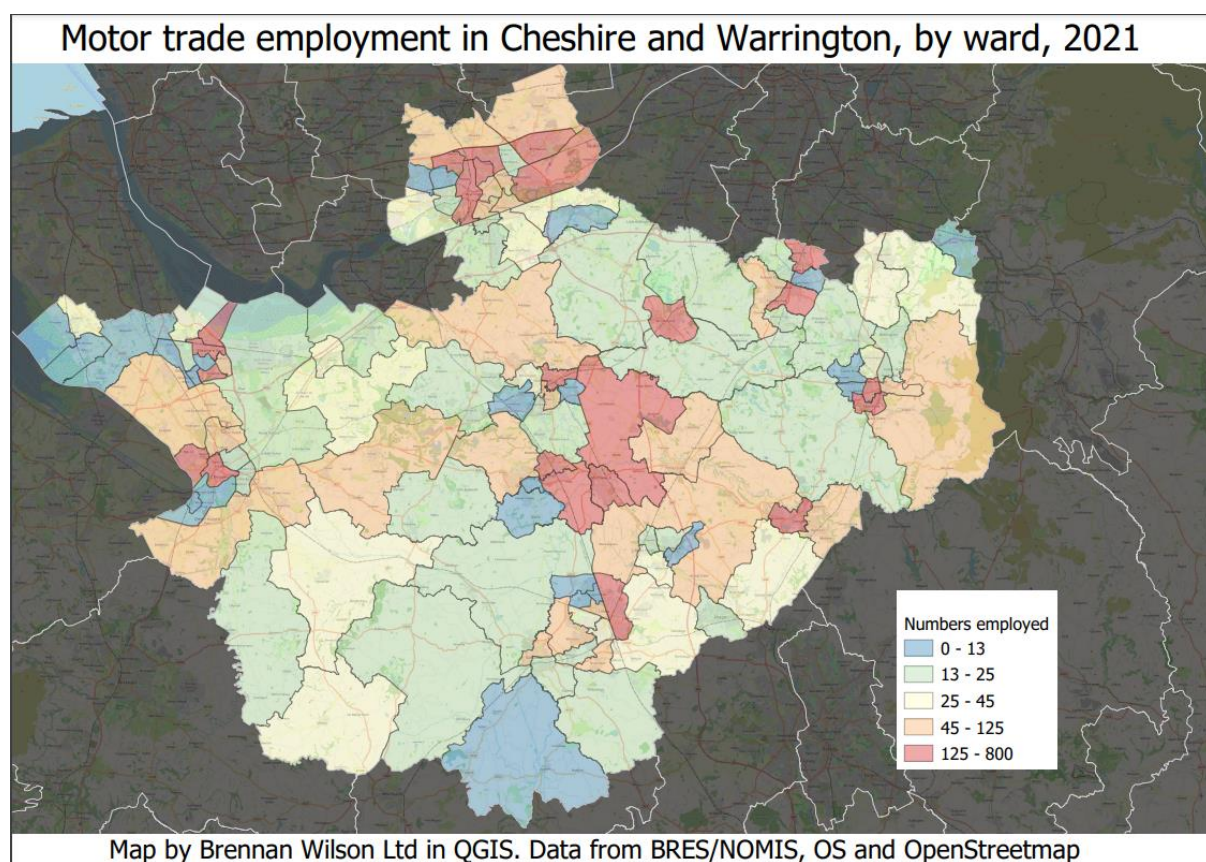
Map by Brennan Wilson Ltd in QGIS. Data from BRES/NOMIS, OS and OpenStreetmap

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 ranged from £26,028 in the 'Maintenance and Repair of Motor Vehicles' subsector to £31,807 in the 'Sale of Motor Vehicles' sub sector. At 783 the 'Maintenance and Repair of Motor Vehicles' subsector had the highest number of employers.

In 2022, 'Sale, Maintenance and Repair of Motorcycles and Related Parts and Accessories' and 'Sale of Motor Vehicle Parts and Accessories' subsectors employed a smaller proportion of the workforce than would be expected from the national distribution (LQs of 0.74 and 0.9 respectively). Whilst the 'Sale of Motor Vehicles' and 'Maintenance and Repair of Motor Vehicles' subsectors employed more (LQs of 1.54 and 1.20).

Wholesale and Retail Trade and Repair of Motor Vehicles and Motorcycles subsectors in Cheshire and Warrington, 2022				
	2022 LQ	2022 Jobs	Avg. Wages Per Job	2021 Establishments
Sale of Motor Vehicles	1.54	4635	31807	477
Maintenance and Repair of Motor Vehicles	1.20	4589	26028	783
Sale of Motor Vehicle Parts and Accessories	0.90	1501	26783	214
Sale, Maintenance and Repair of Motorcycles and Related Parts and Accessories	0.74	98	30018	36
Source: Lightcast Analyst, Jan 2023				

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 over half of all employment in the sector. Hourly wages for these occupations range from £9.59 (Sales and Retail Assistants) to £21.42 (Sales Accounts and Business Development Managers).

Top occupations in the 'Wholesale and Retail Trade and Repair of Motor Vehicles and Motorcycles' sector in Cheshire and Warrington, 2022			
	Employed (2022)	Median Hourly Wages (£)	Education Level
Sales and Retail Assistants	18629	9.59	Level 2
Managers and Directors in Retail and Wholesale	4860	13.47	Level
Elementary Storage Occupations	4358	10.51	Level 1
Retail Cashiers and Check-out Operators	2691	9.59	Level 2
Sales Supervisors	2574	10.41	Level 2
Sales Accounts and Business Development Managers	2465	21.42	Bachelor's degree
Other Administrative Occupations n.e.c.	2425	11.29	Level 2
Vehicle Technicians, Mechanics and Electricians	2203	13.2	Level 3
Van Drivers	1739	9.96	Level 2
Customer Service Occupations n.e.c.	1536	10.22	Level 2
Source: Lightcast Analyst, Jan 2023			

Analysis of EMSI Job postings for the occupations above in 2022 (table below) indicates that there was an average posting intensity for these roles of 3:1 in this period, which is the same as for the economy as a whole. Elementary Storage Occupations had a higher-than-average posting intensity (suggesting employers may find it harder to fill these roles).

Job postings for top occupations in Motor Trades in Cheshire and Warrington, 2022		
Occupation	Unique Postings from Jan 2022 - Dec 2022	Avg. Posting Intensity (Jan 2022 - Dec 2022)
Managers and Directors in Retail and Wholesale	505	2 : 1
Book-keepers, Payroll Managers and Wages Clerks	3174	2 : 1
Other Administrative Occupations n.e.c.	4821	2 : 1
Receptionists	1539	2 : 1
Vehicle Technicians, Mechanics and Electricians	1248	3 : 1
Sales and Retail Assistants	1847	3 : 1
Vehicle and Parts Salespersons and Advisers	150	2 : 1
Van Drivers	1718	3 : 1
Vehicle Valeters and Cleaners	97	1 : 1
Elementary Storage Occupations	3027	4 : 1
Source: Lightcast Analyst, Jan 2023		

Focus on Wholesale Trades

The Wholesale trades sector employed 18,000 people in Cheshire and Warrington in 2022. The sector employed the same percentage of the workforce as is the case nationally with a Location Quotient (LQ) of 1 in 2022. The average wage per job in the sector was £32,000 and it contributed 4% to Cheshire and Warrington's GVA.

The following wards all employed over 500 people in the Wholesale trades sector in 2021:

- Crewe East
- Winsford Wharton
- Birchwood
- Rixton and Woolston
- Knutsford
- Poplars and Hulme
- Bewsey and Whitecross
- Burtonwood and Winwick
- Bunbury
- Great Sankey North and Whittle Hall
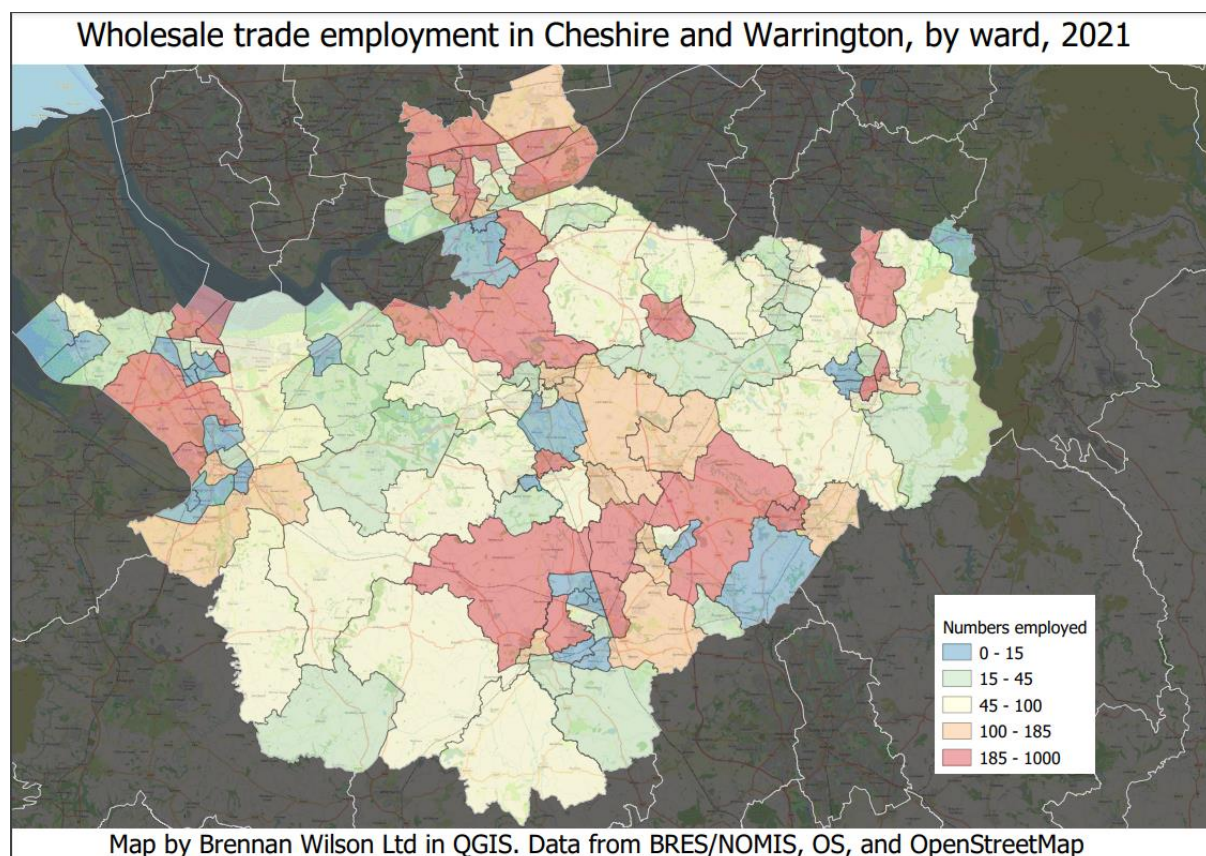
Wholesale trade employment in Cheshire and Warrington, by ward, 2021

Numbers employed
- 0 - 15
- 15 - 45
- 45 - 100
- 100 - 185
- 185 - 1000

Map by Brennan Wilson Ltd in QGIS. Data from BRES/NOMIS, 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 ranged from £26,941in the 'Wholesale of Food, Beverages and Tobacco' subsector to £38,615 in the 'Wholesale of Information and Communication Equipment'

sub sector. At 454, the 'Other Specialised Wholesale' subsector had the highest number of employers.

In 2022, 'Wholesale of Food, Beverages and Tobacco', 'Wholesale of Household Goods', 'Wholesale of Other Machinery, Equipment and Supplies', and 'Wholesale of Agricultural Raw Materials and Live Animals' subsectors employed a smaller proportion of the workforce than would be expected from the national distribution (LQs of 0.93, 0.68, 0.87 and 0.2 respectively). Whilst the 'Wholesale of Information and Communication Equipment' and the 'Wholesale on a Fee or Contract Basis' subsectors employed more (LQs of 2.15 and 1.64 respectively).

Wholesale Trade (exc motor vehicles) subsectors in Cheshire and Warrington, 2021				
	2022 LQ	2022 Jobs	Avg. Wages Per Job	2021 Establishments
Wholesale on a Fee or Contract Basis	1.64	1266	28297	297
Wholesale of Agricultural Raw Materials and Live Animals	0.20	60	31241	49
Wholesale of Food, Beverages and Tobacco	0.93	3568	26941	207
Wholesale of Household Goods	0.68	3171	33544	375
Wholesale of Information and Communication Equipment	2.15	2173	38615	99
Wholesale of Other Machinery, Equipment and Supplies	0.87	2268	36451	288
Other Specialised Wholesale	1.18	4766	31615	454
Non-specialised Wholesale Trade	0.96	1084	31660	196
Source: Lightcast Analyst, Jan 2023				

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 just less than half of all employment in the sector. Hourly wages for these occupations range from £9.59 (Sales and Retail Assistants) to £34.31 (Marketing and Sales Directors).

Top occupations in the Wholesale Trade (exc motor vehicles) sector in Cheshire and Warrington 2022			
	Employed (2022)	Median Hourly Wages	Education Level
Elementary Storage Occupations	1510	10.51	Level 1
Sales Accounts and Business Development Managers	1482	21.42	Bachelor's degree
Sales and Retail Assistants	1001	9.59	Level 2
Large Goods Vehicle Drivers	954	12.85	Level 2
Managers and Directors in Retail and Wholesale	887	13.47	Level 2
Business Sales Executives	714	15.16	Level 3
Other Administrative Occupations n.e.c.	640	11.29	Level 2
Van Drivers	494	9.96	Level 2
Marketing and Sales Directors	440	34.31	Bachelor's degree
Packers, Bottlers, Canners and Fillers	409	9.86	Level 1
Source: Lightcast Analyst, Jan 2023			

Analysis of EMSI Job postings for the occupations above in 2022 (table below) indicates that there was an average posting intensity for these roles of 3:1 in this period, which is the same as for the economy as a whole. Elementary Storage Occupations had a higher-than-average posting intensity (suggesting employers may find it harder to fill these roles).

Job postings for top occupations in the Wholesale sector in Cheshire and Warrington, 2022		
Occupation	Unique Postings (2022)	Avg. Posting Intensity
Marketing and Sales Directors	1872	2 : 1
Managers and Directors in Retail and Wholesale	505	2 : 1
Business Sales Executives	793	3 : 1
Sales Accounts and Business Development Managers	558	2 : 1
Other Administrative Occupations n.e.c.	4821	2 : 1
Sales and Retail Assistants	1847	3 : 1
Large Goods Vehicle Drivers	1051	2 : 1
Van Drivers	1718	3 : 1
Packers, Bottlers, Canners and Fillers	318	3 : 1
Elementary Storage Occupations	3027	4 : 1
Total Across these Occupations	16510	3 : 1
Source: Lightcast Analyst, Jan 2023		

Focus on Retail

The Retail sector employed 52,000 people in Cheshire and Warrington in 2022. The sector employed a higher percentage of the workforce than is the case nationally with a Location Quotient (LQ) of 1.12 in 2022. The average wage per job in the sector was £19,000 and it contributed 7% to Cheshire and Warrington's GVA.

