Labour Market Report 2024

March 2024

West Yorkshire Combined Authority | Tracy Brabin Mayor of West Yorkshire

Contents

Executive Summary 8
Introduction 8
The local landscape 8
Demand for skills 9
Supply of skills 13
Mapping supply and demand 17
1 Introduction 20
1.1 Employment and Skills Framework 20
1.2 Local Skills Improvement Plans 21
1.3 Devolution 22
1.4 West Yorkshire 22
2 The local landscape 24
2.1 Productivity 24
2.2 Pay 27
2.3 Deprivation 32
2.4 Unemployment 36
2.5 Claimant unemployment 38
3 Demand for skills 41
3.1 Employment rate 41
3.2 Sectoral employment profile 47
3.3 Patterns of sectoral employment change 53
3.4 Profile of occupational employment 54
3.5 Patterns of change in occupational employment 57
3.6 Vacancies 61
3.7 Green Economy Skills 77
3.8 Future trends in employment and replacement demands 82
3.9 Automation and Artificial Intelligence 87
4 The Supply of Skills 90
4.1 Demographic Trends 90
4.2 Economic activity 94
4.3 Inclusive labour supply 97
4.4 Qualification Profile 103
4.5 Qualification attainment of young people 106
4.6 Commuting 109

4.7 Apprenticeships 112
4.8 Adult Education 129
4.9 Higher Education 133
4.10 Workforce Development 139
4.11 Work experience and work inspiration 149
5 Mapping of skills demand and supply 153
5.1 Tightening of labour market 153
5.2 Skill shortages 154
5.3 Other reasons for hard-to-fill vacancies 160
5.4 Skills Gaps 161
5.5 Skills underutilisation 167
5.6 Structural joblessness 169
5.7 Responsiveness of education and training sector 171
5.8 Demand and supply for high skilled workers 175
6 Conclusions 177
6.1 Key skills needs 177
6.2 Responsiveness of the system 179

Figures

Figure 1: Productivity trend: current price (unsmoothed) GVA (B) per hour worked (£) 25
Figure 2: Skills and productivity performance by LEP area, 2021 26
Figure 3: Trend in median weekly gross pay for full-time workers (£) 28
Figure 4: Proportion of employee jobs paying below the Real Living Wage (as defined by the Living Wage Foundation) 29
Figure 5: Gender pay gap for median gross hourly earnings (excluding overtime; workplace analysis), 2023 30
Figure 6: Distribution of gross hourly pay (£) for full-time jobs, 2023 31
Figure 7: Median pay per month, seasonally adjusted 32
Figure 8: Proportion of neighbourhoods in 10% most deprived nationally by domain of deprivation and local authority 34
Figure 9: Proportion of neighbourhoods in 10% most deprived nationally by sub-domain of deprivation and district 35
Figure 10: Trend in ILO unemployment, people aged 16-64 37
Figure 12: Claimant count, West Yorkshire 38
Figure 13: Claimant rate trend (claimants as a percentage of residents aged 16-64) 39
Figure 14: Claimant unemployment by age, West Yorkshire 40
Figure 15: Trend in employment level and employment rate 42
Figure 16: Employment rate by local authority (% of population aged 16-64) 43

Figure 17: Payrolled employees, seasonally adjusted, West Yorkshire, July 2014 to December 2023 44
Figure 18: Payrolled employees, seasonally adjusted, index; 2018=100; January 2019 to December 2023 45
Figure 19: Net change in employment by status, West Yorkshire, 2015 to 2022 46
Figure 20: Profile of employment by employment status (% of total employment among people aged 16-64), West Yorkshire 47
Figure 21: Employment by industry (SIC section), West Yorkshire, 2022 48
Figure 22: Comparative sectoral employment profile (% of total employment) 49
Figure 23: Representation of knowledge-intensive business services (% of total employment) 50
Figure 24: Sectoral employment location quotients for West Yorkshire and constituent local authorities (benchmark = England) 52
Figure 25: Sectoral employment in West Yorkshire – current level and recent growth performance 54
Figure 26: Employment by SOC sub-major group, West Yorkshire 55
Figure 27: Comparative occupational employment profile (% of total employment) 56
Figure 27: Proportion of employment in management, professional and associate professional occupations by sector 57
Figure 29: Occupational employment in West Yorkshire – current level and recent growth performance 60
Figure 30: Trend in employment by broad occupational segments, West Yorkshire 61
Figure 31: Trend in total vacancies, UK 62
Figure 32: Vacancy levels and vacancies per 100 employee jobs by sector, UK 63
Figure 33: Index of monthly count of online job postings, three month moving average (2012 = 100) 64
Figure 34: Occupational profile of online job postings, December 2022 to November 2023 65
Figure 35: Ratio of job postings to employment, West Yorkshire (based on count of unique job postings for period December 2022 to November 2023) 67
Figure 36: Change in occupational profile of job postings West Yorkshire, comparison of December to November period over successive years 72
Figure 37: Count of job postings by occupation, West Yorkshire, comparison of April to March period over successive 12 month periods 73
Figure 38: Top occupations in greatest demand overall based on volume of job postings, West Yorkshire, December to November period 75
Figure 39: “Baseline” skills in greatest demand, West Yorkshire, December 2022 to November 2023 76
Figure 40: Computing skill types in greatest demand, West Yorkshire, December 2022 to November 2023 77
Figure 41: Trend in monthly count of online job postings stipulating green skill requirements (3-month moving average), West Yorkshire 79
Figure 42: Most common green skill requirements, identified in new unique job postings, December 2022 to November 2023, West Yorkshire 80
Figure 43: Monthly count of online job postings with green job titles and green skill requirements, West Yorkshire 81
Figure 44: Top green job titles in new unique online job postings, December 2022 to November 2023, West Yorkshire 82

Figure 45: Projected net employment change by industry (thousands of jobs), 2020-2035, West Yorkshire 83
Figure 46: Projected trends in job openings by occupation, 2020-2035, West Yorkshire ..85
Figure 47: Top 20 occupations with highest AI occupation exposure score 88
Figure 48: Relative exposure to all AI by industry....89
Figure 49: Change in working age (16-64) population by local authority, 2011 to 2021 91
Figure 50: Age profile of population, 2021 92
Figure 51: Projected population change by age band, 2018 to 2030....93
Figure 52: Trend in size of 18 year-old cohort in West Yorkshire 94
Figure 53: Employment status profile of West Yorkshire and local authorities....95
Figure 54: Trend in economic inactivity rate for West Yorkshire and England (% of people aged 16-64 and 50-64) 96
Figure 55: Economically inactive people by reason for inactivity (aged 16-64)....97
Figure 56: Employment rate by disability status – % of people aged 16-64....98
Figure 57: Employment rate by ethnicity, % of people aged 16-64....100
Figure 58: Trend in employment rate by ethnicity, % of people aged 16-64 101
Figure 59: Trend in employment by age band, West Yorkshire 102
Figure 60: Profile of highest qualification held by RFQ level by working age (16-64) population, 2022 104
Figure 61: Profile of highest qualification held by working age (16-64) population by economic status, 2022....105
Figure 62: Profile of highest qualification held by RQF level and by age, 2022 106
Figure 63: Proportion of young people achieving qualifications at level 2 and level 3 equivalent by age 19 in 2021/22 (State sector)....107
Figure 64: Proportion of young people achieving qualifications at level 2 equivalent by age 19 in 2021/22 (State sector) by free school meal eligibility 108
Figure 65: Commuting patterns, people aged 16 and over....111
Figure 66: Trend in total apprenticeship starts, West Yorkshire....112
Figure 67: Trend in apprenticeship starts by age, West Yorkshire....113
Figure 68: Trend in starts by level, West Yorkshire 114
Figure 69: Change in total apprenticeship starts by local authority....115
Figure 70: Profile of Apprenticeships starts by length of employment and subject area, West Yorkshire, 2022/23 academic year 116
Figure 72: West Yorkshire apprenticeship starts by provider type 117
Figure 73: Trend in apprenticeship starts by sector subject area, West Yorkshire 118
Figure 74: Net change in starts by tier 2 framework sector subject area, 2022/23 vs 20181/9, West Yorkshire....119
Figure 75: Trend in higher apprenticeship starts by sector subject area, West Yorkshire124
Figure 76: proportion of pupils entering sustained apprenticeship following completion of Key Stage 4, by free school meal status....125
Figure 77: Proportion of pupils entering sustained apprenticeship following completion of 16-18 study by disadvantage status at Year 11 126
Figure 78: Trend in proportion of pupils entering sustained apprenticeship following completion of 16-18 study by disadvantage status at Year 11, West Yorkshire....127
Figure 79: Apprenticeship starts by gender and subject area, West Yorkshire, 2021/22 .128
Figure 79: Proportion of apprenticeship starts by selected learner characteristics, West Yorkshire....129

Figure 80: Participation on FE and Skills programmes (learners aged 19+), West Yorkshire 130
Figure 81: Participation on FE and Skills programmes (learners aged 19+) by home district 131
Figure 82: Education and Training funded enrolments by sector subject area, (learners aged 19+), West Yorkshire 132
Figure 83: Education and Training funded enrolments by level, (learners aged 19+), West Yorkshire.....133
Figure 84: Higher education qualifiers from West Yorkshire institutions by subject area, 2021/22 academic year.....135
Figure 85: Proportion of graduates in employment retained in MCA area / ITL 1 region at 15 months by location of institution.....136
Figure 86: Proportion of qualifiers with Yorkshire and the Humber and West Yorkshire employment location at 15 months by subject 137
Figure 87: Proportion of students entering higher education by free school meal status .138
Figure 88: Trend in higher education progression rate and progression rate gap (FSM vs non-FSM pupils) 139
Figure 89: Proportion of employers providing any kind of training, West Yorkshire 140
Figure 90: Proportion of employees receiving any kind of training, West Yorkshire 141
Figure 91: Volume and prevalence of training by sector, West Yorkshire.....142
Figure 92: Value of investment in training per employee (£).....143
Figure 93: Training equilibrium summary, West Yorkshire.....144
Figure 94: Barriers to providing more training among employers who would have provided more training if they could.....145
Figure 95: External training sources used in last 12 months: % of employers who provide external training, West Yorkshire 146
Figure 96: Proportion of people of working age (16-64) receiving job-related training in previous 13 weeks 147
Figure 97: Proportion of people receiving job-related training in last 13 weeks by labour market group.....148
Figure 98: Factors looked for by employers when recruiting (proportion rating as critical or significant).....150
Figure 99: Proportion of employers who have had anyone on a work experience placement and / or have offered work inspiration in previous 12 months 151
Figure 100: Type of work experience placement provided in last 12 months.....152
Figure 101: Trend in number of claimant unemployed per online job posting.....154
Figure 102: Proportion of firms reporting at least one skill shortage vacancy.....155
Figure 103: Vacancies and skill shortage vacancies by Mayoral authority 156
Figure 104: Vacancies and skill shortage vacancies by West Yorkshire local authority ..157
Figure 105: Skill shortage vacancies as a proportion of total vacancies by occupational major group.....158
Figure 106: Skill shortage vacancies as a proportion of total vacancies by industry sector, 2022.....159
Figure 107: Skill shortage vacancy density (as a percentage of vacancies) by occupational sub-major group, Yorkshire and the Humber, 2022 160
Figure 108: Main causes of having a hard-to-fill vacancy (unprompted).....161
Figure 109: Volume and prevalence of skills gaps by Mayoral authority 162
Figure 110: Volume and prevalence of skills gaps by local authority.....163

Figure 111: Volume and prevalence of skills gaps in West Yorkshire by industry sector, 2022....164
Figure 112: Incidence of skills gaps in West Yorkshire by occupational major group (% of all establishments reporting skills gaps in each occupation)....165
Figure 113: Technical / practical skills that need improving in occupations with skills gaps (% of skills gaps reported) 166
Figure 114: Soft / people skills that need improving in occupations with skills gaps (% of skills gaps reported)....167
Figure 115: Proportion of employers with staff whose skills and qualifications are under-utilised....168
Figure 116: Number and proportion of people with a higher qualification by occupation, West Yorkshire 169
Figure 117: Occupational profile of the unemployed and inactive (based on last job), people aged 16-64, West Yorkshire....170
Figure 118: Comparison of subject profile of higher education qualifiers with profile of online job postings in related occupations 172
Figure 119: Comparison of subject profile of FE / Skills starts vs employment in related occupations, West Yorkshire 174
Figure 120: Trends in numbers of high skilled people and the level of high skilled employment, West Yorkshire 176

Executive Summary

Introduction

This report provides an assessment of West Yorkshire's skills needs based on a detailed analysis of the supply and demand of skills together with evidence of mismatch and market failure.

A key purpose of the analysis is to inform local policy and strategy development but it also has wider applications; for example, it can be used to inform the curriculum strategies of local institutions and to underpin local careers information and advice practice.

The local labour market remains in a state of flux due to the ongoing after-effects of the pandemic on labour supply combined with the impact of high interest rates on economic activity and consumer demand. There are growing signs of a cooling of labour market demand both locally and nationally. The report considers the influence of these factors but also focuses on the underlying strengths and weaknesses of the local labour market, some of which are structural in nature and will continue to have a longer-term bearing on its future performance.

The local landscape

Local action on employment and skills aims to contribute to improvements in wider economic performance, particularly around productivity, earnings and employment. It also seeks to foster greater inclusion in terms of opportunities to participate in and benefit from employment. This report provides an overview of the current performance of the economy and labour market in these areas.

In common with most areas in the north of England, West Yorkshire's **productivity** level is below the national average: the deficit emerged in the period following the global financial crisis and the gap has not narrowed over the last decade. The quality of the area's skills base is an important factor in the productivity deficit but other factors including a lack of capital investment also contribute to the issue.

Pay levels are lower than the national average, reflecting this weak productivity performance. At £640 per week, gross median pay for full-time jobs in West Yorkshire is only 94% of the national average. This relative position has remained largely unchanged in the last 20 years. The area faces a significant low pay challenge, with 14% of jobs paying below the Real Living Wage, above the national average of 13%. West Yorkshire's overall pay deficit mainly reflects a gap at the upper end of the pay distribution: the best-paid workers in West Yorkshire are paid less than their national counterparts.

West Yorkshire also faces a **gender pay gap**[1] of 16%, slightly above the national average of 15%.

Pockets of acute **deprivation** are widespread across West Yorkshire – it has twice its "fair share" of the most deprived neighbourhoods nationally - and deprivation is particularly prevalent in Bradford and Leeds. Education, skills and training deprivation is a key issue, with Bradford, Wakefield and Leeds facing the biggest challenges. Adult skills deprivation is more commonplace in all West Yorkshire local authorities with the exception of Leeds, where education, skills and training deprivation affecting children and young people is more widespread.

West Yorkshire's **claimant count** increased sharply during the health crisis, peaking in March 2021, before falling steadily in the period to October 2022. The count has increased modestly since then with the fastest rate of growth being seen among 16-24 year olds.

In terms of **commuting flows**, West Yorkshire is largely self-contained, with nine out of 10 residents working within the area and nine out of 10 jobs in the area being undertaken by local residents. However, there are substantial commuting flows both in and out of West Yorkshire and a net commuting inflow, overall. The most significant sources of inward commuters into West Yorkshire are Barnsley, Harrogate and Selby, followed by York and Doncaster. Leeds is the principal destination for these inward commuters. Clearly, commuting has been severely disrupted by the pandemic and there is continuing uncertainty about future travel-to-work behaviour. An examination of alternative travel to work areas relating to commuting patterns for full-time jobs indicates that West Yorkshire is contained within a single travel to work area, except for Bradford. This suggests that Bradford is less integrated within the regional labour market than other parts of West Yorkshire.

Demand for skills

The report provides an overview of the demand for skills in the area, based on the profile of jobs locally and the skills required to do those jobs. It considers the current picture and the way in which the pattern of demand is expected to develop in the future. The fundamental question that it addresses is: what skills are needed by employers and the local economy, both now and in the future?

West Yorkshire's **employment rate** has been below the national average since the financial crisis but increased steadily from around 2012 until the onset of the pandemic. The pandemic led to a decline in the rate for West Yorkshire and nationally and West Yorkshire's employment rate is yet to recover to its pre-pandemic position using the official measure based on the Annual Population Survey. However, administrative data from HM Revenue and Customs indicates that the seasonally-adjusted count of employees in West

[1] The gender pay gap is calculated as the difference between average hourly earnings (excluding overtime) of men and women as a proportion of average hourly earnings (excluding overtime) of men's earnings.

Yorkshire was 4% higher in December 2023 than immediately before the pandemic, although there has been little growth since summer 2023.

Turning to **employment status**, local employment growth has principally come from employee and full-time jobs in recent years. The longer-term increases in part-time and non-permanent jobs have stalled.

The sectoral make-up of employment in a local area is an important determinant of the workforce skills that are required. The **biggest sectors** in West Yorkshire's employment base are *Health and social care*, *Wholesale and retail*, *Manufacturing* and *Administrative and support services*.

The local employment base has several distinct **sectoral specialisms**. Most notably *Manufacturing* and *Financial services* are key strengths of the local employment base, along with *Health and social work* and *Other services*, accounting for a larger share of total employment than at national level. There are also distinctive sectoral patterns at local authority level. For example, *Manufacturing* accounts for relatively large shares of employment in all local authority areas except Leeds. *Financial and insurance activities* are well-represented in both Calderdale and Leeds and *Professional, scientific and technical activities* are strongly represented in Leeds.

Overall, West Yorkshire has a **deficit of high skilled employment:** 47% of people are employed in higher skilled roles locally, versus a national average of 51%. This deficit of workers in higher skilled occupations extends to employment in most industry sectors in the local area, reflecting relatively low value business activities, low productivity and an associated weak demand for skills locally.

In absolute terms, *Business and public service associate professional, Administrative* and *Elementary admin and service roles* are the biggest occupations in West Yorkshire. In terms of **occupational specialisms**, the local area's employment base is distinguished by a relatively large proportion of people employed in *Customer service* together with skilled and semi-skilled manual roles. Higher skilled occupations such as *Business, media and public service professionals* and *Culture, media & sports* occupations, are among those that are under-represented in West Yorkshire

Among the largest employing sectors in West Yorkshire, *Health and social work* has generated the strongest growth rate in recent years, with *Manufacturing* remaining largely static and *Wholesale and retail* seeing a small measure of decline. Among "mid-sized" sectors there has been growth for *Transportation and storage* and *Accommodation and food services.* Turning to smaller sectors, *Other services* and *Information and communication* have seen the strongest rates of growth. The *Financial and insurance* sector– an important specialism of the West Yorkshire economy – has seen employment decline in recent years.

Occupations experiencing the most significant employment growth in recent years are mainly high skilled, including:

- ***Science, research, engineering and technology professionals*** (largely driven by growth in digital professionals)

- ***Business, media & public service professionals*** (partly driven by increased demand for *Business, Research and Administrative Professionals,* which includes detailed categories like *Management consultants and business analysts*).

The ***Culture, media and sports*** occupational category has also **seen growth*.***

Higher skilled occupations aside, ***Customer service occupations*** experienced notable growth**.**

Online job postings data provide an insight into the level and **profile of current job openings**.

The monthly count of online job postings, both in West Yorkshire and nationally, fell sharply during the pandemic but soon began a sustained recovery, reaching a peak level in summer 2023. Since then, the trend has been downwards but the level of postings remains at high levels in historic terms and is around 80% higher than before the pandemic.

West Yorkshire has also performed more strongly than the wider national (England) picture; the latter being just over 50% higher in terms of level of postings compared with November 2019.

The occupational profile of local job postings is broadly similar to the national average, although postings for higher skilled STEM and business occupations are currently strongly represented in West Yorkshire relative to the England average. The occupational categories with the greatest number of postings are mostly higher skilled, professional and associate professional groups, with the top ranked being *Science, research, engineering and technology professionals*, *Business, media and public service professional* and *Business and public service associate professionals*. These occupational groups also have high levels of job postings relative to their respective employment bases.

Leeds has specific higher skilled specialisms that are not present elsewhere in West Yorkshire, including legal roles at professional and associate professional levels, architecture-related roles, information technology and web design roles, business related roles and HR roles.

There have been changes to the occupational profile of job postings in the last year with increased shares for teaching, hospitality, retail and skilled trades roles and a cooling of demand for STEM professional and associate professional occupations.

Looking over a longer time frame, the **occupations that have seen the fastest growth in absolute terms compared with pre-pandemic** are as follows:

- *Science, research, engineering and technology professionals* (with *Information Technology Professionals* and *Engineering Professionals* among the occupational minor groups seeing the largest net growth in absolute terms)
- *Business, media & public service professionals* (with biggest growth for *Finance Professionals*, *Business, Research and Administrative Professionals* and *Welfare Professionals*).

- *Administrative* (with largest growth in demand for *Administrative occupations in finance*).
- *Business, media & public service professionals* (with notable growth for *Business Associate Professionals*, *Sales, Marketing and Related Associate Professionals* and *HR, Training and Other Vocational Associate Guidance Professionals*).

The **individual detailed occupations in greatest demand** currently, based on online job postings, are drawn from a diverse range, covering digital, retail, care, finance, teaching and customer service.

Communication is the "baseline" skill that is in the greatest demand by far in terms of employers' job postings, followed by skills such as management, customer service, organisation skills, attention to detail, planning, leadership and problem solving.

Analysis of job postings also provides an insight into the profile of demand for **green economy skills**, although it does not provide a full picture. The number of postings for jobs requiring green skills has grown rapidly since 2020 in West Yorkshire. There are some signs that the monthly count of postings may have peaked in the latter part of 2023, reflecting a wider cooling of the labour market.

The skills in greatest demand include skills relating to aspects of environmental health and safety (the biggest area), environmental management, aspects of water management, renewable energy and power, environmental science and ecology.

Although growing, job titles that are specific to the green economy remain niche in terms of the number of job opportunities recorded for them. Key examples, include sustainability managers and consultants, recycling workers and solar electricians / installers / project managers. In the main this analysis points to the greening of existing occupations – green skills becoming more important rather than the emergence of novel job roles with an explicit focus on climate and environmental issues.

Around two-thirds of employers have **upskilling needs** in West Yorkshire, driven by new working practices, new technology / equipment and regulatory requirements. Employers are most likely to say that managers need upskilling. The types of skills employers believe need to be developed across the workforce are a combination of operational skills, including job specific skills and product / service knowledge; complex analytical skills such as problem solving; and digital skills including digital literacy and advanced IT skills. Functional literacy and numeracy skills are also highlighted.

The most recent Working Futures study provides employment projections for the period 2020 to 2035. Based on this study the **main sectoral sources of net job growth** in West Yorkshire over the next decade are forecast to be service-based, in the form of *Health and social work* *Support services*, *Transport and storage* and *Professional services*. The industries with the poorest prospects based on the forecasts are mainly drawn from the manufacturing and primary sectors of the economy.

The same projections indicate that higher skilled occupations will continue to see the strongest net growth in employment, with a projected combined increase in employment three times that of the overall average. Substantial growth is projected for *Science,*

research, engineering and technology professionals, Health and social care associate professionals and *Business, media and public service professionals*.

Middle skilled occupations are projected to see net decline but at a much slower rate than previously estimated, reflecting the fact that these occupations performed relatively well in employment terms in the period since the last set of projections was produced. Employment in *Administrative* occupations is now expected to grow, offsetting projected decline in *Secretarial* roles, manual operative roles and some skilled trades.

Replacement demands will reinforce net growth in higher skilled occupations and caring roles, leading to strong recruitment needs in these areas. However, because replacement demands are expected to generate the vast majority of job openings over the next decade rather than net growth, they will also serve to offset net declines in other occupational areas, such as *Sales* and *Elementary administration and service* occupations, ensuring that most occupational areas will see a positive recruitment requirement over the next decade. The broad-based nature of the future recruitment requirement is a key message for those planning education and training provision within institutions and for individuals making careers choices.

Labour market projections assume a continuation of past patterns and trends; however, these could be disrupted by sudden, large-scale changes. In this regard there is a growing recognition that the latest generation of **artificial intelligence** (AI) tools will impact on a range of occupations that were previously considered to be relatively resistant to the effects of automation. Modelling of the abilities required to perform different job roles and the degree to which these can be undertaken by AI applications, suggests that *Professional* occupations have the greatest exposure to AI, particularly roles associated with finance, law and business management activities. This has important implications for employment within knowledge based service activities which form a key part of the West Yorkshire economy.

Supply of skills

What are the trends in the supply of people and what is coming through the pipeline of the education and training system of West Yorkshire? How inclusive is the supply-side: are there groups that face barriers to employment and learning opportunities?

West Yorkshire's overall population of working age is growing, at a rate below the national average, although Leeds and Wakefield have seen strong population growth in the last decade. Projections indicate that the number of young people aged 16-24 will grow strongly in the coming decade.

A key supply issue is the decline in **participation in the labour force** linked to the effects of the pandemic, which contributes to current recruitment difficulties. Although sufficiently timely data is not available for West Yorkshire, Yorkshire and the Humber analysis shows a substantial fall in economic activity and rising inactivity. This growth in worklessness is being driven by fewer older people in work and more people out of work due to long-term ill health.

The profile of the labour force is changing. **Older people** have become increasingly important over time as a source of labour supply. Three-quarters of the increase in employment in recent years has been among people aged 50-64 and the number of over-65s in employment has increased rapidly in percentage terms. The number of **disabled people** of working age is growing strongly as is the number of disabled people in employment, both locally and nationally. Nonetheless, there is a continuing employment rate gap for key groups, including the disabled, people from ethnic minorities as well as older people.

One of the key challenges facing West Yorkshire is its relatively **weak skills base**. In spite of steady improvement over time there continues to be a deficit of people with high level qualifications relative to the national average and a large proportion of people with no qualifications or low-level qualifications. The situation differs considerably at local authority level with Wakefield facing the lowest proportion of its population with qualifications at Level 4 and above whilst Bradford has the highest proportion lacking in formal qualifications; meanwhile Leeds outperforms the national average in terms of higher level qualifications. West Yorkshire's skills / qualification deficit extends to the employed as well as the unemployed.

The **low attainment of young people** in West Yorkshire perpetuates the area's weak skills base: they are significantly less likely than the national average to achieve either level 2 or level 3 equivalent qualifications by the age of 19. Much of this underperformance is concentrated in Bradford, Leeds and Wakefield. Disadvantaged pupils are much less likely to achieve qualifications by the age of 19 and Wakefield and Leeds have the widest attainment gaps in West Yorkshire at level 2.

After recovery a degree of recovery in 2021/22, **Apprenticeship** starts for West Yorkshire residents fell slightly (by 56 or less than one per cent) in the 2022/23 academic year, following growth in the previous year; starts were 16% lower than pre-pandemic (2018/19) and 34% lower than at their peak in 2015/16.

Most segments of apprenticeship provision declined to a modest extent, but there was growth for under-19 apprenticeships, Higher apprenticeships and increased take-up in Bradford and Kirklees. At subject level, there was growth for *Health, Public Services and Care*, *Information and Communication Technology* and *Education* but declines for *Business, Administration and Law*, *Construction, Planning and the Built Environment* and *Retail and Commercial Enterprise*.

There is still a significant deficit in starts compared with the pre-pandemic period for a number of key subjects: *Business, Administration and Law* (-1,537, -27%), *Retail and Commercial Enterprise* (-770, -37%) and *Engineering and Manufacturing Technologies* (-737, -27%). Two subjects are in a significantly stronger position compared with 2018/19: *Information and Communication Technology* (+226; +25%) and *Construction, Planning and the Built Environment* (+106; 9%).

Higher apprenticeship starts, which are largely funded through the levy, grew by 11% during 2022/23. Apprenticeships at levels 4, 6 and 7 all grew in terms of starts. Higher apprenticeships remain narrowly focused in subject terms, with 74% of starts concentrated in *Business, administration and law* (primarily management apprenticeships) and *Health,*

public services and care. Apprenticeship provision in technical areas like *Construction* and *Engineering* remains relatively small, limiting work-based progression routes into higher level roles in these areas, although starts have grown strongly in recent years in *Information technology*.

Access to apprenticeships for disadvantaged young people continues to be an issue, particularly in view of the widespread nature of deprivation in parts of West Yorkshire. Although West Yorkshire has an above average apprenticeship entry rate overall following both Key Stage 4 and Key Stage 5 disadvantaged pupils are less likely to enter an apprenticeship than other pupils at both stages.

Acute **gender segregation** across subject areas and **under-representation of people from ethnic minorities**, particularly with regard to young apprenticeships are further issues relating to the inclusiveness of apprenticeships locally, as well as nationally.

The level of participation in **adult education** recovered in West Yorkshire in 2022/23. Participation on Education and Training courses grew by 2,900 (+7%) in 2022/23 following a 6% fall in the previous year. Community Learning participation grew by a more modest 640 (5%) following a 36% increase in 2021/22.

Subjects which saw significant growth in enrolments in 2022/23 include *Preparation for Life and Work, Information and Communication Technology*, *Engineering and Manufacturing Technologies* and *Business, Administration and Law*.

Much of the growth in enrolments seen in 2022/23 was concentrated in learning aims at Entry Level and at Level 3. Enrolments at Level 2 and Level 4 and above declined.

West Yorkshire has a significant **higher education footprint** with 109,000 student enrolments at its higher education institutions during the 2021/22 academic year. The total number of enrolments at West Yorkshire institutions has grown in recent years, by 17% or 16,000 since 2018/19 and by 12% or 9,000 for UK-domiciled students, whilst the total number of qualifiers, including overseas students grew by 2,900 or 9% over the same period.

The subject profile of qualifiers from West Yorkshire's HEIs is broad-based and similar to the national picture. Subjects which account for smaller shares of provision relative to the national average include *Computing*, *Education and teaching* and *Business and management*; but the differences are small. West Yorkshire is above average in terms of *Subjects allied to medicine* (a category which includes nursing), *Biological and sports sciences* and particularly in *Design, and creative and performing arts,* which accounts for 11% of all qualifiers compared with 8% nationally. More broadly, science and technology subjects account for the same proportion of total qualifiers as nationally, at 44% in each case.

Attraction and retention of graduates in the regional economy is key to maximising the economic benefits of higher education. West Yorkshire has a strong positive net inflow of higher education students (i.e. the number of people who come to West Yorkshire to study substantially exceeds the number of people from West Yorkshire who go elsewhere to study). However, a minority of employed graduates take up jobs in the area. In 2020/21,

around 55% of employed qualifiers from West Yorkshire institutions were in employment in Yorkshire and the Humber 15 months after graduation, with 24% in employment in West Yorkshire itself. The extent to which qualifiers are retained in West Yorkshire and the wider Yorkshire and the Humber region varies by subject. The *Education and teaching* category has the highest retention rate followed by *Subjects allied to medicine*, while *Physical sciences*, *Engineering and technology* and, *Mathematical sciences* have low retention rates.

Inclusive access to higher education is an issue both locally and nationally. Overall entry rates into HE are slightly lower for West Yorkshire than nationally (45% versus 47%), with variations in rates at local authority level. The local authorities with the lowest overall entry rates, namely Wakefield and Leeds, also have low entry rates for disadvantaged pupils who are eligible for free school meals (FSM). The gap in HE entry rates between disadvantaged and non-disadvantaged pupils is 19 percentage points in West Yorkshire (29% versus 48%) but rises to 22 points in both Leeds and Wakefield. Although the entry rate into HE has seen an upward trend for all groups in recent years, this has not led to a sustained reduction in the progression rate gap between FSM and other pupils, which remains at around 20 points.

Investment in training by employers is crucial to developing the local skills base, since the vast majority of the 2030 workforce are already in employment. Employers already make a substantial investment in this area, estimated at £1.9bn per annum in West Yorkshire. However, only 57% of employers provide training, with 60% of staff receiving training. There has been no sign in recent years of an improvement in performance against these indicators and both proportions are lower than those recorded by the previous survey in 2019. In sectoral terms, *Business services*, *Education, Wholesale and retail* and *Health and social care* are responsible for the largest volumes of training (days of training) with *Health and social care* having the highest training prevalence (% of staff trained).

However, it is important to **view training behaviour in the context of business need**: 46% of local employers acknowledge that they under-invest in training from this perspective. The key constraints relate to a lack of funds for training and an inability to spare staff time for training rather than the availability of suitable externally-provided training provision. The key challenge is to make the case for training as a business investment that will deliver suitable returns in the form of improved business performance.

Although employer survey data indicates that a similar proportion of local employees as national receive training data from the Annual Population Survey (a household survey) indicates that local people are less likely to participate in job-related training and this has been the case for a sustained period: 15% of local people received training in the previous 13-week period compared with the national average of 19%. Moreover, there is **unequal access to job-related training**. Some workforce groups are significantly less likely to undertake job-related training than others both locally and nationally, with a potential impact on prospects for pay and progression. For example, workers who are already qualified to a high level (level 4+) are twice as likely to receive training than their less qualified colleagues.

Work experience and work inspiration are important ways in which the world of business can engage with education, supporting an effective transition into the world of work by helping individuals to understand and meet the requirements of employers. By contributing to improved career-readiness and employability these activities have a positive influence on local labour supply. Although most employers consider that relevant work experience is an important factor in recruitment decisions, only 31% of West Yorkshire employers had provided a work experience placement in the previous 12 months. A small minority of employers (8%) had engaged with an educational institution to offer inspiration activities such as careers talks, site visits, mentoring, mock interviews, enterprise competitions and input to curriculum.

Mapping supply and demand

Where skills mismatches are acute and persistent, there can be significant implications for business performance. This kind of market failure presents a policy priority but also offers an opportunity for individuals considering their career options to target areas of unmet demand.

The number of unemployed people per vacancy is a key measure of the **tightness of the labour market**, showing the number of jobless people who are actively seeking and available for work relative to the number of opportunities open to them. To assess this at West Yorkshire level a comparison can be made between the number of claimant unemployed people and the number of online job postings. Following a pronounced tightening of the labour market as the regional economy emerged from the pandemic in 2021, the ratio of postings to claimants has remained fairly constant, although there are tentative signs of softening due to a modest increase in claimants since late 2022 coupled with a decline in the monthly count of job postings.

Skill shortages are vacancies that are difficult to fill due to a lack of candidates with the required skills. More than a third of vacancies in West Yorkshire were skill shortage vacancies in 2022 – a substantial increase on the prevalence recorded in 2019 of around one-quarter. Shortages in West Yorkshire are similar to the national average but lower than in some comparator areas, such as Greater Manchester.

Skill shortages have a significant prevalence across all occupational categories in West Yorkshire, with the greatest numbers within *Professional*, *Associate professional and technical* and *Skilled trades* occupational categories. The skills that employers find most difficult to obtain from applicants are principally specialist, job-specific skills and knowledge required to perform the role. Drilling down into the more detailed **occupational pattern of shortages** across Yorkshire and the Humber, the most acute shortages are found among occupations that require STEM skills at *Professional* and *Associate professional* levels plus a range of *Skilled trades*.

Skills gaps are another form of skills mismatch and come about when existing employees within an organisation are not fully proficient in their job and are not able to make the required contribution to the achievement of business or public service objectives. The pattern of skills gaps provides a useful indication of employers' needs in terms of workforce development.

Nearly a fifth (19%) of employers in West Yorkshire are affected by a lack of proficiency among existing staff. There are approximately 90,000 gaps, equivalent to around 9% of total employment in the area. The number of gaps has nearly doubled from its level of 51,000 in 2019 and the number of employers affected has increased from 15%, whilst the proportion the proportion of staff affected has grown from 5% in 2019. Skills gaps in West Yorkshire are well above the national average in terms of both the proportion of employers (England average: 15%) and staff (6%) affected, indeed, the region has the highest volume and prevalence of skills gaps of any Mayoral authority, based on the latest data.

The *Business services* sector has by far the highest volume of skills gaps in West Yorkshire, and a prevalence of gaps that is almost twice the overall average, accounting for more than a third of total gaps. *Manufacturing* and *Wholesale and retail* also contribute high volumes of skills gaps, whilst the *Hotels and restaurants* sector has the highest prevalence of gaps after *Business services*.

Turning to the occupational pattern of skills gaps, employers in West Yorkshire are most likely to report deficits in respect of *Administrative and secretarial*, *Sales and customer service,* and *Elementary* staff. Relatively few highlight gaps for higher skilled professional and associate professional workers, although a relatively substantial proportion of employers say that management level staff are affected by skills gaps. This has clear implications for wider business performance.

Many skills gaps pertain to operational skills (often firm-specific knowledge and skills) and are caused by staff turnover and the need to train new recruits. Complex analytical skills, such as problem solving, creative thinking, plus digital skills at a variety of levels, as well as basic skills (functional literacy and numeracy in a workplace context) are also in deficit for many staff. Many gaps pertain to a need for workers to improve their soft skills, in areas such as time management, team working, customer handling skills and persuading / influencing others.

There is evidence of continuing **structural joblessness** in West Yorkshire, underpinned by a mismatch between the skills of the jobless and the profile of labour demand in the local economy. Many of the jobless have an occupational background in low-skilled roles – particularly elementary roles – whilst demand is increasingly concentrated on higher skilled occupations.

However, this does not mean that all people with higher level skills and qualifications are seeing their skills being fully utilised. More than a third of employers say that the **skills *and* qualifications of some of their staff are in advance of those required for the job**, whilst more than 40% indicate that they have staff whose qualifications that are in advance of requirements. Around 120,000 workers, many employed in administrative, caring, retail and elementary roles (including storage and hospitality occupations), have higher level qualifications but are employed in non-graduate roles.

There are **differences between the subject profile of qualifiers from local HE institutions and the profile of local labour market demand**, although it should be borne in mind that the HE sector serves a national labour market to a large extent and the skills developed through study in HE can be applicable across a wide range of occupations. There are several key subject areas where the proportion of qualifiers is small compared

with the proportion of job openings in related occupations. These include *Computer science* and *Architecture, building and planning* and *Business and administration*. Conversely, there are other subject areas where the proportion of qualifiers outweighs the proportion of related job openings; the most notable examples being *Design, and creative and performing arts*, *Media, journalism and communications* and *Social sciences*. The patterns identified above in the profile of provision have been broadly present for a number of years.

Some occupational pathways are better served by apprenticeships than others, as reflected in their share of apprenticeship starts relative to their respective shares of total employment, with some of the best served fields not traditionally associated with the apprenticeship route. This includes the following subjects: *Accounting and Finance*, *Health and Social Care*, *Child Development and Well Being*, *Public Services, ICT Practitioners*, *Engineering*, *Nursing* and *Subjects and Vocations Allied to Medicine* and *Business Management*. Disciplines that are "under-served" relative to their labour market demand include *Retailing and Wholesaling*, *Manufacturing Technologies* (following recent declines in starts), *Warehousing and Distribution* and *Marketing and Sales.*

Turning to the **balance of supply and demand in respect of adult education**, the proportion of enrolments significantly outweighs employment to a large extent for *Health, public services and care.* Other subjects that account for a larger share of starts than of employment include *Sport, Leisure and Recreation*, *Education and Training*, *Public Services* and *Service Enterprises.*

Conversely, there is a range of **subjects that are under-represented** in terms of adult FE starts, including *Retailing and Wholesaling*, *Manufacturing Technologies*, *Hospitality and Catering*, *Warehousing and Distribution*, *Business Management*, *Administration*, *Transportation Operations and Maintenance* and *Accounting and Finance*.

Higher skilled occupations have been the main source of employment growth both locally and nationally in recent years. An indicative comparison of demand (in the form of employment in higher skilled occupations) and supply (in the form of economically active people qualified at level 4 and above) shows that **demand for higher level skills continues to outstrip supply, although there has been little change in either indicator since the pandemic**.

1 Introduction

What skills are needed to support the development of the local economy, to enable people to fulfil their career potential and to promote inclusion?

This document provides an assessment of skills needs across West Yorkshire, taking into account the level and nature of labour demand and the sufficiency of skills available in the local area in meeting this demand, as well as highlighting instances of market failure and skills mismatches. It considers current skills needs and those that are likely to emerge in future, as well as the potentially disruptive impact of novel developments like generative artificial intelligence.

Rich and comprehensive intelligence is needed by the various groups in the labour market in order for them to make informed decisions about employment and skills. In undertaking a labour market analysis the aim is to add value by supplying intelligence for the following purposes:

- To support strategy and policy development, particularly around areas of market failure in the local labour market that require intervention, such as skills shortages and gaps.
- To influence the focus / profile of local learning delivery with reference to evidence of labour market demand and the wider learning supply picture, in order to strengthen the relevance of provision to local economic needs.
- To inform careers choices by individuals by providing clear and robust information on labour market opportunities, with a view to ensuring that individual decision-making is grounded in a full understanding of the prospects associated with different career pathways.
- To inform action by local employers (including through collaborative action) to address the skill needs of business.
- To support policy development and action on skills by local authority districts within West Yorkshire.

Ultimately, we are seeking to use intelligence to get the right people with the right skills in the right place to support economic growth and to promote individual progression and well-being.

1.1 Employment and Skills Framework

The analysis contained in the report takes account of local policy priorities. The West Yorkshire Combined Authority has set out its priorities for employment and skills for 2021-2025 in its Employment and Skills Framework.

The priorities set out in the Employment and Skills Framework relate to:

- Quality technical education - technical education is a choice with clearly developed pathways that meet the needs of employers.
- Great education connected to business - locally-rooted careers information and learning, informed by employers, that inspires and enables informed choices to support personal ambitions and progression in work.

- Accessing and progressing in good work - everyone has the skills to be able to access good work and is supported to take up training in the workplace that enables progression and development of transferable skills.
- Creating a culture of investment in workforce skills Every employer has a skills plan and invests in the workforce at all levels leading to reduction in skills gaps and increased productivity.
- Driving innovation and productivity through high level skills - to increase the qualification levels, particularly in STEM, of working age adults, foster a culture of enterprise and innovation and widen the talent pool for employers.

The Framework also has a series of cross-cutting themes around inclusive growth, digital skills and net zero carbon.

The development and dissemination of high-quality labour market intelligence is a key cross-cutting element of the Employment and Skills Framework. This includes the use of intelligence to inform careers choice, to support entry into employment for adults and to shape learning provision including through the devolved Adult Education Budget but also more widely including higher level skills provision.

The priorities highlighted above are used as important reference points throughout this report, in terms of the progress that is being made and the key issues that remain to be addressed.

1.2 Local Skills Improvement Plans

Arising out of the Skills for Jobs White Paper, Local Skills Improvement Plans (LSIPs) are part of a wider effort to put employers at the heart of the skills system to help ensure businesses and people have the skills they need to prosper.

The key purpose of LSIPs is to set out the key priorities and changes needed in a local area to make post-16 technical education or training more responsive and closely aligned to local labour market needs.

The development of LSIPs is led by Employer Responsive Bodies. For West Yorkshire, the West and North Yorkshire Chamber of Commerce and the Mid Yorkshire Chamber of Commerce jointly fulfil this role.

The intention is to develop actionable priorities that are grounded in a representative and coherent employer view of the skills needed to support local economic growth and boost productivity, and to improve employability and progression for learners. Plans also seek to forge effective join-up between LSIP priorities and the workings of other parts of the local skills system.

LSIPs selectively focus on areas of provision that can have the greatest impact on the local economy and can gain traction with local stakeholders.

They have a lifetime of three years with the option to be reviewed and updated during this time to ensure continued relevance in a fast-changing environment.

LSIPs also need to explicitly consider skills development needs associated with jobs that contribute to the achievement of net zero objectives and wider environmental goals.

This report is intended to contribute to the available evidence base for the further development of West Yorkshire's LSIP.

1.3 Devolution

The Election of the West Yorkshire Mayor provides an unprecedented opportunity to make progress on employment and skills issues as part of a devolved approach to transforming the regional economy. It gives local control of at least £1.8 billion of funding to be spent on the things that make a difference to the people of West Yorkshire, including substantial funding for adult education. We can use our understanding of regional needs to inform decision-making and the development of tailored employment and skills solutions. The devolution deal includes responsibility for the £65m Adult Education Budget (AEB), to fund training programmes for West Yorkshire residents aged 19+, providing them with the skills needed for entering and sustaining work, an apprenticeship / traineeship, or other further learning.

1.4 West Yorkshire

The prime focus of this report is West Yorkshire: a combined authority area and metropolitan county which consists of five local authorities: City of Bradford, Calderdale, Kirklees, City of Leeds and City of Wakefield.

The region is the economic and geographic heart of Yorkshire and an essential component of the Northern Powerhouse. Lying at the centre of the UK, within one hour's drive of 7 million people, it comprises 1.6% of the land area of England.

West Yorkshire is a vibrant, internationally-significant economy, with a population of 2.38 million, output of £60bn, 91,000 private sector businesses and a total of 1,239,000 jobs.

Bradford and Leeds have the highest population density of the five local authority areas (1,508 and 1,491 people per square kilometre respectively), followed by Kirklees and Wakefield (1,071 and 1,056 respectively). Calderdale has the lowest population density by far with a figure of 571, although this still exceeds the Yorkshire and the Humber and national averages (360 and 438).

Leeds has easily the highest job density in West Yorkshire, with 1.03 jobs[2] per head of working-age resident population, well above the average for the region (0.83) and the national average (0.88). Wakefield (0.80) and Calderdale (0.83 are in line with the West Yorkshire average, whereas Bradford (0.69) and Kirklees (0.66) are much lower in terms of job density.

[2] This is a workplace-based measure of jobs compared with a resident-based measure of population.

2 The local landscape

This section provides important context to the analysis of local skills needs by examining the area's performance against high level economic and labour market indicators, including productivity, pay, employment and deprivation. These are the issues that we need to positively influence through action on employment and skills if the wider vision for West Yorkshire, around prosperity, the fulfilment of individual potential and inclusion, is to be realised.

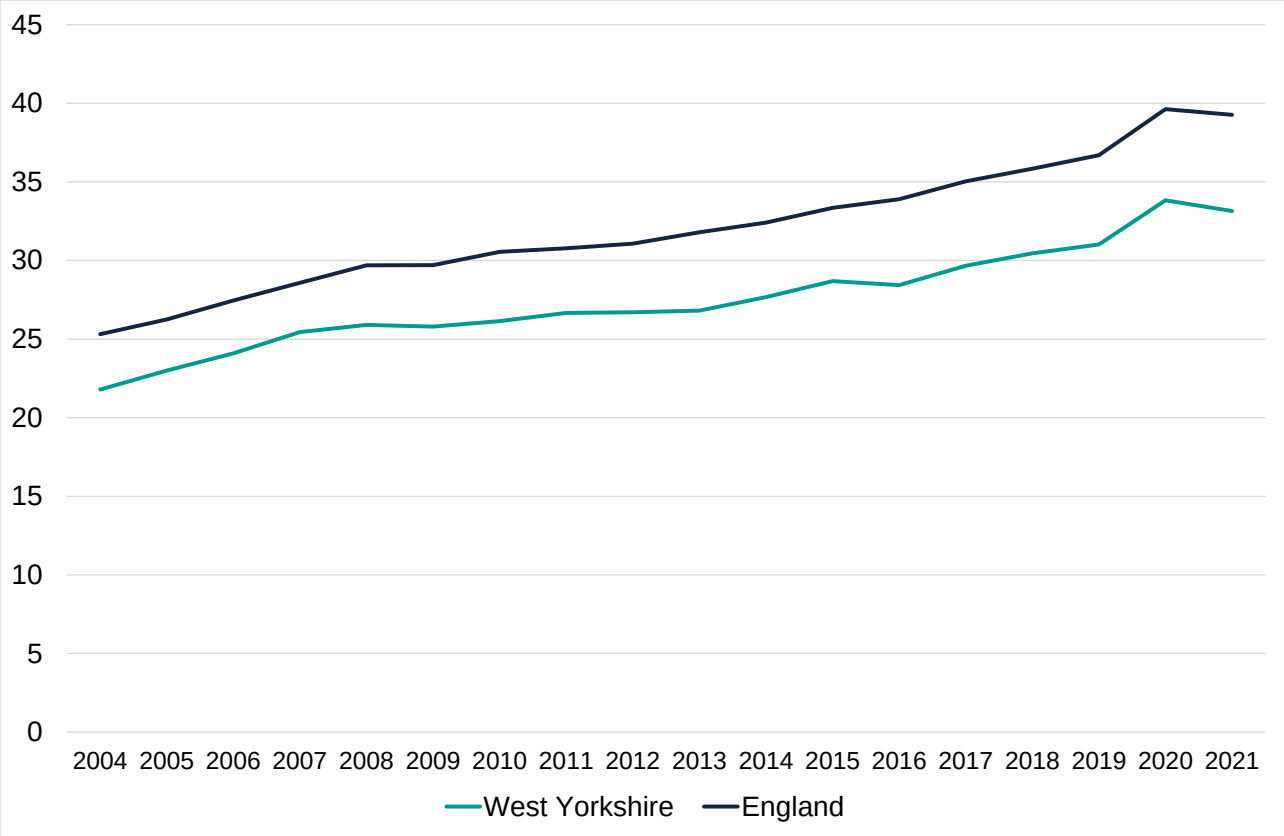
2.1 Productivity

West Yorkshire's position on skills has a direct impact on its performance on productivity, pay and employment and hence on the overall level of prosperity in the area.

West Yorkshire under-performs on productivity and this is linked to its skills performance

Increased productivity is the main contributor to growth in the wider economy and provides the foundation for improvements in living standards.

Figure 1: Productivity trend: current price (unsmoothed) GVA (B) per hour worked (£)



Source: ONS Subregional Productivity July 2021 release, Office for National Statistics

Following an increase in productivity between 2019 and 2020, the latest figures show a decline between 2020 and 2021. This reflects the impact of the pandemic on the economy: in the first instance less productive sectors of the economy fell out of the figures due to restrictions on their operations during lockdown; subsequently, the lifting of restrictions in 2021 led to their re-inclusion.

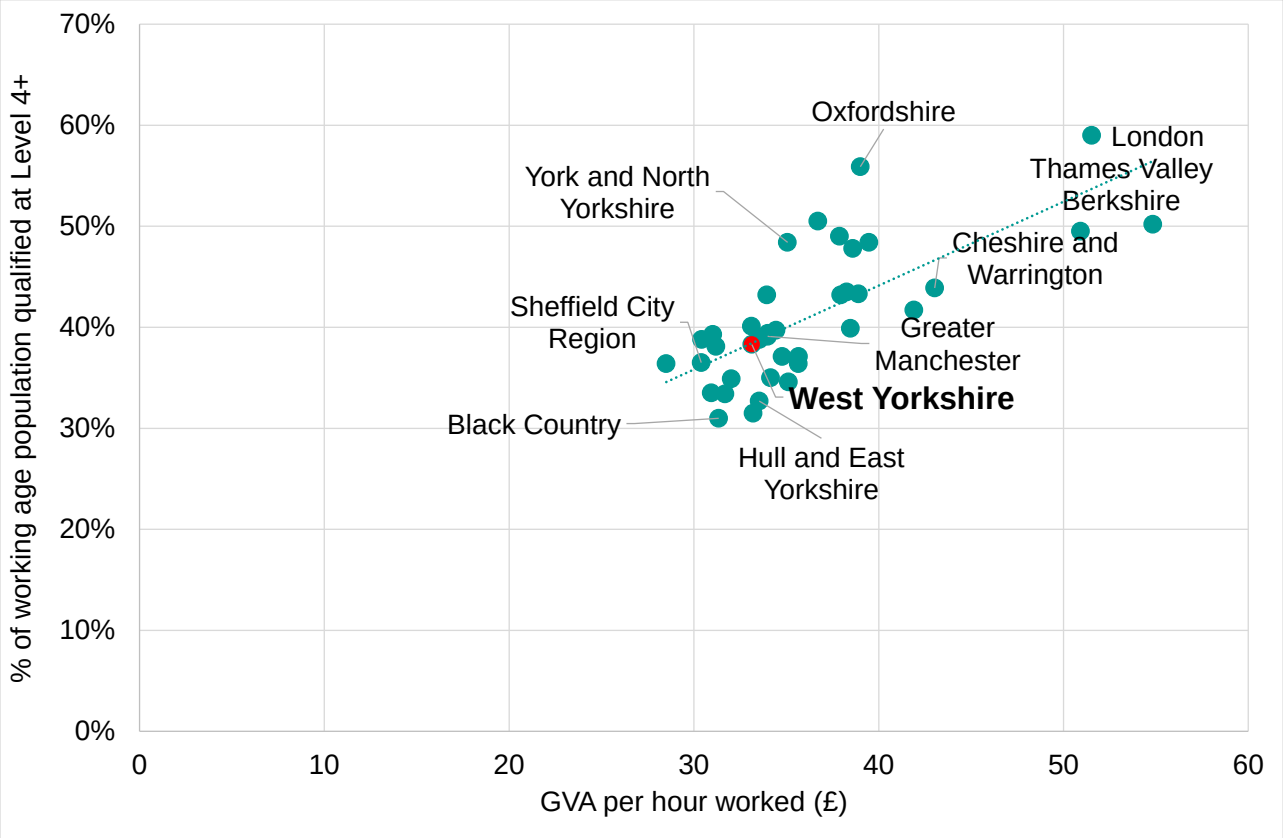
Turning to the more important longer-term patterns, productivity in West Yorkshire has followed an upward trend in recent years, in current price terms, but there is no sign of an improvement in the region's relative performance compared with the national average. Output per hour worked in West Yorkshire fell from 89% of the England average in 2007 to 84% in 2021, indicating that local productivity growth has lagged the rate of growth seen nationally and the gap in productivity performance has widened. All local authorities in West Yorkshire have a level of productivity that is below the West Yorkshire average, except Leeds; its output per hour of £33.26 is still only 94% of the national average.

If West Yorkshire's productivity level could be raised to match the England average it would mean an increase of around £10bn in the size of the local economy.

The national average productivity figure is skewed by the performance of London, where output per hour worked is £46.38, 54% higher than West Yorkshire's figure. West Yorkshire's productivity level is in line with most parts of the north of England, although it is slightly behind Greater Manchester (£31.20 per hour) and Merseyside (£32.10) and well

behind Cheshire (£37.10). These comparator areas also have slightly higher average annual growth rates over the last decade than West Yorkshire.

Figure 2: Skills and productivity performance by LEP area, 2021



Source: Annual Population Survey; Subregional productivity: labour productivity indices by economic enterprise region, Office for National Statistics

A simple illustration of the link between productivity performance and skills is presented in the above figure which plots the performance of LEP areas against two variables – productivity (output per hour) and higher-level skills (the proportion of the working age population qualified at level 4 and above). This shows the strong relationship between the two. West Yorkshire is positioned towards the bottom-left of the chart, indicating relatively low productivity combined with low skills. The top right area, indicating high productivity and a strong skills base, is mainly occupied by areas from London and the South East.

Raising the skills of the local workforce, as well as improving the way in which they are utilised in the workplace, as part of a comprehensive strategy for the local economy, can help to address this productivity deficit. The literature suggests that overall increases in skills or higher levels of skills are associated with greater area productivity and that differences in performance between UK regions and sub-regions can be partially attributed

to differences in skills and in the occupational composition of employment[3]. In particular, management skills can affect the productivity of a firm through developing and implementing market strategy, managing technical and organisational change, and effectively utilising workforce skills[4]. However, interventions to address skills deficits on the supply-side need to be combined with action to address demand-side weaknesses in order to increase the availability of the well-paid jobs that are needed to attract skilled workers into the area and to encourage local people to invest in their skills.

2.2 Pay

Productivity is closely linked to pay and therefore to living standards: more productive firms pay higher wages.

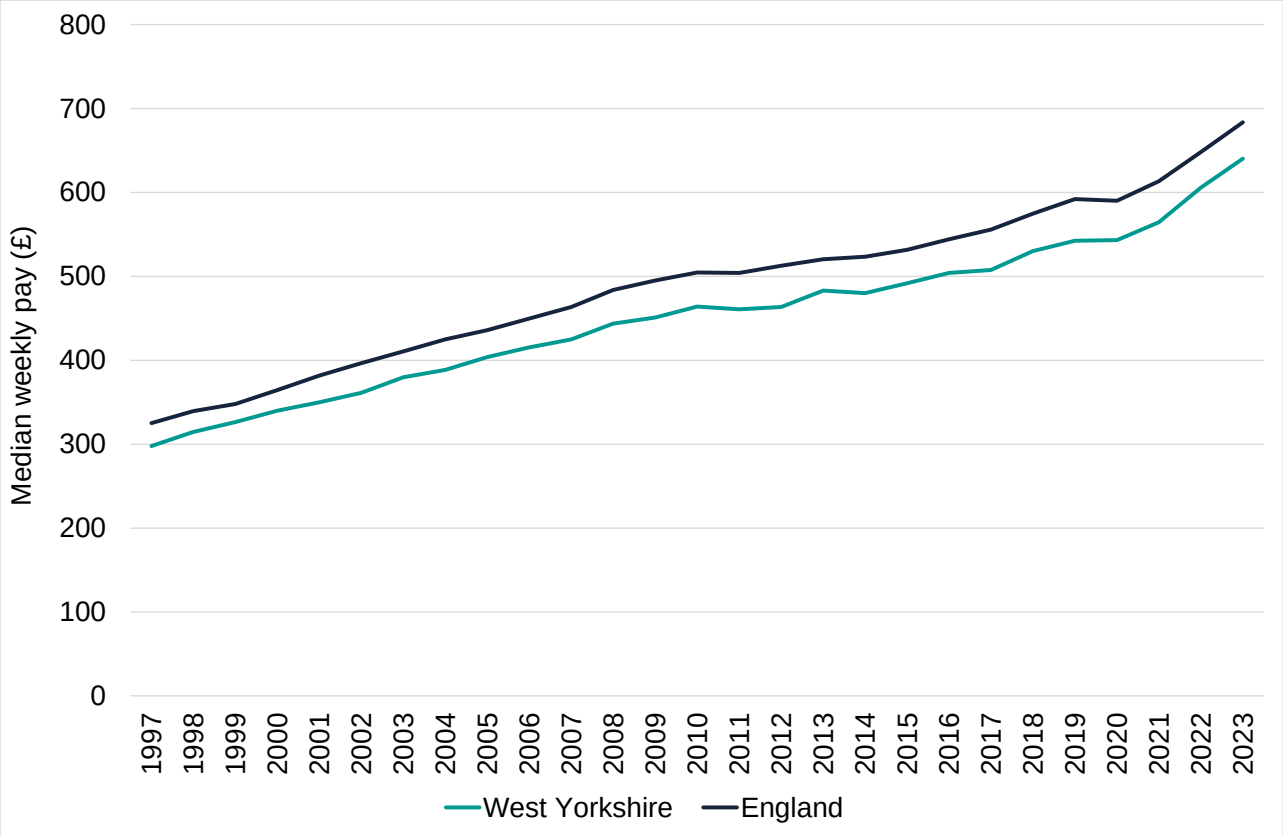
Local pay is below the national average

The local productivity deficit is reflected in West Yorkshire's pay situation. Median gross weekly pay for full-time jobs in West Yorkshire is £640, 94% of the England average. At local authority level this varies between £586 in Kirklees (86% of the national average) to £665 in Leeds (97% of the national average). Bradford's and Calderdale's median pay are also below the West Yorkshire average, at £621 (91% of the national average) and £626 (92%) respectively, whilst Wakefield's is above the West Yorkshire average at £657 (96% of the national average).

[3] Gambin, L, Green, A.E. and Hogarth, T. (2009), 'Exploring the links between skills and productivity: Final Report', Institute for Employment Research, University of Warwick for the East Midlands Development Agency

[4] Bender, S, Bloom, N, Card, D, Van Reenen, J and Wolter, S (2016), 'Management Practices, Workforce Selection, and Productivity', Centre for Economic Performance, CEP Discussion Paper Number 1,416, March 2016

Figure 3: Trend in median weekly gross pay for full-time workers (£)



Note: Workplace-based estimates
Source: Annual Survey of Hours and Earnings

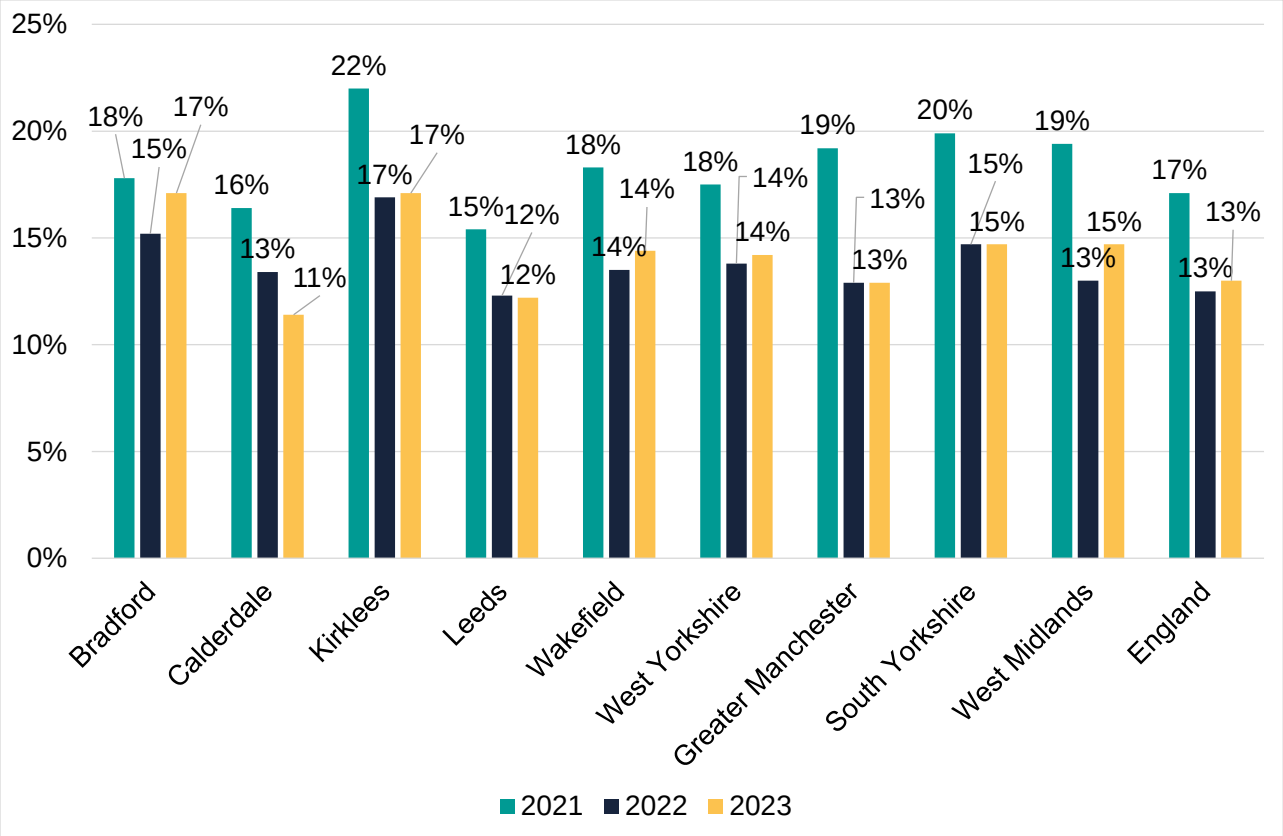
West Yorkshire's median level of pay has increased steadily over time, growing by an average of 3% per annum over the last decade in nominal terms. There figures point to a slight narrowing of the pay gap in recent years but the data for these years was affected by the pandemic and the picture must be considered provisional.

Around 130,000 jobs in West Yorkshire pay below the Real Living Wage

Fourteen per cent of local jobs, 131,000 in absolute terms, pay less than the Living Wage Foundation's Living Wage rate, which is intended to reflect the level of pay people need to get by[5].

[5] The applicable Real Living Wage Rate for 2023 was £10.90 for people working in the UK, outside London.

Figure 4: Proportion of employee jobs paying below the Real Living Wage (as defined by the Living Wage Foundation)



Note: Workplace-based estimates
Source: Annual Survey of Hours and Earnings 2023

The issue of low pay and lack of pay progression remain entrenched in the labour market, with the majority of low-paid workers remaining permanently stuck in low pay or cycling in and out of higher pay.

However, there are signs of improvement. The proportion of jobs paying below the Real Living wage in West Yorkshire in 2023, at 14%, was 4 percentage points lower than in 2021, although there was little change between 2022 and 2023, reflecting the impact of rising inflation during the period.

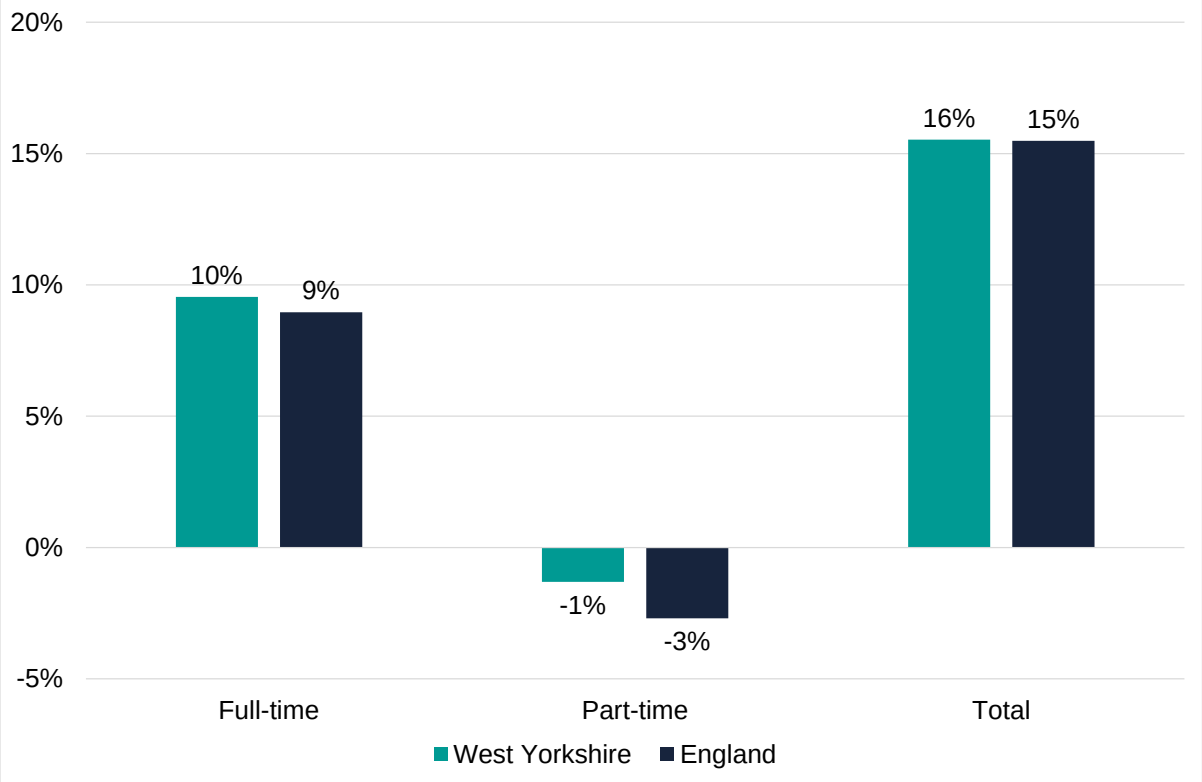
There is a mixed picture at local authority level: Kirklees and Bradford have the highest proportions of job paying below the Real Living Wage; Calderdale and Leeds the lowest; and Wakefield is in the middle of the ranking.

What's driving the reduction in low pay against this measure? It coincides with recent increases in the National Minimum Wage (NMW) and National Living Wage (NLW) rates. The improvement also coincides with the additional increase in the NMW for those aged 23 and 24 years, who join those aged 25 years and over in receiving the NLW in 2021.

West Yorkshire's gender pay gap is similar to the England average

West Yorkshire faces a significant gender pay gap. The overall pay gap for all employee jobs locally is 16%, slightly above the national average of 15%. The size of the overall gender pay gap partly reflects the fact that women are more likely than men to work in part-time roles which attract a lower hourly rate of pay. However, at 10% the gap for full-time jobs is smaller but still substantial, and above the national average. There is a negative gender pay gap for part-time jobs, reflecting the fact that male part-time workers are paid less per hour than women part-time workers, both nationally and regionally.

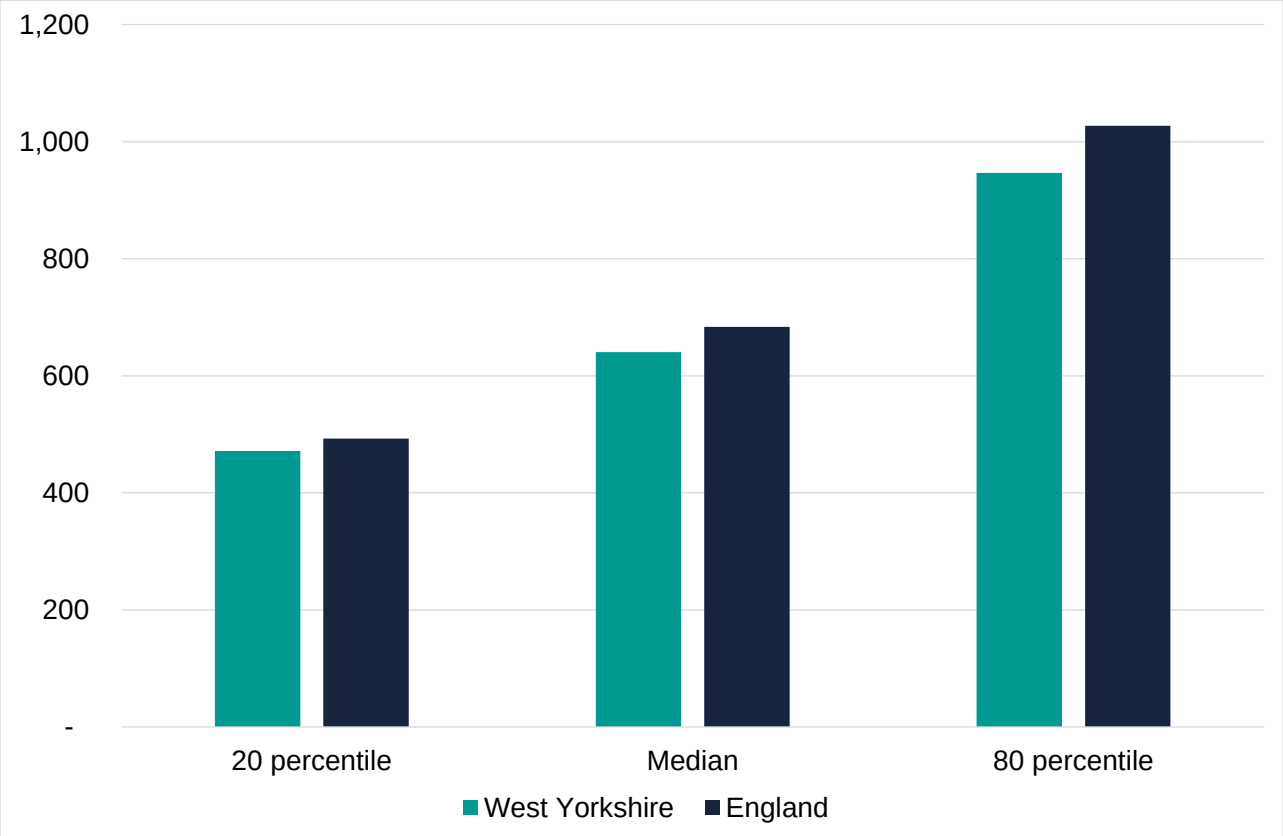
Figure 5: Gender pay gap for median gross hourly earnings (excluding overtime; workplace analysis), 2023



Note: The gender pay gap is calculated as the difference between average hourly earnings (excluding overtime) of men and women as a proportion of average hourly earnings (excluding overtime) of men's earnings
Source: Annual Survey of Hours and Earnings (ASHE) - Office for National Statistics

The gender pay gap for all jobs is highest in Calderdale and Wakefield at 18% and lowest in Bradford at 12%. Kirklees and Leeds are close to the regional average with figures of 15% and 16% respectively.

