Cheshire and Warrington LEP

Labour and Learning Market Assessment (Draft v1.3)

2019

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1. INTRODUCTION

Cheshire and Warrington is one of the UK's success stories and one of the strongest economies in the North; it is generating £5.4bn more every year than if it performed at the UK average. A £30.9bn economy it has grown strongly in recent years, exceeding both the UK and North West (NW) average. Looking at GVA per head, in 2017, Cheshire and Warrington produced £33,384 per head of population. This is the highest of all northern LEPs and the fourth highest of all LEPs.

Whilst Cheshire and Warrington is a successful economy with higher than average productivity, this has declined marginally in recent years. Growth in number of hours worked has exceeded GVA growth. There has been larger job growth in low productivity sectors and more part-time jobs have been created.

Cheshire and Warrington is home to many large, well-known businesses (including Bentley, Novelis, Eddie Stobart, Essar Oil, Betfred) with good levels of business activity and business density in Chester and Macclesfield. In total there are 42,000 VAT registered businesses with a high ratio of business per capita. The area also enjoys a low business death rate and high business survival rate.

Manufacturing is thriving, both growing at a significantly higher rate than across the rest of the UK and most manufacturing heartlands. It is over twice as productive as GB with GVA per job of £171,756. It has the biggest GVA contribution of any sector (£7.7bn) and has a high number of jobs (45,000). Economic analysis by the LEP has identified 'super strengths' in 'Manufacture of petroleum, chemicals and pharmaceuticals' and 'Manufacture of motor vehicles, trailers and semitrailers'.

There are around 930,000 residents in Cheshire and Warrington, however the population is growing more slowly than the national average. This is accompanied by other demographic challenges, particularly around ageing and the proportion of early retired residents in Cheshire and Warrington far exceeds the national average. Macclesfield particularly has low population growth and an older population.

In addition, there are areas of deprivation in the region. Ellesmere Port, Crewe and Warrington, as well as parts of Chester, Northwich, Winsford and Macclesfield, all perform poorly on the Index of Multiple Deprivation and see low skill levels.

There is an active labour force with high levels of employment, typically with high skills in high-level jobs with good wages. Since 2004, there has been an increase in residents qualified to NVQ Level 4 and above, and a steady decline in the proportion of working individuals with other qualifications (including trade apprentices), no qualifications and NVQ Level 1 qualifications.

The unemployment rate in Cheshire and Warrington is lower than the regional and national average, whilst the employment rate is higher than the averages for the NW and UK. This is accompanied by a low level of NEETs. This suggests that out of work residents are not especially a drag on productivity.

However, the percentage of jobs in Cheshire and Warrington paying below the real living wage is higher than the UK and regional average. This is an area of concern given that the real living wage acts as a proxy for in work poverty, which remains a major issue for achieving inclusive growth.

2. INDUSTRY

2.1 INDUSTRY SIZE, STRUCTURE AND GROWTH

Cheshire and Warrington LEP has a £30.9bn economy with an ambition to be a £53.3bn economy by 2040. It has experienced 2.7% average annual GVA growth compared to 2.2% in the UK and 2.1% in the NW, and it has the highest GVA per head of northern LEPs and 4th highest of all LEPs - £33,384, which equates to £34.63 produced per hour worked - 4.1% higher than UK and 13.6% higher than the North West.

The LEP's Industrial Strategy Evidence Base reports that of the VAT registered businesses in Cheshire and Warrington, 47.7% are in Cheshire East, 33.4% in Cheshire West and 19.0% in Warrington. The majority of Cheshire and Warrington's largest companies have been established for a significant length of time with around two thirds of them established before 2007. This includes Certas Energy UK, Sellafield, Bentley Motors and Atos.

Looking at the spatial distribution of companies shows that newer companies, which have been established within the last ten years, tend to be located in urban centres. Companies in rural areas tend to be older. This suggests that new business start-ups and investments in Cheshire and Warrington tend to be in urban areas, particularly the towns of Chester, Macclesfield, Crewe and Warrington.

	Cheshire And	Cheshire And	North West	North West (%)
	Warrington (Numbers)	Warrington (%)	(Numbers)	
Enterprises				
Micro (0 To 9)	38,895	89.8	236,975	88.8
Small (10 To 49)	3,590	8.3	24,390	9.1
Medium (50 To 249)	660	1.5	4,405	1.7
Large (250+)	175	0.4	1,040	0.4
Total	43,325	-	266,810	-
Local Units				
Micro (0 To 9)	42,825	84.5	262,955	83.3
Small (10 To 49)	6,355	12.5	42,140	13.4
Medium (50 To 249)	1,320	2.6	9,055	2.9
Large (250+)	190	0.4	1,375	0.4
Total	50,695	-	315,525	-

Source: Inter Departmental Business Register (ONS)

Note: % is as a proportion of total (enterprises or local units)

Comparative data for the size structure of the Cheshire and Warrington business base is presented in Table 2.1 above. As would be expected, small and micro enterprises are in the overwhelming majority, constituting 98.1% of all enterprises. The size structure of the Cheshire and Warrington

business base is very similar to that of the North West with a slightly smaller proportion of medium enterprises occurring in Cheshire and Warrington.

Table 2.2: Jobs density (2017)								
	C&W (density)	C&W (Jobs)	NW (Density)	GB (Density)				
Job Density	1.01	570,000	0.83	0.86				
Source: ONS jobs density								

Demand for Labour is high in Cheshire and Warrington as can be seen from the jobs density data presented in Table 2.2 above. The density figure represents the ratio of total jobs to population aged 16-64. Total jobs include employees, self-employed, government-supported trainees and HM Forces. A jobs density ratio of over 1 (as is the case in Cheshire and Warrington) means that the total number of jobs in the LEP economy exceeds the total resident population. This means that the Cheshire and Warrington economy imports labour. Analysis¹ of the net inflows of workers to the Cheshire and LEP economy has established that the largest net inflows of workers comes from the Wirral, Halton and St. Helens.

As might be expected from the above, business density is also high. In Cheshire and Warrington, there are 454 VAT registered businesses per 10,000 population. This is almost 27% higher than the North West, which has 358 VAT registered businesses per 10,000 people. It is just over 12% higher than the UK level of 404 VAT registered businesses per 10,000 people².

Table 2.3 below shows job growth for Cheshire and Warrington, the three local authorities and comparators. Jobs growth, between 2011 and 2016, in Cheshire and Warrington has been strong with 61,500 new jobs, which equates to growth of 13.7%. This rate of growth is significantly higher than Great Britain (8.4%), North West (8.8%) and Greater Manchester (10.1%). It is also significantly higher than the growth in the overall population of Cheshire and Warrington which was 2% in the same period.

Warrington's jobs growth of 16.5% has been the strongest of the local authorities. This has been followed by Cheshire West and Chester and Cheshire East which experienced 12.9% and 12.5% growth respectively.

Table 2.3: Job growth by local authority (2011-16)									
	Jobs (2016)	New jobs (2011-16)	Job growth (2011-16)						
Cheshire East	198,500	22,000	12.5%						
Cheshire West and	175,000	20,000	12.9%						
Chester									
Warrington	138,000	19,500	16.5%						
Cheshire and	511,500	61,500	13.7%						
Warrington									
Job growth: Greater M	Job growth: Greater Manchester = 10.1%, North West = 8.8%, Great Britain = 8.4%								

Table 2.4 below shows the top 10 SIC2 sub-sectors by job growth in Cheshire and Warrington between 2011 and 2016. High job growth has occurred in the key sector of finance and business services, in the sub-sectors of office administration and support (3,000 new jobs), employment

¹ Metro-Dynamics, Industry Strategy Evidence Base

² Metro-Dynamics, Industry Strategy Evidence Base

activities (3,000 new jobs) and services to buildings and landscapes (2,500 new jobs). In another key sector, logistics and distribution, there have been 6,000 new jobs created in warehousing and support services for transportation. Other large increases in jobs have occurred in health and social care with 10,000 new jobs in human health activities, the visitor economy with job growth of 8,000 in food and beverage services, retail (4,000 new jobs) and public services, specifically education (4,000 new jobs). The sub-sector with the highest increase in the number of jobs is legal and accounting activities with 10,500 new jobs created in the past five years.

Table 2.4: Top 10 Sub-sectors by Job Growth (2011-2016)

Top 10 SIC2 sub-sectors by job growth in C&W (2011-16)

Sub-sector	Jobs (2016)	Job change (2011-2016)
Legal and accounting activities	19,500	10,500
Human health activities	36,500	10,000
Food and beverage service activities	32,000	8,000
Warehousing and support activities for transportation	13,000	6,000
Retail trade, ex. motor vehicles and motorcycles	52,000	4,000
Education	36,500	4,000
Activities of head offices; management consultancy activities	15,000	3,500
Office administrative, office support and other business support activities	9,000	3,000
Employment activities	20,000	3,000
Services to buildings and landscape activities	11,000	2,500

Source: Metro-Dynamics

2.2 PRODUCTIVITY

The chart below (Figure 2.1) illustrates overall productivity, measured by GVA per hour worked for Cheshire and Warrington, its local authorities, and comparators.

In 2016, GVA per hour worked was £34.63 in Cheshire and Warrington. This is 4.1% higher than the UK average and 13.6% higher than the North West average. Greater Manchester is 15.9% less productive, whilst GVA per hour worked is 8.5% higher in EM3.

Reflecting other economic metrics, Cheshire East is best performing producing £39.02 per hour worked. Cheshire West and Chester is slightly lower at £33.96 per hour worked. Productivity in Warrington is lower than the Cheshire and Warrington average at £29.15, falling below the UK level in 2009 and the North West in 2014.

During the financial crisis, all areas experienced a decline in productivity. The impact in Cheshire and Warrington (-2.3%) between 2008 and 2009 was similar to the UK (-1.9%) and North West (-2.1%). It was most pronounced for Warrington (-3.1%). Productivity in Cheshire and Warrington has not recovered to its 2007 levels with a decrease of 4.6% from 2007 to 2016.

Between 2011 and 2016, productivity has been relatively static in the UK with on average 0.3% growth per annum. Growth has also been stagnant in the North West (0.0%), EM3 (0.2%) and Greater Manchester (-0.1%). In the same period, Cheshire and Warrinton has declined slightly by 0.6% with negative growth of -1.3% in Cheshire West and Chester and -1.7% in Warrington.

Decreasing productivity in Cheshire and Warrington, Cheshire West and Chester and Warrington may be due to GVA growing more slowly than the number of hours worked. The opposite is true of Cheshire East where average annual productivity growth between 2011 and 2016 has been 0.5%

It may also be due to a large increase in the number of jobs (>1,000) between 2011 and 2016 in low productivity, low wage sub-sectors in health and social care, hospitality and the visitor economy, retail, education, and logistics. There has also been a 22.9% increase in the number of part-time employees, compared to an increase of 12.0% in fulltime employees.



Figure 2.1: GVA per head Cheshire and Warrington and Comparators

Source: ONS Balanced GVA by industry – country and region; NUTS 1, NUTS 2 and NUTS 3; combined authorities, city regions and other economic and enterprise regions of the UK (1998-2017); Balanced GVA indices by UK Local Authorities, LEPs and UK NUTS 1, NUTS 2 and NUTS 3 (1998-16); ONS Population Estimates (2017)

Source: Metro-Dynamics

GVA is deflated to give values in 2017 terms. Geography of EM3 calculated at full extent of districts

2.3 SECTORS

Table 2.5 overleaf sets out the number of employees in each industrial sector in the LEP's business base. The overall industrial structure of Cheshire and Warrington LEP is broadly similar to the North West region and to Great Britain. However, the Wholesale and Retail sector has a higher representation in the LEP area as does the Financial and Insurance Activities sector. The sector with the highest over-representation compared to the North West region and Great Britain is the Professional, Scientific and Technical activities sector which accounts for 13.3% of all employees in the LEP area compared to proportions of 8.3% for the North Wst Region and 8.7% for Great Britain.

The sectors which are under-represented in Cheshire and Warrington compared to the North West and Great Brittan are the Public Administration and Defence sector, the Human Health and Social

Work and the Education sectors. This is to be expected in an area with a high Job Density as these sectors are more closely tied to the size of the population compared to other forms of activity.

Table 2.5: Employee Jobs by Industry				
	Cheshire And Warrington (Employee Jobs)	Cheshire And Warrington (%)	North West (%)	Great Britain (%)
B : Mining And Quarrying	600	0.1	0.1	0.2
C : Manufacturing	41,000	8.4	9.6	8.1
D : Electricity, Gas, Steam And Air Conditioning Supply	1,750	0.4	0.5	0.5
E: Water Supply; Sewerage, Waste Management And Remediation Activities	4,000	0.8	0.6	0.7
F : Construction	23,000	4.7	4.7	4.7
G : Wholesale And Retail Trade; Repair Of Motor Vehicles And Motorcycles	85,000	17.3	16.9	15.2
H : Transportation And Storage	26,000	5.3	5.5	4.8
I : Accommodation And Food Service Activities	34,000	6.9	7.1	7.6
J : Information And Communication	15,000	3.1	2.7	4.2
K : Financial And Insurance Activities	20,000	4.1	2.7	3.5
L : Real Estate Activities	7,000	1.4	1.5	1.7
M : Professional, Scientific And Technical Activities	65,000	13.3	8.3	8.7
N : Administrative And Support Service Activities	46,000	9.4	9.0	9.1
O : Public Administration And Defence; Compulsory Social Security	14,000	2.9	4.5	4.3
P : Education	34,000	6.9	8.5	8.9
Q : Human Health And Social Work Activities	52,000	10.6	13.4	13.2
R : Arts, Entertainment And Recreation	12,000	2.4	2.4	2.5
S : Other Service Activities	10,000	2.0	1.9	2.0

Source: ONS Business Register and Employment Survey : open access

Notes: % is a proportion of total employee jobs excluding farm-based agriculture
Employee jobs excludes self-employed, government-supported trainees and HM Forces Data excludes
farm-based agriculture

Table 2.6 below shows the top 10 SIC2 sub-sectors by job growth in Cheshire and Warrington between 2011 and 2016. High job growth has occurred in the key sector of finance and business services, in the sub-sectors of office administration and support (3,000 new jobs), employment activities (3,000 new jobs) and services to buildings and landscapes (2,500 new jobs). In another key sector, logistics and distribution, there have been 6,000 new jobs created in warehousing and support services for transportation.

Other large increases in jobs have occurred in health and social care with 10,000 new jobs in human health activities, the visitor economy with job growth of 8,000 in food and beverage services, retail (4,000 new jobs) and public services, specifically education (4,000 new jobs).

The sub-sector with the highest increase in the number of jobs is legal and accounting activities with 10,500 new jobs created in the past five years.³

Sub-sector	Jobs (2016)	Job change (2011-2016)
Legal and accounting activities	19,500	10,500
Human health activities	36,500	10,000
Food and beverage service activities	32,000	8,000
Warehousing and support activities for transportation	13,000	6,000
Retail trade, ex. motor vehicles and motorcycles	52,000	4,000
Education	36,500	4,000
Activities of head offices; management consultancy activities	15,000	3,500
Office administrative, office support and other business support activities	9,000	3,000
Employment activities	20,000	3,000
Services to buildings and	11,000	2,500
landscape activities		

2.4 EMPLOYMENT STRUCTURE

The split between full and part-time employment is quantified in Table 2.7 below. As can be seen from this, the proportion of full-time employees is higher in Cheshire and Warrington than both the North West Region and Great Britain (68.6% compared to 67.9% and 67.6% respectively).

	Cheshire And Warrington	Cheshire And Warrington	North West (%)	Great Britain
	(Employee Jobs)	(%)		(%)
Total Employee Jobs	490,000	-	-	-
Full-Time	336,000	68.6	67.9	67.6
Part-Time	154,000	31.4	32.1	32.4

³ Metro-Dynamics, Industrial Strategy Evidence Base

Table 2.8 below sets out the occupational structure of the Cheshire and Warrington LEP economy. The occupational structure is skewed towards higher skilled/higher paid occupations with SOC Major Groups 1-3 (ie Managers, Directors and Senior Officials; Professional Occupations; Associate Professional and Technical) representing 54.4% of the LEP workforce compared to 44.5% and 47.1% for the region and Great Britain respectively. Whilst all major groups 1-3 are over-represented in Cheshire and Warrington compared to Great Britain, this is most pronounced for Professional occupations (24.6% of the workforce in the LEP compared to 21% for Great Britain).

As would be expected, the converse of this is also true. Specifically, the LEP has a lower proportion of jobs in lower paid/lower skilled occupations than is the case in the North West or Great Britain.

	Cheshire And Warrington (Numbers)	Cheshire And Warrington (%)	North West (%)	Great Britain (%)
Soc 2010 Major Group 1-3	246,100	54.4	44.5	47.1
1 Managers, Directors and Senior Officials	63,100	13.9	10.3	11.1
2 Professional Occupations	111,500	24.6	20.1	21.0
3 Associate Professional & Technical	71,500	15.8	13.9	14.8
Soc 2010 Major Group 4-5	79,900	17.7	20.0	19.9
4 Administrative & Secretarial	41,800	9.2	10.3	9.8
5 Skilled Trades Occupations	38,100	8.4	9.6	10.0
Soc 2010 Major Group 6-7	63,300	14.0	17.9	16.4
6 Caring, Leisure And Other Service Occupations	33,400	7.4	9.6	9.0
7 Sales And Customer Service Occs	29,900	6.6	8.3	7.3
Soc 2010 Major Group 8-9	63,100	14.0	17.6	16.6
8 Process Plant & Machine Operatives	25,300	5.6	6.8	6.3
9 Elementary Occupations	37,800	8.4	10.7	10.3

Source: ONS annual population survey Notes: Numbers and % are for those of 16+% is a proportion of all persons in employment

Figure 2.2 below illustrates the change in the occupational structure for Cheshire and Warrington LEP over time. Between the years of 2004 and 2017 there has been a very clear increase in the proportion of top managers and professionals and a lesser increase in the proportion of Associate professional and technical workers, with a decline in all other occupational areas including for industry operatives and elementary workers.