The following wards all employed over 1000 people in the Retail sector in 2021:

- Bewsey and Whitecross
- Rudheath
- Chester City & the Garden Quarter
- Wolverham
- Handforth
- Crewe East
- Blacon
- Westbrook
- Macclesfield Central
- Nantwich North and West
- Northwich Leftwich
- Fairfield and Howley

Retail employment in Cheshire and Warrington, by ward, 2021

Numbers employed
- 10 - 75
- 75 - 100
- 100 - 250
- 250 - 470
- 470 - 3000

Map by Brennan Wilson Ltd in QGIS. Data from BRES/NOMIS, 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 ranged from from £8,786 in the 'Retail Sale Via Stalls and Markets' subsector to £28,991 in the 'Retail Trade Not in Stores, Stalls or Markets' subsector. At 1608, the 'Retail Sale of Other Goods in Specialised Stores' subsector had the highest number of employers.

In 2022, 'Retail Sale in Non-specialised Stores', 'Retail Sale of Information and Communication Equipment in Specialised Stores', 'Retail Sale Via Stalls and Markets' subsectors employed a smaller proportion of the workforce than would be expected from the national distribution (LQs of 0.88, 0.45, and 0.53 respectively). 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 1.31, 1.78, 1.20, and 1.72 respectively).

Retail subsectors in Cheshire and Warrington, 2021				
Description	2022 LQ	2022 Jobs	Avg. Wages Per Job	2021 Establishments
Retail Sale in Non-specialised Stores	0.88	18606	17898	795
Retail Sale of Food, Beverages and Tobacco in Specialised Stores	1.31	3082	16443	405
Retail Sale of Automotive Fuel in Specialised Stores	1.02	663	18365	46
Retail Sale of Information and Communication Equipment in Specialised Stores	0.45	208	22009	81
Retail Sale of Other Household Equipment in Specialised Stores	1.78	7667	22341	571
Retail Sale of Cultural and Recreation Goods in Specialised Stores	1.08	1882	18720	289
Retail Sale of Other Goods in Specialised Stores	1.20	15230	17898	1608
Retail Sale Via Stalls and Markets	0.53	87	8786	30
Retail Trade Not in Stores, Stalls or Markets	1.72	4416	28991	636
Source: Lightcast Analyst, Jan 2023				

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 £9.59 (Sales and Retail Assistants) to £13.47 (Managers and Directors in Retail and Wholesale).

Top occupations in the Retail sector in C&W, 2022			
	Employed in Industry (2022)	Median Hourly Wages	Education Level
Sales and Retail Assistants	17283.98	9.59	Level 2 NVQ; GCSE at grades A*-C
Managers and Directors in Retail and Wholesale	3660.55	13.47	Level 2 NVQ; GCSE at grades A*-C
Retail Cashiers and Check-out Operators	2566.117	9.59	Level 2 NVQ; GCSE at grades A*-C
Elementary Storage Occupations	2477.491	10.51	Level 1 NVQ; GCSE at grades D-G
Sales Supervisors	2336.058	10.41	Level 2 NVQ; GCSE at grades A*-C
Shelf Fillers	1460.065	9.63	Level 1 NVQ; GCSE at grades D-G
Other Administrative Occupations n.e.c.	1399.032	11.29	Level 2 NVQ; GCSE at grades A*-C
Pharmacy and Other Dispensing Assistants	1150.223	9.29	Level 2 NVQ; GCSE at grades A*-C
Customer Service Occupations n.e.c.	1151.86	10.22	Level 2 NVQ; GCSE at grades A*-C
Van Drivers	900.9704	9.96	Level 2 NVQ; GCSE at grades A*-C
Source: Lightcast Analyst, Jan 2023			

Analysis of EMSI Job postings for the occupations above in 2022 (table below) indicates that there was an average posting intensity for these roles of 3:1 in this period, which is the same as for the economy as a whole. Elementary Storage Occupations had a higher-than-average posting intensity (suggesting employers may find it harder to fill these roles).
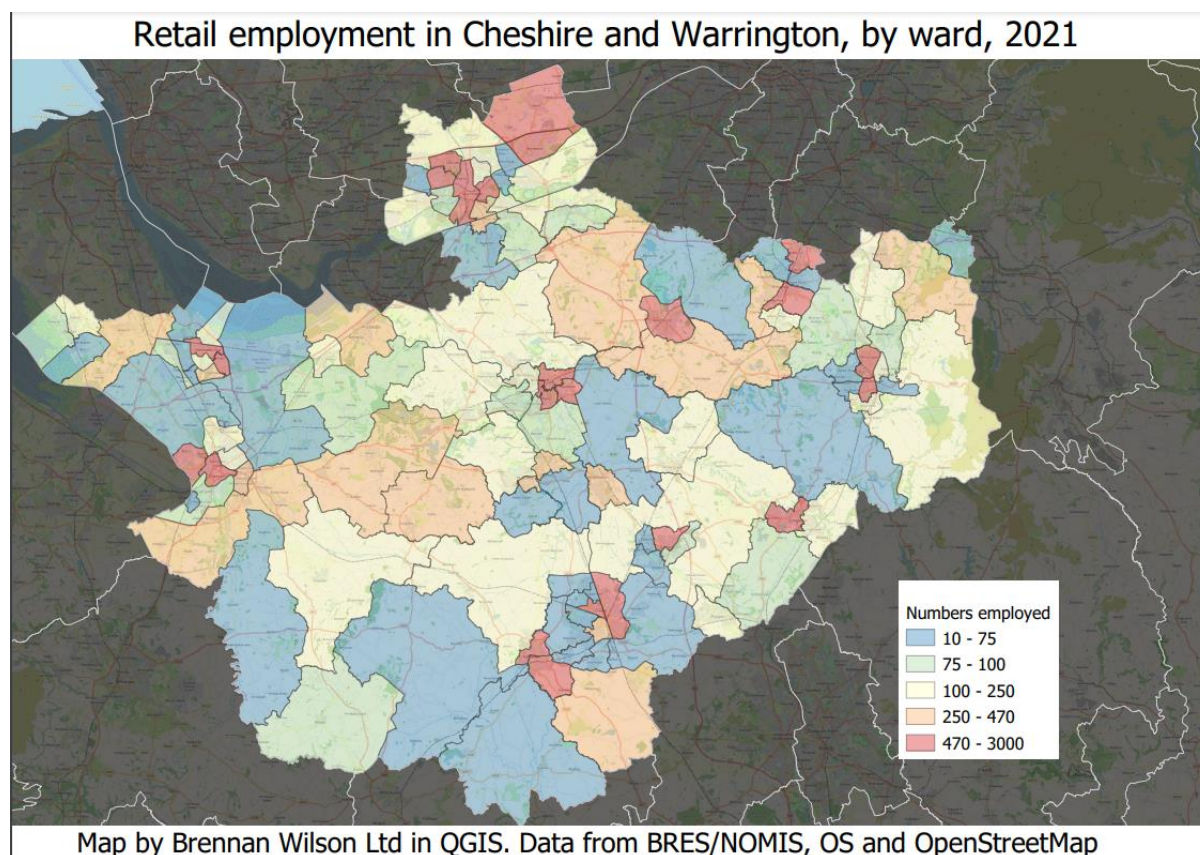
Job postings for top occupations in the Retail Sector in Cheshire and Warrington, 2022		
Occupation	Unique Postings 2022	Avg. Posting Intensity
Managers and Directors in Retail and Wholesale	505	2 : 1
Other Administrative Occupations n.e.c.	4821	2 : 1
Sales and Retail Assistants	1847	3 : 1
Retail Cashiers and Check-out Operators	77	3 : 1
Pharmacy and Other Dispensing Assistants	37	3 : 1
Sales Supervisors	1113	3 : 1
Customer Service Occupations n.e.c.	4906	3 : 1
Van Drivers	1718	3 : 1
Shelf Fillers	9	2 : 1
Elementary Storage Occupations	3027	4 : 1
Total Across All Occupations	18060	3 : 1
Source: Lightcast Analyst, Jan 2023		

Focus on Transport and Storage

The Transport and Storage sector employed 26,000 people in Cheshire and Warrington in 2022. The sector employed the same percentage of the workforce as is the case nationally with a Location Quotient (LQ) of 0.99 in 2022. The average wage per job in the sector was £30,000 and it contributed 4% to Cheshire and Warrington's GVA.

The following wards all employed over 1000 people in the Transport and Storage sector in 2021:

- Great Sankey North and Whittle Hall
- Crewe East
- Grappenhall
- Middlewich
- Westminster
- Bewsey and Whitecross
- Rudheath
- Westbrook
- Birchwood
- Crewe South
- Rixton and Woolston
- Burtonwood and Winwick

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.
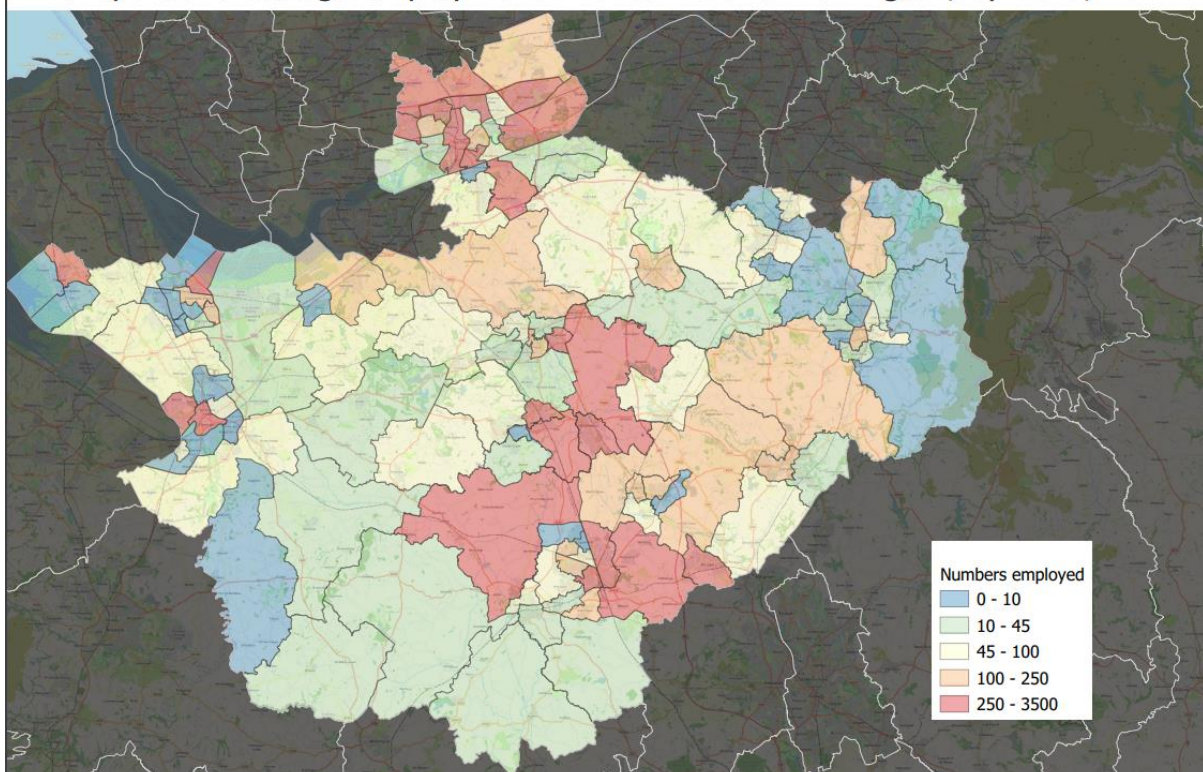
The average wage for a job in the sector ranged from £28,564 in the 'Land Transport and Transport Via Pipelines' subsector to £32,686 in the 'Water Transport' sub sector. At 1116, the 'Land Transport and Transport Via Pipelines' subsector had the highest number of employers.

In 2022, the 'Water Transport', 'Air Transport', and 'Land Transport and Transport Via Pipelines' subsectors employed a smaller proportion of the workforce than would be expected from the national distribution (LQs of 0.19, 0.03, 0.68 respectively). Whilst the 'Warehousing and Support Activities for Transportation' and 'Postal and Courier Activities' subsectors employed more (LQs of 1.37 and 1.18 respectively).

Transport and Storage subsectors in Cheshire and Warrington, 2022				
Description	2022 LQ	2022 Jobs	Avg. Wages Per Job (£)	2021 Establishments
All Transportation and Storage	0.99	26050	30255	2228
Land Transport and Transport Via Pipelines	0.68	7300	28564	1116
Water Transport	0.19	42	32686	1
Air Transport	0.03	40	28680	6
Warehousing and Support Activities for Transportation	1.37	14068	31722	339
Postal and Courier Activities	1.18	4601	28736	766
Source: Lightcast Analyst, Jan 2023				

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 £9.86 (Packers, Bottlers, Canners and Fillers) to £17.04 (Managers and Directors in Transport and Distribution).

Top 10 occupations linked to the Transport and Storage sector in C&W, 2022			
Description	Employed in Industry (2022)	Median Hourly Wages	Education Level
Elementary Storage Occupations	6010	10.51	Level 1
Large Goods Vehicle Drivers	3890	12.85	Level 2
Postal Workers, Mail Sorters, Messengers and Couriers	1929	12.81	Level 1
Fork-lift Truck Drivers	957	10.91	Level 2
Van Drivers	902	9.96	Level 2
Managers and Directors in Transport and Distribution	766	17.04	Level 3
Packers, Bottlers, Canners and Fillers	773	9.86	Level 1
Managers and Directors in Storage and Warehousing	752	13.89	Level 3
Other Administrative Occupations n.e.c.	618	11.29	Level 2
Bus and Coach Drivers	602	11.83	Level 2
Source: Lightcast Analyst, Jan 2023			

Analysis of EMSI Job postings for the occupations above in 2022 (table below) indicates that there was an average posting intensity for these roles of 3:1 in this period, which is the same as for the economy as a whole. Elementary Storage Occupations had a higher-than-average posting intensity (suggesting employers may find it harder to fill these roles).

Job postings for top occupations in the Transport and Storage sector in Cheshire and Warrington, 2022		
Occupation	Unique Postings from Jan 2022 - Dec 2022	Avg. Posting Intensity (Jan 2022 - Dec 2022)
Managers and Directors in Transport and Distribution	195	2 : 1
Managers and Directors in Storage and Warehousing	265	2 : 1
Other Administrative Occupations n.e.c.	4821	2 : 1
Large Goods Vehicle Drivers	1051	2 : 1
Van Drivers	1718	3 : 1
Bus and Coach Drivers	57	2 : 1
Fork-lift Truck Drivers	209	3 : 1
Packers, Bottlers, Canners and Fillers	318	3 : 1
Postal Workers, Mail Sorters, Messengers and Couriers	84	2 : 1
Elementary Storage Occupations	3027	4 : 1
Total across these Occupations	11745	3 : 1
Source: Lightcast Analyst, Jan 2023		

Focus on Accommodation and Food services

The Accommodation and Food services sector employed 32,000 people in Cheshire and Warrington in 2022. The sector employed a slightly lower percentage of the workforce than is the case nationally with a Location Quotient (LQ) of 0.91 in 2022. The average wage per job in the sector was £14,000 and it contributed 3% to Cheshire and Warrington's GVA.

