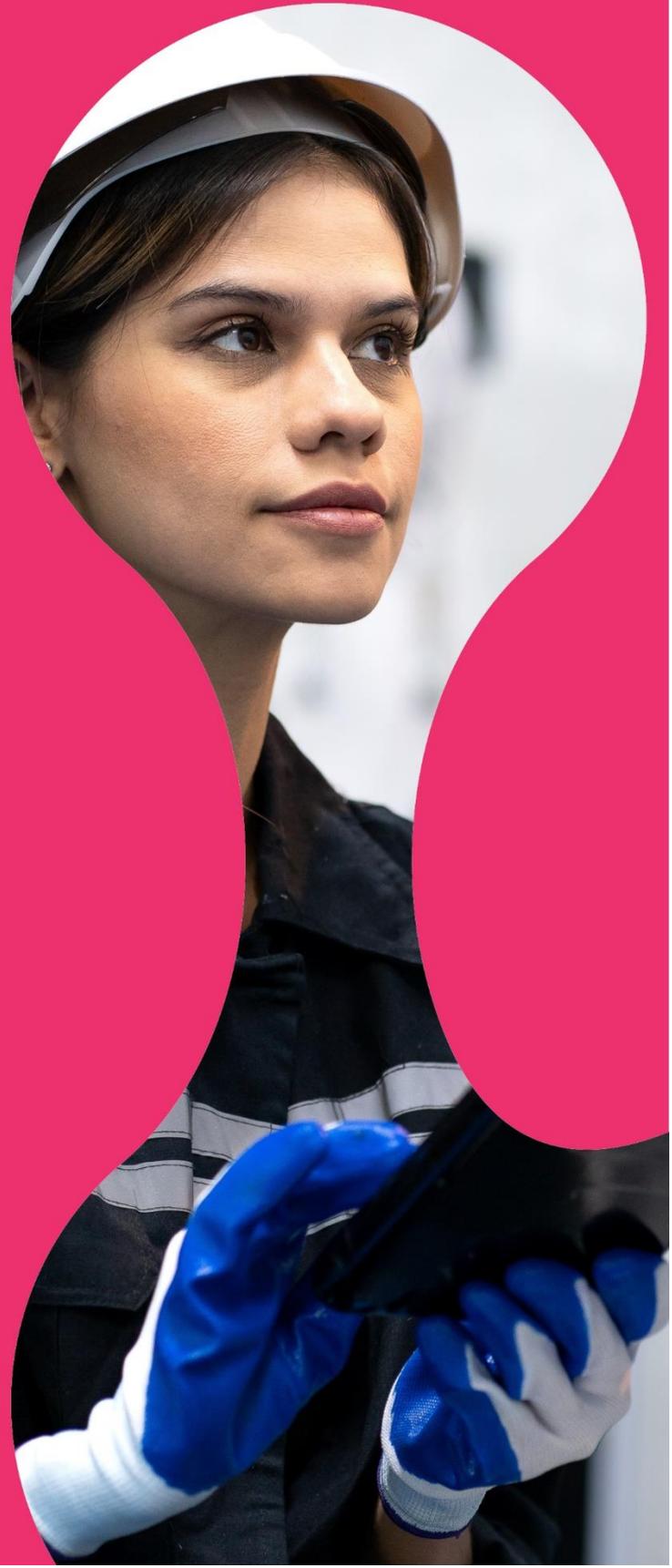




**South Yorkshire
Skills and
Employment
Evidence Base**

A Report
for the South
Yorkshire Mayoral
Combined Authority
September 2023



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EXECUTIVE SUMMARY

This is the executive summary for the Skills and Employment Evidence Base produced for the South Yorkshire Mayoral Combined Authority. The report provides a detailed picture of South Yorkshire's skills, education, and employment performance.

INTRODUCTION

The report is formed of six chapters, five of which are based upon themes which were identified through extensive engagement with stakeholders and learners, young people, and jobseekers. Each chapter dives into the key challenges and opportunities for South Yorkshire. At the centre of these challenges and opportunities are people and places, and importantly potential. The evidence base extends beyond the traditional and presents a more holistic picture of skills and employment in South Yorkshire which reflects the diverse nature of the skills system as well as the nuance of South Yorkshire's geography and history.

South Yorkshire's Strategic Economic Plan¹ 2021 – 2041 has the vision 'to grow an economy which works for everyone' underpinned by inclusive growth in recognition that previous economic approaches have not seen benefits 'trickle down'. Skills and education are an essential tool to achieve this vision.

This executive summary presents the headline findings from each of the five chapters, more information can be found in the relevant sections in the report. First, challenges which cut across the other chapters are outlined.

CROSS-CUTTING CHALLENGES

Chapter one provides a methodological overview, context and sets out the challenges identified through qualitative research which cut across people's experience of and access to education and skills which are summarised below.

CAREERS EDUCATION, INFORMATION, ADVICE AND GUIDANCE

Conversations about careers need to start earlier, be more frequent, and be of more consistent quality. High quality Careers Education, Information, Advice and Guidance (CEIAG) is essential for people to understand and navigate education and employment opportunities. It inspires people to seize opportunities and is key for social mobility. As we shift towards a more inclusive, green, and digital economy there is a growing need for CEIAG to be accessible to all ages, current and of a more consistent quality.

RECRUITMENT AND RETENTION OF STAFF

Across education there are challenges in the recruitment and retention of staff particularly in sectors with competitive industry career opportunities. The challenges of staff recruitment and retention were widely reported by stakeholders from early years through to further and higher education.

¹ SYMCA. 2021. Strategic Economic Plan. [Available here](#).

BARRIERS: THE COST-OF-LIVING CRISIS AND PUBLIC TRANSPORT

The cost-of-living crisis was a key stakeholder concern who saw the negative impacts this was having on communities including learners, with some individuals making difficult choices as to whether they could *afford* to enter or remain in education.

The inconsistency of public transport in South Yorkshire is limiting people's ability to participate in education and employment.

SOCIAL MOBILITY

Evidence suggests social mobility in South Yorkshire is lower than average particularly in Doncaster and Barnsley. Stakeholders noted the importance of enriching extra curricula experiences for children and young people which build confidence, skills, social networks (social capital) and broaden horizons.

The data shows that learners eligible for FSM tend to experience lower attainment levels through education (see next section (Secondary School (KS3 – KS4))).

A STRONG START FOR A SECURE FUTURE

Giving people a strong start provides the foundations for people and places to thrive. Chapter two highlights the importance of early years and compulsory education and its impact on economic, social and health outcomes. The infographic overleaf presents the headline findings from this chapter which is followed by a summary of the evidence base.

EARLY YEARS IN SOUTH YORKSHIRE

There are clear, evidenced economic and social benefits of investment in the early years sector. Yet, the UK early year expenditure is lower than the OECD average and the amount provided from the Government for free childcare hours (15 to 30) does not cover provider running costs.

Approximately 5,817 (37%) children in South Yorkshire are not at the expected level of development across all Early Learning Goals (ELGs) by age five. Barnsley is higher than the national average for percentages of children with a 'good' level of development aged 5 and those with the expected level across all learning goals, whereas Doncaster, Rotherham and Sheffield fall below the national average with Sheffield the worst performing. Early years development has reduced between 2019-2022 indicating the potential impact of Covid-19 on a generation of children. Boys have lower levels of ELGs development, as do children who are eligible for FSMs, when compared to those who are not, and children from certain ethnic backgrounds.

Despite the importance of their work for child development and the wider labour market, the early years sector nationally and in South Yorkshire is under-funded, under-valued and struggles to recruit, retain, and upskill staff. Stakeholders highlighted the significant recruitment and retention challenges facing the early years sector, which is low paid with a demanding workload.

Regional partners are already working together to support the early years workforce and subsequently improve outcomes for South Yorkshire's children. Research with 822 early years workers in South Yorkshire into their skills to support speech, language, and communication (SLC) found the highest self-reported competency levels in Sheffield and lowest in Rotherham. Nursery nurses had the lowest confidence in their SLC skills (68% were confident) and speech therapists reported the highest (97%).

A Strong Start for a Secure Future Headlines



Covid-19 has negative impacted children and young people socially, **emotionally, behaviourally, and educationally** - the latest attainment results in South Yorkshire from early years to KS4 tentatively support this.



37% of five-year-olds in South Yorkshire were not at the expected level of **Early Learning Goals** development compared to 36.6% nationally.



At the end of KS2, 59% of children in Barnsley met the **expected standard in reading, writing and maths**, aligning with the national average, Doncaster (56%), Sheffield (55%) and Rotherham (54%) all fell below.



The **average attainment 8 score** across South Yorkshire is between 2.1 (Rotherham – 46.8) and 3.8 (Doncaster – 45.1) points lower than the national average (48.9).



South Yorkshire is below the national and regional average for the percentage of pupils achieving grades 4 or above in **English and maths GCSEs**. Barnsley has the lowest percentage of pupils (63.2%) and Rotherham has the highest at (65.8%).



Doncaster has the lowest level of **SEND pupils** achieving grades 4 or above in English and maths GCSE at 25.1% compared to the highest in Rotherham at 28.7%, and the national average of 32.2%.



Absenteeism from compulsory education has more than doubled in South Yorkshire since 2017.



In the autumn term of 2022-23, **45,591** South Yorkshire pupils were **persistently absent** (missing 10% of possible sessions) which is approximately a quarter of pupils, and **4,119** pupils were **severely absent** (missing 50%) from school.



From early to the end of compulsory education, **children and young people who are eligible for Free School Meals have lower attainment on average** than those who are not eligible.

PRIMARY (KS1 – KS2) AND SECONDARY (KS3 –KS4) EDUCATION

Rotherham (54%), Sheffield (55%), and Doncaster (56%) recorded lower levels of KS2 pupils meeting the expected standard in reading, writing and maths in 2021/22 than nationally (59%). Levels have reduced since 2018/19 which provides an indication of the negative impact of Covid-19 on children’s development (we need more data to confirm this trend). Sheffield recorded the largest reduction (9 percentage points) between 2018/19 and 2021/22 and Doncaster the smallest (5 points) which is below the national average (6 points).

The average attainment 8² score across South Yorkshire is between 2.1 (Rotherham – 46.8%) and 3.8 (Doncaster – 45.1%) points lower than the national average (48.9%). Whilst average attainment 8 scores have increased since 2018/19 there was a reduction between 2020/21 and 2021/22. Barnsley has the lowest percentage of pupils achieving grades 4 or above in English and maths GCSEs (63.2%), in South Yorkshire Rotherham has the highest at (65.8%), although this is still below the national average (69%).

Pupils eligible for FSM have lower attainment rates at KS4 compared to pupils who are not eligible. The percentage achieving grades 4 and above in GCSE English and maths is 32.9 percentage points lower for those eligible for FSM in Sheffield compared to those who are not eligible – which is the largest gap in South Yorkshire and larger than the national gap (27.6 percentage points).

PUPILS WITH SPECIAL EDUCATIONAL NEEDS AND DISABILITIES

Barnsley (14.5%) and Doncaster (13.6%) have slightly lower levels of pupils at the end of KS4 identifying as SEND than nationally (15.7%) whereas Sheffield (16.1%) and Rotherham (17.7%) record higher levels. The percentage of pupils achieving grades 4 or above in English and maths at GCSE for SEND young people in South Yorkshire is lower than the national (32.2%) and regional (28.8%) average.

IMPACT OF COVID-19 ON CHILDREN AND YOUNG PEOPLE

Local insights and national evidence illustrate children and young people have been negatively affected by Covid-19 socially, emotionally, and behaviourally, and the latest data indicates there has been a decline in attainment for children and young people at all stages.

Since Covid-19 there has also been a significant increase in pupil absenteeism from compulsory education. Levels of persistent absence (missing 10% of possible sessions) and severe absence (missing 50%) have more than doubled between 2017-18 and 2022-23 nationally and in South Yorkshire. In the autumn term of 2022-23, 45,591 children and young people were persistently absent from school and 4,119 pupils were severely absent. Rotherham has the highest percentage of persistent absenteeism and Sheffield the highest for severe absenteeism and all local authorities in South Yorkshire are above the national average. Pupils eligible for FSM had more than double the rate of persistent and severe absenteeism compared to pupils who were not eligible.

STRENGTHENING PATHWAYS AND OPPORTUNITIES FOR PROGRESSION

Chapter three discusses pathways and progression in further and higher education and considers upskilling and reskilling of the workforce. The headline findings for the chapter are presented in the infographic on the next page which is followed by a more detailed discussion of the issues.

² A measure of the average performance of GCSE students across eight subjects.

Strengthening Pathways and Opportunities for Progression Headlines



Only one third of learners who did not achieve a **L2 English and maths** at 16 had done so by 19 years old.



92% of KS4 pupils in South Yorkshire have a '**sustained positive destination**' which is below the national average (94.1%), with most remaining in education (84.6%).



South Yorkshire has a higher percentage of young people after KS4 entering **apprenticeships** (3.3% compared to 2.4% nationally).



Higher level apprentices have increased in South Yorkshire by 23% between 2018/19 and 2021/22.



Apprenticeships in **health, public services and care** are the most popular choice for females in South Yorkshire and for males it is **engineering and manufacturing technologies**.



Nearly one third of the **34,545 university students** in South Yorkshire are enrolled in subjects allied to medicine and for graduates human health and social work activities is the largest employment sector.



Barnsley has the lowest levels of **progression into higher education** by age 19 in South Yorkshire.



7% (60,627) of people aged 16 – 64 in South Yorkshire have **no qualifications** compared to 6.6% nationally. Doncaster (9.4%) and Barnsley (9.3%) record the highest levels of adults with no qualifications.



55% of working age people in South Yorkshire are **qualified to L3 and above** compared to 60% of adults in England.



Over 80% of the 27,940 **enrolments on 19+ provision** for 2022/23 in South Yorkshire have been at L2 and below.

KS4 SUSTAINED POSITIVE DESTINATION

92% of KS4 pupils in South Yorkshire have a 'sustained positive destination' which is below the national average (94.1%). Most pupils remain in education (84.6%) and South Yorkshire has a higher percentage of young people entering apprenticeships (3.3% compared to 2.4% nationally) and employment (4.0% compared to 2.4% nationally). Barnsley has the highest percentage of KS4 pupils entering employment and apprenticeships in South Yorkshire (9%) and Sheffield has the lowest (6%).

APPRENTICESHIPS

Apprenticeships nationally and locally have declined with 10,540 apprenticeship starts in South Yorkshire in 2018-19 down to 8,810 in 2021-22. There is a similar number of male and female apprentices, and most are from a white ethnic background. Most apprenticeships are at the advanced (L3) level although these have declined along with the intermediate level in recent years, however higher-level apprenticeships (L4 – L7) have increased. Business, administration and law, and health, public services and care are the most popular apprenticeships in South Yorkshire. Apprenticeships in health, public services and care are the most popular choice for females in South Yorkshire and for males it is engineering and manufacturing technologies.

A LEVELS, APPLIED GENERALS, AND TECH LEVELS

45% of A Level students in South Yorkshire (2021/22) were in Sheffield. Psychology, maths, and biology are the most popular A Level subjects in South Yorkshire. Doncaster has the largest gap (27.5 percentage points) between the percentage of students eligible for FSM achieving two or more A Levels (50%) and those who were not eligible (77.5%). In South Yorkshire the A Level Average Point Scores for Black or Black British students are the lowest across all groups and are below national levels with the lowest average in Sheffield (25.68).

L2 ENGLISH AND MATHS ATTAINMENT

L2 English and maths attainment at ages 16 and 19 is below average in South Yorkshire. Doncaster has the highest percentage of 19-year-olds with a L2 in English and maths (72.2%), followed by Barnsley (71.2%), Sheffield (69.7%) and Rotherham (67.8%), all below England (74.8%). The increasing numbers of 19-year-olds in South Yorkshire with L2 English and maths is encouraging. However, this only accounts for around one third of 19-year-olds who did not achieve L2 English and maths at 16. More females than males achieve L2 English and maths by age 19. Fewer learners who were eligible for FSM have L2 English and maths by 19 compared to those not eligible. Sheffield has the largest gap in L2 English and maths at 19 (32.8 percentage points) by FSM status (over 7 points more than the national gap).

KS5 SUSTAINED POSITIVE DESTINATION

78% of pupils at the end of KS5 entered or remained in education, apprenticeships, or employment, with the highest levels in Doncaster (80%) and lowest in Barnsley and Rotherham (76%). Most young people remain in education. More KS5 pupils in South Yorkshire enter or remain in apprenticeships (7%) than in England (6%). As at the end of KS4, Barnsley has a higher-than-average level of young people entering or remaining in employment (25%).

HIGHER EDUCATION AND GRADUATE PATHWAYS

There were 34,545 university students in South Yorkshire (2020/21) with nearly one third of enrolments in subjects allied to medicine. The most popular subjects undertaken at the University of Sheffield and Sheffield Hallam University align some of South Yorkshire priority areas (health, advanced manufacturing and digital). Between 2018-2021, there was a reduction in undergraduate qualifiers but a growth in

postgraduate qualifiers driven by taught masters graduates. Barnsley has the lowest levels of progression into higher education by age 19 in South Yorkshire. Rotherham has the largest HE progression gap between those who were eligible for FSM (17.7% HE progression) and those who were not (41% HE progression).

In 2020/21 most Sheffield Hallam University and the University of Sheffield graduates were in full-time employment with the most common salaries between £24,000 and £26,999. Human health and social work activities was the largest employment sector for graduates from Sheffield Hallam University and the University of Sheffield. Employed graduates were mostly in professional occupations.

QUALIFICATION LEVELS AND ADULT EDUCATION

7% (60,627) of the working aged population in South Yorkshire have no qualifications which is higher than the national average (6.6%). Excluding Sheffield, South Yorkshire has a lower level of working aged adults qualified at NVQ4+ and more at NVQ2 and below, than nationally.

There have been 27,940 enrolments on 19+ provision for 2022-23 in South Yorkshire, the majority (over 80%) has been at L2 and below. Preparation for life and work is the most popular provision for adults in South Yorkshire (12,270 enrolments) and most enrolments is at entry level and level 1 (11,010). Followed by Health, Public Services and Care (4,180) and. Business, Administration and Law (2,150).

EMPLOYMENT TRENDS AND SKILLS NEEDS

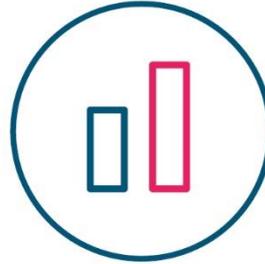
The following DfE projections have important implications for the upskilling and reskilling in South Yorkshire to ensure workers are equipped to seize future opportunities. Healthcare (12.1%) and Information and Communication Technology (8.1%) were the most common online job adverts in December 2022. Between 2023-2035, employment in South Yorkshire is predicted to grow by 4%, with non-marketed services and business and other services witnessing the largest growth. For occupational projections, Skilled trade occupations and process, plant and machine operatives are predicted to have the largest declines between 2023-2035 and professional occupations and associate professional occupations the biggest increases.

The following infographic details the headline findings for Chapter four 'Inclusion: Realising the Potential in Communities.

Inclusion: Realising the Potential in Communities Headlines



42,300
people aged 16-64
are economically
inactive and would
like a job.



Sheffield's
unemployment rate is
7.5%
approximately double
the national average
and the highest in South
Yorkshire.



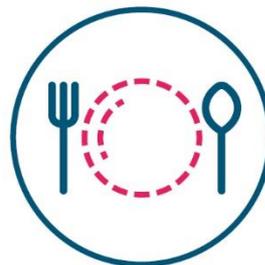
The level of NEET
16 – 17-year-old is
highest in Sheffield
and across South
Yorkshire is higher
than the national
average.



Full-time workers in
South Yorkshire are
earning between
£79.60 and
£47.90 less
each week than the
national average.



62%
of the 71,905 children
living in low-income
families in South
Yorkshire are from
working households.



Between 2018/19 –
2022/23 the number
of Trussell Trust food
parcels given in South
Yorkshire rose by
261.5%



34%
of people claiming
Universal Credit in
South Yorkshire are
in work.



Long-term sickness
accounts for nearly
a third of economic
inactivity in South
Yorkshire compared
to a quarter
nationally.

INCLUSION: REALISING THE POTENTIAL IN COMMUNITIES

Learning at any level offers individuals the opportunity to discover, develop, and connect, it builds confidence and opens opportunities – or makes them more accessible. Education and lifelong learning can provide the key to unlock labour market opportunities for the people and places across South Yorkshire.

Chapter four explores the challenges for South Yorkshire to overcome including growing economic inactivity in the over fifties post Covid-19, above average unemployment, young people who are Not in Education Employment or Training (NEET), low pay, and deprivation.

Experiences of economic inactivity, unemployment, low paid work, and deprivation have detrimental impacts on people, families, and communities with the potential to create long-term consequences such as reducing health or the scarring impact of youth unemployment on earnings and future job opportunities. Therefore, these individuals need support to mitigate the impacts and empower them to (re)engage with opportunities for education, employment, and progression.

ECONOMIC INACTIVITY

20.8% (42,300) of the 203,500 working age people (16-64) who are economically inactive in South Yorkshire would like a job which is slightly higher than nationally (18.1%) and regionally (16.6%). South Yorkshire has higher than average economic inactivity due to long term sickness (31.3% compared to 25.8% nationally).

Between 2018 and 2022, the level of economic inactive 50 – 64-year-olds grew by 18.6% (13,200) in South Yorkshire which is over double the national percentage increase (9.2%). Barnsley (-2.9%) and Sheffield (-3.9%) have seen a decrease in the economic inactivity since the pandemic whereas Rotherham (+11.8%) and Doncaster (+3.6%) have seen increases.

UNEMPLOYMENT

The unemployment level in the working age population in South Yorkshire (4.9%) is higher than the national average (3.7%). Sheffield's unemployment rate (7.5%) is approximately double the national level, whereas Doncaster (3.51%), Barnsley (2.8%), and Rotherham (2.5%) have lower levels. Female unemployment in Sheffield accounts for 62% of the total numbers whereas in Barnsley, Rotherham and Doncaster female unemployment is lower than males.

All areas in South Yorkshire apart from Barnsley (3.6%) have a higher claimant count as a percentage of the working population than the national average (3.7%). Of the 142,145 people claiming Universal Credit in South Yorkshire (February 2023), 29,279 were 'searching for work'. People in work account for 34% of Universal Credit claims in South Yorkshire.

NOT IN EDUCATION, EMPLOYMENT AND TRAINING

The level of 16 to 17-year-olds who were Not in Education, Employment and Training (NEET) in Sheffield was 6.8% (834), 5.4% (283) in Barnsley, 4.9% (304) in Rotherham, and 4.8% (334) in Doncaster compared to a national average of 4.7%. Between 2019 and 2022 NEET levels for 16-17-year-olds have risen in Barnsley and Sheffield and reduced in Doncaster and Rotherham.

29.2% of 16-17-year-olds in Sheffield are vulnerable to becoming NEET, as are 28.3% in Doncaster, 21.3% in Rotherham, and 11.8% in Barnsley compared to 23.6% nationally.

LOW PAY, DEPRIVATION AND POVERTY

A full-time worker's gross weekly pay in Barnsley is £562.60, in Doncaster is £594.30, in Sheffield is £592.60, and in Rotherham is £597.70 – which is less than the national average (£642.20).

23.8% of neighbourhoods in Sheffield are in the 10% most deprived according to the Indices of Multiple Deprivation as are 23.7% in Doncaster, 21.8% in Barnsley and 21.6% in Rotherham. There were 71,905 children living in low-income families in South Yorkshire (2021-22), 62% (44,640) were working families. Rotherham (23%), Doncaster (17.6%), Sheffield (16.5%) and Barnsley (15.6%) all have higher levels of child poverty than the national average (14.7%).

South Yorkshire has higher than the national average level of fuel poverty with 16.8% of households fuel poor, which can negatively impact their health. Food poverty has risen significantly in South Yorkshire, between 2018/19 – 2022/23 the number of Trussell Trust food parcels given rose by 261.5%. This represents a growing number of South Yorkshire residents being unable to afford food and therefore accessing an emergency food parcel which provides enough food for three days. Between April 2022 and March 2023, the Trussell Trust provided 92,521 food parcels in South Yorkshire.

Travel was identified by stakeholders as a significant barrier for people to engage with education and employment opportunities, as was the affordability and accessibility of childcare.

Digital



Employment in South Yorkshire's digital sector is projected to grow by **9.2%** by 2035.



82% of online job adverts have digital skills as an essential requirement.



13% of jobs in Doncaster are at a high risk of automation



The top three in demand digital skills by South Yorkshire employers are general office software, security, privacy and GDPR and social media/digital marketing.

Green



Transitioning to net zero could deliver **£2.8billion** annually in benefits for South Yorkshire.



Net zero workers have an average salary **£12,640** higher than the South Yorkshire average.



In the short to medium term, insulation and heat pumps are South Yorkshire's biggest green opportunity, but skills gaps must be addressed.



The hydrogen industry is a long-term opportunity for South Yorkshire.

Health and Social Care



South Yorkshire residents live shorter lives than the national average and spend fewer years in 'good' health. There is a gap of over ten years in life expectancy between the top and worst performing wards.



Men in Barnsley have a healthy life expectancy **7.2 years** lower than the national average.



The health and social care sector is the biggest employer in South Yorkshire with **93,000** workers and is projected to grow by **15.1%** by 2035 which is higher than the national average.



The healthcare sector had the most online job adverts in December 2022 with care assistants and nurses in demand.

CHANGING FUTURES: PREPARING FOR THE ECONOMY OF TOMORROW

As South Yorkshire transforms to become greener, healthier, and more digital it will need the current and future workforce to be equipped with the skills and capabilities to succeed. Chapter five explores the challenges and opportunities for South Yorkshire in preparing for the economy of tomorrow.

DIGITAL FUTURES

South Yorkshire has a growing digital sector with projected employment growth of 8.2% by 2035. Life and work are increasingly reliant on digital skills, with digital skills an essential requirement for 82% of online job vacancies. There is a need to continue to upskill digitally now to ensure everyone has at least basic digital skills and in the future reskilling will be required for those workers at greatest risk from automation. 13% of jobs in Doncaster are at a high risk (over 70%) of automation, as are 9.3% in Barnsley, 7.6% in Rotherham, and 6.9% in Sheffield – all apart from Sheffield are higher than the national average (7%)³.

There are digital skills gaps nationally and in South Yorkshire with local employers reporting a need for general office software skills, security, privacy and GDPR and social media/digital marketing. The latest South Yorkshire Local Skills Improvement Plan (LSIP) found 72% of surveyed employers felt their employees would benefit from external training for data skills and social media/digital marketing.

Computing GCSE numbers have grown steadily nationally. Across digital provision there is a significant gender divide with more male entrants than female. There are small numbers of computing A level students and ICT apprentices in South Yorkshire. At HE level, computing learners have increased steadily in recent years, however at a weaker rate than nationally. The growth in computing postgraduates shows the pipeline for more advanced digital skills is developing locally.

GREENER FUTURES

To achieve net zero status by 2041, significant co-ordinated and collaborative action is required and in doing so South Yorkshire could significantly boost its economy and improve the life and future of residents.

South Yorkshire needs to adapt its workplaces, homes, and infrastructure to become net zero. Two-thirds of South Yorkshire homes are rated below EPC C and the sub-region has higher than average levels of fuel poverty. South Yorkshire has a mixed performance on several sustainability measures, positively carbon and greenhouse gas emissions are reducing.

A greener economy is a more productive one which provides workers an average salary £12,640 higher than the average South Yorkshire salary. In 2019, there were 3,900 LCREE workers (1% of workforce) and between 2019 – 2021 the most in demand green skill was environmental protection and processes. Insulation and heat pumps are South Yorkshire's biggest short to medium term opportunity but skills gaps in the workforce must be addressed. In the long-term the development of the hydrogen industry in South Yorkshire is a prime opportunity.

³ ONS. 2019. Which occupations are at the highest risk of being automated. [Available here](#).

South Yorkshire has academic and innovation assets which can help to deliver net zero, address sustainability challenges and drive economic growth.

HEALTHIER FUTURES

Residents in South Yorkshire not only live shorter lives but fewer of those are spent in 'very good' or 'good' health. There are significant health challenges and inequalities in South Yorkshire with a gap of over ten years in life expectancy between the top and worst performing wards. Health inequalities are shaped by social, economic and environment factors which will need to be addressed to improve South Yorkshire's health.

South Yorkshire's growing innovation strengths in health and social care can be utilised to improve the sector, increase the talent pipeline, and improve local health whilst driving economic activity.

At 16.1% of the total workforce South Yorkshire's health and social care sector (93,000 workers) is larger than regional and national averages and is predicted to grow by 2035 by 15.1% which is higher than the national average (9%). Online job adverts for healthcare were the largest group as of December 2022 with care assistants and nurses particularly in demand. There are significant staffing shortages nationally which are growing as employers struggle to recruit and retain staff (due to pay and working conditions).

South Yorkshire has a large cohort of health and social care students with 18,695 university students on health-related courses in South Yorkshire (2021/22), 4,180 adult learners (health, public services, and care), and 2,350 health, public services and care apprenticeship starts (2021-22). Students entered for 1 or more STEM subjects at A Level is below average in South Yorkshire (43% compared to 47.4% nationally) as is students entering 2 or more STEM subjects at A Level (26.4% compared to 29.7% nationally).

The Place for Ideas, Enterprise, and Better Business Headlines



Higher Education Institutions, Catapults and Research and Technology Organisations in South Yorkshire R&D investment is nearly three times the UK average per capita level. Yet business spend on R&D in South Yorkshire is below the national average.



44% of South Yorkshire employers have difficulties finding applicants with management and leadership skills. This ranges from 81% of Barnsley employers to 27% of employers in Doncaster.



South Yorkshire's supply of workers for innovation is limited by lower-than-average qualification levels, L2 English and maths performance, and fewer learners taking L3 STEM related subjects.



If 25% of low paid workers in South Yorkshire were moved up to the Living Wage, the benefit to the economy would equate to £29m per annum.



Across South Yorkshire there is considerably lower business density than regional and national averages.



Sheffield is the only South Yorkshire local authority to have increased the disability employment rate since 2019 (by 11.6%) and substantially more than regionally (2.9%) and nationally (3%).



Rotherham performs best in South Yorkshire on ONS job quality measures with five indicators above the national average, and Barnsley records the fewest with two.



The employment gap between males and females has reduced from 8.6 percentage points in 2018 to 5.9 points in 2022 in South Yorkshire, with more women entering the workplace since the pandemic.



Of the 659 Living Wage accredited employers in Yorkshire and Humber, approximately 273 are in South Yorkshire which accounts for 0.7% of the business base.



There is a 20-percentage point gap between the working age employment rate of White ethnic groups (75.4%) and people from a Minority Ethnic Background¹ (55.7%).

¹ This is a combination of all non-white ethnic groups.

THE PLACE FOR IDEAS, ENTERPRISE, AND BETTER BUSINESS

Innovation, entrepreneurialism, and diversity create more productive economies. This final chapter (six) explores South Yorkshire's innovation, business, and entrepreneurial performance as well as job quality and the inclusivity of businesses.

IDEAS AND INNOVATION

As noted above in relation to the health sector ideas and innovation are crucial to the future success of the South Yorkshire economy. The most innovative firms and industries are the most productive, and innovation delivers benefits to society as well as creating jobs and economic growth. Innovation and skills are closely linked.

South Yorkshire has some world-class innovation and translational R&D assets, and a high proportion of businesses which are classed as 'innovation active'; however, business investment in R&D (per head of population) is well below the national average (£108 per head compared to £747 per head in England and Wales as a whole), and lower than in all the comparator areas. Low levels of investment in innovation contribute to South Yorkshire's productivity gap compared to national levels.

A wide variety of skills contribute to innovation, with technical skills, soft skills (such as teamwork and communication) and adaptability and flexibility all important. Rather than focussing on developing specific 'skills for innovation' it is important to create an environment in which individuals can acquire and upgrade skills throughout their working lives in response to new and frontier technologies.

South Yorkshire's relatively poor basic literacy and numeracy skills mean that many workers lack the foundations on which to build skills which support innovation, with below average take-up of STEM subjects also a cause for concern.

Making innovation inclusive and increasing diversity can lead to greater creativity and better outcomes with innovation better meeting the needs of individuals and communities. There is a lack of inclusion and diversity in some parts of the South Yorkshire workforce, which is considered in section 6.3.

ENTERPRISE

Enterprise and entrepreneurship are key to economic dynamism and growth, not only through the establishment of new businesses, but through bringing new ideas and ways of working to the public sector, charities, universities, and social enterprises as well as corporate organisations.

South Yorkshire's business base is small relative to its population; however, the number of businesses has increased throughout the region (9.2% overall). South Yorkshire has a lower proportion of high growth businesses, and a smaller percentage of businesses survive their first year of trading than is the case nationally, although longer-term survival rates are above the national average.

There are 75,000 self-employed people in South Yorkshire. Whilst the proportion of self-employed workers is lower than nationally, they account for over 10% of the adult population.

The skills needed for enterprise include technical skills relevant to the specific area of work, management skills and entrepreneurship skills including developing entrepreneurial mindset and learning to act in an entrepreneurial fashion (such as being innovative, taking risks, being resilient). Literacy and numeracy skills provide the base for the development of skills for enterprise and as noted previously, are a weakness

for South Yorkshire. Leadership skills are important for creating a positive work culture and entrepreneurial mindset in all organisations, but only one-quarter of South Yorkshire employers rated the leadership skills within their workforce as '5' on a 1-5 scale, and only one-third of employers felt that entrepreneurialism was important within their workforce.

CREATING AND SUPPORTING BETTER BUSINESS

Businesses have a role beyond wealth creation and are key partners in tackling social challenges and creating an environment where people want to live and work. As South Yorkshire seeks to raise prosperity levels and tackle inequalities, businesses have a key role to play in creating good jobs and higher productivity, including through provision of relevant skills and training.

There will always be significant variation in earnings levels across firms, sectors, and occupations; however, everyone should be able to access good quality work. ONS identifies eight indicators of 'good quality' jobs, including the type of contract offered, pay levels, hours worked and opportunities for progression and the data suggests that jobs in South Yorkshire are less likely to be 'good quality' jobs, with Barnsley below the national average on six of these indicators, Doncaster on five, Sheffield and four and Rotherham on three. Pay levels in South Yorkshire are lower on average than nationally or regionally, and in many of the comparator areas, as a result of South Yorkshire's poor productivity performance, and relatively high proportion of employment in 'low pay sectors'.

There are significant differences in labour market outcomes for people from different ethnic groups, men and women, and those with and without a disability. Employment rates are lower for non-white ethnic groups, and national data shows that certain groups are over-represented in lower skilled and less well-rewarded occupations. Gender segregation in the labour market is clear from looking at the occupational groups which are most common for males and females, with little commonality in the 'top 5' groups for men and women in the South Yorkshire local authority areas. Disabled people of working age are considerably less likely to be in employment than people without a disability.

1 INTRODUCTION

This is the Skills and Employment Evidence Base produced for the South Yorkshire Mayoral Combined Authority. It is a substantive assessment of the skills' performance and prospects of the sub-region.

This chapter introduces the report by providing guidance on how to navigate the report, notes on the method and evidence reviewed, acknowledges the people with lived experience and stakeholders who helped to inform the evidence base, and provides some context.

1.1 ABOUT THIS REPORT

This report provides a detailed picture of skills, education, and employment across South Yorkshire. The report is shaped by the key themes listed in the report structure below which were identified through extensive stakeholder engagement from July 2022 – November 2022 and engagements with learners, young people, and jobseekers between November 2022 and January 2023.

Through the analysis of the qualitative research and synthesis with desk research challenges, strengths and opportunities were identified for South Yorkshire. Subsequently, these were used to guide the development of the evidence base which involved a deep dive into the available quantitative data at a national, regional, and local level to provide a robust and timely picture.

The report structure is as follows:

- This chapter sets the scene including the report coverage, method and cross cutting challenges.
- Chapter two '**A Strong Start for a Secure Future**' covers early years and the early years workforce and primary and second schooling. It considers pupils with special educational needs, absenteeism and the impact of Covid-19 on children and young people.
- Chapter three '**Strengthening Pathways and Opportunities for Progression**' looks at further education, apprenticeships, higher education, and adult education. It also reflects on employment trends.
- Chapter four '**Inclusion: Realising the Potential in Communities**' assesses economic inactivity, unemployment, and those not in education, employment or training. It also considers low pay, deprivation and poverty.
- Chapter five '**Changing Futures: Preparing for the Economy of Tomorrow**' covers digital, green and health and social care trends and opportunities.

- Chapter six '**The Place for Ideas, Enterprise and Better Business**' highlights key issues in relation to ideas and enterprise and their role within the South Yorkshire economy, as well as features of *doing* 'better business'.

Each section concludes with challenges and opportunities for South Yorkshire.

1.2 METHODOLOGICAL NOTES

This section provides an overview on the data sources used to develop the evidence base as well as the qualitative engagements which helped shape the themes of the review through the identification of challenges and opportunities for South Yorkshire.

QUANTITATIVE DATA

The evidence base uses a range of official data sources predominately from the Office for National Statistics and various Government Departments. Due to the broad nature of themes covered in the report uses data and sources beyond traditional economic and skills analysis such as for health data.

The definitions used in the report are those from the data source (therefore different terms are used) and we have been as specific as the available data allows, yet we (the authors) recognise this can lack nuance. It should also be noted that the categories used in the data sources do not fully reflect the experiences and voices of the people within these categories.

In some areas, namely the digital and green sections, there is a lack of clarity over the definition of the sector and subsequently limited data. Where there is a lack of quantitative data at a local level, desk research has taken place to provide a national picture. Desk research was also undertaken to explore challenges and opportunities that emerged through the engagements with stakeholders and people with lived experiences.

Where possible, the geographies used in this report are national, regional (Yorkshire and Humber), sub-regional (South Yorkshire), and local authority (Barnsley, Doncaster, Rotherham, and Sheffield). It is not always possible with the available data to provide data at each of these levels. Comparisons are also made with Liverpool (MCA), Tees Valley (LEP), West Midlands (MCA), and Buckinghamshire (LEP). When using data from the DfE Local Skills Dashboard comparisons are available for the 10 other English MCAs.

STAKEHOLDER ENGAGEMENT

The stakeholder engagement began in July 2022 with a workshop to launch the consultation with key stakeholders in South Yorkshire. Subsequently initial discussions were held with all four Local Authorities to explore the local challenges and opportunities in Barnsley, Doncaster, Rotherham, and Sheffield.

In October 2022, seven workshops, attended by over 120 stakeholders, which were organised by the following themes:

- Early Years
- Compulsory Education
- Pathways into Work: Further Education
- Pathways into Work: Higher Education
- Upskilling and Reskilling: Skills for the Future
- Inclusion: No one Left Behind

- Levers and Systemic Change

Following the workshops, summaries of each session were sent to participant for comment to ensure the insights captured reflected the understandings of stakeholders.

After the large engagement events, follow up meetings were held with Colleges and Local Authorities to sense check emerging findings. Separate workshops were also held with the voluntary sector in Sheffield, Independent Training Providers and the SY College Partnership group, as well as several 1-2-1 conversations with stakeholders who had missed the large workshops. The extensive stakeholder consultation ended in November 2022.

ENGAGEMENTS WITH LEARNERS, YOUNG PEOPLE AND JOBSEEKERS

Between November 2022 and January 2023, learners, young people, and jobseekers were engaged with to explore the lived experiences of the skills system in South Yorkshire. A small group workshop was held with jobseekers aged over 50 in Barnsley to understand the challenges they faced regarding skills and employment, and what support they would like to see. A workshop was also held with learners at a college in South Yorkshire which explored their aspirations for the future, experiences of education, barriers, and support they would like.

South Yorkshire's Youth MCA was also engaged with through a group discussion which considered the challenges facing young people in accessing and thriving in education and employment, experiences of CEIAG, and explore what young people in South Yorkshire need from the skills system. A day was also spent engaging with young jobseekers at a Youth Hub to understand their experiences, challenges, and support needs.

1.3 ACKNOWLEDGEMENTS

We would like to thank the learners, young people and jobseekers who gave key insights from their experiences of education and employment in South Yorkshire.

Thank you also to the stakeholders who helped with the study including those who attended workshops and follow up discussions in Autumn and Winter in 2022 giving us their understandings on the challenges and opportunities for South Yorkshire. The stakeholders engaged included early years providers and those working in secondary, higher, and further education, as well as local authorities. Individuals involved in training, employment support, and inclusion and accessibility activities also attended.

Thank you to the SYMCA client team who have guided and supported us throughout the assignment and kept us up to speed with parallel activities and partner priorities.

1.4 CONTEXT

South Yorkshire's Strategic Economic Plan⁴ (SEP) for 2021 – 2041 outlines an ambition 'to grow an economy which works for everyone' based upon inclusive growth as previous economic approaches have not seen benefits 'trickle down'. The SEP explains:

"Inclusive growth is a model which enables as many people as possible to contribute to and benefit from prosperity... There are specific inclusion challenges for the SY MCA which include low productivity rates, low wages, in-work poverty, and a lack of higher-level occupations. The inclusive growth agenda is fast-moving and requires the development of bold and

⁴ SYMCA. 2021. Strategic Economic Plan. [Available here](#).

innovative strategies and a willingness to pilot experimental approaches to make a real difference" SEP, page 14.

The development of skills through education and training are an essential tool to make South Yorkshire's economy more inclusive and to help address the inclusion challenges highlighted by the SEP. Investment in skills can empower the people and places of South Yorkshire, unlock opportunities for a more equitable and prosperous economy, and increase the health and wellbeing of residents.

An 'economy which works for everyone' will require a skilled population able to navigate the dynamism of a digital and green economy which offers high quality employment that is empowering with progression opportunities, fairly paid, and secure. This more inclusive economy will also be a more prosperous and productive one which can help address South Yorkshire's low productivity levels.

South Yorkshire underperforms on GVA (both per hours worked and per filled job) compared to the UK, England and Yorkshire and Humber.

Table 1 GVA per hours worked and per filled job 2021

	GVA per hour worked	GVA per hour worked (£)	GVA per filled job	GVA per jobs filled (£)
UK less Extra-Region	100.0	£38.33	100.0	£58,326.59
England	101.5	£38.91	101.7	£59,286.30
Yorkshire & The Humber	85.0	£32.59	84.4	£49,237.52
South Yorkshire	78.4	£30.04	78.4	£45,721.83
Sheffield	84.1	£32.24	80.9	£47,201.55
Barnsley, Doncaster, & Rotherham	73.9	£28.31	76.3	£44,473.85

Source ONS Subregional Productivity: labour productivity indices by UK ITL2 and ITL3 subregions

The lower levels of productivity limit the growth and wealth in the sub-region and across the communities of South Yorkshire. The data shows Sheffield records higher levels of productivity than the South Yorkshire average but still below regional and national averages. The output per hour worked in Barnsley, Doncaster and Rotherham is over £10 less per hour compared to the rest of the UK.

Between 2018 and 2021 GVA (per hours worked indices) has fallen in Barnsley, Doncaster, and Rotherham by 2.7% which has led to a reduction in South Yorkshire of 1.7% over this period.

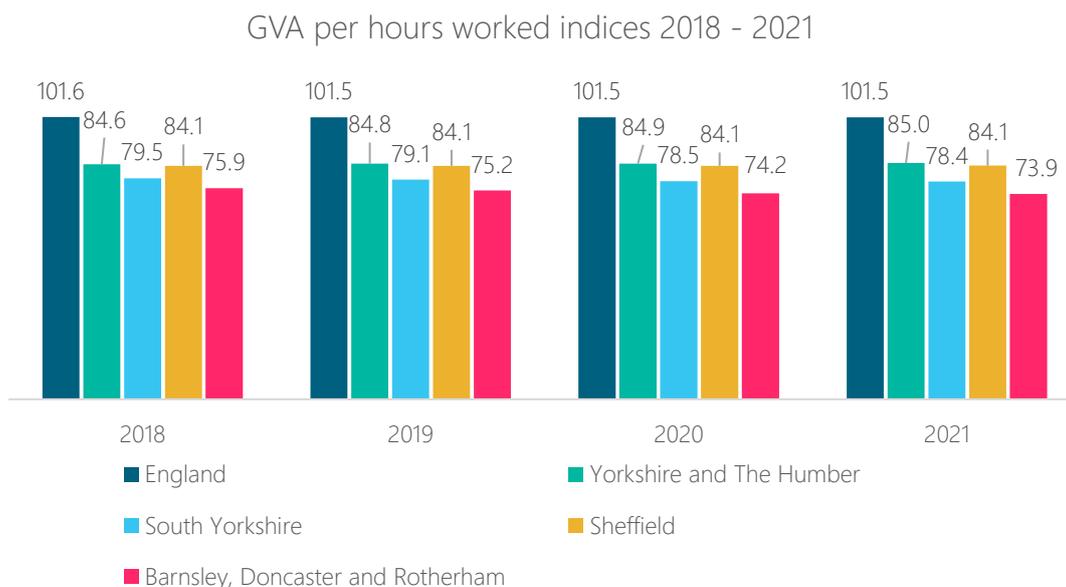


Figure 1 Productivity (GVA per hours worked indices) 2018 - 2021 Source ONS Subregional Productivity: labour productivity indices by UK ITL2 and ITL3 subregions.

Whereas in Sheffield there has been a marginal increase between 2018-2021 (0.1%) which is like Yorkshire and Humber (+0.4%) and England (remained the same).

Education and skills are important tools to improve productivity by equipping people with the capabilities to engage in the workplace and be resilient and adaptable to change.

1.5 CROSS CUTTING CHALLENGES

This section considers challenges which cut across education, employment and skills and is informed by engagements with young and old jobseekers, college students, the Youth MCA, and stakeholders across South Yorkshire.

These challenges impact the development of skills and education and highlight the wide range of factors which cut across people’s experiences of and access to the skills system and employment. The issues discussed in this section intersect with the evidence presented throughout this report.

CAREERS EDUCATION, INFORMATION, ADVICE AND GUIDANCE

Schools and colleges are required by law to provide CEIAG to learners aged between 11 and 18 years old, and for people up to 25 years with an education, health, and social care plan. The Government expects all schools and colleges to deliver CEIAG in line with the Gatsby Benchmarks.⁵

As there is no legal requirement, primary school CEIAG is rare. Yet, children can decide from a young age (as young as 7 onwards) whether their aspiration is achievable⁶, but this is tempered by expectations and experiences. Therefore, stakeholders raised the importance of age appropriate CEIAG interventions in primary schools and with families such as having relatable role models visit to showcase potential careers and overcome stereotypes. This is particularly helpful for new industries or ones which have been transformed through technological development such as advanced manufacturing which can still be

⁵ Gatsby Charitable Foundation. Good Career Advice. [Available here.](#)

⁶ Moulton. V. et al. 2014. Fantasy, unrealistic and uncertain aspirations and children’s emotional and behavioural adjustment in primary school. [Available here.](#)

perceived as a 'dirty' job and one which is 'not for girls'. Changing this perception and providing high quality CEIAG will help this sector to become more accessible and diverse.

The inclusion of families was another factor raised by stakeholders as they are often key influences on children and young people as they navigate education and employment opportunities. A survey of young people in South Yorkshire⁷ found families were the greatest influence on post 16 choices for 74% of participants. Helping adults to be informed about career options and pathways will empower them and the young person they are supporting. Moreover, it was recognised how a family approach can boost opportunities for parents and carers themselves to engage with learning.

The Higher Education Progression Partnership South Yorkshire⁸ (HeppSY) is a partnership between Sheffield Hallam University, the University of Sheffield, and South Yorkshire colleges and schools, which supports young people from underrepresented groups to access higher education. HeppSY helps young people to make informed decisions about their future, supports attainment raising, delivers targeted outreach to widen access to higher education, and provides signposting to schools and colleges to access outreach activities.

As well as starting earlier, there is a need for improved CEIAG as currently stakeholders and young people reported it is inconsistently delivered across South Yorkshire.

"If you are going to offer careers guidance, do it properly because when it is done badly it makes the situation worse"

(Young college student in South Yorkshire).

CEIAG in secondary schools is not currently providing all young people with the information and guidance they need to realise and fulfil their potential. Some young people are unintentionally removing potential education and employment pathways by not selecting the required options in school.

Work experience should be delivered in a meaningful way to ensure all young people across South Yorkshire have the same opportunities to explore pathways to their aspirations. Currently not all young people have access to work experience in school which can provide a valuable first encounter with a potential career. Stakeholders felt work experience should include time for young people to reflect on their experiences to help them learn and take more from the time spent in the world of work.

The college students wanted more engagements with employers through their studies and more opportunities to develop their employability skills such as how to communicate in the workplace and networking tools such as LinkedIn.

Across CEIAG vocational and technical education should be seen as equal to academic routes, as stakeholders and young people felt currently this is not always happening. Moreover, for certain industries a wider change in perceptions is required for example young people are offered 'hair or care' as a pathway which does not reflect the opportunities, complexities, or vocational nature of early years.

Stakeholders raised the importance of CEIAG for adults who may require support to upskill and reskill as well as for those further away from the labour market. Older job seekers were keen to have opportunities to engage with companies/organisations for example through job fairs and be able to have a 'proper conversation' with potential employers.

⁷ Hepp SY. 2020. Evaluation and Data. [Available here.](#)

⁸ More information [available here.](#)

The growing importance of green and digital skills and jobs requires CEIAG to adapt, learn, and promote the sectors and support young people through these new pathways.

Positively, there are Careers Hubs operating in Barnsley, Doncaster, Rotherham and Sheffield which help young people make informed decisions about their future and work with over one hundred education providers. There are opportunities through organisations such as Work-wise, an employer-led charity who inspire and support skills development for young people, to increase meaningful connections between young people and employers. Work-wise are developing Skills Street⁹ - an immersive and inspiring centre of excellence for training across key South Yorkshire industries aimed at children and young people.

RECRUITMENT AND RETENTION OF STAFF IN EDUCATION

Education providers struggle to attract and retain staff as the pay is generally higher in an industry role and it could offer better conditions (particularly with the increase in hybrid working).

It is particularly difficult within industries such as digital and advanced manufacturing who require educators to have technical knowledge and industry experience (which is rapidly changing and advancing). There are also issues with aging workforces both within industry and education for example within engineering this is a national challenge and locally stakeholders were concerned about this workforce and encouraging young people into it.

There is also a growing need to train and recruit staff who will be able to equip learners with the skills required for green jobs such as heat pump engineers as highlighted in chapter five. Stakeholders were concerned that not enough action is being taken now to train the current educators who will need to prepare a workforce to decarbonise and deliver net zero in South Yorkshire and beyond.