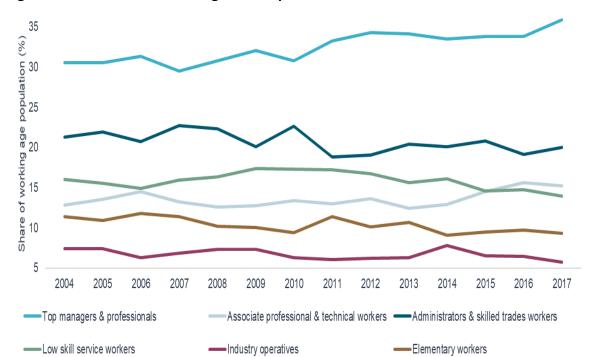


Figure 2.2 Cheshire and Warrington Occupational Shares 2004-2017S

Source: Metro-Dynamics

Whilst the proportion of occupations in Cheshire and Warrington has shifted towards higher skilled better paid occupations, there has been growth in all occupational areas. This is illustrated by the chart (Figure 2.3) from EMSI below which shows that the highest volume growth of jobs has been in Professional occupations; Administrative and Secretarial occupations; Associate Professional and Technical occupations; and, elementary occupations.

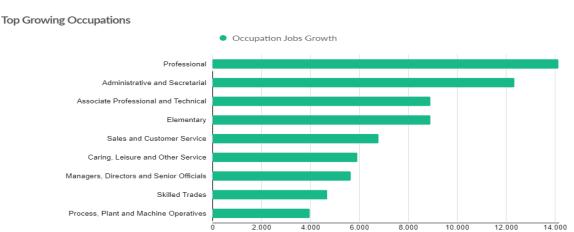


Figure 2.3: Top Growing Occupations

Source: EMSI

3. **PEOPLE**

3.1 **POPULATION**

Cheshire and Warrington LEP has a population of approximately 930,000 people, comprising 379,00 in Cheshire East, 338,000 in Cheshire West and Chester and 211,000 in Warrington. Overall the population grew by 3% between 2010 and 2018 which was a slower growth than the North West (4%) and Great Britain (6%) over the same time period. Over this period, Warrington was the fastest growing local authority in the Cheshire and Warrington LEP area with a population growth of 5%. The LEP population is overwhelmingly white with 97% self-identifying as white and every other ethnic group below 1% of the overall population.⁴

Table 3.1: Population Change 2010-2018									
	2010 Population	2018 Population	Change	% Change					
Cheshire East	369,051	379,331	10,280	3%					
Cheshire West and Chester	329,553	337,914	8,361	3%					
Warrington	201,309	210,990	9,681	5%					
Cheshire and Warrington LEP	899,913	928,234	28,321	3%					
North West	7,019,921	7,279,003	259,082	4%					
GB	61,701,999	65,361,983	3,659,984	6%					

Source: EMSI Analyst

The working age population in Cheshire and Warrington comprises 60.5% of the overall population. This is a smaller proportion than both the North West (62.3%) and GB (62.7%). This is largely because the LEP population is older than elsewhere. Metro-Dynamics report that there is a higher proportion of residents at retirement age compared to the region and the UK. Of the five principal towns, Macclesfield has the highest proportion of residents in this age bracket at, whilst Warrington town has the lowest⁵.

Equally, there is a lower proportion of younger residents in Cheshire and Warrington with 22.4% of residents aged 0 to 19 compared to 23.6% regionally and 23.5% nationally. This is more pronounced for the 20 to 34 age group, which represents 16.4% of Cheshire and Warrington's population compared to 19.9% in the NW and UK.

Table 3.2: Population aged 16-64 (2018)										
	Cheshire And Warrington	Cheshire And Warrington	North West (%)	Great Britain (%						
	(Numbers)	(%)								
All People Aged 16-64	563,200	60.5	62.3	62.						
Males Aged 16-64	277,900	60.9	62.8	63.						
Females Aged 16-64	285,300	60.1	61.8	62.						

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

⁴ EMSI Analyst

⁵ Metro-Dynamics, Industrial Strategy Evidence Base

As can be seen from the figure below, the population profile of Cheshire and Warrington LEP has aged, with those aged 65-69 increasing by 13%, 70-74 by 35%, 75-79 by 21%, 80-84 by 21% and 85+ by 23% between 2010 and 2018.

Figure 3.1: Population by Age Cohort

Source: EMSI Analyst

Cheshire and Warrington LEP has 151,437 millennials (ages 25-39). The national average for an area this size is 183,260. In addition, retirement risk is high. The national average for an area the size of Cheshire and Warrington is 323,236 people 55 or older, while there are 371,682 such individuals in the LEP.⁶

Table 3.	3: Projec	ted popu	ulation c	hange by	/ Age Ba	nd 2018-	2025					
Age	2018	2025		%	2018	2019	2020	2021	2022	2023	2024	2025
Band	Popn.	Popn.	Change	Change	Popn.	Popn.	Popn.	Popn.	Popn.	Popn.	Popn.	Popn.
Under												
16	167845	170107	2262	1	167845	169026	169740	170260	170543	170534	170217	170107
16 to 18	29940	33218	3278	11	29940	29502	29854	30588	31408	32074	32871	33218
19 to 24	56200	51848	-4352	-8	56200	55216	54246	53049	51993	51644	51484	51848
25 to 29	51893	47530	-4363	-8	51893	51791	51240	50623	49725	48890	48238	47530
30 to 34	52421	53691	1270	2	52421	52747	53046	53423	54468	54442	54315	53691
35 to 39	55092	56423	1331	2	55092	55260	55185	55366	55272	55679	56070	56423
40 to 44	54406	57277	2871	5	54406	53844	54114	54746	55884	57082	57296	57277
45 to 49	67773	55171	-12602	-19	67773	65487	63500	60633	57546	55308	54829	55171
50 to 54	71778	63646	-8132	-11	71778	71361	70419	69949	69173	67864	65605	63646
55 to 59	66710	69608	2898	4	66710	68671	70499	71117	71348	70901	70515	69608
60 to 64	55886	69008	13122	23	55886	57208	58684	60854	63052	65292	67210	69008
Over 65	198290	223356	25065	13	198290	201563	204616	207950	211455	215284	219346	223356
Source: E	MSI Anal	yst										

⁶ EMSI Analyst

Table 3.3 above sets out projected population change between 2018 and 2025. It is evident from this that the LEP's population will continue to age, with a 13% increase in the over 65 population expected over this time period. What is also notable is the projected 11% increase in the 16-18 population peaking at over 33,000 in 2025. The increase in this age segment will put additional pressure on the LEP's Further Education capacity.

3.2 ECONOMIC ACTIVITY

Table 3.4 below sets out some of the key labour market indicators for Cheshire and Warrington LEP. Economic activity indicates the size of the labour market. Economically inactive people, including students, the long-term sick and carers, are outside of the labour market, as they are neither in employment nor are they unemployed. Economic Activity in the LEP area at 80.6% is higher than both the North West (77.1%) and Great Britain (78.9%). LEP Economic Activity rates are higher than the regional and GB figures for both men and women.

The unemployment rate is a measure of the health of an economy, as it responds to recession and growth. Unemployed people are those without a job who have been actively seeking work in the past four weeks and those who have found a job and are waiting to start. Levels of unemployment are lower (2.9%) than the North West (4%) and GB (4.1%) and, again, this is the case for both men and women.

	Cheshire Warrington		North West	Great Britain (%)
	(Numbers)	Warrington (%	(%)	
All People				
Economically Active†	466,600	80.6	77.1	78.9
In Employment†	453,000	78.1	73.9	75.6
Employees†	386,100	67.7	64.3	64.6
Self Employed†	64,000	10.2	9.4	10.7
Unemployed§	13,600	2.9	4.0	4.1
Males				
Economically Active†	247,800	85.8	81.8	83.5
In Employment†	239,000	82.6	78.1	79.9
Employees†	197,200	69.9	65.0	65.4
Self Employed†	39,300	12.2	12.9	14.2
Unemployed§	8,800	3.6	4.4	4.2
Females				
Economically Active†	218,800	75.5	72.4	74.3
In Employment†	214,000	73.8	69.7	71.3
Employees†	188,900	65.5	63.6	63.9
Self Employed†	24,700	8.3	5.9	7.2
Unemployed§	4,700	2.2	3.7	3.9

Source: ONS annual population survey

^{† -} numbers are for those aged 16 and over, % are for those aged 16-64

^{§ -} numbers and % are for those aged 16 and over. % is a proportion of economically active

Metro-Dynamics report that within Cheshire and Warrington, there is some variation on the key Labour Market indicators⁷. Cheshire East has a very low unemployment rate (1.3%), but has the highest levels of economic inactivity. Cheshire West and Chester has the highest unemployment rate (5.9%) and the lowest employment rate (73.6%).

Overall levels of self-employment for the LEP at 10.2% stand between the rate for the North West (9.4%) and GB (10.7%). However, the rate of self-employment for men is below the regional and national figures, by contrast, the rate of self-employment for women is above the regional and national figures.

Economic inactivity in Cheshire and Warrington LEP (Table 3.5) stands at 19.4% which is below the rate in the North West (22.9%) and Great Britain (22.1%). Much higher levels of the economically inactive population in Cheshire and Warrington are inactive due to retirement than is the case for the region or Great Britain (21.2% compared to 12.9% for both North West and GB). This may be a lifestyle choice reflecting the affluence of the area and the clusters of older, established residents.

On the other hand, lower levels are inactive in Cheshire and Warrington as a result of long-term sickness (18.1%) than nationally or regionally (23% and 26.1% respectively). This suggests that ill health is not the primary reason for the area's high rate of early retirement. The proportion of the economically inactive who do not want a job is slightly higher in Cheshire and Warrington than in the North West or Great Britain.

	Cheshire And	Cheshire And	North West	Great Britain	
	Warrington (Level)	Warrington	(%)	(%)	
		(%)			
Total	108,600	19.4	22.9	21.1	
Student	26,900	24.8	26.8	26.9	
Looking After Family/Home	24,600	22.7	22.5	23.6	
Temporary Sick	#	#	2.0	1.9	
Long-Term Sick	19,600	18.1	26.1	23.0	
Discouraged	į.	į.	0.5	0.4	
Retired	23,000	21.2	12.9	12.9	
Other	13,100	12.1	9.3	11.2	
Wants A Job	16,200	14.9	18.3	20.7	
Does Not Want A Job	92,400	85.1	81.7	79.3	

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

Sample size too small for reliable estimate

Notes: Only includes those households that have at least one person aged 16 to 64.

Children refers to all children aged under 16.

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⁷ Metro-Dynamics, Industrial Strategy Evidence Base

There are 39,300 workless households in Cheshire and Warrington which is 13.3% of all households in the LEP area. This is a lower percentage than for the North West (16.3%) and Great Britain (14.3%).

Table 3.6: Workless Households (Jan-Dec 2018)			
	Cheshire And Warrington	North West	Great Britain
Number Of Workless Households	39,300	376,100	2,919,800
Percentage Of Households That Are Workless	13.3	16.3	14.3
Number Of Children In Workless Households	#	162,900	1,259,000
Percentage Of Children Who Are In Households That Are Workless	#	11.7	10.3

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

Sample size too small for reliable estimate

Notes: Only includes those households that have at least one person aged 16 to 64.

Children refers to all children aged under 16.

Table 3.7 presents data for the claimant count. The claimant count is a measure of those in receipt of benefit. Under Universal Credit a broader span of claimants is required to look for work than under Jobseeker's Allowance. As Universal Credit Full Service is rolled out in particular areas, the number of people recorded as being on the Claimant Count is therefore likely to rise. The September 2019 Claimant count in Cheshire and Warrington LEP at 2.2% of the resident population is lower than both the North West (3.5%) and Great Britain (2.8%). Metro-Dynamics report that for those residents claiming Employment and Support Allowance (ESA), a study from 2017 showed that 47% had mental and behavioural disorders.⁸

Table 3.7: Claimant count by sex - not seasonally adjusted (September 2019)									
	Cheshire And Warrington	Cheshire And Warrington (%)	North West (%)	Great Britain (%)					
All People	12,545	2.2	3.5	2					
Males	7,220	2.6	4.1	3					
Females	5,325	1.9	2.8	2					

Source: ONS Claimant count by sex and age

Note: % is the number of claimants as a proportion of resident population of area aged 16-64 and gender

As Table 3.8 shows overleaf, the proportion of the resident population who are claimants is lower in Cheshire and Warrington LEP than in the North West and Great Britain for every age band.

⁸ Metro-Dynamics, Industrial Strategy Evidence Base

	Cheshire And	Cheshire And	North West (%)	Great Britain
	Warrington	Warrington (%)		(%)
Aged 16+	12,545	2.2	3.5	2.8
Aged 16 To 17	40	0.2	0.3	0.3
Aged 18 To 24	2,340	3.5	4.8	3.9
Aged 18 To 21	1,375	3.8	5.0	4.2
Aged 25 To 49	7,065	2.5	3.9	3.0
Aged 50+	3,105	1.6	2.6	2.3

Source: ONS Claimant count by sex and age

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

3.3 NEET

Table 3.9 below sets out the proportion of 16-17 year olds in education in Cheshire East, Cheshire West and Chester and Warrington; compared with the proportions in the North West and England. The local authority totals for participation for Cheshire East, Cheshire West and Chester and Warrington (at 96.5%, 96.7% and 94% respectively) all stand above the figure for Enland (92.5%) and the North West (91.5%). All three authorities have experienced a year-on-year improvement in the indicator.

Table 3.9: Pro	Table 3.9: Proportion of 16-17 year olds recorded in education and training, March 2019									
	Proportion	of 16 aı	nd 17 y	ear olds	recorded as pa	rticipati	ng in:	Parti	icipation	Current
	Full time education and training	Apps	WBL	P/t educ	Employment with study	Other	Total	in perd perd p (M	, change year in centage oints arch to arch) ²	activity not known to the LA
England	84.8%	5.5%	1.1%	0.2%	0.7%	0.2%	92.5%	0.5		2.3%
North West	82.2%	6.5%	1.6%	0.0%	0.9%	0.3%	91.5%	0.5		2.8%
Cheshire East	86.2%	4.8%	1.2%	0.1%	4.0%	0.1%	96.5%	0.3		0.0%
Cheshire West and Chester	85.5%	6.0%	0.5%	0.0%	2.8%	1.9%	96.7%	0.6	A	0.3%
Warrington	85.6%	6.3%	0.2%	0.0%	0.7%	1.2%	94.0%	1.0	A	0.3%

Source: DfE Local Authority Participation Data, <u>16- to 17-year-olds recorded in education and training and NEET by local authority</u>, 2019

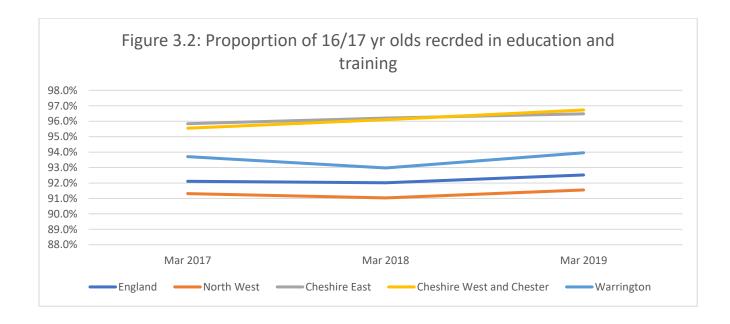
Table 3.10 below details the different routes to participation in education and training being used by different proportions of 16 and 17 year olds. It is notable that the proportion undertaking employment with study at 4% in Cheshire East is five and a half times the English proportion of 0.7%. Similarly at 2.8% the proportion is four times higher than the English in Cheshire West and Chester.

This suggests that there may be an opportunity for increasing the volume of apprenticeships in these local authority areas.

Table 3.10:	Table 3.10: Proportion of 16-17 year olds meeting the duty to participate, March 2019									
		M	eeting the duty	Of those	not meeting th	e duty				
England	F/t educ and training 86.2%	Apps 5.5%	Employment with study 0.7%	Working towards participation 0.2%	Total 92.6%	P/t education 0.2%	Employment with non- regulated qualifications 2.2%	Temp break from learning 0.5%		
North West	84.1%	6.5%	0.9%	0.2%	91.7%	0.0%	2.2%	0.6%		
Cheshire East	87.5%	4.8%	4.0%	0.4%	96.8%	0.1%	1.0%	0.4%		
Cheshire West and										
Chester	87.8%	6.0%	2.8%	0.1%	96.7%	0.0%	0.8%	0.5%		
Warrington	86.9%	6.3%	0.7%	0.7%	94.7%	0.0%	2.1%	0.7%		

Source: DfE Local Authority Participation Data, $\underline{16-to\ 17-year-olds\ recorded\ in\ education\ and\ training\ and\ NEET\ by\ local\ authority,\ 2019}$

Figure 3.2 below illustrates that there has been a year on year increase in the proportion of 16-17 year olds in education and training in Cheshire East and Cheshire West and Chester between March 2017 and March 2019. The position also improved in Warrington between 2017 and 2019.



3.4 SKILLS PROFILE AND PIPELINE

Table 3.11 below compares the attainment of young people at the end of Key Stage 4 (age 16) in the three Cheshire and Warrington LEP Local Authorities with the figures for England in 2018. Young people resident in the three local authorities performed better than the English average on the

average Attainment 8 score; on the percentage who achieved a 9-5 GCSE pass; on the percentage who achieved a 9-4 GCSE pass; and, on the Average Point Score per pupil for the English Baccalaureate.

