

**West Yorkshire:
State of the Region Report
2021**

Mayor's Foreword

I was elected Mayor of West Yorkshire just a few months ago, in the midst of a global pandemic. Our region was hit hard by COVID-19, but I was elected on a commitment to deliver a just, fair and lasting recovery. This new report provides insight and analysis on how the region is performing, what our strengths are to forge our path forward, and how we can rebuild and create a more inclusive and sustainable economy.

We have much to be proud of here in West Yorkshire. We are the largest hub for banking, legal and professional services outside of London, and an international leader in digital technology, healthcare innovation, advanced manufacturing, and engineering. We are one of the UK's leading regions for creative industries, home to global and national brands, as well as small enterprises working across gaming, technology, digital media, TV and film. As we emerge from the pandemic, positive progress in a number of areas, including the development of our digital infrastructure and improvement in our skills base provide a strong foundation for the future.

The resilience of the people and businesses in our region is second to none, but whilst there are many great stories to tell, there is still a lot of work to do. This report flags some core areas I am striving to change and improve.

This report particularly highlights the productivity gap between West Yorkshire and the rest of the UK – the main barrier to improving living standards across the region in the long run and something we need to address to tackle inequality. More than a fifth of our workforce has no or low qualifications, placing huge limits on earning potential and the contribution they can make to the economy. A fifth of jobs in West Yorkshire pay below the Real Living Wage, the amount needed for a decent standard of living, and we can see the impact of this all around us.

We are progressing with plans to further support local businesses and the wider economy in the region. We have updated our Economic Recovery Plan to deliver inclusive growth across our region and tackle the climate and environment emergency. In the coming months, we will launch the Fair Work Charter for West Yorkshire to encourage good pay, fair and flexible working conditions, promote diversity and social mobility within the workforce.

I wanted this report to focus on women and girls in particular. The results show that the gap between employment rates for males and females in West Yorkshire has narrowed, compared to the national average. While this is great news, there is still so much more to be done to achieve parity. There is a significant pay gap of 12% in median earnings in the region. 66% of companies in West Yorkshire have no female representation at director level and, despite the indications that women are more likely to be highly qualified than men, the evidence suggests this is not reflected in pay or employment rates. This gender inequality further affects women who are disabled or from an ethnic minority group – these women can face “double-disadvantage” in terms of their likelihood of being in employment. I am a passionate advocate for women and girls and want to make sure everyone in our region, no matter what their background, can succeed. One of my key pledges is to appoint an Inclusivity Champion for West Yorkshire who will work with under-represented groups and individuals to make sure everyone benefits from our recovery.

Another key challenge is our ambition is to create a net-zero carbon economy by 2038. When I became Mayor, I made tackling the climate and environment emergency one of my pledges. We know there is more to be done to ensure we meet this critical commitment, and that means doing everything in my power to make our region a place where everyone

benefits from the economic, health and environmental benefits of a net-zero carbon economy.

It is a pleasure and a privilege to serve as the Mayor of West Yorkshire and to represent our communities. I want us to build on our successes as a region and believe there is so much we can achieve together to create opportunities for everyone to make a difference, lead their best life, and enjoy the benefits of a strong, growing economy.

Executive Summary

Background and Context

State of the Region 2021 is the first annual review of the performance of West Yorkshire against key socio-economic and environmental indicators. It provides a stocktake using indicators developed as part of the Combined Authority's Strategic Economic Framework. As West Yorkshire exercises its devolved powers with the direct election of its new Mayor, it is an opportune and appropriate time to assess the progress the region is making.

COVID-19 has had a huge impact on all aspects of the West Yorkshire economy during 2020 and 2021, although in many cases this is not directly captured by the indicators because of issues with the timeliness of the available data and the lagging nature of annual reporting. The key implications of the crisis for progress against the priorities are considered within the report but it is not primarily intended to be an assessment of the impact of COVID-19.

Boosting Productivity

Helping businesses to grow, and invest in the region and their workforce, to drive economic growth, increase innovation and create jobs

West Yorkshire's direction of travel on growth was fairly positive prior to the health crisis, with **economic output** (gross value added) increasing at a similar rate to the UK average. The region's job creation performance has also been positive in recent years, as reflected in the upward trend in its **employment rate**. Although there is still a gap with the national average against this measure, the region compares favourably with most other Combined Authorities.

West Yorkshire's **business base** is relatively under-sized, however: it has fewer private sector businesses per head of population than the national average. The characteristics of the business base, in terms of its sectoral make-up and the degree of focus on tradeable products and services for example, helps to explain the region's productivity deficit¹.

The main challenge facing West Yorkshire in this sphere is its **productivity deficit**. Although productivity is increasing in absolute terms there remains a significant gap with the UK as a whole and the gap which opened-up around the recession of 2008 has not closed significantly in recent years. This needs to be tackled if living standards in the region are to be raised.

The region's underperformance on productivity can be traced to a number of factors that constrain its productive capacity. The value of **exports** is relatively low, the proportion of businesses engaging in **innovation** has remained flat in recent years and fewer people have higher level qualifications than nationally.

There are also some bright spots: for example, West Yorkshire has recorded strong growth in **exports of services** in recent years and the proportion of people with **higher level qualifications**, although still below the national average, has improved strongly.

The performance of West Yorkshire's **local authorities** varies across many of the indicators. Leeds performs relatively strongly on a number of the indicators, including economic output per head, employment rate, productivity (output per hour worked) and higher-level

¹ West Yorkshire Combined Authority, [Economic Assessment](#) (2020)

qualifications. But other local authorities can also point to positives; for example, Calderdale's economy has seen the fastest rate of output growth of any in West Yorkshire in recent years.

Whilst it is anticipated that 2021 will see historically high growth at the outset of the recovery, there is uncertainty about the **long-term structural impacts of COVID-19** on the type and location of economic activity in future. For example, it is unclear whether the shift to remote working seen during the pandemic will persist in the medium to long term, while the implications of such a change for future productivity are poorly understood.

Enabling Inclusive Growth

Enabling as many people as possible to contribute to, and benefit from, economic growth in our communities and towns, irrespective of their background

West Yorkshire underperforms against the national average in respect of many inclusive growth indicators. Perhaps more importantly, there is considerable inequality between population groups and areas within the region.

Life expectancy, which to a large extent reflects socio-economic conditions, is lower than the England average in West Yorkshire. In parts of the region there is acute inequality in life expectancy between the most and least deprived neighbourhoods. Life expectancy has also been adversely affected by Covid-19.

Creating and supporting good quality **employment** is a key way in which we can promote an inclusive economy. Prior to the pandemic the region was performing well in terms of getting people into work and reducing unemployment; nonetheless some groups, including disabled people, people from ethnic minorities, older people and women were less likely to be in employment.

Not all employment is of good quality. Aside from Leeds, all local authorities in the region have a relatively low proportion of people in **quality work**, based on a combination of pay, hours and preferred contractual status. Looking at pay specifically, one fifth of jobs in the region pay below the Real Living Wage – the hourly rate of pay that offers a decent standard of living.

Access to employment and career progression to a large extent rely on people having the right **skills**. A lack of skills among the population has long been a key weakness for the region, in terms of individuals having no qualifications or being qualified at a low level. This partly reflects a low demand for skills in the West Yorkshire economy and relatively low productivity. Recent improvements in performance in this area run the risk of being undermined by the negative impact of the pandemic, with a reduction in the number of apprenticeships and an increase in the number of young people who are NEET (not in education, employment or training).

Household incomes in West Yorkshire are some way below the national average on a per capita basis and the gap is widening. But there are positives for living standards in the region. The **housing stock** is growing, **house prices** are affordable and **rents** comparatively low, although affordability measures are not adjusted for quality of housing stock. **Fuel poverty** is a key challenge but with signs of improvement.

There is a risk that the legacy of the **pandemic** could undermine progress and exacerbate existing disadvantage and inequalities in West Yorkshire across a range of dimensions.

Tackling the Climate Emergency

Growing our economy while cutting emissions and caring for our environment

West Yorkshire has declared a climate emergency and is committed to becoming a net zero carbon economy by 2038 and to making significant progress against this challenge by 2030. Net zero carbon means emissions produced and emissions taken in are balanced.

The latest data indicate that CO₂ end-user **emissions** in West Yorkshire stand at around 10.8 Mt CO₂. This equates to 4.7 tonnes per capita, slightly below the national average of 4.9 tonnes.

Carbon dioxide emissions have fallen less quickly in West Yorkshire than nationally over the last decade for which we have data, but West Yorkshire's starting point was lower in per capita terms.

A continuation of current rates of **emission reduction** in West Yorkshire will not be sufficient to achieve the target of net zero by 2038. It is projected that current policies will only achieve a fraction of the further reductions required to meet the net zero target.

Over the last decade, emissions from the industry, commercial and domestic sectors of the regional economy fell substantially but **transport emissions** did not register a sustained reduction.

Carbon dioxide (CO₂) **emissions intensity** measures the level of emissions per unit of gross value added (GVA) and can be used to examine the relationship between economic growth and emissions. The emissions intensity of the West Yorkshire economy, in terms of CO₂ emissions (kt) per £m of GVA, is slightly above the national average and is higher than most of the comparator areas. The region's emissions intensity fell by 40% between 2005 and 2019.

National data show that there was a significant fall of around 11% in the **UK's CO₂ emissions** in 2020, linked to the effects of the pandemic. This was manifested in a large reduction in the use of road transport and a fall in emissions from the business sector.

Buildings are responsible for almost 40% of the UK's energy consumption and carbon emissions. Improving the **energy efficiency** of properties is an important lever for reducing emissions but also for helping households to manage their living costs. The average Energy Performance Certificate rating for domestic properties in West Yorkshire is D (using a scale of A – most efficient to G – least efficient). This is similar to the national average but significant progress is required to meet the government's target to upgrade as many homes as possible to EPC Band C by 2035.

Providing local people with access to nature is vital to health and quality of life. Currently, just over a fifth of West Yorkshire's population have easy access to local **natural greenspace**.

Flooding is likely to become a more frequent occurrence as a result of climate change. Around 4% of residential properties in West Yorkshire fall within a flood zone, rising to more than 6% in Calderdale. A significant proportion of neighbourhoods in Bradford and Calderdale are acutely vulnerable to the effects of flooding.

Delivering 21st Century Transport

Creating efficient transport infrastructure to connect our communities, making it easier to get to work, do business and connect with each other.

A key purpose of an effective transport system is to connect people to better living standards and higher earning jobs. There has been good progress against our key indicator in this

area: West Yorkshire's **access inequality ratio** has improved substantially: Eighty-five per cent of jobs that can be reached within 30 minutes by car from the most deprived neighbourhoods are also accessible in that time via the bus network, up from 68% in 2016/17.

The West Yorkshire Transport Strategy sets out an ambition to reduce **reliance on private car journeys** and substantially grow the number of trips made using sustainable transport. Sixty-one per cent of trips in West Yorkshire are made by car (slightly above the national average) but the car's share of total trips was falling even before the COVID-19 crisis, just as walking was increasing its share. The bus plays a vital role for those who lack access to a car but its share of trips is also falling, although it plays a more important part in the transport mix in West Yorkshire than nationally.

The transport system must play its part in creating clean, safe, healthy places for communities and businesses. Ensuring the safety of all users of our streets and highway network is essential to this as well as enabling people to feel confident to walk or cycle more. For the key indicator of reported **road casualties**, there is a mixed picture. The number of killed or seriously injured casualties arising from traffic accidents has fallen in West Yorkshire in recent years but is still higher than the national average relative to vehicle miles travelled.

Better planning and management of West Yorkshire's transport networks is essential and smart ticketing products like Metro's **MCard** contribute to this. Around 18m bus trips were made using the MCard during 2019, improving the affordability, ease, and experience of bus travel in West Yorkshire. The proportion of travel tickets bought through the MCard mobile app rather than traditional outlets has increased to 35% since its introduction in 2017.

Satisfaction with transport infrastructure, is a key measure of performance and public perceptions. In spite of an improvement in ratings in 2020/21, public satisfaction with highway infrastructure remains relatively low, with road maintenance elements having the lowest levels of user satisfaction.

Satisfaction with local public transport in West Yorkshire is high, when compared with other aspects of the transport system. The level of satisfaction increased in 2020/21, despite the impact of the pandemic on the operation of the system.

It is uncertain what patterns of travel will emerge over time following the pandemic, particularly around the potential for a sustained shift to home working. Usage of public transport, including bus and rail, remains below pre-crisis levels with no certainty that it will recover. There is an opportunity to consolidate the changes in travel choices seen under lockdown and support a shift away from carbon-intensive travel to sustainable modes as the economy recovers and grows, to meet the challenge of becoming a net-zero carbon city region by 2038.

Securing Money and Powers

Empowering the region by negotiating a devolution deal and successfully bidding for substantial additional funds.

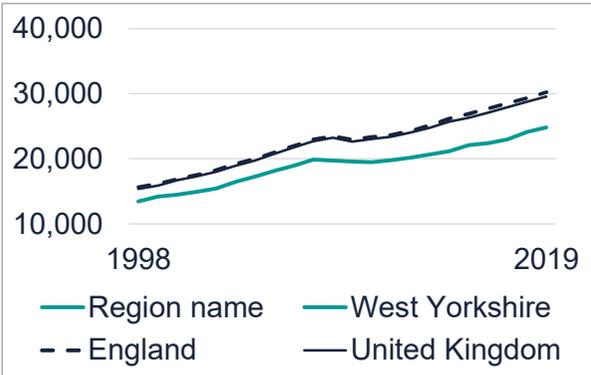
Major progress has been achieved against this priority. In March 2020 the West Yorkshire Combined Authority and the Leeds City Region LEP agreed a substantial devolution deal with government to unlock significant long-term funding of at least £1.8 billion and give our region greater freedom to decide how best to meet local needs. The election of the West Yorkshire Mayor, Tracy Brabin, in May 2021 provides greater accountability in the exercise of these powers.

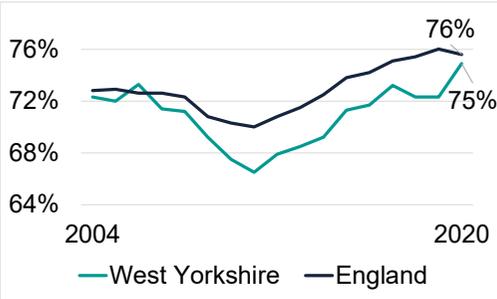
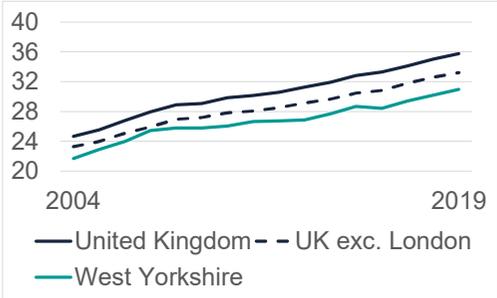
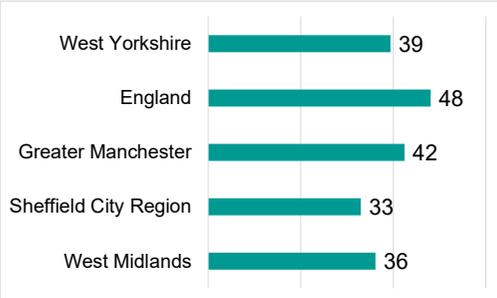
One of the measures of success in exercising the devolved powers will be the region's ability to grow its economy and make an increased **net contribution to HM Treasury**.

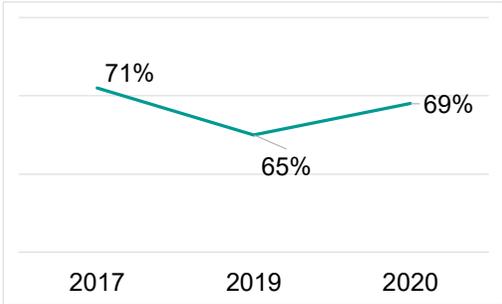
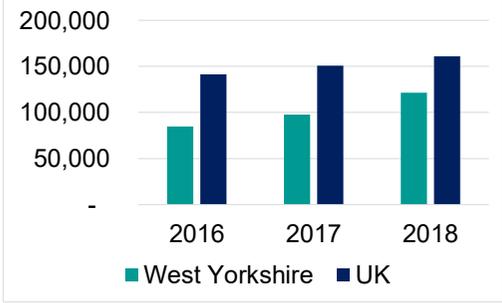
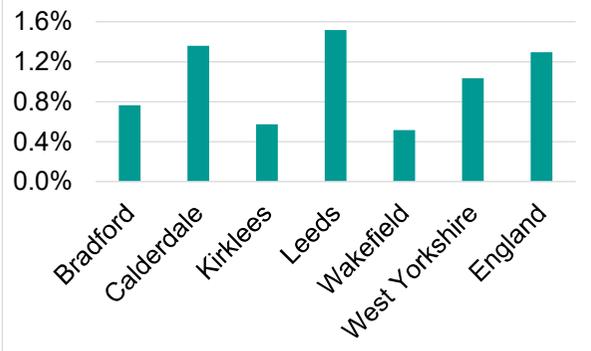
Before the pandemic West Yorkshire was making a small positive net fiscal contribution, the only Combined Authority area in the North of England with a positive net fiscal balance.

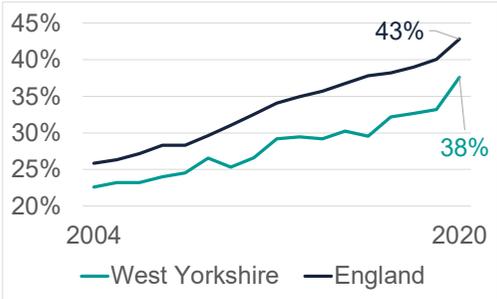
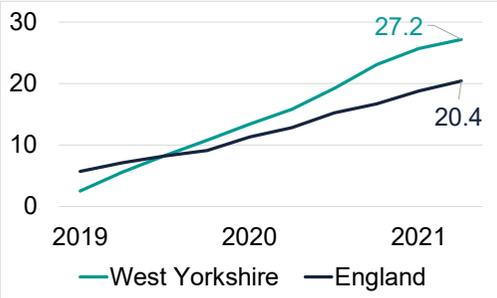
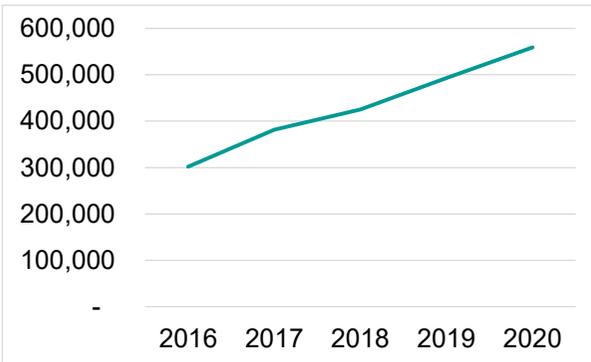
The additional public expenditure and reduced tax receipts associated with the pandemic will have impacted on the region's fiscal balance but the previous performance against this indicator shows that West Yorkshire has the potential to make a positive contribution in future, subject to achieving a strong economic recovery as we emerge from the pandemic.

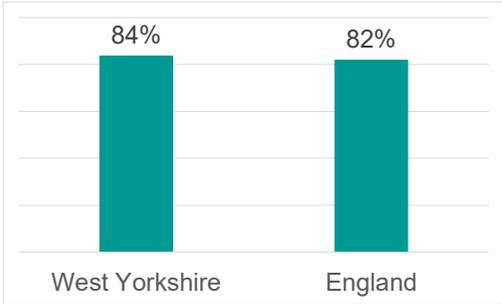
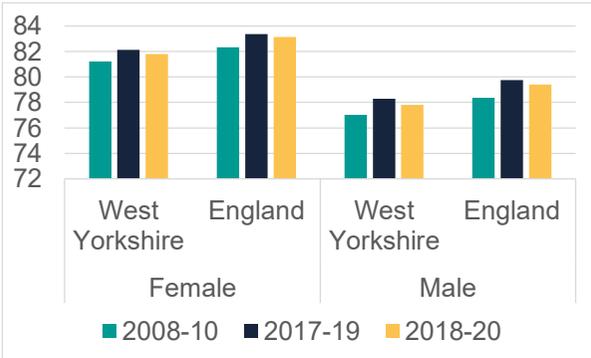
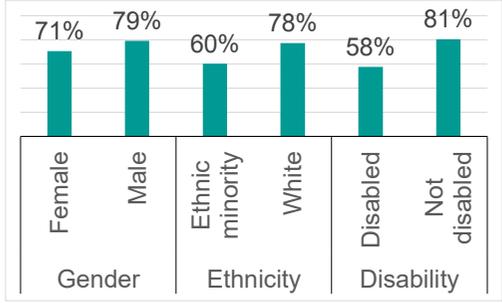
Summary of performance against the indicators

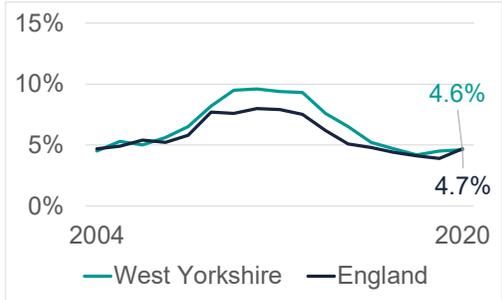
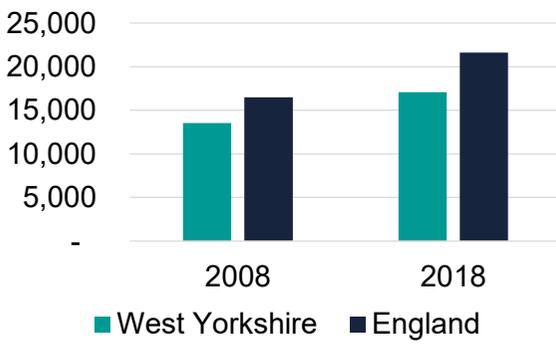
Indicator	Headline chart	Comment										
Boosting Productivity												
<p>Economic output (GVA)</p> <p><i>GVA (balanced) at current basic prices - compound annual growth rate (%), 2013-19</i></p> <p>Source: ONS, Sub-regional GVA data</p>	 <table border="1"> <thead> <tr> <th>Region</th> <th>CAGR (%)</th> </tr> </thead> <tbody> <tr> <td>West Yorkshire</td> <td>3.7%</td> </tr> <tr> <td>England</td> <td>3.9%</td> </tr> <tr> <td>United Kingdom</td> <td>3.7%</td> </tr> <tr> <td>UK exc. London</td> <td>3.5%</td> </tr> </tbody> </table>	Region	CAGR (%)	West Yorkshire	3.7%	England	3.9%	United Kingdom	3.7%	UK exc. London	3.5%	<p>Prior to the pandemic West Yorkshire's economy was growing at a slightly higher rate than the UK average excluding London.</p>
Region	CAGR (%)											
West Yorkshire	3.7%											
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United Kingdom	3.7%											
UK exc. London	3.5%											
<p>Economic output (GVA) per head</p> <p><i>GVA per head (balanced) at current basic prices</i></p> <p>Source: ONS, Sub-regional GVA data</p>	 <p>Legend: — Region name — West Yorkshire - - England — United Kingdom</p>	<p>Output per head is below the national average and since 2013 has been growing at a rate similar to the UK and England averages.</p>										

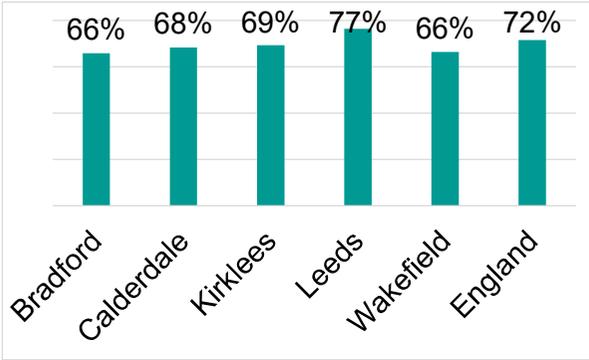
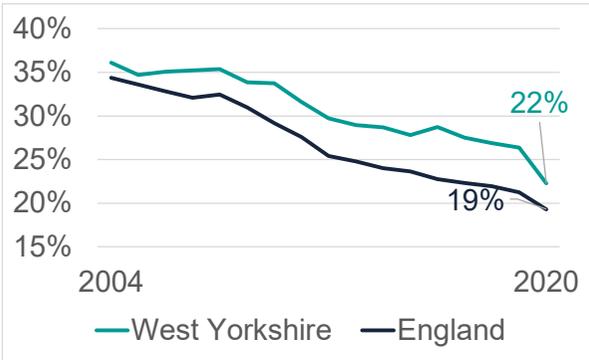
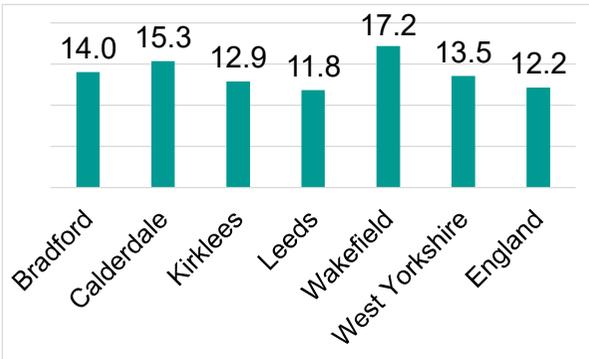
Indicator	Headline chart	Comment
<p>Employment rate <i>Employment rate for all aged 16-64</i></p> <p>Source: ONS APS</p>		<p>West Yorkshire's employment rate is growing and outperforms many comparator areas; the gap with the national average has narrowed.</p>
<p>Productivity <i>Nominal unsmoothed GVA per hour worked</i></p> <p>Source: ONS, Sub-regional productivity data</p>		<p>Productivity is increasing in West Yorkshire but not quickly enough to make significant inroads into the gap with the UK average.</p>
<p>Private sector businesses <i>Businesses per 1k of population</i></p> <p>Source: ONS, Business activity, size and location, 2020</p>		<p>The number of private sector businesses in West Yorkshire is growing at a similar rate to the national average but the level of business density is relatively low in the region.</p>

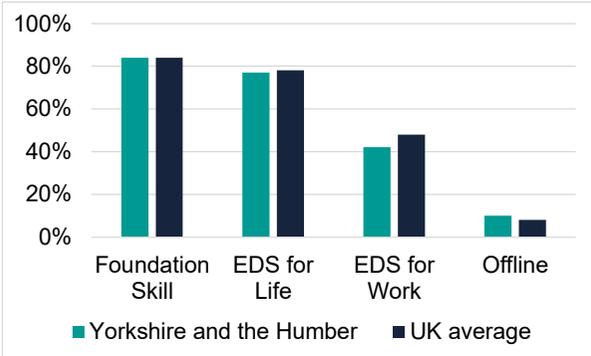
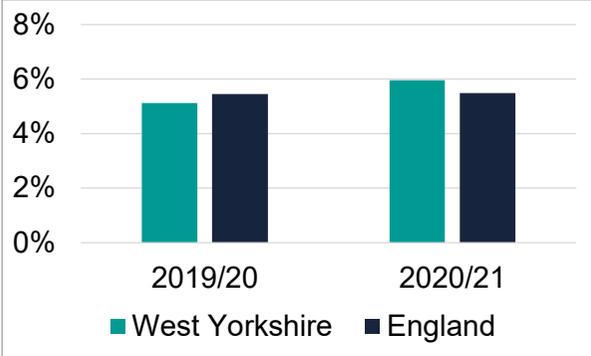
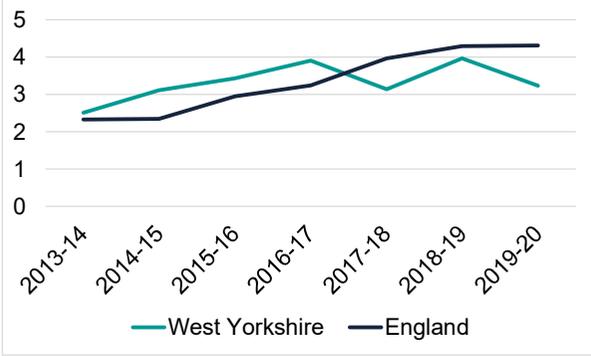
Indicator	Headline chart	Comment																
<p>Innovation</p> <p><i>Proportion of Leeds City Region business engaged in innovation activities</i></p> <p>Source: Leeds City Region Business Survey</p>	 <table border="1"> <caption>Proportion of businesses engaged in innovation activities</caption> <thead> <tr> <th>Year</th> <th>Proportion (%)</th> </tr> </thead> <tbody> <tr> <td>2017</td> <td>71%</td> </tr> <tr> <td>2019</td> <td>65%</td> </tr> <tr> <td>2020</td> <td>69%</td> </tr> </tbody> </table>	Year	Proportion (%)	2017	71%	2019	65%	2020	69%	<p>The proportion of businesses engaging in innovation activity has remained largely flat in recent years.</p>								
Year	Proportion (%)																	
2017	71%																	
2019	65%																	
2020	69%																	
<p>International trade</p> <p><i>Service exports per £m of GVA</i></p> <p>Source: ONS, International exports of services from subnational areas of the UK</p> <p>(NB: Goods exports covered in main report)</p>	 <table border="1"> <caption>Service exports per £m of GVA</caption> <thead> <tr> <th>Year</th> <th>West Yorkshire</th> <th>UK</th> </tr> </thead> <tbody> <tr> <td>2016</td> <td>~85,000</td> <td>~140,000</td> </tr> <tr> <td>2017</td> <td>~100,000</td> <td>~150,000</td> </tr> <tr> <td>2018</td> <td>~120,000</td> <td>~160,000</td> </tr> </tbody> </table>	Year	West Yorkshire	UK	2016	~85,000	~140,000	2017	~100,000	~150,000	2018	~120,000	~160,000	<p>Value of exports of goods and services per £m of total GVA in West Yorkshire are both below the national average. Although service exports are increasing strongly relative to GVA, exports of goods have remained flat.</p>				
Year	West Yorkshire	UK																
2016	~85,000	~140,000																
2017	~100,000	~150,000																
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<p>Cultural sector contribution to employment</p> <p><i>Employment in cultural activities as a proportion of total employment</i></p> <p>Source: Business Register and Employment Survey, 2019</p>	 <table border="1"> <caption>Employment in cultural activities as a proportion of total employment</caption> <thead> <tr> <th>Local Authority</th> <th>Proportion (%)</th> </tr> </thead> <tbody> <tr> <td>Bradford</td> <td>~0.7%</td> </tr> <tr> <td>Calderdale</td> <td>~1.3%</td> </tr> <tr> <td>Kirklees</td> <td>~0.6%</td> </tr> <tr> <td>Leeds</td> <td>~1.4%</td> </tr> <tr> <td>Wakefield</td> <td>~0.5%</td> </tr> <tr> <td>West Yorkshire</td> <td>~1.0%</td> </tr> <tr> <td>England</td> <td>~1.2%</td> </tr> </tbody> </table>	Local Authority	Proportion (%)	Bradford	~0.7%	Calderdale	~1.3%	Kirklees	~0.6%	Leeds	~1.4%	Wakefield	~0.5%	West Yorkshire	~1.0%	England	~1.2%	<p>Cultural employment is relatively low in West Yorkshire as whole, although the picture varies across local authorities. Employment in the sector has grown at a faster rate in West Yorkshire than nationally in recent years.</p>
Local Authority	Proportion (%)																	
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Indicator	Headline chart	Comment									
<p>People qualified at level 4 and above <i>People whose highest qualification is at Level 4 or above - all aged 16-64</i></p> <p>Source: ONS APS</p>	 <table border="1"> <caption>Percentage of people qualified at level 4 and above</caption> <thead> <tr> <th>Year</th> <th>West Yorkshire</th> <th>England</th> </tr> </thead> <tbody> <tr> <td>2004</td> <td>~23%</td> <td>~25%</td> </tr> <tr> <td>2020</td> <td>38%</td> <td>43%</td> </tr> </tbody> </table>	Year	West Yorkshire	England	2004	~23%	~25%	2020	38%	43%	<p>The proportion of people qualified at this level is on an upward trend in West Yorkshire but there is still a significant gap with the national average – albeit narrowing.</p>
Year	West Yorkshire	England									
2004	~23%	~25%									
2020	38%	43%									
<p>Gigabit-capable internet coverage <i>% of properties with gigabit-capable internet coverage</i></p> <p>Source: ThinkBroadband</p>	 <table border="1"> <caption>% of properties with gigabit-capable internet coverage</caption> <thead> <tr> <th>Year</th> <th>West Yorkshire</th> <th>England</th> </tr> </thead> <tbody> <tr> <td>2019</td> <td>~3%</td> <td>~5%</td> </tr> <tr> <td>2021</td> <td>27.2</td> <td>20.4</td> </tr> </tbody> </table>	Year	West Yorkshire	England	2019	~3%	~5%	2021	27.2	20.4	<p>West Yorkshire's gigabit-capable internet coverage is growing and is above the national average. West Yorkshire also outperforms the national average on full-fibre coverage.</p>
Year	West Yorkshire	England									
2019	~3%	~5%									
2021	27.2	20.4									
<p>Take-up of superfast (or above) broadband services <i>Number of connections >=30 Mbit/s (number of lines) in West Yorkshire</i></p> <p>Source: Ofcom Connected Nations Summer Report 2020</p>	 <table border="1"> <caption>Number of superfast broadband connections in West Yorkshire</caption> <thead> <tr> <th>Year</th> <th>Number of connections</th> </tr> </thead> <tbody> <tr> <td>2016</td> <td>~300,000</td> </tr> <tr> <td>2020</td> <td>>500,000</td> </tr> </tbody> </table>	Year	Number of connections	2016	~300,000	2020	>500,000	<p>The number of superfast connections is growing rapidly in West Yorkshire but only a fraction of households covered by these services take them up.</p>			
Year	Number of connections										
2016	~300,000										
2020	>500,000										

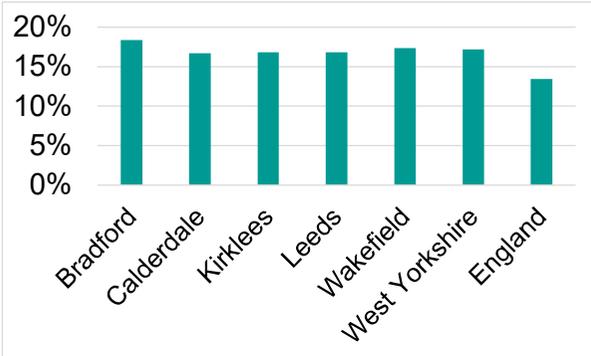
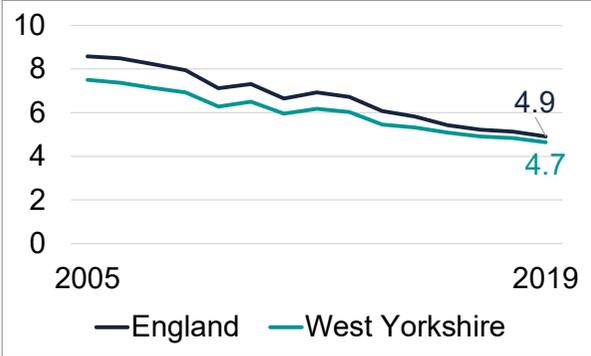
Indicator	Headline chart	Comment																							
<p>Mobile coverage</p> <p><i>4G premises (indoor) coverage from all providers, 2020</i></p> <p>Source: Ofcom Connected Nations Summer Report 2020</p>	 <table border="1"> <thead> <tr> <th>Region</th> <th>Coverage (%)</th> </tr> </thead> <tbody> <tr> <td>West Yorkshire</td> <td>84%</td> </tr> <tr> <td>England</td> <td>82%</td> </tr> </tbody> </table>	Region	Coverage (%)	West Yorkshire	84%	England	82%	<p>4G coverage is growing in West Yorkshire and exceeds the national average.</p>																	
Region	Coverage (%)																								
West Yorkshire	84%																								
England	82%																								
<p>Enabling inclusive growth</p> <p>Life expectancy</p> <p><i>Male and female life expectancy at birth</i></p> <p>Source: Life expectancy by sex, age and area, ONS, September 2021</p>	 <table border="1"> <thead> <tr> <th>Sex</th> <th>Region</th> <th>2008-10</th> <th>2017-19</th> <th>2018-20</th> </tr> </thead> <tbody> <tr> <td rowspan="2">Female</td> <td>West Yorkshire</td> <td>~80</td> <td>~81</td> <td>~80</td> </tr> <tr> <td>England</td> <td>~81</td> <td>~82</td> <td>~81</td> </tr> <tr> <td rowspan="2">Male</td> <td>West Yorkshire</td> <td>~77</td> <td>~78</td> <td>~77</td> </tr> <tr> <td>England</td> <td>~78</td> <td>~79</td> <td>~78</td> </tr> </tbody> </table>	Sex	Region	2008-10	2017-19	2018-20	Female	West Yorkshire	~80	~81	~80	England	~81	~82	~81	Male	West Yorkshire	~77	~78	~77	England	~78	~79	~78	<p>Life expectancy in West Yorkshire remains lower than the England average. The most recent data shows a fall in life expectancy (the first drop in 20 years) due to high mortality rates (Covid-19) in 2020.</p>
Sex	Region	2008-10	2017-19	2018-20																					
Female	West Yorkshire	~80	~81	~80																					
	England	~81	~82	~81																					
Male	West Yorkshire	~77	~78	~77																					
	England	~78	~79	~78																					
<p>Employment rate gap for disadvantaged groups</p> <p><i>Employment rate for all aged 16-64</i></p> <p>Source: ONS APS</p>	 <table border="1"> <thead> <tr> <th>Group</th> <th>Employment Rate (%)</th> </tr> </thead> <tbody> <tr> <td>Female</td> <td>71%</td> </tr> <tr> <td>Male</td> <td>79%</td> </tr> <tr> <td>Ethnic minority</td> <td>60%</td> </tr> <tr> <td>White</td> <td>78%</td> </tr> <tr> <td>Disabled</td> <td>58%</td> </tr> <tr> <td>Not disabled</td> <td>81%</td> </tr> </tbody> </table>	Group	Employment Rate (%)	Female	71%	Male	79%	Ethnic minority	60%	White	78%	Disabled	58%	Not disabled	81%	<p>Members of some groups are much less likely to be in employment. Prior to the pandemic there were signs that the employment rate gap was narrowing for disabled people and people from ethnic minorities but there is evidence that progress has been affected by the health crisis.</p>									
Group	Employment Rate (%)																								
Female	71%																								
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Disabled	58%																								
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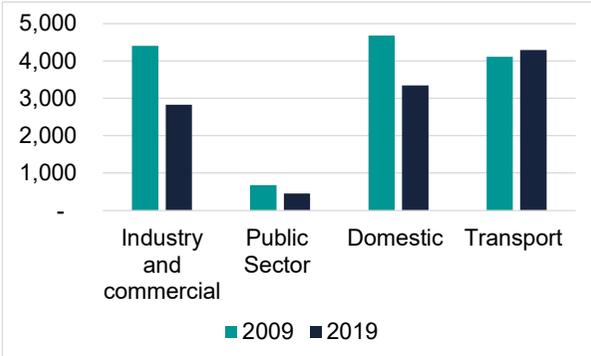
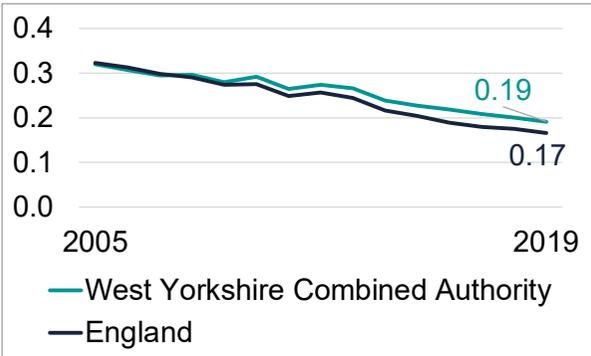
Indicator	Headline chart	Comment																		
<p>Unemployment rate</p> <p><i>Unemployment rate for all aged 16+</i></p> <p>Source: ONS APS and model-based estimates of unemployment</p>	 <table border="1"> <caption>Unemployment Rate Data (2004-2020)</caption> <thead> <tr> <th>Year</th> <th>West Yorkshire (%)</th> <th>England (%)</th> </tr> </thead> <tbody> <tr> <td>2004</td> <td>~4.5</td> <td>~4.5</td> </tr> <tr> <td>2010</td> <td>~9.5</td> <td>~8.5</td> </tr> <tr> <td>2020</td> <td>4.6</td> <td>4.7</td> </tr> </tbody> </table>	Year	West Yorkshire (%)	England (%)	2004	~4.5	~4.5	2010	~9.5	~8.5	2020	4.6	4.7	<p>West Yorkshire's unemployment rate has fallen and is now on a par with the national average, although the adverse impact of COVID-19 is unlikely to be fully reflected in the figures</p>						
Year	West Yorkshire (%)	England (%)																		
2004	~4.5	~4.5																		
2010	~9.5	~8.5																		
2020	4.6	4.7																		
<p>Gross disposable household income</p> <p><i>Gross disposable household income per head (£) at current basic prices</i></p> <p>Source: Regional Accounts ONS</p>	 <table border="1"> <caption>Gross Disposable Household Income per Head (£)</caption> <thead> <tr> <th>Year</th> <th>West Yorkshire (£)</th> <th>England (£)</th> </tr> </thead> <tbody> <tr> <td>2008</td> <td>~13,500</td> <td>~16,500</td> </tr> <tr> <td>2018</td> <td>~17,000</td> <td>~21,500</td> </tr> </tbody> </table>	Year	West Yorkshire (£)	England (£)	2008	~13,500	~16,500	2018	~17,000	~21,500	<p>Income is growing over time in nominal terms but the gap with the national average on income per head has widened slightly.</p>									
Year	West Yorkshire (£)	England (£)																		
2008	~13,500	~16,500																		
2018	~17,000	~21,500																		
<p>Jobs paying below Real Living Wage</p> <p><i>Jobs paying below Real Living Wage by gender and status</i></p> <p>Source: Annual Survey of Hours and Earnings, 2020</p>	 <table border="1"> <caption>Jobs Paying Below Real Living Wage (%)</caption> <thead> <tr> <th>Category</th> <th>West Yorkshire (%)</th> <th>England (%)</th> </tr> </thead> <tbody> <tr> <td>Male</td> <td>~18</td> <td>~16</td> </tr> <tr> <td>Female</td> <td>~23</td> <td>~25</td> </tr> <tr> <td>Full-time</td> <td>~14</td> <td>~14</td> </tr> <tr> <td>Part-time</td> <td>~38</td> <td>~37</td> </tr> <tr> <td>Total</td> <td>~20</td> <td>~20</td> </tr> </tbody> </table>	Category	West Yorkshire (%)	England (%)	Male	~18	~16	Female	~23	~25	Full-time	~14	~14	Part-time	~38	~37	Total	~20	~20	<p>The proportion of jobs paying below the Real Living Wage has fallen in West Yorkshire and is now on a par with the national average. Women and part-time workers are more likely to be paid below the Real Living Wage.</p>
Category	West Yorkshire (%)	England (%)																		
Male	~18	~16																		
Female	~23	~25																		
Full-time	~14	~14																		
Part-time	~38	~37																		
Total	~20	~20																		

Indicator	Headline chart	Comment																
<p>Quality work</p> <p><i>Proportion of residents who are employees in quality work</i></p> <p>Job quality in the UK, ONS, 2018</p>	 <table border="1"> <thead> <tr> <th>Region</th> <th>Proportion (%)</th> </tr> </thead> <tbody> <tr> <td>Bradford</td> <td>66%</td> </tr> <tr> <td>Calderdale</td> <td>68%</td> </tr> <tr> <td>Kirklees</td> <td>69%</td> </tr> <tr> <td>Leeds</td> <td>77%</td> </tr> <tr> <td>Wakefield</td> <td>66%</td> </tr> <tr> <td>England</td> <td>72%</td> </tr> </tbody> </table>	Region	Proportion (%)	Bradford	66%	Calderdale	68%	Kirklees	69%	Leeds	77%	Wakefield	66%	England	72%	<p>All local authorities in West Yorkshire except Leeds have a relatively low proportion of people in jobs that offer quality work, based on a composite measure that takes into account pay, working hours and contractual status.</p>		
Region	Proportion (%)																	
Bradford	66%																	
Calderdale	68%																	
Kirklees	69%																	
Leeds	77%																	
Wakefield	66%																	
England	72%																	
<p>People with no / low qualifications</p> <p><i>% of people aged 16-64 qualified below level 2 or with no qualifications</i></p> <p>Source: ONS APS</p>	 <table border="1"> <thead> <tr> <th>Year</th> <th>West Yorkshire (%)</th> <th>England (%)</th> </tr> </thead> <tbody> <tr> <td>2004</td> <td>~35%</td> <td>~34%</td> </tr> <tr> <td>2020</td> <td>22%</td> <td>19%</td> </tr> </tbody> </table>	Year	West Yorkshire (%)	England (%)	2004	~35%	~34%	2020	22%	19%	<p>The proportion of people with no / low qualifications is falling and the deficit with the national average narrowed in 2020.</p>							
Year	West Yorkshire (%)	England (%)																
2004	~35%	~34%																
2020	22%	19%																
<p>Apprenticeships</p> <p><i>Ratio of apprenticeship starts to people in employment</i></p> <p>Source: Department for Education, Annual Population Survey (ONS)</p>	 <table border="1"> <thead> <tr> <th>Region</th> <th>Ratio</th> </tr> </thead> <tbody> <tr> <td>Bradford</td> <td>14.0</td> </tr> <tr> <td>Calderdale</td> <td>15.3</td> </tr> <tr> <td>Kirklees</td> <td>12.9</td> </tr> <tr> <td>Leeds</td> <td>11.8</td> </tr> <tr> <td>Wakefield</td> <td>17.2</td> </tr> <tr> <td>West Yorkshire</td> <td>13.5</td> </tr> <tr> <td>England</td> <td>12.2</td> </tr> </tbody> </table>	Region	Ratio	Bradford	14.0	Calderdale	15.3	Kirklees	12.9	Leeds	11.8	Wakefield	17.2	West Yorkshire	13.5	England	12.2	<p>West Yorkshire has more apprenticeships relative to its employment base than the national average but the number of starts fell in 2019/20, both regionally and nationally.</p>
Region	Ratio																	
Bradford	14.0																	
Calderdale	15.3																	
Kirklees	12.9																	
Leeds	11.8																	
Wakefield	17.2																	
West Yorkshire	13.5																	
England	12.2																	

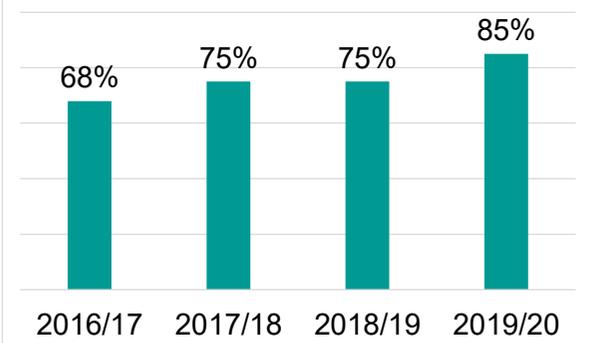
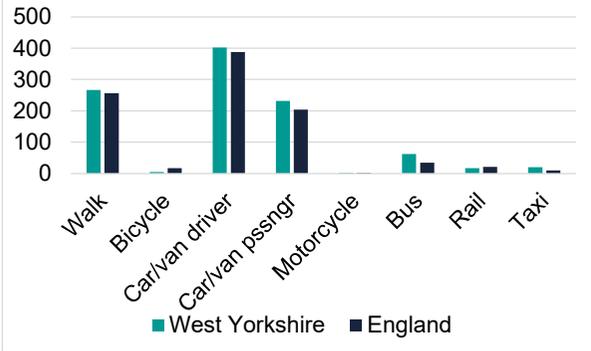
Indicator	Headline chart	Comment																								
<p>People without basic digital skills</p> <p><i>Essential digital skills (EDS) – key indicators</i></p> <p>Lloyds Bank, UK Consumer Digital Index, 2020</p>	 <table border="1"> <caption>Digital Skills Comparison</caption> <thead> <tr> <th>Category</th> <th>Yorkshire and the Humber (%)</th> <th>UK average (%)</th> </tr> </thead> <tbody> <tr> <td>Foundation Skill</td> <td>~85</td> <td>~85</td> </tr> <tr> <td>EDS for Life</td> <td>~75</td> <td>~78</td> </tr> <tr> <td>EDS for Work</td> <td>~42</td> <td>~48</td> </tr> <tr> <td>Offline</td> <td>~10</td> <td>~8</td> </tr> </tbody> </table>	Category	Yorkshire and the Humber (%)	UK average (%)	Foundation Skill	~85	~85	EDS for Life	~75	~78	EDS for Work	~42	~48	Offline	~10	~8	<p>There has been no sustained improvement over time against these measures and mixed performance relative to the national average.</p>									
Category	Yorkshire and the Humber (%)	UK average (%)																								
Foundation Skill	~85	~85																								
EDS for Life	~75	~78																								
EDS for Work	~42	~48																								
Offline	~10	~8																								
<p>NEETs</p> <p><i>Number and proportion of 16- and 17-year-olds not in education, employment or training (NEET) or whose activity is not known</i></p> <p>NEET and participation local authority figures, Department for Education, 2021</p>	 <table border="1"> <caption>NEET Rates Comparison</caption> <thead> <tr> <th>Year</th> <th>West Yorkshire (%)</th> <th>England (%)</th> </tr> </thead> <tbody> <tr> <td>2019/20</td> <td>~5.2</td> <td>~5.5</td> </tr> <tr> <td>2020/21</td> <td>~6.0</td> <td>~5.5</td> </tr> </tbody> </table>	Year	West Yorkshire (%)	England (%)	2019/20	~5.2	~5.5	2020/21	~6.0	~5.5	<p>The proportion of 16 and 17-year olds who are NEET has increased in last year and is now slightly above national average</p>															
Year	West Yorkshire (%)	England (%)																								
2019/20	~5.2	~5.5																								
2020/21	~6.0	~5.5																								
<p>Net additional dwellings</p> <p><i>Net additional dwellings per 1,000 population</i></p> <p>Source: West Yorkshire local authorities, MHCLG</p>	 <table border="1"> <caption>Net Additional Dwellings per 1,000 Population</caption> <thead> <tr> <th>Year</th> <th>West Yorkshire</th> <th>England</th> </tr> </thead> <tbody> <tr> <td>2013-14</td> <td>~2.5</td> <td>~2.5</td> </tr> <tr> <td>2014-15</td> <td>~3.2</td> <td>~2.8</td> </tr> <tr> <td>2015-16</td> <td>~3.5</td> <td>~3.0</td> </tr> <tr> <td>2016-17</td> <td>~3.8</td> <td>~3.5</td> </tr> <tr> <td>2017-18</td> <td>~3.2</td> <td>~4.0</td> </tr> <tr> <td>2018-19</td> <td>~4.0</td> <td>~4.2</td> </tr> <tr> <td>2019-20</td> <td>~3.2</td> <td>~4.2</td> </tr> </tbody> </table>	Year	West Yorkshire	England	2013-14	~2.5	~2.5	2014-15	~3.2	~2.8	2015-16	~3.5	~3.0	2016-17	~3.8	~3.5	2017-18	~3.2	~4.0	2018-19	~4.0	~4.2	2019-20	~3.2	~4.2	<p>West Yorkshire has fallen below the national average on this measure of housing supply in recent years.</p>
Year	West Yorkshire	England																								
2013-14	~2.5	~2.5																								
2014-15	~3.2	~2.8																								
2015-16	~3.5	~3.0																								
2016-17	~3.8	~3.5																								
2017-18	~3.2	~4.0																								
2018-19	~4.0	~4.2																								
2019-20	~3.2	~4.2																								

Indicator	Headline chart	Comment																								
<p>Housing affordability</p> <p><i>Affordability of House Prices 2010 and 2020 – ratio of median house price to median annual wage (residence-based) at local authority level</i></p> <p>Housing affordability in England and Wales: 2020, ONS, 2021</p>	<table border="1"> <caption>Estimated data for Housing Affordability Ratio</caption> <thead> <tr> <th>Local Authority</th> <th>2010</th> <th>2020</th> </tr> </thead> <tbody> <tr> <td>Bradford</td> <td>5.0</td> <td>5.0</td> </tr> <tr> <td>Calderdale</td> <td>5.0</td> <td>5.0</td> </tr> <tr> <td>Kirklees</td> <td>5.0</td> <td>5.0</td> </tr> <tr> <td>Leeds</td> <td>5.5</td> <td>6.0</td> </tr> <tr> <td>Wakefield</td> <td>5.0</td> <td>5.5</td> </tr> <tr> <td>England 2010</td> <td>7.5</td> <td>7.5</td> </tr> <tr> <td>England 2020</td> <td>7.5</td> <td>7.5</td> </tr> </tbody> </table>	Local Authority	2010	2020	Bradford	5.0	5.0	Calderdale	5.0	5.0	Kirklees	5.0	5.0	Leeds	5.5	6.0	Wakefield	5.0	5.5	England 2010	7.5	7.5	England 2020	7.5	7.5	<p>Homes have become slightly less affordable over the last decade in four of the five local authorities in West Yorkshire but are more affordable than nationally in terms of this ratio. Nonetheless, West Yorkshire still faces significant affordability problems, particularly with regard to households in poverty.</p>
Local Authority	2010	2020																								
Bradford	5.0	5.0																								
Calderdale	5.0	5.0																								
Kirklees	5.0	5.0																								
Leeds	5.5	6.0																								
Wakefield	5.0	5.5																								
England 2010	7.5	7.5																								
England 2020	7.5	7.5																								
<p>Rented housing costs</p> <p><i>Median monthly rental prices for private sector two-bedroom properties</i></p> <p>Private rental market summary statistics in England, ONS, 2021</p>	<table border="1"> <caption>Estimated data for Median Monthly Rental Prices</caption> <thead> <tr> <th>Year</th> <th>West Yorkshire</th> <th>England</th> </tr> </thead> <tbody> <tr> <td>2015</td> <td>480</td> <td>600</td> </tr> <tr> <td>2016</td> <td>490</td> <td>620</td> </tr> <tr> <td>2017</td> <td>490</td> <td>640</td> </tr> <tr> <td>2018</td> <td>500</td> <td>650</td> </tr> <tr> <td>2019</td> <td>520</td> <td>660</td> </tr> <tr> <td>2020</td> <td>550</td> <td>680</td> </tr> </tbody> </table>	Year	West Yorkshire	England	2015	480	600	2016	490	620	2017	490	640	2018	500	650	2019	520	660	2020	550	680	<p>Median private rents are increasing in West Yorkshire but are well below national figure.</p>			
Year	West Yorkshire	England																								
2015	480	600																								
2016	490	620																								
2017	490	640																								
2018	500	650																								
2019	520	660																								
2020	550	680																								

Indicator	Headline chart	Comment																
<p>Fuel poverty</p> <p><i>Proportion of households in fuel poverty, 2019</i></p> <p>Source: Fuel poverty detailed tables, Department for Business, Energy and Industrial Strategy, 2021</p>	 <table border="1"> <caption>Proportion of households in fuel poverty, 2019</caption> <thead> <tr> <th>Region</th> <th>Proportion (%)</th> </tr> </thead> <tbody> <tr> <td>Bradford</td> <td>18</td> </tr> <tr> <td>Calderdale</td> <td>16</td> </tr> <tr> <td>Kirklees</td> <td>16</td> </tr> <tr> <td>Leeds</td> <td>16</td> </tr> <tr> <td>Wakefield</td> <td>16</td> </tr> <tr> <td>West Yorkshire</td> <td>17</td> </tr> <tr> <td>England</td> <td>13</td> </tr> </tbody> </table>	Region	Proportion (%)	Bradford	18	Calderdale	16	Kirklees	16	Leeds	16	Wakefield	16	West Yorkshire	17	England	13	<p>Around 169,000 households in West Yorkshire (17% of all households) are in fuel poverty, a prevalence that is above the national average (13%).</p>
Region	Proportion (%)																	
Bradford	18																	
Calderdale	16																	
Kirklees	16																	
Leeds	16																	
Wakefield	16																	
West Yorkshire	17																	
England	13																	
<p>Tackling the climate emergency</p>																		
<p>Carbon dioxide emissions</p> <p><i>Per capita carbon dioxide emissions (t CO₂ per head)</i></p> <p>Source: UK local authority carbon dioxide emissions estimates 2019, Department for Business, Energy and Industrial Strategy, 2021</p>	 <table border="1"> <caption>Per capita carbon dioxide emissions (t CO₂ per head)</caption> <thead> <tr> <th>Year</th> <th>England</th> <th>West Yorkshire</th> </tr> </thead> <tbody> <tr> <td>2005</td> <td>8.5</td> <td>7.5</td> </tr> <tr> <td>2019</td> <td>4.9</td> <td>4.7</td> </tr> </tbody> </table>	Year	England	West Yorkshire	2005	8.5	7.5	2019	4.9	4.7	<p>Per capita emissions in West Yorkshire are below the national average and are on a downward trend. The rate of reduction needs to be accelerated to achieve net zero by 2038.</p>							
Year	England	West Yorkshire																
2005	8.5	7.5																
2019	4.9	4.7																

Indicator	Headline chart	Comment															
<p>Carbon dioxide emissions by sector</p> <p><i>CO₂ emissions (ktCO₂) by sector for West Yorkshire</i></p> <p>Source: UK local authority carbon dioxide emissions estimates 2019, Department for Business, Energy and Industrial Strategy, 2021</p>	 <table border="1"> <caption>CO₂ emissions (ktCO₂) by sector for West Yorkshire</caption> <thead> <tr> <th>Sector</th> <th>2009</th> <th>2019</th> </tr> </thead> <tbody> <tr> <td>Industry and commercial</td> <td>~4,500</td> <td>~2,800</td> </tr> <tr> <td>Public Sector</td> <td>~800</td> <td>~500</td> </tr> <tr> <td>Domestic</td> <td>~4,800</td> <td>~3,500</td> </tr> <tr> <td>Transport</td> <td>~4,200</td> <td>~4,500</td> </tr> </tbody> </table>	Sector	2009	2019	Industry and commercial	~4,500	~2,800	Public Sector	~800	~500	Domestic	~4,800	~3,500	Transport	~4,200	~4,500	<p>All sectors have seen significant reductions in emissions over time except transport, which is now the largest source of emissions.</p>
Sector	2009	2019															
Industry and commercial	~4,500	~2,800															
Public Sector	~800	~500															
Domestic	~4,800	~3,500															
Transport	~4,200	~4,500															
<p>Emissions intensity</p> <p><i>Emissions intensity ratio - the level of CO₂ emissions per unit of gross value added (GVA)</i></p> <p>Source: UK local authority carbon dioxide emissions estimates 2019, Department for Business, Energy and Industrial Strategy, 2021; Regional gross value added (balanced) by industry: all ITL regions, ONS, 2021</p>	 <table border="1"> <caption>Emissions intensity ratio (CO₂ emissions per unit of GVA)</caption> <thead> <tr> <th>Year</th> <th>West Yorkshire Combined Authority</th> <th>England</th> </tr> </thead> <tbody> <tr> <td>2005</td> <td>~0.32</td> <td>~0.32</td> </tr> <tr> <td>2019</td> <td>0.19</td> <td>0.17</td> </tr> </tbody> </table>	Year	West Yorkshire Combined Authority	England	2005	~0.32	~0.32	2019	0.19	0.17	<p>Emissions intensity (ratio of emissions to economic output) is in steady decline in West Yorkshire but is higher than the national average and the gap is widening.</p>						
Year	West Yorkshire Combined Authority	England															
2005	~0.32	~0.32															
2019	0.19	0.17															

Indicator	Headline chart	Comment																																																																								
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Year	Bradford	Calderdale	Kirklees	Leeds	Wakefield																																																																					
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² This is the ratio of number of jobs accessible in 30 minutes using frequent bus network from most deprived areas in West Yorkshire, to the number of jobs accessible by car in 30 minutes from same areas, during the morning peak

Indicator	Headline chart	Comment																				
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Year	KSI																					
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2012	930																					
2013	870																					
2014	920																					
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2016	890																					
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2018	870																					
2019	830																					
<p>MCard ticket transactions</p> <p><i>Bus Trips made using MCard Products (millions)</i></p> <p>Source: WYCA NERO Reports</p>	<table border="1"> <caption>Bus Trips made using MCard Products (millions)</caption> <thead> <tr> <th>Year</th> <th>Millions</th> </tr> </thead> <tbody> <tr><td>2016</td><td>13.5</td></tr> <tr><td>2017</td><td>16.5</td></tr> <tr><td>2018</td><td>17.5</td></tr> <tr><td>2019</td><td>17.5</td></tr> <tr><td>2020</td><td>8.5</td></tr> </tbody> </table>	Year	Millions	2016	13.5	2017	16.5	2018	17.5	2019	17.5	2020	8.5	<p>Uptake of smart ticketing was on an upward trend prior to the pandemic, but then fell along with bus patronage. Purchase of products through digital channels continues to grow.</p>								
Year	Millions																					
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<p>Satisfaction with highway infrastructure</p> <p><i>Public satisfaction with highway infrastructure in West Yorkshire (average score on scale of 1-10)</i></p> <p>Source: Residents' Perceptions of Transport Survey</p>	<table border="1"> <caption>Public satisfaction with highway infrastructure in West Yorkshire</caption> <thead> <tr> <th>Year</th> <th>Score</th> </tr> </thead> <tbody> <tr><td>2016/17</td><td>5.7</td></tr> <tr><td>2017/18</td><td>5.9</td></tr> <tr><td>2018/19</td><td>6.3</td></tr> <tr><td>2019/20</td><td>5.4</td></tr> <tr><td>2020/21</td><td>5.8</td></tr> </tbody> </table>	Year	Score	2016/17	5.7	2017/18	5.9	2018/19	6.3	2019/20	5.4	2020/21	5.8	<p>Satisfaction has increased over the period but to a modest degree and progress has not been consistent.</p>								
Year	Score																					
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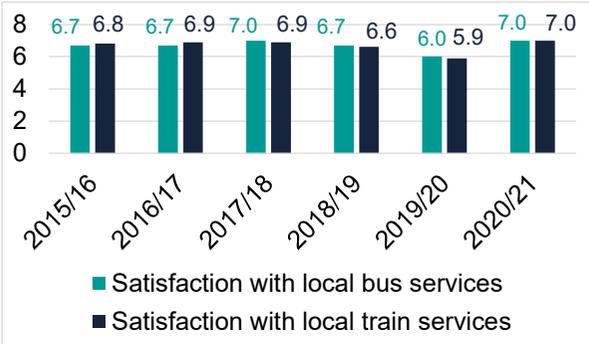
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Year	Satisfaction with local bus services	Satisfaction with local train services																					
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Local Area	Net difference per head																						
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1 Background and context

1.1 Introduction

Welcome to State of the Region 2021 – the first annual review of the performance of West Yorkshire against key socio-economic and environmental indicators.