Figure 6: Distribution of gross hourly pay (£) for full-time jobs, 2023



Source: Annual Survey of Hours and Earnings (ASHE) - Office for National Statistics

The pay level for jobs at the 20th percentile in West Yorkshire is 96% of the equivalent national figure; however, at the 80th percentile it is only 92% of the national figure (falling to 85% in Kirklees and 87% in Bradford).

This indicates that the highest paid jobs in the region are paid significantly less than the highest paid jobs nationally and this is the main source of the overall pay gap. This, in turn, reflects the under-representation of jobs in the highest skilled and highest paid occupations in the region. This is important because it is the highest paid and most productivity workers who drive productivity growth. According to ONS analysis at UK level over half of the growth in mean labour productivity between 1998 and 2019 was because of the top 10% of workers by labour productivity.

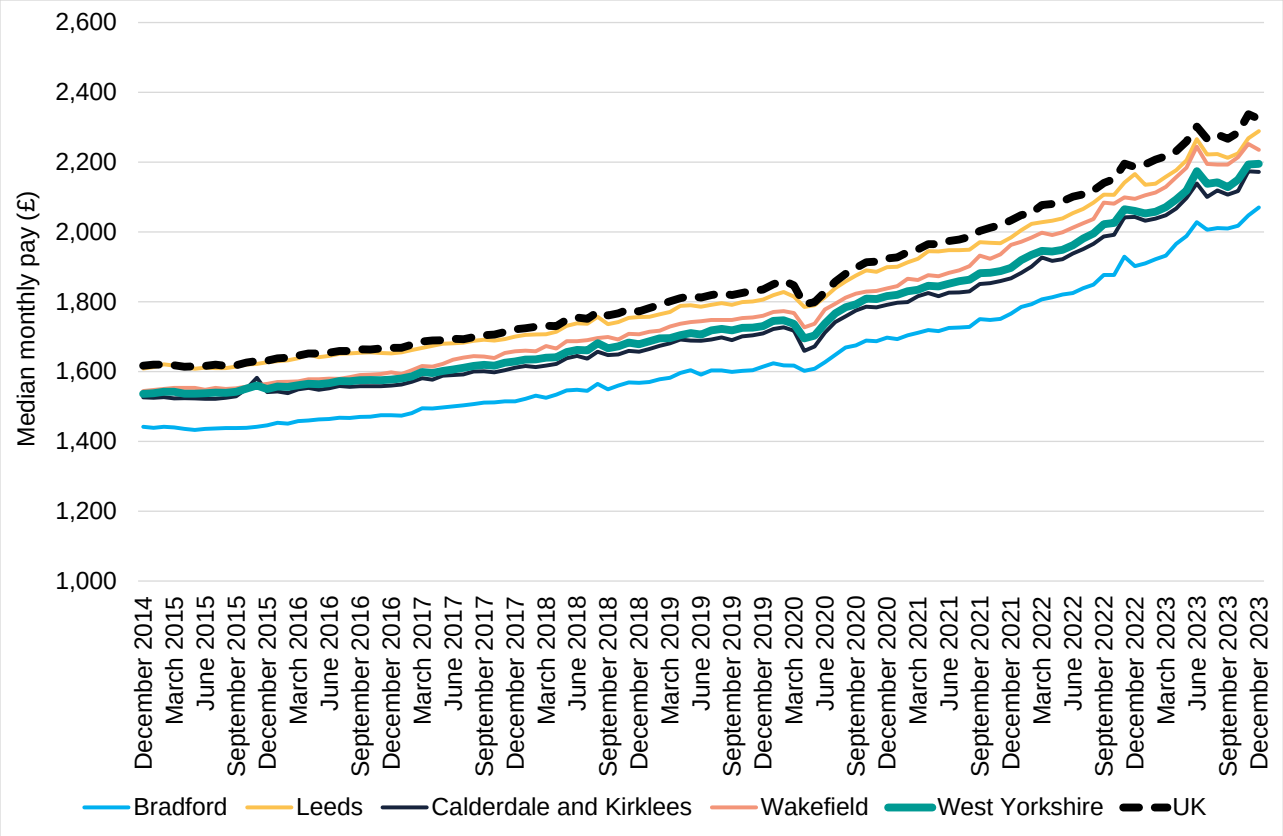
A corollary of this is that pay inequality (the gap between the highest and lowest paid) is slightly less pronounced in West Yorkshire than nationally, however. The ratio of pay at the 80th percentile to pay at the 20th percentile is 2.0 in West Yorkshire compared with an England average of 2.1.

The median rate of hourly pay for full-time jobs is similar at West Yorkshire level for both workplace and residence measures but there are variations at local authority level. Most notably, workplace pay is 4% lower than residence-based pay in Kirklees, indicating that a substantial number of residents travel out of Kirklees to relatively well-paid jobs. The

opposite is true for Wakefield, where workplace pay is 7% higher, implying that people are travelling into Wakefield to undertake better-paid jobs.

A supplementary source to the Annual Survey of Hours and Earnings used above is experimental monthly estimates of median monthly pay for payrolled employees from HM Revenue and Customs' (HMRC's) Pay As You Earn (PAYE) Real Time Information (RTI) data.

Figure 7: Median pay per month, seasonally adjusted



Source: Pay As You Earn Real Time Information from HM Revenue and Customs

This data source shows that nominal pay (i.e. not adjusted for inflation) has increased steadily since the pandemic, although there are tentative signs of a moderation in wage growth in late 2023.

2.3 Deprivation

As well as improving the performance of the local economy we also need to ensure that everyone in the local community has the opportunity to participate in high quality employment and benefit from growth.

Skills deficits play a part in neighbourhood-level deprivation

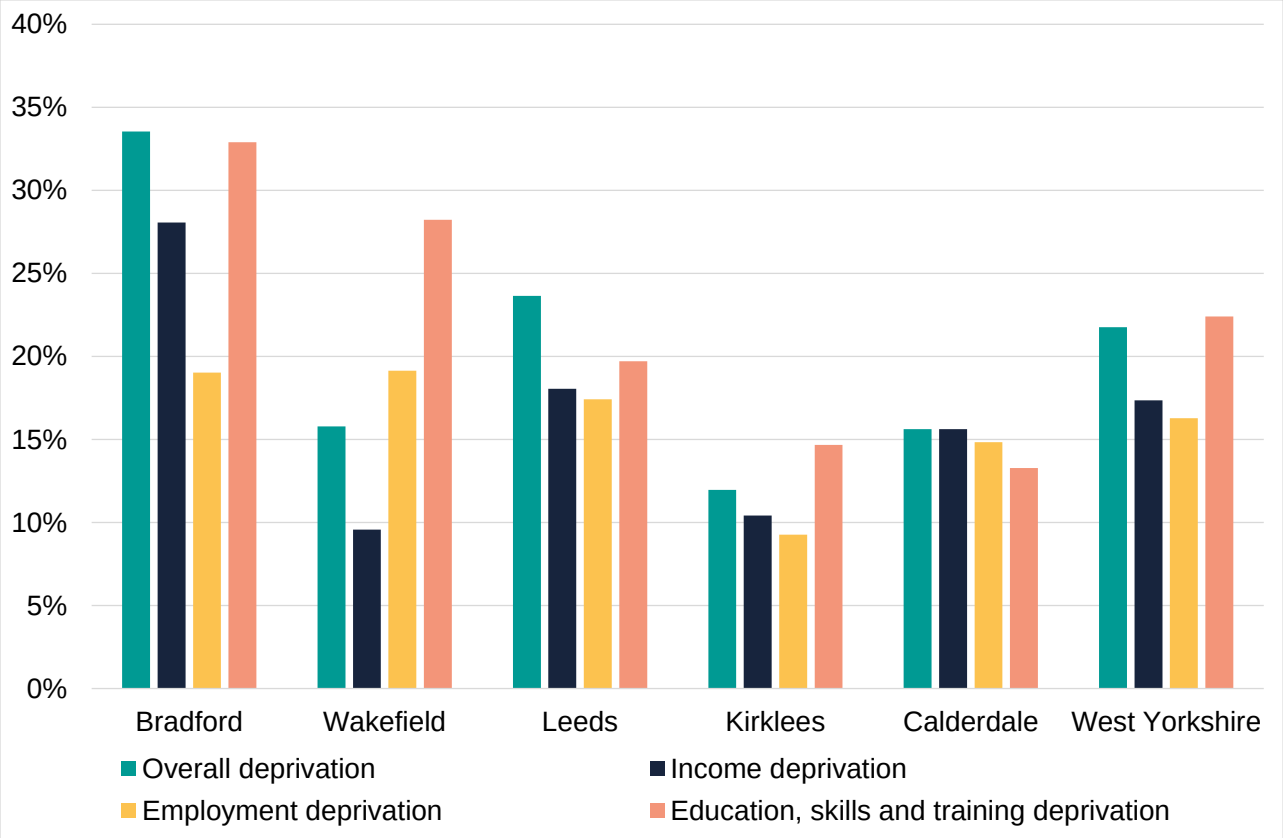
One key challenge is to address concentrated deprivation at neighbourhood level. According to the English indices of deprivation 2019[6], 22% of neighbourhoods in West Yorkshire are among the 10% most deprived nationally, more than twice the share one would expect. There are 302 acutely deprived neighbourhoods in West Yorkshire that fall into this category.

A domain of deprivation within the IMD is education and skills deprivation, which mainly relates to attainment and skills in the population – both of young people and adults.

Again, 22% of West Yorkshire neighbourhoods are in the worst 10% nationally on this measure. Moreover, 83% of West Yorkshire neighbourhoods that fall within the most deprived overall are also classed among the most deprived 10% in terms of education, skills and training, showing the strong correspondence between the two. The most deprived neighbourhoods overall also typically face an acute lack of skills.

[6] The English indices of deprivation measure relative deprivation in small areas in England called lower-layer super output areas. The index of multiple deprivation is the most widely used of these indices.

Figure 8: Proportion of neighbourhoods in 10% most deprived nationally by domain of deprivation and local authority



Note: The Education, Skills and Training Domain measures the lack of attainment and skills in the local population.
Source: Department of Communities and Local Government, Index of Multiple Deprivation 2019

Performance on deprivation varies markedly at local authority level. Bradford and Leeds face the most widespread acute deprivation in terms of the proportion of neighbourhoods falling into the 10% most deprived nationally. In Bradford the figure is 34% and in Leeds 24%.

Focusing on Education, skills and training deprivation, Bradford again has the most widespread problem (33% of all neighbourhoods in the 10% most deprived nationally) but Wakefield is the second highest with 28%, followed by Leeds with 20%.

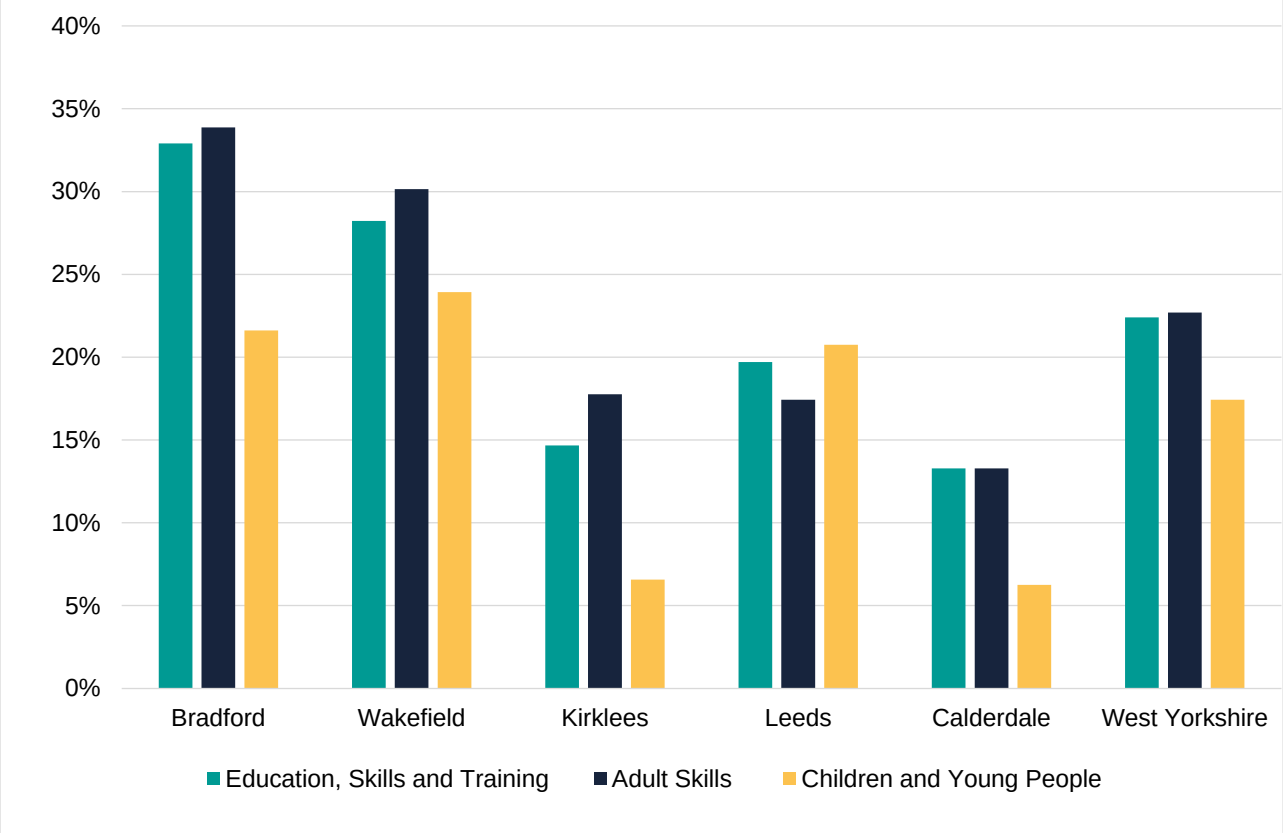
Skills deprivation relating to adults is a key issue for West Yorkshire

The Education, skills and training domain of the IMD comprises two sub-domains – one focusing on children and young people and one relating to adult skills[7], providing further insight into the character of this aspect of deprivation.

[7] The Children and Young People sub-domain is based on indicators that include attainment at Key Stages 2 and 4, secondary school absence, staying on rates and entry into higher education. The adult skills domain

Across West Yorkshire a greater proportion of neighbourhoods (23% of the total) face acute deprivation in respect of adult skills rather than relating to children and young people (17%), although the latter is still relatively high. There are also differences at district level.

Figure 9: Proportion of neighbourhoods in 10% most deprived nationally by sub-domain of deprivation and district



Source: Department of Communities and Local Government, Index of Multiple Deprivation 2019

Bradford has fewer neighbourhoods among the 10% most deprived in respect of children and young people than it does in respect of adult skills – and the same is true of Calderdale, Kirklees and Wakefield. For some of these districts the issue of English language proficiency may play a strong part in the prevalence of adult skills deprivation.

This is not to seek to understate issues around children and young people in these districts, however; in both Bradford and Wakefield more than 20% of neighbourhoods are still among the most acutely deprived on this basis.

The reverse position is true of Leeds. A greater proportion of neighbourhoods are among the most deprived with regard to children and young people than for adult skills (the proportions being 17% versus 21%).

---

is made up of two indicators relating to adults with low or no qualifications and adults who lack English language proficiency.

Improving the skills pipeline by raising the attainment of young people is a critical priority but in some parts of the region will not be sufficient in view of the issues around adult skills.

2.4 Unemployment

Getting people into work is central to inclusive growth and boosting individual living standards. At the current time, unemployment remains well above pre-pandemic levels (in claimant count terms) even though the worst case scenario of mass unemployment was not realised during the lockdown of the economy.

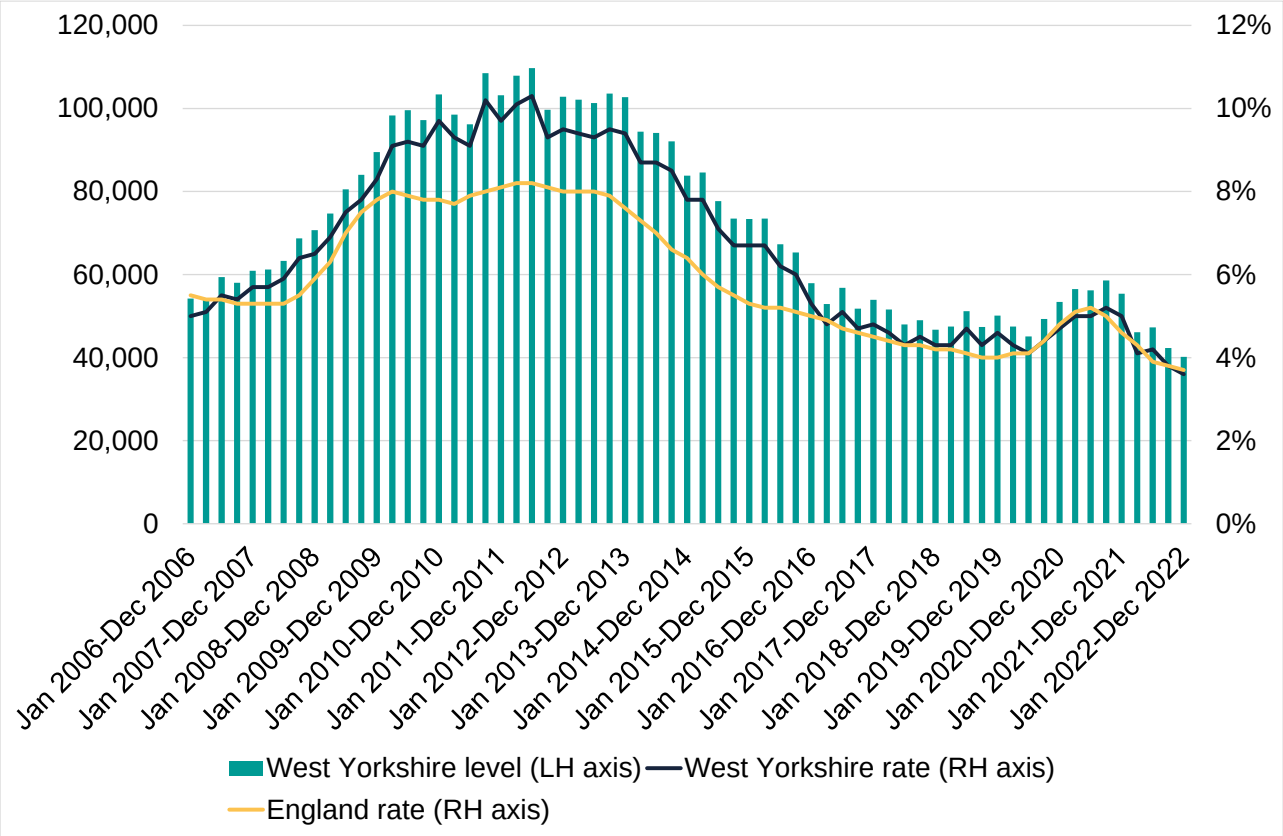
It is difficult to measure the impact of COVID-19 on unemployment in local economies using the official ILO indicator[8]. This is because we are reliant on the Annual Population Survey, which draws on 12 months of survey data for its estimates, meaning that the most recent data (for July 2019 to June 2020) captures only a small portion of the COVID-19 period whilst combining it into an average for a full 12-month period, most of which preceded COVID-19.

West Yorkshire's official unemployment rate is currently similar to the national average but it is likely that the rate is now rising

According to the Annual Population Survey for January to December 2022, the official measure of unemployment in West Yorkshire stands at 40,200, 3.6% of the population aged 16-64. This is close to the national average of 3.7%.

[8] The UK's official definition of unemployment is the one specified by the International Labour Organisation (ILO). This ILO definition defines unemployed people as being: without a job, have been actively seeking work in the past four weeks and are available to start work in the next two weeks or out of work, have found a job and are waiting to start it in the next two weeks.

Figure 10: Trend in ILO unemployment, people aged 16-64



Source: Annual Population Survey

As the figure above shows, the recent unemployment level trend in West Yorkshire is one of strong decline in the middle of the last decade, followed by a more modest rate of decrease and then a relatively small increase as a result of the pandemic. More recently there has been a decline in unemployment both locally and nationally prompted by the re-opening of the economy. The unemployment rate achieved convergence with the national average in around 2016 and has followed the national trend since then.

The available data from the Annual Population Survey is based on 12-month averages, limiting our ability to track changes in unemployment on a timely basis. The claimant count provides an important supplement in terms of tracking unemployment trends.

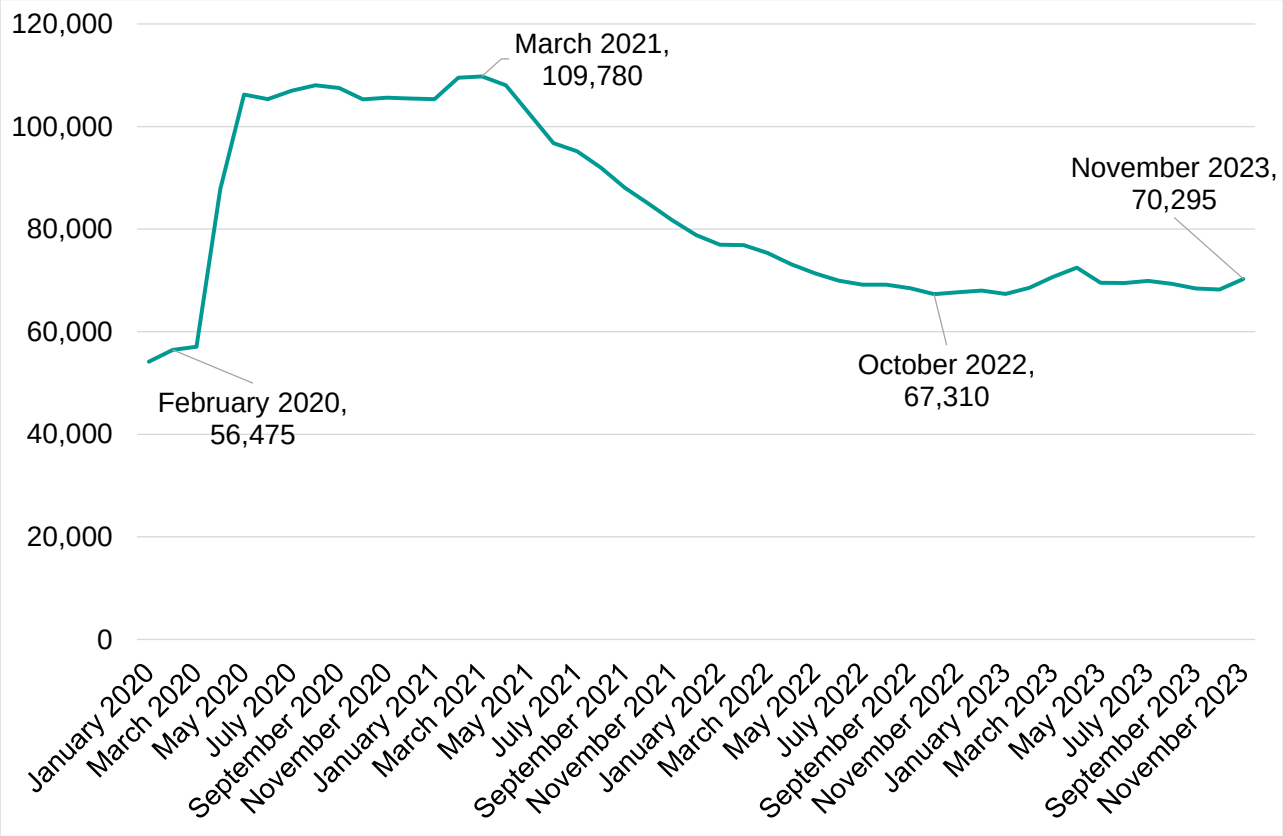
2.5 Claimant unemployment

The Claimant Count experimental dataset seeks to measure the number of people claiming benefits (Universal Credit and Jobseekers' Allowance) principally for the reason of being out of work[9]. It provides a timely picture of joblessness at local level.

The claimant count has been increasing at a moderate rate since late 2022

The claimant count almost doubled during the course of the pandemic, reaching its highest point in March 2021. From then until October 2022 the claimant level fell steadily in West Yorkshire (and nationally). Since October 2022 the claimant count has increased to a modest extent, growing by 4%, in West Yorkshire (a net increase in the count of around 3,000) and by 5% nationally in the period up to November 2023.

Figure 11: Claimant count, West Yorkshire



Source: Claimant count, ONS

As of April 2023 the claimant count is still 13,800 or 24% higher than pre-pandemic (February 2020) in West Yorkshire. Nationally, the count is still 28% higher than before

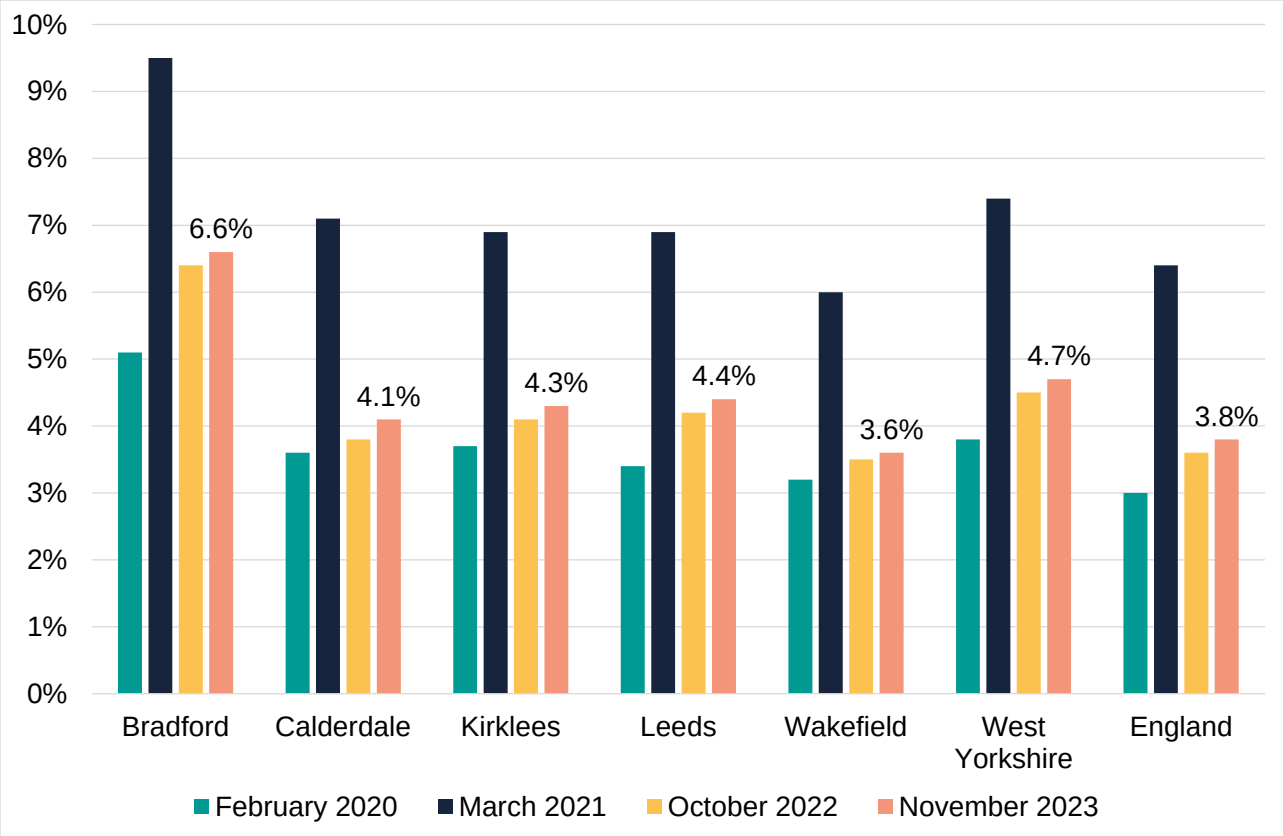
[9] Enhancements to Universal Credit as part of the UK government's response to the coronavirus mean that an increasing number of people became eligible for unemployment-related benefit support, although still employed. Consequently, changes in the Claimant Count will not be due wholly to changes in the number of people who are unemployed. However, national data suggest that only around 100,000 (or 7%) of the recent growth in the claimant count is accounted for by people in work but with low earnings.

the pandemic. The picture varies between local authorities, ranging from 11% higher in Calderdale (Kirklees: 13%; Wakefield: 14%) to 32% higher in both Bradford and Leeds, showing different rates of recovery and performance.

The claimant rate is highest in Bradford

The claimant rate (claimants expressed as a proportion of the population aged 16-64) has remained consistently above the national average in West Yorkshire since before the pandemic. The current figure of 4.7% is higher than the England rate of 3.8% and all local authorities have rates above the national average, except Wakefield (3.6%). Bradford's rate of 6.6% is the highest in West Yorkshire and among the highest in the country. Claimant rates have increased slightly in all parts of West Yorkshire, as well as nationally, since October 2022 when most areas reached a post-pandemic low point.

Figure 12: Claimant rate trend (claimants as a percentage of residents aged 16-64)



Source: ONS claimant count

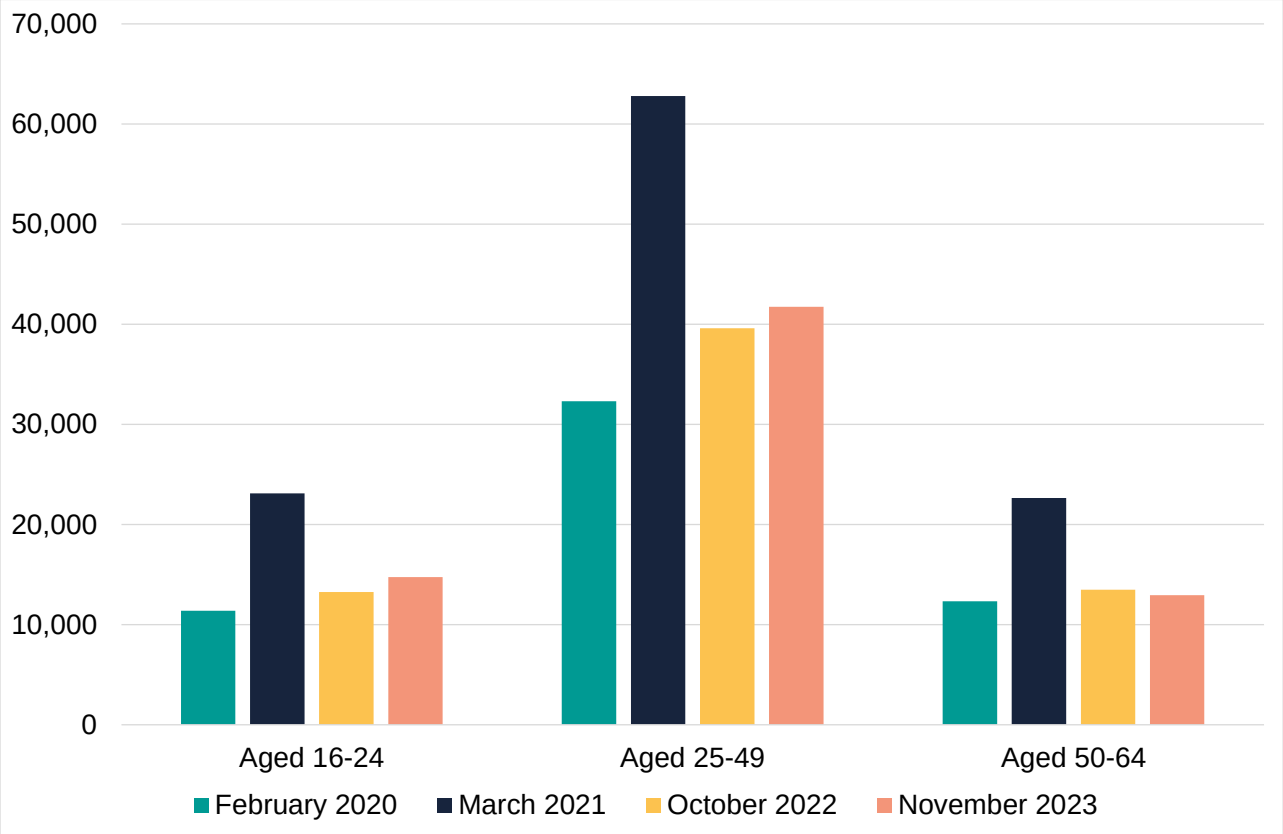
There are 30% more young people (aged 16-24) on the claimant count in November 2023 than was the case in February 2020, similar to the 30% figure for 25-49 year olds. The growth figure for those aged 50+ is much lower at 5%.

The claimant count has grown fastest among young people and women in the last 12 months

Since October 2022, the claimant count has grown fastest among younger people aged 16-24, with an increase of around 1,500 or 11%. Among 25-49 year olds, the number of

claimants grew by 5% or 2,100, whilst the count fell among older people aged 50-64, by 4% or around 600.

Figure 13: Claimant unemployment by age, West Yorkshire



Source: ONS claimant count

The proportion of claimant unemployed who are women has grown over time since before the pandemic. The number of women claimants was 30% higher in November 2023 than in February 2020, compared with a figure of 20% for males, giving an increase in the female share of total claimants from 41% to 43%. The number of female claimants also grew faster between October 2022 and November 2023: by 9% versus only 1% for males.

3 Demand for skills

This section provides an overview of the demand for skills in the West Yorkshire economy, based on the profile of jobs locally and the skills required to do those jobs. It considers the current picture and the way in which the pattern of demand is expected to develop in the future.

3.1 Employment rate

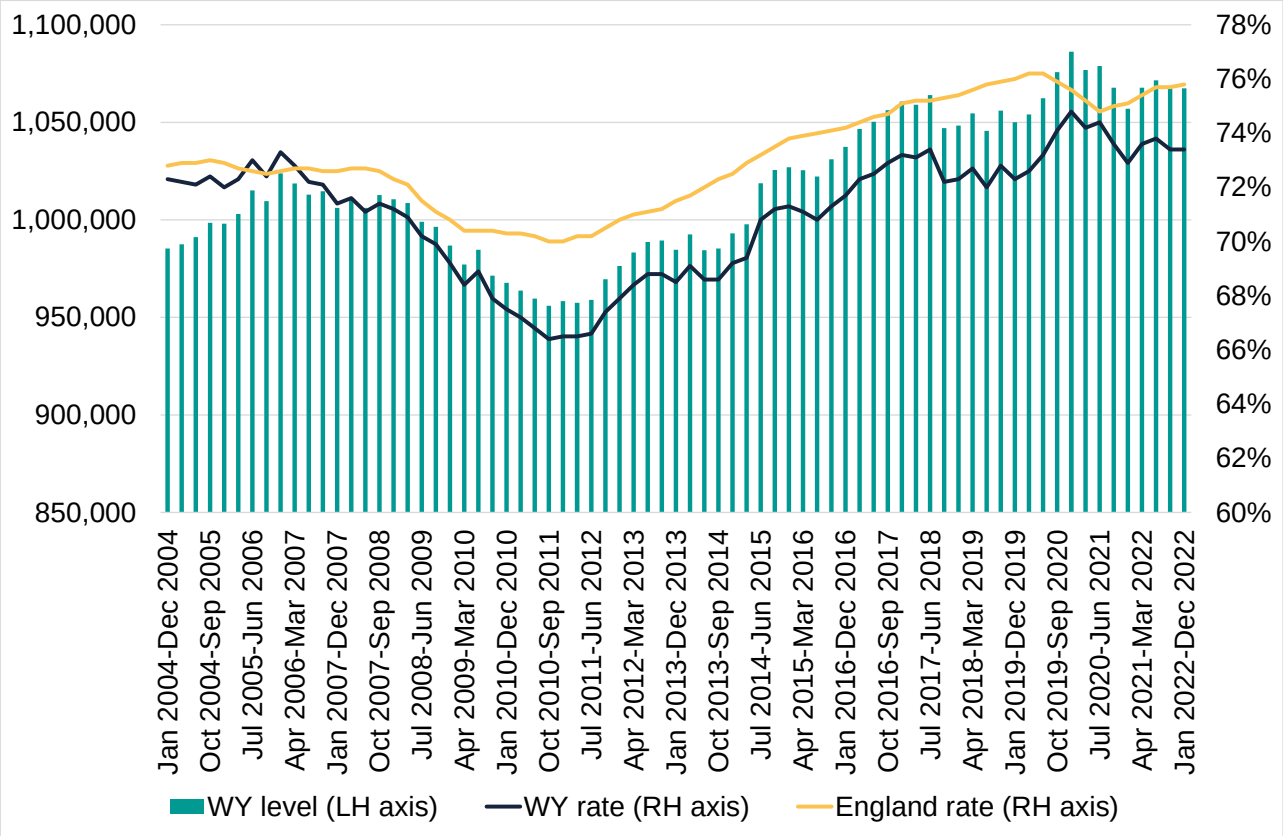
West Yorkshire's level of employment is the main indicator of the overall demand for labour in the area. It is difficult to measure the impact of COVID-19 and the subsequent recovery on employment in local economies using official data. This is because we are reliant on the Annual Population Survey, which draws on averages of12 months of survey data for its estimates, concealing significant changes that may be happening in the short-term. More timely national and regional (Yorkshire and the Humber) data has been used to supplement the local data.

West Yorkshire's employment rate was negatively affected by the pandemic but its employee count is substantially higher than before the pandemic, based on HMRC data

There are 1,067,000 people in employment in West Yorkshire based on data for the January to December 2022 period. The employment rate in West Yorkshire, expressed as a proportion of the population aged 16-64, is slightly below the national average at 73% (versus 76%). An additional 35,000 people would be in employment in West Yorkshire if the employment rate could be raised to the national average.

The local rate has been consistently lower than the England average over the last 15 years and along with the national average has followed an upward trend since 2012, reflecting the progress of the recovery from the global financial crisis. Between 2014 and 2022 the level of employment increased by 7% in West Yorkshire, the same rate of growth as seen nationally. A decline in the national employment rate, broadly coinciding with the start of the pandemic, led to a near-convergence with West Yorkshire's rate, although the gap has widened subsequently.

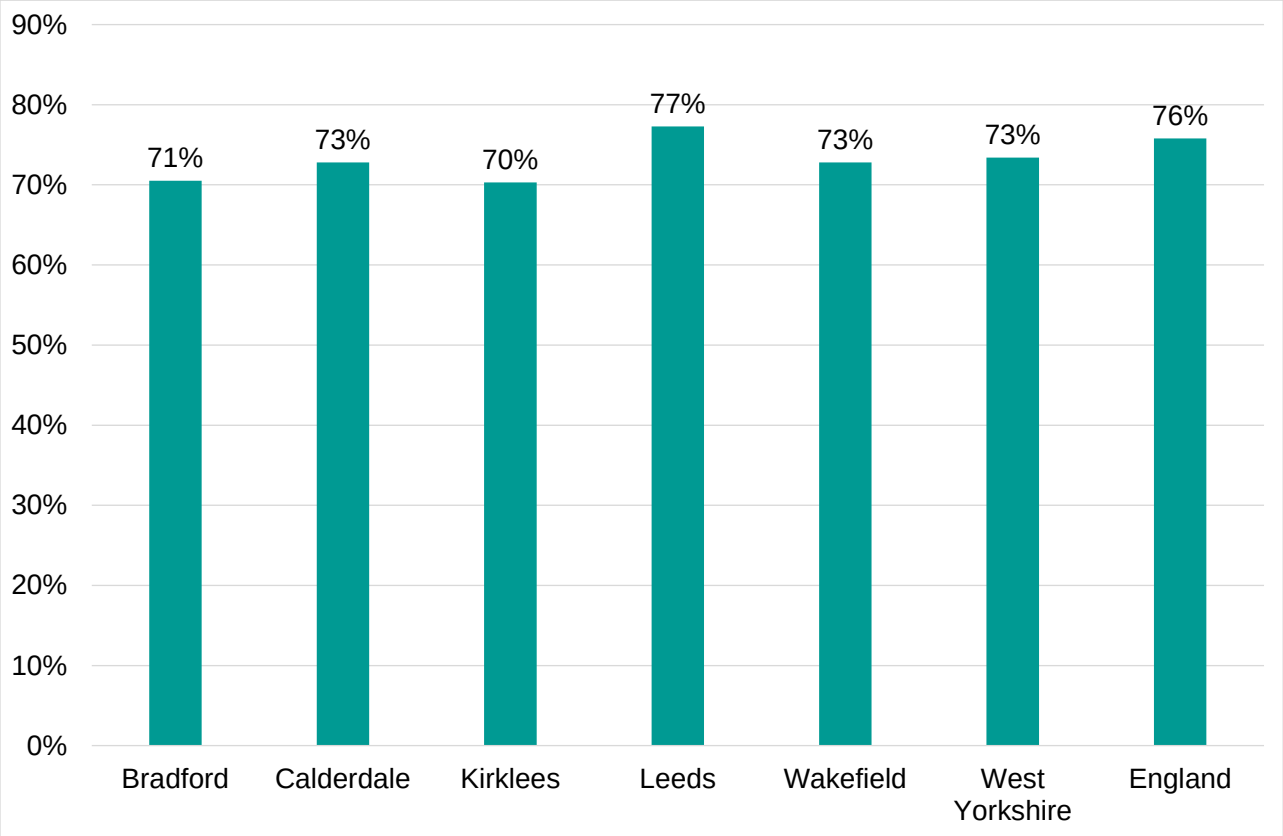
Figure 14: Trend in employment level and employment rate



Source: Annual Population Survey

West Yorkshire's local authorities have similar employment rates to the West Yorkshire average, except for Leeds which has a rate in line with the national average. At this spatial level rates have seen a large degree of volatility in recent years, which may partly reflect the margins of error associated with the statistical estimates. Bradford's current rate is somewhat higher than in previous years.

Figure 15: Employment rate by local authority (% of population aged 16-64)

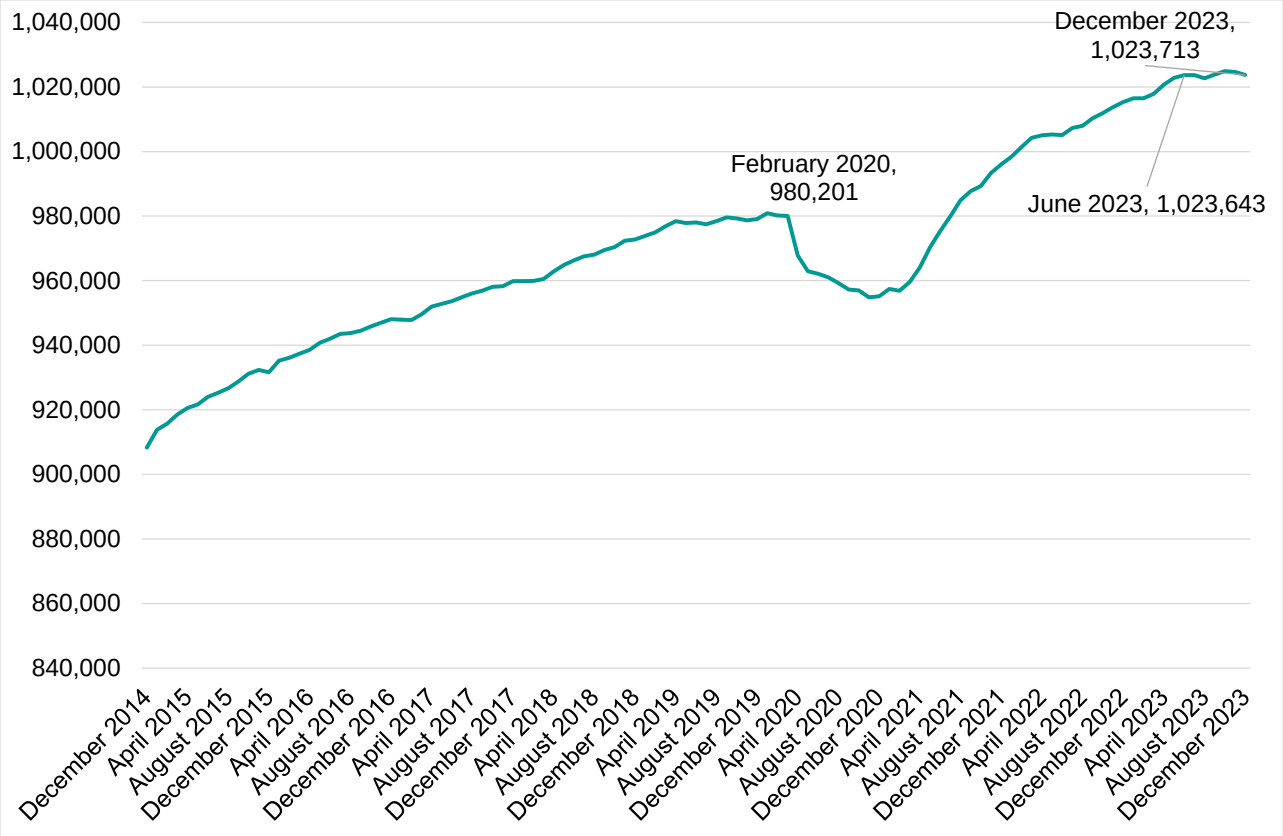


Source: Annual Population Survey, January to December 2022

A supplementary source to the Annual Population Survey analysis used above is experimental monthly estimates of payrolled employees from HM Revenue and Customs' (HMRC's) Pay As You Earn (PAYE) Real Time Information (RTI) data. This data is not directly comparable with the Annual Population Survey / Labour Force Survey [10]but provides a timely insight into the number of employees in West Yorkshire.

[10] A comparison of the different data sources can be found here.

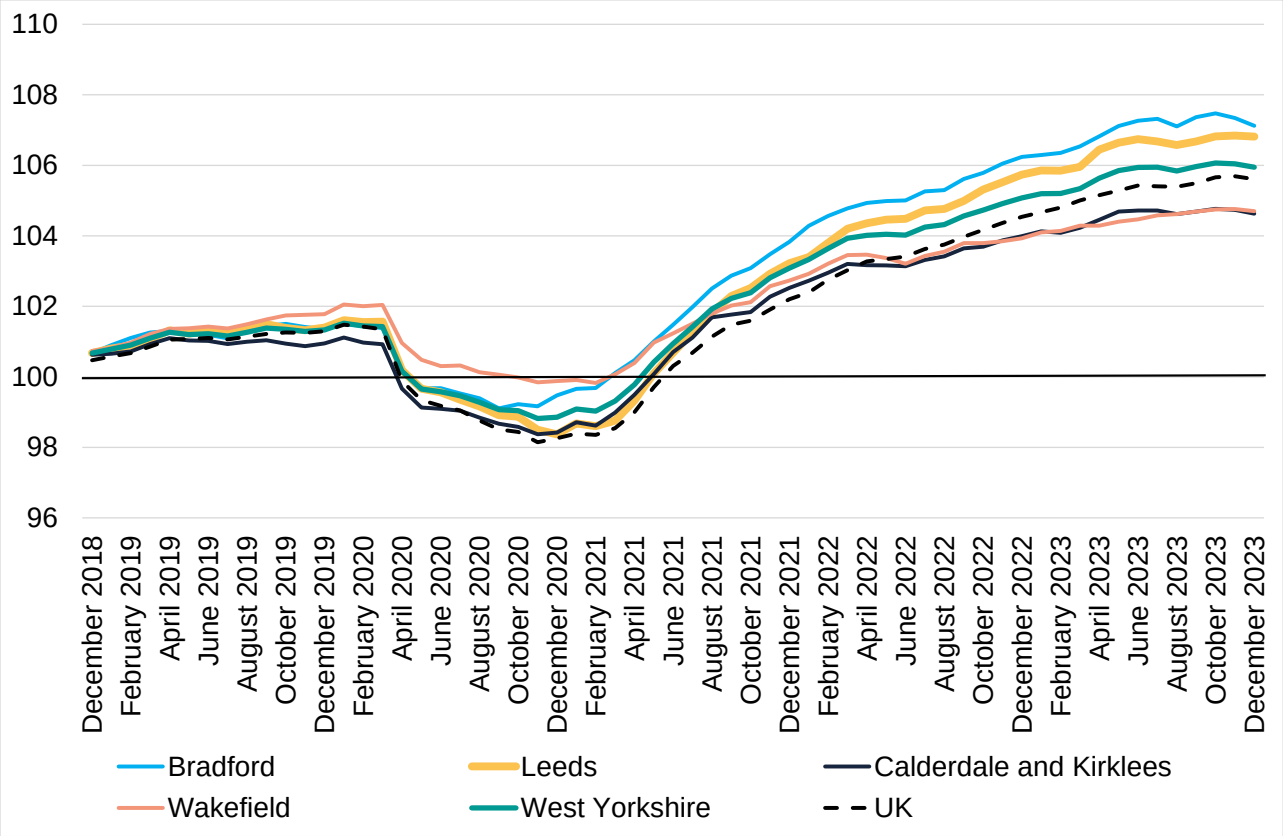
Figure 16: Payrolled employees, seasonally adjusted, West Yorkshire, July 2014 to December 2023



Source: Pay As You Earn Real Time Information from HM Revenue and Customs

RTI data show a steady increase in the count of employees in West Yorkshire from early 2021 onwards. By July 2021 the count had returned to pre-pandemic levels recorded in February 2020 and by December 2023 the employee count in West Yorkshire was 43,000 or 4% higher than immediately before the pandemic. At national level the employee count recovered more slowly, returning to its February 2020 level in September 2021 and was also 4% higher than at the former point in time by the end of 2023.

Figure 17: Payrolled employees, seasonally adjusted, index; 2018=100; January 2019 to December 2023



Source: Pay As You Earn Real Time Information from HM Revenue and Customs

The HMRC data shows that Bradford and Leeds have performed strongest among the five local authorities since before the pandemic (February 2020), with employee growth of 6% and 5% respectively. Calderdale / Kirklees and Wakefield performed close to the West Yorkshire average with net increases of 3% and 4% respectively during this period.

The employee count grew by around 1% between December 2022 and December 2023 across West Yorkshire and nationally but was largely static between July 2023 and December, suggesting that labour market conditions may be cooling.

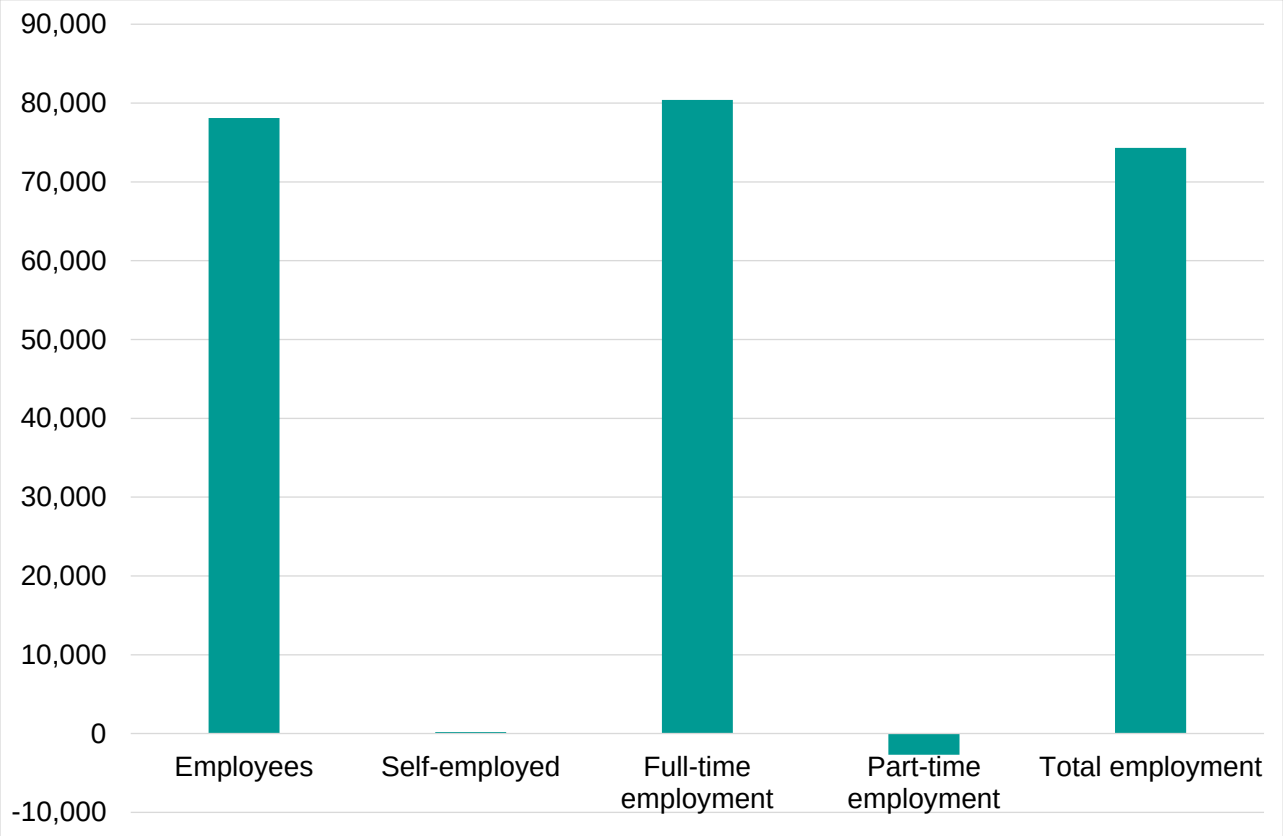
Employee jobs and full-time employment have been key contributors to employment growth in the local area in recent years

In overall terms West Yorkshire has seen an upward trend in employment in recent years, but there is also the question of the nature of the jobs created through that growth. There is a widespread concern about the quality of jobs and in particular the rise of "atypical" forms of employment, including self-employment, part-time employment, temporary employment and zero hours contracts.

As the figure below shows, the strongest areas of growth in absolute terms since 2015 have been for employees, with self-employment remaining flat. Full-time rather than part-

time jobs contributed to net growth over this period, with the latter experiencing net decline.

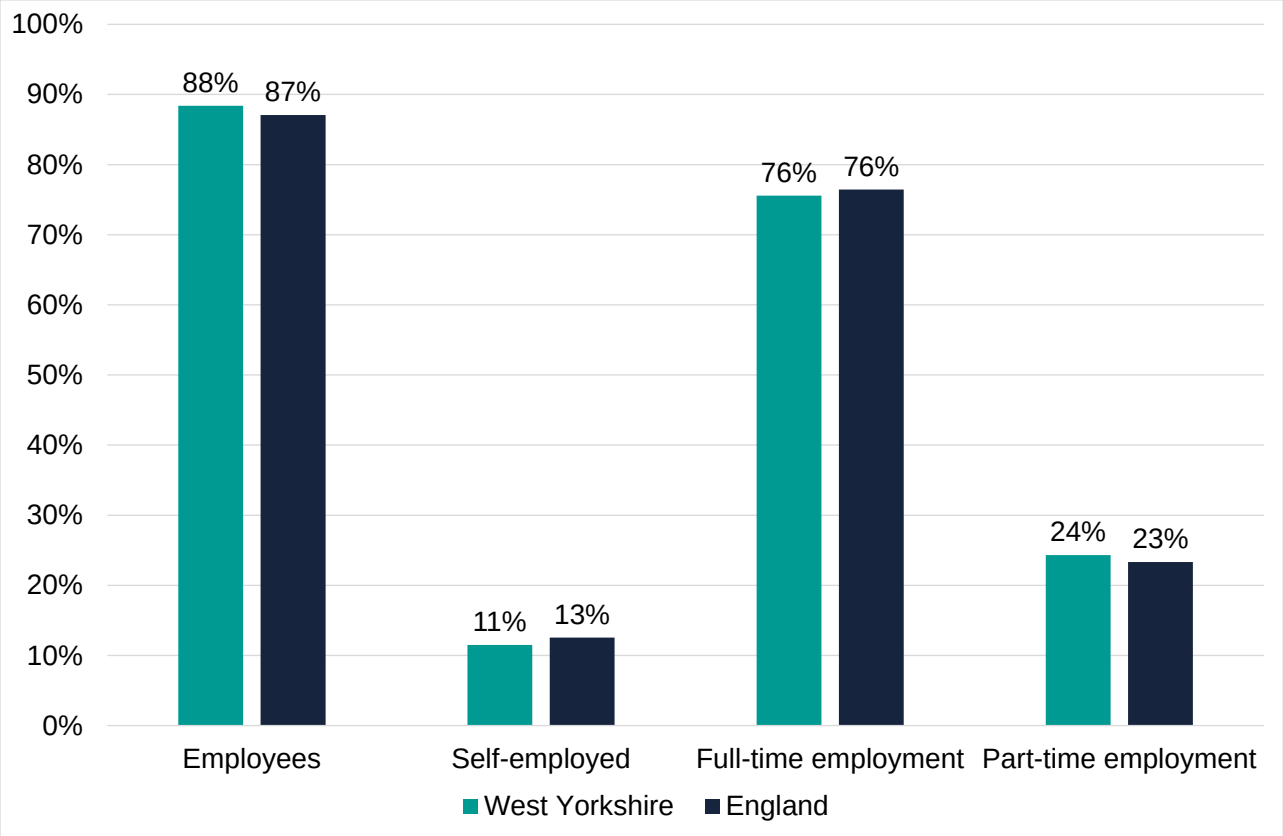
Figure 18: Net change in employment by status, West Yorkshire, 2015 to 2022



Source: Annual Population Survey, September to October periods

West Yorkshire's current employment profile by status is similar to the national average, although the data suggests that local workers are slightly less likely than nationally to be self-employed.

Figure 19: Profile of employment by employment status (% of total employment among people aged 16-64), West Yorkshire



Source: Annual Population Survey, January to December 2022

Published figures are not available at local level in respect of zero hours contracts. People on such contracts account for 4.4% of all employment across Yorkshire and the Humber[11]. Assuming that West Yorkshire has the same prevalence as regionally this would imply that there are around 49,000 people aged 16 and over who are employed on zero hours contracts in West Yorkshire.

3.2 Sectoral employment profile

The sectoral make-up of a local area is an important determinant of the workforce skills that are required. Sectors have distinctive occupational employment structures with implications for skill requirements.

As of 2022, West Yorkshire has employment of 1,113,000 based on data from the Business Register and Employment Survey (BRES), including employees and working owners in PAYE-registered firms. It should be noted that BRES does not provide full coverage of self-employment.

[11] Source: EMP17: People in employment on zero hours contracts, ONS, August 2023

Among the largest sectors by employment are *Wholesale and retail*, *Health and social care* and *Manufacturing*

Focusing on the profile of these jobs in absolute terms, the largest broad sectors are *Wholesale and retail* (170,000 jobs; 13%); *Health and social care* (167,000 jobs; 15%);; and *Manufacturing* (113,000; 10%); together with *Administrative and support services* (114,000; 10%). The biggest component of this latter sector is employment agency activity as well as activities like rental and leasing and travel agencies.

In addition to *Health and social care* there is also significant further employment in activities that are primarily public sector-based, including *Education* (100,000; 9%) and *Public administration and defence* (47,000; 4%).

In respect of business-related services, *Professional, scientific and technical activities* account for employment of 85,000 (8% of the total).

Finance and *Information and communication* are much smaller contributors to employment, with 4% and 3% of total employment respectively– they are modest in relative terms but still substantial areas, with employment of 45,000 and 35,000 respectively.

This analysis also indicates that there is employment of 50,000 in Construction but it should be noted that does not include the full range of self-employment in this sector.

Figure 20: Employment by industry (SIC section), West Yorkshire, 2022

Source: Business Register and Employment Survey, 2022

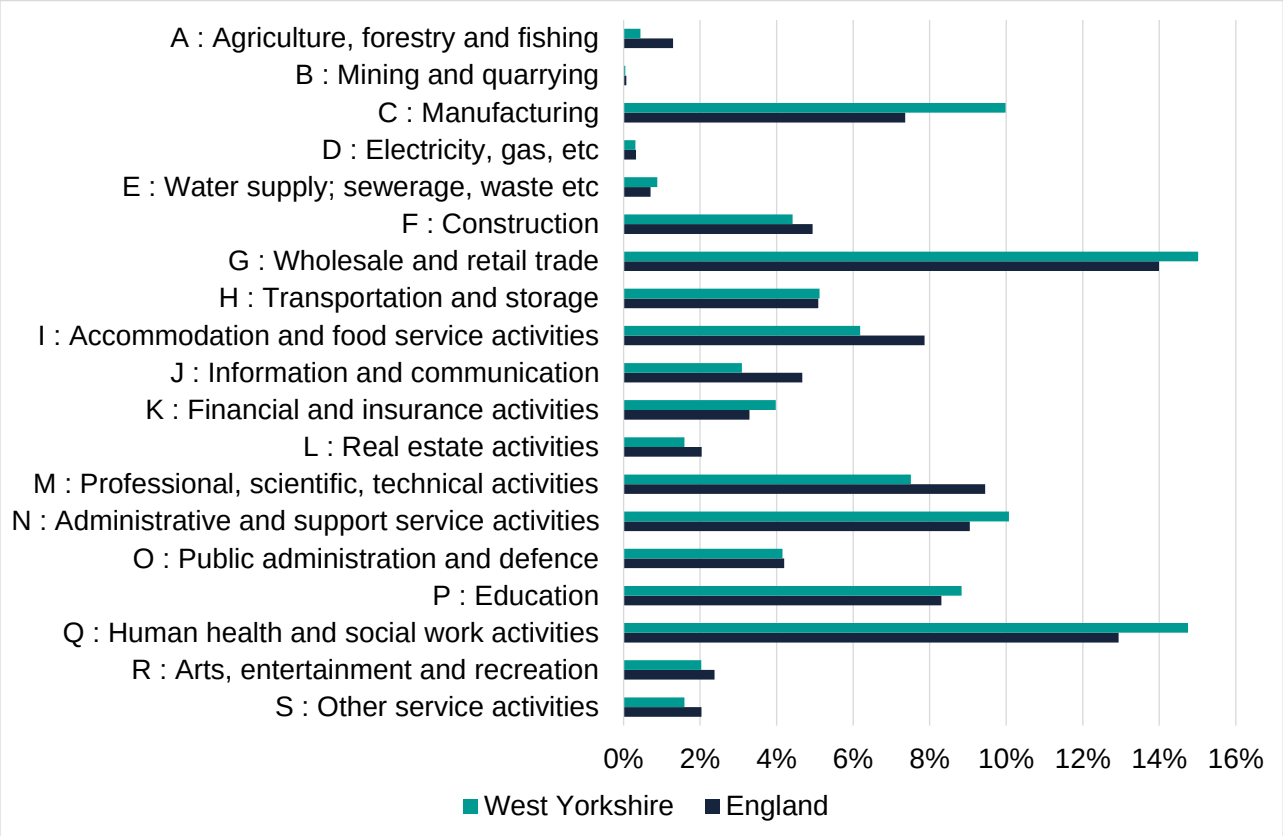
Overall, there are 211,000 public sector employee jobs in West Yorkshire, based on the Office for National Statistics' broader definition. This equates to 19% of total employment, somewhat higher than the national average of 16%. The proportion ranges from 15% in Calderdale to 21% in Bradford and 22% in Wakefield (with 17% and 18% in Kirklees and Leeds respectively).

West Yorkshire has key specialisms in manufacturing and financial services

How does WY compare with sectoral employment profile at national level?

The figure below compares the employment profile of West Yorkshire by industry sector with that of England, based on the latest available data.

Figure 21: Comparative sectoral employment profile (% of total employment)



Source: Business Register and Employment Survey, 2022

Manufacturing is strongly represented in West Yorkshire relative to the national benchmark. In proportionate terms it is almost 1.4 times larger than nationally. Manufacturing specialisms in West Yorkshire which are also significant in absolute terms include, manufacture of food, textiles and clothing, chemicals, fabricated metal products, machinery and furniture.

Financial and insurance activities account for 45,000 jobs in West Yorkshire and this sector has a slightly larger overall share of employment than nationally.

As the chart shows there are a number of sectors that account for a small share of jobs in West Yorkshire relative to the national employment profile. *Agriculture* and *Mining* are both small in absolute terms, but *Accommodation and food service* is substantial, even though it only accounts for four-fifths of the job share of its national counterpart.

Other sectors that account for a small share of employment in West Yorkshire compared to nationally are *Information and Communication* and *Professional services* (section M), which account for around two-thirds and four-fifths of the national employment share respectively.

Some of the largest sectors in the economy including *Wholesale and retail* and *Public administration* are broadly in line with the national average in terms of their share of local employment.

West Yorkshire has a strong representation of employment in Knowledge-intensive financial services

Knowledge-intensive services are key to prospects for local economies since as highly productive sectors they are an important potential source of growth and are skills-intensive in employment terms. These activities account for 17% of employment in West Yorkshire, lower than the national average of 19%.

Figure 22: Representation of knowledge-intensive business services (% of total employment)

Knowledge-intensive sector	West Yorkshire	England
Knowledge-intensive financial services	4%	3%
High-tech knowledge-intensive services	3%	4%
Knowledge-intensive market services	11%	12%
Total	17%	19%

Source: Business Register and Employment Survey, 2022

Although West Yorkshire has a higher representation of employment in financial activities but a slightly smaller representation in high-tech and market services. At local authority level, knowledge-intensive business services account for 25% of employment in Leeds, well above the national average. Leeds is strongly represented in all three knowledge-intensive segments.

The industry structure of West Yorkshire's local authority areas is distinctive

Location quotients (LQ) are a useful way of quantifying how concentrated a particular industry or occupation is in a local area or region as compared to a reference area such as the nation. It can reveal what makes a particular region distinct in comparison to the national average. This gives an insight into the characteristics of local labour and skills demand and of specialist requirements.

In the table, below, cells highlighted in red represent sectors that are “over-represented” (LQ greater than 1.2) in the district or LEP area relative to the national (England) benchmark. Those highlighted in yellow are under-represented (LQ below 0.8).

The analysis brings out distinctive concentrations of sectoral employment at local authority level, which are important to an understanding of employment patterns and labour demand in West Yorkshire. The key points are as follows:

- As well as being strongly represented at West Yorkshire level, *Manufacturing* accounts for relatively large shares of employment in all local authority areas except Leeds.
- Although Leeds has the largest *Wholesale and retail* sector in West Yorkshire in absolute terms, this sector accounts for a relatively small share of employment in the city.
- The large share of employment in *Transportation and storage* is a distinctive feature of Wakefield’s employment base.
- *Accommodation and food services* is poorly represented in employment terms across West Yorkshire with the exception of Calderdale.
- *Information and communication* has a very low representation in the region except for Leeds.
- *Financial and insurance activities* are well-represented in both Calderdale and Leeds but are poorly-represented in Kirklees and Wakefield.
- *Professional, scientific and technical activities* have a low representation in employment terms in all parts of West Yorkshire except Leeds.
- *Public administration and defence* is strongly represented in Wakefield, whilst the other predominantly public activities of *Education* and *Health* account for relatively high shares of employment in Bradford and also Kirklees in the case of the former.
- The *Arts, entertainment and recreation* sector has a low employment representation in all parts of West Yorkshire except Leeds.

Figure 23: Sectoral employment location quotients for West Yorkshire and constituent local authorities (benchmark = England)

Industry	Bradford	Calderdale	Kirklees	Leeds	Wakefield	West Yorkshire
A : Agriculture, forestry and fishing	0.36	0.76	0.59	0.19	0.33	0.34
B : Mining and quarrying	0.23	2.29	0.64	0.49	0.63	0.62
C : Manufacturing	1.59	1.78	2.24	0.79	1.64	1.36
D : Electricity, gas, steam and air conditioning supply	0.18	0.03	0.38	1.38	1.30	0.95
E : Water supply; sewerage, waste management and remediation activities	1.66	0.77	0.87	1.14	1.28	1.25
F : Construction	0.85	1.11	1.11	0.81	0.98	0.89
G : Wholesale and retail trade; repair of motor vehicles and motorcycles	1.27	1.09	1.31	0.86	1.21	1.07
H : Transportation and storage	0.92	0.64	0.72	0.79	2.25	1.01
I : Accommodation and food service activities	0.77	0.83	0.78	0.76	0.77	0.79
J : Information and communication	0.35	0.35	0.33	1.11	0.29	0.66
K : Financial and insurance activities	1.14	2.33	0.42	1.52	0.37	1.21
L : Real estate activities	0.69	0.80	0.90	0.78	0.74	0.78
M : Professional, scientific and technical activities	0.59	0.52	0.52	1.12	0.45	0.79
N : Administrative and support service activities	0.67	1.21	0.67	1.48	0.93	1.11
O : Public administration and defence; compulsory social security	0.89	0.78	0.87	1.00	1.44	0.99
P : Education	1.24	1.05	1.25	1.04	0.80	1.06
Q : Human health and social work activities	1.41	0.93	1.13	1.07	1.16	1.14
R : Arts, entertainment and recreation	0.69	0.69	0.90	1.01	0.63	0.85
S : Other service activities	0.69	1.07	0.90	0.88	0.52	0.78

Note: Employment figures relate to employee jobs
Source: Business Register and Employment Survey, 2022

Sector strongly represented
Sector under-represented

Looking in more detail at the industry divisions with high shares of employment relative to the national average, the analysis highlights the importance of manufacturing sub-sectors, including textiles, furniture, printing, chemicals and machinery as specialisms within the local employment base.

Table 1: Industry divisions with highest employment location quotient in West Yorkshire (benchmark = England)

	2022 employment	Location quotient
13 : Manufacture of textiles	7,000	3.76
39 : Remediation activities, waste management services	1,500	3.37
14 : Manufacture of wearing apparel	2,250	2.78
18 : Printing and reproduction of recorded media	8,000	2.82
31 : Manufacture of furniture	8,000	2.63
20 : Manufacture of chemicals and chemical products	7,000	2.30
36 : Water collection, treatment and supply	3,000	2.06
28 : Manufacture of machinery and equipment n.e.c.	12,000	1.86
16 : Manufacture of wood and of products of wood and cork	5,000	1.67

Note: Analysis limited to sectors with employment of more than 1,000 in West Yorkshire
Source: Business Register and Employment Survey, 2022

A number of sectors have very low location quotients, indicating that they have a weak representation in West Yorkshire in employment terms. These include *Agricultural activities*, *Manufacture of other transport equipment*, *Scientific research and development* and *Programming and broadcasting activities*.