The following wards all employed over 700 people in the Accommodation and Food services sector in 2021:

- Chester City & the Garden Quarter
- Bewsey and Whitecross
- Wolverham
- Alderley Edge
- Macclesfield Central
- Knutsford
- Christleton & Huntington
- Crewe East
- Congleton West
- Poynton East and Pott Shrigley
- Farndon

Accommodation and food services employment in Cheshire and Warrington, by ward, 2021
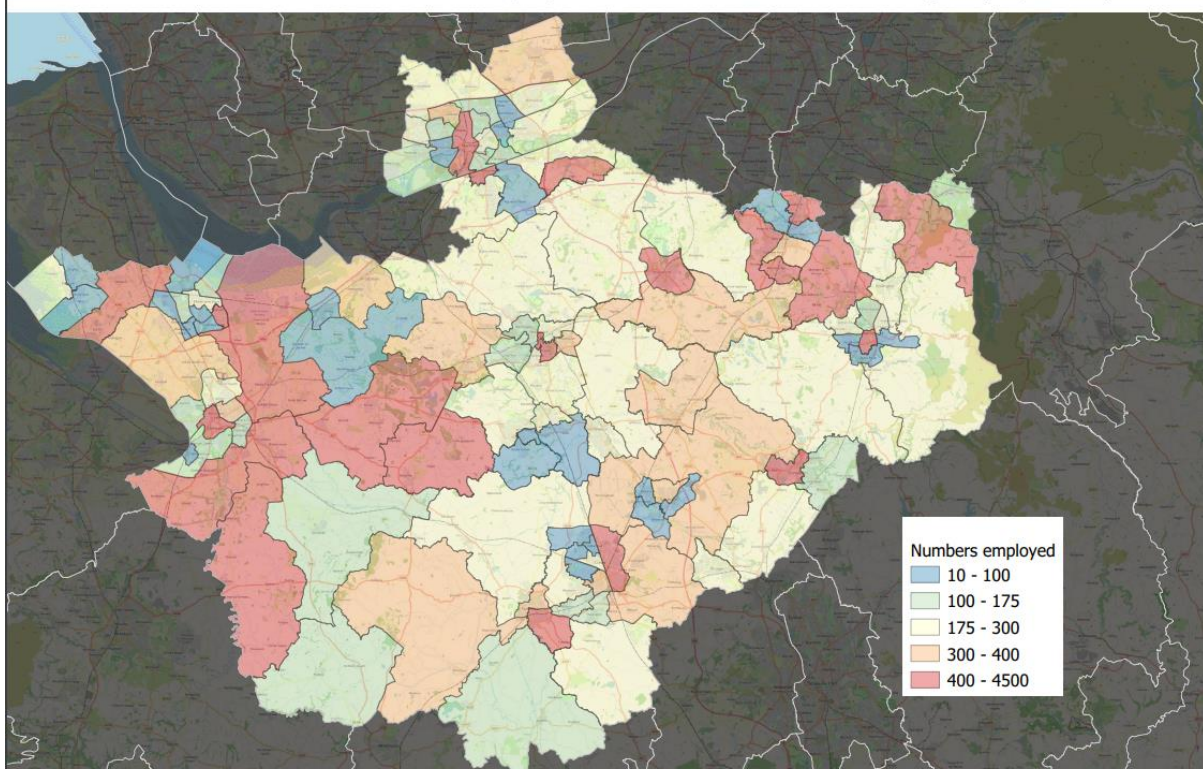
Numbers employed
- 10 - 100
- 100 - 175
- 175 - 300
- 300 - 400
- 400 - 4500

Map by Brennan Wilson Ltd in QGIS. Data from BRES/NOMIS, 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 ranged from £11,894 in the 'Restaurants and Mobile Food Service Activities' subsector to £28,304in the 'Other Accommodation'

subsector. At 1371, the 'Restaurants and Mobile Food Service Activities' subsector had the highest number of employers.

In 2022, the 'Event Catering and Other Food Service Activities', '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 0.83, 0.11, 0.49, 0.48 and 0.73 respectively). Whilst the 'Beverage Serving Activities' and the 'Hotels and Similar Accommodation' subsectors employed more (LQ of 1.23 and 1.16 respectively).

Accommodation and Food services subsectors in C&W, 2022				
Description	2022 LQ	2022 Jobs	Avg. Wages Per Job	2021 Establishments
Accommodation and Food Service Activities	0.91	31828	14012	2872
Hotels and Similar Accommodation	1.16	6018	19360	191
Holiday and Other Short-stay Accommodation	0.11	76	21121	50
Camping Grounds, Recreational Vehicle Parks and Trailer Parks	0.49	292	24084	32
Other Accommodation	0.48	71	28304	16
Restaurants and Mobile Food Service Activities	0.73	11852	11894	1371
Event Catering and Other Food Service Activities	0.83	3175	14899	445
Beverage Serving Activities	1.23	10344	12567	767
Source: Lightcast Analyst, Jan 2023				

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 £7.13 (Waiters and Waitresses) to £11.44 (Restaurant and Catering Establishment Managers and Proprietors).

Top 10 occupations linked to the Accommodation and Food Services sector in C&W, 2022			
	Employed in Industry (2022)	Median Hourly Wages	Education Level
Kitchen and Catering Assistants	5781	8.91	Level 2
Bar Staff	5239	7.88	Level 2
Waiters and Waitresses	4559	7.13	Level 2
Chefs	3740	9	Level 2
Cleaners and Domestics	1460	9.23	Level 1
Restaurant and Catering Establishment Managers and Proprietors	1318	11.44	Level 3
Catering and Bar Managers	864	9.64	Level 2
Sales and Retail Assistants	829	9.59	Level 2
Publicans and Managers of Licensed Premises	721	10.44	Level 2
Cooks	640	9.34	Level 2
Source: Lightcast Analyst, Jan 2023			

Analysis of EMSI Job postings for the occupations above in 2022 (table below) indicates that there was an average posting intensity for these roles of 3:1 in this period, which is the same as for the economy as a whole.

Job postings for top occupations in the Accommodation and Food sector in Cheshire and Warrington, 2022		
Occupation	Unique Postings from Jan 2022 - Dec 2022	Avg. Posting Intensity (Jan 2022 - Dec 2022)
Restaurant and Catering Establishment Managers and Proprietors	280	2 : 1
Publicans and Managers of Licensed Premises	13	1 : 1
Chefs	2330	2 : 1
Cooks	216	2 : 1
Catering and Bar Managers	570	2 : 1
Sales and Retail Assistants	1847	3 : 1
Cleaners and Domestics	2440	3 : 1
Kitchen and Catering Assistants	3041	3 : 1
Waiters and Waitresses	756	3 : 1
Bar Staff	577	2 : 1
Total across these Occupations	12070	3 : 1
Source: Lightcast Analyst, Jan 2023		

Focus on Information and Communication

The Information and Communication sector employed 19,000 people in Cheshire and Warrington in 2022. The sector employed a lower percentage of the workforce than is the case nationally with a Location Quotient (LQ) of 0.84 in 2022. The average wage per job in the sector was £41,000 and it contributed 4% to Cheshire and Warrington's GVA.

The following wards all employed over 500 people in the Information and Communication sector in 2021:

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

Information and Communication employment in Cheshire and Warrington, by ward, 2021
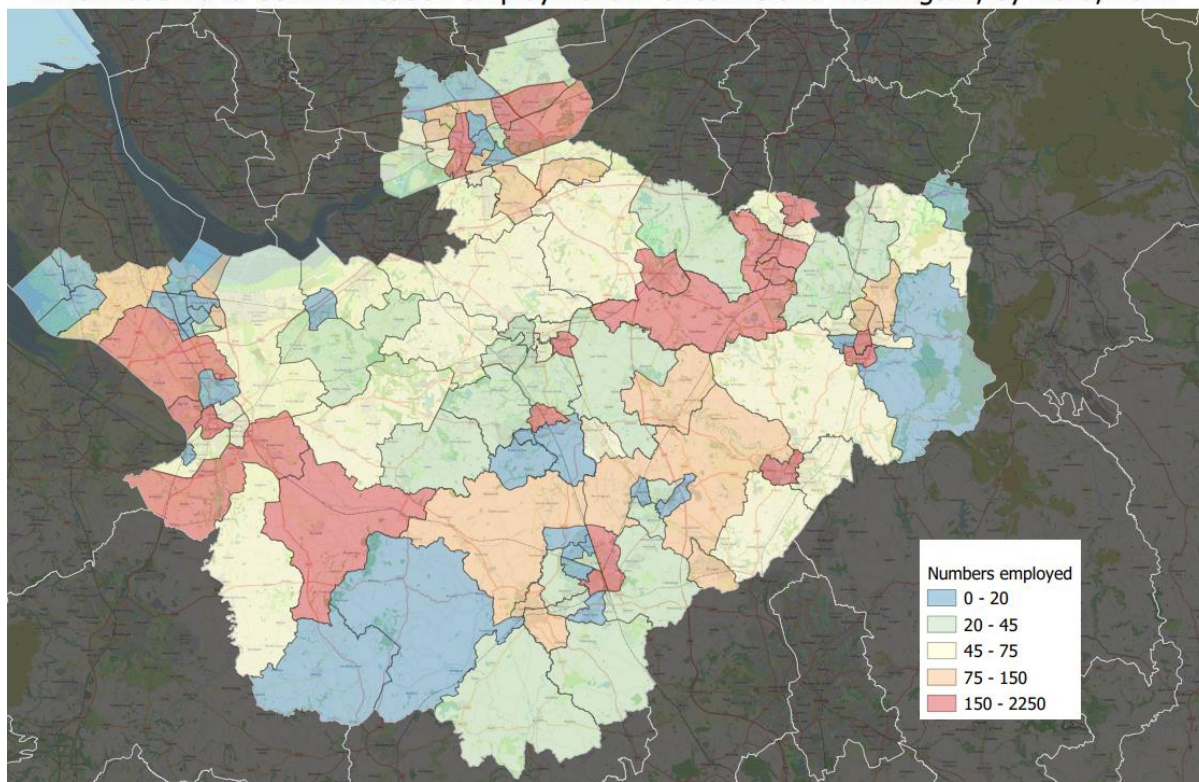
Map by Brennan Wilson Ltd in QGIS. Data from BRES/NOMIS, OS and OpenStreetMap

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 £40,821, with average wages ranging from £18,611in the 'Motion Picture, Video and Television Programme Production, Sound Recording and Music Publishing Activities' subsector to £43,015in the 'Computer Programming, Consultancy and Related Activities' subsector. At 2407, 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, excepting the 'Computer Programming, Consultancy and Related Activities' subsector, is underrepresented in Cheshire and Warrington.

Information & Communication subsectors in C&W, 2022				
	2022 LQ	2022 Jobs	Avg. Wage (£)	2021 Establishments
All Information and Communication	0.84	19038	40821	3066
Publishing Activities	0.42	733	28940	146
Motion Picture, Video and Television Programme Production, Sound Recording and Music Publishing Activities	0.20	451	18611	171
Programming and Broadcasting Activities	0.07	44	28583	24
Telecommunications	0.62	2196	41726	177
Computer Programming, Consultancy and Related Activities	1.11	14602	43015	2407
Information Service Activities	0.76	1012	26517	141
Source: Lightcast Analyst, Jan 2023				

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 almost 60% of all employment in the sector. Hourly wages for these occupations range from £12.97 (IT User Support Technicians) to £27.96 (Information Technology and Telecommunications Directors).

Top 10 occupations linked to the Information & Communication sector in C&W, 2022			
	Employed in Industry (2022)	Median Hourly Wages	Education Level
Programmers and Software Development Professionals	3010	23.19	Bachelor's degree
Information Technology and Telecommunications Professionals n.e.c.	1827	20.41	Bachelor's degree
IT Specialist Managers	1259	20.7	Bachelor's degree
IT Business Analysts, Architects and Systems Designers	940	23.45	Bachelor's degree
Sales Accounts and Business Development Managers	915	21.42	Bachelor's degree
Information Technology and Telecommunications Directors	698	27.96	Bachelor's degree
IT Project and Programme Managers	689	27.06	Bachelor's degree
Web Design and Development Professionals	592	16.71	Bachelor's degree
IT User Support Technicians	572	12.97	Level 3
IT Operations Technicians	565	15.62	Level 3
Source: Lightcast Analyst, Jan 2023			

Analysis of EMSI Job postings for the occupations above in 2022 (table below) indicates that there was an average posting intensity for these roles of 2:1 in this period, which was lower than the economy as a whole. This suggests that employers found it easier to fill roles in this sector than elsewhere.

Job postings for top occupations in the Information & Communication sector in Cheshire and Warrington, 2022		
Occupation	Unique Postings from Jan 2022 - Dec 2022	Avg. Posting Intensity (Jan 2022 - Dec 2022)
Information Technology and Telecommunications Directors	227	2 : 1
IT Specialist Managers	107	3 : 1
IT Project and Programme Managers	732	2 : 1
IT Business Analysts, Architects and Systems Designers	2082	2 : 1
Programmers and Software Development Professionals	4048	3 : 1
Web Design and Development Professionals	787	2 : 1
Information Technology and Telecommunications Professionals n.e.c.	966	2 : 1
IT Operations Technicians	1073	2 : 1
IT User Support Technicians	1891	2 : 1
Sales Accounts and Business Development Managers	558	2 : 1
Total across these Occupations	12471	2 : 1
Source: Lightcast Analyst, Jan 2023		

Focus on Financial and Insurance services

The Financial and Insurance services sector employed 21,000 people in Cheshire and Warrington in 2022. The sector employed a higher percentage of the workforce than is the case nationally with a Location Quotient (LQ) of 1.25 in 2022. The average wage per job in the sector was £35,000 and it contributed 9% to Cheshire and Warrington's GVA.

The following wards all employed over 1000 people in the Financial and Insurance services sector in 2021:

- Christleton & Huntington
- Chelford
- Wistaston
- Crewe East
- Rudheath
- Chester City & the Garden Quarter
- Bewsey and Whitecross
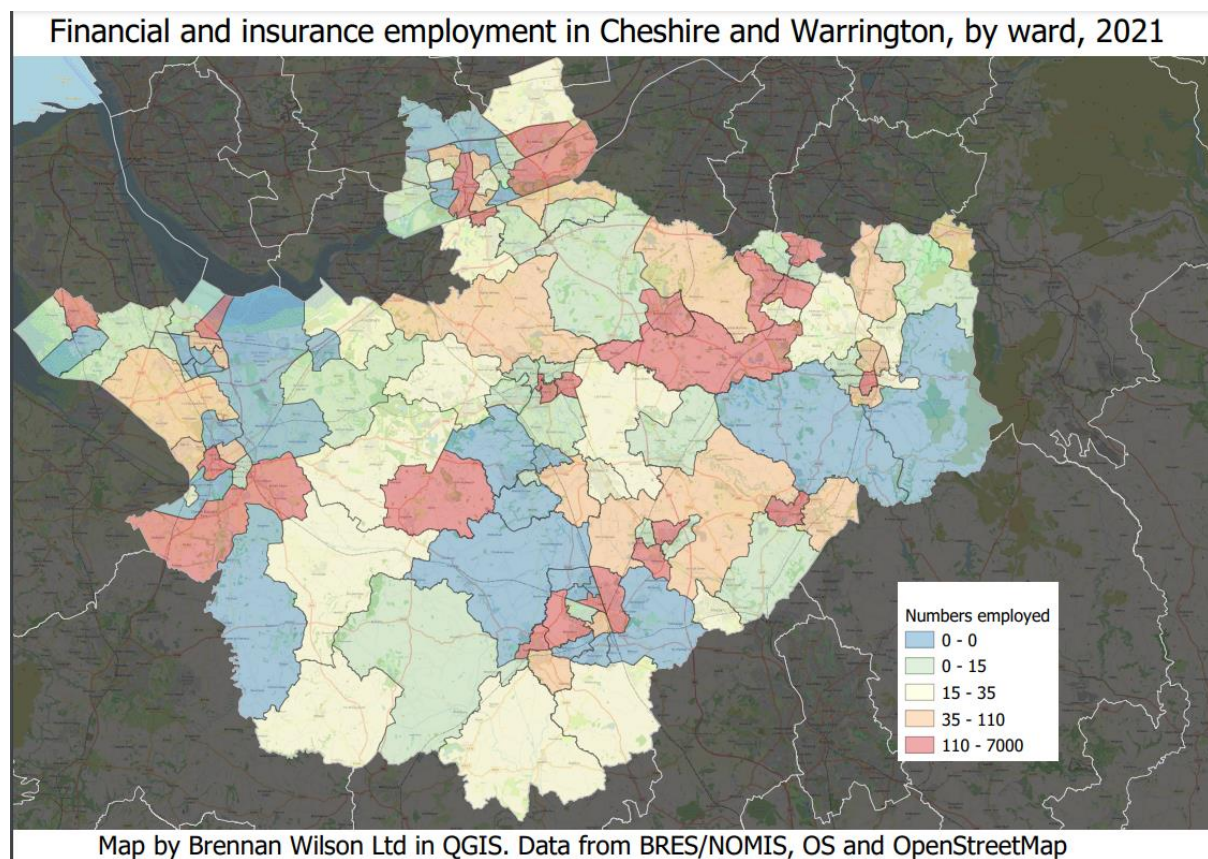
Financial and insurance employment in Cheshire and Warrington, by ward, 2021

Numbers employed
- 0 - 0
- 0 - 15
- 15 - 35
- 35 - 110
- 110 - 7000

Map by Brennan Wilson Ltd in QGIS. Data from BRES/NOMIS, 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 £34,969, with average wages ranging from £33,626 in the 'Insurance, Reinsurance and Pension Funding, Except Compulsory Social Security' subsector to £38,553 in the 'Activities Auxiliary to Financial Services and Insurance Activities' subsector. At 621, the 'Activities Auxiliary to Financial Services and Insurance Activities' subsector had the highest number of employers.