The report is intended to provide a stocktake of where West Yorkshire currently stands, using a basket of headline indicators developed as part of the Combined Authority's Strategic Economic Framework. As West Yorkshire takes up its devolved powers with the direct election of its new mayor, it is an opportune and appropriate time to assess the progress the region is making.

It is designed to be a resource for all partners across West Yorkshire but will also be useful for stakeholders from outside the region, including national government. It highlights areas of strength and positive trends in the local economy but also flags key issues and challenges that are priorities for future action.

The report aims to provide a balanced and objective view of economic performance in the region and gives some insight into the difference we are making through the combined action of all partners in West Yorkshire. It does not seek to provide a review of the impact or performance of the Combined Authority, Local Enterprise Partnership or any other partner in West Yorkshire.

Nor does it make policy recommendations – the solutions to the problems faced by West Yorkshire are set out in the Strategic Economic Framework (including the West Yorkshire Economic Recovery Plan, which forms part of the SEF) and the other policies and strategies developed by partners in the region. Indeed, a report of this kind can only go so far in unpacking and explaining the wide range of complex issues facing the region. Nonetheless, this analysis should prove useful in prompting debate as partners seek to review their strategies in the light of the direction of travel in the economy.

COVID-19 has had a huge impact on all aspects of the West Yorkshire economy during 2020 and 2021, although in many cases this is not directly captured by the indicators because of issues with the timeliness of the available data and the lagging nature of annual reporting. The key implications of the crisis for progress against each of the priorities are considered within the report. However, this report is not primarily intended to be an assessment of COVID-19, although clearly this is a development that cannot be ignored. There is a recognition that we are currently in state of flux so far as the impact of COVID-19 is concerned and that in the short term, conditions could still change significantly. Ultimately, we are seeking to understand the underlying trends in performance in the region and the opportunities and challenges for the medium to longer term.

Medium-term prospects will also be shaped by Brexit. As well as the initial customs and border disruption the UK is currently experiencing, there will be medium- and longer-term impacts resulting from divergence from EU product standards and other regulations that will lead to restructuring in the national and local economy.

We plan to update State of the Region on an annual basis, in order to track the progress that West Yorkshire is making over time. We will also be developing interactive dashboards with dynamic content to show movement against the indicators in the period between annual reports.

1.2 Overview of West Yorkshire

The work of the West Yorkshire Combined Authority and the Leeds City Region Enterprise Partnership covers the West Yorkshire local authority areas of Bradford, Calderdale, Kirklees, Leeds and Wakefield.

West Yorkshire is key to re-balancing the national economy and enabling the North of England to contribute fully to, and benefit from, national economic growth. It is the UK's largest economy and population centre outside of London, with an output larger than nine EU countries, and is the biggest contributor to the Northern Powerhouse in economic terms. West Yorkshire is at the centre of the UK, is well-served by East-West and North-South road links and is within one hour's drive of 7 million people.



People are the heart of the region. We have over 2.3 million residents in West Yorkshire and the population is projected to grow by 8% to more than 2.5 million by 2043.

West Yorkshire has an employed workforce of 1.1 million and around 95,000 businesses. In addition, West Yorkshire is the United Kingdom's largest regional finance centre and contains more manufacturing jobs than anywhere in the north.

Our region has a highly diverse population with many ethnicities, backgrounds and lifestyles represented, bringing great cultural diversity, a diversity which is celebrated.

West Yorkshire³ contains five cities and major towns, including the core city of Leeds. Leeds is the main retail and office centre on the eastern side of the Pennines and is at the heart of the West Yorkshire economy. Leeds is a renowned retail destination, is home to award winning national theatre and dance companies has a world class arena and thriving independent food scene.

Bradford has the 4th highest number of manufacturing jobs of any city in the UK (after London, Birmingham and Leeds) and has a diverse population, with people from ethnic minorities making up 36% of the total population.

³ For further detail of see Place Narrative

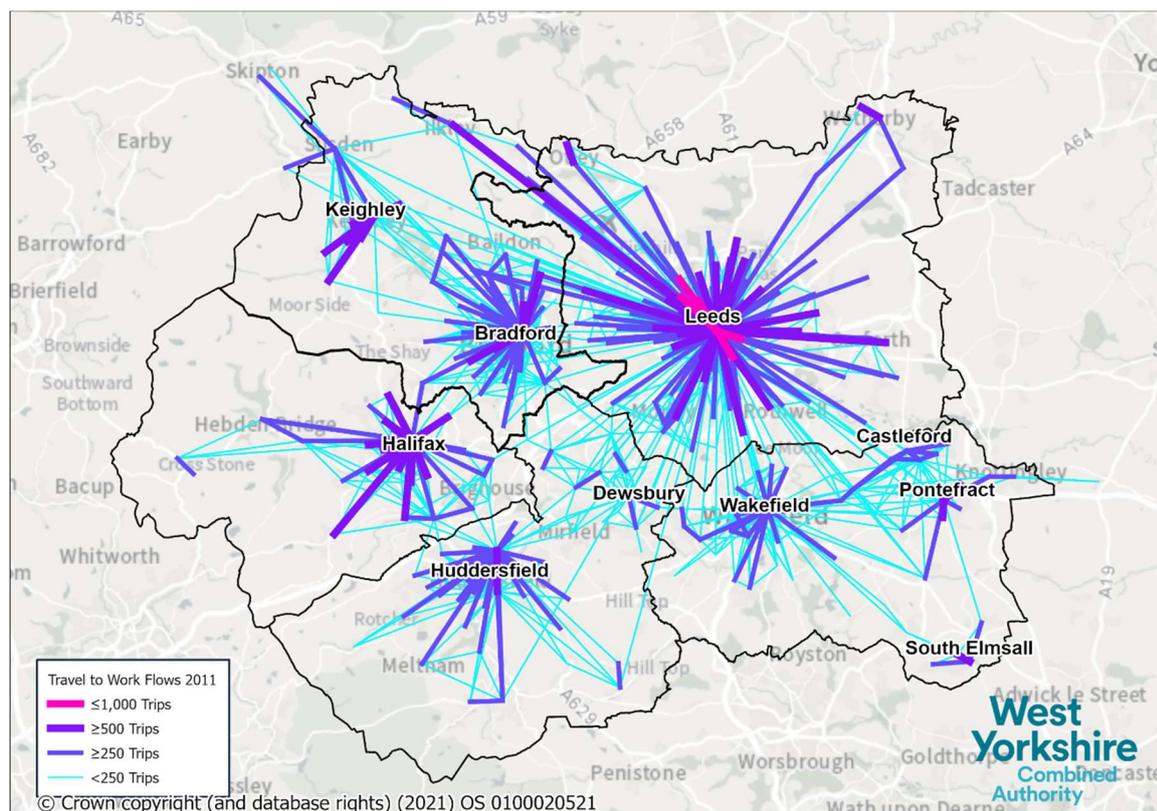
Centered on Huddersfield, Kirklees has a strong manufacturing base, has world leading engineering and textile businesses and is receiving multi-million-pound investment in gigabit infrastructure

Situated between Leeds and Manchester, Calderdale is within one hour's travel of a quarter of a million businesses, eight million people and a combined economy worth around £150 billion. Calderdale has strengths in financial and professional services, and advanced manufacturing, as well as creative and digital industries, and innovation in green business.

Wakefield has significant strengths in manufacturing and logistics, and benefits from being one of the United Kingdom's most accessible places by road, rail and air.

Turning to **commuting flows**, West Yorkshire is largely self-contained, with 90% of residents working within the area and 90% of jobs in the area being undertaken by local residents. A fifth of residents travel to a work destination outside their home district but within West Yorkshire. Nonetheless, there are substantial commuting flows in absolute terms both in and out of West Yorkshire and a net commuting inflow, overall. The most significant sources of inward commuters into West Yorkshire are Barnsley, Harrogate and Selby, followed by York and Doncaster, with Leeds being its principal destination. Clearly, commuting has been severely disrupted by COVID-19 and there is great uncertainty about future travel-to-work behaviour.

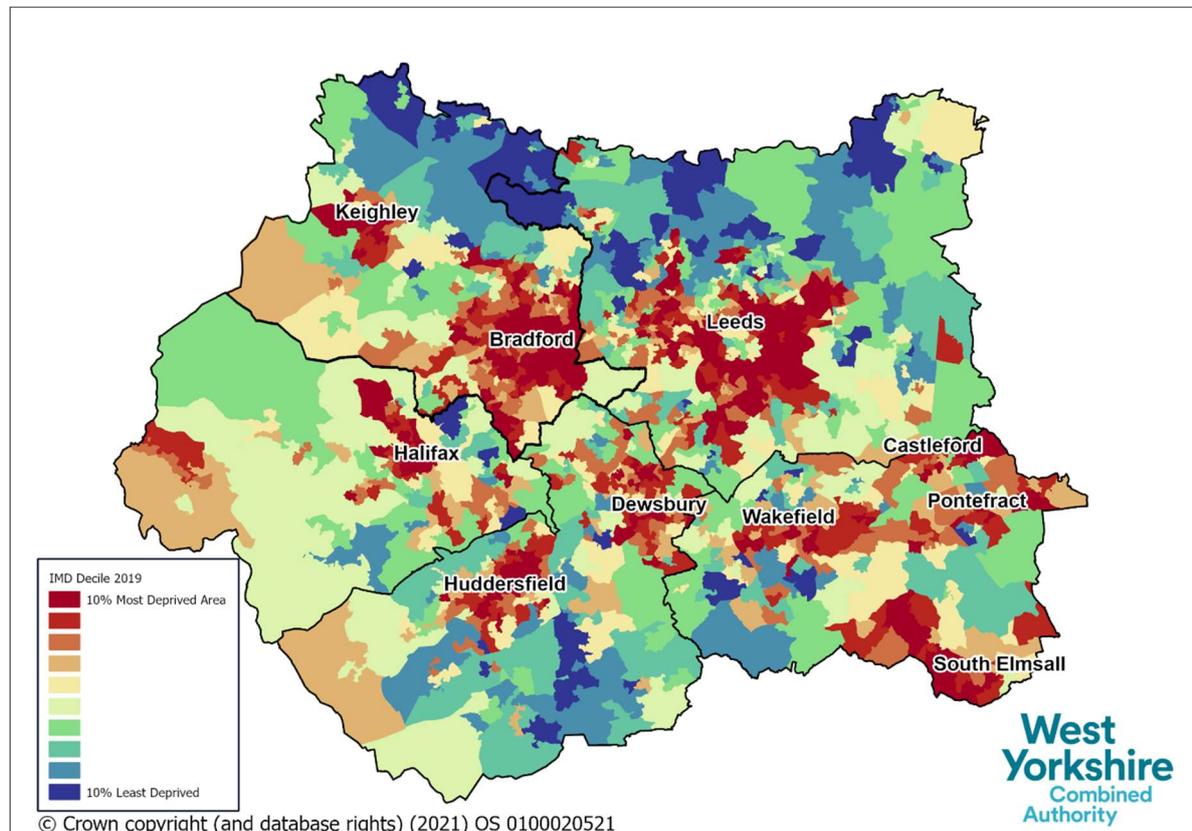
Figure 1: 1,000 Largest Travel To Work Flows in West Yorkshire 2011



More than one in five people in West Yorkshire live in areas within the 10% most deprived in England, according to the Index of Multiple Deprivation (IMD). This is equivalent to more than half a million people. The deprivation profile of our region has remained relatively unchanged between 2004 and 2019, reflecting the existence of pockets of persistent deprivation. The most disadvantaged areas are clustered around town and city centres and their periphery. A key issue of concern is that residents from an ethnic minority group are

roughly twice as likely as the population as a whole to live in areas of the most acute deprivation in our region, meaning that around a third of residents in the most deprived neighbourhoods are from an ethnic minority group.

Figure 2: West Yorkshire Index of Multiple Deprivation 2019



1.2.1 COVID-19 crisis

This report considers the impact of COVID-19 on various aspects of the local economy and transport system. At the time of writing there were signs of strong recovery in the economy, reflected in positive trends in town / city centre activity, employment, vacancies (online job postings), furlough use and people returning to their workplaces⁴.

1.2.2 Devolution

The State of the Region report has been produced at the start of an important new stage in the work of the West Yorkshire Combined Authority and its partners – work that aims to transform the performance of the region. In March 2020 we agreed our first devolution deal with government, granting us greater influence over investment in skills, transport, housing and business support. It will also give us local control over at least £1.8 billion to spend on the things that matter to the people of West Yorkshire. The election of the first West Yorkshire Mayor, Tracy Brabin, provides a new focal point for the region, championing it with Government and the rest of the world. Most importantly, the mayor is directly accountable to the people of West Yorkshire and will ensure that the priorities of residents are reflected in the decisions the Combined Authority makes.

⁴ West Yorkshire Combined Authority, [COVID-19 Economic Monitor](#) (2021)

1.3 Strategic Economic Framework (SEF)

The [West Yorkshire Strategic Economic Framework \(SEF\)](#) provides the context for investment and decision making during this next stage of transformation as a Mayoral Combined Authority. It sets out our vision for the region and our priorities for achieving this. It ensures that all Combined Authority strategies are aligned with a clear focus on meeting these priorities. It has been designed to be flexible, able to reflect our evolving policy remit and prove our resilience during periods of change and uncertainty. It aims to inspire confidence in the region, demonstrating that we have an ambitious strategy for transformation as we take on a greater role in the decisions that affect us.

Ultimately, the Strategic Economic Framework (SEF) will allow us to realise our Vision for West Yorkshire to be:

Recognised globally as a place with a strong, successful economy where everyone can build great businesses, careers and lives supported by a superb environment and world-class infrastructure.

1.3.1 Priorities

The SEF identifies significant challenges preventing us from realising our vision for everybody in the region.

First, a history of lower levels of skills, infrastructure investment and innovation means that productivity has lagged behind much of the UK as well as our European peers. Real terms living standards can only be increased sustainably by increasing productivity. This means that success in boosting productivity underpins the long-term aspirations of West Yorkshire.

Second, not all parts of our region have benefited from economic growth in the past and there is a risk that they will fall further behind as the country emerges from the COVID-19 pandemic. This is reflected in widespread and acute deprivation, a large number of low paid jobs and poor life expectancy.

Third, we need to ensure that growth in the region does not hamper our efforts to tackle the climate emergency and meet our commitment to become a net zero carbon economy by 2038.

Fourth, our transport network is under increasing pressure. Our diverse geography presents challenges in balancing transport priorities and funding. This matters because efficient transport infrastructure connects our communities, making it easier to get to work, do business and connect with each other.

Finally, further devolution of both investment and decision making is crucial for us to fully realise our vision for West Yorkshire. We need to address the historic under-investment in the region, align policy more closely to West Yorkshire's needs and adopt a more co-ordinated and innovative approach to service delivery in the region.

Five priorities have been identified that underpin our Vision and address the challenges facing West Yorkshire:

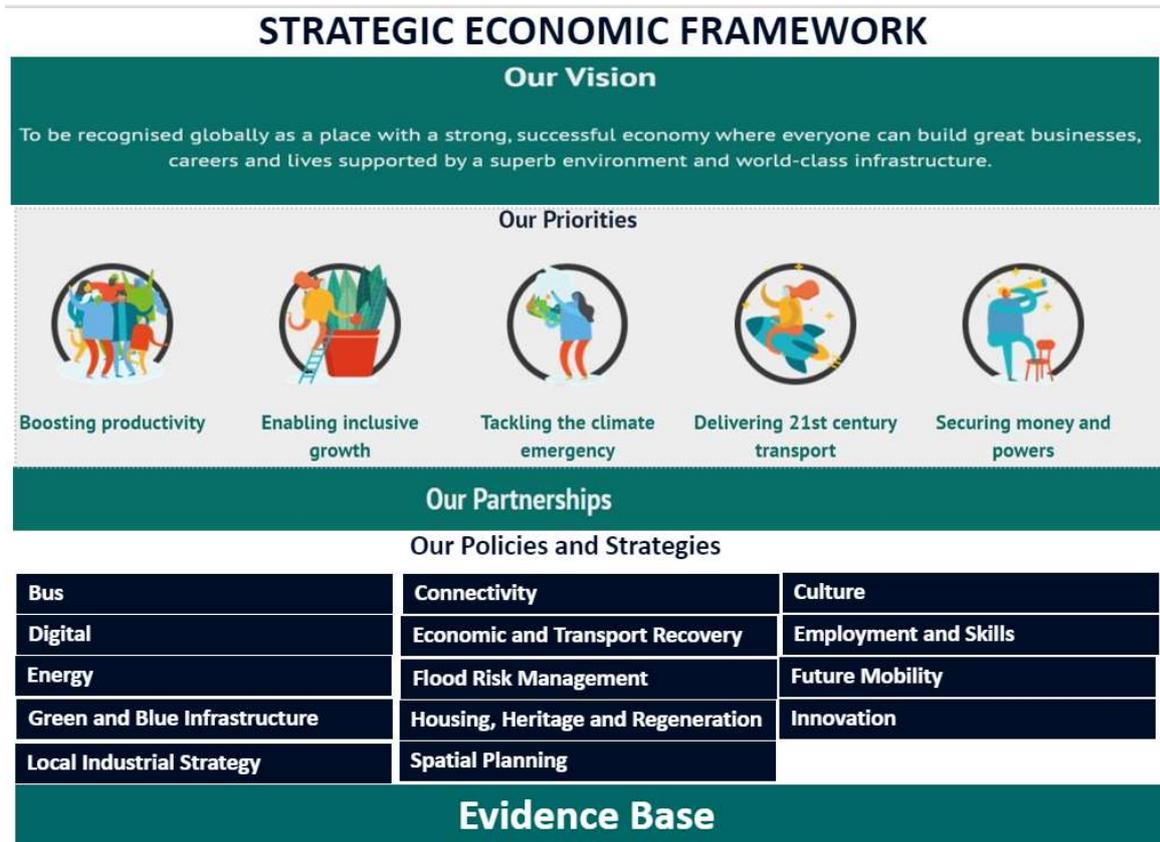
Boosting productivity Helping businesses to grow and invest in the region and their workforce, to drive economic growth, increase innovation and create jobs.

Enabling inclusive growth Enabling as many people as possible to contribute to, and benefit from, economic growth in our communities, towns and cities.

Tackling the climate emergency Growing our economy while cutting emissions and caring for our environment.

Delivering 21st-century transport Creating efficient transport infrastructure to connect our communities, making it easier to get to work, do business and connect with each other.

Securing money and powers Empowering the region by negotiating a devolution deal and successfully bidding for substantial additional funds.



As we embark on the next stage of transformation in the region, we will ensure that all of our policies and investment decisions are driven by at least one of our five priorities. The successful implementation of the SEF over the course of the next decade will ensure that our vision for West Yorkshire becomes a reality for more and more people.

It will mean that:

- Businesses in the region have proven their resilience to the challenges they face and are driving economic growth and closing the productivity gap.
- More and more people can share in the benefit of this economic growth across all parts of our region, and inequalities in income, opportunity and quality of life are reduced.
- We have made significant progress in reducing carbon emissions.
- We have a modernised transport network, with more journeys made by public transport, walking and cycling.
- And West Yorkshire itself will have secured more powers and funding freedoms from government and will be leading this transformation itself.

By the end of the decade West Yorkshire will be increasingly recognised globally as a place with a strong, successful economy where everyone can build great businesses, careers and lives supported by a superb environment and world-class infrastructure.

1.4 The SEF indicators

The SEF is underpinned by a monitoring and impact section, the purpose of which is to measure the progress West Yorkshire is making against the five priorities and the overall vision of the SEF.

A key element of the monitoring and impact approach is a basket of 40 headline indicators. These headline indicators are high level, strategic indicators that reflect key dimensions of performance in the West Yorkshire economy, the key areas where we would like to see change and improvement in order to support improved living standards and inclusion as set out in the SEF vision.

The range of indicators has been selected so as to be reflective of the SEF priorities but also to be broadly reflective of the diverse range of policy areas covered by the SEF. Since there are currently 14 of these policy areas the headline indicators are supplemented by additional indicators within each policy area to cover the outputs and outcomes relevant to those areas. Further details can be found in the respective [policy documents](#).

As the SEF evolves, there is the potential to bring forward additional indicators to reflect new areas of policy interest.

The **Local Plans** of the five West Yorkshire local authorities have a key influence on the full range of SEF indicators, facilitating inclusive growth, regeneration, housing delivery and helping to address the climate emergency. Local Plans provide a vision for the future of each local area and a framework for addressing housing needs and other economic, social and environmental priorities. They set out a spatial planning framework, seeking to manage growth in a sustainable way and to balance the overall scale, distribution and phasing of development⁵.

⁵ Further details are set out in the Government's [National Planning Policy Framework](#)

Figure 3: The Strategic Economic Framework (SEF) headline indicators and their links to the SEF priorities

- Primary link
- Secondary link

Indicator title	Boosting Productivity	Enabling Inclusive Growth	Tackling the Climate Emergency	Delivering 21st Century Transport
Economic output (GVA)	●●●	●●		●●
Economic output (GVA) per head	●●●	●●		●●
Employment rate	●●●	●●		●●
Productivity	●●●	●●		●●
Private sector businesses	●●●	●●		●●
Businesses engaging in innovation activity	●●●		●●	●●
Goods / services exports as % of GVA	●●●	●●		●●
Cultural sector contribution to employment	●●●	●●		
% qualified at level 4 and above	●●●	●●		
Gigabit-capable broadband coverage	●●●	●●	●●	
Take-up of superfast (or above) broadband services	●●●	●●	●●	
Mobile coverage (4G and 5G)	●●●	●●	●●	
Life expectancy	●●	●●●		●●
Employment rate gap for disadvantaged groups	●●	●●●		●●
Unemployment rate		●●●		●●
Gross disposable household income		●●●		●●
Jobs paying below Real Living Wage	●●	●●●		●●
% of employees in quality work	●●	●●●		●●
% qualified below level 2	●●	●●●		
Apprenticeship starts	●●	●●●		
People without basic digital skills	●●	●●●		

Indicator title	Boosting Productivity	Enabling Inclusive Growth	Tackling the Climate Emergency	Delivering 21st Century Transport
NEETs	●●	●●●		
Net additional dwellings	●●	●●●		
Housing affordability	●●	●●●		
Rented housing costs	●●	●●●		
% of households in fuel poverty		●●●	●●	
CO2 emissions (ktCO2)			●●●	●●
CO2 emissions (ktCO2) by sector			●●●	●●
Emissions intensity ratio	●●		●●●	●●
Building energy efficiency		●●	●●●	
Access to green and blue infrastructure		●●	●●●	
Premises at risk of flooding	●●	●●	●●●	
Access inequality ratio (employment)	●●	●●	●●	●●●
West Yorkshire mode share		●●	●●	●●●
Reported road casualties		●●		●●●
MCard ticket transactions (bus)		●●	●●	●●●
Public satisfaction with bus and rail services in the region			●●	●●●
Satisfaction with highway infrastructure	●●	●●		●●●

Under the priority of Securing Money and Powers there is a single indicator: *Net contribution of local area to exchequer*.

1.5 Structure and content of the report

The report is structured around the five priorities of the SEF, with each of the indicators assigned to a priority, as per Figure 3.

There is a short analysis and commentary for each indicator, examining why the indicator is important, how West Yorkshire is performing against the indicator based on the latest available data and an assessment of trends / direction of travel. Additional evidence is drawn upon to provide added context and to explain the factors behind changes in performance.

To set the analysis in context, we have, where data allows, set out comparisons between West Yorkshire and the national (England) average. Comparisons are also made with selected Mayoral Combined Authority areas whose circumstances are most relevant to the experience of West Yorkshire, including Sheffield City Region, Greater Manchester City Region and West Midlands Combined Authority (CA)¹ (Greater Birmingham and Solihull is used in some instances for reasons of data availability).

COVID-19 has had a fundamental impact on the economy and society of West Yorkshire over the last year, although this is not always captured by our indicators because of the lagging nature of much of the available data. However, the primary purpose of this report is not to assess the consequences of the pandemic, even though these cannot be ignored. Therefore, for each priority we have considered the implications of COVID-19 and Brexit within a discrete section. This means that the core narrative of the report is not dominated by these developments and a focus can be maintained on the broader and longer-term picture, which is the main concern of this exercise.

¹ This is coterminous with the West Midlands Metropolitan County rather than the wider West Midlands region.

2 Boosting Productivity

Summary

Like most of its comparator areas, West Yorkshire has seen lower economic growth since the crash of 2008 than in the years preceding it. However, since 2013, growth has been close to the UK average, and marginally higher than the UK average excluding London.

Output (GVA) per head is a key indicator of prosperity. At regional level it has grown at a similar pace to the national average in recent years, and although Leeds is the only part of West Yorkshire with output per head higher than the national average, the other local authorities have closed the gap to some degree since 2013.

Productivity is increasing in absolute terms in West Yorkshire, but there remains a significant gap to the UK as a whole, even when the outsized contribution made by London is factored in. Despite recent growth, the gap which opened up around the recession of 2008 has not closed significantly in recent years. This needs to be tackled if living standards in the region are to be raised.

West Yorkshire's job creation performance has been positive in recent years, as reflected in the upward trend in its employment rate. Although there is still a gap with the national average against this measure, the region compares favourably with most other Combined Authorities.

West Yorkshire has fewer private sector businesses per head of population than the national average, but Leeds has seen strong growth in its business base in recent years.

Around 70% of businesses in the Leeds City Region are engaged in innovation, according to the Leeds City Region Business Survey for 2020. A quarter invest in research and development (R&D), but national statistics indicate that the level of R&D spend is particularly low in Yorkshire and the Humber.

West Yorkshire area exports more in services per £1m of GVA than any comparator Combined Authority, although still slightly less than the national average. The value of service exports per £1m of GVA has grown strongly in recent years while the value of goods exports per £1m of GVA has been flat.

Overall, West Yorkshire has a relatively small cultural sector in employment terms, although Leeds and Calderdale are above the national average. There are signs that the sector was growing prior to the current health crisis.

West Yorkshire underperforms on the proportion of its population qualified to a higher level (level 4+), although 2020 saw a sharp improvement against this measure.

2.1 Overview of the priority

Helping businesses to grow, and invest in the region and their workforce, to drive economic growth, increase innovation and create jobs

A history of lower levels of skills, infrastructure investment and innovation means that productivity in West Yorkshire has lagged behind much of the UK as well as our European peers. Weak productivity performance is the most important constraint on regional economic growth. Raising the prosperity and real terms living standards of the region can only be achieved sustainably by increasing productivity.

- Support business to respond to the challenges and opportunities of Brexit
- Provide businesses with intensive support to boost productivity/innovation capacity
- Attract global investors to the region, creating jobs and boosting productivity within the regional economy
- Help businesses to increase overseas trade
- Embed the Regional Digital Framework
- Make the local skills system more responsive by embedding the recommendations of the Skills Commission, implementing the devolved Adult Education Budget and extending Delivery Agreements with education and training providers in the region.

The basket of indicators for this priority is wide ranging and focuses on productivity, economic performance and its key drivers. It includes measures relating to economic growth, productivity performance, export and innovation activity, the business base, digital infrastructure and skills of the workforce.

A number of the indicators are relevant to multiple priorities, reflecting the interconnected nature of this exercise.

It should be noted that the most recent data for many of the indicators in this section dates to the pre-pandemic and pre-Brexit period. This means that the substantial impact of COVID-19 on economic performance is not captured in the analysis of the core indicators. Consideration is given to the likely nature and extent of the impact and the potential outlook for West Yorkshire on page 75

2.2 Performance against the indicators

2.2.1 Economic output (GVA)

Like most of its comparator areas, West Yorkshire has seen lower growth in the years since the crash of 2008 than in the years preceding it. However, in recent years, growth has been similar to the UK average, and marginally higher than the national average excluding London.

Gross value added (GVA) is the most commonly-used measure of economic output at the local level. It is a similar measure to GDP, but with the effects of taxes and subsidies included. GVA is a measure of the increase in value of the economy through the production of goods and services in a given area and time.

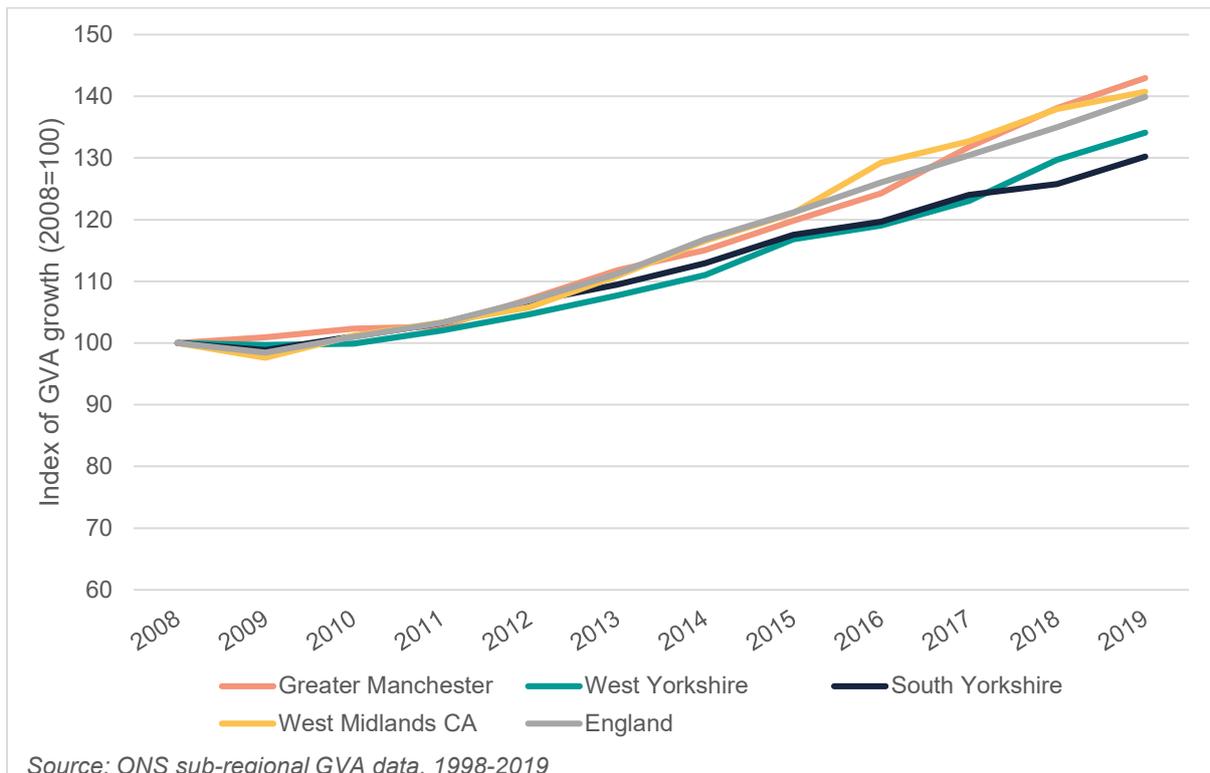
It is a critical indicator of the health and performance of a local economy. It gives a measure of the prosperity and living standards of an area but needs to be considered alongside demographics and employment to provide a full understanding of economic conditions. GVA growth can be driven by an expansion of the labour force, or by increases in productivity.

In 2019, the latest year available, West Yorkshire had economic output (GVA, or gross value added) of £57.9bn. That makes it a larger economy than nine EU countries and second only to Greater Manchester among core city Local Enterprise Partnership areas.

The West Yorkshire economy was slower to enter recovery from the crash of 2008 than some comparator areas, but subsequently grew by an average of 3.7% (including the effects of inflation) between 2013 and 2019.

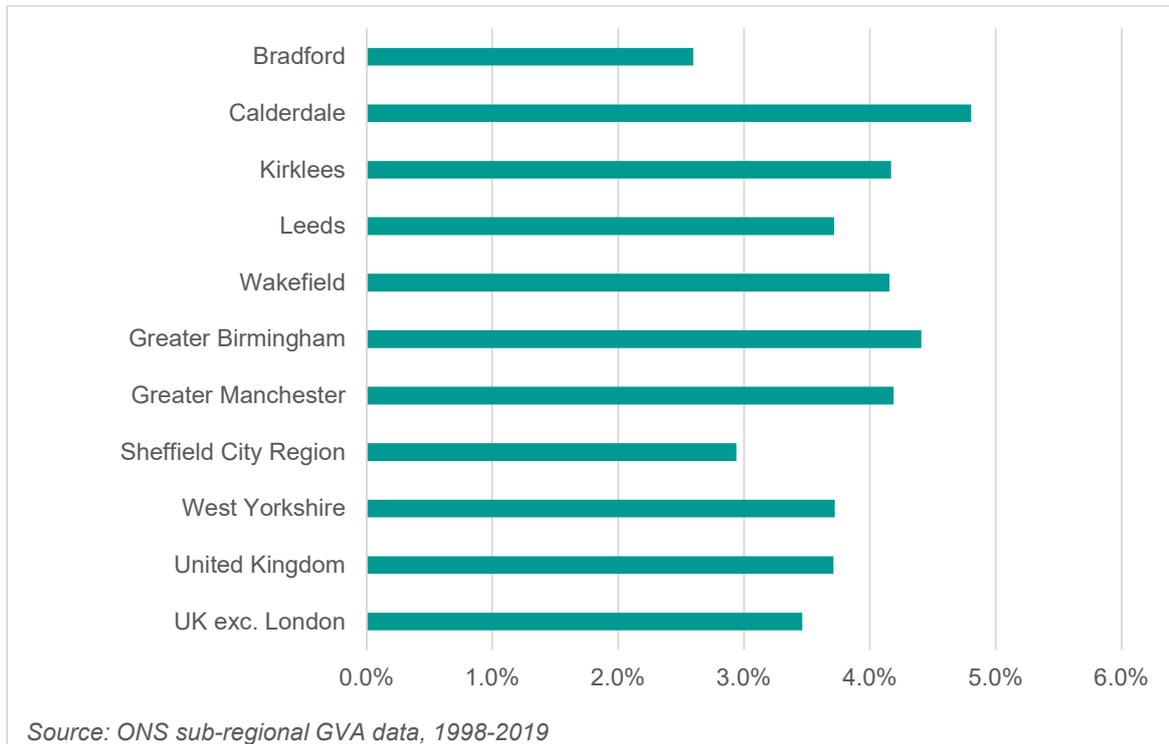
Growth between 2013 and 2019 was similar to the 3.7% averaged nationally, and slightly higher than the national average excluding London (3.5%). Over this period, West Yorkshire performed slightly better than the Sheffield City Region (2.9%), but slightly worse than Greater Manchester (4.2%).

Figure 4: Index of GVA growth (current prices) – West Yorkshire and key comparator NUTS2 areas, 2008-19



Locally, Calderdale, Kirklees and Wakefield have seen higher average growth rates than the UK since 2013 (4.8%, 4.2% and 4.2%, respectively), with Leeds matching the UK rate but Bradford notably lower. Bradford saw strong growth until 2017, followed by a fall in output thereafter, whereas Wakefield recorded strong growth in 2018 after relatively weak output in the years preceding that.

Figure 5: Gross value added in current prices - compound annual growth rate, 2013-19

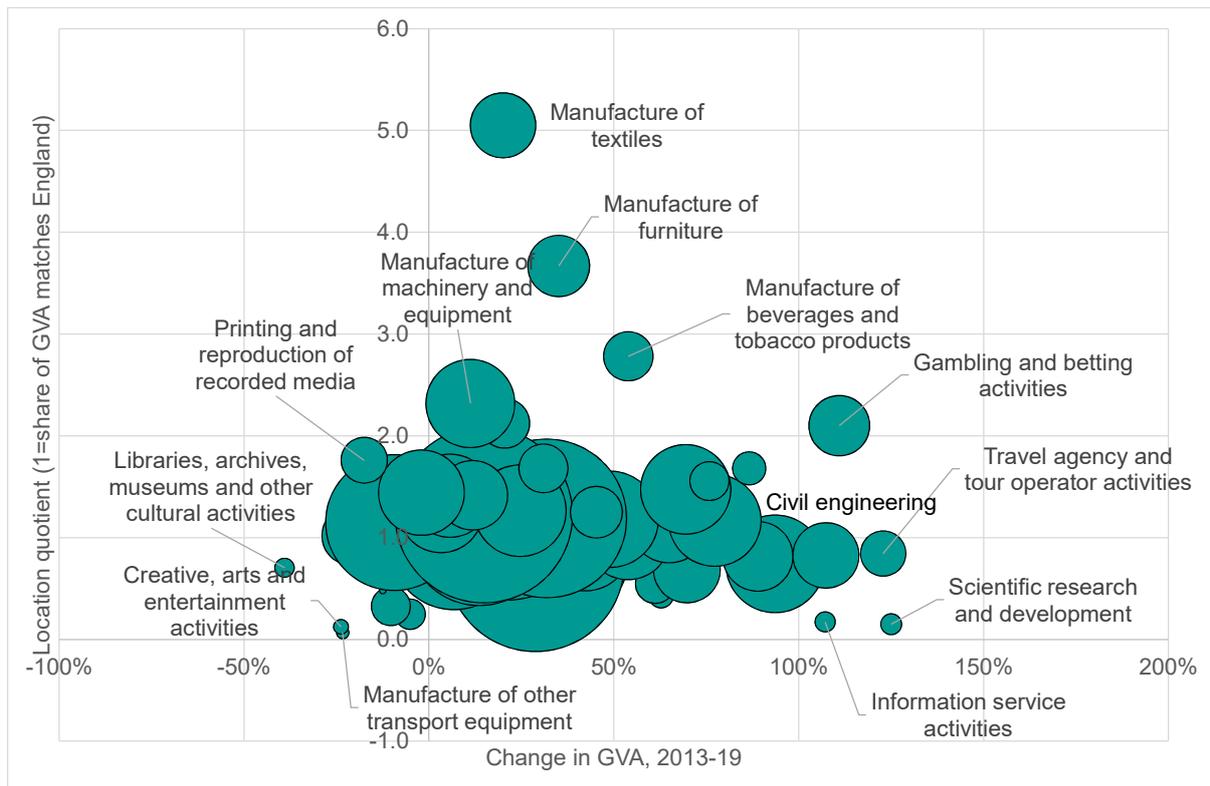


Whilst overall growth in West Yorkshire has been similar to the national figure in recent years, there are areas of the economy which have outpaced both local growth and England averages. A number of industries have seen their output in West Yorkshire more than double since 2013: scientific R&D (125%), travel agency activities (123%), gambling and betting (111%), civil engineering (107%) and information services (107%). However, all are small in absolute terms, each contributing 1% of GVA or less in 2019. Other sectors that have seen strong growth include computer programming and consultancy (94%), head offices and management consultancy (89%) and manufacture of apparel (87%). Both computer programming and social work activities have seen output increase by two thirds in the past five years, and both contribute around 2% of GVA –approximately £1.1bn per year.

Whilst education (£4bn), health, retail and financial services (all c. £3bn) are the biggest contributors to output in absolute terms, areas of manufacturing offer a larger share of output than they do nationally. Textiles' share of output is around 5 times higher than it is nationally, and furniture and beverage manufacture 4 and 3 times higher, respectively.

A small number of sectors have seen output decline between 2013 and 2018, including creative industries, cultural activities, and manufacture of transport equipment.

Figure 6: Economic output – concentration and growth, 2013-18



2.2.2 Economic output (GVA) per head

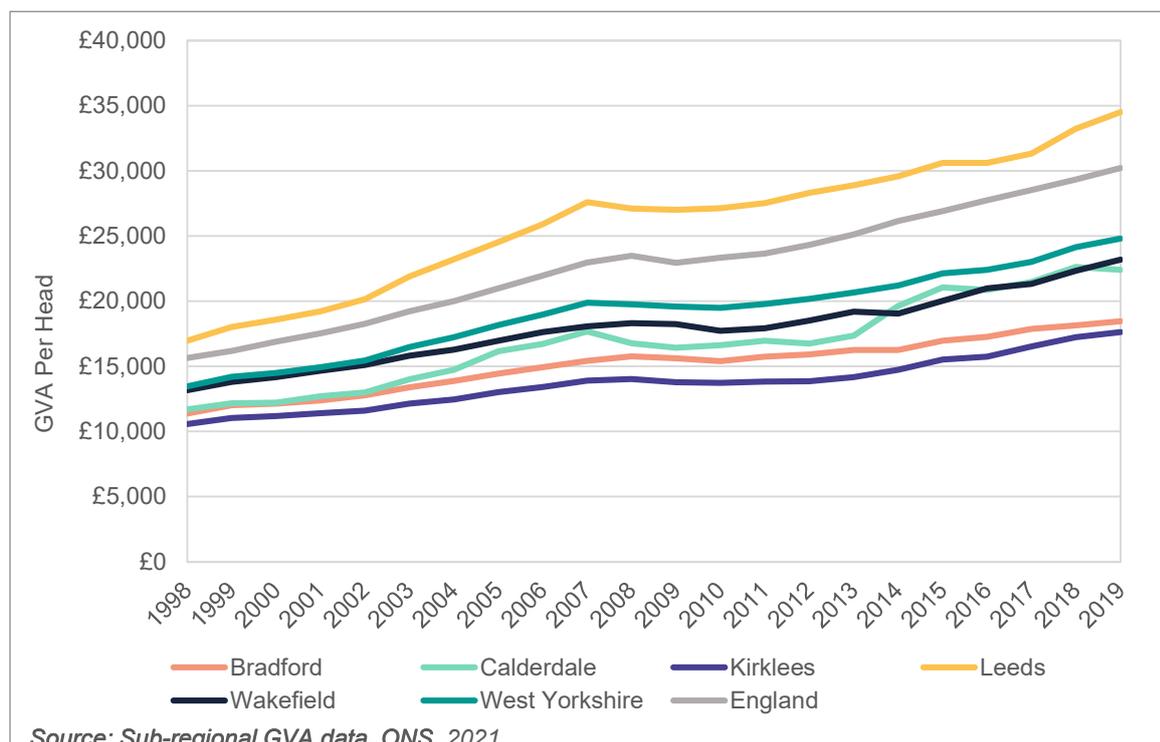
As with total GVA, output per head has grown at a similar pace to the national average in recent years. Overall, it remains lower in West Yorkshire than for England as a whole, and this is also true for all comparator areas. Leeds is the only area of West Yorkshire with output per head higher than the national average, but other areas have closed the gap to some degree since 2013.

Looking at GVA per head enables better comparison between areas of different sizes and also provides a measure of an area’s prosperity, by quantifying economic output per resident. However, GVA per head is not a measure of productivity –particularly as the population data will include a substantial number of people not working in the area and will not account for factors such as commuting flows and demographics.

GVA per head in West Yorkshire stood at £24,828 in 2019, which is 82% of the average for England (£30,239). With a GVA per head of £34,510, Leeds is the only area of West Yorkshire where output per head is higher than the England average. Other areas range from £17,629 in Kirklees to £23,198 in Wakefield.

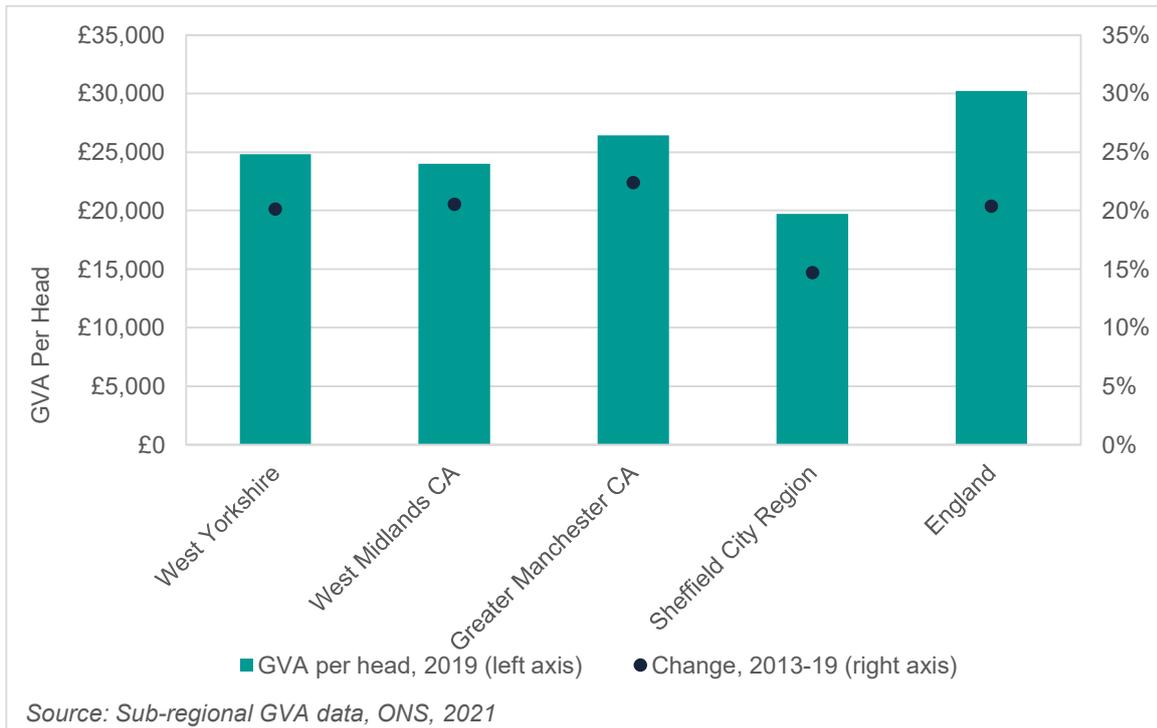
As with absolute GVA, Calderdale has seen the fastest increase since 2013 –an increase of 29%, significantly larger than the 20% for England as a whole. Kirklees has also seen faster than average growth (24%).

Figure 7: Economic output (GVA) per head – West Yorkshire areas, 2000-19



Output per head in West Yorkshire increased by 20% between 2013 and 2019, which is similar to the average for England (also 20%) and slightly above wider UK growth (19%). Whilst all comparator areas have lower output per head than the average for England, Greater Manchester is closest to the national average and has also seen the strongest growth since 2013 (22%). Sheffield City Region had the lowest growth in this group (15%), and also the lowest GVA per head (£19,717).

Figure 8: GVA per head – West Yorkshire and comparator areas, 2019



2.2.3 Employment rate

West Yorkshire's employment rate has been on an upward trend in recent years. Although it is lower than the national average, it outperforms most Mayoral Combined Authority (MCA) areas

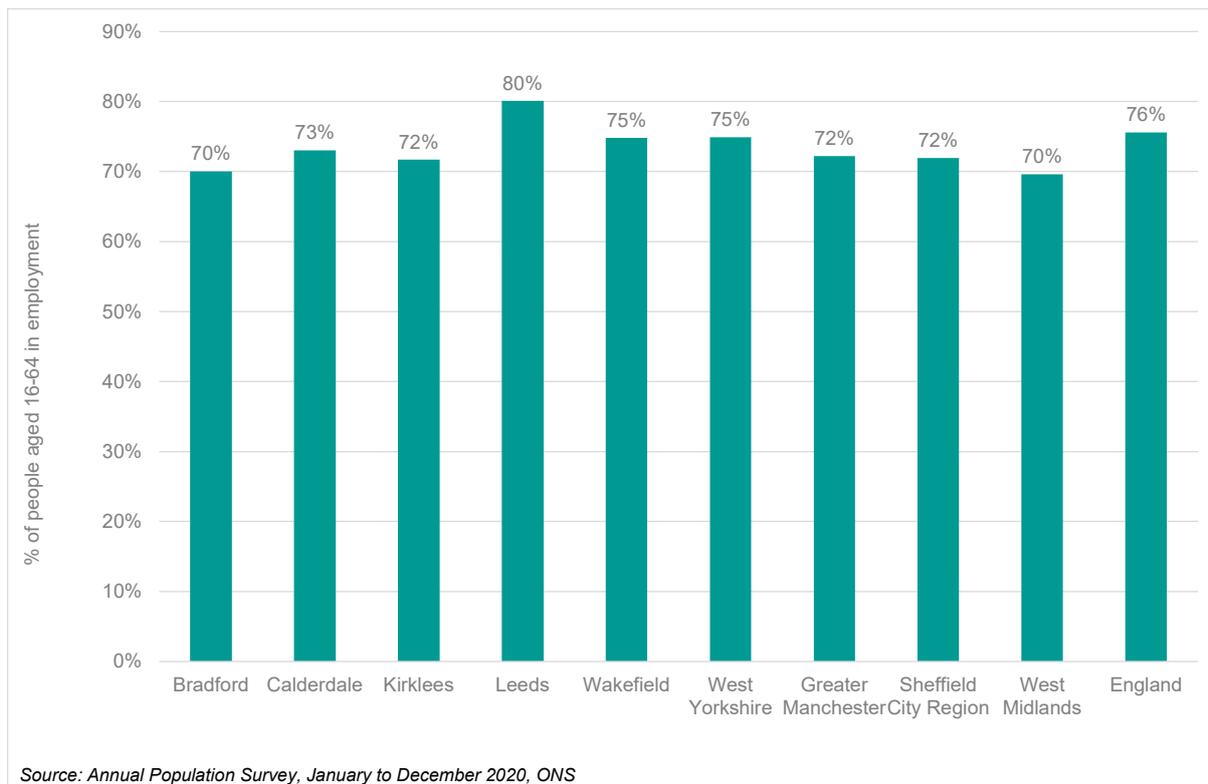
The employment rate is an important measure of the performance of the local economy because prosperity is dependent on two things: the number of people in employment and how productive those people are in their jobs. The focus here is on the first of those aspects.

Around 1.1m people in West Yorkshire are in employment, an employment rate of 75% of the population of working age. This is slightly lower than the national average of 76%. In absolute terms this equates to a gap of 10,000 fewer people in employment locally than would be the case if the national employment rate were to be applied to West Yorkshire.

The employment rate varies considerably among West Yorkshire's local authority areas. Leeds's rate is four points above the national average, but Bradford's rate is six points lower.

In comparison with other MCAs, West Yorkshire performs fairly well. It has a higher rate than Greater Manchester, Sheffield City Region and the West Midlands and outperforms all MCAs except West of England and Cambridgeshire and Peterborough.

Figure 9: Comparison of employment rates (% of population aged 16-64 in employment)

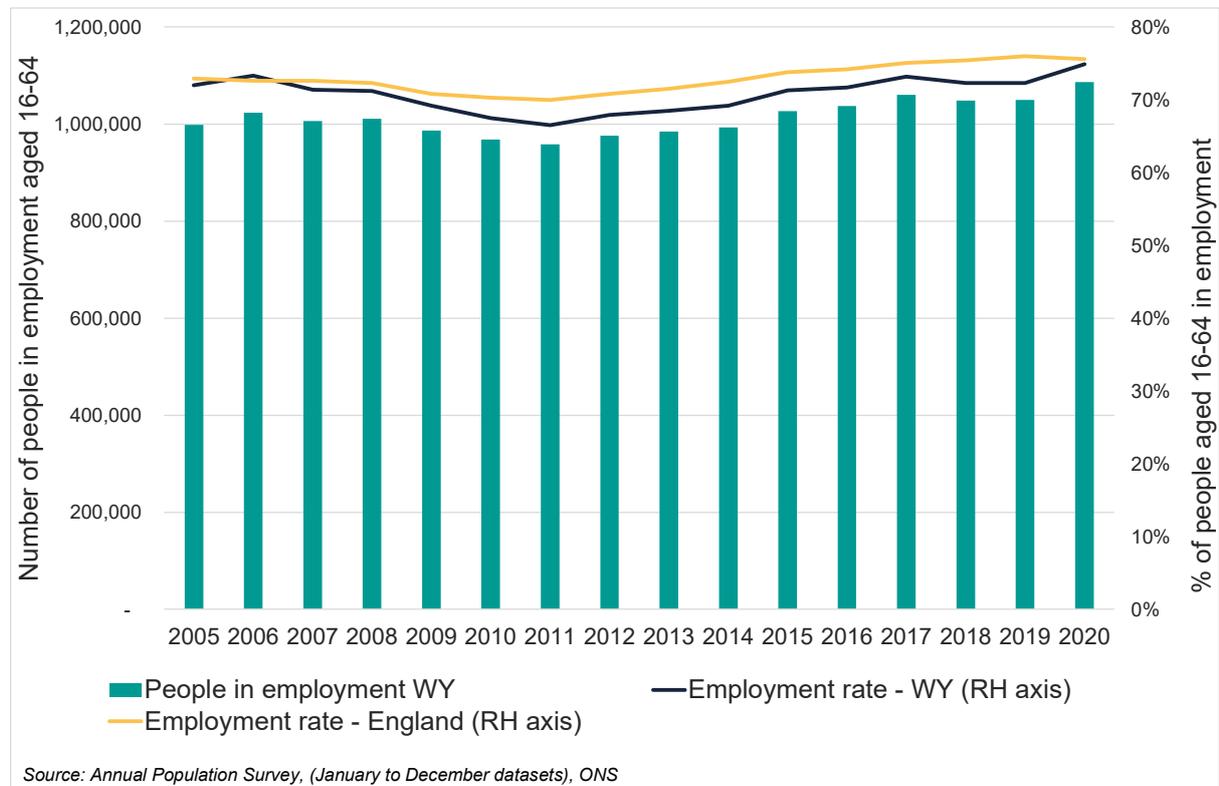


About the data

Employment rate estimates are taken from the Annual Population Survey. The Annual Population Survey is a continuous household survey covering the UK, designed to provide information on socio-economic variables at local levels.

The number of people in employment has increased steadily in recent years, growing by 60,000 or 6% in the last five years. However, a certain amount of growth is required just to maintain the employment rate, since the working age population also grew by around 1%.

Figure 10: Trend in employment rate and number of people in employment



West Yorkshire was successful in growing its employment rate from 71% to 75% over the last five years but the national average rate also increased, from 74% to 76%. This represents a slight narrowing of the gap between the regional and national figures.

West Yorkshire’s performance on employment is fairly strong relative to some of the other indicators considered in this report. However, challenges remain around strengthening the demand-side of the local economy to increase the supply of available job opportunities and addressing potential barriers to participation in the labour market. We consider this in more detail, below, when we examine employment rates for disadvantaged groups.

2.2.4 Productivity

Although productivity is increasing in absolute terms in West Yorkshire, there remains a significant gap to the UK as a whole, even when the outsized contribution made by London to productivity is factored in. Despite recent growth, the gap which opened up around the recession of 2008 has not closed significantly in recent years and there is clearly a concern that the current crisis will reinforce this situation.

Productivity generally refers to how efficiently inputs (labour and capital) are used to produce outputs (goods and services). It is directly linked to living standards –higher productivity increases firms’ ability to raise wages. Therefore, at an aggregated level, a country’s ability to improve its living standards over time is almost entirely dependent on productivity growth.

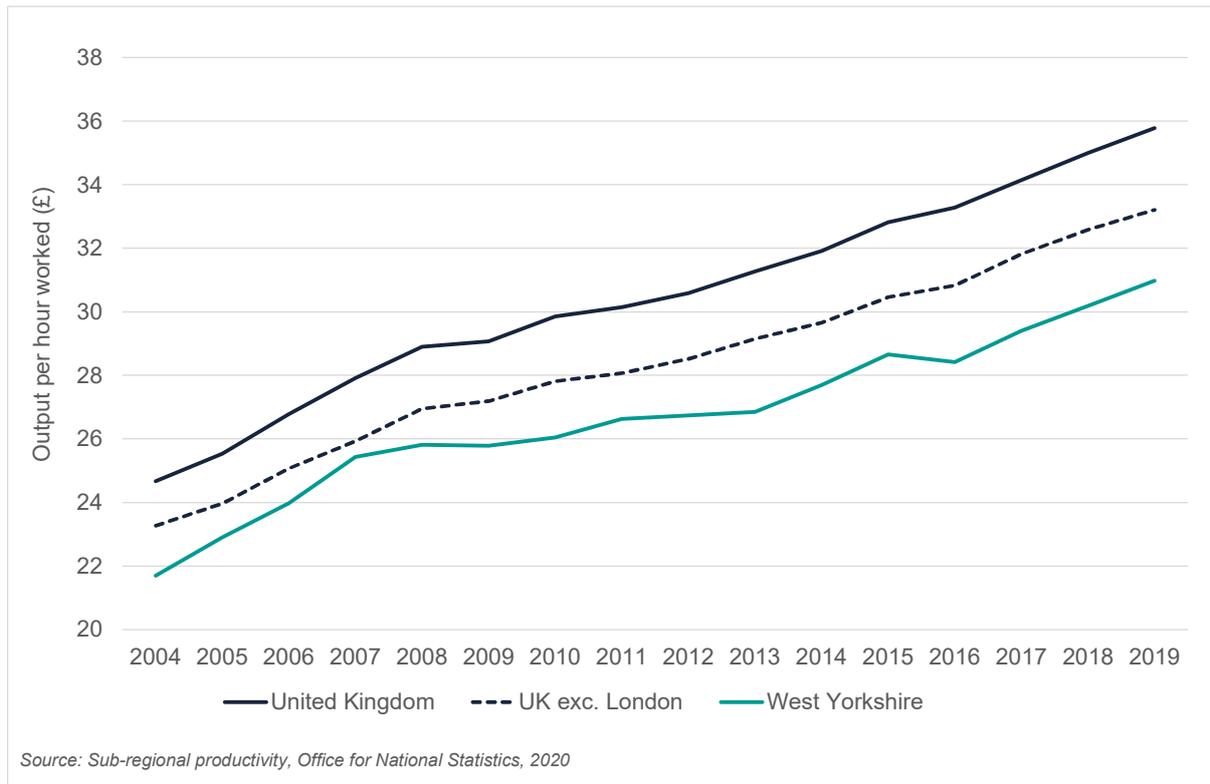
Productivity is also crucial in determining long-term growth rates of an economy. In other words, stronger productivity growth leads to stronger Gross Domestic Product (GDP) growth. This, in turn, increases tax revenues and lowers government budget deficits.