THE COST-OF-LIVING CRISIS

The ongoing cost of living crisis and its impacts on people, families and communities was a key stakeholder concern. The increasing poverty and squeeze on incomes was highlighted by stakeholders with examples of learners regularly coming into schools and colleges hungry – which is consistent with the growing levels of food and child poverty in South Yorkshire (see section 4.5).

Deprivation and the cost-of-living crisis are placing greater pressures on families with rising numbers of children living in poverty which impacts on their engagement with education (transport costs, being able to do homework, access to the internet, unable to do extra-curricular activities) and physical and mental health.

The cost-of-living crisis is seeing individuals make difficult choices about whether they can *afford* to continue their education journey. For example, one older college learner was frustrated that they could not study environmental science due to the costs and lack of funding available to them. Stakeholders also highlighted how single parents found accessing education opportunities difficult due to the cost and availability of childcare.

TRANSPORT

The accessibility and frequency of transport was identified as a significant barrier for people to engage with education and employment opportunities. Young people described the long journeys on public

⁹ More information [available here](#).

transport to attend college and were frustrated at the unreliability of the buses and trains. This difficulty was raised by stakeholders also as well as older jobseekers.

Jobseekers, young and old, explained they were unable to take up job offers or had to leave employment because of poor public transport which meant they could not get to work on time (i.e with shift work). Several younger jobseekers wanted to learn to drive so they could travel to work but could not afford to do this.

The inaccessibility of transport and the impacts of this on inclusion has also been raised by stakeholders in South Yorkshire elsewhere¹⁰.

SOCIAL MOBILITY

Social mobility at its simplest refers to the movements people can make during their life through different social classes which is impacted by various structural factors (i.e social, economic, cultural, environmental). Education is key to social mobility particularly for children and young people.

The UK Government's Social Mobility Index is being redeveloped and the most recent data available is from 2017. Whilst providing an indication of social mobility it will not consider recent events (such as leaving the EU, the Covid-19 pandemic, the cost-of-living crisis).

The Social Mobility Index ranks all 324 English local authorities by measurements (drivers of social mobility) from early years through to adulthood for people from disadvantaged backgrounds. Doncaster and Barnsley are the worst performing areas in South Yorkshire in 2017 and were identified as 'cold spots' for social mobility. Doncaster is ranked 298th out of the 324 for social mobility and Barnsley is 219th. Rotherham is the best performing area in South Yorkshire being placed 188th out of 324, however this is still in the bottom half of local areas in England.

Table 2 Social Mobility Index South Yorkshire

Local Authority	Overall score	Early Years	Schools	Youth	Adulthood
Rotherham	188	60	187	253	229
Sheffield	212	213	254	156	124
Barnsley	291	233	227	307	234
Doncaster	298	86	309	290	280

Source: Social Mobility Index 2017

Rotherham (60th) and Doncaster (86th) performed best within early years education which as highlighted earlier (see section 2.1) brings significant gains in later life. Sheffield performs best under the measures for adulthood which may in part be due to the two universities located in the city.

In 2020, the Social Mobility Commission adopted a new longitudinal measure to connect educational outcomes to earnings¹¹. It uses educational outcomes for boys at 16 years and their earnings at age 28 which enables comparisons across and within deprived areas. In the most mobile places, pay gaps are driven by educational outcomes and in the least mobile places pay gaps are driven by the long-term impacts of deprivation. In South Yorkshire, median earnings of sons aged 28 who were eligible for FSM were in two worst performing categories. Sheffield (£9,800), Doncaster (£12,000) and Rotherham

¹⁰ CRESR.2022. Inclusion Plan Evidence Base. [Available here.](#)

¹¹ Social Mobility Commission. 2020. The long shadow of deprivation. [Available here.](#)

(£12,200) were the in the bottom 20% (median earnings between £6,900 and £12,600) and Barnsley (£13,000) was only slightly above this.

The Social Mobility Commission announced a new range of measures to inform the Social Mobility Index which cover mobility outcomes, 5 yearly measures of the intermediate outcomes, annual measures of intermediate outcomes, and drivers and area due to publish their first data report later in 2023 which will include analysis of geographical regions¹².

A learner's eligibility for Free School Meals (FSM) provides an indication of whether they are living in a low-income household and is used to monitor social mobility. Experimental ONS data analysis¹³ found in England at the age of 25, 23% of people who received FSM had an annual income equivalent to the living wage compared to 43.5% of people who did not receive FSM. The differences in attainment by FSM eligibility is explored in chapters two and three with those who were eligible consistently receiving lower results than those who were not.

Stakeholders highlighted the importance of extra curricula activities such as sport or cultural events or clubs for children and young people across South Yorkshire to help them build confidence, develop new skills and experiences, and broaden their horizons. It was felt many children and young people were missing out on these opportunities and the benefits they bring particularly those living in deprived areas. All children, regardless of income or geography, should be able to access enriching experiences and this is an important factor for raising social mobility.

¹² Social Mobility Commission. 2022. The state of the nation: a fresh approach to social mobility. [Available here](#).

¹³ ONS. 2022. Education, social mobility and outcomes for FSM in England. [Available here](#).

2 A STRONG START FOR A SECURE FUTURE

For South Yorkshire to achieve its ambitions to build a stronger, greener, and fairer future every child must be provided with a sound start to lead them from early years through compulsory education. Today's children and young people will be the net zero generation and will need to innovate, renovate, and continually adapt to champion a greener future.

Over the last few years children and young people's education has been disrupted by Covid-19 and we are now entering a period of significant change as we transition to a greener society. The children at school today will be the workers of tomorrow who will need to be adaptable with digital skills as second nature.

Giving people a strong start provides the foundations for people and places to thrive. There is strong evidence highlighting the importance of early years and its impact on economic, social and health outcomes. Each stage of education from early years through compulsory schooling and beyond provides another layer of protection against the challenges of the future and equips people with the skills and capabilities to remain resilient and flourish.

2.1 EARLY YEARS

This section explores the early years sector, outcomes for children in South Yorkshire and the importance of investment in early childhood.

THE IMPORTANCE OF EARLY YEARS INVESTMENT

The importance of meaningful early years interventions delivered by skilled professionals cannot be understated with their power to improve outcomes for all children and an estimated return on investment of 13%¹⁴. The New Economics Foundation¹⁵ recently estimated the purely fiscal benefits to the Government for early years education expenditure was £1.31 extra for every £1 spent and this does not include the wider societal benefits.

In 2015, the UK Health Security Agency (formerly Public Health England) estimated:

"For every £1 invested in quality early care and education, taxpayers save up to £13 in future costs; in addition, for every £1 spent on early years education, £7 would need to be spent to have the same impact in adolescence"¹⁶.

Moreover, £16.13 billion is the estimated¹⁷ cost annually from the impacts of lost opportunities within early years.

¹⁴ Heckman, J. et al. The Heckman Equation. [Available here](#).

¹⁵ New Economics Foundation. 2023. Investing in universal early years education pays for itself. [Available here](#).

¹⁶ UKHSA. 2015. Ensuring all children have the best start in life. [Available here](#).

¹⁷ Centre for Early Childhood - London School of Economics. 2021. Big Changes Start Small. [Available here](#).

A Strong Start for a Secure Future Headlines



Covid-19 has negative impacted children and young people socially, **emotionally, behaviourally, and educationally** - the latest attainment results in South Yorkshire from early years to KS4 tentatively support this.



37% of five-year-olds in South Yorkshire were not at the expected level of **Early Learning Goals** development compared to 36.6% nationally.



At the end of KS2, 59% of children in Barnsley met the **expected standard in reading, writing and maths**, aligning with the national average, Doncaster (56%), Sheffield (55%) and Rotherham (54%) all fell below.



The **average attainment 8 score** across South Yorkshire is between 2.1 (Rotherham – 46.8) and 3.8 (Doncaster – 45.1) points lower than the national average (48.9).



South Yorkshire is below the national and regional average for the percentage of pupils achieving grades 4 or above in **English and maths GCSEs**. Barnsley has the lowest percentage of pupils (63.2%) and Rotherham has the highest at (65.8%).



Doncaster has the lowest level of **SEND pupils** achieving grades 4 or above in English and maths GCSE at 25.1% compared to the highest in Rotherham at 28.7%, and the national average of 32.2%.



Absenteeism from compulsory education has more than doubled in South Yorkshire since 2017.



In the autumn term of 2022-23, **45,591** South Yorkshire pupils were **persistently absent** (missing 10% of possible sessions) which is approximately a quarter of pupils, and **4,119** pupils were **severely absent** (missing 50%) from school.



From early to the end of compulsory education, **children and young people who are eligible for Free School Meals have lower attainment on average** than those who are not eligible.

"This sum of £16.13 billion is equivalent to nearly five times the total annual spend in England on early education and childcare entitlements, and around 44 times the annual expenditure on specialist perinatal mental health support¹⁸".

Investment in early years is a preventative measure which increases social mobility and creates savings for other services such as the NHS or police in the long-term^{19,2021}. Yet, the UK spends less than the OECD average (0.8% of GDP) on early childhood education and care at 0.5% of GDP (2019). Stakeholders consulted for the development of this evidence base highlighted that the level of funding for early years provision was placing significant strain on the sector. A strain which had been further compounded by Covid-19 and cost-of-living impacts.

A Sutton Trust report²² notes the amount of funding from the Government to early years providers for the free 15- and 30-hour entitlements does not cover running costs and subsequently concerns have been raised over quality. Providers also find other ways to supplement this shortfall, for example by asking parents for additional costs for the extra hours or charging extra for food. The report questions the proposed expansion of measures, arguing it will not help those families on the lowest incomes with only 20% estimated to have access. Estonia demonstrates how increasing the qualification level of staff in early years settings, and enhancing working conditions, drives up the quality of provision and subsequently improves outcomes for children. The three lessons for England from international best practice are²³: (a) children benefit from being in settings with highly qualified staff, (b) having a higher staff-to-child ratio supports better quality provision and (c) removing barriers for disadvantaged families helps to increase participation.

EARLY YEARS IN SOUTH YORKSHIRE

Early Years Foundation Stage (EYFS) assessment data provides a picture of the development of children at the end of the academic year they turn five, it measures 17 ELGs across seven themed areas. A child is at a 'good' level of development if they reach the expected level across the communication and language; personal, social, and emotional development; physical development; literacy; and mathematics themed areas²⁴. The achievement of a 'good' level of development is a useful indicator for the 'school readiness' of a child.

Table 3 EYFS Development in South Yorkshire 2018 - 2021

	ELG Expected Development			Good Level of Development		
	2018/19	2021/22	Change	2018/19	2021/22	Change
Barnsley	69.1	64.6	-4.5	70.4	67.1	-3.3
Doncaster	71.2	62.8	-8.4	72.5	65.0	-7.5
Rotherham	68.9	63.0	-5.9	70.3	64.5	-5.8
Sheffield	69.7	62.4	-7.3	70.0	63.9	-6.1
England	70.7	63.4	-7.3	71.8	65.2	-6.6

Source: Early years foundation stage profile results 2018/19 and 2021/2 (% of all children)

¹⁸ As above.

¹⁹ Alava, M. et al. 2011. Economic outcomes of early years programmes and interventions designed to promote cognitive, social and emotional development among vulnerable children and families. [Available here](#).

²⁰ Early Years Foundation. 2021. The case for early intervention to support levelling up and the covid recovery. [Available here](#).

²¹ Parent and Infant Foundation. 2021. Investing in Babies: the economic case for action. [Available here](#).

²² The Sutton Trust. 2023. A fair start? [Available here](#).

²³ As above.

²⁴ DfE. 2022. Early years foundation stage profile results. [Available here](#).

Across South Yorkshire there have been reductions in the levels of children at the expected level of development at age 5 and the levels of children with a ‘good’ level of development between 2018/19 and 2021/22. In England the average for children with a good level of development was 71.8% in 2018/19 which declined by over 6 percentage points to 65.2% in 2021/22.

The biggest reductions in South Yorkshire have been in Doncaster, followed by Sheffield, Rotherham and then Barnsley. National research from Ofsted²⁵ found the Covid restrictions led to many children not attending early years provision which negatively affected personal, social, and emotional development. Similar messages were provided by local stakeholders who also highlighted the extra pressures to the early year workforce created by the pandemic.

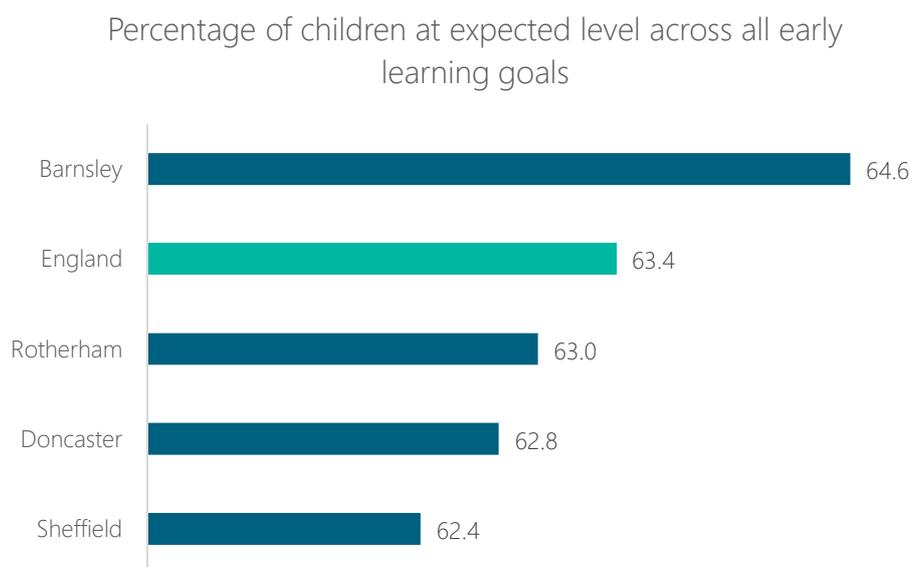


Figure 2 South Yorkshire children with expected ELG development. Source: Early years foundation stage profile results 2022

At 64.6%, Barnsley has the highest percentage of children with the expected level development for all 17 ELGs and is over the national average (63.4%). Rotherham (63.0%), Doncaster (62.8%), and Sheffield (62.4%) all fall below the national average. This means that approximately 5,817 children in South Yorkshire are not at the expected level of development across all ELGs at the age of five.

Compared with the other South Yorkshire local authorities, Barnsley also has a higher proportion of children with a ‘good’ level of development (67.1%), again higher than the national average (65.2%) with Sheffield reporting the lowest level (63.9%).

²⁵ Ofsted. 2020. COVID-19 series: briefing on early years. [Available here](#).

Percentage of children with a good level of development

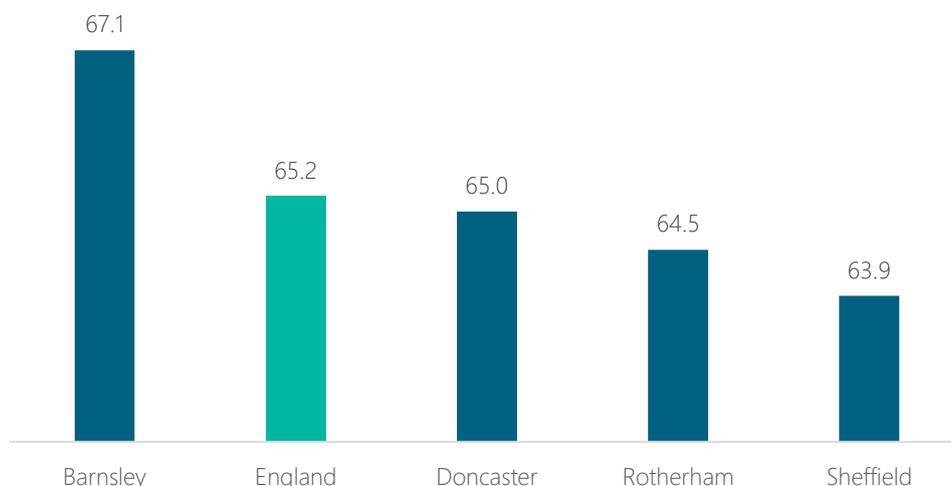


Figure 3 South Yorkshire children with good level of ELG development. Source: Early years foundation stage profile results 2022

Nationally and locally, there are gender differences in the levels of ELG development, with girls outperforming boys. The biggest gender gap on both measures is found in Rotherham.

Table 4 ELG development by gender in South Yorkshire

% of children at expected level across all early learning goals			
	Boys	Girls	Difference
Barnsley	58.0	71.5	13.5
Doncaster	55.7	70.6	14.9
Rotherham	55.6	71.1	15.5
Sheffield	55.5	69.4	13.9
England	56.5	70.6	14.1

Source: Early years foundation stage profile results 2022

Table 5 Good level of ELG development by gender in South Yorkshire

% of children with a good level of development			
	Boys	Girls	Difference
Barnsley	61.6	72.9	11.3
Doncaster	58.9	71.7	12.8
Rotherham	57.5	72.1	14.6
Sheffield	57.5	70.3	12.8
England	58.7	71.9	13.2

Source: Early years foundation stage profile results 2022

The percentage of boys at the expected level across ELGs is highest in Barnsley with the other three local authorities slightly under the national average. Barnsley, Rotherham, and Doncaster are all above or at the national average for girls at the expected level across ELGs.

Barnsley and Doncaster have a higher-than-average percentage of boys with a good level of development and Sheffield and Rotherham are slightly under the national average. Barnsley and Rotherham are over the national average for girls with a good level of development, Doncaster is slightly under and Sheffield the worst performing area.

There is also variation between different ethnic groups; nationally, children from mixed/multiple ethnic groups have the highest percentage of children at the expected level of development across all ELGs and for the 'good' level of development.

Table 6 Expected ELG development by ethnicity

Percentage of children at expected level across all early learning goals					
	Barnsley	Doncaster	Rotherham	Sheffield	England
White	64.8	63.3	64.4	65.0	64.8
Mixed/multiple ethnic groups	67.1	67.9	65.4	61.7	65.1
Asian/Asian British	68.4	59.8	59.6	61.8	62.1
Black/African/Caribbean/Black British	72.2	62.7	47.5	55	58.1
Other ethnic group	33.3	59.3	43.2	51.8	52.7
Unclassified	48.6	41.8	40.7	47.2	48.0

Source: Early years foundation stage profile results 2022

Table 7 Good level of ELG development by ethnicity

Percentage of children with a good level of development					
	Barnsley	Doncaster	Rotherham	Sheffield	England
White	67.3	65.6	65.9	66.4	66.3
Mixed/multiple ethnic groups	68.4	68.6	65.4	64.2	67.0
Asian/Asian British	68.4	60.6	61.2	63.2	64.9
Black/African/Caribbean/Black British	72.2	64.2	47.5	56.4	60.6
Other ethnic group	33.3	59.3	43.2	53.4	55.3
Unclassified	51.4	48.1	44.1	48.1	49.6

Source: Early years foundation stage profile results 2022

There is a mixed picture across South Yorkshire when compared to national averages. Barnsley performs well in both measures across the ethnic groups apart from 'Other ethnic group' which at 33.3% (for both) is significantly below the national average and other areas in South Yorkshire. There is more variation in

Doncaster across the different ethnic groups, with higher-than-average performance in Mixed/multiple ethnic groups, Black/African/Caribbean/Black British groups, and 'Other ethnic group'. Yet below average results for children from Asian/Asian British and White backgrounds. Rotherham is below the national average level across all ethnic groups listed for both measurements. The lowest percentages of children at the expected level of ELGs and 'good' level of development in Rotherham were from Asian/Asian British and Black/African/Caribbean/Black British backgrounds. In Sheffield children from White groups have higher than the national average percentages for both measurements. The lowest percentage of children with a 'good' level of development and meeting the expected ELGs in Sheffield are from 'Other ethnic groups' followed by Black/African/Caribbean/Black British children. The percentage of children from mixed/multiple ethnic groups in Sheffield was below the national average for a 'good' level of development and meeting the expected ELGs.

Free school meal (FSM) eligibility is one way of identifying whether a child is living in a household with a low income. Children who are not eligible for FSM have a higher level of development across all ELGs than those who are eligible. Nationally, there is a gap of nearly 20 percentage points with 47.1% of children eligible for FSM at the expected level of development compared to 67% who are not eligible for FSM.

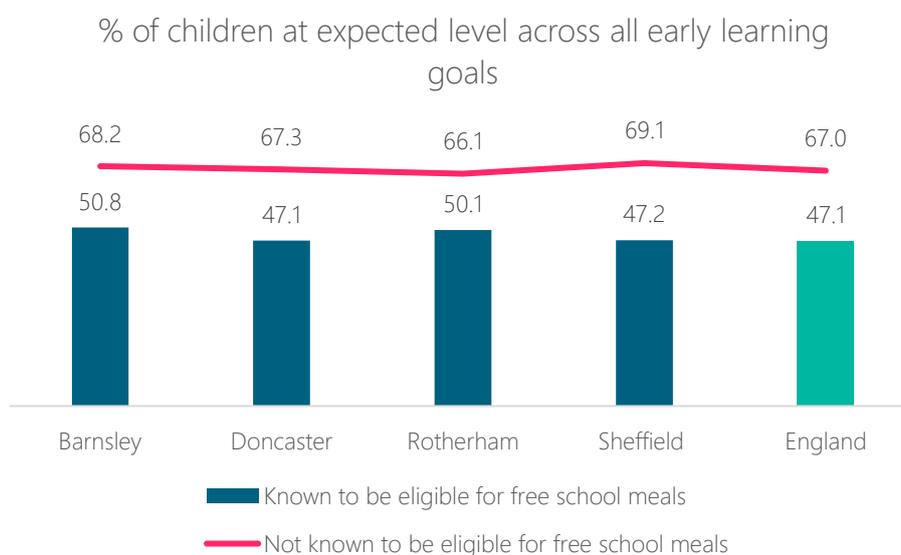


Figure 4 Expected ELG development by FSM status. Source: Early years foundation stage profile results 2022

All local authorities in South Yorkshire are at or above the national average for children eligible for FSM with the expected level of attainment across ELGs, with Barnsley and Rotherham the highest. Looking at the differences between FSM eligibility and expected level of ELG development, Sheffield has the highest gap between the two groups at 21.9 percentage points, which is followed by Doncaster (20.2 percentage point gap) – both of which are larger than the national gap. Rotherham has the smallest gap between ELG development of those eligible and not eligible for FSM at 16 percentage points, and Barnsley is the next smallest (17.4 percentage points).

There are similar variations in the percentages of children with a 'good' level of development and their FSM eligibility.

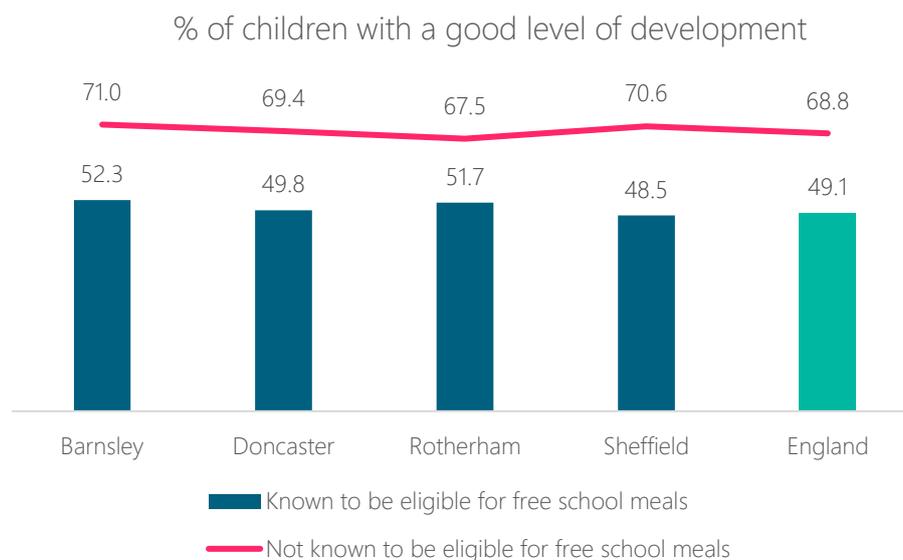


Figure 5 Good ELG development by FSM status. Source: Early years foundation stage profile results 2022

Positively, all areas apart from Sheffield have a higher percentage of children eligible for FSM with a 'good' level of development than nationally, with Sheffield 0.6 percentage points below the national average. Barnsley (71.0%), Sheffield (70.6%) and Doncaster (69.4%) all have higher percentages of children not eligible for FSM with a 'good' level of development compared to the national average (68.8%), Rotherham is below this level (67.5%).

In Sheffield, there is a 22.1 percentage point gap between children with a good level of development who are eligible for FSM and those who are not which is the only local authority in South Yorkshire higher than the national FSM gap (19.7 percentage points). The smallest gap between groups is found in Rotherham at 15.8 percentage points.

SOUTH YORKSHIRE'S EARLY YEARS WORKFORCE

The early years workforce is essential to child development and education in South Yorkshire as well as enabling parents to remain in the labour market; however, it is a workforce that is traditionally undervalued.

South Yorkshire stakeholders highlighted the challenges facing the early years sector due to difficulties for workforce recruitment and retention which has left the sector '*nearing crisis point*'. The work conditions within early years are demanding with low pay and a high workload. This combined with the under-appreciation of early years is causing the South Yorkshire workforce to be '*tempted*' into other higher paid employment such as warehouse jobs.

Stakeholders suggested that more funding is required to improve pay and working conditions and offer greater stability for early-year providers. Currently, early years providers are struggling to support staff with training and progression due to the lack of capacity and this also limits their ability to train apprentices.

The nature and importance of work in early years is often misunderstood, and it is often portrayed as '*just childcare*' which does not reflect the skills, creativity and dynamism needed for working in the sector.

Due to the challenges for staff recruitment and retention, stakeholders were increasingly concerned that local authorities would not be able to provide sufficient levels of childcare²⁶.

Importantly, partners across South Yorkshire are working together to build resilience into the early years sector with a working group including all four local authorities and South Yorkshire Futures (Sheffield Hallam University's Social Mobility Partnership). The Regional Speech, Language and Communication Skills Strategy²⁷ outlines the importance of speech, language, and communication for children's development. The Regional Speech, Language and Communication Skills Strategy aim is that all 'children in South Yorkshire begin school ready to thrive' and outlines how a highly skilled early years workforce can support this.

The development of the strategy included a self-assessment of competencies with 822 people from the children's workforce to identify skills gaps in South Yorkshire focusing on skills to support speech, language, and communication (SLC) of children 0 – 5 years. It found 80% of the children's workforce felt confident in their SLC skills, with the highest proportion in Sheffield (83%) and lowest in Rotherham (79%). Confidence levels in competencies varied significantly by role, with the lowest confidence reported by nursery nurses (68%), followed by specialist staff for looked after children (70%), and early years development workers (73%). The highest confidence levels were found in speech and language therapists (97%), SEN development staff (96%), portage staff (93%) and strategic managers and team leaders (93%).

The strategy identifies ten skills gaps in the children's workforce (more information about the actions to address these can be found in the strategy)²⁸.

Table 8 South Yorkshire EY workforce confidence in skills

Skills Gap	Overall Confidence
Learning English as an additional language	67%
Strategies for supporting children and young people with SLC needs	77%
Typical SLC development	78%
Identification and assessment of SLC needs	79%
Parents, carers, families, peers & friends	81%
Roles and responsibilities supporting children and young people with SLC needs	82%
Reflecting on professional development around SLC and SLC needs	83%
The communication environment	84%
Involving children and young people with SLC needs	85%
Relationship between SLCN and other areas of development	85%

Source: Regional Speech, Language and Communications Strategy 2021

It is important South Yorkshire's early years sector is supported so that the actions identified in the regional strategy can be taken forward to facilitate improvements in quality and outcomes for children. If SLC needs are not addressed effectively there is a negative impact on children's "...emotional wellbeing,

²⁶ The most recent Childcare Sufficiency Report for each local authority in South Yorkshire states there is sufficient childcare to meet local demand, however in some areas the number of early years providers has reduced.

²⁷ [Available here.](#)

²⁸ Regional Speech, Language and Communication Strategy. 2021. [Available here.](#)

school readiness, literacy and school attainment, putting children at increased risk of long-term consequences such as poor literacy, mental health problems and unemployment²⁹.

2.2 COMPULSORY EDUCATION FROM KS1 TO KS4

This section investigates children and young people's education journey through compulsory education from Key Stages 1 to 4 (KS1 to KS4). Compulsory education provides children and young people with the preparation required to access further education, training, and jobs in the future, as well as supporting social and cognitive development and positive, healthy behaviours. It also increases civic engagement and social networks with clear benefits for physical and mental health³⁰.

PRIMARY SCHOOL (KS1 – KS2)

Attainment at the end of KS2 (year 6) is one indication of a child's development. The most recent statistics show that 59% of children in Barnsley met the expected standard in reading, writing and maths at the end of KS2, which is in line with the national average, Doncaster (56%), Sheffield (55%) and Rotherham (54%) all fell below. Notably, the children in year 6 in 2021-22 will have been impacted by the Covid-19 pandemic when they were in the previous two academic years.

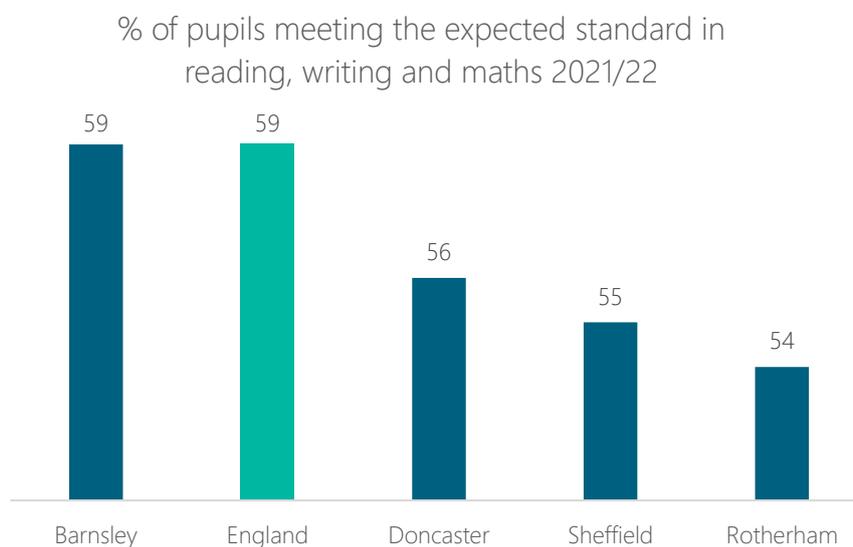


Figure 6 KS2 pupils reading, writing and maths standards. Source: DfE KS2 Attainment 2021-2022

Nationally and locally, there has been a reduction in KS2 attainment (reading, writing and maths) between 2018-19 and 2021-22. There has been a 7-percentage point drop in KS2 attainment in Barnsley and Rotherham, and a 9-percentage point drop in Sheffield – all above the England change of 6 percentage points. Doncaster has seen the smallest drop (5 percentage points).

²⁹ Public Health England. 2020. Best start speech, language and communication: supporting evidence. Page 6. [Available here.](#)

³⁰ Public Health England. 2021. Education, schooling and health summary. [Available here.](#)

Table 9 KS2 pupils with expected standard in reading writing and maths 2017/18 – 2021/22

Percentage of pupils meeting the expected standard in reading, writing and maths (combined)				
	2017/18	2018/19	2021/22	Change 2018/19-2021/22
Barnsley	65%	66%	59%	-7%
Doncaster	60%	61%	56%	-5%
Rotherham	59%	61%	54%	-7%
Sheffield	62%	64%	55%	-9%
England	65%	65%	59%	-6%

Source: DfE KS2 Attainment 2017 – 2021

(Note: no data available for 2019-2021 due to Covid-19)

In Doncaster and Rotherham, the change between 2018-19 and 2021-22 in KS2 attainment was the same for girls and boys, however in Barnsley, Sheffield and England girls had a larger reduction (1%).

South Yorkshire's Children's University³¹ provides opportunities for children (from aged 5) to partake in enriching learning experiences and at regular intervals celebrate their achievements with their families in a university style ceremony. The Children's University aims to provide new learning experiences, boost confidence, teach new skills, and instil a culture of lifelong learning, irrespective of a child's background.

SECONDARY SCHOOL (KS3 – KS4)

Secondary school is an important stage in a young person's development educationally, socially, and culturally. Attainment 8 scores (the average score of a pupil across their GCSE subjects) provide an indication of a young person's educational development when they leave secondary school. The latest attainment 8 scores show that the South Yorkshire authorities have a lower average score than regionally and nationally; Rotherham has the highest (46.8) and Doncaster records the lowest (45.1).

Table 10 Attainment 8 average 2018/19-2021/22

Average Attainment 8 score of all pupils					
	2018/19	2019/20	2020/21	2021/22	2018/19 – 2021/22 Change
Barnsley	44.1	46.1	46.3	45.2	1.1
Doncaster	44.0	46.8	47.0	45.1	1.1
Rotherham	44.4	48.1	48.7	46.8	2.4
Sheffield	44.9	47.7	48.1	46.1	1.2
Y&H	45.4	48.3	49.1	46.9	1.5
England	46.8	50.2	50.9	48.9	2.1

Source: DfE KS4 Attainment 2018-19 to 2021-22

³¹ More information [available here](#).

Whilst results have increased between 2018-19 and 2021-22, there was a reduction in the most recent results compared to the year prior. The results for 2022-23 will provide a clearer indication of the impacts of Covid-19 on the attainment of secondary school children.

English and maths achievement is important for education progression but also throughout life. If a young person does not achieve the Level 4 (equivalent to grade C) or above at GCSE in English and maths, then they are required to re-sit the qualification whilst at college or sixth form. The percentage of pupils achieving grades 4 or above in English and maths at GCSE is lower in the South Yorkshire authorities than the national and regional averages.

Table 11 English and maths GCSE at grade 4+ 2018/19 – 2021/22

Percentage of pupils achieving grades 4 or above in English and maths GCSEs					
	2018/19	2019/20	2020/21	2021/22	2020/21 – 2021/22 Change
Barnsley	62.5	66.6	66.2	63.2	-3.0
Doncaster	62.1	67.4	66.8	65.0	-1.8
Rotherham	59.1	68.6	70.0	65.8	-4.2
Sheffield	59.5	65.7	66.9	65.2	-1.7
Y&H	62.6	68.8	70.0	66.6	-3.4
England	64.9	71.2	72.2	69.0	-3.2

Source: DfE KS4 Attainment 2018-19 to 2021-22

At 63.2%, Barnsley has the lowest percentage of pupils achieving grades 4 or above in English and maths GCSEs and Rotherham has the highest at 65.8% of pupils. Although there have been improvements in attainment levels since 2018-19, the results between 2020-21 and 2021-22 show a reduction with the largest in Rotherham (-4.2) and smallest in Sheffield (-1.7).

Table 12 English and maths GCSE at grade 5+ 2018/19 – 2021/22

Percentage of pupils achieving grades 5 or above in English and mathematics GCSE					
	2018/19	2019/20	2020/21	2021/22	2020/21 – 2021/22 Change
Barnsley	41.5	48.0	45.6	45.3	-0.3
Doncaster	38.3	45.8	46.4	44.6	-1.8
Rotherham	38.0	45.3	47.1	44.9	-2.2
Sheffield	38.8	46.4	47.4	47.2	-0.2
Y&H	41.1	47.5	49.4	47.7	-1.7
England	43.4	49.9	51.9	50.0	-1.9

Source: DfE KS4 Attainment 2018-19 to 2021-22

The South Yorkshire authorities performance is below the national and regional averages for the percentage of pupils achieving grades 5 (equivalent to a high C or low B) or above in English and maths

GCSE. Doncaster has the lowest percentage (44.6%) whereas Sheffield has the highest (47.2%). There have been improvements in the levels of students achieving grade 5 in English and maths since 2018-19 locally and nationally. However, as with the other KS4 results the latest figures (2021-22) are lower than the previous year.

Young people entitled to free school meals (FSM) have lower attainment at KS4 on average compared to those students who are not entitled to FSM. The entitlement to FSM provides an indication of children and young people who are living in a low-income household. The average attainment 8 score in England (2021-22) for those entitled to FSM is 15 points lower than those who are not entitled to FSM, with a similar gap in South Yorkshire³². Fewer young people entitled to FSM achieve English and maths GCSE at grades 4 and above compared to all other students.

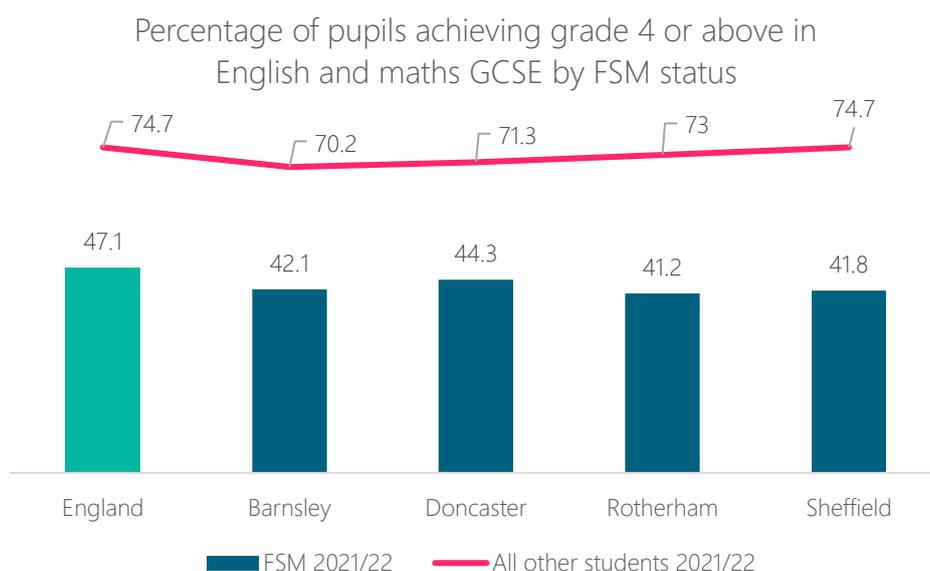


Figure 7 English and maths GCSE at grade 4+ by FSM status. Source: DfE KS4 Performance local authority characteristics

Sheffield has the largest FSM attainment gap in South Yorkshire, with a 32.9 percentage point difference between the pupils achieving grade 4 or above in English and maths GCSE who are entitled to FSM and those who are not. Doncaster has the smallest gap at 27 percentage points and is the only local area in South Yorkshire below the national average (27.6 percentage point gap).

³² DfE. 2022. Key Stage 4 performance. [Available here](#).

Percentage of pupils achieving grade 4 or above in English and maths GCSE by disadvantage status

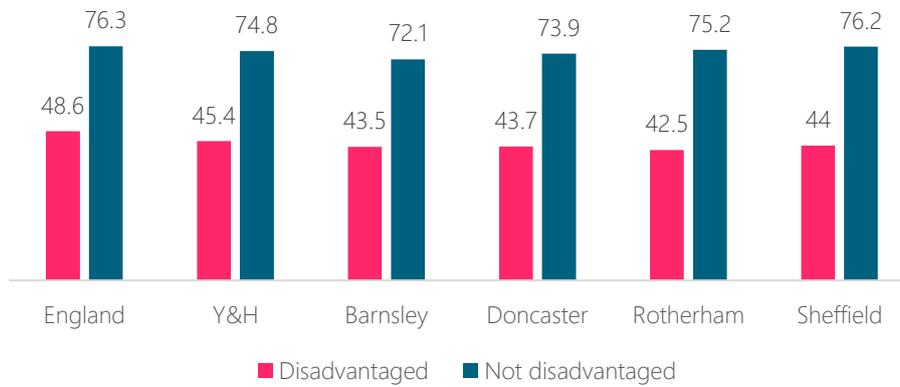


Figure 8 English and maths GCSE at grade 4+ by disadvantage status. Source: DfE KS4 Performance local authority characteristics 2021-22

Similar differences in English and maths GCSE attainment are found between those pupils who are disadvantaged and those who are not – highlighting the disadvantage gap which is apparent throughout Key Stages 1 to 4. Across South Yorkshire a lower percentage of disadvantaged pupils achieve grade 4 or above in English and maths GCSEs than national and regional averages, with Rotherham recording the lowest at 42.5% and Sheffield the highest (44%). Sheffield also has the largest proportion of non-disadvantaged pupils achieving grades 4 and above (76.2%) and Barnsley has the smallest (72.1%).

Rotherham has the largest disadvantage gap (32.7 percentage points) at five percentage points higher than the national gap. Barnsley has the smallest disadvantage gap (28.6 percentage points), but this is still bigger than the national gap (27.7 percentage points). There are also variations in GCSE attainment and ethnicity, with Chinese pupils achieving the highest proportion of grades 4 or above in English and maths GCSE nationally and locally.

Percentage of pupils achieving grade 4 or above in English and maths GCSEs by ethnicity

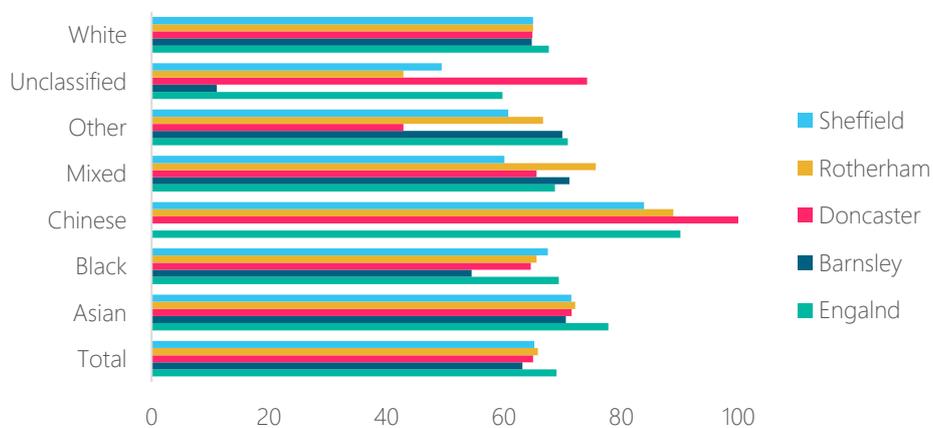


Figure 9 English and maths GCSE at grade 4+ by ethnicity. Source: DfE KS4 Performance local authority characteristics 2021-22

Young people whose ethnicity is unclassified have the lowest proportions achieving grades 4 or above in English and maths nationally and in South Yorkshire, apart from Doncaster where pupils from the 'other' ethnic group have the lowest attainment.

YOUNG PEOPLE WITH SPECIAL EDUCATIONAL NEEDS AND DISABILITIES

17.7% of pupils identify as having Special Educational Needs and Disabilities (SEND) in Rotherham at the end of KS4 which is the highest level in South Yorkshire, followed by Sheffield (16.1%), Barnsley (14.5%), and Doncaster (13.6%), compared to the national average of 15.7% of pupils³³.

The percentage of pupils achieving grades 4 or above in English and maths at GCSE for SEND young people in South Yorkshire is lower than the national (32.2%) and regional (28.8%) average. Doncaster has the lowest level of SEND pupils achieving grades 4 or above in English and maths GCSE at 25.1% compared to the highest in Rotherham at 28.7%.

Table 13 Percentage of pupils achieving grades 4 or above in English and mathematics GCSEs

	Total	SEND	Not SEND
Barnsley	63.2%	27.9%	71.6%
Doncaster	65.0%	25.1%	71.3%
Rotherham	65.8%	28.7%	73.8%
Sheffield	65.2%	28.1%	72.4%
Y&H	66.6%	28.8%	73.9%
England	69.0%	32.2%	76.1%

Source: Department for Education Key Stage 4 Performance 2021 - 22

Young people with SEND are at an increased risk of becoming NEET (see section 4.3 for more details).

South Yorkshire has a range of provision for SEND young people for example the Northern College in Barnsley is one of only two residential colleges in the country for SEND adults. Doncaster is home to the Deaf Trust which provides education and support for deaf people from nursery to college. The SHEAF Vocational College in Sheffield provides SEND young people with entry level to level 3 courses including traineeships and apprenticeships.

ABSENTEEISM POST COVID-19

Absenteeism has increased since the Covid-19 pandemic with higher levels of overall absence, persistent absentee, and unauthorised absent rates between 2017-18 and 2022-23. Absenteeism has clear links to lower education attainment³⁴ and increases the risk of becoming NEET³⁵ (Not in Education, Employment or Training).

³³ Department for Education. 2023. Key Stage 4 Performance 2021 - 22. [Available here.](#)

³⁴ DfE. 2022. The link between absence and attainment at KS2 and KS4. [Available here.](#)

³⁵ DfE. 2018. Characteristics of young people who are long term NEET. [Available here.](#)

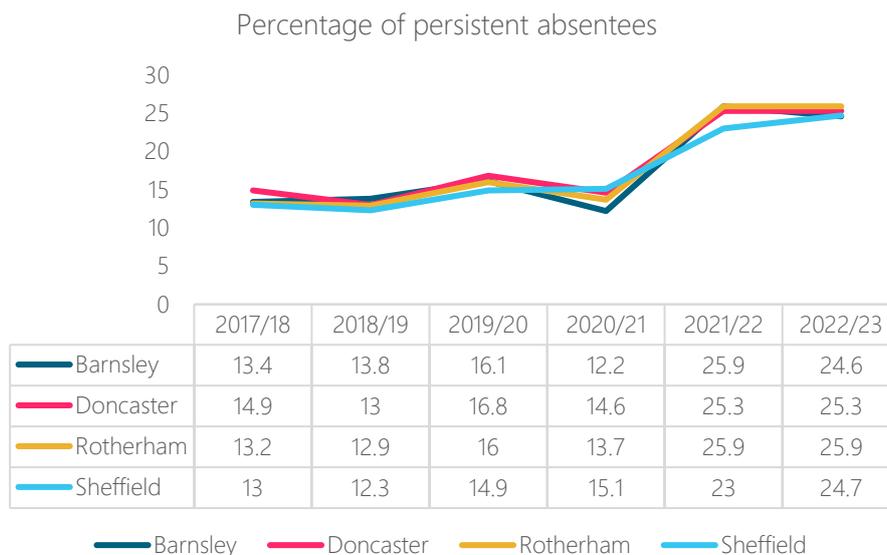


Figure 10 Pupil absenteeism 2017 – 2022. Source: DfE Pupil absences in schools in England 2017-18 to 2022-23 autumn terms

Persistent absenteeism³⁶ has more than doubled nationally between 2017-18 and 2022-23 (from 11.7% to 24.2%) and a similar increase is seen across South Yorkshire; persistent absenteeism has risen by over ten percentage points since 2017-18, rising sharply since 2020-21. In the autumn term of 2022-23, 45,591 children and young people were persistently absent from school and the percentages of persistent absenteeism was higher across South Yorkshire than the England average. Barnsley is the only local authority in which the percentage of persistent absentees reduced between 2021-22 (by 0.5), elsewhere the levels are the same or higher.

The levels of severe absenteeism (where students miss 50% or more of possible sessions) has also increased since the Covid-19 pandemic nationally and in South Yorkshire. In England, 0.7% of pupils were severely absent from school in 2017/18 and this has risen to 1.7% for 2022/23 and in Yorkshire and Humber severe absenteeism has increased from 0.8% to 2.1%.

³⁶ DfE defines this as missing 10% or more of possible sessions (school day has two sessions – morning and afternoon) which is roughly 7 days of the autumn term.

Percentage of severe absentees

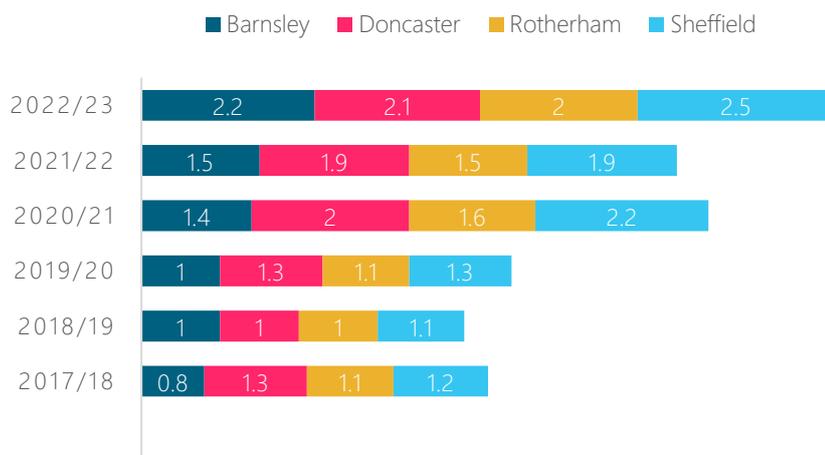


Figure 11 Severe absenteeism 2017/18 – 2022/23. Source: DfE Pupil absences in schools in England 2017-18 to 2022-23 autumn terms

The level of severe absentees has over doubled in South Yorkshire since 2017-18, with the highest percentage in Sheffield (2.5%) and the lowest in Rotherham (2%). All local authorities in South Yorkshire record a higher percentage of severe absenteeism than the national average and Sheffield and Barnsley are higher than the regional average. In the autumn term of 2022/23, 4,119 children and young people in South Yorkshire were severely absent from school – missing over half of possible sessions.

Table 14 Absenteeism by FSM status 2021-22

	Persistent absentees %		Severe absentees %	
	No FSM	FSM	No FSM	FSM
Barnsley	18.4	39.2	0.9	3.3
Doncaster	19.3	41.9	1.1	4.0
Rotherham	19.3	41.5	0.9	3.1
Sheffield	16.4	38.5	1.1	3.6
Y&H	18.1	39.2	1.0	3.6
England	17.5	37.2	0.9	3.0

Source: DfE Pupil absences in schools in England full academic year 2021-22

Pupils who are eligible for FSM had over double the levels of persistent or severe absenteeism of students who are not eligible for FSM. At 41.9%, Doncaster has the highest level in South Yorkshire of pupils eligible for FSM who were persistently absent from school in 2021-22, and Sheffield reported the lowest (38.5%). Doncaster also recorded the highest level of severe absenteeism at 4% of pupils eligible for FSM and Rotherham recorded the lowest (3.1%). The large attendance gap between pupils driven by FSM eligibility is a concern which has the potential to negatively impact on future attainment and subsequently social mobility.

2.3 IMPACT OF COVID-19 ON CHILDREN AND YOUNG PEOPLE

The impacts of Covid-19 on children and young people's development were a concern for stakeholders with descriptions of pupils behaving as if they were two years younger and the data through-out this chapter showing reducing levels of attainment at key stages. These local concerns are reflected in national evidence which found the lockdowns had impacted a growing number of young people post-covid who were behind developmentally and had worsening mental health³⁷. The mental health and wellbeing of young people from low-income families and who were SEND were particularly affected by the school closures during the pandemic³⁸.