3.3 Patterns of sectoral employment change

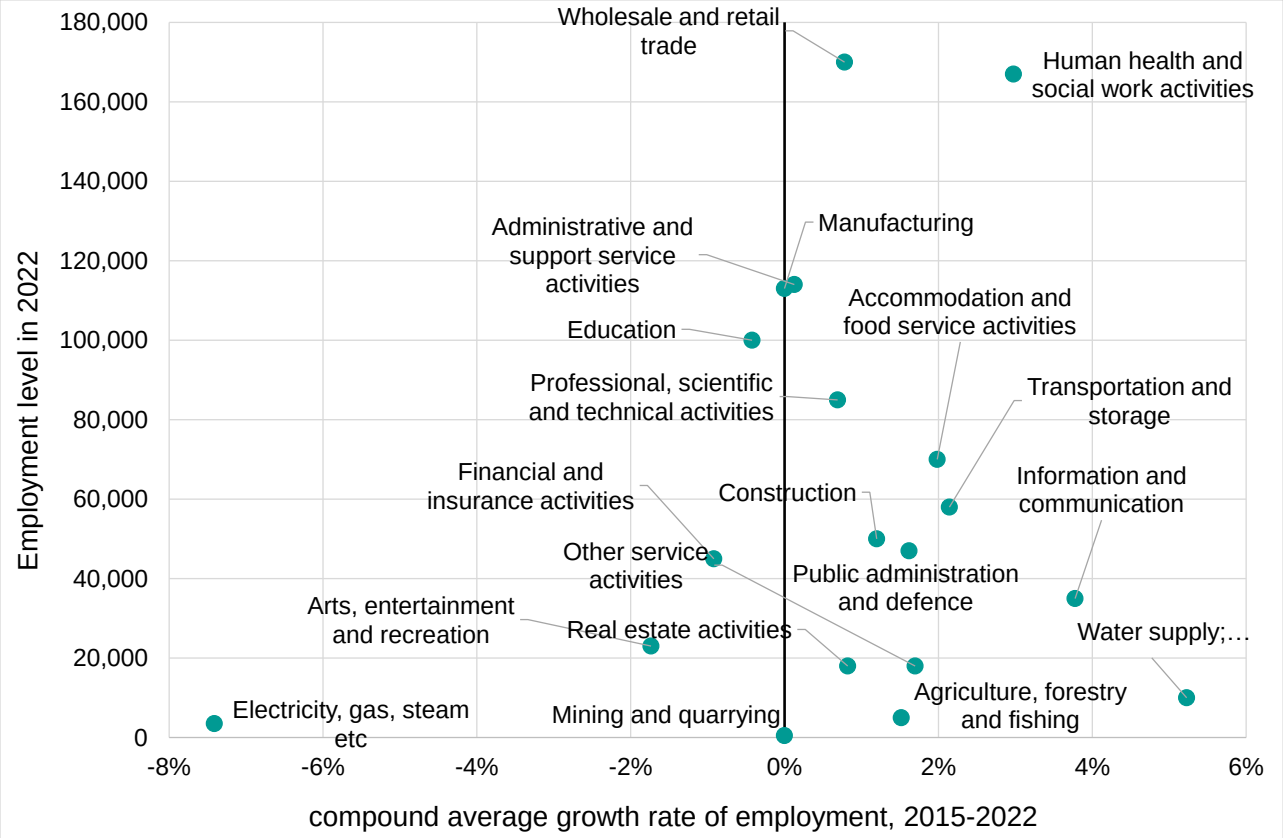
The pattern of growth and decline across industry sectors is a key driver of change in terms of skills requirements.

The figure below plots sectors by their size in current employment terms together with their recent growth performance.

Among the largest employing sectors in West Yorkshire, *Health* has generated the strongest growth rate in recent years, with *Manufacturing* remaining largely static and *Wholesale and retail* seeing a small measure of decline.

Among “mid-sized” sectors there has been growth for *Transportation and storage* and *Accommodation and food services.*

Figure 24: Sectoral employment in West Yorkshire – current level and recent growth performance



Source: Business Register and Employment Survey

Turning to smaller sectors, *Information and communication* has seen the strongest rate of growth.

The *Financial and insurance* sector– an important specialism of the West Yorkshire economy – has seen a degree of employment decline in recent years.

3.4 Profile of occupational employment

How is employment in West Yorkshire distributed at a detailed occupational level? This gives an insight into the profile of work that people do locally and the skills needed to do that work.

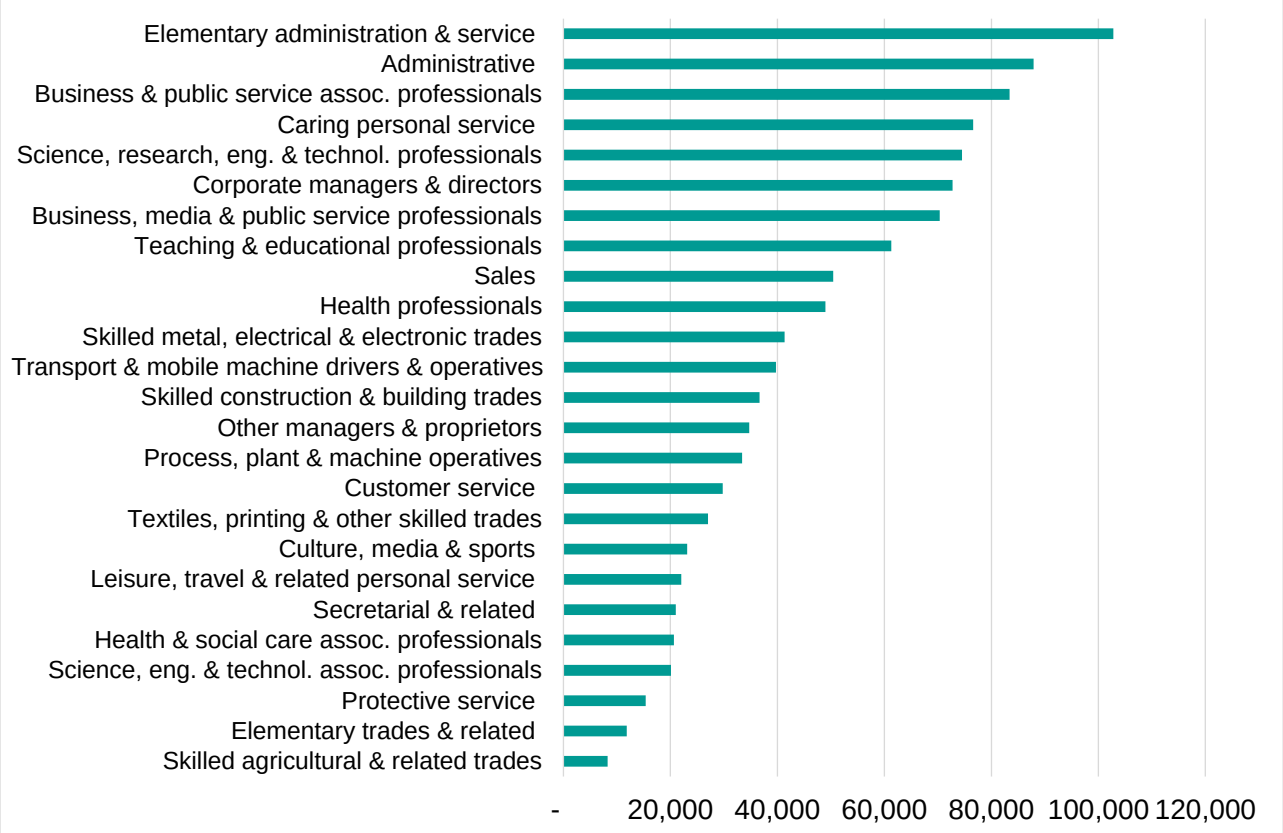
***Elementary admin and service*, *Administrative* and *Business and public service associate professional* roles are the biggest occupational categories in West Yorkshire**

The chart below ranks occupational sub-major groups by the level of local employment in each.

The five largest groups in West Yorkshire are:

- *Elementary administration and service* roles (employing 103,000 people), a category which includes hospitality staff such as waiters / waitresses, bar staff and kitchen and catering assistants; cleaners; and elementary storage roles.
- *Administrative occupations*, including book-keepers, payroll managers and admin roles in finance and local government, employing 88,000 people.
- *Business and public service associate professionals* (employing 83,000), a diverse category which includes sales and marketing, human resources, financial and public service roles at the associate professional level.
- *Caring personal services* (employment of 77,000), which includes care workers and home carers, teaching assistants, nursing auxiliaries and nursery nurses.
- *Science, research, engineering and technology professionals* (employment of 75,000), which comprises scientific, engineering, IT and conservation/environmental roles at professional level.

Figure 25: Employment by SOC sub-major group, West Yorkshire



Note: Workplace employment
Source: Annual Population Survey

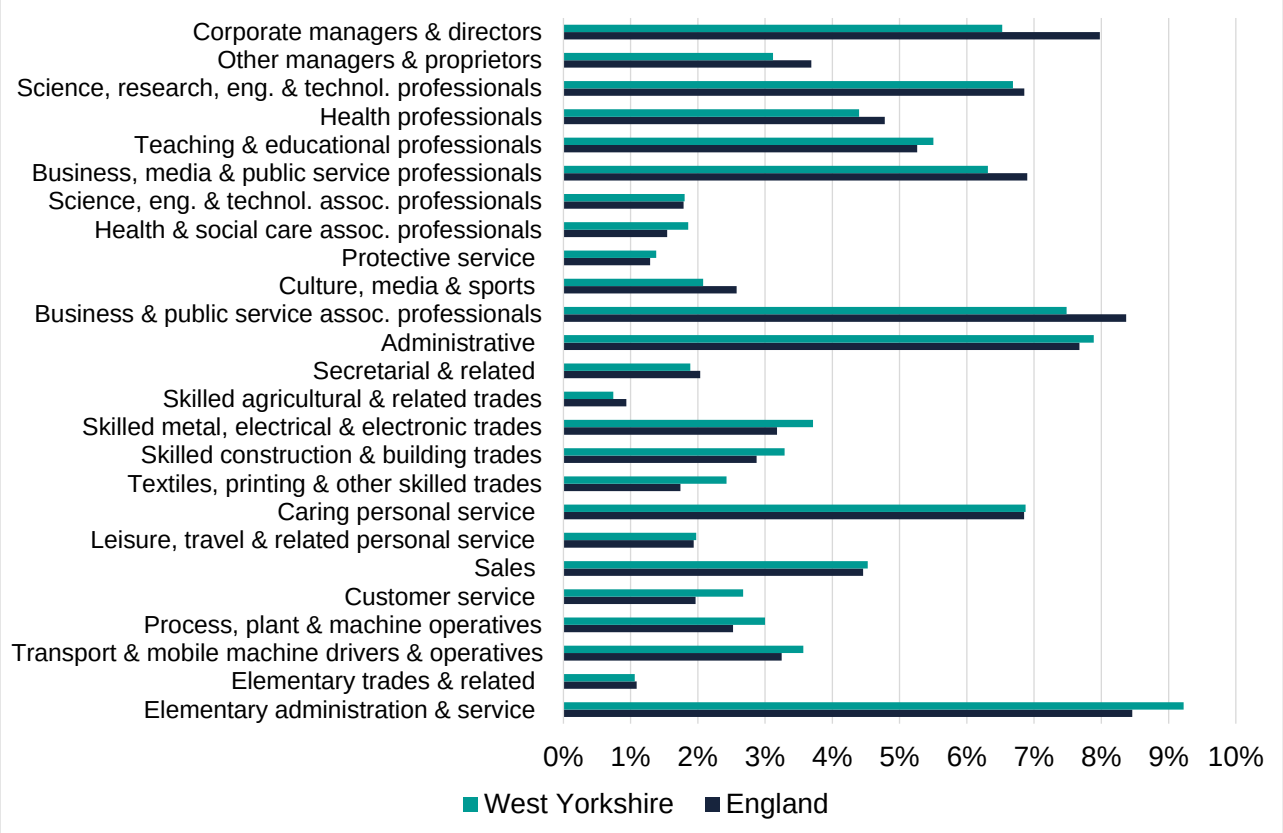
It is also useful to understand the distinctive features of occupational employment in West Yorkshire, to gain an insight into specific skill requirements of the locality. The following chart provides a comparison of the occupational distribution of local employment relative to the national picture.

Overall, employment in higher skilled management, professional and associate professional occupations is under-represented in West Yorkshire. These occupations

account for 47% of total employment compared with 51% nationally. In absolute terms this represents a deficit of 43,000 fewer people in higher skilled employment.

The majority of higher skilled occupations have a smaller share of total employment in West Yorkshire as compared to the national average, with *Corporate managers*, *Culture, media and sports* and *Other managers and proprietors* being the most under-represented. The exceptions are *Science, engineering and technology associate professionals* and *Teaching professionals*, which have similar shares of total employment to the national average.

Figure 26: Comparative occupational employment profile (% of total employment)



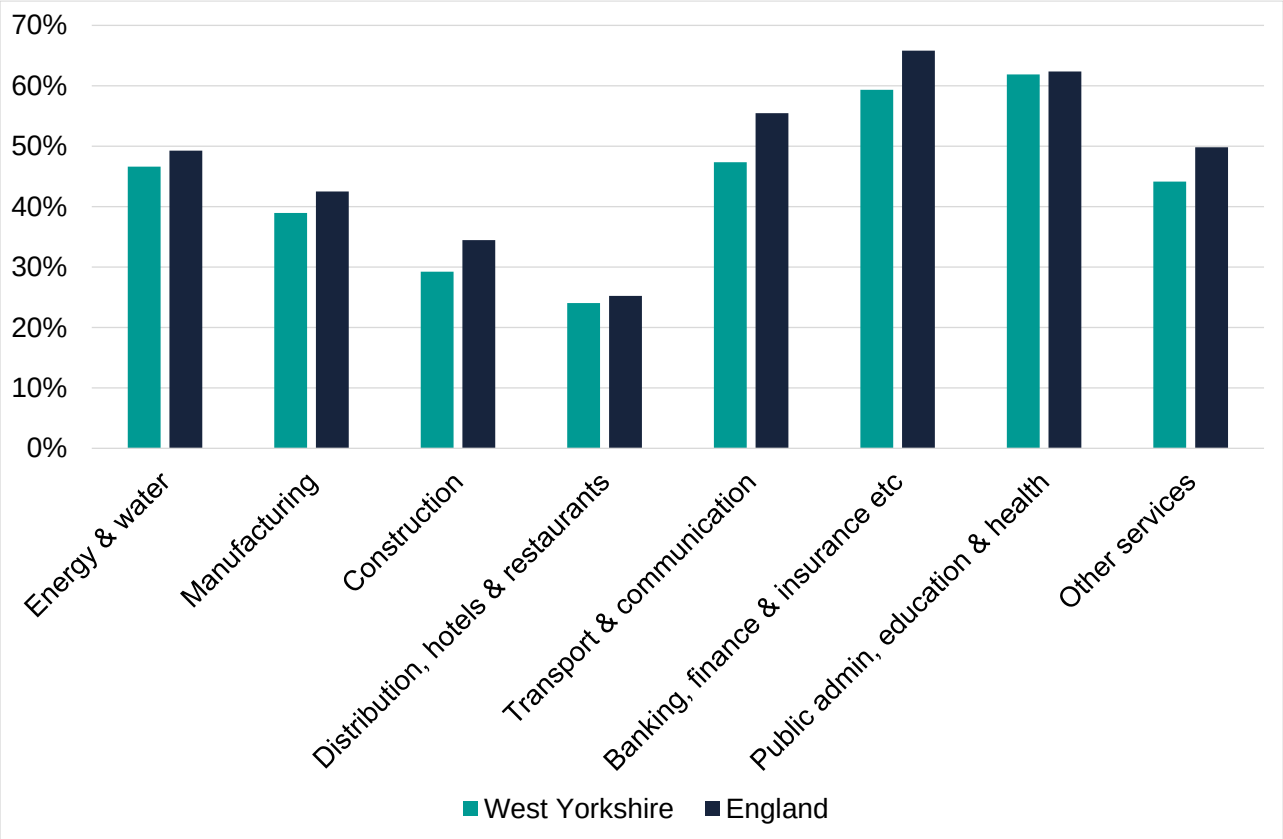
Note: Workplace employment
Source: Annual Population Survey

Occupational employment in West Yorkshire is weighted towards intermediate and lower-skilled service and labour-intensive roles, as the above figure demonstrates. The share of local employment accounted for by *Customer service* roles exceeds the national average. Other roles that are strongly represented can be mostly categorised as skilled and semi-skilled manual roles:

- *Textiles, printing and other skilled trades*
- *Health & social care associate professionals*
- *Process, plant and machine operatives.*
- *Skilled metal, electrical & electronic* trades

The occupational profile within industry sectors in West Yorkshire demonstrates that there is lower demand for higher skilled workers across much of the region's economy. Almost all broad sectors of the economy in West Yorkshire employ a smaller proportion of higher skilled management, professional and associate professional workers than the national average.

Figure 27: Proportion of employment in management, professional and associate professional occupations by sector



Note: Workplace employment
Source: Annual Population Survey, January to December 2022

In sectors like Banking, finance and insurance the differences in occupational profile reflect the differing nature of the activities undertaken, with a greater focus on lower value back-office functions in West Yorkshire compared with the national average. This is also reflected in West Yorkshire's pay distribution as highlighted in section 2.2.

3.5 Patterns of change in occupational employment

The changing profile of occupational employment provides an important insight into the evolving demand for skills in the local labour market.

The analysis needs to be interpreted with care since employment trends were disrupted by the pandemic and the performance of some occupational categories over the period under consideration may not fully reflect their longer-term prospects. Moreover, the occupational employment estimates available at West Yorkshire level are subject to statistical noise

which affects our ability to assess trends over time with a further complicating factor being the shift in occupational classification from Standard Occupational Classification 2010 to Standard Occupational Classification 2020, which limits our ability to track trends at a more detailed level. However, national data enables us to triangulate the reliability of the local trends and also to examine more detailed occupational data underlying the broader patterns of change.

Science, research, engineering and technology professionals and Business, media and public service professionals have been key sources of recent employment growth

Among the occupations with the largest employment, the fastest rate of growth between 2016 and 2022 was seen for *Science, research, engineering and technology professionals* and *Business, media and public service professionals*, both higher skilled occupational categories. This reflects the performance of these occupations at national level during this period.

Growth within the former category was primarily driven by demand for *Information Technology Professional* workers, the largest and fastest growing category. Whilst in the latter category a key source of growth was *Business, Research and Administrative Professionals*, which includes specific occupations such as *Business and financial project managers* plus *Management consultants and business analysts*, which demonstrate growth at national level.

With regard to the remaining professional level occupations, the data points to moderate growth for *Teaching professionals* and a largely static position for *Health professionals*. National data shows continuous growth for all professional occupations including *Health professionals* and it is possible that West Yorkshire's divergence from the national trend reflects data issues.

Turning to occupations at associate professional level, the largest source of employment is the *Business and public service associate professional* category, with more than 80,000 people employed in West Yorkshire. This category saw a marginal rate of growth in West Yorkshire between 2016 and 2022, due to net employment declines in 2020 and 2021. National data shows continuous growth over the period for this occupation.

Among the remaining associate professional categories, which have much smaller employment bases, there was relatively strong growth over the period for *Culture, media and sports* occupations, *Health and social care associate professionals* and *Protective services*, with a more moderate rate of growth for *Science, engineering and technology associate professionals*. The pattern of growth is very similar to the national picture.

Within *Culture, media and sports*, a key feature shown by national data is sustained growth for *Artistic, Literary and Media Occupations*.

The *Administrative occupations* category is the second largest in West Yorkshire in employment terms. It remained largely static during the period under consideration, mirroring the position seen at national level. Employment in *Secretarial* roles continued its trend of long-term decline.

The performance of the four skilled trades categories showed little change during the period, ranging from modest decline (*Skilled construction and building trades*) to moderate growth (*Textiles, printing and other skilled trades*).

Caring personal service occupations employ nearly 80,000 people in West Yorkshire and in the past have been a key source of employment growth alongside higher skilled occupations. However, during the 2016-2022 period employment in this category remained essentially flat as it did nationally. This may partially reflect supply side constraints such as recruitment difficulties in the social care sector.

Employment in *Leisure, travel and related personal service* occupations is much smaller than *Caring personal services* but experienced growth during the period.

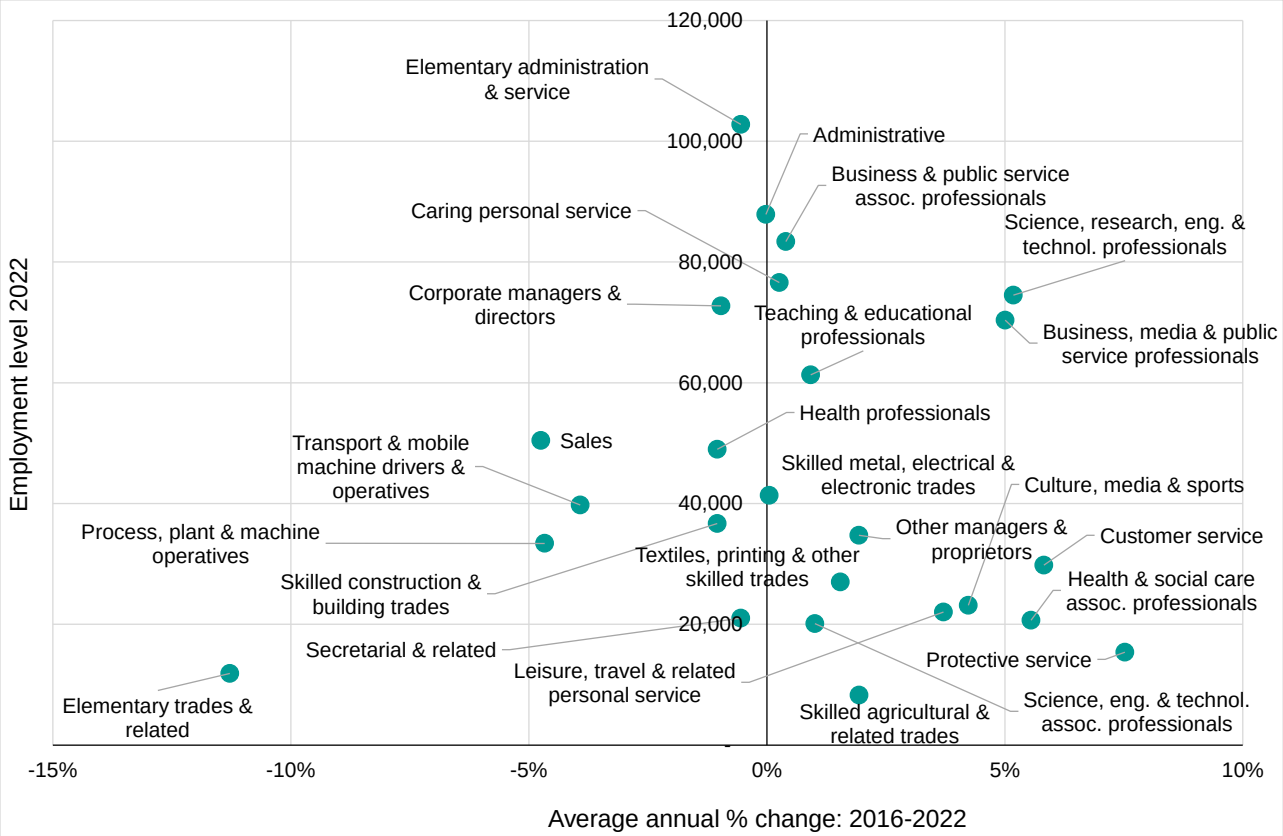
There was a marked divergence in the performance of the related categories of *Sales* occupations and *Customer service*, with the former seeing decline and the latter growing at a respectable rate. This reflects the national pattern of change. The pandemic may have contributed to the fall in employment of *Sales assistants and retail cashiers* – the key component of *Sales* occupations – but national data indicates that the downward trend pre-dates the crisis.

With regard to operative occupations, both categories of *Process, plant and machine operatives* and *Transport and mobile machine drivers & operatives* underwent a net reduction in employment in West Yorkshire during the period. The former category has been subject to a long-term trend of decline both national and locally although national employment remained largely static at national level between 2016 and 2022.

Elementary Trades saw the fastest rate of decline in employment over this period. A similar trend can be observed at national level but it is likely to be the case that this at least partially reflects the impact of the pandemic on employment in component occupations like *Elementary process plant* and that the data does not fully capture the recovery in employment seen since the economy re-opened.

Elementary administration and service is the occupational category with the highest employment in West Yorkshire. It saw little change during the period 2016 to 2022, mirroring the national position. Prior to the pandemic there was sustained growth in Other Elementary Services Occupations and Elementary storage occupations. National data shows that he increase in employment in the former category was driven by demand for occupations related to hospitality and catering, such as Kitchen and catering assistants.

Figure 28: Occupational employment in West Yorkshire – current level and recent growth performance

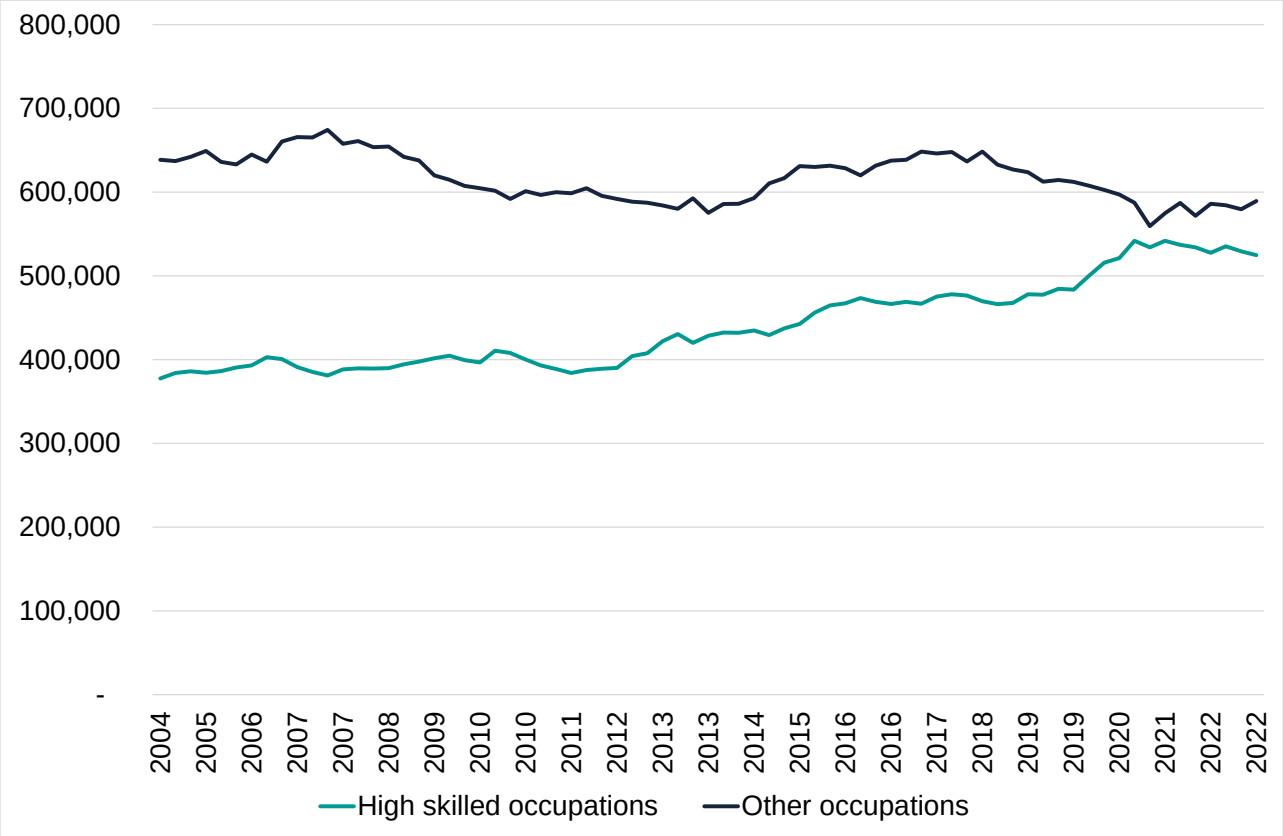


Source: Annual Population Survey

Overall growth in employment is being driven primarily by higher skilled occupations

The figure, below, shows the trend in employment in West Yorkshire over time, splitting out two components - higher skilled occupations – management, professional and associate professional occupational categories, versus the remainder – administrative, skilled trades, care, sales and semi-skilled and lower-skilled manual.

Figure 29: Trend in employment by broad occupational segments, West Yorkshire



Note: Workplace employment
Source: Annual Population Survey, October to September periods

Higher skilled employment grew by 29% over the decade between 2012 and 2022, or 117,000 in absolute terms to its current total of 525,000. This is in spite of an absence of growth between 2020 and 2022, which is probably linked to the pandemic.

Meanwhile, employment in the remaining occupations was little changed in 2022 compared with 2012. In the intervening period there was growth between 2013 and 2018 but then a period of decline in the run up to the pandemic.

Therefore, higher skilled employment has increased its share of total employment from 41% in 2012 to 47% in 2022.

Nonetheless this latest share is still lower than the England average (see above).

3.6 Vacancies

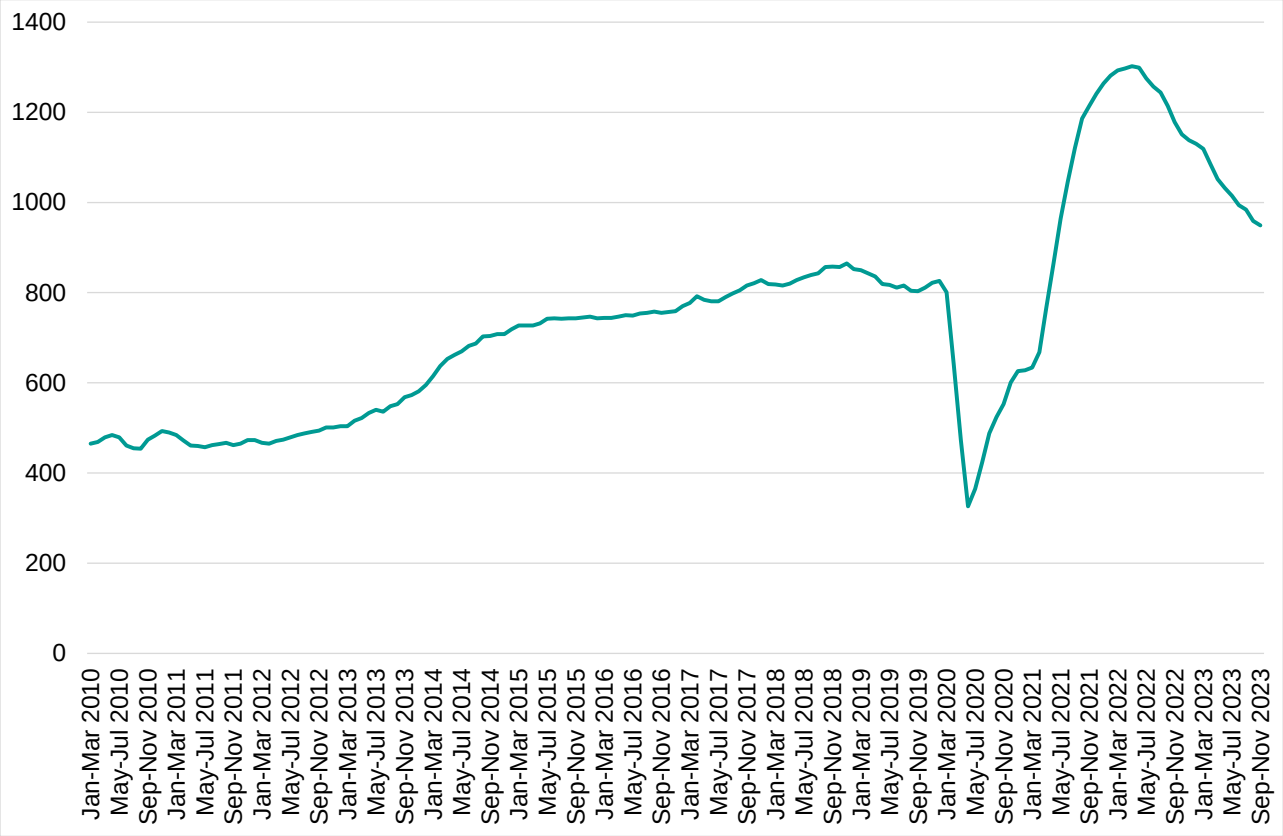
Job vacancies provide a key insight into the level and nature of current labour demand and employer skills needs. At local level this means examining the types of job that are being

advertised via online job postings[12] and the skills that are being specified in those postings. This gives an insight into current recruitment levels and patterns and the timeliness of these data provide an insight into recent developments in a volatile labour market.

National data shows vacancies are cooling across the board after reaching record levels in 2022

It is useful to examine the UK context for trends in vacancies since reliable published statistics are available at this level but not at sub-national level.

Figure 30: Trend in total vacancies, UK

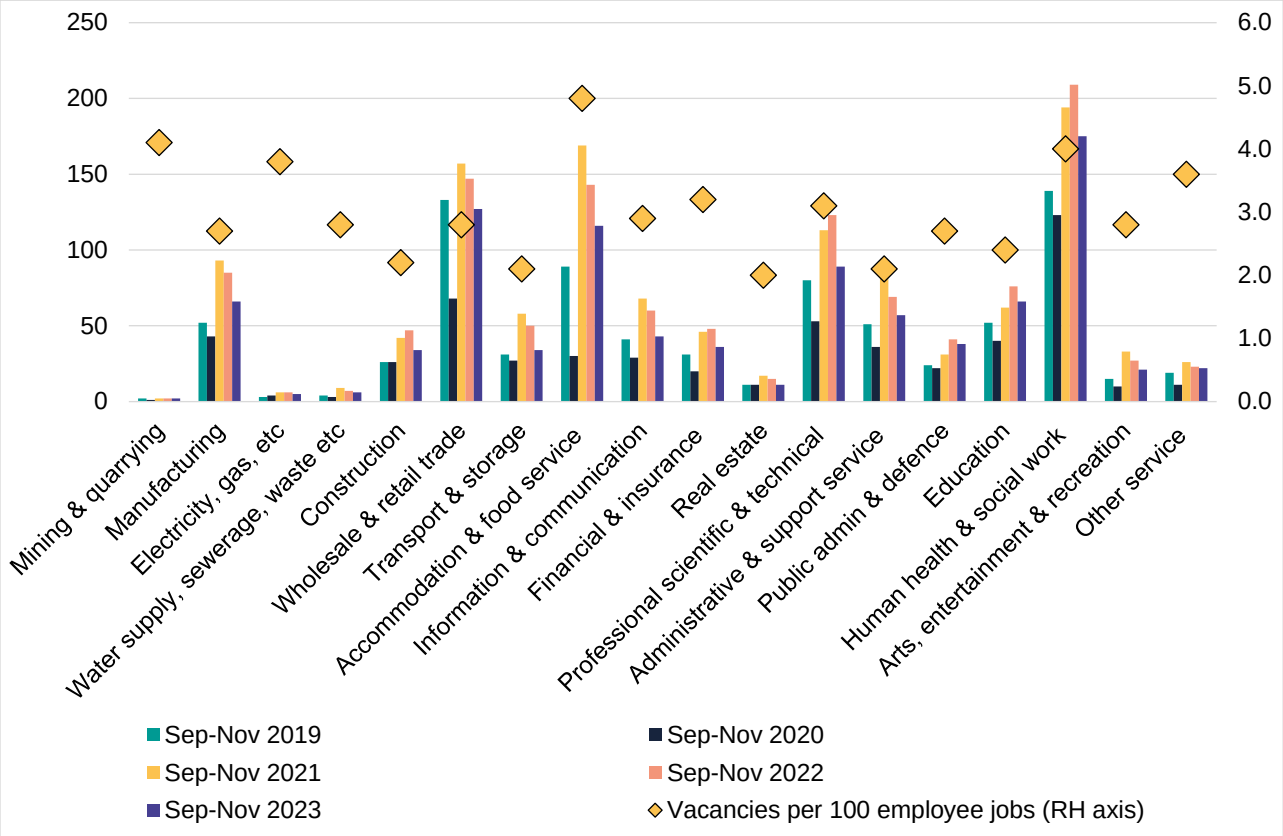


Source: Vacancies by industry, ONS

According to ONS' vacancy survey, vacancies peaked during spring 2022 and have declined since then. The overall level of UK vacancies for September to November 2023 was 949,000 compared with the peak value of 1.3m (March to May 2022). This is 19% lower than the same period of 2022 and 22% lower than the same period of 2021 but still 18% higher than September to November 2019 (pre-pandemic).

[12] It should be noted that online job postings do not provide a fully representative picture of employer vacancies. Relative to all vacancies higher skilled occupation are over-represented in online postings and middle and lower-skilled occupations are under-represented.

Figure 31: Vacancy levels and vacancies per 100 employee jobs by sector, UK



Source: Vacancies by industry, ONS

All sectors recorded fewer vacancies in September to November 2023 than in the same period of 2022, with largest falls in absolute terms seen in *Professional scientific & technical*, *Human health & social work* and *Accommodation & food service*. In percentage terms the largest falls for this period were for *Transport & storage*, *Information and communication* and *Construction*.

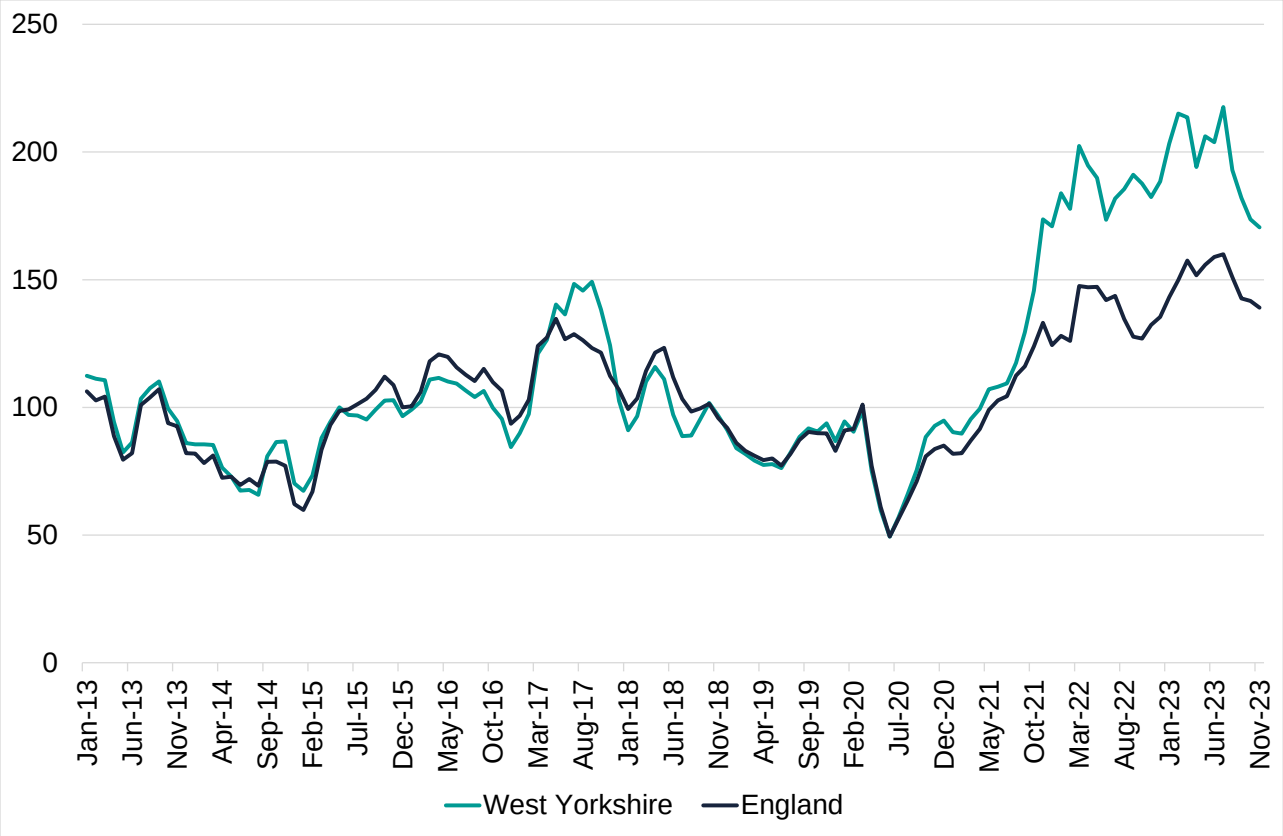
However, with the exception of *Wholesale and retail*, the level of vacancies remained higher across all sectors than pre-pandemic (September to November 2019).

As the chart shows, *Accommodation and food service* is the sector with the highest ratio of vacancies to employment, reflecting continued strong recruitment demand. Among sectors of substantial size, vacancy rates are also above average in *Health and social work*, *Other services*, *Financial and insurance* and *Professional scientific and technical*.

The level of job postings in West Yorkshire remains high although with some signs of cooling in recent months

The monthly count of online job postings, both in West Yorkshire and nationally, fell sharply during the pandemic but soon began a sustained recovery, reaching a peak level in summer 2023. Since then, the trend has been downwards.

Figure 32: Index of monthly count of online job postings, three month moving average (2012 = 100)



Source: Lightcast

In West Yorkshire, the level of postings as of November 2023 is around a fifth lower than at its peak and 10% lower than a year earlier in November 2022. Nonetheless, postings remain relatively high in historic terms and are around 80% higher than before the pandemic (November 2019). West Yorkshire has also performed more strongly than the wider national (England) picture; the latter being just over 50% higher in terms of level of postings compared with November 2019.

Higher skilled occupations are ranked highest in terms of volume of postings

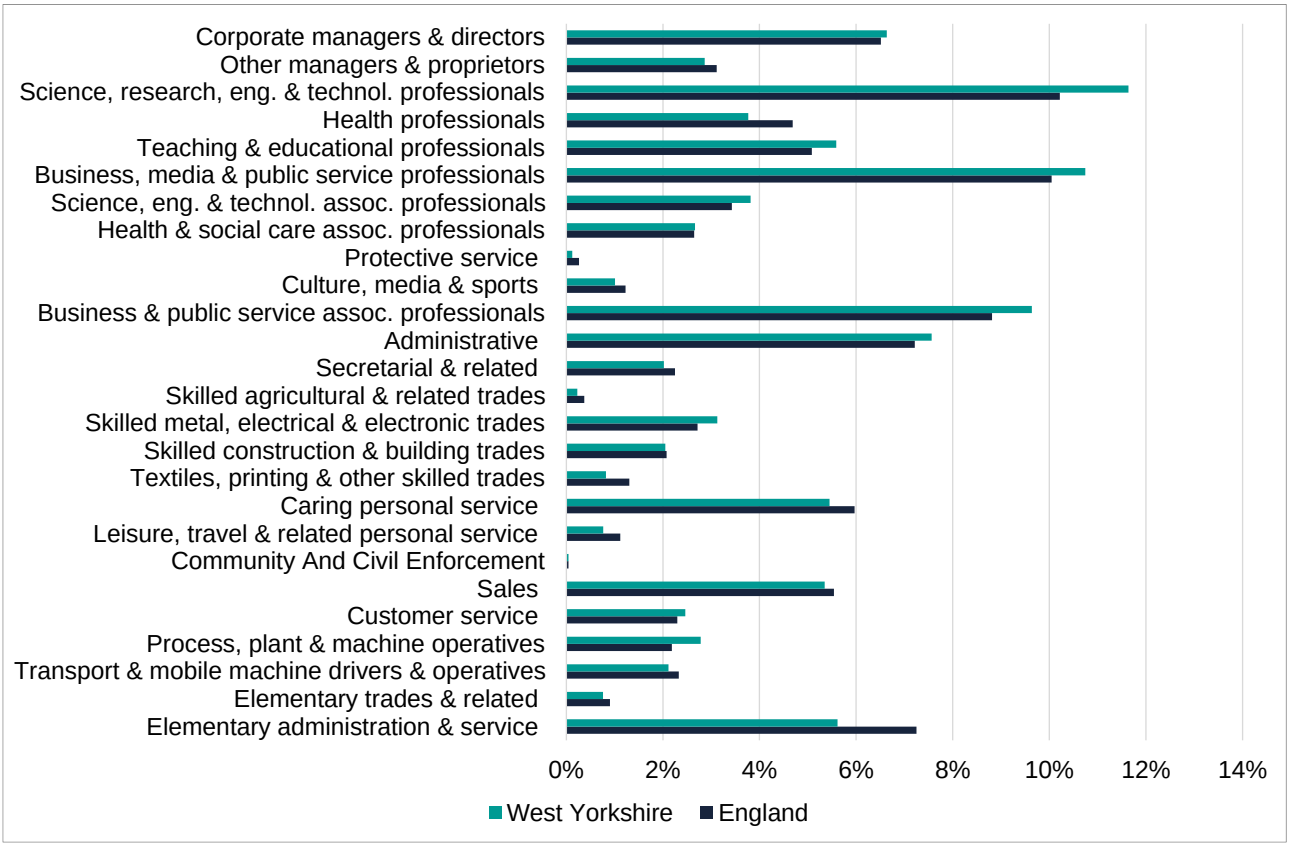
As Figure 33 shows, the occupational categories with the greatest number of postings are mostly higher skilled, professional and associate professional groups, with the top ranked being *Science, research, engineering and technology professionals*, *Business, media and public service professional* and *Business and public service associate professionals*.

Administrative occupations are ranked fourth, reflecting the high level of employment in this occupation within West Yorkshire.

The occupational profile of local job postings is broadly similar to the national average

The occupational profile of West Yorkshire's job postings is broadly similar to the national picture, based on an analysis of postings for the 12-month period of December 2022 to November 2023, reflecting the depth and diversity of the region's economy.

Figure 33: Occupational profile of online job postings, December 2022 to November 2023



Source: Lightcast

Higher skilled management, professional and associate professional occupations account for a similar proportion of total postings in West Yorkshire compared with nationally, at a combined 58% versus 56% respectively. Therefore, higher skilled opportunities formed a greater part of the total in West Yorkshire than nationally in the last year.

Job postings for higher skilled STEM and business occupations are strongly represented in West Yorkshire

Occupational sub-major groups in which West Yorkshire was most strongly represented relative to the England average in terms of share of total postings during 2022/23 include the following higher skilled categories:

- *Science, Research, Engineering and Technology Professionals* (driven primarily by strong demand for *Engineering Professionals* and *Information Technology Professionals*)
- *Science, Engineering and Technology Associate Professionals* (largely driven by demand for *Information Technology Technicians*)
- *Teaching and Other Educational Professionals*

- *Business and Public Service Associate Professionals* (driven by postings for *Finance Associate Professionals*, *Business Associate Professionals*, *Sales, Marketing and Related Associate Professionals* and *HR, Training and Other Vocational Associate Guidance Professionals*)
- *Business, Media and Public Service Professionals* (with strong demand for *Legal Professionals*, *Architects / Surveyors* and *Welfare Professionals*).

Looking beyond higher skilled occupations, there are a number of further areas in which postings were strongly represented in West Yorkshire relative to the national benchmark in 2022/23:

- *Process, Plant and Machine Operatives*
- *Skilled Metal, Electrical and Electronic Trades (*including *Metal Forming, Welding and Related Trades, Metal Machining, Fitting and Instrument Making Trades* and *Electrical and Electronic Trades*)
- *Customer Service Occupations*
- *Administrative Occupations* (with particularly strong demand for *Administrative Occupations in Finance*).

There are a number of occupational areas in which West Yorkshire has a low representation in terms of job postings during 2022/23 relative to the national benchmark, with several of them relating to the hospitality sector:

- *Skilled Agricultural and Related Trades* (reflecting the relatively small size of the agricultural sector in the region)
- *Textiles, Printing and Other Skilled Trades* (driven by low representation of *Food Preparation and Hospitality Trades* and the relatively small size of the hospitality sector in the region)
- *Leisure, Travel and Related Personal Service Occupations* (with low representation of *Sports and Leisure Assistants*, *Hairdressers and Barbers*, *Beauticians*, *Housekeepers and Related Occupations* and *Cleaning and Housekeeping Managers and Supervisors*)
- *Elementary Administration and Service Occupations* (driven by low representation of *Elementary Cleaning Occupations*, *Elementary Security Occupations* and *Other Elementary Services Occupations* [such as *Kitchen and Catering Assistants*, *Waiters and Waitresses* and *Bar Staff*]).

By viewing the volume of job postings relative to the level of employment in each occupational category we can achieve a clearer picture of the profile of demand.

Higher skilled STEM and business occupations have the highest recruitment demand relative to employment

There are marked differences across occupations in their ratio of job postings to employment level.

Figure 34: Ratio of job postings to employment, West Yorkshire (based on count of unique job postings for period December 2022 to November 2023)

Source: Lightcast and Census 2021

Higher skilled STEM and business occupational categories have the highest ratio of job postings to employment in West Yorkshire.

The sub-major group with the highest ratio is *Science, research, engineering and technology professionals*. This is based on high ratios for the component minor groups of *Engineering Professionals* and *Information Technology Professionals*.

Another STEM related category is ranked second in terms of its job postings to employment ratio - *Science, engineering & technology associate professionals*. A number of components of this category have high volumes of postings relative to employment, including *Information Technology Technicians*, *CAD, Drawing and Architectural Technicians* and *Science, Engineering and Production Technicians*.

The *Business, media & public service professionals* category is ranked third. Within this category several components have strong recruitment demand relative to employment: *Architects*, *Welfare Professionals*, *Business, Research and Administrative Professionals* and *Finance Professionals*.

A further business-related occupational category is *Business and Public Service Associate Professionals*, which is ranked fourth due to strong ratios for its component sub-categories

of *Legal Associate Professionals*, *Finance Associate Professionals*, and *HR Associate Professionals*.

The occupational employment profile across the five West Yorkshire local authorities is diverse; in particular, the profile in Leeds is highly distinctive in comparison with the other four authorities.

Leeds has a number of higher skilled occupational specialisms in its labour demand profile

In Leeds 63% of unique job postings recorded in December 2022 to November 2023 were for higher skilled management, professional and associate professional occupations. In contrast the average figure for the four remaining local authorities was 54%, with individual local authorities' figures ranging from 50% in Calderdale to 57% in Bradford (Kirklees: 53%; Wakefield 52%).

Leeds accounts for a disproportionate share of postings for higher skilled job openings. Fifty-six per cent of postings for higher skilled vacancies across the five local authorities relate to opportunities in Leeds compared with 52% of overall postings.

Table 2, below, provides a ranking of the most marked occupational specialisms in each local authority[13]. This brings out the distinctive nature of Leeds' labour demand profile compared with the rest of West Yorkshire. All of Leeds' top 10 specialisms relate to higher skilled management, professional and associate professional occupations, with no manual roles present. Particular specialisms include legal roles at professional and associate professional levels, architecture related roles, information technology and web design roles, business related roles and HR roles.

Across the rest of West Yorkshire, specialisms in higher skilled occupations are less prominent and are largely confined to teaching, welfare and health disciplines. Key specialisms mainly relate to skilled and semi-skilled manual categories associated with manufacturing and engineering, including skilled trades and operatives occupations of various kinds. This reflects the importance of manufacturing to the four local authorities outside Leeds. In addition, the importance of transport and logistics to Wakefield is reflected in the presence of *Elementary storage occupations* among its specialisms.

When viewed in absolute terms, there is a degree of commonality across the local authorities with the same occupational categories at the top of the ranking based on number of postings. The following five minor groups (presented in descending order) recorded the highest level of unique postings in 2022/23 across West Yorkshire:

- *Information Technology Professionals*
- *Teaching Professionals*
- *Engineering Professionals*

[13] Specialisms reflect occupations with high shares of total postings relative to the England average share.

- *Sales Related Occupations* (mainly comprising retail roles such as checkout operators etc)
- *Sales, Marketing and Related Associate Professionals*.

These five groups were also represented in the top 10 in absolute terms across all five local authorities, although the position of each varied. For example, the *Teaching Professionals* category was ranked at number one in all local authorities except Leeds, where it was ranked fifth. Conversely, the *Information Technology Professionals* category was ranked top in Leeds, second in Bradford and Wakefield, third in Kirklees and fourth in Calderdale.

Table 2: Occupational specialisms at local authority level – occupational minor groups with highest location quotient in each local authority

Bradford	Calderdale	Kirklees	Leeds	Wakefield
Metal Forming, Welding and Related Trades	Metal Working Machine Operatives	Metal Machining, Fitting and Instrument Making Trades	Legal Professionals	Elementary Process Plant Occupations
Metal Machining, Fitting and Instrument Making Trades	Plant and Machine Operatives	Elementary Process Plant Occupations	CAD, Drawing and Architectural Technicians	Vehicle Trades
Process Operatives	Process Operatives	Plant and Machine Operatives	Architects, Chartered Architectural Technologists, Planning Officers, Surveyors etc	Elementary Administration Occupations
Production, Factory and Assembly Supervisors	Production, Factory and Assembly Supervisors	Metal Forming, Welding and Related Trades	Legal Associate Professionals	Metal Forming, Welding and Related Trades
Teaching Professionals	Metal Machining, Fitting and Instrument Making Trades	Process Operatives	Web and Multimedia Design Professionals	Elementary Storage Occupations
Plant and Machine Operatives	Assemblers and Routine Operatives	Assemblers and Routine Operatives	HR, Training and Other Vocational Associate Guidance Professionals 3	Production, Factory and Assembly Supervisors
Welfare and Housing Associate Professionals	Metal Forming, Welding and Related Trades	CAD, Drawing and Architectural Technicians	Information Technology Professionals	Plant and Machine Operatives
Welfare Professionals	Customer Service Supervisors	Production, Factory and Assembly Supervisors	Information Technology Technicians	Mobile Machine Drivers and Operatives
Health Associate Professionals	Welfare Professionals	Vehicle Trades	Business, Research and Administrative Professionals	Process Operatives
Health and Social Services Managers and Directors	Elementary Process Plant Occupations	Health Associate Professionals	Managers and Directors in Retail and Wholesale	Skilled Metal, Electrical and Electronic Trades Supervisors

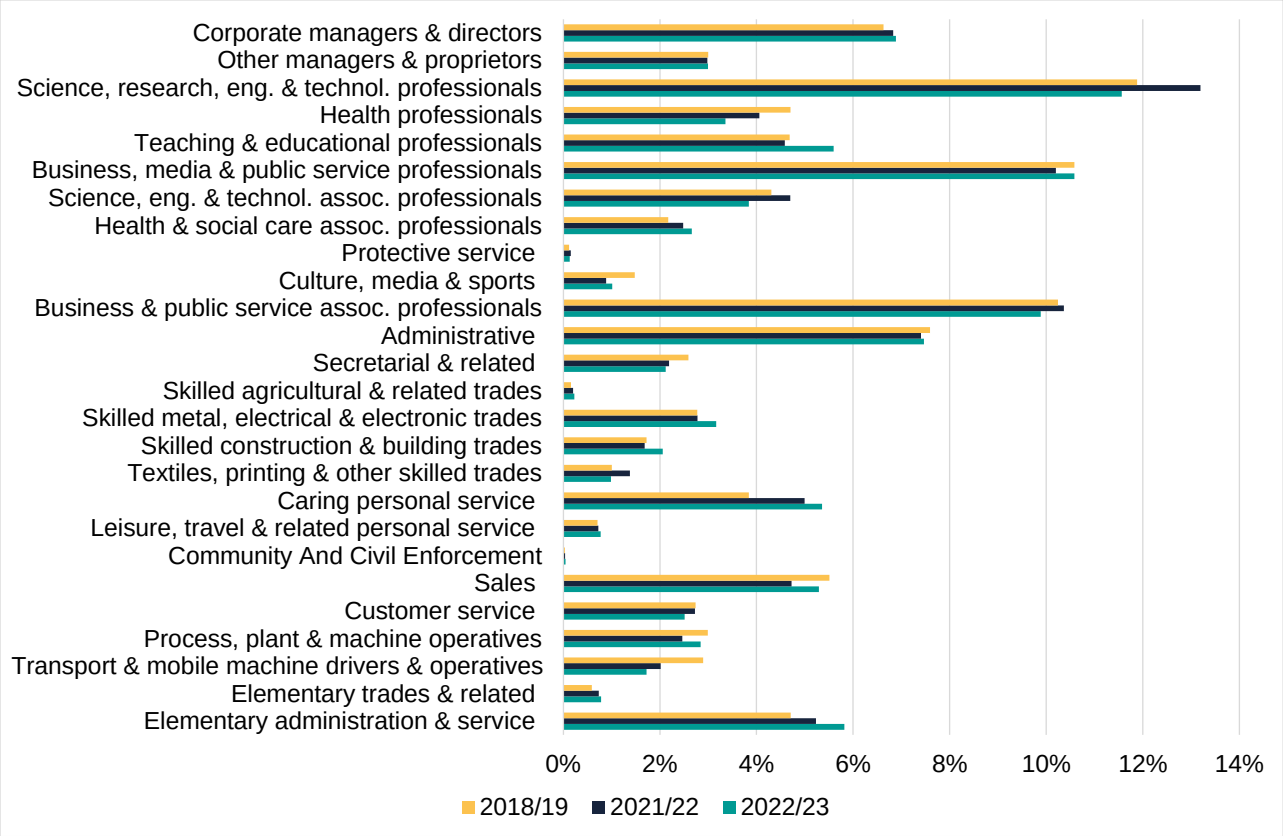
Source: Lightcast

There have been changes to the occupational profile of job postings in the last year with a shift towards teaching, hospitality, retail and skilled trades roles and a cooling of demand for STEM professional and associate professional occupations

Between 2021/22 and 2022/23 several occupational categories increased their share of total postings, indicating an increase in relative demand in these areas. These included:

- *Teaching and educational professionals* (including notable areas of growth such as secondary education teachers, special and additional needs teachers *and Education Managers)*
- *Elementary administration & service (including Elementary Cleaning Occupations* and across hospitality roles such as *Kitchen and Catering Assistants, Waiters and Waitresses, Bar Staff)*
- *Sales (retail)*
- *Skilled metal, electrical & electronic trades* (including *Electrical and Electronic Trades, Metal Forming, Welding and Related Trades* and *Vehicle Trades)*
- *Business, media & public service professionals* (including *Architects, Welfare Professionals* and *Legal Professionals)*
- *Skilled construction & building trades,*
- *Process, plant & machine operatives*
- *Caring personal service occupations.*

Figure 35: Change in occupational profile of job postings West Yorkshire, comparison of December to November period over successive years



Source: Lightcast

At the same time several occupations saw a reduction in their share of total postings year on year, including *Science, Research, Engineering and Technology Professionals*, *Science, Engineering and Technology Associate Professionals* and *Health professionals*. The first two of these three occupational categories had seen strong growth in preceding years.

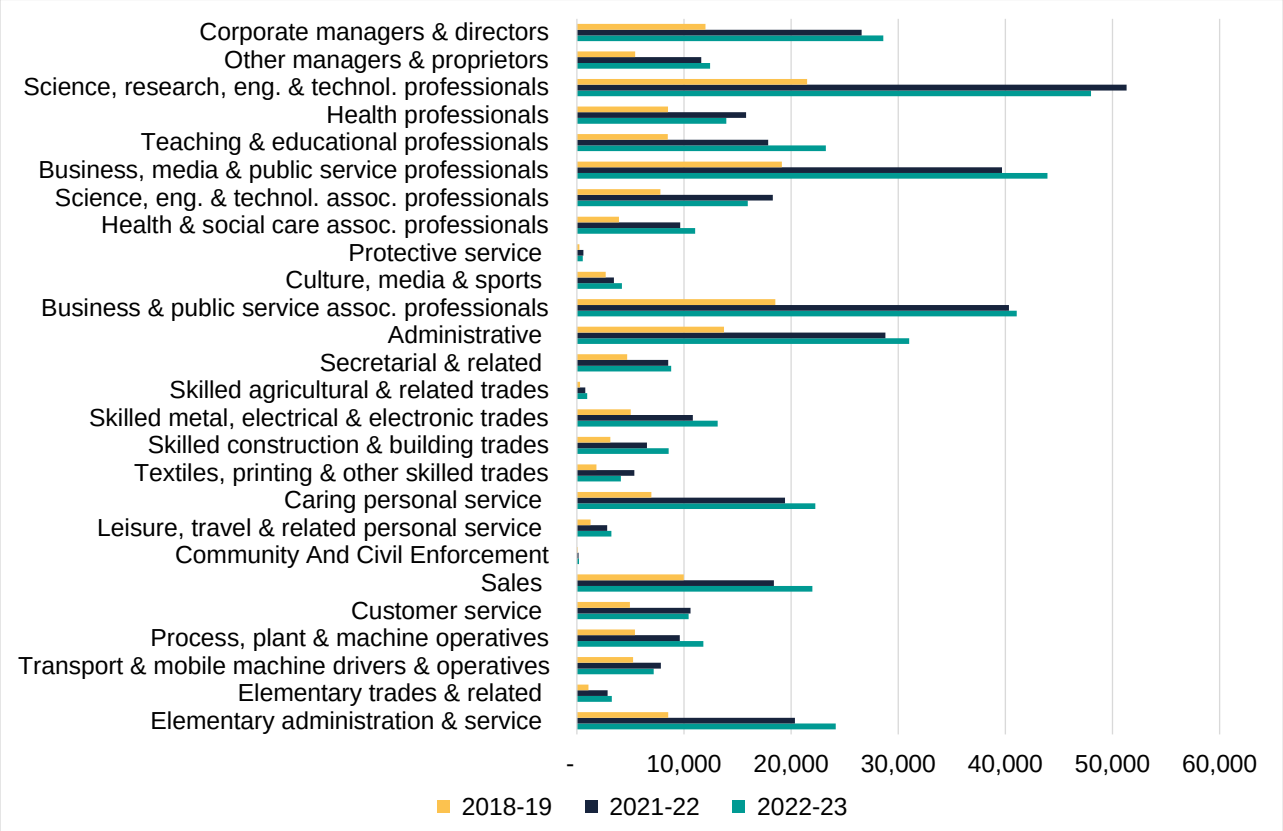
When comparing the profile of job postings in the December 2022 to November 2023 period with that of the pre-pandemic period (December 2018 to November 2019) the occupations which saw an increase in share between the two periods, include the following (presented in descending order of increase in share):

- *Caring personal service* (driven by strong growth for *Teaching Assistants* and *Care Workers and Home Carers*)
- *Elementary administration and service* (with strong growth for *Elementary Cleaning Occupations*, *Elementary Storage Occupations* and a range of hospitality occupations)
- *Teaching and educational professionals*
- *Health and social care associate professionals* (with growth for a range of occupations including *Early Education and Childcare Practitioners* and *Youth and Community Workers*)

- Skilled metal, electrical and electronic trades (driven largely by growth for *Vehicle Trades*, *Electrical and Electronic Trades* and *Metal Forming/Welding Trades*).
- *Skilled construction and building trades* (with strong contributions from *Carpenters and Joiners*, *Plumbers and Heating and Ventilating Engineers* and *Painters and Decorators*).

This shows that these occupations saw an increase in demand relative to other occupations during this period. Two occupations saw a decline in share of total job postings compared with the pre-pandemic period: *Health professionals* and *Transport and mobile machine drivers and operatives*.

Figure 36: Count of job postings by occupation, West Yorkshire, comparison of April to March period over successive 12 month periods



Source: Lightcast

However, it is important to note that all of the sub-major group occupational categories enjoyed growth in absolute terms in 2022/23 (including those that saw a reduction in percentage share) when compared with the pre-pandemic period, as the overall volume of job postings saw a net increase of 130% relative to 2018/19.

The occupations that saw the largest growth in absolute terms compared with pre-pandemic were as follows:

- *Science, research, engineering and technology professionals* (with Information Technology Professionals and Engineering Professionals among the occupational minor groups seeing the largest net growth in absolute terms)
- *Business, media & public service professionals* (with biggest growth for Finance Professionals, Business, Research and Administrative Professionals and Welfare Professionals).
- *Administrative* (with largest growth in demand for Administrative occupations in finance).
- *Business, media & public service professionals* (with notable growth for Business Associate Professionals, Sales, Marketing and Related Associate Professionals and HR, Training and Other Vocational Associate Guidance Professionals).

The occupations seeing the largest growth in absolute terms over this period are also those that had the greatest level of demand in the baseline period of 2018/19.

A diverse range of detailed occupations are among those in greatest demand during 2022/23

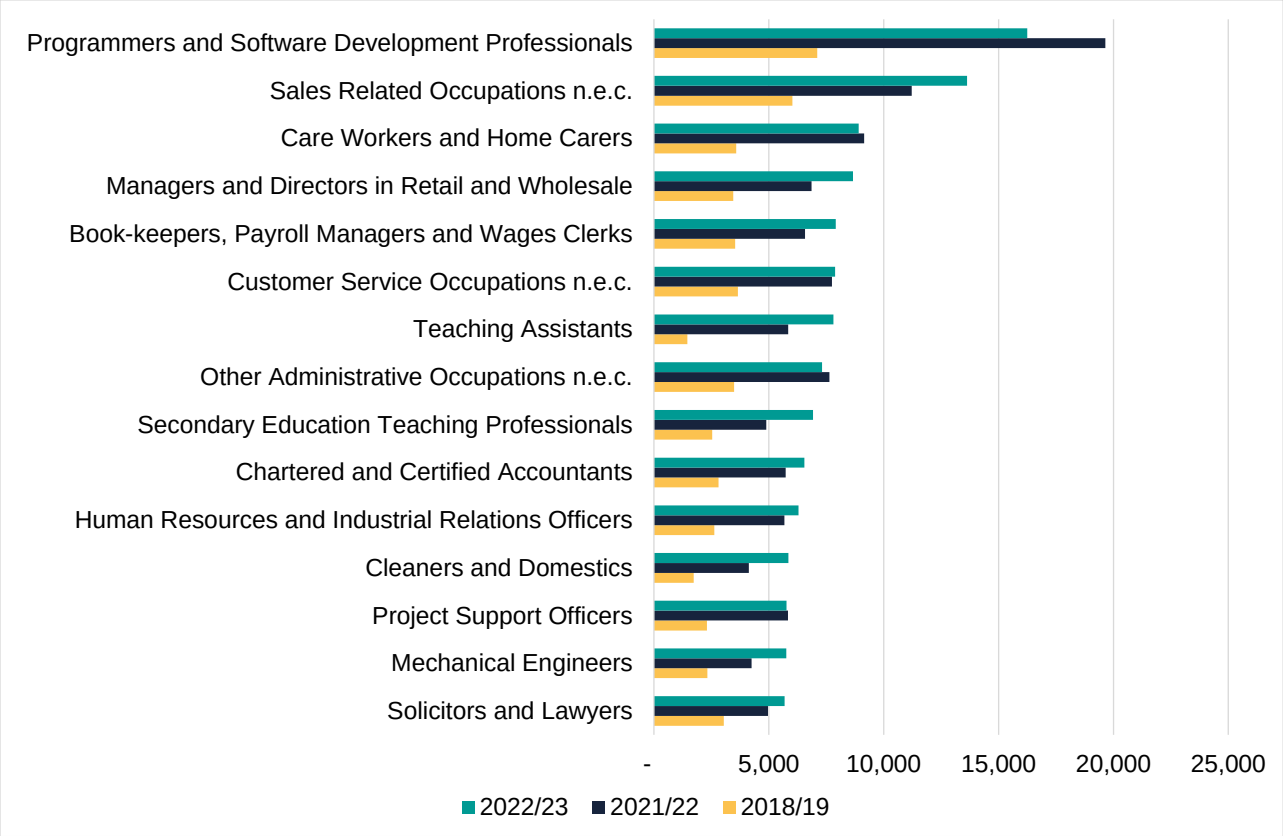
Turning to the individual detailed occupations in greatest demand currently the occupations with the greatest number of postings are drawn from a diverse range, including, digital, retail, care, finance, teaching and customer service, among others.

The chart (below) compares the December 2022 to November 2023 with the same period of 2021/22. It shows that the majority of top occupations experienced growth between these two periods with some remaining fairly static.

The key exception is the highest ranked occupation, *Programmers and software development professionals*, which saw a decline of around 17% in 2021/22. This represents a cooling of demand following strong growth for this occupation during preceding years. The number of postings recorded in 2022/23 was well over double the figure for 2018/19 before the pandemic.

Among these leading detailed occupations, the fastest growth in percentage terms between 2021/22 and 2022/23 was observed for teaching roles (Secondary teachers: +42%; *Teaching assistants*: +34%); *Cleaners and Domestics* (+42%); *Mechanical engineers* (+36%); and *Managers and directors in retail and wholesale* (+26%).

Figure 37: Top occupations in greatest demand overall based on volume of job postings, West Yorkshire, December to November period



Source: Lightcast

Lightcast also supports analysis of the types of skill that employers ask for in their job postings, enabling us to profile the skills in greatest demand. The fact that employers ask for skills suggests they are not available as matter of course – in some cases they may be difficult to obtain from candidates.

Figure 38: "Baseline" skills in greatest demand, West Yorkshire, December 2022 to November 2023

Source: Lightcast

The analysis presented in the figure above focuses on baseline skills – generic skills in widespread demand across different types of job. The size of the text reflects frequency with which they are mentioned by employers in their vacancy postings.

Communication, management and customer service are among the skills in greatest demand

Closely reflecting analysis from previous years, communication is the baseline skill that is in the greatest demand by far, followed by skills such as management, customer service, organisation skills, attention to detail, planning, leadership and problem solving.

Demand from employers for ICT user skills is widespread, with Microsoft Excel skills close to the top of the rankings for all skill types and Microsoft Office as a whole also featured.

Skills relating to use of Microsoft Excel and the wider Office suite are in strong demand

There is a range of evidence to suggest that digital skills are an increasingly important factor in employability across most jobs. This means it is valuable to drill down on the specific computing skills that are cited in employers' job postings. The figure below sets out the most in demand software skills across all jobs and is not confined to specialist digital roles. Not surprisingly an ability to use packages within the Microsoft Office suite is in widespread demand, particularly Excel but also Powerpoint and Word.

Figure 39: Computing skill types in greatest demand, West Yorkshire, December 2022 to November 2023

Source: Lightcast

In addition to skills in the use of standard productivity packages, specialist digital skills are highlighted in significant numbers of postings, including LeSS (large scale scrum), Microsoft Azure, SQL, SAP applications, Javascript and Amazon Web Services. This reflects a widespread need for programming skills in general analytical roles, for example.

The figure below examines the importance of digital skills to a variety of disciplines, illustrating how digital is permeating across the workforce.

3.7 Green Economy Skills

Green jobs and skills are critical to the local economy as large-scale measures are implemented to meet West Yorkshire's commitment to achieve a net zero carbon economy by 2038.

However, our interest extends beyond jobs that support the achievement of the UK's net zero emissions target to jobs that underpin other environmental goals, such as nature restoration, climate resilience and mitigation against climate risks.

It is difficult to assess current demand for "green" skills in the local labour market because job tasks and skill requirements that are relevant to the green economy are embedded in a wide range of occupations. One of the ways in which we can assess current demand for green skills locally is by looking at the profile of vacancies posted online and drilling down on those that specify a requirement for "green" skills.

There has been continued growth in vacancies requiring green skills

The figure, below, shows the trend in the monthly count of postings with green skills requirements.