Economic output can only be increased by either increasing the amount of inputs such as labour or by raising productivity.

Whilst UK productivity growth has been below trend since the recession of 2008, local productivity has persistently lagged behind UK levels. In 2008, output per hour worked in West Yorkshire was around 89% of the UK figure. Since the downturn of 2008, this gap has widened further, and has averaged around 86% of UK levels since 2013. As of 2019, output per hour in West Yorkshire stood at £30.98 per hour, 87% of UK levels.

The fact that London is significantly more productive than the rest of the country skews UK data slightly. Despite this, West Yorkshire is still 7.2% less productive than the rest of the UK, excluding London.

Figure 11: Unsmoothed output per hour worked, West Yorkshire and UK, 2004-2019

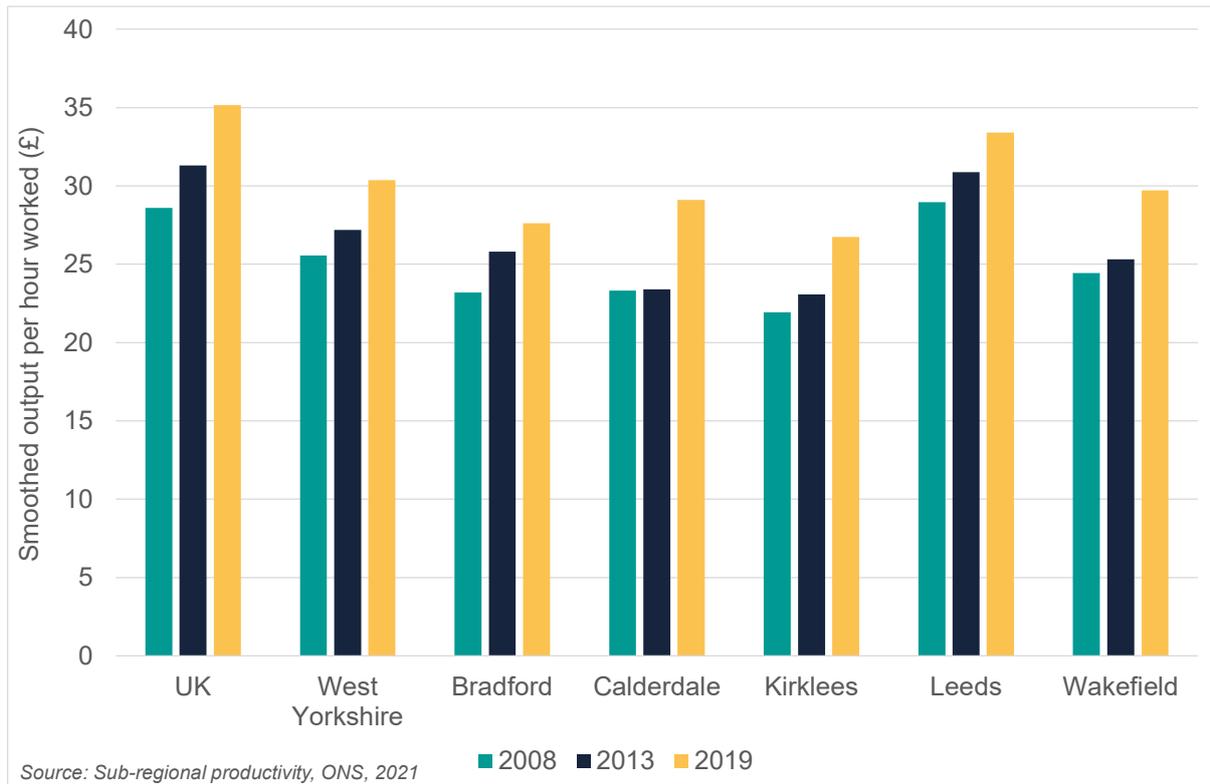


As with total GVA, the period of flat or low productivity growth after the recession ended later in West Yorkshire relative to the UK; however, since then the gap has been somewhat less pronounced, with productivity increasing by 15% locally, compared to 14% nationally, between 2013 and 2019.

Between 2013 and 2019, productivity in Calderdale, Wakefield and Kirklees has grown at a faster rate than the UK average (24%, 18% and 17%, respectively, compared to 12% for the UK); however, productivity growth in other areas of West Yorkshire is below the UK average.

Although in absolute terms productivity is increasing in all parts of West Yorkshire, all areas have lower productivity than the UK average. This ranges from 76% of the UK average in Kirklees and 79% in Bradford, to 95% of the UK average in Leeds.

Figure 12: Smoothed output per hour worked, West Yorkshire council areas, 2019

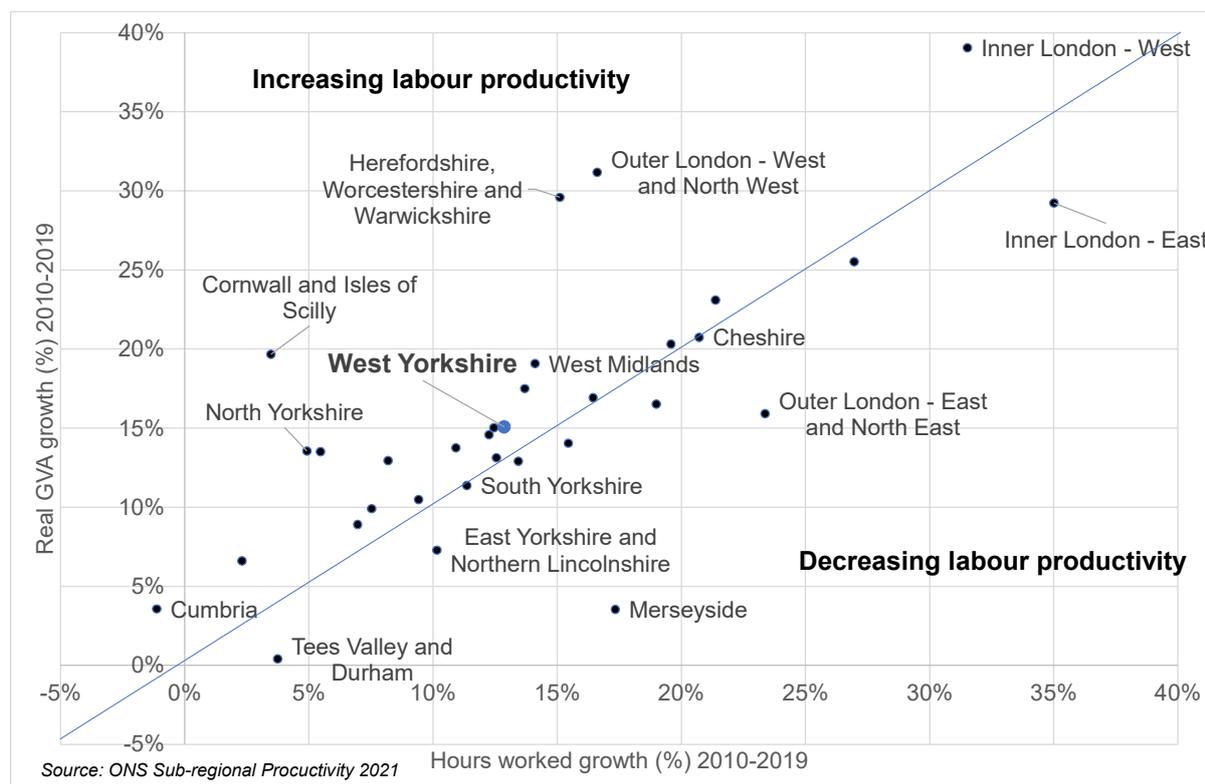


About the data

Local productivity data is produced by ONS, by combining the GVA data outlined above along with data on hours worked from the Annual Population and Labour Force Surveys to produce standard measures of productivity. The focus here is on labour productivity; other factors such as capital, machinery and services also contribute to productivity, but are more complex to measure at the local level.

The above analysis looks at changes in nominal output –that is, including the impacts of inflation. Removing the effects of inflation to look at “real” GVA gives a better sense of how productivity has changed over time. As the below chart shows, output per hour worked has seen only modest growth since 2010 in West Yorkshire once the impact of inflation is removed, a little below UK trends.

Figure 13: Real GVA growth vs. hours worked growth, ITL2 areas 2010-19



In West Yorkshire, real GVA and hours worked grew by 15% and 13% respectively between 2010 and 2019, leading to a slight increase of 2% in output per hour worked in real terms. At UK level the increase was 3% over the same period.

This analysis also demonstrates the different routes that can lead to productivity growth, and the limitations of using productivity as a measure of economic performance without wider context.

Inner East London, for example, saw productivity fall between 2010 and 2018 despite strong growth in hours worked (35%) and real GVA (29%). Conversely, Cumbria saw productivity improve despite having the third lowest GVA growth of any NUTS2 area, because the number of hours worked actually fell.

Wider analysis, like the work undertaken as part of the evidence base for the West Yorkshire Local Industrial Strategy¹², identifies a range of factors which contribute to poor productivity performance locally and across the north, compared to the UK. Many of these are explored in more detail elsewhere in this document but include factors such as relatively lower skills levels and investment in research, development and innovation among the region’s business base. Whilst issues such as the area’s sectoral makeup may also be a contributory factor – particularly the deficit of knowledge-intensive and digital jobs compared to international comparators– there is also evidence that intra-sector productivity is lower in West Yorkshire than in the country as a whole.

¹ [West Yorkshire Combined Authority Economic Assessment](#), 2020

² Hatch Regeneris, [North and West Yorkshire Productivity Audit](#), 2019

2.2.4.1 Private sector business

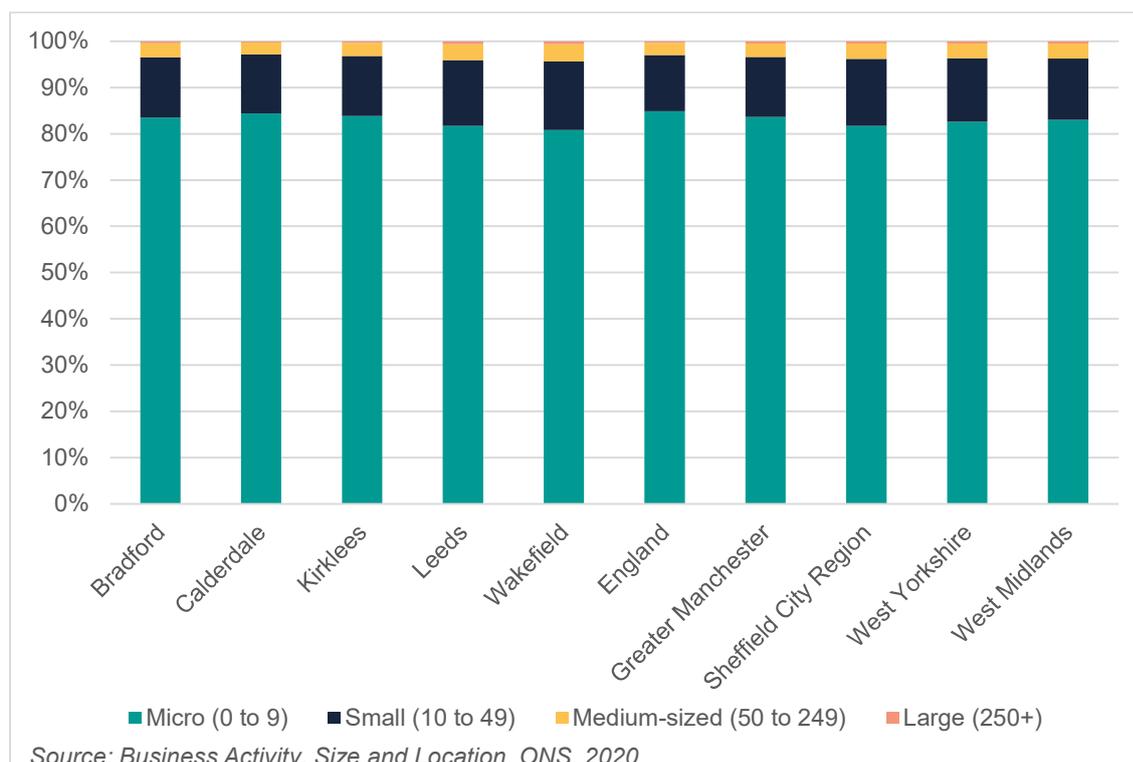
West Yorkshire has fewer private sector businesses per head of population than the national average.

The size of the private sector business base is a key measure of the health of a regional economy.

In March 2020, prior to the start of the COVID-19 pandemic, West Yorkshire was home to 94,600 businesses, giving the area the third largest business base among MCAs behind Greater Manchester and West Midlands. Of these, the vast majority (97%) are private sector enterprises with little variation across different MCAs.

99.5% of local businesses are small and medium sized enterprises with fewer than 250 staff. This again is in line with the national average, but West Yorkshire does have fewer microbusinesses with 0-9 staff. These make up 82.6% of the local business base, compared to 84.9% across England. The region therefore has a higher proportion of mid-size firms, accounting for 16.9% of local businesses, compared to 14.7% nationally. Sheffield City Region and West Midlands CA are similar to West Yorkshire in this respect.

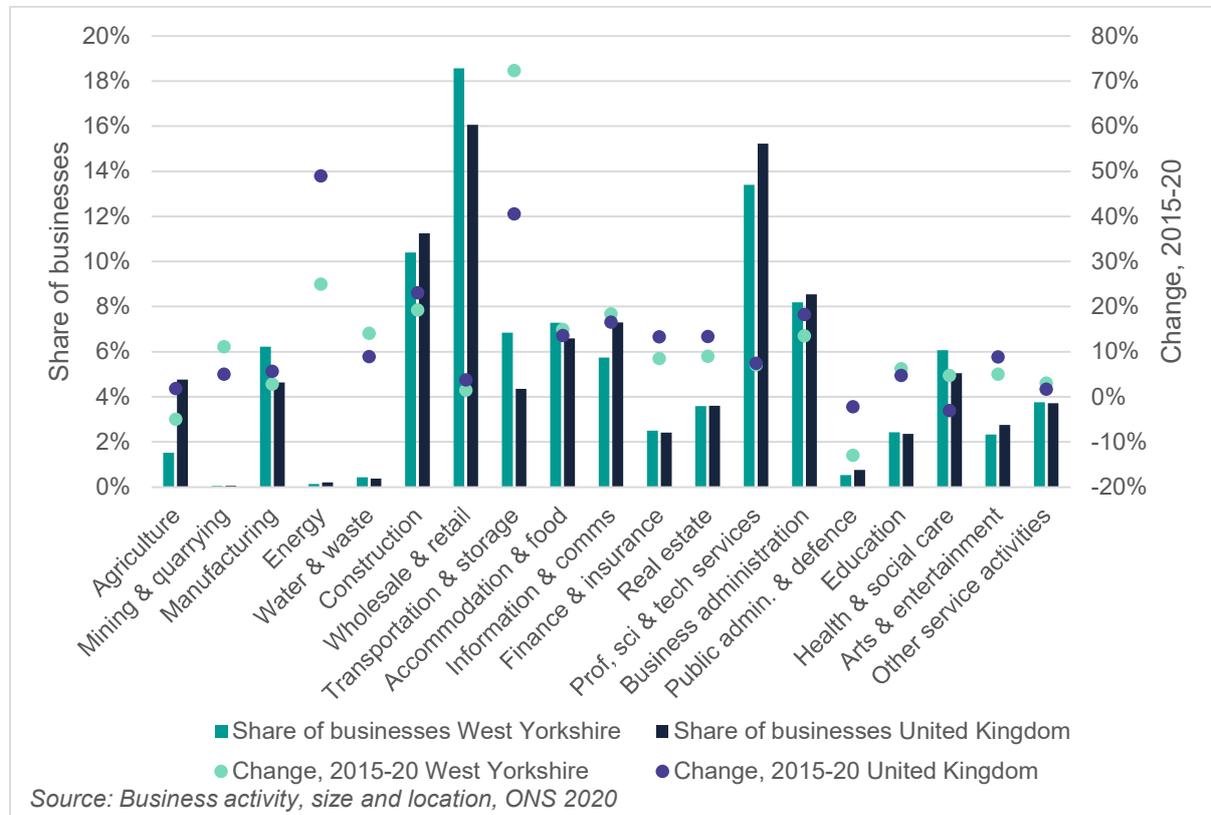
Figure 14: Profile of private sector enterprises by size band, 2020



West Yorkshire is similar to the UK in terms of its sectoral makeup but does have some notable points of difference. Notably, the share of businesses is higher locally in transport and storage (7% of businesses locally vs. 4.5% nationally), manufacturing (6% vs. 4.5%), whilst it is also higher in wholesale and retail (18.5% vs. 16%). Conversely, West Yorkshire has a lower share of businesses in agriculture and professional services. This picture varies by local authority however –whilst all West Yorkshire areas feature a mix of manufacturing and service industries, Leeds and Calderdale feature a greater presence of professional service industries, with manufacturing more prominent in Kirklees and Wakefield in particular.

In the past five years, West Yorkshire has seen particularly strong growth in transport and storage industries, which have increased by 72% (compared to 40% nationally).

Figure: Business base by sector and change, 2015-20

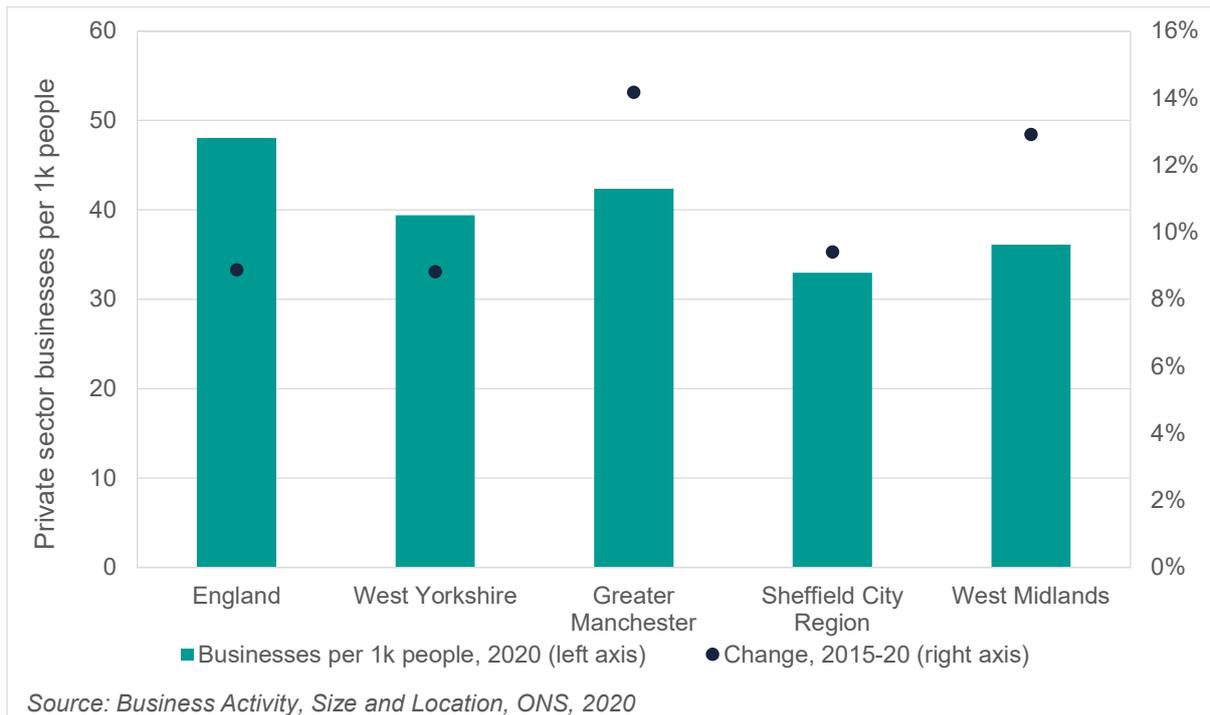


About the data

Data on local areas’ business stock is drawn from the Office for National Statistics’ Inter-Departmental Business Register (IDBR). Business counts are taken from the ONS “Activity, Size and Location” release, which provides a count of businesses at a point in time. The 2020 data presented here is from a point in March 2020, so pre-dates the COVID-19 pandemic. Data on business births and deaths is published in the ONS “Business Demography” release.

There were 39.4 private sector businesses per 1,000 people in West Yorkshire in March 2020, second only to Greater Manchester among comparator MCA areas. However, this is still below the average for England of 48 businesses per 1,000 people. West Yorkshire has followed the same trajectory as England in recent years, with a 9% increase on this metric since 2015. Some comparators, most notably Greater Manchester (+14%) and Greater Birmingham (+13%) have seen stronger growth over this period.

Figure 15: Private sector business density



With 44.9 private businesses per 1,000 people, Leeds is the only area of West Yorkshire where growth in private sector businesses on this metric has outpaced the average for England in recent years, moving marginally ahead of Calderdale (44.6) as the local authority area with the highest rate. Both are close to the 48 for England. Although rates are lower elsewhere in West Yorkshire, growth has generally been close to the national average though it is lower in Wakefield in recent years.

2.2.5 Innovation

Around 7 in 10 businesses in Leeds City Region are engaged in innovation, according to the Leeds City Region Business Survey for 2020. A quarter invest in R&D but national statistics indicate that the level of R&D spend is particularly low in Yorkshire and the Humber.

Innovation is key to addressing some of the biggest challenges facing the UK and the Yorkshire economies, most notably productivity.

Increasing productivity is inextricably linked to innovation. As the UK's Industrial Strategy Green Paper (2017) notes:

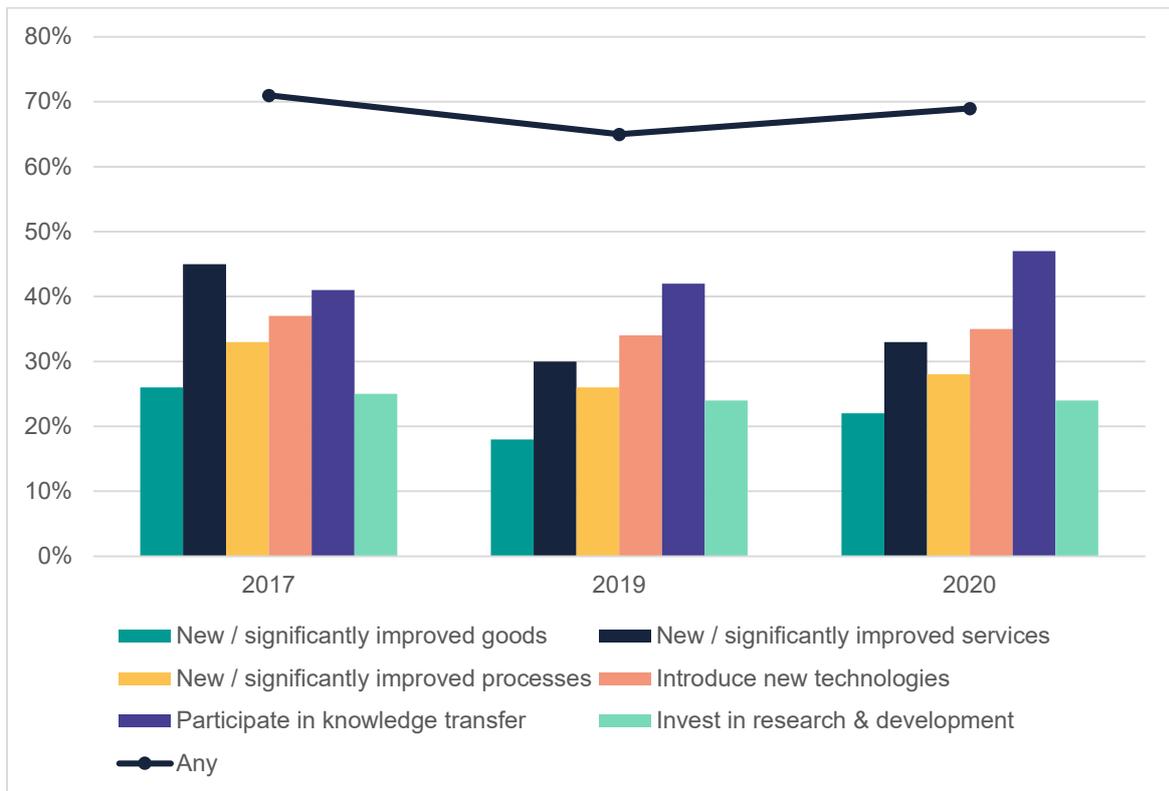
“Higher levels of investment in innovation correlate with faster growth and higher income levels... leads to the creation of new products and services, more effective processes and better ways of doing business. These improvements are the essence of economic growth.”

In recognition of this, the national Industrial Strategy sets out a target for the UK to spend 2.4% of GDP on research and development (R&D) by 2027. Whilst R&D is a critical element of innovation, it is not the only source of innovation which can also come from the development of new processes, products or services to improve efficiency.

The latest Leeds City Region Business Survey, carried out in January and February 2020, suggested 69% of businesses in Leeds City Region had undertaken some form of innovation in the past three years. This was largely unchanged from 71% in 2017, though it represents a slight improvement on 2019 (65%).

47% of respondents said they had engaged in knowledge transfer, up from 41% in 2017. Around a third have introduced new technologies and a similar number have introduced new or improved processes –the latter down from 45% in 2017. Around a quarter of businesses have invested in R&D, a figure consistent across the last three waves of the survey.

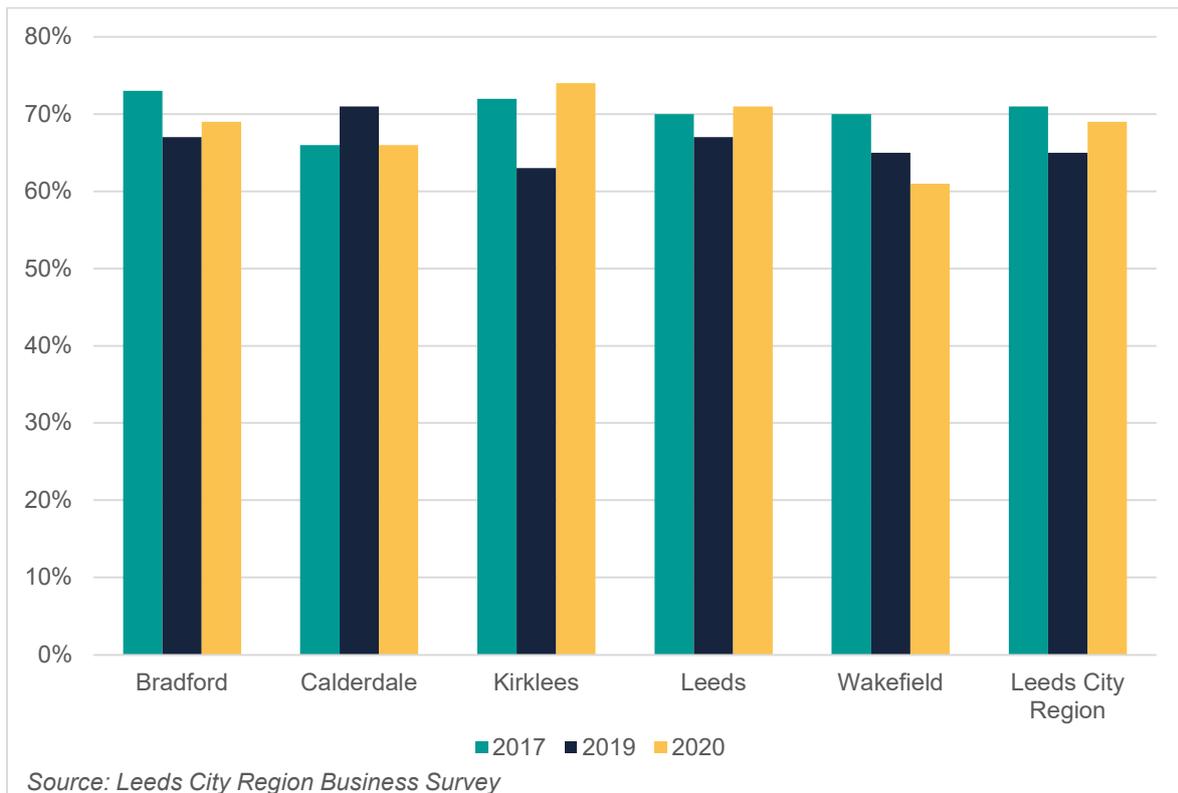
Figure 16: % of Leeds City Region business engaged in innovation activities, 2017-20



Source: Leeds City Region Business Survey, 2020

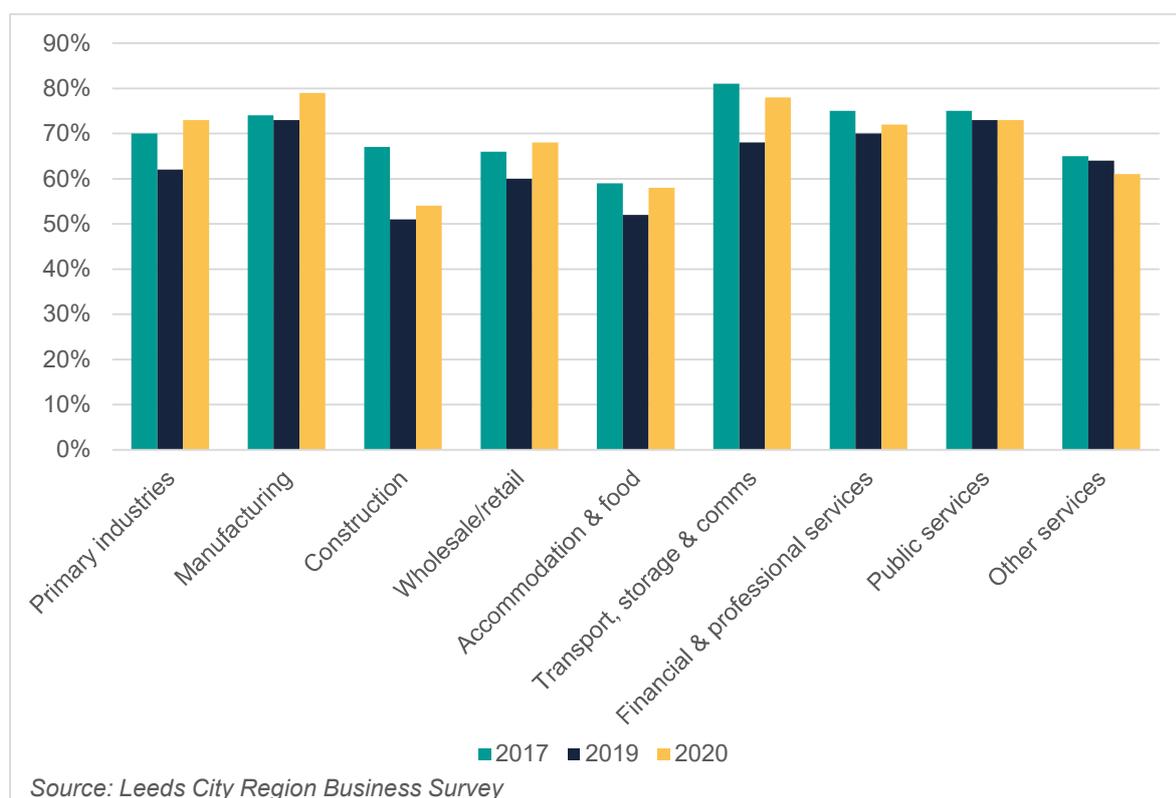
Whilst the survey data suggests some variation in the take up of innovation at local authority level, most of these differences are not statistically significant. The exception is that a significantly lower proportion of businesses in Wakefield (61%) said they were engaged in innovation than in the City Region as a whole (69%) in 2020.

Figure 17: % of businesses engaged in innovation by West Yorkshire local authority



There is more variation across sectors, with manufacturing and the transport, storage and communications sector (which includes ICT and digital industries) both significantly more likely to be engaged in innovation. Conversely, innovation was significantly lower in construction, hospitality and other services.

Figure 18: % of businesses engaged in innovation in West Yorkshire by sector



Although the questions used in the LCR Business Survey are similar to those used in the UK Innovation Survey, the two are not directly comparable due to the level of detail in the national survey questions, and sampling differences. However, the 2019 UK Innovation Survey found that around 39% of businesses in Yorkshire & Humber had engaged in innovation in the past three years, in line with the level for England as a whole.

Although this survey data suggests relatively strong performance on innovation, other data suggests levels of investment in R&D are lower in Yorkshire and the Humber than elsewhere in the country. The Office for National Statistics analysis on Gross Domestic Expenditure on R&D (GERD), for example, shows the region had the lowest investment in R&D per £1m of GVA of any English region outside London. This suggests that the level or scale of innovation taking place locally may be lower than elsewhere even if the proportion of businesses engaged is relatively high. More detailed analysis exploring the innovation ecosystem¹ in West Yorkshire has highlighted that the region performs relatively well in attracting R&D investment in the higher education sector, but less well in terms of business investment in R&D. This and other analysis² suggests the region faces a challenge to increase the adoption of new technologies and diffusion of new ideas throughout the economy.

About the data

Local data on businesses' engagement in innovation is not readily available on a consistent basis. The Leeds City Region Business Survey provides local data on this subject, asking respondents whether they have undertaken innovation activities in the past three years.

¹ RSM, [Understanding the Region's Innovation Capacity](#), Capability and Potential, 2019

² [West Yorkshire Combined Authority Economic Assessment](#), 2020

2.2.6 International trade

West Yorkshire area exports more in services per £1m of GVA than any comparator area, though still less than the national average. Leeds exports more in services and less in goods than other parts of West Yorkshire. Goods exports dominate in Calderdale, Kirklees and Wakefield, with a relatively even split in Bradford. Overall, it would appear West Yorkshire exported more in services than in goods in the latest year of comparable data, although these are not directly comparable due to methodological differences.

International trade, and particularly exporting, is an important measure as there is evidence to suggest that businesses who trade internationally tend to perform better than those who don't. Internationally trading businesses often experience higher growth and are often more productive than their domestically focused counterparts. This is due to the former operating in markets where greater competition is present, as well as the fact that they are more likely to be exposed to more ideas and innovations which helps to drive their own performance.

About the data

Local data on international trade is published by the Office for National Statistics, following methodologies to disaggregate national and regional trade data. For goods, this draws on data on trade from HMRC. For services, it relies on the International Trade in Services Survey. Both are published at different times, so 2018 is currently the latest services data available, with 2019 data available for goods trade.

Goods exports

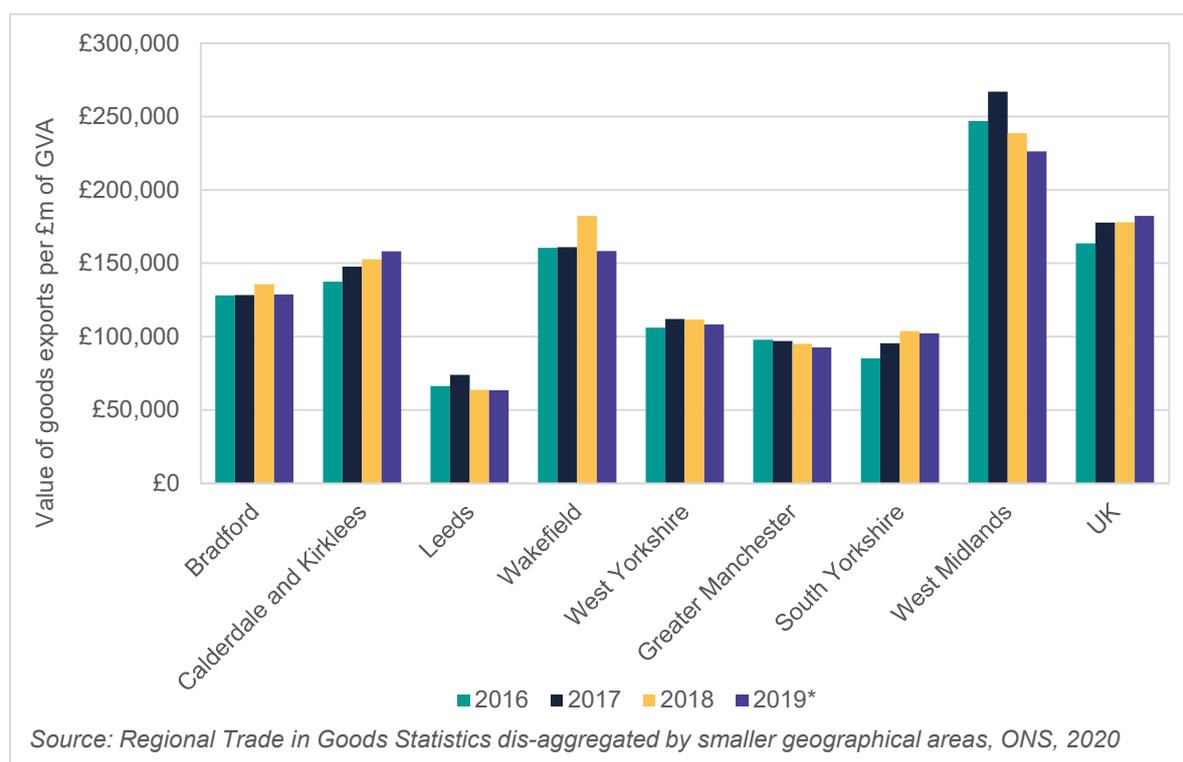
West Yorkshire exported goods worth £5.99bn in 2019, down 2% on the previous year's £6.1bn. Other comparator areas broadly saw similar falls though overall UK goods exports increased by 2%.

Looking at exports per £1 million of GVA shows the economic contribution exports make and enables comparison across geographies of different scale. West Yorkshire exported goods worth £108,250 for every £1m of GVA in 2019¹. This is more than South Yorkshire (£102,120) and Greater Manchester (£92,640) but is 40% lower than the UK figure of £182,250. With £226,140 per £1m of GVA West Midlands is the only comparator area which exports more than the UK average.

Locally, both the Calderdale/Kirklees and Wakefield areas exported goods worth just over £158,000 per £1m of GVA in 2019. Bradford (£128,700) was also substantially higher than the West Yorkshire average. Conversely, Leeds exported goods worth £63,455. This clearly reflects the economic specialisms within West Yorkshire. Whilst all areas have degrees of strength in manufacturing and services, services are a greater contributor to the economy in Leeds and this is reflected in export activity.

¹ 2019 GVA data is unavailable, so 2018 GVA data has been matched with 2018 export data. The other years of GVA and export data are concurrent.

Figure 19: Ratio of value of goods exports per £m of GVA



Services

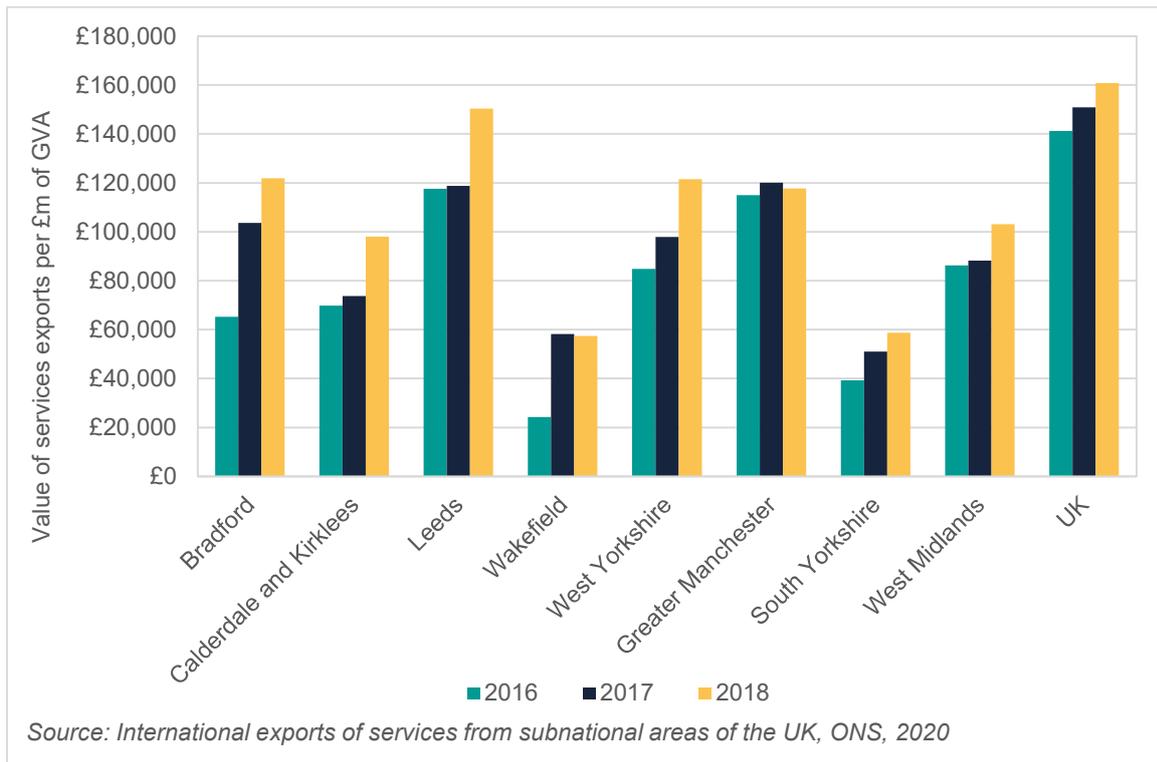
In 2018, the value of service sector exports from West Yorkshire totalled £6.73bn, being greater than that of goods exports. Service sector exports have also seen strong growth, increasing by 54% compared to 2016. Goods exports rose by 13% over the same period. This rapid growth in local service exports –nationally, the average increase was 22%– is matched only by South Yorkshire among comparators (60%).

All parts of West Yorkshire have experienced growth in service exports of almost double the national average or greater since 2016. Leeds saw an increase of 42%, with Bradford and Wakefield seeing much stronger increases (92% and 154% respectively).

When looking at exports per £1m of GVA, Leeds remains the focal point of service sector exports in West Yorkshire, exporting £150,400 of services per £1m of GVA, close to the national average of £160,800. This is followed by Bradford (£121,900). Despite recent growth, service exports are lower as a proportion of GVA in Wakefield, Kirklees and Calderdale.

Across West Yorkshire, £121,500 of services were exported per £1m of GVA in 2018 –more than in any comparator area analysed here, and more than double the £58,800 seen in South Yorkshire.

Figure 20: Ratio of value of services exports per £m of GVA



2.2.7 Cultural sector contribution to employment

Overall, West Yorkshire has a relatively small cultural sector in employment terms, although Leeds and Calderdale are above the national average for the proportion of employment in cultural activities. There are signs that the sector was growing prior to the COVID-19 crisis.

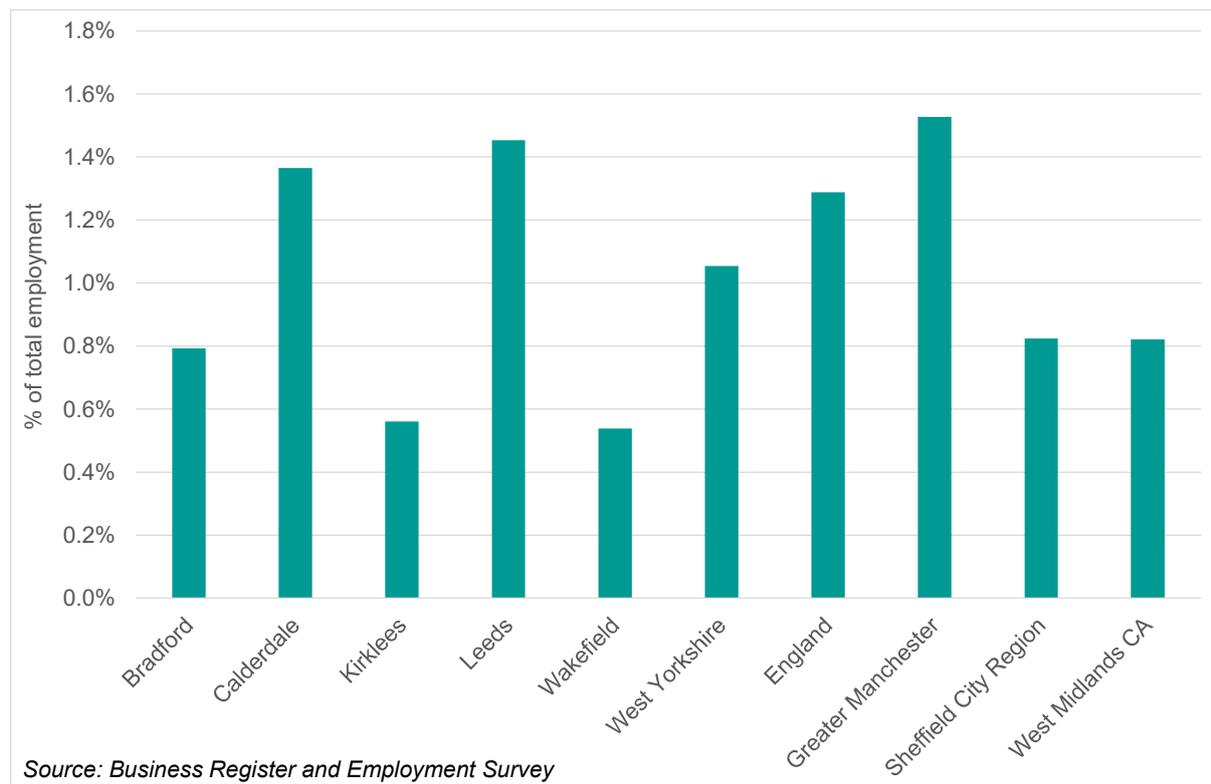
The [SEF](#) sets out a commitment to make the most of the region's distinctive natural and cultural assets, to enhance pride and well-being and to develop the local visitor economy. One of the objectives is to secure an increase in employment in culture, sport and arts roles across West Yorkshire.

According to the Department for Culture, Media and Sport's definition¹, the cultural sector includes film, TV and music; radio, arts, library and archive activities; and museums and galleries.

Around 1% of employment in West Yorkshire is in the cultural sector (11,000 jobs). The prevalence of cultural employment varies by local authority within West Yorkshire; it is highest in Calderdale and Leeds (both above the national average), followed by Bradford and lower in Kirklees and Wakefield.

In line with the national picture, the largest activities within the sector in West Yorkshire are film, TV and music, and the arts.

Figure 21: Employment in cultural activities as a proportion of total employment



Cultural employment in West Yorkshire is somewhat below the national average in proportionate terms. It is also lower than in Greater Manchester but slightly higher than in the comparator areas of Sheffield City Region and West Midlands CA.

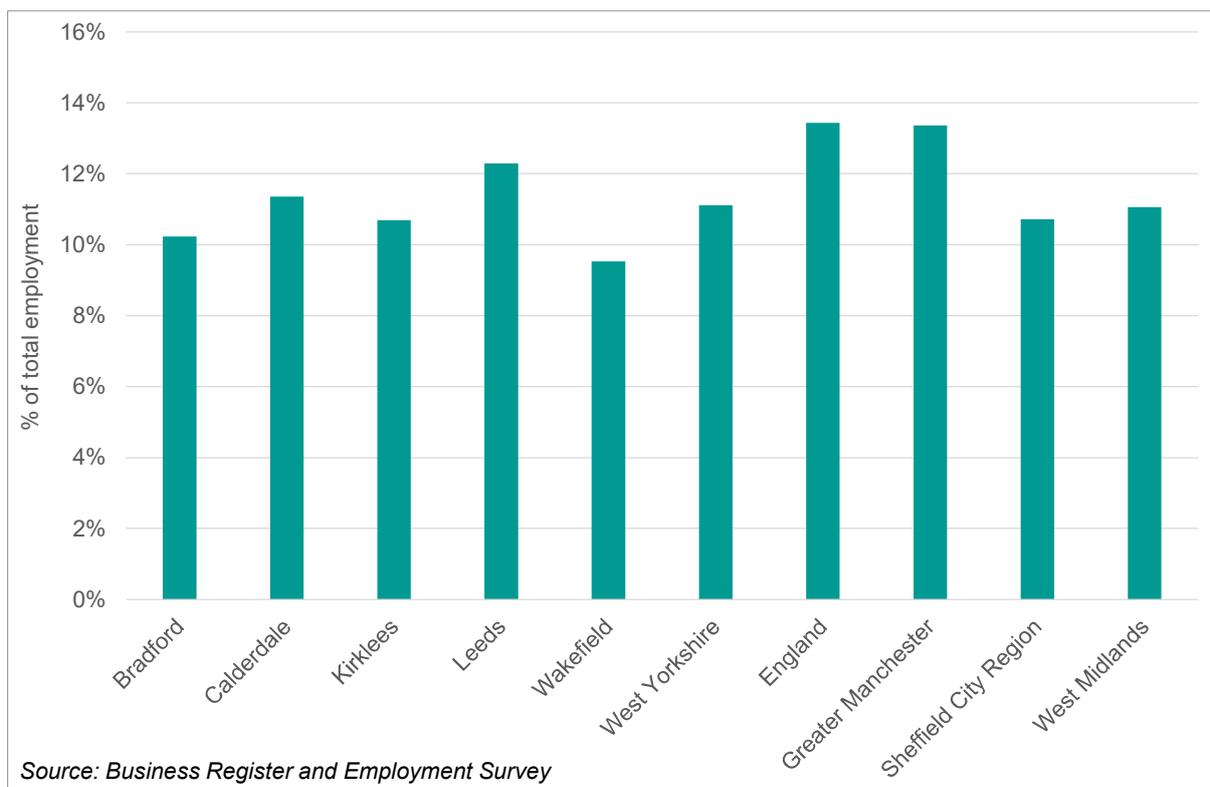
¹ DCMS, [DCMS Sectors Economic Estimates Methodology](#) (2021)

However, the sector was growing strongly in the region prior to COVID-19. West Yorkshire recorded an increase in cultural employment between 2015 and 2019, growing from 7,000 to 11,000 during this period. This growth rate of around 50% easily exceeds the 16% growth rate seen nationally.

It is also useful to consider employment in cultural activities in a wider context, alongside the associated sectors of sport and tourism. The tourism sector, as defined by DCMS, includes hospitality activities, elements of transport and travel agency activities. The sport sector includes operation of sports facilities and sports clubs.

Taking these additional activities into account, the proportion of total employment is much larger, at around 11% across West Yorkshire, equivalent to 122,000 jobs. But again, this is somewhat below the national average, partly reflecting the relatively small size of the hospitality sector across West Yorkshire.

Figure 22: Employment in Culture, Sport and Tourism activities as a proportion of total employment



About the data

The Business Register and Employment Survey (BRES) is the official source of employee and employment estimates by detailed geography and industry. The survey collects employment information from businesses across the whole of the UK economy for each site that they operate. BRES includes self-employed workers (within the employment estimates) as long as they are registered for Value Added Tax (VAT) or Pay as You Earn (PAYE) schemes.

2.2.8 People qualified at level 4 and above

West Yorkshire underperforms on the proportion of its population qualified to a higher level but has recently narrowed the gap with the national average.

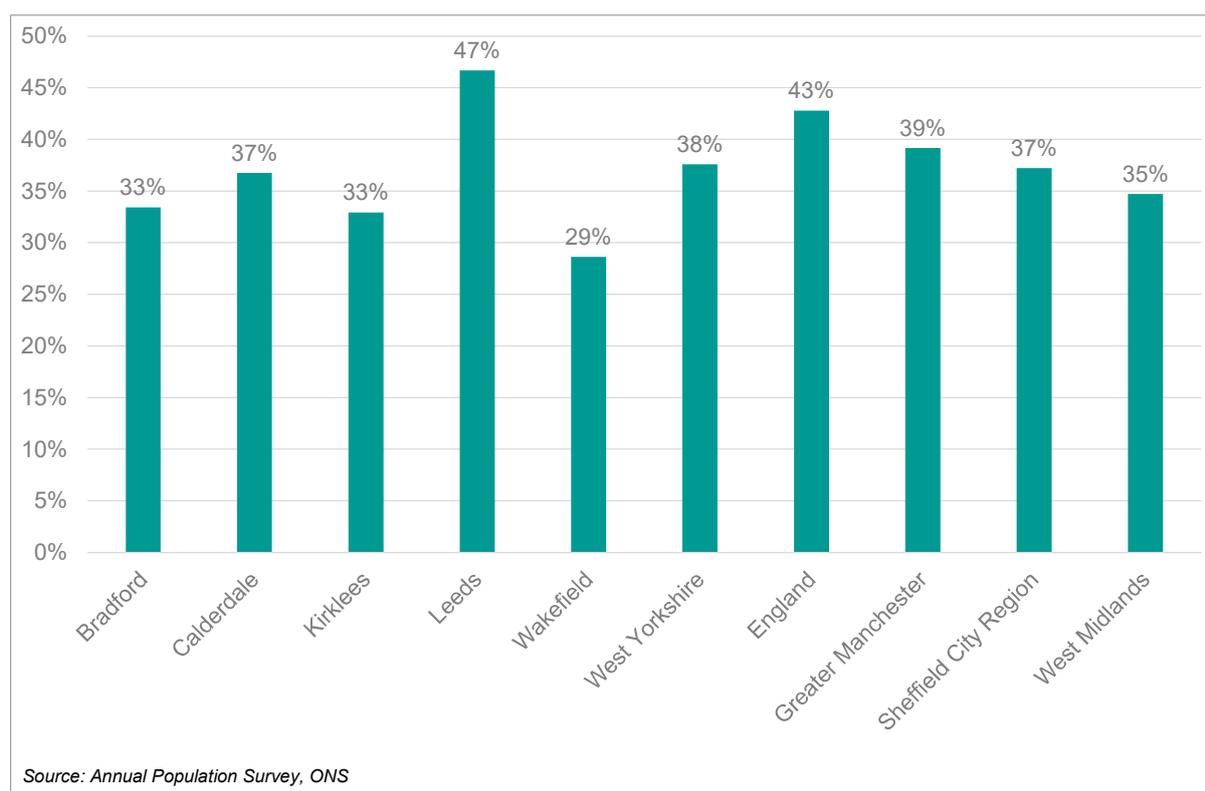
One of the key challenges facing West Yorkshire is a deficit in its skills base relative to other parts of the UK. This is closely associated with its underperformance on productivity and innovation. For example, according to one study, higher skill levels among London's workforce explain about two-thirds of the productivity gap between the capital and the rest of the country¹.

Even before COVID-19, it was clear that the world of work in 2030 was going to look considerably different to today. Tasks, roles and entire jobs were set to transform, as technology rapidly changes work and drives up demand for new and higher skills.

The availability of people with higher level qualifications at Level 4 and above is a key area of under-performance for the region. With 38% of its population qualified to this level, West Yorkshire is five points below the national average of 43%.

West Yorkshire performance against this measure is similar to both Greater Manchester and Sheffield City Region, but it outperforms the West Midlands Combined Authority.

Figure 23: Proportion of working age population qualified at Level 4 and above, January – December 2020



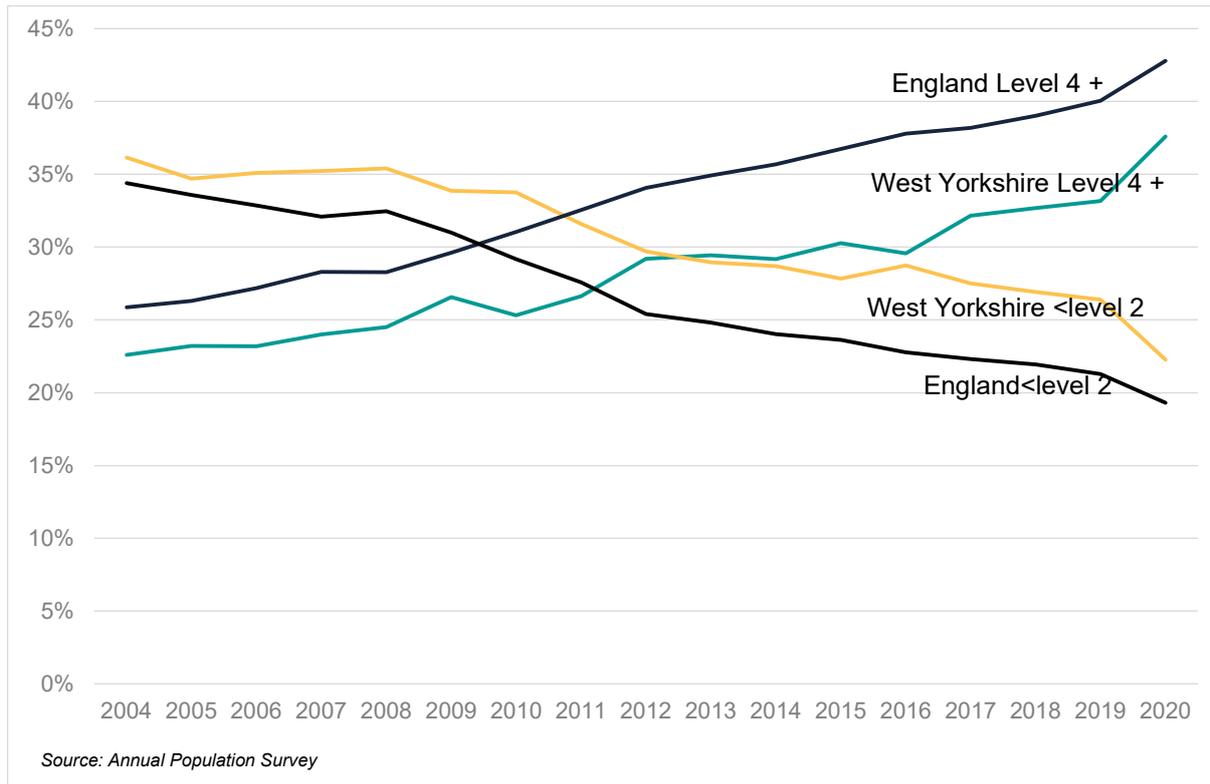
The proportion of people qualified at level 4 and above in West Yorkshire has followed a sustained upward trend over the last decade. A sharp increase of five percentage points in 2020 narrowed the gap with the national average, although the deficit remains significant.

¹ Industrial Strategy Council, [UK Skills Mismatch in 2030](#) (2020)

About the data

Level 4 and above includes all higher education qualifications, from Level 4 qualifications such as a higher national certificate (HNC), through to Level 8, which includes doctorate-level qualifications. Honours degrees are at Level 6¹. Qualifications serve as a proxy for the level of skills and knowledge held by individuals. The qualifications held by individuals are measured using the Annual Population Survey, a continuous household survey covering the UK designed to provide information on socio-economic variables at local levels..