An IFS³⁹ study found 47% of parents "reported that their child had more socio-emotional difficulties in February 2021 than the year earlier" with parents of young children (4 – 7 years) and girls more adversely affected. Children with furloughed parents were also more likely to report more socio-emotional difficulties which suggests the labour market instability was a factor.

A local charity in South Yorkshire that supports young people's mental health has seen a significant increase in demand for their support since Covid-19. Young people engaged with for this research explained there was a need for more mental health support and many of them identified as experiencing a mental illness. Many of the young jobseekers spoke of their poor mental health and low self-confidence, one young person explained how not being able to take his GCSEs made them feel as if they had not earned the grades received. Subsequently, the GCSE achievements were not a source of pride.

The impacts from Covid-19 are still rippling out and across lives and it is not yet clear how this generation of children and young people will be affected.

2.4 KEY CHALLENGES AND OPPORTUNITIES FOR SOUTH YORKSHIRE

Local insight and national evidence **highlight the negative impact Covid-19** has had on children and young people regarding their **socially, emotionally, and behaviourally**, and the latest attainment results in South Yorkshire from early years to KS4 tentatively support this. This adds weight to the need for **collective actions to reverse this trend** and support this generation of children and young people to realise and achieve their potential.

In **early years**, 5,817 children in South Yorkshire are not at the expected level of development across all Early Learning Goals by age 5. On average Doncaster, Rotherham and Sheffield all fall below the national average for children with a 'good' level of development aged 5. Despite the pivotal role early years workers play in children's development and wider society, their work has been undervalued and low paid, and the sector is under-funded. South Yorkshire's Regional Speech, Language and Communication (SLC) strategy found only 68% of nursery nurses had confidence in their SLC competencies.

At **KS2**, Rotherham (54%), Sheffield (55%), and Doncaster (56%) record lower levels of pupils meeting the expected standard in reading, writing and maths in 2021/22 than nationally (59%). At **KS4**, the average attainment 8 score across South Yorkshire is lower than the national average as is the percentage of pupils achieving grades 4 and above in GCSE English and maths. **Absenteeism** is linked

³⁷ Ford. T. 2021. Mental health of children and young people during the pandemic. [Available here](#).

³⁸ Public Health England. 2021. Education, schooling and health summary. [Available here](#).

³⁹ IFS. 2023. How did parents' experiences in the labour market shape children's social and emotional development during the pandemic? [Available here](#).

to lower attainment and becoming NEET; in the autumn term of 2022-23, 45,591 South Yorkshire pupils were persistently absent (missing 10% of possible sessions) and 4,119 pupils were severely absent (missing 50%) from school. Levels of persistent and severe has more than doubled between 2017-18 and 2022-23 in South Yorkshire. Pupils eligible for FSM had more than double the rate of persistent and severe absenteeism compared to pupils who were not eligible.

From early years to further and higher education, **children and young people who are eligible for FSM have lower attainment on average** than those who are not eligible. In South Yorkshire, learners eligible for FSM have on average lower levels of ELGs attainment aged 5, and lower levels of attainment throughout compulsory schooling including the percentage of students with L4 GCSE English and maths which has repercussions for future pathways.

3 STRENGTHENING PATHWAYS AND OPPORTUNITIES FOR PROGRESSION

To create a more diverse and inclusive economy in South Yorkshire, young people and adults need equitable skills and education opportunities which reflect labour market demands now and in the future. Technical and academic pathways (or a mix of both) create vital talent pipelines which will help South Yorkshire to deliver its vision as outlined in the SEP.

This chapter investigates South Yorkshire's performance in further and higher education for young people transitioning from school to adult learners who are upskilling and reskilling.

Strengthening Pathways and Opportunities for Progression Headlines



Only one third of learners who did not achieve a **L2 English and maths** at 16 had done so by 19 years old.



92% of KS4 pupils in South Yorkshire have a '**sustained positive destination**' which is below the national average (94.1%), with most remaining in education (84.6%).



South Yorkshire has a higher percentage of young people after KS4 entering **apprenticeships** (3.3% compared to 2.4% nationally).



Higher level apprentices have increased in South Yorkshire by 23% between 2018/19 and 2021/22.



Apprenticeships in **health, public services and care** are the most popular choice for females in South Yorkshire and for males it is **engineering and manufacturing technologies**.



Nearly one third of the **34,545 university students** in South Yorkshire are enrolled in subjects allied to medicine and for graduates human health and social work activities is the largest employment sector.



Barnsley has the lowest levels of **progression into higher education** by age 19 in South Yorkshire.



7% (60,627) of people aged 16 – 64 in South Yorkshire have **no qualifications** compared to 6.6% nationally. Doncaster (9.4%) and Barnsley (9.3%) record the highest levels of adults with no qualifications.



55% of working age people in South Yorkshire are **qualified to L3 and above** compared to 60% of adults in England.



Over 80% of the 27,940 **enrolments on 19+ provision** for 2022/23 in South Yorkshire have been at L2 and below.

3.1 FURTHER EDUCATION

This section discusses young people’s pathways and progression in further education (FE). It considers technical and academic routes for learners, the impact of not passing GCSE English and maths at school and the differences in choices and attainment by different genders, ethnicities, and FSM status.

South Yorkshire has a strong FE sector with over 40 providers including large colleges, independent training providers and specialist SEND provision including a residential college (one of only two in the country). The South Yorkshire Colleges Network, launched in July 2022, is a dynamic partnership of eight colleges who collectively have over 66,000 learners.

KS4 SUSTAINED POSITIVE DESTINATION

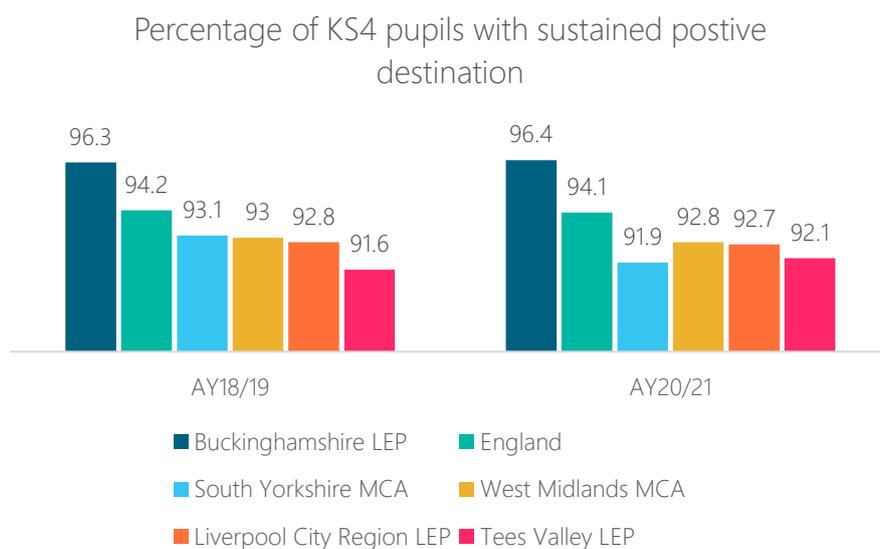


Figure 12 KS4 sustained positive destination comparison. Source: DfE Local Skills Dashboard KS4 Sustained Positive Destination 2018/19 - 2020/21

South Yorkshire ‘sustained positive destination’⁴⁰ rate at KS4 is 92% which is the lowest of all 10 other Mayoral Combined Authorities in England and below the England average (94.1%).

Out of the comparators above, South Yorkshire recorded the largest reduction in sustained positive destinations at KS4 between 2018/19 and 2020/21 (1.2 percentage points) and moved from third highest in the chart to the lowest.

84.6% of school leavers remain in education in South Yorkshire, compared to 89.3% nationally. South Yorkshire has a higher rate of apprenticeships with 3.3% of young people becoming apprentices after KS4, compared to 2.4% in England. 4% of young people enter employment after KS4 in South Yorkshire which is nearly double the national figure (2.4%).

⁴⁰ Destination measures show the percentage of students going to or remaining in an education, apprenticeship or employment destination in the academic year after completing Key Stage 4 studies (usually aged between 14 to 16). The cohort of learners used in the metrics here completed in AY19/20. [Data available here.](#)

KS4 sustained positive destination percentage 2020/21

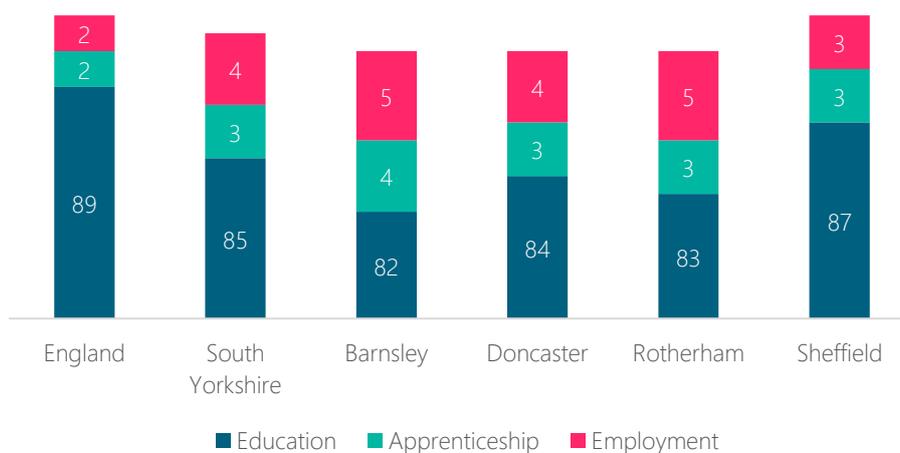


Figure 13 KS4 detailed sustained positive destination. Source: DfE Local Skills Dashboard KS4 Sustained Positive Destination 2020/21

Sheffield has the highest percentage of young people at KS4 entering or remaining in education (87%), followed by Doncaster (84%), Rotherham (83%) and Barnsley (82%). Barnsley records the highest percentage of young people entering apprenticeships at KS4 (4%), compared to 3% for all other local authorities in South Yorkshire. Rotherham and Doncaster have a KS4 employment destination rate of 5%, the highest in South Yorkshire, followed by Barnsley (4%) and Sheffield (3%). Sheffield’s KS4 ‘sustained positive destination’ results are the closest to the national picture. Notably, all these destinations are ‘positive’ and the *right* route will vary for each young person, technical and academic pathways both offer opportunities as does a blend of both.

APPRENTICESHIPS

Apprenticeship starts have been in decline nationally and locally, with 1,720 fewer starts in 2021-22 than in 2018-19 in South Yorkshire⁴¹.

South Yorkshire apprenticeship starts 2018/19 to 2021/22



⁴¹ DfE. 2022. Apprenticeships and Traineeships. [Available here](#).

Figure 14 Apprenticeship starts in South Yorkshire 2018/19 – 2021/22. Source: DfE Apprenticeships and Traineeships 2018 – 2021

Whilst apprenticeship starts have reduced overall since 2018-19, there has been a recent uplift between 2020-2021 which may indicate a shift in uptake, however more data is required to explore this pattern. Doncaster and Sheffield have seen the largest percentage decrease in apprenticeship starts between 2018-2021, with both around -18%, whereas Barnsley recorded the smallest percentage reduction (-11.7%).

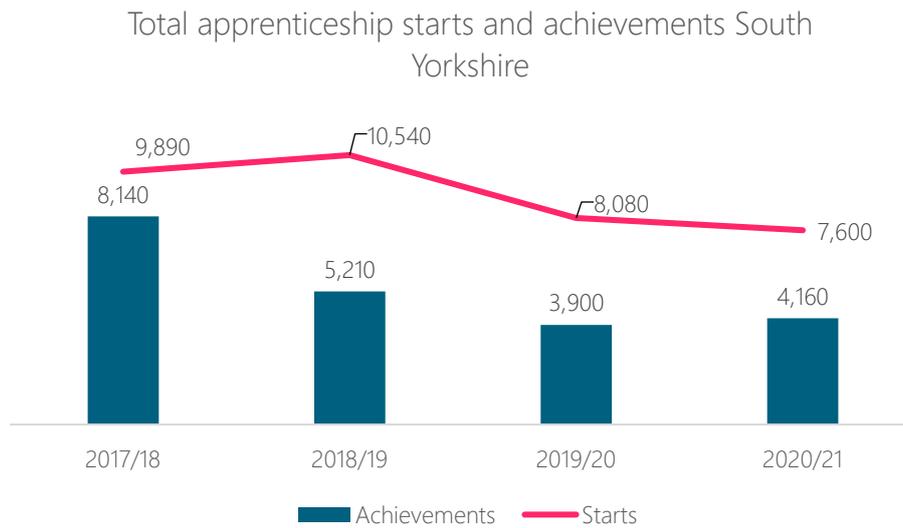


Figure 15 Apprenticeship starts and achievements in South Yorkshire 2017/18 - 2020/21. Source: DfE Apprenticeships and Traineeships 2017/18 – 2020/21

In 2017/18 there was an approximate 17% gap between apprenticeship starts and achievements, this increased the following academic year to 50%. The 2019/20 and 2020/21 results will be impacted by the Covid-19 pandemic, although the most recent results show the gap is reducing (45% in 2020/21).

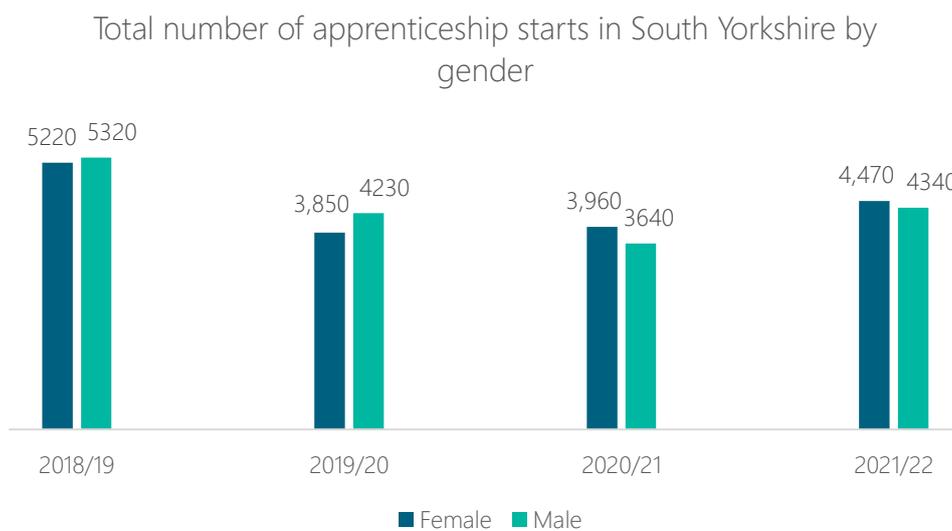


Figure 16 Apprenticeship starts in South Yorkshire by gender 2018/19 – 2021/22. Source: DfE Apprenticeships and Traineeships 2018 – 2021.

Total apprenticeship starts are relatively evenly split between males and females in South Yorkshire. In 2021-22, 90% of apprenticeship starts in South Yorkshire were for people who identified as 'White' (7,940 people), people from a 'Asian/Asian British' background were the next largest group (3%, 270 people)⁴². 44% of apprenticeship starts for 2021-22 were at the advanced level (L3), which is the largest proportion. Higher and intermediate apprenticeship starts each accounted for 28% of all starts.

South Yorkshire apprenticeship starts 2021/22

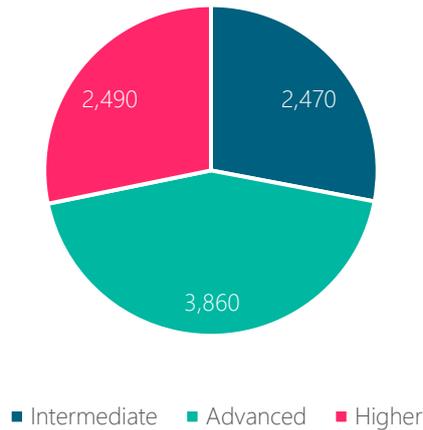
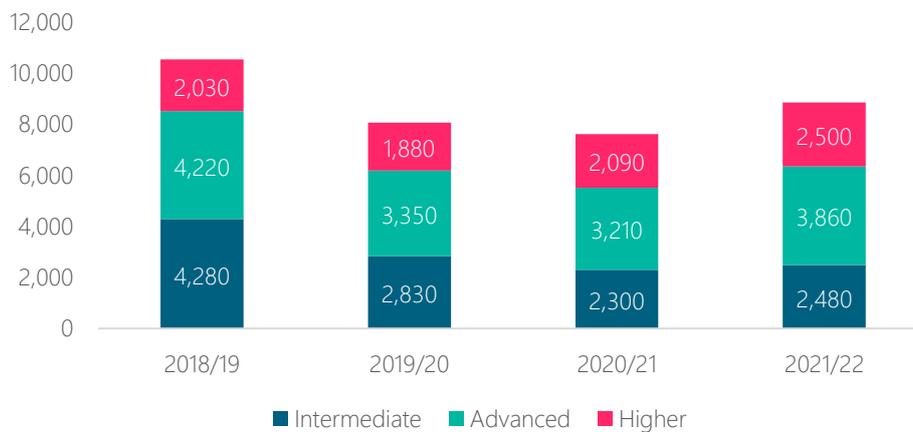


Figure 17 Apprenticeship starts in South Yorkshire by level 2021/22. Source: DfE Apprenticeships and Traineeships 2021-22

In South Yorkshire, people aged under 19 made up approximately a quarter of apprenticeship starts in 2021-22 and most of these were at intermediate and advanced level. Intermediate apprenticeship starts saw the largest decline between 2018-21 (-42%), on the other hand higher level (foundation degree and above) apprenticeship starts increased during this time by 23%.

South Yorkshire apprenticeship starts by level 2018-19 to 2021-22



⁴² DfE. 2023. Apprenticeships and Traineeships Academic Year 2021-22. [Available here.](#)

Figure 18 Apprenticeship starts in South Yorkshire by level 2018/19 - 2021/22. Source: DfE Apprenticeships and Traineeships 2018 – 2021

Whilst advanced level apprenticeships have reduced overall since 2018-19, they have increased in the last year. The growth in higher level apprenticeship starts is a positive with more individuals obtaining new skills and qualifications whilst progressing through technical pathways. Nationally, there has also been an increase in interest at higher (degree) level apprenticeships with 40% of potential undergraduate students interested in apprenticeships, yet this interest does not currently translate into starts for those under 19 according to a report from UCAS⁴³ and the Sutton Trust. The lack of a centralised application system for apprenticeship is a hinderance for potential apprentices and lack of apprenticeship availability was a common reason for young people not pursuing this option. People from lower socio-economic backgrounds are more likely to consider a degree apprenticeship (63% compared to 51% from higher socio-economic backgrounds) yet people from higher socio-economic backgrounds account for double the number of apprentices compared to those from the lowest. This highlights a gap with one third of degree apprentices from lower socio-economic backgrounds receiving no support during their application process.

Notably, 45% of Sheffield Hallam University's degree apprentices are from the most deprived areas compared to 34% nationally. Sheffield Hallam University is one of the largest degree apprenticeship providers in the country and has partnerships with over 570 local and national employers⁴⁴.

Business, Law, and Administration are the most popular apprenticeships in South Yorkshire, accounting for 27% of starts in 2021-22. This is closely followed by Health, Public Services and Care which makes up 26.6% of apprenticeship starts in South Yorkshire.

⁴³ UCAS. 2023. Where next? What influences the choices of would be apprentices. [Available here](#).

⁴⁴ Sheffield Hallam University. 2023. Sheffield Hallam welcomes Minister as it celebrates 2,500th Degree Apprentice. [Available here](#).

Table 15 Apprenticeship starts and achievements by subject and Level

		Total		Intermediate Apprenticeship		Advanced Apprenticeship		Higher Apprenticeship	
		2021/22	2022/23	2021/22	2022/23	2021/22	2022/23	2021/22	2022/23
Total	Achievement	3,460	1,550	1,050	430	1,570	720	840	400
	Starts	8,810	4,820	2,470	1,210	3,860	2,220	2,490	1,400
Business, Administration and Law	Achievement	1,030	470	170	80	450	220	410	170
	Starts	2,400	1,310	310	130	1,070	590	1,030	590
Health, Public Services and Care	Achievement	830	410	230	120	360	160	250	130
	Starts	2,350	1,080	500	230	960	480	880	380
Engineering and Manufacturing Technologies	Achievement	650	300	220	80	390	200	40	20
	Starts	1,350	880	460	220	780	550	110	110
Construction, Planning and the Built Environment	Achievement	250	50	130	30	80	10	40	10
	Starts	870	560	520	300	250	180	100	80
Retail and Commercial Enterprise	Achievement	340	160	250	110	70	40	20	10
	Starts	860	380	550	260	260	90	50	30
Information and Communication Technology	Achievement	140	80	low	low	80	30	60	50
	Starts	400	260	low	low	220	120	180	140

Source: DfE Apprenticeships and Traineeships 2021-21 – 2022-23 (in-year data)

Apprenticeship starts in Retail and Commercial Enterprise were most popular at the intermediate level (22%), followed by Construction, Planning, and the Built Environment (21%). Business, Administration and Law has the most apprenticeship starts at the advanced and higher levels. For advanced apprenticeship starts, Health, Public Services and Care are second most popular followed by Engineering and Manufacturing Technologies. However, for higher level apprenticeship starts Information and Communication Technology replaces Engineering and Manufacturing Technologies for third place.

Apprenticeships in health, engineering and digital areas align well with South Yorkshire's industrial priorities. More action is required to develop and support green apprenticeships with clear technical pathways to help South Yorkshire decarbonise, this gap in provision is also a national challenge⁴⁵.

⁴⁵ APPG Apprenticeships. 2023. Apprenticeships report. [Available here](#).

Apprenticeship starts by subject and gender in South Yorkshire

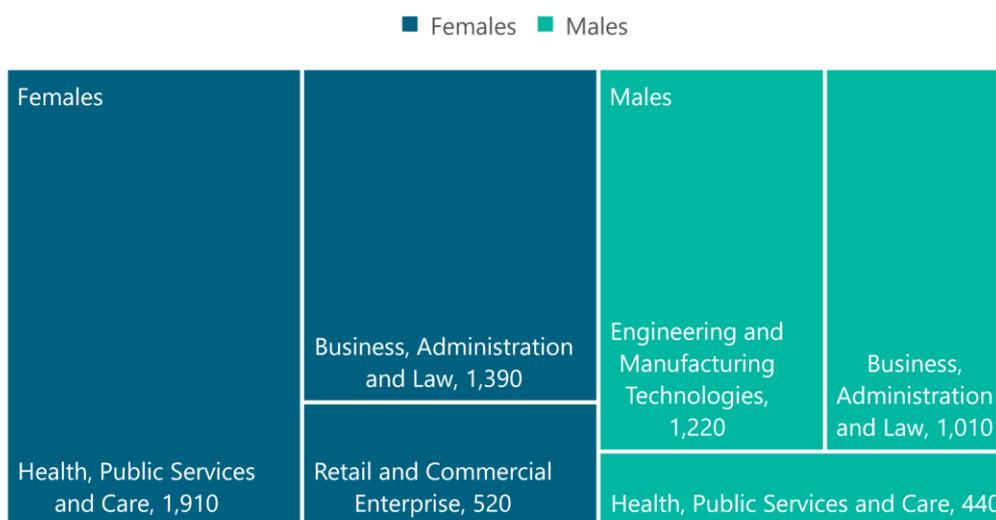


Figure 19 Apprenticeship starts by subject and gender. Source: DfE Apprenticeships and Traineeships 2021-21

Health, Public Services and Care is the largest apprenticeship start subject for females (1,910) whereas it is Engineering and Manufacturing Technologies for males (1,220). Business, Administration and Law is the second most popular for females and males. Retail and Commercial Enterprise is the third largest apprenticeship start subject for females, and for males it is Health, Public Services and Care.

Stakeholders highlighted the importance of apprenticeships for young people across South Yorkshire and that this pathway should be recognised and promoted like academic routes. Stakeholders were keen to increase the numbers of apprenticeships in South Yorkshire’s priority sectors and saw this as an opportunity to create a more diverse and industry ready workforce.

A South Yorkshire Apprenticeship hub will be launched later in 2023 and provide a ‘one stop shop’ for potential learners and businesses. The hub is expected to deliver 300 apprentices by 2026.

A LEVELS, APPLIED GENERALS AND TECH LEVELS (T LEVELS)

A Levels continue to be the most popular choice with 4,615 students in 2021/22 across South Yorkshire, with the highest numbers in Sheffield – accounting for 45% of all A Level students. Applied General students were the next largest group in 2021/22 with 1,805 and the largest cohorts were in Rotherham, closely followed by Doncaster. Tech Levels were the smallest group with 1,034 students in 2021/22 with the largest number found in Doncaster.

Table 16 Student type and geography 2018-2021

Student type and geography		2018/19	2019/20	2020/21	2021/22	Percentage change (2018/19–2021/22)
Number of A Level Students	Barnsley	509	425	456	476	-7%
	Doncaster	1,118	939	987	1,047	-6 %
	Rotherham	1,196	1,014	969	995	-17%
	Sheffield	2,089	1,972	2,014	2,097	0%
Number of Applied General students (more commonly known by brand names i.e. BTECs)	Barnsley	211	245	251	186	-12%
	Doncaster	348	372	422	707	103%
	Rotherham	461	547	504	725	57%
	Sheffield	193	218	143	187	-3%
Number of Tech Level (T Level) students	Barnsley	185	294	241	253	37%
	Doncaster	99	104	42	391	295%
	Rotherham	193	218	143	187	-3%
	Sheffield	132	198	129	203	54%

Source: DfE A level and other 16 – 18 results 2018/19 to 2021/22

In Doncaster there has been a clear increase in students taking applied and technical routes post 16 and increases in Rotherham for Applied General students. There have been reductions in Barnsley and Sheffield in the numbers of Applied General students yet increases in the numbers of Tech Level students. If Applied General and Tech Level students are combined, then all have seen percentage increases between 2018 and 2021. Whereas A Level students have reduced in Barnsley, Doncaster and Rotherham and stayed at a similar level in Sheffield.

Applied General and Tech Level students South Yorkshire total and % change



Figure 20 Applied General and Tech Level Students in South Yorkshire 2018/19 - 2021/22. Source: DfE A level and other 16 – 18 results 2018/19 to 2021/22

The average Applied General result in 2021/22 was highest in Barnsley and Doncaster (Dist), followed by Sheffield (Dist-), and Rotherham (Merit+) - the only South Yorkshire local authority to fall below the national average (Dist-). Rotherham and Sheffield report the highest average Tech Level result (Dist-) which is the same as the national average whereas Barnsley and Doncaster are below (Merit+)⁴⁶.

Applied General and Tech Level students South Yorkshire by gender

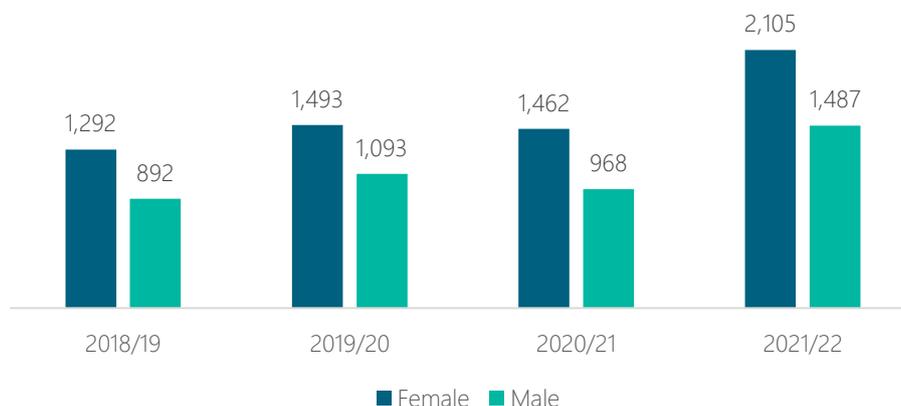


Figure 21 Applied General and Tech Level students by Gender. Source: DfE A level and other 16 – 18 results 2018/19 - 2021/22.

There are more female students taking Applied Generals and Tech Levels in South Yorkshire compared to males and this gender gap increased between 2018 and 2021. In terms of 2021/22 results, females tend to slightly outperform males in South Yorkshire apart from Tech Level results in Doncaster where the male average was Dist- compared to Merit for females.

STEM subjects account for just over a third of A Level entries in 2021-22, this is discussed in more detail in chapter five. The table below details the top ten A Level entries in South Yorkshire for 2021-22. Psychology was the most popular subject in South Yorkshire (1,332 entries) closely followed by maths (1,319). The top ten includes a mixture of science (biology, chemistry, and physics) and maths, humanities (English and history), social science (psychology and sociology), art and design, and business studies. These subjects align with South Yorkshire’s priority areas except for digital, with computer science the 17th highest for A Level entries.

Table 17 A Level entrants in South Yorkshire by subject

A Level exam entries 2021/22	Barnsley	Doncaster	Rotherham	Sheffield	South Yorkshire
All subjects	1,294	2,419	2,507	5,833	12,053
Total STEM subjects	402	760	811	2,194	4,167
Total Psychology	148	245	252	687	1,332
Total Maths	137	268	232	682	1,319
Total Biology	118	178	235	538	1,069
Total English	125	212	217	483	1,037
Total Chemistry	64	128	179	452	823

⁴⁶ DfE. 2023. A level and other 16 to 18 results 2021/22. [Available here](#).

A Level exam entries 2021/22	Barnsley	Doncaster	Rotherham	Sheffield	South Yorkshire
Total Sociology	80	153	182	401	816
Total History	91	142	156	299	688
Total Art & Design	27	235	132	238	632
Total Physics	52	105	91	339	587
Total Business Studies	95	119	127	205	546

Source: DfE A level and other 16 – 18 results A Level exam entries 2021-22

The average A Level result for 2021-22 in South Yorkshire was B- which is the same as the national average. The Average Point Score (APS) in England was 37.86, see the following table, and Doncaster recorded the highest APS in South Yorkshire (37.17), slightly below the national average. Rotherham recorded the lowest APS (36.52) and has consistently been the lowest in South Yorkshire since 2018/19 although it has improved. The APS figures declined from 2019 to 2021 which indicates a potential impact of Covid-19 on learners, more data is required to confirm this.

Doncaster has the lowest percentage of pupils achieving two or more A Levels (75.5%) in 2021/22, which is 12 percentage points below the national average. Barnsley records the highest percentage of pupils achieving two or more A Levels (93.1%) which is higher than the England average.

Table 18 A Level results 2018-2021

A Level Results		2018/19	2019/20	2020/21	2021/22
Barnsley	% achieving \geq 2 A Levels	78.40	93.60	94.10	93.10
	APS per A Level entry	31.52	39.20	39.01	37.05
Doncaster	% achieving \geq 2 A Levels	75.10	81.40	79.40	75.50
	APS per A Level entry	31.69	37.92	38.99	37.17
Rotherham	% achieving \geq 2 A Levels	70.70	82.20	86.30	82.90
	APS per A Level entry	30.93	37.26	39.27	36.52
Sheffield	% achieving \geq 2 A Levels	78.50	88.50	89.40	87.70
	APS per A Level entry	32.85	38.56	40.54	36.82
England	% achieving \geq 2 A Levels	80.00	85.40	87.80	87.50
	APS per A Level entry	32.80	38.55	40.46	37.86

Source: DfE A Level and other 16 to 18 results 2018-19 to 2021-22

There is an attainment gap within the percentage of students achieving two or more A Levels and their FSM status. Nationally, there is an 8.3 point percentage gap between students achieving two or more A Levels who are eligible for FSM (80.6%) and those who are not eligible (88.9%). In South Yorkshire, Doncaster recorded the largest gap of 27.5 percentage points with the percentage of students eligible for FSM achieving two or more A Levels at 50% compared to 77.5% who were not eligible. Rotherham (10.3 points) and Sheffield (8.9 points) both have larger FSM attainment gaps than nationally. Barnsley records the lowest gap of 4.2 percentage points which is nearly half the national average.

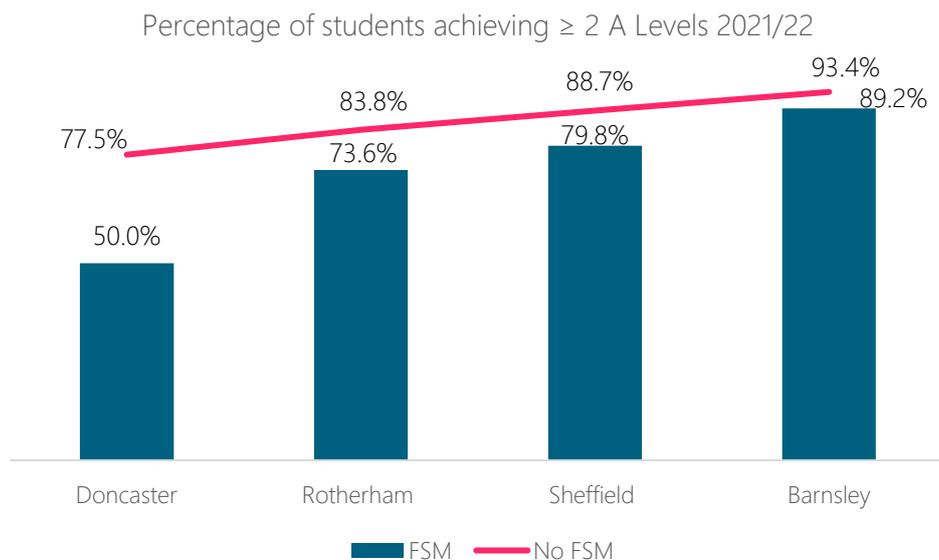


Figure 22 Students achieving 2 or more A Levels by FSM status. Source: DfE A Level and other 16 – 18 results

The table below details the Average Point Score (APS) at A Level for students in South Yorkshire for 2021-22 by their ethnicity and is measured against the national average for each ethnic group. The APS for all students in England was 38.87 for 2021-22 with Black or Black British A Level students having the lowest APS nationally. Likewise, across South Yorkshire the APS for Black or Black British students was below national levels and overall this was the worst performing group with the lowest average in Sheffield (25.68). A Level students from a Chinese background or Unknown ethnic background scored the highest APS nationally and in South Yorkshire.

Table 19 A Level Average Point score by ethnicity

APS per A Level Entry	Barnsley	Doncaster	Rotherham	Sheffield	England
Any other ethnic group		38.80	30.91	36.49	36.74
Asian or Asian British	32.50	36.85	37.43	35.16	37.22
Black or Black British	27.5	26.11	32.63	25.68	34.06
Chinese	40.00	47.5	40.32	33.21	43.66
Mixed Dual Background	32.00	35.84	39.49	37.47	38.09
Unknown	38.95	41.19	41.67	33.49	43.79
White	37.15	37.21	39.59	38.17	38.31

Source: DfE A Level and other 16 – 18 results 2021-22

Rotherham had three ethnic groups (Asian or Asian British, Mixed Dual Background and White) scoring above the national average, followed by Doncaster (Chinese and Any other ethnic group).

ENGLISH AND MATHEMATICS

As previously noted, English and maths GCSE at grade 4 or above is a pre-requisite for most post 16 courses which means young people retaking these subjects alongside or instead of a L3 course.

Table 20 L2 English and maths attainment at 16 and 19 between 2018/19 – 2021/22

Percentage of students with L2 English and maths	% at 16 2018/19	% at 19 2018/19	% at 16 2019/20	% at 19 2019/20	% at 16 2020/21	% at 19 2020/21	% at 16 2021/22	% at 19 2021/22
Barnsley	57.2	66.1	55.3	66	56.3	69.3	58	71.2
Doncaster	58.3	66.2	54.2	65.2	55.6	68.5	59.3	72.2
Rotherham	60.2	69.8	53.5	66.6	53.7	67.4	52.7	67.8
Sheffield	55	66.7	54.5	66	54.8	68.8	55.2	69.7
England	59.7	71.3	59.7	70.8	59.8	73	60.3	74.8

Source: DfE Level 2 and 3 attainment aged 16 - 25 English and maths 2018 – 2021

Nationally and locally there has been an increase in the percentage of 16-year-olds and 19 year olds with L2 (equivalent to GCSE) English and maths between 2018 and 2021, apart from Rotherham which saw reductions at both age 16 (7.5 percentage points) and age 19 (2 percentage points). Since 2018, South Yorkshire has consistently fallen below the national average (74.8%) for the proportion of 19-year-olds with a L2 in English and maths. In 2021/22 Doncaster had the highest percentage of 19-year-olds achieving L2 in English and maths (72.2%), followed by Barnsley (71.2%), Sheffield (69.7%) and Rotherham (67.82%) and the same pattern can be seen for attainment at age 16.

The data shows improvement with more 19-year-olds having L2 English and maths than those aged 16. Doncaster records the smallest increase between 16- and 19-year-olds with L2 English and maths (12.9 percentage points), and Rotherham the largest (15.1 percentage points). In 2021/22, 1,914 South Yorkshire students who had not achieved L2 English and maths at age 16 had done so by age 19.

Number of young people achieving L2 English and maths at age 19 but who did not achieve it aged 16

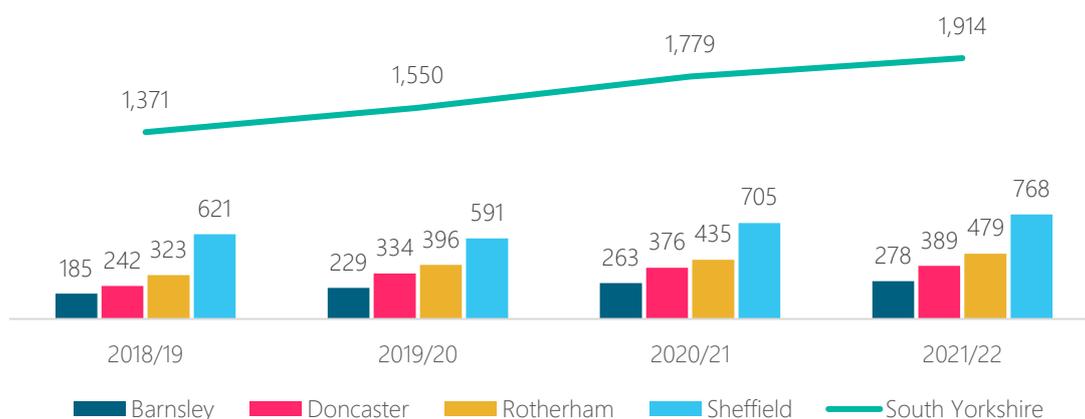


Figure 23 L2 English and maths achieved at age 19 not 16 (numbers). Source: DfE Level 2 and 3 attainment aged 16 - 25 English and maths 2018/19 – 2021/22

The growth in the numbers of 19-year-olds in South Yorkshire with L2 English and maths is encouraging. However, this only accounts for around one third of 19-year-olds who did not achieve L2 English and maths at 16, as the table below shows.

Table 21 Percentage achieving L2 English and maths at age 19 not 16

Percentage L2 English and maths at 19 not 16	2018/19	2019/20	2020/21	2021/22
Barnsley	20.7	24	29.8	31.4
Doncaster	19	24.1	29	31.7
Rotherham	24.2	28	29.7	31.9
Sheffield	26	25.1	30.9	32.4
Yorkshire and Humber	27.7	27.3	32.1	34.6
England	28.7	27.6	32.7	36.7

Source: DfE Level 2 and 3 attainment aged 16 - 25 English and maths 2018 – 2021

Nationally, almost two thirds of 19-year-olds who did not achieve L2 English and/or Maths at aged 16 had not obtained these qualifications by the age of 19 – with a similar picture across South Yorkshire. Between 31% and 32% of 19-year-olds in South Yorkshire had achieved L2 English and maths by 19 (not 16) which is slightly lower than regional and national averages. The progress between 2018/19 and 2021/22 is a positive story with increases of between 11 and 6 percentage points across South Yorkshire.

There is a higher percentage of females at 19 with L2 English and maths compared to males locally in South Yorkshire and nationally. Doncaster has the highest percentage of females with English and maths L2 at 19 at 78.5% which is nearly at the national level (78.8%) and Rotherham records the lowest (73%). Barnsley has the largest percentage of males with a L2 in English and maths at aged 19 (66.5%) which is below the national average (71.1%).

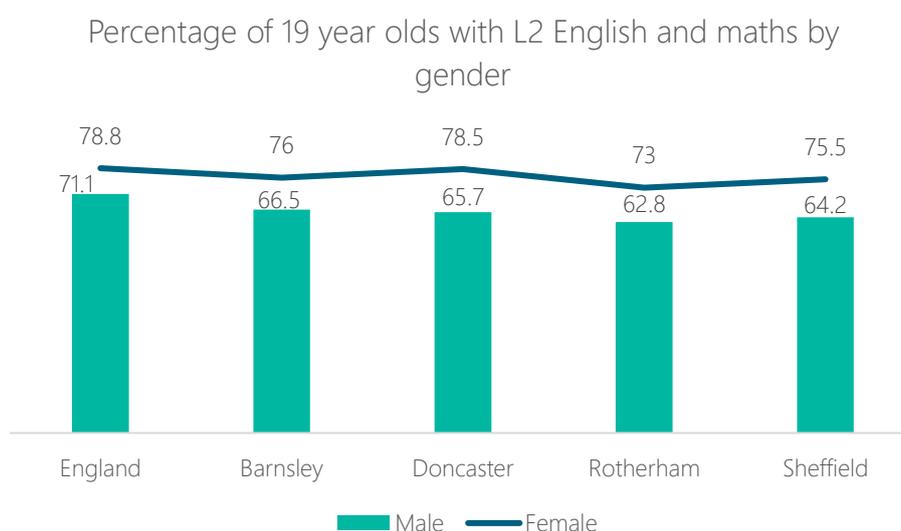


Figure 24 L2 English and maths attainment aged 19 by gender. Source: DfE Level 2 and 3 attainment aged 16 - 25 English and maths 2018 – 2021

Doncaster records the largest gap (12.8 percentage points) between male and female L2 English and maths attainment at age 19, Sheffield is second (11.3 percentage points), followed by Rotherham (10.3

percentage points) and Barnsley (9.5 percentage points) – all higher than England (7.7 percentage points).

There are also differences in L2 English and maths attainment at 19 by FSM eligibility.

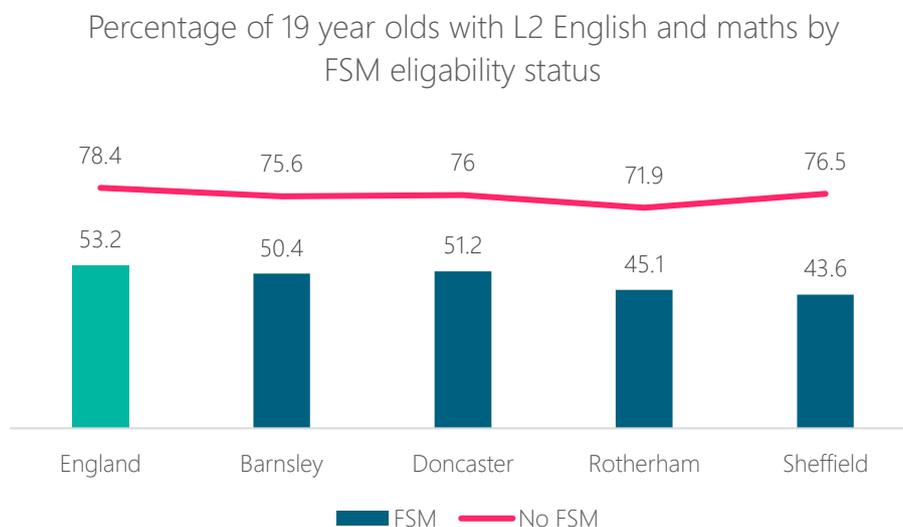


Figure 25 L2 English and maths attainment age 19 by FSM status. Source: DfE Level 2 and 3 attainment aged 16 - 25 English and maths 2018 – 2021

Doncaster (51.2%), Barnsley (50.4%), Rotherham (45.1%) and Sheffield (43.7%) all record a lower percentage of 19-year-olds who were eligible for FSM with L2 English and maths than nationally (53.2%). At 32.8 percentage points, Sheffield has the largest gap in L2 English and maths at 19 between those who were eligible for FSM and those who were not which is over 7 points more than the national gap. Doncaster records the smallest gap (24.8 percentage points), yet this is still a considerable difference. There are also lower levels of people eligible for FSM gaining L2 English and maths by 19 and not 16 when compared to those who were not eligible for FSM.

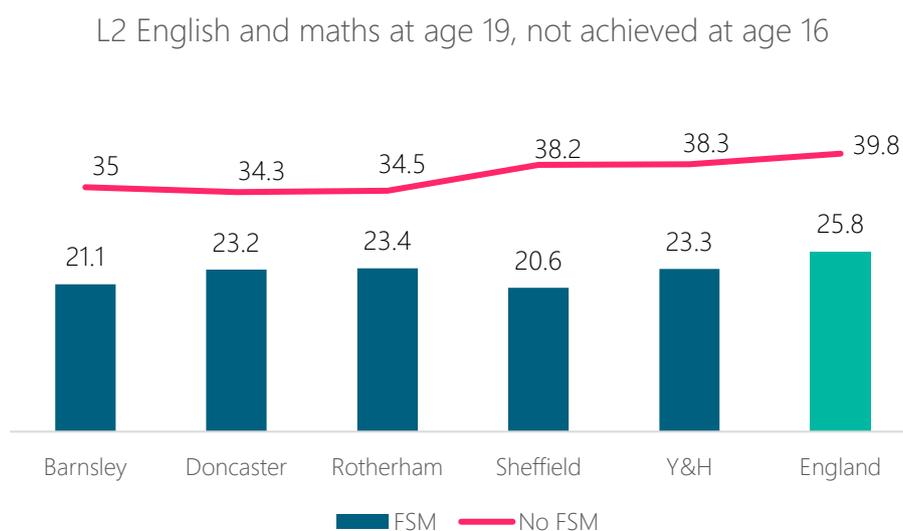


Figure 26 L2 English and maths achievement at 19 not 16 by FSM status. Source: DfE Level 2 and 3 attainment aged 16 - 25 English and maths 2018 – 2021

In Sheffield, only one fifth of 19-year-olds eligible for FSM who had not obtained L2 English and maths at 16 had done so by 19 with a similar picture in Barnsley (21.1%), Doncaster (23.3%) and Rotherham (23.4%). This compares to 38.2% of 19-year-olds in Sheffield who were not eligible for FSM and had L2 English and maths at age 19 but not 16. The FSM eligibility gap for L2 English and maths achievements at 19 but not 16 is largest in Sheffield (17.5 percentage points) and lowest in Doncaster (11 percentage points).

KS5 SUSTAINED POSITIVE DESTINATION

The KS5 'sustained positive destination' shows the percentage of students at the end of the academic year (usually aged 18) going into or remaining in education, apprenticeship, or employment. In 2020/21, 78% of young people in South Yorkshire were in a sustained positive destination at KS5 which is the fifth highest of the 11 English MCAs.

Between 2018/19 and 2020/21, there has been a reduction in the percentage of KS5 pupils in a sustained positive destination in South Yorkshire and the comparator areas. South Yorkshire has recorded the second smallest reduction (1.3 percentage points) and remains in fourth position, albeit with a slightly narrower gap with England, Buckinghamshire, and Liverpool.

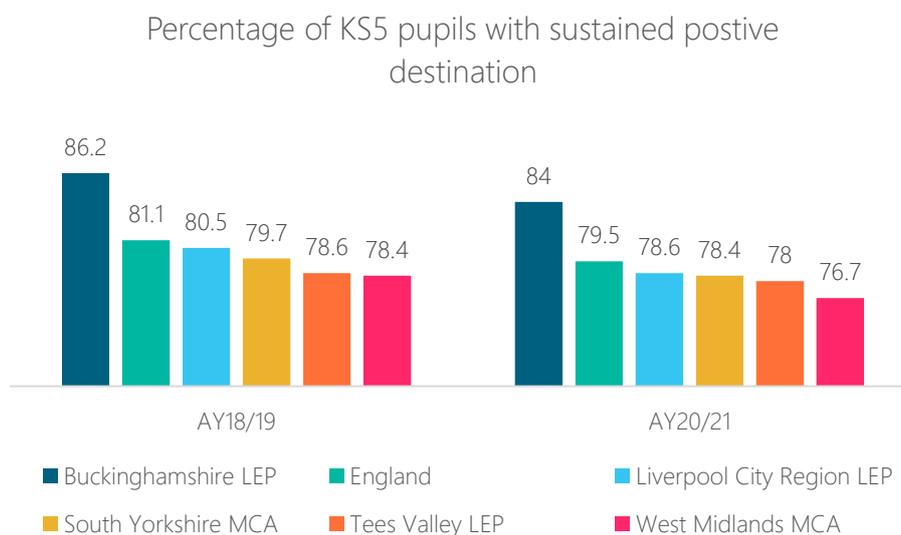


Figure 27 KS5 sustained positive destination 2018/19 - 2020/21 comparison. Source: DfE Local Skills Dashboard Sustained Positive Destinations 2018/19 - 2020/21

At 80%, Doncaster has the highest level of 'sustained positive destinations' at KS5 and Barnsley and Rotherham have the lowest (76%).

Remaining or entering education is the most common KS5 destination overall, particularly in Sheffield (56%) and the least common in Barnsley (43%). In South Yorkshire apprenticeships account for 7% of KS5 destinations with slightly higher levels (8%) in Barnsley, Doncaster, and Rotherham and lower (6%) in Sheffield which is the same as the England average. 25% of young people in Barnsley enter employment at the end of KS5, the highest level in South Yorkshire and above the national average (21%), whereas Sheffield is below the national average (17%).

