State of the Region 2020

Riley, Bec

West Midlands Combined Authority

State of the Region 2020 Full Report

Prepared by the

West Midlands Regional Economic Development Institute Partnership (WMREDI)

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UNIVERSITY OF BIRMINGHAM | BIRMINGHAM BUSINESS SCHOOL
WM REDI
CITY REDI
UKRI Research England
West Midlands Combined Authority

About WMREDI

WMCA along with other regional partners have given support to a recently funded research institute in the region. WM-REDI will be a catalyst for a step-change in regional collaboration. Alongside funding from UKRI's Research England and the matching funds from the University of Birmingham, we have secured matched funding from the leading regional stakeholders involved in planning and delivering growth policies. This will be a shared collaborative approach to research and evidence in the region, as such all partners can utilise the structure to deliver research and data activities.

Key partners are:

- West Midlands Combined Authority (WMCA)
- GBS Chamber of Commerce
- Business and Professional Services consortium (BPS)
- West Midlands Growth Company (WMGC)
- Greater Birmingham and Solihull Local Enterprise Partnership (GBS LEP)
- The Black Country Consortium Ltd.
- The Coventry and Warwickshire Local Enterprise Partnership (C&WLEP)
- Aston University
- Birmingham City University (BCU)
- Other partners include Birmingham City Council and the other local authorities in the West Midlands metropolitan area, the Midlands Engine and the University of Warwick.

With special Thanks to the Black Country Consortium Economic Intelligence Unit for their significant contribution to this work

Black Country Consortium

Economic Intelligence Unit

Foreword

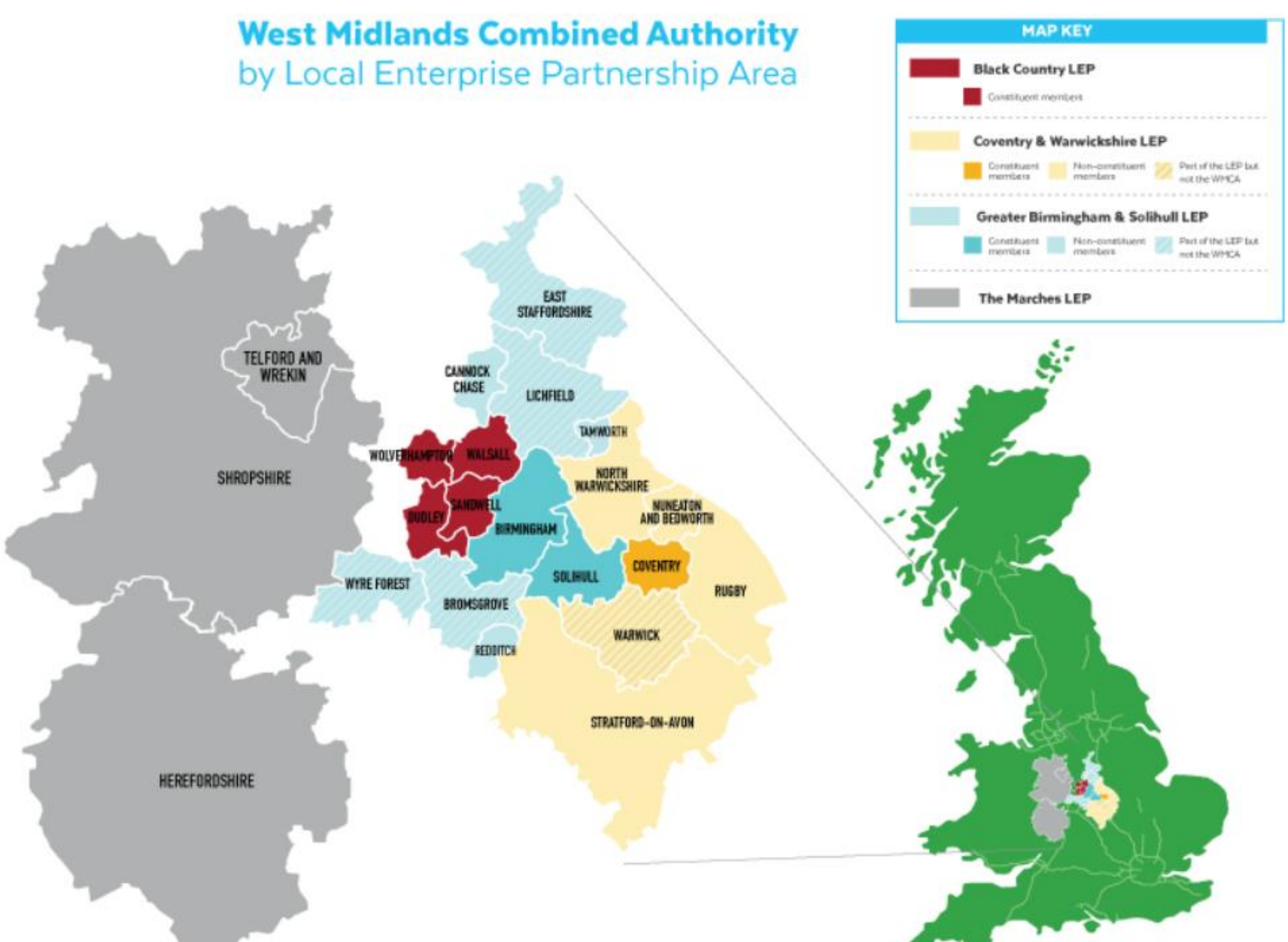
Welcome to State of the Region 2020 – the fourth annual review of performance across the West Midlands, In this edition we had already begun the process of moving to a wider analysis focussing on alignment to monitoring the Sustainable Development Goals (SDGs). This report is written on behalf of the West Midlands Combined Authority and all its partners, it should be seen as a stocktake of where the region stands, it's a snapshot on where we are doing well and where we need to work together to improve the region. But this year it is produced in extraordinary circumstances it's a call to action for everyone invested in the West Midlands. It is important to note this report was written in June 2020 and that some of the data included changes on a weekly basis. Latest data will be found in the weekly monitors as circumstances unfold.

It endeavours to be an honest reflection of the current regional condition, highlighting the challenges we face. However, we are not attempting to suggest what the solutions are; this lies within strategies and action plans the WMCA and partners own and deliver. It highlights how we are driving our evidence base for the future and continuing to build our understanding of the performance of the region. There are challenges to understanding this performance and how we change places for the better, not least understanding the causation and causality between action, output and outcomes. This document provides a balanced approach to regional monitoring and a useful tool understand the progress we are making through our combined action.

The statistics used in the performance monitoring section of the report predominantly cover periods prior to the current Coronavirus pandemic due the lagging nature of annual reporting.

The data used is accurate as at end of June 2020.

Unless otherwise stated the data relates to the West Midlands Combined Authority region covered by the 3 LEP geography.



Contents

Executive Summary

The West Midlands is one of the largest conurbations outside London, its central location puts it at the heart of the UK's transport networks and international connections. The region was one of the most prosperous areas of the UK until the 1970/80s, and in the last 5 years it has been experiencing a resurgence of that power on the back of the growth in the business and professional services sector; technology driven manufacturing and city centre construction growth; thriving city centre based international business and professional services sector which was driving high levels of business tourism; a manufacturing base becoming more productive and an automotive sector responding to the challenge of a carbon neutral future; high exports, foreign direct investment and strong international links, and the biggest higher education cluster outside London. The region broke through the £100bn GVA barrier and had been bucking the national trend on a host of economic indicators, such as enterprise and employment growth. All this was powered by a young workforce, increasing its skills and moving to the region. However, underlying this growth there were significant issues with inequality, poverty, youth unemployment, low skills, poor health and school performance.

The economic impact of the Covid-19 pandemic has been severe. First quarter UK GDP fell 20% compared to last year, manufacturing PMI hit an all-time low and 496,000 people across the 3 LEP area are on furlough in June 2020, the equivalent of all jobs in Birmingham. Despite the general stasis felt by the economy through furlough and lockdown, the overall claimant count has nearly doubled overall and for young people.

Sectors where we have previously seen growth and expansion are now hardest hit, such as construction and the expanding higher education sector which makes our 3 cities, Birmingham, Coventry and Wolverhampton vulnerable. Our largest employment and GVA sector (professional, businesses and financial services) is still resilient and the sectors hardest hit through furlough (retail, hospitality and tourism) could bounce back providing consumer demand returns.

Economic forecasts consistently show the West Midlands to be one of the UK regions hit hardest by the economic crisis. This is because of our industrial and demographic mix, with some local economies among the most vulnerable in the UK in terms of their sectoral composition and health vulnerability. Those same models also show relatively strong regional growth in 2021, but this depends on assumptions about future market demand and international trade agreements. The stakes are high everywhere, but particularly so in the West Midlands.

However, our economic performance over the last 10 years since the last recession should give us confidence that with the appropriate support from Government, we can return to growth rapidly.

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Executive Summary - SWOT

Pre-Covid-19 Strengths

Young and diverse population
Business, Professional, Financial and Services sector and resilience
Private sector R&D and Innovation assets
Largest University sector outside London
Strong construction sector and portfolio of capital investment opportunities
Employment growth
Wage growth
Increase in high skills
Apprenticeship starts
Reducing number of young people not in education and training
Improving school attainment
Increasing numbers of active businesses
Increasing number of affordable homes
Business R&D investment
Strong levels of exporting and largest trade surplus
International Airport and close to a global city

Pre-Covid-19 weaknesses

High unemployment and youth unemployment
Unhealthy communities
Low/poor jobs growth
Survival rates of businesses
Significantly deprived areas and inequalities
Low usage of renewable energy
Numbers of residents with low qualifications
Higher unemployment

Threats created by Covid-19

Economic crash, social distancing and drop in consumer demand
Large scale unemployment
Long term scarring effects on young people
Apprenticeship availability
Trade and export drop and uncertainty
Negative impacts on international travel, education and tourism
Business investment and cash flow disrupted
R&D and innovation investment curtailed
Digital skills and infrastructure inequalities
Reduced take up and usage of public transport
A changing world which values technology, personalised interactions, flexibility which we may not be ready for
Large employer asset companies are starting to declare redundancies
Uncertainty over transition period and new trade and position

Opportunities post Covid-19

Sector mix ready for recovery and pick up
Strong healthcare and life sciences sector
Build on successful past growth in construction and business and professional services
Building on community spirit and growing community infrastructure
Adoption of technology and new business models
Growth in clean green mobility
Investing in strong local infrastructure which has responded well in the crisis
Greater investment in young people
Enhanced emphasis on lifelong learning, and adaptive flexible workforces

Executive Summary – Specific Asset SWOT

Strengths*
Automotive and Advanced engineering – JLR, Rolls Royce, Aston Martin, Aurrigo, Geely
Visitor and cultural sector – RSC, NEC, Royal Ballet and Symphony Hall, Birmingham Airport
BPFS sector and resilience – Large international companies, Deloitte, KPMG, HSBC, Lloyds TSB, PWC, NFU and Deutsche Bank
Major Brands - Mondelez, HSBC, National Express and Jaguar, Wesleyan Assurance Society and Gowling WLG, EON, Severn Trent, Balfour Beatty, KEIR
Largest University sector outside London - Aston University; Birmingham City University; Newman University College, University College Birmingham; University of Birmingham, Wolverhampton University, Warwick University and Coventry University
Strong construction sector and portfolio of projects - HS2, Metrolink, light rail, university station

Weaknesses
High unemployment and youth unemployment
Unhealthy communities
Weak jobs growth
Longer term survival rates of businesses
Significantly deprived areas and inequalities
Low usage of renewable energy
Numbers of residents with low qualifications
Higher unemployment
Supply chain vulnerability and international markets

Threats*
International transport impact on Commonwealth Games, Capital of Culture and tourism assets such as Stratford.
Economic crash globally and impact on FDI
Social distancing and drop in consumer demand
Large scale unemployment - Announcements already for JLR, DHL, Rolls Royce, John Lewis
Long term scarring effects on young people
Apprenticeship availability due to employer instability
Trade deals and investment as a major exporting region, wider negative impacts on international travel, education and tourism
Business investment and cash flow disrupted
R&D and innovation investment curtailed especially in automotive
Digital skills and infrastructure inequalities
Reduced take up and usage of public transport

Opportunities
HS2 and UK Central
Commonwealth Games
City of Culture
5G testbed
Devolved Adult Education Budget
Brownfield Land Programme
Housing Programme
Driverless cars testbed
Silicon Spa
Life Sciences Park
Warwick Manufacturing Group and the Manufacturing Technology Centre
Local supply chain development

* The companies listed are intended as examples only, representative of the breadth of the business base

Challenges Facing Policy

The evidence base on the impact of covid-19 highlights a number of policy challenges, which have acerbated underlying weaknesses in the regional ecosystem and also threaten our strengths:

Good health & wellbeing – The West Midlands already had poor health outcomes, the pandemic has highlighted this and improving the health of the population continues to be an issue. Driving improvement in physical activity and maximising the sectoral strengths the region such as the health sector, data driven healthcare and life sciences could improve the position.

Reduced Inequalities – The pandemic has highlighted how unequal society is, from the impacts on health and jobs at risk, through to the polarisation of communities. The pandemic has highlighted the role of key workers in underpinning society and the importance of roles in the foundational economy to vibrant, successful places. It has exposed how important it is to have access to digital infrastructure and the breadth of skills to utilise it. It has exposed need for good digital and safe physical connectivity to enable people to access jobs of the future.

Sustainable Cities & Communities – investing in community infrastructure is important for the future, as we have seen a return to hyper local living and investment in local businesses this creates an opportunity to build on changes the pandemic has brought to support SMEs and local high streets. The importance of open, green space to wellbeing, community support and reducing unnecessary travel are demand changes which could improve places in the long term. We have seen a change in the role of the home, and being able to access good broadband infrastructure and outside space could change the demands homeowners have and could change the face of city centres.

Decent work & economic growth – The pandemic has accelerated the need for investment in employability to protect workers affected by Covid-19 and to prepare for Brexit. The region already has underlying issues with people unable to access good employment because of their lack of qualifications. The rapid adoption of technology could leave many behind who do not have the advanced skills needed. The acceleration of youth unemployment and collapse of the industries they work in such as visitor economy, retail and culture, is of major concern everywhere, but in a region with internationally significant assets, these are also hit by the reduced global travel. The resilience of the education infrastructure under social distancing and the changing nature of future employment is an ongoing challenge to preparing people for the future. The impact of the pandemic makes addressing these issues even more important going forward and to equip them with the skills needs of the future.

Industry, Innovation & infrastructure – As can be seen in our sectoral assessments we have many assets and strengths in the region, but they are at risk. Forecasts demonstrate our assets can help us recover quicker, so it is vital we make the most of and protect our assets. There is a need to ensure people get the most out of our key companies, HS2, the Commonwealth Games and the City of Culture, and position ourselves as a global region. There is a potential risk to our higher education infrastructure as a driver of innovation and high level skills and business R&D investment, where we are a leader, is a key risk going forward.

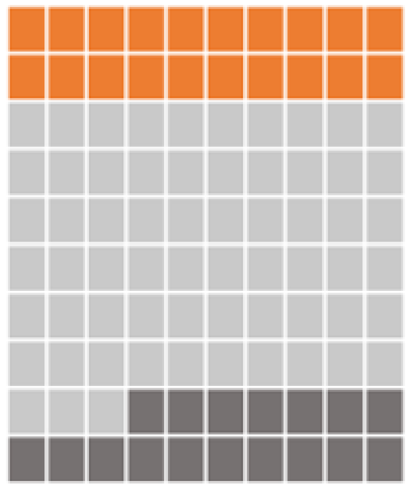
Affordable & Clean energy – the drive towards green, clean energy has accelerated with the impacts of Covid-19, as people experience the drop in pollution from reduced movement and the demand for different forms of safe transport rises. Along with the growth in technology and the drive for secure, safe energy this leads to a need for increased transport capacity, green growth and electrification. The West Midlands has major innovation assets in energy and electric vehicle manufacturing providing jobs in one of our biggest sectors, which is also most at risk of collapse post Covid-19. The need to future proof homes and businesses in terms of energy use was a key issue before the pandemic and continues to be, this is especially important as there may be greater use of homes in the future as workplaces, but opens up demand and opportunities for large scale retrofit programmes.

The West Midlands Combined Authority Area – summary data

The region has large differences between its towns and cities, with Birmingham dominating most statistics, as would be expected as the largest Local Authority. But there is a great variation in performance within the region (from last year's State of the Region):

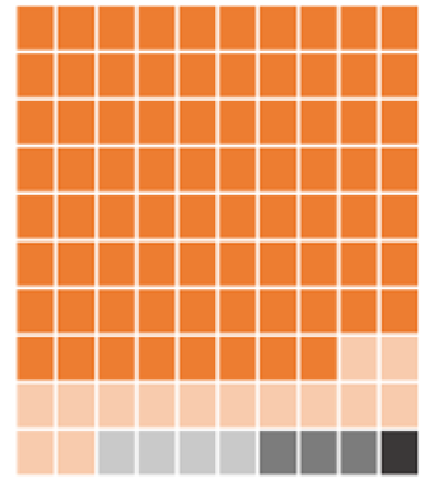
- There are 4m residents in the WMCA area. The Black Country has the highest **population** at 1.19m, followed by Birmingham at 1.1m and Coventry at 366k
- There were 32k **apprenticeship** starts across the WMCA region an increase of 8.7% double the national rate of 4.7%
- The number of people with **highest qualifications** at NVQ4 has increased by 4.4% to 860k compared to a UK increase of 2.9%. Meaning a third of the working age population is educated to degree level. The region needs another 173k to reach the national average.
- The number with **no qualifications** however have increased by 6,800 and increase of 2.4% compared to a UK decrease of -1.3%.
- The **employment** rate was 72.4% compared to 75.6% for the UK as a whole, a net increase of 25,500 more people in employment. The employment rate is highest in Warwick at 86%, Stratford-on-Avon at 85% and lowest in Birmingham at 65%
- The **unemployment** rate as 5.5% compared to 4% for the UK a net increase of 4,200
- The WMCA region has 1.8m **employees** and business, professional and financial services accounts for the highest percentage of jobs at just under 22% and the sector is increasing.
- Birmingham has 500k **jobs** followed by 450k in the Black Country, 162k in Coventry, with the lowest number of jobs in Tamworth 29k and Wyre Forest at 32k.
- Bromsgrove has the highest **earnings** at £34.4k only slightly above Solihull at £34.1k, lowest earnings are in Sandwell as £24.8k and Wolverhampton at £25.4k. However the gross domestic household income has far less disparity, with Coventry and Warwickshire at £21.6k, Birmingham and Solihull £17.9k and Black Country £15.6k
- Overall **deprivation** is high with 34.5% of local areas in the most deprived in the country. Birmingham has 41% of its neighbourhoods in the 10% most deprived, followed by Walsall at 26% and Wolverhampton at 21%.
- Birmingham **GVA** is £29bn, and the next highest was the Black Country at £21.2bn, Solihull at £9.8m, and Coventry at £9.5m. The lowest is in Wyre Forest at £1.4bn followed by Tamworth at £1.5bn. However GVA per employee is more balanced with narrower gaps demonstrating the greater numbers of "lower value" roles such as Birmingham at £56k, but the highest is Solihull at £80k, and Warwick at £73K to the lowest of £41k in Walsall.
- There were 170,475 active **enterprises**, and increase of 1.7%, where the UK experienced a decrease of 0.3%. Birmingham has 46.6k businesses, followed by the Black Country at 38.3k, Coventry 11.6k and Bromsgrove 11.5k, this order is replicated in the number of business starts. 18,805 enterprise births in 2013 in the WMCA (3 LEP), 42.1% (7,910) were still active in 2018. This is slightly below the UK survival rate of 42.4%
- Solihull has the best **school readiness** levels at 72.6% through to Sandwell at 66.8%. The average Progress 8 score in the West Midlands 7 Met. area has increased from -0.14 in 2018 to -0.08 in 2019. Birmingham was rated as 'Above Average'; both Solihull and Wolverhampton as 'Average'; while Coventry, Dudley, Sandwell and Walsall were deemed 'Below Average'. Solihull has the best school readiness levels at 72.6% through to Sandwell at 66.8%
- In the West Midlands region, the value of **exports** has decreased from £32.6bn in the year of 2019 Q1 to £30.6bn in the year 2020 Q1
- There are 1,735,709 **dwellings** in the WMCA (3 LEP) area in 2019, an increase of 16,615 dwellings since 2018

If the West Midlands was 100 people…



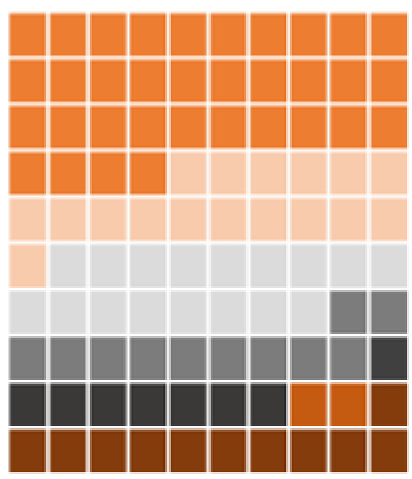
Age Band

Children
Working age adults
65 and over



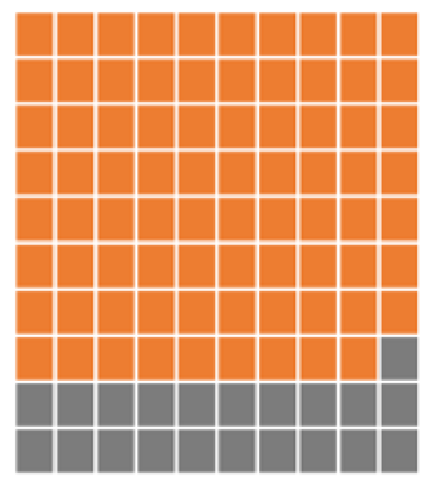
Ethnicity

White
Asian/Asian British
Black/Africa/Caribbean /Black British
Mixed/Multiple ethnic
Other



Qualifications

NVQ4 and above
NVQ 3 (only)
NVQ 2 (only)
NVQ 1 (only)
Other
Trade Apprenticeships
No Qualifications