In 2022, 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 0.26 and 0.71 respectively). By contrast, the 'Financial Service Activities, Except Insurance and Pension Funding' subsector employed double the national proportion (LQ of 2).

Finance & Insurance subsectors in C&W, 2022				
Description	2022 LQ	2022 Jobs	Avg. Wages Per Job (£)	2021 Establishments
All Financial and Insurance Activities	1.25	21397	34969	1056
Financial Service Activities, Except Insurance and Pension Funding	2.00	15630	33763	409
Insurance, Reinsurance and Pension Funding, Except Compulsory Social Security	0.26	495	33626	26
Activities Auxiliary to Financial Services and Insurance Activities	0.71	5272	38553	621
Source: Lightcast Analyst, Jan 2023				

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 £10.22 (Customer Service Occupations n.e.c.) to £27.68 (Financial Managers and Directors).

Top 10 occupations linked to the Finance & Insurance sector in C&W, 2022			
	Employed in Industry (2022)	Median Hourly Wages	Education Level
Bank and Post Office Clerks	3121	10.74	Level 2 NVQ; GCSE at grades A*-C
Finance and Investment Analysts and Advisers	1508	15.81	Honours, Bachelor's degree
Financial Institution Managers and Directors	1490	17.21	Honours, Bachelor's degree
Financial Accounts Managers	1120	17.58	Honours, Bachelor's degree
Financial Administrative Occupations n.e.c.	852	11	Level 2 NVQ; GCSE at grades A*-C
Financial Managers and Directors	797	27.68	Honours, Bachelor's degree
Other Administrative Occupations n.e.c.	746	11.29	Level 2 NVQ; GCSE at grades A*-C
Business and Financial Project Management Professionals	743	23.79	Honours, Bachelor's degree
Customer Service Occupations n.e.c.	707	10.22	Level 2 NVQ; GCSE at grades A*-C
Call and Contact Centre Occupations	520	10.77	Level 3 NVQ; A Levels
Source: Lightcast Analyst, Jan 2023			

Analysis of EMSI Job postings for the occupations above in 2022 (table below) indicates that there was an average posting intensity for these roles of 2:1 in this period, this was slightly lower than for the economy as a whole, which suggests that employers found it easier to fill these types of roles than other types of occupations.

Job postings for top occupations in the Finance & insurance sector in Cheshire and Warrington, 2022		
Occupation	Unique Postings from Jan 2022 - Dec 2022	Avg. Posting Intensity (Jan 2022 - Dec 2022)
Financial Managers and Directors	1172	2 : 1
Financial Institution Managers and Directors	13	3 : 1
Business and Financial Project Management Professionals	1265	2 : 1
Finance and Investment Analysts and Advisers	1329	2 : 1
Financial Accounts Managers	223	2 : 1
Bank and Post Office Clerks	233	2 : 1
Financial Administrative Occupations n.e.c.	798	2 : 1
Other Administrative Occupations n.e.c.	4821	2 : 1
Call and Contact Centre Occupations	200	2 : 1
Customer Service Occupations n.e.c.	4906	3 : 1
Total across these occupations	14960	2 : 1
Source: Lightcast Analyst, Jan 2023		

Focus on Professional, Scientific and Technical services

The Professional, Scientific and Technical services sector employed 73,000 people in Cheshire and Warrington in 2022. The sector employed a higher percentage of the workforce than is the case nationally with a Location Quotient (LQ) of 1.63 in 2022. The average wage per job in the sector was £34,000 and it contributed 12% to Cheshire and Warrington's GVA.

The following wards all employed over 1000 people in the Professional, Scientific and Technical services sector in 2021:

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

Professional, scientific and technical employment in Cheshire and Warrington, by ward, 2021
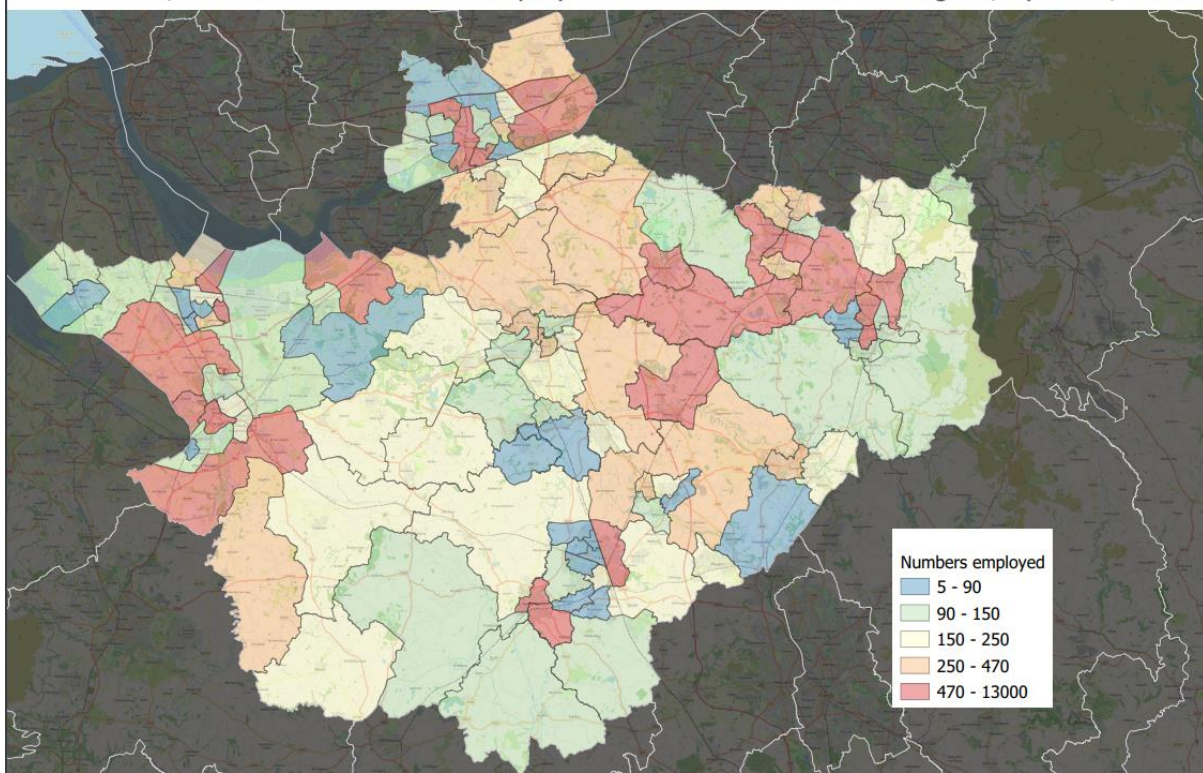
Numbers employed
- 5 - 90
- 90 - 150
- 150 - 250
- 250 - 470
- 470 - 13000

Map by Brennan Wilson Ltd in QGIS. Data from BRES/NOMIS, 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 £34,050, with average wages ranging from £23,199 in the 'Veterinary Activities' subsector to £40,590in the 'Architectural and Engineering Activities; Technical Testing and Analysis' subsector. At 3642, the 'Activities of Head Offices; Management Consultancy Activities' subsector had the highest number of employers.

In 2022, 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 0.59 and 0.76 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 2.86, 1.15, 1.21, 1.02, 1.89 respectively).

Professional, Scientific and Technical subsectors in C&W, 2022				
	2022 LQ	2022 Jobs	Avg. Wages Per Job (£)	2021 Establishments
All Professional, Scientific and Technical Activities	1.63	73195	34050	9454
Legal and Accounting Activities	2.86	37835	30477	1183
Activities of Head Offices; Management Consultancy Activities	1.15	15055	38982	3642
Architectural and Engineering Activities; Technical Testing and Analysis	1.21	11416	40590	2599
Scientific Research and Development	0.59	1434	38774	126
Advertising and Market Research	0.76	1755	35453	398
Other Professional, Scientific and Technical Activities	1.02	3241	31326	1323
Veterinary Activities	1.89	2459	23199	183
Source: Lightcast Analyst, Jan 2023				

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 almost half of all employment in the sector. Hourly wages for these occupations range from £11 (Financial Administrative Occupations n.e.c.) to £27.68 (Financial Managers and Directors).

Top 10 occupations linked to the Professional, Scientific and Technical sector in C&W, 2022			
	Employed in Industry (2022)	Median Hourly Wages	Education Level
Book-keepers, Payroll Managers and Wages Clerks	12151	12.59	Level 2 NVQ; GCSE at grades A*-C
Chartered and Certified Accountants	5898	21.99	Honours, Bachelor's degree
Other Administrative Occupations n.e.c.	3620	11.29	Level 2 NVQ; GCSE at grades A*-C
Management Consultants and Business Analysts	1951	19.69	Honours, Bachelor's degree
Taxation Experts	2032	18.91	Honours, Bachelor's degree
Sales Accounts and Business Development Managers	1924	21.42	Honours, Bachelor's degree
Financial Managers and Directors	1903	27.68	Honours, Bachelor's degree
Personal Assistants and Other Secretaries	1725	11.34	Level 2 NVQ; GCSE at grades A*-C
Financial Accounts Managers	1706	17.58	Honours, Bachelor's degree
Financial Administrative Occupations n.e.c.	1451	11	Level 2 NVQ; GCSE at grades A*-C
Source: Lightcast Analyst, Jan 2023			

Analysis of EMSI Job postings for the occupations above in 2022 (table below) indicates that there was an average posting intensity for these roles of 2:1 in this period, which was lower than for for the economy as a whole, suggesting that employers found it easier to appoint to these type of roles than others.

Job postings for top occupations in the professional, Technical and Scientific sector in Cheshire and Warrington, 2022		
Occupation	Unique Postings from Jan 2022 - Dec 2022	Avg. Posting Intensity (Jan 2022 - Dec 2022)
Financial Managers and Directors	1172	2 : 1
Chartered and Certified Accountants	2262	2 : 1
Management Consultants and Business Analysts	1758	2 : 1
Taxation Experts	150	2 : 1
Financial Accounts Managers	223	2 : 1
Sales Accounts and Business Development Managers	558	2 : 1
Book-keepers, Payroll Managers and Wages Clerks	3174	2 : 1
Financial Administrative Occupations n.e.c.	798	2 : 1
Other Administrative Occupations n.e.c.	4821	2 : 1
Personal Assistants and Other Secretaries	511	2 : 1
Total across these occupations	15427	2 : 1
Source: Lightcast Analyst, Jan 2023		

Focus on Business Administration and Support Services

The Business Administration and Support services sector employed 53,000 people in Cheshire and Warrington in 2022. The sector employed a higher percentage of the workforce than is the case nationally with a Location Quotient (LQ) of 1.17 in 2022. The average wage per job in the sector was £24,000 and it contributed 8% to Cheshire and Warrington's GVA.

The following wards all employed over 1000 people in the Business Administration and Support services sector in 2021:

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

Business administration and support sservices employment in C&W, by ward, 2021
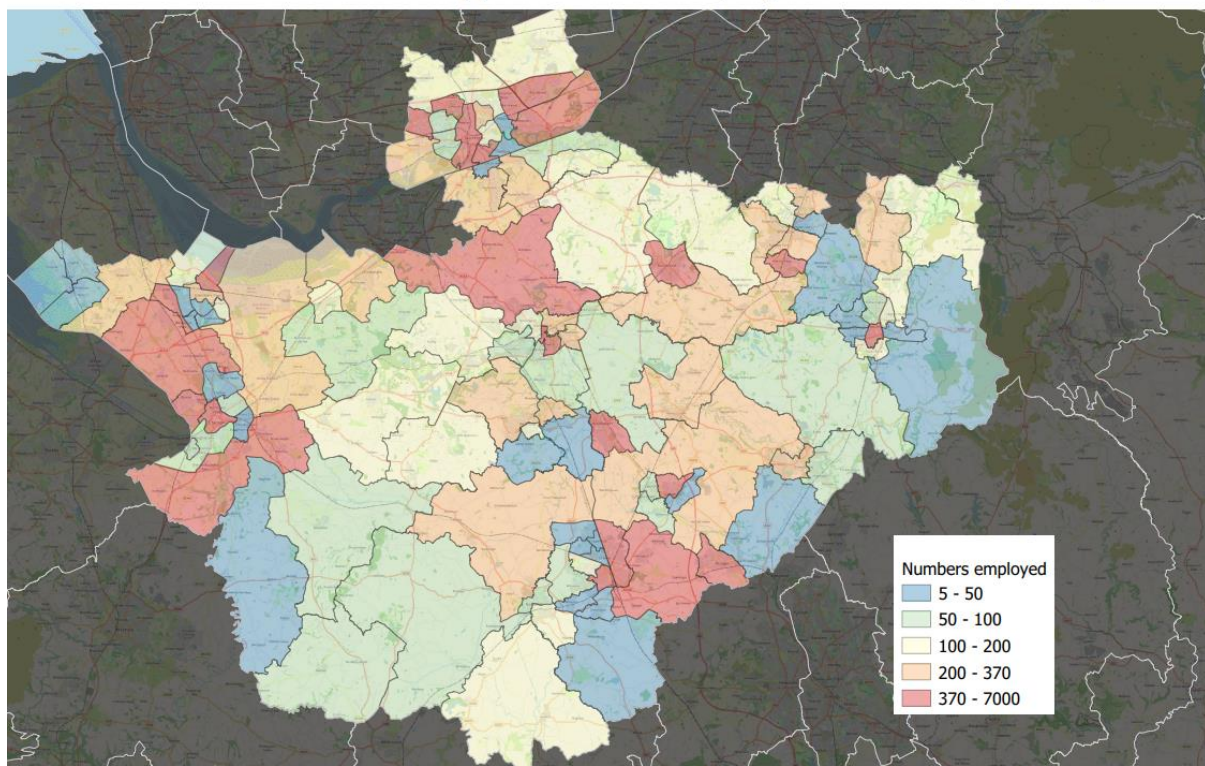
Numbers employed
- 5 - 50
- 50 - 100
- 100 - 200
- 200 - 370
- 370 - 7000

Map by Brennan Wilson Ltd in QGIS. Data from BRES/NOMIS, 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 £24,227, with average wages ranging from £18,672 in the 'Services to Buildings and Landscape Activities' subsector to £34,855 in the 'Rental and Leasing Activities' subsector. At 2077, the 'Office Administrative, Office Support and Other Business Support Activities' subsector had the highest number of employers.