KS5 sustained positive destination (percentage)

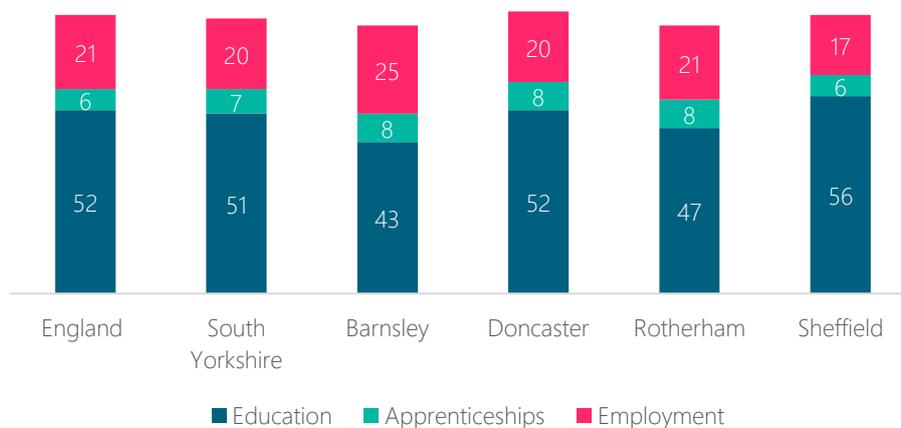


Figure 28 KS5 detailed sustained positive destination. Source: DfE Local Skills Dashboard Sustained Positive Destinations 2020/21

3.2 HIGHER EDUCATION

This section explores the characteristics of students at university in South Yorkshire including numbers, subject area and level as well as differences by gender and eligibility for FSM.

BENEFITS OF HIGHER EDUCATION

In the UK, working age graduates (undergraduate and postgraduate) had an employment rate in 2022 of 87.3% which is higher than the employment rate for working age non-graduates (69.6%)⁴⁷. Moreover, 66.3% of working age graduates in 2022 were in ‘high-skilled employment’ and this was higher for postgraduates (78.3%). Whereas only 23.6% of working age non-graduates were in ‘high-skilled employment’. Graduates also earn more than non-graduates, the average median nominal salary for working age graduates in 2022 was £38,500 compared to £27,000 for non-graduates. Working age people with a postgraduate qualification had the highest earnings at an average of £45,000. The lifetime economic benefit for an undergraduate degree is significant:

“Over their working lives, men will be £130,000 better off on average by going to university after taxes, student loan repayments and foregone earnings are taken into account. For women, this figure is £100,000”⁴⁸

UNIVERSITY STUDENTS IN SOUTH YORKSHIRE

South Yorkshire is home to two award winning universities with world class academics and facilities. In 2020/21, 34,535 students enrolled at Sheffield Hallam University and 30,860 enrolled at the University of Sheffield. The tables below show student numbers by subject at both universities.

Across both universities student enrolments were highest (2021-22) for subjects allied to medicine with over 11,000 enrolments. This is followed by enrolments in business and management (9,070), engineering and technology (8,290), social sciences (6,800), and computing (3,460). These subjects align well with

⁴⁷ DfE. 2023. Graduate labour market statistics 2022. [Available here.](#)

⁴⁸ Institute for Fiscal Studies. 2020. The impact of undergraduate degrees on lifetime earnings. [Available here.](#)

South Yorkshire's strategic growth priorities particularly those in healthcare, advanced manufacturing and digital.

The largest cohort of students at the University of Sheffield in 2021-22 was for engineering and technology (5,905 enrolments) and for the two years prior. Social sciences were the next largest group (3,375 enrolments), with business and management (3,165), subjects allied to medicine (2,950) and medicine and dentistry (2,225) all in the top five subjects at the University of Sheffield. Subjects allied to medicine had the largest increase in enrolments between 2019-20 and 2021-22 (785) and education and teaching the greatest reduction (-190). Agriculture, food and related studies has seen the largest percentage increase between 2019-2021 (50%) albeit from a low starting point, followed by subjects allied to medicine (36.2%).

There is a similar mix in the top five subjects by enrolment at Sheffield Hallam University. Subjects allied to medicine is the largest group (8,085 enrolments in 2020-2021, an increase of 1,685 from 2019-20). Business and management were the second largest group (5,905), followed by social sciences (3,425), engineering and technology (2,385), and education and teaching (2,290). Subjects allied to medicine saw the largest growth in terms of numbers between 2019-20 and 2021-22 and language and area studies the biggest reduction (-245). As at the University of Sheffield, student enrolments in agriculture, food and related studies saw the most substantial percentage increase between 2019-2021 (113%) with subjects allied to medicine the second largest (26.3%).

Table 22 University of Sheffield and Sheffield Hallam University enrolments by subject 2019-2021

University of Sheffield Student Enrolments	2019-20	2020-21	2021-22	% Change 2019/20-2021/22
Total	30,055	30,605	30,860	2.7
Engineering and technology	6,075	5,900	5,905	-2.8
Social sciences	3,385	3,405	3,375	-0.3
Business and management	2,675	3,320	3,165	18.3
Subjects allied to medicine	2,165	2,690	2,950	36.2
Medicine and dentistry	2,085	2,125	2,225	6.7
Architecture, building and planning	1,595	1,645	1,705	6.9
Language and area studies	1,845	1,825	1,675	-9.2
Psychology	1,020	1,090	1,235	21
Computing	1,030	1,115	1,235	19.9
Historical, philosophical and religious studies	1,370	1,260	1,230	-10.2
Media, journalism and communications	1,135	1,110	1,195	5.3
Biological and sport sciences	1205	1,140	1,190	-1.2
Law	1,065	950	915	-14
Physical sciences	940	835	785	-16.5
Education and teaching	870	725	680	-21.8
Mathematical sciences	780	745	655	-16

Design, and creative and performing arts	265	255	295	11.3
Geography, earth & env. studies (natural sciences)	235	210	230	-2.1
Geography, earth & env. studies (social sciences)	295	235	190	-35.6
Agriculture, food and related studies	10	15	15	50
Veterinary sciences	10	5	0	-100
Combined and general studies	0	0	0	0
Sheffield Hallam University Student Enrolments	2019-20	2020-21	2021-22	% Change 2019/20-2021/22
Total	30,960	33,270	34,535	11.5
Subjects allied to medicine	6,400	7,810	8,085	26.3
Business and management	5,080	5,270	5,905	16.2
Social sciences	3,095	3,255	3,425	10.7
Engineering and technology	2,025	2,125	2,385	17.8
Education and teaching	2,215	2,330	2,290	3.4
Computing	2,030	2,220	2,225	9.6
Design, and creative and performing arts	2,130	2,020	1,915	-10
Biological and sport sciences	1,695	1,710	1,515	-10.6
Psychology	1,335	1,470	1,495	12
Law	810	1,180	1,420	75
Architecture, building and planning	1,340	1,295	1,290	-3.7
Media, journalism and communications	760	740	815	7.2
Language and area studies	680	510	435	-36
Geography, earth & env. studies (natural sciences)	320	360	335	4.7
Agriculture, food and related studies	115	130	245	113
Mathematical sciences	285	245	240	-15.8
Physical sciences	250	235	200	-20
Historical, philosophical and religious studies	235	205	180	-23.4
Geography, earth & env. studies (social sciences)	160	160	125	-21.9
Combined and general studies	10	5	10	0
Medicine and dentistry	0	0	0	0
Veterinary sciences	0	0	0	0

Source: HESA HE student enrolments by HE provider and subject of study 2019-20 to 2021-22

In 2021-22, there were 22,880 qualifiers from the University of Sheffield and Sheffield Hallam University, an increase of 955 from 2019-20. Business and management had the largest number of qualifiers (3,575), followed by subjects allied to medicine (3,090), engineering and technology (2,695), social sciences (2,385), and education and teaching (1,610). Computing was the sixth largest qualifier (2021-22) growing by 15% from 2019-20. The tables feature the top ten qualifiers at both universities.

The subjects allied to medicine had the highest levels of qualifiers at Sheffield Hallam University in 2021-22 (2,220) and this was the fourth largest group at the University of Sheffield (870). For the University of Sheffield, qualifiers in engineering and technology were the largest group (2,015) and this was the fifth largest at Sheffield Hallam University (680). Computing qualifiers saw the largest growth between 2019/20-2021/22 at Sheffield Hallam University (26.4%) however this group saw a marginal decline at the University of Sheffield over the same period (1.9%). At the University of Sheffield, psychology qualifiers had the largest increase between 2019/20-2021/22 (29.9%) followed by business/management (31.1%).

Table 23 Sheffield Hallam University and University of Sheffield qualifiers by subject 2019/20-2021/22

Sheffield Hallam University Qualifiers	2019-20	2020-21	2021-22	% Change 2019/20 - 21/22
Total	9,890	10,230	10,630	7
Subjects allied to medicine	1,990	2,000	2,220	10.4
Business and management	1,490	1,665	1,705	12.6
Education and teaching	1,205	1,470	1,160	-3.9
Social sciences	1,015	950	1,100	7.7
Engineering and technology	610	675	680	10.3
Computing	460	580	625	26.4
Design, and creative & perf. arts	570	675	590	3.4
Psychology	435	365	505	13.9
Biological and sport sciences	495	450	495	0.0
Architecture, building and planning	505	395	400	-26.3
The University of Sheffield Qualifiers	2019-20	2020-21	2021-22	% Change 2019/20 - 21/22
Total	12,035	12,625	12,250	1.8
Engineering and technology	2,075	2,090	2,015	-2.9
Business and management	1,310	1,700	1,870	29.9
Social sciences	1,175	1,235	1,285	8.7
Subjects allied to medicine	685	935	870	21.3
Architecture, building and planning	740	725	830	10.8
Language and area studies	695	710	700	0.7
Media, journalism & communications	845	780	660	-28
Psychology	405	510	535	32.1
Medicine and dentistry	565	430	525	-7.0
Computing	535	520	525	-1.9

Source: HESA HE qualifiers by HE provider and subject of study 2019-20 to 2021-22

In 2021-22, there was a relatively even number of learners graduating with undergraduate or postgraduate degrees at the University of Sheffield and Sheffield Hallam University.

Combined graduate totals for University of Sheffield and Sheffield Hallam University 2018-19 to 2021-22



Figure 29 Graduate totals for University of Sheffield and Sheffield Hallam University 2018 – 2021 Source: HESA HE qualifiers by HE provider and level of qualification obtained 2018-19 to 2021-22

Between 2018-19 and 2021-22 the gap between undergraduate qualifiers and postgraduate qualifiers reduced from 38% more undergraduates to just 0.4%. This may have been affected by the pandemic and subsequent impacts on the labour market, yet it is positive to have a potential workforce with higher level qualifications. The increase in postgraduates has been driven by masters (taught) qualifications with a 32% increase at Sheffield Hallam University and 38% at the University of Sheffield between 2018-19 and 2021-22 whereas postgraduate research qualifiers have reduced during this time. There was an 11% reduction in undergraduate qualifiers across both Universities between 2018-19 and 2021-22 caused by less people undertaking their first degree which again may have been affected by the pandemic.

Nationally, there are more female undergraduate and postgraduate students than male, and this is reflective of South Yorkshire.

HE enrolments by gender and level in South Yorkshire



Figure 30 Sheffield Hallam University and University of Sheffield students by gender. Source: HESA HE student enrolments by HE provider 2021-22

Nationally, in 2021-22, subjects allied to medicine had the most female undergraduates, followed by business and management, and social sciences. For male undergraduates' business and management is the most popular subject, engineering and technology is second (12th out of 22 subject area for females) and computing third (15th out of 22 subject area for females)⁴⁹.

In England, students identifying with a White ethnic background form the largest group (69% of all students in 2021-22) and people from an Asian background the second largest (14%). At postgraduate level, there are more students from a White ethnic background (74%) and fewer from other ethnic groups – 12% are from an Asian ethnic group, 8% from a Black ethnic group, and 4% from a mixed ethnic background⁵⁰.

Progression into higher education (HE)⁵¹ by the age of 19 nationally varies by ethnicity with white learners the least likely to have progressed (41.8%) in 2021-22. The HE progression rate was highest for pupils from a Chinese background (83.8%), followed by Asian pupils (67.8%), Black pupils (63.5%) and pupils from a mixed ethnic background (51.5%).

A student's FSM eligibility at 15 years old impacts the likelihood of their progression into HE by age 19. In England, just under half (49.4%) of pupils not eligible for FSM progress into HE, compared to 29.2% of students who were eligible for FSM. This is a gap of 20.2 percentage points (progression gap) which is the highest level on record. In South Yorkshire, Sheffield has the highest levels of HE progression with 49% of pupils not eligible for FSM progressing into HE and 25.9% of those who were eligible progressing. Barnsley has the lowest levels of HE progression, with just 16.1% of FSM eligible pupils progressing into HE by age 19 and 34.7% of those who were not eligible.

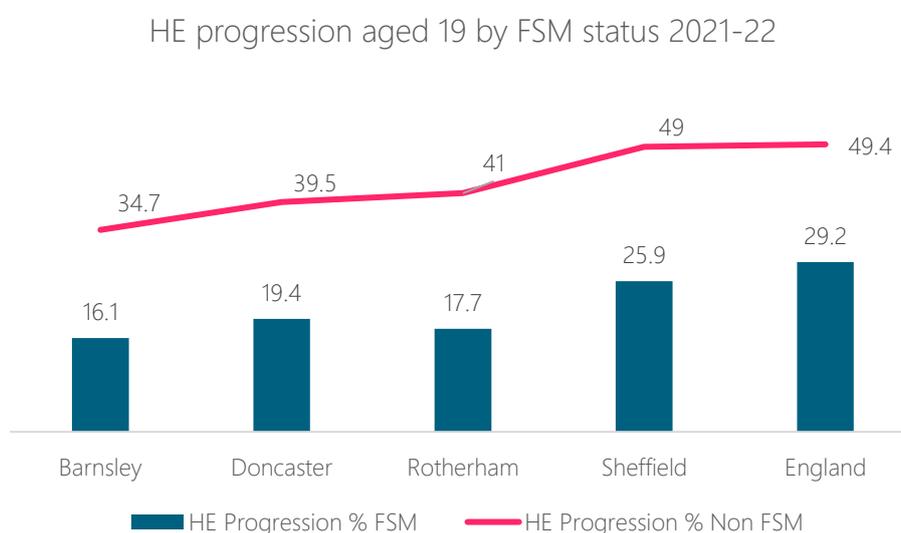


Figure 31 HE progression by 19 by FSM status. Source: DfE Widening participation in higher education, free school meals gap 2021-22

⁴⁹ HESA. 2023. Who's studying in HE? [Available here](#).

⁵⁰ As above.

⁵¹ DfE. 2023. Widening participation into higher education. [Available here](#).

Barnsley records the smallest FSM progression gap with 18.6 percentage points between those who were and were not eligible for FSM and this has reduced by nearly 4 percentage points since 2018-19. Rotherham has the largest FSM progression gap (23.3 percentage points) with Sheffield a close second (23.1 percentage points). Doncaster has the same progression gap as nationally (20.2 percentage points) and has seen this increase since 2018-19 by 2.9 points. The progression gap has grown the most in Rotherham (4.2 points) which is over twice the amount of the national increase.

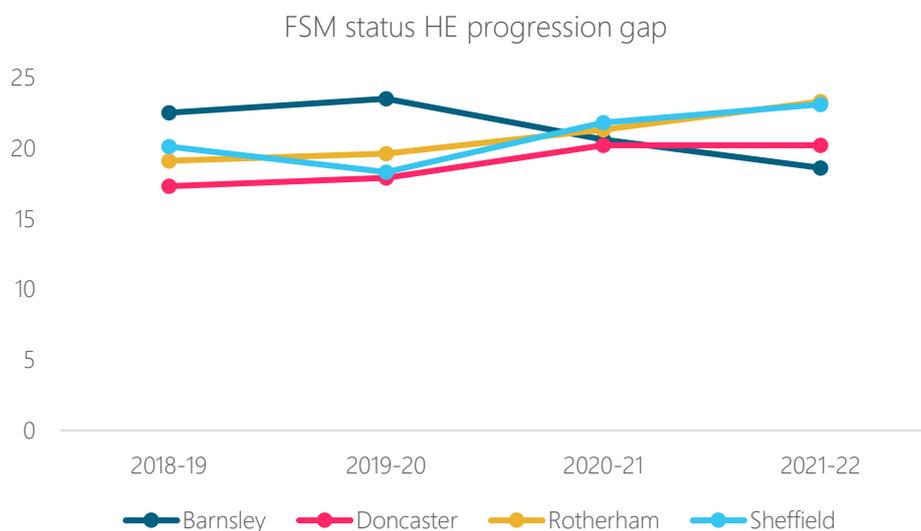


Figure 32 HE progression by FSM status 2018 – 2021. Source: DfE Widening participation in higher education, free school meals gap 2021-22

GRADUATE OUTCOMES

In 2020/21, 86.8% of graduates nationally were in sustained employment, education or both five years after graduation⁵². There has been a reduction (between 2019-20 and 2020-21) in the level of sustained employment, education, or both for first degree graduates one year after graduation and for their median earnings. DfE⁵³ suggests that this could be due to the economic shocks of leaving the EU and the Covid-19 pandemic which adversely affected employment opportunities for young people (the older cohorts did not experience these reductions in the first year).

Nationally, 61% of 2020/21 graduates were in full-time employment and another 10% were in employment and further study⁵⁴. In South Yorkshire, 70% of Sheffield Hallam graduates and 64% of the University of Sheffield graduates were in full-time employment. There was a smaller percentage of graduates in employment and further study from the University of Sheffield (8.7%) and Sheffield Hallam University (8%) than nationally. The University of Sheffield had a higher proportion of graduates in full-time study 9.7% than the national average (7%) and Sheffield Hallam University (4%). Both universities had a lower percentage of graduates who were unemployed than nationally.

Table 24 University of Sheffield and Sheffield Hallam University graduate activities 2020-21

⁵² DfE. 2023. LEO Graduate and Postgraduate Outcomes. [Available here](#).

⁵³ DfE. 2023. LEO Graduate and Postgraduate Outcomes. [Available here](#).

⁵⁴ HESA. 2023. Graduate outcomes 2020/21: Summary statistics. [Available here](#).

2020/21 Graduate activities	Sheffield Hallam University Total	Sheffield Hallam University Percentage	The University of Sheffield Total	The University of Sheffield Percentage
Full-time employment	3,260	70	2,860	64
Part-time employment	415	9	295	6.6
Unknown pattern of employment	10	0	20	0.5
Voluntary or unpaid work	30	1	40	0.9
Employment and further study	380	8	390	8.7
Full-time further study	200	4	435	9.7
Part-time further study	15	0	25	0.6
Other including travel, caring for someone or retired	180	4	200	4.5
Unemployed	180	4	200	4.5
Total with known outcomes	4,670		4,460	
Non-respondents	4,625		7,620	
Total	9,295		12,080	

Source: HESA Graduate activities by provider and sex 2020-21. Percentage calculated by total known outcomes

Human health and social work activities was the largest employment sector for graduates from Sheffield Hallam University (825) and the University of Sheffield (580) in 2020-21. Followed by the education sector for Sheffield Hallam graduates (790) and professional, scientific, and technical activities for the University of Sheffield graduates (525)⁵⁵. 81% of graduates from Sheffield Hallam University and 85% from the University of Sheffield were in 'high skilled' occupations driven by those in professional occupations⁵⁶.

Most graduates from Sheffield Hallam University and the University of Sheffield report salaries of £24,000 and £26,999. There is a higher percentage of graduates from the University of Sheffield earning above £27,000 compared to Sheffield Hallam University.

⁵⁵ HESA. 2023. Standard industrial classification of graduates entering work in the UK by provider. [Available here.](#)

⁵⁶ HESA. 2023. Standard occupational classification of graduates entering work in the UK by provider. [Available here.](#)

Graduate paid employment activity

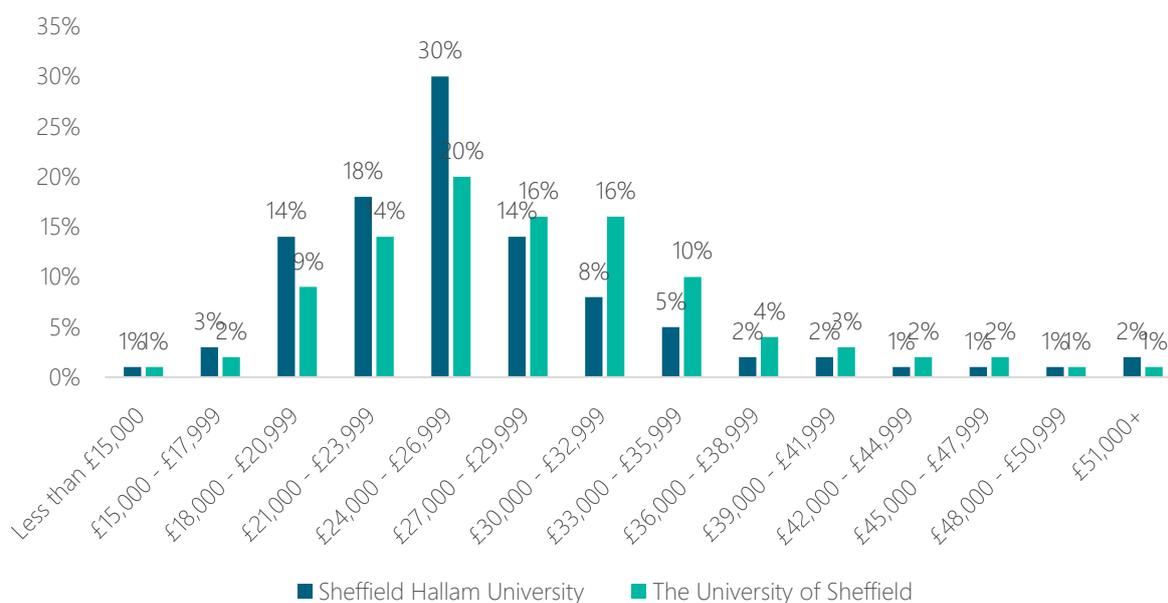


Figure 33 Sheffield Hallam University and University of Sheffield graduate salaries. Source: HESA UK domiciled graduates who obtained first degree qualifications and entered full-time paid employment in the UK by provider and salary band 2020-21

Stakeholders raised several challenges involving graduates in the labour market, for example employers often report graduates as not being work ready with a need to further develop their employability skills such as communication, teamwork and problem solving. There is also a growing need to equip graduates with the necessary digital skills to create a resilient workforce for the future. On the other hand, graduates often ‘*excel beyond South Yorkshire*’ as people cannot find suitable employment or risk ‘underemployment’ which itself is problematic. Thus, the current labour market is not always offering the right opportunities which ensure graduates stay in or return to South Yorkshire. This issue around the graduate perception of opportunities for employment and career progression was also identified during research to inform South Yorkshire’s Innovation District Skills, Training and Business Support Plan.

3.3 UPSKILLING AND RESKILLING

Upskilling and reskilling are vital for adult learners to enable and empower them to take advantage of labour market opportunities. The existing workforce will need to adapt through the development of new skills as the economy changes to become greener and more digitalised. The labour market trends discussed in this section provide an indication of current and future skills needs in the labour market.

LABOUR MARKET TRENDS – SKILLS NEEDS AND PROJECTIONS

Data from the Department for Education (DfE) shows that in December 2022 there were 20,495 online job adverts in South Yorkshire, which is the eighth lowest out of the 11 MCAs in England⁵⁷. Covid-19 and the subsequent restrictions had a clear impact on online job adverts as statistics from between 2017-2022 show.

⁵⁷ Department for Education. 2023. Local Skills Dashboard. [Available here](#).

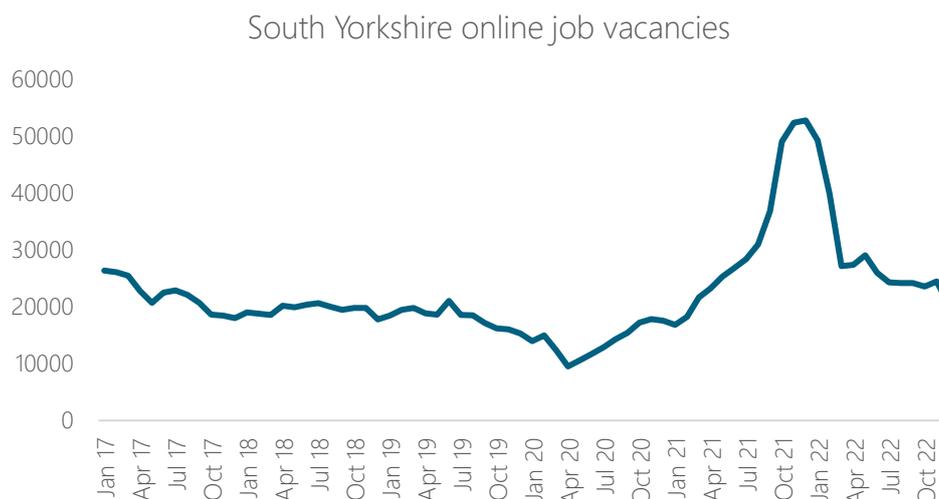


Figure 34 Online job vacancies in South Yorkshire 2017 – 2022. Source: DfE Local Skills Dashboard December 2022

Job adverts declined rapidly in early 2020 as lockdowns were imposed and then rebounded in late 2021 and early 2022. Through-out the remainder of 2022 online job adverts across South Yorkshire have been in decline, which reflects the national picture. As of December 2022, there were 2,785 online vacancies in Barnsley, 4585 in Doncaster, 2,240 in Rotherham and 10,870 in Sheffield which is more than the combined total of the three other local authorities.

Experimental DfE statistics⁵⁸ demonstrate online job adverts for healthcare roles were most common (12.1%) in South Yorkshire and England (12.6%) with care assistants most in demand. Information and Communication Technology is next with 8.3% of postings in South Yorkshire which is slightly lower than the national picture (9.3%) with programmers most needed. Both Healthcare and Information and Communication Technology clearly align with South Yorkshire's strategic priorities and the latter is the focus of the latest Local Skills Improvement Plan. Administration and Customer Service are third in South Yorkshire (7.4%) but are fourth largest nationally (6.8%). In South Yorkshire, 7.3% of online vacancies were for Legal, Human Resources, and Social Services, and Education and Training which is higher than England (6.8%, 5.8%). Engineering vacancies are also higher in South Yorkshire (6.7%) than in England (6.1%) and reflective of the strength of this sector in the sub-region historically.

Projections of future demand for specific employment sector and occupational skills are helpful as they can inform strategic skills planning for education and training provision. The DfE⁵⁹ has also developed projections for 2035 which show employment growth in South Yorkshire between 2023 and 2035 is 4%, which is eighth out of the 11 MCAs in England, and lower than the national average. Cambridgeshire and Peterborough and North Tyneside have the highest projections at 7% growth. In terms of employment growth by broad sector, non-marketed services have the highest predicted growth between 2023-2035 at 8.8% which is higher than the national average (6.5%). Business and other services are second highest at 5.9% growth, yet this is slightly lower than England (6.8%). Trade, accommodation, and transport is third highest in South Yorkshire (but fourth nationally) at 3.9% predicted growth which is lower than England (6.4%). Construction is third nationally with 10.2% predicted growth but is projected to grow only by 1.2% in South Yorkshire. Manufacturing is predicted to decline by 15.3% in South Yorkshire and

⁵⁸ Department for Education. 2023. Local Skills Dashboard. [Available here](#). These statistics are experimental projections and should be treated with caution.

⁵⁹ As above.

9.6% nationally. The low employment growth for construction and decline in manufacturing employment presents a challenge and opportunity for South Yorkshire to upskill and reskill this workforce. There is also alignment with the need to decarbonise the manufacturing and construction industries as well as the need for workers to help deliver decarbonisation more widely such as through retrofitting.

DfE projections for occupational change in South Yorkshire between 2020-2035 show annual reductions in skilled trades occupations (0.8%), process, plant and machine operatives (0.5%), elementary occupations (0.3%), and administrative and secretarial occupations (0.1%). These reductions are all greater in South Yorkshire than nationally apart from the administrative and secretarial occupations. Professional occupations have the largest growth projection at 1.1% annually in South Yorkshire (compared with 1.2% nationally), this is followed by associate professional occupations which is estimated to grow by 1% annually in South Yorkshire which is marginally higher than the national projections (0.9%). Other occupations with predicted annual growth in South Yorkshire include caring, leisure and service occupations (0.6%) and managers, directors, and senior officials (0.1%). The projections provide insight into the changing nature of the workforce who will need to be more qualified in their relevant industries.

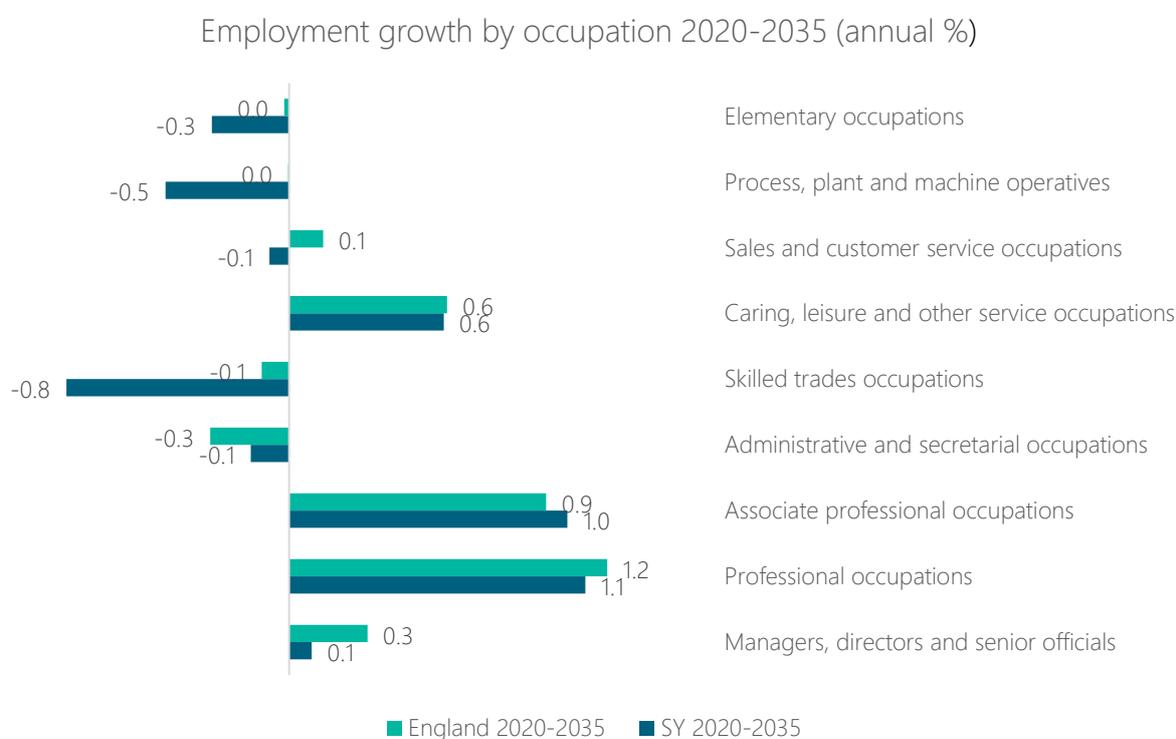


Figure 35 Employment growth by occupation 2020 – 2035. Source: DfE Labour Market and Skills Projections

QUALIFICATION LEVELS

Qualifications and education are key to an individual’s access and navigation of the labour market. Statistics⁶⁰ show that in the UK, at age 30, people with the highest level of education will generally live four years longer than people with the lowest level of education.

⁶⁰ OECD. 2021. Life expectancy by sex and education level. [Available here.](#)

Between 2018 and 2021 the proportion of working age adults qualified to L3 and above has increased nationally and locally. In 2021, 55.3% of working age adults in South Yorkshire had qualifications at L3 plus which places the sub-region at 8th out of the 11th English MCAs.

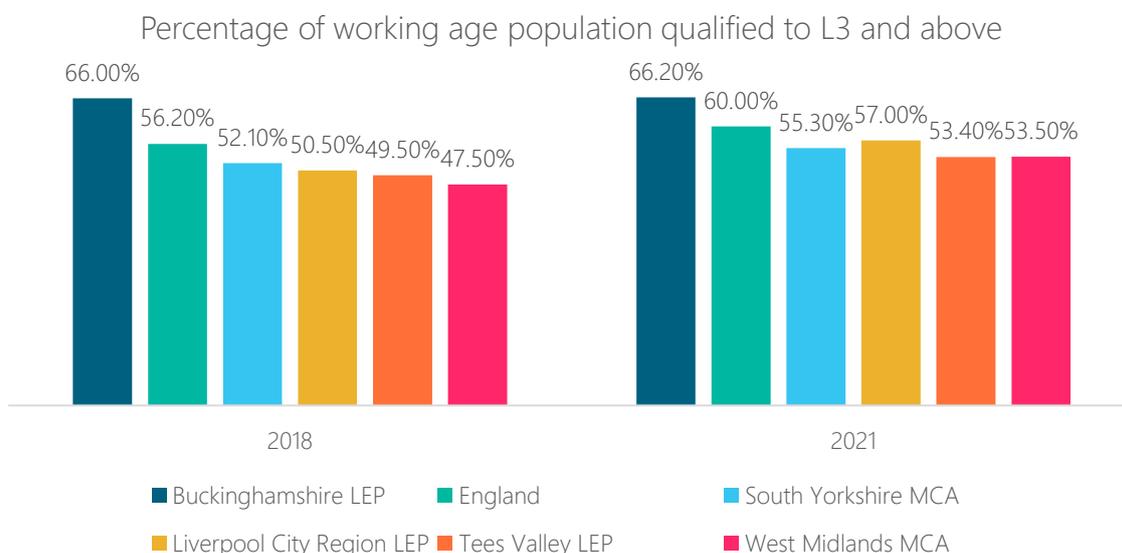


Figure 36 Working age L3+ qualifications comparison. Source: DfE Local Skills Dashboard Qualified at L3 or above 2018 – 2021.

Buckinghamshire consistently outperforms the England average with 66.2% of adults qualified to L3 or above in 2021 which is 6.21 percentage points higher than England and 10.8 percentage points higher than South Yorkshire. In 2018, 52.1% adults in South Yorkshire were qualified at L3+ compared to 50.5% in Liverpool, however in 2021 Liverpool had increased its proportion to 57% which is 1.7 percentage points higher than South Yorkshire.

South Yorkshire’s level of the working age population with no qualifications (7%, 60,627 people) is higher than the national average (6.6%).

Table 25 Qualifications by NVQ Level (all people aged 16-64)

	NVQ4+ %	NVQ3 %	NVQ2 %	NVQ1 %	Other qualifications %	No qualifications
Barnsley	31.2	20.4	21.8	12.1	5.2	9.3
Doncaster	27.2	25.2	21.2	9.9	7.1	9.4
Rotherham	31.9	22.2	18.8	11.9	6.9	8.3
Sheffield	45.1	17.1	18.7	8.8	6.1	4.2
South Yorkshire	36.5	20.3	19.8	10.2	6.3	7
Great Britain	43.6	17.9	16.6	9.4	5.9	6.6

Source: Annual Population Survey Jan 2021 – Dec 2021.

Doncaster (9.4%) and Barnsley (9.3%) have the highest percentages of the working age population without qualifications. 8.3% of the working age population in Rotherham have no qualifications. Sheffield has lower than average levels of working age people with no qualifications (4.2%). This may be reflective of the two large universities in the city which is also highlighted in the above average levels of working

age people qualified to NVQ4 and above, with Sheffield reporting 45.1% compared to South Yorkshire (36.5%) and Great Britain (43.6%).

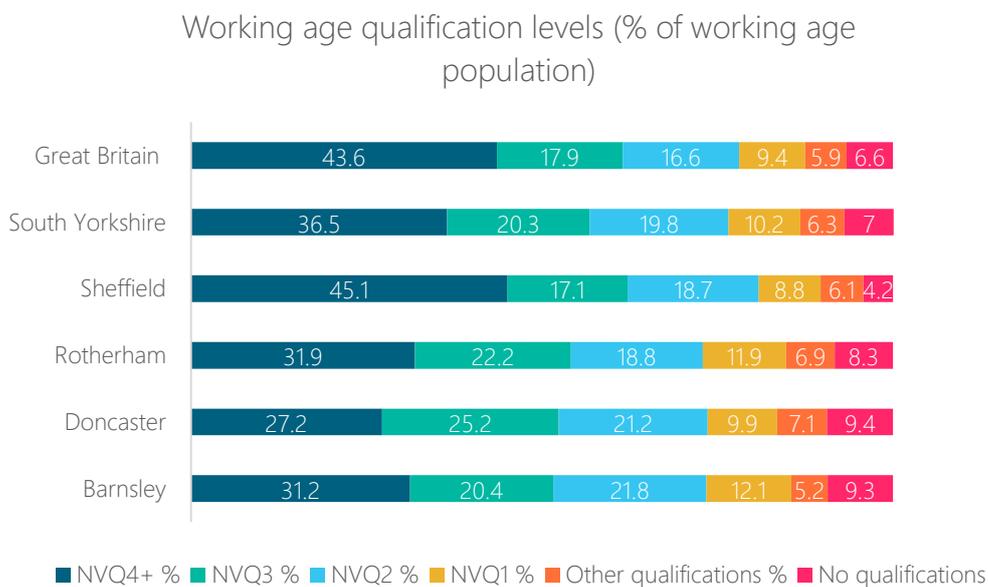
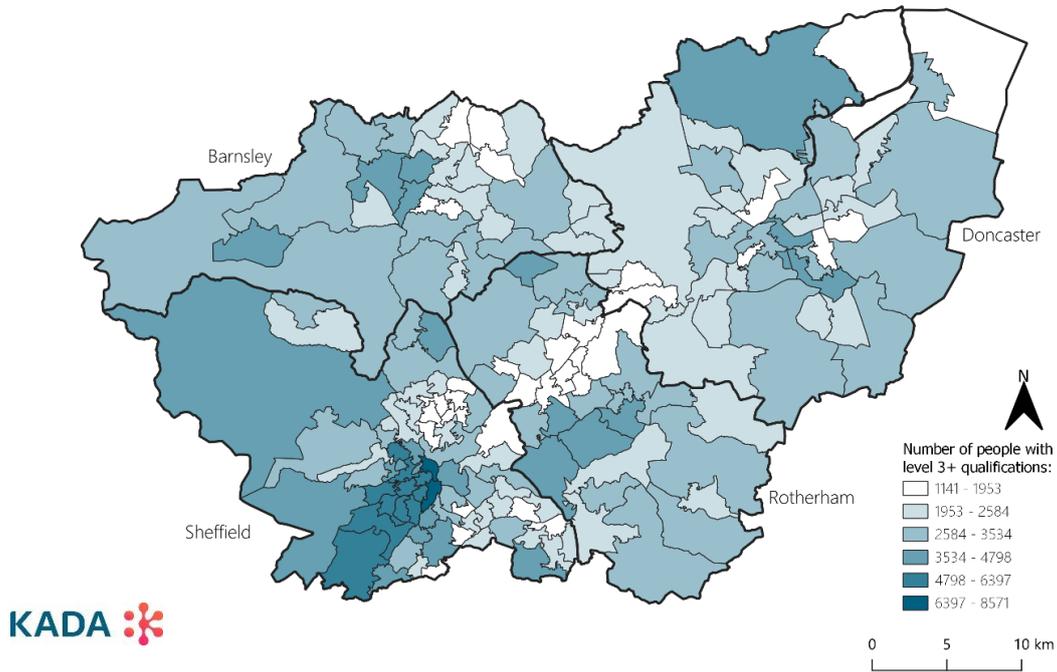


Figure 37 Working age qualification levels. Source: Annual Population Survey Jan 2021 – Dec 2021

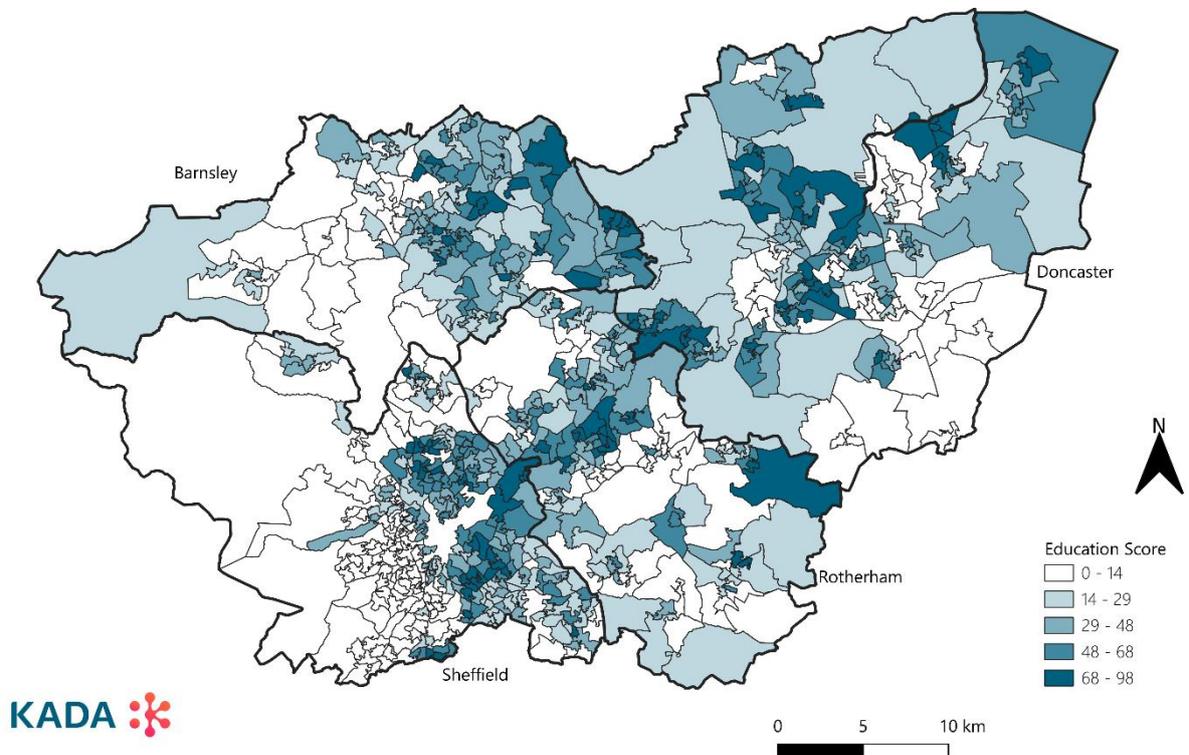
Doncaster has the lowest level of working age people with an NVQ4+ qualification at 27.2% which is 16.4 percentage points lower than the national average. Barnsley (31.2%), Rotherham (31.9%) and South Yorkshire (36.5%) also have a lower percentage of the working age population qualified at NVQ4+ than the national average. Looking at those qualified at NVQ2 and NVQ1, 30% of South Yorkshire’s working age population is in this group which is higher proportion than nationally (26%). At 33.9%, Barnsley has the highest level of adults with NVQ2 and NVQ1 qualifications followed by Doncaster (31.7%), Rotherham (30.7%) and Sheffield (27.5%). Thus, there is a significant number of adults across South Yorkshire without NVQ3+ qualifications and they may require upskilling and reskilling over the next decade as the economy is digitalised and decarbonised. It is essential that a culture of lifelong learning is created and promoted across South Yorkshire to empower people to seize new opportunities.

Map 1 Adult qualification levels South Yorkshire (Level 3+)



Adults With Qualifications at Level 3 or above. Source: ONS Census 2021 (n=509,906)

Map 2 IMD education score South Yorkshire



⁶¹ Department for Education. 2023. Local Skills Dashboard. [Available here.](#)

Experimental DfE statistics project South Yorkshire’s population will possess higher qualifications by 2035, with increases in qualifications at A Level and equivalent and above. Likewise, there will be reductions in the percentage of adults with no qualifications and qualifications at GCSE level and below. South Yorkshire has a slightly higher increase in qualification levels from A Level & equivalent and above than the England average.

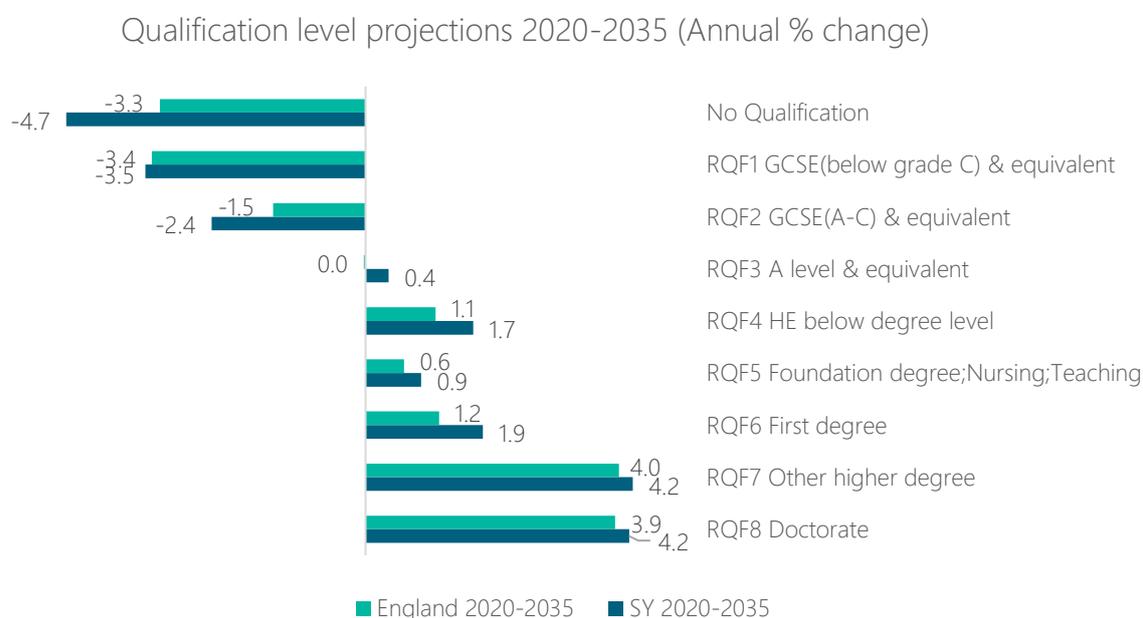


Figure 38 Qualification level projections. Source: DfE Labour Market and Skills Projections 2020 – 2035

South Yorkshire has a range of excellent further education providers already working to offer opportunities for adults to upskill and reskill as well as providing young people with a great educational experience. The South Yorkshire College Partnership is a collaborative group including Barnsley College, DN Colleges Group, Doncaster Deaf Trust, Northern College, RNN Group, The Sheffield College, University of Sheffield AMRC Training Centre, and the Chesterfield College. Together they deliver training and education to over 66,000 learners and work with over 7,500 employers. The South Yorkshire Provider Network brings together independent training providers across the sub-region and offers support and representation.

ADULT LEARNING

Learning as an adult can unlock new opportunities within the labour market and bring personal benefits such as increased confidence and wellbeing. It is estimated nationally in 2021 that for every £1 invested in entry level provision (for learners aged 19-24 years) there is a social value return of £17, and for L1 provision a return of £22⁶².

There have been 27,940 enrolments on 19+ provision for 2022-23 in South Yorkshire, (by May 2023) this is based on in-year data and target numbers for enrolments and achievements and therefore should be treated with caution.

The highest demand has been for L2 courses and below which account for over 80% of enrolments this academic year so far. There were only 3,240 enrolments on L3 provision and 440 for L4.

⁶² Learning and Work Institute. 2022. Getting the basics right: the case for action on adult basic skills. [Available here](#).

The achievement level is substantially less than the enrolments which reflects the timeliness of the data collection (in-year data), as courses will continue to be completed throughout the academic year which will increase the achievements. The completion rate for courses L3+ is currently 8.9% compared to 36.8% for courses L2 and below.

Table 26 Adult education enrolments and achievements

		Total	Entry	1	2	3	4+
Total 19+ for South Yorkshire for 2022- 23	Aim Enrolments	27,940	6,820	6,930	9,590	3,240	440
	Aim Achievements	9,420	2,080	3,490	3,030	300	30
Preparation for Life and Work	Aim Enrolments	12,270	6,520	4,490	1,060	low	low
Health, Public Services and Care	Aim Enrolments	4,180	20	560	2,520	880	200
Business, Administration and Law	Aim Enrolments	2,150	low	240	1,380	400	90
Construction, Planning and the Built Environment	Aim Enrolments	1,350	50	570	530	180	10
Retail and Commercial Enterprise	Aim Enrolments	1,330	low	230	570	480	40
Science and Mathematics	Aim Enrolments	1,140	no data	low	990	160	low
Engineering and Manufacturing Technologies	Aim Enrolments	1,130	low	240	770	110	low
Information and Communication Technology	Aim Enrolments	1,070	210	460	230	120	10
Languages, Literature and Culture	Aim Enrolments	920	10	40	850	20	low
Not Applicable/ Not Known	Aim Enrolments	760	no data	no data	100	150	no data
Education and Training	Aim Enrolments	560	10	30	230	140	60
Agriculture, Horticulture and Animal Care	Aim Enrolments	380	no data	40	240	100	10
Leisure, Travel and Tourism	Aim Enrolments	310	no data	low	90	210	10
Arts, Media and Publishing	Aim Enrolments	270	10	20	40	180	10
Social Sciences	Aim Enrolments	100	no data	no data	no data	100	low
History, Philosophy and Theology	Aim Enrolments	30	no data	10	10	low	no data

Source: DfE Explore Statistics FE and Skills Enrolments and Achievements May 2023

Preparation for life and work is the most popular type of provision for adults in South Yorkshire (12,270 target enrolments) and most enrolments are at Entry Level and Level 1 (11,010). Health, Public Services and Care is the next largest with 4,180 enrolments for 2022-23 and most entrants are taking Level 2 courses. Business, Administration and Law is the third most popular provision with 2,150 enrolments, most of which are Level 2. There are five other subjects with over 1000 enrolments for 2022-23 which

are Construction, Planning and the Built Environment (1,350), Retail and Commercial Enterprise (1,330), Science and Maths (1,140), Engineering and Manufacturing Technologies (1,130), and Information and Communication Technology (1,070). Health, Public Services and Care (1080) has the most enrolments at Levels 3 and 4, followed by Retail and Commercial Enterprise (520) and then Business, Administration and Law (490).

The adult enrolments in education and training do align with some of South Yorkshire priority sectors such as Health, Public Services and Care, Construction, Planning and the Built Environment, Engineering and Manufacturing Technologies, Science and Maths, and Information and Communication Technology. Yet, these enrolments are predominately at lower levels and there are gaps for example around the creative and cultural sector.

3.4 KEY CHALLENGES AND OPPORTUNITIES FOR SOUTH YORKSHIRE

Doncaster (72.8%), Barnsley (71.2%), Sheffield (69.7%), and Rotherham (87.8%) all have a lower percentage of 19-year-olds achieving **L2 in English and maths** (72.28%), compared to England (74.89%). Only one third of 19-year-olds who did not achieve L2 English and maths at 16 have done so by 19, without this qualification many L3 plus study options are not accessible.