Table 3.11: GCSE and e	Table 3.11: GCSE and equivalent entries and achievements of pupils at the end of key stage 4								
Year: 2017/18 (provisional)									
Region/	Average	Englis	h and maths G	English Bac	calaureate				
Local Authority	Attainment 8 score per pupil ⁶	Percentage of pupils entered for components	Percentage of pupils who achieved a 9-5 pass	Percentage of pupils who achieved a 9-4 pass	Percentage of pupils entered for all components	Average Point Score per pupil			
England	44.3	89.9	39.9	59.1	35.1	3.83			
Cheshire East	48.7	97.9	47.7	69.5	32.0	4.17			
Cheshire West and Chester	46.3	97.4	40.5	64.2	44.3	4.07			
Warrington	47.0	97.9	46.3	67.0	33.4	4.07			
Source: Department for E	ducation Sta	tistical First R	elease 2018	•		•			

Table 3.12 below sets out the percentage of 19 year olds in the three LEP local authorities who had achieved a level 2 by age 19 in the five years between 2014 and 2018. It also reports the percentage point gap of level 2 achievement between the total cohort and those on free school meals. In all three local authorities, the percentage of the cohort achieving a Level 2 qualification by age 19 declined, most significantly in Warrington, which saw a 4.7% decline in achievement from 89.8% in 2014 to 85.1% in 2018. In 2018 attainment in all three local authorities was above the English percentage of 82.2%.

The gap in attainment between the whole cohort and those on free school meals increased in all three local authorities between 2014 and 2018, most significantly in Warrington with an increase of 5.4% from 21.5% to 26.9%. All three of the Cheshire and Warrington Local Authorities had a Level 2 attainment gap in 2018 which was higher than the English figure of 21.9%

Table 3.12: Percentage of 19 year olds qualified to Level 2, by FSM eligibility and Local Authority										
	All. 19 yrs in Gap between All and FSM								/	
	2014	2015	2016	2017	2018	2014	2015	2016	2017	2018
Warrington	89.8	89.9	89.1	85.4	85.1	21.2	21.5	22.2	29.6	26.9
Cheshire East	89.2	88.4	86.8	88.7	87.4	23.5	24.8	28.7	28.4	27.0
Cheshire West and Chester	84.2	85.6	83.6	84.9	82.8	28.2	26.8	25.9	28.0	28.3

Source: DfE matched administrative data

DfE: Level 2 and 3 attainment in England: Attainment by age 19 in 2018 www.gov.uk/government/collections/statistics-attainment-at-19-years

Table 3.13 below sets out the percentage of 19 year olds in the three LEP local authorities who had achieved a level 3 by age 19 in the five years between 2014 and 2018. It also reports the percentage point gap of level 3 achievement between the total cohort and those on free school meals. In Warrington and Cheshire East, the percentage of the cohort achieving a Level 3 qualification by age 19 declined by 1.6% and 0.6% respectively, whilst achievement in Cheshire West and Chester increased by 0.8%. Attainment in all three Cheshire and Warrington LEP Local Authorities exceeded the English figure of 57.2% in 2018.

The gap in attainment between the whole cohort and those on free school meals decreased by 1.4% in Warrington and 6% in Cheshire West and Chester, whilst it increased by in Cheshire East by 3.4%. In all three Cheshire and Warrington Local Authorities the Level 3 attainment gap at age 19 was significantly higher than the national gap of 25.7% in 2018.

Table 3.13: Percentage of 19 year olds qualified to Level 3, by FSM eligibility and Local										
	All. 19 yrs in Gap between all and FSM									
	2014	2015	2016	2017	2018	2014	2015	2016	2017	2018
Warrington	63.5	61.6	63.3	61.3	61.9	35.7	37.1	36.1	35.0	34.3
Cheshire East	66.1	66.0	64.0	66.8	65.5	37.1	34.8	35.5	34.6	38.2
Cheshire West and Chester	58.8	60.2	57.7	60.6	59.6	40.6	39.3	34.8	36.0	34.6

Source: DfE matched administrative data

DfE: Level 2 and 3 attainment in England: Attainment by age 19 in 2018 www.gov.uk/government/collections/statistics-attainment-at-19-years

The population of Cheshire and Warrington has a higher skills profile than both the population of the North West and the population of Great Britain. 42.7% of the population of Cheshire and Warrington LEP are qualified to NVQ 4 or above. This compares to 35.5% and 39.3% for the North West and Great Britain respectively. At the other end of the scale only 6% of the population have no qualifications in Cheshire and Warrington compared to 7.8% in Great Britain and 9.1% in the North West.

Warrington (Level)			Great Britain
. 8 (====,	Warrington	(%)	(%)
	(%)		
238,200	42.7	35.5	39.3
338,900	60.7	55.1	57.8
444,000	79.5	74.1	74.9
497,600	89.1	84.8	85.4
27,300	4.9	6.1	6.8
33,300	6.0	9.1	7.8
	338,900 444,000 497,600 27,300	238,200 42.7 338,900 60.7 444,000 79.5 497,600 89.1 27,300 4.9	238,200 42.7 35.5 338,900 60.7 55.1 444,000 79.5 74.1 497,600 89.1 84.8 27,300 4.9 6.1

Metro-Dynamics have reported on the spatial distribution of skills in Cheshire and Warrington for the Industrial Strategy Evidence Base.

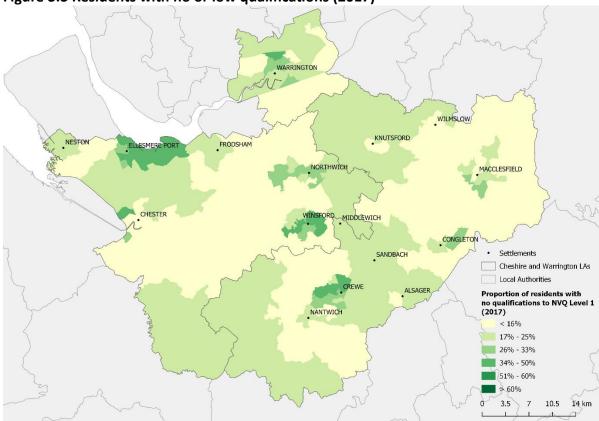


Figure 3.3 Residents with no or low qualifications (2017)

Source: Metro-Dynamics

The map above (Figure 3.3) shows the proportion of residents with either no qualifications of NVQ Level 1 and the map below (Figure 3.4) shows the proportion of residents with NVQ Level 4 or above. The two maps are almost exact inverses of one another.

There are high levels of skills inequality with a difference of approximately 47 percentage points between the areas with the highest and lowest proportion of residents with NVQ Level 4 or above.

Areas where a relatively high proportion of residents have high level qualifications (51 to 60%) are typically in the north west part of the LEP area, moving east from Chester and northwards to Frodsham, and the outskirts of Macclesfield. In south Chester, Appleton (south of Warrington), Knutsford and Wilmslow, over 60% of residents have NVQ Level 4 or above.

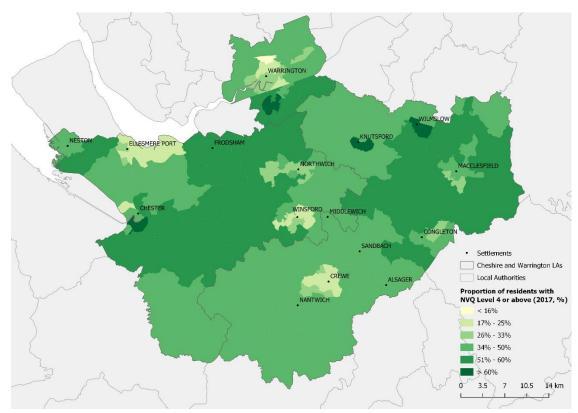


Figure 3.4: Residents with further or higher education degree or above (2017

Source: Metro-Dynamics

There are a high proportion of residents with no qualifications or NVQ Level 1 in Ellesmere Port, north Chester, Winsford, Crewe and north Warrington.

The skills profile for the five principal towns shows that Chester overall has the highest proportion of residents with a degree equivalent qualification or higher (45.2%) and the lowest proportion of residents no or low qualifications (18.0%). In contrast, Ellesmere Port has the highest proportion of residents with no or low skills (27.0%). Crewe has the lowest proportion of residents with a degree or higher (26.9%).

The chart below⁹ illustrates changes in the skills composition of the working age population in Cheshire and Warrington between 2004 and 2017. Since 2004, a steady decline in the proportion of working individuals with other qualifications (including trade apprentices), and no qualifications or NVQ Level 1 qualifications is observed.

The proportion of Cheshire and Warrington's working population with NVQ Level 2 and NVQ Level 3 has remained constant over the 14 year period, whilst there have been increases in the proportion of the working population with NVQ Level 4 or above. These results are consistent with trends in

⁹ Metro-Dynamics, Evidence Base for the Industrial Strategy

both the UK and NW. Encouragingly, Cheshire and Warrington's workforce is, on average, more highly qualified than the national average.

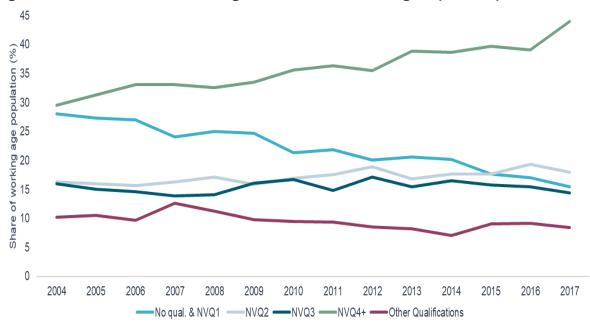


Figure 3.5: Qualifications level change in Cheshire and Warrington (2004-17)

Source: Metro-Dynamics

3.5. EARNINGS

	Cheshire And Warrington (Pounds)	North West (Pounds)	Great Britain (Pounds)
Gross Weekly Pay			
Full-Time Workers	615.7	555.8	587.0
Male Full-Time Workers	685.5	598.0	632.0
Female Full-Time Workers	529.8	498.0	528.9
Hourly Pay - Excluding Overtime			
Full-Time Workers	15.59	13.95	14.88
Male Full-Time Workers	16.64	14.56	15.44
Female Full-Time Workers	13.90	13.16	13.99

Source: ONS annual survey of hours and earnings - resident analysis Notes: Median earnings in pounds for employees living in the area. figures for this table have been constructed on an Output Area basis

The current median earnings for residents is set out in Table 3.15 above. Overall, the median values for Gross weekly and gross hourly pay are higher in Cheshire and Warrington than for both the region and for Great Britain. This is also the case for male gross weekly and gross hourly pay. Female

gross weekly pay is only slightly higher than for Great Britain (Cheshire and Warrinton is £529.8, Great Britain is £528.9), whilst female gross hourly pay is lower in Cheshire and Warrington than for Great Britain ((£13.90 compared to £13.99).

The current median earnings by place of work is set out in Table 3.16 below. By contrast with the data for residents, the median values for gross weekly and gross hourly pay are lower in Cheshire and Warrington than for Great Britain. This is also the case for male and female gross weekly and gross hourly pay. Gross weekly and hourly pay by place of work is higher in Cheshire and Warrington than it is for the North West as a whole.

	Cheshire And	North West	Grea
	Warrington	(Pounds)	Britair
	(Pounds)		(Pounds
Gross Weekly Pay			
Full-Time Workers	567.3	549.8	586.5
Male Full-Time Workers	608.6	588.2	631.7
Female Full-Time Workers	502.0	496.4	528.2
Hourly Pay - Excluding Overtime			
Full-Time Workers	14.17	13.84	14.87
Male Full-Time Workers	14.79	14.38	15.43
Female Full-Time Workers	13.25	13.14	13.98

Source: ONS annual survey of hours and earnings - workplace analysis Notes: Median earnings in pounds for employees working in the area. figures for this table have been constructed on an Output Area basis

The map below (Figure 3.6) illustrates the spatial distribution of wages across Cheshire and Warrington¹⁰. Mean annual household income may be distorted by outlying values, resulting in income seeming higher than expected. This disguises extremes which is important when considering inclusive growth.

Much of Cheshire and Warrington has a medium value mean annual household income of £45,001 to £50,000. There are some areas with slightly higher income of £50,001 to £55,000, particularly around the outskirts of Chester, south of Frodsham and south Warrington.

Wealthier pockets with a mean household income upwards of £55,001 exist in Nantwich and the surrounding area, north of Macclesfield and parts of Warrington. Appleton (south of Warrington) and Wilmslow have the highest mean annual household income of > £65,000.

Areas with relatively low household income (<£40,000) are typically in urban areas, including Ellesmere Port, Chester, Warrington, Northwich, Winsford, south Macclesfield, and the area encompassing Crewe, Sandbach, Alsager and Congleton.

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¹⁰ Metro-Dynamics, Industrial Strategy Evidence Base

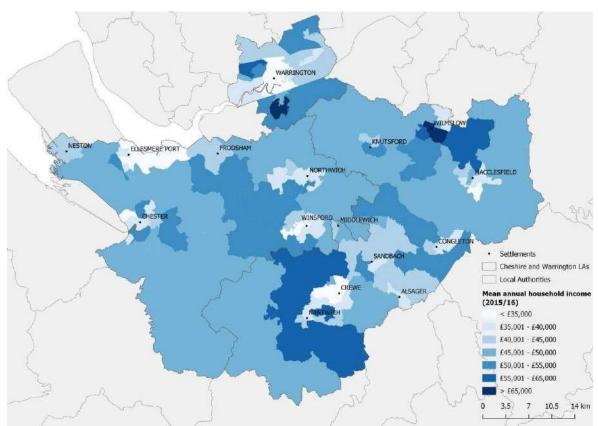
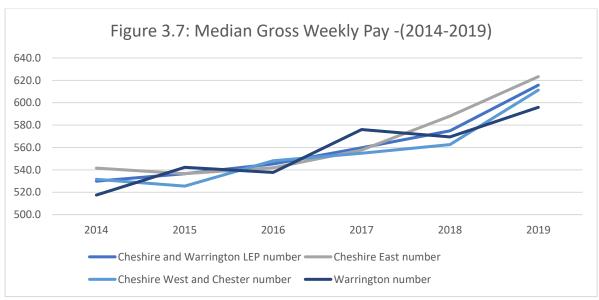


Figure 3.6: Spatial distribution of wages across Cheshire and Warrington

Source: Metro-Dynamics

Data for gross weekly earnings between 2014 and 2019 for Cheshire and Warrington LEP and its three constituent local authorities is presented in Figure 3.7. As can be seen from the graph the trend of increase in this indicator has been steady and similar across all three local authorities.

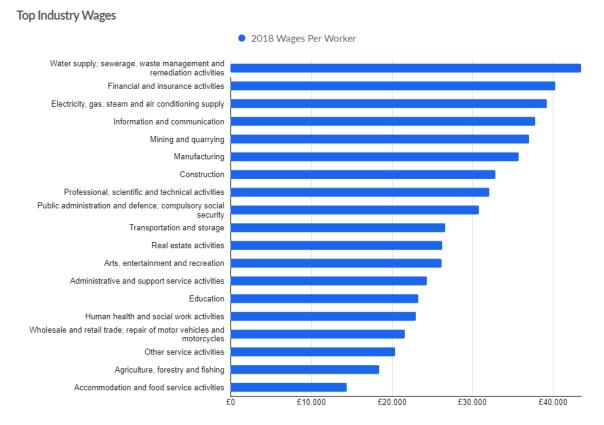


Source: NOMIS, Annual Survey of Hors and Earnings

Data from EMSI allows us to understand earnings in different industry sectors. This is illustrated in Figure 3.8 below. In 2018, the average wages per worker exceed £40,000 in the Water supply,

sewage, waste management and remediation activities sector. It also exceeded £40,000 in the Financial and insurance activities sector. At the other end of the scale, the lowest paying sectors in Cheshire and Warrington are the Accommodation and food service activities sector and the Agriculture, forestry and fishing sector.

Figure 3.8: Industry Wage rates



Source: EMSI

EMSI also provides data on wage rates by occupation. Hourly wage rates by occupation are shown in Figure 3.9 below. Wage rates are highest for Professional, Managerial and Associate Professional and Technical occupations. Occupations which are all overrepresented in Cheshire and Warrington compared to Great Britain (as discussed above).

Figure 3.9: Occupational Wage Rates





Source: EMSI

The chart below (Figure 3.10) illustrates the percentage of workplace jobs earning beneath the real living wage in 2017, as set by the Living Wage Foundation. Results indicate that Cheshire and Warrington (22.4%) has a slightly higher percentage of workers earning below the living wage than the UK as a whole (22.0%), Greater Manchester (21.8%) and EM3 (15.5%), but less than the NW average (23.8%). This is an area of concern given that the real living wage acts as a proxy for in-work poverty, which remains a major issue for achieving inclusive growth

Figure 3.10: Share of workplace jobs under the real living wage for Cheshire and Warrington and Comparators



Metro-Dynamics¹¹ report that the breakdown between the three local authorities in Cheshire and Warrington demonstrate that jobs paying below the living wage are more prevalent in Cheshire East (22.7%) and Cheshire West & Chester (23.3%). The percentage of C&W residents earning below the living wage is 2.3 percentage points lower than the proportion of jobs in Cheshire and Warrington which pay below the living wage. This indicates a mismatch between the wages of those who live and those who work in C&W.