Minimum Wage

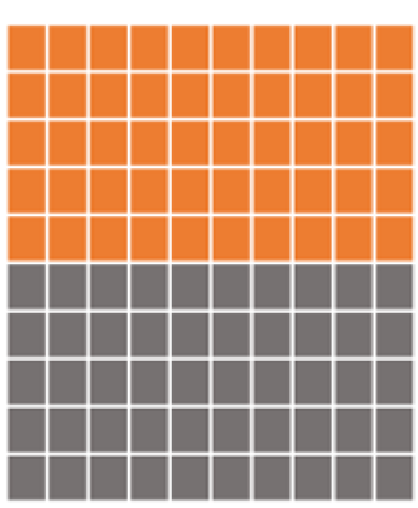
Earning above
Earning below

Physical Activity

Physically Active
Fairly active
Inactive

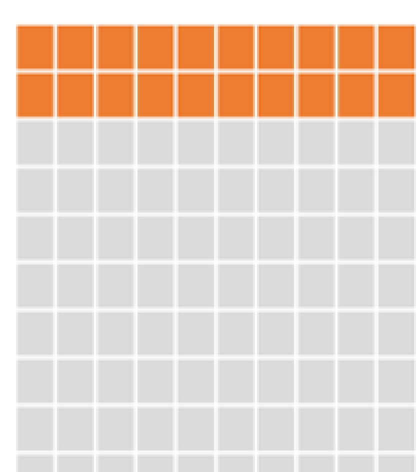
Employed

Working age and active
Working age and inactive



Gender

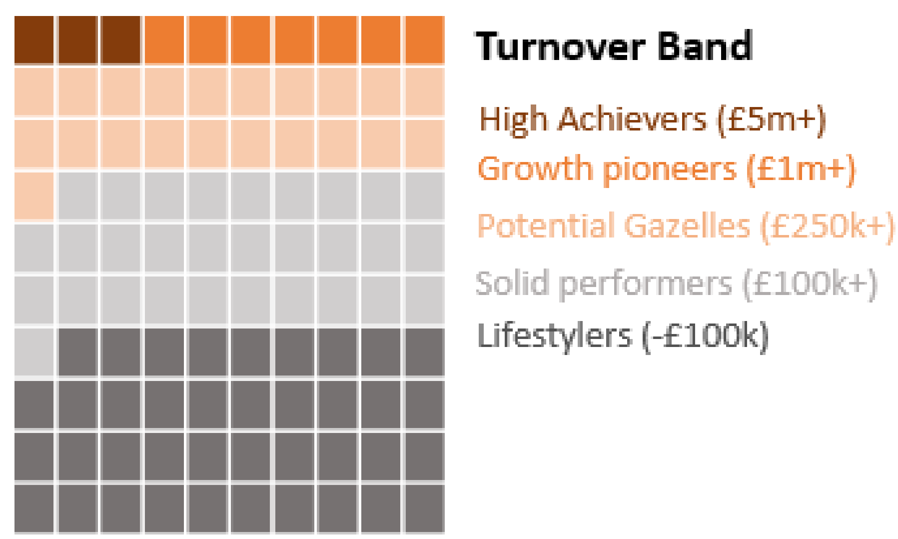
Female
Male

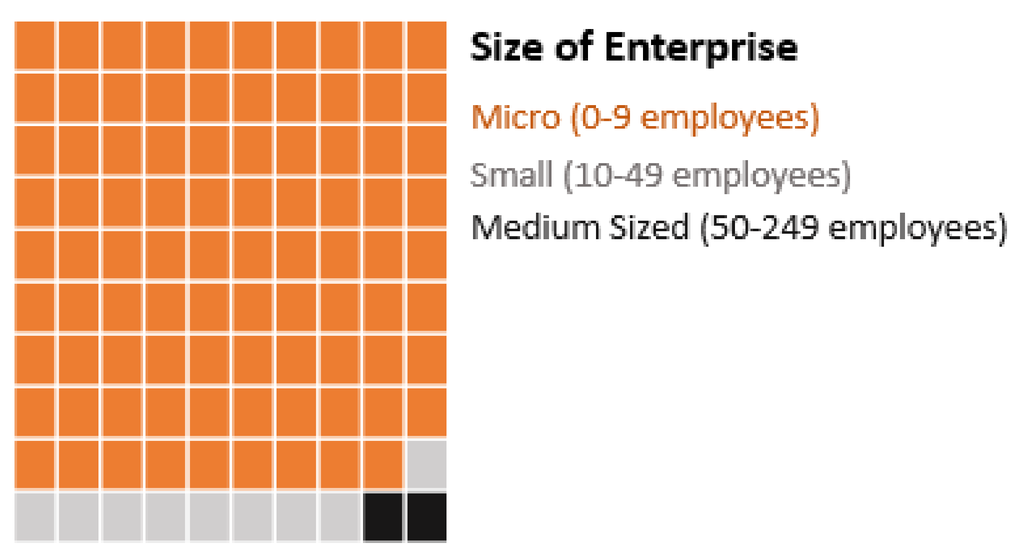


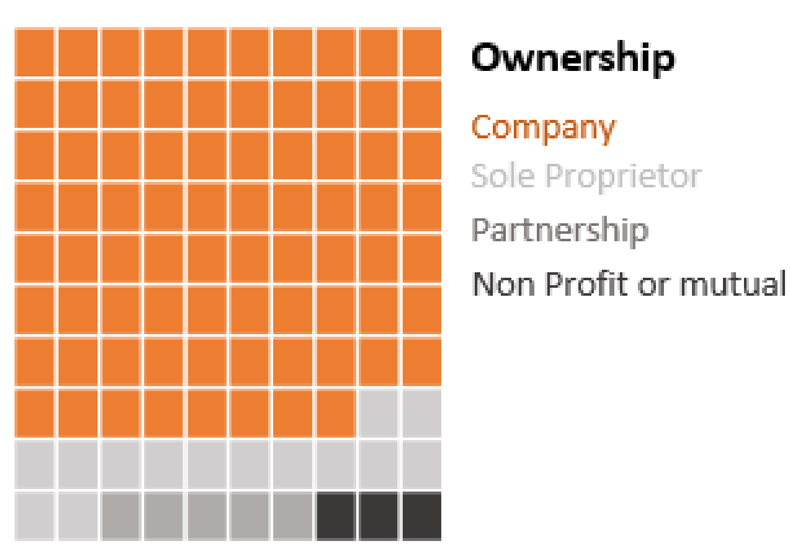
Deprivation

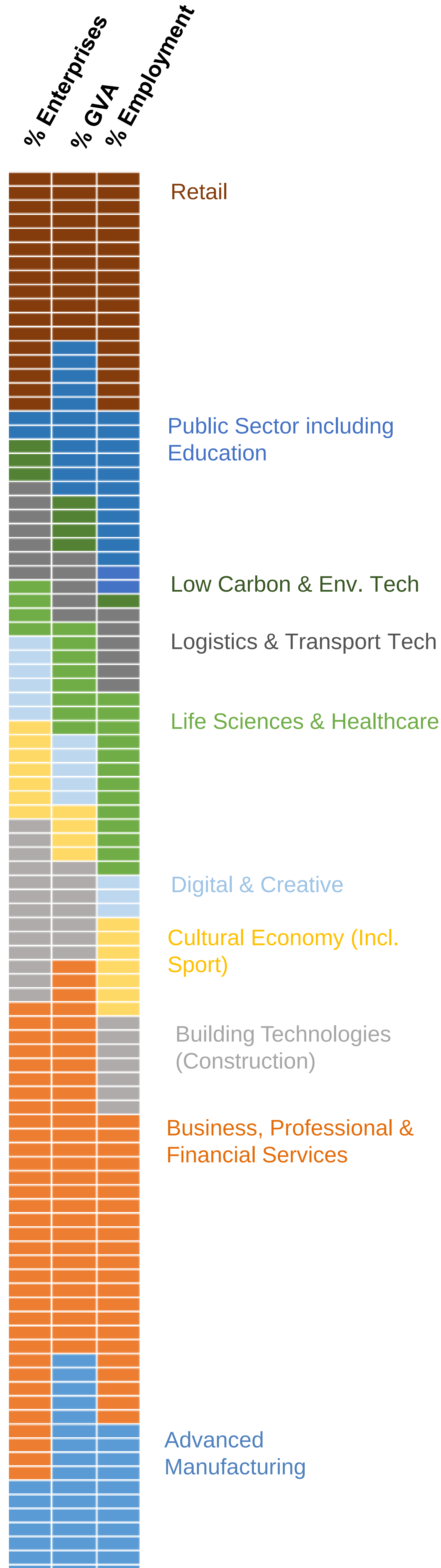
Residents living in 10% most deprived
Residents not living In 10% most deprived

If the West Midlands was 100 Businesses…









Key Past Trends Performance Indicators

The following indicators are the key ones identified across the previous State of the Region reports. All the green indicators are ones where the region has improved and got nearer to the target. Orange demonstrate we are going in the right direction but not as quickly as we would like. Red indicators are areas where we have stayed the same of have not progressed towards the target.

In general like many economies which grow rapidly, the focus shifts to ensuring that everyone can benefit from that growth and the progress of these indicators demonstrates the importance of that focus.

To note these data are largely precovid19 due to the lagging nature of the data and the actual year of the data is dependent on latest available release.

Outperforming Indicators

Total GVA: £105.1bn

Increasing at a higher rate than the UK average at 4.0% vs 3.4% (2017-2018)

Target – to reach £153bn by 2030

GVA per Head: £25,183

+3.3% (+£801) growth compared to +2.7% UK (2017-2018)

Shortfall of £3,545 to the UK Average

Enterprise Births: 24,640

+1.7% (+410) growth compared to decrease of -0.3% for the UK (2017-2018)

59 Births per 10,000 population– above the UK (58).

Employment Rate: 72.6% (1,870,000 people)

+0.7pp (+25,500 people) compared to +0.6pp UK (2018-2019)

To reach the UK average of 75.6%, an additional 82,370 required to be employed

Resident Wages: £29,422

Increasing at the same rate as the UK since 2018 (+2.7%)

Still a shortfall of £931 to reach national level.

NVQ4+ Qualifications: 33.5% (861,700 people)

+4.4% (+36,200 people) compared to +2.7% UK (2018-2019)

To reach the UK average of 40.2%, an additional 173,249 need to be upskilled

Apprenticeship Starts: 31,700

+8.7% (+2,540 people) compared to +4.7% England (2017/18 - 2018/19)

84,000 Apprenticeship Starts Target: An additional 52,300 required

NEETs: 6.6% (WM 7 Met.)

decreasing at the same rate as England since 2018 (-0.5pp)

To reach the England average of 5.5%, would require 713 less NEETs

Progress 8: -0.08 (WM 7 Met.)

-0.06 decrease compared to an increase of +0.01 England

To reach the England average -0.03 requires an improvement of +0.05

Active Enterprises: 170,475

Increasing above the UK average: +3.3% (+5,430) vs +0.5% (2017-2018)

To be above the UK per 10,000 population 409 vs 442

Additional Affordable Rented Dwellings: 1,960

+13.8% (+238) compared to 8.0% England (2017/18 – 2018/19)

Increase the number of additional affordable rented dwellings

Output Gap: £14.8bn

A decrease of nearly £44m from 2018 Output Gap

The aim is to have no output gap

Maintaining our Position

Total Additional Affordable Dwellings: 3,822

Increasing at a slower rate than the England: 10.2% (+353) vs 22.0% (2017/18-2018/19)

Increase the number of additional affordable dwellings

Five Year Survival Rate: 42.1% (2013 births)

The five-year survival rate is below the UK average of 42.4% - however compared to the five-year survival for 2012 births is decreasing at a slower rate than the UK -1.4pp vs 1.7pp

Target: Be above the UK and decrease at a slower rate

Focus on Improvement

Total Jobs: 1.8m

-0.9% (-16,000) compared to an increase across England of +0.6%

To reach the Strategic Economic Plan target we need to achieve 2.4m jobs

Top 10% Most Deprived Areas: 19.2%

+0.3pp compared to 2015

Target: 10%

Renewable Electricity Generation: 736,150 MwH

A decrease of 7.5% (-60,044 MwH) since 2017 – the UK increased by 11.4%

No Qualifications: 11.3% (290,500 people)

+2.4% (+6,800 people) compared to a decrease of -1.3% UK (2018-2019)

To reach the UK average of 7.9%, an additional 87,115 need to gain one qualification

Male Healthy Life Expectancy: 59.6 Years (WM 7 Met.)

-0.3 years vs no change for the UK since 2015-17

3.5 years gap to UK average

Target: Reach UK average of 63.1 years

Female Healthy Life Expectancy: 59.8 Years (WM 7 Met.)

-0.3 years vs no change for the UK since 2015-17

3.8 years gap to UK average

Target: Reach UK average of 63.6 years

Unemployment Rate: 5.5% (109,500 people)

+0.1pp compared to a decrease of 0.3pp UK (2018-2019)

To reach the UK average of 4.0%, an additional 30,320 people need to employed.

Impact of Covid-19

The following section explores the impact of the pandemic on the region and its economy. This is a summary of what we know as at end of June 2020. The impacts and effects are still emerging and recovery depends on the return of consumer demand, global recovery and the likelihood of further waves of the virus.

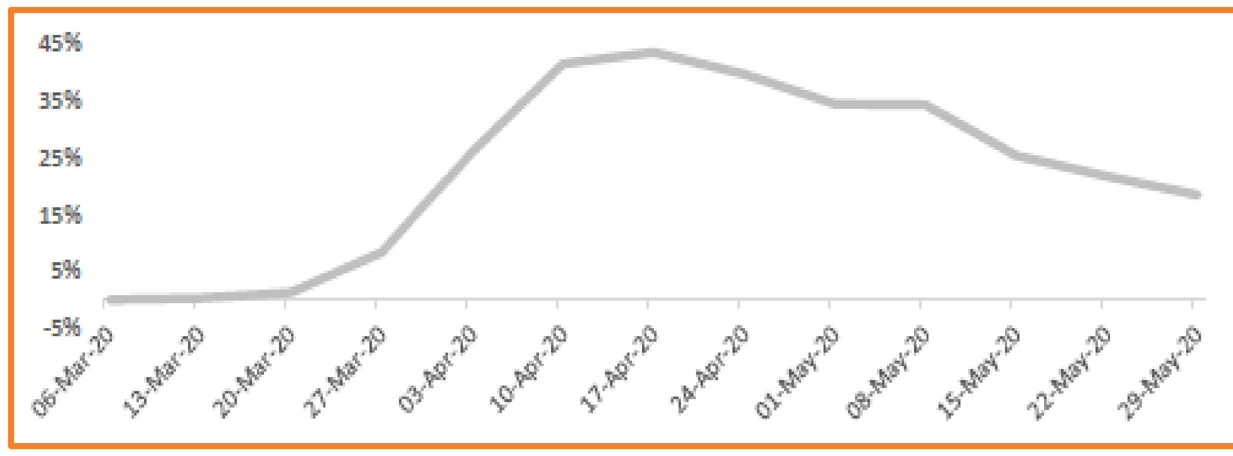
Impact of Covid-19 – Key Issues

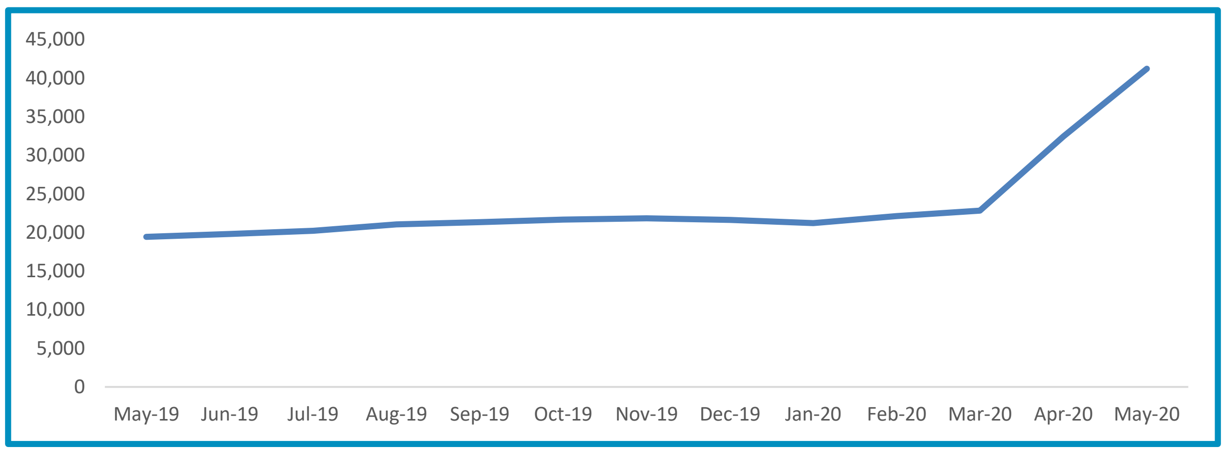
Since the start of the pandemic the West Midlands performance has changed dramatically, as is the case everywhere throughout the UK and elsewhere. Key issues are:

- Forecasters are now coming to a general consensus that the **UK is looking at a sharp fall and slower recovery over at least 2 years, with some sectors taking longer to recover**. This relies on a post Brexit trade deal, no further lockdowns, a credible vaccine and return of consumer spending. The prolonged international lock down, lack of travel, and social distancing may change attitudes to what consumers value and need in the longer term, the effects of which we have yet to see emerge.
- The West Midlands may face the **largest economic decline of all regions at 9.2%** (fall in GDP), however it may see the largest growth in 2021 at 8.1%. This is based on having the largest number of temporary closures and an expectation of most reopening. This however is far from certain and will be affected by social distancing measures and the implications of a second wave and continued lockdowns. Businesses regionally feel there is limited expectation of a consumer bounce-back due to social distancing. Businesses have utilised spare cash and resources and are reluctant to take on debt.
- **The youth claimant count had risen to 41,225** by May 2020, 8.3% of the young population, nearly doubling youth unemployment. It now sits 5th amongst combined authority areas but the rate of increase was much higher than elsewhere. As a region with high numbers of young people, we have a population facing multiple impacts from the pandemic. Closure of sectors which employ them, education system changing rapidly to cope with social distancing and the loss of final term in schools weakens the transition points between school, further and higher education and employment.
- **Overall claimants stand at 208k**, which is 6.3% of the working age population a rise from 115,000 and 3.5% in February, however overall increase in claims has been slower than other areas. This is despite the extensive **furloughing which stands at 496k people** in the WMCA area, which equates to 26.9% of jobs and is seen by business as the most successful of interventions. Businesses are flagging that although this is an excellent policy approach, it may just be moving the redundancy problem down the road if consumer spend and business activity doesn't return and they aren't supported to adapt
- Headline analysis suggests that the **public sector (including higher education) and the visitor economy sector** will be the sectors most impacted from the Covid-19, followed by construction, manufacturing and retail. Analysis suggests that the life science and healthcare may be the only sector that will be relatively unscathed, but notably it is also one of main sectors that has took the brunt of the human impact from Covid-19.
- **Apprenticeships**: the CA has the highest level of available vacancies compared to other regions, 1,643, which is a positive for the region. However this has declined recently, and recent business surveys show a decline in training and apprenticeship opportunities
- The WMCA area had the **highest death rates** at the start of all CAs but dropped down the rankings in later months. Overall however the 3 LEP geography has had the most deaths at over 4000. The pandemic hits cities harder. Pandemics hit denser, poorer, urban populations more, as social distancing is harder and over crowding more common
- Purchasing Managers Index (PMI) show business activity has dropped from 51.2 (over 50 signals growth, under 50 signals contraction) to 10.9, the lowest levels ever and back to 27.9. To be expected in these extraordinary conditions. However the PMI future business activity is holding up rising from 55.9 to 62.1 (down from 72.3% signalling **businesses are positive about the future once lockdown ends**

Impact of Covid-19 – Short Term Indicators

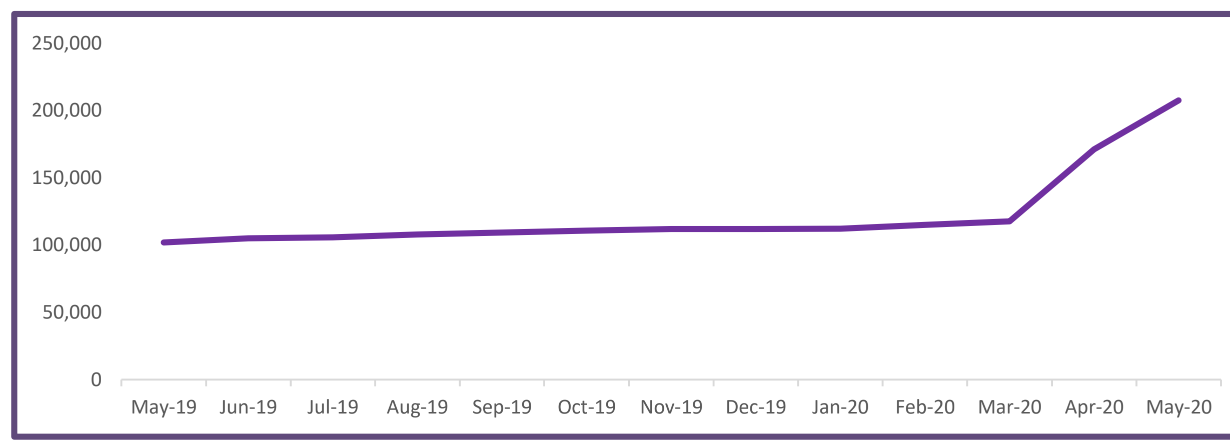
Week on week deaths from Covid-19 have dropped from **43%** in April to **18%** late May

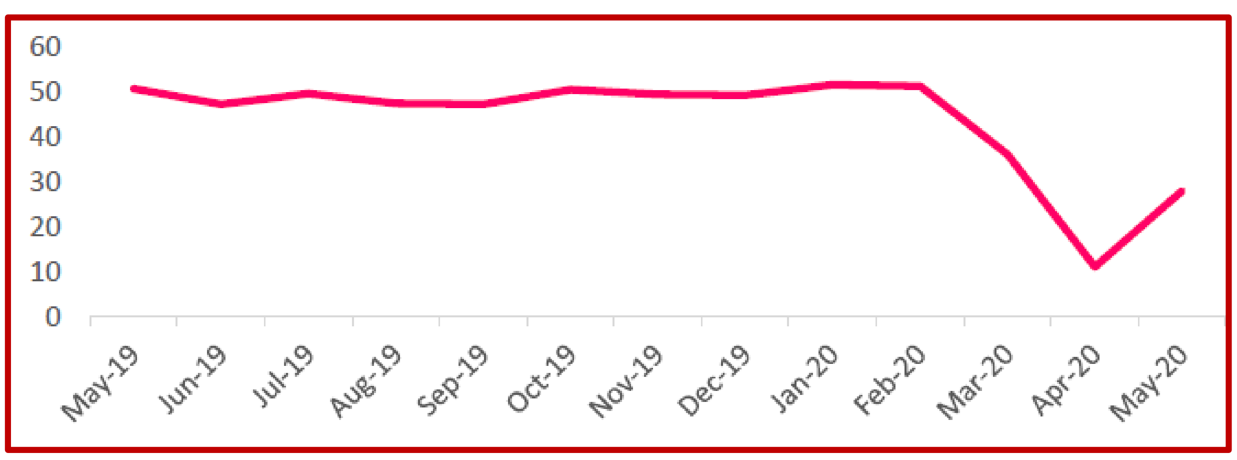




Youth Claimant Counts have increased by **10,000** between March and April 2020 to **41.2k**

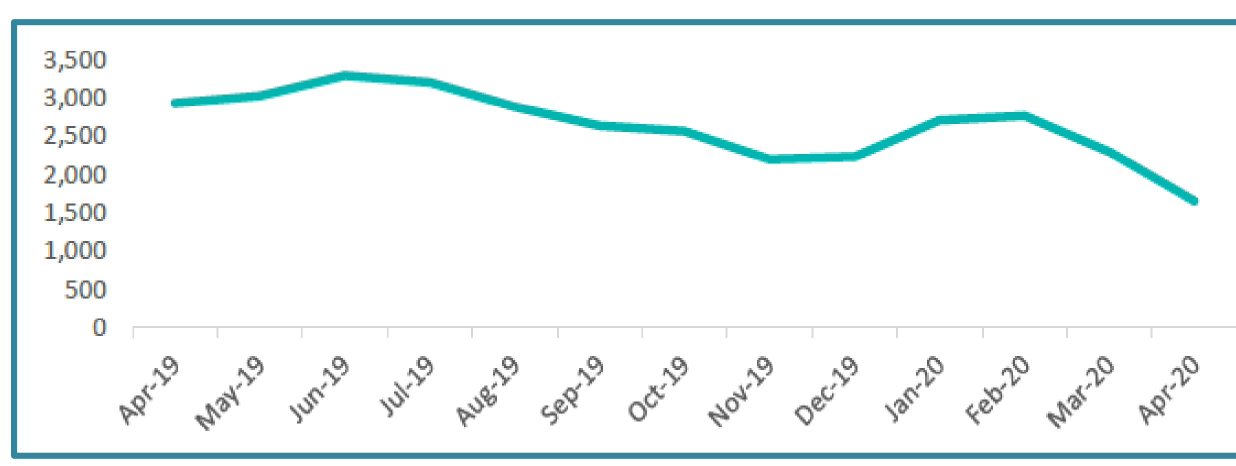
Claimant Counts have increased to **208k (6.3%)** from **115k (3.5%)** in February 2020

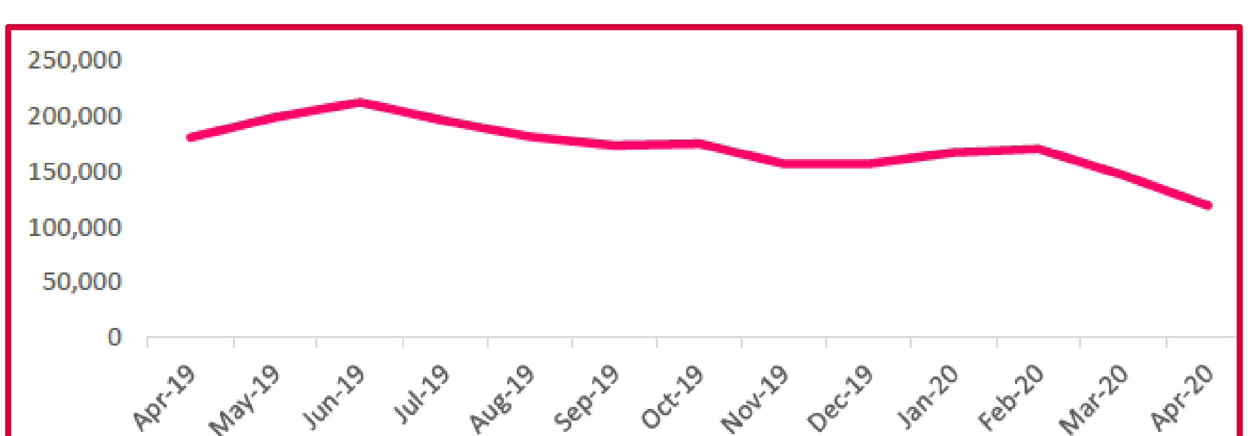




Business Activity Index has dropped from **51.2** to 10.9 and now back to **27.9**

Apprenticeship Vacancies have dropped from **2,756 to 1,643**





The number of unique job postings has reduced from **170k in February to 119k April**

Source: SED Dashboard 17th June 2020

Impact of Covid-19 - Overview

Reviewing the extensive monitoring we have carried out over the last three months there is cause for concern, but the focus now should be on recovery and protecting our assets. Businesses are ready for change and are already innovating, we have to ensure that local skills and employment policies ensure people, especially the young, women and Black and minority ethnics groups who have been hit hardest by the impacts can fit into this change. We may also need to prepare for economic restructuring which significantly changes the job structure in the region. We also need to support and promote a return to good spending and the financial resilience in businesses and households.