Figure 24: Trend in proportion of working age population qualified at Level 4+ versus proportion with no qualifications / qualified below Level 2



¹ See *What Qualifications Levels Mean* for a full breakdown [What qualification levels mean: England, Wales and Northern Ireland - GOV.UK \(www.gov.uk\)](http://www.gov.uk)

2.2.9 Gigabit capable broadband coverage

West Yorkshire has overtaken the national average in terms of gigabit-capable internet coverage and also outperforms the national average with regard to full-fibre coverage.

Delivering fast and reliable broadband is vital to the economic performance of West Yorkshire and supports the Combined Authority's strategic objective of delivering inclusive growth by removing barriers to education, training and employment opportunities.

Digital connectivity has the potential to improve the accessibility of training and employment opportunities by improving access to digital resources and remote learning for students and enabling people who spend a large amount of time at home to adopt more flexible working practices or start up a business at home. Improved digital connectivity also increases the range of occupations which can be carried out at home. As well as professional roles, this could include lower skilled occupations such as call centre operators, which may be suited to people who have spent a long time outside the labour market.

Broadband Technologies

Superfast broadband (SFBB), defined as download speeds above 30Mbps, has traditionally provided enough bandwidth for home Internet use. However, increases in content streaming and working from home, and especially teleconferencing, have created a need for ever increasing bandwidth speeds.

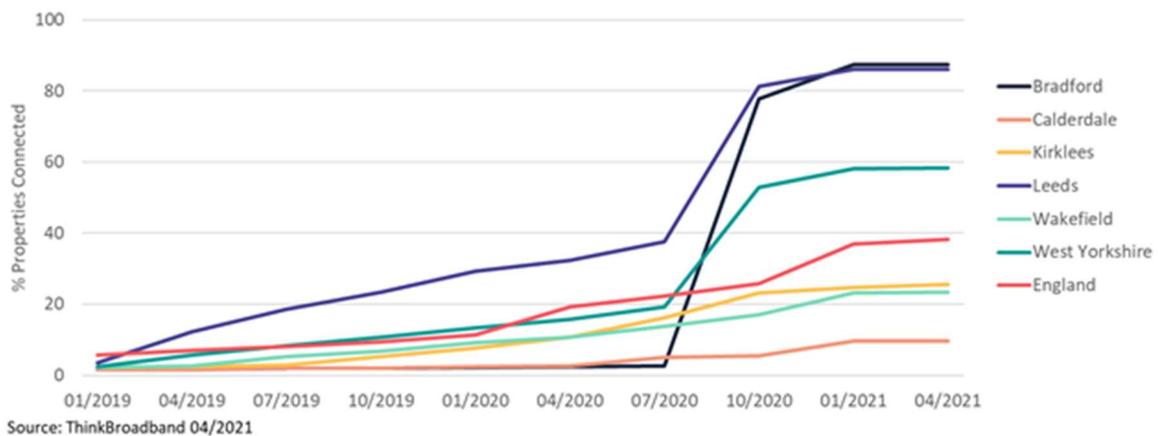
Full fibre Internet provides download speeds up to thirty times faster than SFBB. Whereas SFBB uses fibre optic cable to link to local cabinets and then copper cabling to link to properties, Full fibre runs fibre optic cables directly to properties.

In addition to full fibre broadband similar connection speeds can also be provided through other technologies, such as Data Over Cable Service Interface Specification (DOCSIS), a provision of high bandwidth data transfer through existing cable television infrastructure, and through 5G.

Building Digital UK, part of the Department for Digital, Culture, Media & Sport (DCMS), is supporting the Government's Project Gigabit plan to connect all properties to gigabit capable connections (1 Gbps or 1,000Mbps) through a combination of high-speed broadband and 5G technology. Gigabit broadband is being rolled out nationally rapidly –from one in ten households in 2019 to almost two in five in 2021. In 2020 the Combined Authority secured £9.11M from Building Digital UK to deploy SFBB and FF to 1,7000 businesses and 5,000 homes in rural areas over the next two years.

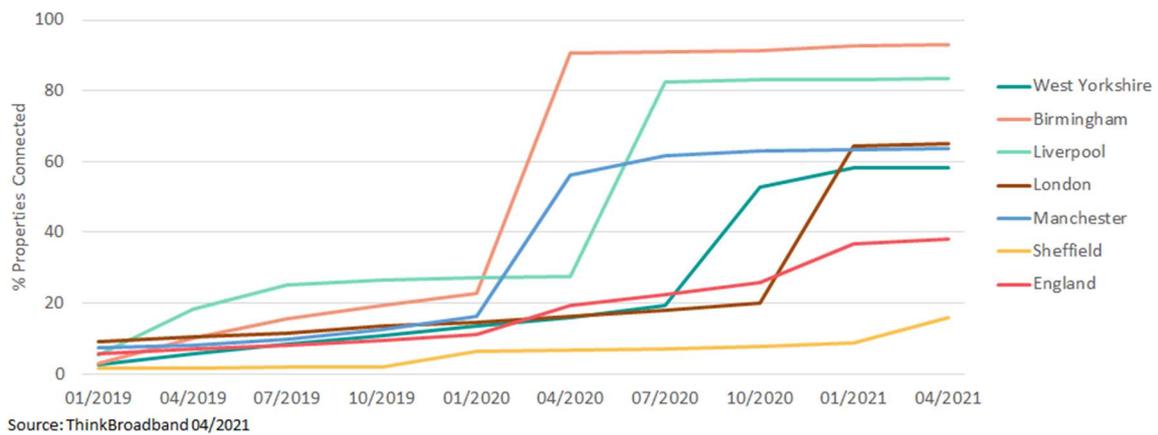
At the start of 2019, the proportion of residential and commercial properties connected to gigabit-capable home Internet in West Yorkshire was less than half the coverage in England. However, as a result of the Superfast West Yorkshire and York roll out programme, West Yorkshire connections have increased to 58%, while coverage in England has only increased to 38%.

Figure 25: West Yorkshire Gigabit-capable internet coverage



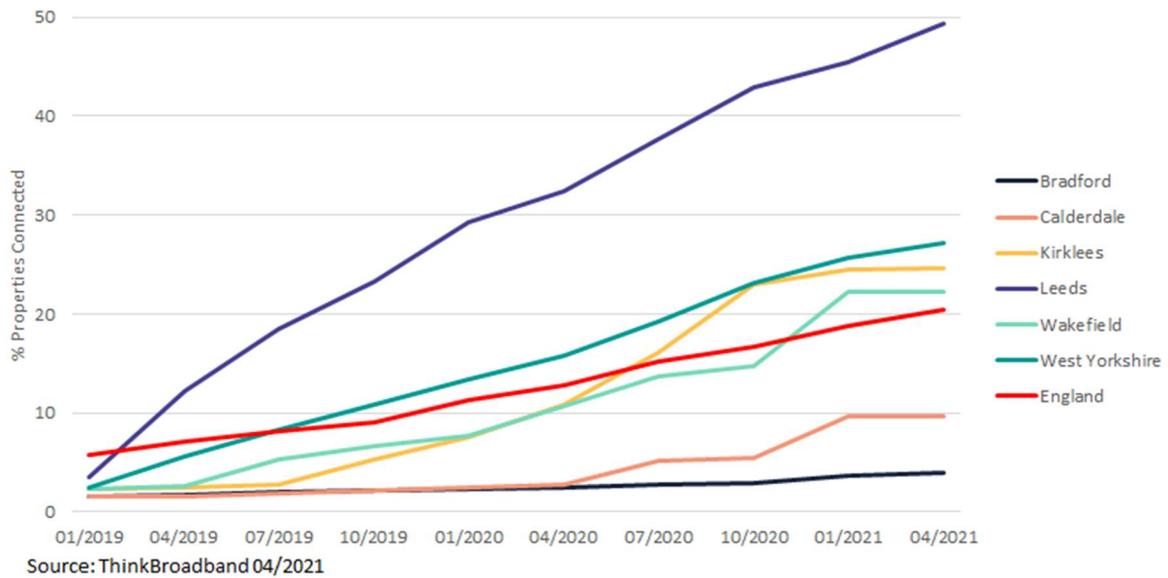
Bradford and Leeds have the highest proportion of properties connected to full fibre, with more than 86% of properties connected, exceeding the connection levels of comparator metropolitan areas including Sheffield (16%), Manchester (64%) and the London region (65%).

Figure 26: Gigabit-capable Internet Connections by Metropolitan Areas



At the start of 2019, the proportion of residential and commercial properties connected to full fibre in West Yorkshire was less than half the coverage level in England. However, because of the Superfast West Yorkshire and York (SWYY) roll out programme, by the end of 2019 local coverage had exceeded the levels for England and since then has outperformed the national average. While this indicator shows that only 4% of properties in Bradford have full fibre connections, 83% already have gigabit-capable Internet connections from other technologies (see above).

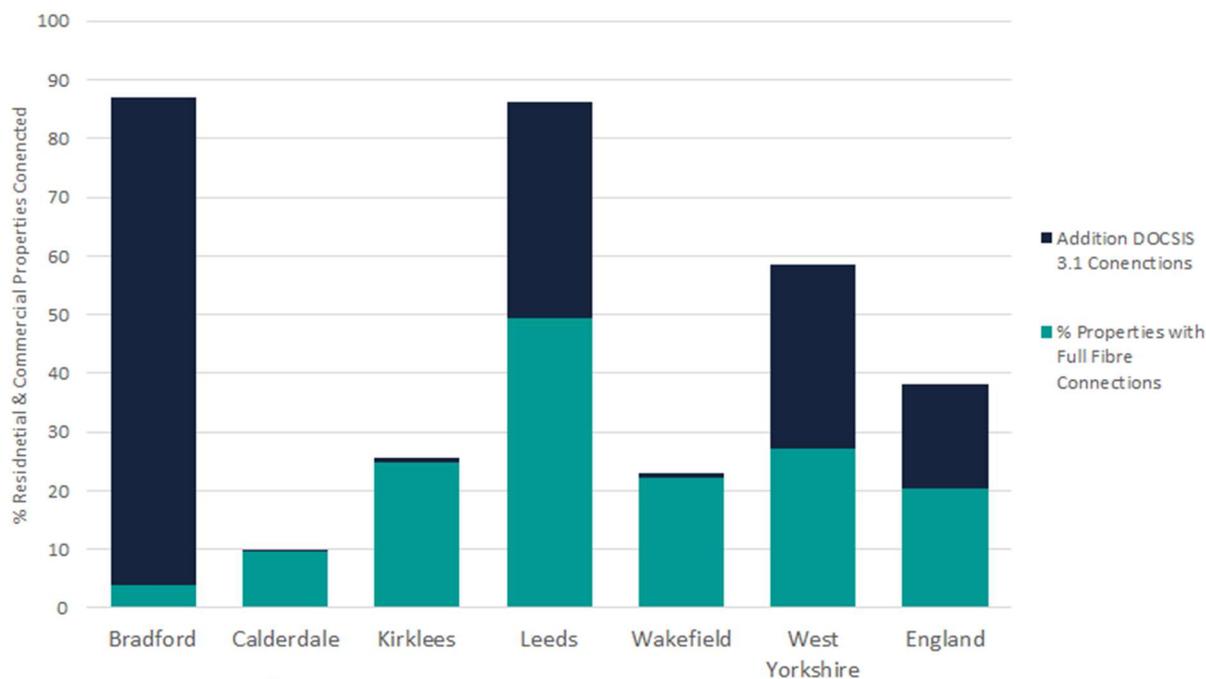
Figure 27: Residential and commercial properties connected to Full Fibre broadband



Leeds has the highest proportion of properties connected to full fibre with almost half of properties connected, exceeding the connection levels of comparator metropolitan areas including Sheffield (16%), Manchester (26%) and Birmingham (39%), the London region (23%) and more than double the coverage rate for England (20%).

Despite this, connectivity remains low in Calderdale, a district with large rural areas and challenging geography, where installing infrastructure is prohibitively expensive.

Figure 28: West Yorkshire Gigabit-capable Internet connections by type



Source: ThinkBroadband 04/2021

While the proportion of properties connected to full fibre in West Yorkshire exceeds the coverage level for England, it falls behind that of other metropolitan areas such as Birmingham and Liverpool. All the comparator metropolitan areas looked at also have higher DOCSIS connection levels than West Yorkshire.

Table 1: Broadband Connections by Type

	Superfast Access >=30 Mbps	Gigabit DOCSIS 3.1 or FTTP	Full Fibre
Birmingham	98	93	39
Liverpool	98	83	37
London	98	65	24
Manchester	97	64	26
West Yorkshire	98	58	27
England	97	38	20

Source: ThinkBroadband 2020

2.2.10 Take-up of superfast (or above) broadband services

The extent of superfast coverage in West Yorkshire is above the national average but with hard-to-reach areas still to address. Take-up of services (reflected in the number of connections) is growing, but many households do not subscribe to services.

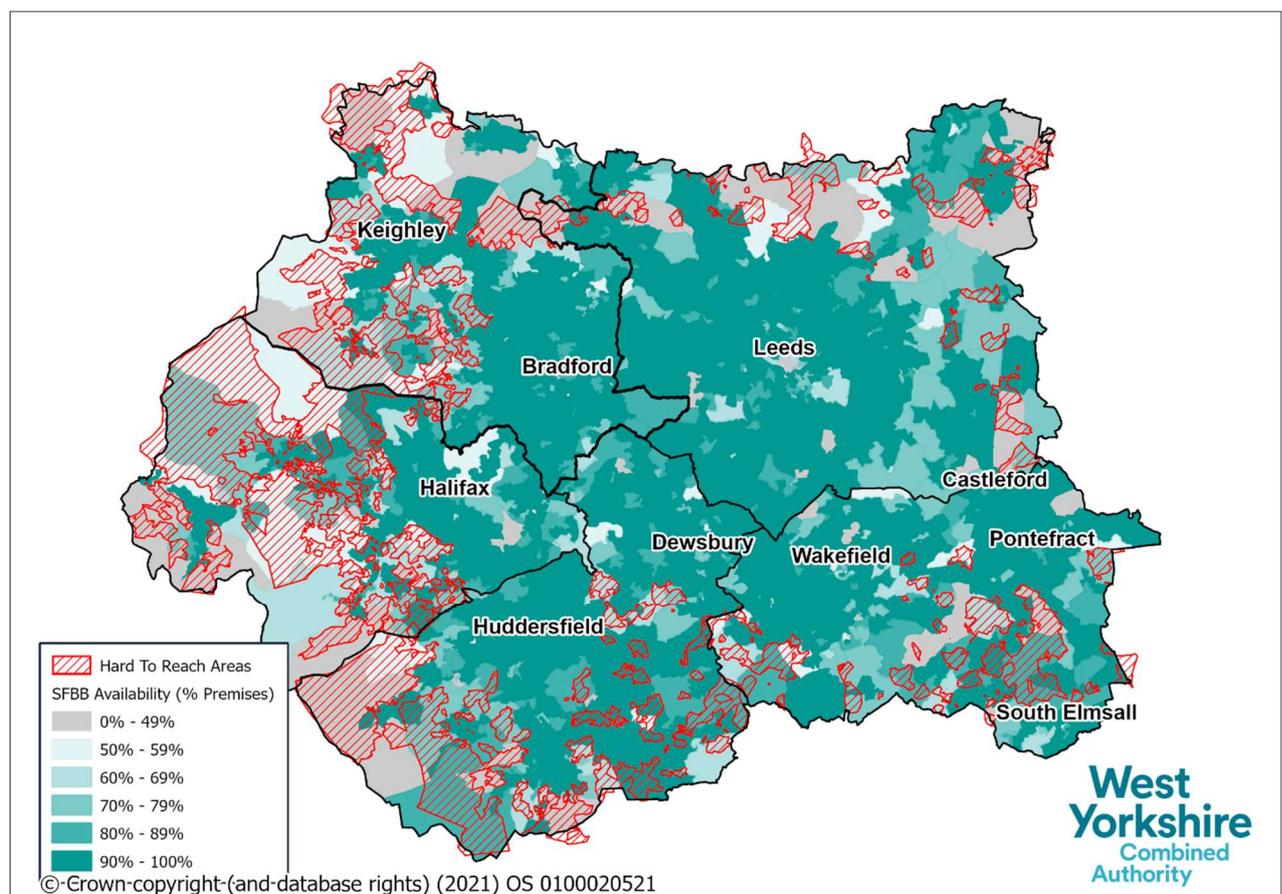
[The Leeds City Region's Strategic Economic Plan](#) (2016) laid out an ambition to have 99% of properties connected to superfast broadband (SFBB) by 2018/19. West Yorkshire coverage is currently 98%, slightly above the England coverage rate of 97%.

The SWYY Programme is using £15.6m funding from the Department for Culture, Media and Sport, The Department for Environment, Food and Rural Affairs and the European Structural and Investment Funds to provide fast and reliable broadband to the eligible premises in rural and isolated settings, in order to make up the 1% commitment.

Targeting these rural areas supports access to services and employment for vulnerable groups and improves social and community cohesion by improving communication links between areas, this way tackling social isolation.

This roll-out will further boost the City Regions business base and economy by helping SMEs increase their productivity by £76m and increasing employment impacts and Gross Value Added by £23M over a fifteen year period.

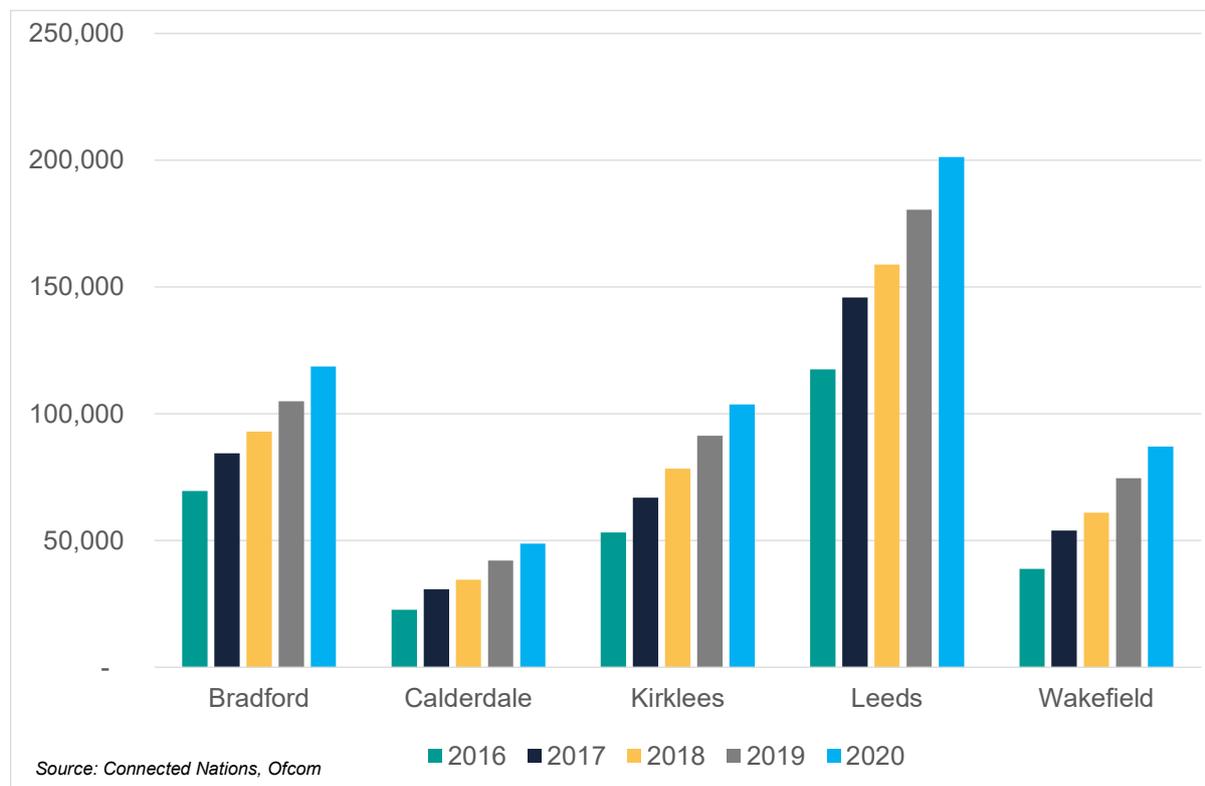
Figure 29: West Yorkshire Superfast Broadband Uptake 2020



The benefits of increased coverage of high-speed broadband networks can only be realised if consumers take advantage of these services when they are available. In its 2020

Connected Nations report, Ofcom estimated¹ that for those premises that are able to take SFBB or a higher speed, around 60% of them do so. This is an increase from around 57% in 2019. They further estimated that take-up of services using full fibre at any speed, where fibre is available, is around 25%. The take-up of gigabit-speed broadband services in the UK is currently low and estimates are not presently available from Ofcom.

Figure 30: Number of superfast connections (>=30 Mbit/s) (number of lines)



Data is not available at local level for the proportion of premises that subscribe to a SFBB service. However, figures are available for the number of connections offering superfast speeds of 30 Mbit/s or more.

Based on data for 2020, there are currently 559,000 connections in West Yorkshire. The number of connections increased by 12% between 2019 and 2020 alone, and by 85% between 2016 and 2020, suggesting rapid growth in take-up.

There are a number of reasons why a consumer may not subscribe to a faster broadband service, including affordability concerns, lack of awareness of faster speeds, lack of need and/or lack of digital skills.

Barriers like affordability point to a challenge around inclusive growth. Digital access is increasingly important for participation in employment, education and wider society. Currently available data do not allow us to assess the extent of this digital divide in terms of superfast take-up at local level.

¹ Ofcom, [Connected Nations 2020](#) (2020)

2.2.11 Mobile coverage (4G and 5G)

4G coverage in West Yorkshire is above the national average but usage is relatively low.

Current 4G networks provide download speeds up to 10 Mbps, with maximum speeds up to 40 Mbps, matching SFBB speeds. Mobile data is an increasingly important part of our daily lives, from people checking news, emails and social media while out and about to utilities companies using it to provide gigabit-capable internet in isolated and hard to reach communities where traditional broadband solutions are not viable.

Future 5G technologies will provide average download speeds of 150-200 Mbps and peak speeds of over 1 gigabyte per second. A robust 5G mobile Internet network will play a transformative role in the future development of the region. As well as supporting local business and services development and providing internet coverage for large sites such as warehouses and hospitals, 5G will enable gigabit-capable Internet connections. The technology will also connect rural or isolated dwellings and provide the bandwidth necessary for autonomous vehicles and other mobility as a service transport solutions.

West Yorkshire has historically had better 4G coverage than the rest of the country, with 79% of properties in the region having indoor 4G coverage from all network providers since June 2017, a time at which only 68% of properties in England had this level of coverage.

Coverage in West Yorkshire has since risen to 84% of all properties, with the gap in coverage compared to the rest of England decreasing to two percentage points.

Table 2: Mobile broadband coverage and usage

Area	4G Premises (Indoor) Coverage from All Providers 2020	Annual 4G Data Download Per Person 2019 (GB)
Bradford	86%	3.81
Calderdale	84%	3.32
Kirklees	83%	2.39
Leeds	83%	4.34
Wakefield	78%	3.82
West Yorkshire Average	84%	3.68
England	82%	5.75

Source: Ofcom Connected Nations Summer Report 2020

While the volume of mobile data downloaded continues to increase as coverage expands and banking, ticketing and email apps become a part of daily life, download volumes in West Yorkshire are below the level for England.

5G Connectivity

5G transmitters are providing coverage in all five West Yorkshire district centres, as well as in Dewsbury, Mirfield, Morley and Pontefract. However, the detailed information about the extent of coverage is not publicly available. As outlined earlier this will be a key indicator for the future.

2.3 Implications of COVID-19 and Brexit

Data on the local economic impact of the pandemic is not yet available, but nationally, gross domestic product (GDP) fell by 9.9% in 2020, with consumer facing industries seeing particularly big falls. The recovery in GDP commenced in May 2020, but as of July 2021 remained 2.1% below its pre-pandemic level.

Whilst there has been a partial recovery in output during the latter part of 2020 and early in 2021, there remains significant uncertainty about the long-term structural impacts of COVID-19 on the type and location of economic activity in future.

ONS analysis has shown that the pandemic may have had a positive short-term effect on productivity. This is due in large part to the fact that jobs which have been more likely to be furloughed or see a reduction in hours have tended to be in sectors which have lower levels of productivity. This includes areas such as hospitality and retail.

The longer term, as most economic indicators, is more uncertain, with the implications of issues such as increased home working on productivity yet to be fully evidenced.

The propensity of businesses to invest in innovation and capital equipment will also be critical to the future path for productivity, as both factors are associated with higher productivity growth. Many businesses will likely exit the pandemic with higher levels of debt which may affect their capacity to invest, though the Budget 2021 did offer some incentives to encourage this.

The UK's exit from the EU is also likely to have implications for productivity; the Office for Budget Responsibility's latest assessment (March 2021) suggests that productivity could be 4% lower in the long run under the new trade arrangements, relative to the pre-Brexit position.

Both COVID-19 and EU Exit have had a significant impact on international trade. COVID-19 restrictions at home and abroad disrupted supply chains at various times throughout 2020, though it is hoped that these disruptions will be temporary. The end of the transition arrangements with the EU has also caused disruption in early 2021. More than half of businesses reported international trade issues in the early months of the year due to disruption at ports, issues with new documentation, taxes and duties.

Some changes are likely to affect international trade in the longer term however –there are signs that some companies have looked to diversify their supply chains and seek suppliers closer to home in response to changing arrangements. This could have both positive and negative effects for local businesses, some of which may depend on businesses' willingness and ability to adopt multiple requirements around certification of products and rules of origin obligations. For the service sector, technical issues around financial services and data sharing remain to be resolved and could affect the ease with which business is done with Europe in future years.

Early survey data suggests that whilst businesses are more likely to look beyond Europe for international expansion in the next 12 months, relatively few expect to reduce their presence in the continent.

The cultural sector and the associated activities in sport and tourism have been particularly hard-hit by COVID-19. Diverse activities, from live performance and theatre productions to exhibitions and galleries, have seen their revenues fall dramatically as venues have closed their doors and gatherings have been prohibited to maintain social distancing.

COVID-19 has brought into sharp focus the significant opportunities and challenges that digital can bring for people, for businesses and for society at large. There has been an

unprecedented rise in the number of people working from home while at the same time we have seen the disproportionate impact that digital poverty is having on accessing remote learning and remote / virtual health services.

3 Enabling Inclusive Growth

Summary

Enabling inclusive growth means ensuring that as many people as possible can contribute to, and benefit from, economic growth in our communities and towns.

Life expectancy in West Yorkshire is lower than the England average. In addition, inequality in life expectancy between the most and least deprived neighbourhoods is greater than the national average in Leeds. The most recent data shows a fall in life expectancy (the first drop in 20 years) due to high mortality rates (Covid-19) in 2020.

Some groups have employment rates that are well below average reflecting **disadvantage in the labour market**, although there are signs that the employment rate gap is narrowing for disabled people and people from ethnic minorities.

West Yorkshire's **unemployment rate** has returned to parity with the national average and is lower than for some areas with comparable economies but is likely to increase as a result of COVID-19.

Gross disposable household income per head in West Yorkshire is well below the national average and the gap has been widening over time, indicating that there is a significant challenge around raising living standards in the region.

Around 200,000 jobs in West Yorkshire, or 20% of the total, pay below the **Real Living Wage**. The percentage increases to 37% for part-time workers. West Yorkshire also has a deficit of the highest paying jobs

All local authorities in West Yorkshire except Leeds have a relatively low proportion of jobs that offer **quality work**, based on a composite measure relating to pay, working hours and contractual status

More than a fifth of people in West Yorkshire have **no qualifications or are qualified to a low level**. This limits their career prospects as well as their potential contribution to the economy.

Take-up of **apprenticeships** in West Yorkshire is strong relative to the national average but there has been a negative effect on starts from COVID-19 and the apprenticeship reforms. Apprenticeships need to be made more inclusive.

One-in-20 young people aged 16 and 17 in West Yorkshire are **NEET** (not in education, employment or training) or their status is not known.

A substantial number of **net additional dwellings** are being delivered each year in West Yorkshire, adding to the region's housing stock. In 2019/20 there was net growth of 7,575, somewhat below the increase seen in 2018/19, which was a peak year.

House prices are relatively low in West Yorkshire and housing is also more affordable than nationally, relative to prevailing rates of pay in the region.

Aside from in Leeds, median monthly **rents** are well below the national average across the West Yorkshire districts.

Around 169,000 households in West Yorkshire, or 17% of all households, are in **fuel poverty**. This prevalence is above the national average of 13%.

There is a risk that the **pandemic** could exacerbate existing disadvantage and inequalities in West Yorkshire across a range of dimensions (see section 3.3).

3.1 Overview of the priority

Enabling as many people as possible to contribute to, and benefit from, economic growth in our communities and towns

The West Yorkshire Inclusive Growth Framework sets out challenges, goals and ambitions associated with achieving inclusive growth, it is intended that the framework will be used to embed inclusive growth within all key policy areas and inform all Combined Authority strategies and activities.

Inclusive Growth is a wide-ranging area and our selection of indicators covers the themes of income, living costs and labour market / skills inclusion. This provides an insight into the range of factors that mediate the relationship between economic growth and disadvantage / poverty. Indicators relating to the incomes of different groups provide a direct measure of the benefits that different parts of society receive as a result of economic growth. Living costs, including housing costs, help to determine the link between growth in the wider economy and the living standards enjoyed by local people. Indicators of labour market inclusion reflect the extent to which different groups can participate in and contribute to growth.

In addition, as previously noted several of the transport-related indicators have an important inclusive growth dimension.

3.2 Performance against the indicators

3.2.1 Life Expectancy

Life expectancy in West Yorkshire is lower than the England average and inequality in life expectancy between the most and least deprived neighbourhoods in Leeds is greater than the national average. The most recent data shows a fall in life expectancy: the first drop in 20 years due to high mortality rates in 2020 linked to Covid-19.

Life expectancy is a measure of the average number of years a person would expect to live based on contemporary mortality rates. For a particular area and time period, it is an estimate of the average number of years a new-born baby would survive if he or she experienced the age-specific mortality rates for that area and time period throughout his or her life. Overall life expectancy and healthy life expectancy are important measures of mortality and morbidity, and inequality in life expectancy is a key high-level health inequalities outcome, which is core to the aims of the Department of Health. There is also a significant divergence in life expectancy by socio economic group¹, making it an important indicator of inclusion.

Male and female life expectancy at birth in West Yorkshire is currently statistically significantly lower than the England average and has been for a number of years. The latest figure for life expectancy (2018/2020, a 3-year average) for a boy and girl born in West Yorkshire was 77.8 and 81.8 years respectively, lower than the England average of 79.4 and 83.1 years respectively. Generally, life expectancy for males in West Yorkshire is similar to Greater Manchester, Sheffield City Region and West Midlands Combined Authority; but female life expectancy is somewhat higher in West Yorkshire compared to Greater Manchester.

At local authority level within West Yorkshire, there is some variation in life expectancy, with Bradford and Wakefield having the lowest life expectancies and Calderdale and Kirklees having the highest (for both males and females), although there is considerable variation within districts.

¹ Longevity Science Panel, [Life Expectancy: Past and Future Variations by Socio-economic Group in England and Wales](#) (2018)

Figure 31: Male life expectancy at birth

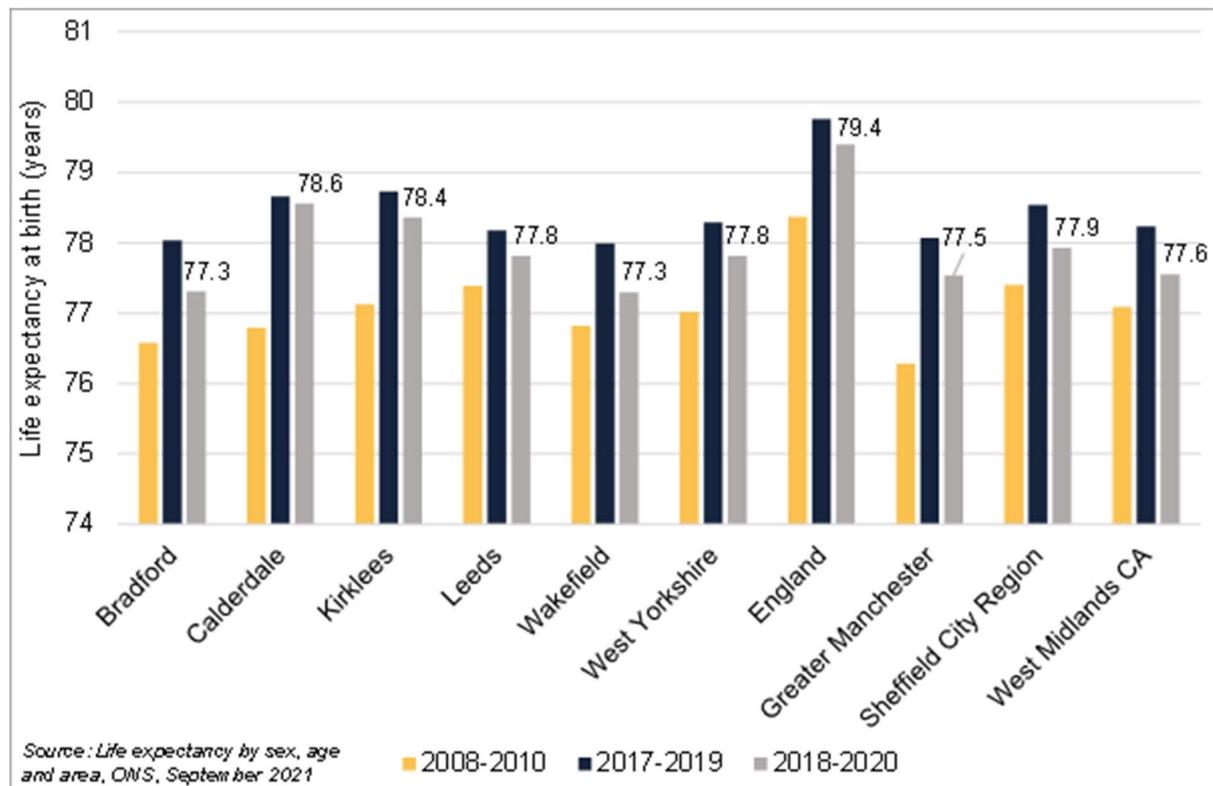
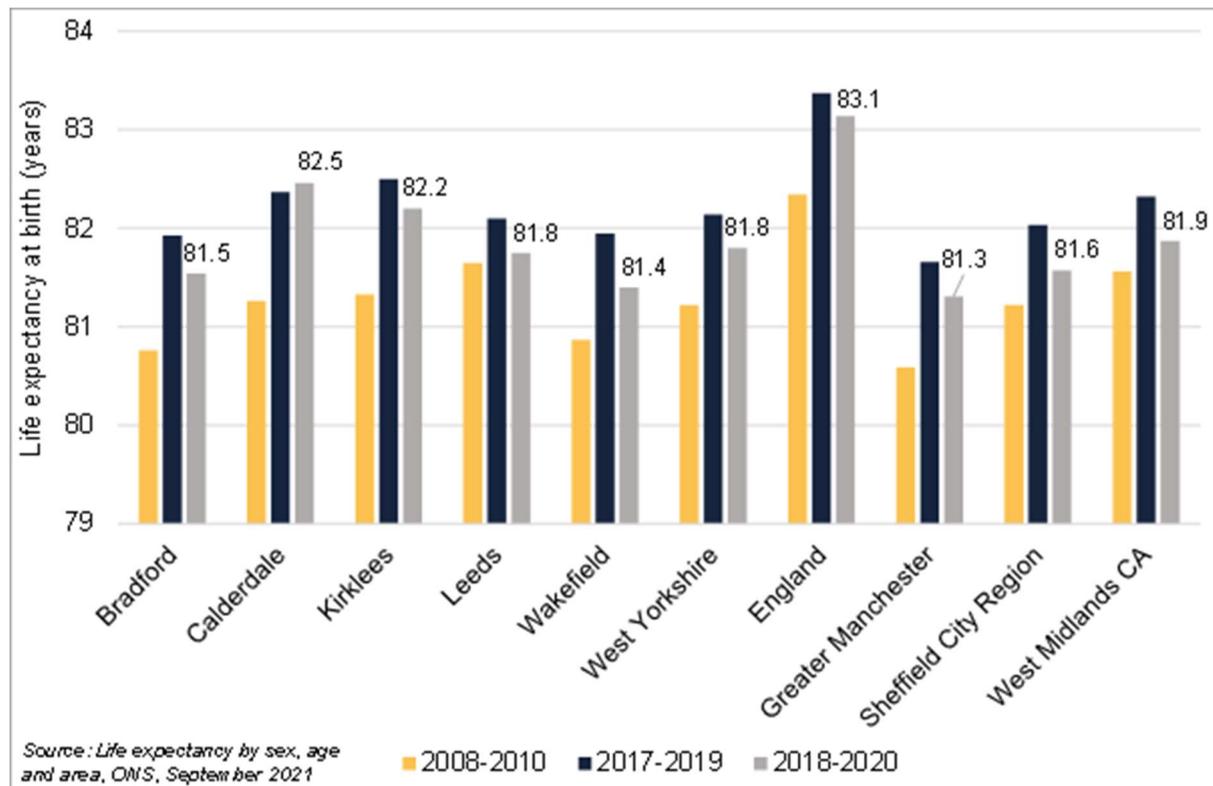


Figure 32: Female life expectancy at birth

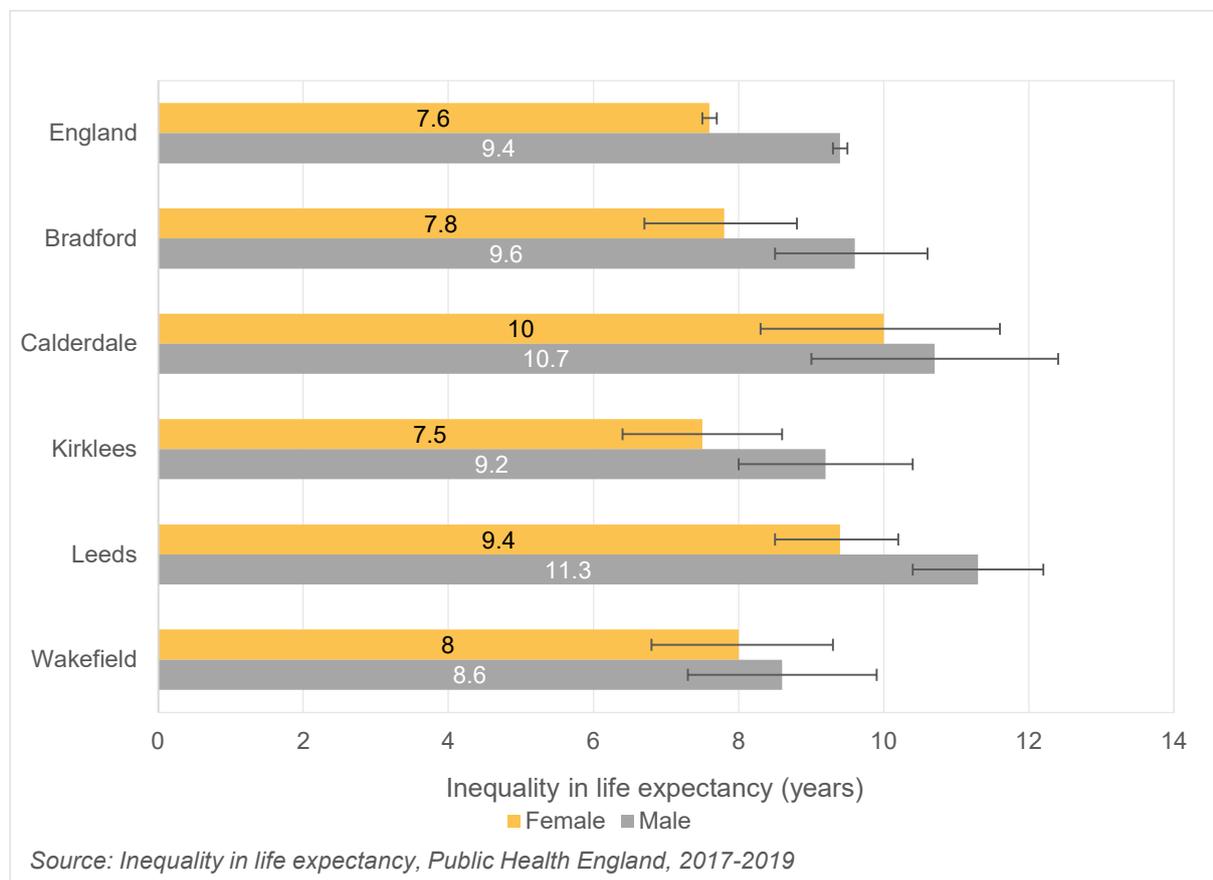


The most recent data for 2018-2020, shows a fall in life expectancy compared with the previous year: the first drop in 20 years due to high mortality rates in 2020 linked to Covid-19. A similar fall was seen across all local authority areas and comparator areas.

Inequality in life expectancy, or the slope index of inequality (SII) is a measure of the social gradient in life expectancy, i.e., how much life expectancy varies with deprivation. It takes account of health inequalities across the whole range of deprivation within each area and summarises this in a single number, the SII. The greater the value of the SII, the greater the average difference in life expectancy between the least deprived and most deprived neighbourhoods within a given area.

Within West Yorkshire, Leeds currently has a statistically significantly larger (steeper) SII of life expectancy compared to the England average. This means that the disparity between life expectancy in the most and least deprived neighbours is more severe than the England average. In practical terms, it means that on average a boy or girl born in an area of Leeds that falls within the most deprived (worst 10%) neighbourhoods in England will live 11.3 or 9.4 years (boys and girls respectively) fewer than a boy or girl born in area of Leeds that falls within the least deprived (best 10%) neighbourhoods.

Figure 33: Inequality in life expectancy (male and female) at birth



3.2.2 Employment rate gap for disadvantaged groups

Some groups have relatively low employment rates, although there are signs that the employment rate gap is narrowing for disabled people and people from ethnic minorities

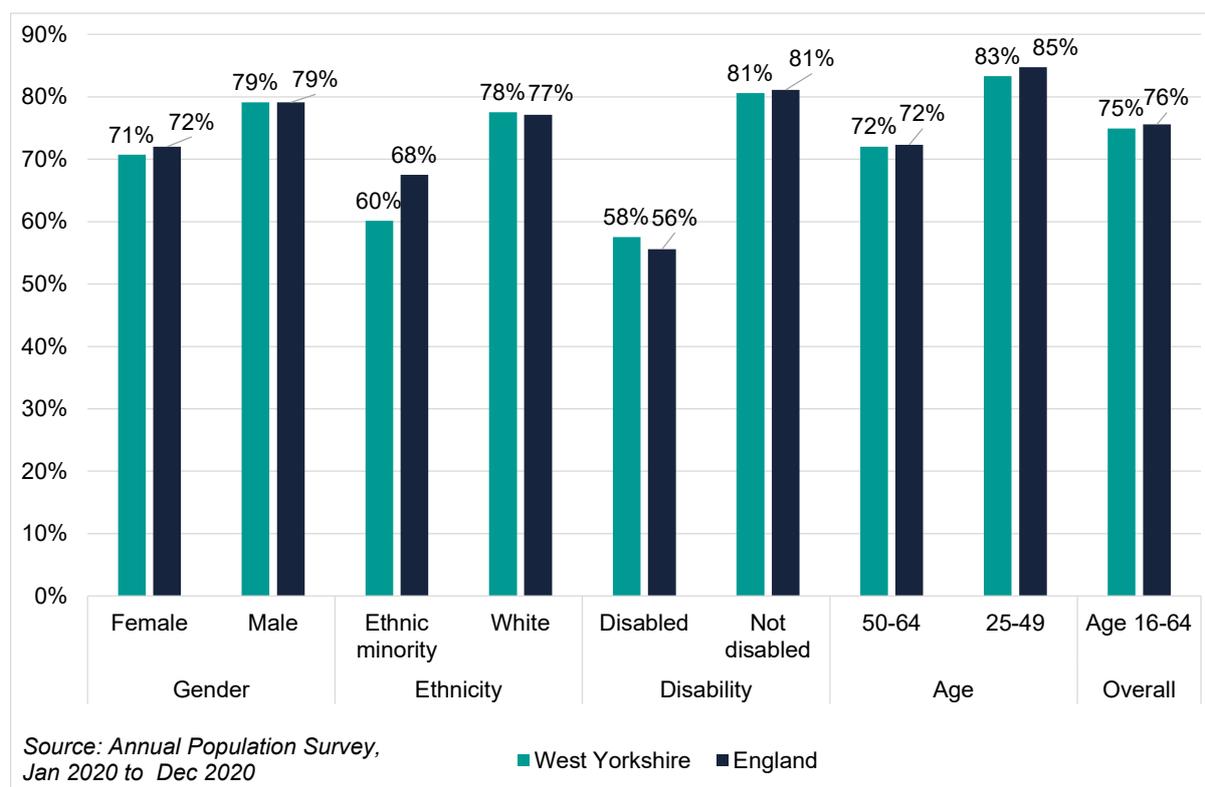
West Yorkshire’s overall level of employment and employment rate have both grown steadily in recent years. However, from an inclusion perspective it is important to understand the extent to which members of different groups participate in employment.

There is a range of groups who are disadvantaged in the labour market. This is reflected in relatively low employment rates. Women, people from ethnic minorities, disabled people and older people are less likely to be in employment than the wider population¹. The picture in West Yorkshire broadly reflects the national pattern.

Only 58% of disabled people and 60% of people from ethnic minorities are in a job in West Yorkshire, according to the latest data. This compares with an overall rate of 75% for the working age population.

The largest employment rate gaps are for disabled people (23 percentage points lower than for people who are not disabled) and people from an ethnic minority (17-point gap with people who classify themselves as white). However, females face a gap of 8 points with males and older people aged 50-64 a gap of 11 points with people aged 25-49.

Figure 34: Employment rate by group



¹ This is not the full range of groups known to be disadvantaged in the labour market but measurement issues at local level preclude analysis of these groups.

For most disadvantaged groups West Yorkshire performs slightly below the national average on employment rates, with the exception of disabled people, for whom the region has a higher rate.

Employment rates vary by different ethnic groups. National data show that the lowest rate is for the combined Pakistani and Bangladeshi ethnic group, at around 18 points lower than the overall rate (57% versus 76%). In West Yorkshire, the employment rate for this group is similar, at 54%. This explains the low ethnic minority employment rate in West Yorkshire since this group accounts for almost a half of the ethnic minority population of West Yorkshire, compared with around a fifth nationally.

At national level, the number of disabled people in employment has increased over recent years. This is due to growth in the size of the disabled population and increases in the overall employment rate, as well as a narrowing of the employment rate gap for this group¹. A similar improvement has been seen in West Yorkshire with the level of employment among disabled people increasing from 130,000 to 191,000 between 2014 and 2020 and the employment rate gap reducing from 24 percentage points to 17 percentage points over the same period.

National data also shows a narrowing employment rate gap between white people and those from all ethnic minority groups combined². In West Yorkshire, this gap fell from 22 points in 2012 to 17 points in 2020.

¹ Department for Work and Pensions, [The Employment of Disabled People: Data to 2019](#) (2020)

² Gov.uk [Ethnicity facts and figures](#) (2021)

3.2.3 Unemployment

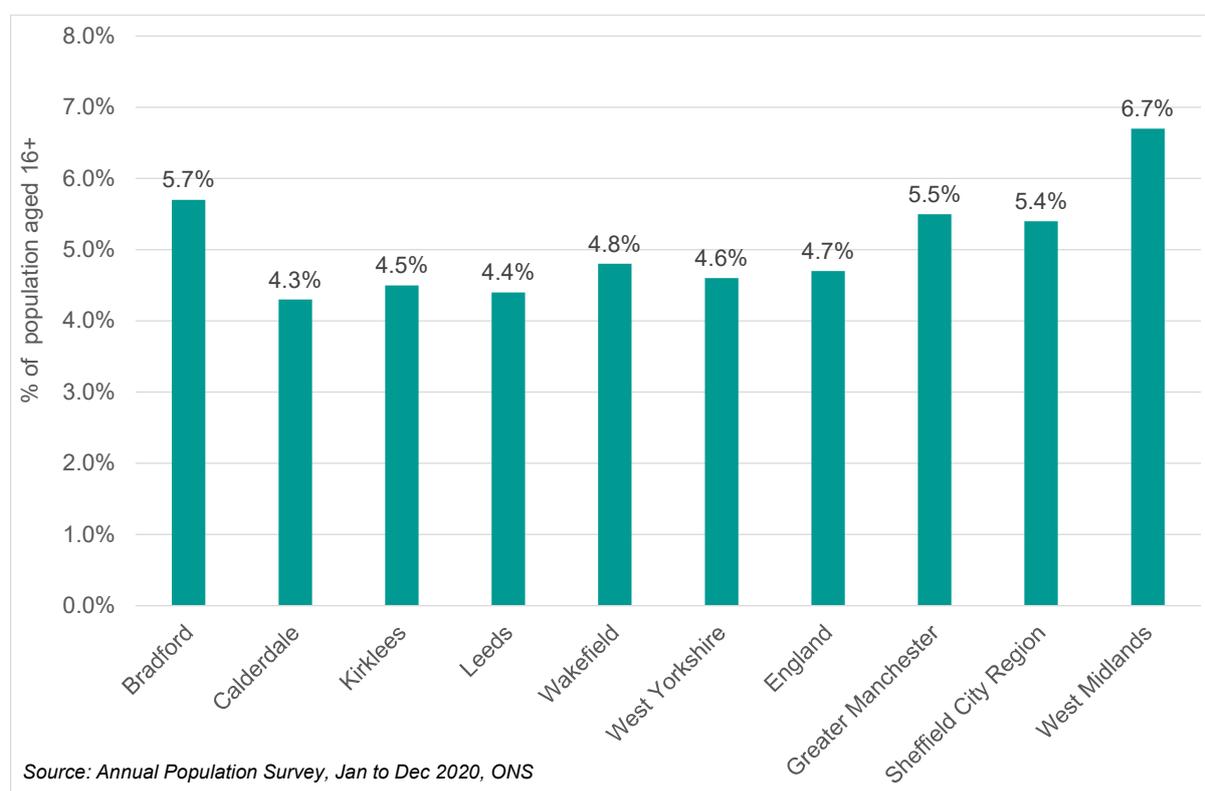
West Yorkshire's unemployment rate has returned to near parity with the national average and is lower than for some areas with comparable economies, but is likely to increase as a result of COVID-19

Connecting people to jobs is one of the most important ways of promoting inclusive growth. When people are unemployed their ability to contribute to growth and share in its benefits is curtailed. The potential for increased unemployment arising out of the COVID-19 crisis is a key threat to West Yorkshire's economic progress.

Under the definition used here unemployed people are out of work and are actively seeking and available for employment. In West Yorkshire, 54,000 people were unemployed according to the latest data; this represents 4.6% of the economically active population of working age. West Yorkshire's unemployment rate is similar to the national average, although Bradford's rate is well above this at around 5.7%.

West Yorkshire's unemployment rate is lower than that of all three comparator MCAs and is substantially lower than the West Midlands.

Figure 35: Unemployment rate - % of economically active population aged 16+

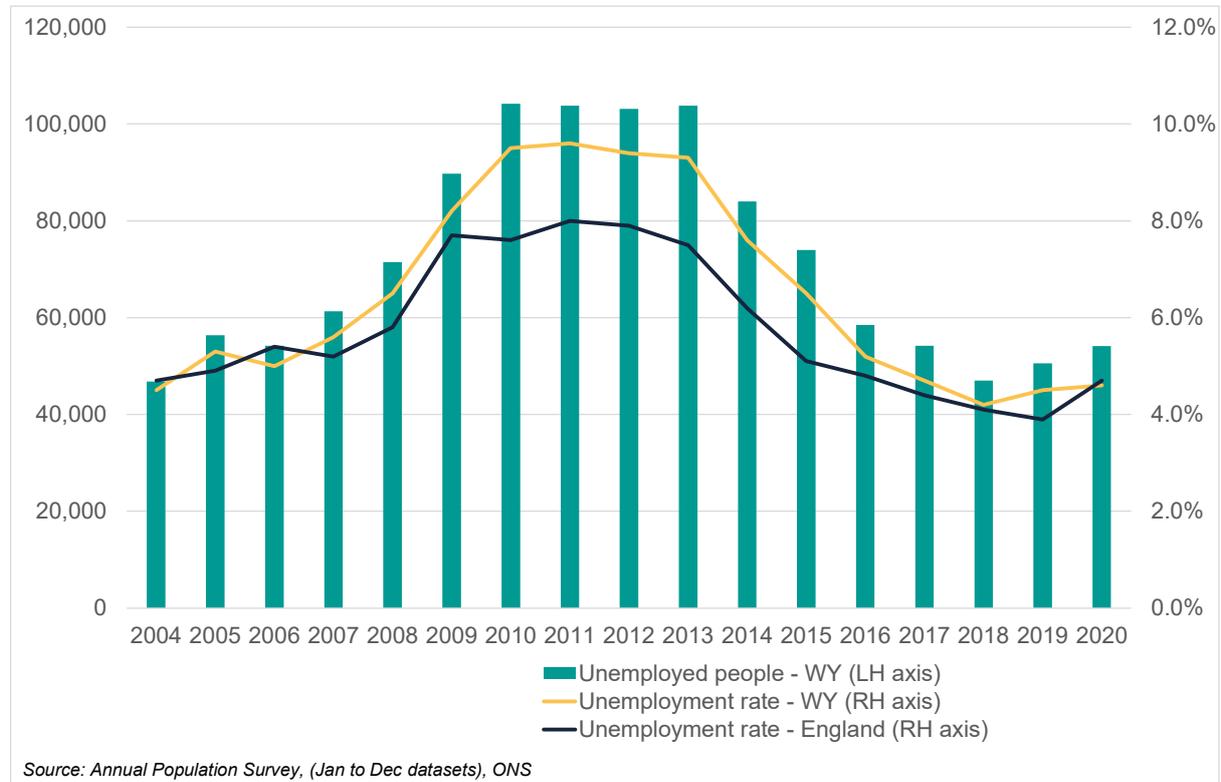


West Yorkshire has seen a steady reduction in unemployment in recent years. Since its peak in 2011 the level of unemployment in the region has almost halved and the unemployment rate has fallen from 10% to less than 5%. The speed of this reduction has led to a convergence of the regional and national unemployment rates; parity between the two rates was last seen prior to the 2008 financial crisis.

Since 2018 there have been signs of a slight increase in West Yorkshire in both the number of people unemployed and the rate, whilst the national rate increased between 2019 and 2020, reflecting the impact of the pandemic.

So far, West Yorkshire’s unemployment rate has only increased slightly in response to COVID-19 but this is largely due to the protection afforded to jobs by the furlough scheme and the way in which the data are calculated for local areas. The effect of the pandemic on the number of people claiming of out-of-work benefits is considered in section 3.3.

Figure 36: Trend in level and rate of unemployment



It is important to note that not all jobless people are covered by the above definition. There are a further 54,000 people in West Yorkshire who are economically inactive who would like a job. These are people who do not have a job but would like one, even though they are not actively seeking work currently and / or are not available to start work in the immediate future.

About the data

The unemployment data used here is taken from the Annual Population Survey (model-based estimates of unemployment). The estimates are based on an average of 12 months of data for the period January to December 2020. Therefore, some of the data on which the estimates are based relates to the pre-COVID-19 period.

3.2.4 Gross disposable household income

GDHI per head in West Yorkshire is well below the national average and the gap has been widening over time

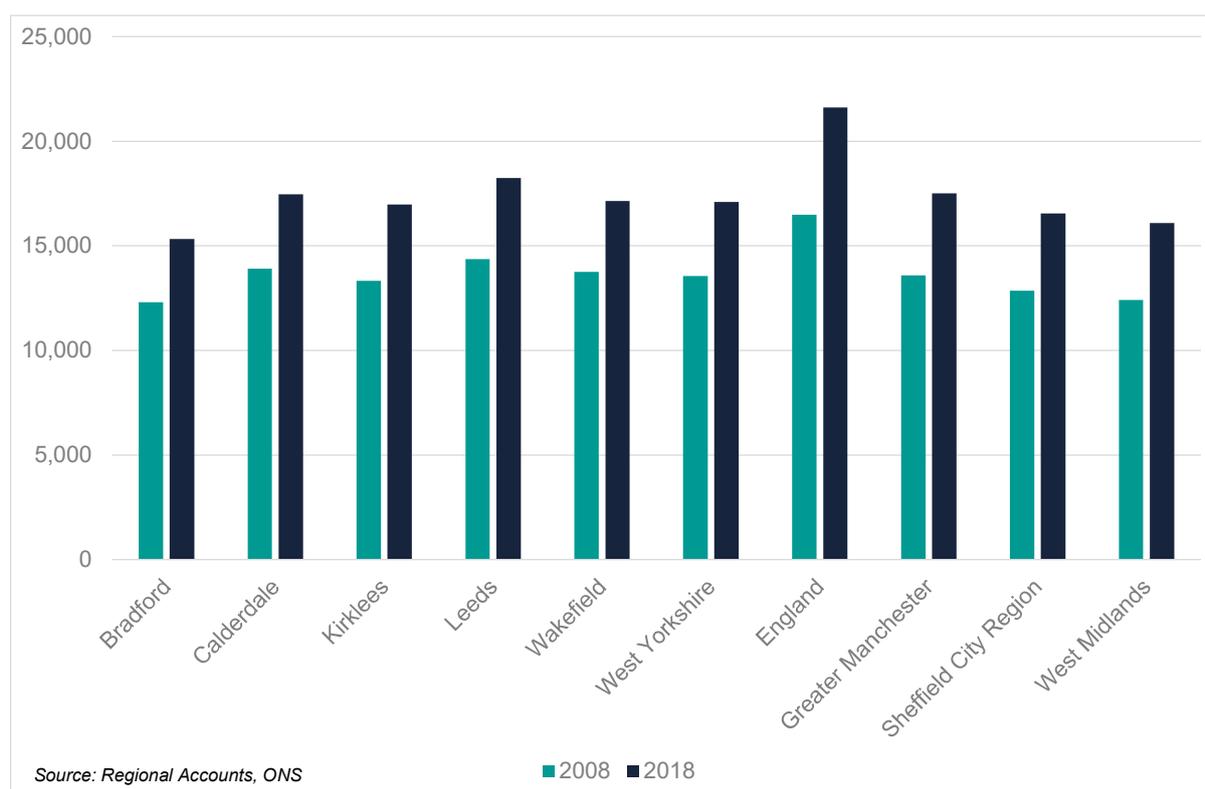
Gross disposable household income (GDHI) is the amount of money that all of the individuals in the household sector have available for spending or saving after they have paid direct and indirect taxes and received any direct benefits. It is a key measure of living standards and material welfare.

The level of GDHI per head in West Yorkshire was £17,086 in 2018, based on the latest figures available. This is 79% of the England average.

Focusing on the West Yorkshire local authorities, the current level of GDHI per head ranges from £15,319 in Bradford, only 71% of the national average, to £18,236 in Leeds, 84% of the England average. Bradford has the eighth lowest GDHI per head of any district / unitary authority in England.

The GDHI per head figure for West Yorkshire is similar to that of Greater Manchester but somewhat higher than that of both Sheffield and the West Midlands. The highest performing areas in respect of this indicator are concentrated in London and the South East.

Figure 37: Gross disposable household income per head (£) at current basic prices



A key challenge for West Yorkshire is to tackle the widening gap with the national average. Whereas GDHI per head grew by 22% in West Yorkshire between 2008 and 2018 it grew by 27% across England.