3.6 DEPRIVATION

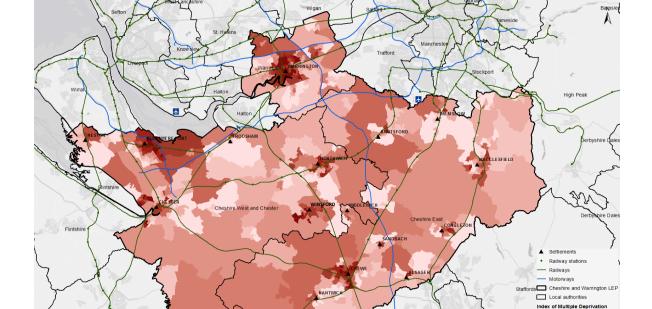


Figure 3.11: Index of Multiple Deprivation (Deciles – Metro-Dynamics)

The Index of Multiple Deprivation (IMD) combines information from multiple domains of deprivation such as income, health and crime, and is used to identify areas of relative high and low deprivation in England.

The map above (Figure 3.11) shows IMD for Cheshire and Warrington with areas of darker red indicating higher deprivation.

There tends to be higher levels of deprivation in towns. For instance, there are areas of relatively high deprivation in Ellesmere Port, Crewe and Warrington, as well as parts of Chester, Northwich, Winsford and Macclesfield.

These areas also tend to underperform in other socio-economic indicators, such as earnings and skills levels.

¹¹ Metro-Dynamics, Industrial Strategy Evidence Base

4 SKILLS PROVISION

4.1 SCHOOLS

Cheshire and Warrington LEP has a strong pre-16 education offer with good quality schools. As of March 2018, 104 schools or 26% of all Ofsted inspected state schools, including nursery, primary, secondary, special and pupil referral units, were ranked 'Outstanding'. This is higher than the North West (23%) and English (21%) averages. In Cheshire West and Chester, 45 schools (or 28%) are 'Outstanding'. The data is set out in Table 4.1 below

	Outstanding	Good	Requires improvement	Inadequate
Cheshire East	25%	65%	8%	2%
Cheshire West and Chester	28%	64%	7%	1%
Warrington	24%	68%	7%	1%
Cheshire and Warrington	26%	65%	7%	1%
Greater Manchester	25%	62%	10%	3%
North West	23%	65%	10%	3%
England	21%	65%	10%	4%

Table 4.2 below provides data on pupil destinations after Key Stage 4 for disadvantaged pupils (defined as pupils known to be eligible for free school meals (FSM) in any spring, autumn, summer, alternative provision or pupil referral unit census from year 6 to year 11 or that are looked after children for at least one day or are adopted from care) and all other pupils. A slightly higher percentage of disadvantaged pupils (90%) progress to sustained education or employment in Cheshire East compared to the English average. However, Warrington and Cheshire West and Chester (87% and 84% respectively) are both below the English average of 88% on this measure.

The gap between disadvantaged pupils and all other pupils in securing sustained education or employment is 8% for England which is the same as for Cheshire East. The gap is greater in both Cheshire West and Chester (11%) and Warrington (10%). It is of concern that the proportion of disadvantaged pupils who secure a sustained education destination is lower in Cheshire East (78%), Cheshire West and Chester (72%) and Warrington (78%) than for England (81%). It is also concerning that the gap between disadvantaged pupils securing a sustained education compared to all other pupils is larger for all three local authorities (12%, 14%, 12%) than the English average of 7%.

Table 4.2: Pupil destinations after completing key stage 4 by disadvantaged¹ status, state-funded schools (mainstream and special)

Year: 2017/18 destinations for the 2016/17 cohort

	Any sustained education or employment			Any sustained education destination		
Local Authority District	Disadv ¹ pupils	All other pupils	Total	Disadv ¹ pupils	All other pupils	Total
ENGLAND - State-funded schools (mainstream and special)	88	96	94	81	88	86
NORTH WEST	87	96	93	78	87	84
Cheshire East	90	98	96	78	90	88
Cheshire West and Chester	84	95	93	72	86	83
Warrington	87	97	95	78	90	87

^{1.} Disadvantaged pupils include pupils known to be eligible for free school meals (FSM) in any spring, autumn, summer, alternative provision or pupil referral unit census from year 6 to year 11 or that are looked after children for at least one day or are adopted from care. These are the pupils who would have attracted the pupil premium at the end of the 2016/17 academic year.

Source: Longitudinal Education Outcomes dataset

4.2 FURTHER EDUCATION

Cheshire and Warrington LEP has three General Colleges of Further Education (Cheshire South and West College, Macclesfield College and Warrington and Vale Royal College), one Specialist Further Education College (Reaseheath) and two Sixth Form Colleges (Priestly and Sir John Deane).

Ofsted is responsible for the inspection of further education providers and grade providers as 1 (outstanding), 2 (good), 3 (requires improvement) or 4 (inadequate). All the colleges in the LEP area have been graded good (2) in their most recently published inspection, aside from Sir John Deane which has not yet received a grade, although the inspection of the previous provider of that name in that location in 2008 was a grade 1 (outstanding).

FE Delivery

The ESFA Localities datacube records learning aims undertaken by learners in colleges and providers funded by the ESFA. A learner may undertake many learning aims, so a count of learning aims does not equate to a count of learners. There is, however, a means of analysing the data in the datacube to provide an estimate for learner numbers.

The estimated learner numbers for providers delivering to over 100 learners aged 16-18 in 2017/18 are detailed in Table 4.3 below. A further 987 learners were recorded as being enrolled with a total of 81 other providers in 2017/18. The figures in the table below exclude enrolments in school sixth forms.

Table 4.3: Estimated Numbers of 16-18 FE Learners on roll 2017/18			
Provider	16-18 Learners Enrolled 2017/18		
CARMEL COLLEGE	140		
CHESHIRE COLLEGE SOUTH AND WEST	3094		
MACCLESFIELD COLLEGE	774		
PRIESTLEY COLLEGE	1506		
REASEHEATH COLLEGE	861		
RIVERSIDE COLLEGE	315		
SIR JOHN DEANE'S COLLEGE	1547		
TOTAL PEOPLE LIMITED	282		
WARRINGTON & VALE ROYAL COLLEGE	1498		
WINSTANLEY COLLEGE	135		
OTHER PROVIDERS	987		
Grand Total	11139		
Source: ESFA Localities Data Cube (residency 2017/18)			
Excludes schools with sixth forms			

Table 4.4 below details the learning aims that 16-18 learners followed in Cheshire and Warrington LEP in 2017/18. The highest frequency of learning aims is for those associated with Preparing for Life and Work at 6,320. 5,430 of these learning aims have not been assigned a level in the datacube. Many students whose main learning aim(s) are elsewhere will also follow at least one aim linked to preparing for life and work as part of their overall Study Programme.

Table 4.4: 16-18 Learning Aims by Sector Subject Area 2017/18				
	Below			
Sector Subject Area	Level 2	Level 2	Level 3	Total
01 - Health, Public Services and Care	163	323	1059	1508
02 - Science and Mathematics	3	2812	2187	4936
03 - Agriculture, Horticulture and Animal Care	29	348	359	531
04 - Engineering and Manufacturing Technologies	211	287	388	857
05 - Construction, Planning and the Built				
Environment	366	253	112	721
06 - Information and Communication Technology	30	84	704	816
07 - Retail and Commercial Enterprise	144	339	146	607
08 - Leisure, Travel and Tourism	54	182	880	1069
09 - Arts, Media and Publishing	51	251	2321	2610
10 - History, Philosophy and Theology	8	8	672	685
11 - Social Sciences	0	0	1168	1168
12 - Languages, Literature and Culture	1	2372	1082	3445
13 - Education and Training	0	2	1	3
14 - Preparation for Life and Work	1176	199	360	6320
15 - Business, Administration and Law	26	111	1369	1501
Grand Total	1953	4539	7650	
Source: ESFA Localities Datacube 2017/18		•		
Excludes school sixth forms				

The further education sector in Cheshire and Warrington provides important support for adults to achieve qualifications at level 2 in English and Maths. Level 2 qualification in English and Maths is widely regarded as an underpinning requirement for employability. Table 4.5 below details the achievement of GCSE English, GCSE Maths, and Functional Skills (English and Maths) at level 2 and below across the three local authorities of Cheshire and Warrington.

Table 4.5: Achievements 2017/18	of Functional	Skills and GCSE English and	Maths by adu	lts	
	Cheshire East	Cheshire West and Chester	Warrington	Total	
FS (English and Maths)					
below Level 2	454	194	740	1388	
FS (English and Maths) at					
Level 2	88	41	188	317	
GCSE Maths	94	140	114	348	
GCSE English	68	95	74	237	
Source: ESFA Localities Datacube 2017/18					

A key component of community cohesion is the ability of all residents to be able to speak, read and write English. Further Education colleges teach English to Speakers of Other Languages (ESOL). Table 4.6 below details the achievement of ESOL qualifications at level 2 and below in each of the LEP's local authorities in 2017/18.

Table 4.6: Achievements of ESOL Qualifications by adults in 2017/18					
	Cheshire East	Cheshire West and Chester	Warrington	Total	
ESOL below Level 2	361	119	194	674	
ESOL Level 2	55	6	4	65	
Total	416	125	198	739	
Source: ESFA Localities Datacube 2017/18					

Non-regulated learning aims tend to be quite short learning episodes. They are often delivered in combination (eg in programmes for the unemployed) or alongside another learning aim (eg CV writing). Table 4.7 below shows that 2,993 such learning aims were achieved by adults in 2017/18 and, unsurprisingly, the large majority of these were in preparation for Life and Work.

Table 4.7: Delivery of non-regulated learning aims to adults 2017/18					
	Cheshire	Cheshire West and		Grand	
Sector Subject Area	East	Chester	Warrington	Total	
01 - Health, Public Services and Care	6	25	17	48	
03 - Agriculture, Horticulture and Animal					
Care	21		12	33	
04 - Engineering and Manufacturing					
Technologies	0	0	12	12	
05 - Construction, Planning and the Built					
Environment	1	1	7	9	
06 - Information and Communication					
Technology	124	3	92	219	
07 - Retail and Commercial Enterprise	170	35	56	261	
08 - Leisure, Travel and Tourism		1	1	2	
09 - Arts, Media and Publishing	4	1	24	29	
12 - Languages, Literature and Culture	2	2	5	9	
13 - Education and Training	0	0	36	36	
14 - Preparation for Life and Work	596	624	1,094	2,314	
15 - Business, Administration and Law	3	1	17	21	
Total	927	693	1,373	2,993	
Source: ESFA Localities Datacube 2017/18					

There are different types of qualification (eg Awards, Certificates, Extended Certificates, Diplomas, Extended Diplomas etc). Awards tend to be quite short programmes of study (eg below 100 guided learning hours) that are vocationally focussed, often at level 2 or below. Table 4.8 overleaf details the Awards achieved by adults resident in Cheshire and Warrington which were funded by the ESFA in 2017/18. 2,847 such qualifications were achieved in 2017/18, with 579 being achieved in Retail and Commercial Enterprise. 1,965 of these Awards were below level 2.

Table 4.8: Awards Achieved by adults in 2017/18 by Sector Subject Area	
Sector Subject Area	Total
01 - Health, Public Services and Care	263
Below Level 2	57
Level 2	206
03 - Agriculture, Horticulture and Animal Care	73
Below Level 2	46
Level 2	27
04 - Engineering and Manufacturing Technologies	110
Below Level 2	30
Level 2	80
05 - Construction, Planning and the Built Environment	261
Below Level 2	261
06 - Information and Communication Technology	188
Below Level 2	184
Level 2	4
07 - Retail and Commercial Enterprise	579
Below Level 2	142
Level 2	437
08 - Leisure, Travel and Tourism	344
Below Level 2	344
09 - Arts, Media and Publishing	120
Below Level 2	118
Level 2	2
12 - Languages, Literature and Culture	78
Below Level 2	69
Level 2	9
14 - Preparation for Life and Work	541
Below Level 2	492
Level 2	49
15 - Business, Administration and Law	290
Below Level 2	222
Level 2	68
Grand Total	2847
Source: Localities Data Cube (Residency 2017/18)	

Certificates (particularly extended certificates), Diplomas and Extended Diplomas are more substantial qualifications that can give a learner a good grounding in a particular vocational area. Table 4.9 overleaf sets out the achievement of Level 2 certificates and diplomas by adults resident n in Cheshire and Warrington in 2017/18. A total of 3,699 such qualifications were achieved. 1,638 (44%) of these were in Health, Public Services and Care.

Table 4.9: Achievements of Level 2 Certificates and Diplomas by adults in 2017/18		
Sector Subject Area	Total	
Qualification Type		
01 - Health, Public Services and Care	1,638	
Certificate	1,623	
Diploma	15	
02 - Science and Mathematics	2	
Certificate	2	
Diploma	0	
03 - Agriculture, Horticulture and Animal Care	25	
Certificate	11	
Diploma	14	
04 - Engineering and Manufacturing Technologies	278	
Certificate	220	
Diploma	58	
05 - Construction, Planning and the Built Environment	205	
Certificate	2	
Diploma	203	
06 - Information and Communication Technology	72	
Certificate	70	
Diploma	2	
07 - Retail and Commercial Enterprise	553	
Certificate	336	
Diploma	217	
08 - Leisure, Travel and Tourism	106	
Certificate	103	
Diploma	3	
09 - Arts, Media and Publishing	52	
Certificate	47	
Diploma	5	
12 - Languages, Literature and Culture	11	
Certificate	11	
13 - Education and Training	198	
Certificate	198	
14 - Preparation for Life and Work	82	
Certificate	58	
Diploma	24	
15 - Business, Administration and Law	477	
Certificate	459	
Diploma	18	
Total	3,699	
Source: ESFA Localities Datacube (Residency 2017/18)		

Substantial vocational qualifications at Level 3 will either be classified as Diplomas or Certificates (normally Diplomas). Figure 4.1 below sets out the data from the ESFA localities datacube on the achievement of such qualifications by adults who were resident in Cheshire and Warrington in 2017/18. There were only 136 such achievements in 2017/18, the highest number of which were delivered in the second tier Sector Subject Area of Service Enterprise. An analysis of this data by learning aim reveals that in 2017/18 there was almost certainly no discrete provision of this kind delivered to adults. Rather, adults will have secured these qualifications as 'in-fill' on young people's classes.

Figure 4.1: Adult Vocational Level 3 Classroom-Based provision

2017-2018 Classroom Achievements of Level 3 Diplomas and Certificates by Adults - 136





FE Colleges run 'Access to Higher Education' programmes that provide learners with a qualification that is recognised by universities as meeting the entrance requirements for degree study in particular subjects. The table below (Table 4.10) details the Sector Subject Areas in which residents of the LEP achieved Access to HE qualifications in 2017/18. There were 41 such achievements in Cheshire and Warrington LEP in 2017/18, with approximately half of those being in in 'Health, Public Service and Care'.

Table 4.10: Achievements in 'Access to HE' courses in 2017/18		
Sector Subject Area	Total Achievements	
01 - Health, Public Services and Care	20	
02 - Science and Mathematics	4	
03 - Agriculture, Horticulture and Animal Care	0	
04 - Engineering and Manufacturing Technologies	1	
09 - Arts, Media and Publishing	2	
11 - Social Sciences	11	
12 - Languages, Literature and Culture	0	
13 - Education and Training	1	
15 - Business, Administration and Law	2	
Grand Total	41	
Source: ESFA Localities Datacube (Residency 2017/18)		

FE Quality

Table 4.11 below presents data from the 2017/18 National Achievement Rate Tables which are published annually by the Department for Education. The data is for the achievement rates for different types of institutions for residents of Cheshire and Warrington LEP. The overall achievement rate for all institution types and the achievement rate for young people and adults in all institution types are all above the national figure. However, adult achievement rates in GFEs and Specialist colleges, and the young people's achievement rate in private sector publicly funded providers and in sixth form colleges are all below the national averages for these types of institutions.

Table 4.11: Ed	Table 4.11: Education & Training Headline Overall Achievement Rates Cheshire and							
Warrington co	mpared	to Natio	nal 2017/18					
			Cheshire a	nd Warringto	n	National		
Institution Type	Age	Cohort	Achievement Rate %	Retention Rate %	Pass Rate %	Achievement Rate %	Retention Rate %	Pass Rate %
General FE and Tertiary College	16-18	11580	84.8	90.3	93.9	82.8	91.2	90.8
	19+	9310	87.9	92.7	94.8	89.1	94.5	94.3
	All Age	20890	86.2	91.4	94.3	85.9	92.8	92.6
Other Public Funded	16-18	6720	91.4	94.6	96.6	82	87.2	94
	19+	2820	95.4	96.8	98.6	86.2	92.4	93.3
	All Age	9540	92.6	95.3	97.2	84.9	90.9	93.5
Private Sector Public Funded	16-18	1150	66.6	70.5	94.5	69.4	77.6	89.4
	19+	2050	88.3	90.1	98	87.6	90.9	96.4
	All Age	3210	80.5	83.1	96.9	83.3	87.7	94.9
Sixth Form College	16-18	950	82.3	87.2	94.3	84.1	88.3	95.2
	19+	70	88.4	89.9	98.4	86.9	92.1	94.4
	All Age	1020	82.7	87.4	94.6	84.2	88.5	95.2
Specialist College	16-18	2320	86.6	93.7	92.4	82.7	91.7	90.2
	19+	260	84.9	91.1	93.2	86.5	93.9	92.1
	All Age	2570	86.4	93.4	92.5	84.5	92.8	91.1
All Institution Type	16-18	22720	85.9	90.8	94.6	82.1	89.5	91.6
	19+	14510	89.4	93.1	96	88.3	93.4	94.5
	All Age	37230	87.3	91.7	95.2	85.2	91.5	93.1
Source: National	Achievem	ent Rates	Tables 2017/18	1				_

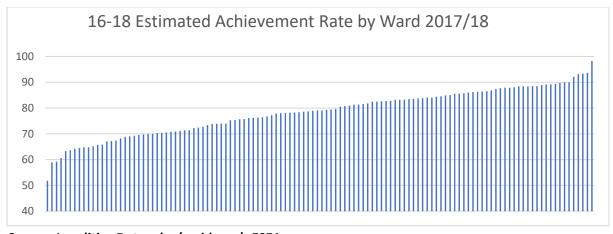
The table below (Table 4.12) presents all age achievement rate data from 2017/18 for class-room based provision (ie not apprenticeships) for all providers that delivered to more than 200 residents in the Cheshire and Warrington LEP area. Only two of these providers do not have delivery bases in the LEP area. The first of these, North Shropshire College, almost certainly delivers to LEP residents because of natural travel to learn patterns. The second, the City of Liverpool College, probably subcontracts activity with one or more providers based in the LEP area.