There are signs that businesses are adjusting their employment but remaining productive, if this pattern grows or remains in the long term it could point towards higher levels of structural unemployment but improved productivity (similar to other European countries). Since 2009 the UK has maintained / grown employment levels and protected the skilled workforce but the trend outlined above may signal the end of that pattern. Rather the emerging pattern may be more aligned to the structural changes in the 1980s. This would lead to high levels of unemployment once furlough ends.

Covid-19 could exacerbate our weaknesses and undermine our strengths. This means we need to protect our assets, such as the diversity of our population, entrepreneurial business base, our improving skills base, strong levels of exporting and international networks, high business investment and the growing employment base and wage growth.

There is a need to ensure our strong sectors survive and flagship companies that support supply chains can adapt, such as business and professional services, construction, automotive and university sector. All sectors currently under threat, and with a high volume of jobs to maintain and grow levels of quality jobs. Sectors which are expected to bounce back, such as retail, hospitality, tourism and culture and provide large numbers of jobs and are based on large numbers of SMES need to be supported to open back up and adapt to the changes. There is a need to build recovery on a resilient infrastructure, which encourages diversifying and supporting local growth, employment and supply chains and moving to a greener future. At the same time we need to develop new ways of working internationally in a tech-based future.

Reviewing the 1918 pandemic for wider economic, social and longer term impacts, some key issues can be seen emerging now, most notably higher death rates in the poor, disadvantaged communities. Variability at the time was attributed to inequalities of wealth and social status, bad diet, crowded living which created an environment where the poor, immigrants and ethnic minorities were more susceptible to infection. As a result cities were hit harder and it took 2 years to recover, with generally 3 peaks, the second more severe due to early lifting of lock down measures in some countries. These unequal impacts are being replicated today.

Impact of Covid-19 – Impact on our Health

Beyond the economic impact: COVID-19 and health inequalities

The conditions in which we are born, grow, live, work and age have important implications for our physical and mental health, as individuals and across wider society. The West Midlands Combined Authority (WMCA) sets out a vision for building a healthier, happier, better connected and more prosperous West Midlands, recognising the inextricable link between health and wealth. COVID-19 has the potential to create and widen health inequalities, both through the direct impacts of the virus, and the indirect impacts of the control measures imposed. While underlying health conditions increase the risk of serious consequences from infection, the economic and social response to COVID-19 has the potential to exacerbate inequalities in physical and mental health.

Many of the frontline key workers who are most at risk of contracting the virus are in low paid, insecure employment. Where someone's home is not a place of safety, or when they do not have ready access to essentials such as food and medicine, being more isolated may place them at greater risk of harm. Social distancing and isolation can have a detrimental impact on mental health and wellbeing, including through harmful health behaviours and reducing access to services and support.

Crucially, the pandemic has highlighted existing socioeconomic inequalities that have underpinned poorer outcomes in already disadvantaged groups. A recent review by Public Health England (PHE) confirmed that the that the impact of COVID-19 has replicated existing health inequalities and, in some cases, has increased them.

Nationally, the largest disparity found was by age. Among people already diagnosed with COVID19, people who were 80 or older were seventy times more likely to die than those under 40. Risk of dying among those diagnosed with COVID-19 was also higher in males than females; those living in the more deprived areas than those living in the least deprived; and those in Black, Asian and Minority Ethnic (BAME) groups than in White ethnic groups.

It is important to note that these analyses did not take into account underlying health conditions or differences in occupational groups. However, a further review focusing specifically on BAME groups found that BAME individuals are more likely to work in occupations with a higher risk of COVID-19 exposure. In addition, the risks associated with COVID-19 transmission, morbidity, and mortality can be exacerbated by the housing challenges faced by some members of BAME groups.

Consultation with stakeholders also highlighted historic negative experiences of healthcare or at work may mean that individuals in BAME groups are less likely to seek care when needed or as NHS staff less likely to speak up when they have concerns about PPE or testing.

Socioeconomic inequalities have consistently been highlighted as key. BAME groups tend to have poorer socioeconomic circumstances which lead to poorer health outcomes; ONS data and PHE analysis confirmed the strong association between economic disadvantage and COVID-19 diagnoses, incidence and severe disease. Economic disadvantage is also strongly associated with the prevalence of smoking, obesity, diabetes, hypertension and their cardio-metabolic complications, which all increase the risk of disease severity.

While unpacking the relative contributions made by different social and economic factors is challenging as they often intersect and do not all act independently, it is clear that action is needed across the whole system to improve the wider determinants of health and actively reduce inequalities. This in line with the inclusive growth principles promoted by the WMCA, and reinforces the importance of building an inclusive economy where all citizens can benefit.

Impact of Covid-19 – Impact on our Health

What is happening in the West Midlands?

Aggregated data for the WMCA show that on average, local authority areas ranking higher for socioeconomic deprivation also have higher rates of COVID-19 related deaths. This demonstrates that there is a broad correlation between area deprivation and COVID-19 related deaths.

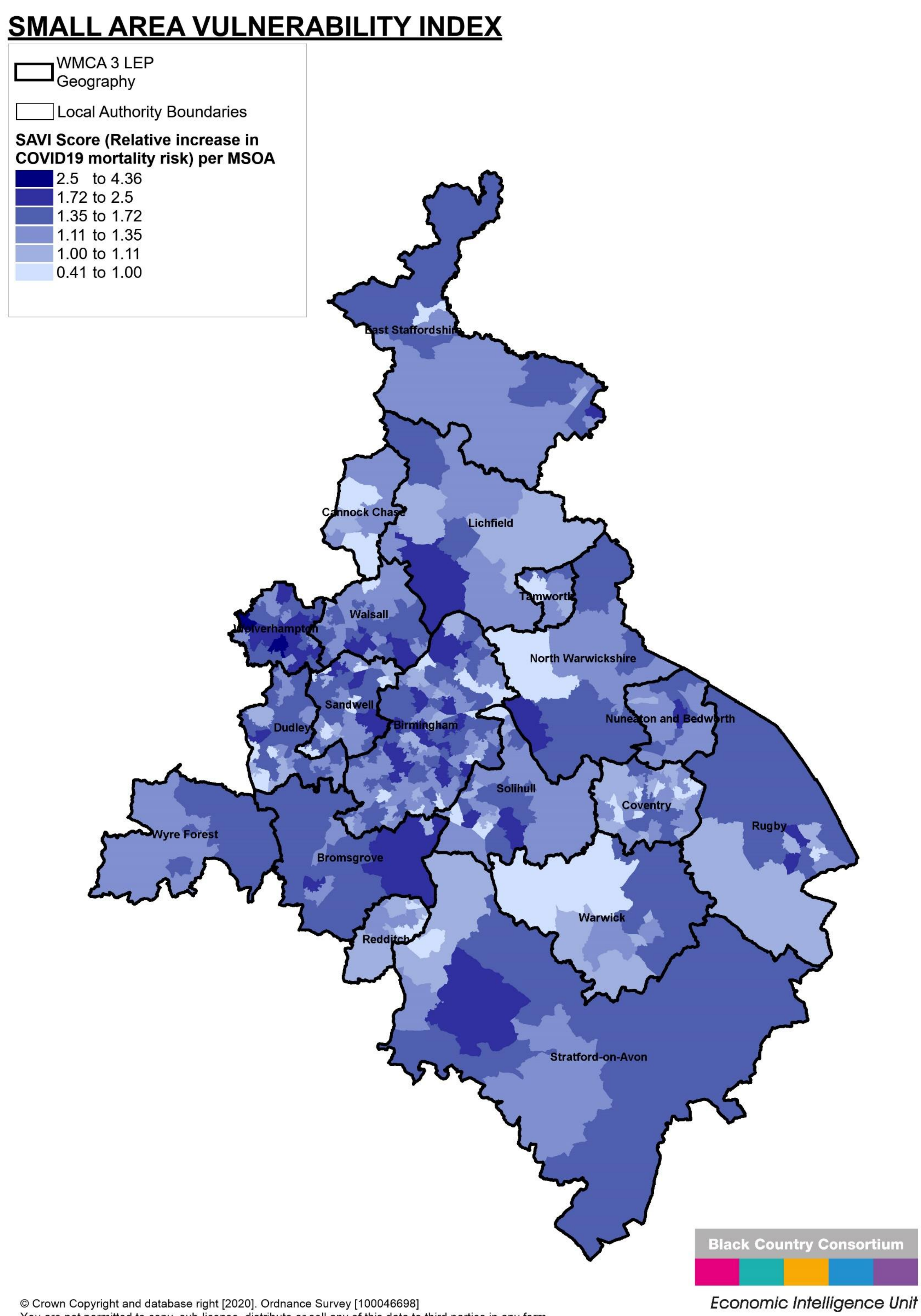
This should be interpreted with caution, as overall levels of deprivation within an area can mask more complex relationships and inequalities. However, we also know that the areas with higher levels of deprivation and higher rates of COVID-19 related deaths are also those where life expectancy and healthy life expectancy are generally lower, and where persisting health and socioeconomic inequalities are greater.

Those within the Black ethnic group may be most affected by exposure to infection as it has the largest population proportion of healthcare workers. The Pakistani ethnic group may be most affected due to an increased risk of infection through exposure to general public as having the largest population proportion of transport and storage workers. This group also be most affected by exposure to loss of income as having the largest population proportion of wholesale and retail trade workers along with the 'other Asian ethnic group ' population also affected by exposure to loss of income as having the largest population proportion of accommodation and food services workers.

Impact of Covid-19 – Impact on our Health

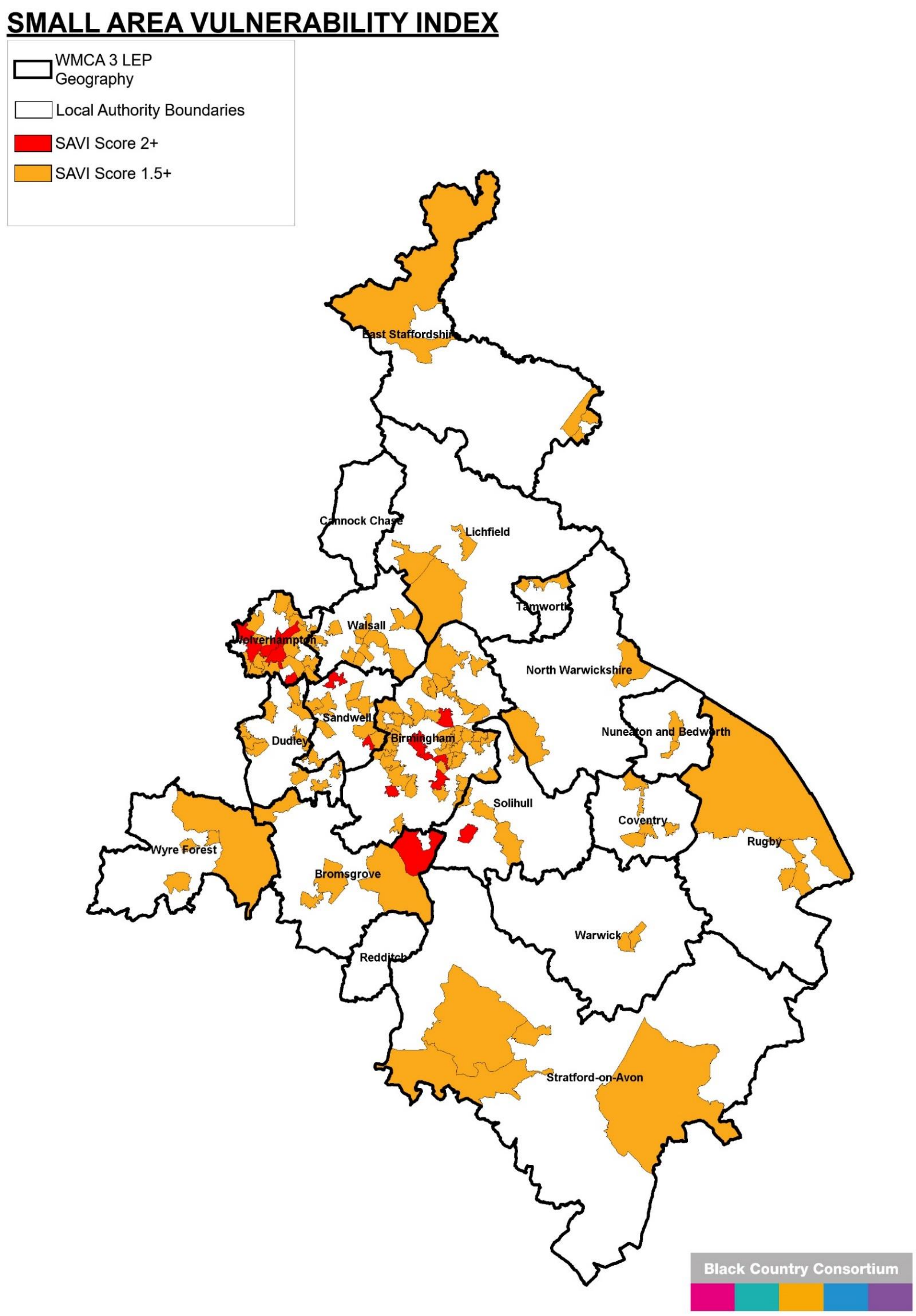
The [Small Area Vulnerability Index]is an empirically informed measure of COVID19 vulnerability for each Middle Super Output Area (MSOA) in England. The SAVI index investigates the association between each predictor (proportion of the population from Black, Asian and Minority Ethnic (BAME) backgrounds, income deprived, over 80 years old, living in care homes, living in overcrowded housing and having been admitted in the past 5 years for a chronic health condition) and COVID19 mortality using a multivariable Poisson regression, whilst accounting for the regional spread and duration of the epidemic.

The SAVI provides a score for each MSOA in England that indicates the relative increase in COVID mortality risk that results from the level of each of the six vulnerability measures for each area.



Impact of Covid-19 – Impact on our Health

Findings indicated that high levels of vulnerability to COVID19 are clustered nationally within the North West, West Midlands and North East regions. Out of the 513 MSOA's covering the WMCA 3 LEP area there were 49 MSOA's (10%) that had a score under 1 whilst 15 MSOA's had a score of 2 plus (3%). The most vulnerable MSOA within the WMCA 3 LEP area was Tettenhall South in Wolverhampton with a score of 2.89 for increase in risk (the 16th highest score in England). High levels of vulnerability are concentrated around particularly in the West Midlands with high scoring clusters in Wolverhampton, Birmingham, Bromsgrove, Wyre Forest, Stratford-on-Avon and Rugby.



The SAVI has been based on the most recent data (available on 12 June 2020) at the MSOA level. The Isles of Scilly (E02006781) and City of London (E02006781) have been excluded due to missing data in these areas, leaving 6,789 MSOAs for analysis.

Impact of Covid-19 on our economy

Forecasters are now coming to a general consensus they the UK is looking at a sharp fall and slower recovery over at least 2 years, with some sectors longer. There is limited expectation of a consumer bounce back, as people have utilised spare cash and resources and are reluctant to take on debt. The prolonged international lock down may change attitudes to what consumers value and need in the longer term, the effects of which we have yet to see emerge.

It is expected that we will have the worst recession in history, with March 2020 seeing the biggest GDP fall since records began and IMF predicting a drop in GDP close to 6% and likely to take 2 years to recover. The OECD released its latest predictions and warns that the UK is likely to be hardest hit with a slump of 11.5%, 14% if there is a second wave. This is largely because of the reliance of the UK on the services sector and the warning that the furlough scheme may not offset effects on employment. Local intelligence would reflect this concern that furlough may just be deferring redundancy and company failure later in the year. ICAEW forecasts prepared by Oxford Economics say GDP dropped 2% in Q1 the largest drop since 2009 and is forecast to shrink by 8.3% rebounding by 7.8% next year. The West Midlands may face the largest decline of all regions at 9.2%, however it may see the largest growth in 2021 at 8.1%. This is based on having the largest number of temporary closures and an expectation of most reopening. This however is far from certain and will be affected by social distancing measures, a trade deal and the implications of a second wave with continued lockdowns.

More forecasts, reports and research are now being published, many of which say Birmingham will be one of the hardest hit places. Oxford Economics predict it will be the worst hit city in the EU. This is because of the dependency on automotive and education (Higher Education Institutions), a younger than average population and high levels of health issues.

The Purchasing Managers Index (PMI), which tracks on a monthly basis business sentiment and thoughts about growth, has had a volatile ride in the last few months. PMI dropped to an all-time low in the region at 10.9 (growth would be above 50 and recession under 50). It is showing welcome signs of the economy picking back up for the West Midlands to 27.9 from its unprecedented low of 10.9 and the export climate index rose to 35.9 from the record low of 24.5 in April.

The pandemic makes it more likely that the UK will exit the EU without a trade deal, work by City-REDI estimated a risk (of no deal) to WMCA GDP of 12.2% and the whole NUTS1 region of 14.3% making it more exposed than the UK average. It is expected that any type of Brexit will exacerbate the negative impact of CV19. We are also nearing the closure of the EU programmes, 80% of which support recovery type activities and there has been no detail on replacement or shared prosperity funds.

Nationally a gradual lifting of lockdown is underway with non-essential retailers able to open from 15th June (contingent on the Covid-19 situation). From August employers will have to pay a quarter of the wages of furloughed staff. There are also reports that some large companies are seeking government bailouts.

UK likely to be the hardest hit region. WM face the largest decline of all regions at 9.2% with the largest growth at 8.1%. But risks are on the downside and on how well businesses recover and return to normal

PMI Business Activity Index in the region dropped to an all-time low of 10.9 and export climate dropped to a record low of 24.5

Impact of Covid-19 on our People

Resilient Communities

Some of the places hardest hit initially may not be the same places as those that struggle over the long run. This is because the initial economic hit is driven by sector concentration within local areas rather than underlying factors that support local resilience to economic shocks that we define as a high level of skills, low unemployment or a speedy recovery from a previous recession. The West Midlands is projected to be hard hit initially (with only the East Midlands expected to suffer a greater decrease in GVA in 2020 Q2). This reflects the preponderance of local authorities in the Midlands with a larger than average manufacturing sector, and also a sizeable construction sector. Analysis by the Centre for Progressive Policy shows that treating all local authorities as being of equal importance economically (which is not realistic given variations in the size of local authorities in the vulnerable, moderate and resilient categories), after five years the West Midlands is expected to see an average 9.2% decrease in average GVA relative to the trend expected in the absence of the Covid-19 crisis. This is a greater decrease than the UK average, but slightly less than the average decreases expected for the North West (-9.5%), Yorkshire & the Humber (-10.5%), Northern Ireland (-11.6%) and the North East (-11.7%).
Relative to other regions, the West Midlands has a similar share of local authorities in the vulnerable category. However, the vulnerable category includes many of the large local authorities: Birmingham and the Black Country. The West Midlands has a greater than national average share of local authorities in the moderate category and a smaller than average share in the resilient category.

Other large regional cities in the UK are categorised as follows:

- *Vulnerable*: Birmingham, Manchester, Nottingham, Glasgow, Belfast
- *Moderate*: Leeds, Newcastle, Sheffield, Cardiff
- *Resilient*: Bristol, Liverpool

In the West Midlands only Coventry and Solihull are in the moderate category, with the remainder categorised as vulnerable.

Vulnerable	Moderate	Resilient
Birmingham	Cannock Chase	Bromsgrove
Dudley	Coventry	Lichfield
Sandwell	East Staffordshire	Malvern Hills
Tamworth	Herefordshire, County of	Warwick
Walsall	Newcastle-under-Lyme	
Wolverhampton	North Warwickshire	
Wyre Forest	Nuneaton and Bedworth	
	Redditch	
	Rugby	
	Shropshire	
	Solihull	
	South Staffordshire	
	Stafford	
	Staffordshire Moorlands	
	Stoke-on-Trent	
	Stratford-on-Avon	
	Telford and Wrekin	
	Worcester	
	Wychavon	

Impact of Covid-19 on our People

Jobs and Employment

There is a rising concern about redundancies with a rise from 2,400 in April to 5,500 in May, significant regional announcements include Rolls Royce, Aston Martin, Triumph, Churchill China and Forterra, with Intu Merry Hill putting administrators on standby. Also concerns about quarantine and its impact on international trade flows and activity, still no support for ltd company directors.

Across the WMCA (3 LEP) area, 496,200 people have been furloughed which accounts for approximately 26.9% of jobs. The Black Country LEP area has the highest levels of staff furloughed at 31.7% across the 3 LEP areas. Tamworth has the highest number per 10,000 WAP for the total number of employments furloughed at 2,508. While Wyre Forest has the highest percentage when proportioned to jobs at 41.9% significantly above England at 24.8%.

Latest unemployment (still not covering the whole pandemic period) tells a story of a labour market in stasis: the West Midlands region is now at 74.5% employment down only -0.7pp since last quarter, with unemployment up slightly to 4.8% and inactivity rates increasing to 21.7%. There were 207,635 claimants aged 16 years and over in May 2020 in the WMCA (3 LEP) – this is an increase of 36,390 claimants since April 2020. This increase equates to 21.3% for the WMCA (3 LEP) compared to 26.6% growth for the UK. There were 41,225 youth claimants in the WMCA (3 LEP) area in May 2020, this is an increase of 8,775 people compared to April 2020. This equates to an increase of 27.0% – while the UK saw an increase of 32.3%.

Comparing unemployment by ethnic groups in the West Midlands, as noted previously unemployment rates were stark, where 11% of ethnic minority groups are unemployed (albeit there are marked differences between ethnic groups) compared to 5% of white groups. Disparities in health outcomes, educational outcomes, crime, age, income and hostile immigration, all contribute to racial inequalities. CV19 is likely to worsen these issues. Although there is not recent data on claimants by ethnicity, preCV19 Black or Black British groups faced higher unemployment levels. Mapping where the increases in claimants are, these are largely in areas with high black populations and greater employment in sectors which are closed.

496k people have been furloughed accounting for 27% of employment in the region

Claimants have increased by **93k** since February

Universal Credit claims **7.3** times higher than same time last year

Significant redundancy announcements at key flagship companies, especially in automotive and aerospace

Rolls Royce, Aston Martin and Triumph

Impact of Covid-19 on our People

Jobs and Employment

Inequality is likely to get worse, as in previous recession/pandemics. Employees aged under 25 years are about two and a half times as likely to work in a sector that is now shut down, as others, so raising the need for specific interventions to support them. Universal Credit (UC) in the last fortnight of March 2020 was 7.3 times higher than the same period a year earlier

We already have high youth unemployment in the region and low skills levels, which puts us at higher risk of longer term scaring effects on our young people, where they take longer to get into the job market and into good jobs. This will have a significant effect on areas already suffering deprivation and inequality. In economic downturns, young people tend to stay in education, but the disruption in the education sector due to closure may put many off this alternative. Therefore the region's young may be further disadvantaged.