Gross disposable household income (GDHI) is the amount of money that households have available for spending or saving, hence 'disposable income'. This is the money left after expenditure associated with income e.g., taxes and social contributions, property ownership

and provision for future pension income. GDHI is comprised of the sum of two balances, the balances of primary and secondary incomes. The balance of primary incomes is mainly employment income, self-employment income, rental income and income from deposits and investments, less interest paid. The balance of secondary incomes is mainly income from benefits, pensions and insurance claims less income tax, council tax, pension contributions and insurance premia.

Total GDHI estimates in millions of pounds (£ million) are divided by the resident population of a region to give GDHI per head in pounds (£). Per head data take account of the entire resident population of regions, sub-regions and local areas including both the working population and the economically inactive.

3.2.5 Jobs paying below the real living wage

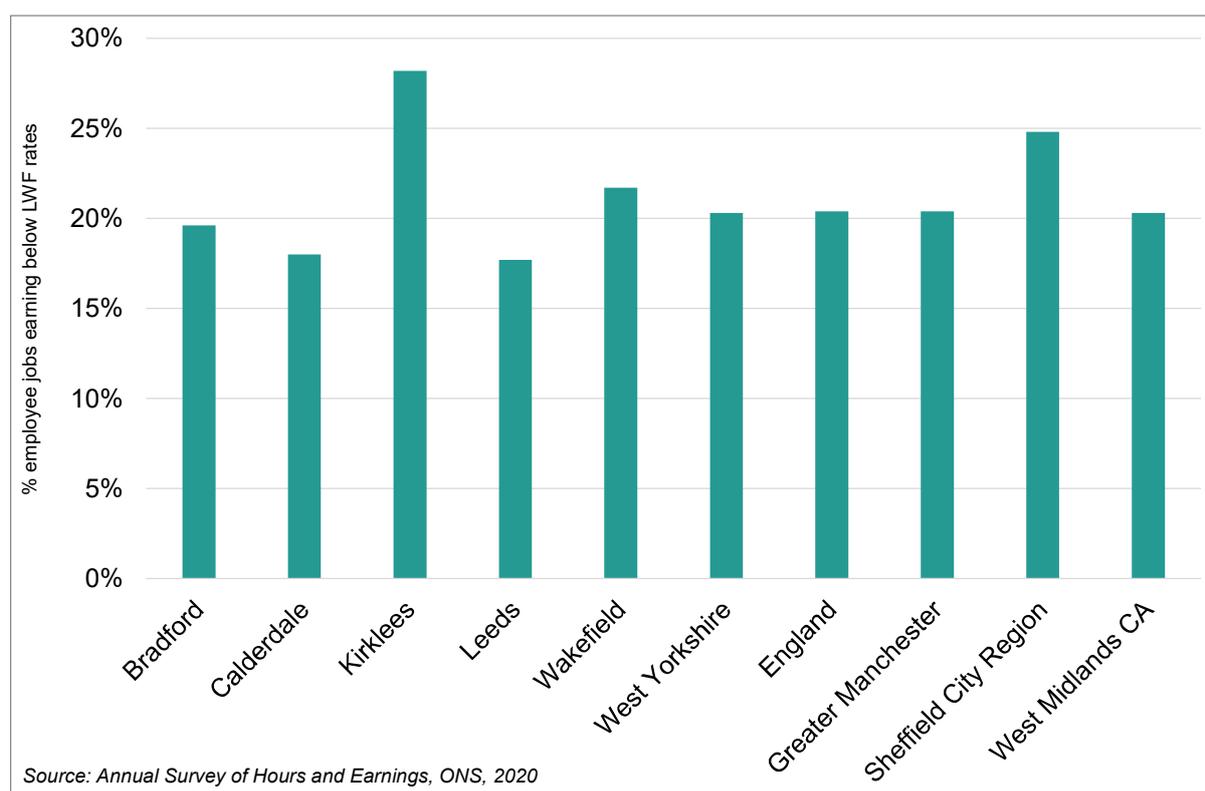
Around 200,000 jobs in West Yorkshire, or 20% of the total, pay below the Real Living Wage. The percentage increases to 37% for part-time workers. West Yorkshire also has a deficit of the highest paying jobs.

The Living Wage Foundation's Real Living Wage is independently calculated based on what people need to get by and to meet everyday needs. The value of the Real Living Wage (outside London) was £9.30 in 2019/20. Ensuring that jobs pay a decent wage and support an appropriate standard of living is central to the inclusive growth agenda.

The issue of low pay is a particular concern because the majority of low-paid workers remain permanently stuck in low pay or cycling in and out of higher pay.

Around 200,000 employee jobs in West Yorkshire pay below the real living wage of £9.30 per hour, based on official statistics for 2020. This is around 20% of all such jobs in the region, a proportion that is similar to the national average. Kirklees has a much higher proportion of jobs that are low-paid on this measure – approximately 28%.

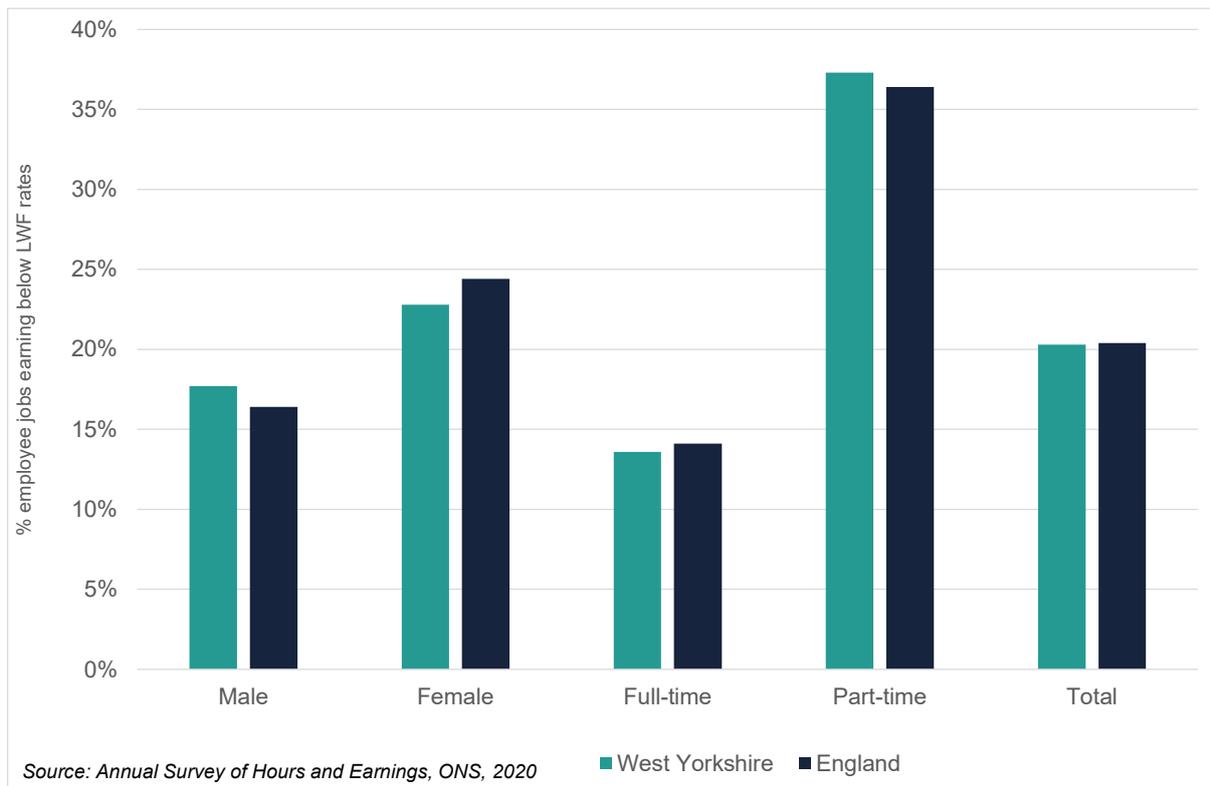
Figure 38: Proportion of all employee jobs paying below the Living Wage Foundation's real living wage rate



Turning to our comparator areas, a similar proportion of jobs in Greater Manchester and West Midlands CA pay below the Real Living Wage but Sheffield has higher percentages of jobs falling below the threshold.

West Yorkshire has improved against this measure in recent years. The proportion of jobs paying below the real living wage in West Yorkshire fell by 4 percentage points (from 24% to 20%) between 2018 and 2020, running alongside a fall of 3 points nationally (23% to 20%).

Figure 39: Proportion of employee jobs paying below the Living Wage Foundation’s real living wage rate by gender and status



Part-time jobs are twice as likely to pay an hourly rate that is below the real living wage threshold. A larger proportion of jobs held by women than men also fall below the threshold, partly because they are more likely to work part-time; although male part-time jobs, which are few in number, are most likely to pay below the real living wage.

Other indicators show West Yorkshire lagging behind on pay, reflecting its productivity deficit.

Median gross hourly pay in the region is £14.16, 92% of the national average of £15.13. This is a deficit in absolute terms of £1.15 per hour and £46 per week.

Although the region has a significant proportion of people paid below the real living wage, there is large pay deficit at the upper end of the pay distribution. The pay level for jobs at the 10th percentile in West Yorkshire is 97% of the equivalent national figure; however, at the 90th percentile it is only 88% of the national figure. This reflects the under-representation in West Yorkshire of jobs in the highest skilled and highest paid occupations.

About the data

The Annual Survey of Hours and Earning (ASHE) is based on a 1% sample of employee jobs taken from HM Revenue and Customs (HMRC) Pay As You Earn (PAYE) records. Information on earnings and hours is obtained from employers and ASHE does not cover the self-employed.

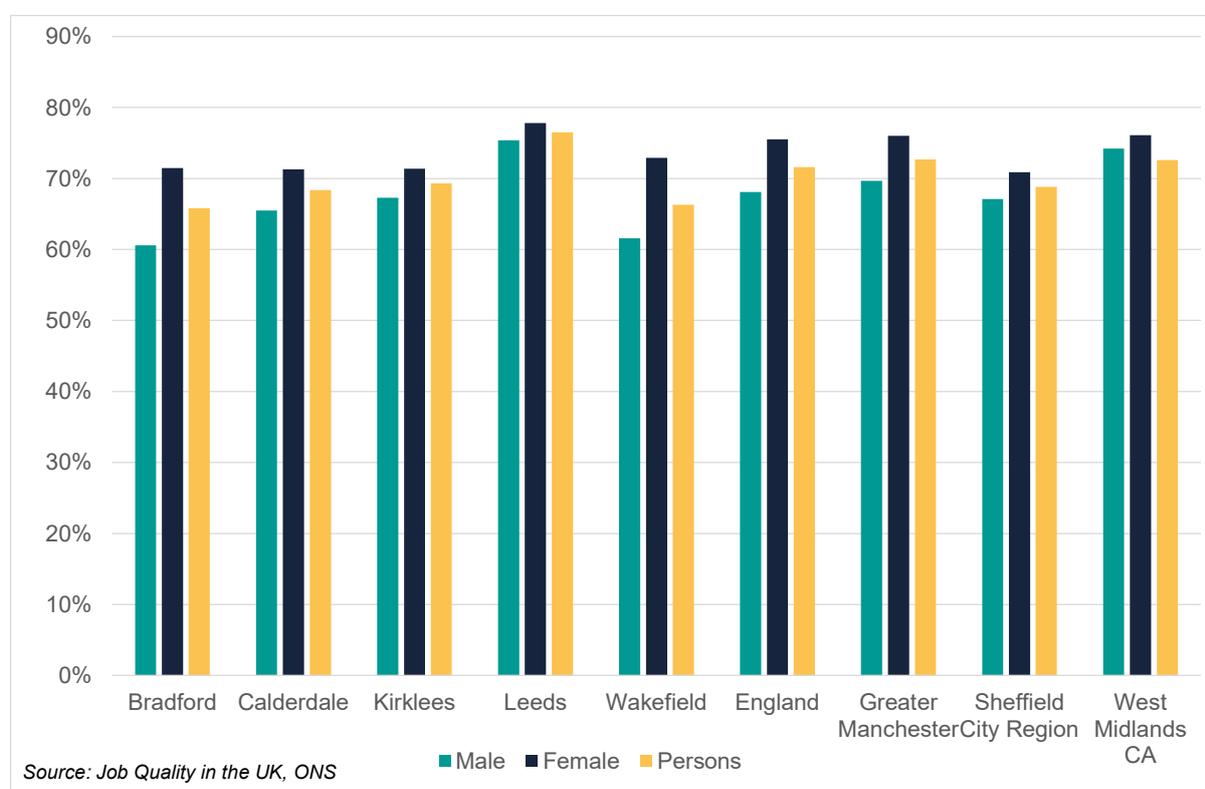
3.2.6 Quality work

All local authorities in West Yorkshire except Leeds are below the national average with regard to the proportion of jobs that offer quality work

Prior to the COVID-19 crisis, West Yorkshire saw a steady increase in the number and proportion of people in employment. However, the quality as well as the quantity of jobs that are available in the region is a key consideration from an inclusion perspective. Inclusive growth means connecting people to jobs that are of good quality, not just in terms of pay but across a range of measures.

The Office for National Statistics has developed a composite measure of good work in response to recommendations in the Taylor Review of modern working practices. According to this measure, a person in quality work has all of the following characteristics: not in low pay, working satisfactory hours, and having desired contractual status.

Figure 40: Proportion of residents who are employees in quality work by sex, 2018



Around two-thirds of resident employees are in quality work across the majority of West Yorkshire districts, somewhat below the national average¹. Women are more likely to be in quality work, reflecting the fact that they are more likely to be working a satisfactory number of hours than men.

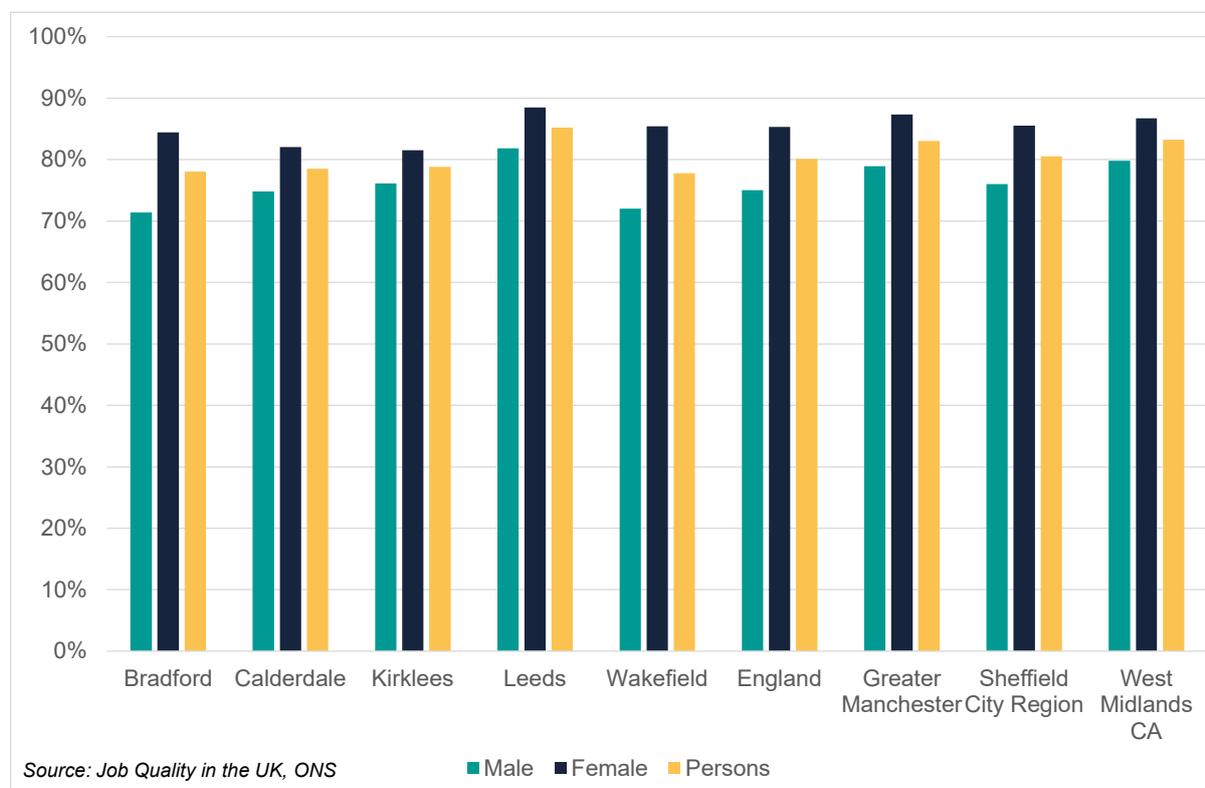
Greater Manchester and the West Midlands CA have a greater proportion of people in quality jobs than all of the West Yorkshire local authorities except Leeds.

Leeds has a considerably higher proportion of people in quality jobs than elsewhere in West Yorkshire and also outperforms the national average by 5 points. It performs consistently

¹ Figures are not available for West Yorkshire as a whole.

strongly on pay, hours and contractual status. Bradford and Wakefield have the smallest proportions of people in quality jobs in West Yorkshire.

Figure 41: Proportion of residents who are employees working satisfactory hours by sex, 2018



Turning to the components of quality work, across most of the West Yorkshire local authorities close to four in five employees work “satisfactory hours”, meaning they work 48 hours or fewer but do not consider themselves underemployed. Men are consistently less likely than women to be working satisfactory hours, due to longer hours of paid work, reflecting shift patterns. It should be noted that women shoulder the responsibility of “unpaid work”, however, undertaking an estimated average of 10 hours more unpaid work than men (26 hours compared with 16 hours)¹. The larger degree of unpaid work and desire for more flexible hours mean female employees are less likely to be in paid employment working above the 48-hour threshold, which is the principal cause of employees working unsatisfactory hours.

Almost all employees (ranging from 97% in Bradford to 99% in Calderdale, Kirklees and Leeds) have a “desired contract”. This means they either have a permanent contract or non-permanent contract for a reason other than “could not find a permanent job”.

Using two-thirds of the UK median hourly pay as a measure for low pay, more than nine out of 10 employees in each of the West Yorkshire local authorities were not in low pay.

About the data

This section is based on an analysis of job quality conducted by ONS using the Annual Population Survey². This analysis looks at employee jobs on a resident basis that provide:

¹ Office for National Statistics, [Women shoulder the responsibility of 'unpaid work' \(2016\)](#)

² Office for National Statistics, [Job quality indicators in the UK – hours, pay and contracts: 2018 \(2019\)](#)

- Good hours: employees working 48 or fewer hours a week and not wishing to work more hours in their current role or look for an additional job or a replacement job that offers more hours
- A desired contract type: employees either in a permanent contract or who did not accept a non-permanent contract because they could not find a permanent one
- A position not in low pay: employees who are earning above two-thirds of the hourly median pay at UK level.

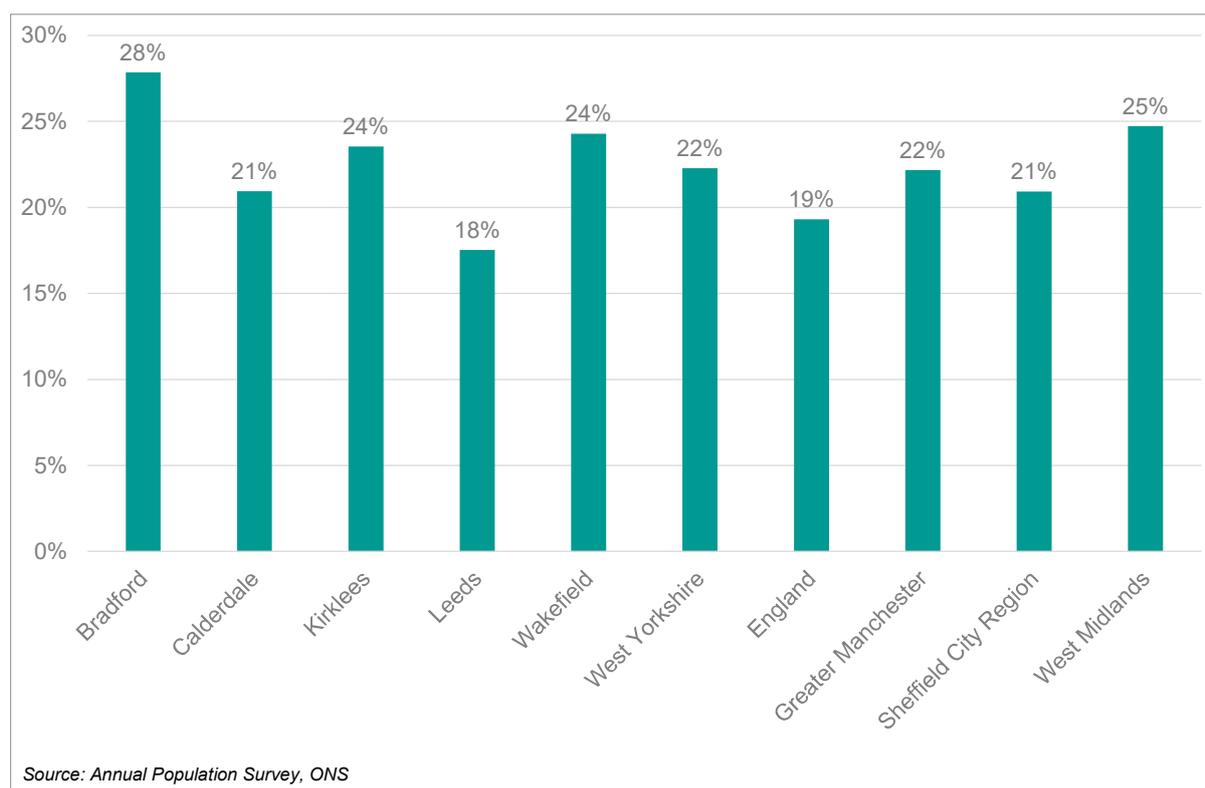
3.2.7 People with no / low qualifications (qualified below level 2)

More than one-in-five (22%) of people in West Yorkshire have no qualifications or are qualified to a low level. This limits their career prospects as well as their potential contribution to the economy. There has been progress against this measure in recent years but although the gap with the national average has fallen, a performance deficit remains.

A lack of skills and qualifications is a major barrier to getting a job and progressing within employment. Attainment at level 2 is often regarded as the threshold for basic employability. And a lack of basic qualifications can be a barrier to meeting the entry requirements for an apprenticeship, a technical course or for many jobs. This is illustrated by the fact that the employment rate for people with no formal qualifications in West Yorkshire, at 44%, is barely half that of people qualified at level 4 and above, at 85%.

Twenty-two per cent of the working age population of West Yorkshire has no or low qualifications. In absolute terms, this equates to 109,000 people with no formal qualifications and 214,000 people whose highest qualification is below level 2.

Figure 42: Proportion of working age population with no qualifications / qualified below Level 2, Jan – Dec 2020



The proportion of people with no / low qualifications rises to more than a quarter (28%) of the population of Bradford and 24% of the population of Wakefield. The equivalent proportion nationally is only 19%. Both Sheffield City Region and Greater Manchester have similar proportions of people with no / low qualifications to West Yorkshire, although West Midlands CA's is higher at 25%.

There was a significant improvement in performance in 2020, however, with the proportion falling sharply by four points from 26% to 22%, closing the gap with the national average (see Figure 24 on page 67).

Although West Yorkshire's continuing deficit against this measure is partly due to the qualification profile of adults already in the labour force, data relating to the qualifications of young people at age 19 suggests that new entrants also contribute to the poor performance. Young people in West Yorkshire are less likely to have achieved a level 2 qualification by the age of 19 than their national counterparts. The proportion is 78%, 5 points lower than the England average. Two districts (Calderdale and Kirklees) match the national average but in Bradford only 73% achieve level 2 by the age of 19, 10 points behind the national average, whilst Leeds is 6 points behind, on 76%.

About the data

Level 2 qualifications are equivalent to GCSEs at grades 9, 8, 7, 6, 5, 4 or grades A*, A, B, C.¹ The qualifications held by individuals are measured using the Annual Population Survey, a continuous household survey covering the UK designed to provide information on socio-economic variables at local levels.

¹ See *What Qualifications Levels Mean* for a full breakdown [What qualification levels mean: England, Wales and Northern Ireland - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/444444/What_qualification_levels_mean_England_Wales_and_Northern_Ireland.pdf)

3.2.8 Apprenticeships

Take-up of apprenticeships in West Yorkshire is strong in relative terms but there has been a negative effect on starts from COVID-19 and the apprenticeship reforms. Apprenticeships need to be made more inclusive.

Apprenticeships are crucial to inclusive growth because they can serve as a ladder for social mobility. They can support employability and enable individuals to gain skills in a non-academic context. They can also upskill and reskill workers, giving a second chance to those already in employment. People from less privileged backgrounds who complete an apprenticeship get a bigger boost in their earnings than other learners. This is particularly true at intermediate level – the first step on the apprenticeship journey¹.

Apprenticeships are also important to boosting productivity, by enabling employers to grow their own skills to meet business priorities and to put innovative ideas into practice.

For an area like West Yorkshire where manufacturing forms a key part of the local economy, apprenticeships are especially important, since they offer an established route into this sector.

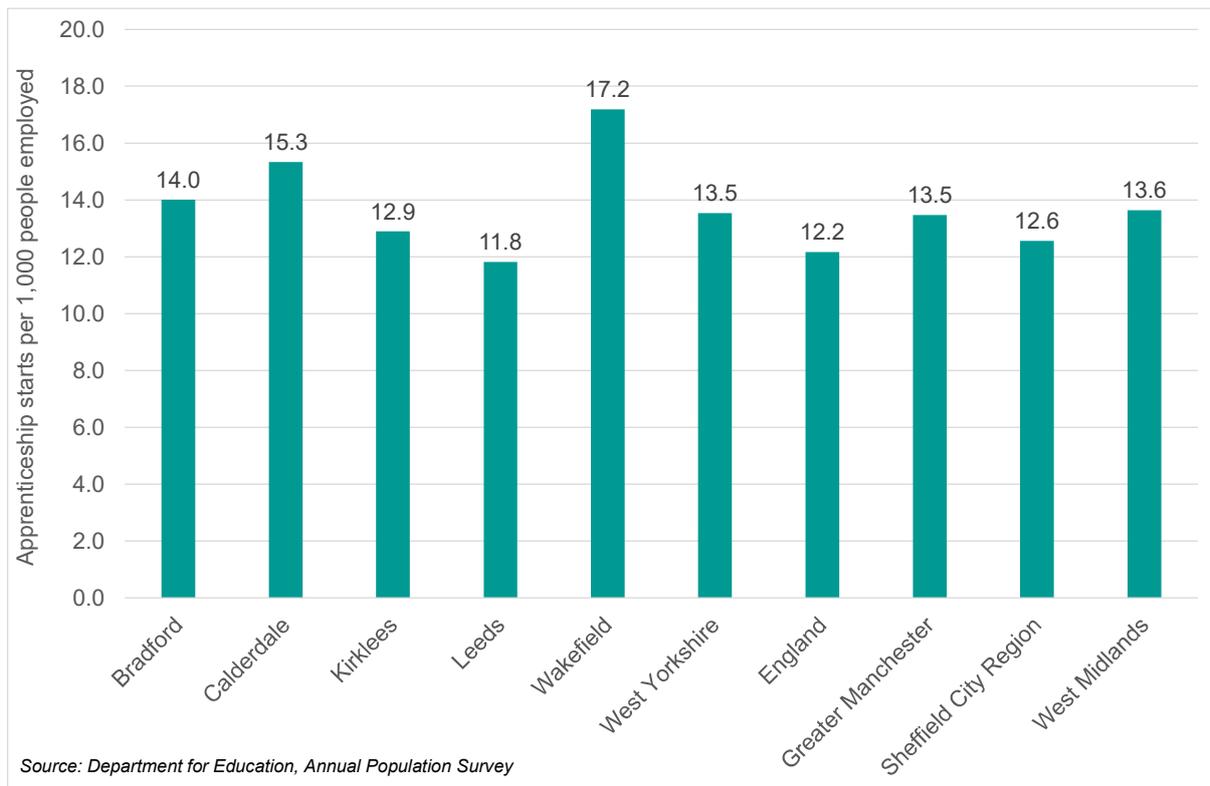
The take-up of apprenticeships in West Yorkshire is relatively strong. With 14,620 apprenticeship starts during the 2019/20 academic year, there were around 14 apprenticeship starts per 1,000 people in employment, somewhat above the national average of around 12. In some local authority areas, including Calderdale and Wakefield, the figure is higher; but it is lower in Leeds, reflecting its local industry structure. West Yorkshire's ratio of apprentices to employment is broadly in line with the comparator MCAs.

About the data

Apprenticeship start figures reflect the number of apprenticeships that began during a given time period, in this case academic year. In a small number of cases individuals may start more than one apprenticeship during an academic year. The apprenticeship data in this analysis is based on data return from apprenticeship training, collected via the Individualised Learner Record (ILR). The ILR is an administrative data collection system designed primarily for operational use in order to fund training providers for learners in FE and on apprenticeship programmes.

¹ Social Mobility Commission [Apprenticeships and social mobility: Fulfilling potential](#) (2020)

Figure 43: Ratio of apprenticeship starts (2019/20) to 1,000 people in employment

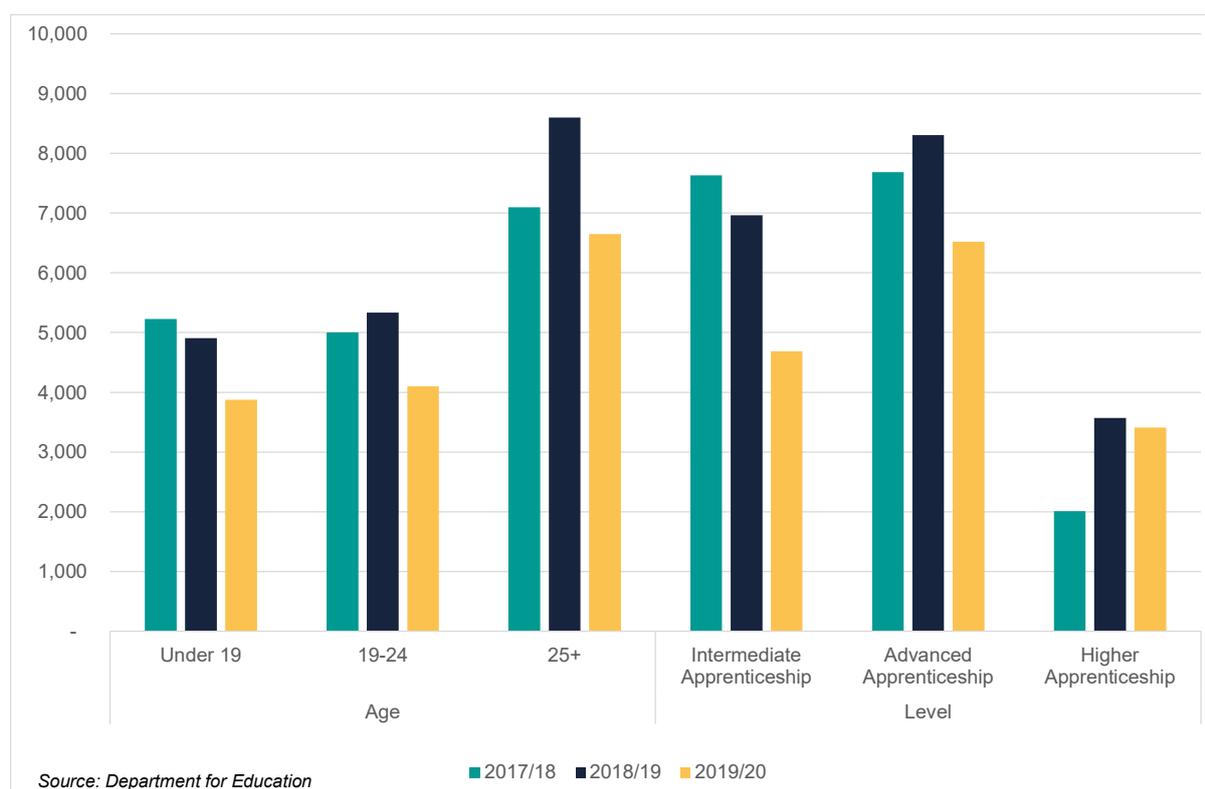


The entry rate into apprenticeships for young people is higher in West Yorkshire than nationally after both Key Stage 4 and Key Stage 5¹.

However, the number of apprenticeship starts in West Yorkshire has fallen significantly as a result of COVID-19 and this follows previous reductions linked to the recent apprenticeship policy reforms. Compared with the previous year, total starts fell by 22% in 2019/20 in the region and by 18% nationally. There was a particularly sharp fall in intermediate apprenticeships, which declined by a third.

¹ West Yorkshire Combined Authority, [Labour Market Report](#) (2021)

Figure 44: Trend in apprenticeship starts by age and level, West Yorkshire



Higher apprenticeships have grown rapidly in West Yorkshire and across the country and form an increasingly important route into higher skilled employment in occupations like accountancy and nursing. Just under a quarter (23%) of apprenticeship starts in West Yorkshire are for higher apprentices, slightly below the national average of 26% and similar to the comparator MCAs. However, West Yorkshire is well below West of England (29%), Cambridgeshire and Peterborough (31%) and London (34%).

The overall apprenticeship achievement rate for West Yorkshire, at 63%, is slightly below the national average of 65%, ranging from 59% in Bradford to 67% in Calderdale¹.

In view of its importance as a mechanism for social mobility and inclusion, it is crucial that apprenticeships are as diverse as possible. However, there are a number of key issues to consider in this regard²:

- Female participation in apprenticeships is strongly concentrated in certain subjects such as health and care and is under-represented in some areas that offer strong pay and career prospects, like engineering, construction and digital.
- Take-up of apprenticeships among people from ethnic minority backgrounds is relatively low.
- Take-up of apprenticeships by young people has fallen sharply in recent years. Coupled with this, opportunities at intermediate level have also seen a significant reduction.
- Disadvantaged pupils eligible for free school meals are less likely to take up an apprenticeship than other pupils.

¹ West Yorkshire Combined Authority, [Labour Market Analysis](#) (2021)

² *ibid*

3.2.9 People without basic digital skills

Although most people have essential digital skills for life, a significant proportion do not. More than half of people lack the full range of essential digital skills for work.

Along with access to digital infrastructure, inspiring people about the benefits of the internet and ensuring organisations are creating accessible services, digital skills are vital to tech adoption.

Digital technologies provide an important lifeline and have become particularly important during the pandemic. They enable people to connect with family and friends and to organise their life better. People who are engaged digitally tend to feel more part of the community and are better able to manage their physical and mental well-being¹.

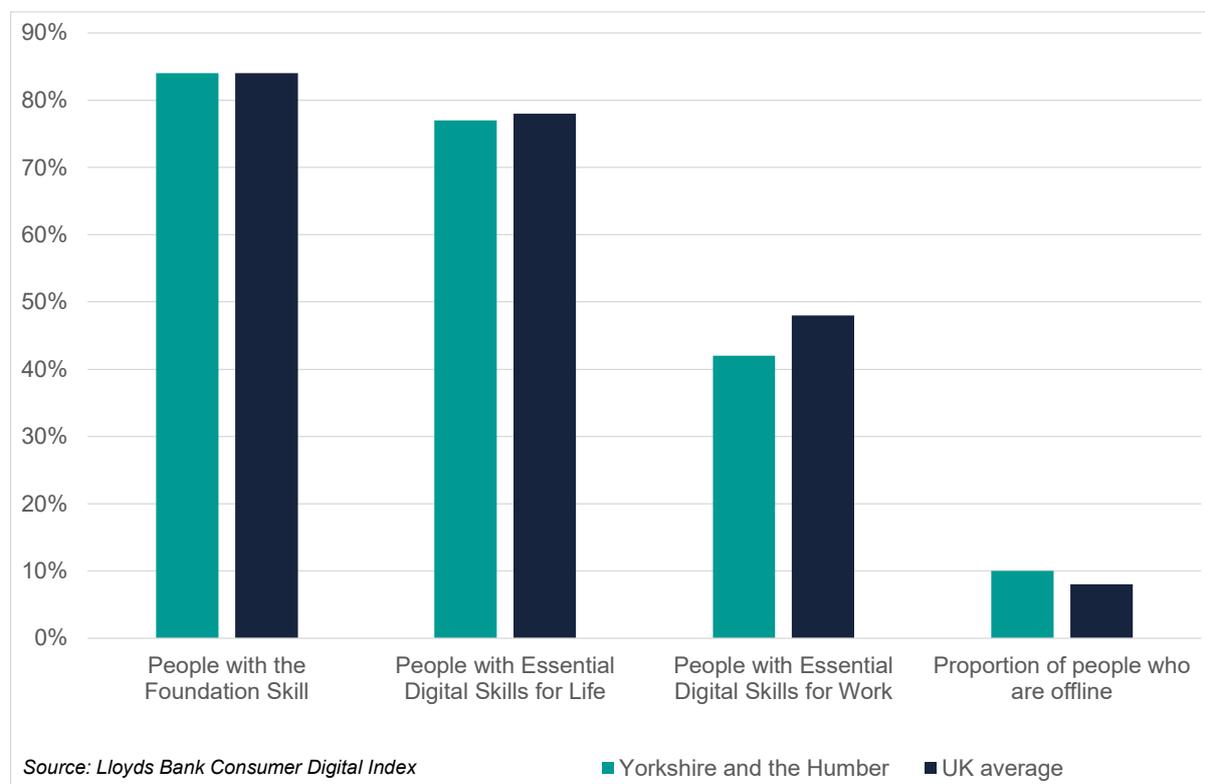
With people staying at home during the health crisis, technology has become a necessity for keeping connected, working remotely and supporting home schooling.

People who are not digitally engaged face genuine disadvantages. For example, they are more likely to be paying higher households bills, for essentials such as utilities.

Digital exclusion is most widespread among older people, who are also susceptible to isolation within the community. It also disproportionately affects people with an impairment, people on low incomes and benefit claimants.

In a professional context, digital skills are increasingly necessary in applying for a job and with the majority of jobs now requiring digital skills are vital to people's wider job prospects.

Figure 45: Digital skills – proportion of people aged 15+ who have each skill level



¹ Lloyds Bank, [UK Consumer Digital Index – Key Findings](#) (2020)

Foundation skills relate to the ability to perform the basic tasks that enable an individual to get online by themselves. This includes tasks like connecting a device to a Wi-Fi network, finding and opening applications on a device and opening an Internet browser to find and use websites. Although 84% of adults can perform these tasks (a one-point improvement on the previous year) this still leaves 16% who are unable to do so.

People who have the Foundation skill are counted as having essential digital skills for life if they can do at least one digital task in each of five skills categories, including communicating (e.g. set up an email account), transacting (e.g. make online payments), problem solving (e.g. use internet to find information to solve problems), handling information and content (e.g. manage content using files and folders) and being safe and legal online (e.g. avoid suspicious links in emails etc). More than three quarters of adults (77%) have essential digital skills for life, although again this leaves almost a quarter of people who lack this level of capability. Although the proportion is unchanged on the previous year, 54% of people in Yorkshire and The Humber believe their digital skills have improved in the last year.

Members of the workforce are required to have both the foundation and life skills before qualifying for the essential digital skills for work. Then they must be able to do at least one task in each of the five skills by themselves in a work environment. Again, the skill areas relate to communicating, transacting, problem solving, handling information and content and being safe and legal online. Well over half (58%) of the workforce lack essential digital skills for work in Yorkshire and the Humber, somewhat below the UK average and with no change compared with the previous year. This means that nearly a third of the workforce have foundation and life skills but not work skills.

There is evidence to show that employees' lack of digital skills impacts on business performance. West Yorkshire employers flag basic digital skills as one of the key areas in which their staff lack the proficiency that is needed to meet business objectives¹.

About the data

The Lloyds Bank UK Consumer Digital Index uses the behavioural data of 1 million people and interviews with almost 7,000 consumers, to create the UK's largest measure of digital capability. A standalone survey, of over 4,000 people, nationally representative of 15+ in the UK is used to measure the UK's level of essential digital skills and track its progress.

¹ West Yorkshire Combined Authority, [Labour Market Report 2021](#), p133

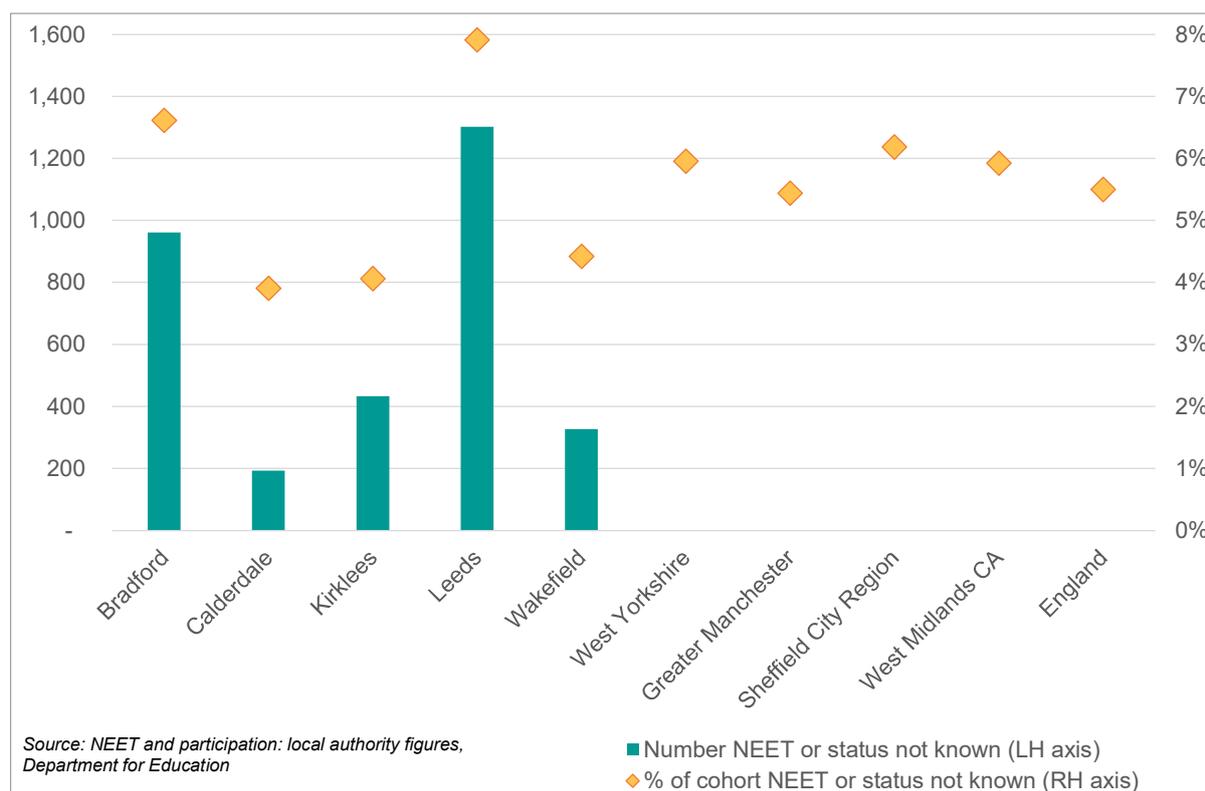
3.2.10 NEETs

The proportion of young people who are NEET in West Yorkshire is slightly above the national average.

Young people who become NEET (not in education, employment or training) face an increased likelihood of unemployment, low wages, or low-quality work later on in life. Being NEET can also have an impact on involvement in crime, as well as a detrimental effect on physical and mental health, particularly when time spent NEET is at a younger age or lasts for longer¹. Local authorities have a duty to track young people’s activity to identify those not participating and support them to do so.

Based on the latest published figures, there was an average of 3,220 young people aged 16 and 17 who were NEET or whose status was not known in West Yorkshire during the months of December 2020 to February 2021. This equates to around 6.0% of all 16- and 17-year-olds known to their respective local authorities, which is slightly above the England average of 5.5%. The proportion of NEETs / not knowns was between 5% and 6% across the three comparator combined authorities, ranging from 5.2% in Greater Manchester to 5.7% in the West Midlands.

Figure 46: Number and proportion of 16- and 17-year-olds not in education, employment or training (NEET) or whose activity is not known (average of December 2020, January 2021 and February 2021)



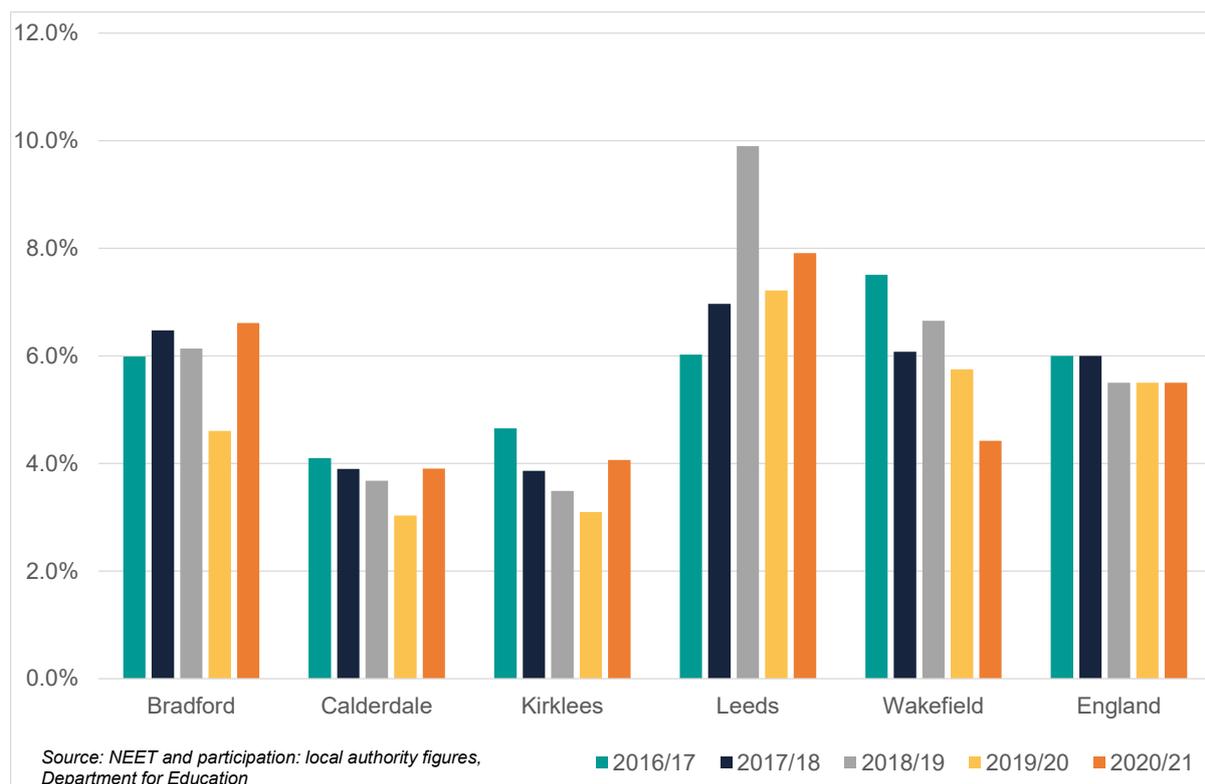
The prevalence of NEETs varies across West Yorkshire local authorities, with some below the national average and some well above. Around 4% of 16- and 17-year-olds in each of

¹ Public Health England, [Local action on health inequalities: Reducing the number of young people not in employment, education or training \(NEET\)](#) (2014)

Calderdale, Kirklees and Wakefield are NEET or not known, with the proportion increasing to 7% in Bradford. The proportion is highest in Leeds at 8%.

The number and proportion of young people NEET and not known in West Yorkshire increased in 2020/21 compared with the same period of the previous year. The number grew by 540 or 20%, whilst the proportion of the cohort increased by 0.8 percentage points, from 5.1% to 6.0%. All local authorities saw an increase, except for Wakefield, where the number fell by around a fifth.

Figure 47: Trend in proportion of 16- and 17-year-olds not in education, employment or training (NEET) or whose activity is not known



Young people from an ethnic minority group are, in general, less likely to become NEET in West Yorkshire. Around 5% of young people from an ethnic minority were NEET or not known as of December 2020, compared with 6% of white young people. Asian / Asian British and Black / Black British groups both had rates below the overall average, although the proportion of mixed-race young people who were NEET or not known was above average at 8%.

9% of young people with special educational needs and disability (SEND)¹ and 9% of young people in receipt of SEN support² were NEET or not known as of December 2020 compared with 6% of the overall cohort.

About the data

Local authorities have a duty to track young people’s activity to identify those not participating and support them to do so. Statutory guidance that underpins this duty directs local authorities to collect information to identify young people who are not

¹ A child or young person has special educational needs and disabilities if they have a learning difficulty and/or a disability that means they need special health and education support.
² Support given in school or college, such as speech therapy.

participating, or who are at risk of not doing so, and to target their resources on those who need them most. Information about a young person's activity is recorded on each authority's client database with data collated centrally by the Department for Education.

3.2.11 Net additional dwellings

A substantial number of net additional dwellings are being delivered each year in West Yorkshire, adding to the region’s housing stock. In 2019/20 there was net growth of 7,575, somewhat below the increase seen in the previous year.

The SEF sets out a [commitment](#) to support the development of well-connected neighbourhoods with good quality homes, in places where people want to live. A key challenge that needs to be addressed is that building rates in the region are below what is needed to meet demand.

In 2019/20, a total of 7,575 net additional dwellings were delivered across West Yorkshire. This represents a decrease over previous years. Overall, the cumulative losses to housing stock across the region stood at 837.

About the data

Net additional dwelling statistics track changes in the size of the dwelling stock due to new builds, flat conversion, change of use and demolition. Normally data is submitted by local authorities to central government, but the data used here are provided directly by the local authorities themselves. The data below shows the gross losses as well net total added. The comparator figures for England and other combined authority areas are taken from the [Live Tables on Housing Supply](#), produced by the Ministry for Housing, Communities and Local Government. The population estimates are taken from the Office for National Statistics annual population estimates.

Table 3: Net housing additions and gross losses 2019/20

Local Authority	Gross Losses	Net Total Increase
Bradford	611	1,010
Calderdale	70	348
Kirklees	103	1,131
Leeds	5	3,328
Wakefield	48	1,758
Total	837	7,575

Source: West Yorkshire local authorities

Over the previous 10 years net housing completions reached a low of 4,148 in 2012/13 following the crash of 2008. Subsequently, net housing completions increased year on year, up to 9,262 in 2018/19.

All local authorities in West Yorkshire have registered a broad upward trend in their annual figures for net additional dwellings over this period, with the exception of Calderdale.

In the last year, however, all local authorities in West Yorkshire saw completions fall; Bradford and Kirklees in particular saw marked reductions, whereas the decline in Leeds was relatively small, with just 100 fewer completions than in 2018/19.

Table 4: Net additional dwellings (2010/11 – 2019/20)

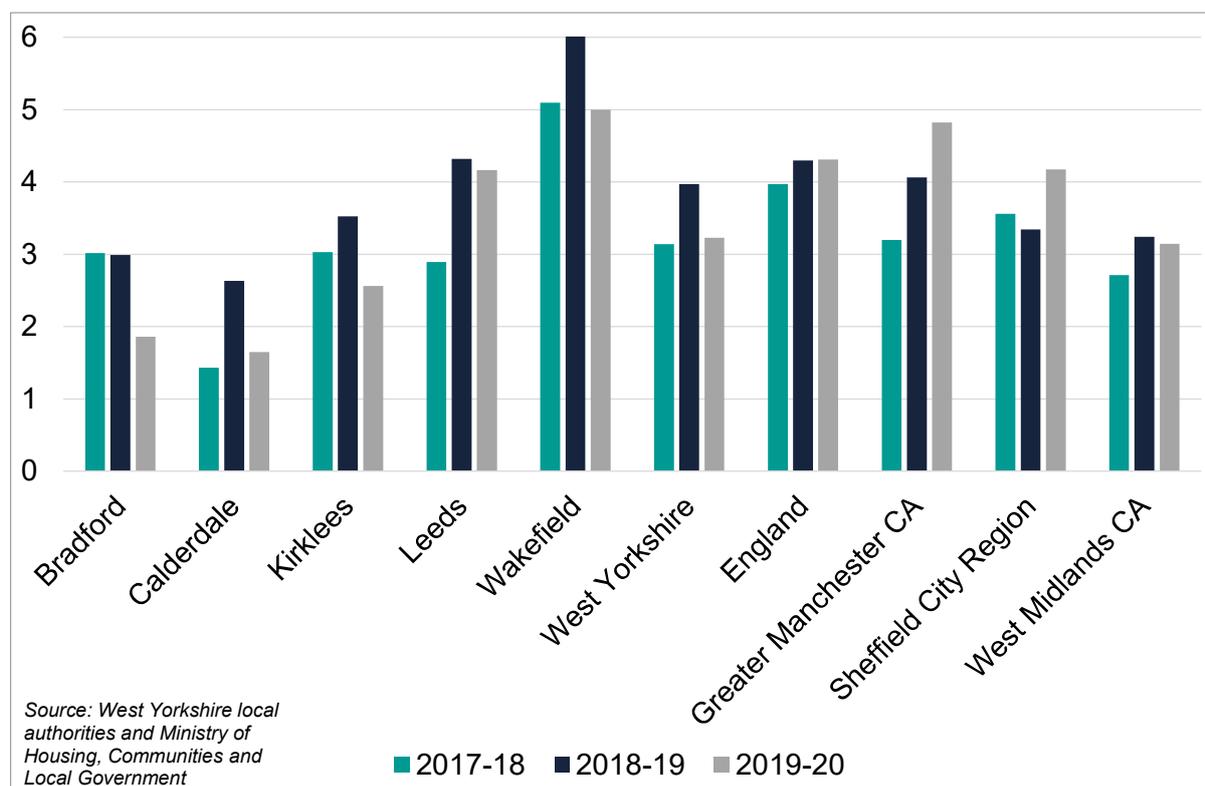
Local Authority	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20
Bradford	696	733	721	874	1,134	1,338	1,489	1,621	1,614	1,010
Calderdale	486	494	517	357	319	340	301	301	557	348
Kirklees	974	873	753	1,036	666	1,142	983	1,330	1,550	1,131
Leeds	1,686	1,931	1,623	2,229	1,979	2,474	2,824	2,283	3,427	3,328
Wakefield	1,061	852	534	806	1,132	1,921	1,816	1,759	2,114	1,758
Total	4,903	4,883	4,148	5,302	5,230	7,215	7,413	7,294	9,262	7,575

Source: West Yorkshire local authorities

The ratio of net additional dwellings per 1,000 population provides an insight into the relative performance of areas in terms of housing supply.

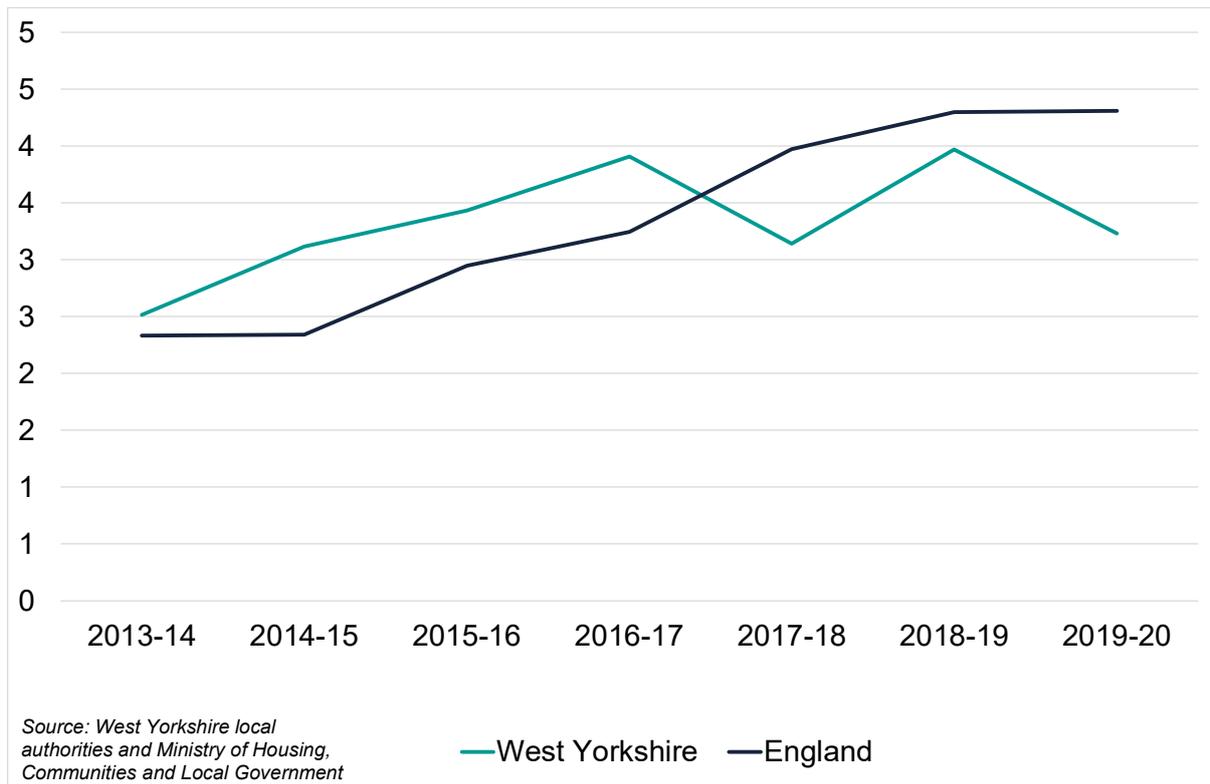
Within West Yorkshire, Leeds and Wakefield have recorded the highest level of net additional dwellings per 1,000 residents in the latest two years for which data are available.

Figure 48: Net additional dwellings per 1,000 population



Looking at a longer time series, West Yorkshire as a whole has fallen below the national average on this measure in recent years.

Figure 49: Trend in net additional dwellings per 1,000 population



3.2.12 Housing affordability

The median house price in West Yorkshire is £164,950 which is lower than the England median house price of £249,000. Aside from Leeds, all districts in the region have a median house price below £190,000. Lower house prices mean that housing is more affordable within West Yorkshire, with a median house price to earnings ratio well below the England average. However, this ratio takes no account of the quality and condition of local housing stock and disguises issues of affordability faced by particular groups, such as households in poverty.

Housing is an important contributor to both economic activity and quality of life. For the former, a sufficient supply of appropriate, affordable housing is essential for enabling people to access employment opportunities and other services they require. The cost and quality of housing can also directly affect quality of life –for most people it is the single biggest expense, particularly for those on lower incomes. Poor quality housing can also affect health and wellbeing. It should be noted that some of the most affordable housing can also be of the poorest quality, such as pre-1919 terraces in some urban areas. However, the necessary data are not available to allow us to produce quality-adjusted analysis of the affordability of local housing.