Two providers, Cheshire West and South College and Total People Limited have all age achievement rates (82.5% and 71% respectively) that fall below the national all age achievement rate of 85.2%. For both of these providers, both the retention rate and the pass rate fall below the national averages.

Table 4.12: Education & Training	Overall Ach	ievement Rate	es by Provide	rs with over 200
learners in Cheshire and Warring			•	
		Achievement	Retention	
Institution Name	Cohort	Rate %	Rate %	Pass Rate %
CHESHIRE COLLEGE SOUTH AND WEST	10730	82.5	89.9	91.7
CHESHIRE EAST COUNCIL	930	97.3	98.9	98.4
CHESHIRE WEST AND CHESTER				
COUNCIL	1700	96.8	97.2	99.6
MACCLESFIELD COLLEGE	2120	91	95.1	95.7
MANTRA LEARNING LIMITED	450	94.5	95.4	99.1
NORTH SHROPSHIRE COLLEGE	260	100	100	100
PRIESTLEY COLLEGE	5290	86.4	91.5	94.3
REASEHEATH COLLEGE	5600	88.3	94.2	93.7
SIR JOHN DEANE'S COLLEGE	2710	98.4	98.7	99.7
THE CITY OF LIVERPOOL COLLEGE	330	95.1	95.1	100
TOTAL PEOPLE LIMITED	900	71	71.1	99.8
WARRINGTON & VALE ROYAL				
COLLEGE	6980	88.5	92	96.2
ALL PROVIDERS (NATIONAL)		85.2	91.5	93.1
				Г
Source: National Achievement Rate Tal	bles 2017/18			

Figure 4.2 below shows the distribution of the estimated FE 16-18 achievement rate in all of the wards of Cheshire and Warrington. Ward names have been withheld. It is a matter of concern that the estimated achievement rate can vary between 52% and 98% depending on where a young person lives.

Figure 4.2: Estimated 16-18 achievement rates by ward



Source: Localities Datacube (residency), ESFA

Table 4.13 below sets out the destinations of learners leaving the 16-18 phase of education in Cheshire and Warrington, comparing the destinations for disadvantaged learners to all other learners, in selected different geographies. The percentage of pupils that secure any sustained employment or education outcome is very similar in the three local authorities to the English figure of 72%. However, the gap between disadvantaged learners and all other learners is wider, 14-16 ppt for Cheshire and Warrington LEP Local Authorities compared to 12 ppt for England.

Table 4.13: Students who reached the end of 16 to 18 study in 2016/17 (activity in the year following 16 to 18 institution attendance)									
	Any educa		ation	Any susta destination		ation	Higher edu (level 4 and		
		All			All			All	
	Disadv ¹	other		Disadv ¹	other		Disadv ¹	other	
	pupils	pupils	Total	pupils	pupils	Total	pupils	pupils	Total
ENGLAND	72	84	81	40	49	47	25	38	35
NORTH WEST	71	86	82	39	51	48	24	40	36
Cheshire East	73	87	85	31	47	44	18	36	34
Cheshire West									
and Chester	73	89	86	32	55	51	17	45	40
Warrington	72	87	84	31	47	43	22	40	36

^{1.} Disadvantage status is given as in year 11. Disadvantaged pupils are defined as those who were eligible for free school meals at any point in the previous six years or having been looked after by their local authority. These are the pupils who would have attracted the pupil premium when in year 11. Pupils with no key stage 4 record were not known to be disadvantaged in year 11 and are included in all other pupils.

Source: Longitudinal Education Outcomes dataset

The proportion of disadvantaged learners that progress to Higher Education is lower in Cheshire and Warrington than is the case for England – as low as 17% in Cheshire West and Chester and 18% in Cheshire East compared to 25% in England. In England the gap between disadvantage learners and all other learners for those progressing to Higher Education is 13% compared to gaps of 18% in Warrington and Cheshire East and 28% in Cheshire West and Chester.

FE Accessibility

Table 4.14 below provides data on journey times to 16-18 Further Education in the three Local Authorities in Cheshire and Warrington LEP. The average journey time to (walking or public transport) is in the range of 19 mins (Warrington) to 27 mins (Cheshire West and Chester). 31% of Service users are unable to get to an FE college by foot or public transport in Cheshire West and Chester.

Table 4.14: FE Journey Time Statistics			
	Cheshire East	Cheshire West and Chester	Warrington
Travel time in minutes to nearest further education college by PT/walk	23	27	19
% users within 15 minutes of further education colleges available by PT/walk	24	15	25
% users within 30 minutes of further education colleges available by PT/walk	86	69	92
% users within 45 minutes of further education colleges available by PT/walk	96	91	100
% users within 60 minutes of further education colleges available by PT/walk	97	98	100
Source: Department for Transport Journey Time Statistics 2016/D	fE Edubase	•	

4.3 APPRENTICESHIPS

In 2017/18 3,361 employers in started just less than 6,400 residents as apprentices. 12 of those employers started 20 or more apprentices in this year with the highest number of starts for a single employer being 61.

Table 4.15 below sets out the volume of apprenticeship starts by residents of Cheshire and Warrington LEP by level and Sector Subject Area/Standard/Framework for all ages in 2017/18.

Overall there were 6,361 apprenticeship starts in 2017/18 with 2,963 starts at the Advanced Apprenticeship level; 978 starts at the Higher Apprenticeship level; and, 2,420 starts at the Intermediate Apprenticeship level.

The three areas with the highest volume of starts were in Business Management (910 starts), Administration (868 starts) and Health and Social Care (783 starts). Almost 40% of the Higher Apprenticeship starts (386) were in Business Management.

Table 4.15: All Age Apprenticesh Area/Standard	ip Starts in 2017/2	L8 by Level and	Sector Subject	
Area/Standard	Advanced	Higher	Intermediate	Grand
SSA/Standard/Framework	Apprenticeship	Apprenticeship	Apprenticeship	Total
Agriculture, Horticulture and Animal			рр. с	
Agriculture	19	1	26	46
Animal Care and Veterinary Science	47	<u> </u>	43	90
Horticulture and Forestry	5		19	24
Arts, Media and Publishing	<u> </u>			
Crafts, Creative Arts and Design	3			3
Media and Communication	8	1		9
Business, Administration and Law		<u> </u>		<u> </u>
Accounting and Finance	176	135	42	353
Administration	316	69	483	868
Business Management	455	386	69	910
Law and Legal Services	13	11	03	24
Marketing and Sales	24	9	11	44
Construction, Planning and the Built	1	3	11	77
Building and Construction	127	20	224	371
Education and Training	127	20	224	3/1
Direct Learning Support	61		18	79
Teaching and Lecturing	5		0	5
Engineering and Manufacturing Technologies				
Engineering	219	12	62	293
Manufacturing Technologies	137	42	140	319
Transportation Ops & Maintenance	93	5	123	221
Health, Public Services and Care	1 30	<u> </u>		
Child Development and Well Being	293		134	427
Health and Social Care	351	148	284	783
Public Services	27	2	19	48
Information and Communication Tec	1			,,,
ICT for Users	11	15	12	38
ICT Practitioners	162	104	32	298
Leisure, Travel and Tourism	102	207	32	230
Sport, Leisure and Recreation	49		43	92
Travel and Tourism	18		2	20
Retail and Commercial Enterprise			<u> </u>	
Hospitality and Catering	99	4	273	376
Retailing and Wholesaling	83	9	71	163
Service Enterprises	147		207	354
Warehousing and Distribution	14	3	82	99
Science and Mathematics		<u> </u>	32	
Science	1	2	1	4
Total	2,963	978	2,420	6,361
Source: Localities Datacube 2017/18	_,		_,	,

Table 4.16 below sets out the overall achievement rate in 2017/18 by LEP residents for apprenticeships at different levels by providers of different types and compares that to the national achievement rates. The achievement rate (all providers, all levels) is higher in Cheshire and Warrington (68.2%) than it is in England. However, the LEP Achievement Rate for Higher Apprenticeships was only 57.3%, more than 6% lower than the English figure (63.6%). This is because providers in the private sector (who delivered most Higher apprenticeships to Cheshire and Warrington LEP residents) and college providers both underperformed against their national peers.

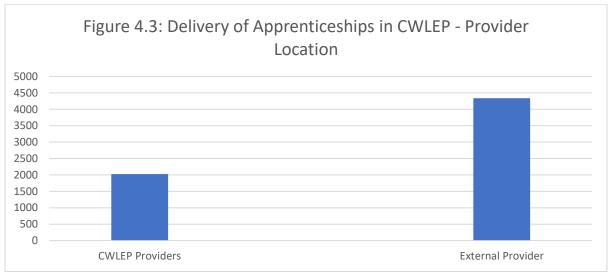
In general, the performance of private apprenticeship providers tends to drive up the overall achievement rate for apprenticeships in Cheshire and Warrington. Achievement rates achieved by residents in General FE and Tertairy Colleges, Specialist Colleges, and Other Public Funded providers are lower at every level than their national comparators

Institution Type	Apprenticeship Type	Overall Cohort	C&W Achievement Rate %	National Achievement Rate %
General FE and Tertiary	Intermediate	1230	68.8	69.4
College	Advanced	800	66.7	68.7
	Higher	120	59.8	61.6
	All	2160	67.5	68.7
Other Public Funded	Intermediate	90	67.7	75.1
	Advanced	40	65.1	76.1
	All	150	65.8	75.5
Private Sector Public	Intermediate	2580	68.2	64.5
Funded	Advanced	2020	70.2	67.2
	Higher	270	56.3	63.6
	All	4870	68.4	65.6
Specialist College	Intermediate	80	71.3	72.7
	Advanced	30	71.9	73.4
	All	110	71.4	72.3
All Institution Type	Intermediate	4000	68.5	67.1
	Advanced	2910	69.2	68.2
	Higher	410	57.3	63.6
	All	7320	68.2	67.3

It would seem however, that this performance of apprenticeship providers is not reflected in the achievement rate of 'indigenous' apprenticeship providers. The all age, all level apprenticeship achievement rate of providers based in Cheshire and Warrington compares well with the national overall rate. Of the eight providers identified in Table 4.8 below (all of which have premises in Cheshire and Warrington), only one provider, Warrington and Vale Royal College, had an achievement rate (65.2%) less than the national rate of 67.3%. Indeed, all other providers had achievement rates in excess of 70% and, in the case of TTE, over 20 ppt higher than the national rate with an achievement rate of 87.7%

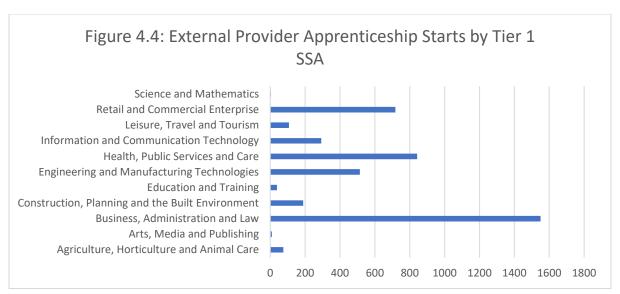
Table 4.17: Apprenticeships Overall Achievement Rates (All Age) for Providers in Cheshire and Warrington 2017/18				
Institution Name	Overall Cohort	Overall Achievement Rate %		
CHESHIRE COLLEGE SOUTH AND WEST	770	77.5		
DAWN HODGE ASSOCIATES LIMITED	890	77		
MACCLESFIELD COLLEGE	240	73.8		
MANTRA LEARNING LIMITED	290	72.9		
REASEHEATH COLLEGE	230	74.2		
TOTAL PEOPLE LIMITED	3410	73		
TTE TRAINING LIMITED	60	87.7		
WARRINGTON & VALE ROYAL COLLEGE	700	65.2		
ALL PROVIDERS (NATIONAL)		67.3		
Source: National Achievement Rate Tables 20.	17/18			

The overall apprenticeship achievement rate for Cheshire and Warrington residents seems to be dragged down by providers whose main base of operations is 'external' to the LEP area. There is likely to be a variety of reasons for this , for example it may be more difficult for providers without a base of operations in Cheshire and Warrington to deliver effective learning and pastoral support to residents. As Figure 4.3 below illustrates, external providers are responsible for the delivery of over two thirds of all apprenticeship starts in the LEP area.



Source: Localities Datacube, ESFA

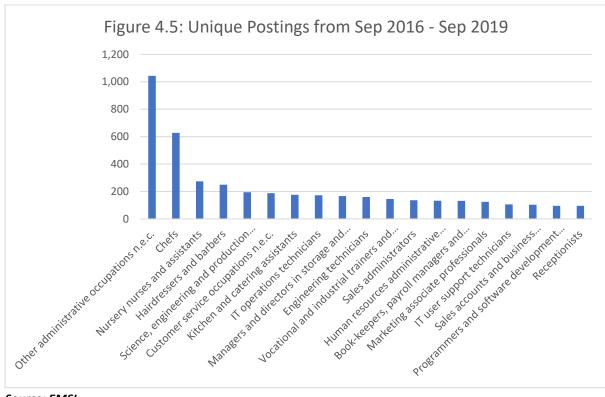
As can be seen from Figure 4.4 below, delivery by 'external' apprenticeship providers takes place across a broad range of Tier 1 Sector Subject Areas with particularly high volumes of delivery in Business, Administration and Law; Health, Public Services and Care; Retail and Commercial Enterprise; and, Engineering and Manufacturing. The Employer's Skills Board will wish to commission further work to understand the dimensions of this issue in greater detail.



Source: Localities Datacube, ESFA

Figure 4.5 below provides information on publicly advertised unique apprenticeship vacancies over the past three years. This confirms the popularity of the apprenticeships in the Tier 1 Sector Subject Areas (SSAs) mentioned above. The four most popular SSAs appear in the top 5 categories of Apprenticeship postings in Cheshire and Warrington:-

- Administrative Occupations (Business, Admin and Law SSA)
- Chefs, Hairdressers (Retail and Commercial Enterprises SSA)
- Nursery nurses and assistants (Health, Public service and care SSA)
- Science, engineering and production technicians (Engineering and Manufacturing SSA)

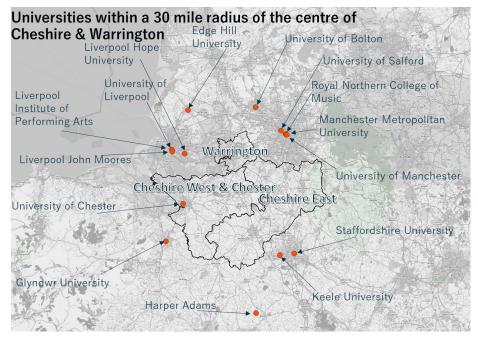


Source: EMSI

4.4 HIGHER EDUCATION

It is a major challenge for Cheshire and Warrington to find suitably qualified and resilient residents to fill the additional 120,000 net additional jobs by 2040 and to replace the 230,000 retiring by 2025. Analysis of replacement demand suggests a deficit of up to 60,000 graduates.

Figure 4.6: Universities within a 30 mile radius



Source: Metro-Dynamics

Cheshire and Warrington has a strong talent pool of graduates from which to draw upon. There is one Higher Education Institution (HEI) within its boundaries (University of Chester), and Cheshire and Warrington is well connected to surrounding universities, as shown on the map above (Figure 4.6). There are 15 HEIs within a 30 mile radius of C&W, including research intensive universities.

These universities have a combined student body of approximately 200,000 students, made up of 160,000 undergraduates and 40,000 post-graduates.

Figure 4.7: Proportion of employment of first degree graduates by sector



Source: Metro-Dynamics

Figure 4.7 illustrates the proportion of employment of first degree graduates (in home region) by sector. This shows that the highest proportion of graduates work in health and social care (19.4%), followed by wholesale, retail and motor trades (13.3%), professional, scientific and technical activities (11.4%), and education (11.2%). This fits with the high levels of employment in these sectors.

5. SKILLS DEMAND

Much of the data used in this section is taken from the UK Employer Skills Survey 2017 (ESS). This survey is one of the largest business surveys in the world, interviewing over 87,000 employers, over 1,400 of which were based in the Cheshire and Warrington LEP area. This survey provides a comprehensive source of intelligence on the skills challenges that employers face both within their existing workforces and when recruiting, the levels and nature of investment in training and development, and the relationship between skills challenges, training activity and business strategy.

5.1 HARD TO FILL VACANCIES AND SKILL SHORTAGES

Participants in the ESS were asked whether they had any current vacancies, whether they were finding these vacancies difficult to fill and, if so, whether they attributed this difficulty to skill shortages. Table 5.1 below provides data for England, the North West, Cheshire and Warrington LEP; and then, within the LEP, data on six sector areas. At the time of the survey, establishments in Cheshire and Warrington were:

- More likely to have a vacancy (23% compared to 20% for England);
- More likely to have a hard to fill vacancy (10% to 8%); and,
- More likely to have a skill shortage vacancy.