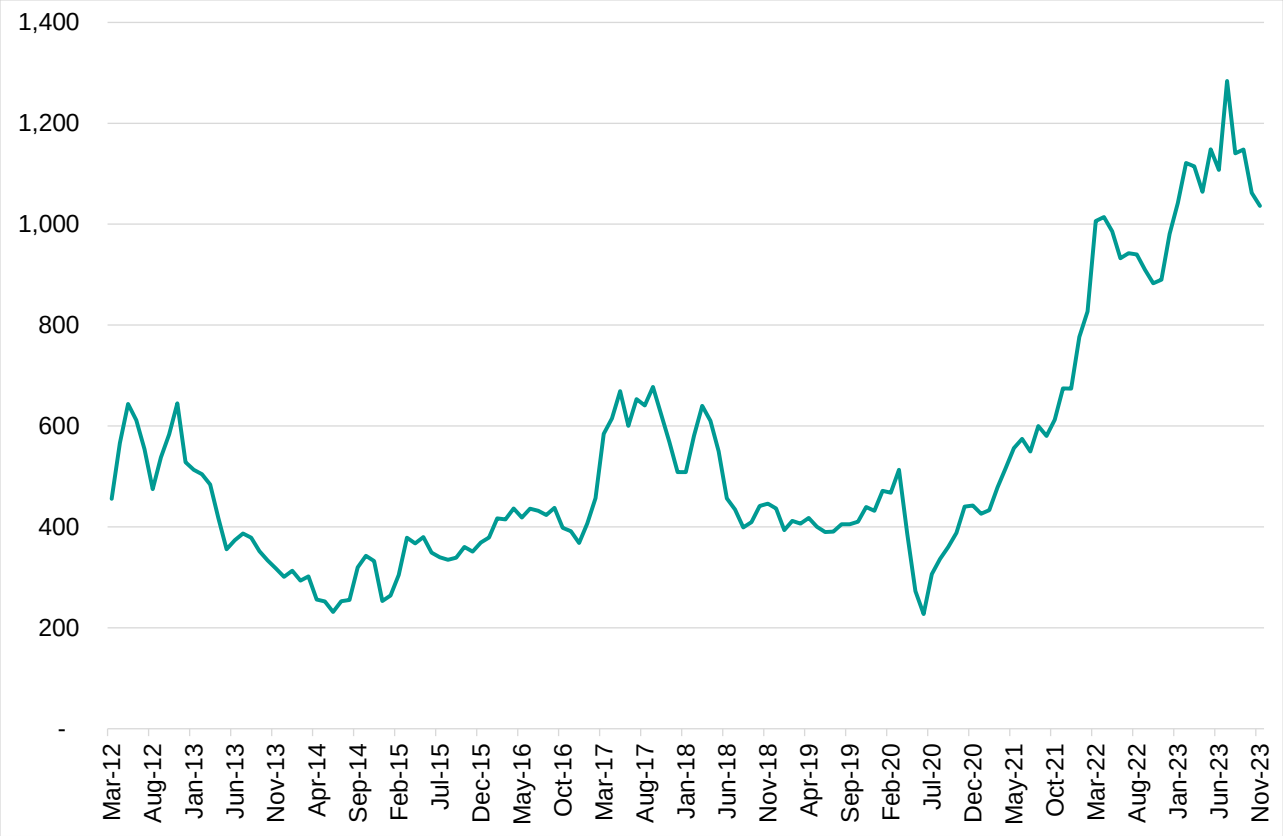
This is based on Lightcast's open-source library of skills groups, which comprises 112 specific green skills and qualifications. Although this provides a degree of insight into labour demand in the green economy it is not the complete picture and some green skills may not have been identified.

What the analysis shows is that demand escalated strongly during 2020 despite the effects of the pandemic and continued to grow during 2021, 2022 and 2023, albeit from that low initial base.

In the three months to November 2023, the monthly count of postings averaged just over one thousand, 16% higher than the same period of 2022, 54% higher than in the same period of 2021 and 136% higher than pre-pandemic (three months to November 2019).

Overall, jobs requiring green skills accounted for 3% of total job postings in West Yorkshire, based on the three-month average for the period to November 2023. There are some signs that the number of green postings is starting to decline, reflecting the wider picture for job postings.

Figure 40: Trend in monthly count of online job postings stipulating green skill requirements (3-month moving average), West Yorkshire



Source: Lightcast

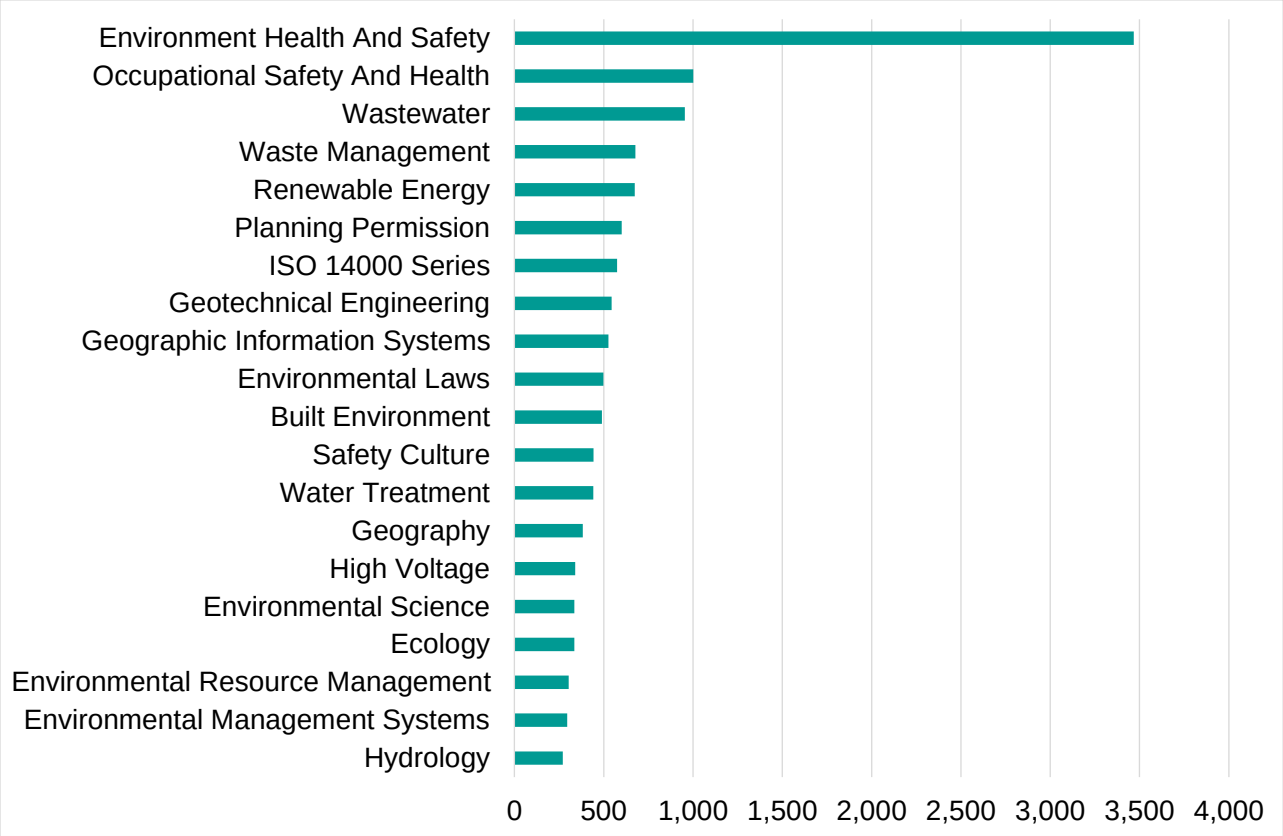
Despite the growth over time, these green opportunities remain quite niche, at around 2% of total job postings in the 2021 calendar year. This figure for West Yorkshire is similar to the national average.

So, what kinds of skills constitute green skills in this analysis and which are in greatest demand?

Diverse range of skills requirements are highlighted in employers' job postings

The skills in greatest demand include skills relating to aspects of environmental health and safety (the biggest area), environmental management, aspects of water management, renewable energy and power, environmental science and ecology.

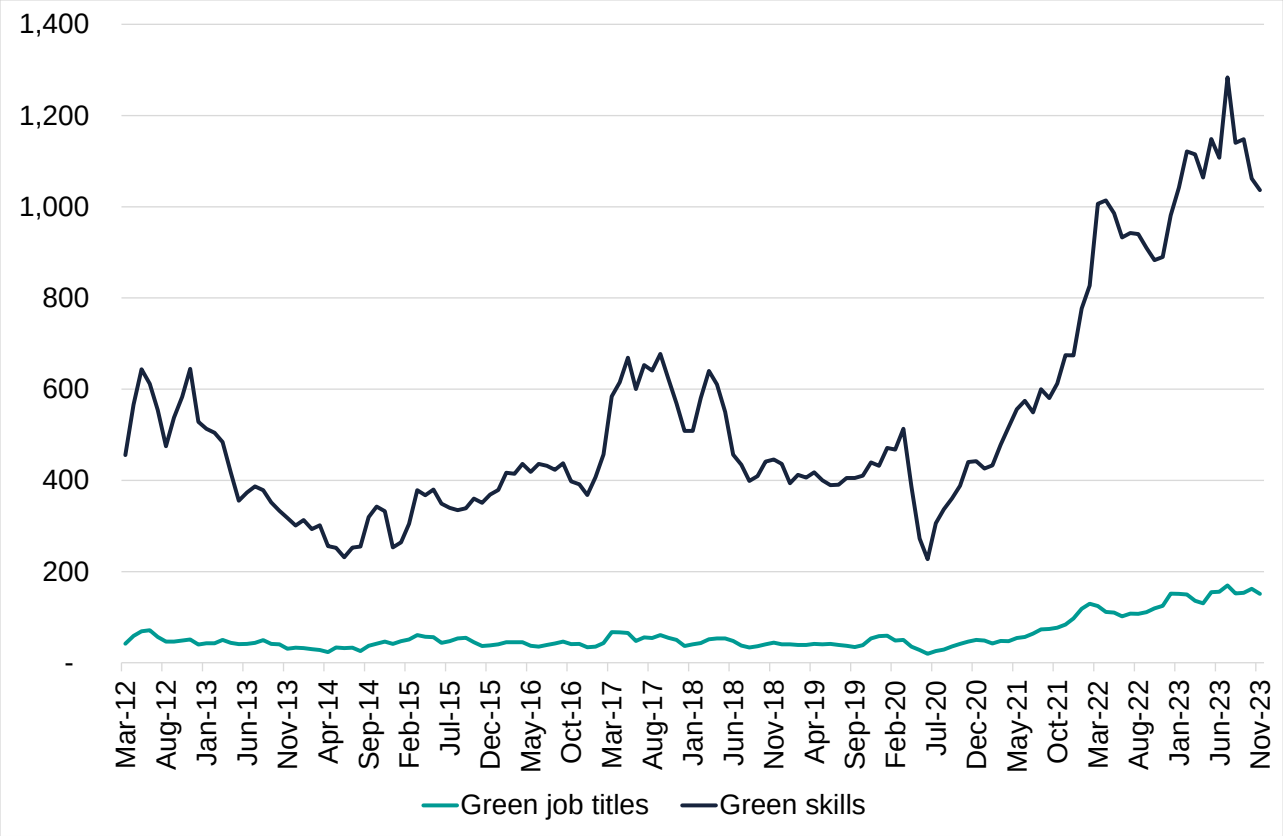
Figure 41: Most common green skill requirements, identified in new unique job postings, December 2022 to November 2023, West Yorkshire



Source: Lightcast

Job postings for vacancies with job titles that are specific to the green economy are much smaller in number than postings for opportunities that require green skills of some kind. In the three months to November the average monthly count of postings with green job titles was around 150, equivalent to 0.5% of total postings. Although postings for green job titles remain niche, like postings for the wider range of jobs requiring green skills, they have grown in volume in recent years and their upward trajectory also started in 2020.

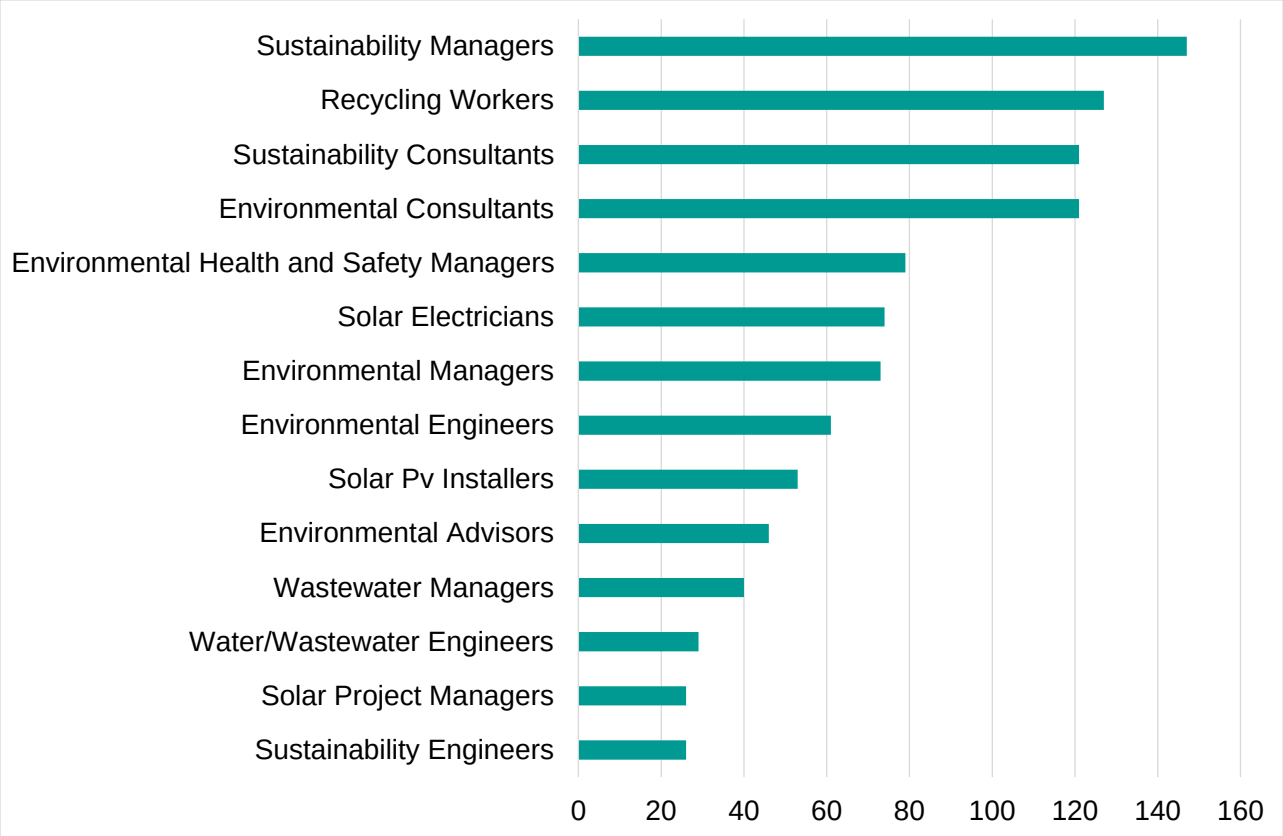
Figure 42: Monthly count of online job postings with green job titles and green skill requirements, West Yorkshire



Source: Lightcast

The niche nature of green job titles is reflected in the fact that only a handful registered more than 100 unique job postings in the course of the 12-month period to November 2023.

Figure 43: Top green job titles in new unique online job postings, December 2022 to November 2023, West Yorkshire



Source: Lightcast

Among the green job titles in the greatest demand are specialists in the environment and sustainability, solar electricians / installers and water/waste water specialists. At the lower reaches of the ranking the number of postings are small at between 20 and 30 for the whole of the 12 month period.

3.8 Future trends in employment and replacement demands

Skills development often requires a considerable level of investment and a significant lead-in time. This means that it is important to take a forward-looking perspective on the demand for skills in order to anticipate future needs and to "future proof" investment decisions, so far as this is possible.

The *Working Futures* labour market model allows us to assess future sectoral and occupational employment prospects based on projections that are grounded in past patterns of performance and behaviour in the labour market.

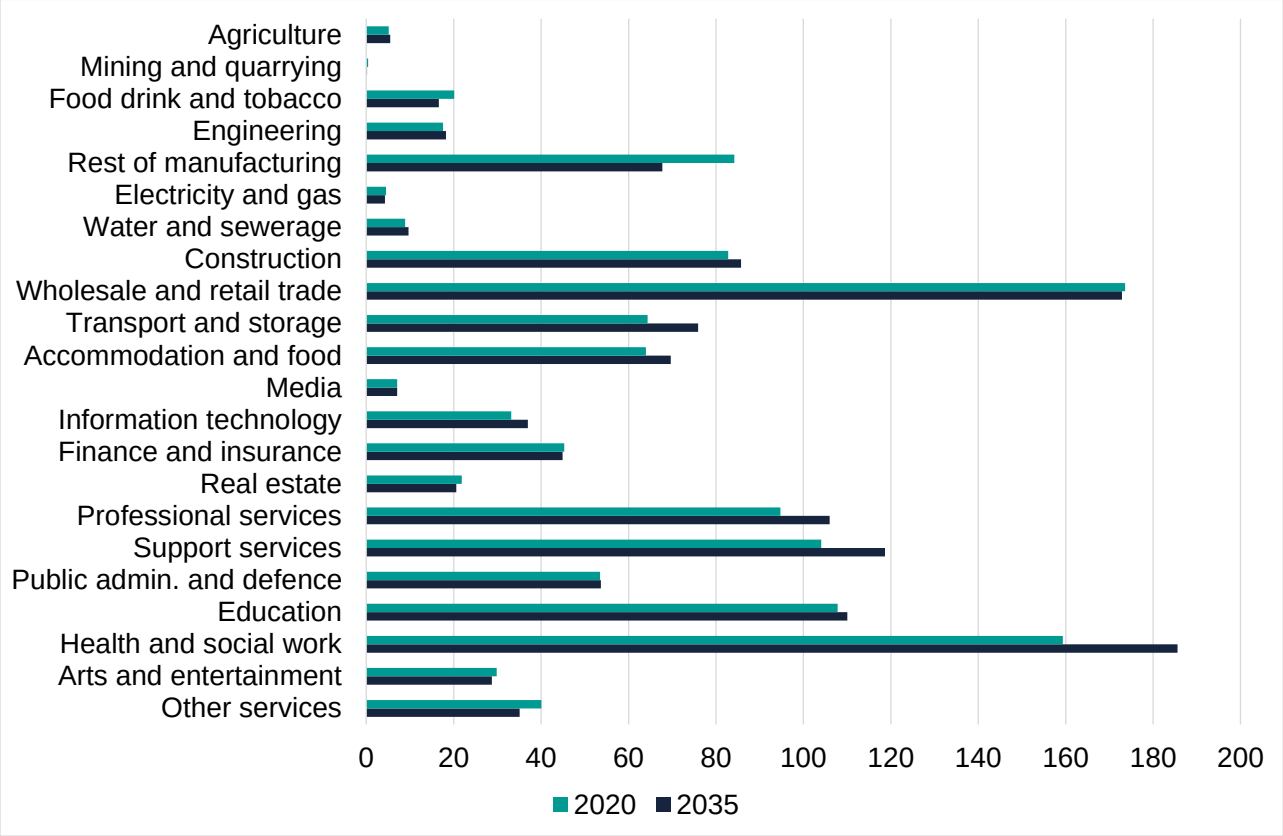
There are several aspects to consider: net change in the level of employment by sector and occupation; replacement demand and the net recruitment requirement.

Net employment growth is expected to be concentrated in service-based activities

The primary sectoral sources of net job growth in West Yorkshire over the period to 2035 are forecast to be service-based in the form of *Health and social work* (+26,000 jobs), *Support services*[14] (+15,000), *Transport and storage* (+12,000) and *Professional services* (+11,000).

Other sectors will also see net growth but at a smaller level in absolute terms, including *Accommodation and food* (+6,000), *Information technology* (+4,000), *Construction* (+3,000) and *Education* (+2,000).

Figure 44: Projected net employment change by industry (thousands of jobs), 2020-2035, West Yorkshire



Source: Working Futures

The fastest rates of growth are expected for *Transport and storage* (forecast average growth rate of 1.1% per annum), *Health and social work* (1% per annum), *Support services* (0.9%) and *Professional services* (0.8%).

The industries with the poorest prospects based on Working Futures continue to be drawn from the manufacturing and primary sectors of the economy. The *Rest of manufacturing*

[14] Support Services includes the following activities: rental and leasing, employment agencies, travel, security and services to buildings.

category is forecast to see net decline in employment of 16,000 between 2020 and 2035, followed by *Other services* (-5,000) and *Food drink and tobacco* (-4,000). These same sectors are also forecast to see the most rapid rates of decline, with annual average rates of around -1% in each case.

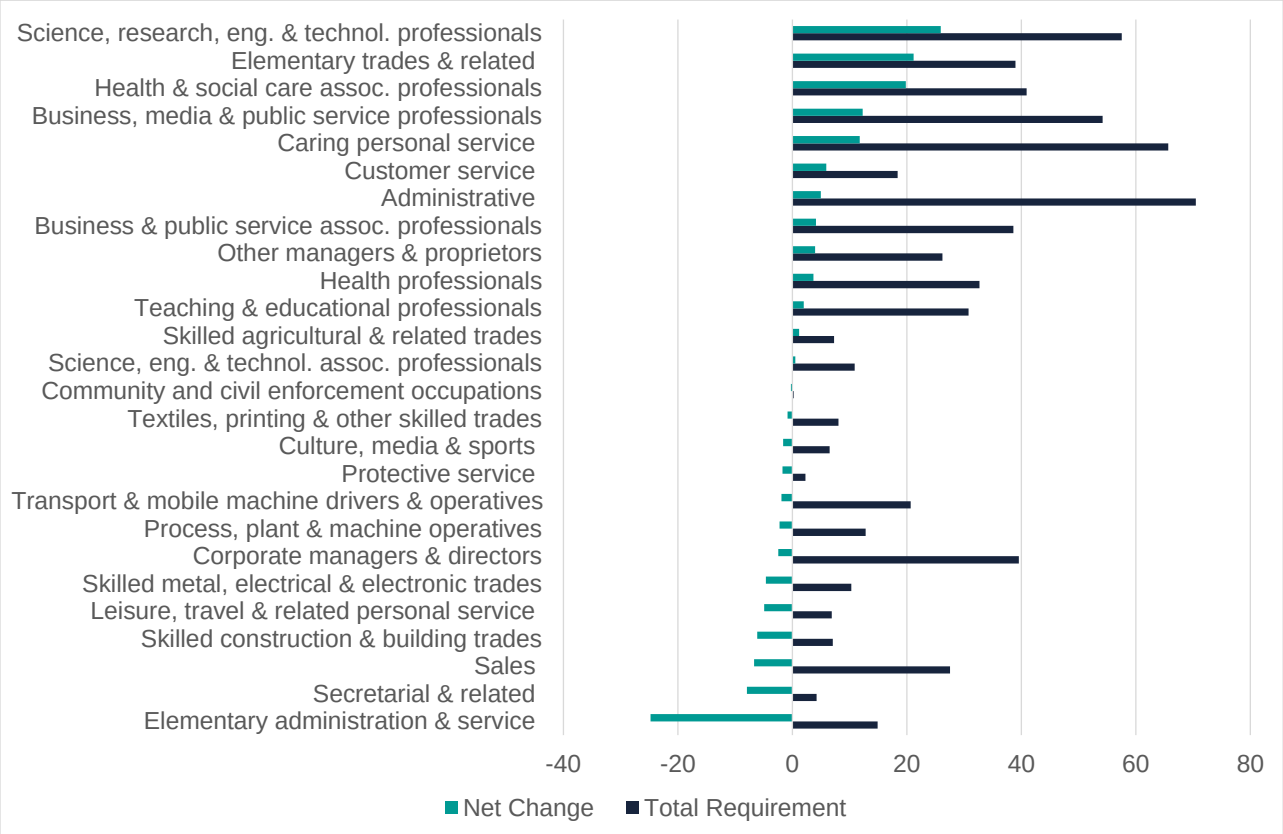
Sectoral rates of change are forecast to be broadly similar to the national average, except that two of the three manufacturing sectors, *Rest of manufacturing* and *Food and drink*, are forecast to perform less well than their national counterparts. *Engineering* is predicted to see modest growth in West Yorkshire over the period whereas decline is forecast for the sector at national level.

The occupational projections sit within the context of relatively modest forecast growth for the local area. According to *Working Futures*, the area is expected to see overall job growth of 4%, slightly above forecast UK growth of 3%. However, the overall quantum of future growth is uncertain and subject to the influence of fluctuations in macro-economic conditions both nationally and internationally.

Higher skilled occupations are expected to grow much faster than the overall rate

Even though there is uncertainty about the future growth trajectory of the UK economy and the sectoral pattern of change within the economy, it is worth noting that established trends in occupational employment have proven to be largely resilient in recent years.

Figure 45: Projected trends in job openings by occupation, 2020-2035, West Yorkshire



Source: Working Futures

Significant net employment growth is expected for most higher level occupations, including some management occupations, all professional occupations and most associate professional occupations. Between 2020 and 2035, employment in professional jobs is expected to increase by 44,000 (17%) and in associate professional roles by 21,000 (14%). Net growth in management roles is more marginal at 2,000 (1%) with marginal decline projected for *Corporate managers and directors*. Taken together, these three occupational groups have a combined growth rate of 12%, around three times the average rate.

Science, research, engineering and technology professionals is the category projected to see the biggest growth over the course of the period with a net increase in employment of 26,000. Other higher-level occupations expected to see substantial growth are *Health and social care associate professionals* (+20,000) and *Business, media and public service professionals* (+12,000).

Middle skilled occupations are projected to see net decline but at a much slower rate than previously projected

Net job losses are projected for middle skilled occupations, of 5% or around 13,000 in absolute terms. This represents a less pronounced rate of decline compared with the previous iteration of Working Futures, reflecting the fact that these occupations performed relatively well in employment terms in the period since the last set of projections was

produced. The most pronounced net decrease is expected for Secretarial roles (projected net decline of -30%). Employment in *Administrative* occupations, the largest middle-skilled occupational category by far is now projected to grow with an employment increase of 4%. By 2035 employment in administrative and secretarial occupations is expected to be only 3,000 lower than its 2020 level and to be 10,000 (10%) lower in skilled trades.

There is expected to be a net decline of 2,000 (-6%) in *Process, plant and machine operative* jobs (semi-skilled blue-collar occupations). Employment for *Transport & mobile machine drivers and operatives* is also projected to decline by around 2,000 (-4%).

Caring personal service jobs are expected to be a source of net growth

Caring personal services is expected to see 12,000 net additional jobs, a growth rate of 13%. This represents a downward revision from previous projections.

Employment in *Elementary administration and service* roles is projected to decline by 25,000 or 24%.

Growth in *Customer service* jobs of 6,000 (+24%) is projected to be offset by a net decline in employment of 7,000 (-9%) in *Sales occupations*.

Over the next decade replacement demands are expected to generate 12 times as many job openings as net growth

From the point of view of assessing future labour demand, it is important to focus not just on projections of changing levels of employment by occupation, but also on replacement demands – the job openings created by the outflow of workers from the labour force.

Workers leave the labour market for a variety of permanent and temporary reasons including retirement, family reasons (e.g. maternity leave) and mortality. These outflows have a significant influence on job opportunities.

Over the period to 2035, replacement demands are expected to generate around 12 times as many job openings in West Yorkshire as those arising from net job growth.

In absolute terms this equates to around 51,000 job openings resulting from net growth and 602,000 openings arising from replacement needs, giving a total number of job openings (total requirement) of approximately 654,000.

Recruitment needs will be greatest for higher skilled occupations and caring occupations

Occupations where employment is growing will require additional workers on top of those being replaced. Almost all higher skilled occupational sub-major groups are expected to see strong demand from this effect and especially *Science, research, engineering and technology professionals* (58,000), *Business, media and public service professionals* (54,000) and *Health and social care associate professionals* (41,000).

The *Administrative occupations* category has the highest projected net requirement of any sub-major group, mainly driven by substantial replacement demands. In total, more than

71,000 job openings are expected for this occupation between 2020 and 2035. *Caring personal services* occupations are projected to see 66,000 job openings over the same period with strong net growth as well as replacement needs.

Replacement demands mean that job openings are expected in all broad occupational groups including those that are projected to see net decline

Employment in some occupations is forecast to see net decline but in most cases replacement demands mean that there will still be job openings that need to be filled.

For example, in the case of middle-skilled occupations (administrative, secretarial and skilled trades) a projected net decline in jobs of 13,000 is projected; this is expected to be more than offset by 121,000 job openings arising out of replacement demands. A similar effect is anticipated in respect of *Sales* and *Elementary administration and service* occupations. Replacement demands tend to be much more significant than any net change in the level of jobs, meaning that we can still expect some job openings across nearly all broad occupational groups. Individuals need to consider this when making careers decisions and employers need to be conscious of the need to replace key workers.

3.9 Automation and Artificial Intelligence

Technology is one of the main drivers of change in the profile of occupational employment and many commentators have expressed concerns about the future potential for widespread displacement of workers by technologies like robotics and artificial intelligence.

The labour market projections considered in the previous section assume the continuation of past patterns of behaviour and performance and do not take full account of the potential disruptive impact of novel developments, most notably the emergence of the latest generation of artificial intelligence.

Until recently, there was a strong consensus within published studies that occupations drawing mainly on routine or physical skills had the highest exposure to new technology, whilst those with the lowest exposure were those requiring more analytical and interpersonal skills. These technological factors are still in play and continue to impact on employment in, for example, *Secretarial* and *Sales* occupations, as considered in the previous section on employment projections. However, there is a growing recognition that artificial intelligence will have a significant impact on the economy and society and that the latest generation of artificial intelligence tools will have the greatest impact on a range of occupations that were previously considered to be relatively resistant to the effects of automation.

A study by the Unit for Future Skills[15] seeks to quantify the impact of AI on the UK job market (separate to automation more generally), adopting an approach that considers the

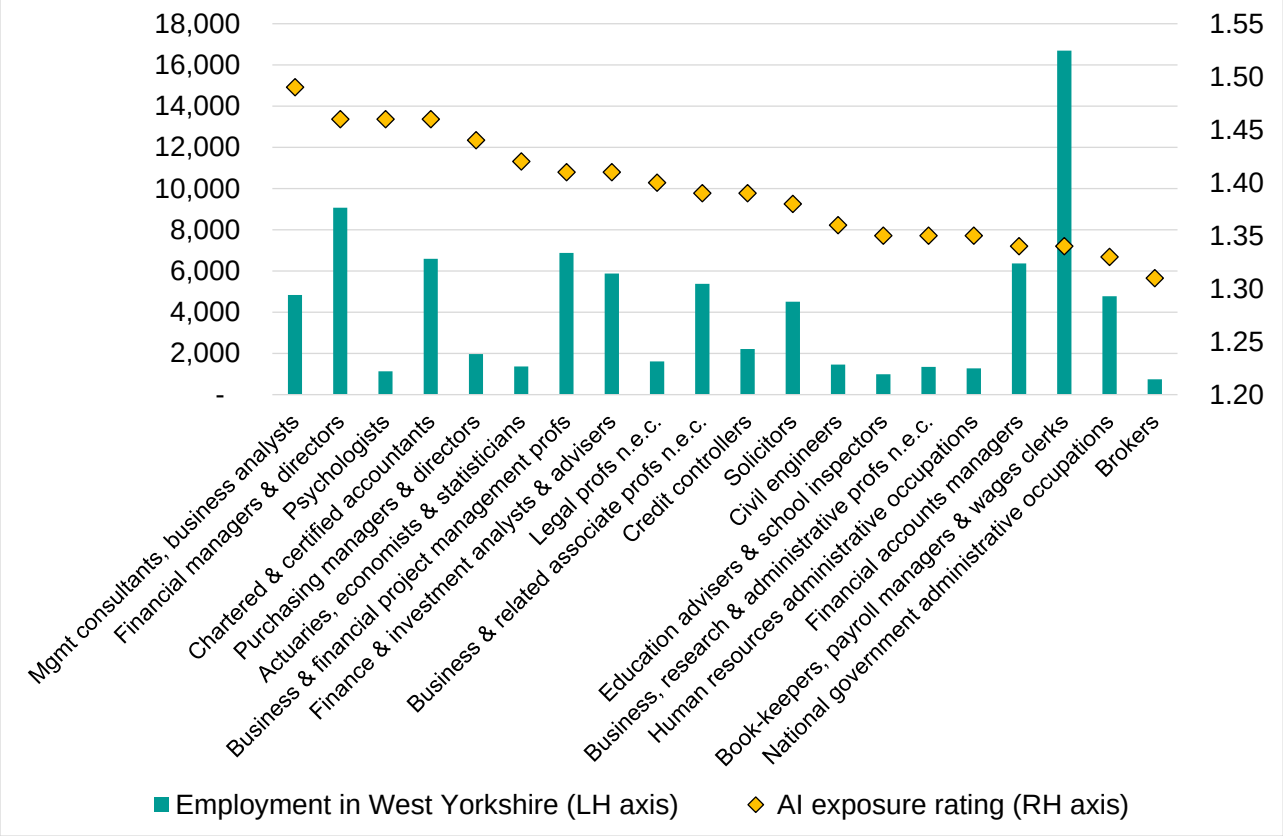
[15] Unit for Future Skills (2023), The impact of AI on UK jobs and training, Department for Education

abilities needed to perform different job roles, and the extent to which these can be aided by 10 common AI applications.

The study finds that higher skilled professional occupations are most exposed to AI, especially those specific occupations associated with finance, law and business management. Accordingly, occupations that require qualifications at a more advanced level have a higher exposure than those requiring intermediate and lower level qualifications. Geographic areas have a greater or lesser overall exposure to AI depending on the extent to which employment in professional occupations is represented there. For example, London and the South East of England have the highest exposure and the North East of England the lowest.

The figure below presents the top 20 occupations with the greatest exposure to artificial intelligence; it also shows the estimated level of employment in West Yorkshire in each occupation. Among the top 20 occupations with the highest AI exposure score, the majority are higher skilled requiring higher level qualifications. They are typically business-related and finance roles, including *Management consultants and business analysts*, *Financial managers and directors*, *Chartered and certified accountants* and *Purchasing managers and directors*. The roles that do not require higher qualifications are typically administrative roles including *Credit controllers*, *Human resources administrative occupations* and *Book-keepers, payroll managers and wages clerks*. The last of these categories has considerably higher employment than any of the other categories.

Figure 46: Top 20 occupations with highest AI occupation exposure score

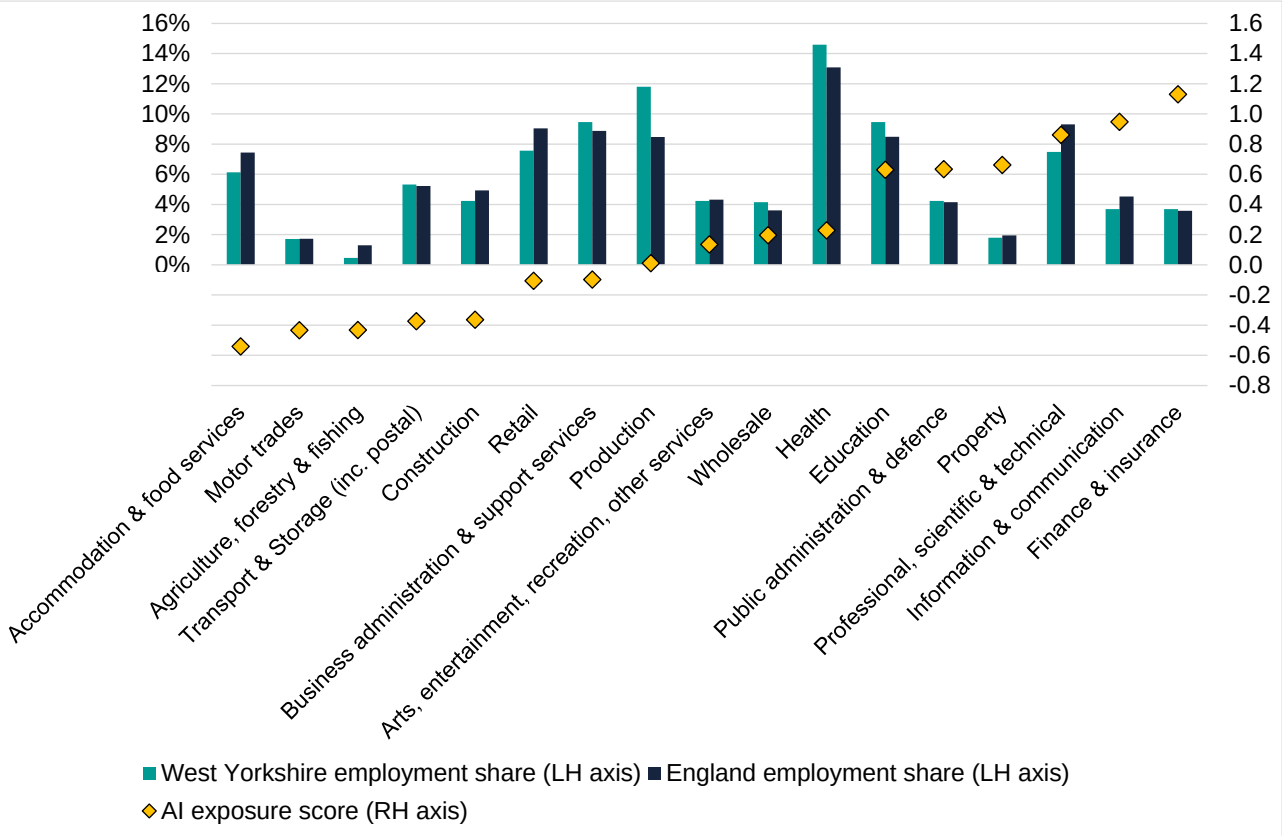


Source: Unit for Future Skills, Department for Education; Lightcast

The figure, below, shows the exposure of industry sectors (least to most exposed working left to right) based on their occupational employment structures. It also shows the shares of total employment contributed by each sector at West Yorkshire and national levels.

Sectors like Finance and Insurance, Information and communication and Professional scientific and technical services are believed to be the most exposed, reflecting their strong concentrations of business and finance occupations that are strongly represented in the top 20 most heavily exposed occupational categories.

Figure 47: Relative exposure to all AI by industry



Source: Unit for Future Skills, Department for Education

Although the figure shows that, aside from *Finance and insurance*, these sectors have a smaller representation in West Yorkshire than nationally, the picture is different for Leeds, where they are more prominent in employment terms (see section 3.2).

4 The Supply of Skills

The availability of the right number of people with the right skills is critical to West Yorkshire's ambition to achieve inclusive growth. Skills play a key role in driving productivity and competitiveness within firms and they underpin the employability and earning potential of individuals. The following section examines the overall level and profile of labour supply in West Yorkshire as well as the key characteristics of the "skills pipeline", with regard to the various elements of the education system as well as employer investment in workforce development.

4.1 Demographic Trends

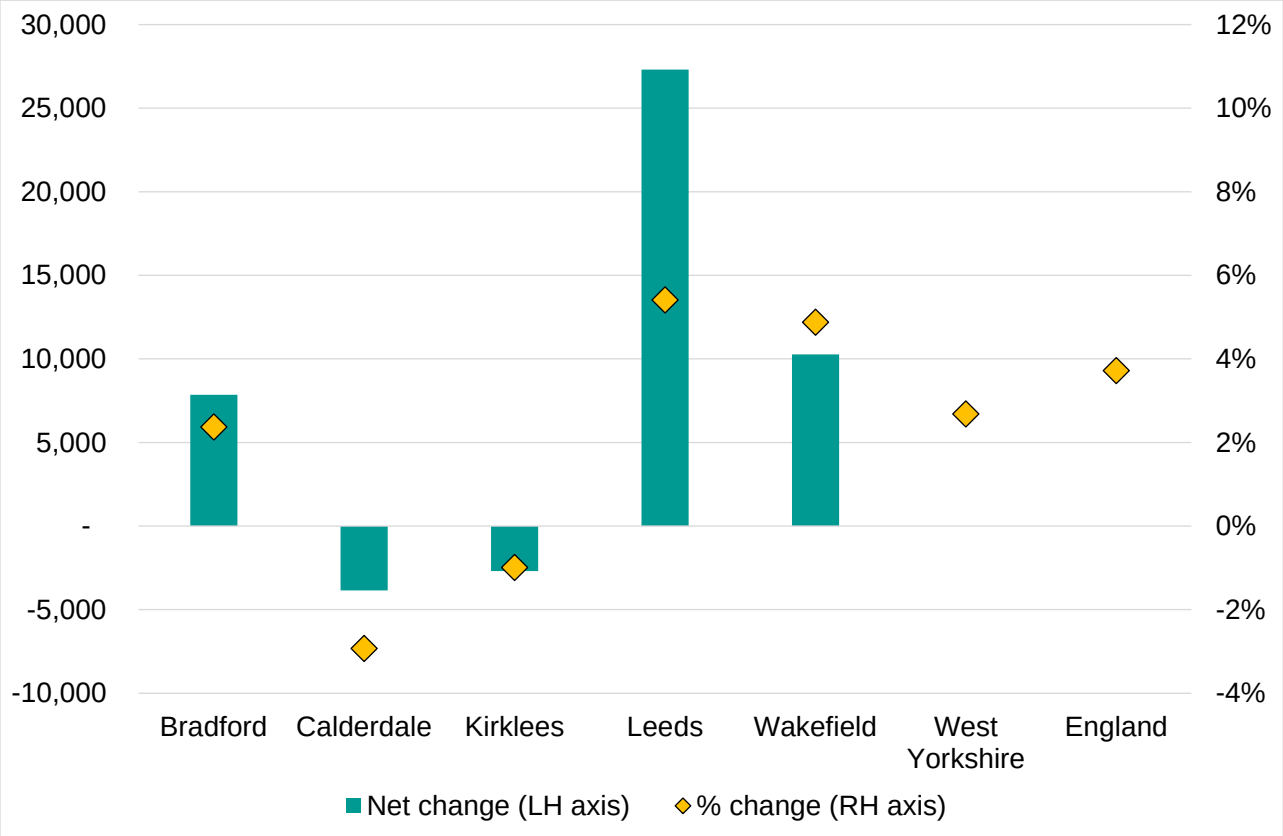
Changes in the structure of the local population can have an important influence on the available labour supply.

West Yorkshire's working age population is growing but less quickly than nationally

West Yorkshire has a total population of 2,351,000 with 1,488,000 (63%) people of working age (16-64). The working age population of the area grew by 3% over the course of the last decade (2011 – 2021), less quickly than the national average, which saw an expansion of 4%. Bradford saw modest growth (2%), while the working age population of Calderdale and Kirklees both experienced declines (of -3% and 1% respectively). West Yorkshire's population growth came principally from Leeds and Wakefield.

Analysis shows that West Yorkshire's population growth has been driven by natural change and international migration. Net internal migration has been negative, with the exception of Wakefield.

Figure 48: Change in working age (16-64) population by local authority, 2011 to 2021



Source: Mid-year Population Estimates, Office for National Statistics

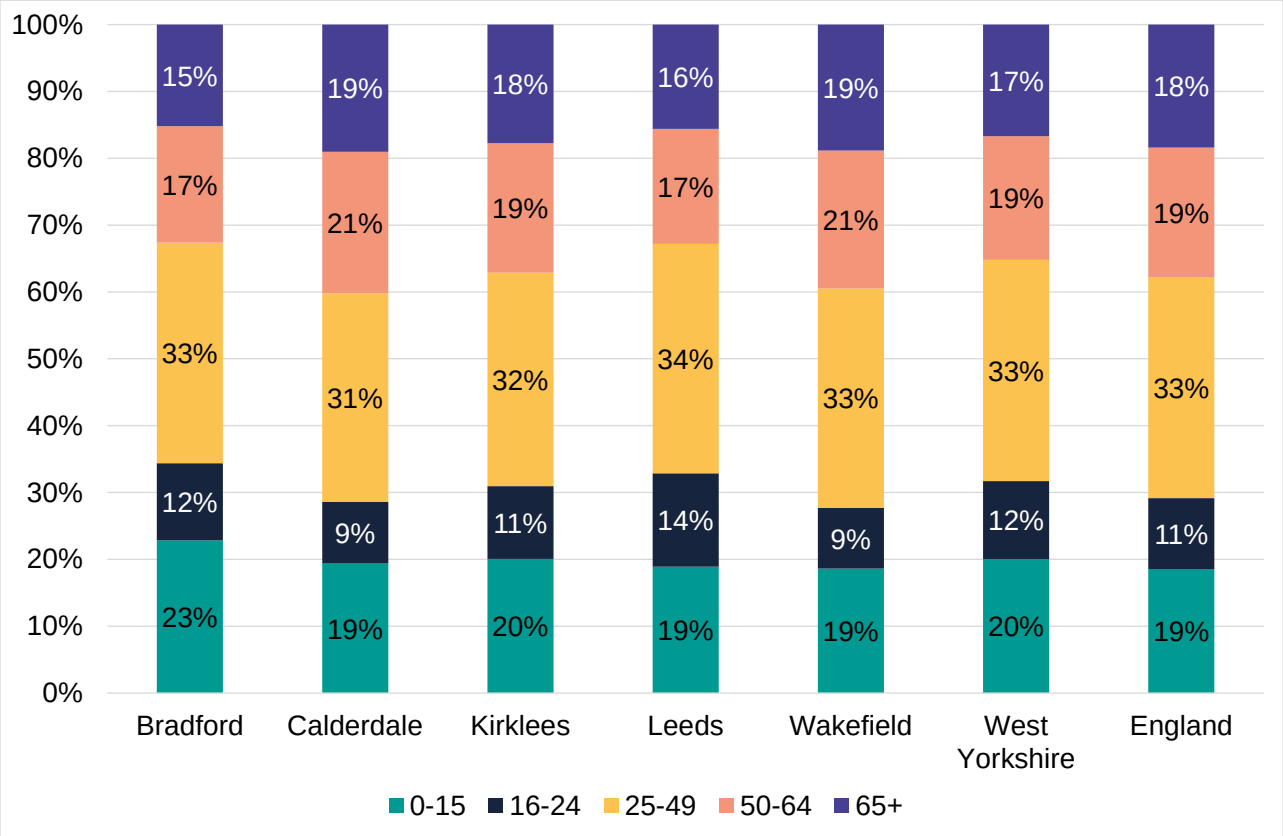
The age profile of West Yorkshire is broadly similar to the national picture, in both cases the working age element accounts for 63% of the total population. Seventeen per cent of the population of West Yorkshire is aged 65 years and above, also similar to the England average of 19%.

Bradford and Leeds have relatively young populations

There is some variation at district level. Bradford and Leeds have relatively young populations, with median ages of 36.7 and 36.8 respectively compared with the national average of 40.5. In Bradford 23% of the population are aged below 16, 4 percentage points higher than the national average. In Leeds 14% of the population is aged 16-24, 3 points higher than average.

The populations of Calderdale and Wakefield are relatively old, with median ages of 42.4 and 41.4 respectively.

Figure 49: Age profile of population, 2021



Source: Mid-year Population Estimates 2021, Office for National Statistics

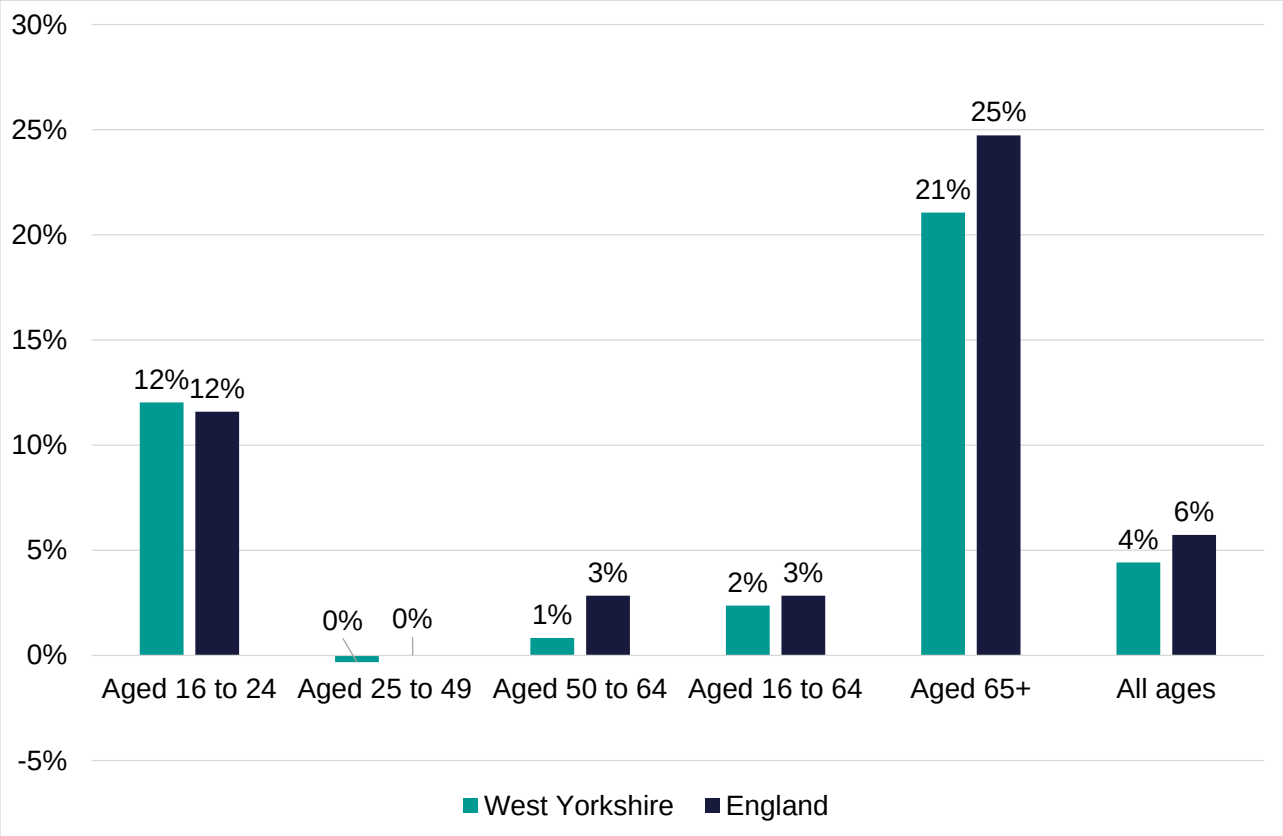
Population projections produced by ONS suggest that the number of people of working age in West Yorkshire will increase in the period from 2018 (base year) to 2030, but at a slightly slower rate than the expected national position.

An increase in the number of young people is projected for the next decade

The local working age population is projected to grow by 2% over this period compared with growth of 3% nationally. In absolute terms this is an increase of 35,000 in the number of people aged 16-64.

The number of young people aged 16-24 is projected to grow strongly, by 12% or 34,000. Meanwhile, the number of people aged 65 and over is expected to grow by 21% or 81,000.

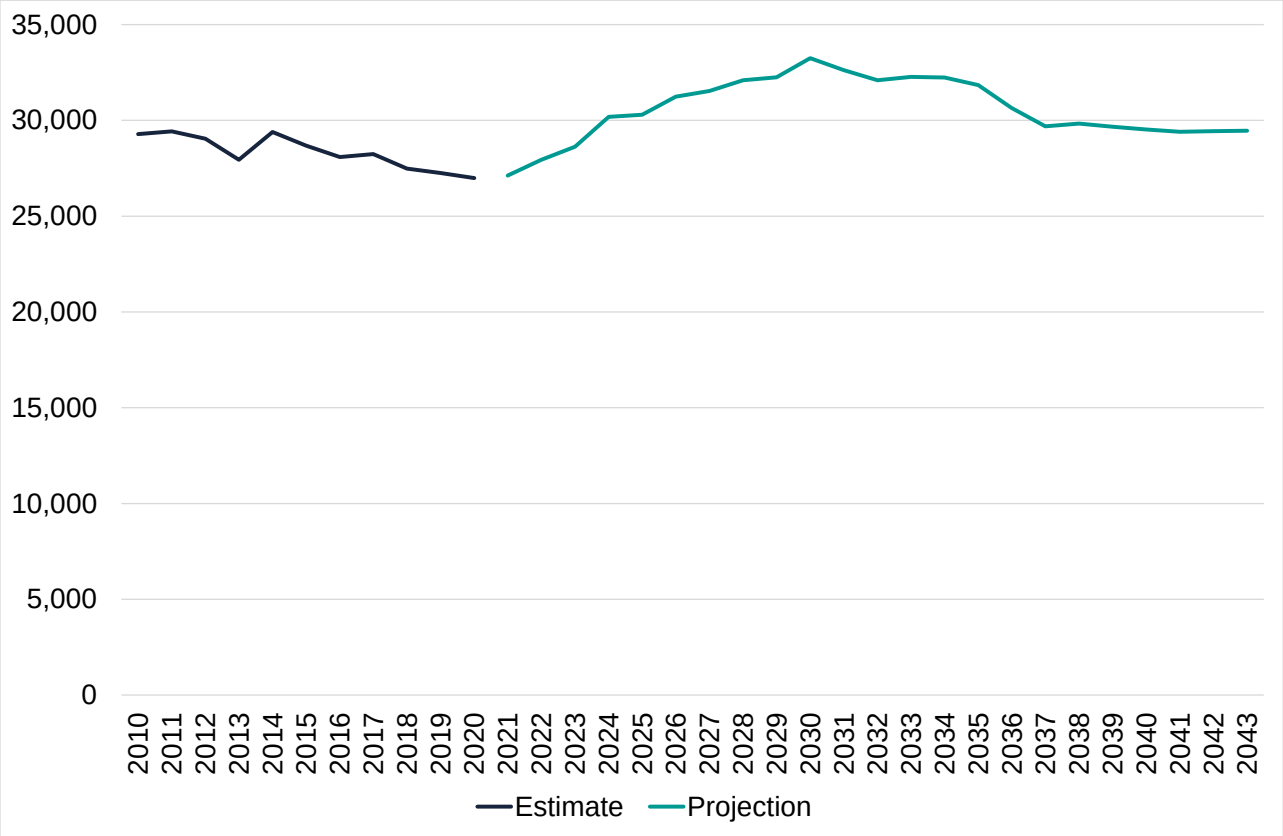
Figure 50: Projected population change by age band, 2018 to 2030



Source: Population Projections, Office for National Statistics

Again, there is variation at district level in projected growth rates. The working age population of Calderdale is projected to fall by 2% whilst Kirklees' remains virtually static. Bradford's working age population is projected to grow by only 2%, as is Leeds', but Wakefield's is projected to grow by a considerable 8%, one of the largest projected growth rates in the country.

Figure 51: Trend in size of 18 year-old cohort in West Yorkshire



Source: Population Projections, Office for National Statistics

It is also notable that the number of 18 year olds, the prime target market for higher education, is projected to grow in the coming years, following a period of decline.

Between 2010 and 2020 the size of the 18 year-old cohort fell by 8% in West Yorkshire.

But population projections point towards a marked and sustained increase in the number of 18 year-olds for the rest of the decade.

Growth of 25% is projected for West Yorkshire between 2020 and 2030; similar to national average growth of 26%.

4.2 Economic activity

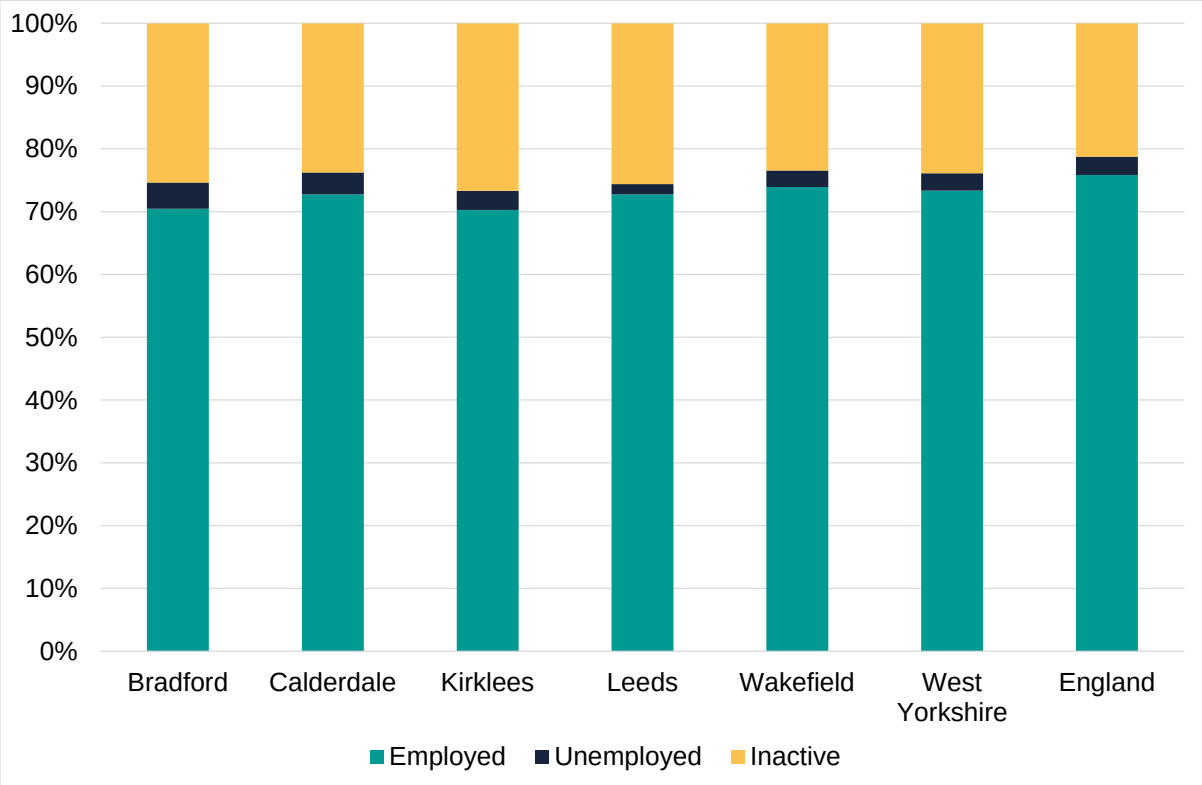
Labour force participation has emerged as a major issue since the pandemic, based on a concern that an increase in economic inactivity is constraining the performance of the economy. However, economic inactivity in West Yorkshire has been above the national on a sustained basis for more than a decade.

The economic activity rate for working age people in West Yorkshire of 76% is below the national average of 79%. At 24% the inactivity rate is correspondingly higher than the national average of 21%. A total of around 350,000 people in West Yorkshire are

economically inactive, falling to approximately 250,000 when students are excluded from the total.

Differences in the economic inactivity rate are the main factor behind the relatively low employment rate in West Yorkshire and across the five local authorities.

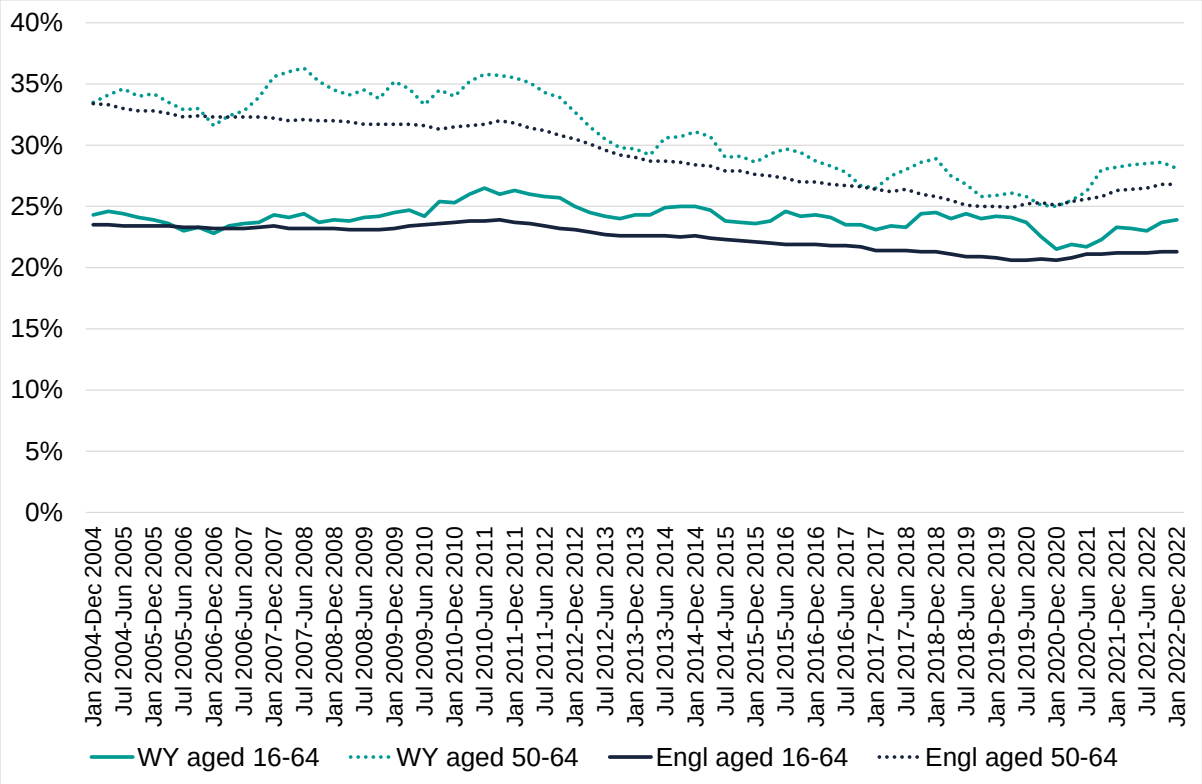
Figure 52: Employment status profile of West Yorkshire and local authorities



Source: Annual Population Survey

West Yorkshire's inactivity rate has been above the national average on a consistent basis for more than a decade but the direction of travel since then reflects the national picture, although there is statistical noise in the data at West Yorkshire level. Prior to the pandemic the region's inactivity rate among people of working age was on a downward trend but the rate began to increase from 2020 onwards, seeing a net increase of around 2 percentage points to 24%, around 35,000 additional inactive people in absolute terms.

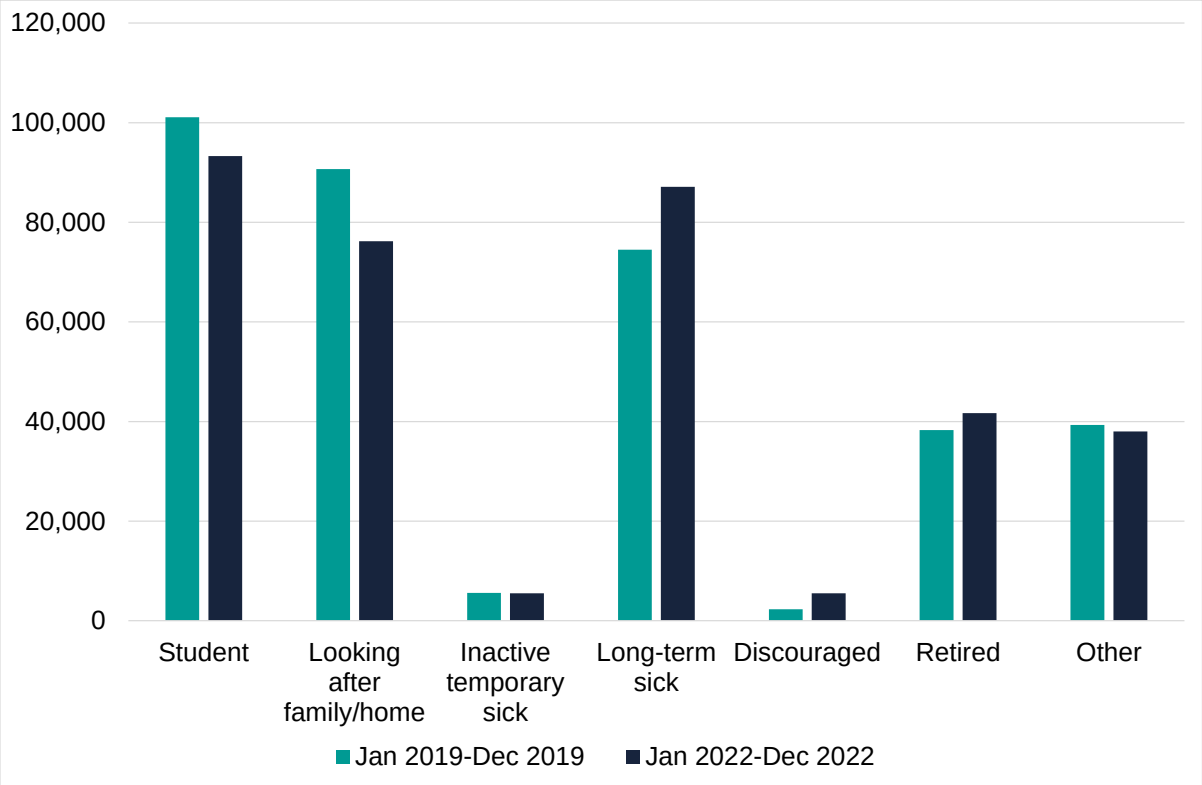
Figure 53: Trend in economic inactivity rate for West Yorkshire and England (% of people aged 16-64 and 50-64)



Source: Annual Population Survey

The inactivity rate among older people, aged 50-64, is 28%, 8 points higher than the average for all people of working age. It has also increased since the pandemic, growing by around 3 percentage points or 20,000 people in absolute terms. The bulk of growth in inactivity has therefore come from the increase in inactive older people.

Figure 54: Economically inactive people by reason for inactivity (aged 16-64)



Source: Annual Population Survey

The number of people who are inactive due to long-term sickness has grown strongly at national level, both in absolute terms and also as a share of total inactivity. An increasing proportion of this group have five or more health conditions, suggesting that many have interlinked and complex health issues[16]. Data for West Yorkshire shows that more than 80,000 people of working age are inactive due to long-term sickness and that the number falling into this group has grown since the pandemic.

4.3 Inclusive labour supply

The Combined Authority is committed to supporting local business to develop an inclusive and diverse workforce. A key challenge in this area is the employment rate gap faced by specific groups in the labour force. As well as acting as a limitation on individual opportunity, this also constrains the labour supply available to local employers.

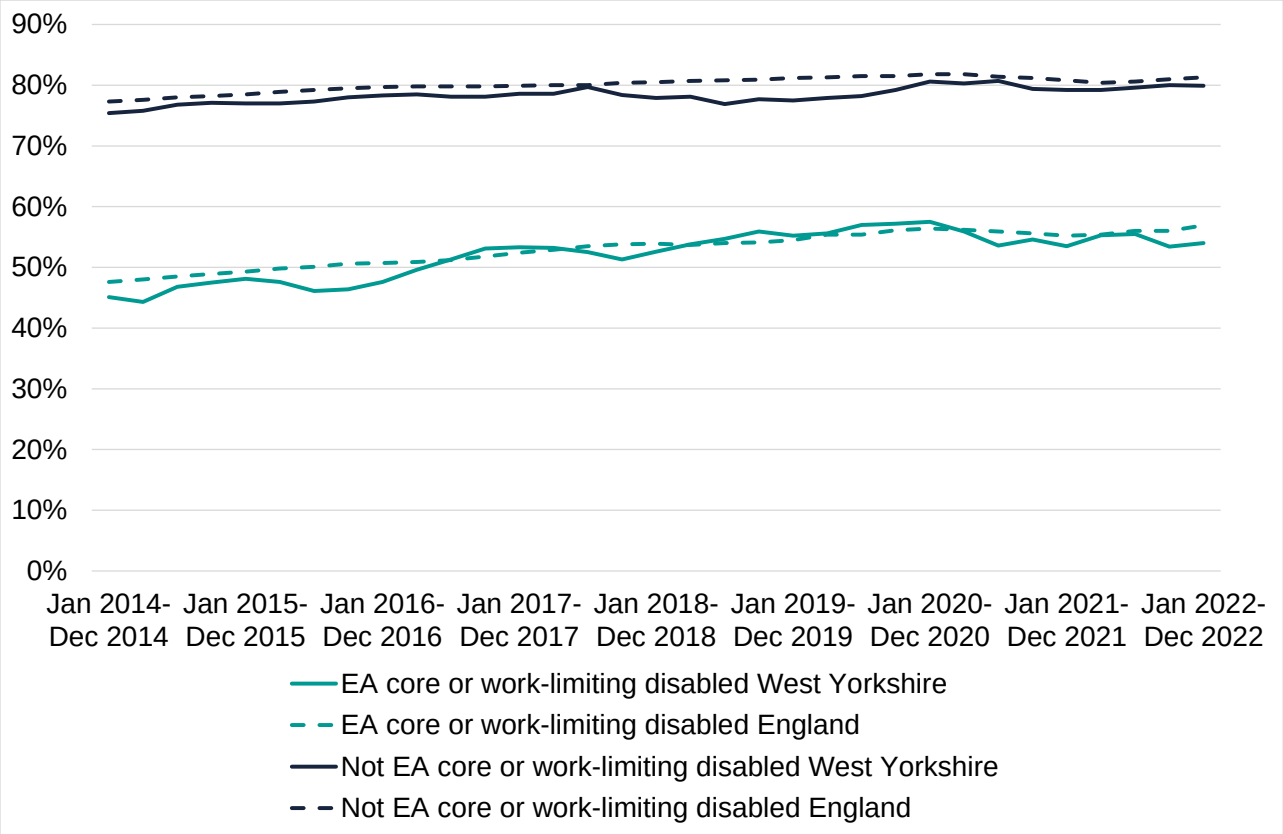
[16] Office for National Statistics (2023) Rising ill-health and economic inactivity because of long-term sickness, UK: 2019 to 2023

Around 361,000 people of working age in West Yorkshire are Equality Act core or work-limiting disabled[17], equivalent to 25% of the total working age population and similar to the national average of 24%. The proportion of people who are disabled varies at local authority level: the figure is below average in Leeds (22%) and above average in Wakefield (30%).

Working age women are more likely to be disabled then men, with respective proportions of 29% and 21% for West Yorkshire.

The number and proportion of working age people who are disabled is growing over time in West Yorkshire. Between 2014 and 2022 the number grew by 72,000 or 25%, with a five point increase in the disability rate (proportion of working age people who are disabled).

Figure 55: Employment rate by disability status – % of people aged 16-64



Source: Annual Population Survey

The proportion of disabled people in employment is well below the rate for those who do not have a disability, at 55% and 80% respectively - a gap of 25 percentage points. There

[17] EA Core disabled includes those who have a long-term disability which substantially limits their day-to-day activities. Work-limiting disabled includes those who have a long-term disability which affects the kind or amount of work they might do.

are signs that the gap has narrowed over time: it was around 30 percentage points in 2014. The local employment rate gap for disabled people is similar to the England average, which is 24 points. The employment rate gap for disabled women is lower than for men at 22 points compared with 29 points. This is because, although the employment rate for disabled women is slightly lower than for males, the employment rate for males without a disability is much higher.