About the data

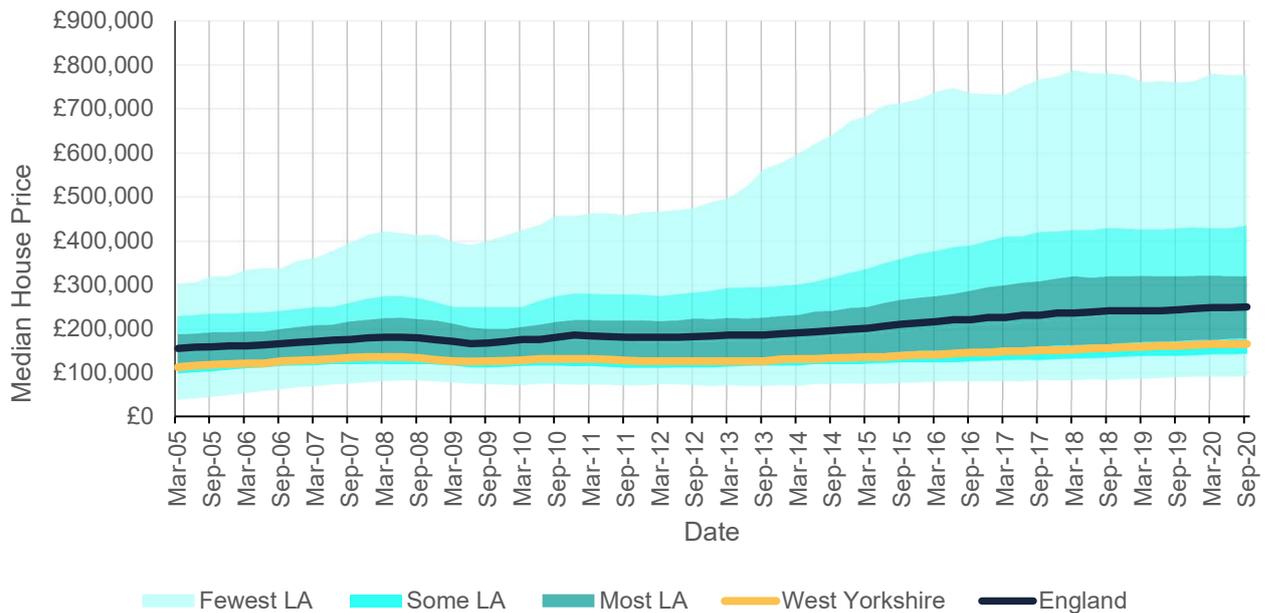
House price data in the UK is robust with the ONS collating and presenting data on sales, volumes and prices broken down to LSOA level. Because of this we can give a detailed picture of the real estate market in the local area.

Housing affordability is taken as a ratio between median house price and the median annual wage of the same area. This measure does not provide a complete picture on how accessible the housing market is to individuals, and the Combined Authority has undertaken more detailed analysis to explore these issues¹. But the measure used here does give an indication of how easily people in the local area could afford to buy there. Data for housing affordability is broken down to local authority level while house price data is broken down to LSOA level.

The latest data shows that the median house price in West Yorkshire was £164,950 in the year ending September 2020, well below the England median house price of £249,000. Most local authorities nationally have higher median house prices than West Yorkshire. Local areas have followed a largely similar pattern to the national and regional trends in terms of price growth, which has been relatively slow in the past year.

¹ Sheffield Hallam University Centre for Regional Economic & Social Research, Leeds City Region Housing Affordability and Need Study, 2020

Figure 50: Median House Prices – West Yorkshire compared to local authorities nationally, March 2005- September 2020.



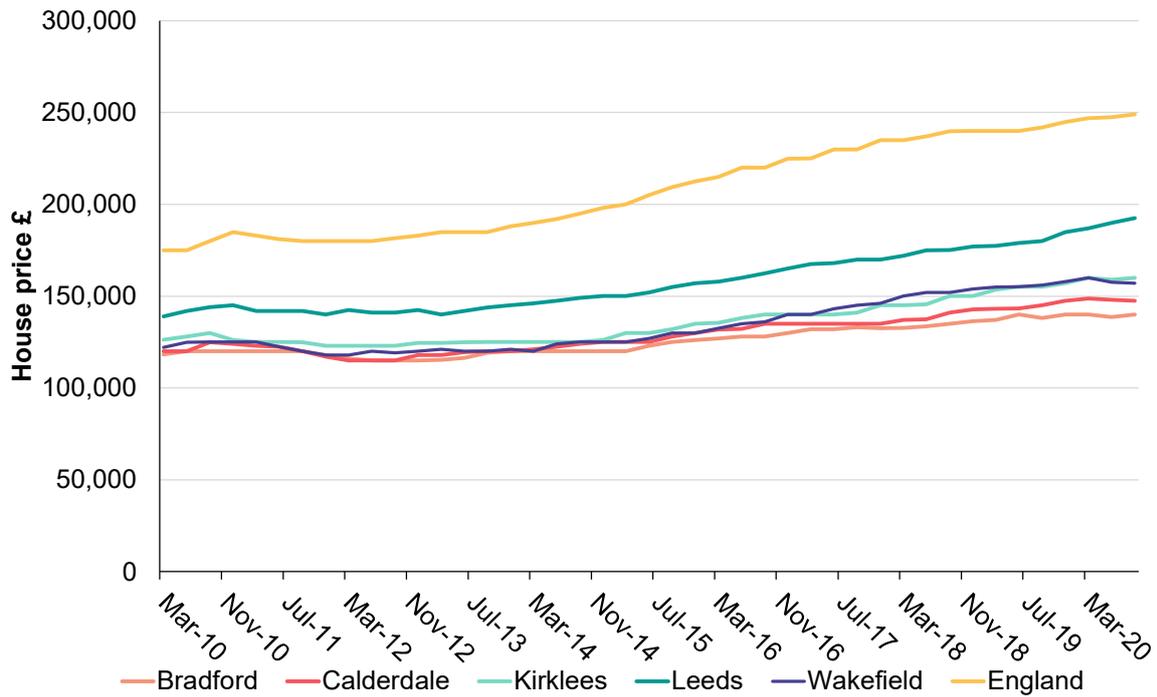
Source: ONS

The areas shaded in blue represent the percentile ranges of median house prices across all local authorities in England, from the lowest median house price to the 99th percentile. The highest house prices are not shown as this can distort the distribution. Most local authorities belong to the darkest blue segments and the least amount in the lightest.

With the exception of Leeds, the local authorities in West Yorkshire all have a median house price around or below £190,000. Leeds has continued to see strong growth over the last few years, however the rest of the districts in West Yorkshire have seen slower growth in house prices over the last three years.

Over the last five years West Yorkshire’s median house price grew by 20% which is higher than the 19% at national level. Looking at the past three years, both Leeds and Kirklees (13.5%) have seen faster growth than England as a whole (8.5%), with Calderdale and Wakefield broadly in line with national growth. Prices increased slightly more slowly in Bradford (5%)

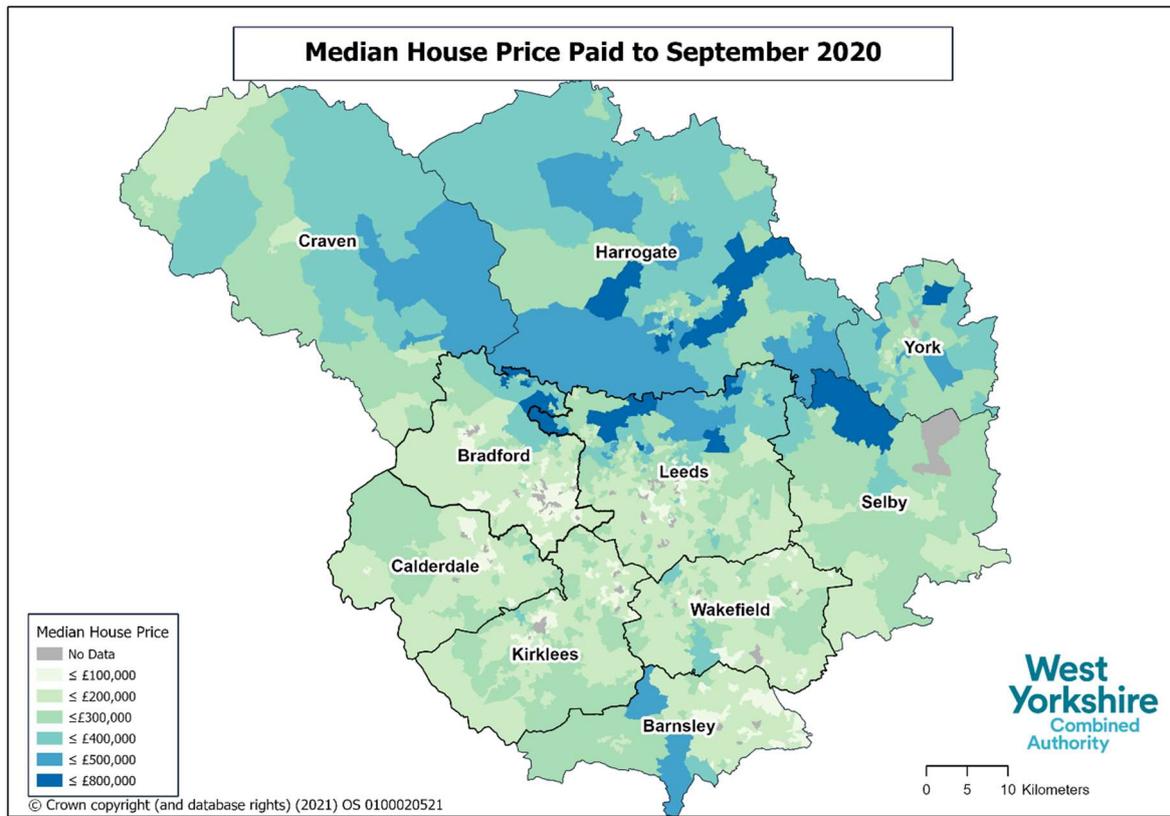
Figure 51: Median House Price of Local Authorities in West Yorkshire 2005 – 2020



Source: ONS Median price paid for administrative geographies

Figure 52 below shows the median house price at LSOA level for the wider Leeds City Region. The most expensive areas for housing tend to be those in the northern areas of this geography, represented by the blue shading, while the light green regions represent some of the cheapest housing which tend to be in the urban areas.

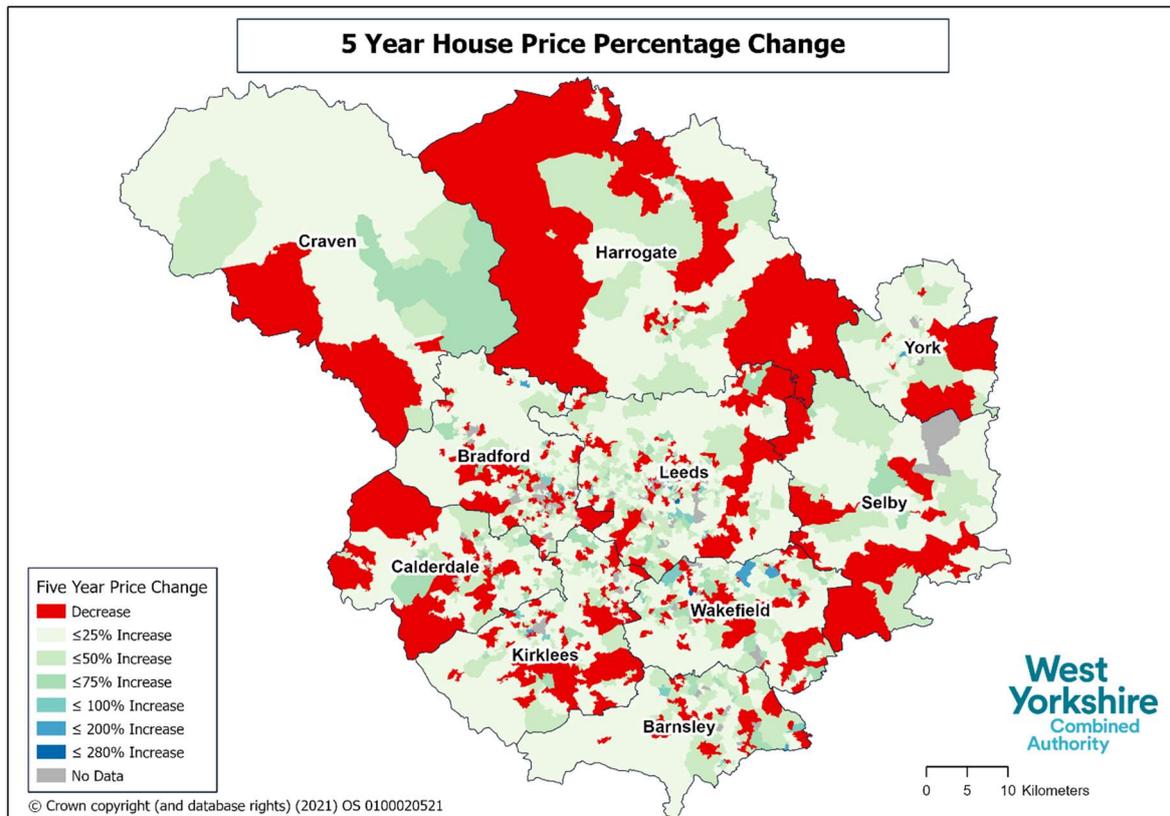
Figure 52: Median House Prices September 2020 at LSOA level for the Leeds City Region.



Source: ONS

Figure 53 below shows the percentage five-year house price change by LSOA for Leeds City Region. Most areas in the region have seen an increase in house prices, with no clear spatial pattern to those areas which have seen a decrease. At such small geographies, average prices can be distorted by the type of properties sold in a given period.

Figure 53: Median House Prices percentage growth at LSOA level for the Leeds City Region, 2015 – 2020.



The below graph shows the housing affordability ratio, which is a ratio of median house price to median annual wage (residence-based). The median house price of England is 7.8 times the median wage of England in 2020. This has increased over the last 10 years; it was 6.84 in 2010, meaning houses are now less affordable on average.

In contrast, the districts in West Yorkshire are considerably more affordable with Leeds having a median house price affordability ratio of 6.36 in 2020. While most local authority areas have seen a slight increase in the affordability ratio over the last 10 years, Bradford has seen an improvement in affordability over that period, driven by strong annual wage growth. Bradford as such remains the most affordable local authority area in West Yorkshire, with house prices five times average earnings.

The ratio between lower quartile house price and lower quartile annual wage follows largely the same pattern as that of the median ratio. However, the key difference is nationally the house price ratio is slightly lower at the 25th percentile at 7.15 than it is at the median (7.8), meaning properties at this level are slightly more affordable. The 25th percentile affordability ratio has only seen a slight increase from 2010 of 6.86. Locally, both Bradford and Calderdale have become slightly more affordable over the last 10 years.

Figure 54: Affordability of House Prices 2010 and 2020 – ratio of median house price to median annual wage (residence-based) at local authority level

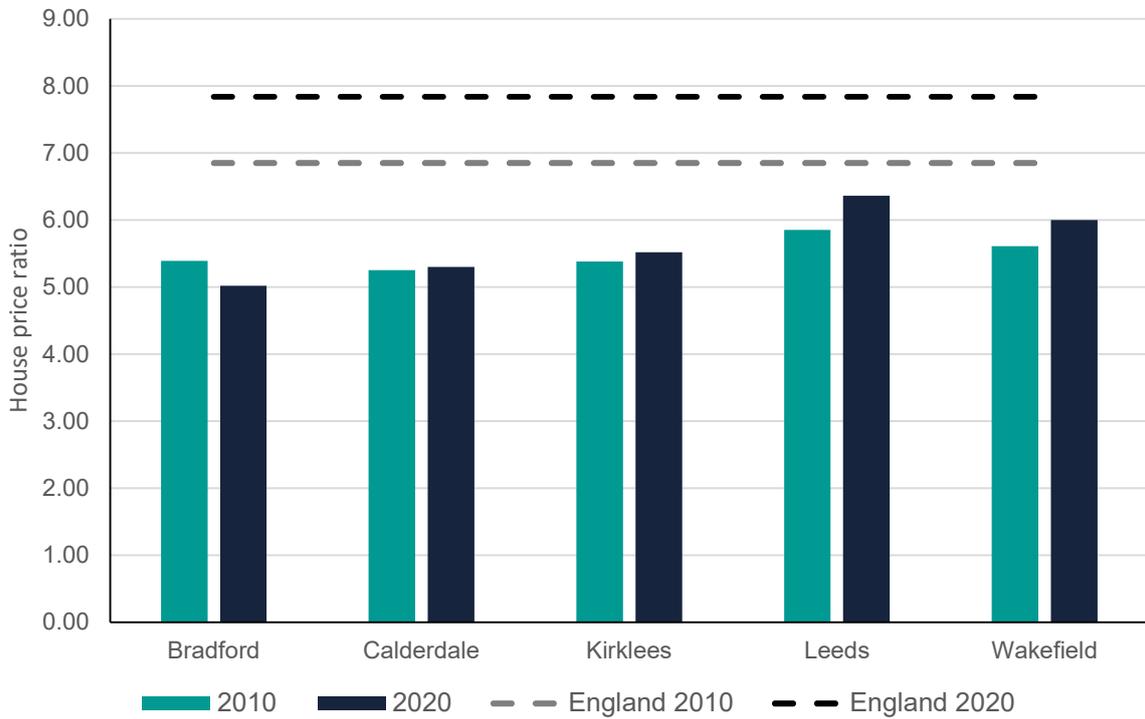
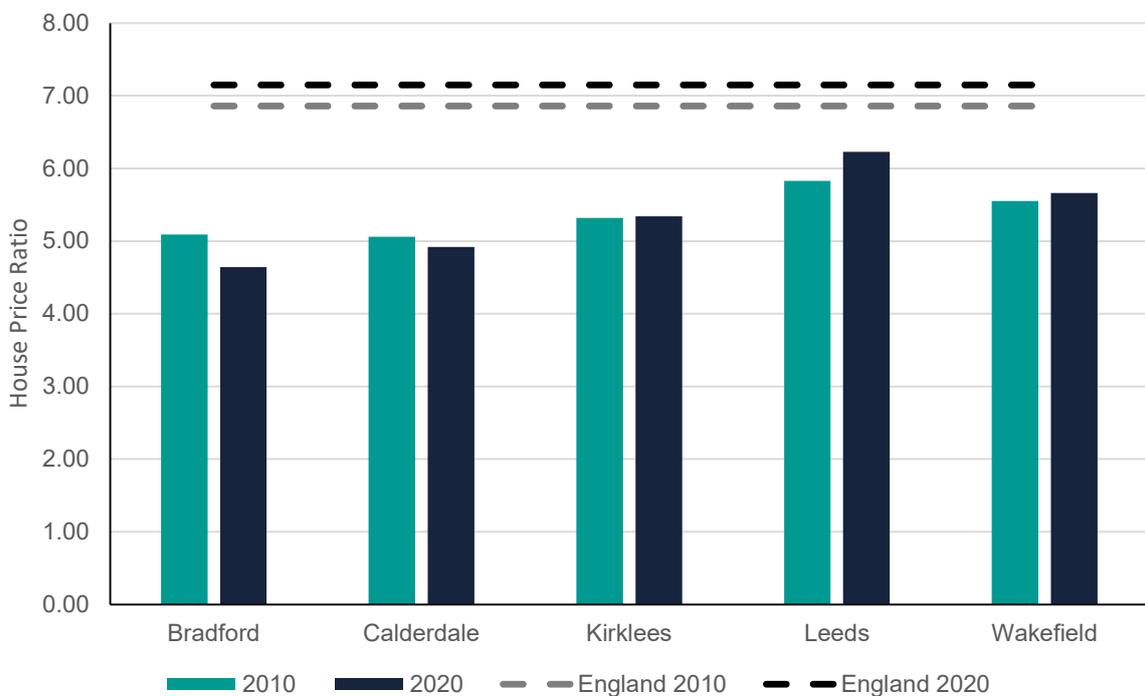


Figure 55: Lower quartile house price ratio to lower quartile annual wage ratio for West Yorkshire



It should be noted that the issue of housing affordability is more complex than that demonstrated by a simple house price to income / earnings ratio and that there are

significant problems of affordability in West Yorkshire, particularly for households in poverty and newly-forming households¹.

In addition, the affordability ratio used here does not factor in housing quality and condition. Lower house prices may simply reflect lower quality of housing stock. Housing quality is a key evidence gap that the Combined Authority will seek to address in the near future.

¹ Sheffield Hallam University, Centre for Regional Economic and Social Research, [Leeds City Region Housing Affordability and Need Study](#) (2020).

3.2.13 Rented housing costs

Median private monthly rent for two-bedroom properties in West Yorkshire is 80% of the national figure. It is higher in the Leeds district than any other in West Yorkshire.

The median private monthly rental value for two-bedroom properties in West Yorkshire is £560, approximately 80% of the national figure of £700.

Leeds has the highest two-bedroom median monthly rent in West Yorkshire at £725, which is slightly above the England wide figure of £700. The rest of West Yorkshire has considerably lower rents, with Wakefield having the second highest at £535. Outside of Leeds, lower quartile rents are around £475, with upper quartile rents at £600 in Bradford and Wakefield and around £550 in Calderdale and Kirklees.

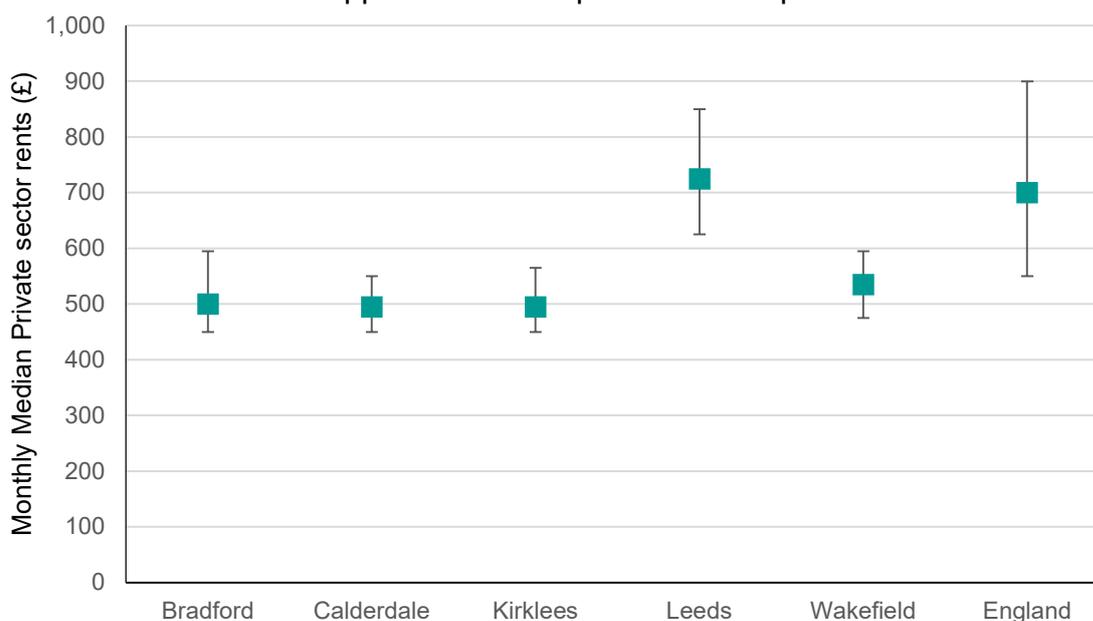
Figure 56: Private two-bedroom median monthly rent for West Yorkshire, 2015 – 2020.

	2015	2016	2017	2018	2019	2020
Bradford	475	465	495	495	500	500
Calderdale	450	458	475	475	480	495
Kirklees	450	450	475	475	495	495
Leeds	600	607	650	650	675	725
Wakefield	490	495	495	498	500	535
West Yorkshire	475	495	495	510	530	560
England	595	625	650	650	675	700

Source: Private rental market summary statistics in England, ONS

Figure 57: Median private sector two-bedroom monthly rents in 2020 for West Yorkshire districts.

The error bars show the upper and lower quartile of rent prices.



Source: Private rental market summary statistics in England, ONS

Median rents in West Yorkshire grew by 18% between 2015 and 2020, the same rate of increase as nationally. The value for West Yorkshire has remained at around 80% of the national figure throughout this period.

About the data

The data presented is the median monthly rent for two-bedroom properties between October 2019 and September 2020. It is published by the Office for National Statistics and is calculated using data from the Valuation Office Agency and Office for National Statistics. The data also comes with the lower and upper quartile of rents which can give good insight into the range of different rents available in a local authority. This data looks at properties rated from private landlords, as opposed to local authority and housing association rents.

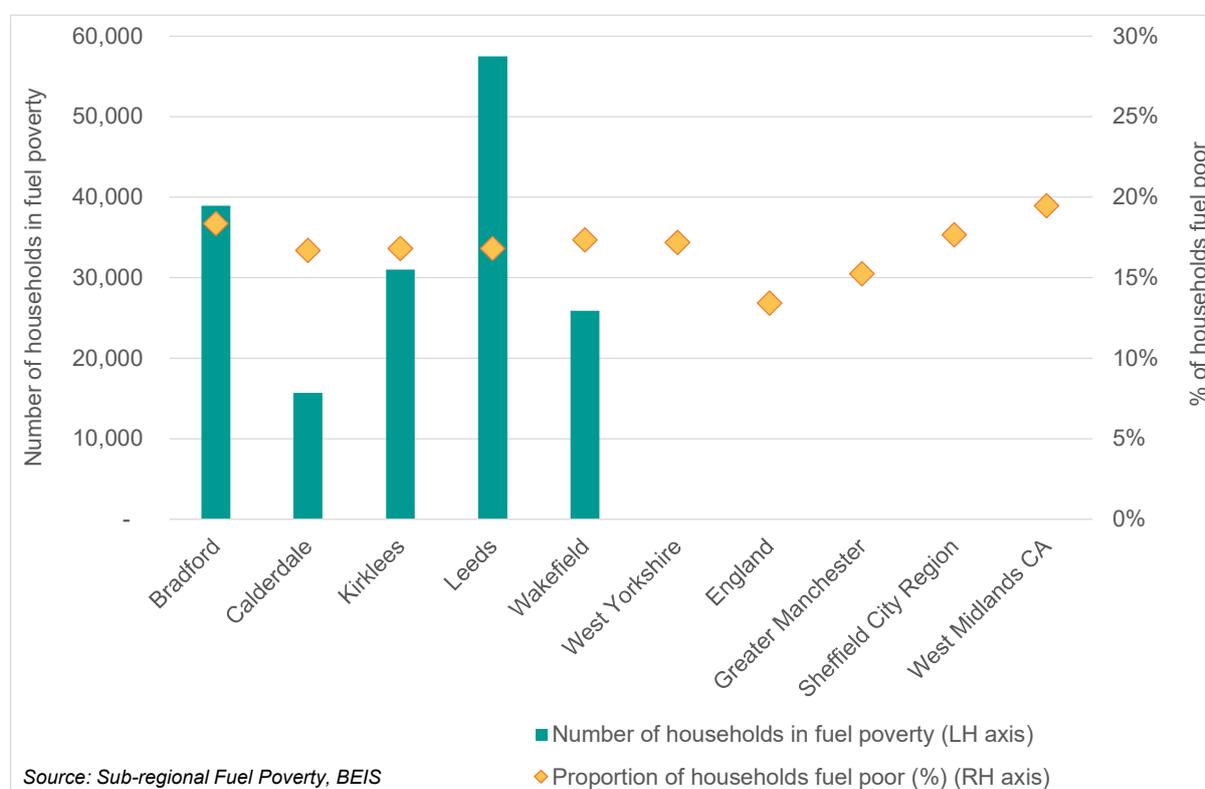
3.2.14 Fuel poverty

Around 169,000 households in West Yorkshire (17% of all households) are in fuel poverty, a prevalence that is above the national average.

Fuel poverty is the problem faced by households living on a low income in a home which cannot be kept warm at reasonable cost. As well as providing a measure of deprivation, in terms of low incomes relative to an essential element of living costs, the prevalence of fuel poverty points to an issue that can be alleviated through investment in energy efficiency measures. These measures are an important contributor to reducing emissions and tackling the climate emergency.

Around 169,000 households in West Yorkshire are in fuel poverty, equivalent to 17% of total households in the region. The prevalence of fuel poverty in West Yorkshire is higher than the national average of 13% and also higher than in Greater Manchester (15%) but slightly lower than in Sheffield City Region (18%) and West Midlands CA (19%).

Figure 58: Number and proportion of households in fuel poverty, 2019



Bradford has the highest prevalence of fuel poverty in West Yorkshire, with 18% of its households classed as fuel poor. The presence of fuel poverty is very similar across the remaining local authorities in the region, affecting approximately 17% of households in each case.

The government's switch to a new fuel poverty metric in 2021 (see "About the data", below) means that consistent time series data are no longer available at local level. National data

show a steady decrease over time in the proportion of fuel poor households, from more than 20% in 2010 to the current level of 13%¹.

Based on the Low Income High Cost metric used previously, the number and proportion of households in fuel poverty in West Yorkshire fell in the three consecutive years leading up to 2018. The proportion of households affected fell from 13.5% in 2015 to 10.6% in 2018. The number of fuel poor households reduced by almost one fifth (19%) from 127,000 to 102,000.

A household's fuel poverty status depends on the interaction of three key drivers:

- Energy efficiency - as households become more energy efficient, they have lower required energy costs (see section 4.2.5)
- Energy prices
- Incomes.

Dwelling characteristics also influence the likelihood of a household being in fuel poverty. For example, age, size and main fuel type used have an influence. Household characteristics also play a part and, for example, ethnic minority households and households with an unemployed head are more likely to be in fuel poverty.

About the data

As announced in the government's fuel poverty strategy 2021, fuel poverty in England is now measured using the Low Income Low Energy Efficiency (LILEE) indicator.

Under the LILEE indicator, a household is considered to be fuel poor if:

-They are living in a property with a fuel poverty energy efficiency rating of band D or below

-When they spend the required amount to heat their home, they are left with a residual income below the official poverty line.

Fuel poverty is measured based on required energy bills rather than actual spending. This ensures that those households who have low energy bills simply because they actively limit their use of energy at home, for example, by not heating their home, are not overlooked.

¹ Department for Business, Energy and Industrial Strategy, [Annual Fuel Poverty Statistics in England, 2021](#) (2021)

3.3 Implications of COVID-19

As well as curtailing business activity and growth, the COVID-19 crisis has had a significant effect on inclusion within the regional economy and there is likely to be a lasting impact that will need to be addressed through the economic recovery effort.

At the time of writing there is evidence of recovery in employment levels in the region. As of August 2021 the number of payroll employees was 1% above pre-pandemic levels seen in August 2019 and 4% higher than its lowest point during the pandemic in February 2021, as the employee count increased by 35,000 between February and August 2021.

National employment rates fell across all ethnic groups as a result of the pandemic. Although rates show signs of recovery according to the latest data, they remain below levels seen before the health crisis and employment rate gaps for a number of ethnic minority groups persist¹.

Among the most visible results of the COVID-19 restrictions on the economy is the increase in people claiming out of work benefits. Although the August 2021 claimant count was 15% or 16,000 lower than at its peak in March 2021 it was still 66% higher than before the pandemic in February 2020, with around 94,000 claimants in West Yorkshire.

Contrary to forecasts produced earlier in the pandemic, unemployment on the official measure is showing signs of levelling off during the final quarter of 2021 at national level, although there are still concerns about rises in long-term unemployment².

According to the latest figures available (end of July 2021) there were still 47,000 people on furlough in West Yorkshire, suggesting there could be a substantial impact on the regional labour market as the job retention scheme unwinds. Sectors with the highest number of furloughed workers are Wholesale and retail (8,000), Manufacturing (7,000) and Hospitality (7,000). In addition, a relatively high proportion of workers in Arts and entertainment are still on furlough.

With regard to job quality there is a risk that, as with previous economic crises, insecure work and 'second choice jobs' will come to the fore. Nationally, the number of people in temporary jobs because they cannot find permanent work or in part-time jobs who would like full-time employment have both risen substantially during the crisis. Overall part-time working remains below its pre-crisis level, however, with the main impact being on women who account for three-quarters of people who work part-time³.

The effects of the pandemic threaten to widen the digital divide. The shift towards working, learning and interacting online during the pandemic presents a major challenge for those who lack digital skills or access and there is a risk they will become further excluded.

The impact of COVID-19 has not been purely economic and there is evidence to show a negative influence of the crisis on measures of well-being. There has been a worsening of average well-being ratings across all local authorities in West Yorkshire, relating to anxiety, life satisfaction and happiness, even before the COVID-19 crisis hit⁴. National data relating to the period since March 2020 shows that ratings have further worsened since the onset of COVID-19⁵.

¹ Office for National Statistics, [Labour Market status by ethnic group, August 2021](#) (2021)

² Institute for Employment Studies, [Labour Market Statistics September 2021](#) (2021)

³ Institute for Employment Studies, [Labour Market Statistics September 2021](#) (2021)

⁴ Office for National Statistics, [Personal well-being estimates by local authority](#) (2020)

⁵ Office for National Statistics, [Personal well-being in the UK, quarterly: April 2011 to September 2020](#) (2021)

4 Tackling the Climate Emergency

Summary

West Yorkshire has committed to becoming a net zero carbon economy by 2038.

The latest data indicate that CO₂ end-user emissions in West Yorkshire stand at around 10.8 Mt CO₂. This equates to 4.7 tonnes per capita, slightly below the national average of 4.9 tonnes.

Carbon dioxide emissions have fallen less quickly in West Yorkshire than nationally over the latest decade for which we have data, but West Yorkshire's starting point was lower in per capita terms.

A continuation of current rates of emission reduction in West Yorkshire will not be sufficient to achieve the target of net zero by 2038. It is projected that current policies will only achieve a fraction of the further reductions required to meet the net zero target.

Emissions from the industry, commercial and domestic sectors of the regional economy fell substantially over the last decade but transport emissions did not register a sustained reduction in the period to 2019.

The emissions intensity of the West Yorkshire economy, in terms of CO₂ emissions (kt) per £m of GVA, is slightly above the national average and is higher than most of the comparator areas. The region's emissions intensity fell by 40% between 2005 and 2019.

National data show that there was a significant fall of around 11% in CO₂ emissions in 2020, linked to the effects of the pandemic. This was manifested in a large reduction in the use of road transport and a fall in emissions from the business sector.

Engagement with the natural environment is key to quality of life. Just over a fifth of West Yorkshire's population have easy access to local natural greenspace.

The average Energy Performance Certificate rating for domestic properties in West Yorkshire is D (using a scale of A – most efficient to G – least efficient). This is similar to the national average but significant progress is required to meet the government's target to upgrade as many homes as possible to EPC Band C by 2035.

Around 4% of residential properties in West Yorkshire fall within a flood zone, rising to more than 6% in Calderdale. A significant proportion of neighbourhoods in Bradford and Calderdale are acutely vulnerable to the effects of flooding.

4.1 Overview of the priority

Growing our economy while cutting emissions and caring for our environment

In June 2019, a [climate emergency was declared](#) for West Yorkshire and we are now placing increased emphasis on our commitment to clean growth and our ambition to become a net zero carbon economy by 2038, with significant progress by 2030. The increasing severity of flooding in West Yorkshire, demonstrates that climate change poses a very real threat to the economy and the livelihoods of many in our region.

As detailed in the West Yorkshire Emission Reduction Pathways study, Energy Strategy and Delivery Plan and the Green and Blue Infrastructure Strategy and Delivery Plan, the

Combined Authority's approach to tackling the climate emergency and supporting nature recovery focuses on the following actions:

- Support businesses to reduce their energy costs and carbon emissions
- Enable new forms of energy generation including district heat networks and H21 hydrogen energy project in Leeds
- Develop smart grid systems integration to use energy more intelligently
- Increase the levels of travel by walking, cycling, bus and rail
- Maximise home working, teleconferencing and greater co-location of housing with workplaces and amenities.
- Retrofit homes with energy efficiency measures such as loft and cavity wall insulation.
- Install heat pump heating systems in homes
- Generate additional electricity from onshore wind and solar
- Investigate how carbon capture and storage technology can contribute to emissions reductions
- Increase the area of woodland / forest coverage in the region

The headline indicators for this priority focus on West Yorkshire's performance on carbon emissions, the region's exposure to flooding, progress on energy efficiency and residents' access to green and blue infrastructure.

Several of these indicators are relevant to additional priorities beyond tackling the climate emergency. For example, progress on building energy efficiency supports inclusive growth by reducing living costs and can contribute to the alleviation of poverty. More generally, deprived communities have a greater exposure to the impact of climate change resulting from CO₂ emissions, in the form of flooding, for example.

Following the adoption of the Carbon Emissions Reductions Pathways study, work is underway to develop a more comprehensive suite of indicators focusing on the climate emergency.

4.2 Performance against the indicators

4.2.1 CO₂ emissions

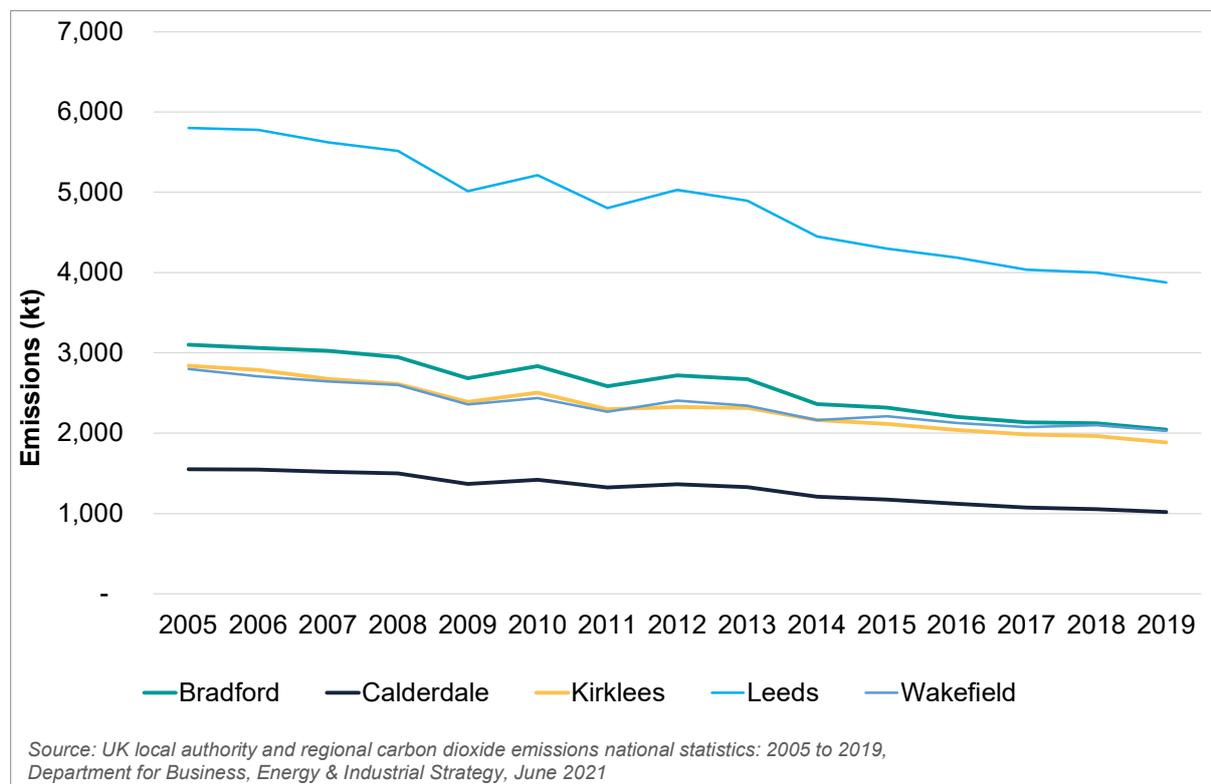
Between 2005 and 2019 emissions of CO₂ fell across West Yorkshire but by slightly less than the reduction seen at national level and among comparator areas. Per capita emissions have also fallen everywhere and are lower in West Yorkshire than the England average. A continuation of current rates of emission reduction will not be sufficient to achieve the target of net zero by 2038.

In June 2019 a climate emergency was declared for West Yorkshire. The Combined Authority and its partners are placing increased emphasis on a commitment to clean growth and the stated ambition is for the region to become a net zero carbon economy by 2038.

The central indicator of progress is the region's level of carbon dioxide emissions. As of 2019, the latest year for which data are available, CO₂ emitted in West Yorkshire was 10,848 kt CO₂. This equates to 4.7 tonnes per capita, slightly below the national average of 4.9 tonnes.

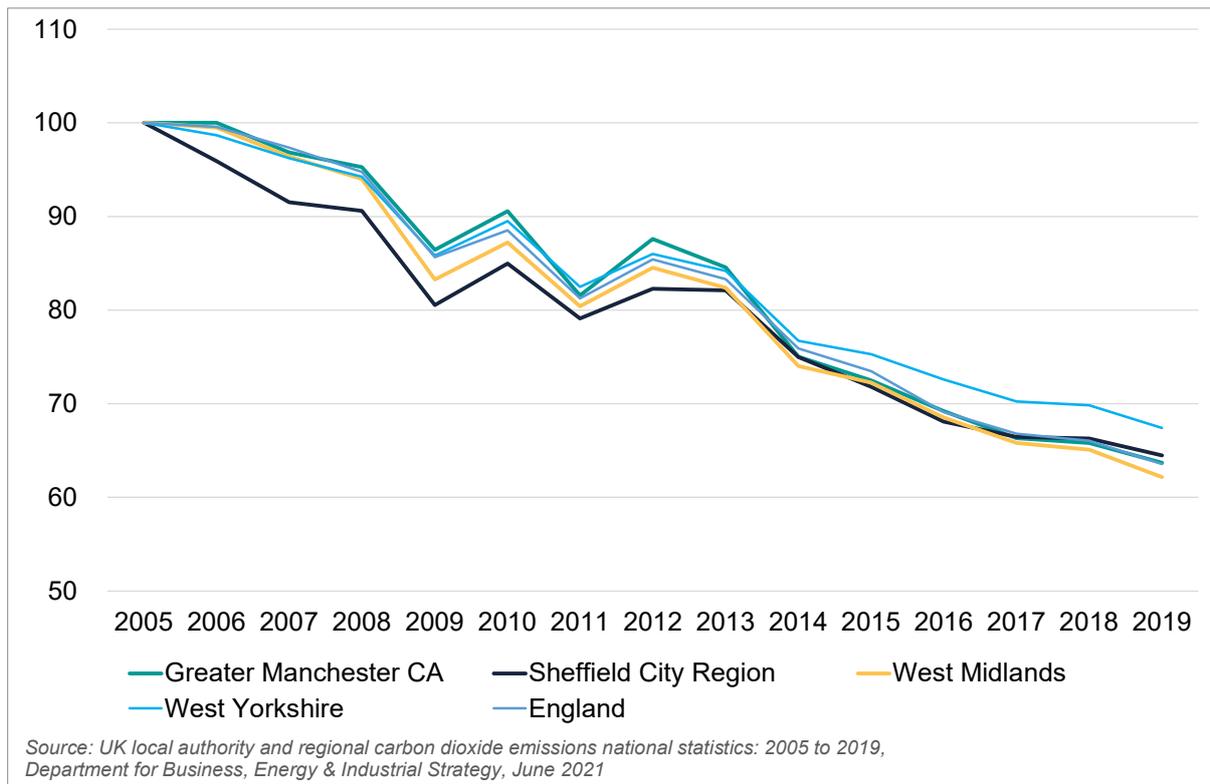
There has been a reduction in emissions in all West Yorkshire local authorities over the period from 2005 to 2019. Overall, the reduction across West Yorkshire was 33%, and this has been mirrored in all the districts apart from Wakefield, where emissions have only fallen by 28% over the same period.

Figure 59: Trend in carbon dioxide emissions by district, 2005-2019 (ktCO₂)



The reduction in West Yorkshire is slightly lower than for Greater Manchester (36%), Sheffield City Region (36%), West Midlands CA (38%) and England (36%).

Figure 60: Trend in carbon dioxide emissions by comparator area index, 2005-2019 (2005 = 100)



The main driver of the decrease in UK emissions was a change in the fuel mix for electricity generation, with a decrease in the use of coal and gas and more use of renewables. In West Yorkshire, electricity generation through renewables increased by 82% between 2014 and 2019¹.

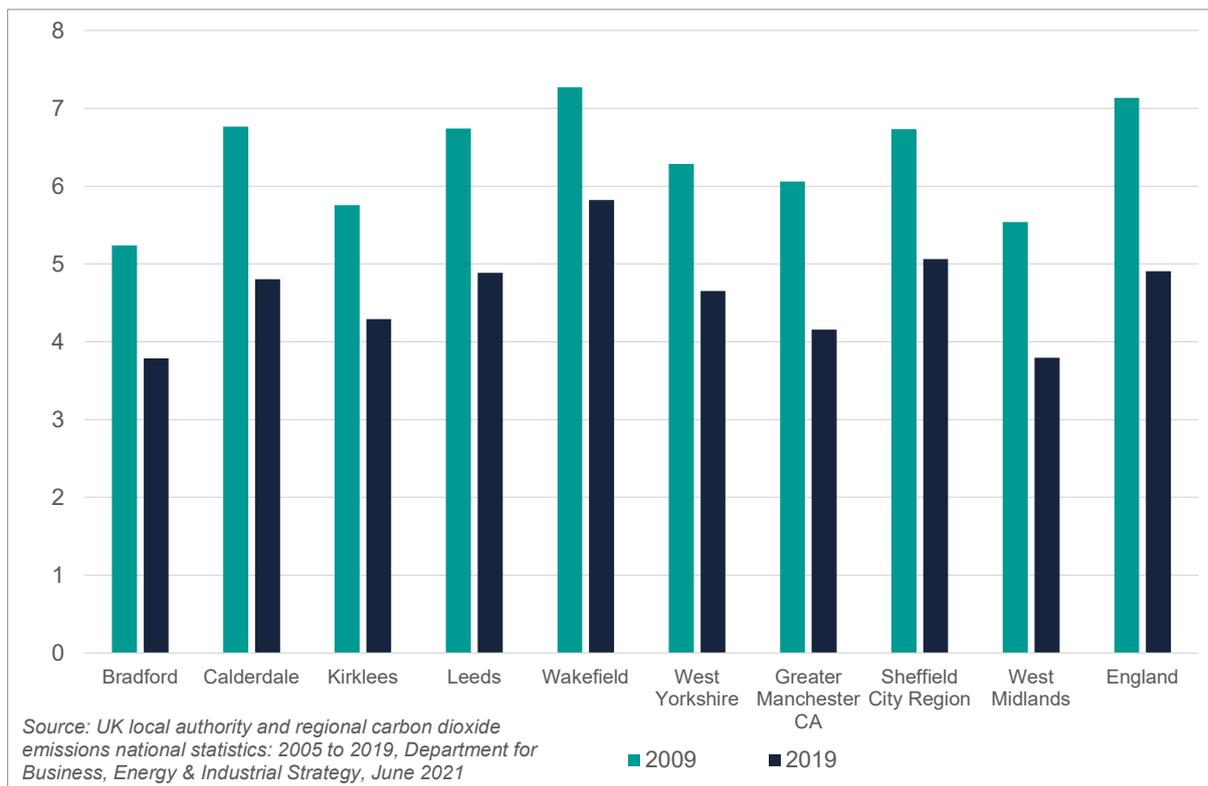
The Baseline Scenario set out in the West Yorkshire Carbon Emissions Reduction Pathways study, which reflects the likely outcome with current policies, projects a reduction of only 32% in emissions between 2020 and 2038, due to a lack of strong incentives for consumers and businesses to switch to low carbon heat, transport and other practices².

By local authority, Leeds has the highest level of emissions, reflecting the size of its economy. In per capita terms the figures range from 3.8 tonnes in Bradford to 5.8 tonnes in Wakefield. Leeds and Calderdale are both close to 5 tonnes per capita, whereas in Kirklees emissions stand at 4.3 tonnes per capita.

¹ Department for Business, Energy and Industrial Strategy, Regional Renewable Statistics (2020)

² West Yorkshire Combined Authority, [West Yorkshire Carbon Emissions Reduction Pathways](#), 2020

Figure 61: Per capita carbon dioxide emissions (tonnes CO₂ per resident)



Per capita emissions in West Yorkshire as a whole, are slightly lower than those in Sheffield City Region and England, but higher than those in Greater Manchester and the West Midlands CA area.

About the data

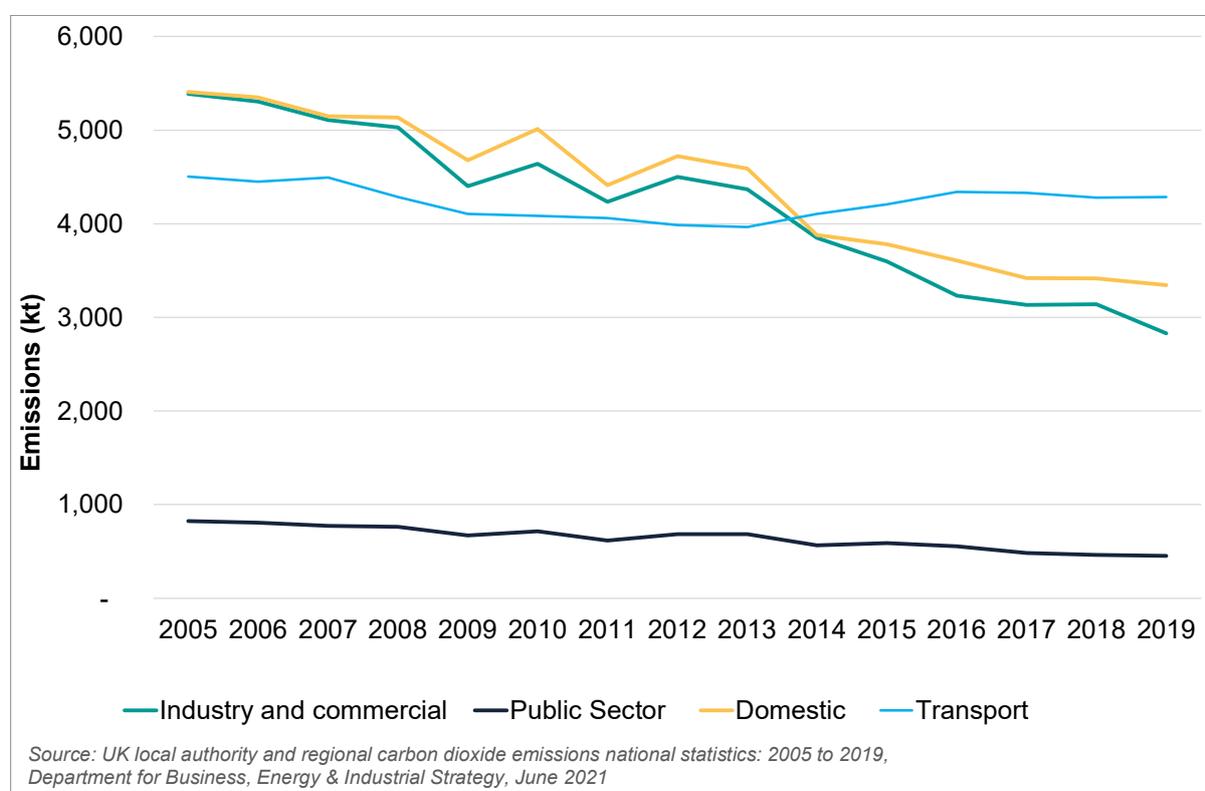
The source of the data is the UK National Statistics publication 'UK local authority carbon dioxide emissions estimates 2019' from the Department for Business, Energy and Industrial Strategy (published annually). This provides the latest estimates of territorial carbon dioxide (CO₂) emissions for local authority areas for 2005-2019. The statistics show estimated emissions allocated on an "end-user" basis where emissions are distributed according to the point of energy consumption (or point of emission if not energy related). Except for the energy industry, emissions from the production of goods are assigned to where the production takes place. Therefore, emissions from the production of goods which are exported will be included, and emissions from the production of goods which are imported are excluded.

4.2.2 CO2 emissions by sector

Transport makes the biggest contribution to emissions at regional level. There have been significant reductions over time in emissions from the industry, commercial, public sector and domestic sectors but not from transport.

Emissions from all main sectors of end users (domestic, industry, commercial, public sector and transport) have fallen over the period from 2005 to 2019 in West Yorkshire. The reductions in emissions from the domestic and industry and commercial sectors have been higher than from the transport sector. As a result, transport is now the largest sector by emissions in West Yorkshire, accounting for 39% of the total. This is likely to be because the bulk of the reduction between 2005 and 2019 was driven by the significant decarbonisation of electricity generation, which has comparatively little impact on transport, as this largely remains to be fossil fuel powered.

Figure 62: Trend in carbon dioxide emissions by sector, West Yorkshire

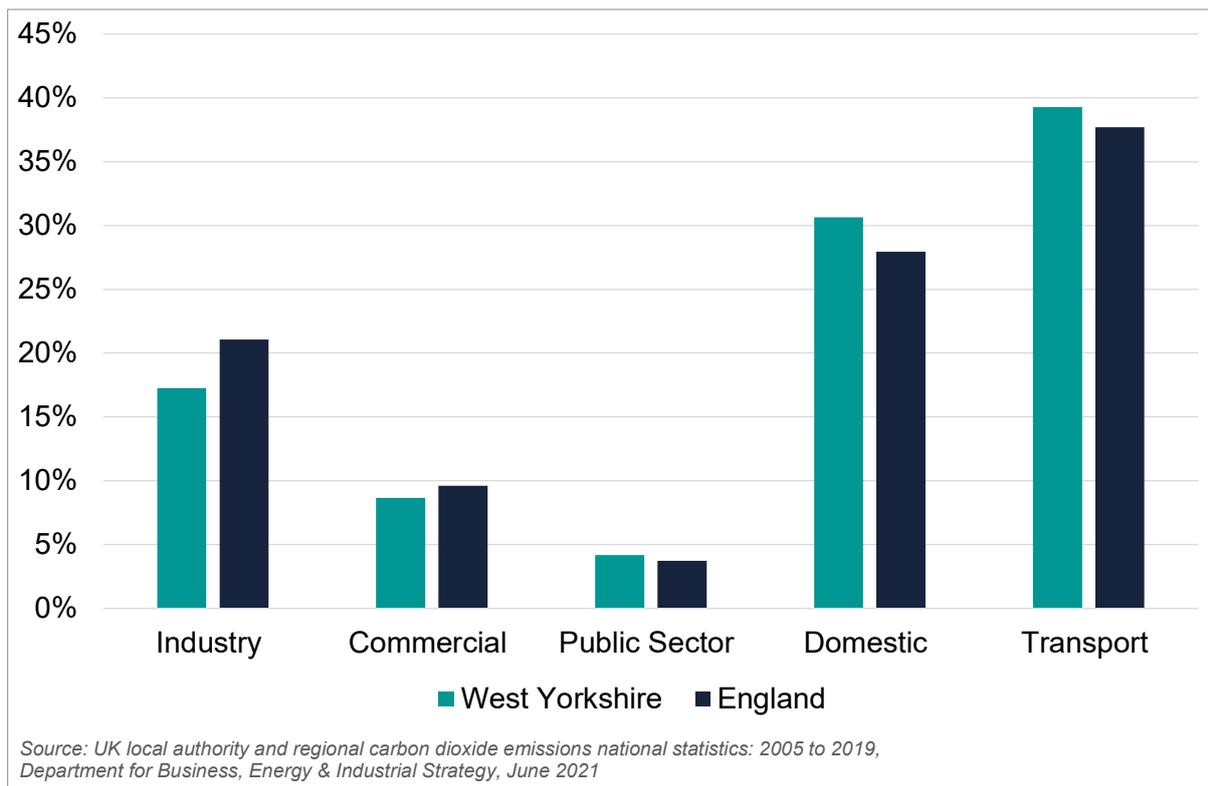


In West Yorkshire, 17% of CO₂ emissions were attributed to the industrial sector in 2019, 9% to the commercial sector, 4% to the public sector, 37% to transport and 31% to the domestic sector.

Compared with the national average, emissions in West Yorkshire are weighted towards the domestic sector and transport, with industry and commercial sectors each accounting for slightly smaller proportions.

West Yorkshire has relatively little heavy industry: large industrial installations contribute only 5% of total industry and commercial emissions, compared with 24% across England.

Figure 63: Profile of emissions by sector, % of total, 2019

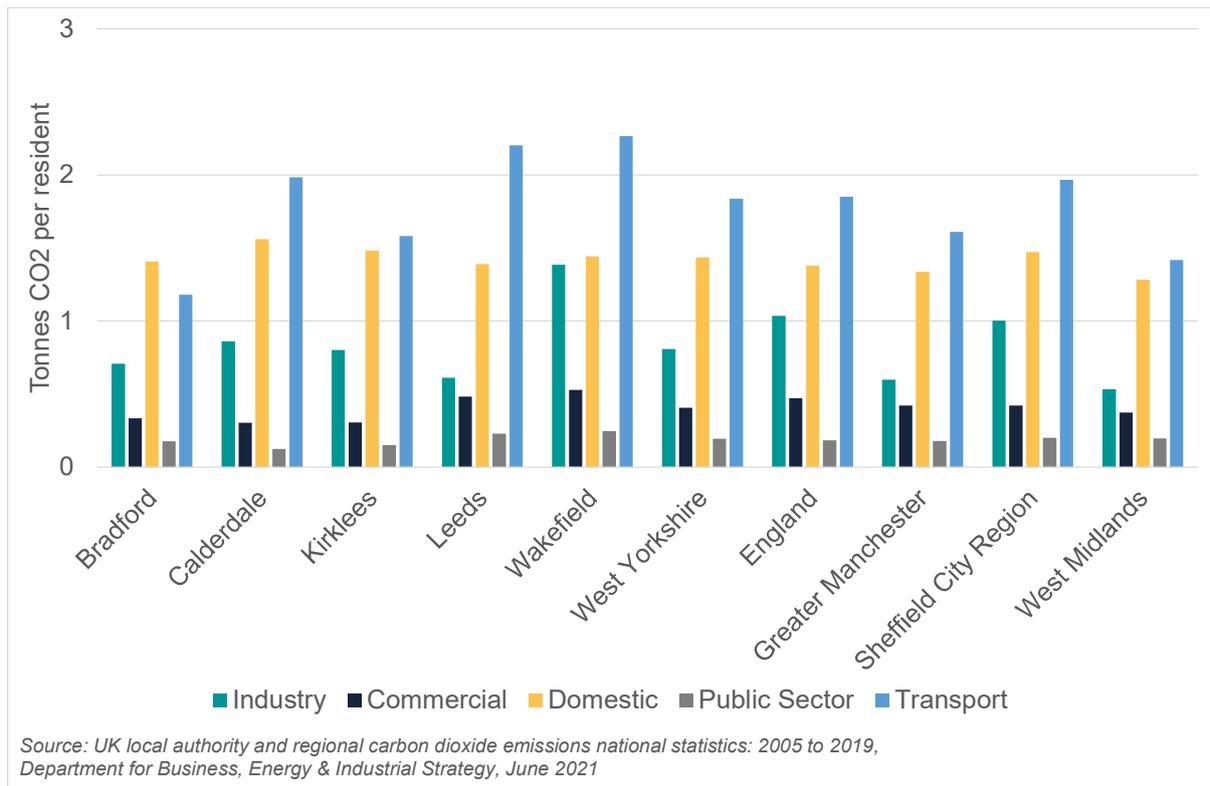


West Yorkshire has slightly higher 38% emissions to the national average for the domestic and transport sectors but lower values for both the industry and commercial sectors.

Per capita domestic emissions are at a fairly similar level across the West Yorkshire local authorities. This is also the case for industry and commercial, with the exception of Wakefield, where emissions from industry are much higher, reflecting emissions from industrial gas and industrial electricity. Per capita transport emissions vary widely and are highest in Wakefield and Leeds, followed by Calderdale. They are lower in Kirklees and particularly in Bradford.

Road transport is the main contributor to overall transport emissions. Although vehicle efficiency improved during this period, this was probably offset by changes in demand and road mileage.