Apprenticeship starts have declined nationally and in South Yorkshire. In 2021-22 there were 8,810 apprenticeship starts in South Yorkshire compared to 10,549 in 2018-19, however higher-level apprenticeships have increased. Most apprenticeships in South Yorkshire are at the advanced level and in Business, administration, and law. There are a similar number of male and female apprentices however their subject choices differ with more females in health, public services, and care and males in engineering and manufacturing technologies.

Sheffield Hallam University and the University of Sheffield create a **strong talent pipeline with 34,545 students** in 2020/21, a third of which were enrolled in subjects allied to medicine and other popular areas aligning well with South Yorkshire's priorities (health, advanced manufacturing and digital). HE progression by age 19 is lowest in Barnsley and highest in Sheffield. There are **growing numbers of postgraduate qualifiers** driven by taught masters and reducing numbers of undergraduate qualifiers. In 2020/21, most Sheffield Hallam University and the University of Sheffield **graduates were in full-time employment** with Human health and social work activities the largest employment sector and **professional occupations** the largest occupational group for graduates. Stakeholders raised concerns about graduates '**excelling beyond South Yorkshire**' and a mismatch between graduate skills and labour market opportunities.

Learners **eligible for FSM** have lower levels of L2 English and maths by 19, a smaller percentage achieving two or more A Levels, and are less likely to progress into HE by 19, when compared to those not eligible for FSM.

Roles in Healthcare (12.1%) and Information and Communication Technology (8.1%) were the most common online job adverts in December 2022. Employment is predicted to grow by 4% in South Yorkshire between 2023-2035, with non-marketed services and business and other services having the biggest growth projections. Skilled trade occupations and process, plant and machine operatives are predicted to see the largest declines within occupational projections between 2023-2035 and professional occupations and associate professional occupations the largest increases. These DfE projections have important implications for upskilling and reskilling in South Yorkshire to ensure workers are equipped to seize future opportunities.

60,627 working age people in South Yorkshire have **no qualifications**. Doncaster has the lowest level of working age people qualified at NVQ4 and above and the highest level with no qualifications – in Sheffield the situation is reversed. By 2035, residents in South Yorkshire will have higher levels of qualifications with increases at Level 3 and above and reductions in those with no qualifications. For 2022-23, there were **27,940 enrolments in 19+ provision with the majority at L2 and below** and in the subject of preparation for life and work. Improving qualification levels enables people to access new employment opportunities as well as bringing wider social and economic benefits. It is estimated nationally in 2021 that for every £1 invested in entry level provision (for learners aged 19 – 24 years) there is a social value return of £17, and for L1 provision a return of £22⁶³.

⁶³ Learning and Work Institute. 2022. Getting the basics right: the case for action on adult basic skills. [Available here](#).

4 INCLUSION: REALISING THE POTENTIAL IN COMMUNITIES

This chapter investigates the challenges facing South Yorkshire which are limiting economic activity, inclusion, and lives. It explores the inequalities experienced by certain people and places and the impacts of this. In the face of these challenges, organisations across South Yorkshire are providing valuable support and education opportunities. Yet more action is required to address the chronic problems surrounding economic inactivity, low pay, and deprivation, which are holding back South Yorkshire.

Education and lifelong learning can provide the key to unlock labour market opportunities for the people and places across South Yorkshire.

This chapter provides a detailed picture of economic inactivity, unemployment, NEETs, low pay, and deprivation and poverty. It concludes by highlighting the key challenges for South Yorkshire. The following page features an infographic with the headline findings for this chapter.

4.1 ECONOMIC INACTIVITY

Economic inactive refers to people outside the labour market who are not actively seeking a job. This includes students, early retirees, people who are looking after the family/home, and people experiencing long term sickness. Thus, economic inactivity refers to a range of people and circumstances whose contributions to society should not be overlooked.

Economic inactivity, particularly for those whose health has restricted their engagement with the labour market, is a concern for policymakers because it can restrict labour market supply and create additional costs through social security and healthcare⁶⁴.

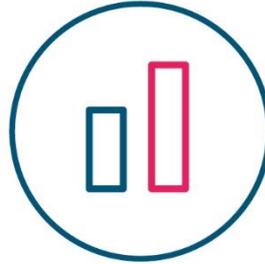
The following discussion on economic inactivity has clear links to section 5.3 which explores the health of residents in South Yorkshire.

⁶⁴ The Health Foundation. 2022. Is poor health driving a rise in economic inactivity? [Available here](#).

Inclusion: Realising the Potential in Communities Headlines



42,300
people aged 16-64
are economically
inactive and would
like a job.



Sheffield's
unemployment rate is
7.5%
approximately double
the national average
and the highest in South
Yorkshire.



The level of NEET
16 – 17-year-old is
highest in Sheffield
and across South
Yorkshire is higher
than the national
average.



Full-time workers in
South Yorkshire are
earning between
£79.60 and
£47.90 less
each week than the
national average.



62%
of the 71,905 children
living in low-income
families in South
Yorkshire are from
working households.



Between 2018/19 –
2022/23 the number
of Trussell Trust food
parcels given in South
Yorkshire rose by
261.5%



34%
of people claiming
Universal Credit in
South Yorkshire are
in work.



Long-term sickness
accounts for nearly
a third of economic
inactivity in South
Yorkshire compared
to a quarter
nationally.

LEVELS OF AND REASONS FOR ECONOMIC INACTIVITY

At 23% of the working age population, South Yorkshire’s economic inactivity level is slightly higher than the national average (21.5%) but the lowest of the other MCA comparators with West Midlands recording the highest at 26.1%. Equally, South Yorkshire records a higher level of male and female economic inactivity than the national average and is again the lowest against Liverpool City Region, Tees Valley, and the West Midlands.

Working age economic inactivity by gender in 2022

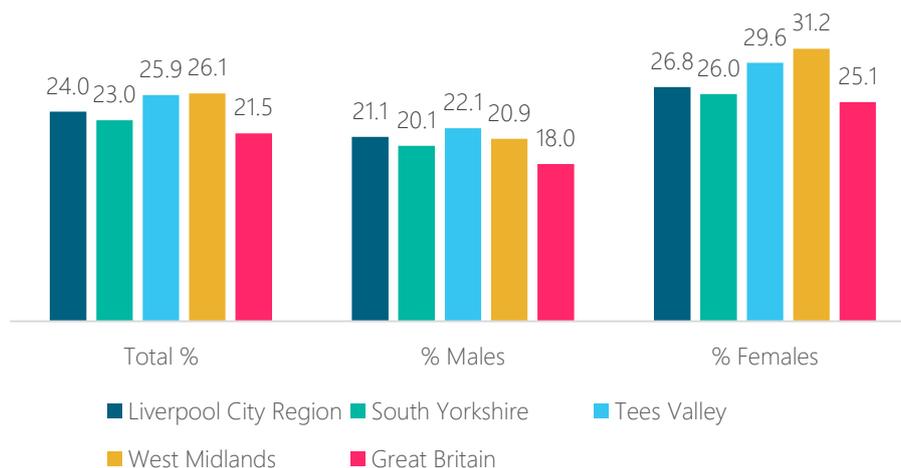


Figure 39 Working age economic inactivity comparison. Source: Economic inactivity reason by gender. Source: ONS Annual Population Survey, Jan 2022 – Dec 2022

There are 203,500 economically inactive people of working age (16 -64 years) in South Yorkshire⁶⁵ which includes 51,000 students. 20.8% (42,300) of the economically inactive population in South Yorkshire ‘want a job’, leaving 79.2% (161,200) who ‘do not want a job’. Sickness accounts for over a third of economic inactivity, with 67,200 people experiencing long term sickness and 7,100 temporary sickness. Long term sickness is the biggest reason for economic inactivity for men (32,100) and women (31,600). For women, this is closely followed by looking after family (31,500).

⁶⁵ Annual Population Survey. Jan 2022 – Dec 2022.

Reason for inactivity by gender in South Yorkshire

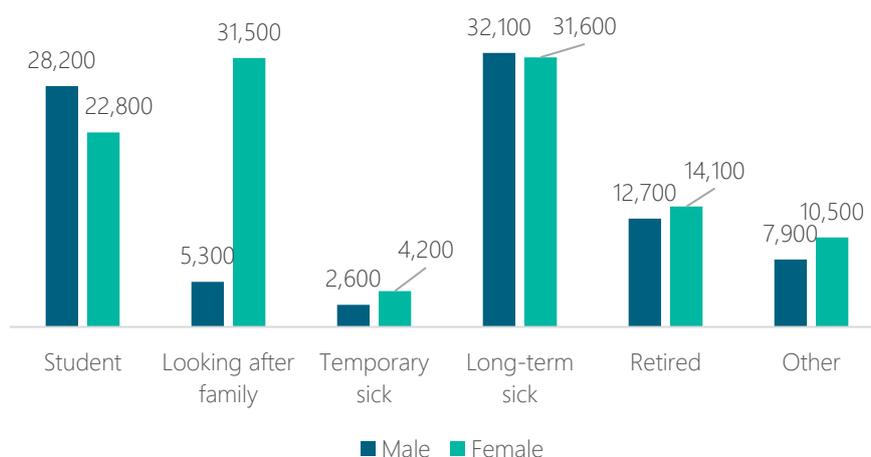


Figure 40 Economic inactivity reason by gender. Source: ONS Annual Population Survey, Jan 2022 – Dec 2022

Looking across South Yorkshire, Rotherham has the highest percentage of economic inactivity within the working age population at 24.9% (39,700 people), followed by Barnsley (23.9%, 36,700), Doncaster (23.4%, 43,400), and lastly Sheffield (21.7%, 83,800) – all higher than the national average (21.5%).

Table 27 Economic inactivity by local authority and reason

	Barnsley	Doncaster	Rotherham	Sheffield	GB
Student	15.2% (5,600)	30% (13,000)	26% (10,300)	26.4% (22,200)	26.3%
Looking after family	19.9% (7,300)	18.3% (7,900)	17.4% (6,900)	17.5% (14,600)	19.8%
LT sickness	33.5% (12,300)	26.6% (11,500)	31.8% (12,600)	32.5% (27,300)	25.8%
Retired	16.2% (5,900)	10.1% (4,400)	18.8% (7,500)	10.8% (9,100)	13.8%
Other	13.6% (5,000)	9.4% (4,100)	7.3% (2,800)	8.8% (7,400)	11.7%
Wants a job	16.2% (6,000)	13.9% (6,000)	11.6% (4,600)	30.6% (25,700)	18.1%
Doesn't want a job	83.8% (30,800)	86.1% (37,300)	88.4% (35,100)	69.4% (58,200)	81.9%

Source: ONS Annual Population Survey Jan 2022-Dec 2022

In Barnsley, Rotherham and Sheffield long term sickness is the biggest reason for economic inactivity yet for Doncaster it was being a student. Notably, all areas have a higher rate of long-term sickness than the national average. Doncaster has five to seven percent less economically inactive people compared to other South Yorkshire local authorities. At 30.6%, Sheffield has the highest level of economically inactive people who want a job which is much higher than Rotherham who reported the lowest figure (11.6%).

People who are economically inactive due to illness are less likely to return to work and if they do are more likely to experience low pay⁶⁶.

⁶⁶ Northern Health Science Alliance. 2018. Health for Wealth. [Available here](#).

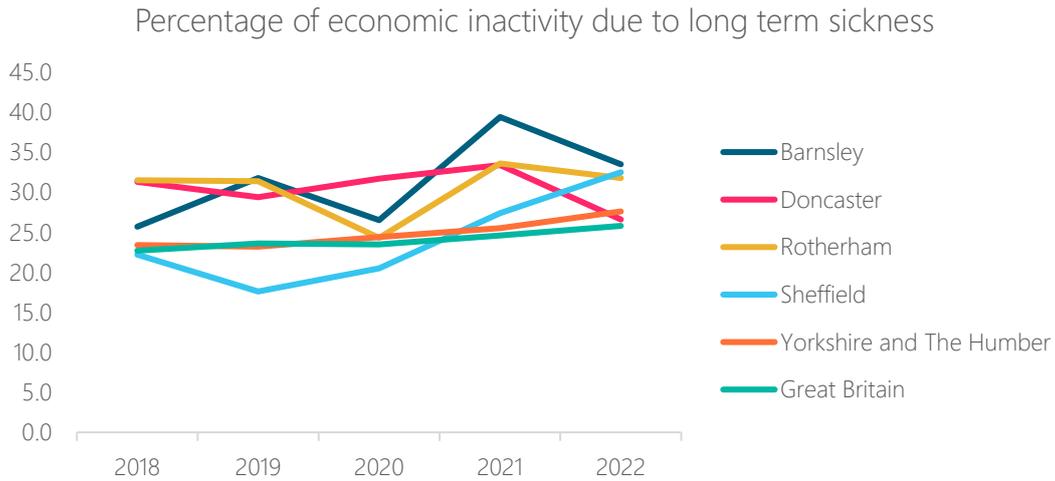


Figure 41 Long term sickness by local authority. Source: ONS Annual Population Survey, Jan 2022 – Dec 2022

The level of economic inactivity due to long term sickness is a growing concern post Covid-19 with increases nationally and locally. Barnsley currently has the highest percentage of economic inactivity due to long term sickness (33.5%) although this has reduced since 2021 (39.4%). Sheffield’s economic inactivity levels due to long term sickness are increasing, going from 17.6% in 2019 to 32.5% in 2022. At 26.6%, Doncaster currently has the lowest proportion of economic inactivity due to long term sickness, yet this is still higher than the national average (25.8%).

ECONOMIC INACTIVITY AND AGE

Younger people (aged 16 – 19) and those over fifty have higher rates of economic inactivity compared to the rest of the working age population. A particular concern is the high levels of economic inactivity within the 50 - 64 age group which is the biggest cohort across South Yorkshire. This group accounts for 84,200 people which is 41% of the working aged economically inactive population, which is marginally higher than the national average (40%). Nearly half (49%) of the economically inactivate population in Barnsley is aged 50 – 64 years, compared to 44% in Rotherham, 39% in Sheffield and 36% in Doncaster.

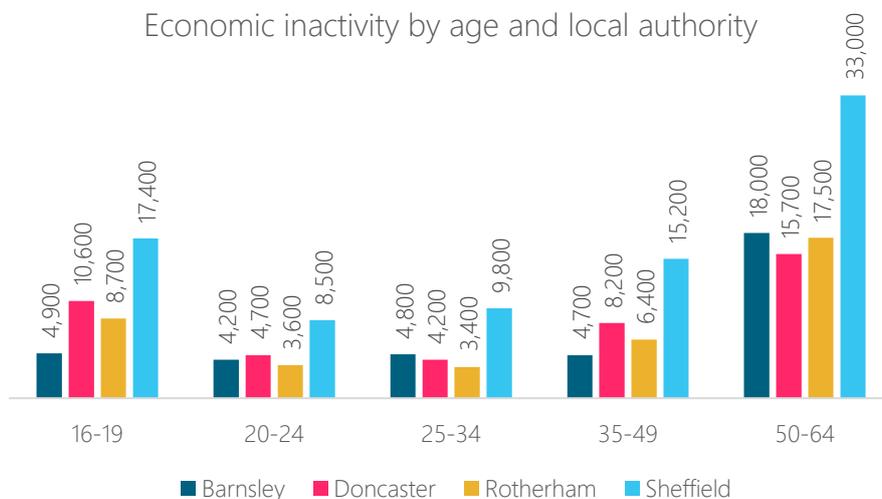


Figure 42 Economic inactivity by age and local authority. Source: ONS APS Jan 2022 – Dec 2022

Between 2018 and 2022, South Yorkshire experienced a small growth (1200, 0.6%) in the number of economically inactive people aged between 16 – 64 years old, in line with the national picture (+0.8%). However, other areas in England recorded a reduction in levels of economic inactivity. Liverpool City Region (-7%) and Buckinghamshire (-8.6%) experienced the biggest reductions in economic inactivity, Tees Valley (-2.6%) and West Midlands (-1.7%) reported smaller decreases.

There has been an increase in economic inactivity levels among those aged 50 – 64 years since the Covid-19 pandemic. Between 2018 – 2022, in South Yorkshire the level of economic inactive 50 – 64-year-olds grew by 18.6% (13,200) which is the over double the national percentage increase (9.2%). Liverpool City Region saw a reduction in people aged 50 – 64 years who were economically inactive which is against the trend nationally. Buckinghamshire saw the largest percentage increase in 50 – 64-year-old economically inactive population at 34.3% (6000) and as the percentage of this group as part of the total economically inactive population, which rose from 31% to 45% over four years.

Table 28 50 plus working age economic inactivity.

Year	Total working age economic inactivity (count)		Change	50 – 64 years economic inactivity (count)		Change	50 – 64 years economic inactivity (% of economically inactive population)	
	2018	2022		2018	2022		2018	2022
South Yorkshire	202,300	203,500	+0.6% (1200)	71,000	84,200	+18.6% (13200)	35%	41%
Liverpool City Region	248,800	230,800	-7.2% (18000)	97,900	89,700	-8.3% (8,200)	39%	39%
Tees Valley	108,200	105,400	-2.6% (2800)	43,800	45,400	+3.6% (1,600)	40%	43%
West Midlands	493,000	484,500	-1.7% (8500)	140,100	155,300	+10.8% (15,200)	28%	32%
Buckinghamshire	56,600	51,700	-8.6% (4900)	17,500	23,500	+34.3% (6,000)	31%	45%
Great Britain	8,624,100	8,693,500	+0.8% (69400)	3,196,400	3,491,200	+9.2% (294,800)	37%	40%

Source: ONS Annual Population Survey 2018 and 2022

Within South Yorkshire, Barnsley (-2.9%) and Sheffield (-3.9%) have seen a decrease in the economically inactive working aged population whereas Rotherham (+11.8%) and Doncaster (+3.6%) have seen increases. For the 50 – 64 age group all areas have seen an increase, Doncaster saw the smallest increase of 1.3% (200) which was significantly lower than Sheffield (21.8%), Barnsley (25%) and Rotherham (25.9%). Both Barnsley (-36.3%) and Sheffield (-20.5%) saw reductions in economically inactive people aged 16 – 24 years unlike Doncaster (+17.7%) and Rotherham (+25.5%) who reported increases.

Economic inactivity levels pre and post the Covid-19 pandemic present a mixed picture of large reductions and increases. Across South Yorkshire economic inactivity within 50 – 64-year-olds has

increased, in Doncaster the increase was marginal (1.3%) whereas Barnsley, Sheffield and Rotherham all saw increases of over 20%. In Doncaster and Rotherham economic inactivity among people aged 16 – 24 years old has increased whereas in Barnsley and Sheffield it has reduced. 42,300 people who are economically inactive in South Yorkshire would like a job and will require support.

Table 29 Change in working age economic inactivity between 2018 - 2022

Area	Economically inactive aged 16 - 64		Economically inactive aged 16 - 19		Economically inactive aged 20 - 24		Economically inactive aged 25 - 34		Economically inactive aged 35 - 49		Economically inactive aged 50 - 64	
	2018	2022	2018	2022	2018	2022	2018	2022	2018	2022	2018	2022
Barnsley	37,800	36,700	6,600	4,900	7,700	4,200	4,300	4,800	4,700	4,700	14,400	18,000
Doncaster	41,800	43,400	8,800	10,600	4,200	4,700	5,400	4,200	7,900	8,200	15,500	15,700
Rotherham	35,500	39,700	6,300	8,700	3,500	3,600	6,300	3,400	5,600	6,400	13,900	17,500
Sheffield	87,200	83,800	18,300	17,400	14,300	8,500	12,100	9,800	15,300	15,200	27,100	33,000
Change												
Barnsley	-2.9% (1,100)		-25.7% (1,700)		-45.4% (3,500)		+11.6% (500)		0		+25% (3,600)	
Doncaster	+3.8% (1,600)		+20.4% (1,800)		+11.9% (500)		-14.8% (800)		+3.8% (300)		+1.3% (200)	
Rotherham	+11.8% (4,200)		+38% (2,400)		+2.8% (100)		-46% (2,900)		+14.3% (800)		+25.9% (3,600)	
Sheffield	-3.9% (3,400)		-4.9% (900)		-40.5% (5,800)		-19% (2,300)		-0.6% (100)		+21.8% (5,900)	

Source: ONS Annual Population Survey 2018 and 2022

People who are economically inactive may require holistic support to help them to lead healthy and fulfilling lives. As highlighted at the start of this chapter economic inactivity captures a diverse range of circumstances and therefore different approaches will be required. Those who want to enter paid employment will require support to re-enter and remain in the workplace as well as opportunities to upskill and reskill as they transition across and within careers.

Employment support can include help to address barriers to work, support with health and wellbeing, finances, accessing other support, pastoral support, skills development, and in-work support. For example, courses to learn and improve English provide vital skills to help people work and live in South Yorkshire. The efforts of providers who support those furthest away from the labour market such as voluntary organisations are a vital asset to the skills system. This pre-engagement work is often overlooked and not attached to a formal qualification yet is crucial. It is through this individualised support that people can build up confidence and start to consider routes to formal qualifications and work.

South Yorkshire has existing strengths within employment support such as the Working Win programme which has helped over 5,200 people with health conditions enter or remain in work⁶⁷. This includes support from a work and enterprise coach to help people manage their health conditions in the workplace, help with job applications or CVs as well as support from health and wellbeing coaches who

⁶⁷ SYMCA. 2023. Working Win. [Available here](#).

provide a range of support for example ways to improve your health. Additionally, Working Win provides access to a free Westfield health and wellbeing package and support from citizens advice (i.e debt and employment law).

4.2 UNEMPLOYMENT

Unemployment creates negative impacts for individuals⁶⁸ (for example poorer health), communities and more widely through an increasing need for social security, wider support, and constricting labour market supply. Unemployment refers to people who are not in the labour market and are actively seeking work, it can be measured by the ONS Annual Population survey, the ONS claimant count, and Universal Credit statistics. There are also statistics on 'hidden unemployment' which offers a further layer of detail.

WORKING AGE UNEMPLOYMENT

At 4.97%, South Yorkshire has a higher percentage of unemployment in the working age population (16-64) than the national average (3.78%), yet it is lower in comparison to the West Midlands (6.76%).

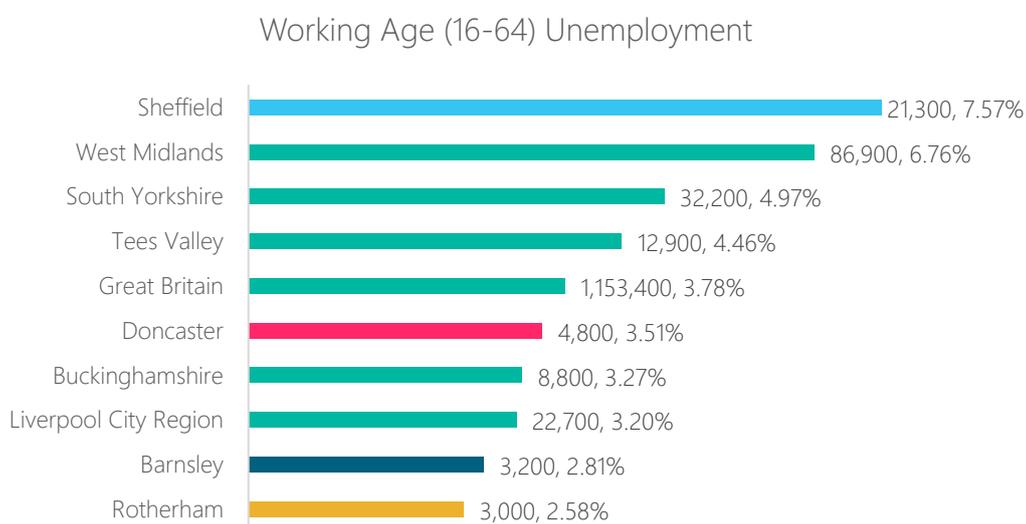


Figure 43 Working age unemployment. Source: ONS Annual Population Survey, 2022

Sheffield has the highest rate of unemployment at 7.57% which is approximately double the national level. Doncaster (3.51%), Barnsley (2.81%), and Rotherham (2.58%) all have lower levels of unemployment than the South Yorkshire and national averages. Male unemployment is higher than female unemployment in Doncaster, Barnsley, and Rotherham whereas in Sheffield there is a significantly higher number of females who are unemployed compared to males – with females accounting for nearly two thirds of unemployment numbers.

⁶⁸ Joseph Rowntree Foundation. 2010. The low pay no pay cycle. [Available here.](#)

Unemployed people aged 16 - 64

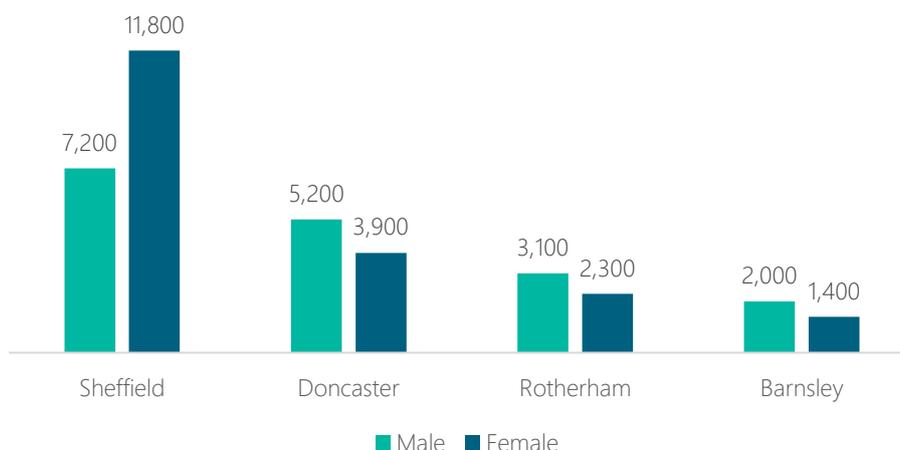


Figure 44 Unemployment by local authority and age. Source: ONS Annual Population Survey Jan 2022 – Dec 2022

THE CLAIMANT COUNT AND UNIVERSAL CREDIT STATISTICS

The claimant count⁶⁹ as of March 2023 for Sheffield was 15, 775 people (4.4% of working age population) and Doncaster has a slightly higher percentage of the working age population (4.6%, 8780). Rotherham’s claimant count is 7195 (4.5%) and Barnsley has the lowest count and percentage (5425, 3.6%). All areas in South Yorkshire apart from Barnsley (3.6%) have a higher claimant count as a percentage of the working population than the national average of 3.7%. The percentages below show the portion of the working age population for the total claimant count, gender, and age groups.

Table 30 Claimant count by local authority and gender

	Total	%	Male %	Female %	18-24 %	25-49 %	50+ %
Barnsley	5,425	3.6	4.3 (3,205)	2.9 (2,220)	6.1 (1,025)	4.2 (3,225)	2.2
Doncaster	8,780	4.6	5.4 (5,190)	3.8 (3,590)	7.4 (1,640)	5.4 (5,330)	2.8
Rotherham	7,195	4.5	5.4 (4,335)	3.4 (2,860)	8 (1,565)	5 (4,130)	2.7
Sheffield	15,775	4.4	5.2 (9,325)	3.6 (6,425)	4.7 (3,190)	5.2 (9,310)	3.2
Great Britain		3.7	4.3	3.1	4.8	4.2	2.8

Source: ONS Claimant Count by sex and age March 2023

Nationally and across South Yorkshire there are more males claiming out of work benefits compared to females, all areas apart from Barnsley have a higher percentage of people claiming within the working age population than Great Britain. Rotherham has the highest percentage of out of work claimants aged 18 to 24 (8%), followed by Doncaster (7.4%) and Barnsley (6.1%) all of which are higher than the national average (4.8%). Sheffield has a slightly lower than average percentage of people aged 18 to 24 who are claiming out-of-work benefits (4.7%). Sheffield has the highest percentage of people aged over 50 claiming out-of-work benefits (3.2%) which is the only area in South Yorkshire higher than the national

⁶⁹ The number of people claiming social security for being out of work.

average (2.8%). Barnsley has the lowest level of people claiming out of work benefits aged over 50 (2.2%).

Table 31 People claiming Universal Credit February 2023

	Not in employment	In employment	Total	'Searching for work'
Barnsley	17,521	9,805	27,324	4,291
Doncaster	22,869	12,897	35,763	7,004
Rotherham	18,877	9,513	28,386	5,721
Sheffield	33,822	16,841	50,666	12,259
Total	93,089	49,056	142,145	29,279

Source: Department for Work and Pensions February 2023

Universal Credit is now the main form of working age social security in the UK and is accessible to people in and out of work (including jobseekers, carers, parents, and those with health conditions which means they are unable to work). In February 2023 there were 142,145 people claiming Universal Credit⁷⁰, 65.5% (93,089) of which were not in employment with 29,279 in the 'searching for work' category. 2,220 were 'planning for work' and 6,104 people were 'preparing for work' which could include activities such as attending training courses.

Whilst Sheffield has the highest number of people claiming Universal Credit (50,666), Rotherham has the highest percentage of claimants within its working age population (17.6%), followed by Sheffield (14.1%), Doncaster (12%) and Barnsley (11.3%).

34% of people claiming Universal Credit in South Yorkshire were in employment and some individuals have requirements to look for extra work to claim such as trying to increase their hours or find a new/additional job. 18,542 people in South Yorkshire are claiming Universal Credit whilst working and are in the 'working with requirements' group. This raises an interesting opportunity as to how to provide support to these workers through upskilling and reskilling. It also highlights the growing numbers of workers who are not earning enough to meet their basic needs and experiencing in-work poverty (deprivation discussed in more detail in subsequent section), the need to help to improve workplaces (discussed in more detail in chapter six) and broaden labour market opportunities.

Nationally, workers in the 'Wholesale and retail trade; repair of motor vehicles and motorcycles' sector are at the greatest risk of experiencing poverty with 19% of these workers having a below average income for 2020/21. 'Accommodation and food service activities' and 'Administrative and support services' are the next two sectors with workers at the greatest risk of poverty⁷¹. These three sectors employ 165,000 people in South Yorkshire in 2021, with 'Wholesale and retail trade; repair of motor vehicles and motorcycles' being the second largest employment sector in South Yorkshire⁷². Thus, a large number of

⁷⁰ Department for Work and Pensions Statistics February 2023. [Available here.](#)

⁷¹ Department for Work and Pensions. 2022. Households below average income. [Available here.](#)

⁷² ONS Business Register and Employment Survey. 2021. [Available here.](#)

workers in South Yorkshire are in sectors at the greatest risk of poverty and the subsequent impacts of experiencing this.

'HIDDEN' UNEMPLOYMENT

It has been argued that the official statistics used for measuring unemployment levels do not provide the full picture with some unemployment being statistically 'hidden'. Research⁷³ calculates the real level of unemployment through a combination of unemployment figures and individuals claiming incapacity benefits who would be expected to be in employment 'in a genuinely fully employed economy'. There are higher levels of 'hidden' unemployment in older industrial areas and some coastal areas, where the local economies are weak. The report identifies three types of areas in Britain – 'Full employment Britain' (under 4% real unemployment), 'Middling Britain' (4 – 8% real unemployment), and 'High unemployment Britain' (over 8% real unemployment).

The research estimates the real unemployment rate for 2022 in Rotherham was 8.4%, in Barnsley 8.3%, in Doncaster 7.8% and in Sheffield 6.1%. These figures are all above the national average which was estimated to be 5.8% and apart from Sheffield higher than Yorkshire and Humber (6.4%). Rotherham and Barnsley both fall into the 'High unemployment Britain' although both are below this group's average real unemployment level (9.4%). Doncaster and Sheffield are part of 'Middling Britain' and are above this group's average real unemployment level (6%).

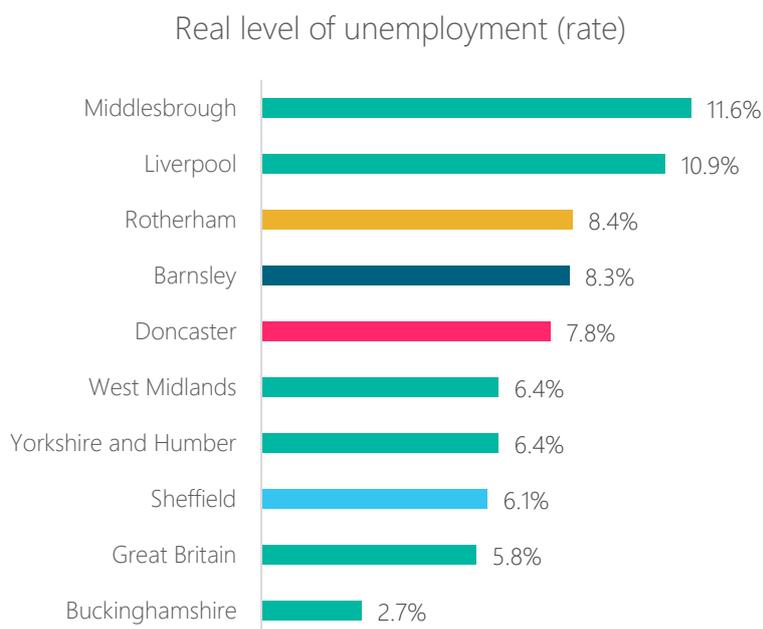


Figure 45 Hidden unemployment. Source: Centre for Regional Economic and Social Research. The Real Level of Unemployment. 2022

Across all unemployment measures discussed here, South Yorkshire or areas within it report higher than average levels. There is variation across South Yorkshire for example Sheffield has the highest level of working age unemployment according to the Annual Population Survey with Rotherham and Barnsley

⁷³ Centre for Regional Economic and Social Research. 2022. The Real Level of Unemployment 2022. [Available here](#).

reporting the lowest. Yet looking at the 'real' level of unemployment Rotherham and Barnsley are the highest and Sheffield the lowest. The Universal Credit statistics provide a clear and current picture of the numbers of people claiming whilst looking for work.

4.3 NEETS

Youth unemployment can have a long term 'scarring' impact on people which negatively impacts employment and wages in later life⁷⁴. The level of 16 to 17-year-olds (average December 2021 to February 2022) who were Not in Employment, Education or Training (NEET) in Sheffield was 6.8% (834), 5.4% (283) in Barnsley, 4.9% (304) in Rotherham, and 4.8% (334) in Doncaster compared to national average of 4.7%⁷⁵.

Table 32 NEET levels for 16 – 17-year-olds between 2019 - 2022

	2019	2020	2021	2022
England	5.5% (29,650)	5.5% (30,710)	5.5% (33,310)	4.7% (30,890)
Barnsley	4.9% (132)	4.1% (117)	5.8% (92)	5.4% (140)
Doncaster	5.9% (202)	4.6% (217)	4.9% (207)	4.8% (233)
Rotherham	5.8% (195)	5.7% (226)	5.6% (248)	4.9% (222)
Sheffield	6.1% (397)	6.7% (474)	7.4% (470)	6.8% (484)

Source: DfE NEET and participation local authority figures

NEET levels for 16–17-year-olds has reduced in Doncaster and Rotherham between 2019 and 2022 reflective of national declines, however it has increased in Barnsley and Sheffield.

Nationally, NEET levels for those aged 16-24 years old has increased by 2% from 2020/22. Yorkshire and Humber has a 16 - 24 NEET rate of 14.3% and increase of 3.4% from 2021, and higher than the national level of 12.3%⁷⁶, unfortunately data is not available for 16 – 24 year old NEETs at a local level. Stakeholders were concerned about the impact of the pandemic on young people who had not reconnected with support since the restrictions had ended.

There are certain factors and experiences which make young people more vulnerable to become NEET. A young person is more likely to be NEET if they are looked after or in care, a refugee or asylum seeker, a carer, has disclosed substance abuse, a care leaver, supervised by the Youth Offending Team, a parent (not for own child), be in alternative provision, or has a mental health flag⁷⁷. 29.2% of 16 - 17-year-olds in Sheffield are vulnerable to becoming NEET, as are 28.3% in Doncaster, 21.3% in Rotherham, and 11.8% in Barnsley compared to 23.6% of national average.

Notably, there are some NEETs who are 'hidden' and are not accessing any social security or other services, this group of young people will require more support to bring them closer to the labour market.

Young people with Special Educational Needs and Disabilities (SEND) are also more likely to be NEET. 13% of 16 - 17-year-olds in Sheffield are SEND (with an Educational Health and Care Plan - EHCP) ,8.9% in Rotherham, 7.2% in Barnsley, 6.1% in Doncaster, compared to England average of 8.6%⁷⁸. The

⁷⁴ Bell, D.N.F. and Blanchflower, D.G. 2013. 'Underemployment in the UK Revisited'. National Institute Economic Review. [Available here](#).

⁷⁵ Public Health England. 2023. [Available here](#).

⁷⁶ Department for Education. 2023. NEET age 16 to 24, 2022. [Available here](#).

⁷⁷ Department for Education. 2023. NEET and Participation LA Scorecard. [Available here](#).

⁷⁸ *Ibid*.

attainment of young people in school with SEND is discussed in chapter two. Stakeholders highlighted the need for extra support for SEND young people when their EHCP comes to an end at aged 25 as there needs to be a clear pathway in place and support for this transition.

Doncaster Youth Hub provides valuable support to young jobseekers through weekly meetings with specialised and committed advisors. Time is given to discuss the young person’s aspirations, personal circumstances, and history, and they are signposted to meaningful education and employment opportunities.

4.4 LOW PAY

Low pay reduces living standards which negatively impacts families, communities, and wider society, and it is also often not ‘good work’ with other negative and insecure working conditions⁷⁹. Gender, ethnicity, and disability pay gaps highlight and reinforce inequalities experienced by these groups and do not create inclusive workplaces or societies.

LOW PAY IN SOUTH YORKSHIRE

Gross weekly pay for a fulltime worker (2022) living in Barnsley was £562.60, in Doncaster it is £594.30, in Sheffield it is £592.60, and in Rotherham it is £587.70, compared to a national average of £642.20.

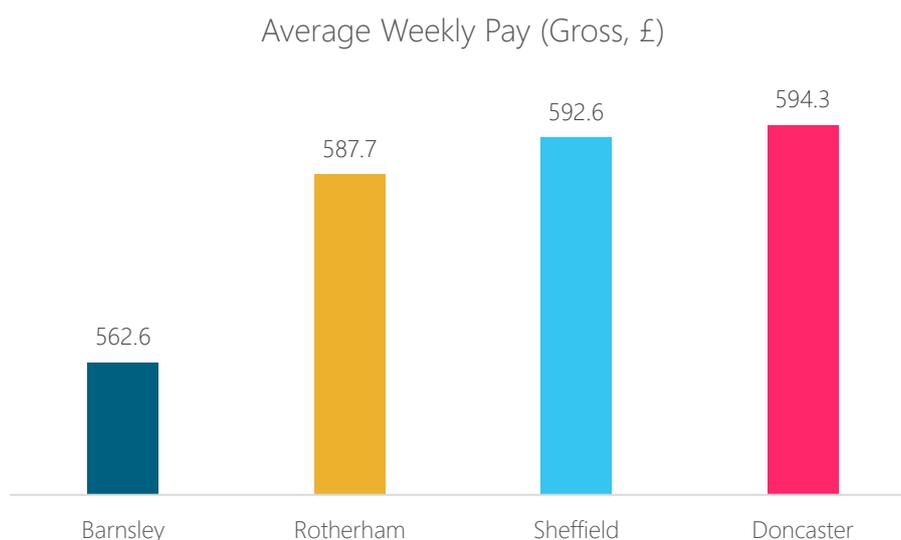


Figure 46 Average gross weekly pay in South Yorkshire. Source: ONS Annual Survey of Hours and Earnings 2022

The lower weekly pay levels across South Yorkshire highlight the prevalence of in-work poverty with full time workers in Barnsley earning £79.60 less a week than the national average. It is a similar picture across South Yorkshire, workers in Rotherham earn £54.50 less, Sheffield workers earn £49.60 less, and Doncaster workers earn £47.90 less than the national average.

⁷⁹ Resolution Foundation. 2023. Low Pay Britain 2023. [Available here.](#)



Figure 47 Average gross weekly pay comparison. Source: ONS, Annual survey of hours and earnings 2022

Compared to Buckinghamshire, Liverpool and the West Midlands all have higher weekly gross earnings for full-time workers than Barnsley, Doncaster, Sheffield, and Rotherham.

GENDER, ETHNICITY AND DISABILITY PAY GAPS

There are gender differences in gross weekly pay with females in South Yorkshire paid less than their male counterparts by between 27.3% (Rotherham) and 13.5% (Sheffield).

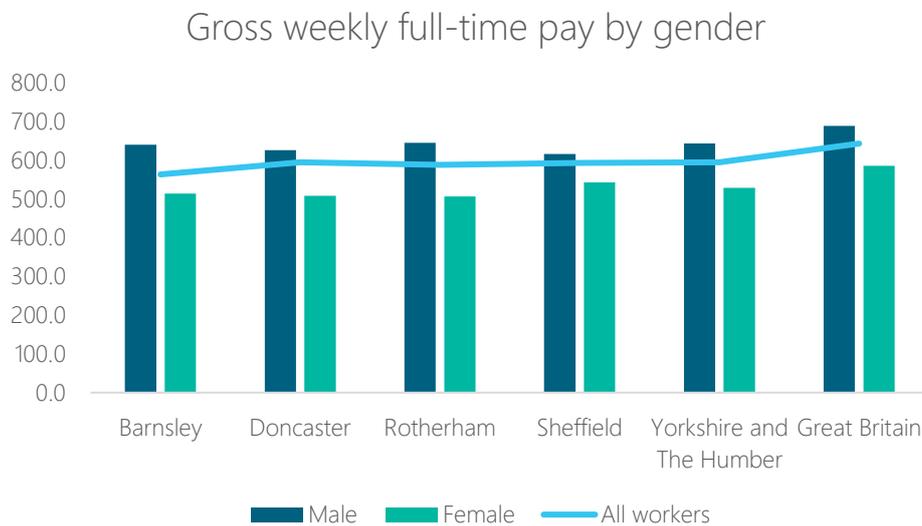


Figure 48 Full-time gross weekly pay by gender. Source: ONS, Annual survey of hours and earnings 2022.

In Barnsley male workers have a gross weekly pay of £639 compared to females pay of £513.20 (£125.80 gap, 20.1%), in Doncaster male workers receive £624.9 compared to £507.30 for female workers (£117.60 gap, 23.2%), in Sheffield it is £615.30 for male workers and £542.20 for female (£73.10 gap, 13.5%), and

in Rotherham male workers receive £644.40 compared to £506.10 for female workers (£138.30 gap, 27.3%)⁸⁰. The national average is £687.50 for male workers and £584.5 for female, a gap of £103 (17.6%).

Yorkshire and the Humber (2019) had a 12.7% ethnicity pay gap in hourly pay; the 2nd highest compared with other regions. This information is not available at a more local level but illuminates a challenge for South Yorkshire to be aware of to ensure it creates an inclusive economy⁸¹.

Nationally, there is evidence of a disability pay gap which provides some insight for South Yorkshire. In 2021, disabled workers median hourly earnings were £12.10 compared to £14.03 for non-disabled workers which is a 13.8% gap, compared with 2014 (11.7%) this gap has widened. The pay gap is larger for disabled people who are 'limited a lot' (19.9%) compared to those who are 'limited a little' (12.1%). Workers with autism had the largest pay gap at 33.5%, followed by those with severe or specific learning difficulties (29.7%), and epilepsy (25.4%). The lowest gaps were for worker with difficulty in seeing (0%), severe disfigurements skin conditions and allergies (-2.8%) and difficulties hearing (-4.8%). Disabled male workers have a higher pay gap than female disabled workers⁸².

The levels of low pay and the gender, ethnicity and disability pay gaps present a challenge surrounding the sectors in South Yorkshire which have low pay and there are also opportunities for upskilling and reskilling workers to enable them to access higher waged employment.

4.5 DEPRIVATION

Deprivation limits lives and creates and cements inequalities with long lasting impacts. The rising levels of poverty in South Yorkshire, accelerated by the cost-of-living crisis, create additional costs across all spheres of society including social security, housing, policing, and healthcare. It also places pressures on the voluntary sector who are often the front line of support for communities experiencing deprivation. Moreover, it casts a 'long shadow' over future generations with reduced social mobility driven by deprivation⁸³ as highlighted in chapter one.

LEVELS OF DEPRIVATION IN SOUTH YORKSHIRE

The 2019 Indices of Multiple Deprivation (IMD) found the proportion of areas in the 10% most deprived nationally were 23.8% for Sheffield, 23.7% for Doncaster, 21.8% for Barnsley and 21.6% in Rotherham.

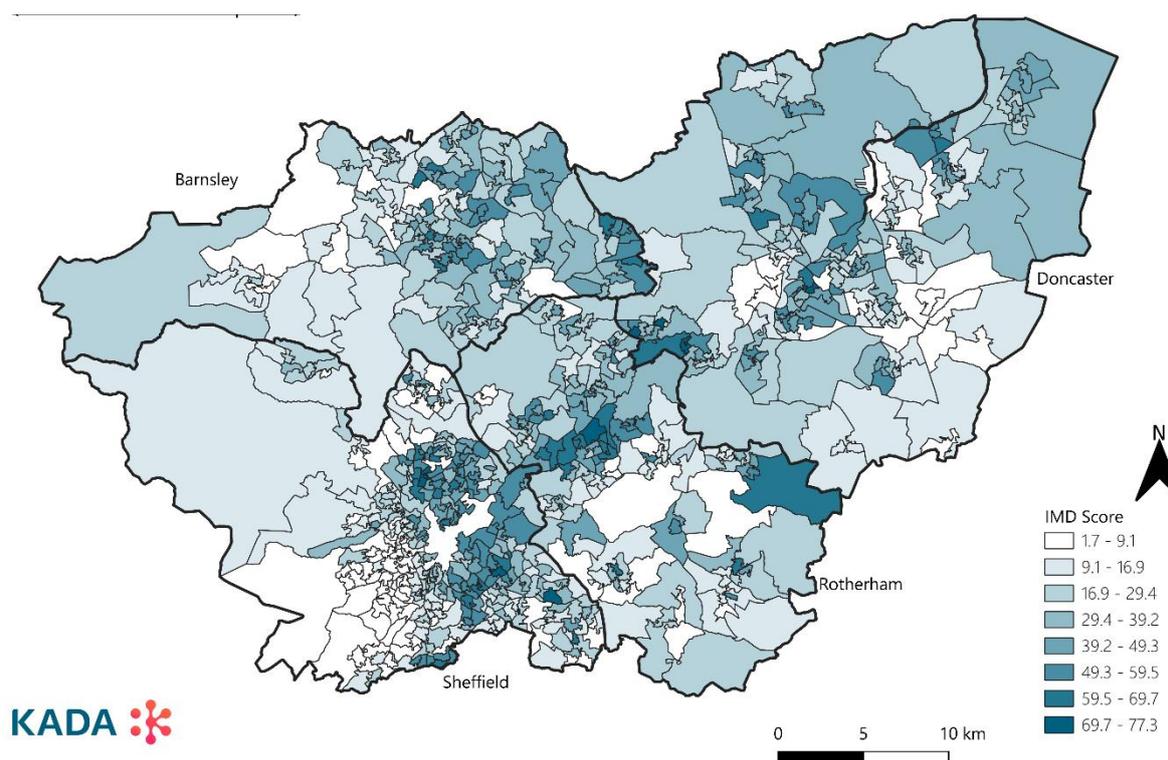
⁸⁰ ONS. 2023. Annual Survey of Hours and Earnings 2022. [Available here](#).

⁸¹ ONS. 2019. Ethnicity pay gaps. [Available here](#).

⁸² ONS. 2021. Disability pay gaps. [Available here](#).

⁸³ Social Mobility Commission. 2020. The long shadow of deprivation: Differences in opportunities across England. [Available here](#).

Map 3IMD in South Yorkshire (1= least deprived)



Source: ONS The English Indices of Deprivation 2019

The map demonstrates where the most deprived areas of South Yorkshire are, using the Indices of Multiple Deprivation⁸⁴, with clusters in the east of Sheffield and Barnsley and dispersed more widely in Rotherham and Doncaster. Sheffield presents the starkest picture with the least and most deprived sitting side by side. Barnsley, Doncaster, and Rotherham have few areas who are the least deprived and more areas within the *middle* levels of deprivation.

Local authority ranking summarises the average levels of deprivation with an area which is more universally deprived scoring higher (the lower the ranking the more deprived the area)⁸⁵. Barnsley is ranked 38th most deprived out of the 317 local authorities in England, compared to Doncaster (41st), Rotherham (50th), and Sheffield (93rd). Sheffield is ranked 30th (out of 317) for the proportion of neighbourhoods (LSOAs) in the 10% most deprived areas nationally, followed by Doncaster (32nd), Barnsley (35th) and Rotherham (36th). Despite ranking as the most universally deprived local authority in South Yorkshire, Barnsley does not have any LSOA in the top ten most deprived within the sub-region. Sheffield accounts for half of the most deprived neighbourhoods, followed by Doncaster who has the most two deprived LSOAs in South Yorkshire.

⁸⁴ The Indices of Deprivation measure seven domains of deprivation and a cumulative Index of Multiple Deprivation (IMD). The seven domains measured include income, employment, education, health, crime, barriers to housing and services, and living environment. The scores of which are combined to determine the IMD.

⁸⁵ Ministry of Housing, Communities and Local Government. 2019. IoD2019 Local Authority Dashboard. [Available here](#).

Table 33 Most deprived wards in South Yorkshire by IMD score

LSOA name (2011)	Ward name	Index of Multiple Deprivation (IMD) Score
Doncaster 023B	Hexthorpe & Balby North	77.2
Doncaster 032D	Conisbrough	76.8
Sheffield 039A	Manor Castle	74.7
Sheffield 012F	Southey	72.6
Sheffield 012E	Southey/Firth Park	70.8
Doncaster 031F	Mexborough	70.6
Rotherham 014A	Rotherham East	70.6
Sheffield 049D	Woodhouse	70.2
Doncaster 030A	Mexborough	69.9
Sheffield 051D	Gleadless Valley/ Park and Arbourthorne	69.5

Source: Indices of Multiple Deprivation 2019

Barnsley, Doncaster, Rotherham, and Sheffield all have higher average IMD scores than national levels. The deprivation across and within South Yorkshire’s communities highlight the deeply rooted challenges facing the sub-region which cut across income, education, employment, health, crime, housing and living environments. Moreover, it demonstrates how interrelated these challenges are, and skills intersects all these spheres.