	Establishments Have at Have a skills Number of % of all						
	with any	least one	shortage	vacancies as	vacancies		
	vacancies	vacancy	vacancy	a % of all	which are		
		that is	(prompted or	employment	SSVs		
		hard to fill	unprompted)				
England Total	20%	8%	6%	4	22		
North West Total	20%	8%	6%	3	22		
Cheshire and Warrington	23%	10%	7%	5	16		
Total							
Primary Sector and	16%	9%	6%	4	29		
Utilities							
Manufacturing	25%	9%	8%	2	22		
Construction	10%	4%	3%	3	29		
Trade, Accommodation	25%	11%	7%	4	23		
and Transport							
Business and Other	23%	9%	7%	4	21		
Services							
Non-Market Services	32%	14%	7%	8	7		
Note: Some smaller sector results	may not he reliable due t	o small sample siz	re. Overall C&W sample	is 1402 husinesses	I		

Table 5.2 below gives data on what percentage of vacancies were identified as skill shortage vacancies in each main occupational area. Skill shortage vacancies in High Skill occupations (Managers, Professionals, Associate Professionals) formed a higher proportion of the skill shortage

vacancies in Cheshire and Warrington than was the case nationally (42% compared with a UK figure of 37%) with Associate professionals accounting for 25% of skill shortage vacancies in Cheshire and Warrington, compared to 18% nationally.

Table 5.2: Incidence of skills shorta	ge vacancies by occ	upation - (employer base)
	National	Cheshire and Warrington
Managers	4%	3%
Professionals	17%	15%
Associate professionals	18%	25%
Administrative/clerical staff	8%	4%
Skilled trades occupations	23%	20%
Caring, leisure and other services staff	13%	8%
Sales and customer services staff	9%	11%
Machine operatives	7%	5%
Elementary staff	10%	10%
Unclassified staff	2%	2%
HIGH-SKILL	37%	42%
MIDDLE-SKILL	30%	24%
SERVICE-INTENSIVE	22%	19%
LABOUR-INTENSIVE	17%	15%
Source: Employer Skills Survey 2017	•	•

5.2 STAFF UTILISATION AND SKILLS GAPS

From Table 5.3, it is clear that levels of staff utilisation by establishments in Cheshire and Warrington are the same as England (34%)

Table 5.3: Under Utilisation				
	Establishments with underutilised staff			
England Total	34%			
North West Total	36%			
Cheshire and Warrington Total	34%			
Primary Sector and Utilities	19%			
Manufacturing	18%			
Construction	18%			
Trade, Accommodation and Transport	44%			
Business and Other Services	32%			
Non-Market Services	42%			
Note: Some smaller sector results may not be reliable due to small sample size. Overall C&W sample is 1402 businesses				
Source: Employer Skills Survey 2017				

The ESS asked establishments about the extent to which their staff were fully proficient in order to estimate skill gaps in the economy (Table 5.4). Cheshire and Warrington had a higher percentage of establishments reporting some staff as not fully proficient (17% compared to 13% for England), and a higher percentage of those in employment being identified as 'not fully proficient' (6% compared to 4%). Most sectors in Cheshire and Warrington had a higher percentage of skill gaps than the English average.

	% of establishments with any staff not fully	Number of reported skills gaps - Absolute	Number of staff not fully proficient as a % of employment
	proficient	figures	, , , , , , , , , , , , , , , , , , , ,
England Total	13	1060004	4
North West Total	15	154754	5
Cheshire and Warrington Total	17	26834	6
Primary Sector and Utilities	16	574	4
Manufacturing	23	3450	9
Construction	16	1397	8
Trade, Accommodation and Transport	2	8317	6
Business and Other Services	14	5428	3
Non-Market Services	19	7668	7

Source: Employer Skills Survey 2017

The occupations in which these skills gaps presented can be seen from Table 5.5 below. Skills gaps were more likely to be reported in all occupational areas in Cheshire and Warrington compared to nationally. This may mean that the employer market and demand for workforce development support in Cheshire and Warrington may be comparatively larger than elsewhere.

Table 5.5: Incidence of skills gaps by occupation (employer base)			
	National	Cheshire and Warrington	
ANY SKILLS GAP	13%	17%	
Managers	2%	4%	
Professionals	1%	2%	
Associate professionals	1%	2%	
Administrative/clerical staff	3%	4%	
Skilled trades	2%	2%	
Caring, leisure and other services staff	1%	2%	
Sales and customer service staff	3%	4%	
Machine operatives	1%	1%	
Elementary staff	3%	4%	
HIGH-SKILL	4%	7%	
MIDDLE-SKILL	5%	6%	
SERVICE-INTENSIVE	4%	5%	
LABOUR-INTENSIVE	4%	4%	
Source: Employer Skills Survey 2017	•	•	

Table 5.6 below summarises data on the incidence of skills gaps and skill shortage vacancies. 22% of Cheshire and Warrington establishments reported having a skills gap or a skill-shortage vacancy compared to 17% for the UK. A higher proportion of establishments reported having a gap and having a skill-shortage vacancy in Cheshire and Warrington than in the national survey.

Table 5.6: Skills deficiency summary				
Base: All establishments				
	National	Cheshire and Warrington		
Have any skills gap	13%	17%		
Have skill-shortage vacancy	6%	7%		
Either skills gap or skill-shortage				
vacancy	17%	22%		
Both skills gap and skill-shortage				
vacancy	2%	2%		

5.3 EMPLOYER TRAINING

Table 5.7 below summarises the key indicators of employers' approach to training in England, the North West, Cheshire and Warrington and sectors in Cheshire and Warrington. Slightly more in employers in Cheshire and Warrington than in England and in the North West:-

- Trained staff over the last 12 months
- Provided off-the-job training in the last 12 months
- Provided on-the-job training in the last 12 months

The average training days per trainee per annum and training days per member of staff per annum were both slightly lower in Cheshire and Warrington than for England.

	% training staff over the last 12 months	% providing off-the- job training in the last 12 months	% providing on-the- job training in the last 12 months	% of training providers providing online training or e-learning in the last 12 months	Number trained as % of total staff	Training days per trainee	Training days per staff
England Total	66	48	53	52	62	6.4	4.0
North West Total	68	48	55	55	64	6.0	3.8
Cheshire and Warrington Total	72	50	59	56	66	5.8	3.8
Primary Sector and Utilities	57	38	41	20	39	3.8	1.5
Manufacturing	71	57	54	28	65	4.3	2.8
Construction	50	42	30	49	54	5.1	2.7
Trade, Accommodation and Transport	70	44	60	60	63	6.5	4.1
Business and Other Services	76	52	63	60	63	6.1	3.8
Non-Market Services	94	71	82	67	82	5.2	4.3

Similarly, Table 5.8 below shows that a slightly higher proportion of employers in Cheshire and Warrington than in England:-

- Had a business plan specifying objectives for the coming year;
- Had a training plan
- Had a budget for training expenditure

Table 5.8: Whether establishment has a business plan, training plan, and/or a budget for training expenditure				
Base: All establishments				
	National	Cheshire and Warrington		
Business plan specifying objectives for the coming year	57%	60%		
A training plan	46%	48%		
Budget for training expenditure	36%	36%		
Any of the above	69%	71%		
All of the above	24%	25%		
None of the above	31%	29%		
TRAINING PLAN OR BUDGET	54%	55%		
Source: Employer Skills Survey 2017				

5.4 EMPLOYER SKILL NEEDS

The Employer Skills Survey asked employers whether they expected the need to develop new skills in the next 12 months (Table 5.9). A slightly higher proportion of employers in Cheshire and Warrington expected this need to arise than was the case in England (65% vs 62%). There was considerable variation between sectors in Cheshire and Warrington in the response to this question, with only 38% of establishments in Construction expecting a need for new skills in the next 12 months.

Table 5.9: Future Skill Nee	Table 5.9: Future Skill Needs				
	Whether expect need for new skills in next 12 months				
England Total	62%				
North West Total	62%				
Cheshire and Warrington Total	65%				
Primary Sector and Utilities	51%				
Manufacturing	48%				
Construction	39%				
Trade, Accommodation and Transport	64%				
Business and Other Services	73%				
Non-Market Services	70%				
Note: Some smaller sector results may n	ot be reliable due to small sample size. Overall C&W sample is 1402 businesses				
Source: Employer Skills Survey 2	2017				

Those employers that were expecting skill needs to arise in the next 12 months were asked what hard skills (Table 5.10 below) and what people skills (Table 5.11 below) they anticipated requiring.

A higher percentage of establishments in Cheshire and Warrington highlighted anticipated requirements for complex analytical skills, operational skills and digital skills than was the case for England (Table 5.10).

The most sought-after skills in the next 12 months were anticipated to be:-

- Solving complex problems requiring a solution specific to the situation
- Adapting to new equipment or materials
- Knowledge of products and services offered by your organisation and organisations like yours
- Specialist skills or knowledge needed to perform the role

Table 5.10: Skills that will need developing among workforce

Base: All establishments who anticipate a need for new skills in next 12 months (and could identify an occupation that would be most affected)

	National	Cheshire and
	%	Warrington %
Computer literacy / basic IT skills	31	33
Advanced or specialist IT skills	30	33
Solving complex problems requiring a solution specific to the situation	38	40
Reading and understanding instructions guidelines manuals or reports	26	32
Writing instructions guidelines manuals or reports	22	25
Basic numerical skills and understanding	15	13
More complex numerical or statistical skills and understanding	19	20
Communicating in a foreign language	12	7
Manual dexterity	13	15
Adapting to new equipment or materials	43	47
Knowledge of products and services offered by your organisation and organisations like yours	48	57
Knowledge of how your organisation works	30	35
Specialist skills or knowledge needed to perform the role	47	59
None of the above	12	8
COMPLEX ANALYTICAL SKILLS	43	46
OPERATIONAL SKILLS	52	59
DIGITAL SKILLS	48	52
Source: Employer Skills Survey 2017		

A higher percentage of establishments in Cheshire and Warrington highlighted anticipated requirements for management and leadership skills, sales and customer skills, and self-management skills than was the case in England (Table 5.11 below). In the case of sales and customer skills and self-management skills, the anticipated requirement came from a significantly higher proportion of establishments in Cheshire and Warrington than in England (10% and 11% higher respectively).

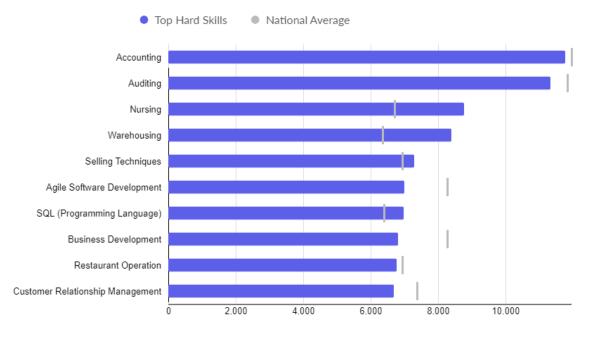
The skills that were most anticipated to be in demand were:

- Customer handling skills
- Team working
- Managing or motivating other staff
- Ability to manage own time and prioritise own tasks

Base: All establishments who anticipate a need for new skills in next 12 month	s (and could ide	ntify an occupatioi
that would be most affected)		
	National	Cheshire and
		Warrington
Instructing teaching or training people	35%	36%
Sales skills	31%	38%
Customer handling skills	36%	41%
Persuading or influencing others	31%	32%
Team working	39%	39%
Managing or motivating other staff	39%	40%
Ability to manage own time and prioritise own tasks	45%	56%
Setting objectives for others and planning human financial and other resources	31%	33%
Managing their own feelings or handling the feelings of others	33%	37%
Making speeches or presentations	19%	22%
None of the above	28%	24%
Don't know	1%	1%
MANAGEMENT AND LEADERSHIP SKILLS	53%	56%
SALES AND CUSTOMER SKILLS	44%	54%
SELF-MANAGEMENT SKILLS	52%	63%

EMSI scrape job advertisements from the internet for the purpose of labour market analysis. Figure 5.1 below ranks the top hard skills most in demand by employers in Cheshire and Warrington'

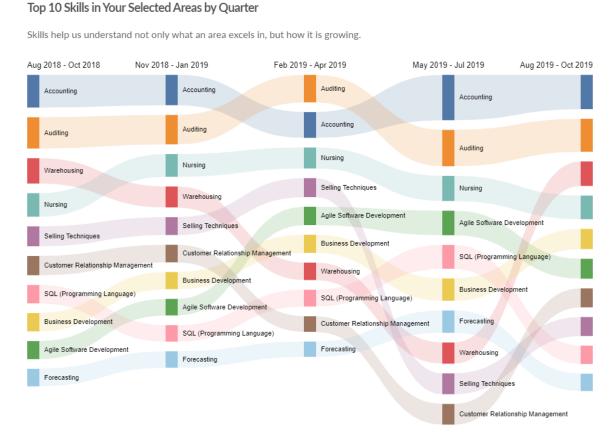
Figure 5.1: Top Hard Skills required for Cheshire and Warrington Vacancies



Source: EMSI

Using these data it is possible to understand the seasonal requirements of employers for hard skills. These are illustrated in Figure 5.2 below.

Figure 5.2: Seasonal requirements of employers in Cheshire and Warrington



Source: EMSI

5.5 SUPPLY AND DEMAND

EMSI's Course Vision tool takes data on learning aim completions from the Localities Datacube (residency) produced by the Education and Skills Funding Agency and maps this to what is known about annual occupational replacement and growth demand. This has the potential to provide an at a glance summary of possible mismatches between the supply of skills on the one hand, and the demand for those skills on the other.

The table below provides a ranked listing of those Course Areas where the unmet demand for provision in that area exceeds 500 annual openings. This tool is experimental at the moment and still under development, but when it is finalised, it has the potential to provide a powerful insight into the curriculum areas that skills providers should seek to develop and expand.

Table 5.12: Annual Completions against Annual Replacement and Growth Demand 2017-2018. All levels. Annual **Course Area** Completions **Openings** Variance Accounting and Finance Marketing and Sales Administration Management **Retail Operations** Vocations Allied to Medicine Construction (General) Science **Hospitality and Catering Operations** Housing Retail Management Care Teaching (General) **ICT Practitioners** Manufacturing Medicine and Dentistry Warehousing and Distribution Cleaning and Housekeeping **Publishing and Information Services** Engineering Wholesale Operations Nursing Hospitality and Catering Management **Property and Facility Services** Media and Communication Metal Work Transportation Operations and Maintenance n.e.c. Leisure and Recreation Services Retailing and Wholesaling n.e.c. **Government Services**

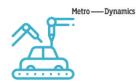
Road Transport Operations

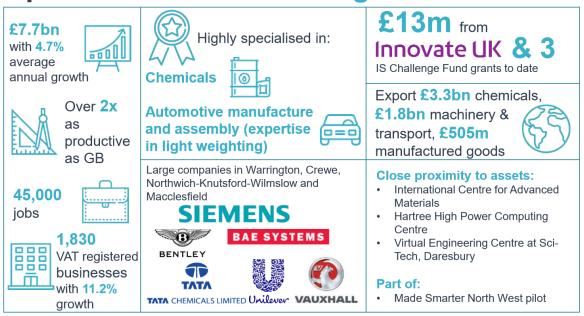
Source: EMSI

6. SECTOR FOCUS

6.1 FOCUS ON MANUFACTURING

Spotlight on the super strength specialism: Manufacturing





Figures for GVA and productivity (inc. chemicals and pharma) are for 2017, with growth 2012-17; number of jobs (inc. chemicals and pharma) are for 2016; number of brinesses are for 2017, with growth 2012-17; exports are for 2016 with chemicals exports inc. pharma; Innovate UK is to date – September 2018. All sources are quoted on the relevant pages.

Analysis to support the development of the LEP's Local Industrial Strategy has identified Manufacturing as a 'Super Strength Specialism' for the Cheshire and Warrington Economy.

Home to national and international brands including Bentley Motors, Vauxhall, Siemens, Tata Chemicals and AstraZeneca, Cheshire and Warrington has a rich heritage of manufacturing excellence. Around a quarter of Cheshire and Warrington's GVA is generated by manufacturing activity and almost 10% of employment. This in turn drives significant export activity and inward investment.

Through the LEP's Local Industrial Strategy, there is an ambition to make the area's manufacturing supply chains amongst the most productive in Europe, through increased levels of automation and digitisation, driving the creation of high quality, well paid jobs and through a shift to more sustainable production process and materials.

Cheshire and Warrington is an integral part of one of the largest and most diverse automotive clusters in the country, stretching from Lancashire, though Liverpool City Region and into North Wales. Work undertaken by the Northern Automotive Alliance and Welsh Automotive Forum has highlighted the risks to the current automotive base caused by Brexit. This includes potential supply chain disruptions and a need to secure higher levels of UK-sourced content in a post-Brexit trade environment. It has also identified a series of potential opportunities centred on regional strengths

in light weighting and control systems which will be key to the next generation of electric and autonomous vehicles.

For the wider sector, and in particular manufacturing supply chains, to continue to thrive, companies and their workforce need support to understand and adapt to a digitally enabled future and meet the challenge of adapting to a low carbon future and the use of more sustainable materials in their production processes. Development of strong, competitive and high-quality supply chains will be essential to maintain the long-term future of the manufacturing sector in Cheshire and Warrington. The nature of the sector also means that the impact of decisions taken by Original Equipment Manufacturers (OEMs) and their large Tier 1 suppliers can be felt across a much wider geography. This is particularly pertinent to key sub-sectors such as automotive manufacturing and chemicals, especially those who may rely heavily on non-UK suppliers at the moment.

There is evidence that automotive companies are making use of national R&D funding opportunities such as the Advanced Propulsion Centre and Innovate UK, bringing new investment into the Cheshire and Warrington region. An example can be seen with FAST STEP 34, an Innovate UK collaborative research project to use titanium in automotive engines with the ultimate aim of lowering vehicle emissions. Crewe-based Bentley Motors are part of that consortium.