In 2022, the 'Rental and Leasing Activities', 'Security and Investigation Activities', and 'Office Administrative, Office Support and Other Business Support Activities' subsectors employed a smaller proportion of the workforce than would be expected from the national distribution (LQs of 0.76, 0.66, and 0.76 respectively). The 'Services to Buildings and Landscape Activities' subsector employed 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 more (LQs of 1.70 and 1.62 respectively).

Administration and support services subsectors in C&W, 2022				
	2022 LQ	2022 Jobs	Avg. Wages Per Job (£)	2021 Establishments
All Administrative and Support Service Activities	1.17	53124	24227	4805
Rental and Leasing Activities	0.76	2126	34855	385
Employment Activities	1.70	26712	24449	847
Travel Agency, Tour Operator and Other Reservation Service and Related Activities	1.62	2216	24564	170
Security and Investigation Activities	0.66	2362	23912	172
Services to Buildings and Landscape Activities	1.00	12608	18672	1153
Office Administrative, Office Support and Other Business Support Activities	0.76	7100	29676	2077
Source: Lightcast Analyst, Jan 2023				

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 £9.23 (Cleaners and Domestics) to £23.9 (Human Resource Managers and Directors).

Top 10 occupations linked to the Administration & support services sector in C&W, 2022			
Description	Employed in Industry (2022)	Median Hourly Wages	Education Level
Cleaners and Domestics	4273	9.23	Level 1 NVQ; GCSE at grades D-G
Human Resources and Industrial Relations Officers	3699	13.21	Honours, Bachelor's degree
Elementary Storage Occupations	2042	10.51	Level 1 NVQ; GCSE at grades D-G
Security Guards and Related Occupations	1754	10.21	Level 2 NVQ; GCSE at grades A*-C
Other Administrative Occupations n.e.c.	1738	11.29	Level 2 NVQ; GCSE at grades A*-C
Gardeners and Landscape Gardeners	1677	10.99	Level 2 NVQ; GCSE at grades A*-C
Care Workers and Home Carers	1483	9.81	Level 2 NVQ; GCSE at grades A*-C
Nurses	1158	18.84	Honours, Bachelor's degree
Human Resource Managers and Directors	1169	23.9	Honours, Bachelor's degree
Book-keepers, Payroll Managers and Wages Clerks	957	12.59	Level 2 NVQ; GCSE at grades A*-C
Source: Lightcast Analyst, Jan 2023			

Analysis of EMSI Job postings for the occupations above in 2022 (table below) indicates that there was an average posting intensity for these roles of 4:1 in this period, which is higher than for the economy as a whole, indicating that employers needed to try harder to fill some of these roles than is generally the case. In particular, Nurses (7:1), Care Workers and Home Carers (4:1) and Elementary Storage Occupations (4:1) had a higher-than-average posting intensity.

Job postings in top occupations in the Administration & Support services sector in Cheshire and Warrington, 2022		
Occupation	Unique Postings from Jan 2022 - Dec 2022	Avg. Posting Intensity (Jan 2022 - Dec 2022)
Human Resource Managers and Directors	353	2 : 1
Nurses	6375	7 : 1
Primary and Nursery Education Teaching Professionals	1128	3 : 1
Human Resources and Industrial Relations Officers	2680	2 : 1
Other Administrative Occupations n.e.c.	4821	2 : 1
Gardeners and Landscape Gardeners	133	2 : 1
Care Workers and Home Carers	7033	4 : 1
Cleaners and Domestics	2440	3 : 1
Security Guards and Related Occupations	704	2 : 1
Elementary Storage Occupations	3027	4 : 1
Total across all these occupations	28694	4 : 1
Source: Lightcast Analyst, Jan 2023		

Focus on Public Administration and Defence

The Public Administration and Defence sector employed 53,000 people in Cheshire and Warrington in 2022. The sector employed a lower percentage of the workforce than is the case nationally with a Location Quotient (LQ) of 0.64 in 2022. The average wage per job in the sector was £31,000 and it contributed 3% to Cheshire and Warrington's GVA.

The following wards all employed over 1000 people in the Public Administration and Defence sector in 2021:

- Bewsey and Whitecross
- Winsford Over & Verdin
- Crewe East
- Chester City & the Garden Quarter
- Central & Grange
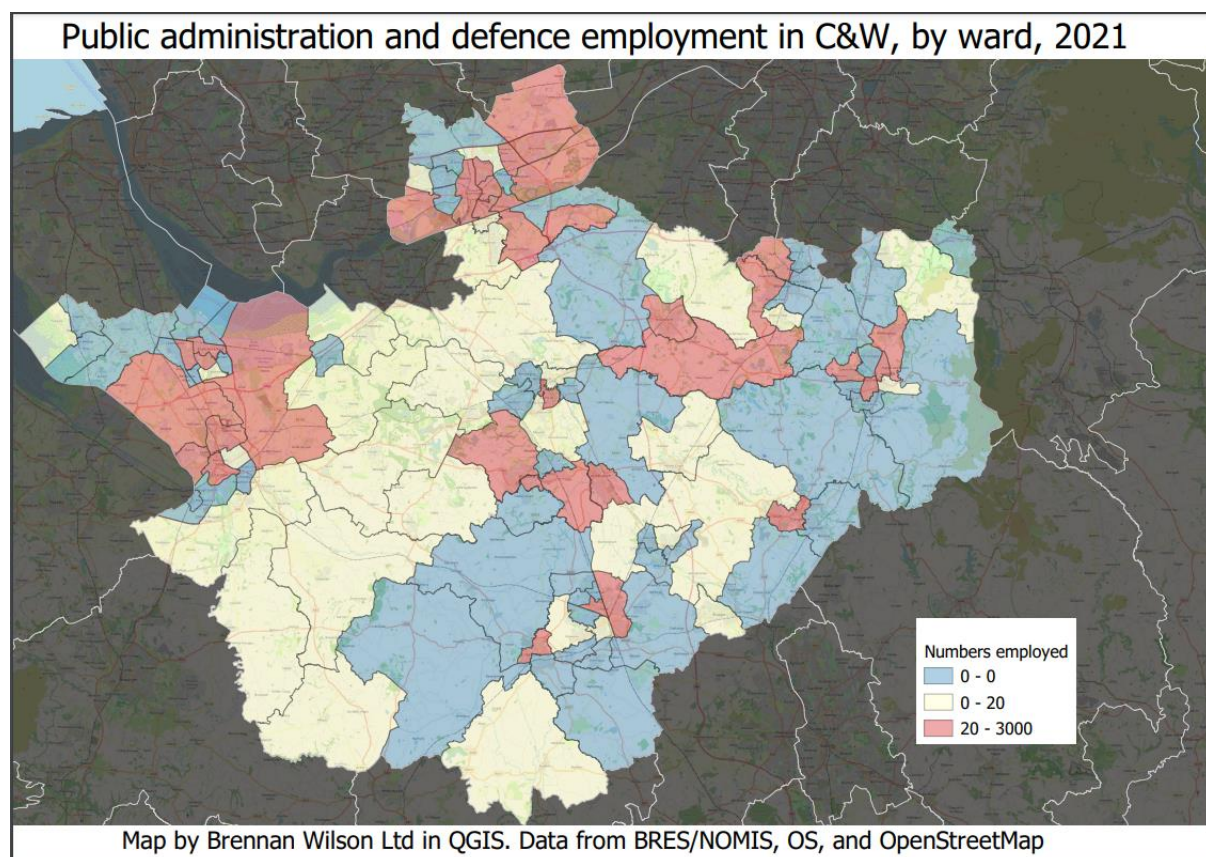
Public administration and defence employment in C&W, by ward, 2021

Numbers employed
0 - 0
0 - 20
20 - 3000

Map by Brennan Wilson Ltd in QGIS. Data from BRES/NOMIS, 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 £30,662, with average wages ranging from £20,407 in the 'Compulsory Social Security Activities' subsector to £33,671 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, 2022				
	2022 LQ	2022 Jobs	Avg. Wages Per Job (£)	2021 Establishments
All Public Administration and Defence; Compulsory Social Security	0.64	15642	30662	346
Administration of the State and the Economic and Social Policy of the Community	0.52	8148	28921	260
Provision of Services to the Community As a Whole	0.84	6853	33671	83
Compulsory Social Security Activities	0.81	642	20407	2
Source: Lightcast Analyst, Jan 2023				

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 over 40% of all employment in the sector. Hourly wages for these occupations range from £10.21 (Security Guards and Related Occupations) to £21.22 (Solicitors).

Top 10 occupations linked to the Public Administration & Defence sector in C&W, 2022			
	Employed in Industry (2022)	Median Hourly Wages	Education Level
Police Officers (Sergeant and Below)	1899	19.8	Level 3 NVQ; A Levels
National Government Administrative Occupations	1412	12.78	Level 2 NVQ; GCSE at grades A*-C
Local Government Administrative Occupations	836	13.52	Level 3 NVQ; A Levels
Other Administrative Occupations n.e.c.	567	11.29	Level 2 NVQ; GCSE at grades A*-C
Fire Service Officers (Watch Manager and Below)	479	17.06	Level 2 NVQ; GCSE at grades A*-C
Public Services Associate Professionals	401	17.78	Level 3 NVQ; A Levels
Prison Service Officers (Below Principal Officer)	338	15.65	Level 3 NVQ; A Levels
Security Guards and Related Occupations	288	10.21	Level 2 NVQ; GCSE at grades A*-C
Solicitors	267	21.22	Honours, Bachelor's degree
Legal Associate Professionals	264	11.52	Honours, Bachelor's degree
Source: Lightcast Analyst, Jan 2023			

Analysis of EMSI Job postings for the occupations above in 2022 (table below) indicates that there was an average posting intensity for these roles of 3:1 in this period, which is the same as for the economy as a whole. Prison Service Officers (below Principal Officer) had a higher-than-average posting intensity (suggesting employers may find it harder to fill these roles).

Job postings for top occupations in the Public Administration & Defence sector in C&W, 2022		
Occupation	Unique Postings from Jan 2022 - Dec 2022	Avg. Posting Intensity (Jan 2022 - Dec 2022)
Solicitors	838	3 : 1
Police Officers (Sergeant and Below)	133	2 : 1
Fire Service Officers (Watch Manager and Below)	40	2 : 1
Prison Service Officers (Below Principal Officer)	230	4 : 1
Legal Associate Professionals	455	3 : 1
Public Services Associate Professionals	70	3 : 1
National Government Administrative Occupations	68	2 : 1
Local Government Administrative Occupations	44	2 : 1
Other Administrative Occupations n.e.c.	4821	2 : 1
Security Guards and Related Occupations	704	2 : 1
Total across all these occupations	7403	3 : 1
Source: Lightcast Analyst, Jan 2023		

Focus on Education

The Education sector employed 33,000 people in Cheshire and Warrington in 2022. The sector employed a lower percentage of the workforce than is the case nationally with a Location Quotient (LQ) of 0.73 in 2022. The average wage per job in the sector was £26,000 and it contributed 3% to Cheshire and Warrington's GVA.

The following wards all employed over 500 people in the Education sector in 2021:

- Chester City & the Garden Quarter
- Whitby Park
- Hartford & Greenbank
- Christleton & Huntington
- Crewe West
- Orford
- Bunbury
- Winsford Over & Verdin

Education employment in Cheshire and Warrington, by ward, 2021

Numbers employed
- 0 - 75
- 75 - 175
- 175 - 250
- 250 - 400
- 400 - 2500

Map by Brennan Wilson Ltd in QGIS. Data from BRES/NOMIS, 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 £ £26,244, with average wages ranging from £14,605 in the 'Pre-primary education' subsector to £33,846 in the 'Higher Education' subsector. At 468, the 'Other Education' subsector had the highest number of employers. In 2022, all subsectors employed a smaller proportion of the local workforce than would be expected from the national distribution.

Education subsectors in C&W, 2022				
	2022 Location Quotient	2022 Jobs	Avg. Wages Per Job	2021 Establishments
All Education	0.73	33361	26244	1150
Pre-primary Education	0.88	1178	14605	100
Primary Education	0.85	14563	25087	365
Secondary Education	0.84	10988	28062	118
Higher Education	0.28	2444	33846	16
Other Education	0.84	3838	24022	468
Educational Support Activities	0.61	351	27164	83
Source: Lightcast Analyst, Jan 2023				

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 £8.91 (Kitchen and Catering Assistants) to £34.8 (Senior Professionals of Educational Establishments).

Top 10 occupations linked to the Education sector in C&W, 2022			
	Employed in Industry (2022)	Median Hourly Wages	Education Level
Primary and Nursery Education Teaching Professionals	5126	22.83	Honours, Bachelor's degree
Teaching Assistants	4438	10.46	Level 2 NVQ; GCSE at grades A*-C
Secondary Education Teaching Professionals	4252	25.07	Level 5 NVQ; Masters
Educational Support Assistants	1740	10.19	Level 2 NVQ; GCSE at grades A*-C
Further Education Teaching Professionals	1204	19.05	Level 5 NVQ; Masters
School Midday and Crossing Patrol Occupations	1081	9.68	Level 2 NVQ; GCSE at grades A*-C
Teaching and Other Educational Professionals n.e.c.	1016	15.75	Honours, Bachelor's degree
Senior Professionals of Educational Establishments	944	34.8	Honours, Bachelor's degree
Kitchen and Catering Assistants	866	8.91	Level 2 NVQ; GCSE at grades A*-C
Higher Education Teaching Professionals	855	27.9	Level 5 NVQ; Masters
Source: Lightcast Analyst, Jan 2023			

Analysis of EMSI Job postings for the occupations above in 2022 (table below) indicates that there was an average posting intensity for these roles of 3:1 in this period, which is the same as for the economy as a whole.