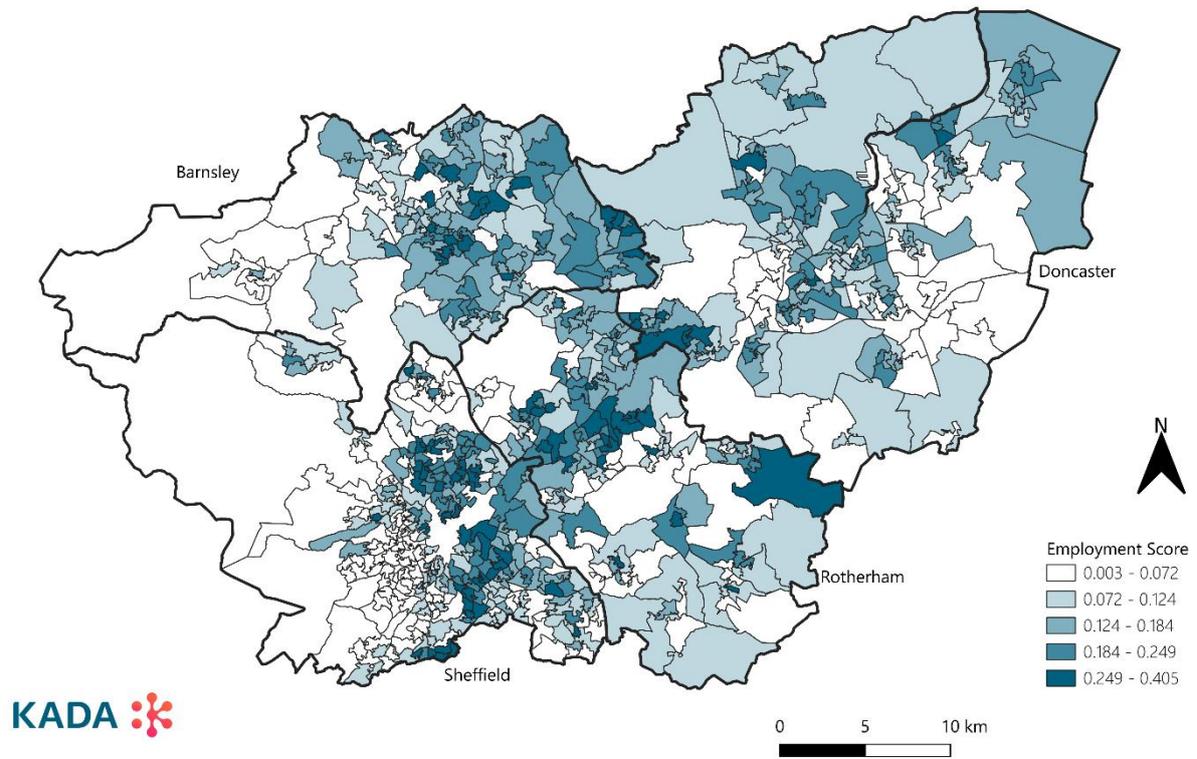
Table 34 Average IMD score by local area

Area:	Average IMD score
Barnsley	30.3
Doncaster	30.2
Rotherham	29.5
Sheffield	26.9
South Yorkshire	28.8
England	21.7

Source: Indices of Multiple Deprivation 2019

The following map focuses on employment deprivation, which looks at the proportion of people aged 16 – 64 years old in an area who are involuntarily excluded from the labour market.

Map 4 IMD employment score South Yorkshire



Source: ONS The English Indices of Deprivation 2019

The map shows more contrast between the most and least employment deprived areas across South Yorkshire compared to the earlier map of the IMD.

POVERTY

Absolute Child Poverty Rate (%)

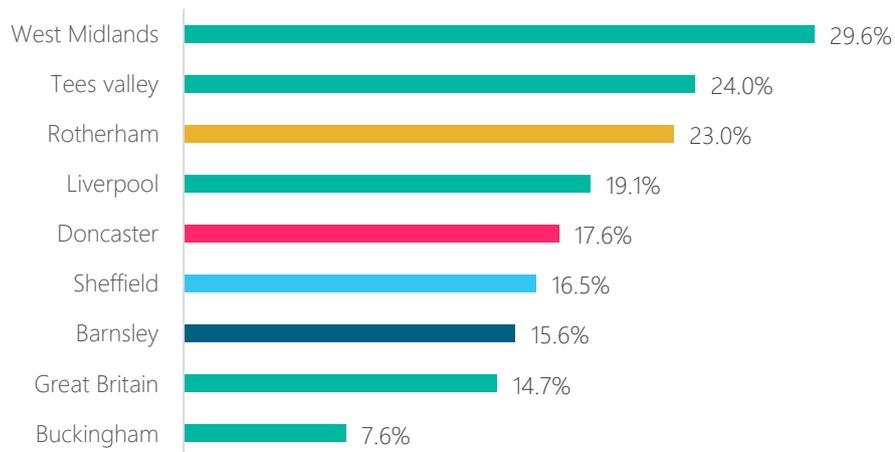


Figure 49 Absolute child poverty rates. Source: House of Commons, Poverty in the UK. 2023

Statistics⁸⁶ show between 2021-22 there were 71,905 of children living in low-income families in South Yorkshire, 62% (44,640) of these families are in work. Rotherham (23%), Doncaster (17.6%), Sheffield (16.5%) and Barnsley (15.6%) all have higher levels of child poverty⁸⁷ than the national average (14.7%). These are lower however than West Midlands and Tees Valley.

The cost-of-living crisis and large increase in energy costs has impacted fuel poverty levels nationally.

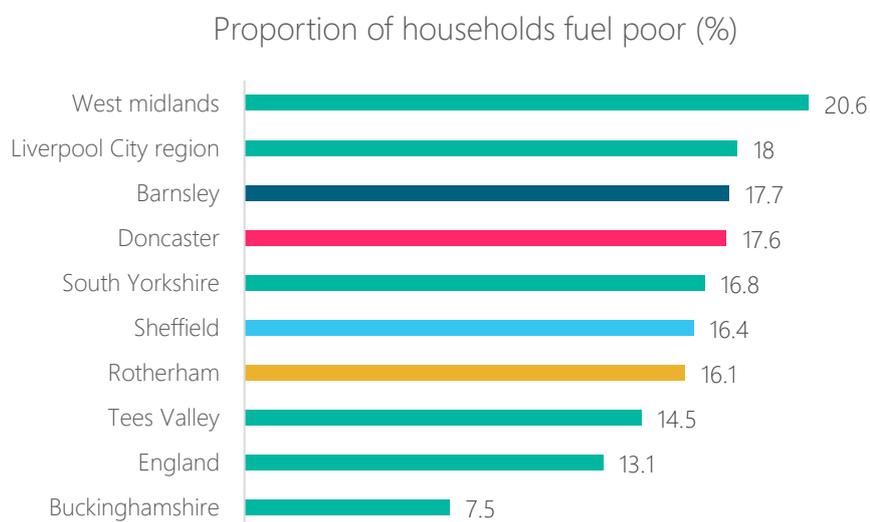


Figure 50 Fuel poor households. Source: Department for Energy Security & Net Zero, Sub-regional Fuel Poverty England 2021 data. 2023

In South Yorkshire, 16.8% of households are fuel poor which can negatively impact their health⁸⁸. Barnsley (17.7%), Doncaster (17.6%), Sheffield (16.4%) and Rotherham (16.1%) have higher than the national average level of households who are fuel poor (in fuel poverty).

Food poverty has also been rising in South Yorkshire, and nationally. Between April 2022 and March 2023, the Trussell Trust provided 92,521 food parcels in South Yorkshire. Sheffield accounts for over two thirds of the food parcels (68,271) and Rotherham reported the lowest (5433). Between 2018 and 2022, the number of food parcels given out to South Yorkshire residents increased substantially and driven by a large increase in Sheffield in 2019-20. Whereas Doncaster and Rotherham saw decreases in food parcels in 2019-20.

⁸⁶ Department for Work and Pensions. 2022. Children in low-income families (relative). [Available here](#).

⁸⁷ Using the absolute poverty measurement which includes households with income below 60% of (inflation-adjusted) median income in 2010/11 before housing costs.

⁸⁸ Marmot Review Team. 2011. The Health Impacts of Cold Homes and Fuel Poverty. [Available here](#).

Number of Trussell Trust Food Parcels Issued Annually

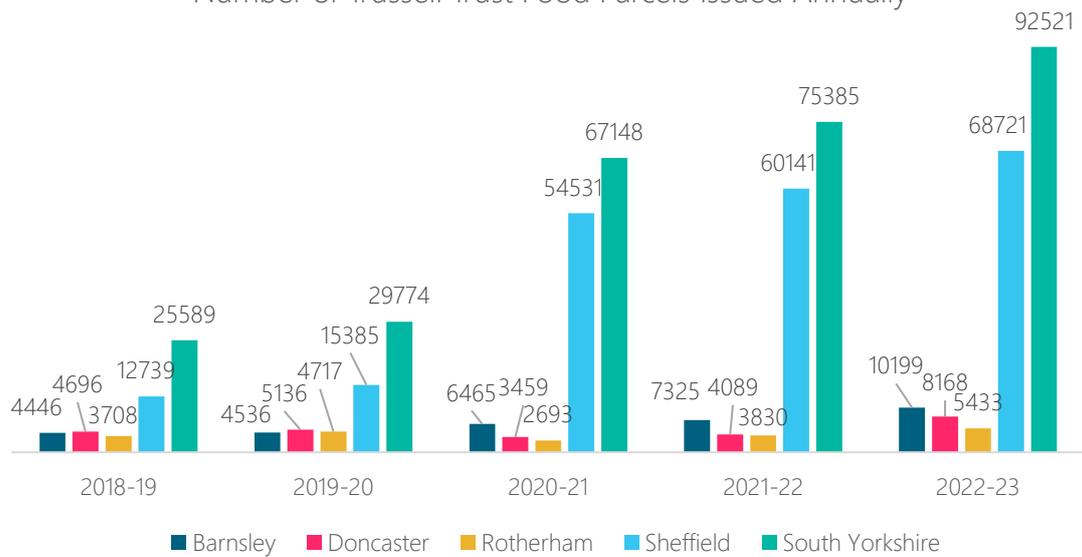


Figure 51 Annual Trussell Trust food parcels in South Yorkshire. Source: Trussell Trust End of Year Statistics 2018 – 2023 (April to March)⁸⁹

From 2018-19 to 2019-20, food parcels in Sheffield increased by 254%, whereas Rotherham reported a reduction of 42.9% and Doncaster a reduction of 32.6%. Barnsley also reported an increase of 42.5% between 2018-19 and 2019-20.

Percentage Change in Trussell Trust Food Parcels

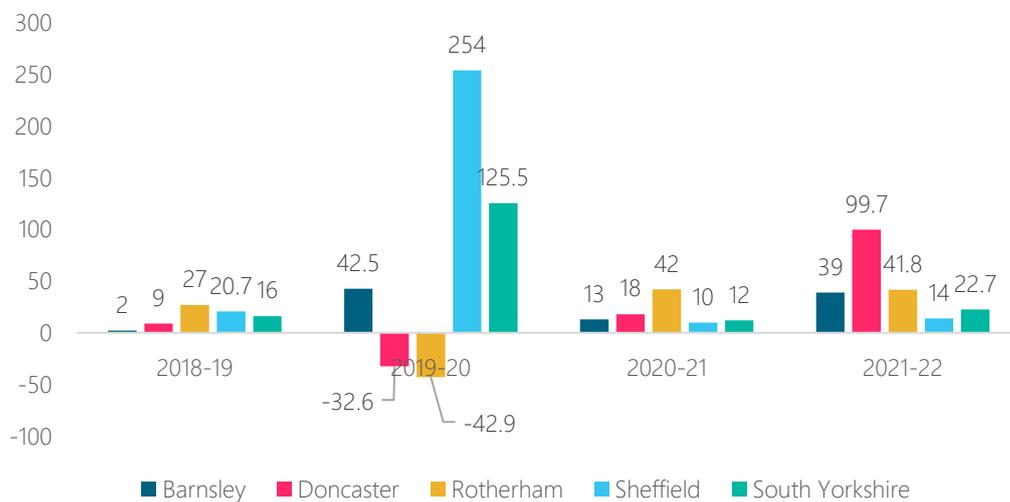


Figure 52 Change in Trussell Trust food parcels 2018 – 2021. Source: Trussell Trust End of Year Statistics 2018 – 2023

In the most recent statistics, Doncaster reports the highest annual increase in food parcels growing 99.75% between 2021/22 and 2022/23. Stakeholders were increasingly concerned about the impact of the cost-of-living crisis and rising food costs were having across South Yorkshire.

⁸⁹ [Available here.](#)

Between 2018/19 and 2022/23, there has been a 261.5% increase in the number of Trussell Trust food parcels given in South Yorkshire. The growth in Sheffield has been the largest (439.4%), followed by Barnsley (129.4%), Doncaster (73.9%), and Rotherham (46.5%). This represents a growing number of South Yorkshire residents being unable to afford enough food to live and therefore accessing an emergency food parcel which provides food for 3 days. Hunger impacts people's ability to engage with education and training due to increased fatigue and difficulties with concentration^{90 91}.

Digital poverty was also a concern raised by stakeholders which included low levels of digital skills within some groups across South Yorkshire, as well as the affordability of digital equipment and the internet. Due to the cost-of-living crisis, digital poverty is growing nationally, with research from the Citizen's Advice reporting one million people cancelling their broadband because they could not afford it over the last year⁹². The research also found people claiming Universal Credit were over six times more likely to have cancelled their broadband compared to those who were not claiming. This is a concern as Universal Credit is managed digitally, job-searching is predominately online and many support services are increasingly adopting a 'digital first' approach. Research from the University of Sheffield⁹³ measured digital poverty across South Yorkshire using a combination of data on deprivation, demography, and broadband. Of the top ten most digitally poor wards (LSOAs), Sheffield accounted for six, Doncaster two, and Barnsley and Rotherham one respectively. Mosborough (Sheffield 065), Darnall (Sheffield 027A), and Adwick le Street and Carcroft (Doncaster 005F) are the top three most digitally poor wards. The report provides a series of recommendations such as social tariffs for the most deprived wards.

Travel was identified by stakeholders as a significant barrier for people to engage with education and employment opportunities. This was supported by comments from job seekers (aged 18 – 24 and over 50), and college students. People commented on the affordability, lack of transport routes and timetables which did not meet their needs for example needing to be at work by 6am to start a shift but public transport not running at this time.

The availability and affordability of childcare was another factor which constrained people's ability to enter and remain in employment and education. If this is not accessible, then people do not often consider these opportunities. The average cost of childcare⁹⁴ continues to rise in the UK and is now £148.63 (£7,143 annually⁹⁵) for 25 hours a week for a child under two and £144.01 (£6,912 annually) for a child over two. It is slightly lower on average in Yorkshire and the Humber, at £129.32 for 25 hours childcare for a child under two and £130.55 for a child over two. Full-time childcare (50 hours a week) costs £285.31 (£13,694.88 annually) for a child under two and £279.60 (£13,420.80 annually) for a child over two. It is slightly lower on average in Yorkshire and the Humber, with childcare for a child under two £255.98 (£12,287.04 annually) weekly and for a child over two it is £256.83 (12,327.84).

If we consider the average weekly pay for a full-time worker in Barnsley is £562.60, in Rotherham is £587.70, in Sheffield is £592.60, and in Doncaster is £594.30, a considerable sum could be being spent

⁹⁰ National Education Union. 2021. Child Poverty Statistics. [Available here](#).

⁹¹ Department for Education. 2017. Evaluation of Breakfast Clubs in Schools with High Levels of Deprivation. [Available here](#).

⁹² Citizens Advice. 2023. One million lose broadband access as cost-of-living crisis bites. [Available here](#).

⁹³ Zamani, E., Vannini, S., Ives, G., Tornquist Perez, F. 2022. Digital Poverty. [Available here](#). The report also includes a map of digital poverty across South Yorkshire.

⁹⁴ Corom. 2023. Childcare Survey 2023. [Available here](#).

⁹⁵ All annual costs are for 48 weeks per year.

on childcare for those under two. The Government does provide up to 30 hours free childcare (for 38 weeks a year) for children over three and has recently announced in the 2023 Budget⁹⁶ expansions to this provision which will be rolled out in the coming years.

The voluntary sector across South Yorkshire is providing essential support to communities locally from providing essential services, alleviating poverty in all its forms, building confidence and connecting with those communities who are 'seldom heard' and giving people opportunities to learn and grow in a safe space which is trusted by communities. Stakeholders provided countless examples of how the voluntary sector was working effectively to address local challenges and noted the important role this sector plays in South Yorkshire.

4.6 KEY CHALLENGES AND OPPORTUNITIES FOR SOUTH YORKSHIRE

The evidence within this chapter demonstrates some clear challenges to address for South Yorkshire to be a fairer, stronger, and greener place where all residents can thrive. To do this, South Yorkshire needs to create a culture of lifelong learning at all ages which recognises and promotes the social and economic benefits of upskilling and reskilling communities into strategically important sectors.

The above average unemployment level in South Yorkshire (4.97% compared to 3.78% nationally) is driven by Sheffield's unemployment rate of 7.57% which is high due to the level of **female unemployment** that accounts for nearly two thirds of total unemployment. If the level of unemployment in Sheffield was reduced to the South Yorkshire average, it would bring the sub-regionally levels more in line with the national picture. Public Health England estimated in 2017 the savings of a person returning to work from unemployment was £12,035 per person annually⁹⁷, this would be £15,005.24 as of March 2023⁹⁸.

There are **203,500 economically inactive** people in South Yorkshire, nearly a third of which is due to long-term sickness which is higher than national levels (25.8%). At 11.8%, Rotherham has seen the largest growth in economic inactivity between 2018-2022. People aged 50-64 account for 41% (84,200) of the working age economically inactive population, those aged 16 – 24 are the next largest group. Tackling economic inactivity would bring social and economic benefits, as the UK Government estimates worklessness and sickness absence costs the economy £100bn annually and the cost of ill health is approximately £50bn each year⁹⁹.

Yorkshire has higher levels of 16–17-year-olds who are **NEET** than the national average, with the highest level in Sheffield (6.8%). NEET levels have reduced in Doncaster and Rotherham since 2019 but increased in Barnsley and Sheffield. Higher youth unemployment incurs economic costs with estimates of £5.9bn lost in 2021 and £6.9bn in 2022 from lost national output. The scarring impact of youth unemployment was forecast to be £14.4bn over seven years from 2021¹⁰⁰. It is estimated that if a young person remained economically inactive for the rest of their working life the average person could cost £340,000 from social security costs over their life (in the worst-case scenario)¹⁰¹.

Full-time workers across South Yorkshire are **earning less** than the average worker, with Barnsley seeing the lowest weekly wage of £562.60 which is £79.60 less than the national level. Female workers in

⁹⁶ Department for Education. 2023. The Education Hub. [Available here.](#)

⁹⁷ Public Health England. 2017. Movement into Employment Return on Investment Tool. [Available here.](#)

⁹⁸ Bank of England. 2023. Inflation calculator. [Available here.](#)

⁹⁹ Public Health England. 2019. Health matters: health and work. [Available here.](#)

¹⁰⁰ Learning and Work Institute. 2021. Facing the future - employment prospects for young people after Coronavirus. [Available here.](#)

¹⁰¹ Local Government Association. 2022. Understanding the cost of economic inactivity in young people. [Available here.](#)

Rotherham experience the largest gender pay gap for weekly pay, as they are paid £138.30 less than male workers. Tackling low pay would help to alleviate the high levels of deprivation and poverty across South Yorkshire and reduce the number of Universal Credit claimants (as this provides support to those in work also) which are discussed next.

In South Yorkshire Sheffield report the highest levels of **deprivation** but all local authorities have over 20% of neighbourhoods in the 10% most deprived nationally. **Fuel and food poverty** is increasing across South Yorkshire with a 261.5% increase in the number of Trussell Trust food parcels given between 2018/19 – 2022/23, driven largely by Sheffield. There are 71,905 children living in low-income families in South Yorkshire, 62% of these are working households. South Yorkshire has a higher-than-average level of child poverty with Rotherham reporting the highest percentage (23%). Poverty has long-last impacts and can create a cycle, for example individuals who experience child poverty will earn roughly 25% less by the age of 30 than someone who did not¹⁰². The cost of child poverty in the UK for 2023 is estimated to be £38bn¹⁰³. Additionally, it was estimated in 2016 that the impacts of poverty cost public services £69bn in the UK¹⁰⁴.

¹⁰² IPPR. 2023. Tipping the Scales. [Available here](#).

¹⁰³ Hirsch, D. 2023. The cost of child poverty in 2023. [Available here](#).

¹⁰⁴ Joseph Roundtree Foundation. 2016. Counting the cost of UK poverty. [Available here](#).

5 CHANGING FUTURES: PREPARING FOR THE ECONOMY OF TOMORROW

To prepare for the economy of tomorrow it is important that partners act today to ensure South Yorkshire can take full advantage of future digital, green and health and social care opportunities.

South Yorkshire's Strategic Economic Plan (SEP) outlined in 2021 the importance of these three sectors if the sub-region is to become greener, stronger, and fairer. Education, skills, and training should directly respond to the SEP to ensure the current and future workforce is equipped with the technical and employability skills, and resilience required for success.

There are significant challenges across South Yorkshire particularly in becoming greener and healthier. Yet, they can be used as opportunities to drive inclusive innovation led growth through the development of local talent and assets already.

The infographic on the next page shows the key messages for South Yorkshire's greener, digital, and healthier future.

Digital



Employment in South Yorkshire's digital sector is projected to grow by **9.2%** by 2035.



82% of online job adverts have digital skills as an essential requirement.



13% of jobs in Doncaster are at a high risk of automation



The top three in demand digital skills by South Yorkshire employers are general office software, security, privacy and GDPR and social media/digital marketing.

Green



Transitioning to net zero could deliver **£2.8billion** annually in benefits for South Yorkshire.



Net zero workers have an average salary **£12,640** higher than the South Yorkshire average.



In the short to medium term, insulation and heat pumps are South Yorkshire's biggest green opportunity, but skills gaps must be addressed.



The hydrogen industry is a long-term opportunity for South Yorkshire.

Health and Social Care



South Yorkshire residents live shorter lives than the national average and spend fewer years in 'good' health. There is a gap of over ten years in life expectancy between the top and worst performing wards.



Men in Barnsley have a healthy life expectancy **7.2 years** lower than the national average.



The health and social care sector is the biggest employer in South Yorkshire with **93,000** workers and is projected to grow by **15.1%** by 2035 which is higher than the national average.



The healthcare sector had the most online job adverts in December 2022 with care assistants and nurses in demand.

5.1 DIGITAL FUTURES

SOUTH YORKSHIRE'S DIGITAL SECTOR

South Yorkshire's digital sector is estimated to employ 20,000 people in the sub-region¹⁰⁵ and is a 'Sector with potential'. Learning (EdTech), data science, industrial, mobility and creative technologies are important sub-sectors. In 2021, there were 18,000 workers in Information and Communication which is 3.1% of the workforce which matches Yorkshire and Humber but is lower than the British average (4.5%). This is the fourth lowest compared with the ten other Combined Authorities in England with Cambridgeshire and Peterborough reporting the highest percentage of the workforce at 6.3% and Greater Manchester the largest number (50,000)¹⁰⁶.

8.3% of online job vacancies in South Yorkshire (December 2022) were in Information and Communication Technology, this is slightly lower than the national level (9.3%) but was the second highest category after Healthcare¹⁰⁷. Programmers were the fifth highest online job vacancy in South Yorkshire (2.3%). Looking at only online vacancies within Information Communication Technology professions programmers were most in demand, followed by specialists and consultants, system developers and analysts, support staff, and IT managers. Employment within Information Technology is projected to grow by 8.2% in South Yorkshire between 2023 – 2035 which is lower than nationally (10.6%)¹⁰⁸.

Analysis of South Yorkshire's employment and Gross Value Added (GVA) data from 2016 – 2020 identified the Information Communication and Technology sector as a 'productivity hero' (sectors which have positive productivity growth where output is increasing faster than employment). The Information Communication and Technology sector had a 27% (3,050) rise in employment and an 82% (£504m) increase in GVA between 2016 – 2020¹⁰⁹.

It is estimated that the UK tech industry will have capacity for three million more workers by 2025 driven by roles in software development, data analysis, machine learning and AI, and cloud and data roles¹¹⁰. Given the advances in flexible and hybrid working since the pandemic there are opportunities for workers to access the much larger national labour market whilst remaining in South Yorkshire.

DIGITALISATION OF LIFE AND WORK

Alongside the digital sector is the wider digitalisation of the labour market, from the NHS to manufacturing. Covid-19 accelerated the demand for digital skills at work and personally. There is increasing use of 'digital by default' across public and private services and within communications, leisure, and commerce.

82% of online vacancies have digital skills as essential entry requirements. Digital skills bring higher wages (29% higher pay than jobs not requiring digital skills) and acceleration through the career ladder with

¹⁰⁵ SYMCA. 2022. Local Skills Report.

¹⁰⁶ ONS. 2022. Business Register and Employment Survey. [Available here](#).

¹⁰⁷ DfE. 2023. Local Skills Dashboard. [Available here](#).

¹⁰⁸ As above.

¹⁰⁹ Kada analysis of ONS BRES and GVA data.

¹¹⁰ Microsoft Data Science. 2020. Estimated capacity of tech jobs. [Available here](#).

high-skilled jobs requiring more specific digital skills¹¹¹. However, Yorkshire and the Humber have one of the highest percentages of adults without basic digital skills compared with other regions across the UK and was the third lowest for adults with foundation level digital skills (and below the national average)¹¹².

Statistics for 2022-2023 show across South Yorkshire there have been 9,620 adult learners participating in 'basic skills including digital skills' for this academic year¹¹³. Stakeholders were concerned about certain groups and communities who did not have the digital skills required for many workplaces and could not afford to stay digitally connected (as highlighted in chapter four).

Whilst digitalisation brings clear opportunities for increased productivity and growth, for example AI is projected to increase England's GDP by 10.6% by 2030¹¹⁴, there are also risks through automation which will remove certain roles from the workplace. Waiters and waitresses, shelf fillers, and elementary sales occupations are at the greatest risk of automation whereas medical practitioners, higher education teaching professionals, and senior professionals of educational establishments are at the smallest risk. Women and young people are most likely to be in roles which will be automated.

Recent estimates confirm that approximately 7% of UK jobs face a high probability of automation in the next five years, increasing to 18% in ten years and around 30% after 20 years¹¹⁵. Thus, there is a need to upskill and reskill workers currently employed in these jobs into new industries and roles. Interestingly, whilst there will be growth in jobs directly linked to AI (i.e data scientists, robotic engineers and the designers and manufacturers of sensors for driverless technologies), the biggest growth in employment will come from other industries where tasks cannot be fully automated. Health and social care is projected to experience the largest employment growth from AI over the next 20 years, followed by professional and scientific, and education. Manufacturing will witness the biggest employment losses, followed by transport and logistics, and public admin and defence over the next 20 years. Subsequently, there will be a growth in demand for health and social care skills, as well as science, research, and digital skills¹¹⁶.

The adoption of new digital technologies will create both winners and losers and it is important that South Yorkshire can support residents negatively impacted into good and secure employment through their development of technical and soft skills. Employers will also require business support to identify and understand how digital technologies can help to improve productivity within their workplace, and leaders within these organisations may also require upskilling to fully realise this opportunity (innovation and improving businesses is discussed in chapter five).

DIGITAL SKILLS GAPS

With growing demand for digital skills within the digital sector and across the labour market, employers nationally and locally are reporting skills shortages. Both of South Yorkshire's LSIPs have highlighted this need, with the most recent LSIP (submitted to the Department of Education in May 2023) having a digital skills focus.

¹¹¹ Department for Digital, Culture, Media and Sport. 2019. No longer optional: employer demand for digital skills. [Available here](#).

¹¹² Essential Digital Skills Survey. 2022. [Available here](#).

¹¹³ DfE. 2023. Basic Skills – Regional breakdown. [Available here](#).

¹¹⁴ PWC. 2017. The economic impact of AI on the UK economy. [Available here](#).

¹¹⁵ PWC. 2021. The potential impact of AI on UK employment and skills demand. [Available here](#).

¹¹⁶ PWC. 2021. The potential impact of AI on UK employment and skills demand. [Available here](#).

Productivity software skills (which includes Microsoft Office skills – with Microsoft Excel most common, project management software, and resource planning) have the largest share of national demand (80%) and this demand will remain stable over the next five years (from 2019). The average salary for productivity software in the UK is £34,700¹¹⁷ compared to the average salary in England of £33,208 and £29,960 for South Yorkshire¹¹⁸. Jobs in data analysis (average salary £52,300), digital marketing (average salary £34,100) and customer relations management (CRM) skills (average salary £37,600) will increase in demand and computer and networking support (average salary £47,600) will decline.

Table 35 Technical skill demand for digital sector

Digital skills by percentage share of demand and projected future skills demand in the UK - 2019

Digital skills clusters	% share of demand ¹	Future demand for skills (5 years) ^{2 3}	% of high skill jobs within digital skills clusters ⁴
Baseline			
Productivity software	80%	Stable (+7%)	47%
Specific			
Programming	58%	Stable (+4%)	71%
Computer and networking support	32%	Declining (-13%)	77%
Data Analysis	25%	Fast (+33%)	92%
Digital Marketing	20%	Fast (+26%)	27%
Customer relations management (CRM)	17%	Fast (+15%)	31%
Manufacturing & machining technology	11%	Stable (-8%)	55%
Digital Design	9%	Stable (-9%)	53%

Source: Original analysis from Local Skills Report 2022. Adapted from Burning Glass (2019) p.51

Legend:

¹ Percentage share of digital demand is calculated as the number of job adverts in digital occupations focusing on the respective digital skill cluster divided by the total number of all job adverts in digital occupations.

² Declining growth: defined as reducing by more than 10%; Stable: ranges from 10% projected decline to 10%; Fast growth: ranges from 10% to 50% projected growth.

³ The data are based on an econometric model developed by Burning Glass, using their own and external data. It uses (trained and validated) historical data which are then applied to current data to make future predictions.

⁴ i.e. jobs requiring levels 6-8 of the Regulated Qualifications Framework (RQF).

Research with South Yorkshire employers¹¹⁹ found the top five most important digital skills currently are:

- General office software skills (94.9%)
- Security, privacy and GDPR skills (87.8%)
- Social media and digital marketing skills (80.5%)

¹¹⁷ Department for Digital, Culture, Media and Sport. 2019. No longer optional: employer demand for digital skills. [Available here](#).

¹¹⁸ Annual Survey of Hours and Earnings. 2022. Median gross annual pay for FTE worker. [Available here](#).

¹¹⁹ SY LSIP. 2023. South Yorkshire Digital Skills Survey, February to April 2023.

- Other software tools skills (77.9%)
- Web content management skills (74.1%)

South Yorkshire employers struggle to recruit and retain workers with 'good data skills' (35% struggle to retain staff and 50% struggle to recruit). Security, privacy and GDPR skills are the next largest shortage (40% struggle to recruit and 32% struggle to retain), and this is followed by project management skills which 38.6% of South Yorkshire employers surveyed struggle to recruit for and 31.9% struggle to retain staff with this skill.

Over the next two to five years, South Yorkshire employers predict the following skills will be most important to their business:

- Social media/digital marketing skills (77.1%)
- Security privacy and GDPR skills (73.7%)
- General office software skills (73.4%)
- Data skills (71.7%)
- Other software tools skills (69.7%)

South Yorkshire employer most important skills needs for now and in the future are largely similar, with data skills replacing web content management in the latter which aligns with the recruitment and retention difficulties highlighted earlier.

The South Yorkshire Digital Skills survey which informed the latest LSIP found 70.2% of employers felt that their employees would benefit from external training for data skills and social media/digital marketing skills. The research applied these survey statistics to South Yorkshire's business population for quantification and predicted over the next two years training would be needed for:

- Data skills for 29,000 workers
- Social media/marketing for 29,000 workers
- Other software tools for 28,200 workers
- Security, privacy and GDPR for 28,000 workers
- General office software for 27,800 workers

The LSIP provides an indication of current and anticipated digital skills shortages in South Yorkshire. There is alignment with national shortages and demands particularly around data skills and digital marketing. The estimated number of workers who will require training over the next two years provides challenges and opportunities for providers and regional stakeholders to respond to collaboratively.

DIGITAL LEARNERS AND PATHWAYS

Since its introduction in 2014, to replace the ICT GCSE¹²⁰, entrants in computing have grown steadily to a total of 81,120 in 2022.

¹²⁰ The ICT GCSE entries have been in rapid decline since 2015 and as of 2022 had 9440 learners.

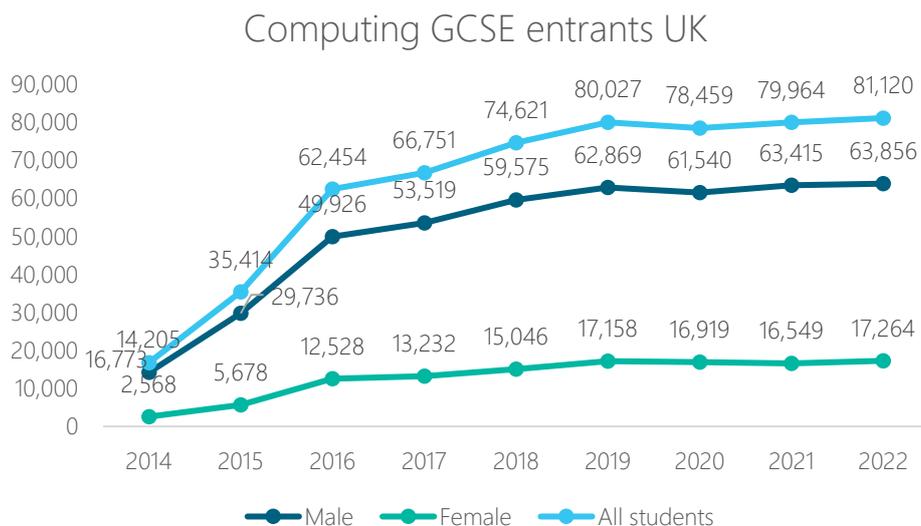


Figure 53 UK Computing GCSE entrants by gender 2014 - 2022. Source: Education Datalab

There is a large discrepancy in the numbers of female computing entrants (17,264) compared to males (63,856) with females accounting for only 21% of entries. Therefore, female learners will already be limiting their options of pathways into digital careers. Computing and ICT GCSE entries form a very low percentage of the total GCSE entries (1.7%).

There has been a small increase in computer science A level entrants between 2017 and 2022 with 199 A level entrants for 2021-2022, and just over 40% of these are in Sheffield.

Table 36 Computer science A Level entrants 2017 - 2022

	2017/18	2018/19	2019/20	2020/21	2021/22	% Change 17/18-21/22
Barnsley	14	16	8	18	15	7%
Doncaster	36	52	55	39	48	33%
Rotherham	52	33	25	40	53	2%
Sheffield	43	50	75	78	83	93%
South Yorkshire	145	151	163	175	199	37%
Y&H	667	694	815	854	970	45%

Source: DfE A Level by region and subject 2017 – 2022

For 2022-2023, there have been 270 Information and Communication Technology apprenticeship starts in South Yorkshire and 70 achievements. Most of the ICT apprenticeship starts (110) and achievements (70) have been in Sheffield and a third of apprentices are female. More ICT apprenticeship starts are taken at degree level (140) than advanced (120) or intermediate (low)¹²¹. ICT apprenticeships in South Yorkshire have been in decline since 2017-18 and this matches the trend for total apprenticeship numbers during this time.

¹²¹ DfE. 2023. Apprenticeships and Traineeships. [Available here](#).

Of all the 24,320 FE achievements in South Yorkshire for 2021-2022, 3.2% were for ICT courses and was the seventh highest subject taken by FE learners. The lowest proportion of ICT FE achievements was in Sheffield (2.6%) and the joint highest was in Barnsley and Rotherham at 4.2%¹²².

In higher education (HE), computing students have grown steadily between 2019 and 2022 at the two South Yorkshire universities, with 3460 students in 2021 – 2022, however the growth is lower than England (24% increase compared to 12% in South Yorkshire). The majority of HE computing students educated in South Yorkshire are from Sheffield Hallam University.

HE computing students

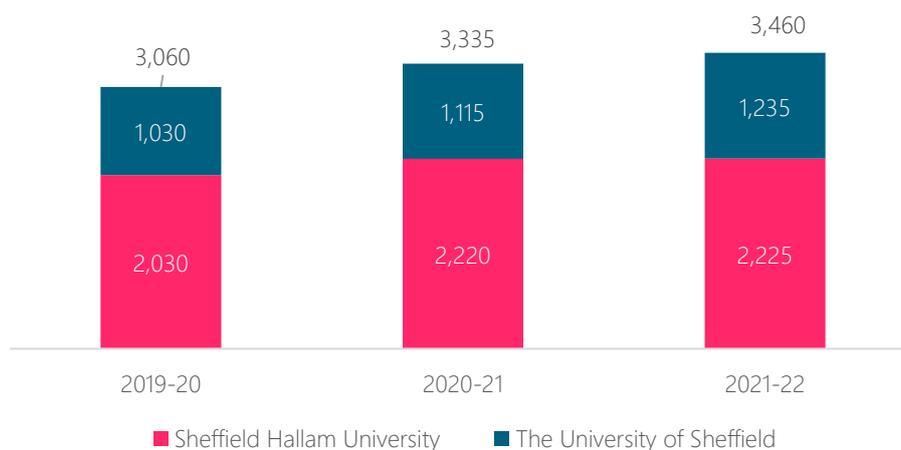


Figure 54 University Computing Students. Source: HESA Student breakdown by provider and subject type 2019 – 2022

Table 37 Undergraduate and Postgraduate University Students 2019/20 - 2021/22

Computing students	Year	Sheffield Hallam University	University of Sheffield	Total
All Undergraduate	2019-20	1800	550	2350
	2020-21	1835	640	2475
	2021-22	1620	675	2295
	% Change	-10%	23%	-2%
All Postgraduate	2019-20	230	480	710
	2020-21	385	475	860
	2021-22	605	560	1165
	% Change	163%	17%	64%

Source: HESA Student breakdown by provider, subject type and level 2019 – 2022

Between 2019-2022 postgraduate computing students have grown at both South Yorkshire universities which aligns with the growing demand from employers for more advanced digital skills. Provision at undergraduate level has grown slightly at the University of Sheffield and in 2021-2022 provided approximately 29% of undergraduate computing provision (up from 23% in 2019 – 2020). Whilst this

¹²² DfE. 2023. Local Skills Dashboard. [Available here](#).

section has focused on computing students, there will be some digital elements across HE such as the use of Microsoft packages, particularly Microsoft word, which is in demand from employers – it is less clear the extent to which software such as Microsoft excel is used and this was the biggest need from employers nationally.

The first and second South Yorkshire LSIP research found local employers did not always find graduates had the right skills for the roles within the digital sector. For example, graduates had the technical skill but lacked industry experience and employability skills which are essential to working such as communication, teamwork, and presentation skills. Subsequently, there are examples where South Yorkshire employers in the digital sector have created their own ‘academies’ to address the skills gap in the talent pipeline to ensure they have the workers they need for success.

5.2 GREENER FUTURES

IMPORTANCE OF NET ZERO

South Yorkshire aims to be net zero by 2041 and is key to becoming a stronger, greener, fairer place to live and work. The significant challenges within this transition present opportunities for South Yorkshire to achieve significant inclusive economic growth opportunities.

"Decarbonising South Yorkshire's economy could cost around £1.7 billion per year but could unlock over £2.8 billion per year in benefits and create thousands of jobs"¹²³.

The need to decarbonize and protect the environment is now urgent: Well-equipped workers will be needed for South Yorkshire's transition to net zero by reducing carbon emissions, generating low carbon energy, improving building's energy efficiency and sustainability, and transitioning to ultra-low or zero-emission transport. South Yorkshire also needs to decarbonize the high carbon industries to safeguard local jobs. The growing need for green skills is clear yet there is less certainty as to how and when the skills system will respond. The green skills pipeline will require time and resource to adequately respond to ensure staff are appropriately skilled and net zero equipment is available for learners.

DEFINING GREEN JOBS

Despite the pressing net zero demands there is a lack of consensus nationally, and subsequently locally, around the definitions and understandings of green jobs and skills. Currently definitions range in their specificity which is reflective of the broad changes required across the labour market to make all sectors greener and the creation of new green industries. A better understanding is required as to what green jobs are and how we can ensure green jobs are good jobs in terms of conditions, pay and progression.

Broadly speaking, green jobs are ‘associated with environmental objectives and policies’ yet this definition lacks specificity. Green jobs could be defined by their connection to green industries, or organisationally (a role connected to the creation of green outputs), or characteristics/tasks linked to green jobs¹²⁴. After extensive stakeholder engagement the ONS define green jobs as “employment in an activity that contributes to protecting or restoring the environment, including those that mitigate or adapt to climate change¹²⁵”. It is currently developing a framework to underpin this definition using

¹²³ SYMCA. 2021. Strategic Economic Plan. Page 56. [Available here](#).

¹²⁴ Nesta. 2023. Green Jobs: Rapid Evidence Review. [Available here](#).

¹²⁵ ONS. 2023. Green jobs update, current and pending work March 2023. [Available here](#).

industry, occupation, and firm-based approaches to development measurements for green jobs. There is also a lack of data, particularly at a local level, around green skills and jobs. National data and literature feature in this section and local data where possible has been used.

SUSTAINABILITY IN SOUTH YORKSHIRE

The SYCMA Energy Strategy¹²⁶ (page 52) identifies the following key challenges for South Yorkshire.

- Lower levels of workers in LCREE (low carbon and renewable energy economy) compared to other parts of Northern England and low growth forecasts in this sector.
- Slow technology adoption aimed at improving resilience and reducing emissions, with significant investment needed from Government to decarbonise South Yorkshire's industry.
- Currently, electricity generation accounts for less than 20% of demand and there are fewer community energy schemes compared to other regions.
- There are 28 designated Air Quality Management Areas (AQMAs) due to poor air quality.
- The biggest contributor to CO₂ emissions in South Yorkshire is road transport.
- Over a quarter of dwellings have the lowest Energy Performance Certificate (EPC) rating (E, F or G) and two-thirds of dwellings are rated below band C.
- 10.6% of households are in fuel poverty and there are over 1,200 excess winter deaths annually in the sub-region.

Skills and education will be essential to address these challenges and realise the potential for a greener South Yorkshire. For example, to improve the EPC ratings of homes across South Yorkshire extensive retrofitting activities will be required including renewable energy (i.e solar panels and heat pumps) and insulation. This creates a need for a sustainable construction workforce who can deliver and maintain net zero homes.

Globally and locally, people receiving lower incomes are more likely to be impacted by climate change and less able (compared to those on higher incomes) to mitigate or address the impacts. Using the retrofit example, people with lower incomes are more likely to live in poor quality housing with low energy efficiency which increases the risk of fuel poverty, which is at a higher level in South Yorkshire than nationally, and subsequently reduces health. The need for green skills and jobs offers interesting opportunities for place-based interventions which reskill and upskill residents, provide employment and retrofit homes.

South Yorkshire has a mixed performance on a range of clean energy measures. Sheffield has the highest carbon emissions in South Yorkshire and is more than double than Barnsley which reports the lowest. Notably, carbon and greenhouse gas emissions have been reducing across South Yorkshire over recent years. Doncaster and Sheffield have the largest proportion of renewable energy installed and this has grown across South Yorkshire since 2017 – Rotherham's installations have nearly doubled in this time. Sheffield has the lowest percentage of household waste that is reused, recycled or composted and is over 10 percentage points below the national average.

¹²⁶ SYMCA. 2022. Energy Strategy. [Available here](#).

Positively, in all local areas of South Yorkshire there is accessible woodland above the national average and the air quality is better than the England average.

Table 38 Clean Energy Indicators South Yorkshire

Measurable	Barnsley	Doncaster	Rotherham	Sheffield	England
Carbon emissions (Grand Total kt CO2e by Gas Type) (2020)	103.1	160.2	156.6	241.9	
GHG Emissions by Sector (Sector Total kt CO2e) (2020)	221.8	247.9	338.3	424.6	
Energy Consumption by Fuel (ktoe) (2020)	1.5	0.8	4.8	2	
Renewable Electricity (Installed Capacity (MW)) (2021)	68.8	129.6	92.9	117.6	
Household Waste (% Reused, Recycled & Composted) (2020/21)	43.2%	43.4%	43.3%	32.2%	42.3%
Employment in Water Supply (Total) (2021)	350	1,000	1,000	1,250	
Ecosystem Services (2021)	1,009	844	885	1,820	
Accessible Woodland (% pop. with access to 20ha+ wood within 4km)	97.3%	87.8%	79.5%	100.0%	67.9%
Natural Environment Cover (Total cover)	32,907	56,802	28,653	26,793	
Air Quality (Fine Particulate Matter-Average PM 2.5) (2020)	6.24	6.35	6.66	6.50	7.54

Source: SYMCA Clean Energy Dashboard

The Thriving Places Index¹²⁷ (TPI) provides information at local authority level of conditions relating wellbeing across three themed areas: local conditions, equality and sustainability (energy use, waste and green infrastructure).

	Local conditions	Equality	Sustainability
Barnsley	4.29	5.85	4.70
Doncaster	3.96	4.93	4.73
Rotherham	4.13	5.25	5.11
Sheffield	4.56	4.98	5.34

Low

<3.5

Medium

3.5-4.5

4.5-5.5

5.5-6.5

High

>6.5

Figure 55 Thriving Places Index South Yorkshire. Source: Thriving Places Index 2022

All four South Yorkshire local authorities are in the medium scores for sustainability, with Barnsley recording the lowest at 4.7 and Sheffield the highest at 5.34 (medium scores are the same or similar to national averages).

DELIVERING NET ZERO AND A GREENER ECONOMY

The average wage in the net zero economy in the UK is £42,600 which is £9,200 higher than the average worker in England and £12,640 more than the average South Yorkshire worker, which is reflective of

¹²⁷ Thriving Places Index. 2022. [Available here.](#)

increased productivity within net zero industries. Additionally, a job in a carbon-intensive industry has a 46% lower skill requirement than the average job in the net zero economy¹²⁸. Thus, the development of a greener economy would help to make South Yorkshire more productive, its current productivity is around 20% below the national average.

The ONS¹²⁹ statistics on the Low Carbon and Renewable Energy Economy (LCREE) provides details on 17 industries with "economic activities that deliver goods and services that are likely to help the UK generate lower emissions of greenhouse gases". In the UK LCREE turnover increased by 30.8% between 2020-21 to a total of £54.4bn, and employment also increased by 16.4% (to 247,400 FTE workers). The energy efficiency products group achieved the highest turnover as did the manufacturing industry. The LCREE is predicted to grow four times faster than the whole of the UK economy until 2030 and SYMCA's Energy Strategy outlines how South Yorkshire is in an advantageous position to take advantage of the green opportunities¹³⁰.

Using the LCREE definition, it was estimated that in 2019 there were 3,900 green workers in South Yorkshire which is 1% of employment in the sub-region, most of which were in 'Other energy efficient products' jobs¹³¹. Using this narrow definition, the top green skills in vacancies between February 2019 – December 2021 in South Yorkshire were for environmental protection and processes (672), recycle (230), and renewable energy (207). Whilst the percentage of green vacancies are still low in South Yorkshire, they have grown each year between 2019 – 2021.

The Local Government Association¹³² predict that there will be 19,616 green jobs in South Yorkshire by 2030 and 32,441 by 2050 across a range of green industries. Whilst these are projections and should be treated with caution, they provide an indication of how green jobs could develop across South Yorkshire. The largest green sector in South Yorkshire by 2030 in terms of employment will be alternative fuels (6264 jobs) followed by low-carbon heat (4012). Alternative fuels continue to be the largest projected sector for green jobs in 2050 (9433), with low-carbon electricity second (6560) and low-carbon heat (6039) the third largest green employer. Low carbon electricity is predicted to be the largest provider of green jobs in Rotherham, whereas in Barnsley, Doncaster, and Sheffield it will be alternative fuels.

¹²⁸ Energy and Climate Intelligence Unit. 2023. Mapping the net zero economy. [Available here](#).

¹²⁹ ONS. 2023. LCREE UK 2021. [Available here](#).

¹³⁰ SYMCA. 2022. Energy Strategy. [Available here](#).

¹³¹ Warwick Institute for Employment Research. 2022. Green jobs and skills in South Yorkshire. [Available here](#).

¹³² Local Government Association. 2020. Local Green Jobs – accelerating a sustainable economic recovery. [Available here](#).

Table 39 Projected low carbon jobs for South Yorkshire

		South Yorkshire	Barnsley	Doncaster	Rotherham	Sheffield
Total jobs	2,030	19,616	3,110	3,649	4,905	7,952
	2,050	32,441	4,919	5,565	8,803	13,154
	% Change	65%	58%	53%	79%	65%
Low-carbon electricity	2,030	2,928	243	81	1,616	988
	2,050	6,560	531	205	3,544	2,280
	% Change	124%	119%	153%	119%	131%
Low-carbon heat	2,030	4,012	725	897	765	1,625
	2,050	6,039	1,092	1,349	1,152	2,446
	% Change	51%	51%	50%	51%	51%
Alternative fuels	2,030	6,264	987	1,330	1,290	2,657
	2,050	9,433	1,473	1,971	2,053	3,936
	% Change	51%	49%	48%	59%	48%
Energy efficiency	2,030	3,671	664	820	700	1,487
	2,050	3,871	700	865	738	1,568
	% Change	5%	5%	5%	5%	5%
Low-carbon services	2,030	1,335	248	194	202	691
	2,050	3,757	697	547	569	1,944
	% Change	181%	181%	182%	182%	181%
Low emission vehicles and infrastructure	2,030	1,404	242	327	331	504
	2,050	2,779	425	628	746	980
	% Change	98%	76%	92%	125%	94%

Source: Local Government Association 2020

Sheffield Hallam University¹³³ investigated six low carbon sectors in South Yorkshire (Carbon Capture, Utilisation and Storage (CCUS), Heat Pumps, Heat Networks, Hydrogen, Insulation and Small scale nuclear) with varying potential. The insulation and heat pump sectors offer the greatest opportunity for South Yorkshire in the short and medium term. The development of a hydrogen industry in South Yorkshire could benefit the manufacturing supply chains and help carbon-intensive industries to decarbonise. The growth in the hydrogen industry would support the Local Government Associations projections for increased employment in alternative fuels. The diagram below shows the potential for growth and skills gaps in sectors for South Yorkshire.

¹³³ Centre for Regional Economic and Social Research. 2022. Low carbon energy supply chains, employment and skills in South Yorkshire: Headline findings. [Available here](#).