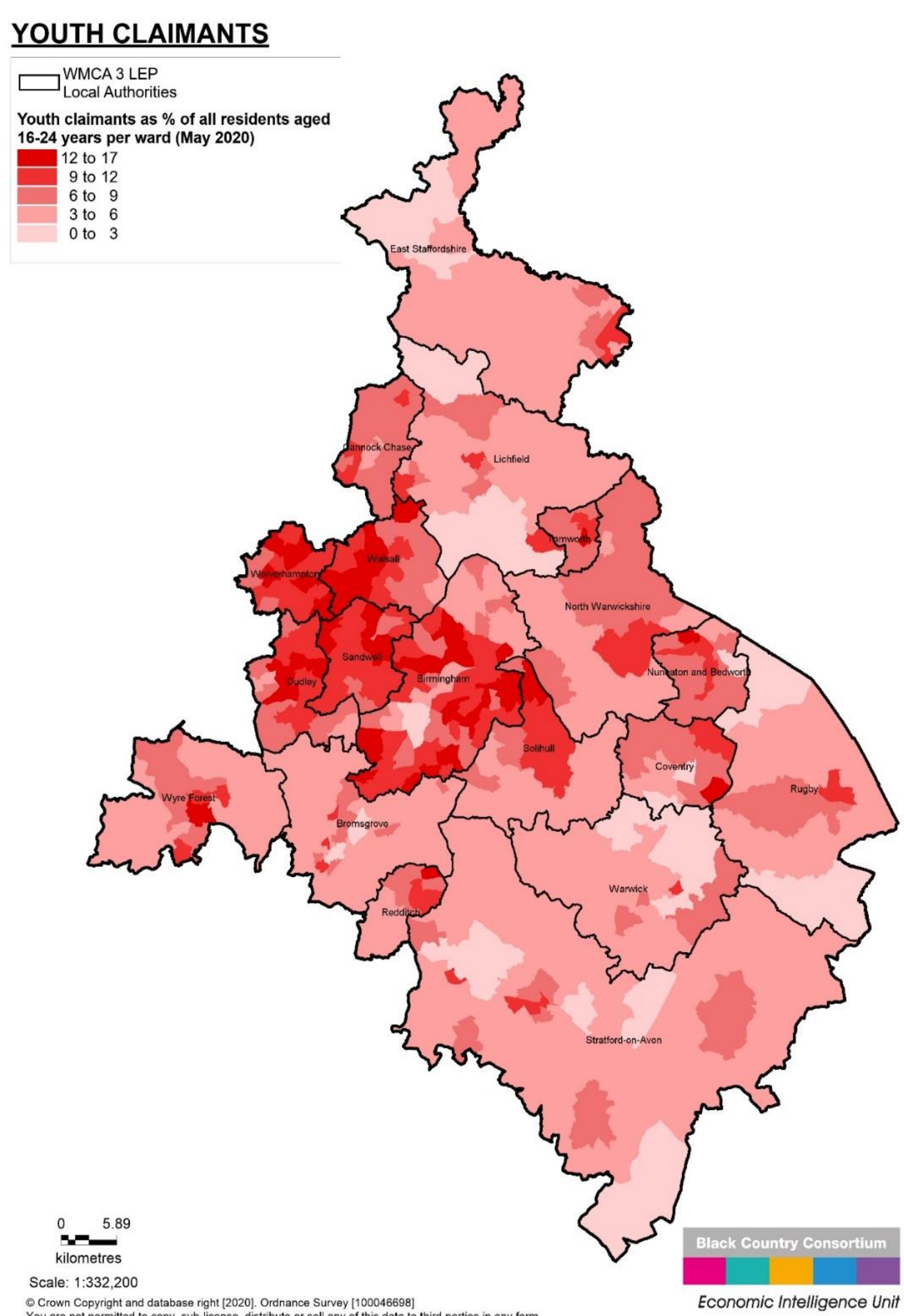
The move to homeworking has exacerbated inequality the ability to work by housing tenure shows that 54% of social housing renters are unlikely to be able to work from home, compared to 33% of private renters and 27% of those with mortgage owned properties

Under 25s

2.5 times

more likely to work in a sector which is shut down

Scaring effects young low, skilled are more likely to be unemployed



ward level
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in May

Impact of Covid-19 on our People

Voluntary sector and support

A poll of voluntary sector organisations showed that the biggest concern for them currently is how to support vulnerable groups, 38% of organizations surveyed identified cash-flow as their biggest concern. Nationally the charity sector bodies have made initial estimates that charities will miss out on a minimum of £4.3bn of income over the pandemic period, though the figure could be far higher. Research finds that up to 9 in 10 BME led organizations are at risk of closure after three months, with a projected 15,000 to 20,000 users per week unable to access services. Across the UK, 1 in 4 groups aren't sure that they will still exist in 6 months' time. 1 in 4 groups aren't sure that participants will come back and 38% of group don't feel equipped to support participants when they come back. Most organisations delivering youth services (88%) indicated they are likely or very likely to reduce service provision to young people. 31% said that staff redundancies were likely, while 17% said permanent closure was likely.

800 potential and actual rough sleepers have secured accommodation in the WMCA region. Of those who have come in off the streets 10 have returned and a further 40 have refused offers of help. Of those accommodated close to 150 have no recourse to public funds

Food poverty has accelerated through the pandemic, The Trussell Trust saw a national rise of 81% and 122% rise in parcels going to children. This is on the back of a 23% rise in the 6 months to December 2019. The Independent Food network reported a rise 17 times the same period last year. The Trussell Trust have said current levels of provision are unsustainable. They published key finds of latest research which found:

- An 89% increase in the number of food parcels distributed in April – up from 81% in March
- 67% increase in household referrals- up from 48% in March
- 107% increase in the number of children needing support from the same time in 2019

Crime and disorder

Nationally crime has fallen by 28% since Britain was locked down to battle the Covid-19. Falls in crime recorded by locally by police in the four weeks up until 12 April included a 37% drop in burglary, a 27% drop in vehicle crime, serious assault and personal robbery. Reported rape offences fell by 37% and shoplifting fell by 54%, with non-essential stores closed. Regionally personal robbery accounts for 3% of usual Total Recorded Crime (TRC). Personal robbery offences have seen a significant reduction of 53.6% since schools were closed and restrictions put 3 in place. Theft Shops & Stalls (TSS) usually accounts for 6% of usual TRC. TSS has reduced by 47.4% with almost all retail premises now closed, aside from supermarkets. Child Abuse accounts for 5% of usual TRC. With levels of school attendance being significantly lower than normal, referrals from partner agencies, especially those from education have been lower. Therefore, recorded child abuse has reduced by 47.7%. Hate crime accounts for 3%, and has reduced by 23.7% in the weeks since restricted movements began.Vehicle accounts for 11% of crime and it has reduced by 43% in the last six weeks and remain very low, most notably theft offences. The hypothesis remains that this is unlikely to change until restrictions are lifted. Domestic Abuse accounts for 17% of usual Total Recorded Crime. The weekly volume of Domestic Abuse has been stable since the beginning of March with a reduction of just 4% since restrictions in movement began. Offences would normally be in a period of seasonal reduction.

Food bank usage is 17 times higher than last year and a 107% increase in children needing support

Crime has dropped across the country
-54% in robbery
-47% in theft from shops
-4% domestic Abuse

1 in 4 charity support groups don't know if they will exist in in 6 months

Impact of Covid-19 on our People

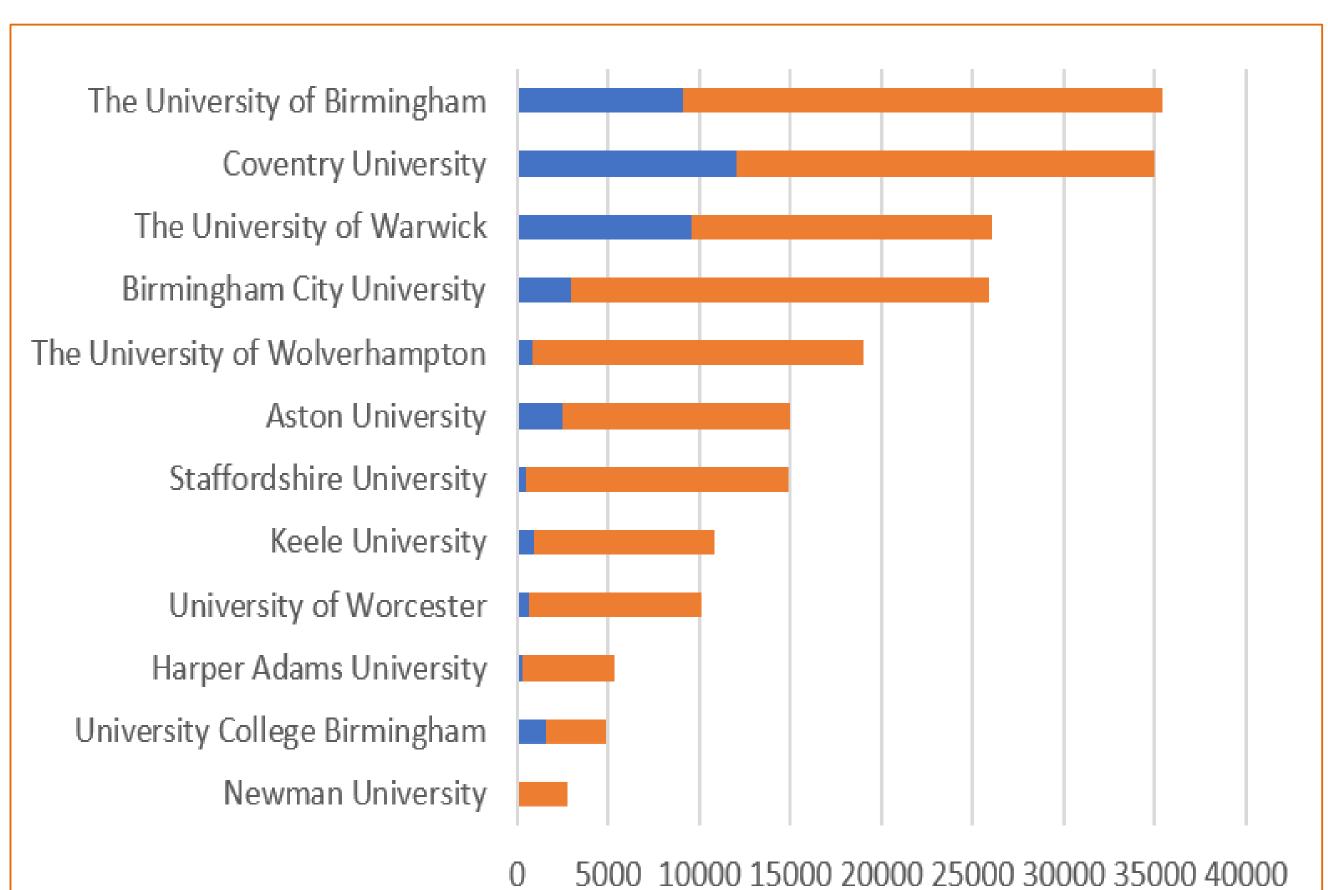
Skills and Education

With some schools reopening for some students from June, it is appropriate to reflect on the large literature indicating that school closures lead to slower progress or a reduction in learning outcomes for students. Despite moves to digital learning there remain concerns about disparities in access, with economically disadvantaged students most affected. There are also concerns about the development of skills that are more difficult to replicate online – including social and emotional skills that are prized by employers. Policy suggestions for overcoming educational disadvantage include extending vocational courses for young people by an additional year; greater flexibility in apprenticeships; extending maintenance loans and greater support for adult reskilling. Young people – especially those with no prior work experience – set to finish further education courses soon are likely to face particular challenges entering employment, with prospects set to be particularly limited for those taking courses in hospitality & catering, and in sports, leisure & recreation.

The university sector continues to be of high concern in the region due to the significant number of jobs and direct and indirect effects, this sector is also underpinning some of the dramatic drops in forecast performance. The instability of the university sector will also effect the future innovation capacity in the region and the support given to businesses to increase resilience as a result. All universities are impacted but the Universities of Birmingham, Coventry and Warwick are especially exposed to a contraction in international students, with important implications for local economies, given the importance of student spending.

Universities also face uncertainty about domestic recruitment and are seeing high levels of deferral. They have also lost income from commercial activities and rental accommodation. This is a particular issue to the West Midlands the region has more universities than anywhere else after London, they support 155k students and have a direct expenditure of £2.6bn in the region and £12bn indirect and supports 71,000 jobs, which puts GVA at £7.5bn (manufacturing worth £11bn). This sector is predicted to be one of the hardest hit due to international student numbers and impact on private sector investment in R&D. The region's universities can expect a serious hit in long-term revenues, resulting from greatly reduced enrolment of international students. This exposure varies across the region (as below); Warwick University is the most exposed with 37% international students, while the University of Wolverhampton is comparatively insulated at only 4% on this measure.

The region has 155k HE students and direct expenditure of £2.6bn and we have yet to see the impact of international travel on recruitment



Students at West Midlands Universities (Overseas Blue, Home Orange)

Impact of Covid-19 on our Businesses

Across various business surveys the main messages are: cash reserves are being used and are rapidly depleting; workforces have stayed relatively stable but there has been a significant amount of furloughing; the threat of redundancies remains, low hours are reducing, there is drop in contract staff and significant homeworking (50% of workers).

Local businesses are facing the most significant economic shock of recent decades with domestic demand, export demand, investment in training & capex and cash flow positions falling to record lows. While businesses are continuing to, on balance, experience the negative impact of COVID-19 and related lockdown measures, it is likely that businesses felt the sharpest negative impact of Coronavirus related measures in the early weeks of lockdown (end of March to mid-April).

Regionally 90% manufacturers have continued to trade during the crisis but 25% plan to make redundancies in the next 6 months. 40% believe it could take more than 12 months to return to normal trading conditions. One fifth of manufacturers are operating between 25% and 50% of their full capacity and over 70% of manufacturers have seen a further decrease in orders and sales. A quarter of companies expect to be back to full operating levels by the start of 2021.

Previous record levels of growth in the West Midlands have been driven by construction, which has now stalled and manufacturing, especially automotive, has been hit hard due to a reduction in domestic and export demand. Work carried out by WMREDI highlights there are 21 large manufacturing firms in the automotive supply chain which are at high risk because they have relatively poor liquidity ratios. They employ 16k people and only 12 are eligible for the Covid-19 Business Interruption Loan Scheme (CBILS). Out of the 9 high-risk firms that do not qualify for the CBILS, 6 of these also have negative profit margins. The 21 firms that do not qualify for CBILS will rely heavily on the Covid-19 Job Retention Scheme (CJRS), which is only a temporary measure.

Contrary to forecasters' assessments, businesses do not expect to see a sharp recovery as lockdown measures ease with the majority predicting a fall in profitability and turnover over the next 12 months. Meanwhile, a number of significant Government support schemes and interventions are set to end over the coming months.

While, on balance, firms are decreasing headcount, and HR1 redundancy notices are seeing a sharp rise, the Coronavirus Job Retention Scheme is likely to be playing a significant role in limiting workforce reduction. Businesses are to adapting to reduced demand by decreasing hours worked without decreasing headcount to the extent they otherwise may have done. However there is a change in business operations, with an increasing recognition that they can maintain operations on much lower numbers of employees, and the accelerated adoption of technology will drive this further. Maintaining headcount was an unusual pattern in the 2008 crash and has continued since, and this may now change as businesses can see gains from reducing the headcount. Therefore as the furlough scheme tapers down, it is likely that further redundancies will be made.

21 automotive sector companies are at high risk due to poor liquidity

25% of companies expect to be back to operating levels by 2021

90% of manufacturers have continued to trade but 25% plan to make redundancies in next 6 months

Impact of Covid-19 on our Businesses

HEADLINE ISSUES STILL OF CONCERN	
SECTOR	**KEY CONCERNS**
Cross Sectoral	**Social Distancing** - Companies are concerned over the lack of clarity for the recommended social distance. With discussions of this being potentially reduced to 1m, some companies have already invested up to £100k to make their premises safe under the 2m rule, meaning there is no further funding to adapt this to 1m. **Access to Finance and Cash flow** - A number of SMEs continue to express concern about their ability to survive until the economy fully reopens due to cash flow. Most businesses in need of financial help in some way. Credit providers more cautious about who to lend to. Sales affected as buyers cannot always afford to pay. Companies do not want to borrow as they feel they are creating a problem, possibly larger, later on. **Diversification -** Many companies looking at what else they are able to do, to diversify. Some are moving very quickly and most are aware this is key to their survival. **Job Retention Scheme & Furlough -**Some confusion around the new rules of the Job Retention Scheme persists, particularly around the rules for part-time workers from July. Fears around the unknown in relation to furlough being decreased in August and then ceasing in October. Companies preparing for redundancies and assessing costs and those at risk. This has been ongoing since furlough started. Potential legal cases as some employees not prepared to go back to work face redundancy.
Retail	**Return to Work -** Many are keen to re-open and start their recovery process. However, others are confused and disheartened due to the decrease in sales and interactions they have been seeing since Feb/March. Most have concerns about how to ensure safety of staff and customers. **New Business Models including Digitalisation -** A lot of retail businesses have mentioned an increase in online orders and many have adopted ways to run the business digitally. **Cross Theme -** The retail sector is complex, and its performance during the pandemic has differed immensely by sub-sector, with some areas showing strong growth whilst other areas have collapsed. Many online shopping, supermarket, and local convenience markets have shown growth over the past three months, whilst most remaining retail markets have had to close, furlough staff, and struggle with shop unit and shopping centre rents.
Business & Professional Services	**Cross Theme** - Many starting to see business pick back up, however this is very much dependent on sub sector. **Access to Finance and Cash flow** - Some businesses still struggling due to not qualifying for the financial support offered.
Construction	**Cross Theme** - Starting to see work picking back up, but volume and value of orders is minimal to previous years. Some are suggesting that the impact has been minimal and they don't think the effects will be long-lasting. Some are looking to cut overhead costs.
Manufacturing & Engineering	**Cross Theme -** Research suggests this sector was one of the hardest hit during the lockdown. Starting to see work picking back up, but volume and value of orders is minimal to previous years. Some are suggesting that the impact has been minimal and they don't think the effects will be long-lasting. **Trade Agreements -** Export sales – which had already fallen in the previous two quarters – continued to plummet. **Diversification -** Businesses looking for funding to support diversification plans.
Visitor Economy	**Access to Finance -** Various businesses that have been closed throughout the lockdown period require support with financials having had no income. **Loss of Sales -** Many are struggling to engage with clients or diversify – a lot of what they do is based on face-to-face interactions; difficult to deliver to an online audience.

Impact of Covid-19 on our Businesses

The closure of the hospitality, retail, tourism and cultural sectors has also taken a heavy toll, especially in rural and peripheral areas dependent on this as a large part of their economy. Latest WMGC data highlights 80% of businesses are now closed in the tourism sector. All have seen a drop in revenue of more than 50% and 60% are experiencing cash flow problems. Most businesses are worried that without additional support, they may not survive lockdown. Some 10% say they are contemplating permanent closure in the next few weeks and another 40% say they may be facing failure by the end of the summer. An audience survey by Indigo highlights only 17% of audience responses are booking for events, half of which are for events from November onwards and 35% are in Sept/October.

A significant proportion of firms report having applied for, or planning to apply for, finance through the Coronavirus Business Interruption Loan Scheme or Bounce Back Loan Scheme and 1 in 4 firms report pressure to increase prices arising from finance costs, indicating high levels of debt accruing within the business community. Going forward the burden of debt is significant; nationally it is forecast to be around £100bn. Payments are now being pushed back across the board, including public sector payments, which is creating a huge credit risk in supply chains. Businesses are understandably reluctant to take on debt they may not be able to pay back, and bank lending processes are still an issue due to the length of time taken and the decision making processes. The new bounce back loans seem to have a higher interest. The furlough scheme is working well and making a difference to businesses and whether they can withstand the current crisis.

Highlighted in purple, the following table shows the sectors where the WMCA (3 LEP area) has a higher percentage of jobs when compared to the England average – this includes advanced manufacturing and engineering (11.4% vs 8.0%), the public sector including education (13.1% vs 12.9%) and logistics and transport technologies (5.9% vs 4.9%) , life sciences and health care (13% v 12.7%) and retail (16.6% v 15.3%). In order to determine which sectors are currently most vulnerable we have applied the broad sector analysis from the Office for Budget Responsibility scenario to the 10 main sectors for the WMCA. The table also shows on a red - green shading scale which sectors will be potentially affected the most and how much that sector accounts for the overall total. This headline analysis suggests that the public sector (including education) and the visitor economy sector will be the sectors most impacted from the Covid-19. Analysis suggests that the life sciences and healthcare may be the only sector that will be unscathed, but notably also one of main sectors that has took the brunt of the human impact from Covid-19

Sector	WMCA (3 LEP) Jobs	% WMCA (3 LEP) Jobs	England Jobs	% of Total England Jobs
Advanced Manufacturing & Engineering	209,400	11.4%	2,083,450	8.0%
Business, Professional & Financial Services	402,040	21.8%	5,962,000	22.9%
Construction (Building Technologies)	121,000	6.6%	1,832,000	7.1%
Cultural Economy inc. Sports	135,150	7.3%	2,569,000	9.9%
Digital & Creative	49,320	2.7%	1,151,000	4.4%
Low Carbon & Environment Technologies	28,615	1.6%	471,850	1.8%
Life Sciences & Healthcare	239,000	13.0%	3,306,000	12.7%
Public Sector inc. Education	242,000	13.1%	3,342,000	12.9%
Retail	306,000	16.6%	3,983,000	15.3%
Logistics & Transport Technologies	109,355	5.9%	1,279,000	4.9%
Total	1,846,000		25,979,300	

Impact of Covid-19 on our Businesses

Furloughed Workers per Sector

HMRC released at a national level the number of workers furloughed by broad sectors. The broad sectors were grouped to largely align to the WMCA ten sectors to help further understand impacts to vulnerable sectors. Applying the national proportions of workers furloughed per sector to the WMCA (3 LEP) furlough numbers suggests the cultural economy, including the sports sector, will have the highest number of workers furloughed at an estimated number of 100,444 workers. This potentially accounts for 74.3% of jobs in the cultural economy, including the sports sector, in the WMCA (3 LEP).

This is followed by the retail sector with an estimated 91,856 workers furloughed in the WMCA (3 LEP) area. This potentially accounts for 30.0% of jobs in this sector the WMCA (3 LEP). Notably, when looking at the proportion of jobs per sector, the retail sector is higher than the national average (16.6% vs 15.3%). The business, professional and financial services also has a potential high number of workers furloughed in the WMCA (3 LEP) area at 91,737 workers, which is an estimated 22.8% of jobs in this sector.

The sector with the lowest proportion of workers furloughed is low carbon and environment technologies, with an estimated number of 5,523 workers furloughed in this sector for the WMCA (3 LEP) area, however this may equate to 19.3% of jobs in the WMCA (3 LEP) area. The next lowest sector at an estimated 9,586 workers furloughed in the digital and creative sector which is around 19.4% of jobs.

The following table firstly shows the potential number of workers furloughed per sector which have been coloured red through to green depending on how heavily impacted and also in the table is the total number and proportion of jobs in the WMCA per sector, highlighted in blue demonstrates where the WMCA has a higher proportion of jobs when compared to national:

	% of National Furloughed	Estimated Number of WMCA Furloughed	WMCA Jobs (2018)	% of WMCA Workers Furloughed to Jobs	WMCA % of Jobs Total	England % of Jobs
Advanced Manufacturing	9.6%	47,417	209,400	22.6%	**11.3%**	8.0%
Business, Professional and Financial Services	18.5%	91,737	402,040	22.8%	21.8%	22.9%
Construction	7.8%	38,778	121,000	32.0%	6.6%	7.1%
Cultural Economy Inc. Sports	20.2%	100,444	135,150	74.3%	7.3%	9.9%
Digital and Creative	1.9%	9,586	49,320	19.4%	2.7%	4.4%
Life Sciences & Healthcare	3.8%	18,944	239,000	7.9%	**12.9%**	12.7%
Logistics & Transport Technologies	3.5%	17,307	109,355	15.8%	**5.9%**	4.9%
Low Carbon and Environment Technologies	1.1%	5,523	28,615	19.3%	1.6%	1.8%
Public Sector Inc. Education	2.5%	12,428	242,000	5.1%	**13.1%**	12.9%
Retail	18.5%	91,856	306,000	30.0%	**16.6%**	15.3%
Unknown/ Other	12.5%	62,025				
Total	100%	496,200	1,846,000	26.9%	100.0%	100.0%

Impact of Covid-19 on our Businesses

Retail footfall fell to 20% of its 2019 levels and remains below 40%, with the West Midlands and the North East seeing the highest falls between 74% and 76%, however the lowest fall is still significant at 68%.