Figure 64: Per capita emissions by sector, 2019



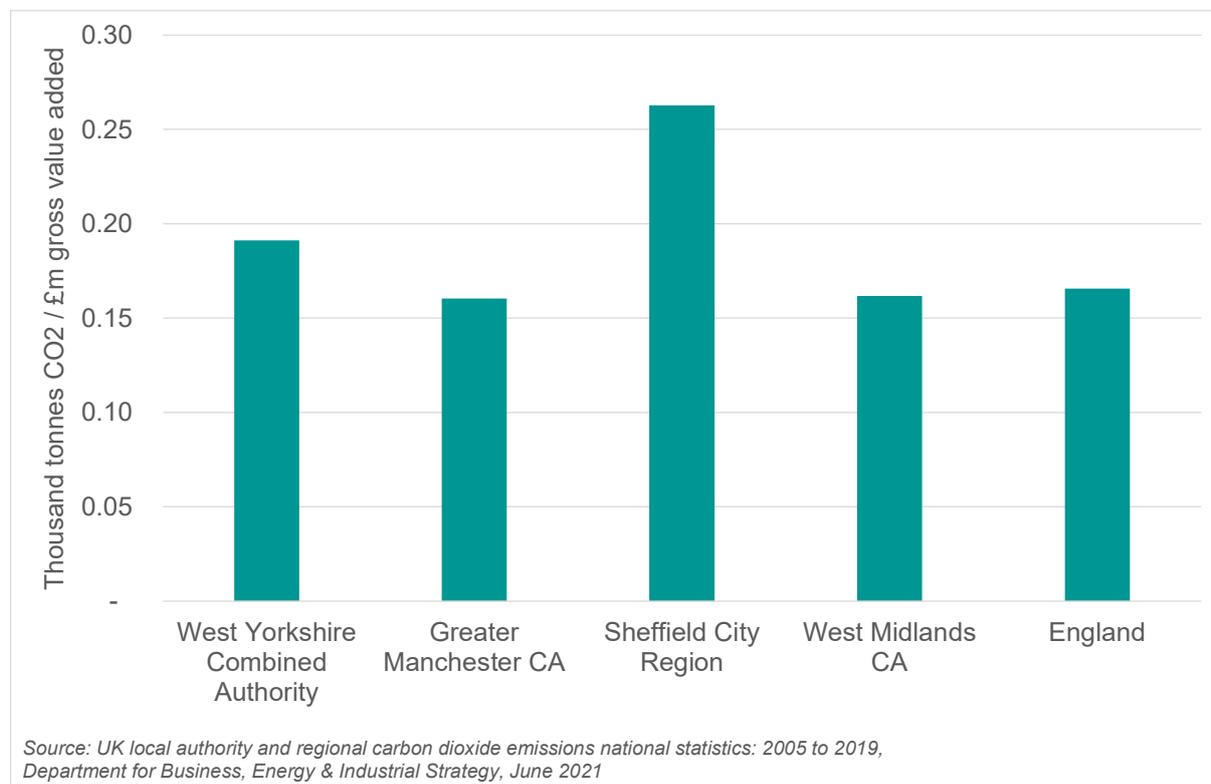
4.2.3 Emissions intensity ratio

The emissions intensity of the West Yorkshire economy, in terms of CO₂ emissions (kt) per £m of GVA, is slightly above the national average and above some of the comparator areas. The region's emissions intensity fell by 40% between 2005 and 2019.

Carbon dioxide (CO₂) emissions intensity measures the level of emissions per unit of gross value added (GVA) and can be used to examine the relationship between economic growth and emissions. It is an important measure because a reduction in emissions intensity may indicate a shift towards a greener and more sustainable economy. This could be through industries becoming more efficient in their processes and emitting less per unit of GVA. At the same time, it may also reflect changes to the structure of the economy, for example, a change from manufacturing to services, which produce fewer greenhouse gas emissions.

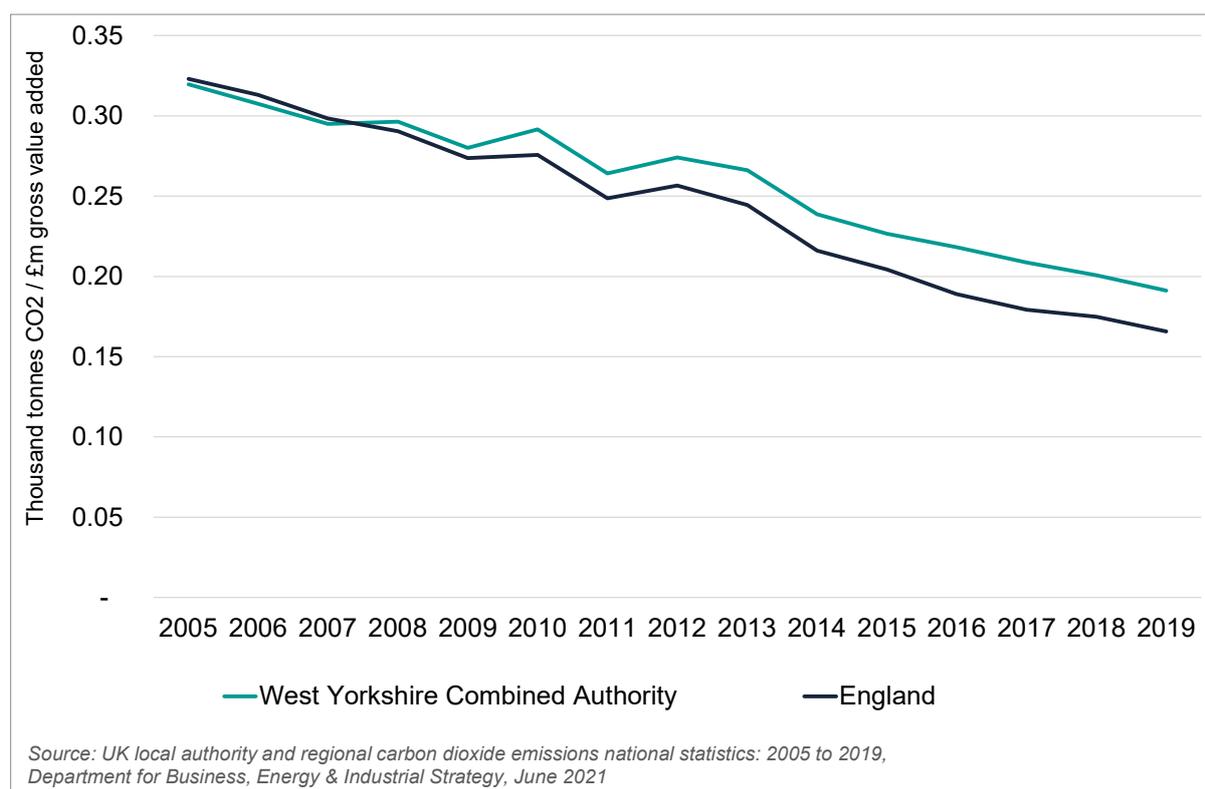
There are wide local variations in emissions intensity, mainly because of the economy and geography of different local areas.

Figure 65: Carbon dioxide emissions intensity, 2019



In 2019, CO₂ emissions intensity for West Yorkshire was around 0.19 thousand tonnes of CO₂ per £ million of GVA. This is slightly above the national average of 0.17 and above the comparator areas, except Sheffield, which is higher (0.26), possibly because of the concentration of energy-intensive industries such as steel in the area.

Figure 66: Trend in carbon dioxide emissions intensity



Emissions intensity for West Yorkshire has reduced steadily over time. Between 2005 and 2019, there was a reduction of 40% (from 0.32 to 0.19 thousand tonnes of CO₂ per £ million of GVA).

West Yorkshire’s emissions intensity fell less quickly than the national average, which declined by 49% over this period. The region’s emissions intensity was similar to the national average in 2005 but a gap has opened up since then.

In the absence of detailed figures for industry sector emissions at local level, it is difficult to assess the relative contributions of changing industry structure and increased efficiency to the reduced emissions intensity in West Yorkshire. As noted above, UK data shows a marked reduction in emissions intensity in the energy supply sector, due to the switch from fossil fuels to renewables but there were also reductions in intensity in the manufacturing and transport sectors¹.

About the data

Emissions intensity is calculated by dividing the level of carbon dioxide emissions by gross value added (GVA). GVA is the difference between output and intermediate consumption, that is, the difference between the value of goods and services produced (output) and the cost of raw materials and other inputs which are used up in production (intermediate consumption). The GVA data used in the denominator are chained volume measures, in constant prices, with 2018 as the base year².

¹ Office for National Statistics , [Greenhouse gas emissions intensity, UK: 2018 provisional estimates \(2019\)](#)

² Office for National Statistics, [Regional gross value added \(balanced\) by industry: all ITL regions \(2021\)](#)

4.2.4 Access to green space

Just over a fifth of West Yorkshire’s population have easy access to local natural greenspace.

Green and blue Infrastructure is the green space and water environment essential to the quality of our lives and ecosystem. It is referred to as ‘infrastructure’ as it is as important as other types of infrastructure such as roads, schools and hospitals¹.

The Green and Blue Infrastructure Strategy aims to ensure that everybody in West Yorkshire is within easy reach of an outstanding and well used network of green and blue infrastructure that reduces flood risks and supports health, the economy, the environment and a superb quality of life by providing local people with access to nature. There are a range of priorities for action, including planting and managing more trees and woodlands, building green and blue infrastructure into physical development and housing and integrating green and blue infrastructure within the transport routes that link our towns, cities and rural areas.

Natural England has developed an Accessible Natural Greenspace Standard (ANGSt)², which has been used as a basis for our indicators. The headline indicator we have selected for access to green space is:

Proportion of the population who have access to local greenspace; that is, they live within 300m (As the crow flies) of an area of accessible natural greenspace of at least 2 hectares in size.

Table 5: Access to natural greenspace in West Yorkshire³

% of population with easy access to local natural greenspace	
West Yorkshire	23
<i>Breakdown by district</i>	
Bradford	23
Calderdale	26
Kirklees	18
Leeds	24
Wakefield	22

Source: Natural England 2021, ONS Mid-Year Population Estimates 2018

Currently, around **23%** of West Yorkshire residents have local natural greenspace within easy access (2021 baseline) –5-to-10-minute walking distance depending on walking speed.

¹ Green infrastructure is defined in the National Planning Policy Framework as “a network of multi-functional green space, urban and rural, which is capable of delivering a wide range of environmental and quality of life benefits for local communities”. Ministry of Housing, Communities and Local Government, [National Planning Policy Framework](#) (2019)

² “‘Nature Nearby’ Accessible Natural Greenspace Guidance”, Natural England, March 2010

³ **Note: Figures are unpublished draft outputs from the England Green Infrastructure Standards Project Mapping made available by permission as initial figures only.** This dataset is being improved and checked for errors, and a revised dataset is expected later in 2021. Once the national dataset is finalised and released by Natural England we will reassess the baseline indicator set for this headline indicator.

Within the region, there is variation between districts: in Leeds and Calderdale, the proportion is slightly higher, at around 26%; in Bradford it is 23%; but it falls to less than a fifth in Kirklees (18%).

A series of sub-indicators have been developed based on the ANGSt thresholds, to show the proportion of the population that have access to larger areas of accessible natural greenspace.

Table 6: Access to natural greenspace in West Yorkshire

Greenspace Type	Wider Neighbourhood; Parks and Public Gardens	District; Country Parks and Accessible Woodland	Sub-Regional; Access Land and Largest Nature Reserves
Distance	2km	5km	10km
Size	20ha	100ha	500ha
Bradford	63.3	57.7	91.0
Calderdale	81.1	93.8	90.0
Kirklees	41.5	51.4	44.0
Leeds	75.3	65.5	76.0
Wakefield	64.6	69.5	7.0
West Yorkshire	62.4	61.6	62.0

Wider neighbourhood - proportion of the population who are within 2km of an accessible 20-hectare site, such as parks and public gardens.

Almost two thirds (62%) of West Yorkshire’s population have this kind of access. There is wide variation at local authority level, however, with the proportion ranging from 42% in Kirklees to 81% in Calderdale and 75% in Leeds. Bradford and Wakefield are both close to the West Yorkshire average with figures of 63% and 65% respectively.

District - proportion of the population who are within 5 km of a 100-hectare site e.g., country parks, access land, accessible woodland

This indicator gives a proxy for a 20-minute cycle journey. Again, 62% of West Yorkshire’s population fall within the catchment of this kind of site, based on these criteria, ranging from 51% in Kirklees to 94% in Calderdale.

Sub regional - proportion of the population who are within 10km of a 500-hectare site e.g., access land, accessible woodland, and the largest nature reserves

This indicator provides a proxy for a 40-minute cycle journey. The proportion of residents who have this level of access is very similar to the previous two indicators at 62%. Around nine out of 10 residents in Bradford and Calderdale are within 10km of a 50-hectare site. At the other extreme only 7% of Wakefield residents fall within the catchment area for this type of site.

About the data

The analysis uses Natural England’s Accessible Natural Greenspace Standard thresholds for distance and size but also filters on “naturalness” score, only including sites with a

score of 1 or 2, such as parks and gardens, woodland, country parks and national parks. Playing fields, tennis courts, allotments and golf courses are excluded. Natural England's methodology measured distance from LSOA population weighted centroids through the OS Highways road and footpath network to polygons defined as green space in OS MasterMap. The proportion of residents with access to green space is based on ONS 2018 mid-year population estimates.

4.2.5 Building energy efficiency

Across West Yorkshire, the average Energy Performance Certificate (EPC) rating for domestic properties falls in the D band. The trend has been one of slight improvement in recent years; however, in the last year there has been a slight drop off across the region, perhaps reflecting the reduction in the supply of new housing during the year.

Buildings are responsible for almost 40% of the UK's energy consumption and carbon emissions. Improving the energy efficiency of properties is an important lever for reducing emissions but also for helping households to manage their living costs.

Energy Performance Certificates are needed any time a property is sold, built or rented. They contain information about a property's energy use and typical energy cost as well as recommendations on how to reduce energy and save money.

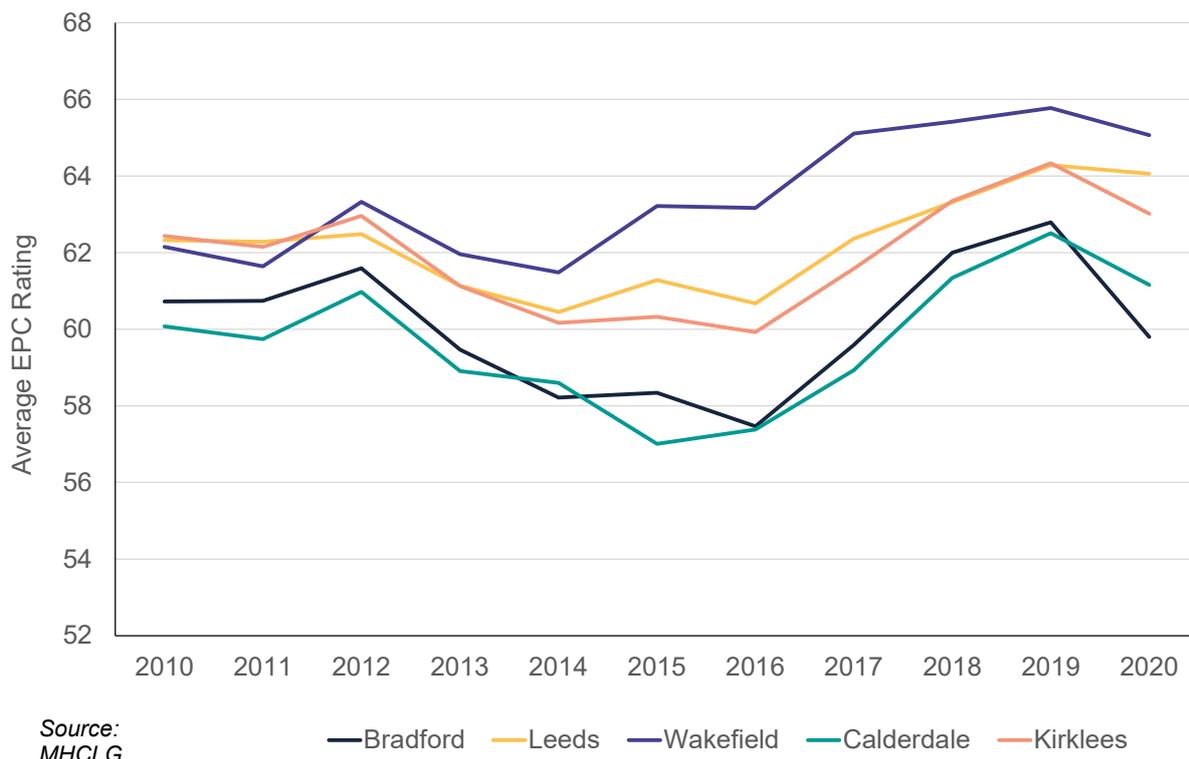
Normally they have a rating between A (Most efficient) to G (Least efficient). For the purposes of the analysis, we have converted the A to G score to a numerical score, which is then averaged across each lower super output area (LSOA) to provide a score from 0 to 100. The data is presented from 2010 and includes both EPC score and potential score. The potential score reflects how energy efficient a property could be if the changes the EPC recommends were made.

Across the West Yorkshire region, all districts have an average EPC score of between 60 to 65, which is a rating of D on the EPC scale. Although not directly comparable, analysis by the ONS suggests the average rating nationally is also D, placing West Yorkshire in line with the national average. However, this performance must be set in the context of the government's target to upgrade as many houses to EPC Band C by 2035 "where practical, cost-effective and affordable", and for all fuel poor households, and as many rented homes as possible, to reach the same standard by 2030. The West Yorkshire Emissions Reduction Pathway study estimates that 680,000 homes in the region will require energy efficiency retrofit to bring them up to EPC rating of C or better, as part of the challenge of meeting the climate target¹.

Locally, the average EPC score has been slowly increasing over the last decade from the low 60s to the mid-60s. However, in 2020 there was a decline in the average EPC rating across West Yorkshire districts. This may reflect the fact that EPC lodgements for new dwellings, which tend to have higher ratings than other forms of transactions, fell as a proportion of total lodgements. As of 2020, Wakefield had the highest average EPC rating and Bradford the lowest.

¹ West Yorkshire Combined Authority, [Carbon Emissions Reduction Pathways](#) (2020) p.19

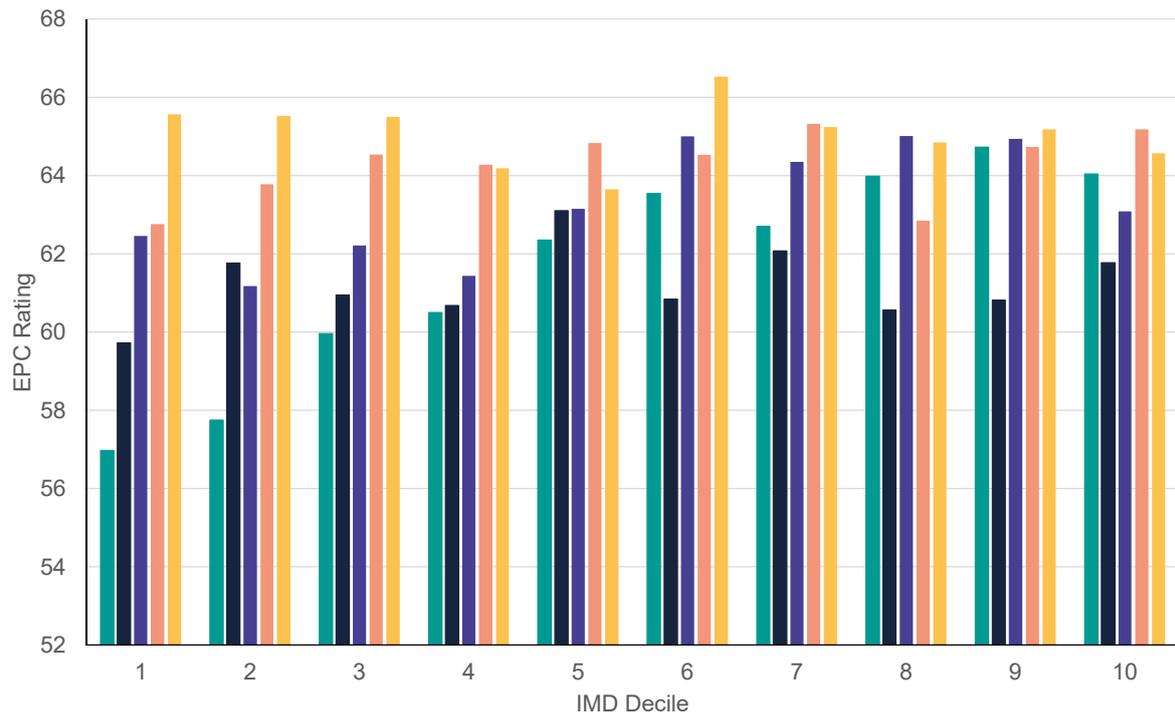
Figure 67: Trend in average EPC rating by district



The data also presents the potential EPC score for each LSOA, across West Yorkshire. The average scores are mostly uniform at around 82 which is a B EPC band. This means that Bradford has the largest gap between the actual EPC score and the potential score at 22, whilst Leeds and Wakefield have the lowest at 17.

When broken down by Index of Multiple Deprivation (IMD) decile, there is no clear relationship between EPC score and IMD decile except in Bradford, where average EPC score grows as relative deprivation decreases. But for the rest of the districts there is no discernible pattern between the IMD deciles.

Figure 68: Average EPC rating by district and IMD decile



Source: MHCLG

Bradford Calderdale Kirklees Leeds Wakefield

4.2.6 Premises at risk of flooding

Around 4% of residential properties in West Yorkshire fall within a flood zone, rising to more than 6% in Calderdale. Many neighbourhoods in Bradford and Calderdale are acutely vulnerable to the effects of flooding. Flooding is likely to become a more frequent occurrence as a result of climate change.

Rivers, reservoirs and canals are defining features of West Yorkshire's landscape, enhancing our living environment with places for exercise and leisure and providing habitat for fish, birds and mammals. A consequence of this however is that some residents live in areas prone to flooding, either DEFRA Flood Zone 3, areas with properties facing a risk of flooding once every hundred years or Flood Zone 2, where properties face a risk of flooding once every 1,000 years. The frequency of flooding in these areas is likely to increase as a result of climate change.

Recent events, such as the Boxing Day Floods of 2015 highlighted the risk that flooding presents to residential and commercial properties in West Yorkshire, with this event alone flooding 3,260 homes and 1,686 businesses, and the economic cost of £227 million and £36.8m worth of damage to local infrastructure¹.

It is apparent that there are further economic costs associated with flooding and these include education, tourism, heritage and agriculture. Based on the 2013/14 Environment Agency report these are likely to account for around 3% of the total costs which would result in an estimated figure of around £12 million.

The ongoing flood risk reinforces the economic, social and environmental arguments for securing capital investment to allow our communities to be more resilient and avoid both the human suffering and economic cost that comes with these events.

[The Leeds City Region Flood Review Report](#) 2016 Yorkshire Flood Risk Capital Investment Programme incorporates the announcements for 'booster' funding that was made in the 2016 Budget to support additional flood mitigation measures across the City Region. The allocation for the Current Spending Review Period in Leeds City Region is £207 million (2016-21). In November 2016, the Combined Authority agreed to invest £7.8 million to fund an initial three schemes in Leeds, Mytholmroyd and Skipton to help enable and accelerate delivery of flood mitigation schemes, support waterway maintenance and invest in upland management and upstream storage and reservoirs.

The Combined Authority is currently working with partners to update its ambitious pipeline of 30 additional flood alleviation schemes for the next six-year funding period from 2021/22. The plan requires £120 million of government investment and will safeguard approximately 3,400 homes, 2,500 businesses and 4,600 existing jobs, equating to c.£246 million in Gross Value Added per annum.

Seventeen thousand West Yorkshire residential properties are located in Flood Zone 3 areas and at risk of flooding once every hundred years, with an additional 22,000 located in Flood Zone 2, which is at risk of flooding once every 100 to 1,000 years. Together this accounts for 4% of West Yorkshire residential properties.

3.5% of West Yorkshire's population live within a Flood Zone, less than the England average of 7.4% and that of comparator regions such as Greater Manchester (4.2%) and Sheffield City Region (4.6%).

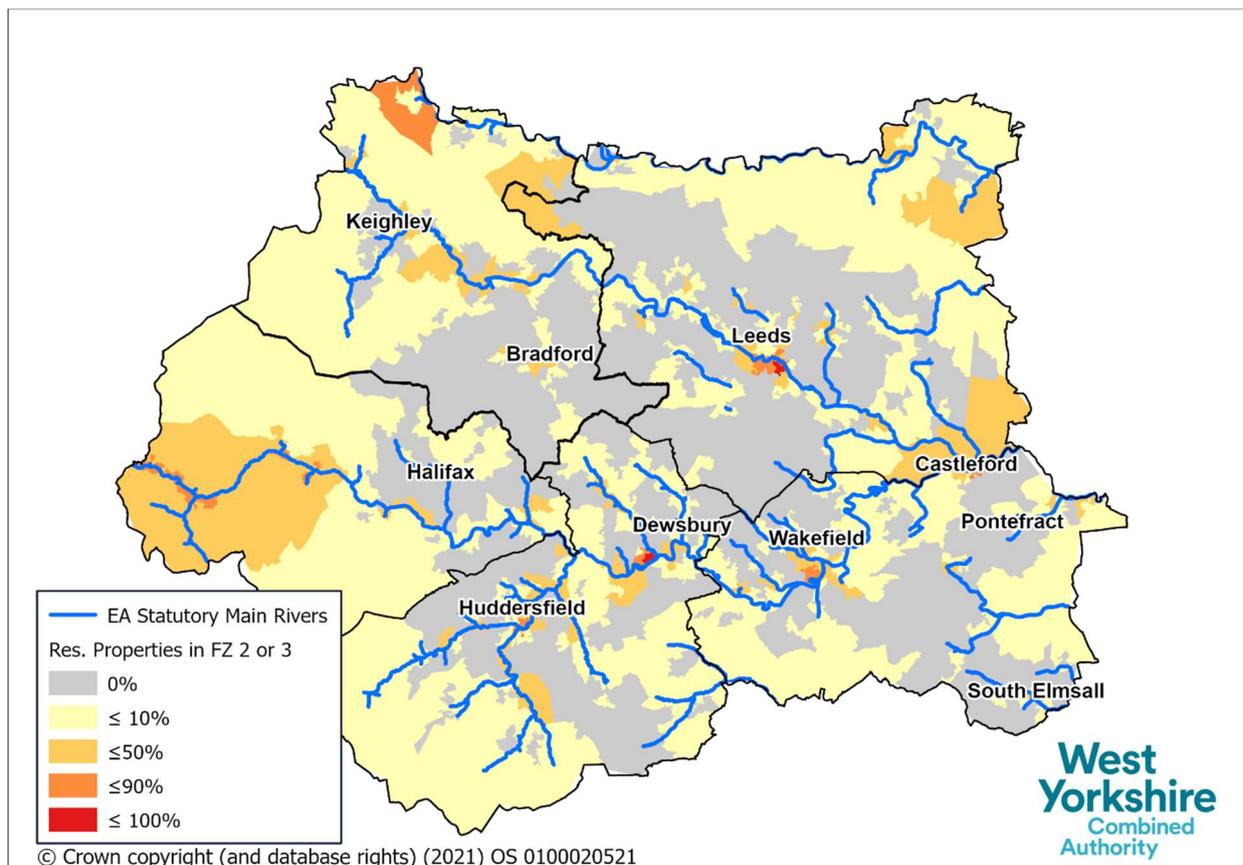
¹ West Yorkshire Combined Authority, [Leeds City Region Flood Review Report](#) (2016)

Figure 69: Proportion of residential properties in flood zones



Source: Environment Agency 2021, Mid-Year Population Estimates 2019, ONS 2020

Figure 70: West Yorkshire residential properties in flood zones



There are also longer-term effects on businesses and districts that will impact on them financially and economically. These include rising insurance costs, a negative impact on

long-term investment decisions and the possibility of relocating as part of a risk mitigation strategy.

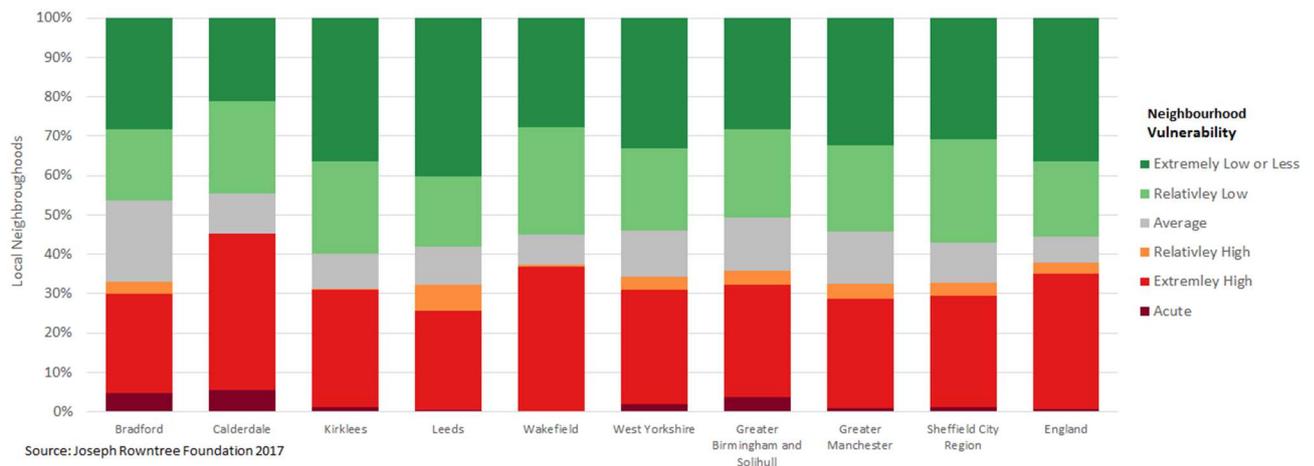
Flood zones in West Yorkshire also include 13,000 commercial properties, 2,000 of them in Leeds city centre. Forty-eight per cent of commercial properties in Hebden Bridge, Sowerby Bridge, Todmorden and Burley (Leeds) –all areas set to benefit flood alleviation measures– are in Flood Zone 3 and at the greatest risk from flooding.

Community Flood Vulnerability Index

The Joseph Rowntree Flood Vulnerability Index measures how socially vulnerable residents of a neighbourhood are should flooding occur, quantifying their ability to prepare, respond and recover to flooding. Vulnerability is calculated according to proximity to flood zones, their physical wellbeing and their ability to access and understand pre and post flooding support.

The proportion of socially vulnerable neighbourhoods at extreme or acute risk of flooding in West Yorkshire is below that in England but matches that of other LEPs. This analysis does however highlight how vulnerability varies across West Yorkshire, with significant proportions of neighbourhoods in Bradford and Calderdale acutely vulnerable and 40% of all Calderdale neighbourhoods at an extremely high risk.

Figure 71: Neighbourhood Flood Vulnerability Index



4.3 Implications of COVID-19

Emissions data are not available for West Yorkshire for the pandemic period; however, national data provide some insight into the impact of COVID-19 and the likely effects at regional level.

In 2020 the COVID-19 pandemic and the resulting restrictions brought in across the UK had a significant impact on greenhouse gas emissions in the UK. Carbon dioxide (CO₂) emissions in the UK are provisionally estimated to have fallen by 10.7% in 2020 from 2019, to 326.1 million tonnes (Mt)¹.

A key driver of this fall was a reduction in road transport activity. CO₂ emissions from this source fell by 19.6%, accounting for half of the overall fall between 2019 and 2020. The business sector also saw a reduction in emissions of 8.7% over the same period. Lower demand during the pandemic and the continued fall in fossil fuel usage led to a reduction in emissions from the energy supply sector. On the other hand, emissions from the residential sector increased by 1.8% as more people stayed at home.

During the pandemic the importance of access to green spaces and nature for physical and mental health has been brought into sharp relief. The period of lockdown has been associated with physical and mental health risks to those confined to their homes, disproportionately affecting those from more disadvantaged communities and those who live alone, or without access to gardens, balconies, or green space.

¹ Department for Business, Energy and Industrial Strategy, [2020 UK greenhouse gas emissions, provisional figures](#) (2021)

5 Delivering 21st Century Transport

Summary

West Yorkshire's access inequality ratio has improved substantially, as the number of jobs accessible by the bus network from deprived neighbourhoods has increased relative to those accessible by private car.

Almost two-thirds of trips in West Yorkshire are made by car but the car's share of total trips was falling even before the COVID-19 crisis, just as walking was increasing its share. The bus plays a vital role for those who lack access to a car, but its share of trips is also falling, although it plays a more important part in the transport mix in West Yorkshire than nationally.

The number of killed or seriously injured casualties arising from traffic accidents has fallen in West Yorkshire in recent years but is still higher than the national average relative to vehicle miles travelled.

Around 18m bus trips were made using the MCard during 2019, improving the affordability, ease, and experience of bus travel in West Yorkshire. The proportion of travel tickets bought through the MCard mobile app rather than traditional outlets has increased to 35% since its introduction in 2017.

In spite of an improvement in ratings in 2020/21, public satisfaction with highway infrastructure remains relatively low, with road maintenance elements having the lowest levels of user satisfaction.

Satisfaction with local public transport in West Yorkshire is high, when compared with other aspects of the transport system. The level of satisfaction increased in 2020/21, in spite of the impact of the pandemic.

It is uncertain what patterns of travel will emerge in the medium to longer term post-COVID-19, particularly in view of what may prove to be a sustained shift to home working.

5.1 Overview of the priority

Creating efficient transport infrastructure to connect our communities, making it easier to get to work, do business and connect with each other.

21st Century Transport is a priority within the Strategic Economic Framework because our transport network is under increasing pressure and our diverse geography presents challenges in balancing transport priorities and funding.

Investment in transport has not kept pace with economic and population growth, resulting in congestion on roads and overcrowding on public transport. Private vehicles still make up a significant proportion of journeys in the region, contributing to serious public health and environmental challenges.

The six headline indicators selected for this priority are key measures of progress towards a more effective and efficient transport infrastructure for West Yorkshire.

However, performance against these indicators also provides an insight into the important contribution of transport to our other priorities. For example, enabling people from deprived communities to access employment opportunities via public transport contributes to inclusive growth, while achieving shifts in mode share towards public transport and active travel and away from private cars is key to reducing carbon emissions from the transport sector.

A [West Yorkshire Transport Recovery Plan](#) has been published, setting out the role of transport in supporting the economic recovery by connecting people to jobs, particularly those in deprived communities, and businesses to new opportunities, while at the same time, tackling the climate emergency.

In addition, more detailed analysis of West Yorkshire's transport performance and its Transport Strategy indicators is contained in the Combined Authority's State of Transport report¹.

¹ West Yorkshire Combined Authority, [State of Transport: Transport strategy annual monitoring report \(2020\)](#)

5.2 Performance against the indicators

5.2.1 Access inequality ratio (employment)

Inequality of access to employment from the most deprived areas in West Yorkshire fell substantially in 2019/20, achieving the Transport Strategy target to increase bus accessibility to 85% of that of travel by car.

People travel to participate in society; however, their capacity to access opportunity may vary greatly, depending on a number of factors, such as their physical ability, the range of transport modes available to them, the speed of these modes, the connectivity of the network or the affordability of the options available, to name just a few.

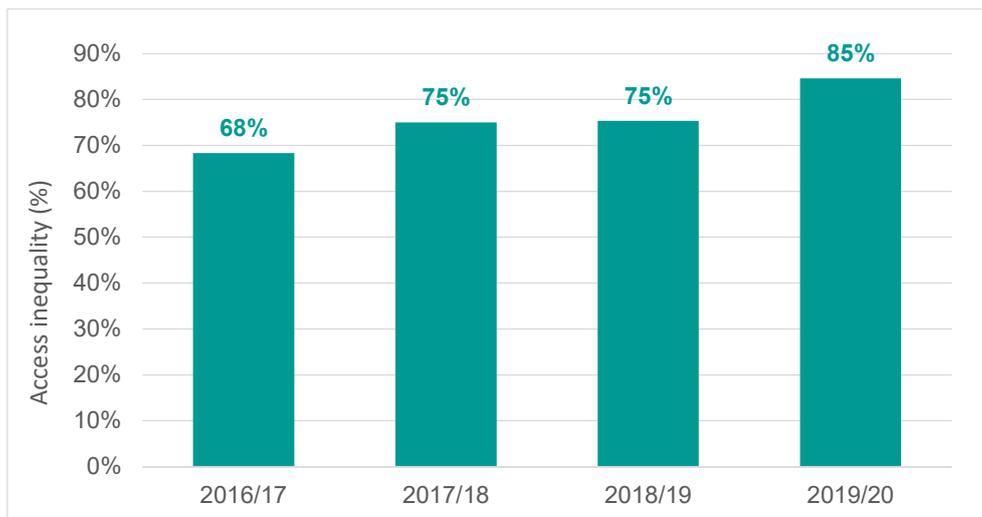
Car drivers are the least mobility-constrained and have higher levels of access to opportunity; individuals from low-income households, on the other hand, are less likely to own a car and are more constrained by affordability issues. In 2019, 45% of households in the lowest income quintile did not have access to a car, compared with 24% across all income levels. Those in the lowest income quintile also made 23% more walking trips and 66% more bus trips than the average across all income levels¹ Improving public transport options for those with no access to a car, is therefore a way to tackle inequality, by making it easier for everyone to access services and activities, including employment.

To capture transport aspects of access inequality, we have defined an 'access inequality ratio'. This is defined as the ratio (expressed as a percentage), between the number of jobs accessible in 30 minutes using the frequent bus network and with origin in the 10% most deprived areas in West Yorkshire, to the number of jobs accessible by car in 30 minutes from these same areas, during the morning peak. The rationale is that all else remaining equal, by improving accessibility by public transport (whether this is by improving its frequency, coverage of the network, connectivity or speed), the number of opportunities available to those with no access to a car is also improved, thereby reducing access inequality.

The value of the indicator in the period ending 2019 was 85%, meaning that the West Yorkshire Transport Strategy 2040's target to increase physical accessibility by bus from the most deprived areas to 85% of that of car during the morning peak has already been achieved.

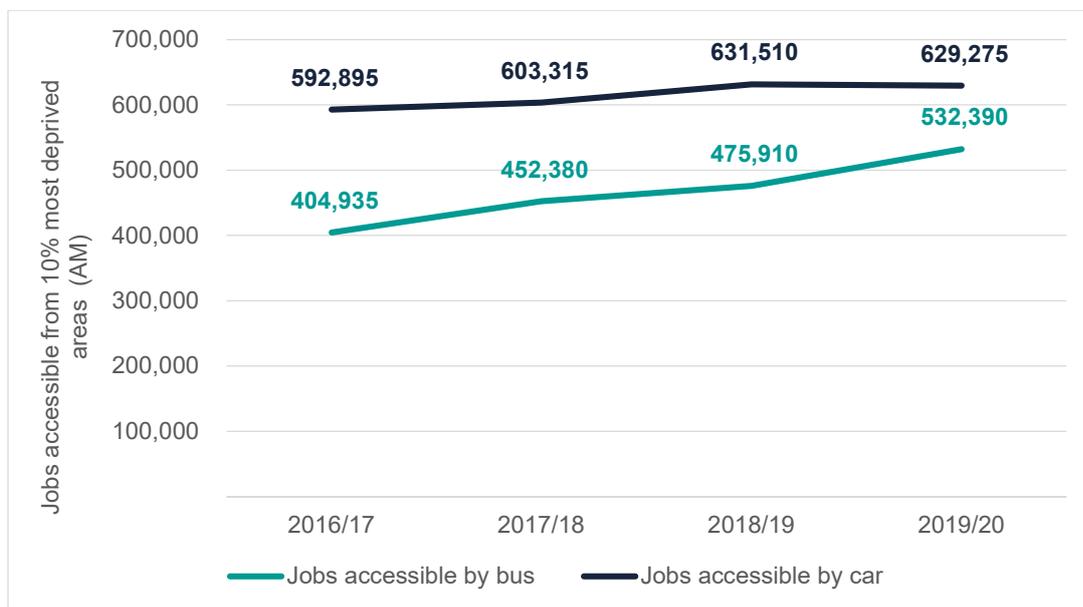
¹ Source: National Travel Survey 2019, DfT, 2020

Figure 72: Access inequality ratio (employment)



This improvement is mainly due to an improvement in bus accessibility during the morning peak; in 2019/20, there were 5% more employments accessible by bus from deprived communities than in the period 2018/19, in spite of a reduction in the number of total jobs available, which is, in practice, the only factor affecting the reduction in car accessibility.

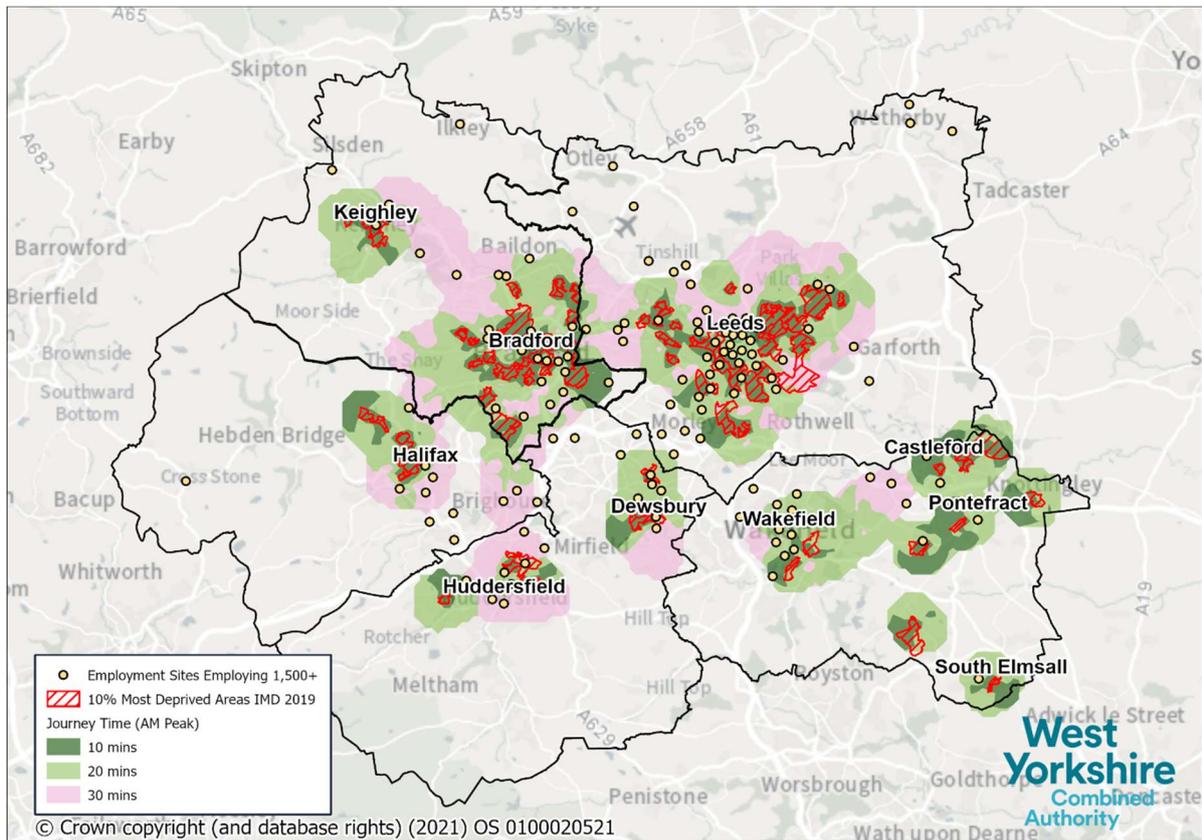
Figure 73: Bus accessibility on the frequent bus network, from the 10% most deprived areas in West Yorkshire and departure time 07:30, vs car accessibility



It has to be noted that this indicator captures only some of the *physical* components of access to employment; there are other factors that impact the range of employments that are available to low income groups and that need to be considered in policy development; amongst them, the affordability of public transport itself, or the nature of employment, which results in a 'skill mismatch' for those with lower qualifications; this is because higher-skilled jobs are typically based in city centres or main transport corridors in cities, well served by public transport, whereas low-skilled jobs are increasingly dispersed outside city centres

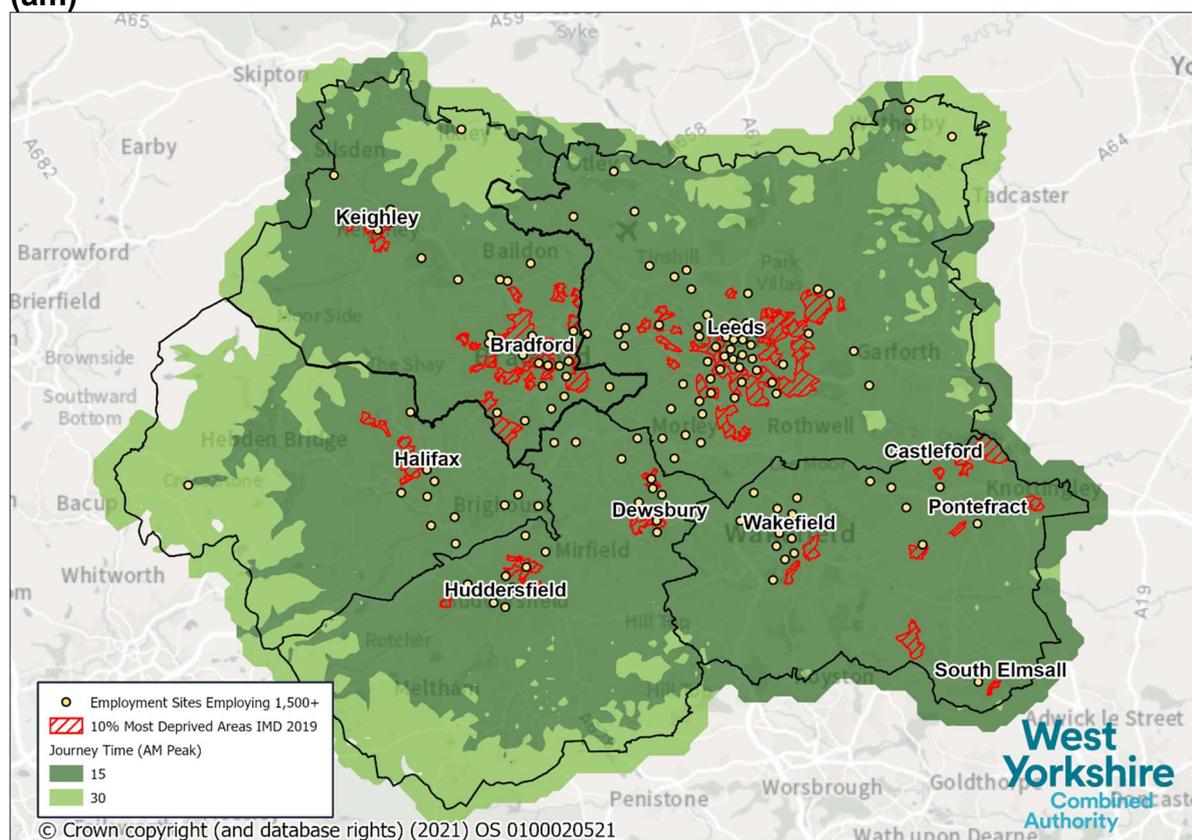
and are often difficult to reach by residents in low-income areas¹. This is exacerbated by the fact that a number of low-skilled jobs in occupations such as distribution, warehousing, hospitality, retail and cleaning often require working unconventional hours, at times where public transport is infrequent or just not available.

Figure 74: Bus accessibility from 10% most deprived areas in West Yorkshire (am)



¹ See, for example Crisp, R. et al, 2018, [Tackling transport-related barriers in low income neighbourhoods](#), Joseph Rowntree Foundation

Figure 75. Car accessibility from 10% most deprived areas in West Yorkshire (am)



About the data

Data for this indicator is calculated using accessibility software. This software allows us to calculate the travel time between any origin and destination point, by bus and car, based on their location relative to the road network, link speeds and public transport timetables. As with any model, a number of assumptions are made:

- *Origin points: these are the centroids (population weighted) of the areas falling within the 10% most deprived in West Yorkshire i.e., travel time from the whole area is assumed to be the same as from its centroid.*
- *Employment centres are defined as the areas with 1,500 employees or more, according to the Business Register and Employment Survey for the corresponding year. As before, travel time to all jobs in an area is assumed to be the same as that to its centroid.*
- *The departure time for bus trips is 07:30 am, which we compare with journey times for car.*
- *The catchment areas are defined based on the minimum travel time from the set of locations taken as origin. This means not all the origins will be able to reach the selected destination in the maximum travel time (in this case 30 minutes); but there is at least one origin that can reach the selected destination in this time.*
- *The calculations do not consider the effect of congestion i.e., car travel time is modelled as per the speed limit of links; bus travel time is based on published timetables.*
- *We are calculating bus accessibility using the frequent bus network. This means that only bus services with a frequency of 4 buses per hour or more are considered in the analysis. The maximum distance from an origin to the first stop is 600 m. The maximum interchange distance is 400m. Walk speed is 4.8 km/h.*

5.2.2 Mode share

West Yorkshire residents make more trips per head than the England average, but travel fewer miles. Most of these trips are made by car, although its share had started to decline before the pandemic, in parallel with a substantial increase in walking. Bus usage is declining, but more bus trips per head are still made in West Yorkshire than nationally.

Mode share is a key indicator of the West Yorkshire Transport Strategy 2040. It is an indicator of not only people's travel needs, but of how the way we travel adapts to economic, technological, and social changes. Travel demand is relevant not only for the design of transport policies, but for other crucial policy areas; If we want to achieve the SEF priorities, we must guarantee access to opportunity for all groups, including those with no access to a car; we must also ensure necessary mobility does not impact negatively on the environment and the health of our residents, while making an efficient use of our transport infrastructure and the opportunities it offers for every transport mode.

Trip rates in West Yorkshire have continued to increase in recent years and have done so at a faster rate than the national average. In the period ending 2019, the average West Yorkshire resident made 1,016 trips per year, 44 more trips per head than the England average; although this is 3% lower than the previous year, it also represents an increase of 2% since 2012, compared with the nearly flat trend observed nationally.

In a context of reduced trips and distance travelled nationally, this higher mobility in West Yorkshire also contrasts with a lower distance travelled than the England average. In 2019, the average West Yorkshire resident travelled 5,880 miles, 10% less than the national average. The gap with England has increased notably in recent years, resulting in an overall reduction of 5% in the number of miles travelled between 2012 and 2019, compared with 2% in England over the same period (Figure 2).

Figure 76: Trends in trips per person and year, West Yorkshire and England (3-year rolling average)

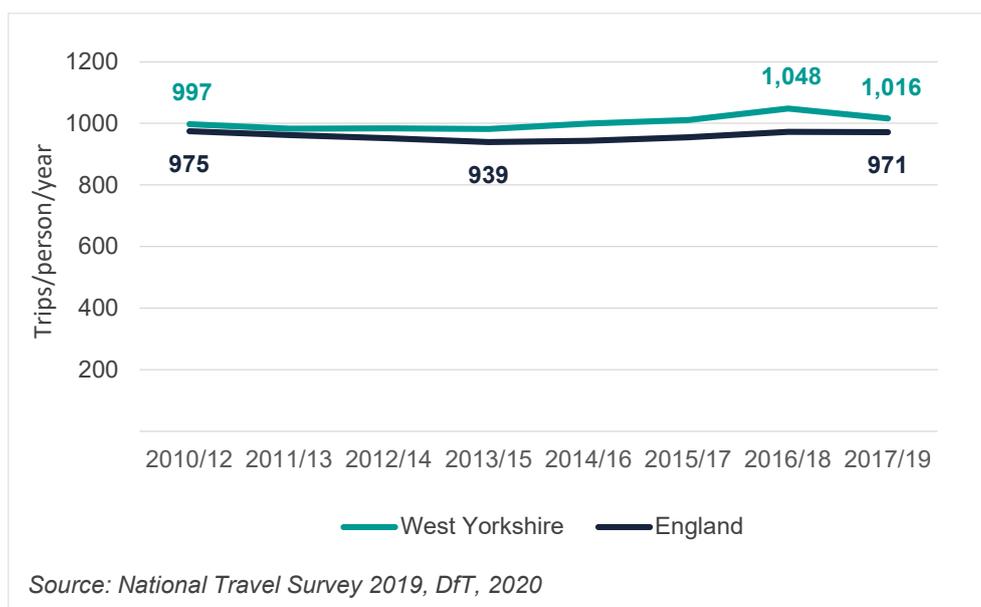


Figure 77: Trends in distance travelled per person and year, West Yorkshire and England

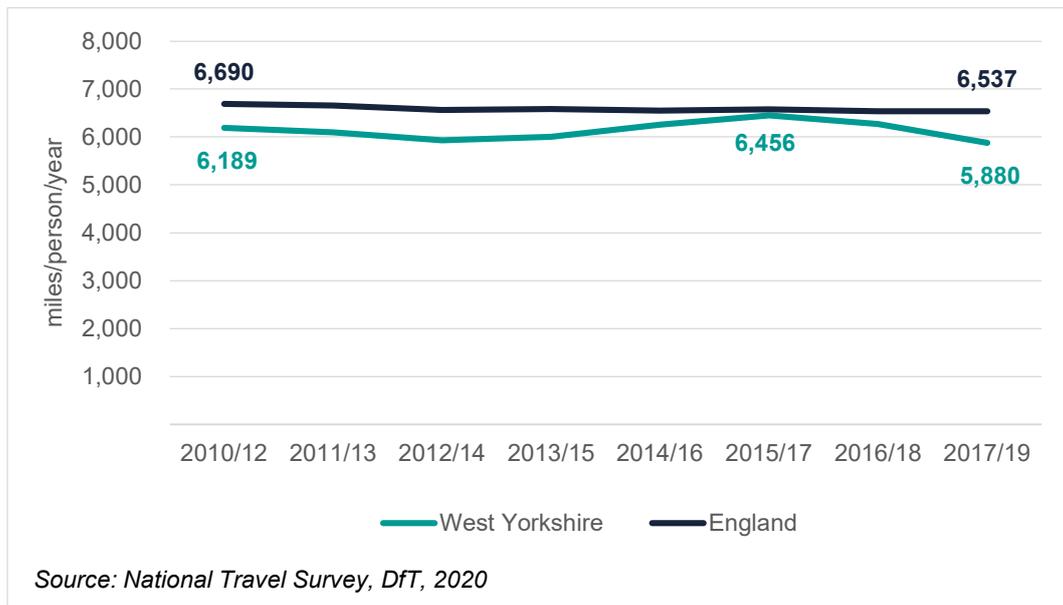


Figure 78: Average trips per person and year by mode, West Yorkshire and England (2017/19 average)

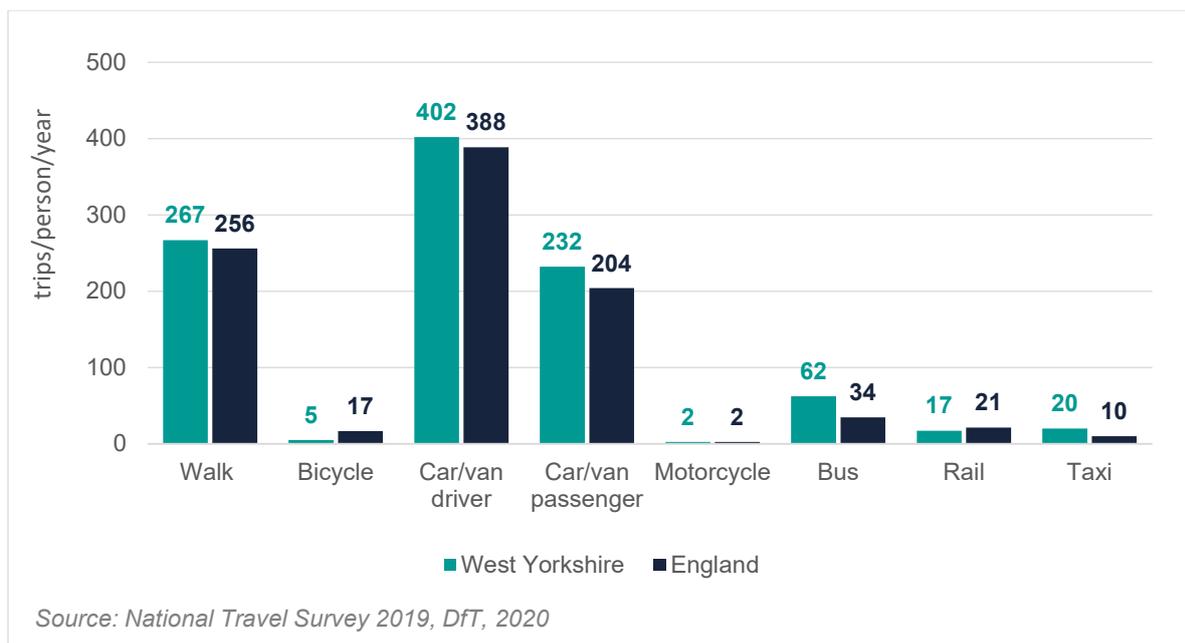
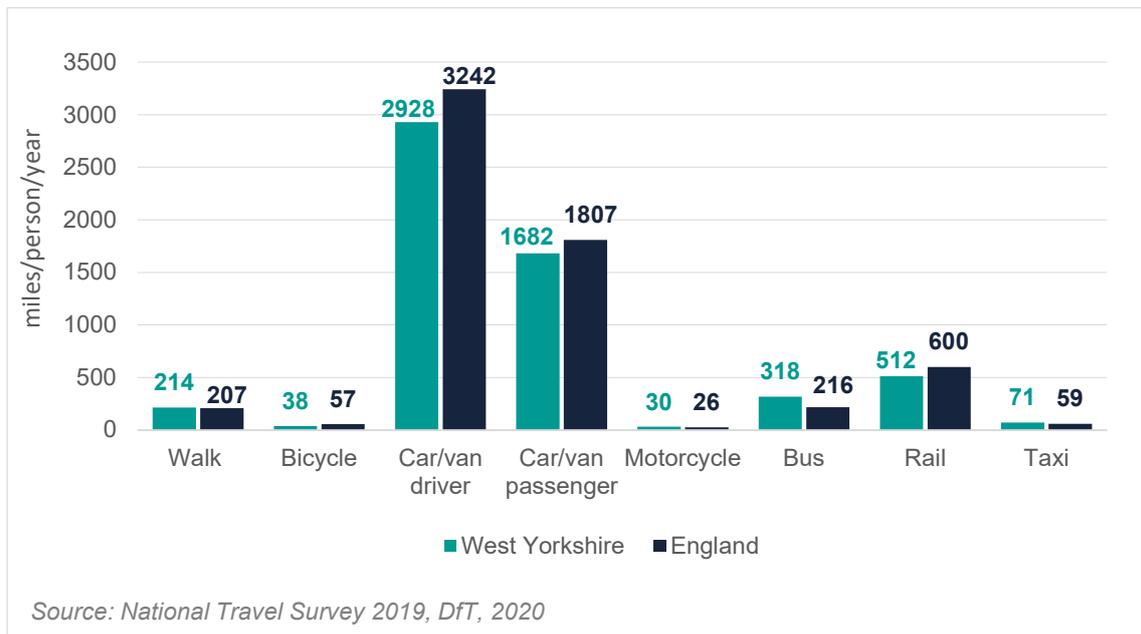


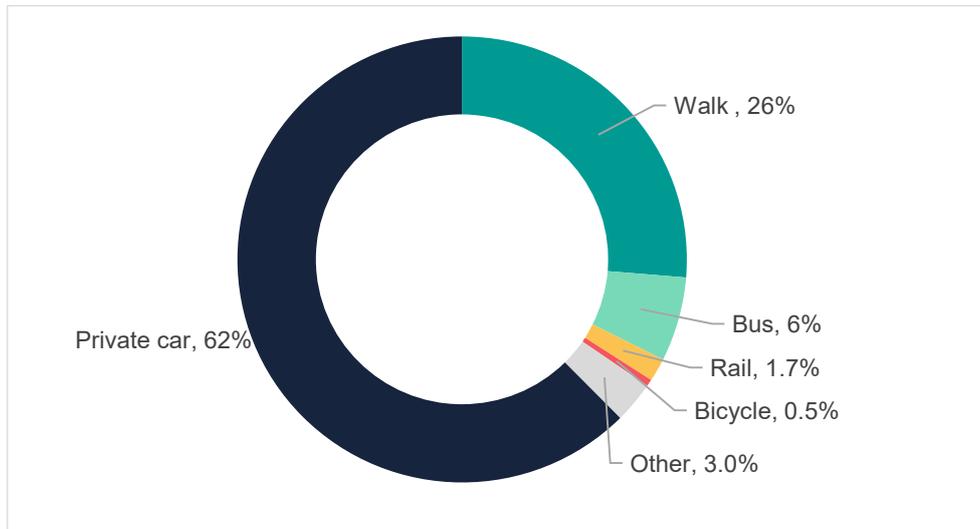
Figure 79: Distance travelled per person and year by mode, West Yorkshire and England (2017/19 average)



In line with West Yorkshire's aspirations to rebalance the transport network in favour of the most sustainable modes, the West Yorkshire Transport Strategy 2040 set ambitious targets for mode share. Three years after the adoption of the Strategy, we observe some change in the right direction, although this is still modest, and not consistent across modes:

- Car continues to be the predominant mode of travel, both in trips and distance. Although in 2019 its share was slightly higher than the national average of 61%, there has been a substantial reduction from the 2016 baseline, when 67% of all trips were made by car.
- Walking trips per head have continued to grow in recent years, leading to an increase of 4 percent points in the share of this mode since 2016. It is estimated that in 2019, 619 million trips were made on foot in West Yorkshire, more than doubling the 10% increase target set for 2027.
- In 2019, the average West Yorkshire resident made 62 trips by bus, 45% more than the English average. This represented 6% of all trips made in West Yorkshire, compared with a share of 3.5% in England outside London. But despite the relative strength that the bus still has in West Yorkshire, like elsewhere in the country it has suffered from a slow, constant decline in recent years; bus trips per head went down by 11% in the period from 2012 to 2019, and 4% since 2016.
- With 17 trips per head per year, rail represented 1.7% of all trips by West Yorkshire residents in 2019, a similar figure to that seen in England (2.2%). The COVID-19 pandemic put a halt to the substantial growth experienced by rail in West Yorkshire (18% between 2016 and 2019, compared to 4% in England for the same period).
- In 2019, bicycle trips represented just 0.5% of all trips made by West Yorkshire residents, compared with 1.7% in England. Moreover, the number of bicycle trips per head experienced a decline of 36% between 2016 and 2019, making the target of quadrupling trips from the 2016 baseline by 2027 extremely challenging.