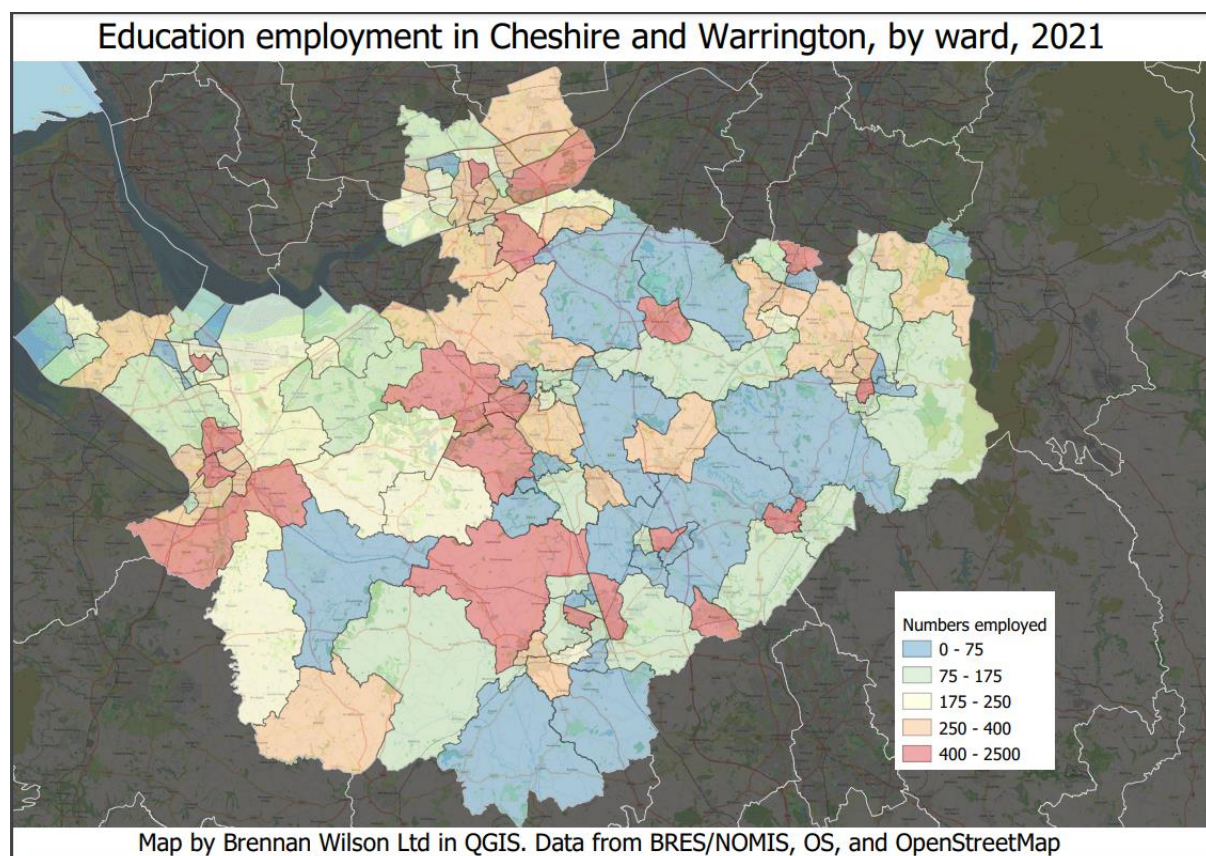| Job postings for top occupations in the Education sector in Cheshire and Warrington, 2022		
Occupation	Unique Postings from Jan 2022 - Dec 2022	Avg. Posting Intensity (Jan 2022 - Dec 2022)
Higher Education Teaching Professionals	539	2 : 1
Further Education Teaching Professionals	58	2 : 1
Secondary Education Teaching Professionals	1124	3 : 1
Primary and Nursery Education Teaching Professionals	1128	3 : 1
Senior Professionals of Educational Establishments	355	2 : 1
Teaching and Other Educational Professionals n.e.c.	1383	3 : 1
Teaching Assistants	2499	3 : 1
Educational Support Assistants	217	2 : 1
School Midday and Crossing Patrol Occupations	21	2 : 1
Kitchen and Catering Assistants	3041	3 : 1
Total across these occupations	10365	3 : 1
Source: Lightcast Analyst, Jan 2023		

Focus on Health

The Health sector employed 58,000 people in Cheshire and Warrington in 2022. The sector employed a lower percentage of the workforce than is the case nationally with a Location Quotient (LQ) of 0.72 in 2022. The average wage per job in the sector was £27,000 and it contributed 6% to Cheshire and Warrington's GVA.

The following wards all employed over 1000 people in the Health sector in 2021:

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

Health employment in Cheshire and Warrington, by ward, 2021

Numbers employed
- 0 - 115
- 115 - 200
- 200 - 300
- 300 - 450
- 450 - 7000

Map by Brennan Wilson Ltd in QGIS. Data from BRES/NOMIS, 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 £26,762, with average wages ranging from £17, 794 in the 'Social Work Activities Without Accommodation' subsector to £30,836 in the 'Human Health Activities' subsector. At 1257, 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, 2022				
	2022 Location Quotient	2022 Jobs	Avg. Wages Per Job	2021 Establishments
All Human Health and Social Work Activities	0.82	58385	26762	2414
Human Health Activities	0.86	38080	30836	1257
Residential Care Activities	0.85	10639	20900	436
Social Work Activities Without Accommodation	0.67	9666	17794	721
Source: Lightcast Analyst, Jan 2023				

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 £9.23 (Cleaners and Domestics) to £24.08 (Medical Practitioners).

Top 10 occupations linked to the Health sector in C&W, 2022			
Description	Employed in Industry (2022)	Median Hourly Wages	Education Level
Nurses	9553	18.84	Honours, Bachelor's degree
Care Workers and Home Carers	9172	9.81	Level 2 NVQ; GCSE at grades A*-C
Nursing Auxiliaries and Assistants	4942	10.81	Level 3 NVQ; A Levels
Medical Practitioners	3483	24.08	Honours, Bachelor's degree
Cleaners and Domestics	1644	9.23	Level 1 NVQ; GCSE at grades D-G
Other Administrative Occupations n.e.c.	1559	11.29	Level 2 NVQ; GCSE at grades A*-C
Nursery Nurses and Assistants	1385	9.3	Level 2 NVQ; GCSE at grades A*-C
Receptionists	1388	9.66	Level 2 NVQ; GCSE at grades A*-C
Medical Secretaries	955	10.86	Level 3 NVQ; A Levels
Senior Care Workers	928	10.73	Level 3 NVQ; A Levels
Source: Lightcast Analyst, Jan 2023			

Analysis of EMSI Job postings for the occupations above in 2022 (table below) indicates that there was an average posting intensity for these roles of 4:1 in 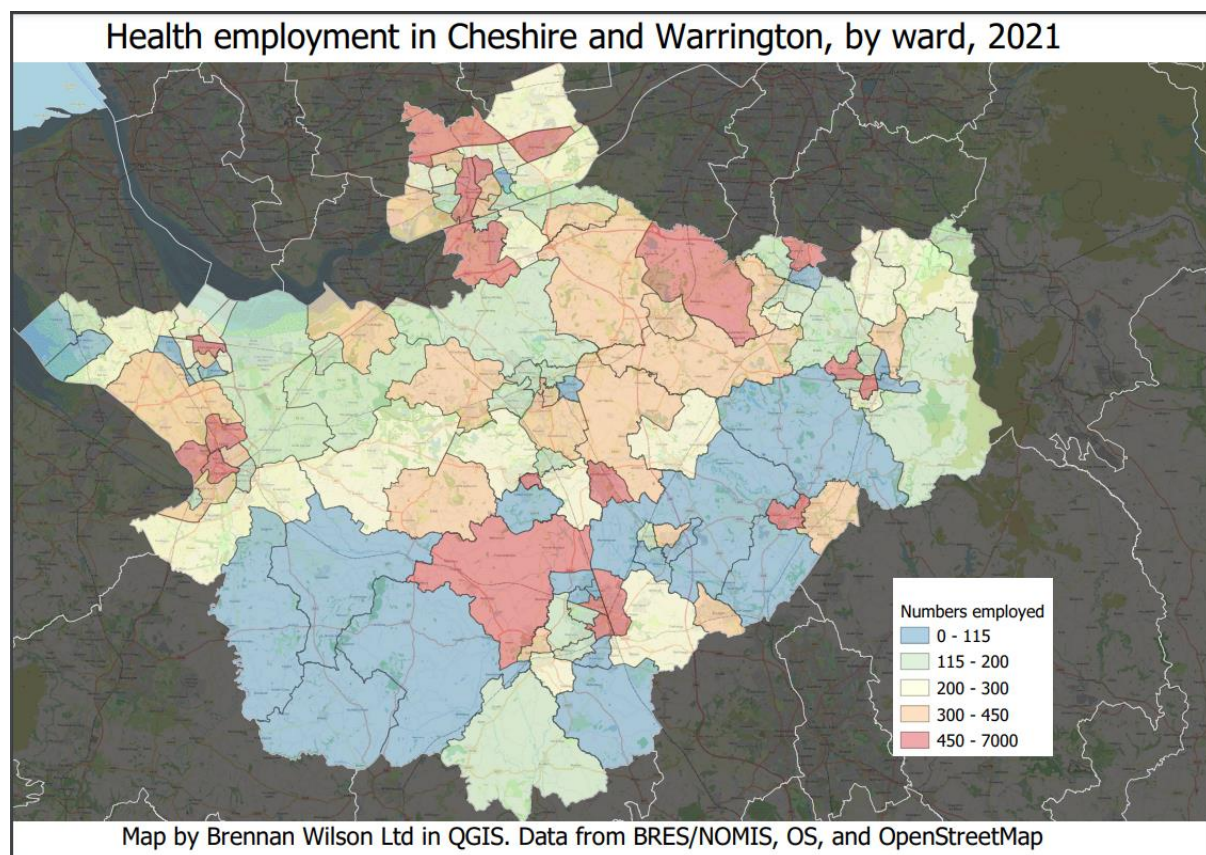this period, which is higher than for the economy as a whole, suggesting employers may find it harder to fill these roles. In particular, there were higher than average posting intensities for Medical Practitioners (4 : 1), Nurses (7 : 1), Medical Secretaries (5 : 1), Nursing Auxiliaries and Assistants (6 : 1), and Care Workers and Home Carers (4 : 1).

Job postings for top occupations in the Health sector in Cheshire and Warrington, 2022		
Occupation	Unique Postings from Jan 2022 - Dec 2022	Avg. Posting Intensity (Jan 2022 - Dec 2022)
Medical Practitioners	1024	4 : 1
Nurses	6375	7 : 1
Other Administrative Occupations n.e.c.	4821	2 : 1
Medical Secretaries	169	5 : 1
Receptionists	1539	2 : 1
Nursery Nurses and Assistants	794	3 : 1
Nursing Auxiliaries and Assistants	1915	6 : 1
Care Workers and Home Carers	7033	4 : 1
Senior Care Workers	282	3 : 1
Cleaners and Domestics	2440	3 : 1
Total across these occupations	26392	4 : 1
Source: Lightcast Analyst, Jan 2023		

Focus on Arts and Recreation

The Arts and Recreation sector employed 11,000 people in Cheshire and Warrington in 2022. The sector employed the same percentage of the workforce as is the case nationally with a Location Quotient (LQ) of 1 in 2022. The average wage per job in the sector was £27,000 and it contributed 1% to Cheshire and Warrington's GVA.

The following wards all employed over 500 people in the Health sector in 2021:

- Chester City & the Garden Quarter
- Bewsey and Whitecross
- Birchwood
- Saughall & Mollington
- Crewe East
- Wilmslow West and Chorley
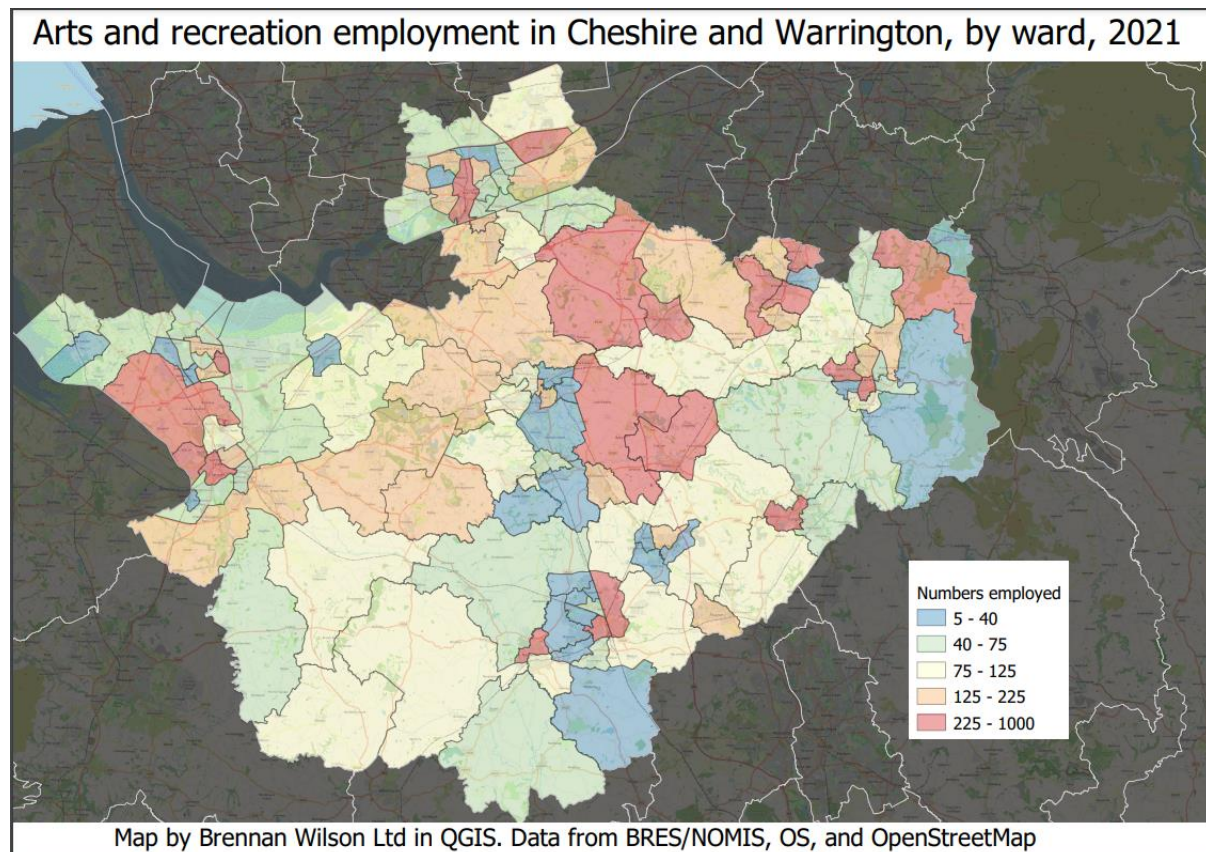
Arts and recreation employment in Cheshire and Warrington, by ward, 2021

Numbers employed
- 5 - 40
- 40 - 75
- 75 - 125
- 125 - 225
- 225 - 1000

Map by Brennan Wilson Ltd in QGIS. Data from BRES/NOMIS, 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 £18,805, with average wages ranging from £18,624 in the 'Gambling and Betting Activities' subsector to £26,214 in the 'Creative, Arts and Entertainment Activities' subsector. At 637, the 'Sports Activities and Amusement and Recreation Activities' subsector had the highest number of employers.

In 2021, the 'Gambling and Betting Activities' and the 'Creative, Arts and Entertainment Activities' subsectors employed a smaller proportion of the workforce than would be expected from the

national distribution (LQs of 0.84 and 0.53 respectively). Whilst the 'Libraries, Archives, Museums and Other Cultural Activities' and 'Sports Activities and Amusement and Recreation Activities' subsectors employed more (LQs of 1.07 and 1.09 respectively).

Arts, Entertainment & Recreation subsectors in C&W, 2022				
	2022 LQ	2022 Jobs	Avg. Wages Per Job	2021 Establishments
All Arts, Entertainment and Recreation	1.00	10519	18805	1080
Creative, Arts and Entertainment Activities	0.53	643	26214	248
Libraries, Archives, Museums and Other Cultural Activities	1.07	1509	22003	92
Gambling and Betting Activities	0.84	1018	18624	103
Sports Activities and Amusement and Recreation Activities	1.09	7348	17467	637
Source: Lightcast Analyst, Jan 2023				

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 half all employment in the sector. Hourly wages for these occupations range from £7.13 (Waiters and Waitresses) to £13.49 (Leisure and Sports Managers).