Consumer spending data shows small towns geared around tourism are hardest hit. There is a significant localisation effect leading to inner city areas doing better than suburbs. Consumer spend in Coventry has seen a 47% drop, Birmingham saw a 42% drop and Wolverhampton and Walsall a 46% drop.

Consumer spend is down significantly, and opening businesses up will have no effect unless people buy the products and services. There has been significant behaviour change with a drop in spend of more than a third and latest data from Barclays says spending is far lower than the Bank of England are forecasting; as yet we do not know yet whether this change will become the norm. However people are clearing household debt greater than ever before £3.8bn has been paid off and savings have gone up by £13.1bn. The virus has accelerated recent trends, with online shopping increasing to 60% against an average of 8%. Businesses have responded with significant take up of online provision and technology transformation. Rebuilding customer experience and appealing to these changing values will be key for business success and revival.

All businesses will be impacted by the Covid-19 pandemic. Some sectors may benefit financially, while others will suffer huge losses. Those countries with more service-oriented economies, like the UK, will be more negatively affected and will suffer larger negative employment effects. The UK economy was not in great shape coming into the Covid-19 crisis, after experiencing years' of little growth and investment, due to the uncertainty of Brexit. While we await the official data to confirm that the UK is currently in recession it is becoming clear the Office of Budget Responsibility's (OBR) forecasted 35% downturn in economic output between April and June as a result of the Covid-19 crisis is likely to be realised.

The ONS Business Impact of Covid-19 Survey (BICS) found that 25% of businesses had closed temporarily and 0.4% had permanently closed. Researchers at the Enterprise Research Centre (ERC) have calculated that, as part of work for the British Business Bank, this could easily translate into the loss of 85,000 firms and 1.2m jobs by September 2020 pushing the unemployment and claimant count even higher than it is now. At the time of writing, 8m jobs in over 1m firms have been 'furloughed' under the Government's Job Retention Scheme with £11.1bn claimed so far, giving an indication of the size of the 'pause' button on the economy.

Spend in Coventry down 47% Wolverhampton 46% Birmingham 42%

Online shopping has increased to 60% from an average of 8%

Retail footfall fell by up to 76% in the West Midlands

Nationally people are clearing debt and saving and increasing savings more than ever before

Impact of Covid-19 on our Environment and Infrastructure

In the West Midlands, of those expressing an opinion, 65% felt the bus operators' response to Covid-19 had been excellent/good. 61% held a similar opinion in respect of rail operators and 59% in respect of Metro. 43% of public transport users are extremely concerned about using public transport post lockdown. Increased cleaning patrols (88%), social distancing when queuing (82%) and when travelling (72%) are essential in renewing passenger confidence.

The top-3 things respondents wanted to see change/ learn lessons from were *cleaner air* (81%) and *reduced traffic on roads/ reduced car use* (75%), followed by a *better work/life balance (*67%).
The two things people are most likely to do when lockdown restrictions are lifted are *walk more* (47%) and *working from home more* (39%) – albeit not everybody is able to do this. The thing they are most like to do less of is *use public transport* (36%). Transport for West Midlands data shows that there were roughly c200,000 daily Swift Card commercial journeys being made in the region in early March, compared to just c15,000 in early May.

36% of respondents to the Covid-19 travel change survey said they were less likely to use public transport post lockdown. Cycling has increased and 17% of respondents to the Covid-19 travel change survey said they are likely to cycle more post lockdown and 47% intend to do more walking. Train station concourse dwelling area capacity could reduce by approximately 86% from 1 person per m^2 because of social distancing.

Building sites across the UK have closed during lockdown (but are are now opening). This brought work on 220,000 new homes to a standstill this is in line with qualitative information which suggests that 80% of building sites were closed in lockdown, with those remaining open running at approx. 20-30% capacity due to distancing and supply chain issues. 51% say they have noticed cleaner air, and 27% more wildlife, since the lockdown began. Daily carbon emissions in the UK to drop by 36% under the current lockdown measures. Regionally levels of road traffic have dramatically reduced, the key source of NO2 in urban centres across the West Midlands – were roughly 30% of normal levels in early April. Nationally Covid-19 lockdown has seen Britain become overrun with tonnes of rubbish as the closure of tips leads to a 300 per cent fly-tipping increase. However more than 19m (38%) say they are cooking more from scratch and 17m are throwing away less food (33%).

Nationally 27% of environmental charities surveyed say they are either at high risk of becoming financially unviable in the coming months or financial reserves sufficient for four months or less. Almost half of those surveyed (47%) say their financial reserves are sufficient for six months or less. Of those that were able to provide details of expected financial losses the expected loss for just 23 organisations is £88m

200k swift card journeys in March dropped to 15k in May

80% of building sites were closed in lockdown

65% think bus operators have responded well

Levels of NO2 have reduced by 30% in urban centres

Impact of Covid-19 on our leisure, culture and tourism

93% of audiences are saying they are missing attending events, 55% look forward to supporting their local venue but only 17% are making bookings (50% of these past November). Only 19% would return to attending events just because venues reopen. 41% would not consider booking for events for at least 4 months and ¾ want to see some distancing measures. There are 30,418 arts, culture, heritage or science charities nationally, about 15% of charitable sector nationally. Majority have had to close, having a significant impact on ability to generate income and deliver social benefits within communities. Charities reported projected loss of 48% income. 98% of heritage organisations were impacted within the first three weeks and the remaining 2% expecting impact in the future. 69% reported lost income and 91% cancelled or postponed events. 82% of organisations reported high or moderate risk to the long-term viability and 46% could survive no more than 6 months. Regionally creative and cultural businesses have been hit harder than most sectors by Covid-19. Even the 80% salary support is insufficient for many to keep staff on as they are often facing cancellation of all of their current contracts with no idea when work will resume. The City of Culture events, which would have generated significant sectoral growth, have also been pushed back to May 2021.

30% of the UK's creative workforce are self-employed (vs national average 15%). Within wider creative industries, 42% of freelancers/self-employed predict an annual decrease in income of more than 75% during 2020, and 63% of organisations predict a decrease in annual turnover of more than 50%. 62% of freelancers/self-employed and 42% of all organisations estimate that their monthly income or turnover has decreased by 100% since the outbreak. Regionally, organisations/individuals concerned about income for next 6 months; 71% of organisations and 63% of individuals expecting to earn less than 25% compared with same period last year. 34% of organisations have no reserves with 23% having less than ¼ in next three months. 28% of individual respondents have no savings at all. 50% of organisations report refocused their priorities, 62% furloughing all or some of their workforce. Good levels of awareness of sector support measures but low take up due to uncertainties about eligibility. 22% of organisations expect to be trading again immediately once lockdown lifted, 25% confident trading within 3 months. 47% are somewhat confident that their business will recover within 12 months.

Tourism (many cultural & heritage organisations are also visitor attractions, with heritage-based tourism alone worth £20.2billion to the UK economy per annum.): 40% of businesses surveyed had closed/ceased trading and only 36% expect to be still open/trading at the end of April, with the figure falling to 32% at the end of June, 25% at the end of August and 20% at the end of September
In Birmingham all cultural sector events and festivals have been cancelled or postponed to later in the year of 2021. There will be a competition for dates and audiences and will also put pressure on available spaces for future events

In Birmingham, snapshot survey data at the end of March showed that between 18 organisations and 15 freelancers, an average of 75% of freelancer contracts were cancelled with total lost income £90k. Estimated losses for organisations were £5.3m (between 3-6 months) and value of cancelled freelance contracts £1.2m . *I*n Coventry evidenced 31 freelancers reporting a total loss of just over £500k with average loss per member £16,657. Summer was also identified as the busiest time of the year with majority of income generated through this period. It is likely this is reflected in other parts of the region.

34% of creative businesses have no reserves and 1/5 of businesses say income has gone down by 100%

40% of tourism businesses have closed; and 75% of freelancer contracts have been cancelled

Impact of Covid-19 on our leisure, culture and tourism

Creative Freelancers

Coventry and Warwickshire LEP have carried out an analysis of the freelancer gap, where funding and support is missing for those who are self employed, which affects the creative and cultural industries specifically.

Covid-19 and the subsequent economic impact has highlighted a lack of understanding and awareness of our freelancer eco-system, particularly within the creative industries. Before Covid-19, creative industries were growing at five times the rate of the rest of the UK economy generating £11.7 billion in GVA and exporting £46 billion in goods and services. 2m people are directly employed by the sector and it is underpinned by a significant and diverse freelance workforce estimated to be an additional average headcount of 34% across all industries, with some sub-sectors as high as 50%.

Covid-19 has presented serious challenges for all businesses, but particularly for the creative industries. The recent Creative Industries Federation survey (March 2020) indicated that 42% of creative freelancers predict an annual decrease in income of more than 75% during 2020 and 63% of creative organisations predict an annual turnover decrease of more than 50%.is a conservatively estimated loss of at least £55 million in GVA this year. Even more concerning is the lack of support available to ensure the survival of our creative industries and freelancer community: nationally 40% of organisations and freelancers were not able to access Government support5 Applied to Coventry & Warwickshire, that is a conservatively estimated loss of at least £55 m in GVA this year. Even more concerning is the lack of support available to ensure the survival of our creative industries and freelancer community: nationally 40% of organisations and freelancers were not able to access Government support.

Although not statistically significant enough as a sample, the average loss of income per organisation was £108,333 in just one month. With an estimated 1138 creative businesses in Coventry city alone, that equates to at least £123m lost to the sector from mid-March to mid-April. With the national picture showing that 40% of creative organisations have not been able to access any Government support to mitigate against lost income, this situation presents a substantial risk to our regional eco-system

To date, Covid-19 Government support schemes have focused on businesses with commercial premises; those with permanently employed staff; or the self-employed with provable income. Most creative freelancers do not fit into these categories. Our lack of regional awareness about our creative freelance community is clear from the lack of sector specific recorded statistics. 51,200 people identify themselves as self-employed across Coventry & Warwickshire and 26,900 identify as working but not in ‘permanent employment ’; yet we do not know how many of these contribute to the creative industries. Creative freelancers often register themselves as Directors of private limited companies without PAYE employees or premises and this has been problematic in terms of business support before the pandemic as well as during. Creative freelancers have been unable to access European funded business support requiring job creation and capital investment. Even the recent West Midlands Combined Authority £2m pilot programme for creative industries focuses on ‘scale-up’.

Impact of Covid-19 on our leisure, culture and tourism

West Midlands Growth Company has developed a series of post Covid forecast scenarios for the likely performance this year and next year for inward investment and tourism, they align with the general thinking across forecasters but apply directly to the West Midlands Economy.

Drivers and enablers	Potential outcomes
Strong bounce back	
Key markets for the region such as China, India, the US and Germany emerge strongly from lockdown The trend to near-shoring and localisation of supply chains to combat Covid-19 disruption continues, boosting in-bound investment in our critical transport technologies and advanced manufacturing clusters The UK emerges successfully from the lockdown in late summer The government negotiates an orderly exit from the EU with a trade deal at the end of 2020 Air bridges are established with the region's key markets for tourism, trade and investment The UK government announces a budget for jobs and growth in the autumn	A release of pent up demand in FDI and in-bound tourism from key source markets UK and WM business and consumer confidence bounces back The region's business conferences and events market begins to recover There is a boom in staycations, domestic day trips and city breaks in the region – facilitated by planned improvements to the transport infrastructure and Coventry City of Culture The Commonwealth Games Tourism Trade and Investment (CWG TTI) programme helps accelerate these trends, hitting all its targets for inward investment, capital investment, business and leisure tourism attraction
Sluggish recovery	
Global storm clouds gather with an escalation of geo-political tensions and trade wars - with hot spots in some of our key markets such as China, the US and the GEC No deal Brexit, WTO rules and tariffs The region's USP's and ability to compete in the market as a business, investment and tourism location are depleted	Sluggish growth in in-bound investment and tourism UK and WM business and consumer confidence is slow and reluctant to recover Tourism sector sees only limited, mainly local growth in demand – notably the VFR market The CWG TTI programme only partially hits its outcome targets
Second wave	
Lockdown re-imposed in the UK and in the region's key markets for trade, tourism and investment	Recovery in key in-bound markets delayed until H2 2021 Tourism and investment in the region continues to flat-line until 2022 at the earliest. The pace and shape of recovery thereafter is uncertain

Impact of Covid-19 on our leisure, culture and tourism

Inward Investment

Forecast for 2020-2021
A combination of Brexit uncertainties and the impact of Covid-19 restrictions meant that by March 2020 WMGC inward investment pipeline had shrunk by 9% from December 2019 and by 33% from March 2019. Many of the projects still within the pipeline, meanwhile, are on pause due to the challenging economic climate. For example:

- While commercial and legal processes relating to property acquisition are taking much longer, investors are also re-setting their space requirements as they adopt more agile and home working.
- There is no incentive for investors to progress projects until office occupation levels begin to increase current projections from Birmingham's BPFS sector practice heads, suggest that only 20% of their staff will be back in the office full time by January 2021.

In the face of these challenges WMGC have downgraded their forecast for projects landed in 2021-2022 from 36 to 12, jobs created from 1,570 to just under 530, GVA generated from £104m to £37m and business rate uplift from £8.3m to £2.9m.

2021-2022 and beyond
Under the WMGC **strong bounce back scenario** the region's investment pipeline to would return to pre-Covid levels in H2 2021-2022, underpinned by:

- The emergence from lockdown of key source markets for the region
- An orderly exit from the EU with a trade deal at the end of 2020
- A UK government budget for jobs and growth in the Autumn
- The increased near-shoring and localisation of supply chains

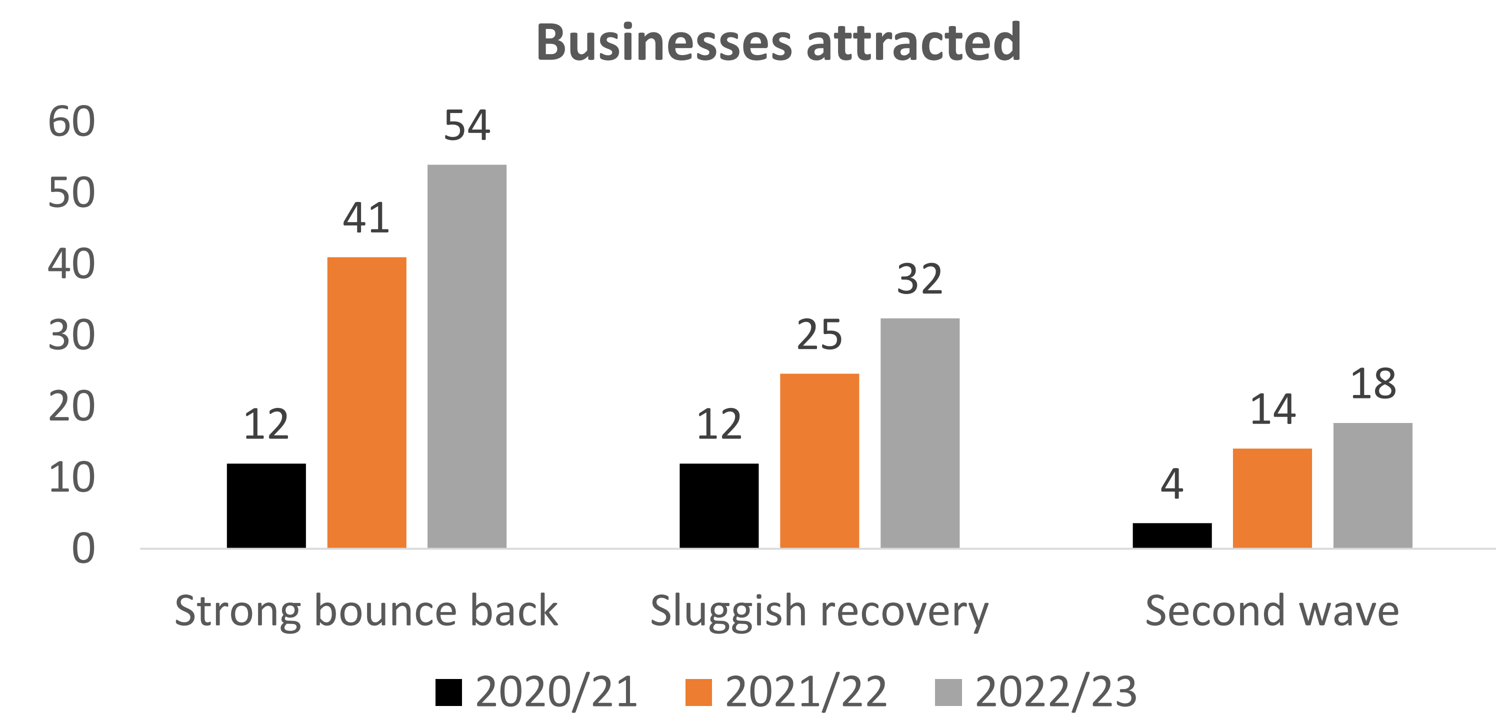
41 new inward investment projects would be landed in 2021-2022 and another 54 would be landed in 2022-2023. So after achieving an outcome nearly 70% below target this year they would out-perform the previous forecast next year and the year after, allowing us to meet our three year target. As a result while projects landed will create less than 530 jobs this year (more than 1,000 below target) this would rise to more than 1,000 next year (nearly 200 above target) and more than 1,500 the year after (nearly 700 above target). This would lead to GVA generation of more than 120m next year and more than 160m next year and business rates uplift of nearly £10 m next year and more than £13 m the year after. 'Gear shift' projects involving the attraction of substantial, high value 'anchor' investments would account for just 4% of the total but account for two thirds of jobs created, GVA generated and business rates uplift. Our estimates for jobs, GVA and business rate uplift per project landed are based on WMGC average actual achievement over the last 3 years

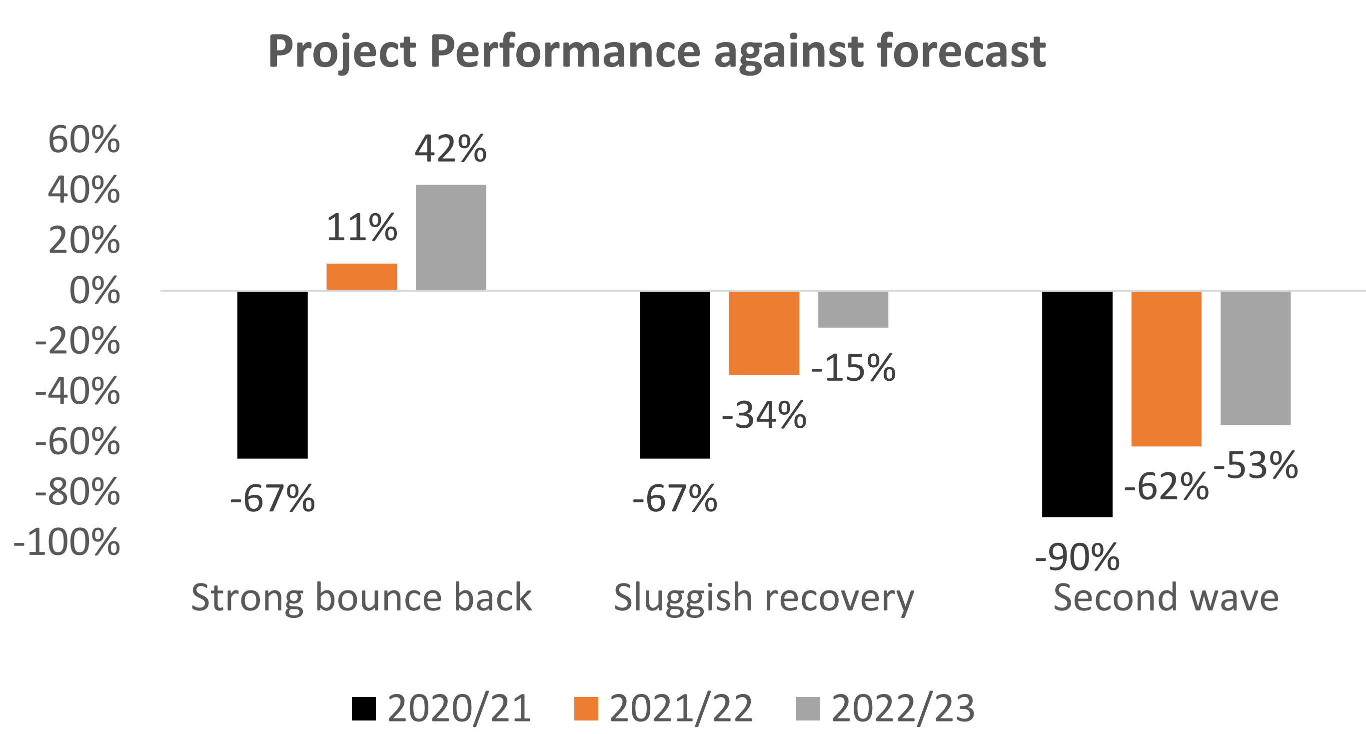
Under our **sluggish recovery scenario** the region's investment pipeline would remain at below pre-Covid levels throughout the forecast period and new initiatives such as the Midlands Engine KAM Programme and the Commonwealth Games Tourism, Trade and Investment (TTI) Programme would not hit their outcome targets.

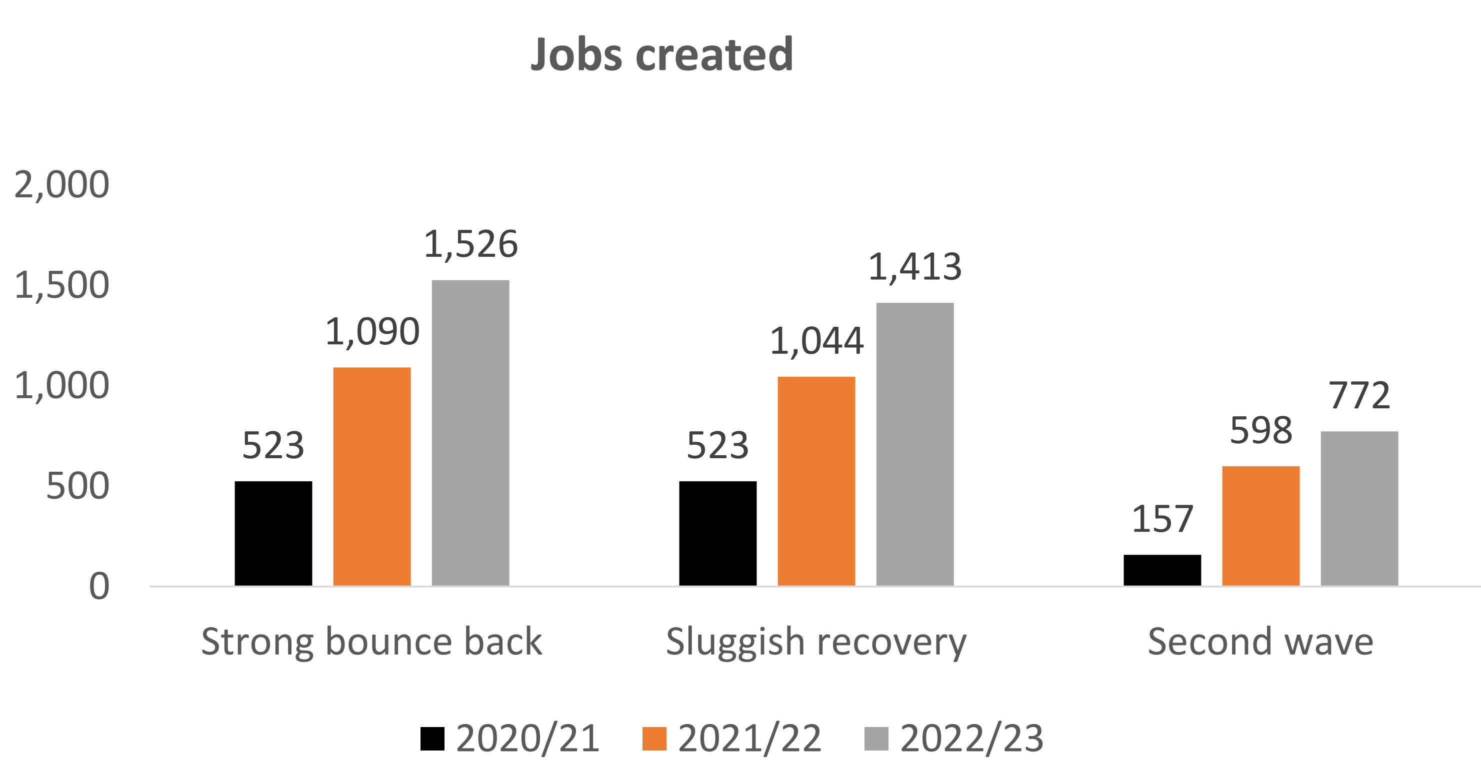
Just 25 new inward investment projects would be landed in 2021-2022 and another 32 would be landed in 2022-2023, with performance 36% below target over the forecast period. Less than 3,000 new jobs would be created over the 3 years, more than 1,700 below target. This would generate just £205m of GVA, more than £120m below target and create just £16m worth of business rate uplift, nearly £10m below target. Only 3 'gear shift' projects would be attracted to the region, creating just over 2,000 jobs.