The number of disabled people in employment is increasing

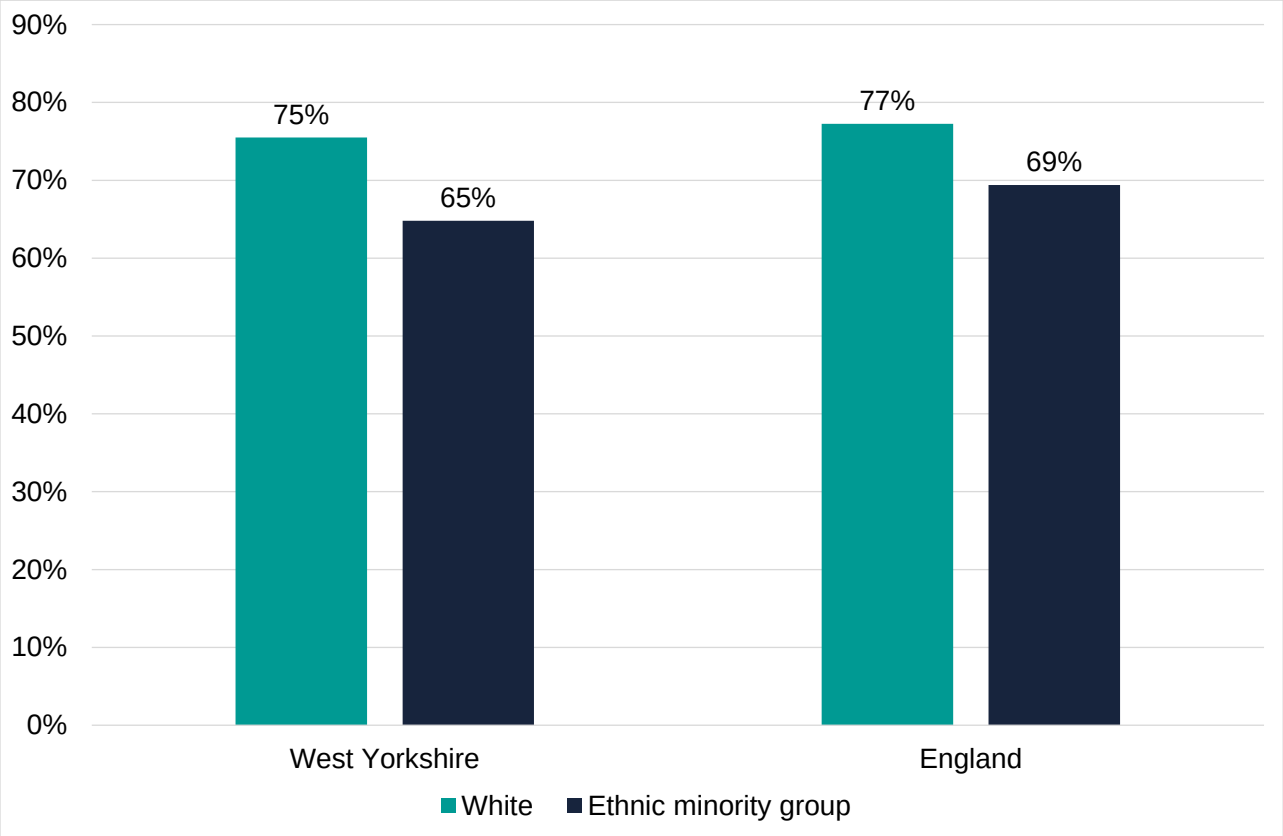
The number of disabled people in work is increasing over time. Nationally, the employment rate for this group increased by 8 points between 2014 and 2022, a net increase in absolute terms of 1.6m people in employment (52% increase). In West Yorkshire, the rate increased by 9 points over the same period, with a net increase of 65,000 disabled people in work, a 50% increase.

It is also notable that the majority of disabled people in employment are women, at 58% of the total. This reflects the fact that there are more working age women with disabilities than men both nationally and locally.

People from ethnic minorities face a wider employment rate gap in West Yorkshire than nationally

Currently, 292,000 people of working age in West Yorkshire are from an ethnic minority, around 20% of the total working age population and higher than the national average of 18%.

Figure 56: Employment rate by ethnicity, % of people aged 16-64



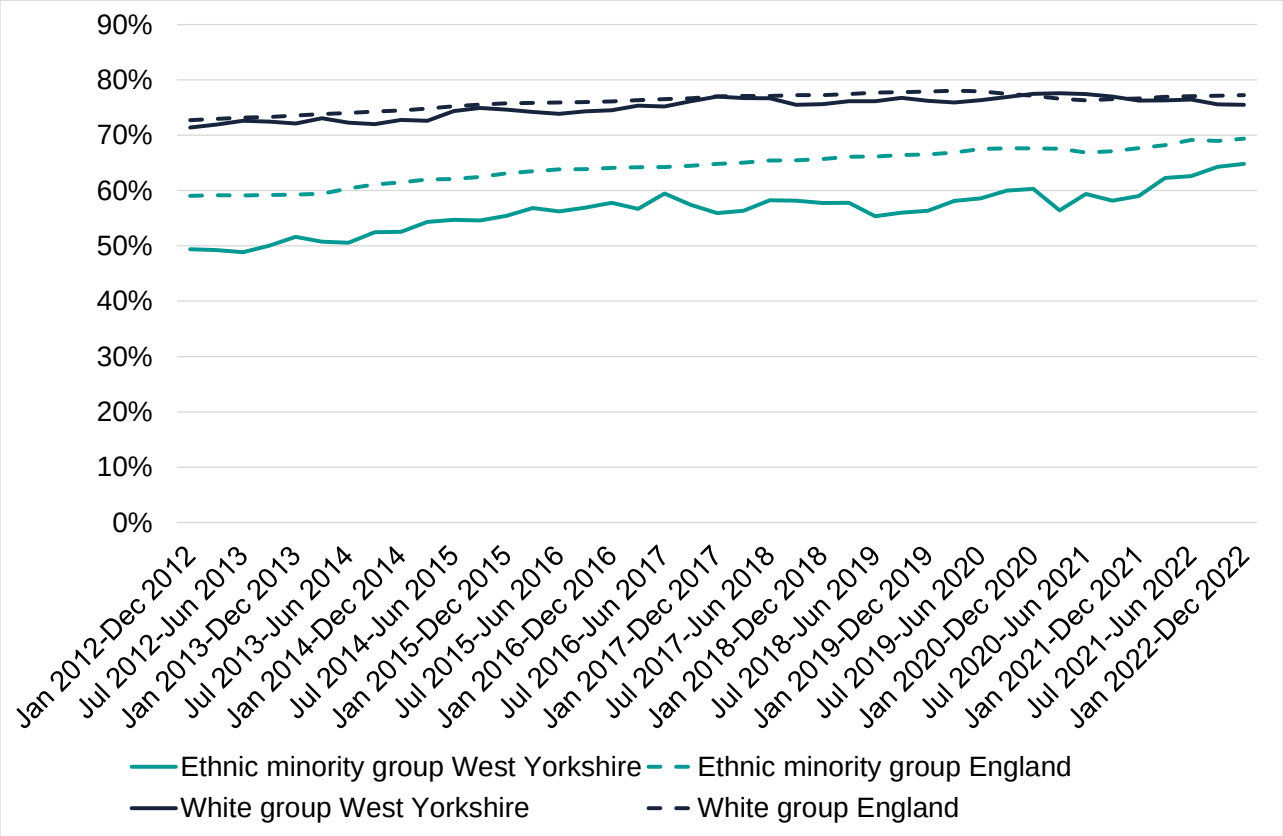
Source: Annual Population Survey, January to December 2022

The employment rate gap for this group is 11 points locally[18], wider than the national gap of 8 points.

As the figure, below, shows the ethnic minority employment rate for West Yorkshire has remained below the national average on a sustained basis, whereas the employment rate for the white group has been relatively close to the national average during this period.

[18] Based on a comparison of the overall ethnic minority employment rate versus the employment rate for the white group.

Figure 57: Trend in employment rate by ethnicity, % of people aged 16-64



Source: Annual Population Survey

Nonetheless, the ethnicity employment rate gap has halved over the last decade, both in West Yorkshire and nationally.

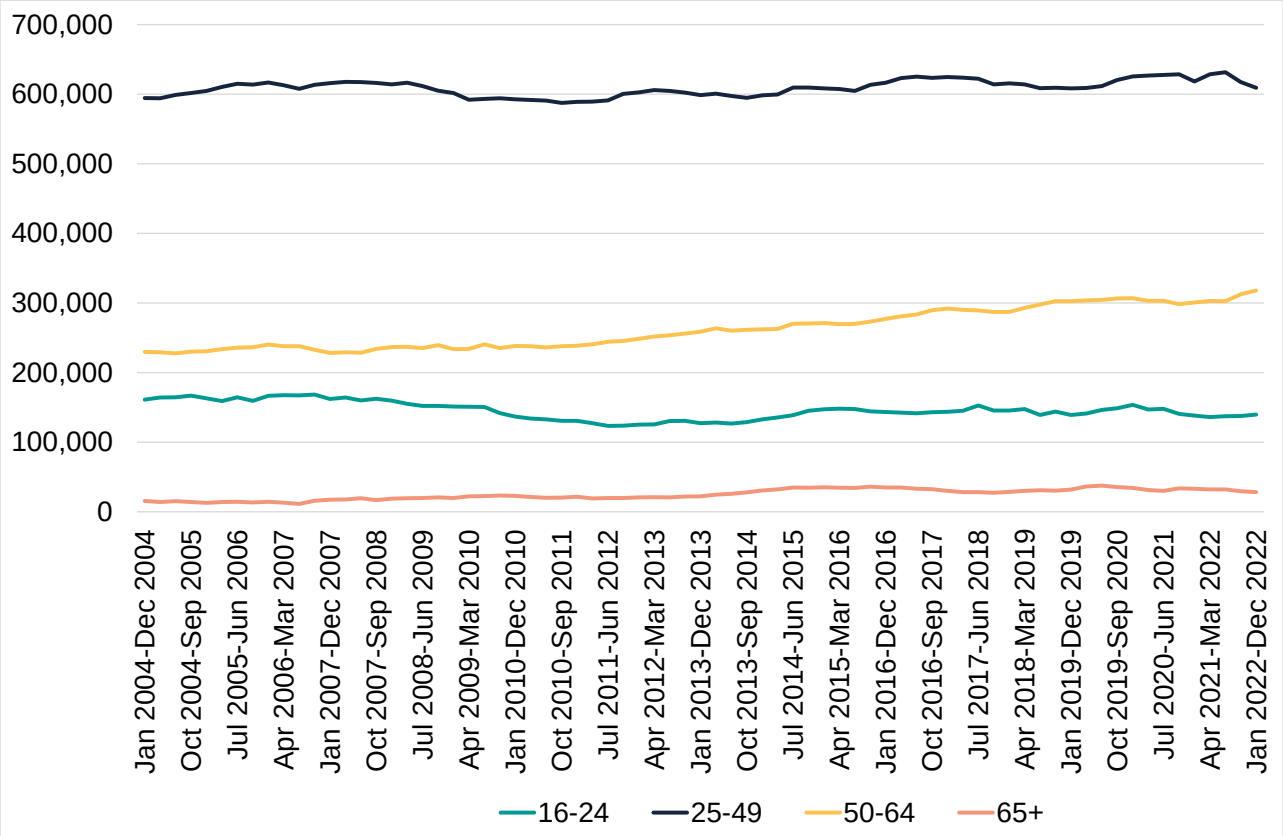
The Pakistani / Bangladeshi ethnic group is the largest in West Yorkshire, accounting for 39% of the ethnic minority population of working age. This group also has a relatively low employment rate of 61%.

Much of the employment rate gap for people from ethnic minorities is due to the gap for ethnic minority women, which stands at 18% (73% versus 55%) compared with around 2% for males (78% versus 76%). A key factor behind this gap is low economic activity rates among Pakistani / Bangladeshi women.

Much of the growth in local employment has been among older people

An analysis of the changing age profile of people in employment in West Yorkshire shows that older workers are becoming increasingly important to local labour supply.

Figure 58: Trend in employment by age band, West Yorkshire



Source: Annual Population Survey

Between 2012 and 2022, total employment in West Yorkshire for those aged 16+ saw net growth of 91,000 or 9%. There was growth in employment across all broad age bands but the biggest contributor by far was among people aged 50-64. There was net growth in this age band of around 70,000, equivalent to three quarters of total employment growth over this period. Whereas the number of people in employment aged 50-64 increased by 28%, for 16-24 year olds it was 12% and for 25-49 the number employed grew by 1%. The number of people aged 65 and over increased at the fastest rate – by 37% - but from a small base. The over-50s now account for 27% of all people in employment in West Yorkshire.

Nonetheless, older people are still much less likely to be in employment than younger age groups. The local employment rate for people aged 50 to 64 is 70%, 13 points lower than the rate enjoyed by people aged 25 to 49. Both figures are slightly below their respective national averages.

The pandemic's impact on labour market participation is also reflected in employment rates among older people. Although the number of people aged 50-64 in employment increased in West Yorkshire between 2019 and 2022, by around 16,000, the employment rate for this age group fell by around 2 percentage points as the number of people in the age group expanded more quickly than the number of people in employment.

However, national data suggests that the potential of older workers is not being maximised. The average age of leaving the labour market has increased over recent decades but it is still lower than it was in 1950 and is not keeping pace with increases in life expectancy. As people approach State Pension age (SPA), the rate of employment declines steeply and economic inactivity rates rise as people leave the labour market 'early'. Although many leave the labour market voluntarily others do so for involuntary reasons linked to ill-health, caring responsibilities, or redundancy[19].

4.4 Qualification Profile

One of the key challenges facing West Yorkshire is a deficit in its skills base relative to other parts of the UK. This is closely associated with its underperformance on productivity and innovation. West Yorkshire has seen improvement in its qualification profile in recent years but a significant gap remains.

West Yorkshire has fewer people qualified at Level 4 and above than nationally

For the latest qualification profile estimates National Vocational Qualifications (NVQ) estimates have been replaced with estimates on a Regulated Qualifications Framework (RFQ) basis, which means that there is a break in the time series and the current estimates cannot be compared on a consistent basis with earlier ones.

The availability of people with higher level qualifications at Level 4 and above is a key area of under-performance for the region. With 38% of its population qualified to this level, West Yorkshire is seven points below the national average of 45%.

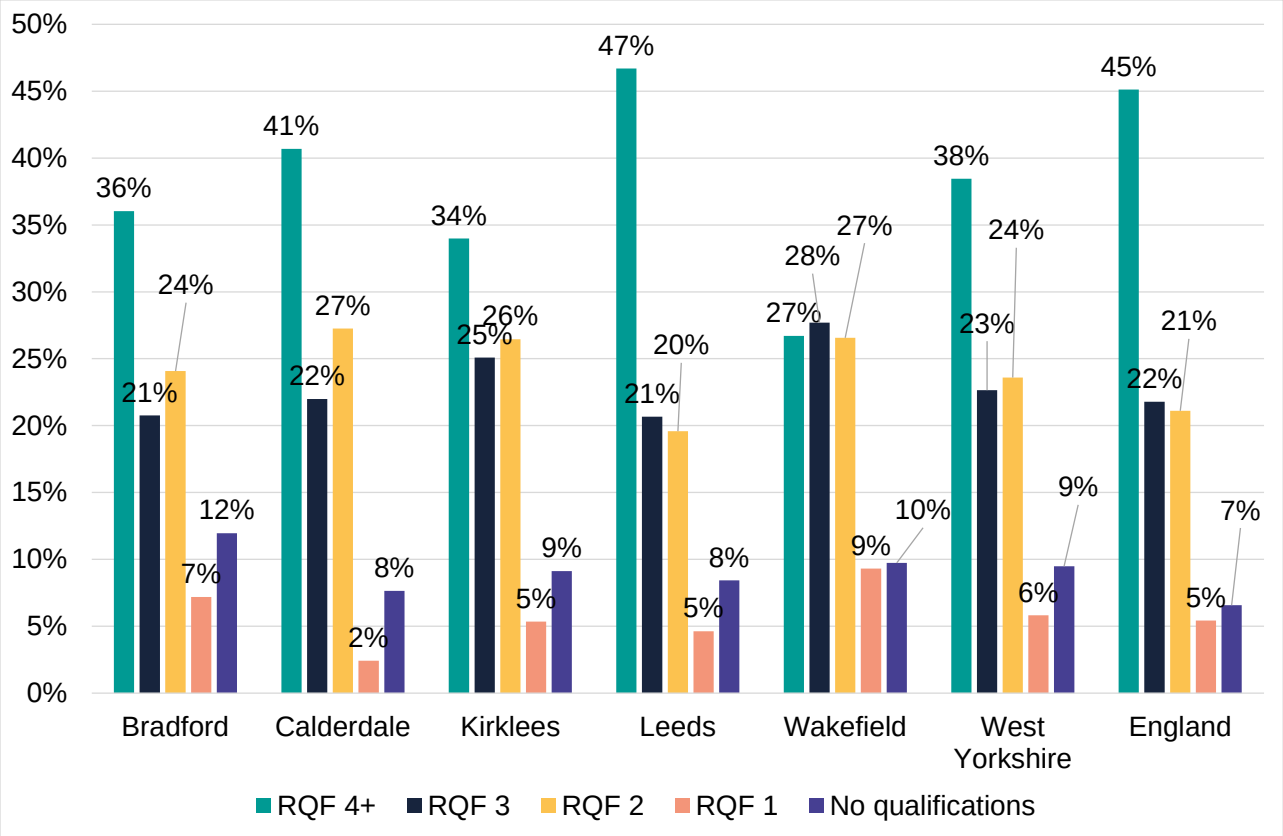
The proportion of working age people in West Yorkshire with no qualifications in 2022 was 9%, leaving a gap with the national average figure of 7%.

Attainment at Level 2 is often regarded as the threshold for basic employability. Fifteen per cent of working age people, or 213,000 in absolute terms, either have no qualifications or are qualified below this level in West Yorkshire, compared with the national average of 12%.

In absolute terms these percentage differences are equivalent to 93,000 fewer people locally with qualifications at Level 4 and above and 46,000 more people qualified below Level 2 or with no qualifications.

[19] DWP (2023) Economic labour market status of individuals aged 50 and over, trends over time: September 2023

Figure 59: Profile of highest qualification held by RFQ level by working age (16-64) population, 2022

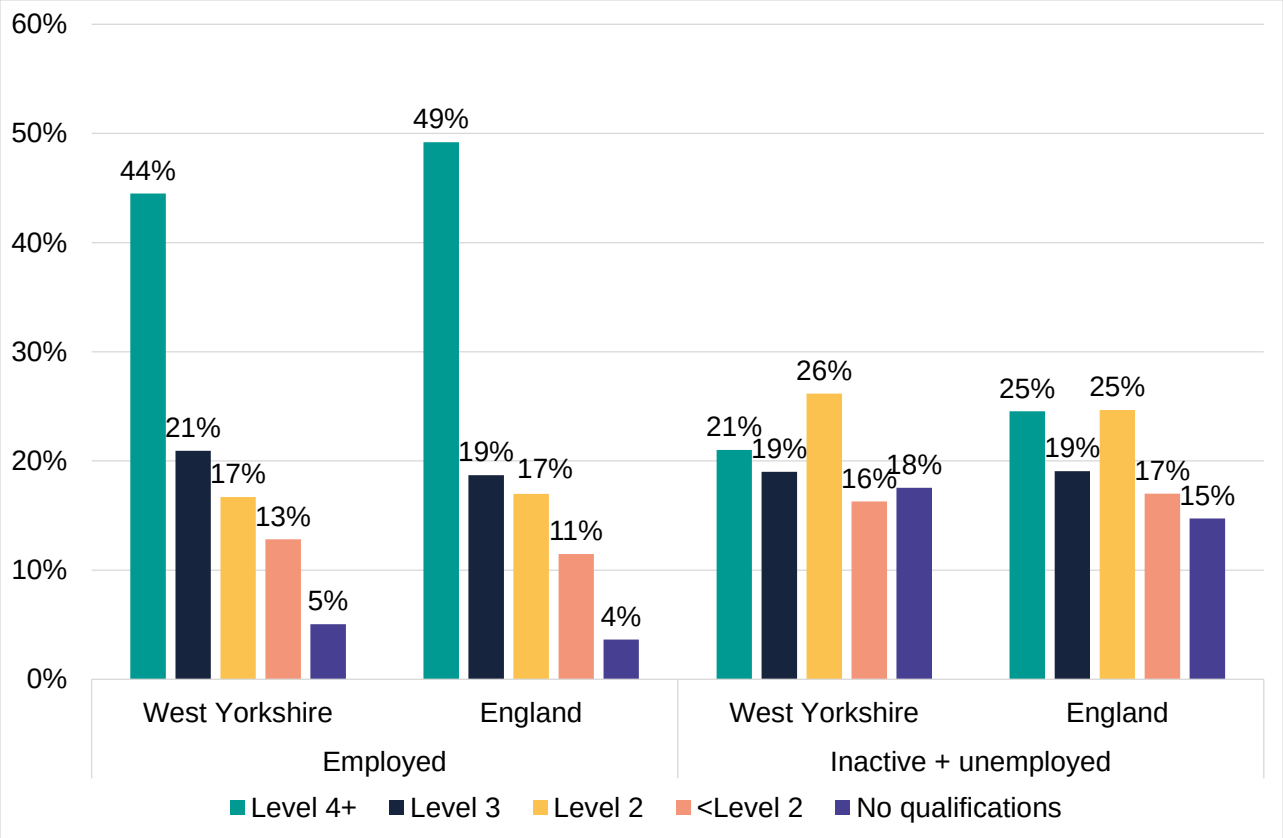


Source: Annual Population Survey, January – December 2022

The overall qualification profile of West Yorkshire conceals marked differences at local authority level. For example, the proportion qualified at Level 4 and above is higher than the national average in Leeds at 47%. Conversely, in Wakefield it is 18 points lower (at 27%) and around 11 points lower in Kirklees (34%) and 9 points lower in Bradford (36%). All local authorities have a higher proportion of working age people who are qualified below Level 2 or hold no formal qualifications than nationally, except Calderdale where it is 2 points lower. In Bradford, it is 7 points higher than nationally at 19%.

The deficit with the national average in terms of qualification performance applies to people in work as well as the unemployed and inactive. The biggest gap is at level 4+, both for people in employment and for the inactive and unemployed. The proportion of unemployed and inactive people in West Yorkshire qualified at this level is 4 points lower than nationally, whilst the equivalent gap for the employed is 5 points.

Figure 60: Profile of highest qualification held by working age (16-64) population by economic status, 2022

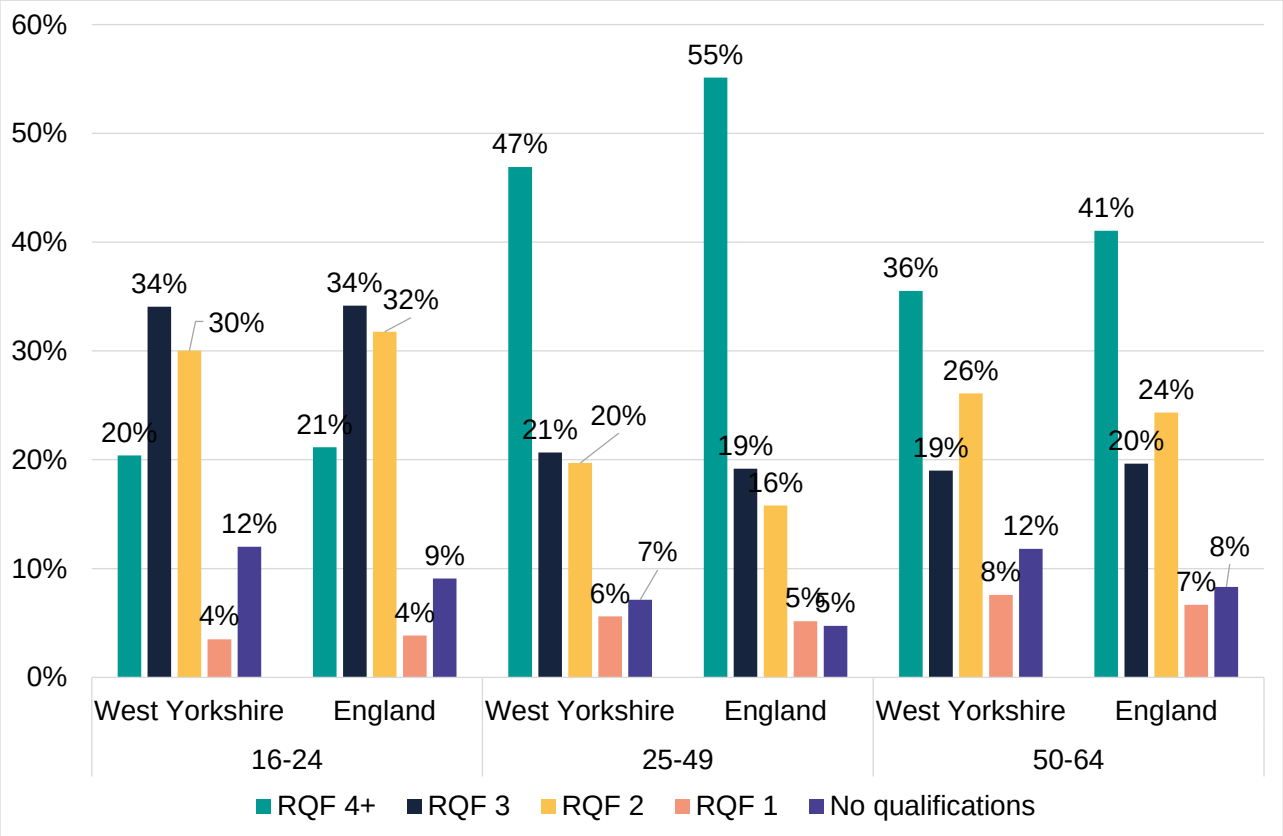


Source: Annual Population Survey

The qualification profile of the unemployed / inactive is very different to that of the employed. The employed are more than twice as likely to be qualified at Level 4 and the unemployed / inactive are more than three times as likely to hold no formal qualifications as the employed.

The qualification profile of the population varies by age. People aged 25-49 are, on average, better qualified than people aged 50-64, partly reflecting the increase in higher education participation seen in recent decades. They are also better qualified than people aged 16-24, many of whom are still in full-time education.

Figure 61: Profile of highest qualification held by RQF level and by age, 2022



Source: Annual Population Survey

West Yorkshire faces a qualification deficit across all age bands relative to the national average. For example, the proportion of people aged 25-49 who are qualified at Level 4 and above is around 8 points lower than nationally and there is a gap of 5 points for those aged 50-64. In West Yorkshire, 12% of people aged 50-64 have no qualifications compared with a national average figure of 8%.

4.5 Qualification attainment of young people

The Department for Education produces statistics on the attainment of 19-year olds at the end of each academic year. This provides an important insight concerning the in-flow into the labour market of qualified people.

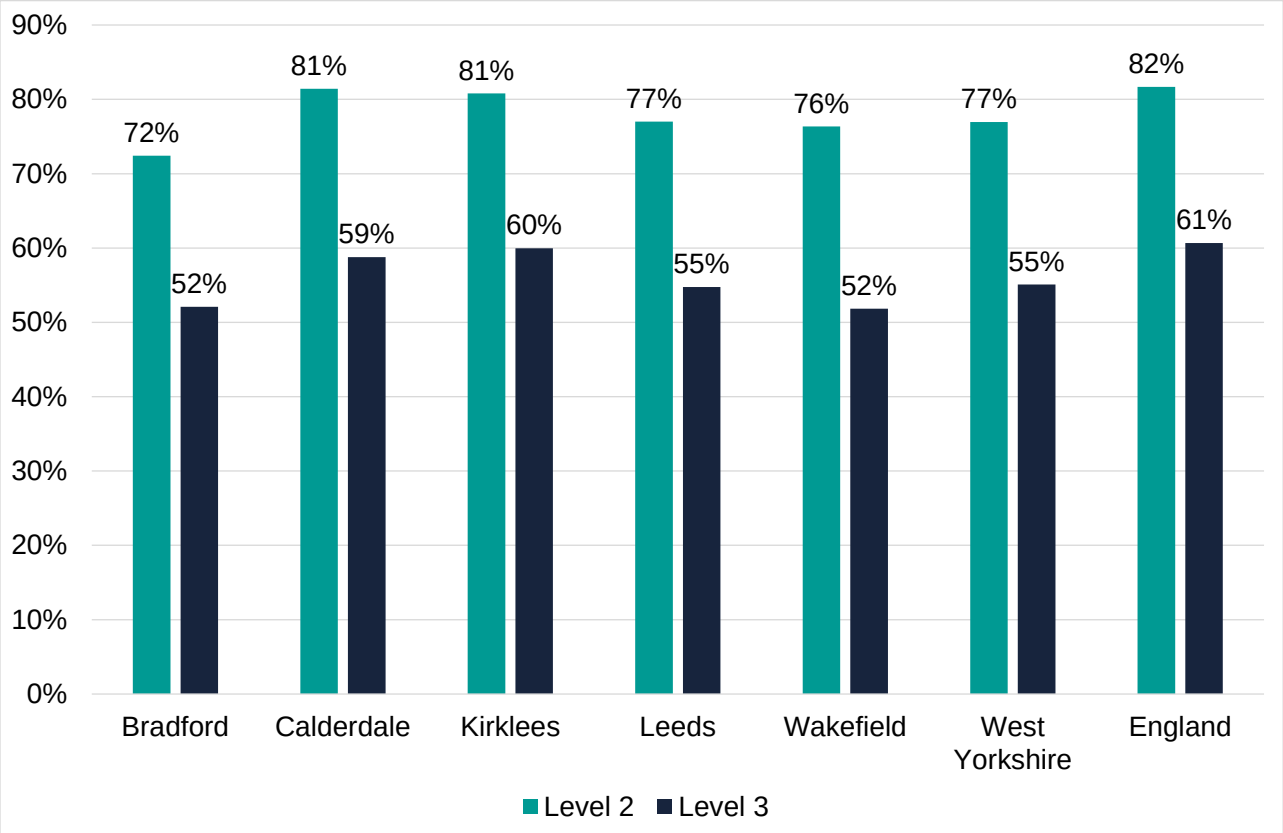
As noted above, the qualification profile of West Yorkshire's population is relatively poor, with a smaller proportion of people qualified at level 4 and above than nationally and a greater proportion with no qualifications or qualified below level 2. Although there is some evidence to show that much of this gap is due to the qualification profile of adults already in the labour force, data relating to the attainment of young people at age 19 indicates that new entrants also contribute to the widening gap with the national average.

The attainment of young people at level 2 and level 3 contributes to West Yorkshire's qualification deficit

Young people in West Yorkshire are less likely to have achieved a level 2 qualification by the age of 19 than their national counterparts. The proportion is 77%, 5 points lower than the England average. Two districts (Calderdale and Kirklees) are close to the national average but in Bradford only 72% achieve level 2 by the age of 19, 9 points behind the national average, whilst Leeds and Wakefield are both around 5 points lower. (Note that percentage point gaps are rounded and may not appear to reflect figures in chart).

This underperformance at level 2 feeds through into a similar gap at level 3. Only 55% of young people in West Yorkshire have achieved level 3 by the age of 19, 6 points below the national average of 61%. Again, Calderdale and Kirklees are relatively close to the national average but Bradford is 9 points behind the average at 52%.

Figure 62: Proportion of young people achieving qualifications at level 2 and level 3 equivalent by age 19 in 2021/22 (State sector)



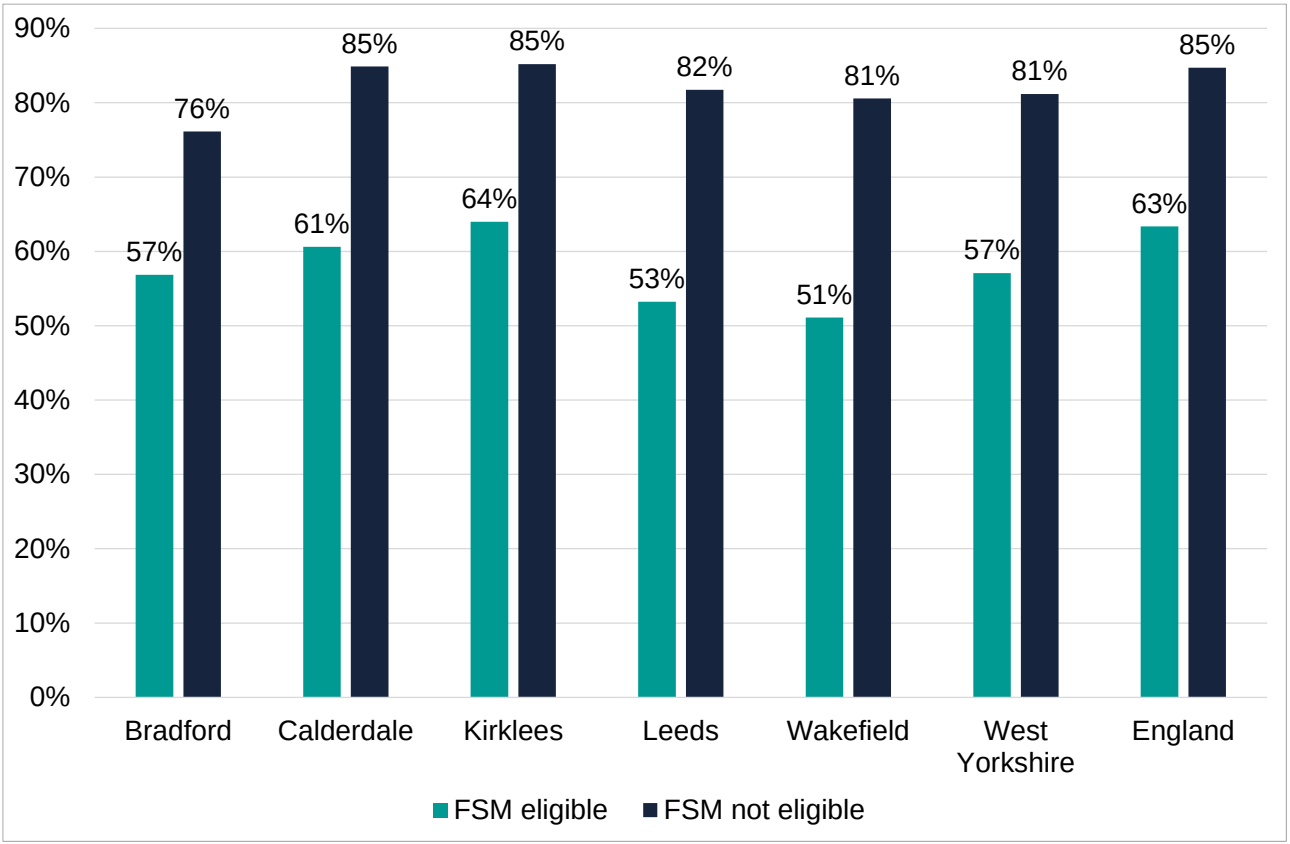
Source: Department for Education

This relatively poor performance on qualification attainment at age 19 constrains entry into higher education and helps to perpetuate West Yorkshire's skills deficit.

Pupils eligible for free school meals are subject to a big attainment gap at age 19

Figure 85 focuses on attainment at level 2 by age 19 and shows the performance of pupils who were eligible for free school meals while at school in comparison with other pupils who were not eligible.

Figure 63: Proportion of young people achieving qualifications at level 2 equivalent by age 19 in 2021/22 (State sector) by free school meal eligibility



Source: Department for Education

It demonstrates the considerable impact that disadvantage has on attainment. In West Yorkshire the attainment gap between these two groups is 24 percentage points, compared with 21 points nationally. This widens to 28 points in Leeds and 29 points in Wakefield, in contrast to 19 points in Bradford and 21 points in Kirklees.

Attainment is poorer in West Yorkshire than nationally for both free school meals pupils and those not eligible, with a gap of 6 points and 4 points respectively. Only Kirklees outperforms the national average with regard to free school meal pupils whilst Leeds is 10 points lower and Wakefield 12 points lower against this measure.

4.6 Commuting[20]

West Yorkshire's labour market is not a closed system: commuting behaviour has a key bearing on the labour supply that is available to meet demand from local employers.

West Yorkshire has significant inward and outward commuting flows with a net inflow of higher skilled workers

The local area is characterised by strong commuting flows, with large numbers of local residents travelling out of the area to work and a considerable number commuting into the area from neighbouring locations.

91% of local residents who are in employment work in West Yorkshire (783,000 people) with the remaining 9% of residents (77,000 people) commuting to jobs elsewhere. Almost nine-out-of-10 people (89%) who work in West Yorkshire also live in the area, with the remaining 11% (100,000 in absolute terms) commuting from outside.

Hence West Yorkshire has a net commuting inflow of around 24,000.

At district level, there is a varied picture. Leeds has a net inflow of workers from outside Leeds of 56,000, whilst Kirklees has a net outflow of 25,000 to workplaces outside Kirklees, mostly within West Yorkshire.

The main destinations for outward commuters from West Yorkshire are:

- Harrogate, the commuting destination for 8,000 West Yorkshire residents, the majority of them from Leeds.
- Barnsley, which is the destination for around 6,000 commuters, primarily from Wakefield and Kirklees.
- Selby, the destination for around 5,000 commuters, mostly from Leeds and Wakefield.
- Craven, which attracts approximately 5,000 commuters, mainly from the adjacent district of Bradford.
- York, which is the destination for around 4,000 West Yorkshire commuters, principally from Leeds.

The most significant sources of inward commuters into West Yorkshire are Barnsley (13,000), Harrogate (10,000) and Selby (10,000), followed by York (6,000) and Doncaster (5,000). There are significant inward flows from Barnsley to Wakefield, Leeds and Kirklees. The main destination of Harrogate commuters is Leeds and the main flows from Selby are to Leeds and Wakefield.

[20] This analysis is based on the 2011 Census. The commuting data provided by the 2021 Census, which was conducted during the pandemic, does not provide a reliable picture of "normal" commuting patterns.

The key destination for inward commuters from outside West Yorkshire is Leeds (47% of the total) followed by Wakefield (21%) and Bradford (15%). Calderdale (8%) and Kirklees (9%) account for relatively small proportions.

The proportion of people in employment who work outside their home district ranges from 22% for Leeds to 37% for Kirklees, with high proportions for Wakefield (35%) and Calderdale (36%) and 30% for Bradford.

Around a fifth of residents commute within West Yorkshire, i.e. travel between constituent districts for work, compared with 9% who commute outside of West Yorkshire. Of the 1788,000 people (21% of the total) who do commute in this way, the largest flows are between Bradford and Leeds (28,000), Wakefield and Leeds (22,000), Kirklees and Leeds (20,000), Leeds and Bradford (17,000) and Leeds and Wakefield (13,000).

A comparison of the occupational profile of people working in West Yorkshire with that of West Yorkshire residents, based on the Annual Population Survey, suggests that there is a net inflow of workers in higher skilled occupations i.e. there are more people working in these roles in West Yorkshire workplaces than there are local residents employed in these roles. For professional occupations the difference is 8,000. There are also 5,000 more people employed in administrative roles in West Yorkshire workplaces than residents working in these roles, again implying a net influx of commuters in this occupation.

The distribution of jobs relative to population across West Yorkshire is also reflected in job density rates, which show the ratio of workplace jobs[21] to resident population. At local authority level the rate ranges from 0.68 in Kirklees and 0.69 in Bradford to 1.01 in Leeds. Calderdale and Wakefield are in the middle of the range with densities of 0.84 and 0.79 respectively. The national average is 0.87.

This pattern confirms the importance of Leeds as a commuting centre and source of employment within West Yorkshire.

[21] Workplace jobs comprise employee jobs, the self-employed, government-supported trainees and HM Forces.

Figure 64: Commuting patterns, people aged 16 and over

	Live in area, work in area	Live in area, work outside area	Work in area, live outside area	Net inward commuting	Commute within WY	Commute outside WY	% of residents who live in area, work in area	% residents who work outside area	% of those working in area who live outside area	% residents who commute within WY	% residents who commute outside WY
Bradford	129,611	55,304	50,439	-4,865	40,930	14,374	70%	30%	28%	22%	8%
Calderdale	52,014	28,713	27,016	-1,697	21,485	7,228	64%	36%	34%	27%	9%
Kirklees	102,258	59,704	34,590	-25,114	46,734	12,970	63%	37%	25%	29%	8%
Leeds	236,326	65,721	121,323	55,602	38,990	26,731	78%	22%	34%	13%	9%
Wakefield	84,977	45,507	45,148	-359	30,103	15,404	65%	35%	35%	23%	12%
West Yorks	783,428	76,707	100,274	23,567	178,242	76,707	91%	9%	11%	21%	9%

Source: Census of Population, 2011

4.7 Apprenticeships

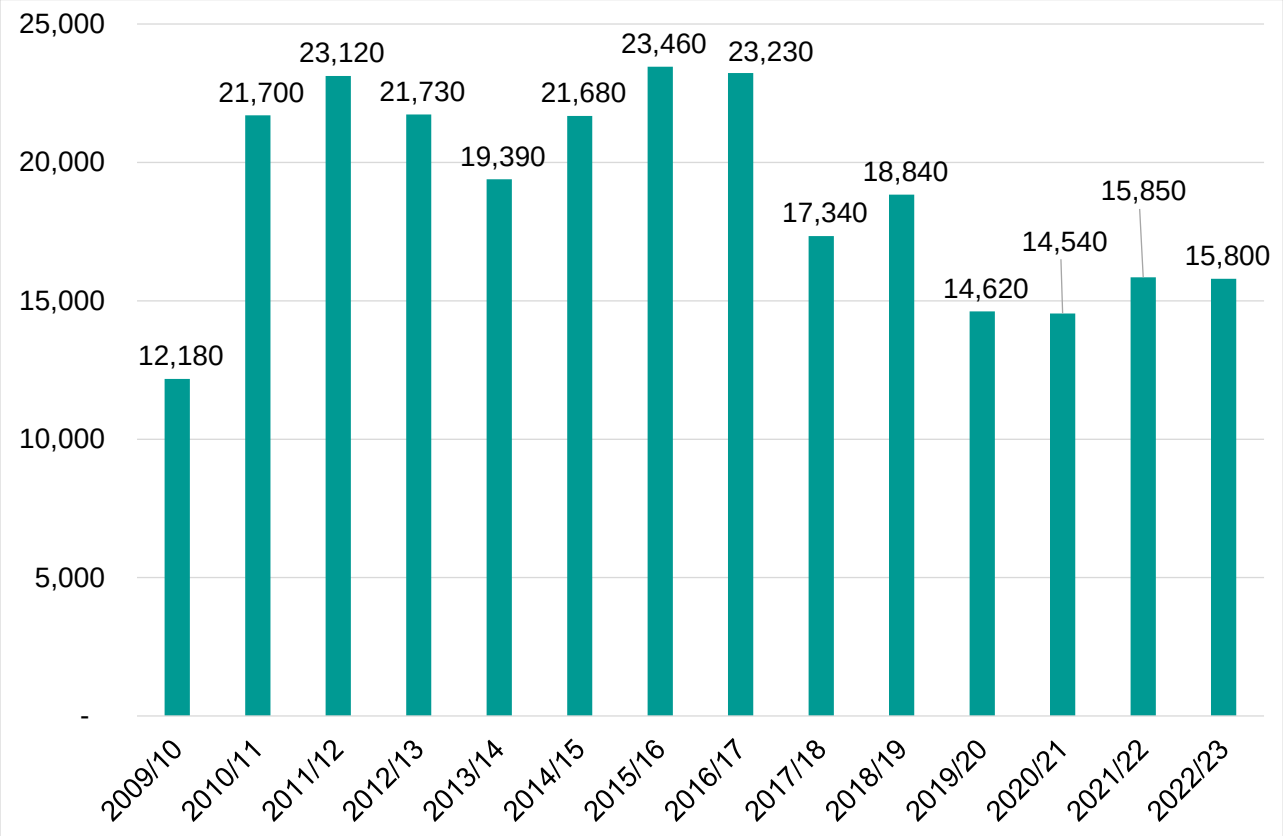
Apprenticeships are a key means for employers to grow their own skills and to address their specific needs, particularly in areas of skills shortage, as well as providing workers with a sustainable career pathway.

Apprenticeship take-up remained static in 2022/23

There were 15,793 apprenticeship starts in West Yorkshire during the academic year of 2022/23. Starts fell by 56 (-0.4%) compared with the previous year; at national level starts grew by around 3%. Starts in West Yorkshire in 2022/23 remained 3,050 (or 16%) below their pre-pandemic level for 2018/19 and have fallen by a third since their peak in 2015/16.

Levy-funded starts accounted for 64% of the total in 2022/23 in West Yorkshire, an increase on the 60% in the previous year and well above the 57% recorded in 2018/19. Levy starts were 7% up on 2021/22 whilst non-levy starts fell by 11% over the same period. Eighty per cent of Higher Apprenticeships were funded through the levy compared with only 52% of Intermediate starts, whilst four-fifths of starts for 25+ year olds but only 38% of starts for under-19s were levy-funded.

Figure 65: Trend in total apprenticeship starts, West Yorkshire



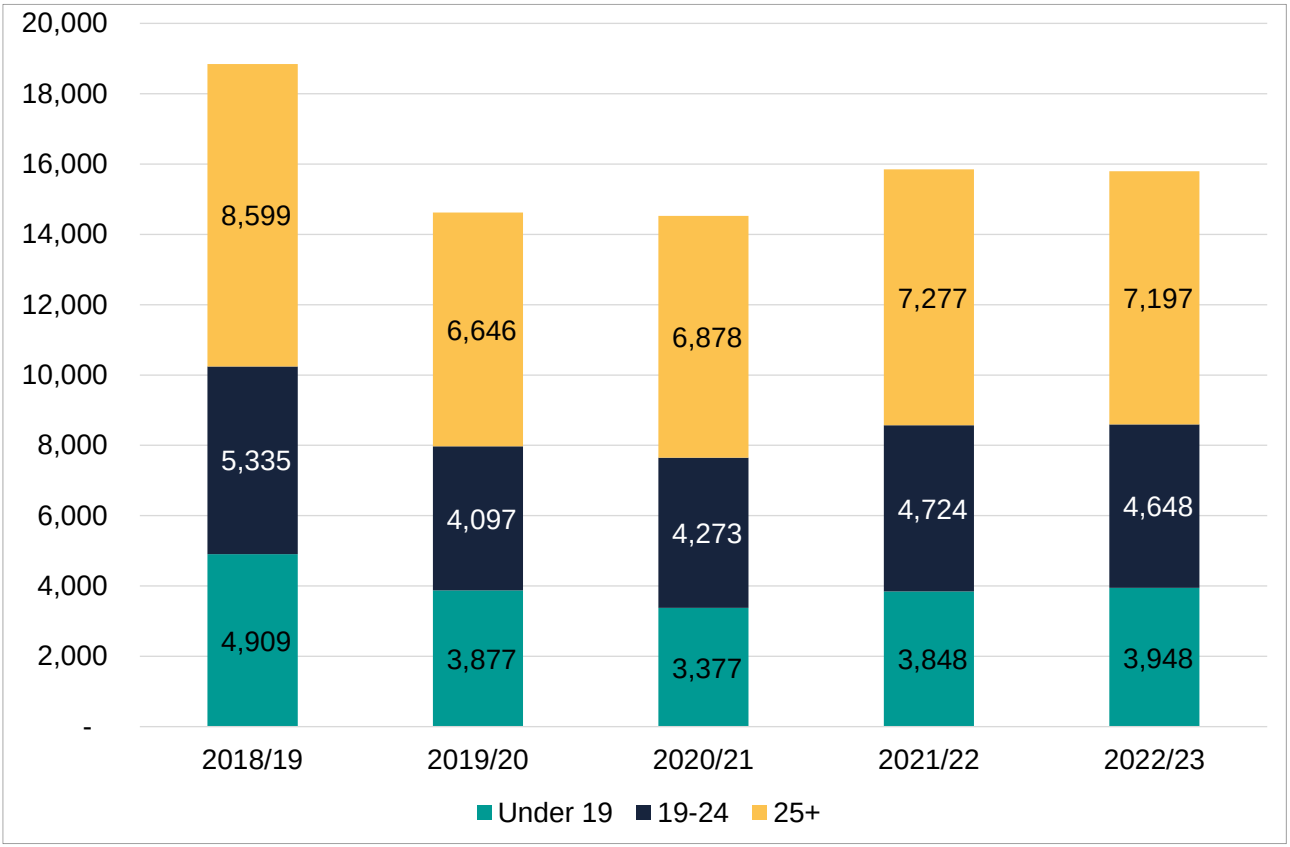
Note: figures are rounded to nearest 10
Source: Department for Education

During 2022/23, there were 7,730 apprenticeship achievements, an increase of 20% on the previous year.

Starts grew slightly for under-19s during the academic year

During 2022/23, 46% of starts were for apprentices aged 25 and over, with 29% for those aged 19-24 and 25% for those aged under 19.

Figure 66: Trend in apprenticeship starts by age, West Yorkshire



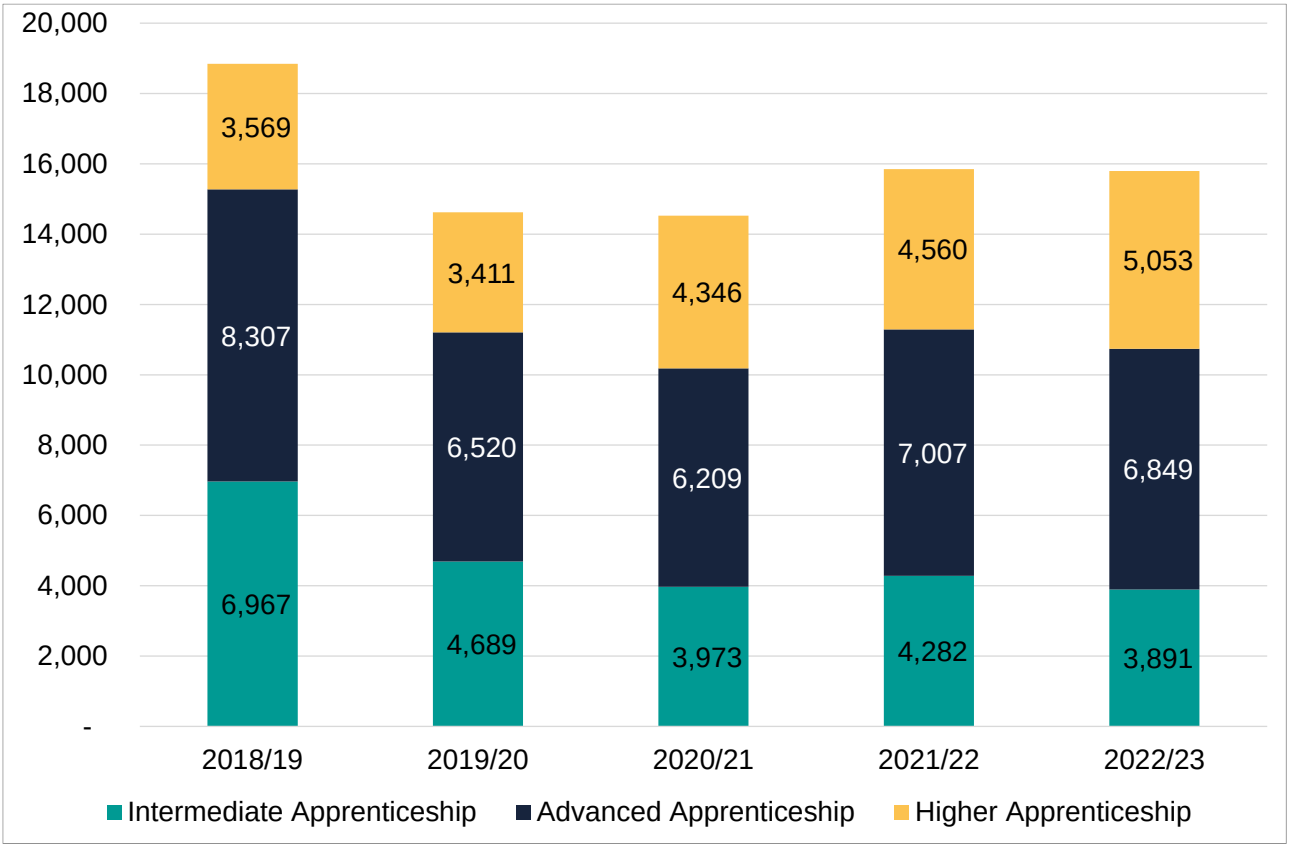
Source: Department for Education

Under-19 starts grew slightly by 3% but are still one-fifth lower than in 2018/19. Starts for 19-24 year olds fell by 2% in 2022/23 but remain 13% below pre-pandemic and starts for those aged 25+ decreased by 1% (16% below 2018/19 level).

Higher apprenticeship starts have grown since before the pandemic but Intermediate starts have fallen

During 2022/23, starts on Intermediate apprenticeships accounted for 25% of total starts (down from 27% in the previous year and from 37% in 2018/19), Advanced apprenticeship starts contributed 43% (similar to the previous year) and Higher apprenticeships 32% (up from 29% in the previous year and from only 19% in 2018/19).

Figure 67: Trend in starts by level, West Yorkshire



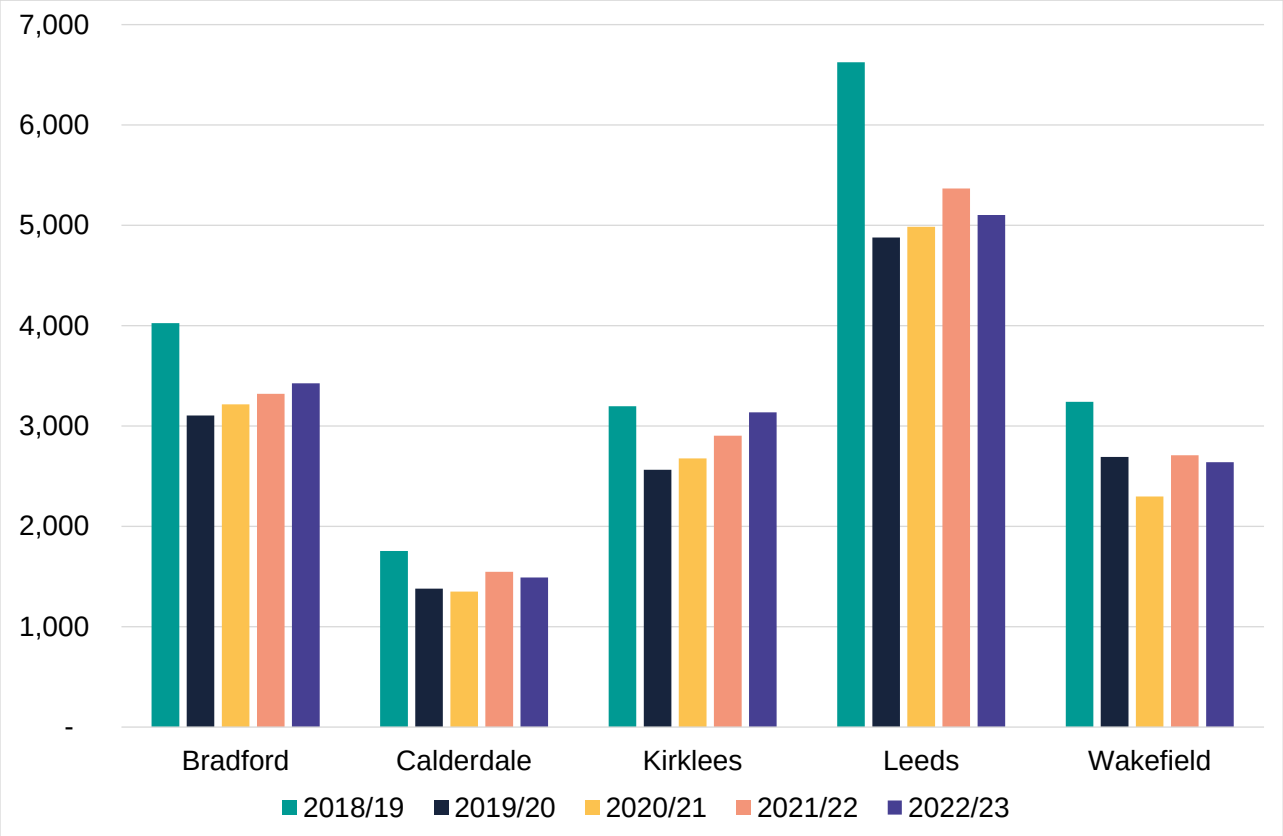
Source: Department for Education

All levels of apprenticeship saw a decline in starts during 2022/23 except at Higher level. Advanced apprenticeships fell by 2%, Intermediate by 9% but Higher grew by 11%. Whilst the number of Higher apprenticeship starts was 42% greater in 2022/23 than in 2018/19, the number of Advanced starts was 18% lower and the number of Intermediate starts a considerable 44% lower.

Only Bradford and Kirklees saw growth in starts in 2022/23

Based on location of learner residence, Leeds contributed the greatest number of apprenticeship starts during 2022/23 (32% of the West Yorkshire total) followed by Bradford (22%), Kirklees (20%), Wakefield (17%) and Calderdale (9%).

Figure 68: Change in total apprenticeship starts by local authority



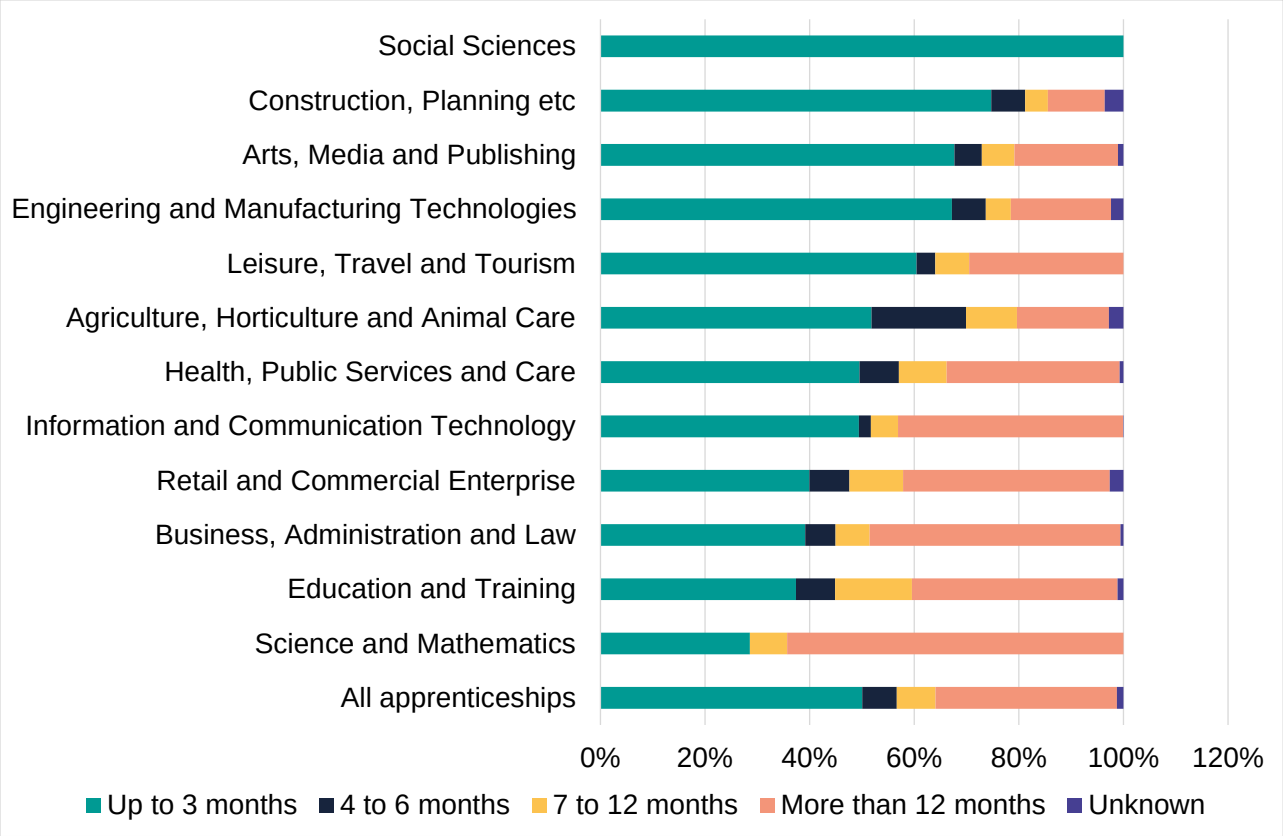
Source: Department for Education

Bradford and Kirklees saw growth in starts during the academic year of 3% and 8% respectively, whereas the remaining local authorities experienced declines ranging from 3% in Wakefield, to 4% in Calderdale to 5% in Leeds.

A significant proportion of apprenticeships are used to develop existing staff

A core aim of apprenticeships is to provide an entry route into a sustainable career. However, apprenticeships are, to a large degree, being used by employers to train their existing staff. Overall, 35% of starts in West Yorkshire are for staff who have been employed for a year or more. In some subject areas a substantial proportion of apprenticeship starts are for people who have been employed for this period, with *Business, administration and law* apprenticeships being a key example, with a figure of 48%. Within this subject 80% of starts for *Business management* apprenticeships are for people employed 12 months or more, although the proportions are less than a quarter for both *Administration* and *Accounting and finance* sub-categories.

Figure 69: Profile of Apprenticeships starts by length of employment and subject area, West Yorkshire, 2022/23 academic year



Source: Department for Education

In other subject areas, a majority of apprentices have been employed for less than 3 months, implying that the focus is on the development of recent or new recruits. Key examples include *Construction*, *Arts, media and publishing* and *Engineering and manufacturing technologies* (*Social sciences* had only a small number of starts during 2022/23).

Overall, 50% of starts were for staff employed for less than 3 months in 2022/23 but the figure rises to 80% for under-19s and falls to 26% among those aged 25 and above. This shows how apprenticeships are used differently across age groups.

Providers

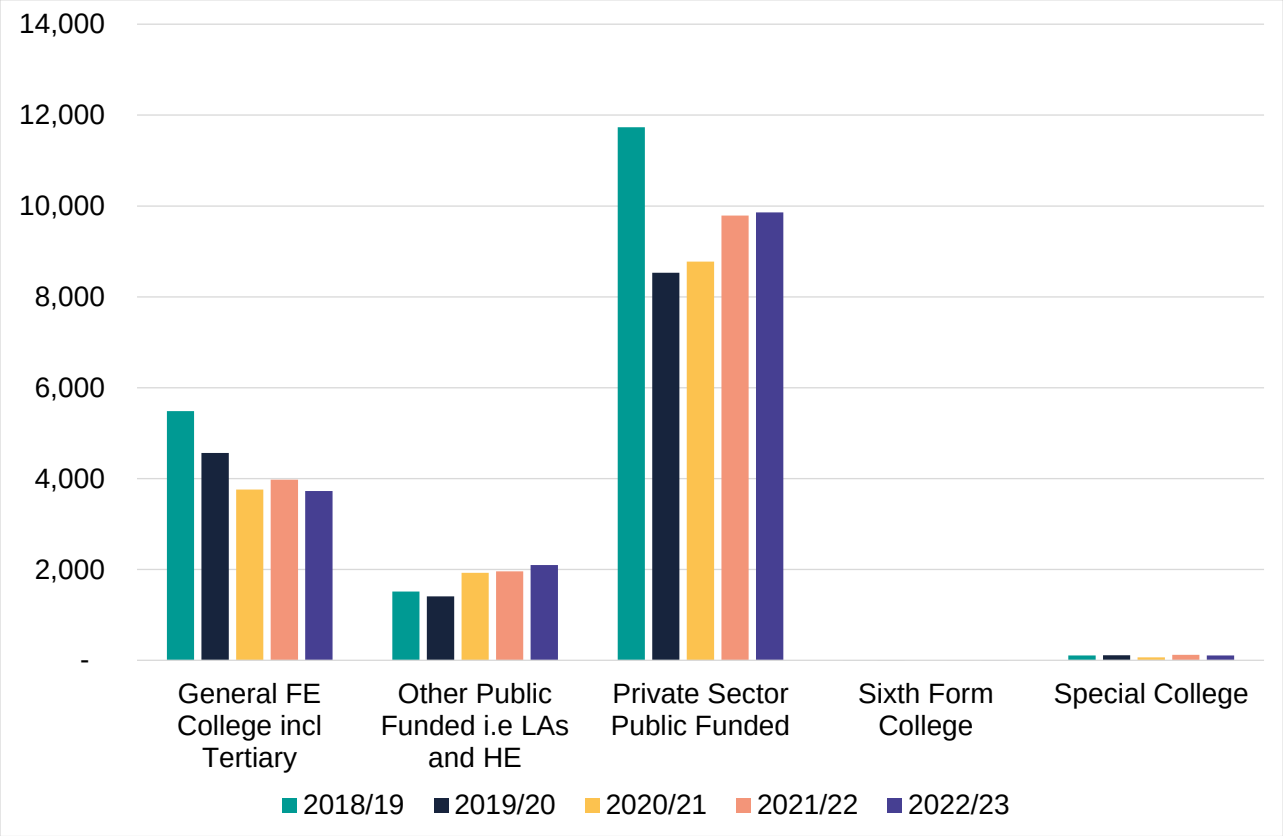
The bulk of apprenticeship starts are delivered by three types of education and training provider.

General FE colleges have seen the biggest fall in starts in West Yorkshire since the pandemic

Private-sector public funded providers delivered 9,860 apprenticeship starts in West Yorkshire in 2022/23, a majority (62%) of total starts. This figure represents a slight increase of 1% on the previous academic year.

General FE colleges contributed 3,730 starts, 24% of the total - a decrease of 6% on the previous year.

Figure 70: West Yorkshire apprenticeship starts by provider type



Source: Department for Education

Other publicly funded providers (including local authorities and HEIs) were responsible for 13% of total starts and saw growth of 7% year on year.

Starts delivered by other publicly funded providers are 38% higher than pre-pandemic (2018/19) but are 32% lower for general FE colleges and 16% lower for private-sector public funded providers.

Subject area

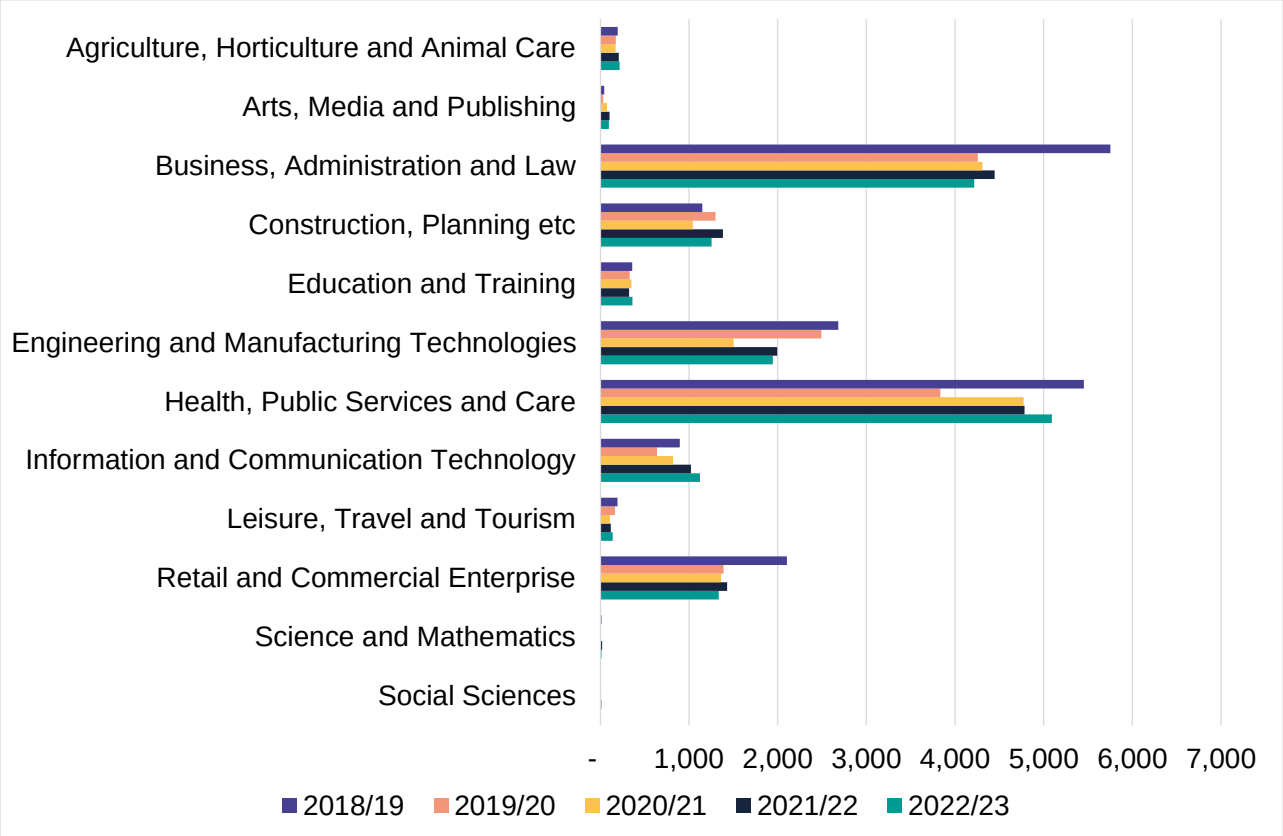
Performance was mixed in terms of starts by subject area. There were year on year increases in starts for five of 13 subjects, most notably for *Health, Public Services and Care* (+308, +6%), *Information and Communication Technology* (+101, +10%), Education (+101, +11%).

Starts were above the pre-pandemic (2018/19) level for ICT and Construction in 2022/23

There were declines for several subject areas, including *Business, Administration and Law* (-232, -5%), *Construction, Planning and the Built Environment* (-128, -9%), *Retail and*

Commercial Enterprise (-96, -7%) and *Engineering and Manufacturing Technologies* (-50, -3%).

Figure 71: Trend in apprenticeship starts by sector subject area, West Yorkshire



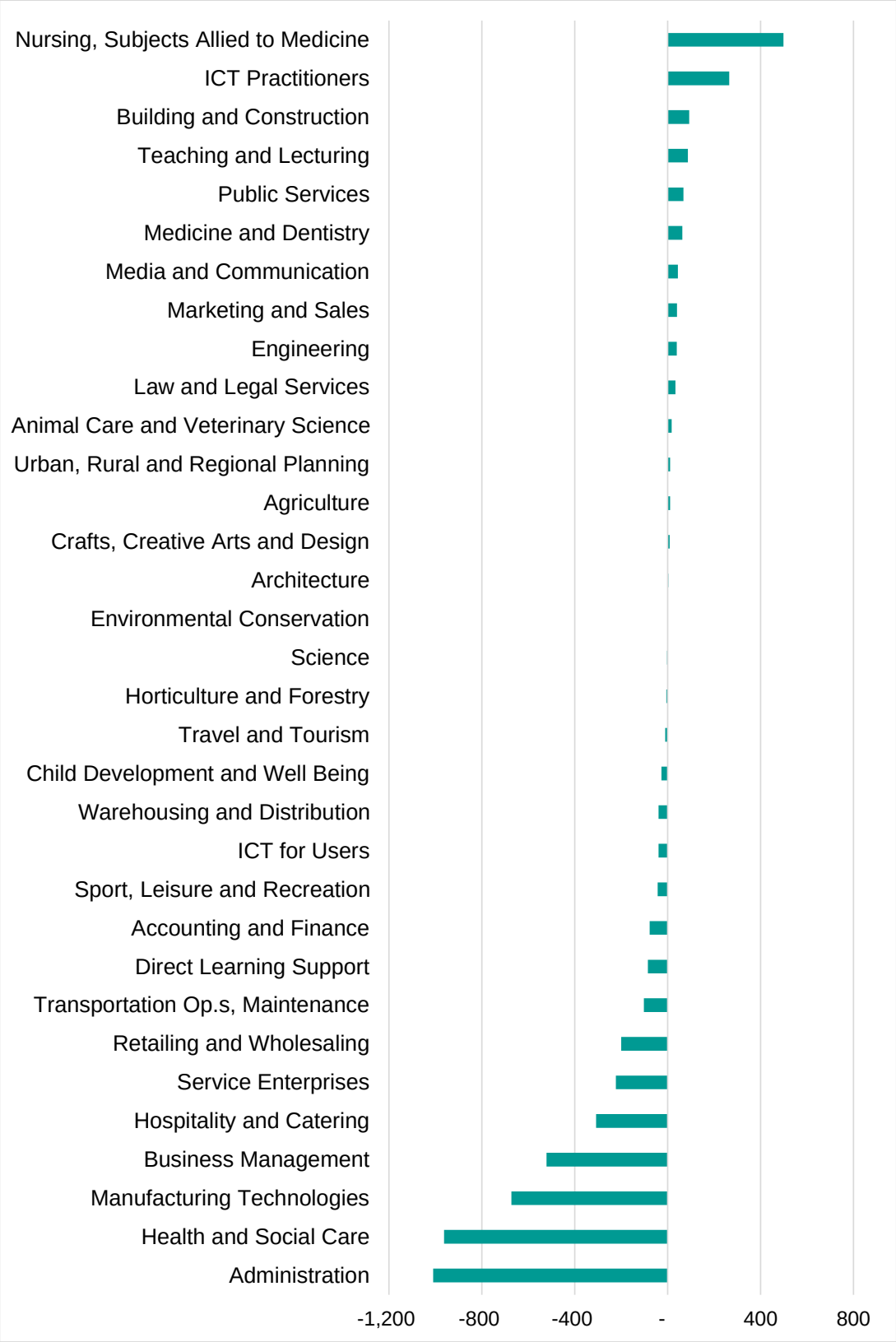
Source: Department for Education

The majority of subjects had fewer starts in 2022/23 than in 2018/19 (pre-pandemic). The biggest deficits were for *Business, Administration and Law* (-1,537, -27%), *Retail and Commercial Enterprise* (-770, -37%) *Engineering and Manufacturing Technologies* (-737, -27%), and *Health, Public Services and Care* (-361, -7%).