Top 10 occupations linked to the Arts, Entertainment & Recreation sector in C&W, 2022			
	Employed in Industry (2022)	Median Hourly Wages	Education Level
Sports Coaches, Instructors and Officials	918	10.31	Level 3 NVQ; A Levels
Sports and Leisure Assistants	914	9.58	Level 2 NVQ; GCSE at grades A*-C
Leisure and Sports Managers	543	13.49	Level 3 NVQ; A Levels
Kitchen and Catering Assistants	492	8.91	Level 2 NVQ; GCSE at grades A*-C
Fitness Instructors	485	8.92	Level 3 NVQ; A Levels
Animal Care Services Occupations n.e.c.	410	9.76	Level 2 NVQ; GCSE at grades A*-C
Leisure and Theme Park Attendants	329	8.17	Level 1 NVQ; GCSE at grades D-G
Other Administrative Occupations n.e.c.	310	11.29	Level 2 NVQ; GCSE at grades A*-C
Waiters and Waitresses	314	7.13	Level 2 NVQ; GCSE at grades A*-C
Bar Staff	283	7.88	Level 2 NVQ; GCSE at grades A*-C
Source: Lightcast Analyst, Jan 2023			

Analysis of EMSI Job postings for the occupations above in 2022 (table below) indicates that there was an average posting intensity for these roles of 3:1 in this period, which is the same as for the economy as a whole.

Job postings for top occupations in the Arts, Entertainment & Recreation sector in Cheshire and Warrington, 2022		
Occupation	Unique Postings from Jan 2022 - Dec 2022	Avg. Posting Intensity (Jan 2022 - Dec 2022)
Leisure and Sports Managers	51	2 : 1
Sports Coaches, Instructors and Officials	435	3 : 1
Fitness Instructors	319	3 : 1
Other Administrative Occupations n.e.c.	4821	2 : 1
Animal Care Services Occupations n.e.c.	92	2 : 1
Sports and Leisure Assistants	250	3 : 1
Kitchen and Catering Assistants	3041	3 : 1
Waiters and Waitresses	756	3 : 1
Bar Staff	577	2 : 1
Leisure and Theme Park Attendants	46	2 : 1
Total across these occupations	10388	3 : 1
Source: Lightcast Analyst, Jan 2023		

ANNEX 2 – FOCUS ON OCCUPATION SECTORS

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 100. 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:

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

SOC	Description	2023 Jobs	Avg. Annual Openings
**Annual Openings (>100 in C&W) for Managers Directors and Senior Officials in 2023/24**			
1	Managers, Directors and Senior Officials	49615	1989
1131	Financial Managers and Directors	5041	227
1190	Managers and Directors in Retail and Wholesale	6086	220
1135	Human Resource Managers and Directors	3625	169
1121	Production Managers and Directors in Manufacturing	4272	141
1132	Marketing and Sales Directors	3222	125
1251	Property, Housing and Estate Managers	2609	113
1259	Managers and Proprietors in Other Services n.e.c.	2675	112
1162	Managers and Directors in Storage and Warehousing	2577	107
*Source: Lightcast Analyst, Jan 2023*			

The table below sets out the top skills being sought by employers in Cheshire and Warrington for Financial Managers and Directors.

Top skills sought in job postings for Financial Managers and Directors in C&W, 2016-2022		
Top 10 Specialized Skills	**Top 10 Common Skills**	**Top 10 Software Skills**
Finance	Management	Microsoft Excel
Accounting	Forecasting	SAP Applications
Auditing	Communications	Microsoft Office
Financial Statements	Budgeting	Accounting Software
Balance Sheet	Leadership	Microsoft PowerPoint
Reconciliation	Operations	Microsoft Outlook
Profit And Loss (P&L) Management	Sales	Xero (Accounting Software)
Key Performance Indicators (KPIs)	Microsoft Excel	Sage 50 (Accounting Software)
Internal Controls	Planning	Management Information Systems
Financial Controls	Detail Oriented	SQL (Programming Language)
Source: Lightcast Analyst, Jan 2023		

The table below sets out the top skills being sought by employers in Cheshire and Warrington for Managers and Directors in Retail and Wholesale.

Top skills sought in job postings for Managers and Directors in Retail and Wholesale in C&W 2016-2022		
Top 10 Specialized Skills	**Top 10 Common Skills**	**Top 10 Software Skills**
Key Performance Indicators (KPIs)	Sales	Microsoft Outlook
Merchandising	Customer Service	Microsoft Excel
Retail Management	Management	Microsoft Office
Visual Merchandising	Leadership	Order Management Systems
Stock Control	Communications	Pinterest
Profit And Loss (P&L) Management	Coaching	SAP Applications
Retail Operations	Enthusiasm	Extensible Stylesheet Language (XSL)
Competitive Analysis	Training And Development	Google+
Marketing	Operations	Microsoft Word
Stock Management	Planning	Reporting Tools
Source: Lightcast Analyst, Jan 2023		

The table below sets out the top skills being sought by employers in Cheshire and Warrington for Managers and Directors in Retail and Wholesale.

Top skills sought in job postings for Managers and Directors in Retail and Wholesale in C&W 2016-2022		
Top 10 Specialized Skills	*Top 10 Common Skills*	*Top 10 Software Skills*
Employee Relations	Management	Microsoft Outlook
Labor Law	Communications	Microsoft Excel
Performance Management	Leadership	Microsoft Office
Change Management	Customer Service	Order Management Systems
Resourcing	Coaching	Pinterest
Human Resource Management	Influencing Skills	SAP Applications
Employee Engagement	Planning	Extensible Stylesheet Language (XSL)
Human Resource Strategy	Sales	Google+
Finance	Operations	Microsoft Word
Business Development	Self-Motivation	Reporting Tools
Source: Lightcast Analyst		

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
- Chartered and Certified Accountants
- Primary and Nursery Education Teaching Professionals
- Secondary Education Teaching Professionals
- Programmers and Software Development Professionals
- Medical Practitioners

Annual Openings (>100 in C&W) for Professional Occupations in 2023/24			
SOC	Description	2023 Jobs	Avg. Annual Openings
2	Professional Occupations	92419	3663
2231	Nurses	11094	519
2421	Chartered and Certified Accountants	7196	431
2315	Primary and Nursery Education Teaching Professionals	6221	203
2314	Secondary Education Teaching Professionals	4965	190
2136	Programmers and Software Development Professionals	4915	189
2211	Medical Practitioners	3723	161
2423	Management Consultants and Business Analysts	3262	129
2424	Business and Financial Project Management Professionals	3419	129
2139	Information Technology and Telecommunications Professionals n.e.c.	2917	110
2133	IT Specialist Managers	3321	106
Source: Lightcast Analyst, Jan 2023			

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

Top skills sought in job postings for Nurses in C&W 2016-2022		
Top 10 Specialized Skills	*Top 10 Common Skills*	*Top 10 Software Skills*
Nursing	Communications	eClinicalWorks (ECW)
Mental Health	Management	Decision-Making Software
Nursing Care	Leadership	Microsoft Deployment Toolkit
Dementia	Customer Service	Microsoft Office
Risk Analysis	Mentorship	Microsoft Excel
Midwifery	Interpersonal Communications	Microsoft Outlook
Care Planning	Planning	Pinterest
Medication Administration	Compassion	Team Foundation Server
Dementia Care	Teaching	Microsoft Access
Elderly Care	Training And Development	Learning Management Systems
Source: Lightcast Analyst		

The table below sets out the top skills being sought by employers in Cheshire and Warrington for Chartered and Certified Accountants.

Top skills sought in job postings for Chartered and Certified Accountants in C&W 2016-2022		
Top 10 Specialized Skills	*Top 10 Common Skills*	*Top 10 Software Skills*
Accounting	Management	Microsoft Excel
Finance	Communications	SAP Applications
Management Accounting	Forecasting	Accounting Software
Auditing	Budgeting	Xero (Accounting Software)
Reconciliation	Microsoft Excel	Microsoft Office
Balance Sheet	Detail Oriented	Management Information Systems
Financial Statements	Sales	QuickBooks (Accounting Software)
Accruals	Planning	Microsoft Outlook
VAT Returns	Operations	Sage 50 (Accounting Software)
Profit And Loss (P&L) Management	Self-Motivation	Microsoft PowerPoint
Source: Lightcast Analyst		

The table below sets out the top skills being sought by employers in Cheshire and Warrington for Primary and Nursery Education Teaching Professionals.

Top skills sought in job postings for Primary and Nursery Education Teaching Professionals in C&W 2016-2022		
Top 10 Specialized Skills	*Top 10 Common Skills*	*Top 10 Software Skills*
Accounting	Management	Microsoft Excel
Finance	Communications	SAP Applications
Management Accounting	Forecasting	Accounting Software
Auditing	Budgeting	Xero (Accounting Software)
Reconciliation	Microsoft Excel	Microsoft Office
Balance Sheet	Detail Oriented	Management Information Systems
Financial Statements	Sales	QuickBooks (Accounting Software)
Accruals	Planning	Microsoft Outlook
VAT Returns	Operations	Sage 50 (Accounting Software)
Profit And Loss (P&L) Management	Self-Motivation	Microsoft PowerPoint
Source: Lightcast Analyst		

Associate Professional and Technical Occupations

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

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

There are three occupational areas where estimated annual openings are more than 150. These are:

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

Annual Openings (>100 in C&W) for Associate Professional and Technical Occupations in 2023/24			
SOC	Description	2023 Jobs	Avg. Annual Openings
3	Associate Professional and Technical Occupations	72358	2742
3545	Sales Accounts and Business Development Managers	9590	329
3562	Human Resources and Industrial Relations Officers	5250	284
3538	Financial Accounts Managers	4173	193
3535	Taxation Experts	2298	145
3542	Business Sales Executives	3019	115
3543	Marketing Associate Professionals	3399	107
3534	Finance and Investment Analysts and Advisers	2985	106
3539	Business and Related Associate Professionals n.e.c.	2857	101
Source: Lightcast Analyst, Jan 2023			

The table below sets out the top skills being sought by employers in Cheshire and Warrington for Sales Accounts and Business Development Managers.

Top skills sought in job postings for Sales Accounts and Business Development Managers in C&W 2016-2022		
Top 10 Specialized Skills	Top 10 Common Skills	Top 10 Software Skills
Product Management	Sales	Microsoft Office
Marketing	Communications	Microsoft Excel
Sales Management	Management	Microsoft PowerPoint
Business Development	Customer Service	Microsoft Outlook
New Product Development	Planning	Application Programming Interface (API)
Selling Techniques	Self-Motivation	JIRA
Account Management	Presentations	Integrated Development Environments
Contract Management	Influencing Skills	Microsoft Word
Key Performance Indicators (KPIs)	Leadership	SQL (Programming Language)
Agile Methodology	Negotiation	Apache Spark
Source: Lightcast Analyst		

The table below sets out the top skills being sought by employers in Cheshire and Warrington for Human Resources and Industrial Relations Officers.

Top skills sought in job postings for Human Resources and Industrial Relations Officers in C&W 2016-2022		
Top 10 Specialized Skills	*Top 10 Common Skills*	*Top 10 Software Skills*
Employee Relations	Communications	Microsoft Excel
Business Development	Management	Microsoft Office
Resourcing	Sales	Microsoft Outlook
Key Performance Indicators (KPIs)	Customer Service	Microsoft PowerPoint
Marketing	Detail Oriented	Microsoft Word
Labor Law	Self-Motivation	Applicant Tracking Systems
Talent Sourcing	Resilience	Human Resources Information System (HRIS)
Performance Management	Microsoft Excel	SAP Applications
Account Management	Coaching	Payroll Systems
Finance	Interpersonal Communications	Workday (Software)
Source: Lightcast Analyst		

The table below sets out the top skills being sought by employers in Cheshire and Warrington for Financial Accounts Managers.

Top skills sought in job postings for Financial Accounts Managers in C&W 2016-2022		
Top 10 Specialized Skills	*Top 10 Common Skills*	*Top 10 Software Skills*
Finance	Management	Microsoft Excel
Accounting	Communications	SAP Applications
Invoicing	Customer Service	Microsoft Office
Portfolio Management	Planning	Microsoft Outlook
Key Performance Indicators (KPIs)	Sales	Microsoft PowerPoint
Accounts Payable	Forecasting	Accounting Software
Auditing	Leadership	Information Technology Infrastructure Library
SAP Applications	Operations	Microsoft Word
Loans	Detail Oriented	Xero (Accounting Software)
Financial Planning	Microsoft Excel	Primavera (Software)
Source: Lightcast Analyst		

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 100. The occupations with estimated levels of current annual demand of more than 150 are:

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

Annual Openings (>100 in C&W) for Administrative and Secretarial Occupations in 2023/24		
Description	2023 Jobs	Avg. Annual Openings
Administrative and Secretarial Occupations	72082	2977
Book-keepers, Payroll Managers and Wages Clerks	17093	959
Other Administrative Occupations n.e.c.	15475	571
Financial Administrative Occupations n.e.c.	4174	173
Bank and Post Office Clerks	3491	149
Personal Assistants and Other Secretaries	3872	141
Receptionists	4771	139
Office Managers	3193	124
Source: Lightcast Analyst, Jan 2023		

The table below sets out the top skills being sought by employers in Cheshire and Warrington for Book-keepers, Payroll Managers and Wages Clerks.

Top skills sought in job postings for Book-keepers, Payroll Managers and Wages Clerks in C&W 2016-2022		
Top 10 Specialized Skills	*Top 10 Common Skills*	*Top 10 Software Skills*
Invoicing	Communications	Microsoft Excel
Accounting	Detail Oriented	SAP Applications
Finance	Management	Microsoft Office
Accounts Payable	Microsoft Excel	Payroll Systems
Ledgers (Accounting)	Sales	Sage 50 (Accounting Software)
Bank Reconciliations	Customer Service	Accounting Software
Reconciliation	Microsoft Office	Microsoft Outlook
Statement Reconciliation	Filing	Xero (Accounting Software)
Credit Control	Self-Motivation	Sage Accounting Software
Bookkeeping	Mathematics	Microsoft Word
Source: Lightcast Analyst		

The table below sets out the top skills being sought by employers in Cheshire and Warrington for Other Administrative Occupations n.e.c..

Top skills sought in job postings for Other Administrative Occupations n.e.c. in C&W 2016-2022		
Top 10 Specialized Skills	*Top 10 Common Skills*	*Top 10 Software Skills*
Invoicing	Communications	Microsoft Excel
Finance	Customer Service	Microsoft Office
Data Entry	Detail Oriented	Microsoft Outlook
Administrative Support	Management	Microsoft PowerPoint
Sales Prospecting	Microsoft Excel	Microsoft Word
Booking (Sales)	Filing	SAP Applications
Accounting	Sales	Microsoft SharePoint
Business Support Systems	Administrative Functions	Microsoft Access
Office Administration	Microsoft Office	Database Systems
Customer Relationship Management	Mathematics	Microsoft Office 365
Source: Lightcast Analyst		

The table below sets out the top skills being sought by employers in Cheshire and Warrington for Financial Administrative Occupations n.e.c..

Top skills sought in job postings for Financial Administrative Occupations n.e.c. in C&W 2016-2022		
Top 10 Specialized Skills	*Top 10 Common Skills*	*Top 10 Software Skills*
Finance	Communications	Microsoft Excel
Invoicing	Detail Oriented	Microsoft Outlook
Accounting	Sales	Microsoft Office
Ledgers (Accounting)	Customer Service	SAP Applications
Reconciliation	Microsoft Excel	Microsoft Word
Bank Reconciliations	Management	Accounting Software
Financial Services	Self-Motivation	Sage 50 (Accounting Software)
Credit Control	Microsoft Outlook	Xero (Accounting Software)
Billing	Mathematics	Microsoft PowerPoint
Auditing	Microsoft Office	Microsoft Dynamics NAV
Source: Lightcast Analyst		

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 *50.* There are no occupational areas where average openings in a year exceeds 150.