Impact of Covid-19 on our leisure, culture and tourism

Under the WMGC **'second wave scenario'** prolonged Covid-19 restrictions would act as a significant constraint on business attraction activity into 2021-2022. Just 4 new inward investment projects would be landed this year, another 14 would be landed in 2021-2022 and another 18 would be landed in 2022-2023, with performance 67% below target over the forecast period. Only just over 1,500 new jobs would be created over the 3 years, nearly 3,200 below target. This would generate just £105m of GVA, more than £220m below target and create just £8m worth of business rate uplift, nearly £18m below target. Only 1 'gear shift' projects would be attracted to the region, creating just over 500 jobs.







Impact of Covid-19 on our leisure, culture and tourism

Visitor Economy

Forecast for 2020

While Covid-19 has created an unprecedented crisis for the region's business community, the tourism sector was the first to be affected and continuing to bearing the brunt. The regular survey of hotels, conference venues and attractions across the region run by WMGC's Research Team and Shakespeare's England indicates that:

- To date 80% of businesses have temporarily closed
- Many businesses are worried that, without additional support, they may not survive lockdown with 10% contemplating permanent closure in the next few weeks and another 40% believing that they may be facing failure by the end of the summer.

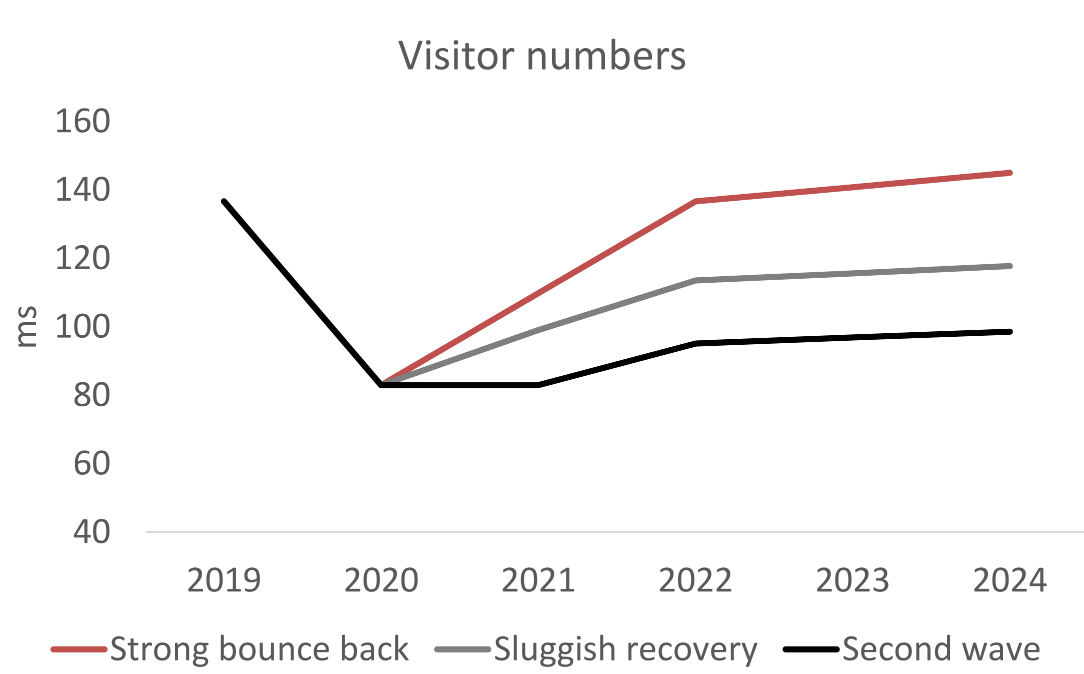
Based on impact modelling carried out by Global Tourism Solutions, the consultants who provide our STEAM tourism and value model, we are forecasting a fall in visitor numbers of 37% and in associated economic impact of 36% between 2018 (latest data available) and 2020. Based on the assumption that the sector continued to grow in line with recent trends in 2019, meanwhile, we estimate that while visitor numbers will fall from 137 m in 2019 to just 83 m in 2020, associated direct and multiplied expenditure will fall from 13 billion to just 8 billion.

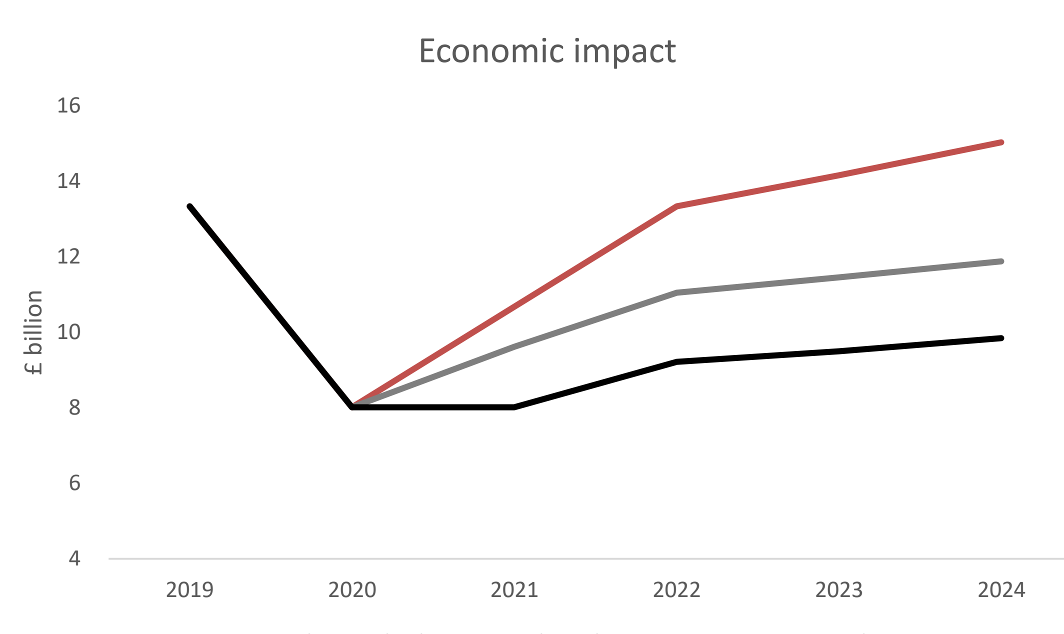
Forecasts for 2021 and beyond

Under our **strong bounce back scenario** visitor volume will increase by around 32% in 2021 and around 24% 2022 and visitor value will increase by around 33% in 2021 and around 25% 2022, with both recovering to pre-Covid levels. This scenario assumes that, boosted by a UK government budget for jobs and growth in the autumn and the establishment of air bridges with the region's key overseas markets for tourism:

- UK and WM business and consumer confidence bounces back
- The region's business conferences and events market begins to recover
- There is a boom in staycations, domestic day trips and city breaks in the region
- The CWG TTI Programme helps stimulate a recovery in international visitor numbers

Under the **sluggish recovery scenario** consumer confidence is much slower to recover and the CWG TTI programme only partially hits its outcome targets. Visitor volume and value would rise by around 19% in 2021 and 15% in 2022, with visitor numbers 14% below pre-Covid levels and economic impact 11% below pre-Covid levels in 2024. Under the **second wave scenario** tourism activity continues to flat-line until 2022 at the earliest as lockdown is re-imposed the UK and the region's key overseas markets. Visitor numbers would be 28% below pre-Covid levels and economic impact 26% below pre-Covid levels in 2024.





Impact of Covid-19 on our Places Birmingham and Solihull

As part of the Midlands Engine Economic Observatory work WMREDI and the Black Country Consortium Economic Intelligence Unit developed Local Economic Partnership level profiles. We have reviewed and updated these profiles and assessed the risks in light of Covid-19.

Ideas

The Greater Birmingham & Solihull LEP has internationally recognised research strengths particularly, in advanced material characterisation and use; energy; low carbon technologies; innovative healthcare; and digital technologies.

Researching and producing innovative products and educating the workforce of the future is strongly supported by the presence of five universities in the area: Aston University; Birmingham City University; Newman University College, University College Birmingham; University of Birmingham.

The crucial role that universities play in relation to local economic development is emphasised by the high value of research funding awarded to universities and businesses in the LEP in recent years. Between 2014 and 2018 53,590,192€ was secured from Horizon 2020, the European Union's Research and Innovation programme. Research councils and the UKRI provided a further £997,002,402 between 2012 and 2021.

Key assets include the large number of business parks and related initiatives in the area:

- Innovation Birmingham Campus,
- Birmingham Research Park located adjacent to the University of Birmingham campus,
- Longbridge Technology Park and Innovation Centre in Birmingham,
- Institute of Translational Medicine at University Hospitals Birmingham,
- Birmingham's Smart City Commission,
- West Midlands 5G Testbed,
- Kingfisher Business Park in Redditch
- Fradley Park industrial estate in Lichfield.
- The STEAMhouse centre for innovation run by Birmingham City University which supports entrepreneurs, sole traders, companies and citizens to build their businesses, develop products and services and develop new ideas.
- The Enterprise Research Centre at Aston University
- The construction of a new Life Sciences Park by the University of Birmingham

The area has particular strengths in terms of the proportion of firms undertaking marketing innovation (ranked 6th of 39 LEP areas and 1st among West Midlands LEP areas) and design investment for innovation (ranked 9th in England and 2nd in the West Midlands).

People

Average earnings within the LEP area are the second highest within the West Midlands - an important factor in attracting higher skilled workers to the area. The area also performs strongly compared to Coventry and Warwickshire and the Black Country in attracting students to remain in the area for study and employment, and in attracting graduates to return to work in the area after they have studied elsewhere.

Employers in the Greater Birmingham and Solihull take on the highest total number of apprentices compared to in Coventry and Warwickshire and the Black Country. In 2018/2019 there were fewer apprenticeship starts per head than in Coventry and Warwickshire and the same number per head as in the Black Country. This is important in terms of enabling companies to have the skills needed to be competitive and develop new products.

Greater Birmingham and Solihull's has an extremely diverse population offering an array of international connections, a blend of different cultures and a large proportion of under 25s.

The HS2 Skills Strategy presents opportunities for Greater Birmingham to benefit from the construction of the Advanced Transport and Infrastructure National College.

Impact of Covid-19 on our Places Birmingham and Solihull

Infrastructure

Greater Birmingham and Solihull is a key regional and national transport Hub. Various motorways, 4 major stations, the Midlands Metro and Birmingham International Airport serve the area. The arrival of high-speed rail will improve connectivity across the functional economic area.

One of the West Midlands 5G test bed Hubs is located in Birmingham offering opportunities to develop and test new digital technologies. Nonetheless, continued investment in new housing and new employment sites together with major new infrastructure schemes and expansion of broadband coverage will be important to support growth in the area.

Residential and commercial developments have multiplied over recent years. Total dwelling stock increased by 6% between 2007 and 2018. The House Price to Income Ratio in 2019 was 7.37 compared to 7.70 in Coventry and Warwickshire and 5.96 in the Black Country.

The area is set to benefit considerably from the arrival of HS2. HS2 will cut the journey time from Birmingham to London to 49 minutes and create opportunities to develop ecosystems in the area and increase the quality of jobs available. Burton Town Centre is also set to benefit from the redesign of Station Street.

Business Environment

With the largest business stock amongst the three West Midlands LEPs, Greater Birmingham and Solihull is an important centre of business. It is home to a number of nationally and internationally significant companies. Reflecting the manufacturing heritage of the area as well as role as a hub for the professional and business services sector for the wider region, these include Mondelez, HSBC, National Express and Jaguar, Wesleyan Assurance Society and Gowling WLG.

At £58,555 in 2019, GVA per employee is higher than in the Black Country but lower than in Coventry and Warwickshire.

The largest sectors in the area in 2018 in terms of the number of jobs were health (13.1%), business administration and support services (10.7%) Manufacturing (9.7%), Education (9.5%) and Retail (9.1%).

Place

Greater Birmingham and Solihull is the West Midlands LEP area with the highest number of visitor trips and highest value of visitor spending. The number of trips made increased by 6% in 2017 compared to 2016 to 3.5 m but then fell to 3.3 m in 2018.

The pace of growth and dynamism in the area is demonstrated by how Greater Birmingham and Solihull was one of the three LEP areas with the most improved UKCI score 2010-2019 in the UK Competitiveness Index (based on a measure integrating both the development and sustainability of businesses and the economic welfare of individuals). In 2019, it had the second highest UKCI score of West Midlands LEP areas after Coventry and Warwickshire.

Although the second most urban LEP in the West Midlands after the Black Country, Greater Birmingham and Solihull has numerous environmental assets including Sutton Park, one of the largest urban parks in Europe.

According to the Index of Access to Health Assets and Hazards, Greater Birmingham and Solihull LEP area together with the Black Country have greater access to health services than the Coventry and Warwickshire area (Gov.uk, 2015).

Impact of Covid-19 on our Places – The Black Country

Ideas

The Black Country currently performs modestly on innovation indicators compared to other Midlands Engine LEPs in terms of business innovation funding secured and the value of research funding received. However, analysis by the Smart Specialisation Hub suggests it performs above average for Higher Education Spending on R&D (Smart Specialisation Hub, 2018).

Over 2 m euros worth of Horizon 2020 projects was secured between 2014 and 2018. The University of Wolverhampton provides a focal point for Black Country research, innovation and the development of ideas. The university contributes world-leading research, strong business links and state-of-the-art facilities, including:

- A large and diverse Science Park including a Technology Centre, a Creative Industries centre and the new Science and Prototyping Centre
- The Statistical Cybermetrics Research Group, one of the UK's leading centres for research on software methods to exploit web-based sources for social sciences research.
- The Research Institute in Healthcare Science, providing a platform for the development and promotion of healthcare science research activities.
- Brownfield Research and Innovation Centre (BRIC), developing cost effective and sustainable solutions to brownfield developments

The Black Country has a cluster of innovative firms delivering cutting-edge solutions to everyday problems, utilising technology to drive progress. Dudley-based Westfield Technology Group is one of the UK's leading autonomous vehicle providers. The Westfield POD, developed in partnership with Heathrow, is the UK's first fully autonomous vehicle for first mile – last mile transportation.

The Black Country performs very well in terms of the proportion of firms introducing new methods of work organisation. Roper and Bonner (2019) rank it 1st of 39 LEP areas for this indicator. It also performs strongly in relation to the proportion of firms collaborating for innovation.

Future opportunities to build on technological developments exist. This includes the current redevelopment of the former Springfield brewery in Wolverhampton into Europe's largest specialist construction and built environment campus. The site is set to be home to a School of Architecture and Built Environment, a National Institute for Brownfield Land and a National Centre for Construction Excellence, providing an environment for innovation to flourish in construction. A Very Light Rail (VLR) Innovation Centre and Test Track is being developed in Dudley. This will help Dudley to revolutionise VLR technology.

People - A long-standing skills challenge exists in the Black Country, with too many people having no qualifications and not enough holding higher qualifications. This leads to sustained weaker employment and lower earnings. However, recent data has shown that the percentage of Black Country residents with NVQ4+ qualifications is increasing. The percentage of those with no formal qualifications fell by over 30% between 2007 and 2019 but increased by 6.4% in 2018-2019. Whilst employment and earnings in the Black Country have remained below the national and regional average, the gap has closed recently. In line with national trends, the number of apprentices has decreased. Key skills assets include:

- Black Country Colleges, who have been instrumental in providing businesses with people that have the right skills. In 2019, the creation of an Institute of Technology was approved by government. The new IoT will focus its provision on advanced manufacturing, modern construction methodologies and medical engineering, all of which are critical transformational sectors for the regional economy.
- The University of Wolverhampton, including the West Midlands Construction UTC and a range of diverse services that underpin higher skills development in the Black Country.
- Black Country Skills Factory, brokering industry-led skills support in key sectors.
- The Elite Centre for Manufacturing Skills, a new flagship £12.4m employer-led training facility designed to improve productivity and growth in advanced manufacturing.
- The Black Country Careers Hubs.
- A new £2m Digital Engineering Skills Centre at Walsall College.

Impact of Covid-19 on our Places – The Black Country

Infrastructure

The number of homes in the Black Country has increased substantially since 2007 and the house price to income ratio is now the lowest among the West Midlands LEP areas. The percentage of premises with Superfast Broadband and Ultrafast Broadband is higher than in Greater Birmingham and Solihull and Coventry and Warwickshire. The area has a key set of programmes and assets across the full range of infrastructure themes that underpin local strategy. Specifically, these include:

- Land, e.g. Brownfield Research and Innovation Centre, Dudley Brownfield Land programme
- Transport, e.g. Wednesbury to Brierley Hill Metro extension, Wolverhampton Interchange
- Housing, e.g. Black Country Garden City, Goscote Lane corridor
- Energy, e.g. Working within Energy Capital partnership in developing Energy Innovation Zones
- Environment, e.g. Black Country Blue Network, Natural Capital Roundtable
- Digital, e.g. Black Country Broadband project, 5G developments.

Various infrastructure investments and developments planned regionally provide opportunities to support economic growth. For example, the Midland Metro expansion from Wednesbury to Brierley Hill will improve regional connectedness for residents and businesses. Plans for new rail stations at Willenhall and Darlaston could similarly boost connectivity.

Business Environment

The Black Country business base features a mix of firms in the high-productivity “frontier” and low productivity “long tail.” Evidence indicates business stock performance in recent years has been strong with more businesses existing than ever before in the Black Country and business births growth being faster than the national average. The Black Country performs comparatively well against Coventry and Warwickshire and Greater Birmingham and Solihull for start-ups generating £1m+ turnover within three years. At £47,098 in 2019, GVA per employee is lower though than in Greater Birmingham and Solihull and Coventry and Warwickshire.

Sectors have been and continue to be a large part of strategy development in the Black Country. Through the West Midlands Local Industrial Strategy, Black Country LEP is leading on the development of four sector action plans for the region: aerospace, rail, metals & materials and construction.

Place

The Black Country is home to distinctive ‘places’ and assets. It includes the city of Wolverhampton – and the industrial supply chains and social and geological heritage of Dudley, Sandwell and Walsall. Within these, a strategic growth network of centres and corridors have been identified by the LEP as providing a spatial focus to local ambitions. Covering 356 square kilometres and located in the heart of England, the Black Country has excellent national transport links, in particular to the M6, M5 and M54 motorways.

A unique mix of urban centres and geological heritage exists:

- Strategic urban centres have an important role to play in making the Black Country a good place in which to live, work, visit and invest. Each has a distinctive offer – e.g. the cultural and creative economy in Wolverhampton and the visitor attractions around Dudley Castle Hill.
- The emerging Black Country Geopark celebrates the area’s geological heritage and provides a boost to the tourism sector.

Impact of Covid-19 on our Places – Coventry and Warwickshire

Ideas

The LEP area has internationally recognised strengths in research and development, especially, advanced engineering, energy, advanced manufacturing, low carbon-technologies, advanced propulsion and digital innovation.

Research and innovation is strongly supported by the presence of two universities, Coventry University and the University of Warwick. Coventry is also home to Arden University, a private, for-profit teaching university which offers a variety of undergraduate and post-graduate programmes through blended and online distance learning.

A large number of world-class state-of-the-art research and development and innovation assets are located within the area. These include:

- Coventry University Technology Park,
- the University of Warwick's multi-site Science Park,
- the Advanced Propulsion Centre at the University of Warwick,
- the Advanced Manufacturing Training Centre in Coventry,
- Horiba MIRA in Nuneaton,
- the National Automotive Innovation Centre at the University of Warwick,
- the National Transport Design Centre at Coventry University,
- Warwick Manufacturing Group,
- the Quinton Rail Technology Centre,
- the UK Battery Industrialisation Centre being constructed in Coventry to support battery manufacturing development.

Coventry and Warwickshire stands out for the high level of business spend on R&D. £3,107 is spent on R&D per full-time equivalent in the area. This is over six times the level of business spending on R&D in Greater Birmingham and Solihull, and over thirty times the level of spending in in the Black Country. Over recent years, the area has also benefitted from the value of research funding particularly from the European Union. Between 2014 and 2018 the area secured 56,158,404€ from Horizon 2020, the European Union's research and innovation programme. UKRI then provided a further £864,635,745 between 2012 and 2021.

People

Coventry and Warwickshire has a very well educated workforce with a higher proportion of the working age population being educated to NVQ Level 4 educated or above than elsewhere in the West Midlands. Coventry and Warwickshire also has the highest employment rate at 77.5% in 2019. This is important in terms of enabling companies to have the skills needed to be competitive and to develop new products. Unemployment is also lower than in the two other WMCA LEP areas at 3.5% in 2019. The area also has the highest average earnings of the three WMCA LEP areas.

A number of innovative training providers operate in the area including Warwick Trident College (a facility purpose-built with industry providing a workplace-style learning environment, to train apprentices in manufacturing, mechanical, electrical, electronic, automotive and product creation sectors) and Digital Schoolhouse. Together with Nintendo UK, Digital Schoolhouse uses play-based learning to engage the next generation of pupils and teachers with the Computing curriculum.

Impact of Covid-19 on our Places – Coventry and Warwickshire

Infrastructure

Coventry and Warwickshire is a key transport hub within the Midlands. Coventry is 20 minutes from Birmingham International Airport and is served by a range of transport infrastructure including rail and multiple motorways. It is within 4 hours travel time of 98% of the UK's population supporting the area's key role as a home for distribution facilities. The area is well-located to benefit from the additional capacity and faster journey times provided by HS2 as well as the associated re-development of Birmingham International Rail Station and the re-generation of the adjacent areas including UK Central, Europe's largest single investable development site. The area is also leading the way in connected autonomous vehicle technologies. Aurrigo, in Coventry is working with Westfield Technology Group based in Dudley, to build a global reputation in the design, manufacture, testing and deployment of innovative autonomous vehicles. UK Autodrive selected Coventry as one of two cities to pilot driverless technology. Additionally, the Coventry area is part of the 5G testbed with Birmingham and Wolverhampton. Initial proposals include using 5G technology the West Midlands Combined Authority collaborating with Jaguar Land Rover to test driverless cars. The area is developing alternative forms of rail travel including hydrogen-powered trains and an innovative and affordable Very Light Rail (VLR) system in Coventry. Alongside the redevelopment of Coventry Rail Station to provide an integrated multi-modal passenger transport hub, the VLR is an R&D-led manufacturing initiative designed to deliver significant economic benefits. Rail travel was also supported in 2019 by Warwickshire County Council when they announced plans to investigate building a new station between Coventry and Kenilworth stations to better serve the University of Warwick.