Three subjects had significantly higher levels of starts than in 2018/19:

- *Information and Communication Technology* (+226; +25%)
- *Construction, Planning and the Built Environment* (+106; 9%)
- *Arts, Media and Publishing* (+52; +118%).

Figure 72: Net change in starts by tier 2 framework sector subject area, 2022/23 vs 20181/9, West Yorkshire



Source: Department for Education

Drilling down into Tier 2 subject areas and comparing 2022/23 with the pre-pandemic position (2018/19) only a few detailed subject areas have seen significant net growth, including *Nursing and Subjects and Vocations Allied to Medicine, ICT Practitioners, Building and Construction, Teaching and Lecturing, Public Services and Medicine and Dentistry*. In the main these subjects have seen growth at Higher level and typically for learners aged 25 and above.

Conversely, other subjects such as *Administration*, *Health and social care*, *Manufacturing technologies*, *Hospitality and catering* and *Business management* have seen substantial net falls in absolute terms relative to before the health crisis.

For some subjects the decline in starts has been severe in proportionate terms. Most notably *Manufacturing technologies* contracted by 66% during this period (although it remained static in 2022/23 compared with the previous year), opening up a significant potential gap in provision.

Much of the decline in *Administration* has been at intermediate level with all age groups affected.

For *Health and social care*, the intermediate level has also been worst-affected but with a reduction in Higher level starts also. The decline has been concentrated among the 19+ age bands.

For *Manufacturing technologies*, the reduction in starts has affected all age bands, affecting take-up at both intermediate and advanced levels.

Some features of the pattern of change at this level reflect what we would expect to see based on what we know about the impact of the pandemic; for example, the increase in nursing starts and the declines in starts linked to the hospitality and retail sectors.

Overall, the number of apprenticeship starts for young people (aged under 25) has seen particularly large declines relative to pre-pandemic in the subjects of Administration (-728; -48%), Manufacturing Technologies (-370, -60%) and Health and social care (-159; - 14%).

Table 3: Standards with greatest number of starts by subject area, West Yorkshire, 2022/23 academic year

Sector Subject Area	Level	Framework/Standard Name	Starts
Agriculture, Horticulture and Animal Care	Intermediate	Horticulture or Landscape Construction Operative	46
	Advanced	Veterinary Nurse	45
	Intermediate	Equine Groom	21
Arts, Media and Publishing	Advanced	Content Creator	43
	Advanced	Print Technician	21
	Advanced	Library, Information and Archive Services Assistant	5
Business, Administration and Law	Advanced	Business Administrator	594
	Advanced	Team Leader or Supervisor	585
	Higher	Operations or Departmental Manager	461
Construction, Planning and the Built Environment	Intermediate	Carpentry and Joinery	247
	Intermediate	Bricklayer	184
	Advanced	Plumbing and Domestic Heating Technician	127
Education and Training	Advanced	Teaching Assistant	174
	Higher	Teacher	60
	Higher	Learning and Skills Teacher	51
Engineering and Manufacturing Technologies	Advanced	Installation and Maintenance Electrician	364
	Advanced	Engineering Technician	151
	Advanced	Motor Vehicle Service and Maintenance Technician - Light Vehicle	151
Health, Public Services and Care	Advanced	Early Years Educator	680
	Intermediate	Healthcare Support Worker	409
	Intermediate	Early Years Practitioner	379

Sector Subject Area	Level	Framework/Standard Name	Starts
Information and Communication Technology	Higher	Data Analyst	237
	Advanced	Data Technician	199
	Advanced	Information Communications Technician	148
Leisure, Travel and Tourism	Advanced	Sporting Excellence Professional	39
	Advanced	Travel Consultant	25
	Advanced	Personal Trainer	19
Retail and Commercial Enterprise	Intermediate	Hairdressing Professional	249
	Intermediate	Hospitality Team Member	119
	Advanced	Customer Service Specialist	107
Science and Mathematics	Higher	Food Industry Technical Professional (Integrated Degree)	4
	Higher	Public Health Practitioner - Integrated Degree	3
	Higher	Medical Statistician	2

Higher apprenticeships

As higher skilled jobs increasingly dominate the employment scene, higher apprenticeships gain greater significance particularly for occupations in which exposure to the workplace is key.

As noted above, the number of higher apprenticeship starts in West Yorkshire increased by 11% in 2022/23, offsetting decline for the other levels and giving a total of 5,035 higher starts during the academic year.

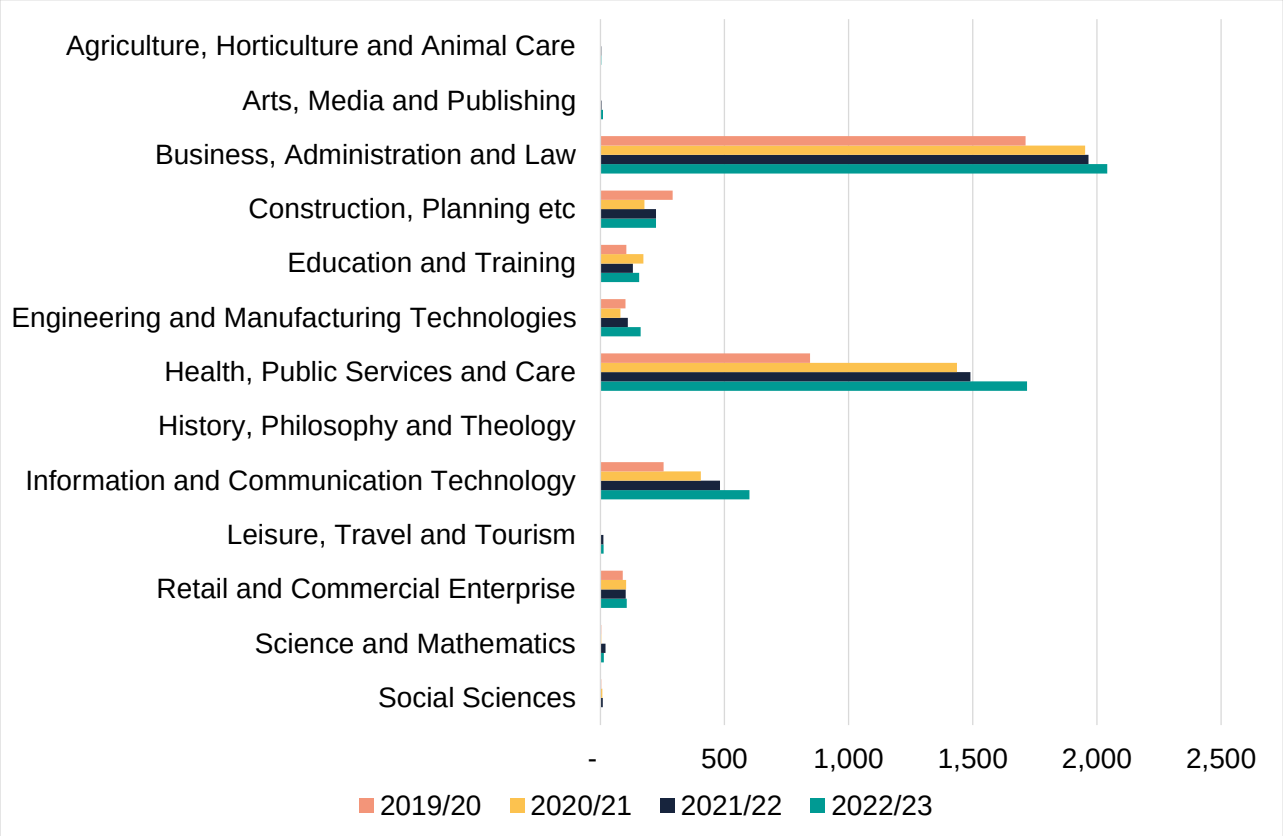
Apprenticeships at levels 4, to 7 all grew in terms of starts, by 10%, 4%, 13% and 21% respectively.

Broad-based growth in higher apprenticeship starts across subjects in 2022/23

The biggest subject areas in terms of starts all grew, including *Health, Public Services and Care* (+228, +15%)*, Information and Communication Technology* (+119; +25%), *Business, Administration and Law* (primarily comprising Management apprenticeships) (+76, +4%) and *Engineering and manufacturing technologies* (+51; +46%).

No subject areas saw a substantial decline, although *Construction, planning and the built environment* and *Retail and commercial enterprise remained static*.

Figure 73: Trend in higher apprenticeship starts by sector subject area, West Yorkshire



Source: Department for Education

However, there is a continuing concern that higher apprenticeship availability in the local area is narrowly concentrated in a few subject areas, with a combined 74% of all higher level starts falling within *Business, administration and law* (40%) and *Health, public services and care* (34%). This proportion has declined only marginally over recent years. Of the first of these subject areas most starts are in *Business Management* (26% of all starts) and *Accountancy* apprenticeships (13%); of the second, Care leadership and management and Nursing apprenticeships have the highest take-up.

The shares of higher apprenticeships in the technical areas of *Construction* and *Engineering* remain small; they currently account for 4%, and 3% of total higher apprenticeship starts respectively, with little change in share over time. *Information and communication technology* has nearly doubled its share of starts between 2019/20 to 2022/23, growing from 7% to 12%, with 601 starts recorded in 2022/23.

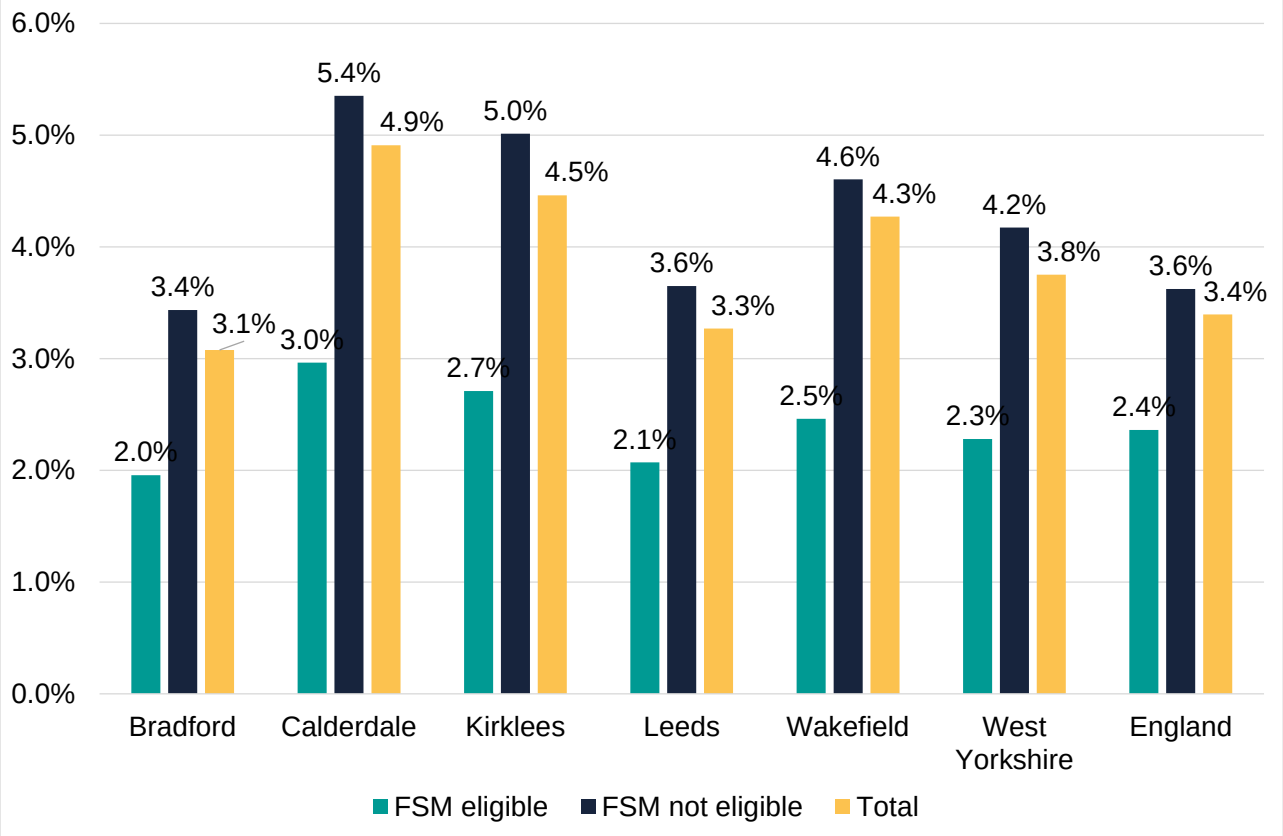
Engineering and *Construction* are occupational areas within which apprenticeships are a staple part of people development arrangements at intermediate and advanced levels and offer a particularly valuable mechanism for addressing skills needs in these parts of the economy. An increase in higher apprenticeships would provide a valuable progression pathway to meet the growing demand for higher skilled workers in these occupational areas.

Disadvantaged pupils are less likely to enter an apprenticeship in all parts of West Yorkshire

In considering the supply of skills within West Yorkshire, we need to take account of the inclusiveness of the skills pipeline, as well as the extent to which it is sufficient to meet needs. In the case of apprenticeships, which should provide an important mechanism for social mobility, there are continuing issues about the degree to which they are inclusive.

Relatively few young people enter an apprenticeship following Key Stage 4 either nationally or locally. However, the entry rate into apprenticeships following Key Stage 4 is above the national average in West Yorkshire and is particularly high in Calderdale, Kirklees and Wakefield.

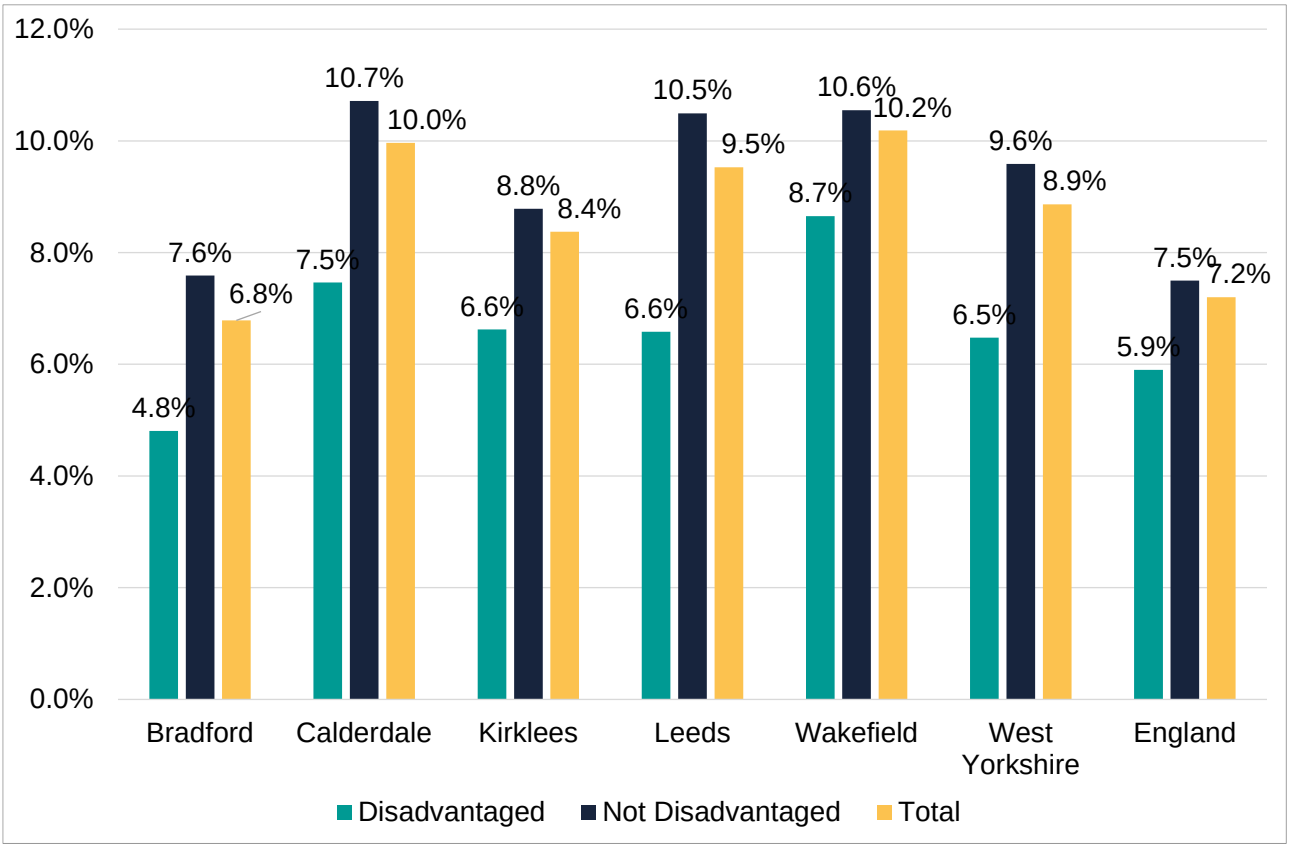
Figure 74: proportion of pupils entering sustained apprenticeship following completion of Key Stage 4, by free school meal status



Note: Analysis shows 2021/22 destinations for the 2020/21 cohort (state-funded mainstream schools).
Source: Department for Education

Across all council areas of West Yorkshire disadvantaged pupils are less likely to enter an apprenticeship than other pupils on the completion of Key Stage 4. Although West Yorkshire has an above average apprenticeship entry rate overall at this stage, of around 4%, only 2% of pupils eligible for free school meals enter an apprenticeship and the gap is particularly wide for pupils in Leeds and Wakefield.

Figure 75: Proportion of pupils entering sustained apprenticeship following completion of 16-18 study by disadvantage status at Year 11

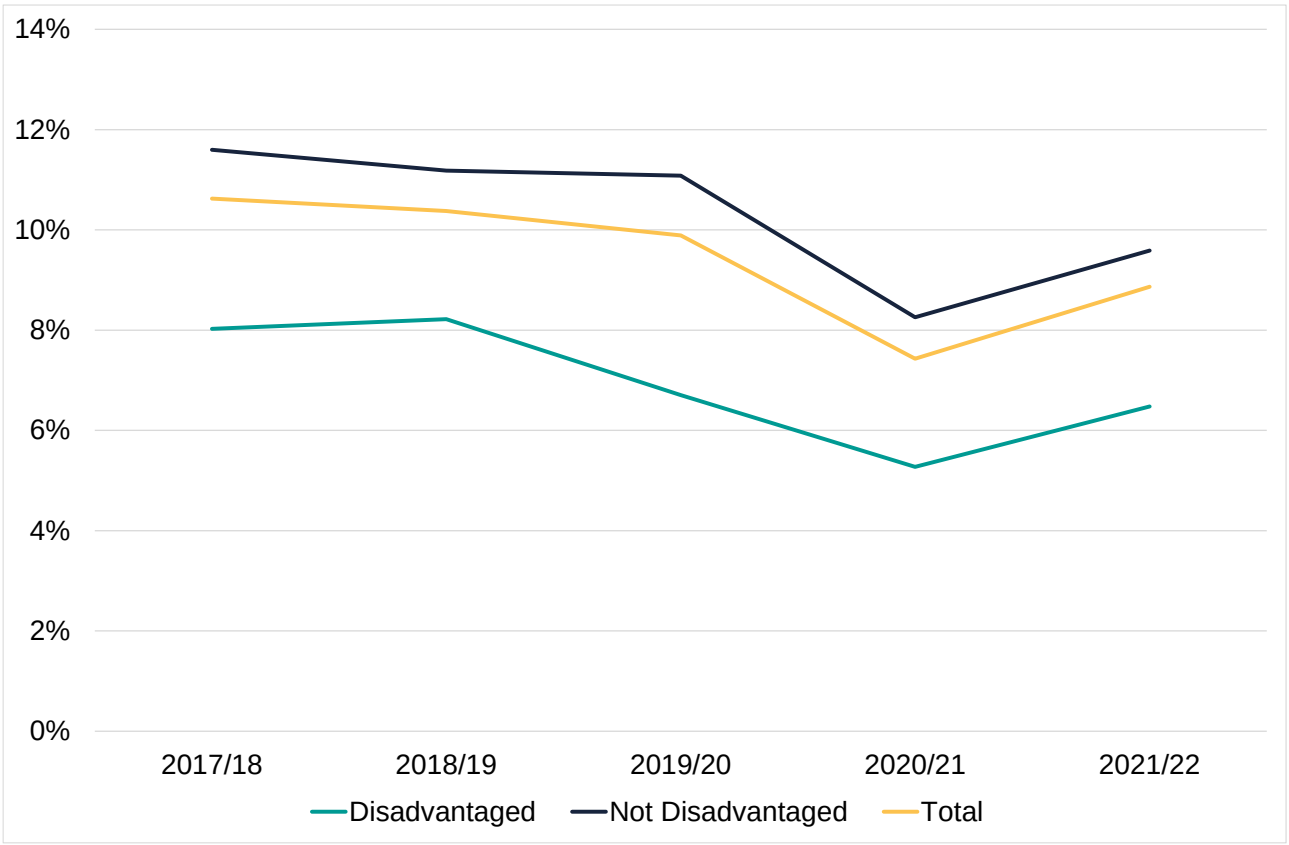


Note: Analysis shows 2021/22 destinations for the 2020/21 cohort (state-funded mainstream schools and colleges).
Source: Department for Education

A similar situation prevails following Key Stage 5. Again, the overall apprenticeship entry rate is above the national average but across all local authority areas in West Yorkshire disadvantaged young people are less likely to enter a sustained apprenticeship destination than their non-disadvantaged peers.

The above chart also shows the differences in apprenticeship entry rates for council areas, ranging from 7% in Bradford to around 10% for each of Leeds, Wakefield and Calderdale.

Figure 76: Trend in proportion of pupils entering sustained apprenticeship following completion of 16-18 study by disadvantage status at Year 11, West Yorkshire



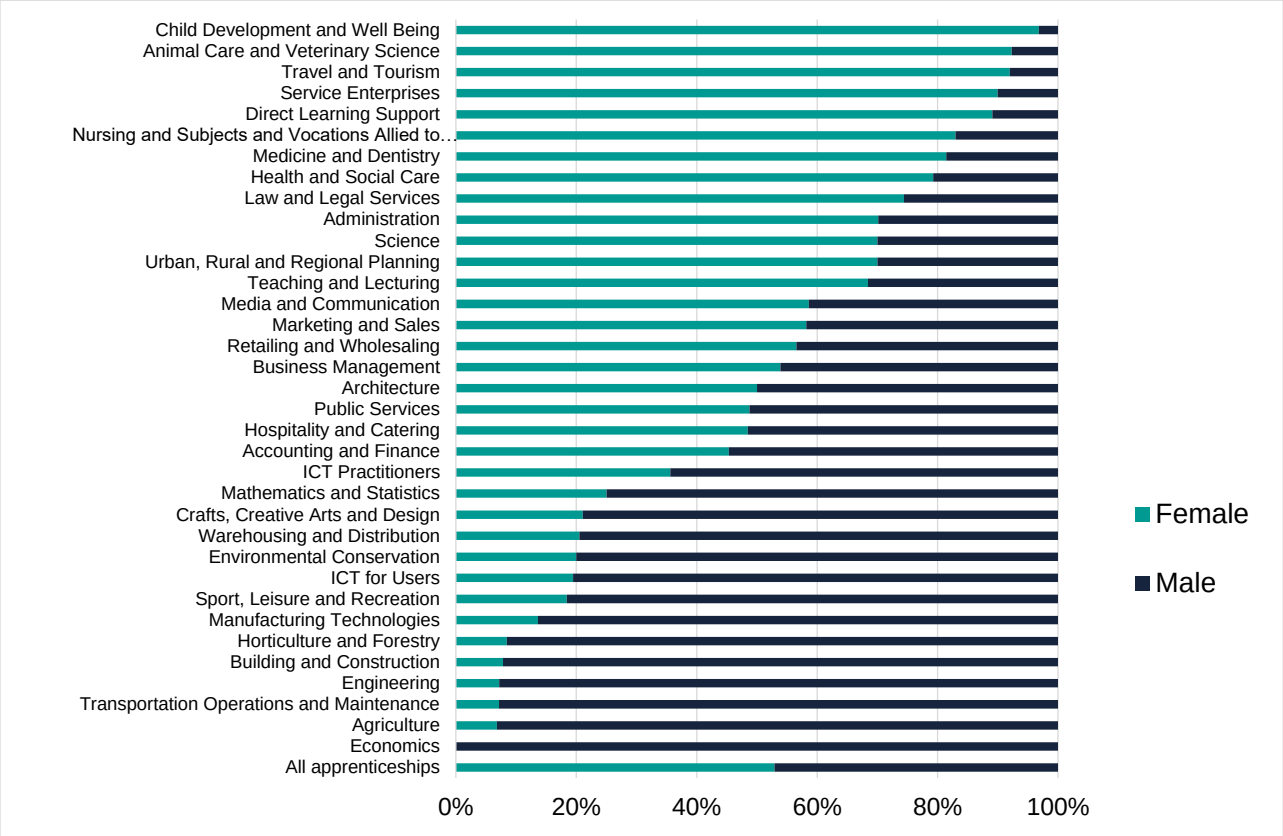
Note: State-funded mainstream schools and colleges
Source: Department for Education.

As the figure shows, apprenticeship entry rates fell during the pandemic for both disadvantaged and non-disadvantaged pupils, with a partial recovery in 2021/22. The gap in entry rates between disadvantaged and non-disadvantaged pupils has not narrowed to any significant extent over time.

There is acute gender segregation within apprenticeships and ethnic minority groups are under-represented, particularly in young apprenticeships

Although 53% of apprenticeship starts overall were for women and girls in West Yorkshire in 2022/23, take-up of apprenticeships is highly segmented by gender and subject, not just locally but nationally. For example, in West Yorkshire 97% of starts on *Child development and well being* were for women and girls in the academic year but the proportion for both *Transportation Operations and Maintenance* and *Engineering* was only 7%. More than a third of total starts for women and girls were in two subjects *Health and social care* and *Child development and well being*. The biggest subjects for male starts were *Building and Construction* and *Engineering*, together accounting for 28% of the total. National research shows that male-dominated apprenticeships such as construction and engineering offer better pay and prospects than those in which women are concentrated.

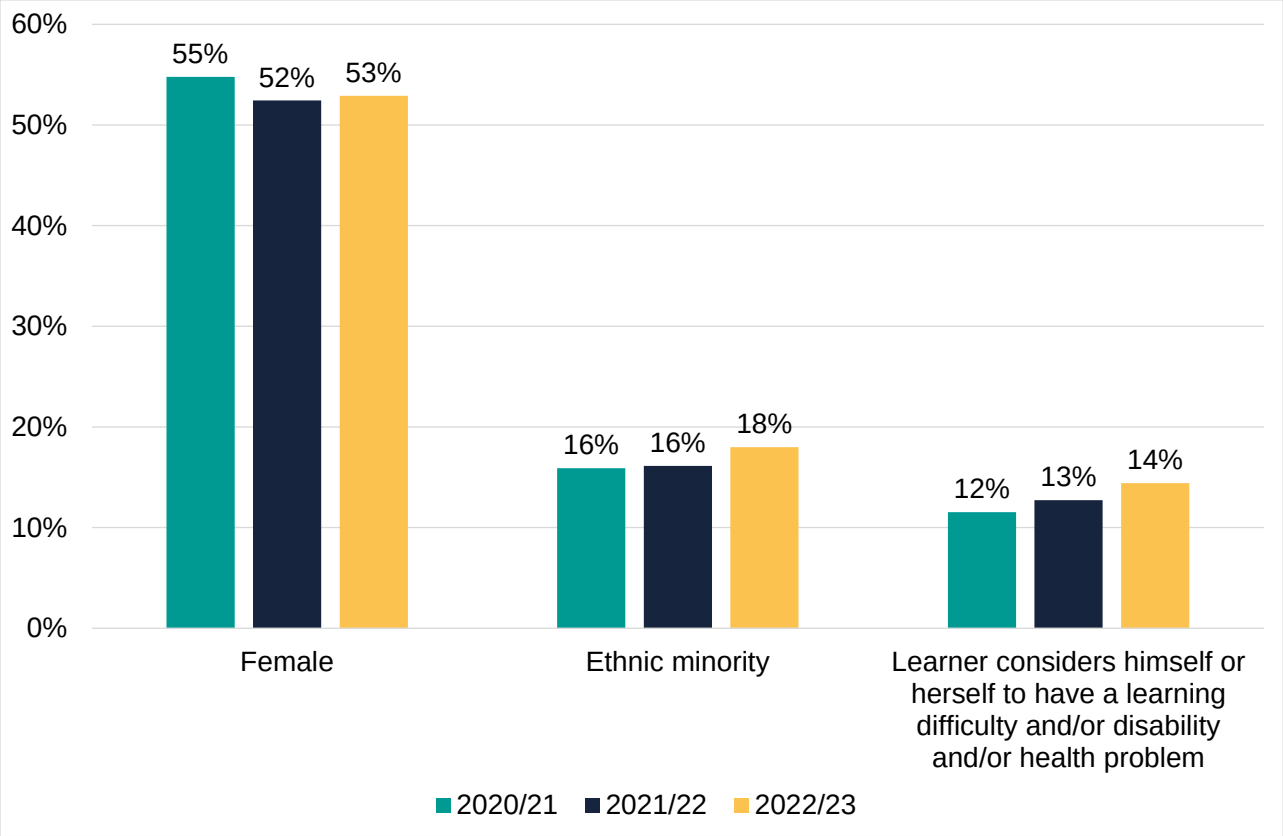
Figure 77: Apprenticeship starts by gender and subject area, West Yorkshire, 2022/23



Source: Department for Education

Eighteen per cent of apprenticeship starts in West Yorkshire during the 2022/23 academic year, were for people with an ethnic minority background. This represents a small increase over recent years.

Figure 78: Proportion of apprenticeship starts by selected learner characteristics, West Yorkshire



Source: Department for Education

Similarly, the proportion of starts for people who have a learning difficulty and/or disability and/or health problem has grown slightly.

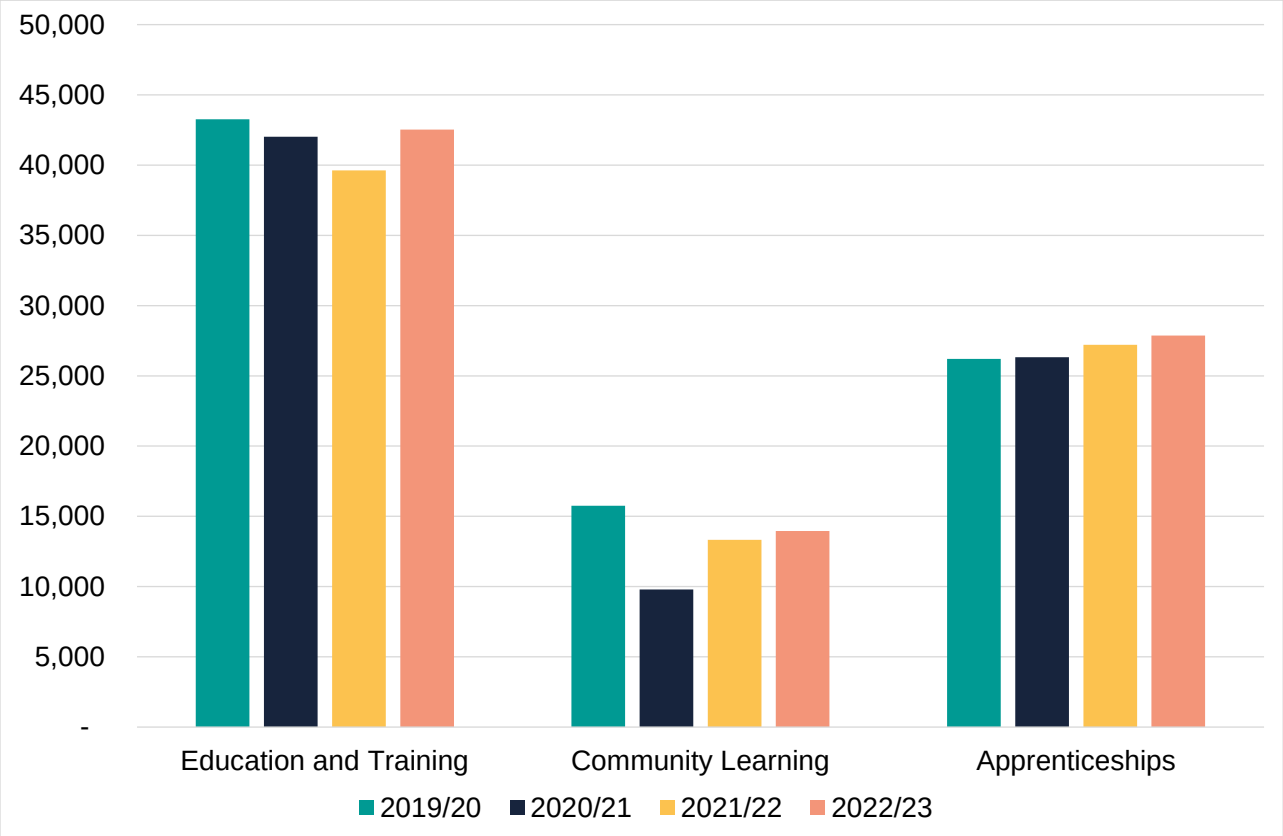
4.8 Adult Education

Looking beyond apprenticeships there is also significant public investment in further education, including Education and Training and Community Learning provision for people aged 19 and over.

There was a recovery in Education and Training participation during 2022/23

There was growth in participation across all strands of Further Education and Skills provision during 2022/23. The level of participation on Education and Training courses grew by 2,900 (+7%) in 2022/23 following a 6% fall in the previous year. Community Learning participation grew by a more modest 640 (5%) following a 36% increase in 2021/22. Adult apprenticeship participation remained stable during 2022/23, growing by 3%, partly reflecting the multi-year nature of apprenticeships.

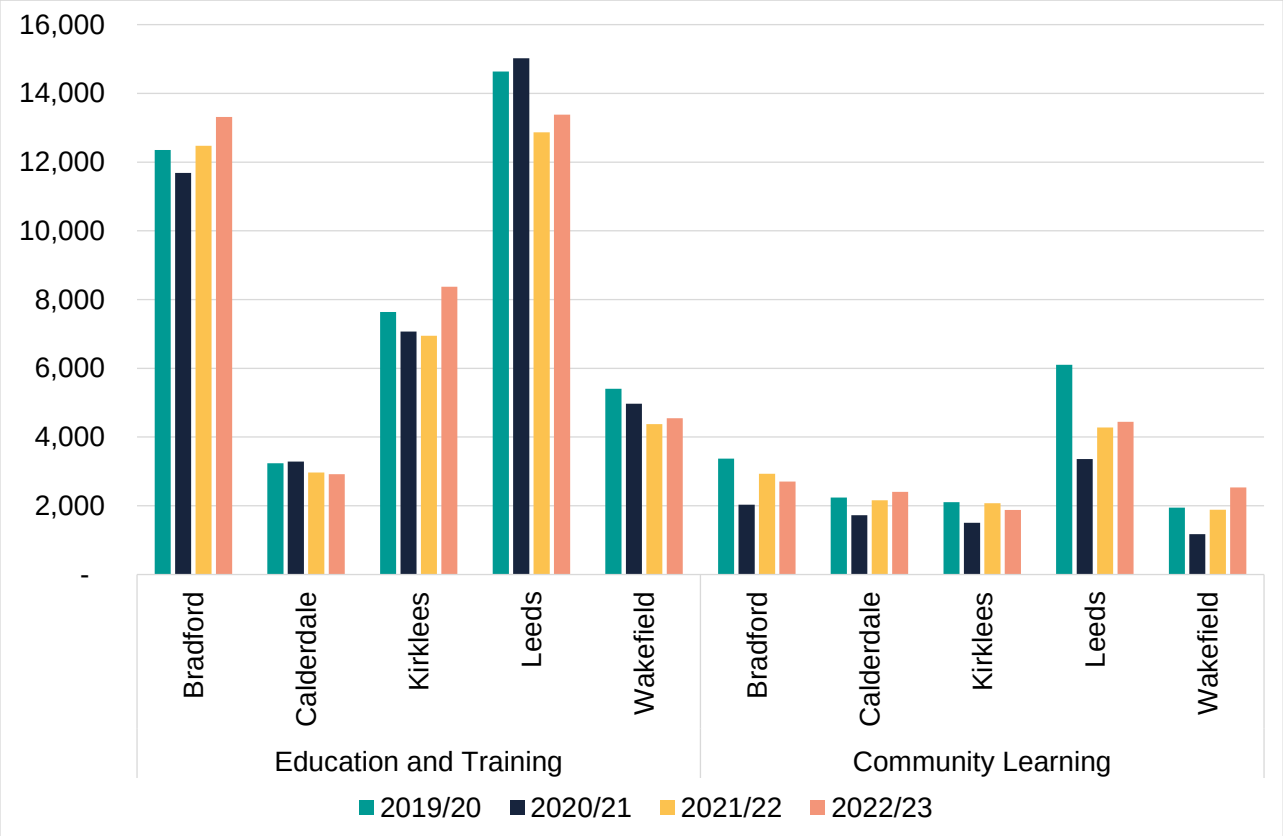
Figure 79: Participation on FE and Skills programmes (learners aged 19+), West Yorkshire



Note: Participation is a count of all publicly-funded learners who were in learning at any point during the year
Source: Further Education and Skills Statistical First Release, Department for Education

The pattern of change at West Yorkshire level was broadly similar to the national average, with Education and Training participation growing by 9% across England in 2022/23 and Community Learning growing by 8%.

Figure 80: Participation on FE and Skills programmes (learners aged 19+) by home district



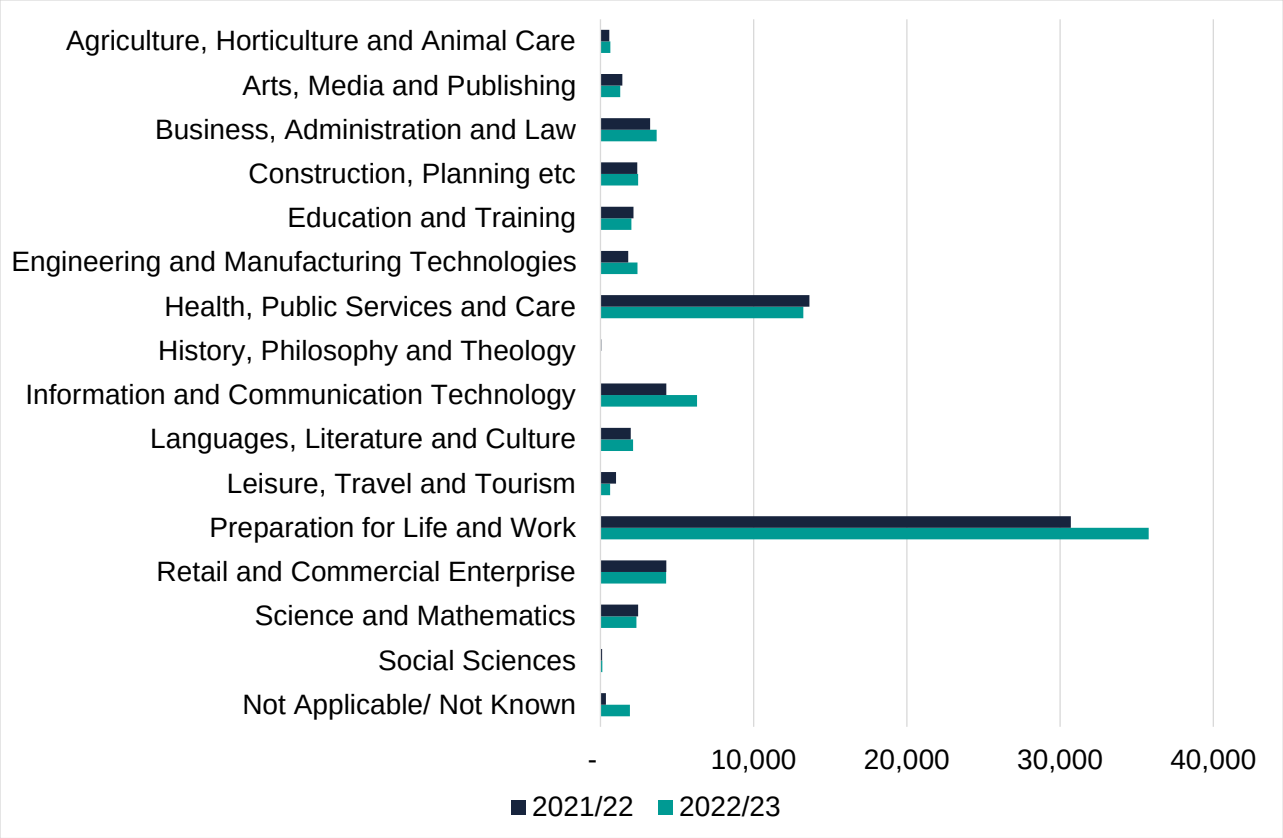
Note: Participation is a count of all publicly-funded learners who were in learning at any point during the year
Source: Further Education and Skills Statistical First Release, Department for Education

Growth in participation was not shared across all local authorities. Kirklees saw the largest increase in Education and Training participation of 21% (+1,430), followed by Bradford with growth of 7% (+840); meanwhile participation in Calderdale declined by around 2% or 50 in absolute terms. For Community Learning, Calderdale and Wakefield both experienced substantial growth of 11% (+250) and 34% (+650) respectively. Bradford and Kirklees each saw declines in participation - of -8% (-230) and -9% (-190) respectively.

Education and Training enrolments increased for *Preparation for Life and Work* and *Information and Communication Technology* in 2022/23

There were around 79,000 funded enrolments on adult Education and Training courses in West Yorkshire in the 2022/23 academic year. This represents a 12% increase (+8,750) on the previous year.

Figure 81: Education and Training funded enrolments by sector subject area, (learners aged 19+), West Yorkshire



Source: Further Education and Skills Statistical First Release, Department for Education

The performance of different subject areas presented a mixed picture during 2022/23.

Preparation for Life and Work is the largest subject area in enrolment terms within this programme strand, accounting for 45% of total enrolments. It saw a growth in enrolments of 5,100 (+17%).

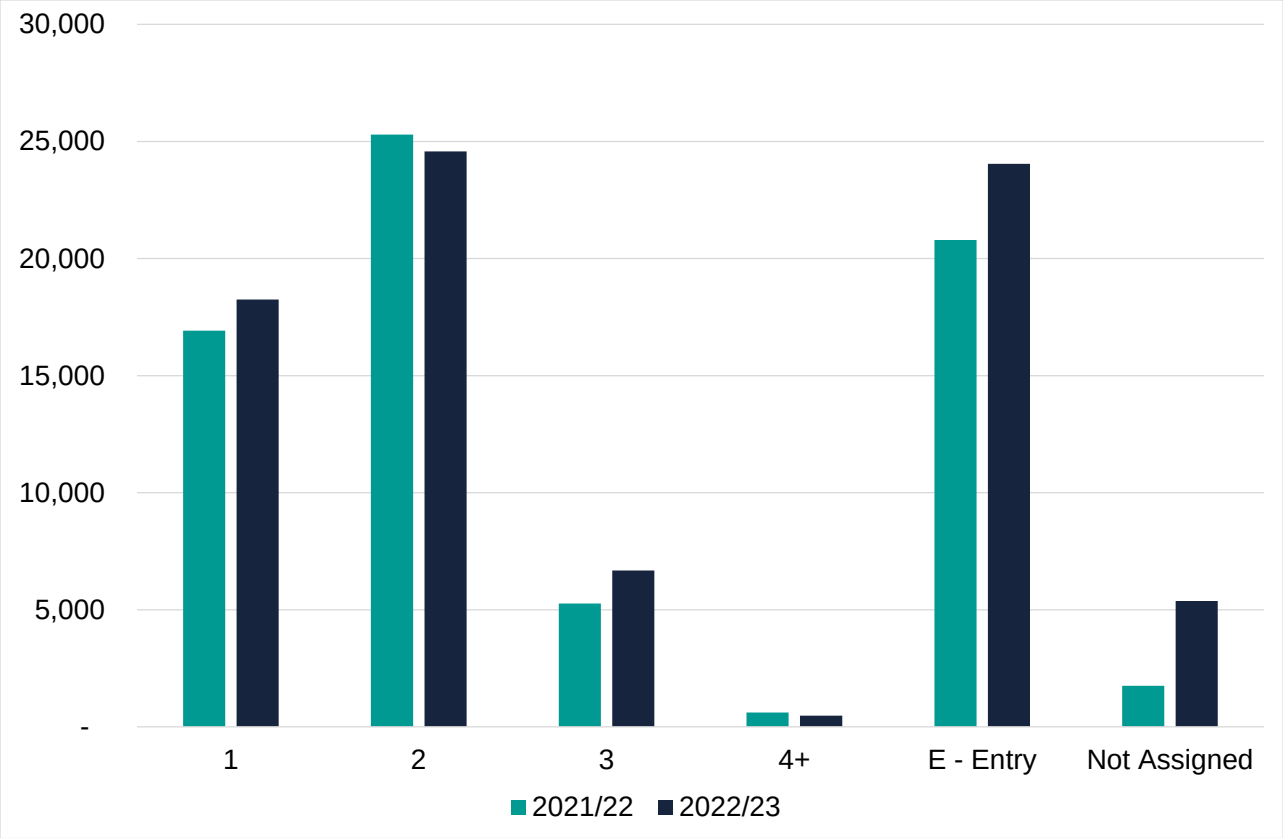
Other subjects which saw significant growth included:

- *Information and Communication Technology*: +2,010 (+47%).
- *Engineering and Manufacturing Technologies*: +600 (+33%)
- *Business, Administration and Law*: +420 (+13%).

In contrast, some subject areas saw decline in 2022/23, most notably:

- *Health, Public Services and Care*: -390 (-3%).
- *Leisure, Travel and Tourism*: -390 (-38%)
- *Education and Training*: -150 (-7%)
- *Arts, Media and Publishing*: -130 (-9%).

Figure 82: Education and Training funded enrolments by level, (learners aged 19+), West Yorkshire



Source: Further Education and Skills Statistical First Release, Department for Education

Much of the growth in enrolments seen in 2022/23 was concentrated in learning aims at Entry Level (+3,250; +16%) and at Level 3 (+1,410; +27%). There was also growth for aims with no assigned level and at Level 1. Enrolments at Level 2 fell by 3% (-720) and declined by 21% (-130) at Level 4 and above.

4.9 Higher Education

It has already been noted that West Yorkshire has a deficit of higher-level qualifications among its working age population; however, it has large and diverse higher education sector.

West Yorkshire has a large HE sector

With around 109,000 students enrolled at its seven[22] institutions during the 2021/22 academic year, West Yorkshire has one of the largest higher education sectors outside London.

The total number of student enrolments at West Yorkshire institutions has grown in recent years, by 17% or 16,000 since 2018/19 and by 12% or 9,000 for UK-domiciled students. The total number of qualifiers, including overseas students grew by 2,900 or 9% over the same period. There were 35,000 qualifiers in 2021/22 including 25,000 UK-domiciled qualifiers. Just over a third (37%) of students enrolled at West Yorkshire institutions are from West Yorkshire.

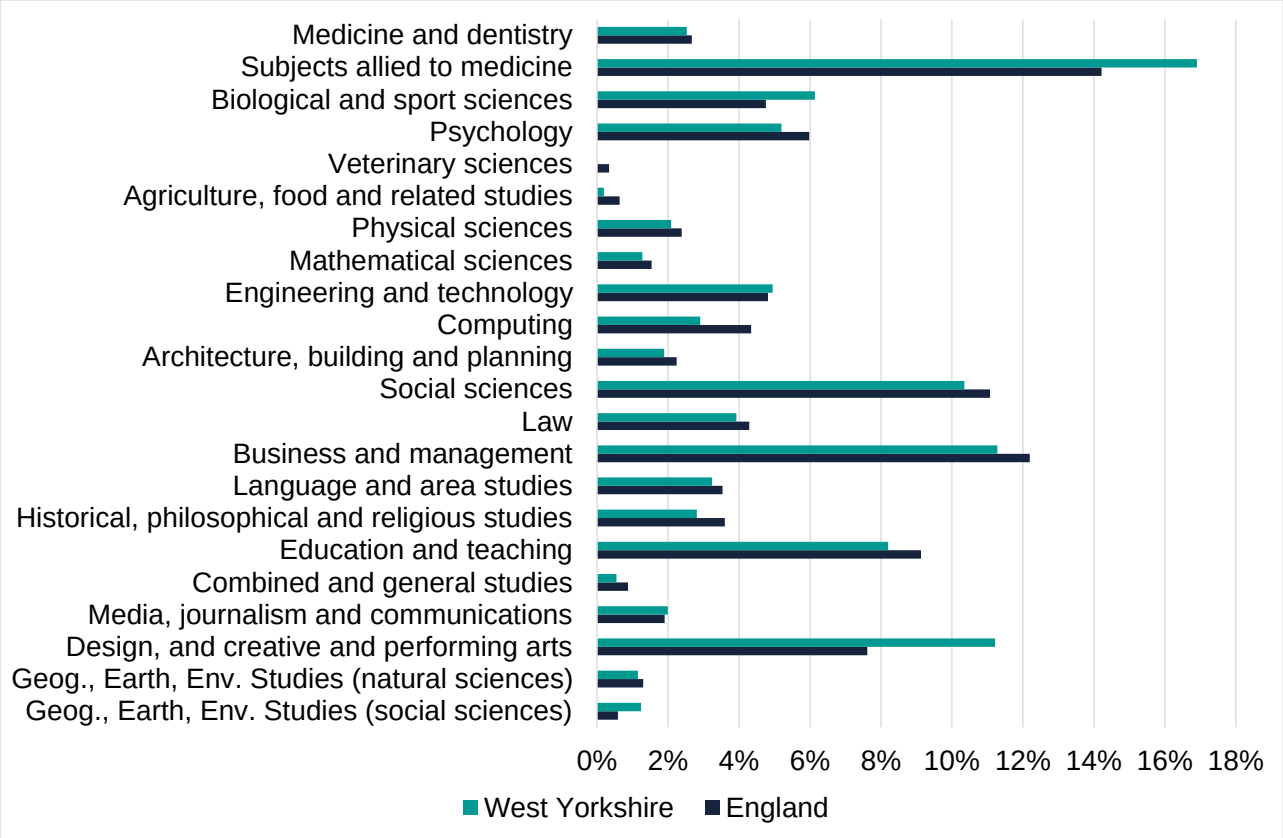
West Yorkshire HE provision is diverse and broad-based

The subject profile of qualifiers from West Yorkshire's HEIs is broadly similar to the national picture. Subjects which account for smaller shares of provision relative to the national average include *Computing*, *Education and teaching* and *Business and management*; but the differences are small.

West Yorkshire is above average in terms of *Subjects allied to medicine* (a category which includes nursing), *Biological and sports sciences* and particularly in *Design, and creative and performing arts,* which accounts for 11% of all qualifiers compared with 8% nationally. More broadly, science and technology subjects account for the same proportion of total qualifiers as nationally, at 44% in each case.

[22] This analysis does not associate institutions which do not submit data to the Higher Education Statistics Agency.

Figure 83: Higher education qualifiers from West Yorkshire institutions by subject area, 2021/22 academic year



Note: UK domiciled qualifiers
Source: HESA

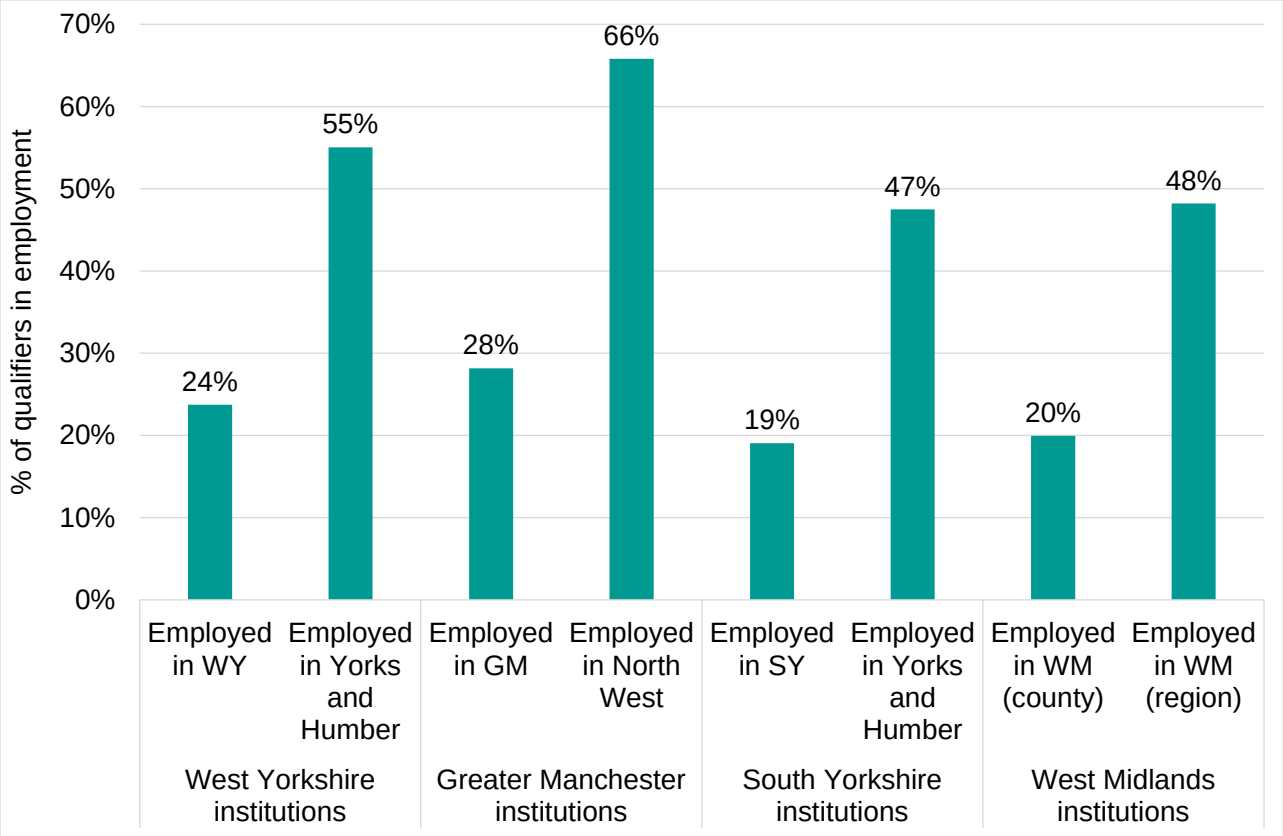
Attraction and retention of graduates in the regional economy is key to maximising the economic benefits of higher education.

Around a quarter of qualifiers from West Yorkshire institutions are in employment in the region 15 months after gaining their qualification

Based on the 2020/21 *Graduate Outcomes Survey*, around 55%[23] of employed qualifiers from West Yorkshire higher education institutions were in employment in Yorkshire and the Humber 15 months after graduation, with 24% in employment in West Yorkshire itself.

[23] When "not known" destinations are excluded.

Figure 84: Proportion of graduates in employment retained in MCA area / ITL 1 region at 15 months by location of institution



Note: UK domiciled leavers from WY institutions in employment after 15 months. Excludes not knowns and overseas destinations.
Source: Graduate Outcomes Survey, 2020/21

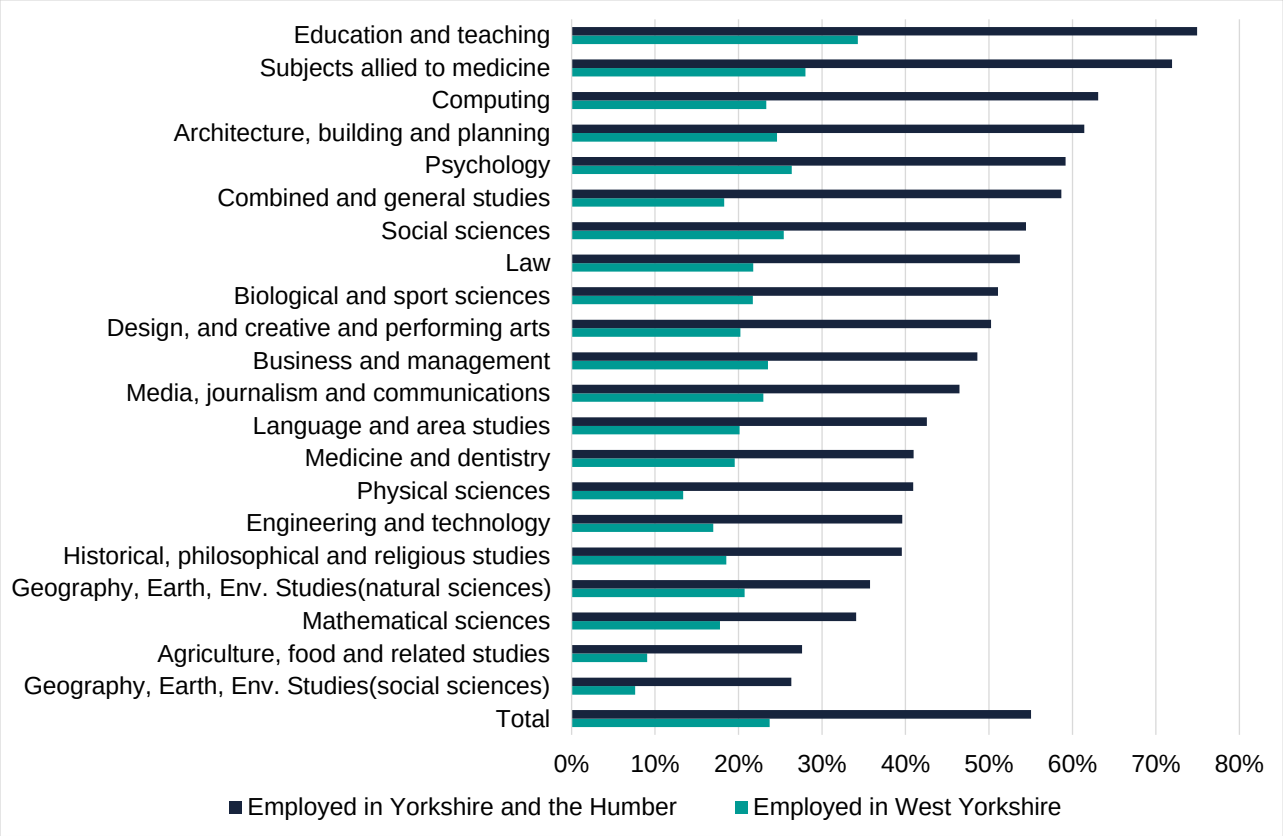
These retention rates are higher than the equivalent rates for South Yorkshire and the West Midlands but somewhat lower than for Greater Manchester.

Focusing on qualifiers who studied at West Yorkshire institutions but also had a West Yorkshire domicile, among this group, 41% of those in employment after 15 months had a West Yorkshire employment location.

The extent to which qualifiers from West Yorkshire institutions with a UK domicile are retained in West Yorkshire varies by subject, as set out in the figure below[24].

[24] The retention rate estimates presented here differ from previous figures because of a shift from *Destinations of Leavers from Higher Education* survey to the *Graduate Outcomes Survey*. The census point in Graduate Outcomes is at approximately 15 months after gaining qualifications whereas for DLHE the main census point was at 6 months. There are also differences in the content and wording of the two questionnaires.

Figure 85: Proportion of qualifiers with Yorkshire and the Humber and West Yorkshire employment location at 15 months by subject



Note: UK domiciled leavers from WY institutions in employment after 15 months. Excludes not knowns and overseas destinations.
Source: Graduate Outcomes Survey, 2020/21

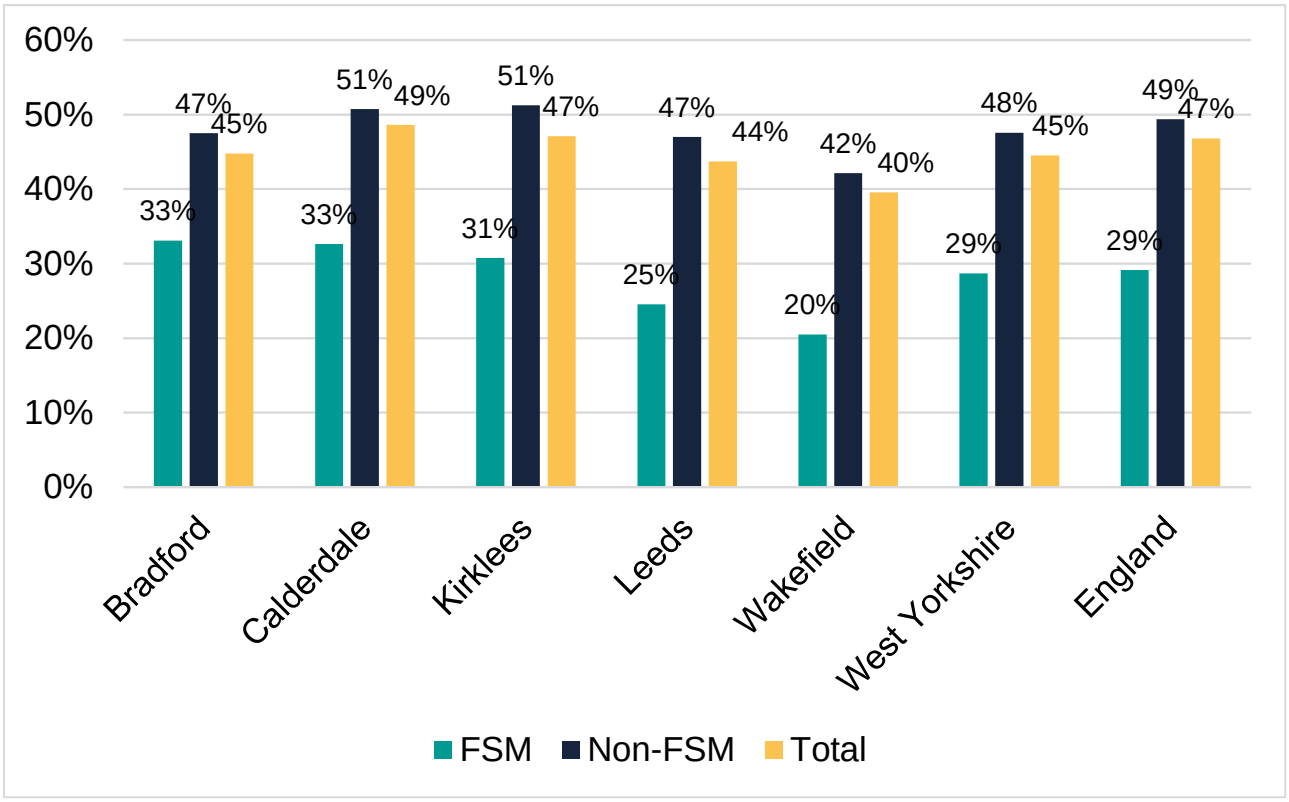
For some technical subjects, West Yorkshire retention rates are relatively low; for example, 9% for *Agriculture*[25], 13% for *Physical Sciences*, 17% for *Engineering and technology* and 18% for *Mathematical Sciences*. *Education* is at the top of the ranking, with a rate of 34%, followed by *Subjects allied to medicine* (28%).

Disadvantaged pupils in West Yorkshire are less likely to enter higher education with no sign of sustained reduction in the gap

Access to higher education offers a key mechanism for promoting social mobility. There is a strong case for supporting people of all ages and communities to progress into higher level learning. However, as with apprenticeships there are issues relating to low higher education entry rates for disadvantaged young people.

[25] It should be noted that the number of qualifiers for this subject area was very small.

Figure 86: Proportion of students entering higher education by free school meal status



Note: Note: Progression rates to higher education by age 19 for state-funded pupils, 2021/22
Source: Department for Education

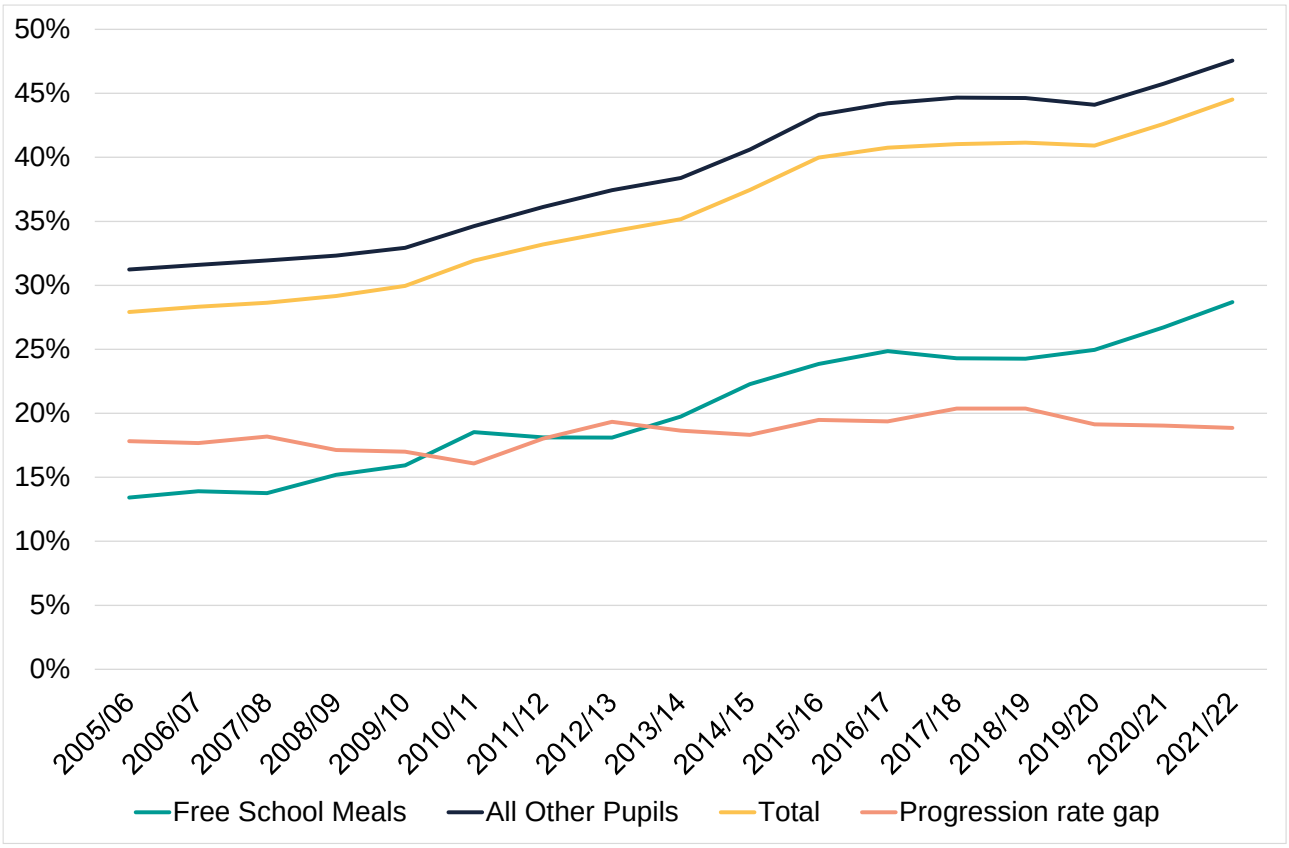
West Yorkshire's overall progression rate into higher education, at 45%, is 2 percentage points below the national average. West Yorkshire's progression rate is also below the average for non-free school meal pupils by 1.8 points but is similar to the national average for free school meal pupils.

Performance on entry rates varies by local authority. Wakefield and Leeds have the lowest overall entry rates, which are 7.2 and 3.1 points below the national average respectively. Meanwhile, Calderdale and Kirklees have entry rates that are higher than the national average, by 1.8 and 0.3 points respectively.

Leeds (-4.6 points) and Wakefield (-8.7 points) both under-perform against the national average in respect of FSM pupils. But Bradford (+3.9), Calderdale (+3.5) and Kirklees (+1.6) outperform the national average.

West Yorkshire's progression rate gap between non-FSM and FSM pupils is slightly below the national average at 19 percentage points versus 20 points. Leeds and Wakefield have the joint widest gap at local authority level at 22 points, followed. Bradford's progression rate gap is the lowest in West Yorkshire and below the national average at 14 points.

Figure 87: Trend in higher education progression rate and progression rate gap (FSM vs non-FSM pupils)



Source: Department for Education

West Yorkshire's overall higher education progression rate increased in 2021/22 and the longer-term trend is upwards for young people eligible for free school meals as well as those not eligible. However, there is no sign that the progression rate gap is narrowing: it has held steady at around 19 to 20 points in recent years.

4.10Workforce Development

Improvements to the skills base of West Yorkshire depend to a large degree on ongoing investments by employers in workforce development. People who are already in employment will remain the mainstay of the labour force for some time to come and are projected to account for a large majority of workers active in the labour market in 2030[26].