SECTOR	TECH MATURITY	SECTOR GROWTH	EMPLOYMENT POTENTIAL			SKILLS GAPS
			NEW JOBS	REPLACEMENT	SAFEGUARDING	
Heat Pumps	Green	Light Green	Green	Green	Orange	Red
Insulation	Green	Green	Green	Yellow	Orange	Orange
Heat Networks	Light Green	Yellow	Yellow	Orange	Orange	Yellow
Hydrogen	Yellow	Green	Light Green	Yellow	Green	Orange
CCS	Orange	Light Green	Yellow	Yellow	Green	Orange
Modular Nuclear	Orange	Light Green	Orange	Orange	Orange	Orange

Note: Green-Red scale where Green is most positive. Ratings for sector growth are relative to existing sector size. For employment, Green = potential for greater than 1,000 jobs.

Figure 56 Low carbon energy sector readiness. Source: Centre for Regional Economic and Social Research, Sheffield Hallam University 2022

It is projected that 3,173 heat pump engineers will be required by 2030 across South Yorkshire and this will increase by just under a third to 4,725 by 2050¹³⁴.

Table 40 Projected heat pump employment demand 2030 – 2050.

Area	Heat pump jobs		% Change 2030-50
	2030	2050	
Barnsley	671	854	21.4%
Doncaster	830	1,056	21.4%
Rotherham	708	901	21.4%
Sheffield	1,504	1,914	21.4%

Source: Local Government Association 2020

The UK will need an estimated¹³⁵ 27,000 heat pump engineers by 2028 to meet Government target of installing 600,000 heat pumps. This is significantly higher than the current number (3,000) and if demand remained constant would mean that between 2025 and 2035 5,000 –7,000 heat pump engineers would need to be trained annually. Therefore, there is a chance for South Yorkshire to create a workforce to tap into this national demand. However, for South Yorkshire to train a decarbonisation workforce, the skills gaps must first be addressed.

Alongside technical skills, workers in LCREE will need transferable ‘soft skills’. Statistical analysis shows the top five in demand skills for green job vacancies (broad definition) in South Yorkshire (between February 2019 – December 2021) were communication, customer service (sector specific), logistics, quality standards, and SQL. As green industries continue to grow Labour Market Information (LMI) must be developed with the relevant measures to understand the new demands for skills and workers.

Businesses, SMEs in particular, require support and encouragement to help decarbonize and transition to net zero. The SEP¹³⁶ notes a significant amount of South Yorkshire 52,000 SMEs are not making energy

¹³⁴ Local Government Association. 2020. Local Green Jobs – accelerating a sustainable economic recovery. [Available here](#).

¹³⁵ Nesta. 2022. The heat pump installer gap. [Available here](#).

¹³⁶ SYMCA. 2021. Strategic Economic Plan. [Available here](#).

efficiency improvements. Improved understanding of sustainability issues and the importance of decarbonization is needed across South Yorkshire to accelerate demand and the net zero transition.

ASSETS IN SOUTH YORKSHIRE FOR A GREENER FUTURE

South Yorkshire has a growing number of green assets including the new South Yorkshire Sustainability Centre¹³⁷ which is led by the University of Sheffield in collaboration with SYMCA, the four local authorities, Sheffield Hallam University and private and voluntary sector organisations. The centre connects research and innovation with local partners to deliver net zero, create jobs and drive economic growth. The centre has three themes: residential and transport decarbonisation, agri-food and environmental restoration, and industrial and commercial decarbonisation. All three will be key to delivering a more sustainable future. For example the residential and transport decarbonisation theme is firstly exploring domestic retrofit (with a regional retrofit optimisation platform and roadmap for decarbonisation South Yorkshire's housing stock) and analytical tools for more sustainable transport management.

South Yorkshire's Innovation District has several emerging capabilities linked to net zero by increasing innovation within local businesses such as carbon accounting, circularity and sustainability, and industrial digitisation for productivity and energy efficiency¹³⁸.

The development of the currently niche hydrogen industry within South Yorkshire brings opportunities for rapid growth and the potential to be a world leader¹³⁹. It aligns with research and teaching strengths within the sub-region such as the Advanced Manufacturing Research Centre which is the planned site for the new National Hydrogen Research, Innovation and Skills Academy.

5.3 HEALTHIER FUTURES

THE IMPORTANCE OF HEALTH

"Since 2010 improvements in life expectancy in England have stalled; this has not happened since at least 1900. If health has stopped improving, it is a sign that society has stopped improving. When a society is flourishing health tends to flourish"¹⁴⁰

An individual's health reflects society and is a key driver of its success. The slowing growth in life expectancy in England since 2010 is a concern, more so is the decline between 2017-19 and 2018-20 life expectancy¹⁴¹. Research from Marmot et al finds clear links between the decade of austerity experienced in England with increasing poverty and subsequently reducing health, and health and social care services reduced by money saving measures at the same time. It is argued this led to worse health outcomes in England during the Covid-19 pandemic¹⁴². The pandemic not only highlighted the importance of workers within the health and social care industry but also the factors which shape our health.

Moreover, the higher a person's qualification level the greater their life expectancy. Health is an asset which can empower individuals to seize opportunities and for the North of England addressing health

¹³⁷ [See here](#) for more information.

¹³⁸ High Value Manufacturing Catapult in Kada Research. 2023. SYID Skills, Training and Business Support Plan.

¹³⁹ Sheffield Hallam University. 2022. South Yorkshire low carbon energy supply chains: hydrogen sector summary. [Available here](#).

¹⁴⁰ Marmot, M. et al. 2020. Build Back Fairer: The COVID-19 Marmot Review. The Pandemic, Socioeconomic and Health Inequalities in England. Page 5. [Available here](#).

¹⁴¹ Office for National Statistics. 2021. National life tables – life expectancy in the UK: 2018 to 2020. [Available here](#).

¹⁴² Marmot, M. et al. 2020. Build Back Fairer: The COVID-19 Marmot Review. The Pandemic, Socioeconomic and Health Inequalities in England. [Available here](#).

inequalities will increase productivity by an estimated £20.2b in GVA - £9b of which would derive from Yorkshire and the Humber¹⁴³.

SOUTH YORKSHIRE'S HEALTH

On average, men (77.9) and women (81.6) in South Yorkshire live 1.5 years less than the national averages (79.4, 83.1). A healthy life expectancy (HLE) refers to the years a person can expect to live in 'very good' or 'good' health based upon individual's perception¹⁴⁴. In England, men have a HLE of 63.1 years and for women a HLE is 63.9 years. However, in South Yorkshire HLE for men is 59.5 (3.6 years less) and for women is 60.2 (3.7 years less).

Table 41 Life expectancy and Healthy life expectancy in South Yorkshire

	England	SY	Barnsley	Doncaster	Rotherham	Sheffield
Life expectancy at birth (Male 2018-20)	79.4	77.9	77.1	77.8	77.5	78.6
Life expectancy at birth (Female 2018-20)	83.1	81.6	81.1	81	81	82.4
Healthy life expectancy at birth (Male 2018-20)	63.1	59.5	55.9	57.4	58.7	62.5
Healthy life expectancy at birth (Female 2018-20)	63.9	60.2	60.1	56.1	56.5	64.3

Source: Office for Health Improvement and Disparities¹⁴⁵

If we look across South Yorkshire men in Doncaster have the lowest life expectancy at 77.1 years (2.3 years less than the national average). Women in Doncaster and Rotherham have the lowest female life expectancy at 81 years (2.1 years less than the national average). All local authorities in South Yorkshire have lower life expectancies for both men and women compared with England. Sheffield has the highest life expectancy for both women (82.4 years) and men (78.6 years). This is 1.5 years more for men compared with Barnsley and 1.4 years more for Sheffield women compared with Doncaster and Rotherham.

Notably, there are significant disparities within the local authorities across South Yorkshire in male and female life expectancy as the following maps demonstrate with the darker colours representing higher life expectancy and the lighter/white areas lower life expectancy. There is a clear east and west divide driven by Sheffield's position with people in the eastern wards living fewer years than those in the west of the city. The maps also highlight how life expectancy can change quite dramatically between wards that are side by side. Fulwood and Ecclesall in Sheffield have the highest male and female life expectancies in South Yorkshire living on average ten years more than the worst wards in South Yorkshire.

Map 5 Female life expectancy South Yorkshire

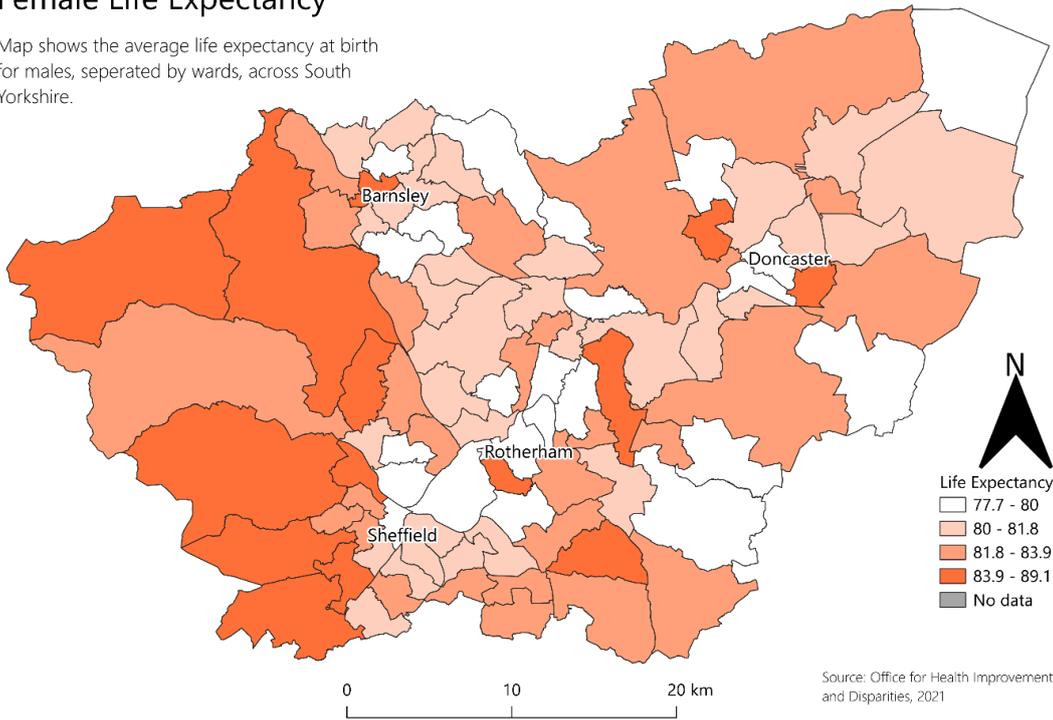
¹⁴³ Thomas. C. 2021. The Disease of Disparity. [Available here](#).

¹⁴⁴ Office for National Statistics. 2022. Health state life expectancies 2018-2020. [Available here](#).

¹⁴⁵ Public Health England Fingertips Dashboard. 2023. [Available here](#).

Female Life Expectancy

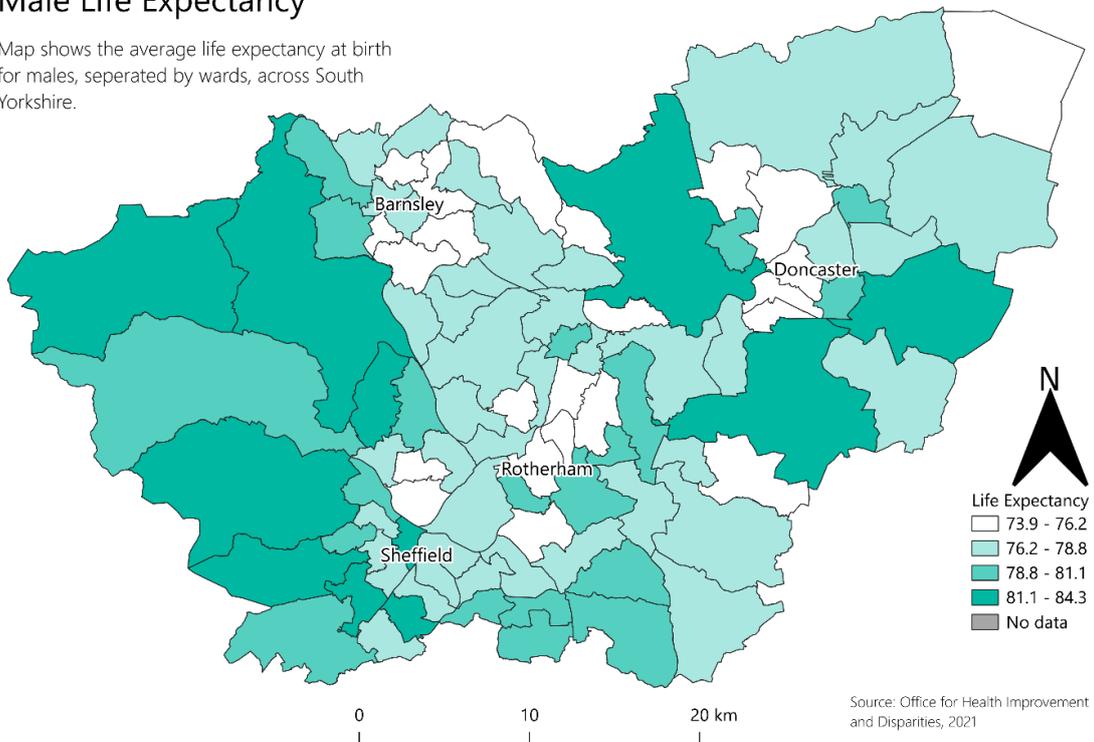
Map shows the average life expectancy at birth for males, seperated by wards, across South Yorkshire.



Map 6: Male Life Expectancy South Yorkshire

Male Life Expectancy

Map shows the average life expectancy at birth for males, seperated by wards, across South Yorkshire.



Male Life Expectancy All Wards in South Yorkshire			
Top 10		Bottom 10	
Ward	LE	Ward	LE
Fulwood	84.3	Dalton & Thrybergh	73.9
Ecclesall	83.4	Greasbrough	74.0
Penistone East	83.1	Maltby East	74.1
Sprotbrough	82.4	Burngreave	74.2
Finningley	82.0	Mexborough	74.5
Tickhill & Wadsworth	81.7	Rawmarsh East	74.6
Stannington	81.7	Worsbrough	74.7
Penistone West	81.6	Firth Park	74.9
Graves Park	81.4	Rotherham East	74.9
West Ecclesfield	81.4	Town (Doncaster)	75.1
Female Life Expectancy All Wards in South Yorkshire			
Top 10		Bottom 10	
Ward	LE	Ward	LE
Ecclesall	89.1	Burngreave	77.7
Fulwood	87.2	Rother Vale	77.9
Penistone East	86.1	Rotherham East	78.0
Bramley & Ravenfield	85.5	Adwick le Street & Carcroft	78.1
Dore and Totley	85.4	Firth Park	78.2
Aston & Todwick	85.3	Greasbrough	78.4
West Ecclesfield	85.0	Stairfoot	78.6
Roman Ridge	84.9	Dinnington	78.9
Stannington	84.8	Mexborough	79.0
Bessacarr	84.7	Thorne & Moorends	79.2

Source: Office for Health Improvement and Disparities

Women in Sheffield have a higher HLE (64.3 years) than national estimates (63.9 years), and in Barnsley (60.1 years), Doncaster (56.1 years) and Rotherham (56.5 years). Women living in Doncaster will live 8.2 years fewer in good health compared to Sheffield. Men in South Yorkshire spend less years in good health (59.5 years) compared to the nationally (63.1 years). This lower figure is driven by male HLE in Barnsley which is 55.9 years, 4.2 years lower than the sub-regional average and 7.2 years than the national average. Male HLE is slightly higher in Doncaster (57.4 years), Rotherham (58.7 years) and Sheffield (62.5 years) but all are still below the national average. Individuals in poor health are more likely to be economically inactive and accessing social security (as discussed in chapter 3).

There are higher rates of under 75 mortality in South Yorkshire (423.7 per 100,000) than nationally (363.4 per 100,000). Sheffield has the lowest rate at 380.5 per 100,000, whereas Barnsley has the highest rate at 497.2 per 100,000 – which is 133.8 per 100,000 higher than England. There is a similar picture in South Yorkshire for the under 75 mortality rates for cardiovascular and cancer with Barnsley faring worst.

These health inequalities reduce the quality of life for residents of South Yorkshire and limit the opportunities accessible to people. There are social, economic, and environmental factors which impact upon people’s health which are referred to as the wider detriments of health. These include education, employment, deprivation and income, built and natural environment, and social capital and community safety¹⁴⁶. The improvement in quality and access to these areas will increase the health of individuals and communities – and education, skills and employment plays a key cross-cutting role.

Economic inactivity due to mental health is rising nationally, in 2022 one in four people were long-term sick due to their mental health¹⁴⁷. South Yorkshire also has higher levels of emergency hospital admissions for intentional self-harm (165.1 per 100,000) than the national average (163.9 per 100,000). At 133.5 per 100,000 Rotherham has lower than average levels of emergency hospital admissions for intentional self-harm than the rest of South Yorkshire and nationally. Barnsley reports the highest levels at 286.7 per 100,000. Suicide rates across South Yorkshire are higher than the national average (10.4 per 100,000) with Doncaster recording the highest (15 per 100,000) closely followed by Barnsley (14.8 per 100,000), then Rotherham (13.2 per 100,000) and lastly Sheffield (11 per 100,000).

Table 42 Health indicators South Yorkshire

	England	South Yorkshire	Barnsley	Doncaster	Rotherham	Sheffield
Under 75 mortality rate all causes (per 100,000 2021)	363.4	423.7	497.2	414.9	447.5	380.5
Under 75 mortality rate cardiovascular diseases	76	95.5	115.3	89.7	106.6	83.2
Under 75 mortality rate cancer	121.5	137.9	158.1	136.7	140.9	126.6
Suicide rate (per 100,000 2019 - 2021)	10.4	Unavailable	14.8	15.0	13.2	11.0
Emergency Hospital Admissions for Intentional Self-harm (per 100,000 2021-22)	163.9	165.1	268.7	160.4	133.5	143.3
Percentage of physically active adults (2021-22)	67.3%	66.3%	60.7%	62.3%	64.4%	71.7%
Population with physical or mental health condition and in employment (aged 16 - 24 2021 - 2022)	65.5%	Unavailable	54.0%	55.7%	59.4%	67.2%

Source: Office for Health Improvement and Disparities

Sheffield has higher than average levels of physically active adults at 71.70% of the population compared to 67.30% in England and 66.3% in South Yorkshire. Barnsley has the lowest level of physically active adults at 60.70%, followed by Doncaster (62.30%) and Rotherham (64.4%).

¹⁴⁶ Public Health England. 2018. Wider detriments of health. [Available here.](#)

¹⁴⁷ Money and Mental Health. 2023. Untapped potential: reducing economic inactivity among people with mental health problems. [Available here.](#)

Addressing the health inequalities across South Yorkshire will drive productivity and prosperity¹⁴⁸. South Yorkshire and Bassetlaw Integrated Care Partnership Strategy 2023 provides more detail on how health inequalities can be reduced¹⁴⁹.

HEALTH AND SOCIAL CARE WORKFORCE

Human health and social care activities is the largest employment sector in South Yorkshire with 93,000 workers (16.1% of the workforce)¹⁵⁰. This is a higher proportion of the workforce than the rest of Yorkshire and the Humber (14.8%) and nationally (13.7%). Doncaster has the highest proportion of health and social care workers (17.3%), followed by Barnsley (16.5%), Sheffield (15.9%) and lastly Rotherham (15%). Human health and social care activities are the highest employment sector across South Yorkshire apart from in Rotherham where this is shared jointly with manufacturing employment.

Experimental DfE statistics¹⁵¹ show that the third highest proportion of online job vacancies in South Yorkshire is for care assistants (3%) and nursing (1.9%) is the eighth highest. Online job adverts for healthcare are the largest group with 12.1% of vacancies as of December 2022, which was slightly below England (12.6%). Between 2023 and 2035 employment in health and social care will grow by 15.1% in South Yorkshire which is higher than the national average (9%).

There are national shortages within the health and social care workforce, it is estimated that in 2020/21 there was a gap of 103,000 full-time workers within the NHS which will increase to a projected 156,000 by 2030/31¹⁵². The NHS struggles to recruit and retain staff and the impacts of Covid-19 have intensified this challenge. Workers leaving the NHS due to health and a better work life balance are now the most common and both have risen significantly since the pandemic. Staff satisfaction survey results show reducing numbers of NHS workers are happy with the level of their pay and staffing levels¹⁵³.

The social care sector is also growing and vacancies within this sector have risen over the last decade, as of 2021/22 there were 165,000 vacancies. Jobs in adult social care are predicted to grow by 27% between 2021 – 2035 which is an additional 480,000 posts¹⁵⁴. The sector also has difficulties in the recruitment and retention of staff with pay and working conditions the most common reasons. Maintaining staff morale and accessing agency staff has become more challenging for adult social care providers¹⁵⁵.

The staffing challenges within health and social care are a concern given the increasing demand for the services due to an aging population. The recently published NHS Long Term Workforce Plan¹⁵⁶ focuses on substantially increasing education and training via academic and technical routes, retaining staff by providing a more supportive and flexible work environment, and by reforms to increase productivity, improving education and training, and ensuring staff have the skills to use new technologies. The plan aims to fill the large number of vacancies across the NHS as well as increase the supply of workers to meet future demand through increases in university training places and apprenticeships (increasing the 7% of clinical training to 20% within the next 15 years).

¹⁴⁸ Thomas, C. 2021. The Disease of Disparity. [Available here.](#)

¹⁴⁹ [Available here.](#)

¹⁵⁰ ONS. 2021. Business Register and Employment Survey. [Available here.](#)

¹⁵¹ DfE. 2023. Local Skills Dashboard. [Available here.](#)

¹⁵² The Health Foundation. 2022. NHS workforce projections 2022. [Available here.](#)

¹⁵³ The Kings Fund. 2023. NHS Workforce. [Available here.](#)

¹⁵⁴ Skills for Care. 2022. The state of adult social care sector and workforce England. [Available here.](#)

¹⁵⁵ Department for Health and Social Care. 2021. Adult social care workforce survey. [Available here.](#)

¹⁵⁶ [Available here.](#)

HEALTH AND SOCIAL CARE STUDENTS

Nearly a third of learners at Sheffield Hallam University are on courses connected to health and it is one of the largest providers of health care workers in the country.

Table 43 CAH Level 1 Learners in Sheffield and England.

HE provider 2021/22	Sheffield Hallam University	The University of Sheffield	England
Medicine and dentistry	0	2,225	55,720
Subjects allied to medicine	8,085	2,950	267,145
Biological & sports sciences	1,515	1,190	83,070
Psychology	1,495	1,235	105,230
Total health-related students	11,095	7,600	
Total number of students	35,535	30,860	

Source: Higher Education Statistics Agency

Learners need to take the right pathways into university healthcare courses and A Levels relating to STEM are one option. South Yorkshire has a lower-than-average percentage of students entered for 1 or more STEM subjects at A Level (43% compared to 47.4% nationally) and 2 or more STEM subjects at A Level (26.4% compared to 29.7% nationally). At 38.9% Doncaster has the lowest percentage of A Level students entered for 1 or more STEM subjects in South Yorkshire and the lowest entered for 2 or more STEM subjects (20.9%) – both of which have reduced since 2017/18 whereas across the rest of South Yorkshire there have been small increases. Sheffield has significantly higher levels of A Level students entered STEM subjects which are above national averages with 50.1% taking 1 or more STEM subjects and 33% 2 or more. Barnsley and Rotherham also fall below the South Yorkshire and England average for students entered for 1 or more STEM subjects and Rotherham also falls below the average for those entered 2 or more STEM subjects whereas Barnsley is marginally over the South Yorkshire average but under the national level.

Table 44 A Level entries in STEM subjects (state-funded schools and colleges)

		2017/18	2018/19	2019/20	2020/21	2021/22	% Change
Barnsley	Number of students	376	415	418	455	476	-26.6%
	% entered for 1 or more STEM subjects	38.8%	42.20%	38.3%	40.4%	41.4%	-6.7%
	% entered for 2 or more STEM subjects	25.3%	28.90%	25.4%	26.6%	26.5%	-4.7%
	% not entered for a STEM subject	61.2%	57.80%	61.7%	59.6%	58.6%	4.2%
Doncaster	Number of students	797	1,006	925	977	1,038	-30.2%
	% entered for 1 or more STEM subjects	40.4%	43.20%	41.3%	40.0%	38.9%	3.7%
	% entered for 2 or more STEM subjects	22.0%	25.40%	24.1%	22.7%	20.9%	5.0%
	% not entered for a STEM subject	59.6%	56.80%	58.7%	60%	61.1%	-2.5%
Rotherham	Number of students	1,183	1,048	988	967	992	16.1%
	% entered for 1 or more STEM subjects	39.3%	37.4%	41.1%	42.2%	41.4%	-5.3%
	% entered for 2 or more STEM subjects	23.6%	23.9%	25.6%	29.1%	25.2%	-6.8%
	% not entered for a STEM subject	60.7%	62.6%	58.9%	57.8%	58.6%	3.5%
Sheffield	Number of students	1,705	1,838	1,918	1,976	2,088	-22.5%
	% entered for 1 or more STEM subjects	50.0%	52.1%	50.3%	52.1%	50.1%	-0.2%
	% entered for 2 or more STEM subjects	31.2%	34.2%	33.1%	32.80%	33%	-5.8%
	% not entered for a STEM subject	50.0%	47.9%	49.7%	47.9%	49.9%	0.2%
South Yorkshire	Number of students	4,061	4,307	4,249	4,375	4,594	-13.1%
	% entered for 1 or more STEM subjects	42.1%	43.7%	42.8%	43.7%	43.0%	-2.0%
	% entered for 2 or more STEM subjects	25.5%	28.1%	27.1%	27.8%	26.4%	-3.4%
	% not entered for a STEM subject	57.9%	56.3%	57.3%	56.3%	57.1%	1.4%
All Students (England)	Number of students	260,494	260,208	261,809	267,487	283,754	-8.9%
	% entered for 1 or more STEM subjects	46.8%	47.8%	47.9%	48.6%	47.4%	-1.3%
	% entered for 2 or more STEM subjects	28.9%	30.3%	30.4%	31.1%	29.7%	-2.8%
	% not entered for a STEM subject	53.2%	52.2%	52.1%	51.4%	52.6%	1.1%

Source: DfE A Level statistics by region and subject

There are gender differences within A Level STEM take up, with most entrants being male and this gap is consequently reflected within STEM careers. Stakeholders highlighted how this funnelling into STEM begins at a much younger age with females deciding early on, some suggested primary school, that STEM careers were 'not for girls'.

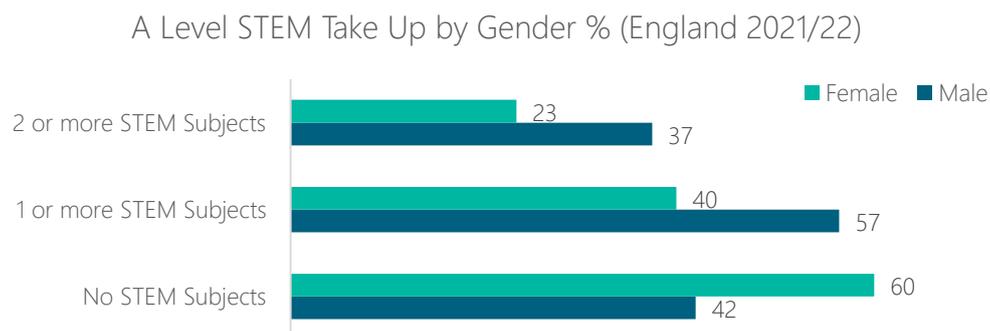


Figure 57 A Level STEM subjects by Gender. Source: DfE A Level and other 16 to 18 results 2021-22

Without STEM A Levels, many students will be unable to progress into the academic routes on their next career step. Importantly, there are other pathways into healthcare including apprenticeships and adult education. As noted in section 3.3 Health, Public Services and Care is the second largest adult education budget area with 4,180 enrolments for 2022-23 mainly at level 2 courses. Whilst it is positive adult learners are aligning with the health and social care demands, there must be clear pathways into higher level courses and apprenticeships are one route.

Of the 8,810 apprenticeship starts (2021/22), 2,350 (26.7%) were for Health, Public Services and Care which is the second highest after Business, Administration and Law. Over half were aged over 25, with only 320 under 19 years old. The highest proportion of apprenticeships for Health, Public Services and Care (960, 40.8%) were taken at the advanced level (L3 – equivalent to two A Level passes). This was followed by higher level (degree) apprenticeships which had 880 starts; again the second highest after Business, Administration and Law. Most Health, Public Services and Care apprentices were female – 1,910 compared to 440 males – and 2,100 were White. Apprenticeships in Science and Maths were low, and the small number was mostly taken by those aged over 25 and at the higher (degree) level.

Table 45 Health, Public Services, and Care Apprenticeship achievements and starts in SY 2021-22

2021/22			Total	U-19	19-24	25+
All Apprenticeships	Total	Achievements	3,460	940	1,090	1,430
		Starts	8,810	2,290	2,490	4,030
	Health, Public Services and Care	Achievements	830	130	230	470
		Starts	2,350	320	660	1,380
Intermediate Apprenticeship	Total	Achievements	1,050	440	290	320
		Starts	2,470	1,090	640	740
	Health, Public Services and Care	Achievements	230	40	70	120
		Starts	500	150	140	220
Advanced Apprenticeship	Total	Achievements	1,570	460	570	540
		Starts	3,860	1,110	1,240	1,500
	Health, Public Services and Care	Achievements	360	80	120	160
		Starts	960	160	320	480
Higher Apprenticeship	Total	Achievements	840	40	230	570
		Starts	2,490	90	610	1,790
	Health, Public Services and Care	Achievements	250	10	50	190
		Starts	880	10	200	680

Source: DfE Apprenticeship and Traineeship by Region and Subject

HEALTH INNOVATION IN SOUTH YORKSHIRE

In 2019, £1 in every £8 generated in South Yorkshire was from the health and wellbeing sector. This represents £3.34 billion of economic output and 12.3% of all GVA which is higher than the regional (10.5%) and national (8.6%) average shares¹⁵⁷. There are significant opportunities for South Yorkshire within health and social care as the sub-region is already home to several globally leading research centres such as the Advanced Wellbeing Research Centre¹⁵⁸ based at the Olympic Legacy Park (OLP). The OLP is developing a dynamic innovation ecosystem and Sheffield Hallam have recently announced plans for its new Health Innovation Campus¹⁵⁹ at the OLP. The Health Innovation Campus will include a new Advanced Health and Social Care Skills Centre with cutting edge facilities to help the health and social care providers train and upskill the workforce to 'meet the challenge of modern health'.

South Yorkshire's Innovation District (SYID) is focused on the development of two clusters based on its existing strengths in advanced manufacturing and advanced health and wellbeing which includes bio-medical, devices, and imaging, sports and child health, nanomaterial/devices, food manufacturing, proteins and packaging, and data science. In spring 2023, a Skills, Training and Business Support Plan was developed with extensive stakeholder engagement for SYID which has more detail on the opportunities for South Yorkshire through health innovation¹⁶⁰. For example, health and social care innovators require support to develop their leadership and commercialisation skills as well as access to a technically skilled workforce. A strong pipeline of future talent is essential for the success of health innovation and that young people and adults are aware of the opportunities and pathways to them.

The health innovations in South Yorkshire could be used to tackle the health inequalities and improve life quality discussed earlier and this is a focus for stakeholders in the sub-region. Moreover, it can be a driver of economic growth and help to address some of South Yorkshire's deep-rooted inequalities.

5.4 KEY CHALLENGES AND OPPORTUNITIES FOR SOUTH YORKSHIRE

Digital jobs bring opportunities with employment in South Yorkshire's digital sector is projected to grow by 8.2% between 2023 – 2035. Digitisation is occurring across the labour market with 82% of online job vacancies having digital skills as an essential requirement. However, there are also risks with **13% of Doncaster jobs are at a high risk of automation**, as are 9.3% in Barnsley and 7.6% in Rotherham, compared to 7% nationally. There is a need to continue to upskill digitally to ensure everyone has at least basic digital skills and future reskilling will be required for those workers at greatest risk from automation.

There are national and local **digital skills gaps**. 72% of surveyed employers (for LSIP 2023) felt their employees would benefit from external training for data skills and social media/digital marketing. South Yorkshire employers report a need for general office software skills, security, privacy and GDPR and social media/digital marketing.

South Yorkshire needs a stronger and more **diverse digital talent pipeline**. Across digital provision there is a significant gender divide with more male entrants than female which reduces the diversity within the

¹⁵⁷ Kada Research. 2022. SYMCA Health and Wellbeing Assets Mapping Study.

¹⁵⁸ [See here](#) for more information.

¹⁵⁹ [See here](#) for more information.

¹⁶⁰ Kada Research. 2023. SYID Skills, Training and Business Support Plan.

digital workforce. There are small numbers of computing A level students and ICT apprentices in South Yorkshire. In HE, computing learners have increased steadily in recent years however, at a weaker rate than nationally. The growth in computing postgraduates shows the pipeline for more advanced digital skills is developing locally.

Transitioning to **net zero** could **deliver £2.8 billion annually in benefits** for South Yorkshire yet significant co-ordinated and collaborative action, and investment, is required. Workplaces, homes, and infrastructure requires adaption for South Yorkshire to become net zero by 2041. Two-thirds of South Yorkshire homes are rated below EPC C and the sub-region has higher than average levels of fuel poverty.

A greener economy is a **more productive** one which provides workers an average salary £12,640 higher than the South Yorkshire average. In 2019, there were 3,900 LCREE workers (1% of workforce) in South Yorkshire and between 2019 – 2021 the most in demand green skill was environmental protection and processes. In the short- and medium-term **insulation** and **heat pumps** are South Yorkshire's biggest opportunity but skills gaps in the workforce must be addressed. In the long-term the development of the **hydrogen industry** in South Yorkshire is a prime opportunity.

South Yorkshire residents not only **live shorter lives** than the national average but fewer in 'very good' or 'good' health. There are significant health challenges and inequalities with a gap of over ten years in life expectancy between the top and worst performing wards. **Health inequalities** are shaped by social, economic and environment factors which will need to be addressed to improve South Yorkshire's health.

At 16.1% of the total workforce (93,000 workers) South Yorkshire's **health and social care sector** is larger than regional and national averages. Between 2023 and 2035 the health and social care sector is **predicted to grow by 15.1%** which is higher than the national average (9%). Online job adverts for healthcare were the largest group as of December 2022 with care assistants and nurses particularly in demand. There are significant **staffing shortages** nationally which are growing as employers struggle to recruit and retain staff (due to pay and working conditions).

There are 18,695 university students on health-related courses (2021/22), 4,180 adult learners (health, public services, and care), and 2,350 health, public services and care apprenticeship starts (2021-22). A Level STEM students are below the national average sub-regionally, however above average in Sheffield.

6 THE PLACE FOR IDEAS, ENTERPRISE, AND BETTER BUSINESS

This section looks at the importance of ideas and enterprise to the future of the South Yorkshire economy, and the skills which will be required to boost innovation and accelerate productivity growth in the region. It also considers the skills implications of a drive for 'better' business, delivering positive social, environmental, and economic change across South Yorkshire.

The recent announcement of South Yorkshire becoming the first Investment Zone further highlights the importance of ideas, innovation, and enterprise for the sub-region.

6.1 INNOVATION

Inclusive innovation: Making innovation inclusive and increasing diversity can lead to greater creativity and better outcomes with innovation better meeting the needs of individuals and communities. There is a lack of inclusion and diversity in some parts of the South Yorkshire workforce, which is considered at the end of this chapter.

THE IMPORTANCE OF IDEAS AND INNOVATION

Ideas and innovation are crucial to the future success of the South Yorkshire economy. Innovation has a transformative effect on economies (over half of productivity growth between 2000 and 2008 was due to innovation) and is vital for economic growth and increased productivity, creating more and better-paid jobs.¹⁶¹ The Strategic Economic Plan (SEP)¹⁶² defines innovation as "the process of creating value from ideas": developing new products and services, capturing a share of new and emerging markets, creating jobs and economic growth, and delivering benefits for society. It notes that in every economy around the world the most innovative firms and industries are also the most productive. In a knowledge-based economy, investment in ideas and innovation – intangible capital – complements investment in physical capital (machines, housing, and infrastructure) and human capital (knowledge, skills, and experiences of the workforce). Ideas and innovation have an increasingly important part to play in driving productivity, growth, and prosperity.¹⁶³

¹⁶¹ [UK innovation strategy \(publishing.service.gov.uk\)](https://www.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/614442/uk_innovation_strategy.pdf)

¹⁶² [SCR SEP Full Draft Jan 21.pdf \(southyorkshire-ca.gov.uk\)](https://www.southyorkshire-ca.gov.uk/media/10000/SCR_SEP_Full_Draft_Jan_21.pdf)

¹⁶³ Haskel, J., Westlake, S. 2018. *Capitalism Without Capital: The Rise of the Intangible Economy*. Princeton University Press.

The Place for Ideas, Enterprise, and Better Business Headlines



Higher Education Institutions, Catapults and Research and Technology Organisations in South Yorkshire R&D investment is nearly three times the UK average per capita level. Yet business spend on R&D in South Yorkshire is below the national average.



44% of South Yorkshire employers have difficulties finding applicants with management and leadership skills. This ranges from 81% of Barnsley employers to 27% of employers in Doncaster.



South Yorkshire's supply of workers for innovation is limited by lower-than-average qualification levels, L2 English and maths performance, and fewer learners taking L3 STEM related subjects.



If 25% of low paid workers in South Yorkshire were moved up to the Living Wage, the benefit to the economy would equate to £29m per annum.



Across South Yorkshire there is considerably lower business density than regional and national averages.



Sheffield is the only South Yorkshire local authority to have increased the disability employment rate since 2019 (by 11.6%) and substantially more than regionally (2.9%) and nationally (3%).



Rotherham performs best in South Yorkshire on ONS job quality measures with five indicators above the national average, and Barnsley records the fewest with two.



The employment gap between males and females has reduced from 8.6 percentage points in 2018 to 5.9 points in 2022 in South Yorkshire, with more women entering the workplace since the pandemic.



Of the 659 Living Wage accredited employers in Yorkshire and Humber, approximately 273 are in South Yorkshire which accounts for 0.7% of the business base.



There is a 20-percentage point gap between the working age employment rate of White ethnic groups (75.4%) and people from a Minority Ethnic Background¹ (55.7%).

¹ This is a combination of all non-white ethnic groups.

Stakeholders consulted as part of this research highlighted the importance of innovation as a driver for the labour market and skills agenda, and the importance of skills to accelerate innovation. This close relationship between skills and innovation is recognised in the Skills, Training and Business Support Plan recently developed for the South Yorkshire Innovation District.

SOUTH YORKSHIRE'S INNOVATION PERFORMANCE

South Yorkshire has two excellent universities with world-class translational R&D assets, which have been successful in attracting very high levels of R&D funding from Innovate UK. Investment in R&D through the higher education institutions, Catapults and Research and Technology Organisations (RTOs) is five times that of some comparator regions (£400m for South Yorkshire since 1999 from Innovate UK, compared to £82m for Greater Manchester), equating to a per capita investment nearly three times the UK average (£222 per capita in South Yorkshire compared to £84 per capita in the UK). Data from the UK Innovation Survey¹⁶⁴ indicates that across all sectors and using a broad definition of 'innovation', 57.5% of South Yorkshire businesses are classified as innovation active (the second highest in the UK), and the sub-region has some good examples of applied research and a high propensity for product innovation amongst SMEs.

However, R&D expenditure by South Yorkshire businesses is considerably below the national average (£108 per head compared to £747 in England and Wales) and levels seen in the other Core Cities, with business spend on R&D in South Yorkshire less than half of the per capita level in Greater Manchester (43%), and less than two-thirds of the West Yorkshire per capita level (62%) as well as below all the comparator areas and the England and Wales average, as shown in figure 58, below¹⁶⁵. Much South Yorkshire business investment in innovation is internally focussed and delivered, resulting in incremental improvement, but not the translational research necessary to lead to fast growth. This represents a significant lost opportunity in terms of economic output and productivity, which must be addressed if South Yorkshire is to accelerate the rate of economic growth.

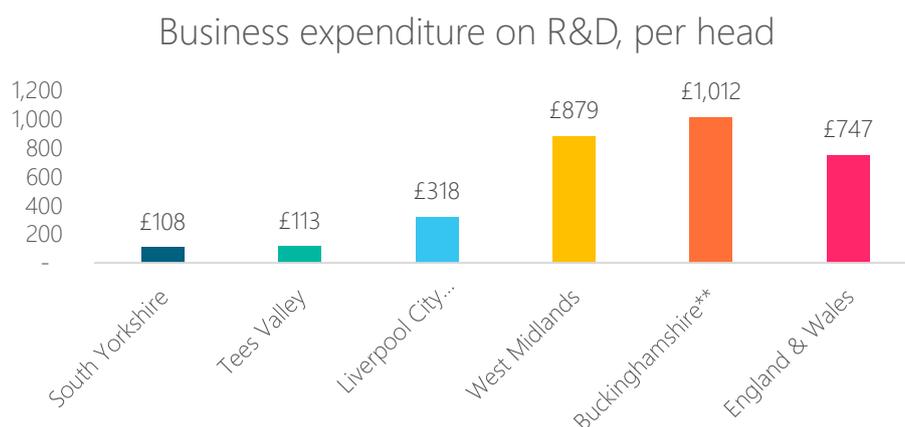


Figure 58 R&D Business Expenditure. Source: Expenditure on R&D, by sector of performance and NUTS 2 region, 2017 and ONS Population Estimates Note *NUTS 2 geography is Merseyside rather than Liverpool City Region and **Berkshire, Buckinghamshire and Oxfordshire rather than Buckinghamshire.

¹⁶⁴ BEIS. 2021 UK Innovation Survey.

¹⁶⁵ Expenditure on R&D, by sector of performance and NUTS 2 region. 2017.

Despite this relative under-performance on business-led innovation compared to other areas, future employment growth in South Yorkshire is projected to be driven by technology and innovation. The number of science, research, engineering and technology professionals in South Yorkshire is expected to rise by 17.4% by 2035 (the second fastest percentage increase after the health and social care associate professionals occupational group), demonstrating technology's expected importance in driving employment growth. This rate of growth is slightly slower than is expected nationally (+17.7% in England over the same period), and South Yorkshire starts from a lower base with 7.1% of those in employment in the sub-region currently employed as science, research, engineering, and technology professionals, compared to 8.1% in England.¹⁶⁶

The SEP sets out an ambition to intensify innovation activities to drive economic development in South Yorkshire, recognising that given its importance to productivity growth and future prosperity, innovation cannot be left to chance. Technological advances will continue to drive the need for digital skills such as with the increased use of AI, machine learning and data analytics (as discussed in chapter five). The 2019 Employer Skills Survey¹⁶⁷ found 40% of South Yorkshire employers anticipated new skills needs due to the adoption of new technologies. Skills interventions therefore have an important role to play in supporting a step change in innovation activity in South Yorkshire.

INNOVATION AND SKILLS

Research by the Organisation for Economic Cooperation and Development (OECD)¹⁶⁸ found that a wide variety of skills contribute to innovation, with individuals, businesses and industries drawing on diverse skills at different times, including:

- Basic skills (reading and writing)
- Academic skills
- Technical skills
- Generic skills such as problem-solving and 'soft' skills such as openness and leadership
- Managerial and entrepreneurial skills, and
- Creativity and design

Whilst soft skills such as communication and teamwork are increasingly required for innovation, technical skills remain important and adaptability and flexibility are crucial for workers who will need to develop new skills throughout their working lives, including in areas such as environmental sustainability which is likely to impact on a wide variety of sectors and occupations. The importance of basic skills to innovation reinforces the need for on-going efforts to reduce the number of people in the workforce who do not have good literacy and numeracy skills.

The wide range of skills which are relevant to innovation highlights the importance of creating "an environment that enables individuals to choose and acquire appropriate skills and supports the optimal use of these skills at work", rather than focusing on specific 'skills for innovation'. The OECD also highlights

¹⁶⁶ Annual Population Survey. Jan 2022 -Dec 2022.

¹⁶⁷ DfE. 2019. Employer Skills Survey. [Available here](#).

¹⁶⁸ OECD. 2011. Skills for Innovation and Research.

the importance of enabling people to upgrade their skills throughout their working lives, encouraging training at work to develop specific technical competencies and organising businesses and workplaces so that people can make best use of the skills they have, to support a more innovative environment.

Research undertaken by the World Economic Forum explores the drivers of industry transformation and the expected impact on skills.¹⁶⁹ The report highlights the impact of green transition, technological change, supply chain transformations and changing consumer expectations, with the adoption of new and frontier technologies and broadening digital access expected to drive organisational change and the need for innovation.

In response, businesses expect the importance of specific skills to their organisation to increase over the next five years. The skills with the greatest net increase in importance were creative thinking; analytical thinking; technological literacy; curiosity and lifelong learning; and resilience, flexibility and agility – all of which were said to be growing in importance by more than two-thirds of the major global businesses consulted.

HOW SOUTH YORKSHIRE PERFORMS ON THE SKILLS NEEDED FOR INNOVATION

The OECD research demonstrates that strong basic literacy and numeracy skills are vital for innovation. However, as shown in Chapter three, South Yorkshire has below average attainment of English and maths at Level 2 by the age of 19 – with around three in ten young people failing to achieve this standard. Attainment at this level is a critical building block for meeting the demands of technology development and adoption, and digitalisation – key aspects of innovation within South Yorkshire’s business base. It also impacts on young people’s options at Key Stage 4 (16) and Key Stage 5 (18). South Yorkshire has a lower-than-average proportion of young people in sustained positive destinations at Key Stage 4, impacting on the development of the skills pipeline needed to support innovation. Take-up of Level 3 STEM options is also below the national average in South Yorkshire (see Chapter five), for example the proportion of A Level students taking two or more STEM subjects is 26% compared with 30% nationally, and 57% of South Yorkshire’s A Level students do not take any STEM subjects compared with 53% in England.

Low attainment levels feed into below average qualification levels amongst the working age population, with all areas within South Yorkshire except Sheffield having a lower proportion of the population qualified to Level 4+ (degree level), and a higher-than-average proportion of adults having no or low qualifications than the national average (see Chapter three). This leaves the workforce less equipped to participate in and benefit from innovation than is the case in other areas. Data from the most recent Employer Skills Survey¹⁷⁰ shows that employers in South Yorkshire were more likely to identify skills gaps in their current workforce relating to basic internet skills (16% of employers with skills gaps, compared to 11% in England) and ‘self-management’ skills (managing own time and prioritising tasks, 70% of employers with skills gaps compared to 68% in England).

¹⁶⁹ World Economic Forum. 2023 The Future of Jobs Report 2023. [Available here](#).

¹⁷⁰ Employer Skills Survey. 2019. [Available here](#).

South Yorkshire employers recognise the importance of the softer skills which are crucial to innovation, with research undertaken for the first Local Skills Improvement Plan (LSIP)¹⁷¹ finding that the following skills were viewed as important:

- Communication (90% of employers)
- Adaptability and Resilience (84% of employers)
- Collaboration (74% of employers)
- Critical thinking (74% of employers)
- Accessing, analysing, and synthesising information (63% of employers)

However, whilst most employers had a high regard for the technical and basic skills of their employees (with over half rating them '5' on a 1-5 scale where 5 was the highest rating), employers were less confident about the other skills needed for innovation with the proportion of employers rating the skills listed above as a '5' ranging from 39% for adaptability and resilience, to 24% for critical thinking skills. Employers were considerably less likely to rate their staff highly for leadership skills (25% ranked '5'), innovation skills (22%) and entrepreneurialism (16%).

Nesta (2016) found that businesses which use both arts and STEM skills outperform those using only arts or science skills stating that "the broader the set of skills a firm uses, the higher its level of innovative performance and future growth". The report showed the combination of arts and STEM skills in businesses produced higher employment and sales growth led to businesses being more likely to commercialise "radical innovations".¹⁷² Mapping undertaken for SYMCA¹⁷³ has found that around 31,000 individuals are part of the creative workforce in South Yorkshire (including freelancers), working across five creative supply chains: content; experiences; originals; services; and software, indicating that there is a significant creative skills base in the sub-region. The report recognised the importance of "cross-over" or "fusion" skills combining creative and technical disciplines, which could be crucial for innovation across South Yorkshire's industries, as well as within the creative and digital sectors.

A mapping study of health and wellbeing assets in South Yorkshire for SYMCA¹⁷⁴ found certain skills for innovation within health were lacking such as those for commercialisation and business development, and regulatory as "*the innovations tend to be a step ahead of the regulations*" in terms of the use of AI, VR, and machine learning. The regulation of AI more widely has recently become a national and global issue given the pace of its advancement and adoption and the UK will host the first global AI safety summit later in 2023.¹⁷⁵

INCLUSIVE INNOVATION

The UK Innovation Strategy highlights the importance of inclusive innovation within its Pillar 2 – People: making the UK the most exciting place for innovation talent. Its aim of making innovation open to everyone reflects the benefits that diversity can bring through increased creativity and innovation, as well

¹⁷¹ Local Skills Improvement Plan: South Yorkshire Skills Accelerator. 2022.

¹⁷² Nesta. 2016. The Fusion Effect: The Economic Returns to Combining Arts and Science Skills [Available here](#).

¹⁷³ The Fifth Sector. 2021. Creative and Cultural Industries Data Research and Mapping. [Available here](#).

¹⁷⁴ Kada. 2021. South Yorkshire Health and Wellbeing Assets Study.

¹⁷⁵ Department for science, innovation and technology. 2023. Tech entrepreneur Ian Hogarth to lead UK's AI foundation model taskforce. [Available here](#).

as a commitment to ensuring that people from disadvantaged groups can participate in innovation at the same rate as people from better-off backgrounds.

The UK Knowledge Transfer Network defines an ‘inclusive innovation’ as one that places equality, diversity, and inclusion at the heart of the approach to designing and developing a product, process, or service. Inclusive innovation is often focussed on addressing a challenge identified by a community or disadvantaged group, and the response co-designed with them to ensure it meets their needs. Inclusive innovation in South Yorkshire is also about ensuring equality of opportunity and spreading the benefits of innovation to a wider range of actors. Achieving inclusive innovation means doing things differently: “The effective practice of inclusive innovation requires effort on the part of a range of organisations...to proactively involve more people, particularly from underrepresented groups in the design, delivery and diffusion of innovation activity.”¹⁷⁶

The sections within 5.3 detail the lack of diversity and inclusion in terms of ethnicity, gender and disability, in some parts of South Yorkshire’s workforce and the importance of addressing this.