Business Environment

Among the West Midlands LEP areas, GVA per employee is highest in Coventry and Warwickshire at £63,143 in 2018. The area has particular strengths in the Professional, Scientific and Technical, Education, Information and Communication, Business administration and Support Services sector, Mining, Quarrying and Utilities, and Transport and Storage sectors. The proportion of firms born before 2013 earning between £1m and £3m in 2017 is higher than in the Black Country but lower than in Greater Birmingham and Solihull. The area is home to a large digital and gaming sector. Approximately, 2,500 digital businesses exist in the Coventry and Warwickshire area, including the gaming cluster around Leamington Spa known as 'Silicon Spa', representing approximately 15% of the national digital games development workforce. According to research by Roper and Bonner (2019), the Coventry and Warwickshire LEP area is good at innovative sales, marketing and co-operation, but is strongest in terms of design investment for innovation. The area is ranked 2nd of 39 LEP areas for this indicator.

Place

Coventry and Warwickshire benefits from a competitive business environment as evidenced by the area having the highest Competitive Index score among the West Midlands LEPs in 2019. However, visitor spending and the number of visitor stays whilst higher than in the Black Country are low when compared to the value and number of visits in Greater Birmingham and Solihull. There is an opportunity to boost national and international tourism when Coventry is the UK City of Culture in 2021. The area features the city of Coventry, a number of historic and distinctive market towns including Leamington Spa, Nuneaton, Rugby, Stratford-upon-Avon and Warwick, in addition to cultural, heritage and leisure assets, large rural areas and attractive green spaces.

In terms of dwelling stock, it has the third lowest level of stock in the West Midlands suggesting that unless the housing stock is expanded, the area may not have sufficient housing stock to support continued population growth. It is encouraging that in 2017-2018 Coventry and Warwickshire had the second highest number of dwellings completed in the West Midlands, indicating some progress may be being made in addressing the shortage of dwellings.

Impact of Covid-19 on our Places – Covid-19 Risks to Place Assets

Tourism Assets
The OECD has stressed how the pandemic and measures to contain its spread are having a heavy impact on the tourism economy. Its analysis shows that depending on how long the crisis lasts, the potential shock could cause a 60-80% decline in the international tourism economy worldwide in 2020. Whilst Coventry and Warwickshire is less reliant on tourism than other parts of the national economy overall, certain areas are likely to be heavily hit in the short-term. This includes Stratford-upon-Avon which, according to estimates by Centre for Cities, is likely to suffer one of the largest declines in GVA in the West Midlands. If the crisis continues, the projected benefit from Coventry being UK City of Culture could also be threatened, although the start date has been pushed back to May 2021. The rise of virtual meetings during the pandemic raises questions over whether Birmingham will continue to see growth in its business tourism sector.

International Travel
If Coronavirus has a medium to long-term impact on air travel, being close to Birmingham International Airport would be less beneficial for the region than previously (i.e. the benefits of productivity would be less). Forecast growth in passenger numbers over the next decade may be impacted. Whilst the extent of the medium-long-term impact is as yet unclear, we know that traffic at the airport has fallen considerably since March, declining by 90% in April. The Chief Executive of the airport stated at the end of June that they expect a passenger scenario for this financial year of 90 percent less than in 2019/20. We have already seen this start to negatively impact on jobs in the region, with the airport announcing plans to cut up to 250 jobs representing 27% of its workforce due to unsustainable income losses.

Young People
A concern across the West Midlands, but especially in Greater Birmingham and Solihull and the Black Country, where skills levels are lower and unemployment rates higher, is that recent progress in increasing skills and employment levels will be slowed or reversed as a result of the pandemic. Unless effective countervailing measures are introduced at a national level, it is likely that lockdown is reducing opportunities for young people to gain work experience and participate in work based learning. Although the number of apprenticeship starts across the West Midlands is increasing, numbers remain low, and the Covid-19 crisis is creating worries that there will be less appetite for recruiting apprentices in firms going forward. A survey by Association of Employment and Learning Providers found 60% of employers nationally have stopped recruiting apprentices. It is encouraging that the government has announced an "opportunity guarantee" to ensure every young person had the chance of an apprenticeship or placement. However, it as yet unclear if the placements will be paid and if a guaranteed interview will be available at the end of the placement. Evidence emphasises the importance of supporting out-of-work people, particularly young people and those over 50 to rapidly find work if they are to avoid long-term unemployment.

Life Sciences
Assets in the West Midlands likely to be strengthened rather than weakened by the Covid crisis include those linked to life sciences. Birmingham with its Life Sciences Park due to open in 2022 and associated well developed medical technology complex (including various hospitals, University of Birmingham Medical School, Birmingham Health Partners and the Institute of Translational Medicine) appears particularly well placed to be at forefront of developing this sector.

Impact of Covid-19 on our Places – Covid-19 Risks to Place Assets

Universities
The Coronavirus crisis is also having an impact on universities in the region. City-REDI research into the impact of student spending, paints a worrying picture for the West Midlands. It finds important variations across the UK by region in the benefits generated by student spending with the West Midlands hardest hit. The West Midlands (NUTS2) is the region that generates the largest multiplier for the UK economy with student spending generating over 4 billion pounds of output, 2 to 3 billion GVA and supporting between 44 and 55 thousand jobs. These figures suggest that student spending generates up to 4.2% of GVA in the West Midlands. Student expenditure directly supports to 4.2% of employment in the West Midlands compared to up to 2% nationally. This means that for each 3 to 5 students not starting in September 2020, a job is at risk. Universities also underpin the innovation assets across the three LEP areas, and the West Midlands is a leader in the business R&D which with reduced investment capacity in the private sector may be hit hard. Especially in the automotive, aerospace and manufacturing sectors

Transport
The drop in patronage of transport assets could reduced the available income for further investment, and the costs of running a much reduced infrastructure under social distancing and lockdown measures could make private and public sector delivery unsustainable. A drop in passenger numbers in the regional airport as highlighted earlier also threatens the integrated infrastructure which has made the West Midlands the heart of the transport network. Future proofing already in place in the region such as autonomous vehicles and electric vehicles could see demand accelerated because of the need for personal and safe transport options.

Digital and Technology
Coventry and Warwickshire is home to one of the country's largest digital gaming sectors and this sector has seen significant growth and demand under lockdown. Accelerated digitisation and application of technology has accelerated with increased homeworking and adoption by businesses of online sales. This presents an opportunity for the region to build and expand the skills and expertise.

Key companies
Many of the regions key companies are under significant pressures, with redundancies being announced and more expected. The companies most at risk are those that rely on face to face business, non food consumer demand and international supply chains. This puts many of our region's assets at sever risk, such as automotive, tourism and hospitality, retail, passenger transport, manufacturing and culture. Loss of major companies also reduces the investment they make in their supply chain, R&D, skills and supply chains.

Impact of Risks from Brexit

Since the UK officially left the European Union on 31 January 2020 much has changed. Brexit has gone out of the political focus as both the UK and European governments have been preoccupied with responding to the Covid-19 pandemic. The negotiations have slowed, or even stalled in some regards, as governments and also civil service functions have been rapidly diverted to addressing the overwhelming health and safety imperatives. These lockdown responses have led to enormous disruptions in global value chains, dramatic capital shocks, and severe cutbacks in the flows of people and, consequently, knowledge and ideas. Jonathan Portes, one of the authors of The Brexit Negotiations: a Stocktake, said: "Covid-19 pandemic and Brexit are major shocks for the UK economy. The interaction of the two is complex and unpredictable, with the potential to amplify some impacts while moderating others." "On balance, the pandemic probably does make the economic risks of exiting transition on January 2021 without a trade deal larger, but considerable uncertainties remain," Portes said. As such, the UK and EU negotiators must decide whether or not to extend the period of negotiation due to the interruptions caused by the pandemic, and if so, how this might be achieved, given that the transition period runs out at the end of 2020.

Over the last few months the UK-EU negotiations have been taking place via electronic media (Ebner, 2020), and in particular via a Webex videoconference system produced by Cisco. Apart from technical issues, the major difficulty here is that electronic video-conferencing and webinar systems cannot act as perfect substitutes for face-to-face contact, especially in highly complex and sensitive negotiations. This suggests that the ability of both sides to come to a mutually acceptable resolution is diminished by the lack of personal interactions over recent months (The Independent). This has probably meant significant lost time. Moreover, during the immediate recovery period, the EU governments are all preoccupied with negotiating the €750 billion recovery package, so the immediacy and importance of Brexit has probably been significantly reduced in most EU capitals. At the same time, as the CBI Daily Covid-19 Webinar "Update on UK-EU negotiations" held on the 10 June concluded, in the case of the UK, that the dominance and disconnection of politics from business and economics suggests that the post-covid recovery priorities of job creation are unlikely to play any real part in extending the transition period, or altering the UK's negotiating position (IANS). The Cabinet Office minister said it is "prudent and wise" to prepare for trade negotiations to fail and for the UK to default to World Trade Organisation (WTO) terms for business with the EU from January (HuffPost UK). The result is that the prospect that Britain departs the bloc with a 'no-deal' Brexit is more likely than ever, or something very close to this.

Our research at WMREDI suggests that these types of outcomes will almost certainly lead to greater interregional and intra-regional inequalities within the UK and will fundamentally work against the 'levelling up' agenda (Billing et al., 2019). The effects of a "no-deal" Brexit will be very damaging for the UK regions and the West Midlands economy in particular as our research has already illustrated Our results show that 2.64% of EU GDP is at risk because of Brexit negative trade-related consequences. In the UK, the Brexit trade-related consequences account for 12.2% of its GDP. Our results suggest that adverse effects are likely to be more severe in the regions which have the least ability to respond to adverse shocks. Our results show that 12.2% of West Midlands GDP is at risk because of Brexit negative trade-related consequences. If we consider the wider West Midlands region we see that the exposure of Shropshire and Staffordshire is 13.9% of local GDP and the exposure of Herefordshire, Worcestershire and Warwickshire is 14.3% of local GDP. In other words, the West Midlands as a whole is more exposed than the UK average (Ortega-Argiles et al., 2018, 2018, 2018c). What is already clear is that any type of Brexit will exacerbate the negative economic effects caused already by Covid-19 in UK firms, regions and sectors.

Impact on Local Government

Councils have spent hundreds of ms more than expected during the lockdown on providing social care, personal protective equipment for staff, housing rough sleepers, and supplying emergency food packages, while losing even larger amounts in lost revenues from council tax, parking charges and leisure fees. The BBC carried out research with councils on the impacts and they highlight that impacts include lost business rates, council tax holidays and emergency payments for families whose incomes have disappeared have all hit upper tier councils' income, at the same time as rising costs of adult care and providing protective equipment (PPE) for carers. Some of those councils would also typically depend on tourism for large chunks of income, such as dividends from airports they own or parking fees from visitors. Birmingham City Council - the largest authority in Europe - said "given the size" of its forecast shortfall of £212m across 2020-21 and 2021-22. after £70m government funding already received, a section 114 notice "would not rectify this situation“

The pandemic also comes on the back of several years of cuts, which many local authorities facing large deficits and councils expecting to be in the red by £5bn and potentially by £8-10bn if spending carries on at the current rate. The FT has highlighted that councils have warned the latest announcements will not be enough to prevent financial failure of councils. Council total budgets for last year came to £56bn and costs to date on the pandemic have been £4.8bn and could reach £10.9bn.

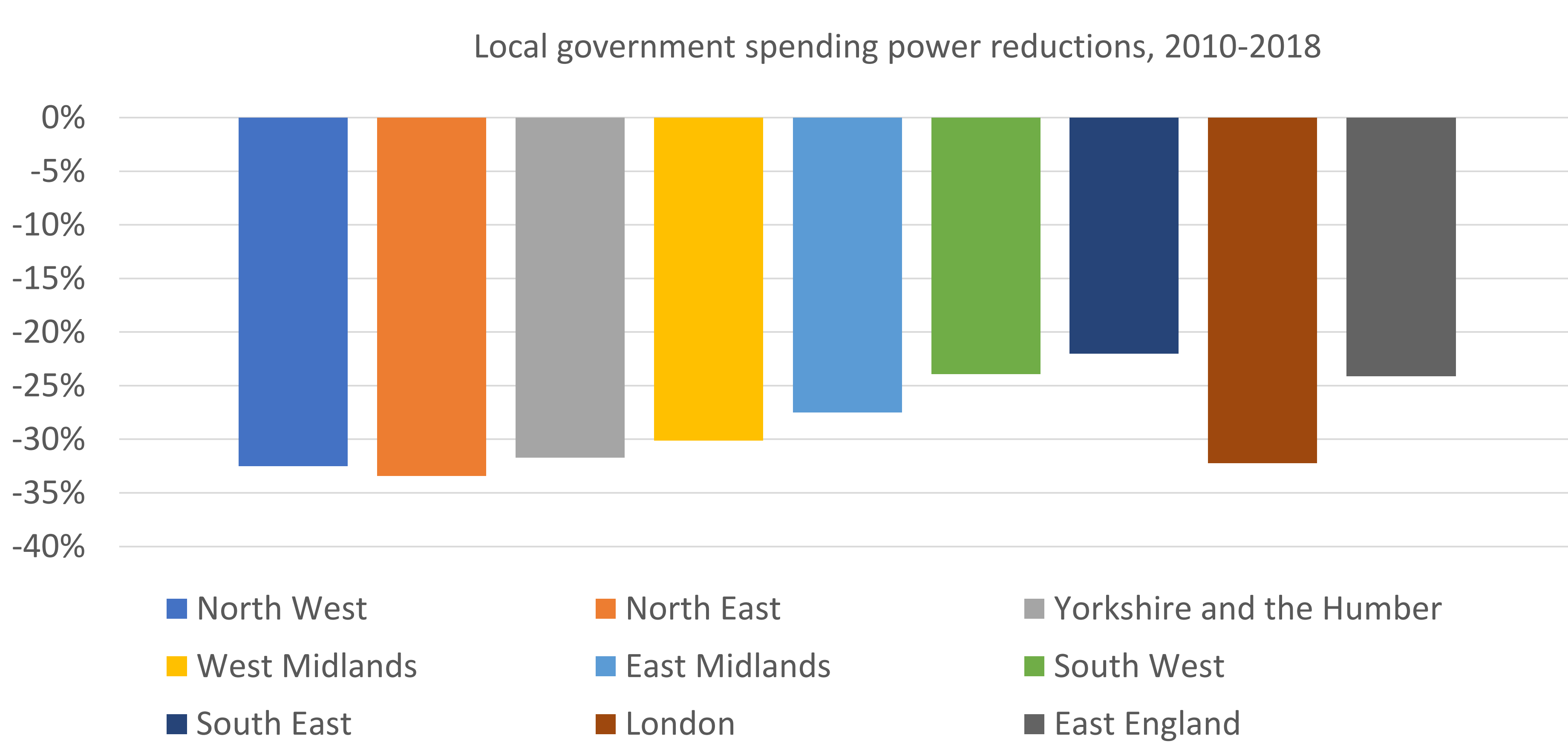
General Public Services Spending

- Spending per head for general public services in the West Midlands remains below the UK average at £98 in 2018-19 compared to £110. This is the sixth highest out of the 12 regions
- Yorkshire and The Humber had the lowest spend on general public services per head with £71 followed by the East Midlands with £76.
- Scotland and Northern Ireland had the highest spend on general public services per head in 2018-19 at £235 and £209 respectively.

Local Government

- Funding for local government across England fell by 49.1% between 2010-11 and 2017-18. The figure for the West Midlands was broadly in line with this trend (48.4%)
- Because local government also raises some of its own revenue (e.g. through council tax), the overall drop in its ‘spending power’ was less across England (28.6%). The West Midlands (30.1%) experienced a fairly average reduction
- However, these figures disguise local differences within the West Midlands

The chart below looks at the local government spending power reductions 2010 to 2018, from the National Audit Office (2018) *Financial sustainability of local authorities*



Impact of Covid-19 on our Recovery

Nationally, according to the ONS weekly survey, people think the country is getting kinder, and generally wellbeing remains the same. But since the beginning of the survey people think the country is also becoming more unequal.

Businesses are understandably reluctant to take on debt they may not be able to pay back, and bank lending processes are still an issue due to the length of time taken and the decision making processes. The new bounce back loans seem to have a higher interest. The furlough scheme is working well and making a difference to businesses and whether they can withstand the current crisis.

Safety measures which need to be put in place to combat the virus and ensure social distancing are of significant concern to businesses as premises are often too small to accommodate the demands. Businesses are still concerned about getting staff back to work without transport and adapting to working from home on a longer basis, but for many industries, this isn't possible. Businesses are still reporting issues with accessing finance through the Covid-19 support schemes due to ineligibility. Quarantine requirements continue to scar businesses as they try and deal with high absence levels. There are also significant issues and implications of track and trace on the operations of businesses

Remaining issues are recovery planning where businesses need advice and support to rebuild. Work by the Enterprise Research Centre shows that sole traders are very exposed, especially female and young entrepreneurs, and this is an issue still being raised by business representative organisations, as often sole traders slip through the current support mechanisms

Although many immediate business issues highlighted over the pandemic period have been addressed, there is still an issue with sole traders operating as limited companies who fall through the cracks. Cash reserves are still being used extensively but this may run out.

Local lockdowns are of significant concern to businesses, especially the manner in which Leicester has been closed, with little warning. There is little understanding of what the lockdown might look like and how it might impact.

The rise in job losses and those claiming benefits points to the need for investment in lifelong learning, better skills development and utilisation; effective local partnerships; reducing skills mismatches and helping people take greater responsibility for their own learning and development. The potential levels of unemployment facing the region will call for significant scaling up of training at a time when providers are facing uncertainty driven by social distancing and individual choices about investment in skills. Significant changes are happening in working practices, such as homeworking and technology changes which are creating a polarisation in employment opportunity and could leave many behind. The importance of key workers to a thriving economy has also been exposed

"Social distancing is of serious concern"

"businesses need advice on adopting new business models"

Impact of Covid-19 on our Recovery

Businesses in the region need to diversify to be more resilient, evidence suggests that more diverse economies and businesses are better able to whether economic shock. Businesses are seeking greater support in how to do this, how they develop new products, services and markets and recovery planning should include funding to accelerate this.

A recent report by NESTA has identified the West Midlands ‘business-led innovation region’ where above average levels of business investment in R&D are not matched by public sector investment. This business led investment is under threat within the post Covid-19 economy and there is a need for a rebalance of the public sector investment. There needs to be a supercharged approach to backing the decisions of the private sector with additional public sector funding. Recommendations include: greater transparency of decisions making; regional devolution of innovation funding; new science and tech institutions outside the SE; UKRI to lead regional rebalancing; Strength in Places Fund developed and expanded

Innovation around business models is crucial to recovery but it is important to focus on individual resilience as well as business resilience. Analysis of the West Midlands Regional Entrepreneurship Ecosystem demonstrates that the weakest parts are around financing, innovation and skills. So financing prospects for potential entrepreneurs is an area of concern and investment in internationalisation is also a priority.

Generally business feedback is that government intervention is working. Businesses are also seeking clear guidance on how to return to work in a social distancing based economy. Businesses need to understand how they return to work. This includes access to PPE, implementing social distancing measures and dealing with their workforce wellbeing. There is a need for guidance and support in planning for recovery, including business diversification and operating in social distancing environments.

Levelling up is going to be a challenge, as London and the South East have a more resilient economy, and poorer areas are going to be hit harder. There needs to be clearer devolution, with powers and funding, to support local areas tackle the levelling up agenda.

Our ability to move around has been severely curtailed, this has impacted at all levels. Affected trade, education and tourism significantly which is driving most of the economic risks and downturn. Lack of public transport has impacted on the more vulnerable in society and continues to constrain businesses opening and customers returning. The lack of national and international mobility has changed our supply chains and is impacting on attitudes towards resilience.

“Businesses are reluctant to take on debt”

“Cash reserves are depleted”

Future scenarios and trends post pandemic

The following section explores the impact of the pandemic on future global trends. It highlights some of the future scenarios which may accelerate due to the impact of the virus. This section is a summary of thinking to date and potential long-term changes the region may face.

Impact of Covid-19 potential future scenarios

As part of developing the State of the Region 2020 we have been reviewing the emerging thinking on global trends and what that means for the West Midlands. A crisis on the scale of Covid-19 will inevitably change the world as we know it in the longer term as well as the unprecedented impacts we have seen already and the previous West Midlands Monitors have covered. It is important to reflect that often crises accelerate the changes which were already evident and in reality we move to the 'next normal'. However it is important to be aware of the idea that while in the main 'our tomorrows will be like our yesterdays' we tend to disregard the events in the tails of a distribution curve as they often contribute most to changes in outcomes. This review will look at those potential events, changes which latest thinking suggests will accelerate and which will permanently shift, and the likely impacts of those changes.

Adaptive, reactive cities and places

Social distancing and the shift to homeworking has created a seismic shift in the way people work and interact. Cities have become the epicentre of outbreaks and proximity has become a friction. Cities provide opportunity for good and bad interaction and pandemics are an example of bad, urbanisation and density making them vulnerable to disease. Lockdown has emptied out cities and urban environments and may lead to greater decentralisation as people seek green space and better home environments. However big tech and personal based service hubs have increased their share of employment and growth as intense agglomeration remains important to these businesses. The emptying out of cities could take the form of accelerating the wealth divide with those able to afford it moving further out and utilising working from home more, leaving the young and poorer communities concentrated in the urban inner city. This will affect the infrastructure demand in cities and the disparity between where money is earned and where it is spent. Globally, however, during the last recession cities grew, gaining migrants and millennials unable to find jobs elsewhere. This time round the future of cities relies more on the decisions on Gen-Z, as with every generation they are more educated and more diverse and already have strong urban roots. They are a generation committed to environmental protection, supporting local businesses and shared assets, less inclined to see home ownership as a necessity and accepting that they will have less than the generations before them. The Covid-19 experience may accelerate a lot of these traits in wider society. The pandemic may accelerate the decline of the high street, where the number of shops could more than halve in the next two years, but this is a trend that was already in play. Highstreets which have thrived are the ones which have picked up on and maximised some of the other trends below, including, personalised, ethical and local businesses and embracing online sales to diversify markets. The impact on universities and international travel and pulling students into cities will dramatically change in the next 12 months, in the longer term this may change the pattern of student movement for the longer term, which will impact on student areas in cities. This could change the face of some cities for a long time and technology could maintain this change as online and virtual studying reduces the need to move. One of the impacts of the virus has been for people to feel more community spirit and kindness, this again could increase the demand for urban villages and communities being developed in many cities. But it remains to be seen whether, and to what extent, the solidarity, community spirit and co-operation evident in lockdown survives or dissipates as it is lifted; we can look for early signs from countries ahead of the UK on the Covid-19 curve. Urban centre are the economic structures which drive high contact, low-wage jobs which can't be carried out remotely. Labour markets over recent years have polarised and the act of the virus could accelerate this. This suggests that cities will experience uneven and unequal impacts.

Impact of Covid-19 potential future scenarios

Clean, safe environments which underpin mobility as individual bubbles

Commuting is one of the main ways people come into contact with one another and social distancing will continue to hamper the use of public transport systems, this is a challenge both for environmental reasons and enabling lower paid workers to move easily for jobs. The need for social environments like transport to be clean and safe and predictable will determine whether they are used and determine whether people choose cars, bikes and walking and abandon public transport. Although in the longer run itis likely people will revert to less hygienic habits the demand for remaining safe will remain but the demand will be for environments that will enable safety effortlessly. For a region with significant industry in the automotive sector an interesting trend identified is people finding comfort in car ownership, especially when other modes of transport have ground to a halt. In China attitudes to cars have shifted significantly with usage doubling after the outbreak, along with ride sharing and taxis, and significant intentions to buy a car. A similar shift is playing out in the US. But car buying is moving online along with all other shopping and there is a growing expectation to have cars delivered. The market is also accelerating in China for aftersales and vehicle repairs as lockdown lifts. Alongside this however is a challenge to the dominance to the car but from the growth in cycling and walking. With temporary cycle lanes in place in many cities, but the challenge for this major change is huge, needing a significant long term change in behaviour. But a more localised homeworking economy could help people to switch and the idea of a 15 minute city has become less of an ideal and more a tangible outcome. At a micro level how the social psychology of space will alter – irrespective of social distancing - remains an open question.