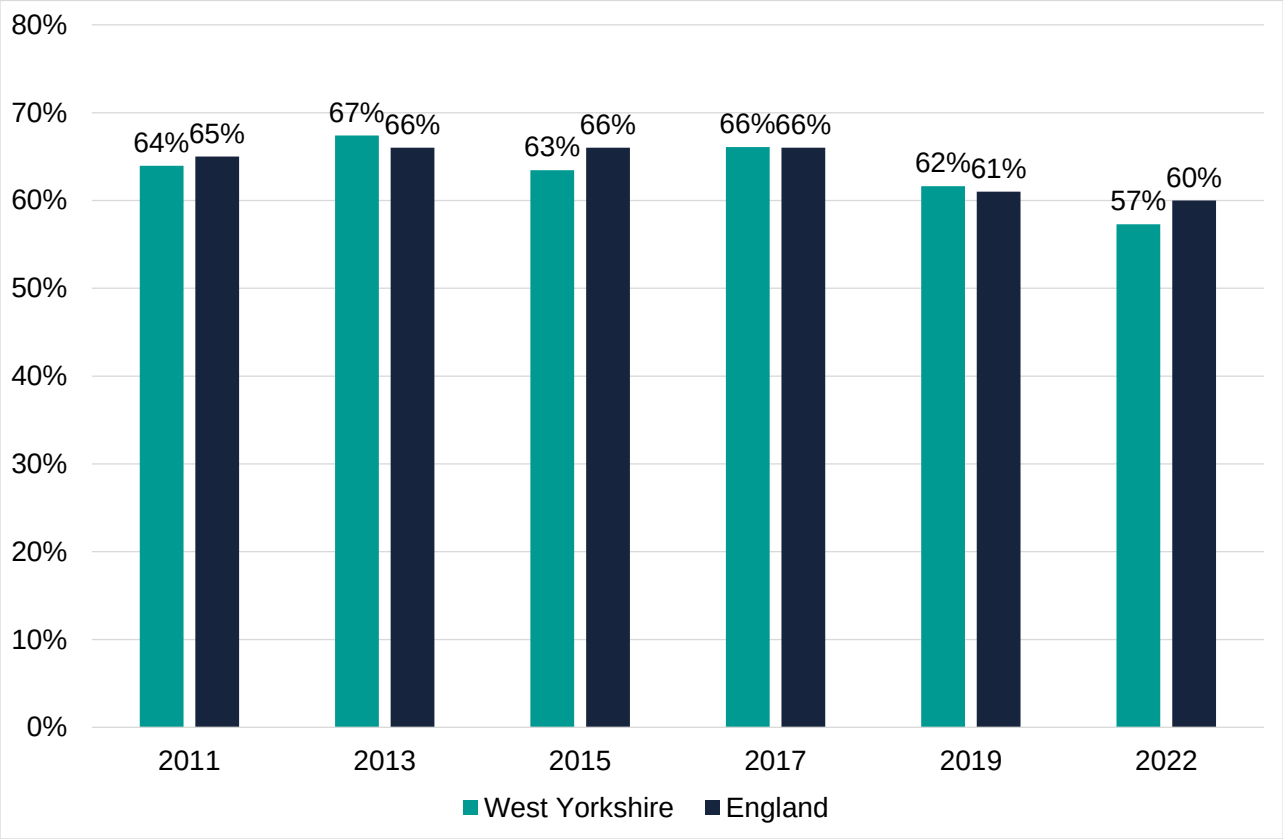
The scale of employers' investment in workforce development also shows its key role within the skills landscape. An **extrapolation** of spend per person trained taken from the Employer Skills Survey it is estimated that employers in West Yorkshire invest around **£1.87bn** per annum on training their staff when wage costs are included.

[26] Industrial Strategy Council (2020) UK Skills Mismatch in 2030. Available at: UK Skills Mismatch 2030 – research paper | Industrial Strategy Council

The prevalence of training has not increased over time

The Employer Skills Survey 2022 shows that 57% of employers in West Yorkshire provide training to their staff, slightly below the England average of 60%. At the same time 60% of staff receive training, the same proportion as the national average.

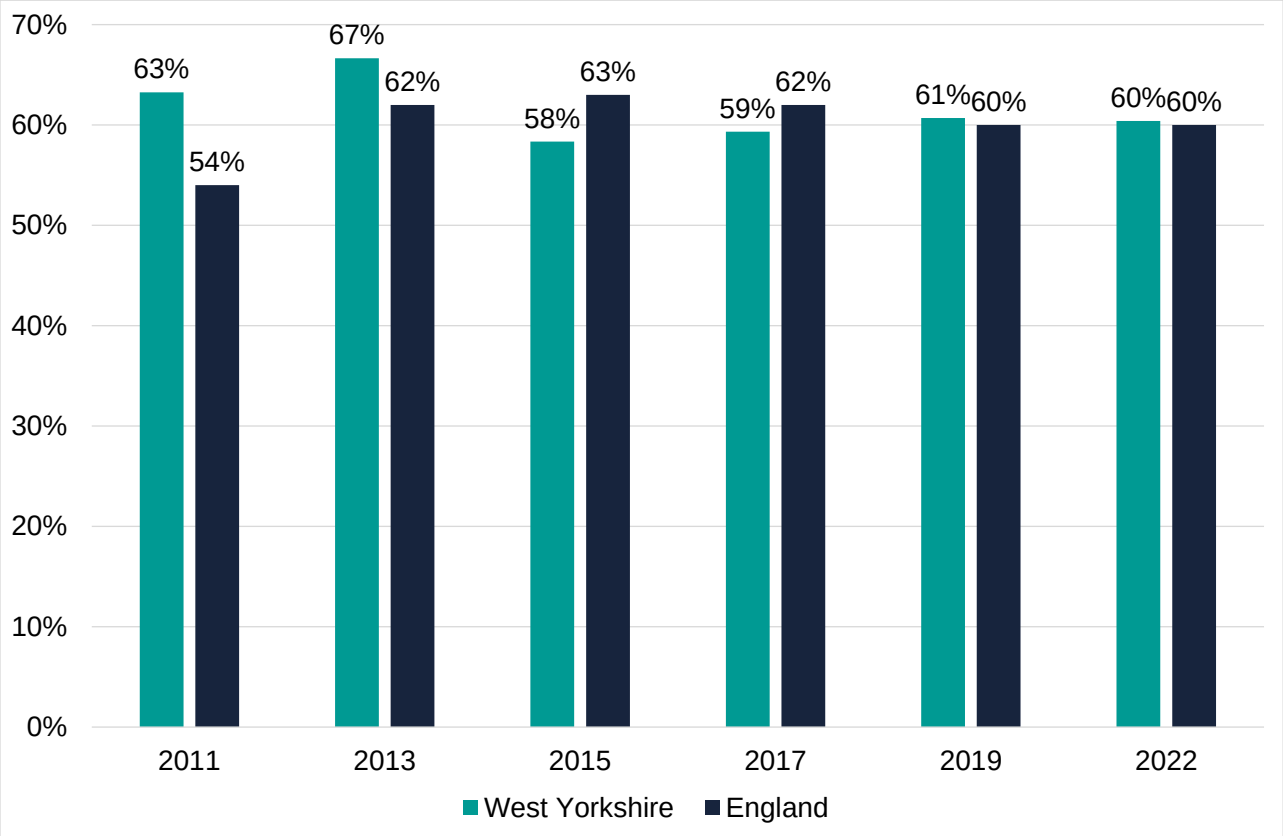
Figure 88: Proportion of employers providing any kind of training, West Yorkshire



Source: Employer Skills Survey 2022

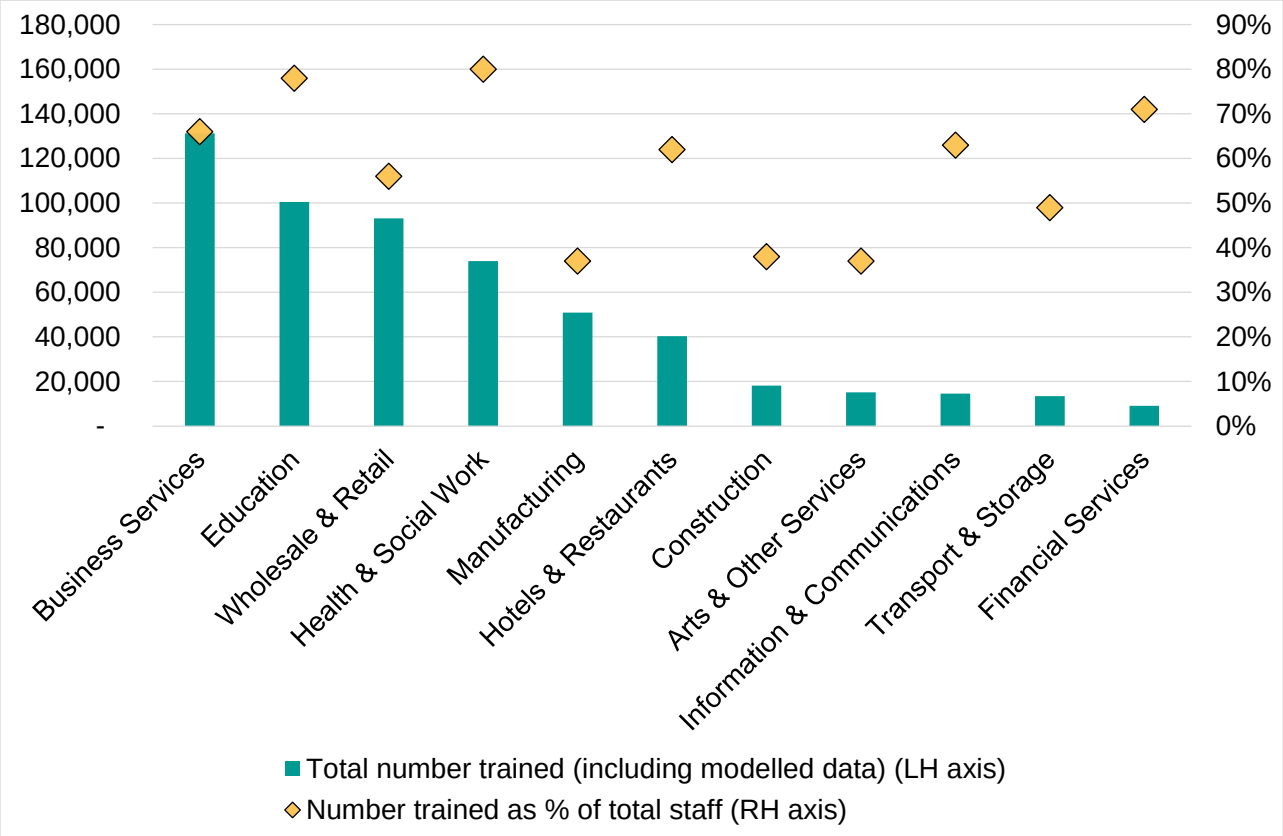
There has been no sign in recent years of a sustained improvement in the proportion of employers providing training nor in the proportion of staff receiving training and there are signs of a reduction in recent years for the former indicator.

Figure 89: Proportion of employees receiving any kind of training, West Yorkshire



Source: Employer Skills Survey 2022

Figure 90: Volume and prevalence of training by sector, West Yorkshire



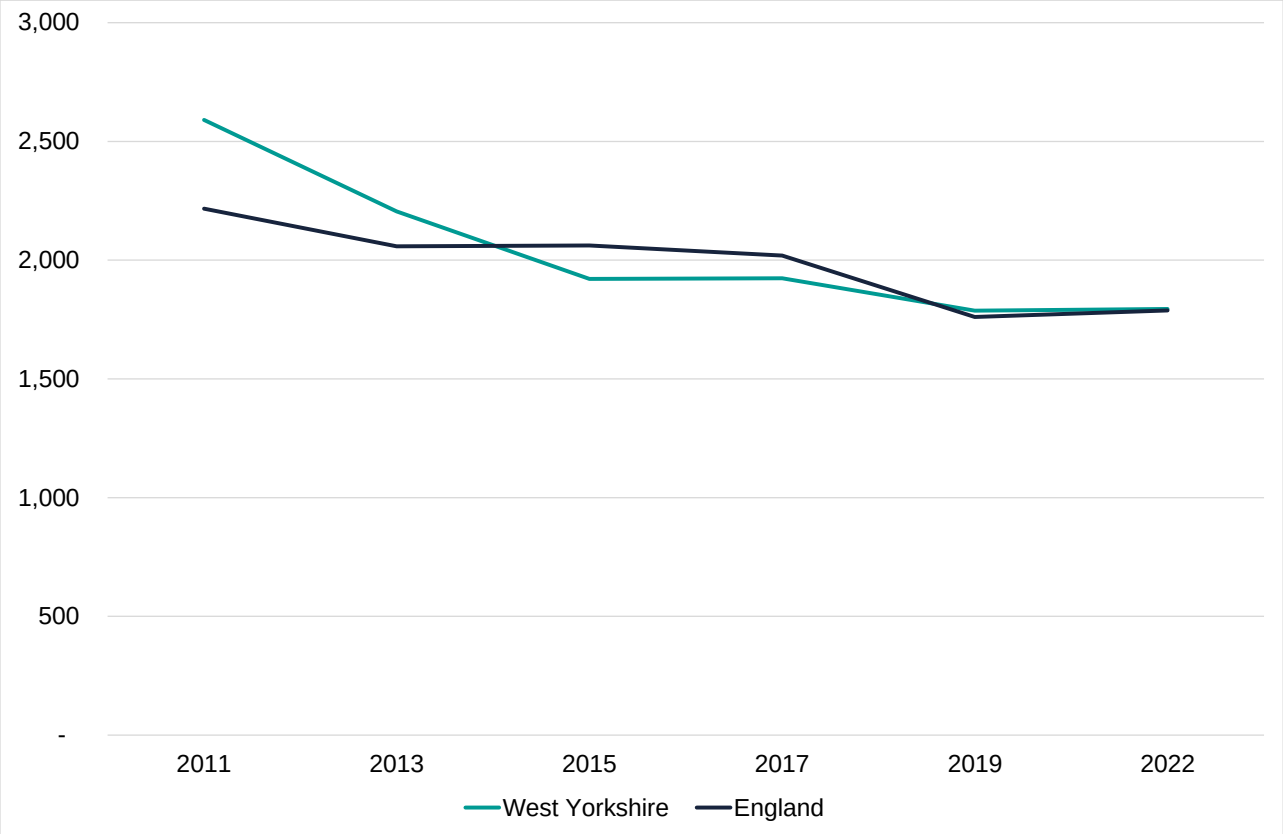
Source: Employer Skills Survey 2022

In sectoral terms, *Business services*, *Education, Wholesale and retail* and *Health and social care* are responsible for the largest volumes of training (days of training) with *Health and social care* having the highest training prevalence (% of staff trained). There is also a high prevalence of training in *Education* and *Financial services* sectors.

Many employers admit that they under-invest in training

Employers' total investment in training over the previous 12 months was equivalent to around £1,795 per person employed in West Yorkshire, according to the Employer Skills Survey 2022, similar to the England average of £1,788. Spend per employee in West Yorkshire has fallen by 31% since 2011, compared with a 19% fall nationally.

Figure 91: Value of investment in training per employee (£)

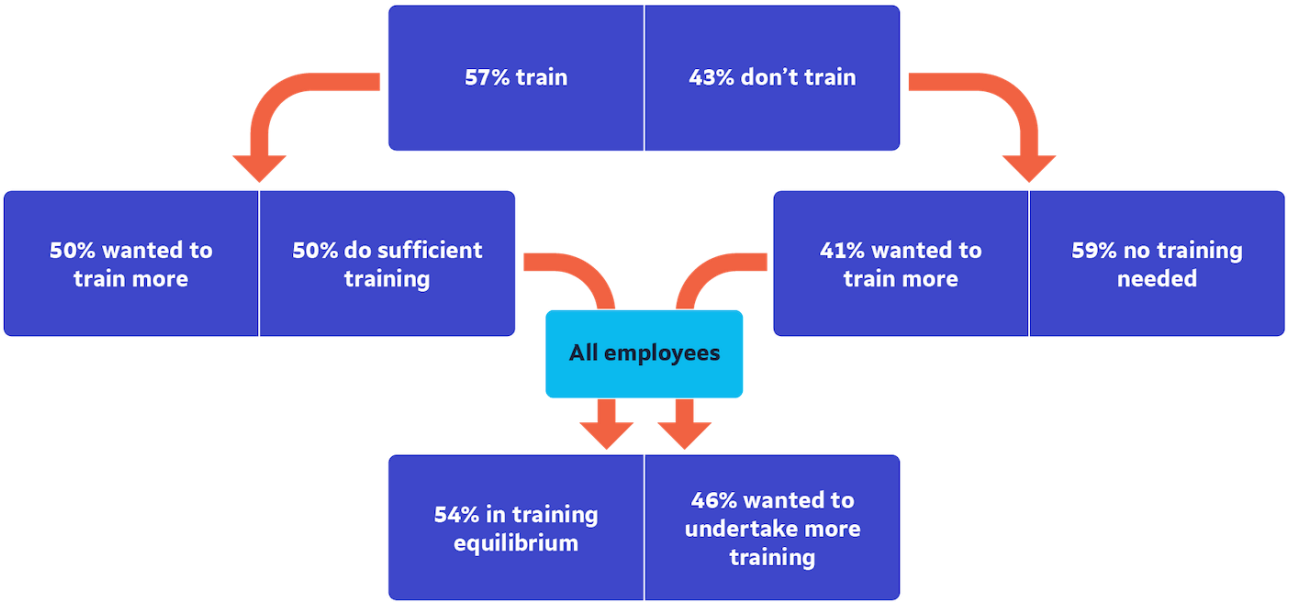


Source: Employer Skills Survey 2022

In assessing whether enough training is being undertaken by local employers it is important to view training behaviour in the context of business need for training.

Among the 43% of local establishments who do not train, a majority (59%) say that no training is needed but a significant minority (the remaining 41%) say that they would have liked to have done some training.

Figure 92: Training equilibrium summary, West Yorkshire

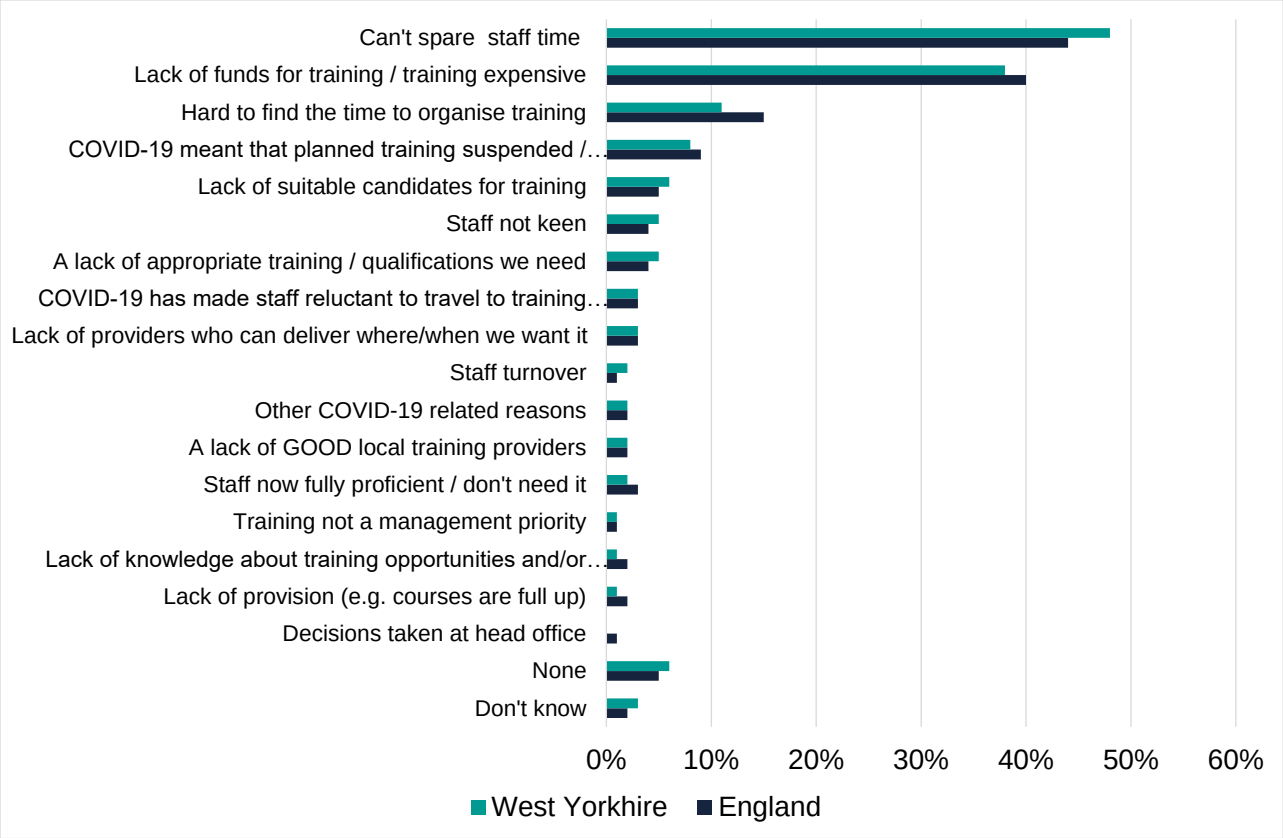


Source: Employer Skills Survey 2022

Among those employers who did invest in training (57%) of the total, 50% would have liked to have done more.

The overall picture is that 46% of employers would have liked to have done more training (or some training in the case of non-training employers). We can view this as an acknowledgement by many employers that they are under-investing relative to the skills needs of their business.

Figure 93: Barriers to providing more training among employers who would have provided more training if they could



Source: Employer Skills Survey 2022

The chief barriers to doing more training were an inability to spare staff time for training (48% of respondents) and a lack of funds for training (38%), followed by a lack of time to organise training (11%). Issues relating to the availability of suitable training provision and perceived lack of capability among training providers were much less likely to be identified by respondents.

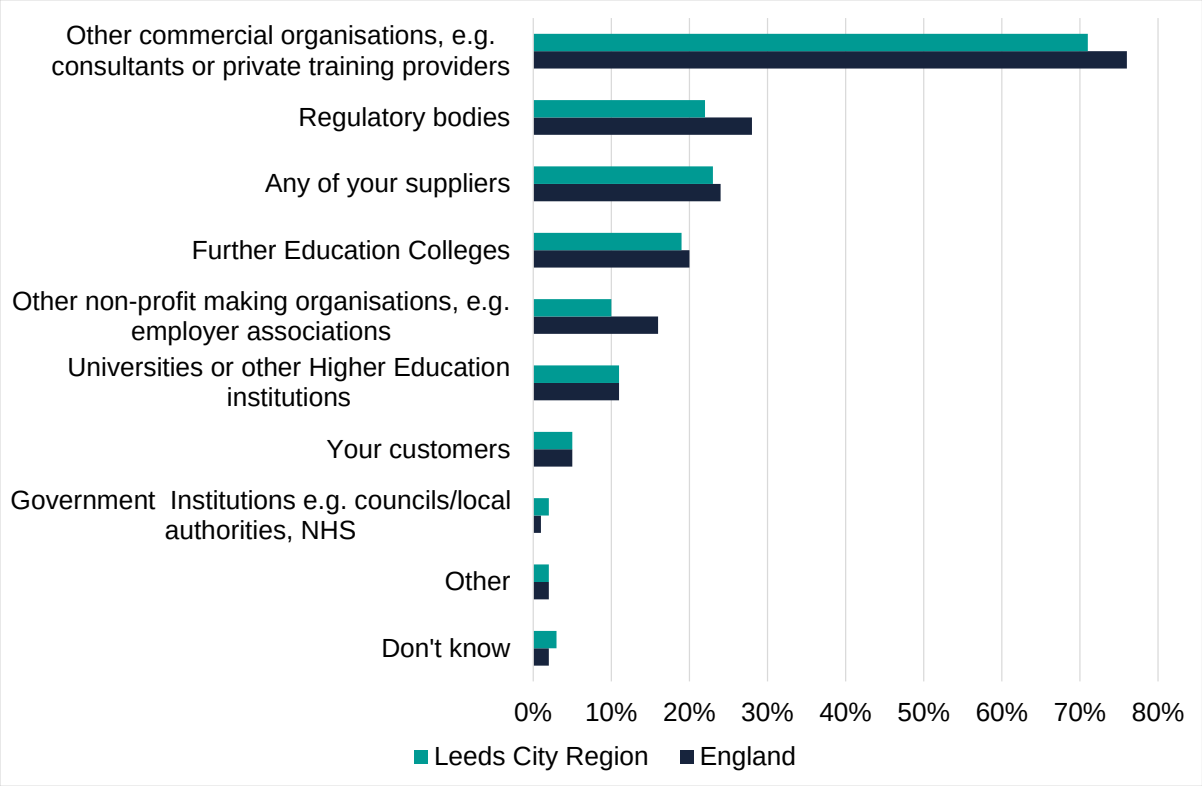
This suggests that the key challenge is to demonstrate to employers that the commitment of time and money to training is a worthwhile investment. A key mechanism for doing this is the promotion of mechanisms that effectively identify skills development requirements linked to wider business needs and which enable employers to harness available skills in a way that contributes to the achievement of business objectives.

Around a third of employers invest in externally provided training

Survey data indicates that among employers who undertake external training a majority use private sector / commercial sources of support to meet their external training needs.

Around a third (32%) of employers in West Yorkshire invest in externally provided training, with the remainder relying on internal training exclusively or do not provide training at all. Among those employers who do draw on external training, around 70% say that they use commercial organisations such as consultants or private providers.

Figure 94: External training sources used in last 12 months: % of employers who provide external training, West Yorkshire



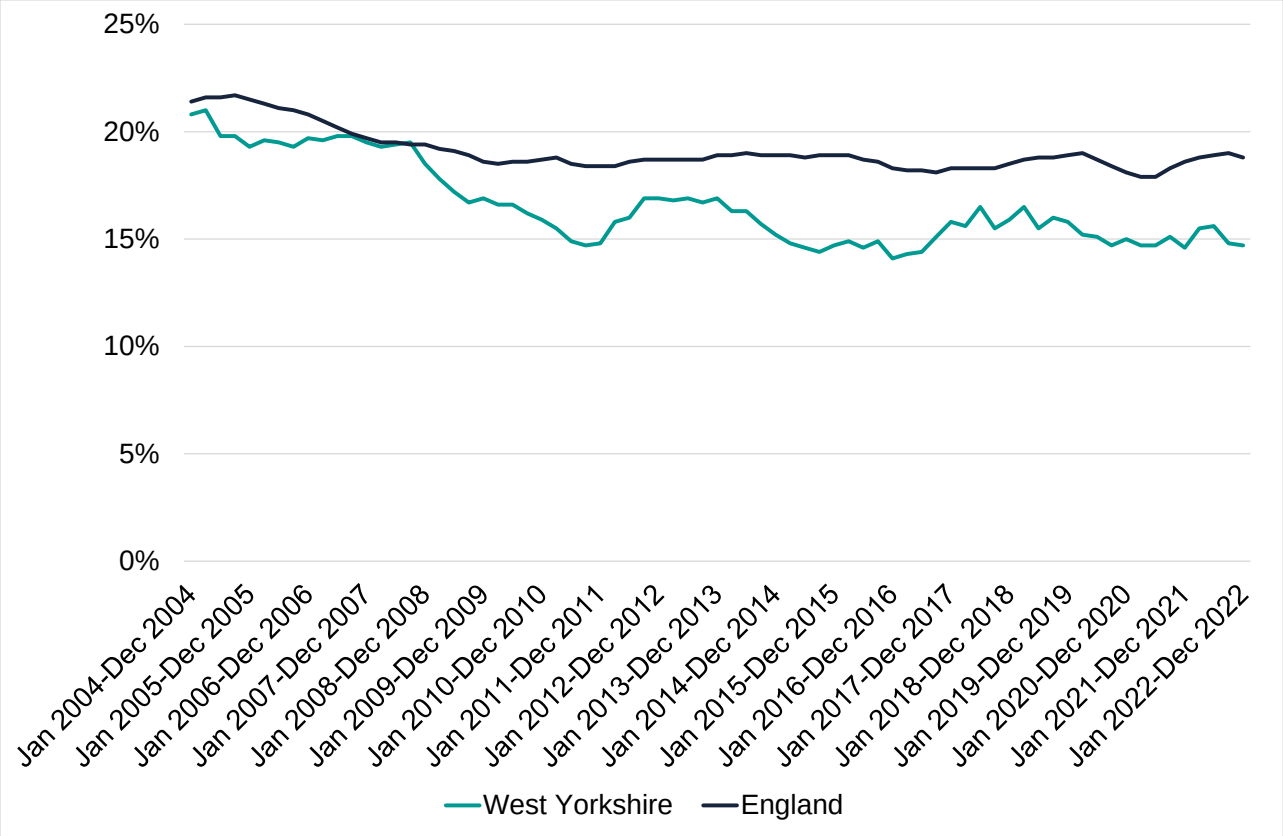
Source: Employer Skills Survey 2022

Just under one-fifth (19%) use further education colleges and 11% use higher education institutions, including universities. In total, 23% of employers say they use any public source to meet their external training needs. The likelihood of employers using these sources of training at West Yorkshire level is similar to the national average.

The proportion of workers receiving training in West Yorkshire is below the national average

Data from the Annual Population Survey shows that the proportion of local people receiving job-related training declined between 2008 and 2011. Since then, the proportion receiving training has remained below the national average on a consistent basis and with little sign of a sustained recovery in recent years; indeed the proportion participating in training in West Yorkshire in 2022 was 2 percentage points lower than a decade previously in 2012. National data shows a decline job-related training during the pandemic followed by a recovery during 2021 and 2022.

Figure 95: Proportion of people of working age (16-64) receiving job-related training in previous 13 weeks



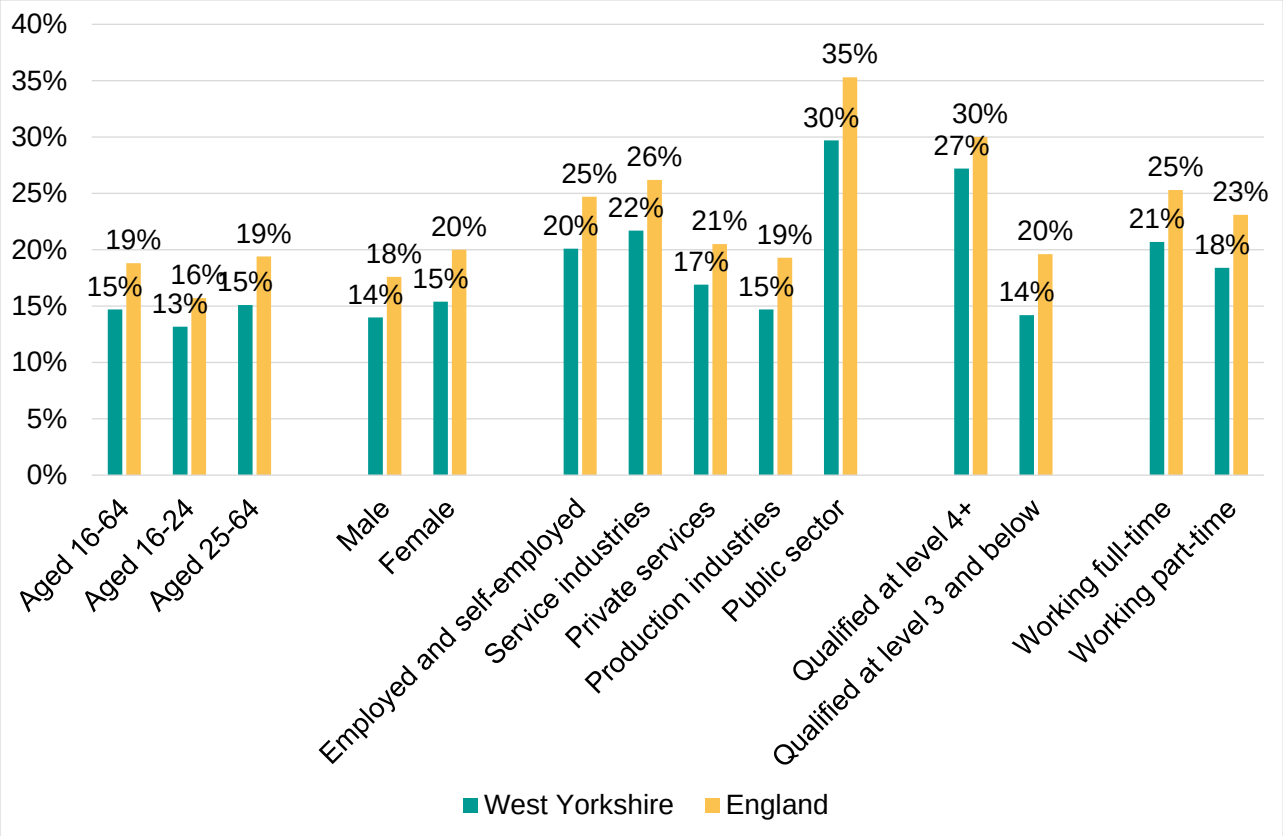
Source: Annual Population Survey

Looking at individual access to training, data from the Annual Population Survey shows that local people are less likely to undertake job-related training than nationally, with 15% of people of working age receiving training in the previous 13-week period compared with the national average of 19%. West Yorkshire performs consistently below the national average in respect of access to training for various groups in the workforce relative to national counterparts (see Figure 96 below).

There is unequal access to job-related training

Some workforce groups are significantly less likely to undertake job-related training than others, with a potential impact on prospects for pay and progression. Arguably, people who could most benefit from skills development are least likely to be provided with access to it. The pattern broadly reflects that seen at national level, although for most categories the incidence of job-related training is lower locally than nationally.

Figure 96: Proportion of people receiving job-related training in last 13 weeks by labour market group



Source: Annual Population Survey, January to December 2022

People who are in employment or self-employment are more likely than jobless people (unemployed and inactive) to receive job-related training. Jobless people receive training in some circumstances to prepare them for employment opportunities.

There are important differences in access to training by industry. Workers in the production industries are less likely to participate than their counterparts in the service industries; in particular, people employed in the public sector are the group most likely by far to receive job-related training.

Young people (aged 16-24), both nationally and locally, are somewhat less likely to participate in job-related training than people aged 25 and over, partly because they are more likely to be in full-time education.

Workers who are already qualified to a high level (level 4+) are considerably more likely to receive training than their less qualified colleagues (those qualified at level 3 and below).

Finally, women are slightly more likely than males to receive training, but to a large extent this reflects their strong representation in public sector employment.

Clearly these inequalities of access to work-related training serve as a potential barrier to career progression and to the fulfilment of individuals' potential.

Access to training and qualifications is associated with higher pay

Equal access to opportunities is important because workplace training and adult education offer a route to higher wages and better opportunities. They can allow adults to upskill and retrain for better-paid occupations. The value of reskilling is evidenced by the fact that access to increased training and higher qualifications is associated with an increased chance of escaping from low pay. In particular, individuals undertaking higher levels of learning (most notably at Level 3) in certain subjects (such as engineering and manufacturing), and longer courses are more likely to escape from low pay[27].

4.11 Work experience and work inspiration

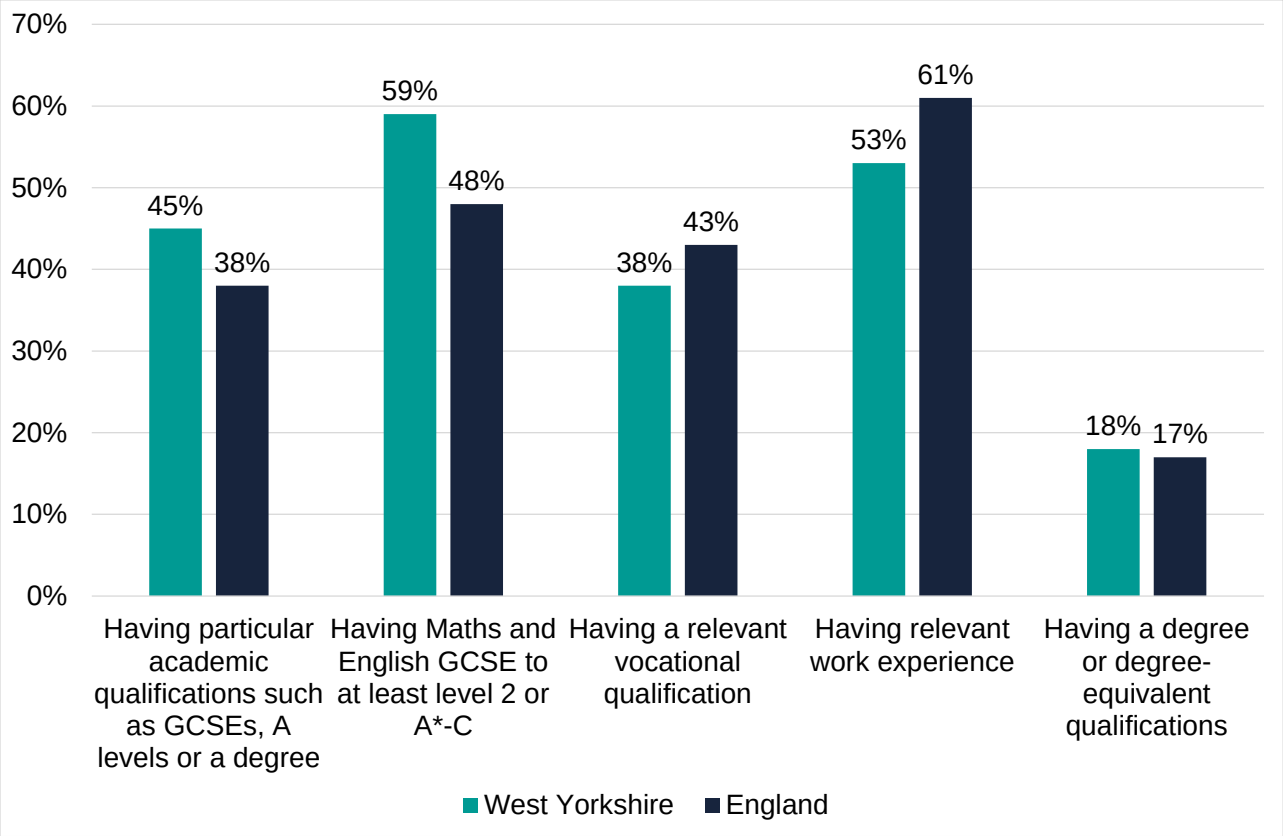
Work experience and work inspiration are important ways in which the world of business can engage with education. These activities play a key role in supporting an effective transition into the world of work for young people and other groups by helping individuals to understand and meet the requirements of employers. Work inspiration involves businesses providing advice and support to students about the workplace and their industry and enables individuals to broaden their perspectives and develop aspirations regarding future career paths. By contributing to improved career-readiness and employability these activities have a positive influence on local labour supply.

Relevant work experience is key to employers' recruitment decisions

The Employer Skills Survey 2022 measures the relative importance to employers of a number of factors in their recruitment decisions including academic qualifications (Maths and English GCSE A*-C as well as the broad range of academic qualifications, including at degree level), vocational qualifications (VQs), and relevant work experience.

[27] Social Mobility Commission (2020) Learning ladders: The role of adult training in supporting progression from low pay. Available at https://www.gov.uk/government/publications/learning-ladders-adult-training-and-progression-out-of-low-pay

Figure 97: Factors looked for by employers when recruiting (proportion rating as critical or significant)



Base: All establishments
Source: Employer Skills Survey 2022

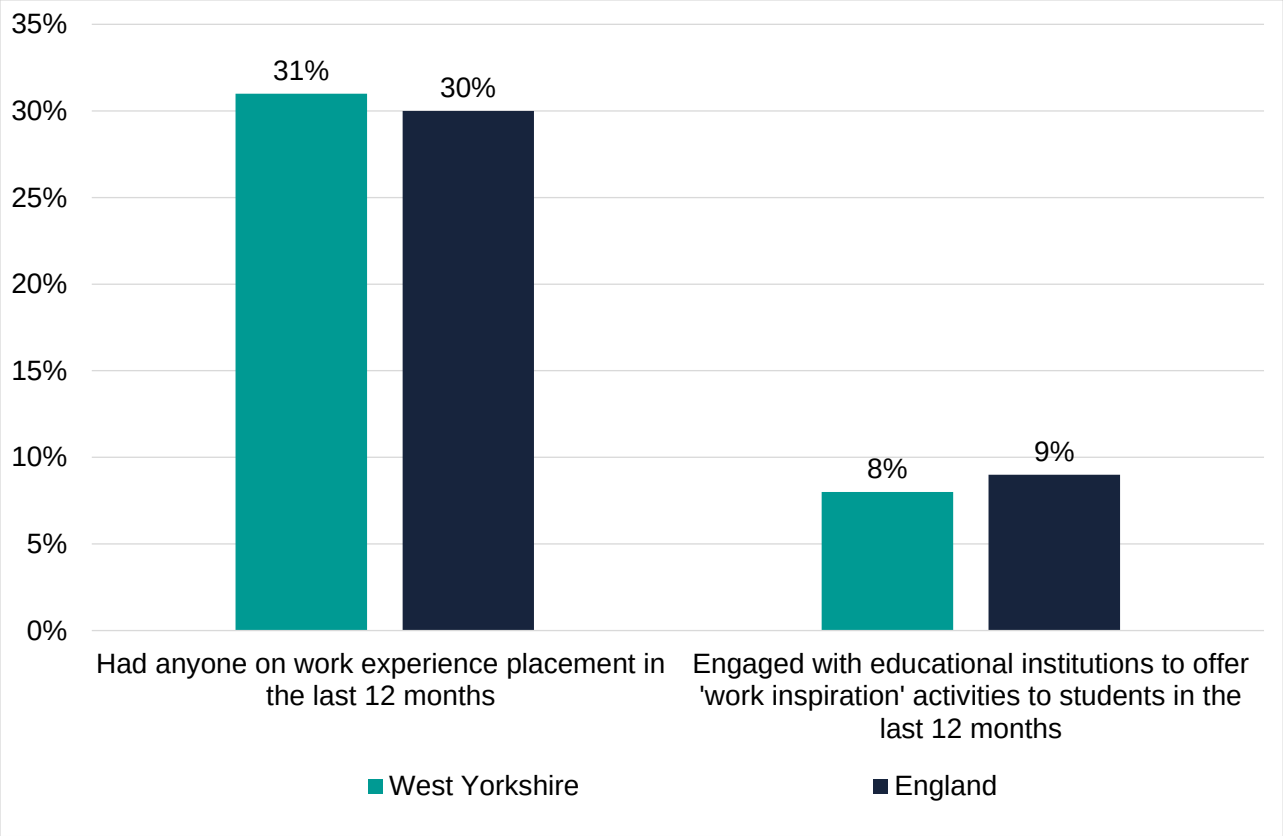
The results show that employers, both locally and nationally, reported that they attach significant value to work experience, rating it more important than all other factors except the achievement of Maths and English at GCSE level in the case of West Yorkshire. Substantial proportions of employers consider that academic and vocational qualifications are either critical or significant to recruitment decisions. The proportion is somewhat smaller for degree-level qualifications, reflecting the fact that many jobs do not require qualifications at this level.

Just under a third of employers provide work experience placements

The Employer Skills Survey examines the extent to which employers at a local level engage in work experience and work inspiration activities.

Although most employers consider that relevant work experience is an important factor in recruitment decisions, a minority actually offer work experience placements.

Figure 98: Proportion of employers who have had anyone on a work experience placement and / or have offered work inspiration in previous 12 months

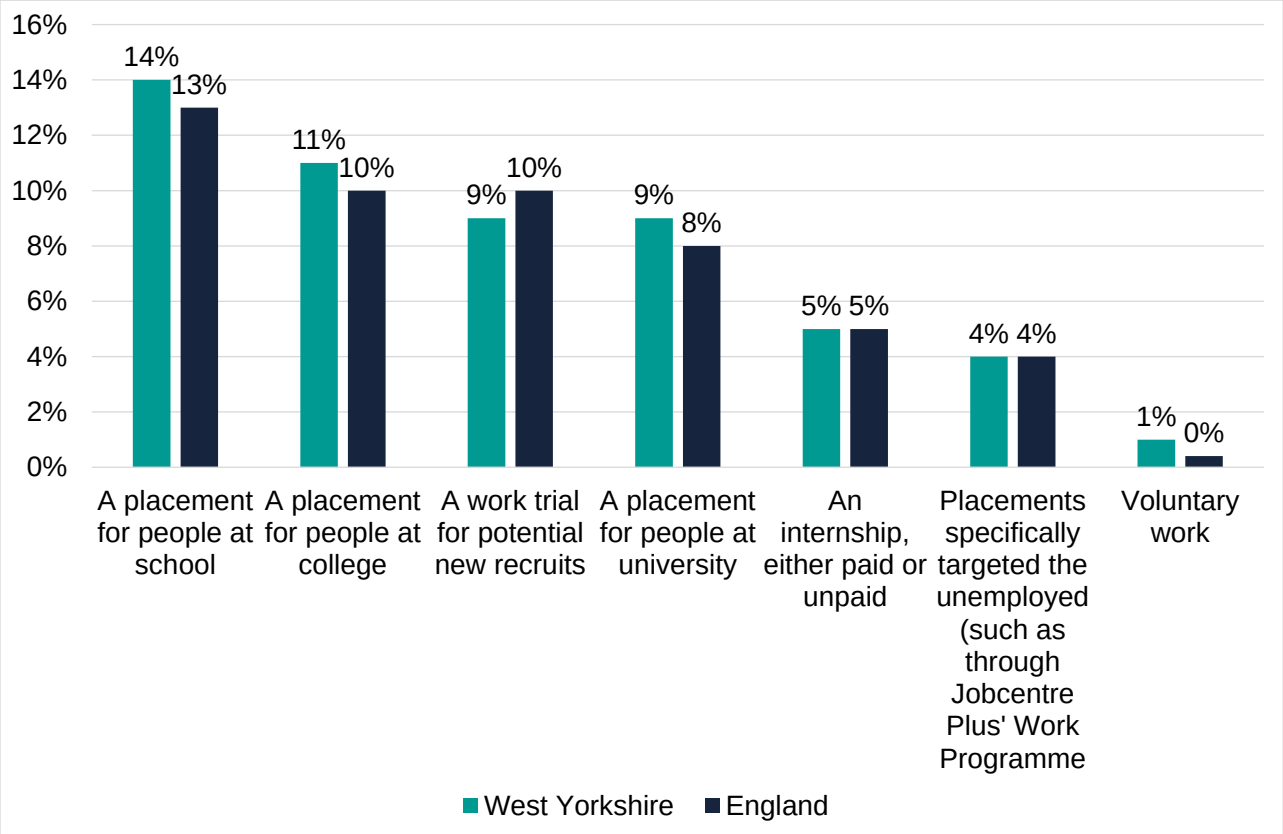


Note: Work experience placements include adult placements, work trials and internships, as well as placements for those in education. Work inspiration activities include careers talks, site visits, mentoring, mock interviews, enterprise competitions and input to design of coursework
Base: All establishments
Source: Employer Skills Survey 2022

The survey finds that 31% of employers in West Yorkshire have provided a work experience placement in the previous 12 months, similar to the England average of 30%.

Employers are most likely to offer placements for school pupils, followed by people at college and then by people at university. Around 23% of employers provided some kind of education placement. Only 4% of employers participated in a placement targeting the unemployed.

Figure 99: Type of work experience placement provided in last 12 months



Base: All establishments
Source: Employer Skills Survey 2022

The main reasons that Leeds City Region employers give for offering work experience placements, according to the survey results, is in order to give people work experience (48%), to help with recruitment (32%) and for moral / altruistic reasons (19%).

The key barriers cited by local employers to offering placements or other work-related experiences to students of educational institutions are structural (e,g, the establishment has no suitable roles, placements not suitable due to size of establishment), cited by 66% of employers; an active choice not to – cited by 12% of employers; and a lack of awareness (15%). Very few indicated that educational institutions of various kinds were difficult to engage with.

As the figure above shows, a much smaller proportion, 8%, offer work inspiration activities in West Yorkshire than offer work experience; this is similar to the national average.

5 Mapping of skills demand and supply

Skill mismatches reflect an imbalance between supply and demand in the labour market, between the skills available and the skills needed by employers and the wider economy.

This inability to obtain the skills that are needed is a key barrier to business growth and improved productivity for firms. In some cases, individuals invest in skills that have limited economic value in terms of employer demand and this represents a missed opportunity for the individual and a constraint on their career potential.

Skills mismatches are often short term, as the operation of the market leads to an increase in the supply of people with the necessary skills, but in some cases, they are acute and persistent, with significant implications for business performance. This kind of market failure presents a policy priority but also offers an opportunity for individuals considering their career options to target areas of unmet demand.

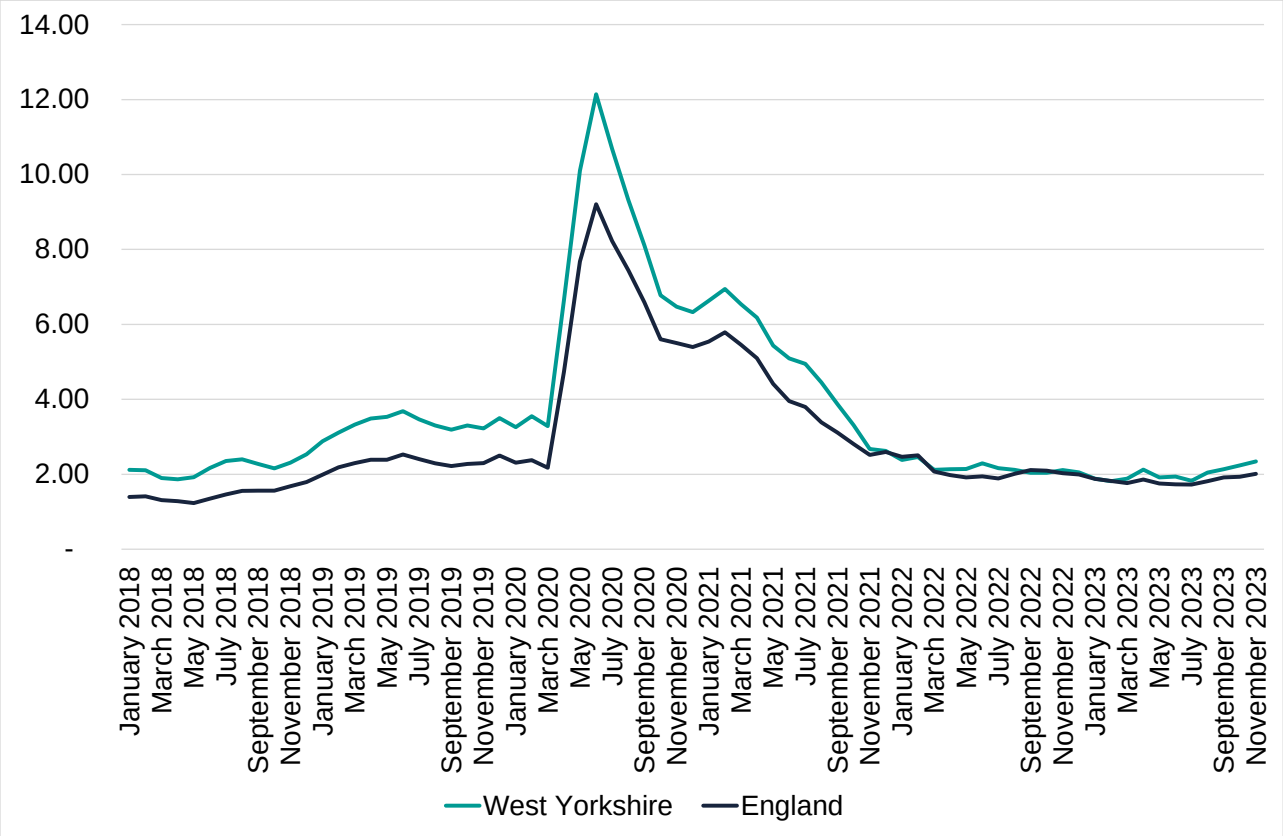
5.1 Tightening of labour market

The number of unemployed people per vacancy is a key measure of the tightness of the labour market, showing the number of jobless people who are actively seeking and available for work relative to the number of opportunities open to them.

The West Yorkshire labour market remains tight in terms of the ratio of unemployed claimants to job postings

At West Yorkshire level a comparison can be made between the number of claimant unemployed people and the number of online job postings. This shows a pronounced tightening of the labour market as the regional economy emerged from the pandemic that is similar to that seen above using official statistics. At the height of the pandemic the number of claimants per job opening soared to more than 10 but quickly fell, as the economy re-opened, to around two in early 2022. This tightening of the labour market was driven by a steady fall in the claimant count in West Yorkshire from March 2021 onwards combined with growth in the count of online job postings. The ratio of postings to claimants has remained fairly constant since then, although there are tentative signs of softening due to a modest increase in claimants since late 2022 coupled with a decline in the monthly count of job postings.

Figure 100: Trend in number of claimant unemployed per online job posting



Source: ONS and Lightcast

As the chart shows, the national labour market consistently had a lower number of claimants per job posting prior to the pandemic but that there has been a convergence between the West Yorkshire and national ratios in early 2022, which has been broadly sustained since then.

5.2 Skill shortages

Skill shortages occur when employers find it hard to fill their vacancies because the available candidates lack the necessary skills, qualifications and experience to do the job.

The Department for Education's Employer Skills Survey provides information on the number of vacancies and skill shortage vacancies that employers have at a single point in time. Skill shortages do not occur in large numbers and are not widespread. They tend to be concentrated in certain industry sectors and occupations but where they do exist, they can be acute and persistent, acting as a significant constraint on business growth and performance.

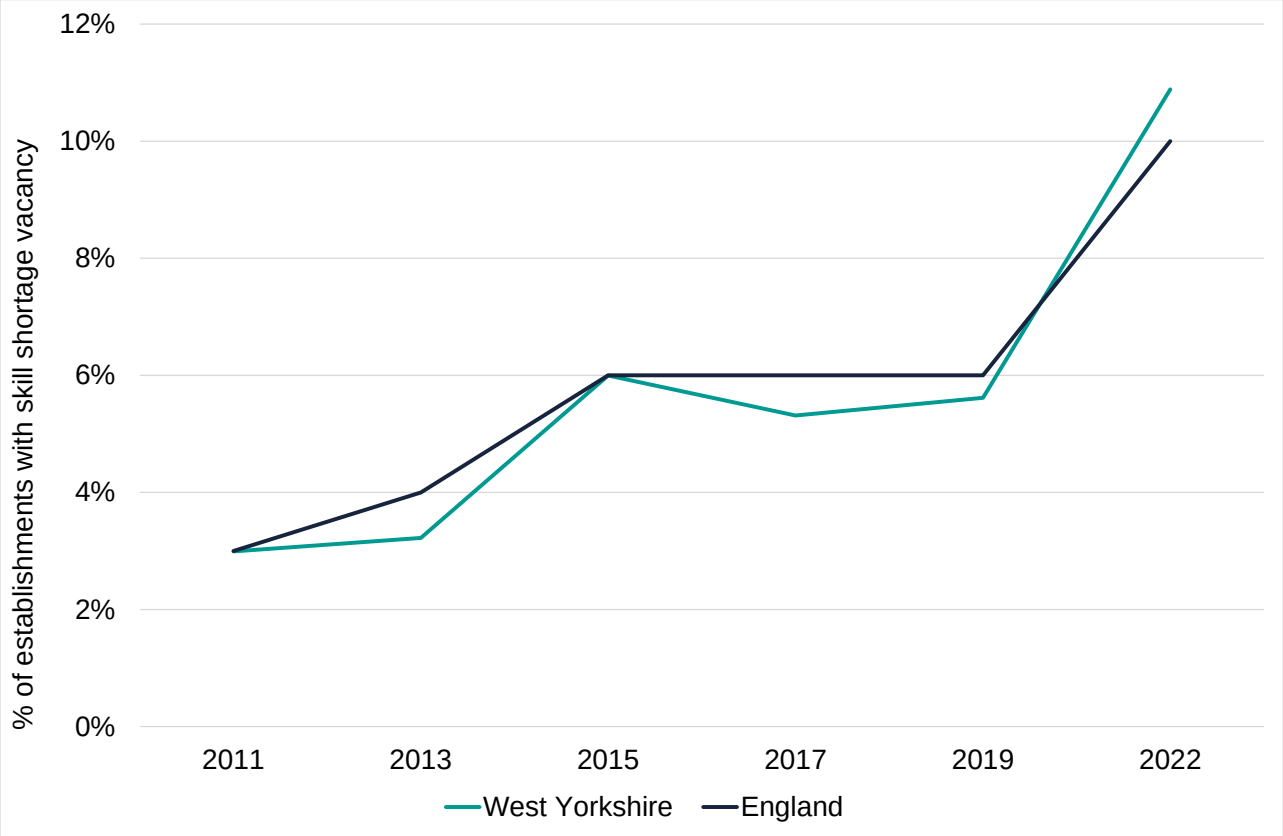
The latest figures from the Employer Skills Survey relate to 2022. It is important to note that the UK economy was still emerging from the effects of the pandemic at this point. The period was characterised by high levels of recruitment activity and worker shortages as employers sought to rebuild their staffing complements.

More than a third of all vacancies were skill shortage vacancies in West Yorkshire in 2022

According to the 2022 Employer Skills Survey there were 15,500 skill shortage vacancies in West Yorkshire at the time of the survey, with 11% of employers reporting one or more shortage.

The number of skill shortage vacancies nearly doubled from its previous 2019 level of 8,100, while the incidence of shortages reported by employers increased from 6% to 11% for the same period.

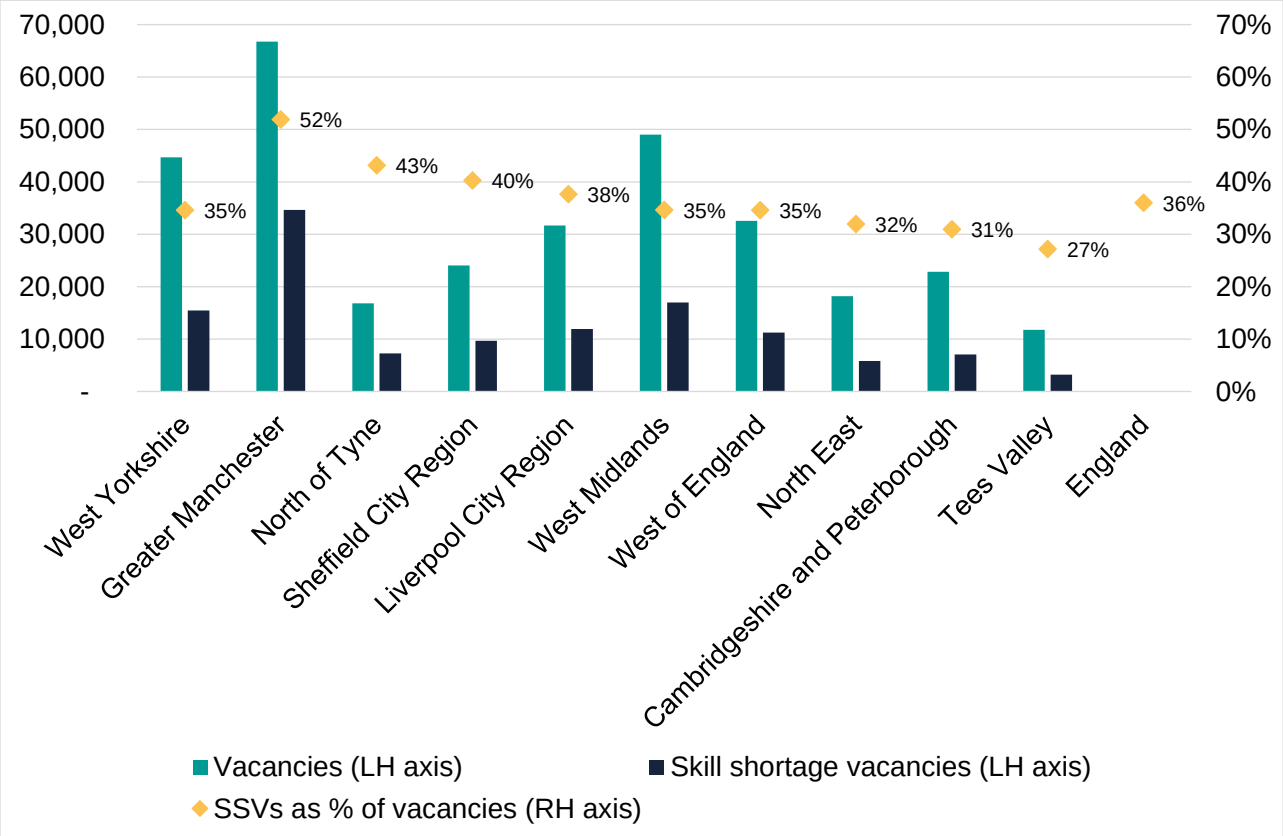
Figure 101: Proportion of firms reporting at least one skill shortage vacancy



Source: Employer Skills Survey, 2022

The incidence of skill shortages among employers has increased over time, reflecting the national trend.

Figure 102: Vacancies and skill shortage vacancies by Mayoral authority



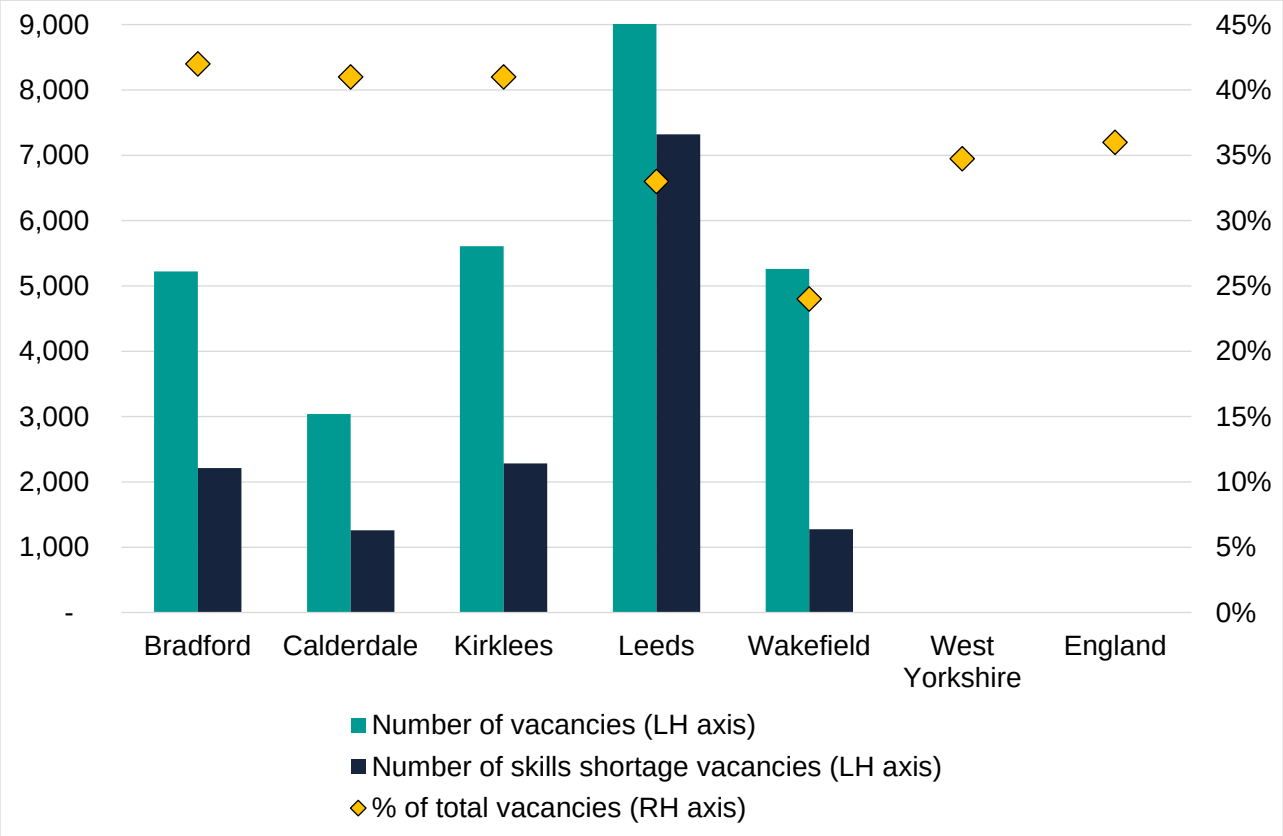
Source: Employer Skills Survey, 2022

More than a third (35%) of all vacancies in West Yorkshire are skill shortage vacancies, similar to the national average of 36% and a substantial increase on the previous estimate (for 2019) which was only 24%, reflecting the tightening of the labour market in the aftermath of the pandemic.

The density of skill shortage vacancies in West Yorkshire (shortage vacancies expressed as a proportion of total vacancies) places the area in a mid-ranked position among mayoral authorities. The prevalence of shortages is much higher than in Tees Valley but lower than Greater Manchester, Sheffield City Region and Liverpool.

Data are also available at local authority level and these indicate that in Bradford, Calderdale and Kirklees skill shortages accounted for more than 40% of vacancies, above the averages for West Yorkshire and England. Leeds was similar to the national average and Wakefield was lowest, but still with a skill shortage rate of 25%.

Figure 103: Vacancies and skill shortage vacancies by West Yorkshire local authority

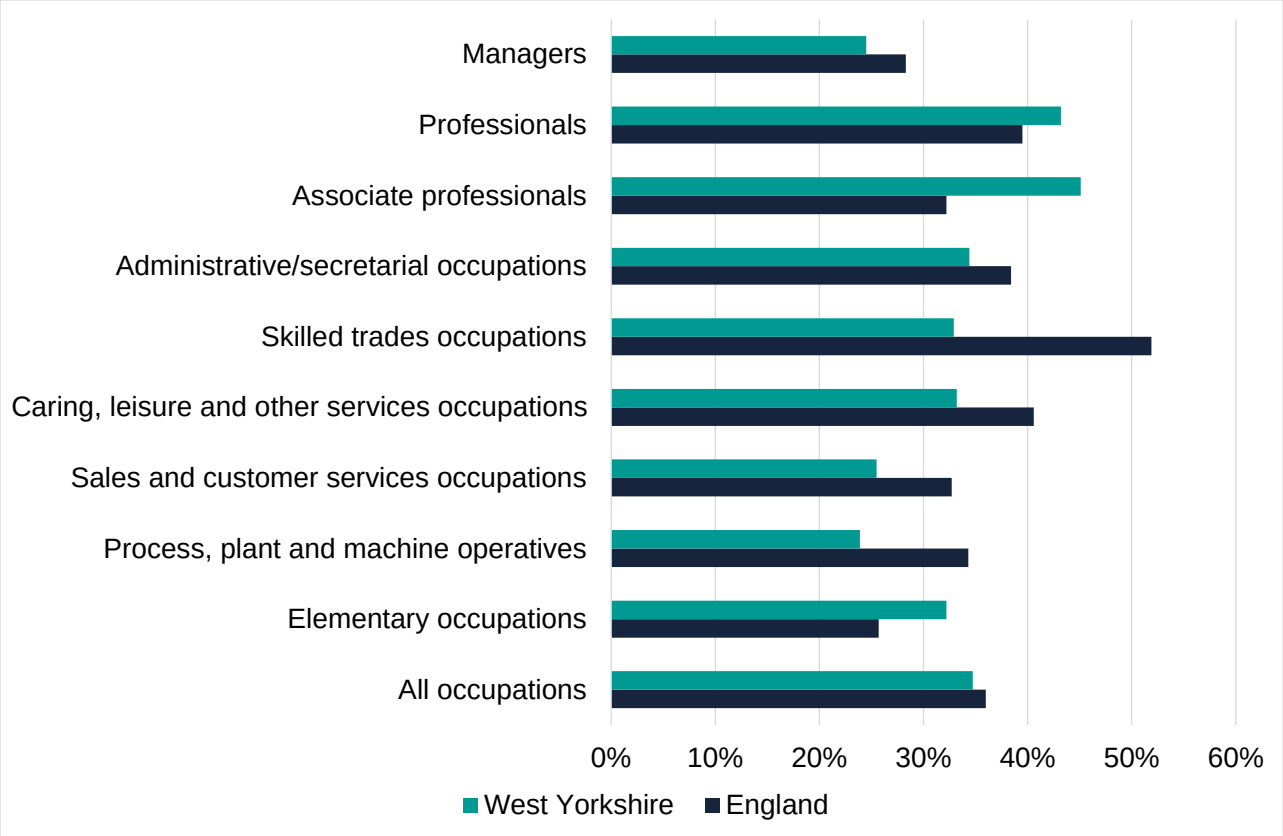


Source: Employer Skills Survey, 2022

The latest data show that shortages have a significant prevalence across all occupational categories, ranging from 24% for *Process, plant and machine operatives* to 45% for *Associate professional and technical occupations*.

Shortages are most acute in West Yorkshire for jobs that require higher level technical skills, specifically *Associate professional* and technical and *Professional* occupations. These occupations often require skills that take an extended period to develop and, in some cases, depend on training and development in a workplace setting.

Figure 104: Skill shortage vacancies as a proportion of total vacancies by occupational major group



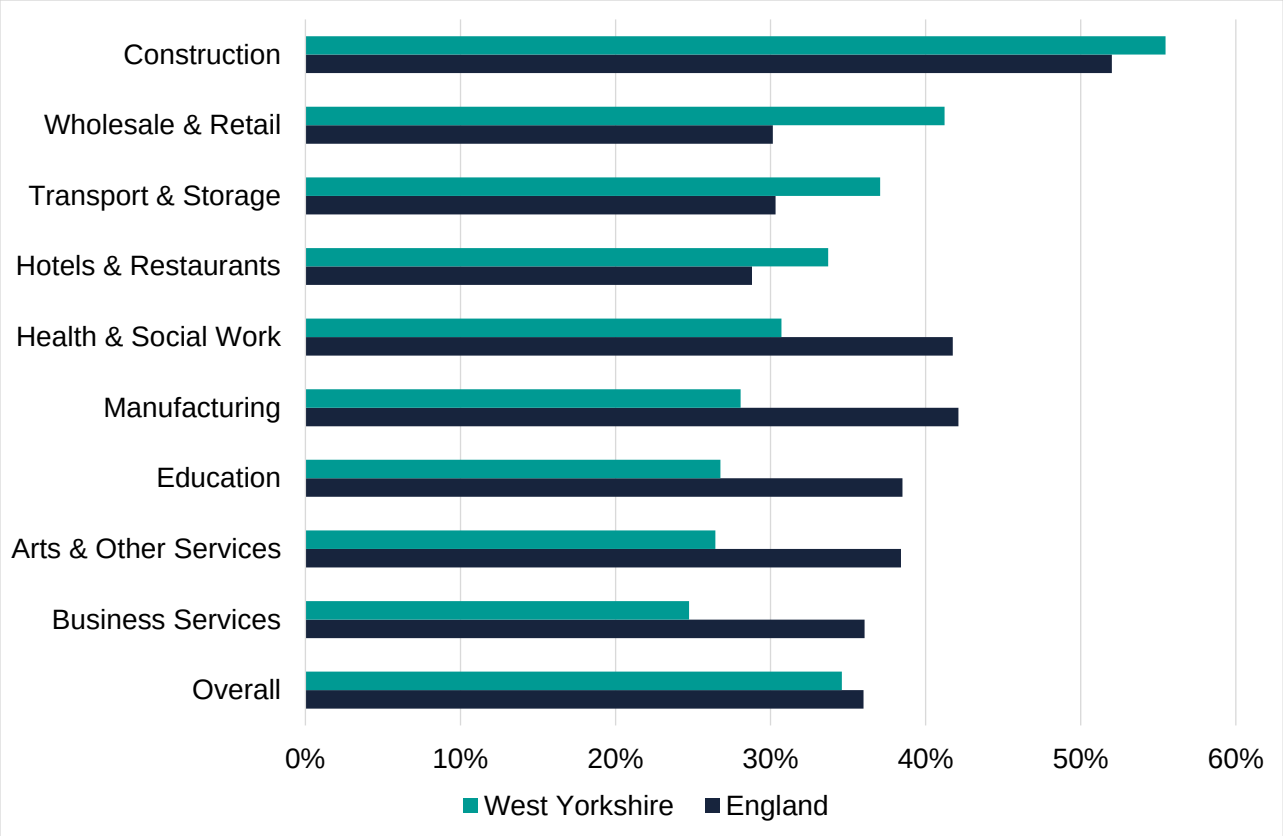
Source: Employer Skills Survey, 2022

The main difference between West Yorkshire and the national picture is in respect of *Skilled trades*, an occupational area with a long history of acute skill shortages due to the same difficulties in developing required skills as highlighted above. The prevalence of shortages is much higher at national level for Skilled Trades at more than 50% but still substantial at around a third in West Yorkshire.