6.2 ENTERPRISE

THE IMPORTANCE OF ENTERPRISE

The Levelling Up White Paper reiterates the importance of enterprise to successful economies: “A vibrant, high wage, high skill economy requires above all unleashing private investment, encouraging enterprise and supporting a dynamic business sector that can create jobs, nurture skills and invest in innovation...Through this mix of human, physical, intangible and financial capital, the business sector generates productivity improvements, creates jobs and boosts local living standards.”¹⁷⁷

The World Economic Forum states that “Entrepreneurship plays a vital role in driving economic growth and job creation. It is the engine that propels innovation, generates new businesses, and brings fresh products and services to the market.” New businesses bring dynamism to an economy as they start-up, establish themselves and grow, meaning that existing businesses must remain competitive to survive. For the South Yorkshire economy to thrive, it needs a good supply of entrepreneurial skills that will stimulate and sustain dynamism.

South Yorkshire stakeholders were keen to highlight the importance of entrepreneurialism within a young person’s education as along with improved financial understanding, it increased problem solving, communication, teamwork, creativity, and critical thinking skills. Examples were given of project-based activities which developed engineering students’ enterprise skills which boosted their confidence and highlighted new potential pathways in the future.

Enterprise education can provide children and young people with increased financial awareness and money management skills with national survey evidence¹⁷⁸ of 15- to 18-year-olds finding 82% wanted to learn more about money and finance but only 62% receiving some form of financial education in school. These national findings align with conversations had locally in South Yorkshire with young people who wanted to be more financially literate to help them navigate adulthood (such as in terms of tax, mortgages, and wider money management).

¹⁷⁶ Catapult. (June 2022). *Inclusive Innovation in the UK*.

¹⁷⁷ Department for Levelling Up, Housing and Communities. 2022. *Levelling Up the United Kingdom*, [Available here](#).

¹⁷⁸ LIBF. 2023. *Young persons money index*. [Available here](#).

SOUTH YORKSHIRE'S ENTERPRISE PERFORMANCE

There are over 41,000 businesses in South Yorkshire, of which 36,000 are microbusinesses employing nine people or less, with 4,000 small businesses (10-49 employees), 700 medium-sized (50-249 staff) and 180 large businesses employing over 250 people. Business density – the number of businesses per 10,000 population – is considerably lower in South Yorkshire than in Yorkshire and Humber or England as a whole, with fewer than 300 businesses per 10,000 population across Barnsley, Rotherham, and Sheffield, compared to 349 per 10,000 at regional level and 426 per 10,000 in England. Doncaster has a higher density with 313 businesses per 10,000 population. Since 2018, all areas within South Yorkshire have seen an increase in business density and at a greater rate than the national average (9.2% growth in South Yorkshire, compared to 2.8% nationally).

Table 46 Businesses per 10,000 population, 2018-2021

	2018	2019	2020	2021	% Change
Barnsley	258	260	265	283	9.60%
Doncaster	283	290	299	313	10.50%
Rotherham	269	269	281	289	7.30%
Sheffield	270	273	273	295	9.10%
South Yorkshire	271	274	279	296	9.20%
Tees Valley	256	263	260	261	2.20%
Liverpool City Region	274	273	276	284	3.90%
West Midlands	295	303	310	312	6.00%
Buckinghamshire	569	573	572	567	-0.40%
Yorkshire and The Humber	334	338	342	349	4.50%
England	414	419	423	426	2.80%

Source: ONS UK Business Counts

Regarding churn within the business base, all South Yorkshire areas have a higher rate of business births and all but Sheffield have a higher rate of business deaths as a proportion of the business base than regionally or nationally (see table below). However, to some extent this is distorted by the relatively small existing business base. When business births and deaths are compared to the population, a less dynamic picture of the enterprise base in South Yorkshire emerges. Liverpool City region is even less dynamic, with a net loss of 1 business per 10,000, in contrast despite a high rate of deaths, Tees Valley has added 24.2 businesses per 10,000.

Table 47 South Yorkshire business births and deaths 2021

	As % of business base		Per 10,000 population	
	Births	Deaths	Births	Deaths
Barnsley	14.10%	12.50%	43.7	38.8
Doncaster	15.80%	13.60%	56.2	48.4
Rotherham	13.20%	13.30%	42.6	43
Sheffield	14.50%	9.90%	48.6	33.1
South Yorkshire	14.50%	11.80%	48.3	39.5
Tees Valley	10.90%	9.40%	174.1	149.9
Liverpool City Region	8.40%	7.90%	19.7	18.6
West Midlands	14.20%	12.80%	107.5	97.1
Buckinghamshire	9.90%	9.40%	55	52
Yorkshire and The Humber	12.30%	10.90%	45.6	40.2
England	12.50%	11.20%	57.4	51.4

Source: ONS Business Demography 2021

High growth enterprises¹⁷⁹ are important because they account for half of employment growth¹⁸⁰. South Yorkshire has fewer high growth firms than the national and regional average (0.3% of the business base in 2021 compared to 0.4% regionally and nationally). The divergence is more apparent when considering the number of high growth firms per 10,000 population, rather than as a percentage of the business base, with 1.1 high growth businesses per 10,000 across South Yorkshire as a whole, compared to 1.4 in Yorkshire and Humber and 1.7 in England. There is a significant variation across South Yorkshire, ranging from 0.8 high growth businesses per 10,000 population in Barnsley and Rotherham, to 1.0 in Doncaster and 1.4 in Sheffield.

Compounding the overall low rates of business density, South Yorkshire has a lower proportion of start-up businesses which survive their first year of trading than the England average (2.8 points below), but longer-term survival is better, outperforming the national average for the following three years with the gap steadily increasing to 1.5 percentage points in year four. Despite a higher-than-average survival rate for businesses in year one in Liverpool, this success diminishes over time, and fewer than average businesses survive to five years (3.6 points below). In contrast, Buckinghamshire businesses are more likely to fail in their first year but are then much more likely than average to operate to five years (6.2 points above).

¹⁷⁹ A 'high growth enterprise' is a company which is defined by the ONS as firms with at least 10 staff that has grown at least 20% annually for three years. Note this is a 'high bar' since only 10,620 businesses in England met this threshold in 2020, see [Analysis of high growth enterprises in the United Kingdom by geography & UK SIC 2007 section](#) – 2020, (2022), ONS

¹⁸⁰ The vital 6 per cent How high-growth innovative businesses generate prosperity and jobs- 2009, NESTA

Table 48 Business survival rates in South Yorkshire

	1-year survival (%)	2-year survival (%)	3-year survival (%)	4-year survival (%)
Barnsley	94.4	71.6	54.3	42.6
Doncaster	94.3	63.6	45.1	35.6
Rotherham	95.0	71.3	56.3	46.3
Sheffield	95.5	71.8	53.8	44.9
South Yorkshire	92.5	71.9	55.0	46.0
Tees Valley	94.5	72.5	54.6	44.3
Liverpool City Region	95.6	74.3	49.3	40.9
West Midlands	95.0	70.0	52.9	43.6
Buckinghamshire	95.0	76.2	60.4	50.7
Yorkshire and The Humber	94.9	71.6	54.2	45.4
England	95.3	70.8	53.6	44.5

Source: ONS Business Demography Business Survival for 2017 (Data released 2022)

Overall South Yorkshire's enterprise performance indicates a low enterprise economy, with a business base which is too small relative to the size of the population. This is likely to be contributing to low rates of productivity in the sub-region, with a lack of dynamism because of lower rates of competition within the economy than seen elsewhere. Encouraging greater levels of entrepreneurship is an important priority for skills policy.

SELF-EMPLOYMENT IN SOUTH YORKSHIRE

Recent years have also seen a significant change in the number of people who are self-employed.¹⁸¹ From the 1970s onwards, the number of people who are 'solo self-employed' in the UK labour market rose considerably and this group accounted for 45% of jobs growth between the 2008 financial crisis and the onset of the Covid-19 pandemic. There were 75,000 self-employed workers in South Yorkshire in 2019, although rates of self-employment were considerably lower than in England across all four local authority areas. Pre-pandemic, self-employed workers were more likely to report higher levels of job satisfaction and wellbeing than employees, although they earn less on average than employed workers and are more likely to be under-employed.

Since the pandemic, the number of self-employed workers has fallen considerably nationally, although the decline has been much less pronounced in South Yorkshire (except for Barnsley where the number fell by 3,000 or 1 in 5 of those self-employed in 2019). Elsewhere there have also been declines in self-employment, although most comparator regions have seen declines at a lower rate than the national average (excluding the West Midlands where the self-employed population has declined by 14.8 percentage points). This shift indicates that whilst self-employment can bring flexibility for workers, it also has additional risks and insecurities and for some is a fall-back option rather than a preference. ONS analysis shows that the most significant fall in self-employment came early in the pandemic with people re-classifying themselves as 'employed' on the basis that they paid PAYE and were therefore eligible for

¹⁸¹ Institute for Fiscal Studies, [What does the rise of self-employment tell us about the UK labour market?](#), 2020

furlough payments.¹⁸² In 2021, there was a further fall in self-employment as a significant number of older self-employed workers became economically inactive (i.e. retired or withdrew from the labour market).

Table 49 Change in the number and percentage of people who are self-employed 2019-2022

	Number		% of people aged 16+		Change	
	2019	2022	2019	2022	Number	%
Barnsley	14,100	11,100	12.10%	9.50%	-3,000	-21.30%
Doncaster	16,200	15,000	11.60%	10.70%	-1,200	-7.40%
Rotherham	13,900	13,500	11.90%	11.20%	-400	-2.90%
Sheffield	30,800	31,400	10.70%	10.80%	600	1.90%
South Yorkshire	75,000	71,000	6.60%	6.20%	-4,000	-5.30%
Tees Valley	34,300	33,500	6.40%	6.20%	-800	-2.30%
West Midlands	167,200	142,500	7.30%	6.20%	-24,700	-14.80%
Liverpool City Region	88,300	79,400	7.00%	6.30%	-8,900	-10.10%
Buckinghamshire	49,400	46,800	11.60%	10.50%	-2,600	-5.30%
Yorkshire and The Humber	345,100	310,900	13.40%	11.90%	-34,200	-9.90%
England	4,295,900	3,721,000	15.60%	13.40%	-574,900	-13.40%

Source: Annual Population Survey

SKILLS FOR ENTERPRISE

A recent report by the All Party Parliamentary Group for Entrepreneurship states that: “ensuring that small businesses are operating as productively as possible will be especially important if we are to stand any chance of successfully achieving economic growth”.¹⁸³ It is therefore important to ensure that people in South Yorkshire have the right skills to start, establish and grow more businesses, as well as to be more enterprising in their existing employment – demonstrating ‘intrapreneurship’.¹⁸⁴

The skills required by entrepreneurs vary according to the specific challenges and barriers to growth that they face. However, a review of the literature undertaken for the OECD¹⁸⁵ identified three main entrepreneurship skillsets, as illustrated below:

¹⁸² ONS, [Understanding changes in self-employment in the UK](#), 2022

¹⁸³ APPG Entrepreneurship, [Supporting SMEs Successfully](#), 2022

¹⁸⁴ MIT Management School (2018). Intrapreneurship Explained. Intrapreneurship is “acting like an entrepreneur within an established company. It’s creating a new business or venture within an organization. Sometimes that business becomes a new section, or department, or even a subsidiary spinoff.”

¹⁸⁵ OECD, [Entrepreneurship skills for growth-orientated businesses](#), 2012

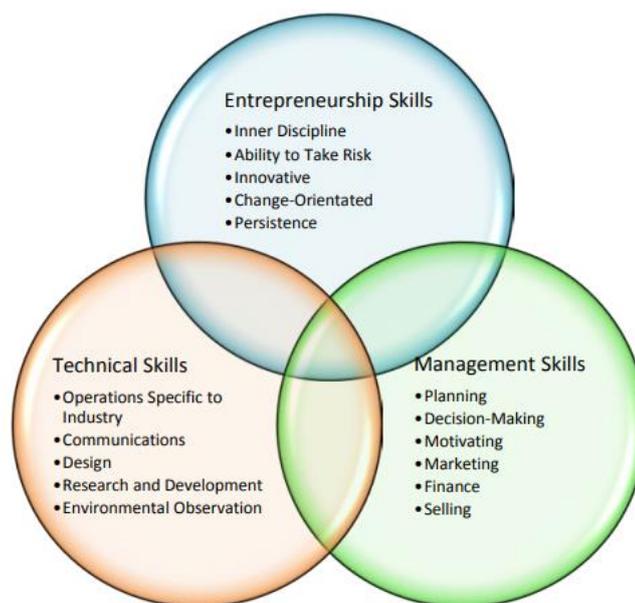


Figure 59 Entrepreneurship Skillsets. Source: OECD Entrepreneurship skills for growth-oriented businesses

Technical skills relate mainly to the specific industry in which the entrepreneur is active, whilst management skills are the skills needed to successfully run a business. Entrepreneurship skills relate to the development of an entrepreneurial mindset and learning to act in an entrepreneurial fashion which is not only beneficial for those starting new companies but creates value “in a range of contexts and environments, from the public sector, charities, universities and social enterprises to corporate organisations and new venture start-ups.”

As countries seek to recover from the economic impact of the Covid-19 pandemic, many are looking to invest in developing enterprise skills to boost business start-up, survival, and growth. This can include supporting existing and potential entrepreneurs through better skills programmes which increase their ability to develop a sustainable business, covering financial literacy, digital skills, and business acumen. The OECD Missing Entrepreneurs report¹⁸⁶ notes that “skills gaps in these areas are typically greater among entrepreneurs from under-represented and disadvantaged groups. A greater use of coaching can address these gaps by improving the relevance of support to individual needs, particularly those who face barriers to training programmes”.

Considerable investment is also being made in enterprise education, although another APPG Entrepreneurship report notes that there are no national strategies for enterprise education in England.¹⁸⁷ In 2010, the then Department for Children, Schools and Families produced guidance which defined enterprise education as enterprise capability (“the ability to be innovative, to be creative, to take risks and to manage them, to have a can-do attitude and the drive to make ideas happen”) supported by financial capability and business and economic understanding.¹⁸⁸

Skills for enterprise are particularly important in the aftermath of Covid-19, with many organisations needing to adapt to new ways of working, new markets, supply chains, processes, and develop new products and services. Business continuity and contingency planning has become an important skillset, and adaptability has been vital businesses have moved to homeworking and online delivery of services.

¹⁸⁶ OECD, *The Missing Entrepreneurs*, 2021

¹⁸⁷ APPG Entrepreneurship, *Entrepreneurship Education*, 2022

¹⁸⁸ DCSF, *A Guide to Enterprise Education*, 2010

Equipping people of every age with both the technical skills needed in the workplace and the commercial sense to identify opportunities, establish, and run a business is a key part of providing skills for enterprise.

SKILLS FOR ENTERPRISE IN SOUTH YORKSHIRE

Literacy and numeracy skills provide the base for the development of skills for enterprise and as noted previously, are a weakness for South Yorkshire. Employers in South Yorkshire also report (44%) that they have difficulties finding applicants with management and leadership skills. This is comparable with the England average. There are large variations within the sub-region with Doncaster reporting the lowest figure (27%) and Barnsley the highest (81%).

Leadership skills are important for creating a positive work culture and one in which learning is promoted and there is a need for a continuous 'learning culture' in the workplace which supports regular professional development in an open, holistic, and inclusive way. Leadership (or a failure of) can impact current skills needs and those of the future, therefore it is important employers have the leadership skills required to address unmet skills needs currently and create the right leadership and learning frameworks for the future.

However, as noted above, through the LSIP research only one-quarter of South Yorkshire employers rated the leadership skills within their workforce as '5' on a 1-5 scale, and only one-third of employers felt that entrepreneurialism was important within their workforce. Employers also noted the difficulties in accessing the innovation and leadership skills they required. There are also challenges with ensuring employers have the leadership skills to create the 'learning culture' for the business to adapt and thrive so that future employee development is not stifled.

As noted in Chapter one, stakeholders and young people expressed concern about the quality and relevance of what CEIAG is currently being provided, and the point in the school career at which young people access it, with many commenting that secondary school is too late and greater efforts need to be made to engage primary school children in age-appropriate enterprise-related activities. For example, Young Enterprise is an organisation promoting enterprise education for children and young people who run a national 'Fiver challenge' which encourages enterprise within primary school¹⁸⁹.

There is a plethora of careers- and enterprise-related activities which can lead to confusion for schools, duplication of activity and multiple similar asks being made of employers. The LSIP employer research¹⁹⁰ found the perceived lack of sector specific CEIAG was a skills barrier in South Yorkshire. In many sectors self-employment is the norm, yet this is often not considered within CEIAG to young people.

6.3 CREATING AND SUPPORTING BETTER BUSINESS

THE DRIVE FOR BETTER BUSINESS

The SEP commits to developing a stronger, greener, fairer, more productive region in South Yorkshire, "creating not just a bigger, but a better economy for all".¹⁹¹ This aligns with a wider shift in understanding of the role that business plays in society, with an increased focus not only on wealth creation but the contribution that businesses can make to addressing society's challenges including the UN's Sustainable

¹⁸⁹ Young Enterprise. More information [available here](#).

¹⁹⁰ Local Skills Improvement Plan: South Yorkshire Skills Accelerator, 2022.

¹⁹¹ SY SEP *ibid*

Development Goals. The UN's Global Compact asks companies to first "do business responsibly and then pursue opportunities to solve societal challenges through business innovation and collaboration."

In the light of trends including increased automation and the growing use of artificial intelligence, South Yorkshire businesses have a key role to play in driving up employment standards whilst improving levels of productivity, including through provision of relevant skills and training.

GOOD JOBS AND WAGES

The Covid-19 pandemic highlighted the importance of the roles of key workers including care workers, retail staff and delivery drivers, who are not always well-valued in the labour market. Whilst there will always be significant variation in earnings levels across firms, sectors and occupations, everyone should be able to access good quality work. Following work to define what is a 'good quality' job¹⁹², the ONS published analysis of job quality in the UK.¹⁹³ Eight indicators of job quality are assessed, the percentage of employees who report: satisfactory hours; overtime; desired contract; zero-hour contracts; low pay; career progression; employee involvement; union representation and workplace injury and illness.

Table 50 ONS job quality indicators

	Satisfactory hours (%)	Paid overtime (%)	Desired contract (%)	Not in low pay (UK) (%)	Not in low pay (local) (%)	Opportunities for career progression	Good employee involvement	Not a zero-hours contract (%)
Barnsley	82.5	18.4	98.1	44.1	52.5	40.1	46.8	96.8
Doncaster	82.0	20.2	97.5	46.3	56.8	50.8	47.7	97.8
Rotherham	84.3	14.2	98.4	51.9	59.3	57.1	52.7	94.7
Sheffield	86.0	12.2	96.2	56.9	59.6	54.5	57.4	96.6
South Yorkshire	83.7	16.3	97.6	49.8	57.1	50.6	51.2	96.5
Buckinghamshire	77.1	10.2	98.8	60.2	53.5	57.9	57.9	97.1
West Midlands	84.4	11.4	98.2	54.0	57.1	54.4	54.7	97.0
Liverpool City Region	84.7	13.1	98.1	58.8	63.1	50.5	51.0	97.1
Tees Valley	80.6	17.1	97.7	62.4	72.7	53.4	50.0	96.2
Yorkshire and the Humber	83.9	13.2	97.9	57.1	61.8	52.4	52.9	97.2
England	82.0	11.1	98.3	58.7	58.9	55.0	54.3	97.0

Source: Jobs quality indicators in the UK - hours, pay, contracts, opportunities, and involvement: Annual Population Survey 2021 Note – data only available at local authority, region and national level

Across all eight measures, Rotherham performs best in South Yorkshire with five indicators above the national average (employees reporting satisfactory hours, paid overtime, desired contract, not in low pay, and opportunities for career progression). Barnsley records the fewest measures above the national

¹⁹² Carnegie UK and RSA, [Measuring Good Work](#), 2018

¹⁹³ ONS, [Job quality in the UK – analysis of job quality indicators](#), 2021

average with just satisfactory hours and paid overtime – which have the strongest performance across South Yorkshire with all local areas meeting or exceeding the national average.

Over half of workers in South Yorkshire are in low pay¹⁹⁴ (UK) which is also highlighted in chapter four. Rotherham has a higher-than-average percentage of employees reporting good opportunities for career progression (57.1% compared to 55%) and Barnsley is the worst performer at 17 percentage points below Rotherham. Opportunities for career progression have important implications for upskilling in the workplace and in-work progression is an important way to increase salaries across South Yorkshire.

On paid overtime, Doncaster performs well compared to neighbouring local authorities and national figures, with 20.2% paid overtime compared to 11.1% nationally. Sheffield is the only South Yorkshire local authority to have higher percentage of employees reporting good employee involvement than the national average (57.4% compared to 54.3%) – an important factor in creating better workplaces. Rotherham (52.7%), Doncaster (47.7%), and Barnsley (46.8%) all fall below the England average.

As shown in Chapter four (low pay section), pay levels in South Yorkshire are lower on average than nationally or regionally, and in many of the comparator areas. This is closely linked to South Yorkshire’s poor productivity performance, and relatively high proportion of employment in ‘low pay sectors’ (defined as Wholesale and retail trade; repair of motor vehicles and motorcycles’, ‘Accommodation and food service activities’, ‘Administrative and support service activities’, ‘Residential care activities’ in the SEP and LIS Evidence Base).¹⁹⁵ There has been a significant increase in in-work poverty as measured by the number of people in-work claiming Universal Credit (UC). South Yorkshire experienced a rise of 116% of workers claiming UC between March 2020 and March 2023 from 19,942 to 43,051¹⁹⁶ which is lower than nationally (127% increase). The working with ‘no requirements’ (to look for extra work/increase hours) has experienced the largest percentage increase across the conditionality groups with the highest increase in South Yorkshire recorded in Sheffield (220%).

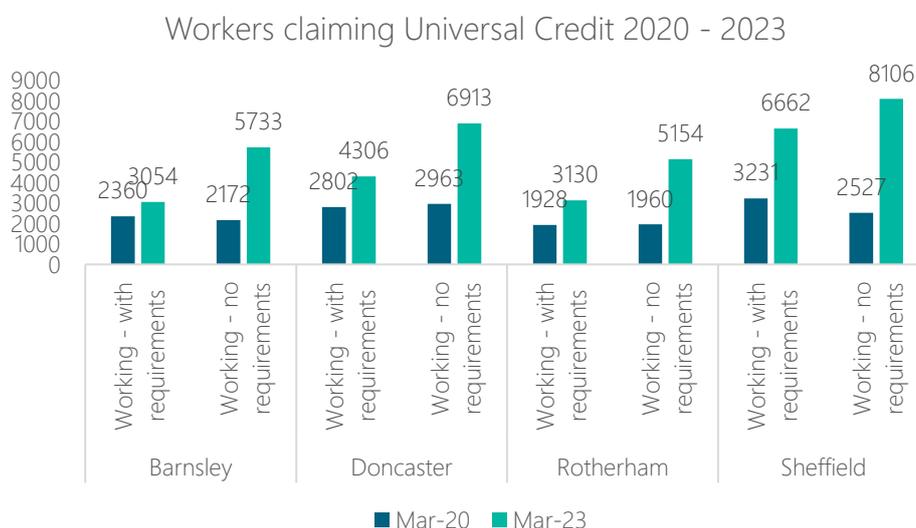


Figure 60 Workers claiming Universal Credit in South Yorkshire Source: DWP people claiming Universal credit March 2020 – March 2023.

¹⁹⁴ Defined here as earning less than two-thirds of the median pay of the UK

¹⁹⁵ SCR, SEP and LIS Evidence Base. 2019.

¹⁹⁶ DWP. 2023. People claiming Universal Credit. [Available here.](#)

The Living Wage Foundation¹⁹⁷ calculate the real living wage across the UK is £10.90 per hour, based upon the cost of living (based on household goods and services). This is 48 pence higher than the national living wage (statutory minimum wage for over 23s). Of the 659 Living Wage accredited employers in Yorkshire and Humber, 273 are in South Yorkshire¹⁹⁸. This accounts for 0.7% of the South Yorkshire business base which is a marginally higher percentage than for the whole of Yorkshire and Humber (0.3%) and is 3.4% of the 8,000 who are currently accredited in total nationally. Other organisations may be providing wages at or above the real living wage without being accredited. The Living Wage accreditation provides a way to monitor business practices and improve workers' wages to reduce low pay (which is high in South Yorkshire).

Research by The Living Wage Foundation¹⁹⁹ shows that paying the Living Wage can have a significant impact on the household incomes of low paid workers. More than one in three workers paid below the Living Wage stated they had skipped meals regularly for financial reasons and over four in ten stated that they had fallen behind on household bills, whilst being paid the Living Wage has a positive effect on people's standard of living, well-being, and gives greater financial resilience. The Foundation has calculated that if 25% of low paid workers in South Yorkshire were moved up to the Living Wage, the benefit to the economy would equate to £29m per annum, with wider benefits linked to increased productivity, a narrowing of the gender pay gap and positive impacts on health and wellbeing.

INCLUSION AND DIVERSITY IN SOUTH YORKSHIRE BUSINESSES

South Yorkshire's SEP highlights the importance of diversity within the workplace with companies that have diverse leadership more successful. Analysis²⁰⁰ found companies who were more diverse in terms of gender and ethnicity had a larger likelihood of financial outperformance compared to those who were the least diverse. Yet the authors note progress in increasing diversity particularly within leadership roles has been slow across the globe. This section considers ethnicity, gender, and disability.

In South Yorkshire there is a 20-percentage point gap²⁰¹ between the working age employment rate of White ethnic groups (75.4%) and people from a Minority Ethnic Background²⁰²(55.7%) – this is commonly referred to as the ethnicity employment gap. There are variations across ethnic groups within the local authorities of South Yorkshire as the table below shows, with a very low rate of employment amongst people who identify as having a mixed ethnic background in Doncaster (30.3%), and low rates of employment amongst the Pakistani / Bangladeshi group (41.5%) and Black group (61.7%) in Sheffield. Amongst the White population, employment rates are below the national average (77.2%) in Barnsley (74.1%), and Rotherham (72.6%).

¹⁹⁷ Living Wage Foundation. 2023. What is it? [Available here](#).

¹⁹⁸ Living Wage Foundation. 2023. Accredited Living Wage Employers. [Available here](#).

¹⁹⁹ The Living Wage Foundation. 2021. The Living Wage Dividend: maximising the local economic benefits of paying a living wage. [Available here](#).

²⁰⁰ McKinsey. 2020. Diversity wins: how inclusion matters. [Available here](#).

²⁰¹ Annual population survey. Jan to Dec 2022.

²⁰² This is a combination of all non-white ethnic groups.

Table 51 Employment rates by ethnicity in South Yorkshire

2022	All people	White	Mixed	Indian	Pakistani / Bangladeshi	Black	Other Ethnic Group
Barnsley	72.3	72.0	!	!	!	!	100.0
Doncaster	73.4	76.9	26.7	!	!	85.7	56.6
Rotherham	72.6	72.9	66.7	!	61.1	71.1	81.8
Sheffield	71.8	75.6	46.3	!	48.3	61.2	56.1
South Yorkshire	73.3	74.2	64.5	71.0	77.4	58.3	60.4
Liverpool City Region	72.4	74.7	40.5	36.4	51.3	68.3	58.7
Tees Valley	71.7	71.9	37.5	89.1	52.2	86.1	67.7
West Midlands	68.6	71.8	55.5	77.9	55.3	62.6	60.8
Buckinghamshire	81.1	81.1	65.8	87.6	84.1	74.4	81.4
Y&H	74.6	76.1	62.9	65.9	61.0	66.8	65.0
England	75.7	77.2	67.1	76.9	60.6	68.5	69.6

Source: Annual Population Survey 2023

Note: ! denotes where data sample was unavailable due to its small size

National data provides a picture of the extent to which there is variation across different ethnic backgrounds in the types of roles in which people are employed. Figure 60 shows the proportion of workers aged over 16 from different ethnic group (as categorised in the Annual Population Survey) employed by occupational group (as per the Office for National Statistics).

The 'Indian' and 'White' ethnic groups have the highest percentage of workers as managers and senior officials and are above the national average for all workers (10.9%). All other ethnic groups fall below the average with the lowest proportion recorded by 'Black/Black British workers at 5.8%. The lack of diversity in leadership roles and how these impacts on workers from different backgrounds was highlighted by Sheffield's Race Equality Commission²⁰³. The Commission produced seven recommendations to address racism and racial disparities in the city which provide important insights for the whole of South Yorkshire.

²⁰³ Race Equality Commission. 2022. An independent commission into racism and racial disparities in Sheffield. [Available here](#).

Percentage of workers aged over 16 by occupation and ethnicity

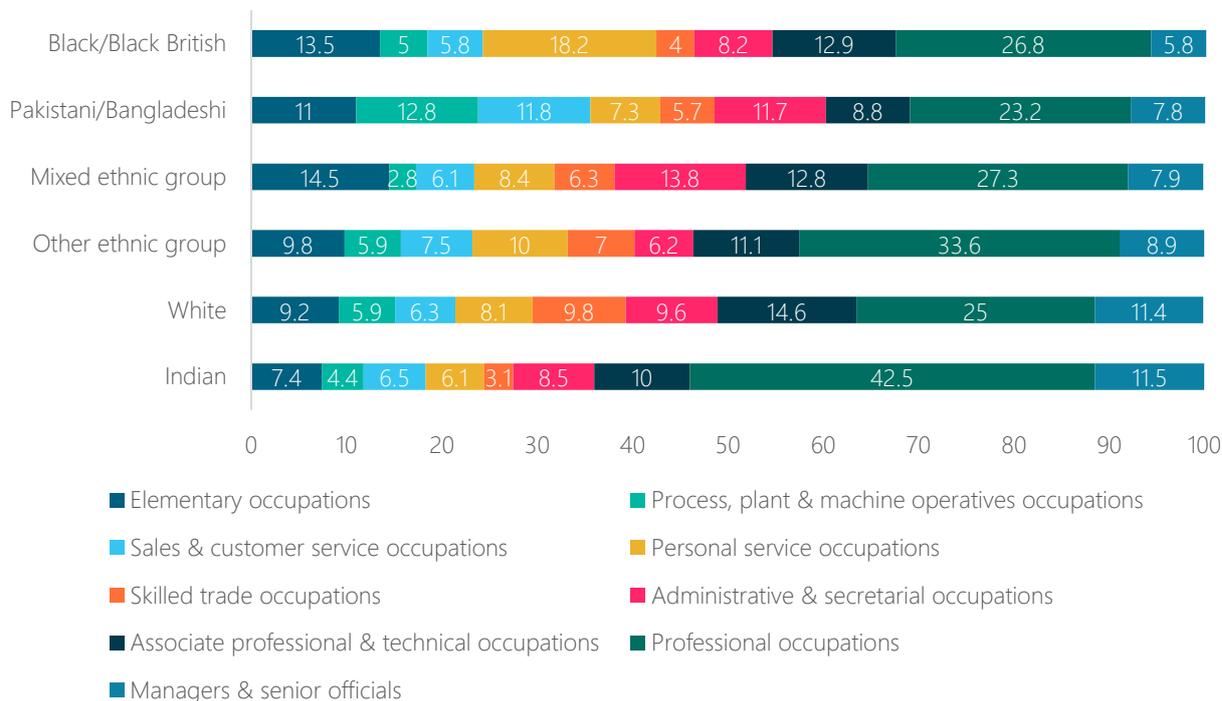


Figure 61 Employment by occupational group and ethnicity. Source: Annual Population Survey 2022

Workers from a ‘Mixed ethnic background’ have the highest proportion in elementary occupations (14.5%) followed by ‘Black/Black British workers’ (13.5%) and ‘Pakistani and Bangladeshi’ workers (11%) – all of which are above the average for all workers (9.4%). ‘Pakistani and Bangladeshi’ workers have the highest percentage in process, plant and machine operative occupations (12.8%) which is over double the proportion of any other ethnic group and the average for all workers (5.9%). The data indicates that higher levels of people from certain ethnic groups are employed in roles which are low paid, associated with poor job quality, and traditionally undervalued. For South Yorkshire, it is important workers and businesses are supported to create more inclusive and diverse workforces from the shop floor to the board room, and address the ethnicity pay gaps as highlighted in chapter four.

In terms of gender, males in South Yorkshire have consistently higher economic activity rates than females, although the gap between males and females has reduced from 8.6 percentage points in 2018 to 5.9 in 2022. The gender employment gap for 2022 is smaller in South Yorkshire than the national (7.1 percentage points) and regional (6.7 percentage points) gaps.

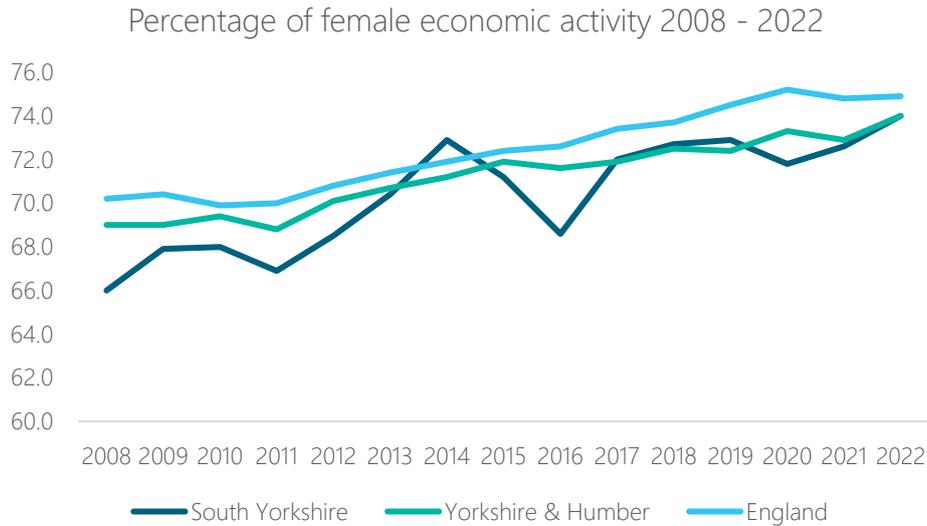


Figure 62 Female Economic Activity 2008 - 2022 Source: Annual Population Survey January to December 2008 - 2022

Between 2008 and 2022, female economic activity has increased by 8 percentage points in South Yorkshire which is at a higher rate than nationally (4.7 percentage point increase) and regionally (5 percentage point increase). However, at 74% female economic activity in South Yorkshire remains below the national average (74.9%) yet it has made significant progress in closing this gap as in 2008 female economic activity was 4.2 percentage points below England, and 3 below Yorkshire and Humber.

All economic activity rates fell slightly in 2020 due to the Covid-19 pandemic, however since then female economic activity has increased by 2.2 percentage points whilst the male rate has fallen by 0.4 points. The comparator areas show similar trends, male economic activity is consistently higher than female activity. The greatest difference can be seen in the West Midlands (males were up to 11% more economically active than females on average), whereas a lesser disparity can be seen in Liverpool City region (males 6.9% more economically active than females).

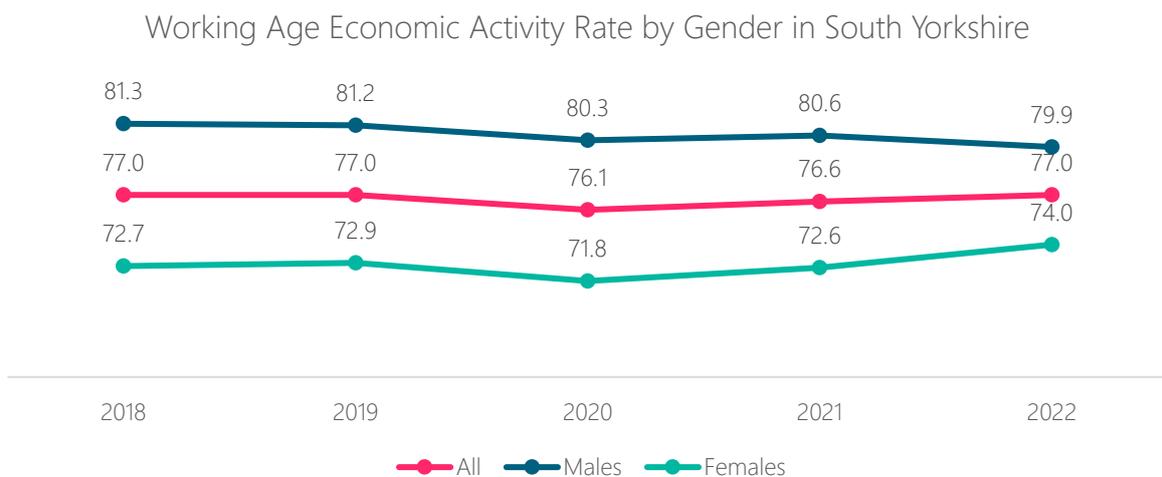


Figure 63 South Yorkshire economic activity by gender. Source: Annual Population Survey January to December 2022

These differences are more pronounced across the local authorities in South Yorkshire with significant falls in male economic activity rates between 2018 – 2022 in Rotherham (10.3 percentage points) and Doncaster (4.3 points), contrasting with increases in Barnsley (1.4 percentage points) and Sheffield (2.6 percentage points). Notably, Rotherham and Doncaster had the highest male working age economic activity rates in 2018, prior to the pandemic, and now in 2022 have the lowest in South Yorkshire.

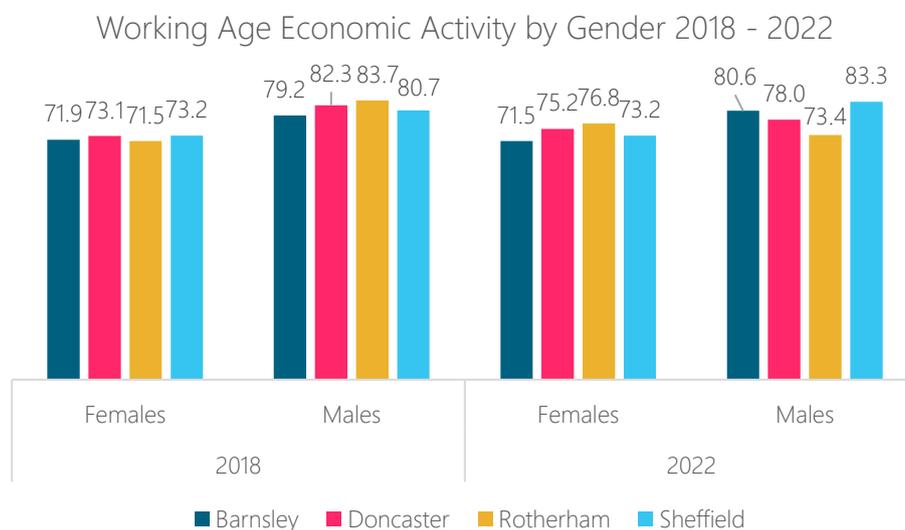


Figure 64 Economic activity by gender 2018 – 2022. Source: Annual Population Survey January to December 2022

Female working age economic activity has increased between 2018 and 2022 in Doncaster (2.1 percentage point growth) and Rotherham (5.3 points), remaining stable in Sheffield (73.2%). Barnsley is the only local authority in South Yorkshire to see a small reduction in female economic activity which fell by 0.4 points between 2018 – 2022. Whilst increasing female economic activity is important and an indication of more women in the workplace, the pay gaps between males and females persist as highlighted in chapter four. As noted earlier to create more diverse and inclusive businesses more women are needed in senior roles, and this would help to address the gender pay gap.

There are clear differences between the occupations in which males and females are employed, illustrating the extent to which the labour market (both nationally and in South Yorkshire) remains segregated by gender. There are also significant differences between the South Yorkshire local authorities, with Sheffield more closely aligned with England.

For males in employment, in Barnsley, Doncaster and Rotherham, the two largest occupation groups, are elementary administration and service occupations and skilled metal, electrical and electronic trades, whereas in Sheffield science, research, engineering, and technology professionals is the largest followed by elementary administration and service occupations (this is the fourth category nationally). These two largest categories in Sheffield have very different skills needs, with the elementary occupations in the lowest level Standard Occupational Classification (SOC)²⁰⁴ whereas science, research, engineering, and technology professionals are in the highest (L4), reflecting the diversity within its labour market.

²⁰⁴ ONS. 2020. SOC 2020 Volume 1: structure and descriptions of unit groups. [Available here](#).

The skilled metal, electrical and electronic trades occupational group does not feature in the top five occupational categories for males in England and is an indication of South Yorkshire’s continuing specialism in manufacturing. The top five occupation groups within South Yorkshire include a mixture of the ‘higher’ level SOC groups (corporate managers and directors, business, media and public service occupations, science, research, engineering and technology professionals) right through to elementary occupations.

Table 52 Top 5 Sub-Major Occupational Groups for Males in England and South Yorkshire

Top Five Sub-Major Groups (SOC2020) in South Yorkshire and England for Males					
	Barnsley	Doncaster	Rotherham	Sheffield	England
1st	Elementary Administration and Service Occupations (8,900)	Elementary Administration and Service Occupations (7,500)	Elementary Administration and Service Occupations (6,100)	Science, Research, Engineering and Technology Professionals (20,100)	Science, Research, Engineering and Technology Professionals (1,716,800)
2nd	Skilled Metal, Electrical and Electronic Trades (6,700)	Skilled Metal, Electrical and Electronic Trades (6,500)	Skilled Metal, Electrical and Electronic Trades (6,100)	Elementary Administration and Service Occupations (16,600)	Corporate Managers and Directors (1,314,300)
3rd	Transport and Mobile Machine Drivers and Operatives (5,200)	Transport and Mobile Machine Drivers and Operatives (6,300)	Corporate Managers and Directors (5,400)	Business, Media and Public Service Professionals (15,100)	Business, Media and Public Service Occupations (1,251,500)
4th	Science, Research, Engineering and Technology Professionals (5,100)	Skilled Construction and Building Trades (6,100)	Process, Plant and Machine Operatives (5,100)	Skilled Metal, Electrical and Electronic Trades (13,600)	Elementary Administration and Service Occupations (1,060,100)
5th	Skilled Construction and Building Trades (4,600)	Science, Research, Engineering and Technology Professionals (5,100)	Science, Research, Engineering and Technology Professionals (4,100)	Corporate Managers and Directors (11,300)	Business, and Public Service Associate Professionals (1,001,900)

Source: Annual Population Survey 2023

Female workers in South Yorkshire are concentrated in a very different set of occupations. The largest occupational group for females in Barnsley is health and social care associate professionals (which is the same as for England and which is the second biggest group in Rotherham and Sheffield, and fourth in Doncaster), in Doncaster and Rotherham protective service occupations is the largest group, and in Sheffield it is secretarial and related occupations. None of these are in the top five categories for male workers anywhere in South Yorkshire.

In contrast to males, science, research, engineering, and technology professionals and cooperate managers and directors do not feature in the top five occupational groups for females in South Yorkshire or England. Indeed, none of the five sub-major occupation groups for females in South Yorkshire feature in the highest SOC level (managerial and professional roles). The majority of the top five female occupations in South Yorkshire sit within the second highest SOC category (L3) and the rest derive from L2. This further demonstrates that women are under-represented in the most senior roles and occupations within South Yorkshire.

Table 53 Top 5 Sub-Major Occupational Groups for Females in England and South Yorkshire

Top Five Sub-Major Groups (SOC2020) in South Yorkshire and England for Females					
Female	Barnsley	Doncaster	Rotherham	Sheffield	England
1st	Health and Social Care Associate Professionals (7,200)	Protective Service Occupations (11,200)	Protective Service Occupations (11,400)	Secretarial and Related Occupations (15,000)	Health and Social Care Associate Professionals (1,629,600)
2nd	Protective Service Occupations (6,800)	Business and Public Service Associate Professionals (8,200)	Health and Social Care Associate Professionals (6,700)	Health and Social Care Associate Professionals (13,500)	Protective Service Occupations (1,349,100)
3rd	Culture, Media and Sports Occupations (6,300)	Culture, Media and Sports Occupations (8,000)	Secretarial and Related Occupations (6,500)	Protective Service Occupations (13,000)	Culture, Media and Sports Occupations (1,082,900)
4th	Business and Public Service Associate Professionals (6,100)	Health and Social Care Associate Professionals (7,800)	Business and Public Service Associate Professionals (5,400)	Skilled Agricultural and Related Trades (12,300)	Skilled Agricultural and Related Trades (1,079,900)
5th	Administrative Occupations (3,700)	Caring Personal Service Occupations (4,100)	Administrative Occupations (4,200)	Skilled Construction and Building Trades (10,300)	Administrative Occupations (978,400)

Source: Annual Population Survey 2023

This section considers the extent to which South Yorkshire's workplaces are inclusive of people with a disability. Chapter four reviewed levels of economic inactivity and chapter five looked at the health of the residents across South Yorkshire. In the UK, 54% (5.51m) of the disabled working age population (9.58m) were in employment between January and March 2023²⁰⁵. Nationally, the disability employment gap – the difference between the employment rate of working age disabled and non-disabled people – was 27 percentage points in the first quarter of 2023. This is 0.2 points higher than pre-pandemic levels and 0.8 points higher than in 2022.

The table below shows the disability employment rate, the proportion of working age disabled people who are employed, which shows a mixed picture for South Yorkshire. Sheffield is the only area to have increased their disability employment rate since 2019 (by 11.6%) and substantially more so than regional (2.9%) and national averages (3%). This could in part be explained by the nature of Sheffield's labour market and the impact of more flexible home working patterns during the pandemic which subsequently made work more accessible. As of 2022 Sheffield had the highest disability employment rate in South Yorkshire and is higher than regional and national averages.

Barnsley, Doncaster, and Rotherham have all seen decreases in Disability Employment Rate between 2019 – and 2022 with the largest percentage reduction in Barnsley (-8.1%) which now has the lowest disability employment rate (43.6%) when in 2019 it had the highest in South Yorkshire (51.7%). Doncaster

²⁰⁵ House of Commons Library. 2023. Disabled People in Employment, [Available here](#).

and Rotherham have experienced smaller reductions in their disability employment rate, with Rotherham seeing a large drop between 2021 – 2022 (11.5 percentage points) and future data will show whether this downward trend continues.

Table 54 Disability employment rate in South Yorkshire 2019 - 2022

Disability Employment Rate					
Area	2019	2020	2021	2022	% Change
Barnsley	51.7	47.8	52.6	43.6	-8.1
Doncaster	48.9	52.9	48.3	47	-1.9
Rotherham	46.1	48.3	56.8	45.3	-0.8
Sheffield	50.2	51.6	48.5	61.8	11.6
South Yorkshire	49.2	50.2	51.6	49.4	0.2
Yorkshire and The Humber	52.1	52.8	52.7	55	2.9
England	52.7	54.8	53.8	55.7	3.0

Source: Labour Force Survey 2022²⁰⁶

Note – data only available at local authority and parliamentary constituency level

Disability confident is a scheme run by the UK government that helps employers attract, recruit, and retain disabled staff. The scheme provides advice and information to help organisations change perceptions of disability and how to make their workplaces more accessible. The Disability Confident scheme has three levels Level 1: Disability Confident Committed, Level 2: Disability Confident Employer, and Level 3: Disability Confident Leader²⁰⁷.

The scheme encourages employers to adapt and make changes so that the workplace is more accessible and empower people with disabilities to flourish in the workplace. In South Yorkshire, 324 employers are registered for the Disability Confident scheme, the majority of which are at Level 1 and the fewest at Level 3 which encourages employers to be ‘champions’ within the local business community.

Table 55 Disability Confident Employers in South Yorkshire

	Level 1 (Confident)	Level 2 (Employer)	Level 3 (Leader)	Total
South Yorkshire	233	79	8	324

Source: DWP Employers that have signed up to the disability confidence scheme 2023

Young people and stakeholders engaged with for this research highlighted the importance of employer practices particularly during the application and interview process. Several neurodiverse young people explained the challenges of this process and the allowances some employers had provided for example providing the questions written down during the interview. It can be within these small actions that

²⁰⁶ Department of Work and Pensions, [Disabled people in employment 2022](#), 2023

²⁰⁷ DWP. 2019. How to sign up to the Disability Confident employer scheme. [Available here](#).

disabled people can feel more comfortable and the employer creates a more accessible and inclusive environment.

6.4 KEY CHALLENGES AND OPPORTUNITIES FOR SOUTH YORKSHIRE

Innovation will be key to the future of South Yorkshire's labour market. As a driver of economic growth, it will help to address the poor productivity performance in the sub-region and has the potential to create a more inclusive economy. Positive partnership working is already taking place across the sub-region to accelerate innovation and the announcement that South Yorkshire will be the first Investment Zone in England cements the importance of this agenda.

South Yorkshire's R&D investment is focused within research institutions, and despite over half of businesses being classed as 'innovative' this has not translated into more of the business base investing in R&D. Currently, the supply of skills and talent in South Yorkshire is not meeting the requirements for innovation led growth, with skills gaps in terms of basic skills (English, maths, digital), STEM and technical skills, as well as employability skills (problem solving, communication, critical thinking, creativity).

Innovation and enterprise combined will enable ideas to be translated into business growth.

Enterprise creates a more diverse, vibrant, and resilient workforce, labour market and community. Yet, South Yorkshire's enterprise performance indicates a low enterprise economy, with a business base too small relative to the size of the population. This is likely to be contributing to low rates of productivity in the sub-region, with a lack of dynamism because of lower rates of competition within the economy than seen elsewhere.

National evidence and local insight highlight the importance of enterprise education for children and young people to equip them with the entrepreneurial mindset and skills (problem solving, critical thinking, teamwork, communication) and financial literacy to thrive in a changing labour market. Innovation and enterprise combined will enable ideas to be translated into business growth.

Creating and supporting better business is a strategic priority for South Yorkshire and key to help make the economy greener, stronger, and fairer. This is particularly important given the labour market transformation which will occur as we transition to a digitalised, net zero economy and the opportunities this brings for inclusion.

However, job quality currently in South Yorkshire is mixed with low pay prevalent and limited opportunities for career progression which have important implications for upskilling and reskilling as well as supporting employers to create better workplaces.

More diverse and inclusive businesses are more productive ones, yet South Yorkshire has significant employment gaps regarding ethnicity, gender, and disability as well as gaps in pay. To create better businesses more diversity is required particularly within leadership and senior roles to ensure future talent at all levels is empowered and so South Yorkshire can create a more inclusive, innovative, and resilient workforce.



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