Annual Openings (>50 in C&W) for Skilled Trades Occupations in 2023/24		
Description	2023 Jobs	Avg. Annual Openings
Skilled Trades Occupations	38416	1092
Gardeners and Landscape Gardeners	1996	125
Chefs	4657	110
Vehicle Technicians, Mechanics and Electricians	3578	92
Electricians and Electrical Fitters	3495	80
Metal Working Production and Maintenance Fitters	3172	71
Source: Lightcast Analyst, Jan 2023		

The table below sets out the top skills being sought by employers in Cheshire and Warrington for Gardeners and Landscape Gardeners.

Top skills sought in job postings for Gardeners and Landscape Gardeners in C&W 2016-2022		
Top 10 Specialized Skills	*Top 10 Common Skills*	*Top 10 Software Skills*
Landscaping	Communications	Microsoft Excel
Mowing	Management	Microsoft Outlook
Gardening	Mathematics	Microsoft Office
Weed Control	Honesty	Google Drive
Pruning	Enthusiasm	Google Maps
Machinery	Customer Service	Google+
Horticulture	Detail Oriented	Microsoft PowerPoint
Trimming	Strong Work Ethic	Apache Wicket
Sales Prospecting	Self-Motivation	Apple IOS
Landscape Architecture	Operations	IOS Applications
Source: Lightcast Analyst		

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

Top skills sought in job postings for Chefs in C&W 2016-2022		
Top 10 Specialized Skills	*Top 10 Common Skills*	*Top 10 Software Skills*
Cooking	Communications	Google Maps
Restaurant Operation	Management	Aruba (Network Management Software)
Food Safety And Sanitation	Detail Oriented	Pinterest
Food Preparation	Cleanliness	Microsoft Teams
Sales Prospecting	Presentations	Microsoft Outlook
Menu Planning	Customer Service	Apache Hive
Stock Control	Enthusiasm	Microsoft Excel
Food Services	Mathematics	Ember.js
Control Of Substances Hazardous To Health (COSHH)	Willingness To Learn	Reliability Availability Maintainability And Safety Software
Stock Rotation	Training And Development	Apple IOS
Source: Lightcast Analyst		

The table below sets out the top skills being sought by employers in Cheshire and Warrington for Vehicle Technicians, Mechanics and Electricians.

Top skills sought in job postings for Vehicle Technicians, Mechanics and Electricians in C&W 2016-2022		
Top 10 Specialized Skills	*Top 10 Common Skills*	*Top 10 Software Skills*
Vehicle Maintenance	Customer Service	Microsoft Outlook
Mechanics	Communications	Microsoft Office
Sales Prospecting	Detail Oriented	Microsoft Excel
Aftersales	Problem Solving	Aruba (Network Management Software)
Automotive Industry	Enthusiasm	Operating Systems
Vehicle Inspection	Self-Motivation	Wonderware
Brakes	Mathematics	Hyper-V
Automotive Services	Management	HyperText Markup Language (HTML)
Automotive Engineering	Professionalism	LAMP (Software Bundle)
Mechanical Engineering	Sales	Active Directory
Source: Lightcast Analyst		

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 50. 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 (>50 in C&W) for Caring, Leisure and Other Service Occupations in 2023/24		
Description	2023 Jobs	Avg. Annual Openings
Caring, Leisure and Other Service Occupations	41333	1638
Care Workers and Home Carers	11246	431
Nursing Auxiliaries and Assistants	5978	286
Teaching Assistants	5436	194
Educational Support Assistants	2382	90
Nursery Nurses and Assistants	2340	82
Animal Care Services Occupations n.e.c.	1313	57
Cleaning and Housekeeping Managers and Supervisors	1653	56
Source: Lightcast Analyst, Jan 2023		

The table below sets out the top skills being sought by employers in Cheshire and Warrington for for Care Workers and Home Carers.

Top skills sought in job postings for Care Workers and Home Carers in C&W 2016-2022		
Top 10 Specialized Skills	*Top 10 Common Skills*	*Top 10 Software Skills*
Personal Care	Communications	Microsoft Outlook
Mental Health	Compassion	Decision-Making Software
Learning Disabilities	Management	Pinterest
Nursing	Enthusiasm	Microsoft Office
Autism Spectrum Disorders	Empathy	Microsoft Excel
Medication Administration	Teamwork	Apple IOS
Companionship	Training And Development	Operating Systems
Home Health Care	Willingness To Learn	Aruba (Network Management Software)
Dementia	Customer Service	eClinicalWorks (ECW)
Cooking	Professionalism	Microsoft Teams
Source: Lightcast Analyst		

The table below sets out the top skills being sought by employers in Cheshire and Warrington for Nursing Auxiliaries and Assistants.

Top skills sought in job postings for Nursing Auxiliaries and Assistants in C&W 2016-2022		
Top 10 Specialized Skills	*Top 10 Common Skills*	*Top 10 Software Skills*
Personal Care	Communications	Microsoft Excel
Nursing	Customer Service	Microsoft Office
Mental Health	Compassion	Microsoft Outlook
Dementia	Management	eClinicalWorks (ECW)
Phlebotomy	Enthusiasm	Microsoft PowerPoint
Rehabilitation	Self-Motivation	SAP Applications
Medication Administration	Interpersonal Communications	Aruba (Network Management Software)
Toileting	Leadership	Operating Systems
Midwifery	Patience	Microsoft Deployment Toolkit
Learning Disabilities	Empathy	Apple IOS
Source: Lightcast Analyst		

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

Top skills sought in job postings for Teaching Assistants in C&W 2016-2022		
Top 10 Specialized Skills	*Top 10 Common Skills*	*Top 10 Software Skills*
Working With Children	Teaching	Microsoft Outlook
Autism Spectrum Disorders	Communications	Qt (Software)
Classroom Management	Management	Aruba (Network Management Software)
Numeracy	Enthusiasm	Microsoft Office
External Auditing	Mathematics	Pinterest
Mental Health	Planning	Web Browsers
National Curriculum	Literacy	Microsoft Excel
Sports Coaching	Resilience	Microsoft PowerPoint
Learning Support	Patience	Microsoft SharePoint
Lesson Planning	Proactivity	SAP Concur (Travel And Invoice Software)
Source: Lightcast Analyst		

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 *50*. 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

SOC	Description	2023 Jobs	Avg. Annual Openings
7	Sales and Customer Service Occupations	45767	1383
7111	Sales and Retail Assistants	21320	629
7219	Customer Service Occupations n.e.c.	5667	182
7220	Customer Service Managers and Supervisors	3085	106
7130	Sales Supervisors	3324	97
7112	Retail Cashiers and Check-out Operators	2869	87
7211	Call and Contact Centre Occupations	2144	68

Annual Openings (>50 in C&W) for Sales and Customer Service Occupations in 2023/24

Source: Lightcast Analyst, Jan 2023

The table below sets out the top skills being sought by employers in Cheshire and Warrington for Sales and Retail Assistants.

Top skills sought in job postings for Sales and Retail Assistants in C&W 2016-2022

Top 10 Specialized Skills	Top 10 Common Skills	Top 10 Software Skills
Merchandising	Customer Service	Microsoft Office
Selling Techniques	Sales	Microsoft Excel
Product Knowledge	Communications	Microsoft Outlook
Warehousing	Retail Sales	SAP Applications
Marketing	Management	Microsoft PowerPoint
Key Performance Indicators (KPIs)	Enthusiasm	Microsoft Word
Cash Handling	Self-Motivation	Adobe Photoshop
Visual Merchandising	Detail Oriented	Application Programming Interface (API)
Customer Inquiries	Willingness To Learn	Microsoft Access
Housekeeping	Teamwork	Design Software
Source: Lightcast Analyst		

The table below sets out the top skills being sought by employers in Cheshire and Warrington for Customer Service Occupations n.e.c..

Top skills sought in job postings for Customer Service Occupations n.e.c. in C&W 2016-2022		
Top 10 Specialized Skills	*Top 10 Common Skills*	*Top 10 Software Skills*
Inbound Calls	Customer Service	Microsoft Excel
Call Center Experience	Communications	Microsoft Office
Customer Relationship Management	Sales	Microsoft Outlook
Invoicing	Detail Oriented	SAP Applications
Booking (Sales)	Management	Microsoft Word
Key Performance Indicators (KPIs)	Problem Solving	Microsoft PowerPoint
Sales Prospecting	Enthusiasm	Order Management Systems
Outbound Calls	Computer Literacy	Network Management System
Customer Support	Self-Motivation	Webforms
Financial Services	Listening Skills	Operating Systems
Source: Lightcast Analyst		

The table below sets out the top skills being sought by employers in Cheshire and Warrington for Customer Service Managers and Supervisors.

Top skills sought in job postings for Customer Service Managers and Supervisors in C&W 2016-2022		
Top 10 Specialized Skills	*Top 10 Common Skills*	*Top 10 Software Skills*
Key Performance Indicators (KPIs)	Customer Service	Information Technology Infrastructure Library
Customer Relationship Management	Management	Microsoft Excel
Marketing	Communications	Microsoft Outlook
Information Technology Infrastructure Library	Leadership	Microsoft Office
Call Center Experience	Sales	Microsoft PowerPoint
Service Management	Coaching	SAP Applications
Auditing	Problem Solving	Microsoft Word
Performance Management	Operations	HyperText Markup Language (HTML)
Client Services	Planning	Operating Systems
Service Improvement	Detail Oriented	ServiceNow
Source: Lightcast Analyst		

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 *50*.

SOC	Description	2023 Jobs	Avg. Annual Openings
Annual Openings (>50 in C&W) for Process, Plant and Machine Operatives in 2023/24			
8	Process, Plant and Machine Operatives	31180	949
8211	Large Goods Vehicle Drivers	7473	239
8212	Van Drivers	4195	130
8222	Fork-lift Truck Drivers	2301	101
Source: Lightcast Analyst, Jan 2023			

The table below sets out the top skills being sought by employers in Cheshire and Warrington for Large Goods Vehicle Drivers.

Top skills sought in job postings for Large Goods Vehicle Drivers in C&W 2016-2022		
Top 10 Specialized Skills	*Top 10 Common Skills*	*Top 10 Software Skills*
Trunking	Communications	AutoCAD
Warehousing	Customer Service	Apple IOS
Palletizing	Loading And Unloading	Aruba (Network Management Software)
Vapor-Compression Refrigeration	Collections	IOS Applications
Truck Driving	Professionalism	Microsoft Outlook
Manual Handling	Management	Microsoft Office
Key Performance Indicators (KPIs)	Lifting Ability	Applicant Tracking Systems
Forklift Truck	Strong Work Ethic	Microsoft Windows 10
Customer Relationship Management	Operations	QuickBooks (Accounting Software)
Business To Business	Positivity	Transportation Management Systems
Source: Lightcast Analyst		

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

Top skills sought in job postings for Van Drivers in C&W 2016-2022		
Top 10 Specialized Skills	*Top 10 Common Skills*	*Top 10 Software Skills*
Warehousing	Customer Service	Apple IOS
Forklift Truck	Communications	Operating Systems
Palletizing	Loading And Unloading	Microsoft Office
Manual Handling	Lifting Ability	Microsoft Outlook
Order Picking	Detail Oriented	IOS Applications
Housekeeping	Self-Motivation	Google Maps
Key Performance Indicators (KPIs)	Collections	Google Play
Invoicing	Sorting	Microsoft Excel
Medical Prescription	Smartphone Operation	Warehouse Management Systems
Numeracy	Professionalism	Aruba (Network Management Software)
Source: Lightcast Analyst		

The table below sets out the top skills being sought by employers in Cheshire and Warrington for Fork-lift Truck Drivers.

Top skills sought in job postings for Fork-lift Truck Drivers in C&W 2016-2022		
Top 10 Specialized Skills	*Top 10 Common Skills*	*Top 10 Software Skills*
Forklift Truck	Loading And Unloading	Microsoft Outlook
Warehousing	Communications	Microsoft Office
Palletizing	Detail Oriented	Operating Systems
Manual Handling	Strong Work Ethic	Aruba (Network Management Software)
Housekeeping	Customer Service	Jasmine (JavaScript Testing Framework)
Order Picking	Punctuality	Microsoft Excel
Production Line	Microsoft Outlook	SAP Applications
Machinery	Operations	Webforms
Stock Control	Self-Motivation	Apple IOS
Key Performance Indicators (KPIs)	Packaging And Labeling	General Packet Radio Service (GPRS)
Source: Lightcast Analyst		

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 100. The occupations with estimated levels of current annual demand 150 or more are:

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

Annual Openings (>100 in C&W) for Elementary Occupations in 2023/24		
Description	2023 Jobs	Avg. Annual Openings
Elementary Occupations	69898	2434
Elementary Storage Occupations	14737	636
Cleaners and Domestics	10309	327
Kitchen and Catering Assistants	9372	292
Bar Staff	5939	200
Waiters and Waitresses	5345	157
Security Guards and Related Occupations	3225	126
Packers, Bottlers, Canners and Fillers	3649	125
Source: Lightcast Analyst, Jan 2023		

The table below sets out the top skills being sought by employers in Cheshire and Warrington for Elementary Storage Occupations.

Top skills sought in job postings for Elementary Storage Occupations in C&W 2016-2022		
Top 10 Specialized Skills	*Top 10 Common Skills*	*Top 10 Software Skills*
Warehousing	Loading And Unloading	Warehouse Management Systems
Palletizing	Communications	Microsoft Excel
Order Picking	Detail Oriented	Microsoft Office
Manual Handling	Customer Service	SAP Applications
Forklift Truck	Sorting	Microsoft Outlook
Housekeeping	Management	Operating Systems
Key Performance Indicators (KPIs)	Sales	Microsoft Word
Stock Control	Lifting Ability	Inventory Management System
Numeracy	Operations	Microsoft PowerPoint
Warehouse Management Systems	Enthusiasm	SQL (Programming Language)
Source: Lightcast Analyst		

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

Top skills sought in job postings for Cleaners and Domestics in C&W 2016-2022		
Top 10 Specialized Skills	*Top 10 Common Skills*	*Top 10 Software Skills*
Mopping	Customer Service	Microsoft Outlook
Housekeeping	Cleanliness	Microsoft Excel
Maid Services	Communications	Google Maps
Cleaning Products	Detail Oriented	Webforms
Warehousing	Honesty	Aruba (Network Management Software)
Ironing	Management	Oculus
Machinery	Strong Work Ethic	Apple IOS
Health And Safety Standards	Enthusiasm	Bluecoat Proxies
Facility Management	Interpersonal Communications	Document Object Model
Window Cleaning	Self-Motivation	IOS Applications
Source: Lightcast Analyst		

The table below sets out the top skills being sought by employers in Cheshire and Warrington for Kitchen and Catering Assistants.

Top skills sought in job postings for Kitchen and Catering Assistants in C&W 2016-2022		
Top 10 Specialized Skills	*Top 10 Common Skills*	*Top 10 Software Skills*
Restaurant Operation	Customer Service	Microsoft Outlook
Food Preparation	Communications	Microsoft Excel
Food Safety And Sanitation	Cleanliness	Aruba (Network Management Software)
Cooking	Enthusiasm	Google Maps
Food Services	Sales	Microsoft Office
Cash Handling	Management	HyperText Markup Language (HTML)
Upselling	Energetic	Management Information Systems
Event Catering	Verbal Communication Skills	Microsoft Word
Sales Prospecting	Training And Development	Reliability Availability Maintainability And Safety Software
Control Of Substances Hazardous To Health (COSHH)	Willingness To Learn	Apache Spark
Source: Lightcast Analyst		