Construction has the highest prevalence of skill shortage vacancies both in West Yorkshire and nationally, accounting for more than 50% of vacancies in the sector. Shortages have a substantial presence across all sectors: even in *Business Services*, which has the lowest prevelance, around a quarter of vacancies are classed as skill shortages.

The pattern of shortages by sector differs from the national picture in West Yorkshire. For example, the prevalence is lower in *Manufacturing* and *Health and social care* but higher in Wholesale and retail and Transport and storage.

Figure 105: Skill shortage vacancies as a proportion of total vacancies by industry sector, 2022



Source: Employer Skills Survey, 2022

With regard to the skills that employers found difficult to obtain from applicants, specialist, occupation-specific skills and knowledge required to perform the role are the type most commonly highlighted (for 59% of shortage vacancies). A deficit of technical or practical skills of some kind is highlighted by employers with reference to more than 80% of skill shortage vacancies. However, other skills including customer handling, team-working and time management were also highlighted.

The detailed occupations with the most acute shortages in Yorkshire and the Humber include STEM professionals and Skilled construction trades

Detailed skill shortage data for Yorkshire and the Humber (data at this level are not available at West Yorkshire level) show that skill shortages are most acute for Science, research, engineering and technology professionals (including Engineering professionals and IT professionals), Skilled construction & building trades, Leisure, travel & related personal service occupations (with acute shortages reported for Hairdressers), Science, engineering and technology associate professionals (with pronounced shortages for Science, Engineering and Production Technicians) and Health professionals.

Figure 106: Skill shortage vacancy density (as a percentage of vacancies) by occupational sub-major group, Yorkshire and the Humber, 2022

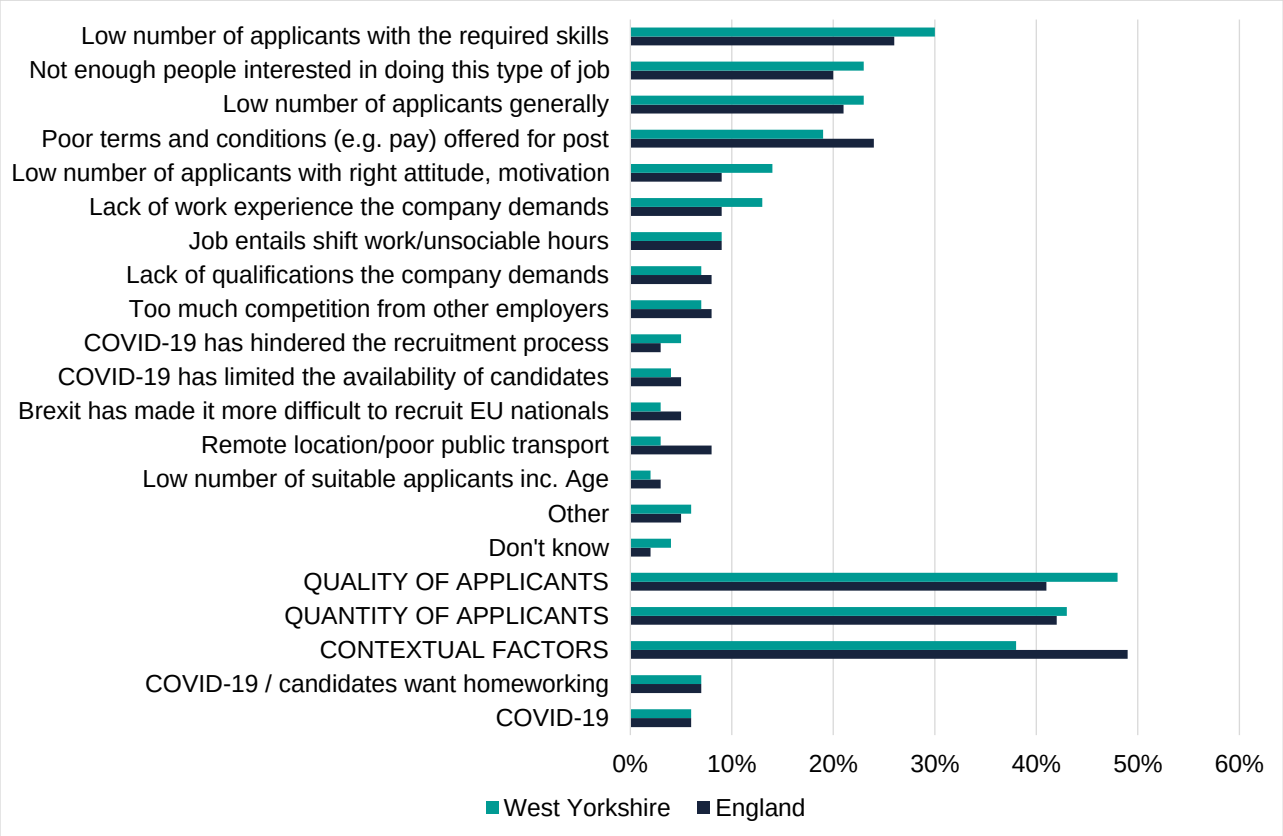
Source: Employer Skills Survey, 2022

The prevalence of skill shortages in the top ranked occupations across Yorkshire and the Humber has been higher than the average for all occupations since 2011, demonstrating their persistent nature.

5.3 Other reasons for hard-to-fill vacancies

The causes of hard-to-fill vacancies are not confined to lack of the required skills among applicants. There is also a range of contextual factors that hamper employers when seeking to recruit workers.

Figure 107: Main causes of having a hard-to-fill vacancy (unprompted)



Base: All hard-to-fill vacancies
Source: Employer Skills Survey 2022

The picture for West Yorkshire is a distinctive one: quality of applicants is more likely to be an issue for West Yorkshire employers than nationally, both in terms of skills and more general factors relating to attitude and personality. Issues around the quantity of applicants have a similar profile to the national average in terms of lack of interest for specific roles and low numbers of applicants. Contextual factors are also important but less so than nationally. Key examples include poor terms and conditions and a need for shift work and unsociable hours. Remote location and poor public transport is a less commonly cited problem than nationally. Continuing issues around COVID-19 and a requirement for homeworking among candidates contribute to relatively few hard-to-fill vacancies.

5.4 Skills Gaps

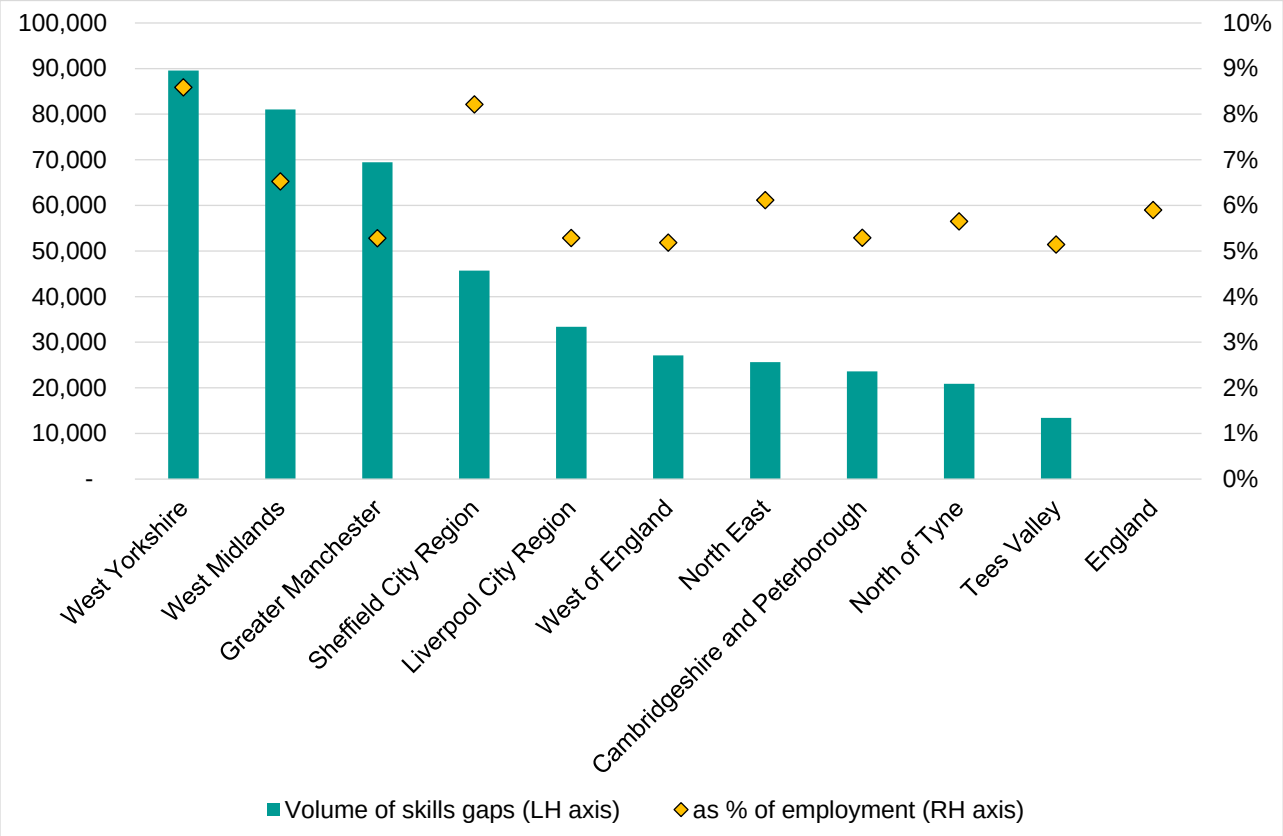
Skills gaps are another form of skills mismatch - they come about when existing employees within an organisation are not fully proficient in their job and are not able to make the required contribution to the achievement of business objectives. The pattern of skills gaps provides a useful indication of employers' needs in terms of workforce development.

Nearly one-fifth of employers are affected by skills gaps

Skills gaps are more widespread and numerous than skill shortages. According to the latest data, 19% of employers in West Yorkshire report that they have one or more skills gaps. There are approximately 90,000 gaps, equivalent to 9% of total employees in employment. This is well above the national average in terms of both the proportion of employers (England average: 15%) and staff (6%) affected.

The incidence and prevalence of skills gaps remained fairly constant within West Yorkshire between 2011 and 2019 but increased from 15% to 19% and 5% to 9% respectively between 2019 and 2022.

Figure 108: Volume and prevalence of skills gaps by Mayoral authority

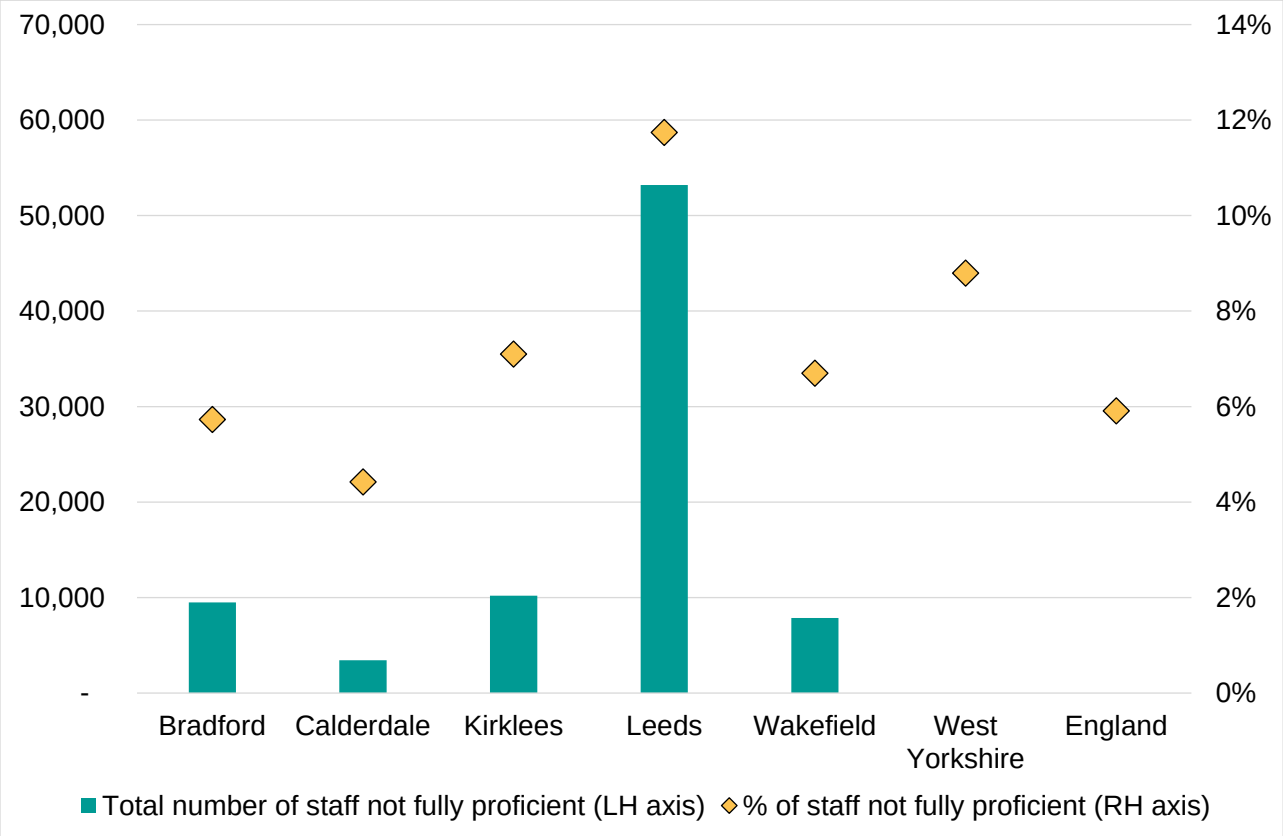


Source: Employer Skills Survey 2022

As shown in the figure above, West Yorkshire has the highest volume and prevalence of skills gaps of any Mayoral authority, based on data for 2022.

The prevalence of skills gaps (as a proportion of total staff) is uneven across West Yorkshire. Not only does Leeds have the highest volume of skills gaps, which is to be expected in view of the large size of its employment base, it also has the highest prevalence of gaps with 12% of staff estimated to lack full proficiency. This is well above that average for the region of 9% and double the national average of 6%.

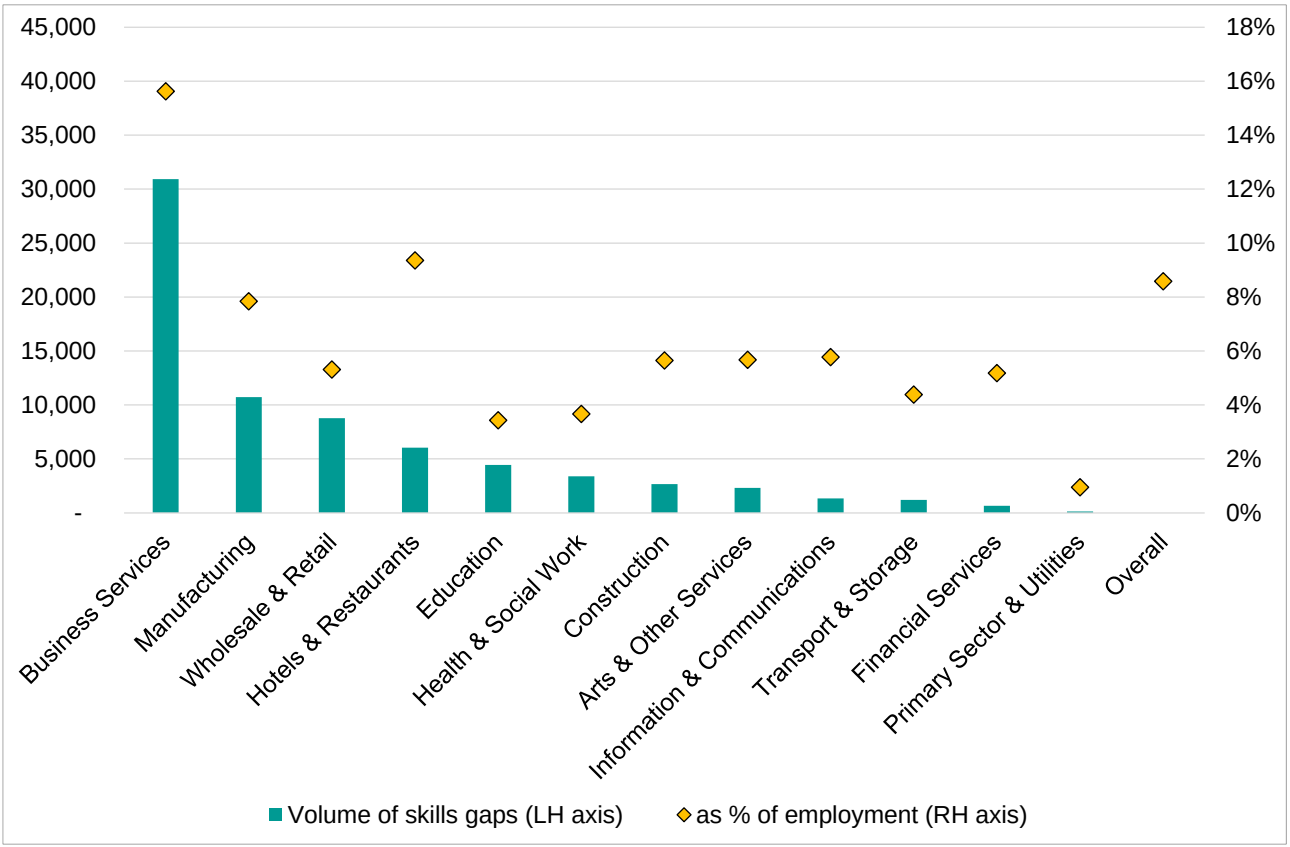
Figure 109: Volume and prevalence of skills gaps by local authority



Source: Employer Skills Survey 2022

Wakefield and Kirklees are also slightly above the national average in terms of the proportion of staff lacking full proficiency, with Bradford similar to the average and Calderdale somewhat below.

Figure 110: Volume and prevalence of skills gaps in West Yorkshire by industry sector, 2022



Source: Employer Skills Survey 2022

As the chart demonstrates, the *Business services* sector has by far the highest volume of skills gaps in West Yorkshire, and a prevalence of gaps that is almost twice the overall average, accounting for more than a third of total gaps. *Manufacturing* and *Wholesale and retail* also contribute high volumes of skills gaps, whilst the *Hotels and restaurants* sector has the highest prevalence of gaps after *Business services*.

Employers are most likely to report skills gaps for Administrative, Sales and customer service and elementary roles

Many skills gaps are short term and associated with high rates of staff turnover, particularly in sectors like hospitality, in the sense that the workers are new to the role or their training is not yet complete. However, in some cases gaps are due to wider organisational changes such as the introduction of new working practices or new technology. In other instances, gaps are associated with management issues, such as staff lacking motivation and problems in retaining staff.

Figure 111: Incidence of skills gaps in West Yorkshire by occupational major group (% of all establishments reporting skills gaps in each occupation)

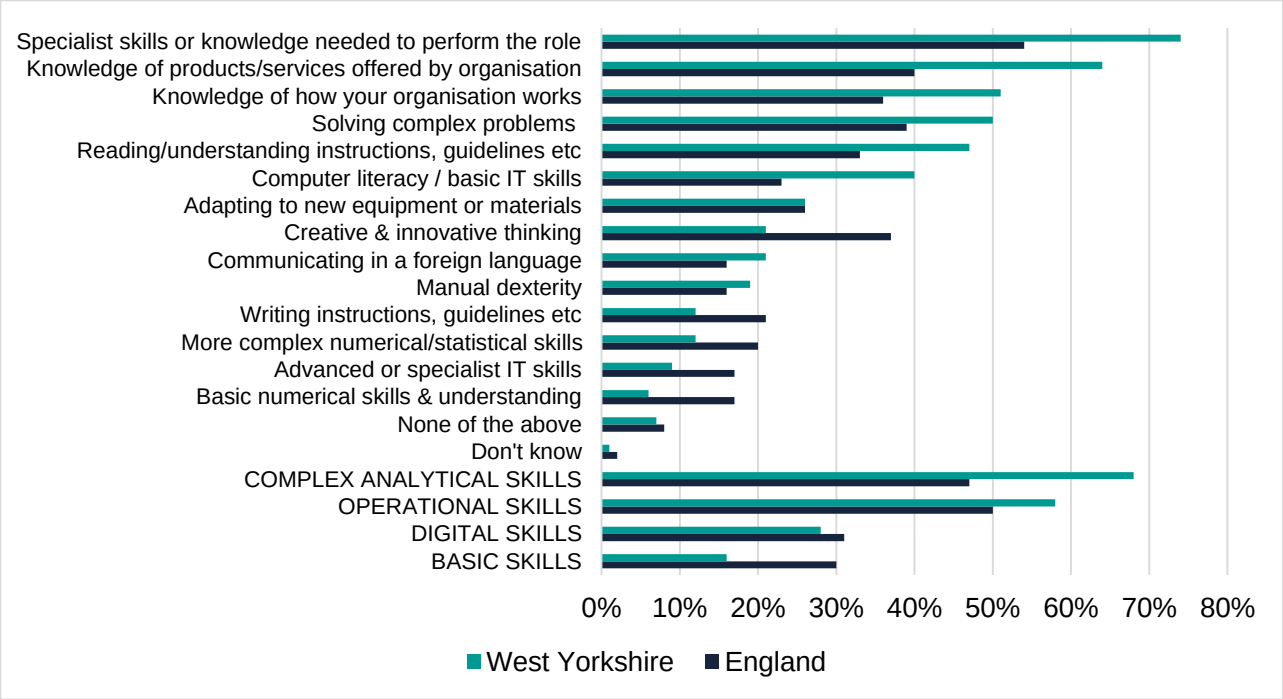
Source: Employer Skills Survey 2022

Turning to the occupational pattern of skills gaps, employers in West Yorkshire are most likely to report deficits in respect of *Administrative and secretarial*, *Sales and customer service,* and *Elementary* staff. Relatively few highlight gaps for higher skilled professional and associate professional workers, although the incidence of gaps for these categories is above the national average in West Yorkshire.

As highlighted in previous reports, a relatively high proportion of employers say that management level staff are affected by skills gaps. This has clear implications for wider business performance.

Many skills gaps are due to a deficit of practical skills among workers, including job-specific skills and operational skills, such as knowledge of the organisation's products and services and knowledge of how the organisation operates. Complex analytical skills, such as problem solving, creative thinking, plus digital skills at a variety of levels, as well as basic skills (functional literacy and numeracy in a workplace context) are also in deficit for many staff.

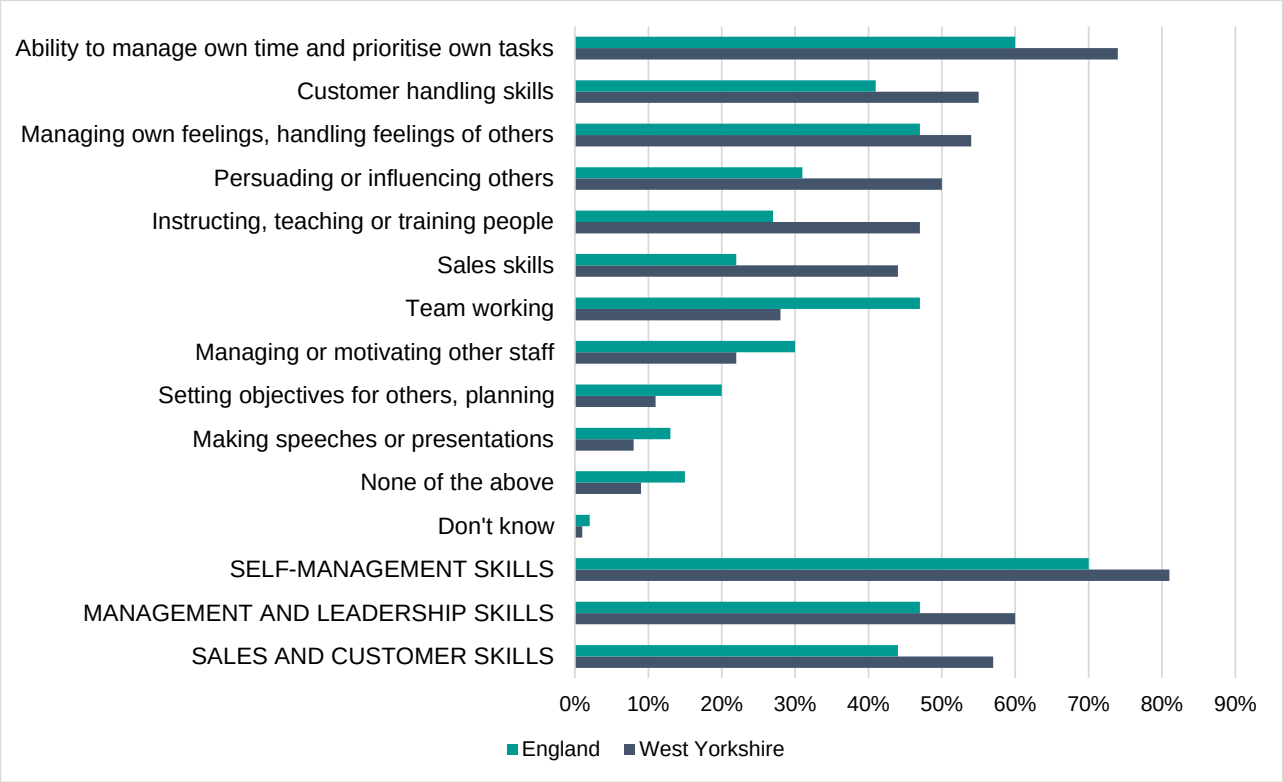
Figure 112: Technical / practical skills that need improving in occupations with skills gaps (% of skills gaps reported)



Base: All skills gaps followed up
Source: Employer Skills Survey 2022

However, a lack of the required "soft" skills is more common across the workforce, including "self-management" skills such as time management and managing one's own feelings, plus team working and persuading / influencing others. Management, whether it be aspects of self-management or leading / managing staff within the organisation, is a key element of skills gaps, together with sales and customer handling skills.

Figure 113: Soft / people skills that need improving in occupations with skills gaps (% of skills gaps reported)



Base: All skills gaps followed up
Source: Employer Skills Survey 2022

For managers with skills gaps the main types of skill that need to be improved include core management skills, complex problem-solving skills, as well as operational skills.

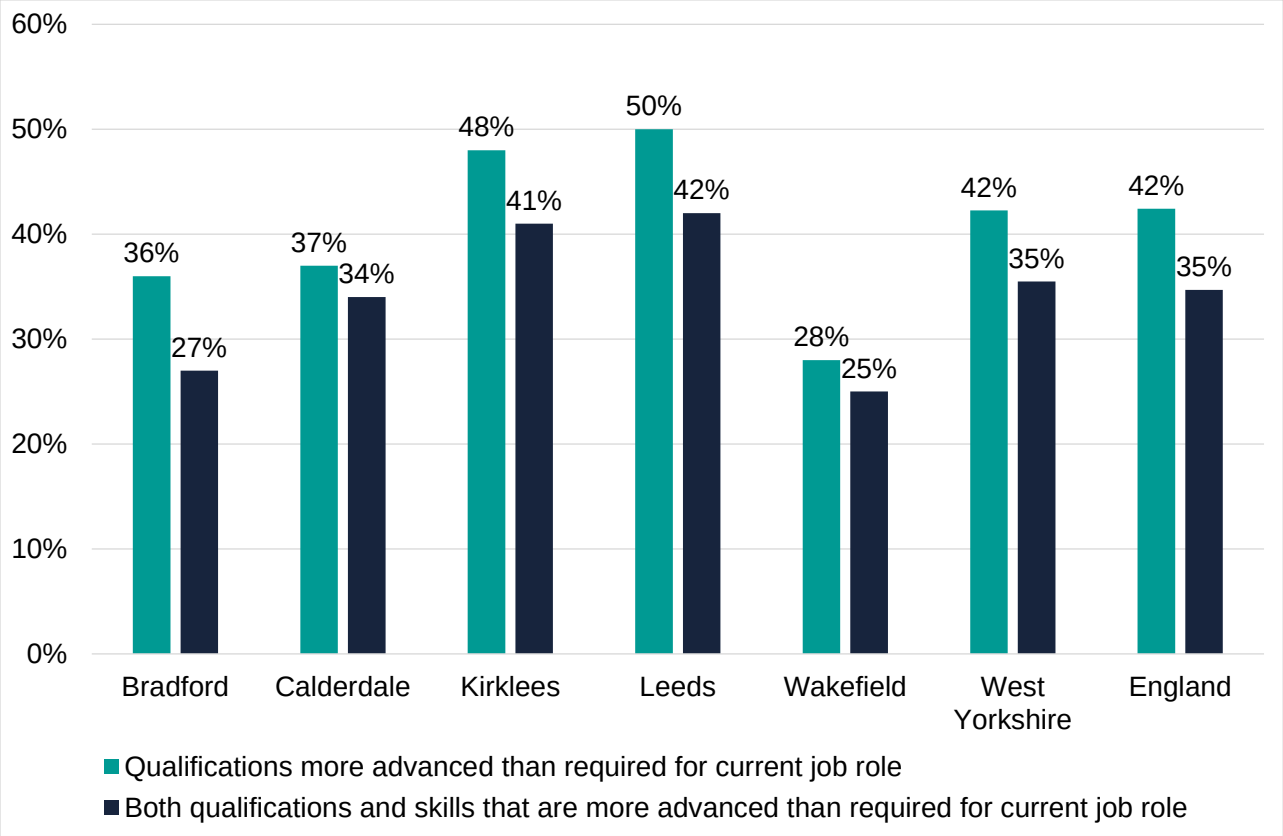
5.5 Skills underutilisation

Skills mismatches are not only due to skills deficits. It is important to understand the extent and nature of skills underutilisation as this issue implies a significant misallocation of resources in view of the large-scale investment in higher education by individuals and the state. An inability to use acquired skills and knowledge has a de-motivating effect on workers and represents a missed opportunity for employers to maximise productivity.

Skills underutilisation is widespread

More than a third (35%) of employers in West Yorkshire say that they have workers whose skills and qualifications are both in advance of those needed for the job; this is the same proportion as the national average. A higher proportion (42%) say they have staff whose qualifications are in advance of the level that their job requires. The survey data suggest that the incidence of underutilisation varies at local authority level, with Leeds and Kirklees having the most widespread issue and Wakefield the least widespread.

Figure 114: Proportion of employers with staff whose skills and qualifications are under-utilised



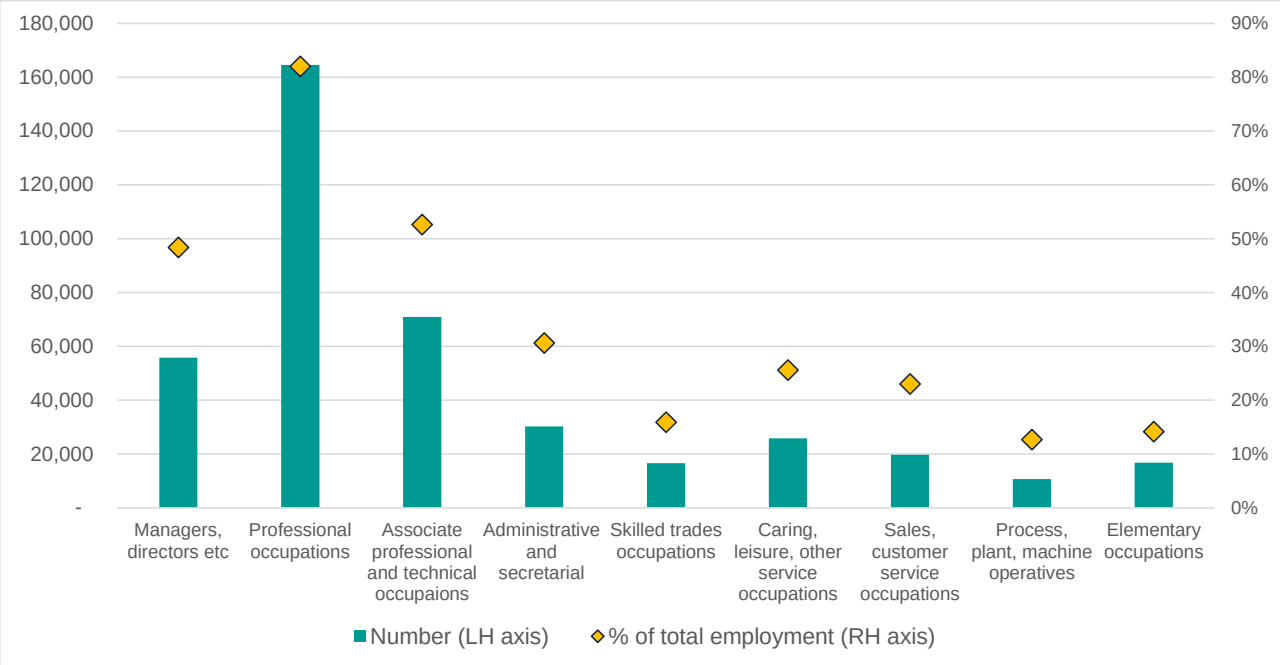
Source: Employer Skills Survey 2022

Analysis of national level data indicates that employers in *Hotels and restaurants*, *Education*, *Arts and other services* and *Health and social work* are most likely to indicate that they have underutilised staff, whilst establishments in the *Information and communication*, *Manufacturing* and *Business services* sectors are least likely to say that this is the case.

Other measures suggest that underutilisation is widespread, at least in notional terms. Census 2021 data for West Yorkshire indicate that 120,000 residents working in non-graduate roles[28] hold qualifications at Level 4 and above. This is equivalent to 22% of all people working in non-graduate roles. Around 16,000 (12%) of these underutilised workers are aged under 25 with the remainder aged 25 and above.

[28] In this context non-graduate roles are defined as SOC major groups 4-9.

Figure 115: Number and proportion of people with a higher qualification by occupation, West Yorkshire



Source: Census 2021

Workers with under-utilised skills are most likely to be employed in administrative, caring, retail and elementary roles (including storage and hospitality occupations). This kind of mismatch represents a waste of human capital and a missed opportunity to maximise productivity. Improved information, advice and guidance is a key mechanism for enabling people to invest in the right economically valuable skills that will allow them to fulfil their potential. The current labour shortages affecting the economy represent an opportunity for individuals to re-position themselves in the labour market, although this presents further challenges around back-filling vacant posts.

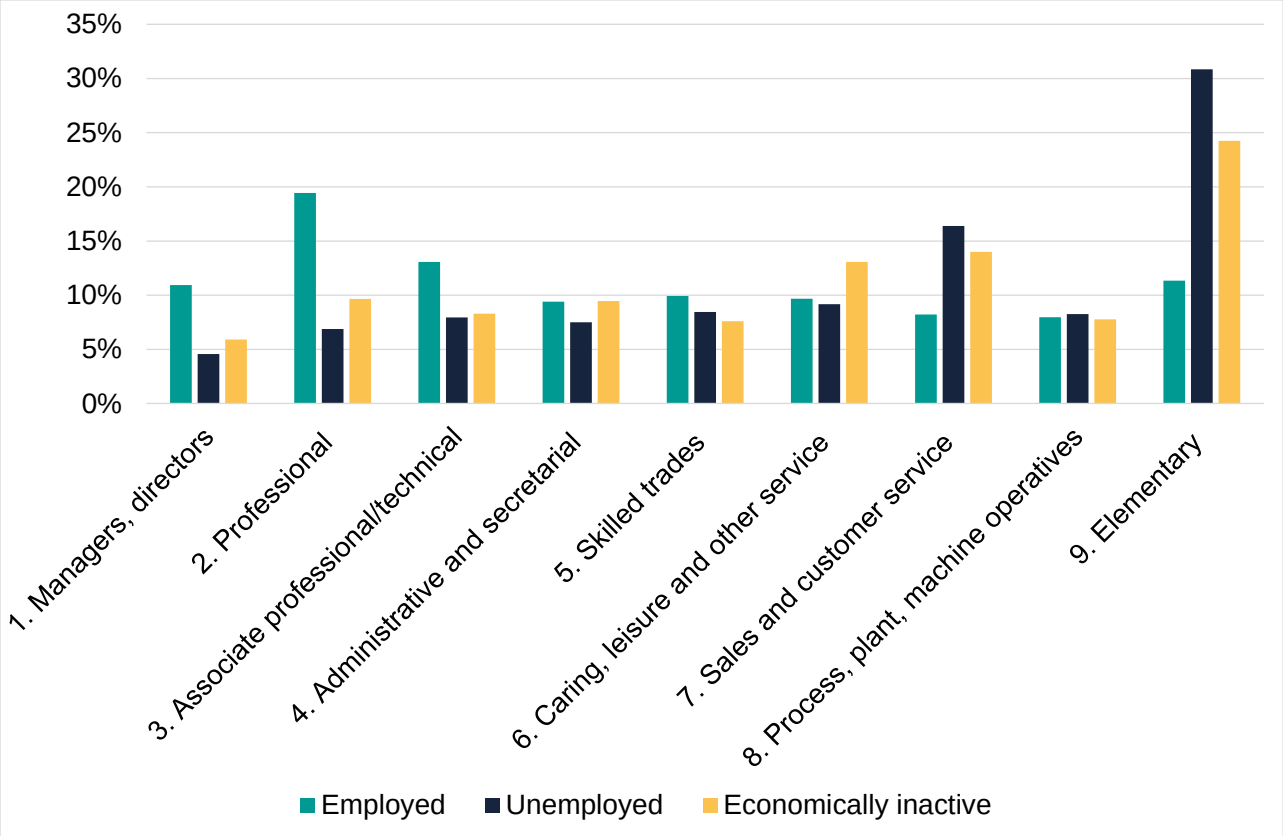
5.6 Structural joblessness

Skills mismatch also comes in the form of structural joblessness, in those instances where the occupational and qualification profile of the jobless is misaligned with demand from the labour market.

Structural joblessness is a key mismatch in the labour market

There are marked differences between the occupational profile of people in work and the occupational background of unemployed and inactive people. This acts as a constraint on the ability of the jobless to get into work.

Figure 116: Occupational profile of the unemployed and inactive (based on last job), people aged 16-64, West Yorkshire



Source: Census 2021

The occupational background of both the unemployed and inactive is weighted towards lower-skilled occupations, principally elementary but also sales and customer service, plus caring roles (in the case of the inactive). The proportion of unemployed and inactive people with a background in higher skilled management, professional and associate professional is around half that of people in employment. This implies a mismatch between the skills and experience of the unemployed and the profile of demand in the labour market.

The post-pandemic period has seen widespread labour shortages both locally and nationally. These shortages extend to the occupations in which inactive and unemployed people are concentrated, presenting an opportunity to get excluded people into jobs with the assistance of appropriate employment support provision.

The unemployed and inactive are also disadvantaged by their qualification profile. As noted in section 4.4, the unemployed and inactive, taken together, are less than half as likely to be qualified at level 4 and above and three times as likely to be qualified below level 2 or to lack formal qualifications.

5.7 Responsiveness of education and training sector

One way of assessing the relevance of HE provision to the needs of the local labour market is to compare the profile of provision in West Yorkshire institutions to that of labour market demand. This involves mapping subject categories to occupations[29]. For this analysis the occupational profile of current vacancies (online job postings for the period December 2022 to November 2023) is used to assess demand for skills in the labour market.

Clearly, there is a major caveat around the transferability of skills. Many people find that study in a particular vocational area proves to be of value across a range of occupational settings. In addition, HE institutions are serving the national labour market (or even an international one in some cases) rather than confining their efforts to meeting local needs and many qualifiers are not retained in the local area. Having said that, the subject profile of West Yorkshire provision is broadly similar to the national one, indicating that it is not narrowly-focused or skewed strongly towards particular subject areas.

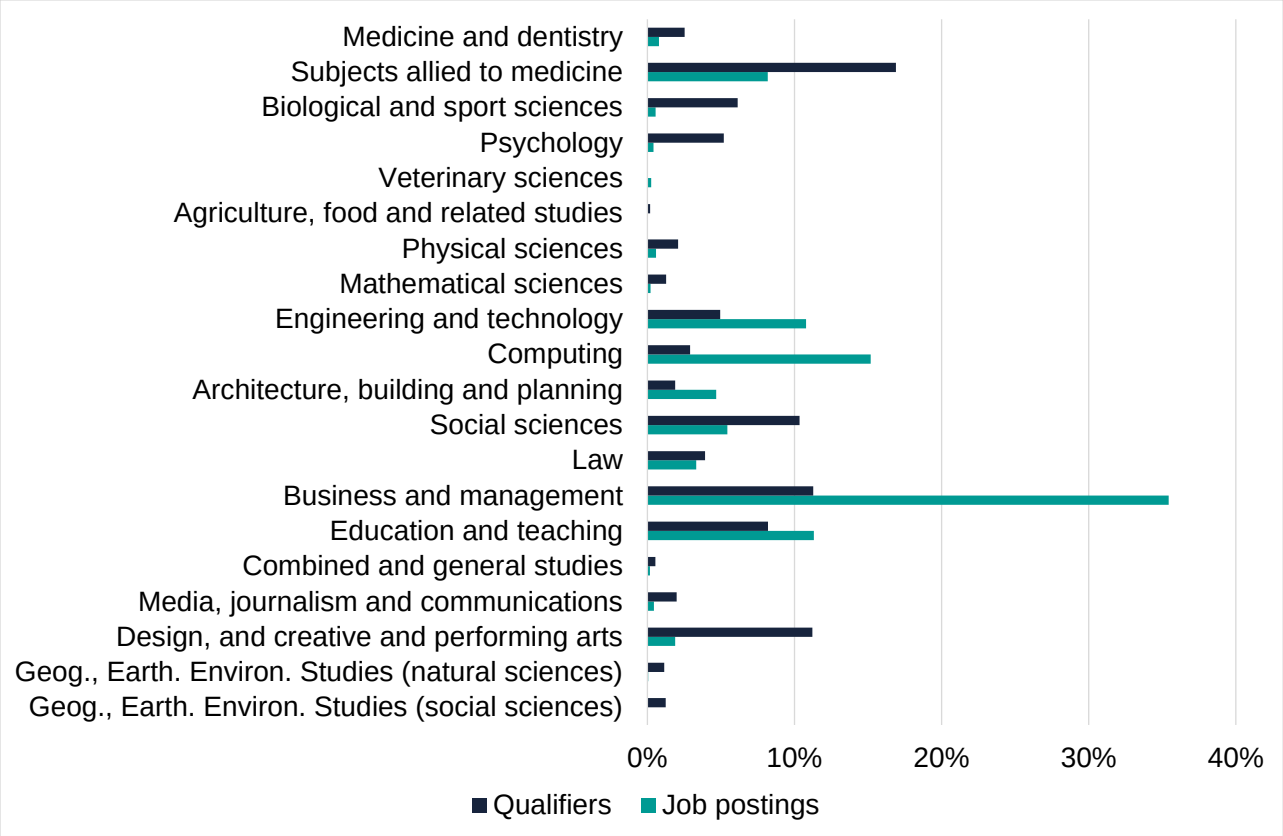
The patterns identified below in the profile of provision have been broadly present for a number of years.

The subject profile of HE qualifiers differs from the profile of local labour market demand

There are several areas where supply is low relative to estimated demand in notional terms. Key instances are *Engineering and technology*, *Computing* and *Architecture, building and planning* and *Business and management*. In each case, the proportion of job openings in associated occupations outweighs the proportion of qualifiers from local institutions to a large degree.

[29] Those subjects that do not have a reasonably straightforward relationship with an occupational group have been excluded. Examples include academically-focused subjects such as history, philosophy and theology, which have a generic rather than job-specific focus.

Figure 117: Comparison of subject profile of higher education qualifiers with profile of online job postings in related occupations



Note: Limited to qualifiers with UK domicile
Source: Calculations based on HESA data for 2021/22 academic year and job postings data from Lightcast (December 2022 to November 2023)

Conversely, there are subject areas in which the proportion of qualifiers is high relative to the proportion of openings. This is the case for *Design, and creative and performing arts*, *Media, journalism and communications*, *Social sciences,* as well as *Medicine and subjects allied to medicine*. The latter subject is a specialism for West Yorkshire and strongly represented relative to the national average in terms of qualifiers.

The proportion of people who qualify in some scientific disciplines, including *Biological sciences*, *Physical sciences* and *Mathematical sciences* outweighs the share of demand for directly-related roles in the labour market.

For all of these occupations skills are arguably transferable and can be applied across a range of settings, with demand from employers extending well beyond the specific occupational field.

A similar approach to comparing supply and demand is applied to further education and skills, below, in this case using employment rather than job postings to profile demand in the labour market.

Some occupational areas are much better served by apprenticeships than others

Apprenticeships differ from the other types of education and training provision considered in this section in the key respect that they provide a job with training and therefore reflect employer demand in themselves. However, the following analysis shows that some occupational pathways are better served by apprenticeships than others and that some of the best served are in fields not traditionally associated with the apprenticeship route. In some cases this is due to the influence of the levy.

Subject areas which account for a high proportion of apprenticeship starts relative to their respective shares of total employment in associated occupations are as follows (presented in descending order):

- *Accounting and Finance* (driven by strong demand for "Accountancy / Taxation Professional", "Assistant Accountant", "Professional Accounting / Taxation Technician", "Accounts / Finance Assistant")
- *Child Development and Well Being* ("Early Years Educator" and "Early Years Practitioner" apprenticeships having the most substantial take-up)
- *Public Services* (including the most popular apprenticeships in this subject area of "Custody and Detention Officer", "Police Constable" and "Ambulance Support Worker")
- *ICT Practitioners* (driven by strong demand for "Information Communications Technician", "Digital Marketer" and "Data Analyst" apprenticeships)
- *Engineering* (key apprenticeships in terms of take-up being "Installation Electrician and Maintenance Electrician", "Engineering Technician" and "Telecoms Field Operative")
- *Nursing and Subjects and Vocations Allied to Medicine*
- *Health and Social Care* (with leading examples of apprenticeships being "Lead Adult Care Worker", "Adult Care Worker", "Healthcare Support Worker" and "Dental Nurse")
- *Business Management* (key apprenticeships include "Team Leader / Supervisor", "Operations / Departmental Manager", "Associate Project Manager" and "Senior Leader".)

Some of these subject areas have seen strong growth in recent years, most notably *Nursing and Subjects and Vocations Allied to Medicine* (+107% increase in starts between 2019/20 and 2021/22), *ICT Practitioners* (63% growth) and *Public services* (38% growth).

Other subject areas account for small shares of starts relative to their shares of employment, with the most notable being:

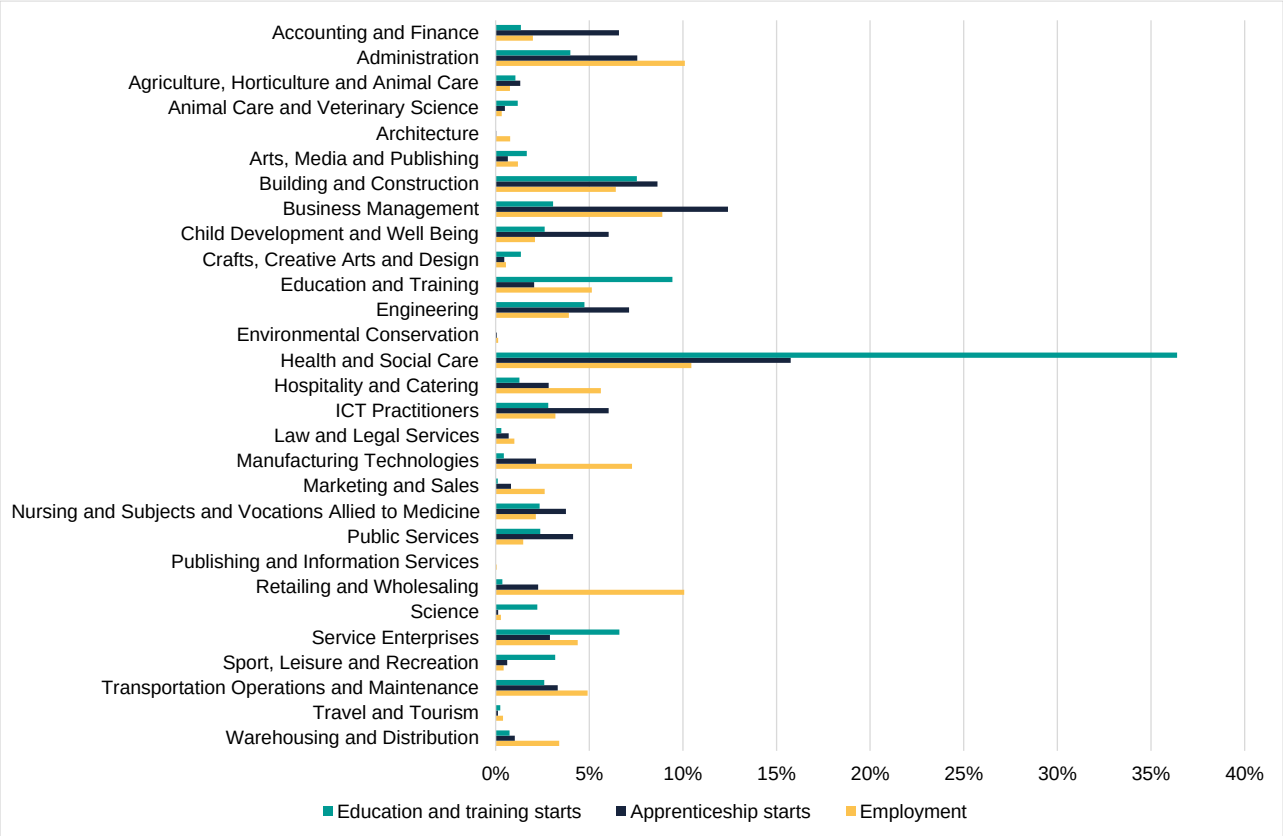
- *Retailing and Wholesaling*
- *Manufacturing Technologies*
- *Warehousing and Distribution*
- *Marketing and Sales.*

Manufacturing Technologies saw a substantial fall in starts of two-thirds between 2019/20 and 2021/22, which helps to explain its position in this ranking. However, the remaining

subjects all saw growth in starts over the same period, demonstrating that they have been under-represented in terms of apprenticeship provision in the longer term.

The proportion of apprenticeship starts in *Building and construction* is somewhat above its share of employment in associated occupations. This reflects the fact that apprenticeships are a prime entry route into construction roles.

Figure 118: Comparison of subject profile of FE / Skills starts vs employment in related occupations, West Yorkshire



Note: Education and Training starts limited to learning aims at level 2 and above for learners aged 19+
Source: Calculations based on ESFA data (2021/22) and Census 2021

With regard to adult education, the most visible disparity is that the proportion of starts significantly outweighs employment for *Health and social care*; this subject accounts for more than a third of total starts compared with around a tenth of employment.

Other subjects account for a larger share of starts than of employment, although on a smaller overall scale than *Health and social care*, including:

- *Sport, Leisure and Recreation*
- *Animal Care and Veterinary Science*
- *Crafts, Creative Arts and Design*
- *Education and Training*
- *Public Services*
- *Service Enterprises*

- *Arts, Media and Publishing.*

Conversely, there are subject areas which account for small proportions of adult education starts relative to their share of employment, most notably:

- *Retailing and Wholesaling*
- *Marketing and Sales*
- *Manufacturing Technologies*
- *Warehousing and Distribution*
- *Hospitality and Catering*
- *Law and Legal Services*
- *Business Management*
- *Administration*
- *Transportation Operations and Maintenance*
- *Travel and Tourism*
- *Accounting and Finance*
- *ICT Practitioners.*

A number of these subjects - *Retailing and Wholesaling*, *Marketing and Sales*, *Manufacturing Technologies* and *Warehousing and Distribution* – are also represented in the list of subjects with relatively low apprenticeship take-up, indicating that overall coverage of these disciplines through publicly-funded education and training is low.

5.8 Demand and supply for high skilled workers

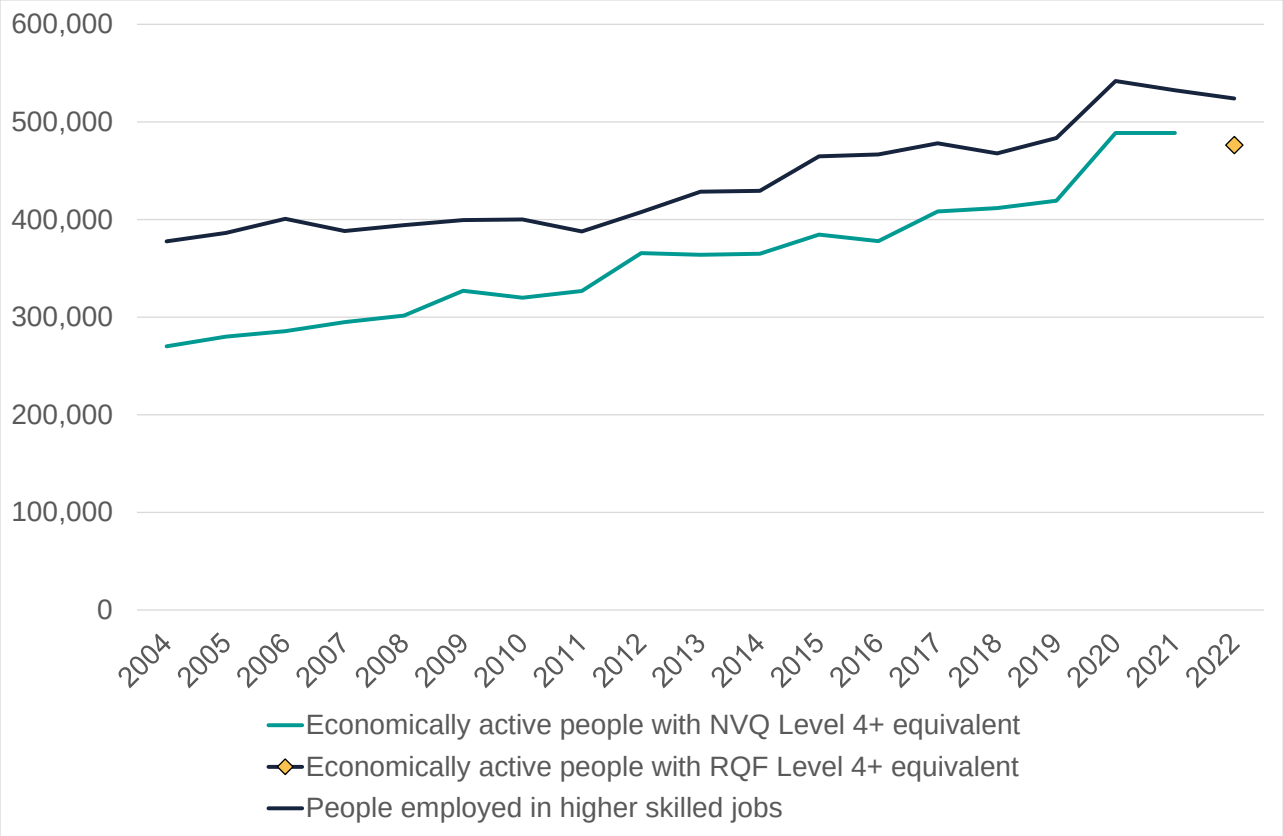
How is supply measuring up to growing demand for higher skilled workers? The figure, below, shows that West Yorkshire has more people working in high skilled jobs in its workplaces than it has economically active residents qualified at level 4 and above.

Growth in higher skilled jobs continues to outpace that in the number of higher qualified people

As of the period from January to December 2022 the number of higher qualified workers stood at 476,000 whilst the number working in high skilled occupations stood at 524,000.

Both have followed an upward trend over the last fifteen years. Overall, the trends suggest that the local area has been successful in increasing employment in higher skilled jobs alongside steady growth in the number of people who are qualified to a higher level. The level of higher skilled employment has been higher than the supply of higher qualified people throughout the period.

Figure 119: Trends in numbers of high skilled people and the level of high skilled employment, West Yorkshire



Note: people qualified at level 4+ is a residence-based measure whilst people employed in higher skilled (SOC 1-3) jobs is a workplace-based measure.
Source: Annual Population Survey

There was a sharp increase in people qualified to Level 4+ and in the number of people in higher skilled employment in 2020, despite the impact of the pandemic. But in the two years since then the position has remained fairly flat in terms of both indicators, with no significant change in the number of higher qualified people or in the number of higher skilled jobs.

6 Conclusions

In this concluding section we consider the main skills needs facing West Yorkshire and review the effectiveness of the local skills system in responding to these needs.

6.1 Key skills needs

Our understanding of the outlook for local skills needs remains clouded by continuing volatility in the economy. There are definite signs that the tight labour market conditions that followed the pandemic are now loosening. This means that prospects for the economy and labour market remain uncertain.

Recent trends in the labour market together with labour market projections point towards the underlying direction of travel in the labour market in terms of occupational employment and associated skills requirements.

There are several areas seeing sustained net growth in employment, with the implication that demand for skills in these areas is also increasing.

Higher skilled occupations continue to serve as the main engine of job growth in the local as well as the national economy. Key pockets of growth include:

- *Business, media & public service professionals*.
- *Science, research, engineering and technology professionals,* with growth being principally driven by strong demand for digital professionals.

This implies increasing demand for a range of business skills plus STEM skills, particularly digital skills.

Although less significant in absolute terms there have also been strong rates of growth for *Culture, media and sports occupations* and *Health and social care associate professionals*.

It is noteworthy that *Professional* occupations are the category most exposed to the impact of the latest **artificial intelligence (AI)** applications, particularly those associated with finance and business management. There is the potential for AI to have its greatest impact on occupational segments that are among those making substantial contributions to employment growth.

Aside from higher skilled occupations another area of net growth is recent years is *Customer service* occupations, already a relative strength of the West Yorkshire employment base. *Caring personal services* has been flagged as a key source of growth in previous reports but this trend is much less pronounced in the latest data and may partially reflect problems in recruiting staff into the relevant roles.

The evidence of online job postings suggests that local labour market underwent a period of intense recruitment activity in 2021, 2022 and the first half of 2023. This picture is supported by national data showing job-to-job flows at record levels. However, there have been distinct **signs of a cooling of the labour market since the second half of 2023**,

with a notable fall in recruitment activity, although the monthly count of job postings remains relatively high in historic terms. Some occupational areas that saw the strongest growth during the pandemic and its aftermath, including digital professional occupations have seen the sharpest correction during this period.

The broad occupational categories which demonstrate the strongest demand in West Yorkshire based on job postings comprise the following. All five are also prominent in the rankings for each local authority.

- *Information technology professionals*
- *Teaching professionals*
- *Engineering professionals*
- *Sales related occupations* (mainly comprising retail roles such as checkout operators etc)
- *Sales, marketing and related associate professionals*.

Job postings also show that there is a marked **difference between the labour demand specialisms of Leeds and of the four remaining local authorities**. Specialisms in Leeds include legal roles at professional and associate professional levels, architecture related roles, information technology and web design roles, business related roles and HR roles. Across the rest of West Yorkshire, specialisms mainly relate to skilled and semi-skilled manual categories associated with manufacturing and engineering, including skilled trades and operatives occupations of various kinds

Demand in the labour market for **green economy skills** grew sharply from 2020 onwards, based on data from online job postings, although there have been signs of cooling in line with the moderation of wider recruitment activity. The skills in greatest demand include skills relating to aspects of environmental health and safety (the biggest area), environmental management, aspects of water management, renewable energy and power, environmental science and ecology.

There is a range of generic or **baseline skills** that are in widespread demand across different types of job in West Yorkshire, most notably communication, organisational skills, attention to detail, planning, creativity and problem-solving.

Crucially, there are a number of key areas of current market failure where supply is not meeting demand, which represent priorities for action.

The latest data available shows that **skills shortage vacancies** have intensified since the pandemic, reaching record highs in 2022. Shortages continue to be most acute for higher skilled technical roles in disciplines like engineering, ICT and health as well as a range of skilled trades but there has also been an increase in the intensity of shortages across a wider range of occupations.

Skills gaps – a lack of proficiency among existing staff – have also intensified in West Yorkshire according to the latest data. Employers are most likely to highlight skills gaps for *Administrative and secretarial*, *Sales and customer service* and *Elementary* roles. The skills most commonly in need of improvement include operational skills, digital skills, problem-solving, basic literacy and numeracy and a range of “soft” skills, including self-

management skills (e.g. time management), sales and customer service and management skills.

Although higher skilled occupations are in general less susceptible to skills gaps there is a continuing widespread **lack of proficiency among managers**. This has implications for business performance and for the way in which the wider workforce is managed and developed.

The latest data from the Employer Skills Survey shows that both **overqualification**, where individuals hold qualifications at a higher level than required for their job role and **skills under-utilisation**, where both skills and qualifications are in advance of job requirements are widespread. This reinforces the need for improved communication of the relative employment prospects offered by the different occupational pathways open to people considering higher level study.

Looking beyond areas of net growth and decline in the local labour market, **replacement demands** are expected to continue to drive a broad-based positive recruitment requirement that extends to most sectoral and occupational areas, including those that are expected to see a net reduction in employment over time. This means that there will continue to be a significant volume of demand for skills associated with declining occupations like some *Skilled trades*, *Administrative* occupations and *Sales and customer service*. Although higher level occupations are the main engine of net growth in employment, intermediate and lower-skilled occupations will continue to offer job opportunities and will also present valuable gateways to career progression.

6.2 Responsiveness of the system

Although improvements to the responsiveness of the system are crucial to addressing constraints on growth in the West Yorkshire economy it is important to note that actions to tackle the current deficit of demand are essential if the region is to break out of its low skills equilibrium. Private sector investment is needed to increase the stock of high skilled and highly paid jobs in West Yorkshire and provide an incentive for people in the region to invest in their skills.

The key skills supply challenge facing West Yorkshire is a **deficit of qualifications and skills** among the local population of working age. There is a significant gap with the national average in the proportion of people with the higher level qualifications that are closely associated with strong productivity performance in sub-regional economies. A substantial proportion of the labour force also lack qualifications entirely or hold a qualification at below Level 2, which impacts on their employability and opportunities for career progression.

There is also **inequality of outcomes within the skills system**: the performance of disadvantaged people in terms of qualification attainment is well below average. Pupils eligible for free school meals have significantly worse attainment at Key Stage 4 and following study at age 16-18. The disadvantaged are also less likely to enter an apprenticeship or higher education, limiting their opportunities for social mobility. Enterprise in education activity can help to address by increasing the exposure of pupils

and students to the world of work thus developing career readiness and employability skills as well as raising individual aspiration with a view to improving attainment.

Similarly, issues relating to **inequality** constrain participation in employment in the region. Employment rates are lower for minority groups, including women, older people, people from ethnic minorities and disabled people. In some cases the employment rate gaps seen locally for these groups are more pronounced than nationally.

Claimant unemployment continues to grow at a gradual rate. When combined with relatively high levels of economic inactivity there could be an increase in demand for employment support services and employment-focused provision delivered through the devolved Adult Education Budget. Spatial targeting of support continues to be important since jobless people are heavily concentrated in the most acutely deprived neighbourhoods.

Although the picture is a complex one, there is evidence of **misalignment between the subject profile of further and higher education delivery and the profile of demand in the local labour market**. Apprenticeships aside, the main determinant of the profile of take-up of FE and HE is individual demand, which suggests that an important mechanism for addressing the misalignment is a stronger focus on careers support to improve learners' understanding of the relative employment and pay prospects associated with different occupational pathways.

Take-up of apprenticeships remains below pre-pandemic levels, with the worst-affected subjects being *Manufacturing technologies*, *Administration*, *Hospitality and catering*, *Retailing and wholesaling* and *Service enterprises*. This raises the question of whether employers in the relevant sectors / occupational areas have access to the supply of apprentices that they need to meet business objectives.

Take-up of **higher apprenticeships** has continued to grow throughout the recent period unlike apprenticeships at other levels, largely due to support through the levy. However, higher apprenticeships remain narrowly focused in subject terms and there are relatively few starts in subject areas associated with the most acute skill shortages such as engineering and construction, although take-up of ICT provision has increased in recent years.

Employers play a central role in developing the skills that the economy needs, although many acknowledge that they under-invest and the evidence suggests that the trend **in job-related training** is static at best. Since public investment in vocational skills is unlikely to take up the slack in future there is a need to make the case for investment in skills by employers as part of a wider emphasis on improving business growth and performance.

Lack of proficiency in **basic literacy and numeracy** is one of the key challenges facing West Yorkshire and employers indicate that many of their staff lack the basic skills needed to operate effectively in the workplace.

West Yorkshire's large **higher education** sector is one of its key assets but there is a continuing challenge of how to connect graduates from local institutions with the growing number of high skilled jobs in the area. As noted above, higher apprenticeships are an

important tool in addressing technical skills shortages at professional and associate professional level. However, the broader range of higher-level technical provision, including that delivered through further education colleges, will play an increasingly important role.

Lack of access for the disadvantaged to education and training opportunities, including apprenticeships and higher education is a key barrier to inclusive growth and social mobility. Lack of attainment at Key Stage 4 has a knock-on effect in terms of subsequent opportunities for this group. Enterprise in education provision plays a crucial part of developing career readiness and employability skills as well as raising individual aspiration with a view to improving attainment.

Previous waves of automation have tended to have the greatest impact on occupational areas that focus on routine tasks that can be easily codified. Roles that rely on interpersonal skills, analytical skills and creativity have tended to be largely insulated from the effects of automation. However, the new generation of **artificial intelligence** is now disrupting that pattern. Enabling employers, individuals and institutions to adapt to potentially sweeping changes in the labour market will present a major challenge to the employment and skills system.

Appendix

This report uses the Standard Occupational Classification as a key mechanism for classifying jobs. The following appendix provides a short guide to this system.

Occupational categories – Standard Occupational Classification 2020

Major group	Overview of skill / qualification requirements	Sub-major group	Examples of detailed occupations / job titles
Managers, directors and senior officials	Tasks consist of planning, directing and coordinating resources to achieve the efficient functioning of organisations and businesses Roles require a significant amount of knowledge and experience of the production processes, administrative procedures or service requirements associated with the efficient functioning of organisations and businesses	Corporate managers and directors	• Chief executives • Production managers • Marketing director • IT director • Bank manager • Retail manager
		Other managers and proprietors	• Farm manager • Café owner • Publican • GP practice manager • Hotel manager • Shopkeeper
Professional occupations	Tasks require a high level of knowledge and experience in the natural sciences, engineering, life sciences, social sciences, humanities. Roles require a degree or equivalent qualification, with some occupations requiring	Science, research, engineering and technology professionals	• Chemical scientists • Mechanical engineers • Programmers and software development professionals • Web and multimedia design professionals • Environment professionals

Major group	Overview of skill / qualification requirements	Sub-major group	Examples of detailed occupations / job titles
	postgraduate qualifications and/or a formal period of experience-related training	Health professionals	• Medical practitioners • Pharmacists • Nurses
		Teaching and educational professionals	• Higher education teaching professionals • Secondary education teaching professionals • Primary and nursery education teaching professionals
		Business, media and public service professionals	• Solicitors • Chartered and certified accountants • Actuaries, economists and statisticians • Architects • Social workers • Quality control and planning engineers • Advertising accounts managers and creative directors
Associate professional and technical occupations Administrative and secretarial occupations	Tasks require experience and knowledge of principles and practices necessary to assume operational responsibility and to	Science, engineering and technology associate professionals	• Laboratory technicians • Engineering technicians • Building and civil engineering technicians

Major group	Overview of skill / qualification requirements	Sub-major group	Examples of detailed occupations / job titles
	give technical support to Professionals and to Managers, Directors and Senior Officials Most roles have an associated high-level vocational qualification, often involving a substantial period of full-time training or further study	Health and social care associate professionals	• Paramedics • Dispensing opticians • Pharmaceutical technicians • Dental hygienist
		Protective service occupations	• Police officers • Prison service officers
		Culture, media and sports occupations	Includes artistic, literary and media, design occupations and sports and fitness occupations • Artists • Authors • Musicians • Photographers • Graphic designers • Sports / fitness instructors
		Business and public service associate professionals	Includes roles in legal, business / finance, sales / marketing, conservation / environment, public services, such as: • Sales managers • Finance analysts • Marketers • Legal executives • Human resource managers

Major group	Overview of skill / qualification requirements	Sub-major group	Examples of detailed occupations / job titles
			• Civil servant
Administrative and secretarial occupations	Tasks relate to general administrative, clerical and secretarial work. Workers require a good standard of general education	Administrative occupations	Includes admin occupations in government, finance, record-keeping, such as: • Book-keepers, payroll managers and wages clerks • Records clerks • Sales administrators • Office managers
		Secretarial and related occupations	• Medical secretaries • Personal assistants • Receptionists
Skilled trades occupations	Tasks involve the performance of complex physical duties that normally require a degree of	Skilled agricultural and related trades	• Farmers • Horticultural trades • Gardeners and landscape gardeners

Major group	Overview of skill / qualification requirements	Sub-major group	Examples of detailed occupations / job titles
	initiative, manual dexterity and other practical skills. Require a substantial period of training, often provided by means of a work-based training programme.	Skilled metal, electrical and electronic trades	Includes roles relating to welding, metal machining, vehicle trades, electrical / electronic trades, such as: • Welding trades • Pipe fitters • Tool makers, tool fitters • Vehicle technicians, mechanics and electricians • Electricians and electrical fitters
		Skilled construction and building trades	Includes construction trades and building finishing trades, such as: • Bricklayers and masons • Roofers, roof tilers and slaters • Plumbers and heating and ventilating engineers • Carpenters and joiners • Plasterers • Floorers and wall tilers • Painters and decorators
		Textiles, printing and other skilled trades	• Includes textile trades, printing trades, food preparation • Weavers and knitters • Printers

Major group	Overview of skill / qualification requirements	Sub-major group	Examples of detailed occupations / job titles
			• Chefs • Florists
Caring, Leisure and Other Service	Good standard of general education and vocational training is required. Some occupations require professional qualifications or registration with professional bodies or relevant background checks.	Caring personal service	• Care workers and home carers • Nursery nurses • Teaching assistants • Nursing auxiliaries
		Leisure, travel, related personal service	• Hairdressers • Sports and leisure assistants
		Community and Civil Enforcement Occupations	• Police community support officers • Parking and civil enforcement occupations
Sales and Customer Service	General education and skills in interpersonal communication. Some occupations will require a degree of specific knowledge regarding the product or service being sold	Sales	• Sales and retail assistants
		Customer service	• Customer service occupations • Contact centre occupations
Process, Plant and Machine Operatives	Most occupations in this group do not specify that a particular standard of education should have been achieved but will usually have a period of formal experience-related training. Some occupations require licences	Process, plant, machine operatives	• Food, drink and tobacco process operatives • Energy plant operatives • Assemblers (electrical and electronic products) • Rail construction and maintenance operatives

Major group	Overview of skill / qualification requirements	Sub-major group	Examples of detailed occupations / job titles
	issued by statutory or professional bodies.	Transport, mobile machine drivers, operatives	• LGV drivers • Van drivers • Taxi drivers
Elementary	Most occupations in this group do not require formal educational qualifications but will usually have an associated short period of formal experience-related training.	Elementary trades	• Elementary construction occupations (labourers) • Packers, bottlers, canners and fillers • Warehouse operator
		Elementary administration and service	• Cleaners and domestics • Kitchen and catering assistants • Elementary storage occupations • Waiters and waitresses • Bar staff

Find out more

westyorks-ca.gov.uk

West Yorkshire Combined Authority

Wellington House
40-50 Wellington Street
Leeds
LS1 2DE

All information correct at time of writing

West Yorkshire Combined Authority | Tracy Brabin Mayor of West Yorkshire