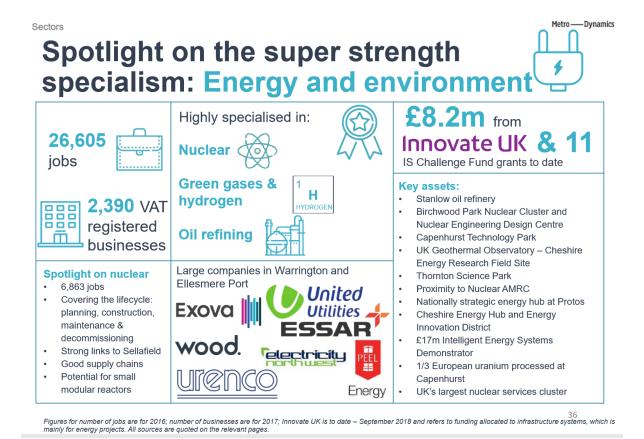
The UK is the fourth largest vehicle producer in Europe. The attractiveness of the UK's automotive sector is underpinned by four key characteristics: economic environment; labour (costs, productivity and flexibility); skills base; and, R&D capabilities and support.

There are expected to be four main areas for technology development in the near future; more efficient Internal Combustion (IC) engines, energy storage, lightweight structures and powertrains and power electronics. Technology change offers the UK an opportunity to create tomorrow's vehicles, increase market share and create new supply chain companies. Currently most repetitive tasks have been automated, the product has become highly complex and manufacturing processes now require different skill sets. Skills issues have constrained the recent growth within the automotive sector with above average levels of hard-to-fill vacancies, difficulty retaining staff and technical skills gaps. The proportion of automotive establishments that trained was also below that of companies that trained across the whole economy.

The global automotive industry is forecast to grow significantly in the next few years with a strengthening trend towards premium vehicles in line with middle class income growth in developing nations. A global shift to ultra-low emission propulsion systems, low carbon technologies, will present significant opportunities for UK automotive companies. A move to new markets and increased focus on innovation will increase the demand for new higher-level technical skills, innovation in product design, the capacity to apply existing skills and the strategic management skills required to identify and capture these new markets.

6.2 ENERGY AND THE ENVIRONMENT

Strategy is Energy and the Environment.



A second 'Super Strength Specialism' for Cheshire and Warrington identified in the Local Industrial

Reducing our carbon emissions whilst delivering sustainable economic growth is a challenge for the us all. Cheshire and Warrington has a significant depth of expertise in producing, managing and distributing energy, built up over many decades. We are well advanced in bringing forward a range of low and zero carbon energy sources which, when coupled with that energy systems expertise, can put the area in a great position to meet the challenge of decarbonising our economy and creating new economic opportunities as a result.

We are already developing and implementing technological solutions which could transform the global energy sector. New projects such as the Protos Energy Park at Ince are a visible sign of the billions of pounds industry in Cheshire and Warrington has already invested or identified to support this ambition.

Work to understand the likely impacts on our local electricity networks of the switch to electric vehicles (EVs) has been led by companies in Cheshire and Warrington. EA Technology, based in Capenhurst, and Scottish Power Energy Networks in particular have been at the forefront of research in this area through projects like Electric Nation and Charge.

Our ambition is for Cheshire and Warrington to be at the forefront in preparing for the switch from traditional combustion engines to new forms of power including electricity. This is an area where Cheshire and Warrington is working with other places to achieve a greater impact. We are working with other LEPs in the Northern Powerhouse to support the development of hydrogen as an

alternative fuel for heating, transport and power. Along with Halton in Liverpool City Region, we have been supporting industry-led plans to ramp up existing hydrogen production whilst developing the means to store it within salt caverns in Cheshire and distribute it using existing gas networks were possible.

The LEP is home to the UK's largest nuclear engineering services cluster, employing almost 7,000 people. Centred at Birchwood near Warrington and with other significant assets in Knutsford and Capenhurst, the cluster includes National Nuclear Laboratories as well as the largest private nuclear laboratories in the UK. Our area has strong links across the North West and North Wales, where the expertise of businesses such as Wood, Cavendish Nuclear, Rolls Royce Nuclear and Sellafield Ltd is deployed to maintain and decommission the existing nuclear 'fleet', as well as working to design a new generation of small and advanced modular reactors.

The national and international market for nuclear new build, maintenance and decommissioning is estimated at over £1.2 trillion by 2030

The sector employs over 300,000 people nationally with more working for large employers than is the case in other sectors but there are a growing number of small businesses. The workforce is older than in other sectors - the average age of managers and professionals is increasing relatively rapidly which suggests there is a low influx of younger people into these roles. A relatively high proportion of employees are process or plant operatives.

The key challenges for the sector are: the growth of energy from renewables; the renewal of current energy production facilities; the long term increase in demand for electricity; the greater emphasis on electricity powered vehicles and microgeneration which will place further demands on the distribution network; the greater emphasis on waste management and emphasis on recovering value from waste rather than disposal.

Employment across the sector is expected to expand by 4% in the next decade, especially in occupations requiring higher level skills. There will also be a demand for new recruits to replace an ageing workforce especially in engineering and technical skills. The decarbonisation of energy production and its regulation will require core technical and job specific skills which may prove difficult for smaller workplaces.

Other skills needed are: adaptability and transferability skills; environmental and sustainability awareness; systems and risk analysis skills; entrepreneurial skills; innovation skills (to identify opportunities and create new strategies); communication and negotiation skills; marketing skills (to promote new products and services); consulting skills (to advise consumers about green solutions and technologies); networking, IT and language skills to operate in the global market.

There are some concerns for the future. These include the following: STEM graduates are not attracted to the industry; the sector is reliant on international migration for engineering professionals, technicians, skilled trades e.g. welders and line repairers; the proportion of professional and technical staff receiving training is low and not over level 4. Much of this training on offer is health and safety or induction related; there are problems recruiting process operatives; skills gaps exist- affecting process operatives, professional and associated professional occupations and managers; expansion and productivity growth could be limited by a lack of high level skills and the ability to innovate and commercialise technological developments.

The sector's full potential and highest performance will only be achieved by attracting, retaining and refreshing talent. Possible actions include developing alternative sources of skills supply to maximise

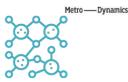
the number of recruits to the sector, for example by encouraging vocational entry routes to the sector such as apprenticeships and Foundation Degrees. The sector could also be made more attractive to new recruits through: increasing awareness of the benefits of working in the sector; improving the provision of careers information, advice and guidance; and, encouraging existing employees to act as ambassadors and promote the benefits of working in the sector to potential new recruits. Further investment in workforce development needs to be encouraged, including continuous professional development, management training and sector initiatives to support smaller employers in managing their training programmes and accessing suppliers.

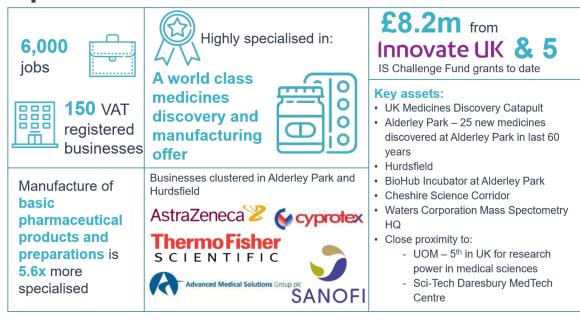
The challenges of building the UK's nuclear skills base are significant. The UK's existing expertise lies primarily in the operation and decommissioning of nuclear plants rather than construction. It will need to reskill workers or attract new skills to meet the changing workforce profile. The sector will need to compete with others for the many Tier 1 skilled workers – those without specialist nuclear skills – required for construction, project management and technical roles. It will likely also need to source talent from overseas to meet the demand. Fewer highly skilled specialists from Tiers 2 and 3 will be needed. Yet as these workers take between five and twenty years to develop their skills, they may prove more difficult to source. Creating a pipeline to foster these skills, coupled with processes to accurately predict potential skills shortfalls will be vital.

6.3 FOCUS ON LIFE SCIENCES

Sectors

Spotlight on the super strength specialism: Life sciences





A third area identified as a 'Super Strength Specialism' for the Cheshire and Warrington economy is Life Sciences.

Many areas of the UK will include Life Sciences as a strength in their Local Industrial Strategy; in a field that is significant in its breadth in Cheshire and Warrington we know that within Life Sciences we are genuinely one of a handful of locations in the world with a strong track record and strength and depth of knowledge and expertise in medicines discovery, development, formulation and manufacturing.

The LEP has a thriving bio-science cluster built on the legacy of decades of medicines research and development. The cluster is underpinned by significant industry expertise, including leading companies such as Astra Zeneca, Waters Corporation, Advanced Medical Solutions and Recipharm (formerly part of Sanofi Group), and assets in Macclesfield and Alderley Park including the Medicines Discovery Catapult and Anti-Microbial Research Centre.

The sector's growth continues to be driven by the changing nature of the pharmaceutical industry, as it moves away from large single integrated structures to more dispersed models. This new model does create significant opportunities for new company development, research and innovation, but also challenges for smaller companies given the costs involved in developing and testing new drugs. Core companies in the cluster have raised over £315m of investment since 2014, 35% of the amount raised by core life sciences companies across the north as a whole.

Growth has outstripped the figures for the north and north west over the last five years with growth at Alderley Park averaging an exceptional 20% per annum. By linking the area's industrial expertise with academic institutions and more targeted business support and financing the LEP works to

increase the rate of success for development of new medicines and the proportion of these manufactured in the UK.

Researchers and scientists at ICI, Zeneca and latterly AstraZeneca at Alderley Park have been responsible for the invention of some of the world's bestselling heart and cancer drugs and the site continues to evolve, cementing its position as the key drug discovery hub site for Northern England. AstraZeneca's manufacturing plant at Hurdsfield is the company's second largest manufacturing site globally – responsible for generating almost three quarters of 1% of all UK exports and with leading expertise in drug formulation; Recipharm (formerly Sanofi) in Holmes Chapel develops and produces a range of asthma treatments whilst Dechra Pharmaceuticals in Northwich is an international specialist veterinary pharmaceuticals business.

In the sector, there is an ageing workforce e.g. in the process manufacturing sector nearly 40% are 45+ and therefore there will a high replacement demand in the next few years. This is compounded by cross - industry shortages of skilled technicians and the fact that the industry is reliant on STEM skill sets. The manufacturing processes of science-based industries is safety critical and carbon/energy intensive therefore it is heavily regulated from a safety and environmental perspective.

The sector is experiencing a shift from corporate entities to collaborative ventures with smaller companies and an increase in the outsourcing of R&D to the growing supply chain. There is a premium on the mobility and transportability of skills and innovation.

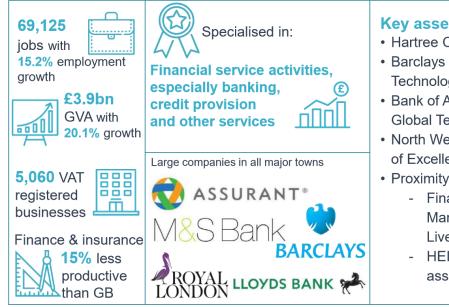
Life science technologies and skills have the same scientific core as wider bio and chemical based industrial sciences- including biotechnology, medical technology, consumer healthcare, chemicals and pharmaceuticals.

Developments in life science research and applications have accelerated since the decoding of the human genome- therefore there is an expectation that this will spur growth.

Metro - Dynamics

Bringing finance and business services to the forefront





Key assets:

- Hartree Centre
- Barclays UK Global **Technology Centre**
- Bank of America EMEA Global Technology Centre
- North West Financial Centre of Excellence
- Proximity to
 - Financial services in Manchester and Liverpool
 - HEIs talent and R&D assets

Figures for number of jobs are for 2016, with growth 2011-16; GVA and productivity are for 2017, with growth 2012-17; number of businesses are for 2017. All sources are quoted on the

Another key sector for the Cheshire and Warrington economy which has been identified in the Local Industrial Strategy is Finance and Business Services. This sector has been identified by the government as a priority sector in terms of skills, jobs, growth and the provision of support services to the wider economy. The sub-sectors include: banks and building societies, investment funds and credit companies; insurance; financial services such as broking; legal services; management consultancy and company head offices.

The workforce characteristics of the sector are as follows: 95% Managerial, professional, associate professional, admin and secretarial roles; 52% are men, 48% women as compared to the economy as a whole which is made up of 54% men and 46% women; the age profile is younger than average but rising; 82% are full time employees which is higher than average; there are a lower than average number of temporary employees and a greater share of self employed workers.

Specialist technical skills are increasingly in demand in the sector in addition to generic skills such as customer service. 52% of workers have level 4+ qualifications and qualification levels in the sector are increasing compared to in the economy as a whole. 35% of managers and professionals are not qualified to level 4 equivalent but this percentage is falling. Employers in the sector are more likely to adopt High Performance Working practices such as flexible working, variety and task discretion in work undertaken and processes for identifying talented individuals.

20% of vacancies in the sector are deemed hard to fill and 18% are due to skills shortages with associate professional roles being the hardest to fill. The main skills in short supply are job specific and technical capabilities such as actuaries in the insurance sub-sector. 12% of employers in the sector report skills gaps-these are particularly concentrated on sales and customer service jobs .

Increased regulation and financial supervision will impact on skill demand in the sector. This could increase the demand for qualified financial advisers, compliance training for sales and other staff and partnership skills at a management level. An ageing population may mean people work longer and therefore their skills need regular updating. Globalisation and the development of new markets will require skills in order to develop product innovation and the cultural awareness required to exploit new opportunities. It is expected that data security and compliance skills are likely to increase in demand and that customer service skills and managerial skills will be required to satisfy higher levels of customer expectations.

Management skills and leadership qualities are likely to be in continual demand due to the need for organisations to be responsive to regulatory regimes, and to exploit new markets in the UK and overseas. Specific technical skills will be required across a range of occupations in the sector: risk and management skills, legal, analytical, statistical and digital skills.

Sector

Unlocking the potential of the logistics and distribution sector





Figures for number of jobs are for 2016, with growth 2011-16; number of businesses are for 2017, with growth 2012-17; GVA and productivity for 2017, with growth 2012-17. Case study on Omega sourced from Warrington Borough Council. All sources are quoted on the relevant pages.

Logistics and Distribution has also been identified as a key sector for the Cheshitre and Warrington economy in the draft Local Industrial Strategy.

In close proximity to two major UK cities and with excellent transport links, Cheshire and Warrington is a major logistics hub. A large employer with 29,000 jobs, logistics and distribution has experienced high employment and business growth in recent years. This is in part due to the development of OMEGA, a £1 billion 575-acre mixed-use development on the site of the former Burtonwood Airbase near the junction of the M6 and M62 motorways. The area has particular specialisms in warehousing and support activities for transport, and postal and courier services.

Home to well-known logistics companies including Eddie Stobart, AO and Great Bear Distribution the area has seen a 45% increase in employment and almost 70% growth in businesses in the sector since 2011/12.

Despite this growth, GVA growth has been low and the sector is less productive than the GB average. Warehousing and support activities for transportation, the most specialised logistics sub-sector, is one of the lowest productivity sectors although it has seen large increases in the number of jobs.

Nationally, Logistics and Transportation is a complex sector, with a mix of national, regional and local activity, as well as companies that operate their own vehicle fleets and others that rely on third parties. In recent years there has been an increase in the way we shop that has further impacted the nature and operation of the logistics sector with home delivery services increasing significantly – a challenge for non-city areas such as Cheshire and Warrington.

As an area with a significant manufacturing base logistics is very important in supporting these businesses to be successful, both in terms of supplying the component parts and raw materials needed for production, but also distributing the final products to national and international markets. Similarly, sectors like retail and health care are reliant on a smooth running, efficient logistics network.

It's possible that the relative performance of the area's logistics and transportation sector is a result of the speed of growth that has been experienced over the last 3-4 years not yet working through in terms of output. Because of this the LEP will focus on working with the sector and key stakeholders to support the ongoing growth whilst working to maximise the number of higher-level jobs created.

The sector employs 2.2m people nationally and is undergoing significant change due to consumer demand and environmental factors therefore the workforce needs to adapt. 70,000 employees are regarded as not being proficient in their job role and have skills gaps. These skills gaps are forecast to increase. Gaps are in technical, practical and job specific skill areas. Employer surveys have suggested that a third of vacancies are hard to fill and this is forecast to increase. There are problems with particular job-types e.g. shortage of LGV drivers; and there are problems attracting young people. Skills shortages and gaps negatively impact on the sector- industry reports difficulties introducing technological change and losing business to competitors. The sector does not traditionally invest in training.

There is a need for a more highly skilled workforce as a result of the adoption of more sophisticated technology driven by cost efficiency, customer expectation, government legislation, competitors and suppliers. For example, the automation of warehouses - now warehouse operatives use handheld computers and use voice enabled technologies for location and handling efficiency. Specifically:

- Individuals with engineering backgrounds and industry specific mechanical knowledge are required.
- There is a need for mathematicians, statisticians and people skilled in quantitative analysis.
- Warehouse management and transport planning needs employees who can collate, manipulate, interpret and report analytics. e.g. Demand Planning Analysts, Inventory Analysts.
- Web designers/developers, software professionals and IT managers are needed to develop systems for tracking deliveries, virtual factory floor design and testing, simulation and analysis.
- Skills are needed in data analysis and manipulation techniques, maths and statistics in order to make use of Big Data for predictive analytics.

The image of the industry and wage levels are barriers to attracting engineers who are in short supply and in demand elsewhere. Attracting young people to the sector is also difficult due to a lack of awareness of the sector which is perceived as 'trucks and warehouses' and 'dangerous, dirty and demanding'. There is a lack of knowledge of the diversity of sector, its job roles and career paths and it is considered low skilled and low earning. There is a need for improved careers education and training to promote greater awareness in schools.