Figure 80: Share of trips by mode, West Yorkshire, 2017/19 (3-year rolling average)



The data analysed suggest that the trend of fewer trips and distance travelled seen in England has started later in West Yorkshire than in other areas of the country. Although the higher mobility in West Yorkshire is partly compensated for by shorter distances travelled, there is also a higher dependence on the car for shorter distances than in other areas, with its negative effects for the environment and health of West Yorkshire's residents.

The above figures also show that the bus, an essential mode to meet the mobility needs of those with no access to a car, continues to be the most accessible form of public transport. Reversing bus decline is vital to achieve the SEF priorities, especially considering the risk that a bounce back of the car during the recovery from the pandemic can pose to the progress made to date.

Much ink has also been spilled about how the COVID-19 pandemic has impacted on travel behaviour and to which extent the trends that have emerged during this time will continue in the future. Interestingly, some of these trends, such as the growth in walking trips and the reduction in miles travelled, had to some degree started before the pandemic, which in some cases, has only accelerated a change that had already been anticipated (e.g., the substitution of a proportion of trips by higher use of information technologies and online services). If the pandemic has demonstrated something, it is that the most successful places are usually those that are able to seize on the opportunities to make progress towards their vision. The trends analysed here show that some advances have been made towards our Transport Strategy 2040 targets; to meet the SEF objectives, it will be important to tackle those areas where further change is needed without reverting the progress made to date.

About the data

Mode share data is taken from the National Travel Survey. This survey is designed to be representative of England's population and therefore, it has limitations when analysing lower-level geographies; 3 years of data have been combined to obtain a robust sample size for West Yorkshire, which we have compared with the 3-year rolling average in England for consistency in the analysis.

It must be noticed that the last survey was conducted in 2019 and therefore does not capture the effects of the COVID-19 pandemic.

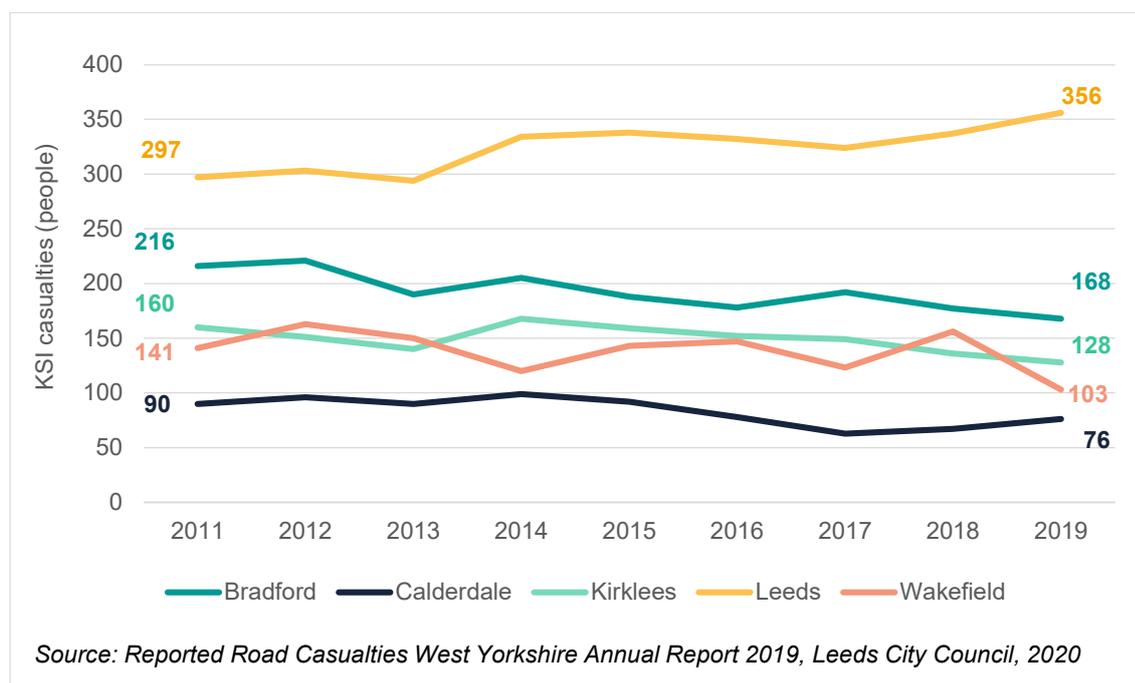
5.2.3 Killed or seriously injured casualties (KSI)

Absolute counts of KSI casualties in West Yorkshire show a declining trend in recent years (13% reduction since 2011¹, a similar decline to that seen in England). The number of KSI casualties per billion vehicle miles travelled has also decreased substantially (29% reduction since 2011), although it is still higher than the England average.

A key focus of our transport investment is to create clean, safe, healthy places for communities and businesses. Ensuring the safety of all users of our streets and highway network and reducing the risk of being killed or seriously injured on our roads is essential to this, in particular where people feel confident to walk or cycle more. There is also an important inclusion dimension since people who live in more deprived areas are at a greater risk than those living in affluent areas. Reducing the number of people killed and injured on our roads is therefore crucial to our priorities of delivering a 21st century transport systems, enabling inclusion and boosting productivity.

There were 831 KSI casualties in West Yorkshire in 2019, 5% less than in the previous year. KSI casualties also fell by 8% between 2011 and 2019, although with substantial differences between districts; whereas Bradford, Calderdale, Kirklees and Wakefield saw reductions in the number of KSI casualties between 2011 to 2019 (varying from 16% in Calderdale through to 27% in Wakefield), Leeds recorded an increase of 20% during the period.

Figure 81: KSI by West Yorkshire district and year, 2011-2019



About the data

Casualty data for West Yorkshire and partner districts have been taken from the Reported Road Casualties West Yorkshire Annual Report 2019 and is based on casualty figures recorded by the West Yorkshire Police. These figures, however, are not directly comparable with those recorded by other organisations, so when comparing national and MCA trends we have used adjusted KSI figures, as per the methodology developed by the

¹ As per DfT's adjusted KSI figures.

ONS Methodology Advisory Service and published by DfT. This is to account for changes in severity reporting across different areas at different points in time. Note that as a result, the figures reported from both sources may differ.

5.2.4 MCard Ticket Transactions (bus)

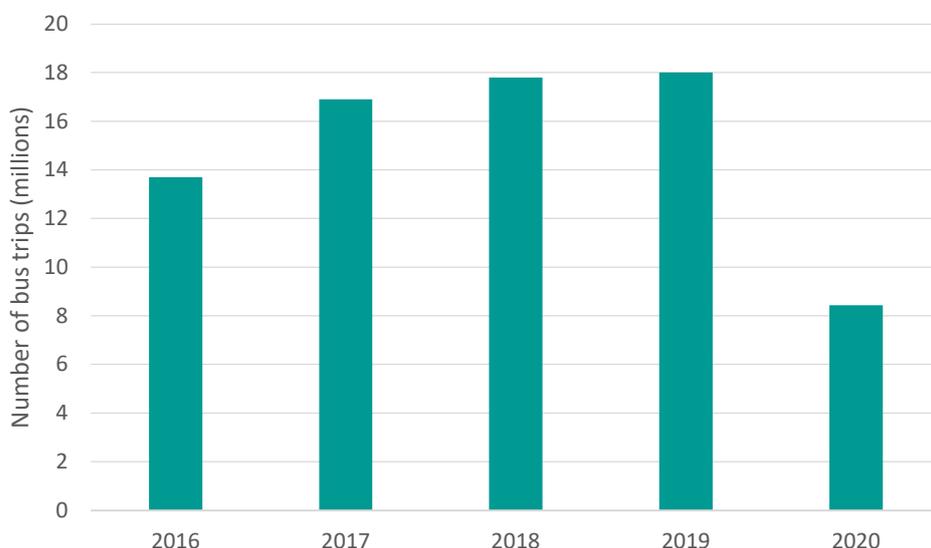
West Yorkshire's uptake of smart ticketing has been on an upward trend in recent years.

MCard is the multi-operator, multi-mode travel smartcard for West Yorkshire. The MCard makes it easier to pay for travel by public transport and is one of the biggest smartcard schemes of its kind outside of London.

The number of trips made using MCard products is an important measure of the take-up of smart ticketing technology which is part of efforts to plan and manage the transport network more effectively to transform the affordability, ease, and experience of passengers.

Before 2020 the number of trips made on buses using MCard products increased year on year from 2016 onwards during a time when overall trips on buses decreased in West Yorkshire. During 2019, the MCard was used for around 18m bus trips, prior to the significant impact on bus patronage in 2020 from COVID-19.

Figure 82: Bus Trips made using MCard Products



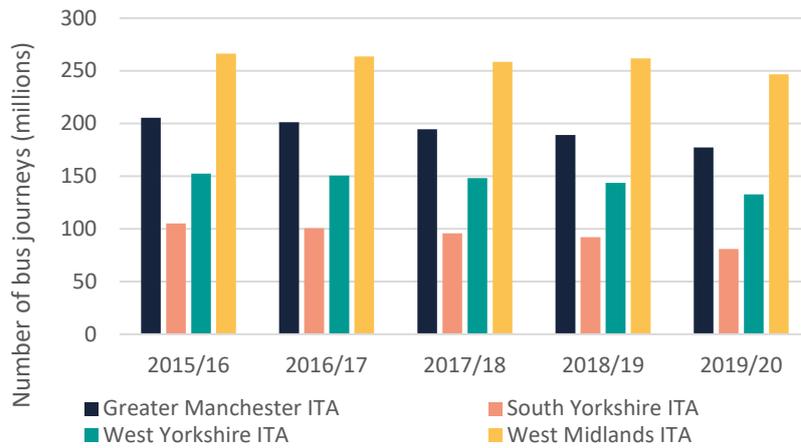
Source: WYCA NERO Reports

About the data

The data includes all bus trips made using MCard products (West Yorkshire Ticketing Company Limited Prepaid tickets) recorded in the data management and reporting system, NERO.

To set this in context, the total number of trips made on buses has fallen steadily in the last few years within West Yorkshire and other metropolitan areas.

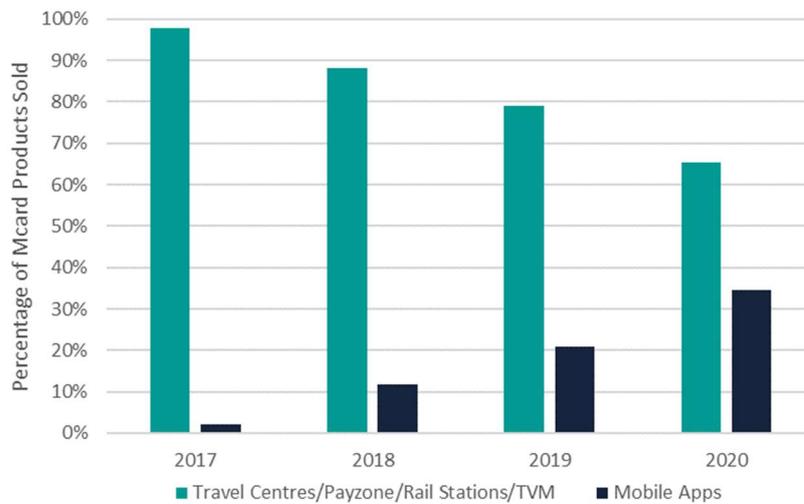
Figure 83: Trend in bus usage



Source: DfT Annual Bus Statistics

West Yorkshire has launched two free MCard mobile apps since 2017. The apps enable customers to buy and load travel tickets anytime, anywhere straight from their smartphone. The percentage of travel products bought via an app, rather than via a traditional outlet, had increased to 35% by 2020.

Figure 84: Percentage of MCard products issued through digital channels



Source: WYCA Dream Reports

5.2.5 Satisfaction with highway infrastructure

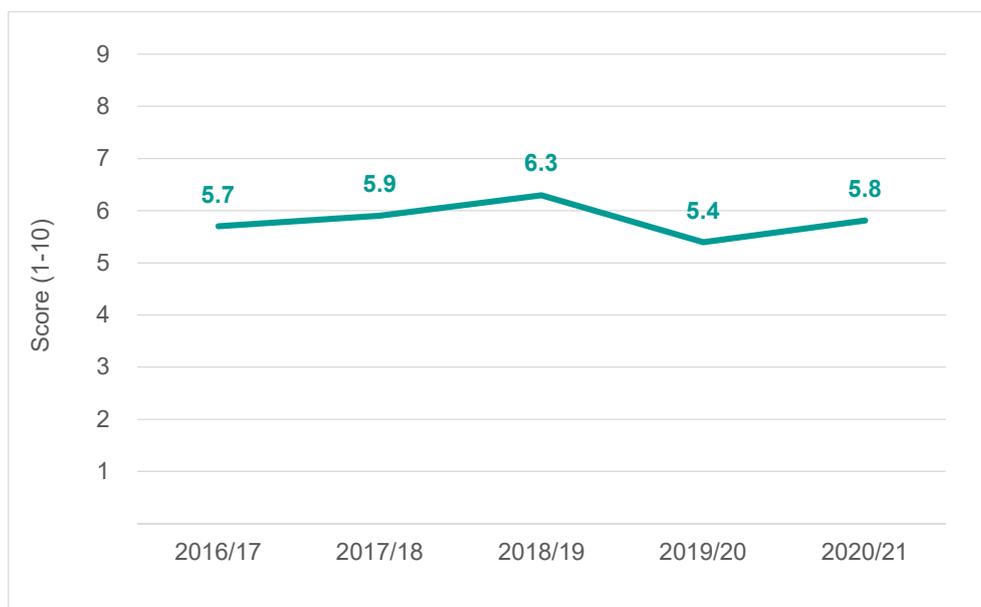
Satisfaction with highway infrastructure increased in 2020/21 compared to the previous year; however, with a score of 5.8 (out of 10), it is only 0.1 points higher than in 2016/17 (baseline).

Highway infrastructure is an essential public asset. It allows access to services and opportunities and the movement of goods. Well maintained streets and roads are safer and more comfortable for walkers, riders and passengers. They are also part of the visual landscape and contribute to create a sense of place.

In order to achieve the West Yorkshire Transport Strategy 2040's ambition to make best use of our infrastructure, we must ensure our assets are fit for purpose and managed in a safe, sustainable and cost-effective way, so that they are resilient into the future. One of the indicators used to measure progress towards this objective is public satisfaction, reflecting the impact that highway assets have on people's daily activities, and therefore, their perceptions of public infrastructure.

Historically, satisfaction with highway infrastructure has been low. The latest data show a slight recovery from 2019/20, when it was at its lowest since 2017. However, this represents a net improvement of just 0.1 points with respect to the West Yorkshire Strategy 2040 baseline value.

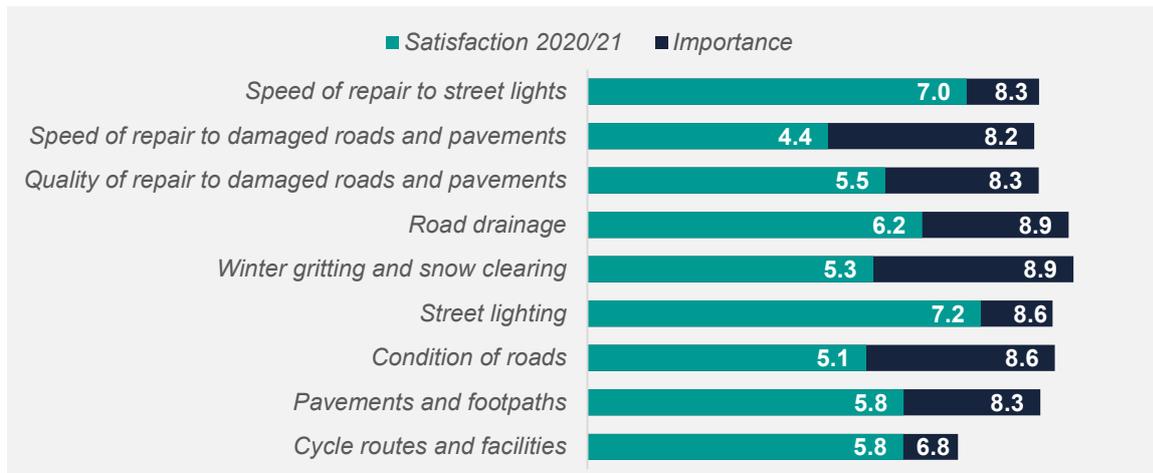
Figure 85: Satisfaction with highway infrastructure 2016/17 to 2020/21



About the data

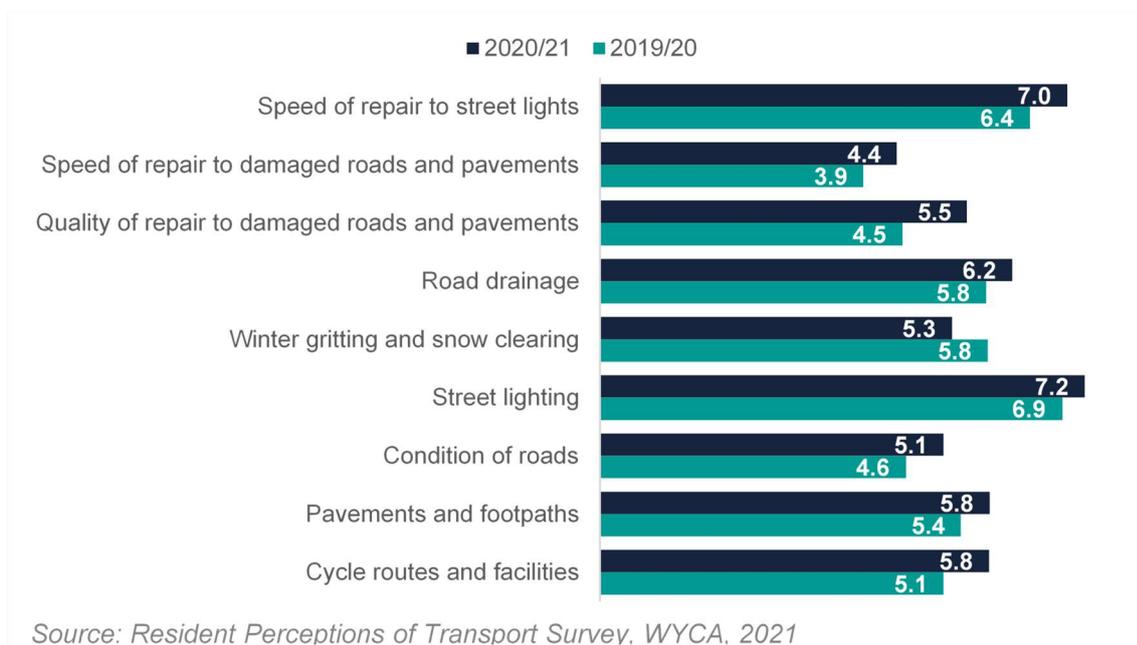
Satisfaction with different elements of asset maintenance is collected through the Residents' Perceptions of Transport Survey, an annual survey of perceptions of transport infrastructure, information and services conducted annually by the Combined Authority. The final score for satisfaction with highway infrastructure is obtained by weighting the individual scores for the different elements of highway maintenance, based on their importance to respondents.

Figure 86: Importance and satisfaction with the elements included in the indicator: 'satisfaction with highway infrastructure' (Score 1-10)



The improvement in satisfaction with highway infrastructure in the latest year is the result of an improvement in the majority of components of this indicator; only satisfaction with winter gritting and snow clearing is lower than in 2019/20. But despite this generalised increase, some elements barely achieve the 'pass' mark, or do not achieve it; this is the case for speed of repair to damaged roads and pavements, which scored 4.4 out of 10, and condition of roads (5.1 out of 10).

Figure 87: Change in scores for components of the highway infrastructure satisfaction, 2019/20 to 2020/21



Satisfaction with highway infrastructure has been historically low, with road maintenance elements typically having the lowest levels of user satisfaction. Main factors determining this outcome are a perception of both poor state of roads and pavements and lack of urgency in the repair of damaged infrastructure. This is a sensitive issue, where residents' expectations are high, as shown by the high importance attributed to most highway infrastructure items.

High standards of asset maintenance continue to be essential for the safety and efficiency of our networks, and more needs to be done to ensure not only this is the case, but residents perceive it as a reality.

5.2.6 Satisfaction with public transport

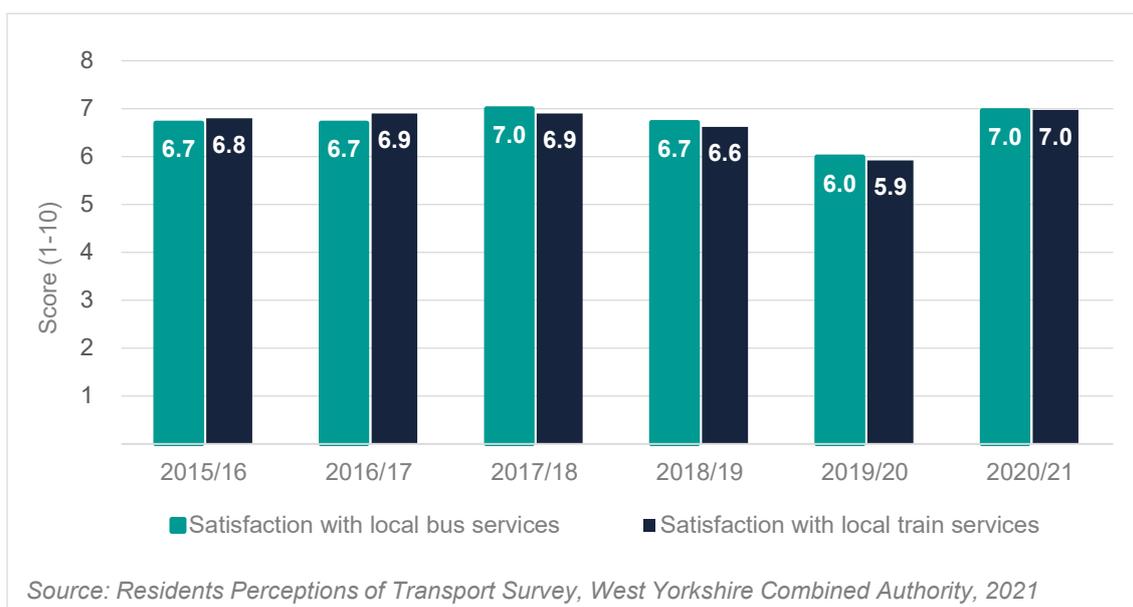
Satisfaction with public transport is good but does not reflect the degree of ambition of West Yorkshire's current transport policies.

Public transport is one of the five themes of the West Yorkshire Transport Strategy 2040. The Strategy states the Combined Authority's aim to "transform the performance, image and experience of public transport to make it an attractive choice for all". We have selected satisfaction with public transport as an indicator of the extent to which this objective is being realised, and which aspects might potentially require further attention.

Satisfaction with local public transport in West Yorkshire is relatively high, when compared with other transport items. After a decline in 2019/20, the latest survey shows a quick recovery, with bus and rail services obtaining scores of 7 out of 10, the highest achieved by both modes in recent years.

This increase in satisfaction is also remarkable considering it reflects pandemic conditions, in a year where public transport operation has been significantly impacted by the restrictions imposed by the COVID-19 response. More than ever, local bus and rail services have played an instrumental role in providing access to employment and essential services to many, and based on these results, our local public transport has responded to the challenge satisfactorily.

Figure 88: Satisfaction with local bus and train services



However, even if these results are good, satisfaction scores for local bus and rail services are not substantially different from those recorded in the past, suggesting more effort is required to realise the transformation the West Yorkshire Transport Strategy 2040 aims for.

About the data

Satisfaction with local bus and rail services is obtained from the Residents Perceptions of Transport Survey. This is a survey conducted annually by the Combined Authority, aimed at measuring public perceptions of aspects of transport infrastructure and passenger transport provision in West Yorkshire. The last wave of the survey, corresponding to the period 2020/21, was undertaken between the months of January and February 2021, to a sample of 1,800 respondents.

5.3 Implications of COVID-19

The number of trips we make and how we make these trips have been greatly impacted by the outbreak of the COVID-19 pandemic. From the first lockdown, people were encouraged to make only essential journeys and transport operators had to adopt strict social distancing measures in order to avoid the spread of the virus.

Public transport usage was decimated with the COVID-19 outbreak. In the months from March to December of 2020, rail and bus usage were 27% and 37% of pre-pandemic levels, meaning that without public support to keep these essential public services running, operations would not have been viable.

Car usage, although it was initially affected by the restrictions to non-essential travel, recovered relatively quickly, and in the months from March to December was 72% of the previous year.

Walking and cycling were the only forms of travel that have increased during the pandemic. In Britain, 34% more cycling trips were recorded from March to December of 2020, relative to the previous year, a trend that is confirmed by data from the West Yorkshire's COVID-19 Transport Survey. Thirty-three per cent of respondents to the fourth wave of this survey, conducted in late November, reported increased walking and cycling with respect to pre-pandemic levels (compared with 21% who reported walking and cycling less).

These dramatic changes have been in part the result of the closure of a part of the economy, but they would not have been possible without a radical change in the way people work, shop and access leisure activities in a very short period of time. Home working and access to an increasing number of remote services have become common for many. Before the pandemic, only 5% of Britons worked from home; by 14 June 2020, 49% had done so in the previous week, and the proportion remained at 40% in the week ending 29 March 2021.

The figures reported earlier also reveal the different speed at which different modes have recovered after the first lockdown and as more areas of the economy return to activity. Whereas bus usage recovered to levels of around 60% of 2019 in early Autumn, rail usage has not seen usage grow above 43% of pre-pandemic levels. This also reflects the two different markets bus and rail cater for, with rail users being more likely to work in city or office jobs, those that typically allow higher levels of home working.

There is still much debate about the extent to which these trends will continue in the future. Evidence suggests that among those who have been able to work remotely during the pandemic, there is a desire to continue to do so in the future; in West Yorkshire, 61% of respondents to the fourth wave of the COVID-19 Transport Survey found home working to be a positive experience, and 62% stated that in the long term, they would be likely to work from home more often than they did before the pandemic.

In the UK, employers expect the proportion of regular home workers to double, from 18% pre-pandemic to 37% post-pandemic. Companies are starting to plan what this will represent for their operation in the long term, and in spite of current uncertainty, many agree that the future will be a combination of remote work with office work (what has been named as 'hybrid working').

Shopping is the most common reason for travelling, and the way people shop has also transformed in the last year, with a shift towards online shopping that is also likely to last after the pandemic. These and other emerging trends –such as the increase in online services for leisure and recreation– are likely to reduce the amount of travel people make, independently of the mode they use. To this we must add suppressed travel demand due to the recession.

Public transport must also face specific challenges, particularly around restoring public confidence after more than a year in which people have received the message that public transport is unsafe and have been encouraged to use alternative options.

What seems clear, it is that public transport will not return to pre-pandemic conditions soon, and longer-term support from the Government will be needed for the recovery of these essential public services, not only because of their social value –60% of bus users and just under 60% of rail users during the pandemic reported not having an alternative for their journeys–, but because of the role public transport is intended to play in achieving the West Yorkshire Transport Strategy 2040’s objectives. However, there are still opportunities: we have seen a notable increase in walking and cycling, a shift sought by successive transport policies with varying degrees of success. The challenge now is to put the right measures in place for this change to be locked in and taken further once the restrictions imposed by the pandemic end.

6 Securing Money and Powers

Summary

West Yorkshire's devolution deal has given the region increased powers and resources to meet local needs.

One of the measures of success in exercising the devolved powers will be the region's ability to grow its economy and make an increased net contribution to HM Treasury.

Before the pandemic West Yorkshire was making a small positive net fiscal contribution, the only Combined Authority area in the North of England with a positive net fiscal balance.

The additional public expenditure and reduced tax receipts associated with the pandemic will have impacted on the region's fiscal balance but the previous performance against this indicator shows that West Yorkshire has the potential to make a positive contribution in future on the back of a strong economic recovery.

6.1 Overview of the priority

Empowering the region by negotiating a devolution deal and successfully bidding for substantial additional funds.

In March 2020 the West Yorkshire Combined Authority and the Leeds City Region LEP agreed a substantial devolution deal with government to unlock significant long-term funding of at least £1.8 billion and give our region greater freedom to decide how best to meet local needs. An elected West Yorkshire Mayor provides greater accountability in the exercise of these powers.

Prior to this, in 2014 Leeds City Region LEP and the Combined Authority secured a £1 billion-plus Growth Deal to make upgrades to transport, increase the supply of housing, invest in a skilled and flexible workforce, support the growth of businesses and build a resource-efficient region.

Further devolution of both investment and decision making is crucial for us to fully realise our vision for West Yorkshire. Greater independence over decision making allows us to better tailor policy to local conditions, coordinate better with our local partners and innovate more in policy making and service delivery.

6.2 Performance against the indicators

6.2.1 Net contribution of West Yorkshire to HM Treasury

West Yorkshire is the only combined authority in the North to make a net positive contribution to HM Treasury (albeit a small one). Public expenditure per head in West Yorkshire is low relative to comparator areas.

In securing devolved funding and powers, West Yorkshire is ultimately seeking to invest in and foster regional economic growth. This will lead to an increase in the tax contribution of the region's people and businesses relative to the level of public sector expenditure and establish West Yorkshire as a strong net contributor to HM Treasury.

The latest data available (for 2017/18) shows that West Yorkshire generates a small positive net contribution, with tax revenues slightly higher than expenditure.

Overall, West Yorkshire has a net positive difference of £4 per head of population between tax and expenditure. Although this is modest, West Yorkshire is the only combined authority in the North of England to make a positive contribution of this kind. As the chart shows, the comparator areas each have a substantial deficit between tax and expenditure.

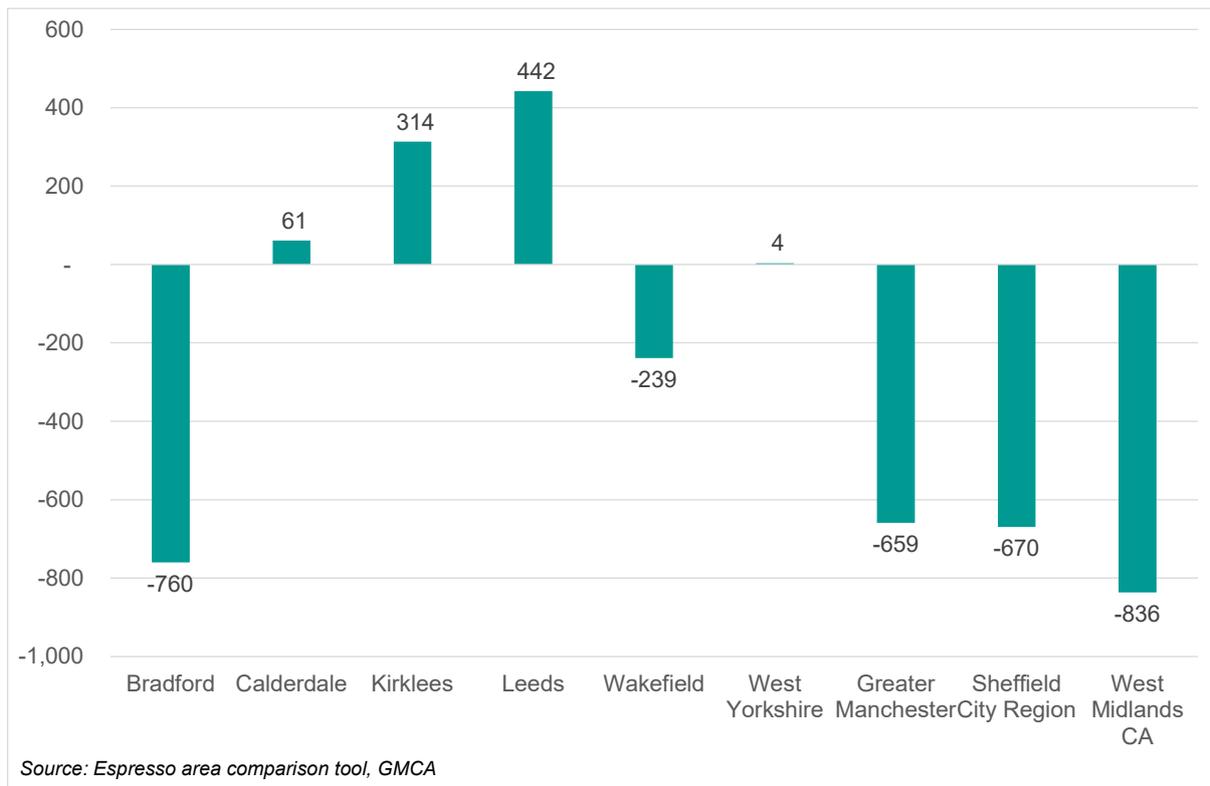
Data for previous years shows that West Yorkshire has improved its position over time. In 2015/16 it had a negative balance of -£528 per head and in 2016/17 a negative balance of -£180.

About the Data

The data underpinning this analysis is taken from Greater Manchester Combined Authority's [Espresso Area Comparison Tool](#), which provides consistent estimates of total expenditure by the public sector and total tax generated, per UK local authority district area.

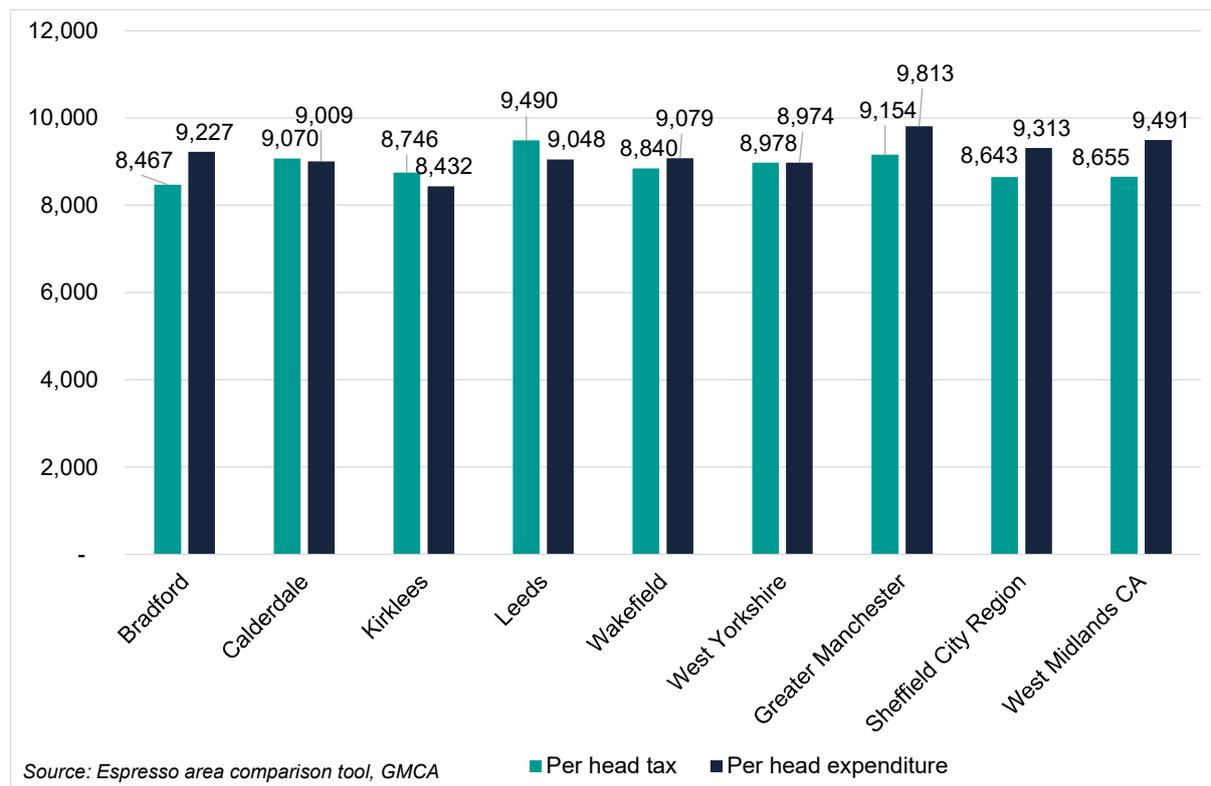
West Yorkshire's positive figure is small compared with some Combined Authority areas in southern England. For example, the net difference figure for Cambridgeshire and Peterborough is £1,944 and the figure for the West of England is £1,549.

Figure 89: Net difference per head between tax generated and public sector expenditure, 2017/18



Focusing on the local authorities of West Yorkshire, Bradford has a substantial negative net difference between tax and expenditure. Wakefield also has a negative net difference but on a smaller scale. However, these negative positions are offset by large net positive contributions by Leeds and Kirklees and a smaller one by Calderdale.

Figure 90: Per head tax and per head expenditure, 2017/18



Within West Yorkshire, tax generated per head is highest in Leeds, although its expenditure is also fairly high. Bradford has the lowest figure for tax generated per head, combined with the highest expenditure, hence the substantial deficit between the two, as noted above. Kirklees has the second lowest tax generated figure of the West Yorkshire local authorities but also has the lowest figure for public expenditure.

Overall, West Yorkshire generates less tax per head than Greater Manchester but the latter has much higher public expenditure. Sheffield City Region and West Midlands CA both have public expenditure per head that is higher than that of West Yorkshire but both generate less tax per head.

6.3 Implications of COVID-19 and Brexit

Although data are not yet available to quantify the impact of COVID-19 on West Yorkshire's net fiscal balance, it seems clear that the crisis has had a large influence on the public finances.

Across the UK, there has been a substantial reduction in tax revenue at local level including from business rates and council tax combined with a reduction in central government tax receipts, including VAT and Fuel Duty.

Public sector current expenditure has increased significantly, including spend on coronavirus job support schemes. Local authorities report additional expenditure due to COVID-19, including spend on adult social care and public health (testing, contract tracing) among other items.

This implies that local areas, including West Yorkshire, have seen a general deterioration of their net fiscal position. A strong and sustained economic recovery will be required if this is to be addressed.

7 Conclusions

West Yorkshire has seen positive progress against many of the headline indicators considered in this report in recent years, although the timeliness of the available data mean that we cannot always fully assess the impact of the current health crisis.

Putting that progress into context, in many cases the rate of improvement is not enough to narrow the gap with the national average and improve the relative position of West Yorkshire, which is fundamental to the ambitious SEF Vision.

It is important to recognise that the local authorities within West Yorkshire have seen varying performance across the range of indicators. In particular, the strong private sector growth enjoyed by Leeds has contributed to relatively positive performance on a number of economic indicators, including GVA per head, productivity and growth in the size of its business base. But other local authorities can also point to positives; for example, Calderdale's economy has seen the fastest rate of growth of any in West Yorkshire in recent years.

Delivering 21st Century Transport

Progress has been made in improving the ability of transport to support the development of a growing, inclusive economy.

There has been an improvement in the ability of the transport system to connect people from deprived communities to jobs via the bus network.

Shifts in mode share towards active travel and away from car use support progress towards our net zero commitment and offer the potential for a more efficient and reliable road network, with reduced congestion and delay for all users.

Nonetheless, West Yorkshire still has a strong reliance on the car for travel and carbon dioxide emissions from transport have proven less susceptible to reductions than other sectors of the economy.

COVID-19 has had a huge impact on transport. There is uncertainty about the future role of the public transport system but inclusive and affordable transport services will play a key role in supporting the economic recovery.

There is an opportunity to consolidate the changes in travel choices seen under lockdown and support a shift away from carbon-intensive travel to sustainable modes as the economy recovers and grows, to meet the challenge of becoming a net-zero carbon region by 2038.

Boosting productivity

Along with most comparable regions in the North, West Yorkshire has seen limited progress on the central indicator of productivity growth. This is a fundamental issue for the region since improvements in productivity are the main source of economic growth, increased prosperity and better living standards.

Nonetheless West Yorkshire has seen steady economic growth in recent years and has become more prosperous based on the key indicator of GVA per head. It seems that a major contributor to this has been an expansion in the number of people in employment rather than workers becoming more productive in their jobs.

West Yorkshire needs to make substantial progress on the key enablers of productivity, including innovation, international trade and higher-level skills. A major area of progress has been the strong growth seen in the region's exports of services. The medium to longer term impact of changes to the UK's trade arrangements with the EU following Brexit bring added uncertainty to the outlook for West Yorkshire's productivity performance.

The region has reduced the gap with the national average on the proportion of people with higher level qualifications but needs to build on and consolidate this progress, since there is a strong correlation between skills and productivity performance across local economies.

West Yorkshire's performance on digital connectivity is largely positive in terms of the coverage and availability of mobile and fixed networks. This will be central to the region's future productivity potential. However, it is not sufficient for services to be available - take-up needs to increase. This is reflected in the relatively low per person download volumes in West Yorkshire. This is an inclusive growth challenge, with affordability and lack of digital skills among the barriers limiting adoption of these technologies in West Yorkshire.

Enabling inclusive growth

In order to deliver inclusive growth, we need to maximise opportunities for people from all groups to participate in the economy, primarily through quality employment, but also to ensure that everyone can reap the benefits of growth in the form of decent living standards. There is much progress that needs to be made across a range of fronts to realise this aim.

Overall participation in employment (reflected in the employment rate) was growing strongly prior to the COVID-19 outbreak but even at that point there were exclusion challenges for some groups. There is a risk that progress achieved in narrowing employment rate gaps for the disabled and ethnic minority groups will be set back by the effects of the pandemic.

Inclusive growth requires that people have access to quality employment, but most of West Yorkshire underperforms the national average against a composite measure of job quality. The proportion of jobs that pay below the 'real living wage' is falling but remains substantial.

The impact of relatively low average earnings and incomes in West Yorkshire is offset by low living costs, particularly with regard to housing, including housing affordability and rental costs. However, low housing costs reflect low quality housing in some cases and investment in the region's housing stock remains a priority, particularly from the perspective of meeting the net zero target.

Access to skills is central to improving career prospects, reducing inequality and promoting social mobility. This area has long been a key weakness for West Yorkshire. Recent progress on reducing the proportion of people who lack formal qualifications or are qualified at a low level has improved the region's relative position with the national average. However, the impact of the pandemic on the skills system, reflected in the apprenticeships and NEET indicators threatens to disrupt access to skills into the medium-term.

West Yorkshire's position on inclusive growth is perhaps best encapsulated in its relatively low life expectancy and the wide inequality in life expectancy seen in parts of the region.

Tackling the climate emergency

West Yorkshire's performance on carbon dioxide emissions is mixed. Per capita emissions are relatively low although the emissions intensity of the region's economy is slightly above the national average. The level of emissions is falling, but at a slower rate than some other parts of the country.

The challenge of achieving net zero by 2038 remains huge and will demand additional action and behaviour change on a considerable scale. The current direction of travel will only yield a small fraction of the reduction in emissions that is required. Meanwhile, the impact of climate change is likely to grow, with parts of West Yorkshire vulnerable to the effects of increased flooding.

Securing money and powers

The SEF's priority on Securing Money and Powers is essentially an "enabling" priority that underpins the SEF vision and the four other priorities. Devolved powers and resources are essential for bringing about the transformation of the local economy that is envisaged in the SEF. To justify additional money and powers it is important to demonstrate that investment in the region is generating a positive return, including through a net positive fiscal contribution to the Exchequer. The most recent data available suggests that prior to the pandemic West Yorkshire had a small positive net balance, in spite of receiving lower levels of public investment than comparator areas with negative balances. Although it is likely that the situation will have been disrupted by the effects of the pandemic, this performance demonstrates the future potential of the region and the importance of achieving a strong economic recovery.

Technical Appendix

Overview of State of the Region indicators

Strategic Priority (1)	Strategic Priority (2)	Related policy	Indicator title	Description	Rationale	Source	Latest available at time of writing	Frequency	Geography for which data is available
Boosting Productivity	Inclusive Growth	Business growth	Economic output (GVA)	Gross value added (balanced) at current basic prices	Shows trend in overall size of local economy	ONS Regional gross value added (balanced) per head and income components release	2019	Annual	District
Boosting Productivity	Inclusive Growth	Business growth	Economic output (GVA) per head	Gross value added (balanced) per head of population at current basic prices	Key indicator of local prosperity	ONS Regional gross value added (balanced) per head and income components release	2019	Annual	District
Boosting Productivity	Inclusive Growth	Employment and Skills	Employment rate	% of 16-64 resident population in employment	Shows extent to which local residents are in jobs.	Annual Population Survey	Jan - Dec 2020	Quarterly	District
Boosting Productivity	Inclusive Growth	Business growth	Productivity	Nominal gross value added per hour worked	Key indicator of local productivity performance	ONS Subregional Productivity release	2019	Annual	District
Boosting Productivity	Inclusive Growth	Business growth	Private sector businesses	Number of private sector workplaces per 1,000 resident population	Key indicator of vitality and resilience of local economy	ONS UK business: activity, size and location	2020	Annual	District
Boosting Productivity	Inclusive Growth	Business growth	Business birth rate	Proportion of active businesses that began trading in reporting year	Key indicator of level of business start-ups and entrepreneurial activity	ONS Business Demography	2019	Annual	District

Strategic Priority (1)	Strategic Priority (2)	Related policy	Indicator title	Description	Rationale	Source	Latest available at time of writing	Frequency	Geography for which data is available
Boosting Productivity	Inclusive growth	Business growth	Businesses engaging in innovation activity	% of businesses in the area that have engaged in innovation, including new / improved products or services, new technologies, knowledge transfer etc	Shows extent to which businesses are engaging in the innovation that is crucial to productivity growth	Leeds City Region Business Survey	2020	Annual	District
Boosting Productivity		Innovation	Goods / services exports as % of GVA	Value of i) goods and ii) services exports expressed as a proportion of total GVA	Shows contribution of international trade to local economy - trade plays a key role in driving productivity growth	HMRC - Regional trade in goods statistics (2019) and International Trade in Services Survey (2018)	2018 and 2019	Annual	District
Boosting Productivity	Inclusive Growth	Culture	Cultural sector contribution to employment	% of jobs that fall within cultural activities	Shows contribution of cultural sector to local economy	Business Register and Employment Survey	2019	Annual	District
Boosting Productivity	Inclusive Growth	Employment and Skills	% qualified at level 4 and above	% of population aged 16-64 with highest qualification at Level 4 and above	People qualified at tertiary level are key to driving innovation and productivity growth	ONS Annual Population Survey	Jan - Dec 2020	Quarterly	District
Boosting Productivity	Inclusive Growth	Digital	Gigabit capable internet coverage	Full-fibre coverage (% premises connected - FTTP or FTTH)	Shows availability of full-fibre connectivity across the area	Thinkbroadband	2021	Real time	District

Strategic Priority (1)	Strategic Priority (2)	Related policy	Indicator title	Description	Rationale	Source	Latest available at time of writing	Frequency	Geography for which data is available
Boosting Productivity	Inclusive Growth	Digital	Take-up of superfast (or above) broadband services	% of properties that use superfast or ultrafast (at least 300 Mbit/s) services in areas where at least superfast broadband is available	Shows whether homes and businesses are taking up the broadband service that is available - important measure of digital inclusion	Ofcom, Connected Nations report	2020	Annual	District
Boosting Productivity	Inclusive Growth	Digital	Mobile coverage (4G and 5G)	% of areas with access to good 4G and 5G mobile coverage (indoors)	Shows availability of good mobile coverage - key to local economy and digital inclusion	Ofcom, Connected Nations report	2020	Annual	District
Inclusive Growth	Boosting Productivity		Life expectancy	Life expectancy by sex Inequality in healthy life expectancy at birth	Shows inequalities within local authorities, enabling a focus on the deprivation that exists at small area level.	Life expectancy for local areas of the UK: between 2001 to 2003 and 2017 to 2019 ONS Health Expectancies at birth by Middle Layer Super Output Areas	2019	Annual	District
Inclusive Growth	Boosting Productivity	Employment and Skills	Employment rate gap for disadvantaged groups	Proportion of people in employment (aged 16-64) in disadvantaged groups (disabled, BAME, aged over-50) versus overall employment rate	Shows extent to which key groups are disadvantaged in the local labour market	ONS Annual Population Survey	Jan - Dec 2020	Quarterly	District

Strategic Priority (1)	Strategic Priority (2)	Related policy	Indicator title	Description	Rationale	Source	Latest available at time of writing	Frequency	Geography for which data is available
Inclusive Growth		Employment and Skills	Unemployment rate (16+)	Proportion of labour force aged 16+ who are unemployed and actively seeking and available for work	Shows performance of local economy in providing employment for local residents	ONS Annual Population Survey – model-based estimates of unemployment	Jan - Dec 2020	Quarterly	District
Inclusive Growth	Boosting Productivity		Gross disposable household income	Gross disposable household income per head	A key indicator of material welfare - reflects amount available to spend or save after taxes have been paid and benefits received.	ONS Regional Accounts	2018	Annual	District
Inclusive Growth	Boosting Productivity	Employment and Skills	Jobs paying below Real Living Wage	% of local jobs that pay below the Living Wage Foundation's Real Living Wage threshold	Shows the extent to which local jobs pay sufficient amount to allow a decent standard of living	Annual Survey of Hours and Earnings (ASHE)	2020	Annual	District
Inclusive Growth	Boosting Productivity	Employment and Skills	% of employees in quality work	% of employees who have good hours, a desired contract type, and are not in low pay	Shows extent to which local workers are in "good" jobs	ONS Job quality indicators in the UK	2018	Annual	District
Inclusive Growth	Boosting Productivity	Employment and Skills	% qualified below level 2 or no qualifications	% of population aged 16-64 with highest qualification below level 2 or no formal qualifications	Low skilled people are at a significant disadvantage in labour market in terms of employability and pay	ONS Annual Population Survey	Jan - Dec 2020	Quarterly	District

Strategic Priority (1)	Strategic Priority (2)	Related policy	Indicator title	Description	Rationale	Source	Latest available at time of writing	Frequency	Geography for which data is available
Inclusive Growth	Boosting Productivity	Employment and Skills	Apprenticeship starts	Number of people starting an apprenticeship each academic year	Shows availability of apprenticeships - which are known to offer sustainable career opportunities for individuals and at same time a mechanism for employers to address skills needs	Department for Education FE Data Library	2019/20	Annual	District
Inclusive Growth	Boosting Productivity	Digital	People without basic digital skills	Proportion of people who lack digital skills needed to operate in society and / or the workplace	Digital skills increasingly important for majority of jobs and as ingredient for social inclusion	UK Consumer Digital Index	2020	Annual	Yorkshire and Humber
Inclusive Growth	Boosting Productivity	Employment and Skills	NEETs	Percentage of 16-17 year olds NEET or activity not known	Shows extent of exclusion among young people	Department for Education NEET - and participation: local authority figures	2020/21	Annual	District
Inclusive Growth		Housing and regeneration	Net additional dwellings	'Net additional dwelling' - local authority estimates of gains and losses of dwellings during each year	Shows trends in housing supply - delivering additional homes is a priority in Housing Vision	West Yorkshire local authorities; Live tables on housing supply: net additional dwellings, MHCLG	2020	Annual	District
Inclusive Growth		Housing and regeneration	Housing affordability	Ratio of lower quartile house price to lower quartile earnings	Shows affordability of local house prices for low paid - key component of living costs	House price statistics for small areas in England and Wales (ONS) and Annual Survey of Hours and Earnings (ASHE)	2020	Annual	District

Strategic Priority (1)	Strategic Priority (2)	Related policy	Indicator title	Description	Rationale	Source	Latest available at time of writing	Frequency	Geography for which data is available
Inclusive Growth		Housing and regeneration	Rented housing costs	Median monthly rents for private sector two-bedroom properties	Shows trend in rental costs as part of understanding changes in overall living costs	Private rental market summary statistics in England, ONS	2020	Annual	District
Inclusive Growth	Tackling the Climate Emergency	Energy; housing and regeneration	% of households in fuel poverty	Proportion of households in fuel poverty, based on Low Income Low Energy Efficiency (LILEE) indicator,.	Fuel poverty is a key challenge from point of view of inclusion and energy efficiency	Fuel poverty sub-regional statistics (BEIS)	2019	Annual	District
Tackling the Climate Emergency	Inclusive Growth	Energy	CO2 emissions (ktCO2)	Carbon dioxide emissions estimates at local authority level	Enables us to assess progress in reducing local carbon emissions towards net zero target.	UK local authority and regional carbon dioxide emissions national statistics (BEIS)	2019	Annual	District
Tackling the Climate Emergency	Boosting Productivity	Energy	CO2 emissions (ktCO2) by sector	Contribution of different sectors of local economy to total carbon emissions	Enables us to provide targeted focus to emissions reduction measures.	UK local authority and regional carbon dioxide emissions national statistics (BEIS)	2019	Annual	District

Strategic Priority (1)	Strategic Priority (2)	Related policy	Indicator title	Description	Rationale	Source	Latest available at time of writing	Frequency	Geography for which data is available
Tackling the Climate Emergency	Boosting Productivity	Energy	Emissions intensity ratio	Ratio of carbon emissions to gross value added	Shows progress in decarbonising the economy and fostering clean growth	UK local authority and regional carbon dioxide emissions national statistics (BEIS); and Regional gross value added (balanced) per head	2019	Annual	District
Tackling the Climate Emergency	Inclusive Growth	Green and Blue Infrastructure Strategy	Access to greenspace	Proportion of the population who have access to local greenspace; that is, they live within 300m (As the crow flies) of an area of accessible natural greenspace of at least 2 hectares in size	Providing everybody with easy access to these assets is central to vision of Green and Blue Infrastructure strategy, in order to promote a strong economy, a sustainable environment and outstanding quality of life.	Natural England	2021	TBC	District
Tackling the Climate Emergency	Inclusive Growth	Energy; housing and regeneration	Building energy efficiency	Average Energy Performance Certificate rating of domestic properties	Shows energy efficiency performance of domestic sector	Live tables on Energy Performance of Buildings Certificates	2020	Quarterly	District
Tackling the Climate Emergency	Inclusive growth	Flood	Premises at risk of flooding	Number of homes and commercial units by likelihood of flooding	The risk of flooding is a significant issue facing many business and resident properties across the area	Environment Agency	2021	Continuous	District

Strategic Priority (1)	Strategic Priority (2)	Related policy	Indicator title	Description	Rationale	Source	Latest available at time of writing	Frequency	Geography for which data is available
21st Century Transport	Inclusive Growth	West Yorkshire Transport Strategy; Bus; Connectivity;	Access inequality ratio (employment)	Ratio of jobs that can be accessed within 30 minutes by bus compared with those accessible by car, from the 10% most deprived neighbourhoods in West Yorkshire	Shows accessibility of jobs for people in deprived communities who are reliant on bus network.	Accessibility analysis using TRACC software Deprivation: English Indices of Deprivation Jobs: Business Register and Employment Survey Road Network (ITN): Ordnance Survey	2019/20	Annual	West Yorks
21st Century Transport	Inclusive Growth	West Yorkshire Transport Strategy; Active Travel; Future Mobility; Rail	West Yorkshire mode share	Average number of trips / distance travelled by mode by WY residents, based on NTS trip rates	Shows how WY residents travel, and whether the strategy is successful in removing barriers to access the WY road network by modes other than car.	National Travel Survey	2017/19	Annual	West Yorks
21st Century Transport	Inclusive Growth	West Yorkshire Transport Strategy; Active Travel	Reported road casualties	Total killed or seriously injured casualties in the West Yorkshire area.	This indicator captures how network management improvements and provision of facilities for most vulnerable users (cyclists, pedestrians, motorcyclists) reflects on safety.	Department for Transport	2019	Annual	District

Strategic Priority (1)	Strategic Priority (2)	Related policy	Indicator title	Description	Rationale	Source	Latest available at time of writing	Frequency	Geography for which data is available
21st Century Transport	Inclusive Growth	West Yorkshire Transport Strategy; Bus; Rail	Public satisfaction with bus and rail services in the region	Satisfaction scores for local bus and rail services as per the West Yorkshire Public Perceptions of Transport Survey	Direct input from the public is essential to know how changes to transport system are perceived, and which aspects need improvement.	West Yorkshire Public Perceptions of Transport Survey	2020/21	Annual	District
21st Century Transport	Inclusive Growth	West Yorkshire Transport Strategy; Bus	MCard ticket transactions (bus)	Annual number of bus trips made using MCard products	Shows take-up of smart ticketing technology - part of efforts to plan and manage transport network more effectively in order to transform the affordability, ease and experience of passengers.	Analysis of SCIP database for MCard transactions	2020	Annual	District
21st Century Transport	Inclusive Growth	West Yorkshire Transport Strategy	Satisfaction with highway infrastructure	Average weighted satisfaction score (by importance) of infrastructure maintenance items, such as condition of roads, quality of street lighting etc	Direct input from the public is essential to know how performance of transport system is perceived, and which aspects need improvement.	West Yorkshire Public Perceptions of Transport Survey	2020/21	Annual	District
Securing money and powers			Net contribution of local area to exchequer	Balance between taxes and public spending attributable to West Yorkshire	Ambition is to make area a net contributor to national economy	Espresso Tool, Greater Manchester Combined Authority	2017/18	TBC	District

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