As the sector grows there will be a greater demand for higher level skills for example: for management, professional and technical roles. Technological change will increase sophistication and efficiency. There will be a replacement demand due to the high proportions of older workers, in particular, machine operatives (drivers).

7. DIGITAL SKILLS FOCUS

7.1 INTRODUCTION

Through our Local Industrial Strategy, we have an ambition to make our manufacturing supply chains amongst the most productive in Europe, through increased levels of automation and digitisation, driving the creation of high quality, well paid jobs and through a shift to more sustainable production process and materials. For the wider sector, and in particular manufacturing supply chains, to continue to thrive companies and their workforce need support to understand and adapt to a digitally enabled future and meet the challenge of adapting to a low carbon future and the use of more sustainable materials in their production processes. Development of strong, competitive and high-quality supply chains will be essential to maintain the long-term future of the manufacturing sector in Cheshire and Warrington.

Almost half the population of Cheshire and Warrington (477,000) live in rural areas, and almost 27,000 business are located outside of our main towns and urban centres. Our rural areas have seen a high level of jobs growth (20.2% between 2012-17). Agriculture, food production, logistics and distribution and the visitor economy are important sectors of the economy in rural areas, as well as an emerging digital and creative sector.

The Local Industrial Strategy highlights the importance of digital in helping to raise productivity and improve the overall quality of jobs as well as providing individuals with the skills to access employment across Cheshire and Warrington. An initial focus of the work on the two priorities will be digital and Science, Technology, Engineering and Maths (STEM) related skills. From logistics to automotive to financial services, digital and STEM skills are fundamental to our local employers' needs. Over the last two years Digital Skills have been identified as a key, cross-cutting skills need that form the corner stone of every business in every sector. We have launched the Digital Skills Partnership, in collaboration with Government.

Our business base is diverse, but with clear strengths in a broad range of manufacturing sub-sectors including automotive, life sciences, chemicals and food and drink. Manufacturing growth in Cheshire and Warrington has outstripped that for the UK for several years. Other sector strengths include life sciences, energy and environment, logistics and finance and business services. We have also experienced growth in recent years in the creative and digital sector with clusters emerging around Chester in the west and Knutsford / Macclesfield in the east of the sub region. Burning Glass (2019, p.40) reports that Creative jobs are another hotspot for digital skills and are well represented in the Greater Manchester LEP in the North West of England by skill clusters like digital marketing, digital design, and CRM.

The Burning Glass (2019, P.37) report states that digital skills are of high importance in all LEP regions but urbanised areas have a greater intensity of digital skill demand. The Greater London region comes out on top as 87% (6% points above the UK average) of all jobs posted in the capital's region are in digital occupations. Among English regions, the West Midlands comes second with an intensity of digital skill demand of 81%.' The North West is slightly below the UK measure for digital intensity.



*Digital Intensity indicates the percentage share of job adverts in digital occupations within the total number of job adverts for a region / nation.

Source: Burning Glass (2019, p.43)

The digital demand concentration by digital occupation in the region comprises of average to high skills:



Source: Burning Glass (2019, p.44)

Effective and high-quality broadband coverage is essential to support businesses and economic growth, especially given the shift towards an internet-based economy and changing work practices with working from home becoming more common.

Whilst coverage has improved greatly in the last few years through the Connecting Cheshire Superfast Broadband programme, it remains sporadic, especially outside of the main towns. The first three phases of our roll-out have been delivered in partnership with Openreach with almost £20m funding invested to reach an additional 100,000 premises; of which over 90,000 are now able to access superfast, or above speeds.

Overall, 29.8% of premises in C&W have Ultrafast broadband with speeds of over 300Mbit/s. There is considerable variation between the local authorities: Warrington – 56.6%, Cheshire East – 29.2%, Cheshire West and Chester – 14.5%. (source - LEP01 – Draft LIS briefing p.35)

7.2 SKILLS PROFILE

The Burning Glass (2019, p7) No Longer Optional: Employer Demand for Digital Skills report commissioned by the Department for Digital, Culture, Media and Sport (DCMS) reports that 'employers indicate that about one-third of vacancies they find difficult to fill are, to some degree, attributable to a lack of appropriate digital skills amongst applicants. The report states that 'digital skills are essential entry requirements for two-thirds of UK SOC occupations.'

Burning Glass (2019, p.24) have 'broken digital skills required by employers into two broad categories: baseline digital skills that open doors to digitally intensive jobs, and specific digital skills that allow people to advance along a digital career pathway'. They also provide digital skills categories:

Digital Skill Type	Digital Skill Cluster	Description	Common Occupations
Baseline	Productivity Software	Productivity software skills such as Word and Excel, Enterprise Resource Planning (ERP), Project Management Software, SAP	Administrative Occupations Customer Service
	Software & Programming	Programming languages such as Java, SQL, and Python	Programmers Software Developers Database Administrators
Specific	Computer & Networking Support	Set up, support and manage computer systems and networks	Network AdministratorsSoftware DevelopersIT User Support Technicians

Digital Skill Type	Digital Skill Cluster	Description	Common Occupations
Specific	Data Analysis	Data analysis tools like R or Stata, Big Data, Data Science	Management ConsultantsEconomistsStatisticiansBusiness Analysts
	Digital Design	Digital production, graphic design, online advertising skills	Marketing Associate ProfessionalsGraphic Designers
	CRM	CRM software, such as Salesforce or Microsoft Dynamics	 Sales Professionals Marketing Associate Professionals Customer Services Managers
	Digital Marketing	Digital marketing technologies, such as social media platforms and analytics tools, such as Google Analytics	 Sales & Marketing Professionals Marketing Associate Professionals HR Officers
	Machining & Manufacturing Technology	Machining and engineering software and tools such as CNC machining and computer-aided design	Machine OperatorsCivil EngineersQuality Control and Planning Engineers

Source: Burning Glass, 2019. pp.25-26

Burning Glass (2019, pp25-26) have grouped SOC occupations into 3 different skills levels according to their educational requirements — low-skill, middle-skill and high-skill jobs:

Skill Level	RQF Levels included	Example qualifications
Low-Skill	Entry level, Level 1, Level 2	Entry level certificate, GCSE, Level 1/2 certificate, intermediate apprenticeship, Functional Skills ²⁸
Middle-Skill	Level 3, Level 4, Level 5	A level, Advanced Apprenticeship, Higher National Certificate (HNC), Higher National Diploma (HND)
High-Skill	Level 6, Level 7, Level 8	Degree Apprenticeship, Bachelor's Degree, Master's Degree, Postgraduate Degree, PhD

Source: Burning Glass, 2019. p26

We are now in the process of incorporating these topologies into our data and labour market intelligence reporting systems.

Burning Glass (2019) reports that digital skills are becoming near-universal requirements for employment. The move up the career ladder from low- to high-skill jobs comes with increased demand for specific digital skills.

Skill Level	Total Number of Job Adverts	Job Adverts in Occupations Requiring Digital Skills	% of Job Adverts in Occupations Requiring Digital Skills
Low-Skill	2,111,889	1,629,017	77%
Middle-Skill	2,602,348	2,214,109	85%
High-Skill	4,685,953	3,873,377	83%
All Jobs	9,400,191	7,716,503	82%

Source: Burning Glass, 2019. p29

This aligns with the profile of the workforce of Cheshire and Warrington outlined in our Local Industrial Strategy which reports that the area has a high skills base with many people employed in high level occupations. We have one of the best qualified workforces in the Northern Powerhouse with almost 45% of working age people having qualifications roughly equivalent to a degree level or higher, compared to 34.5% regionally and 38.4% nationally. Many of these qualifications sit within our older workforce — our younger people aren't as well qualified as their counterparts in other areas. There are currently a number of areas where our skills provision either isn't meeting the changing needs of our employers or keeping pace with the changes in technology which are leading to the creation of new roles and skills needs.

The key sectors set out in Cheshire and Warrington's Strategic Economic Plan are manufacturing, life sciences, energy & environment, chemicals, finance & business services and logistics & distribution. When considering the digital intensity by industry sector financial & business services and manufacturing both score highest in specific digital and all digital requirements.

Industry Sector*	Total Number of Job Adverts	Only Baseline Digital (Percent of job adverts in occupations requiring only baseline digital skills)		All Digital (%)
Financial and Insurance Activities	590,427	29%	66%	95%
Manufacturing	1,343,704	26%	69%	95%

Source: Burning Glass, 2019. Pp.46-47

The full list of Digital Intensity by Sector is listed below:

Table 6: Digital Intensity by Industry Sector

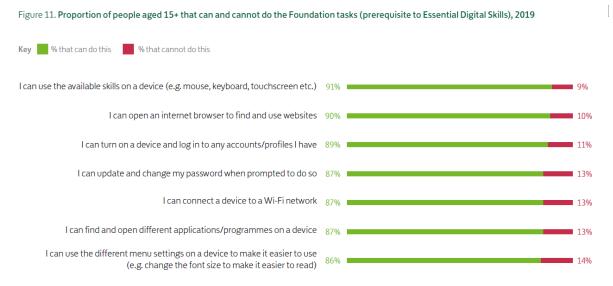
Industry Sector*	Total Number of Job Adverts	Only Baseline Digital (Percent of job adverts in	Specific Digital (Percent of job adverts	All Digital
		occupations requiring only baseline digital skills)	in occupations requiring specific digital skills)	
Finanoial and Insurance Activities	590,427	29%	66%	95%
Manufacturing	1,343,704	26%	69%	95%
Electricity, Gas, Steam and Air Conditioning Supply	36,421	25%	71%	95%
Information and Communication	425,115	16%	79%	95%
Water Supply; Sewerage, Waste Management &	61,444	26%	69%	95%
Real Estate Activities	205,363	49%	45%	93%
Professional, Scientific and Technical Activities	1,110,747	29%	64%	93%
Agrioulture, Forestry and Fishing	16,373	34%	59%	92%
Mining and Quarrying	26,692	20%	68%	88%
Administrative and Support Service Activities	343,033	21%	65%	86%
Transportation and Storage	204,950	36%	50%	85%
Public Administration & Defence; Compulsory Social Security	364,157	31%	51%	82%
Construction	182,236	31%	49%	80%
Activities of Households as Employers; Undifferentiated Goods-and Services- Producing Activities of Households for Own Use	47,603	23%	56%	79%

Industry Sector*	Total Number of Job Adverts	Only Baseline Digital (Percent of job adverts in occupations requiring only baseline digital skills)	Specific Digital (Percent of job adverts in occupations requiring specific digital skills)	All Digita (%)
Wholesale and Retail Trade; Repair of Motor Vehicles & Motorcycles	848,226	32%	47%	79%
Other Service Activities	146,756	28%	48%	76%
Arts, Entertainment and Recreation	233,531	21%	34%	56%
Accommodation and Food Service	511,686	22%	27%	49%
Education	881,312	17%	21%	38%
Human Health & Social Work Activities	1,820,416	18%	16%	34%

^{*} This table shows industry sectors at the 1-digit level. More detailed data at the 2-digit level can be found in the appendix.

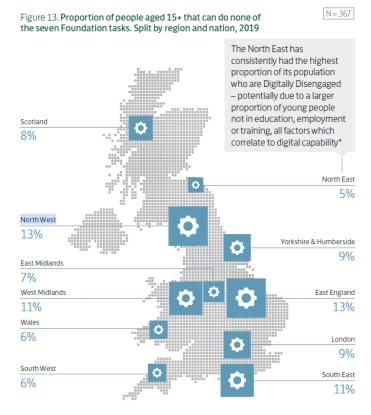
Source: Burning Glass, 2019. Pp.46-47

To assist with delivering more inclusive growth the Cheshire and Warrington Local Industrial Strategy has an ambition to enable all residents to take advantage of local opportunities for prosperity. A more inclusive economy will create the conditions where our residents and workers can reach their full potential, be economically and socially engaged and where our workforce have access to the skills and training needed to boost their earnings power. The Lloyds UK Consumer Digital Index 2019 reports that 22% (11.9 million) of people are without the basic digital skills set out in the Essential Digital Skills Framework.



Source: Lloyds Bank. (2019, p.19) UK Consumer Digital Index 2019

Locally 13% of people aged 15+ in the North West can do none of the 7 foundation tasks, along with the East of England this is the largest % in the UK.

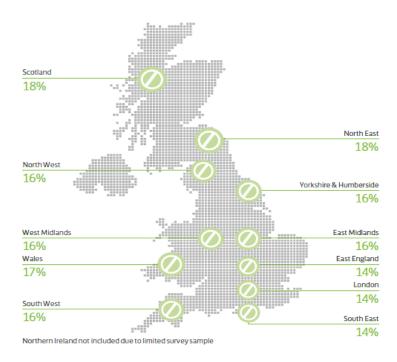


Northern Ireland not included due to limited survey sample

Source: Lloyds Bank. (2019, p.20) UK Consumer Digital Index 2019

Linked to work on digital inclusion a key priority is the 16% of benefit claimants in North West are digitally disengaged.



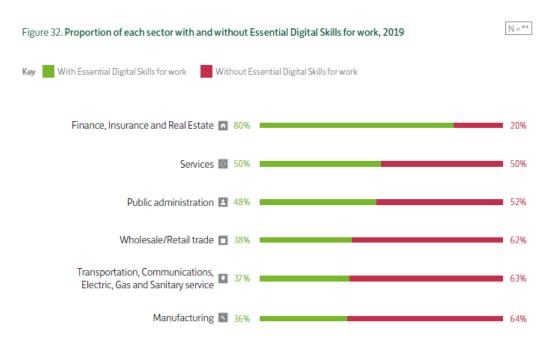


Source: Lloyds Bank. (2019, p.25) UK Consumer Digital Index 2019

The Lloyds UK Consumer Digital Index (2019, p.32) includes insight into the extent to which UK citizens have the digital skills required to be work-ready. As per the broader Essential Digital Skills framework, this has been developed with input from representatives of businesses and charities of all sizes, sectors and employee requirements. For a person to obtain Essential Digital Skills for work, they must:

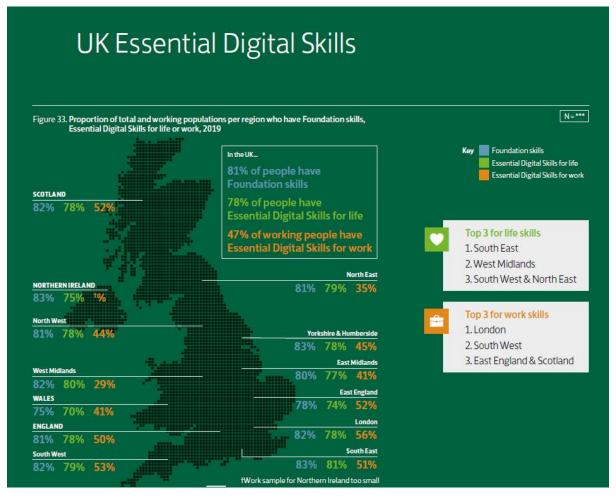
- Be able to do all the Foundation tasks
- Have Essential Digital Skills for life (be able to do at least one 'life' task within each of the five skills)
- Be in employment
- Be able do at least one 'work' task within each of the five skills

The Lloyds UK Consumer Digital Index (2019, p.36) identifies that there is an Essential Digital Skills gap is evident between sectors:



Source: Lloyds Bank. (2019, p.36) UK Consumer Digital Index 2019

78% of people in the North West have essential digital skills for life but only 44% have essential digital skills for work. In both cases the North West is below the UK %:



Source: Lloyds Bank. (2019, p.37) UK Consumer Digital Index 2019

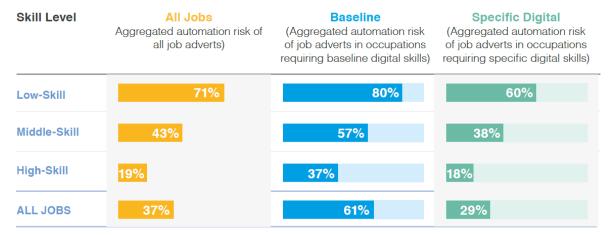
To address some of these barriers the Local Industrial Strategy has identified the following actions:

- Enable an inclusive digital skills offer to older people to directly enable self care and independence through intergenerational projects and employer led retirement groups
- Develop a suite of evidence based digital self-support tools that can enable people to identify and recover from anxiety, depression and low mood.

7.3 OCCUPATIONS AT RISK OF DIGITAL

The Cheshire and Warrington Local Industrial Strategy identifies that Digital Skills have been identified as a key, cross-cutting skills need that form the corner stone of every business in every sector.

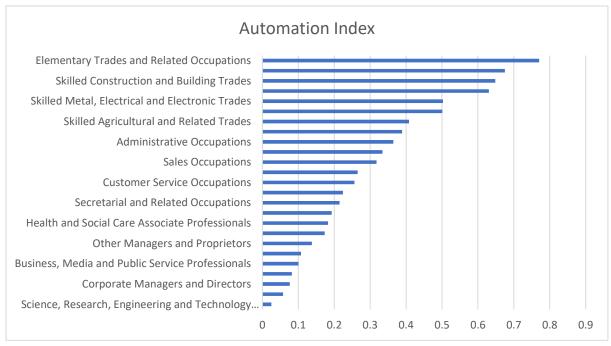
Burning Glass (2019, p.33) reports that 'the rise of technology in the job market has sparked intense debate about the future of work: Will digital technology create jobs, redefine them, or destroy them?' Automation risk is a likelihood that a job can be automated by existing technology in the coming years.



Source: Burning Glass, 2019. p29

Locally the occupations most at risk of automation in Cheshire and Warrington are shown in the table below:

Occupations at Risk of Automation - 2 digit SOC



Source: EMSI Analyst