Impact of Covid-19 potential future scenarios

Automation by default

This trend has been spreading over the last decade, but is likely to surge, with the impact of social distancing on businesses accelerating the trend. Human capital is becoming relatively more expensive and in a world of reduced contact that cost becomes greater. The jobs more affected are likely to be in roles such as food service and cashiers, which will impact on the most vulnerable, young people, BAME and those with lower qualifications. Advancements in AI and deep learning can be used to tackle problems we find difficult and the need to understand and monitor outbreaks may drive greater advancement in monitoring and automated tracking. But advancement in AI tends to create a few new jobs that require sophisticated skills and many jobs that require personal contact skills, while it reduces mid-skill jobs. This could continue the trend of hollowing out the labour market.

Digital diversification and proliferation

Big tech have been winners in the Covid-19 period, with Amazon, Google, Microsoft, Apple, Netflix all making gains from people being in lockdown. Accelerated online shopping and home entertainment has given platforms an increased share of consumer demand. This is creating a greater inequality within the digital business community with large digital also able to invest and innovate due to the revenue they will have generated. Home working has driven an explosion in digital usage remote working tools, video calling and live streaming of content which is spilling out into the private lives of a wide range of ages like never before. There has been, and will be, an acceleration of the digital experience economy, immersive content and technologies will move from the side-line to the mainstream, and from just social media and esports to travel and gatherings. Contactless free interaction and advancement in robotics is enabling a new breed of automated commerce and increasing power and adoption of AI. The pandemic has also highlighted the issues with the digital divide, most starkly in the education sector as the scale of children without home internet and laptops has been exposed. This digital disparity has also prevented many accessing the services needed such as online shopping and homeworking. The pandemic has impacted on every element of the payments industry, contactless payments accelerated and are the new norm as people fear touching cash. Older and poorer vulnerable families have therefore been left dealing with socially distanced shopping and these households face a larger digital barrier than two months ago as the digitally enabled have adapted better to the new world. There is also the important question of how to address inequalities in the ongoing development of digital skills as they become ever more important, with older people, those outside employment and from more disadvantaged backgrounds often most at risk of being set adrift of ongoing developments. The move to homeworking seems likely to exacerbate wealth based inequality and access to jobs. Where broadband and the means to utilise it was a luxury, but now it is exposed as a necessity and an essential utility. Those without access are ever more excluded.

Impact of Covid-19 potential future scenarios

Ethical, online and local consumer spend

Trends already in place such as the decline of the high street and 'retail apocalypse' have been accelerated in the last 3 months, and has driven a need for organisations and businesses to innovate or exit, the current disruption accelerates this need to be creative and embrace new models. Over the period we have seen some brands damaged by the way they dealt with the crisis and this could have lasting damage on their customer base brand purpose is becoming more important, brand curation and navigating the complex world will become more important for business survival, customers, regulators, employees and the public will hold businesses to account, and brands that have over claimed and under delivered in the pandemic could see this lasting long after the virus has gone. This shift in ethical buying because of how we view business behaviour in this period could shape the way people invest, buy and consumer product for a long time to come. This doesn't mean a rush back to face to face; it means being authentic and human, as businesses, service deliverers and government. What matters is tone, content and purpose that stands up to scrutiny. Trends such as moving from products to experiences, e-commerce, buying local, buying socially aware and the sharing economy are trends businesses have been reacting to. Millennials and Gen Z have been trained to see the world as showroom through their phones and social media is a market place which connects locally and globally, hollowing out the real shop floor unless they adapt. The virus has impacted on the customer mind-set, the concept of being a 'better you' has grown with people setting ambitious personal targets. Self-improvement and skill building has become entertainment. The merging of entertainment, community and commerce will likely boom. Social distancing could drive a demand for outdoor local markets, accelerating the trend for locally produced goods and outdoor dining in urban spaces. The summer of 2020 in Europe will show us what might be achieved here, and what local actors can do to assist enhanced use of outdoor spaces for commerce and entertainment. Businesses diversifying their markets in the past have already created hybrid experience based outlets, but the major shift from dine-in to delivery, this is likely to remain as it increases incomes streams in the future, especially as dine-in may still mean reduced customers. But eating out and socialising may become more important after an extended period of isolation, but people may demand more local and authentic offers that reduce the need to travel and fit the socially aware buyer. The virus has affected us all but even in our reaction we have segmented into 4 different consumer groups which might shape our behaviour for years to come. The new normal, the people who've taken the situation in their stride and aren't overly emotional about having to adjust; bittersweet, whose lives have become more challenging, but who can see a bright side and acknowledge the positive changes in their new routine; the struggling, who have found it hard to adjust, are anxious and not coping well; and nothing new, where things haven't changed that much. Business needs to cater for all these groups going forward.

Impact of Covid-19 potential future scenarios

Polarisation between the knowledge worker and the service worker

Social distancing could change the and as home office space has become more accepted. This could impact on leasing and longer term large scale leasing could no longer be the norm. The scale of shift to homeworking is one of the big successes of the virus as innovation which may have taken years to implement was delivered in weeks. It presents an opportunity going forward for more diverse workforces. Gartner analysis shows that 48% of employees will be likely to work remotely at least part of the time, compared with 30% pre-pandemic. But 74% of businesses intend to increase remote working post pandemic. Trends in many sectors such as business and professional services for flexible working have been catapulted forward by years and acceptance of employers and customers that people are productive away from the office enables a variety of different work cultures to be adopted. This will accelerate the need for digital dexterity and collaboration skills. There is also a risk that roles also become polarised though the humanisation and dehumanisation of workers, as more knowledge based roles become increasingly connected, team based and inclusive whilst others become task orientated and detached from others. There may also be an increase in workforce data collection and tracking in remote environments, which raises issues around the ethics and future use of employee data by employers, especially in a health aware post-covid world. However the young, BAME and poor are least likely to be able to access the jobs that make this shift and are least likely to work from home, again accelerating the socio-economic divide between more affluent areas and poorer areas and groups.

Slowing business travel and global flows of people

The virus has shown how our increasingly global world has made us vulnerable to the spread of virus and dense, urban global cities with high levels of international trade, tourism, migrant workforces and business linkages all aiding transmission. An increasingly networked world, business practices and social norms are key, more connectivity introduces more uncertainty to the system, and as in 2008 where the underlying connectivity in debt was unknown, the health impact of prevailing people connectivity was not recognised. Global networks however are valuable and for growth, culturally and for businesses they drive innovation and investment, but there may be more of a move to have fail safe protocols, including trading smaller gains to protect against catastrophic loss. There is a need to discourage concentration of power in large corporations to ensure smaller businesses have more protection from global risks. The changes to international flows of people, affects the Higher Education sector harder than others, but the adoption and utilisation of technology could drive the adoption on online learning bringing it into line with the broader move to self-improvement online. This could accelerate the access students have to intercultural classrooms and partnering across continents, expanding modalities of student and academic experiences. This may also create a rise in virtual internships, virtual service-learning and entrepreneurship programmes which widen cultural experience and increase innovative capacity.

Impact of Covid-19 potential future scenarios

Bringing industrial capacity home

The trend has been for internationalisation and is in contrast to the concept that successful cities and nations should constantly grow their own capabilities, products and services. These ideas looked out of step however in the face of Covid-19 recovery. This may create the environment for a significant but important direction change. The issues raised by the pandemic could affect just in time procurement, lean management and public procurement practices; this shift could change the focus from efficiency to resilience. This lean approach has created fragile systems and change in the face of Covid-19 may mean a return to more adaptive, flexible careers and a move from businesses predicting to responding to change. National self-sufficiency is already becoming part of the language and is in the back of recent trends to re-shore services. The vulnerability of our supply chains has been exposed, especially around medical supplies. Global supply chains peaked in 2011 but were weakened by protectionist policies and the pandemic has caused a supply-shock recession and may slow the expansion of global value chains. Reduced production will create a recession and the v shaped recovery is at risk. Sector specific growth policies locally may help trigger growth, if applied to those which are not substitutive, such as automotive. This approach could mean businesses continue to refocus on growing locally and supporting local supply chain firms, resisting take overs rather than international trade and long uncontrolled supply chains. Against this backdrop there will be a period of volatility that puts UK firms at risk. There will be an increase in mergers and acquisitions, nationalising of companies globally and rising complexity, with big companies becoming bigger. However the UK is a globally open economy and has long benefitted from this openness in the past, and the trend has been to increasingly grow the trading of services, technology and content. From an employee point of view the way employers have treated their staff has been brought more into the spotlight and this may further accentuate a trend for candidates with the skills businesses need to seeking out good employers that they can trust. The social capital of business may become more important across the board.

Impact of Covid-19 potential future scenarios

Low wage workers and the housing crisis

Even in good times many people still do not earn enough to live on, as interventions such as the National Living Wage and the need for Universal Credit demonstrates. Basic costs for some people are already a stretch and housing and energy costs have been rising significantly as a proportion of household spend. Protection for renters introduced over the pandemic period will protect those most vulnerable, but they do not stop personal debt rising. But the predicted rise in unemployment will push more people into this category. Housing costs are often reduced by moving in with family or moving to lower quality housing – but this is not always possible.

Greater inequality: the haves and have nots

Older people have borne the brunt of the health crisis of Covid-19 and in the future this may restrict their ability to carry out their lives as they did in the past, especially under the threat of further waves or potential lack of social distancing. Income inequality increases with age, as does the income from other sources such as pensions and investments, but rising costs have driven a general trend of people retiring later. The predicted increase in unemployment may worsen the position of older works and make finding work after redundancy harder and require them to take deeper pay cuts than the young. So far the closure of sectors has hit the young, women and BAME communities harder, but there may be a greater opportunity for bounce back once lockdown is lifted. More structural and long term damage may be within manufacturing where sectors already facing long term trends may shift to automation which will disproportionately affect men in the longer term. Conversely the shift to homeworking may open up new opportunities for the previously excluded communities such as the disabled, people with care responsibilities, and those living in rural or remote communities as home working could accelerate the levelling up process as it becomes increasingly possible and recognised that people can work from anywhere. The trend of gig economy workers may also continue as a cost saving measure, creating precarious employment situations for many.

Survivability, critical skills and critical roles

Companies have had to redefine what is critical to the business to survive. This has driven a review of roles and whether they are needed and some reassessment of skills requirements. Companies are examining succession planning and development paths to ensure resilience. Through furloughing some businesses have also recognised that they can manage with fewer employees. This could in the longer term lead to real productivity increases at the expense of employment (contrary to the trend to date).

Impact of Covid-19 potential future scenarios

Mental Health Burnout

The social impact of the pandemic has been stark. The sense of loss, both of family, friends but also of places has had significant effects on the psyche of the world. Unemployment and insecurity has more than doubled the levels of suicidal thoughts compared to those employed, and they feel nothing has helped them cope, increased unemployment will increase the levels of suicide and dislocation form society. Isolation, home working, loss of work and social structure has generated anxiety and depression across a wide cross section of the population may have wide reaching effects. Anxiety has risen sharply, the main factors being loneliness, safety, affect on work and disability This large scale scaring can impact on the workforce and society for years to come and can be seen in emerging unrest globally, as seen after the Spanish Flu pandemic in 1918. The pandemic period has also seen a polarisation of the use of 'content as medicine', where online digital content is keeping us up to date, informing us but also providing a mood altering fix. We are using social media content to treat our stress with a dramatic increase in the use of positive content and the treat yourself culture. This has led to an increase in people investing time in creative activities and connection with what is important in our lives and reengaging with traditional life skills development for affluent urbanites. We have also moved to a world where the employer has become the social safety net, with increasing risks of burnout, expanding their involvement in the lives of employees with mental health support, financial health support and wellbeing activities. Whilst remote, this changes the nature of the relationship and in the future this provision could be more of a norm. This could accelerate the development of concepts of urban villages and garden cities.

Resilient Local Institutions

The role and power of the state has changed dramatically across the world. The value of swift decision making and action to combat a global issue has been seen internationally. The size and scale of intervention has never been seen before and this will have implications on expectations in the future. Large scale intervention may be more acceptable and necessary in a future facing further disruption from further waves or new viruses. The deadly impacts of the virus are likely to increase support for investment in medical care, R&D and the NHS strengthening capacity to deal with pandemics in the future. A shift from best value procurement to local and high quality standards could continue to build local resilience, innovation and absorptive capacity. A move in local places to look at public procurement as a local wealth building tool has already been gaining momentum before the impacts of Covid-19 have highlighted the need for places to have access to the people and businesses to keep economies working. Therefore the importance of local anchor institutions in supporting people and businesses has become more apparent. This could signal a demand for stronger local institutions than can deliver in crisis, and recovery. Political dissatisfaction and centralisation as seen over recent years could be destabilised, with greater calls in some quarters for devolved powers to respond locally to issues. The current expansion of state powers could also provide greater resilience if it is about bottom up accountability and emphasises new business creation, education and apprenticeships to enable businesses to grow and adapt. The focus on businesses who have acted responsibly in the pandemic builds on the social investment of the next generation and forces an approach from institutions which prioritises the impact of moral hazard.

Impact of Covid-19 potential future scenarios

Change for the better

What will be the new positives that generations to come will remember? Not all affects will therefore be negative, and previous crisis have borne some of the most innovative changes we take for granted. World War I changed the world for women, with more than a m women joining the workforce to keep the economy going and accelerated change in the law around voting. The aftermath of World War II brought the NHS and large scale rebuilding of society. The Dotcom bubble led to creative destruction; new healthier organisations emerged and underperforming firms closed, so accelerating the conditions for successful companies. Past experience indicates that more people go to university after recessions – albeit in the context of a fully open education system functioning on ‘business as usual’ lines. A lack of jobs leads people to pursue education, which has an impact on subsequent generations; individuals are more likely to go to university if their parents have done so. A more educated workforce tends to make an economy more productive, profitable, versatile and resilient, and impacts positively on a society’s health, crime rate, voting and volunteering. Other potential positives are emerging medical advancements and treatments and international collaboration, stronger public health systems, reduced and unnecessary commuting, less pollution, increasing recognition of the role of key workers, challenging racism and increased kindness and community spirit.

Whether we see a new normal or a return to previous routines and habits is up for debate and most likely the reality will lie somewhere in between. The trends above have implications for policy which include:

- Addressing digital inequality and ensuring people have the skills and technology to gain from the advancements
- Rethinking how places work in a social distancing world, creating places which are safe, green, clean and open
- Training and development which prepares people for a changing world which values technology, personalised interactions, flexibility and uncertainty of employment
- Supporting opportunities for personalised, clean and safe mobility
- Building and investing in strong communities which foster collaboration and support
- Investing in local institutions, and key workers so they can respond to demand for change, invest in new local infrastructure, keep pace with change and react when crisis happens
- Supporting businesses to adapt, innovate and prepare for accelerated change due to technology, changing consumer habits and the growth in ethical buying

There is likely to be an increased sense of community but this will be stronger in the places where this already existed.

The changes above are not inevitable. There is a role for public policy to invest in creating an environment where positive change is enabled and lasts.

Past Performance

The following section looks at how the region was doing pre pandemic. It assesses the long term performance against the UN Sustainable Development Goals, to create a balanced understanding of the issues facing the region.

Most of this data is lagged and pre pandemic but helps us understand the general state of health the region was in before the pandemic.

These indicators relate directly to the key indicators in the executive summary.

The West Midlands Economic Geography

The West Midlands is the only land-locked region in England. It has borders with the North West, East Midlands, South East, South West and Wales. There are no pronounced physical boundaries that would preclude strong economic links with other areas. The 3-LEP area – comprising Greater Birmingham & Solihull, the Black Country and Coventry & Warwickshire – lies at the heart of the West Midlands region in the centre of the country. It is one of the largest urban areas outside London. Its central location at the heart of the road and rail network, together with Birmingham International Airport, means that it is well connected to the rest of the UK and international markets.

Historically the 3-LEP area has been dominated by manufacturing, particularly metal goods, metal manufacturing, mechanical and electrical engineering, and car production. This remains important given that evolutionary economic geography indicates that regional and local development is a function of past histories. During the long post World War II boom from 1945 to the early/mid 1970s the West Midlands was one of the most prosperous regions in England, with in-migration from other parts of the country and overseas. Subsequent job losses in the latter part of the 1970s and the 1980s meant that in the geographical imagination the region moved from the 'affluent south' to the 'declining north'. With the decline of the historic manufacturing sectors and the contraction of associated employment the focus of economic activity in the early 21st century extended outwards from the former industrial heartland areas to the so-called 'E3I belt': an arc 20-40 kilometres from the centre of the conurbation to the east and south. This area provides good accessibility, a high quality environment and increasing employment in a range of innovative manufacturing and business and professional services activities. Birmingham city centre has also emerged as a major centre for business and professional services.

The 3-LEP area represents a coherent functional economic area in its own right, encompassing separable sub-regional functional economic areas. The most commonly used data to delineate functional local areas which are relatively self-contained (i.e. within which a high proportion of residents also work and a high percentage of workers also live) are commuting data from the decennial Census of Population. There are five Travel-To-Work Areas (TTWAs) defined using commuting data from the 2011 Census of Population that broadly map onto the 3-LEP area:

- Birmingham – including Birmingham, Solihull, Redditch, Bromsgrove and Tamworth
- Dudley – including Dudley, Oldbury, Tipton, Wednesbury, Halesowen and Stourbridge
- Wolverhampton & Walsall – including Wolverhampton, Walsall, Cannock and Lichfield
- Coventry – including Coventry, Nuneaton, Bedworth and Rugby
- Leamington Spa – including Warwick, Leamington Spa and Stratford

It is important to note that the commuting flows vary by gender, age, hours of work, mode of travel, occupation and qualification. So males tend to commute further than females, full-time workers further than part-time workers, those in professional occupations further than those in elementary occupations and those with high qualifications further than those with low qualifications. For example, applying the TTWA regionalisation algorithm with commuting data for different qualification groups, across Great Britain there are 153 TTWAs for the highly qualified and 416 for those with low qualifications. To gain further insight into the functional economic geography of the 3-LEP area it is instructive to examine commuting flows for these population sub-groups. Analyses of commuting flows for the highly qualified reveal two large local labour market areas: one encompassing Birmingham and the Black Country, and one covering Coventry and Warwickshire.

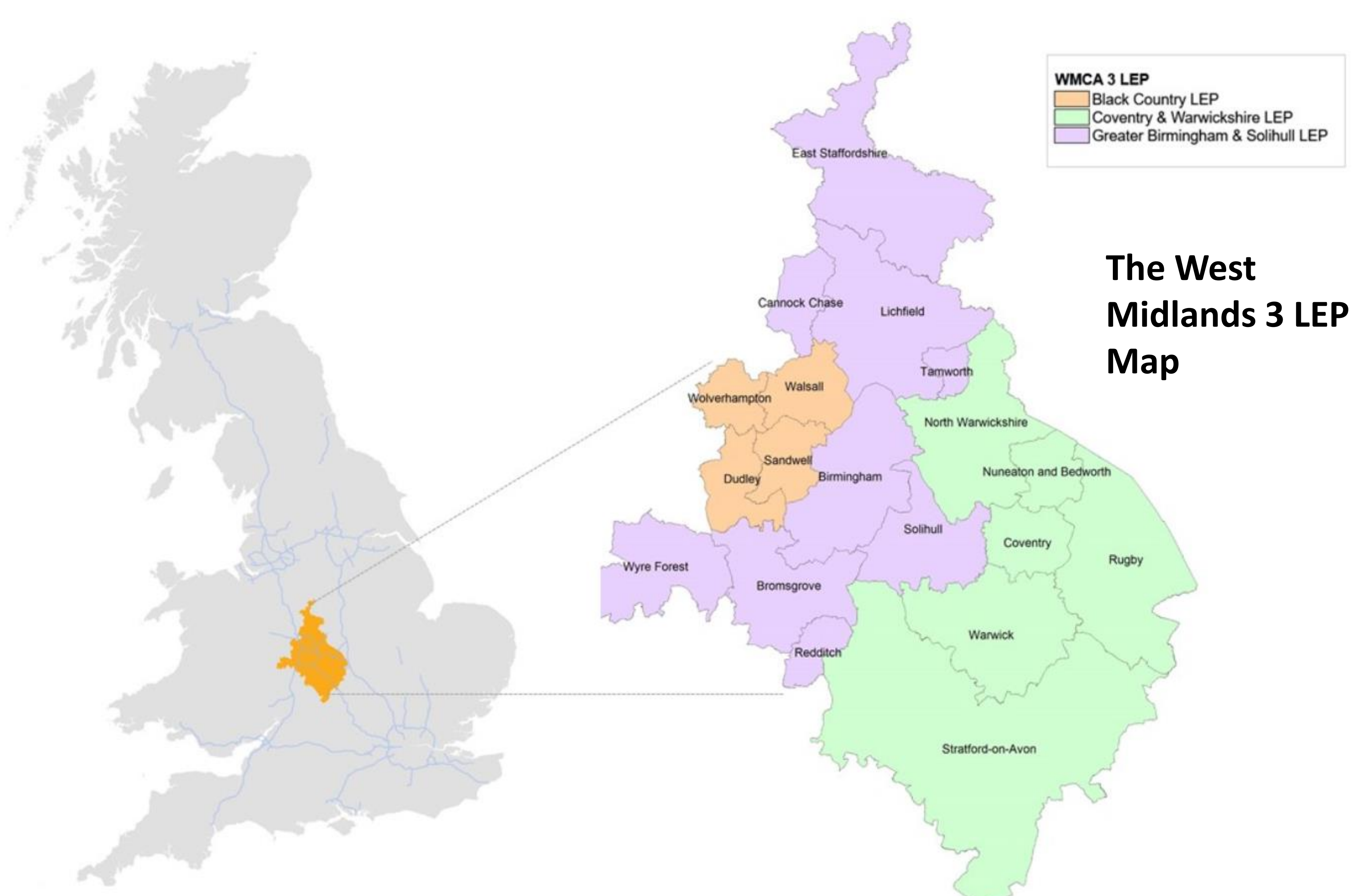
This chimes with findings from earlier research indicating that Coventry is to some extent separate from the rest of the city-region and has close functional ties with Warwickshire. There are closer links between

The West Midlands Economic Geography

Birmingham and the Black Country, together with neighbouring areas of Redditch, Bromsgrove, Cannock, Lichfield and Tamworth. Analyses of commuting flows for the low qualified reveals a pattern more similar to the TTWAs based on aggregate commuting flows, with separate local labour market areas in the south and north of the Black Country, with south Warwickshire distinguished from Coventry and north Warwickshire, and with Redditch and Tamworth emerging separately from Birmingham and Solihull.

Over time the tendency has been for journeys to work to become longer and more complex, so leading to a reduction in the number of TTWAs as large centres expand their influence over time. Given the changing composition of employment this is unsurprising. There are more professional and managerial jobs commanding higher rates of pay, so enabling more costly travel. A sustained increase in car use for travel-to-work over the long-term enables access to more workplaces in a wider range of geographical locations. The diffusion of some jobs to outer areas is also a factor here. The growth in two-earner households is an additional driver, as it is often not feasible for a household to live within reach of two workplaces. Conversely, part-time workers, low-paid workers and those who have to organise work trips along with trips for other purposes tend to be much more restricted in their travel horizons and tend to be restricted to jobs available in their local area. In such circumstances spatial mismatches are likely to occur.

The changes in ways of working in the light of Covid-19 pandemic have implications for the functional economic geography of the West Midlands. From a supply-side perspective, some individuals may work from home more and travel to a workplace less frequently than formerly, perhaps leading to fewer longer journeys if they choose to live in a location further from their workplace. On the other hand, some may choose to live close to their place of work, so as to walk or cycle. Some might have no choice about where to live – and so be dependent on opportunities available locally. On the demand-side, it remains to be seen whether city centre working will decline as more people work at home, for at least some of the time. This in turn has implications for the viability of public transport. The functional economic geography of the West Midlands continues to evolve as the purpose of places change … with important implications for competitiveness, inclusiveness and sustainability.



Outcomes by Sustainable Development Goals

The WMCA is committed to pursuing and defining success in social, environmental and economic terms that feel real to citizens and bring benefits to all who live and work here. These principles are the basis of the delivery of WMCA and its partners. These indicators can be used as outcome measures by partners, the WMCA uses them within its annual planning process, the performance management framework and to create a regional Sustainable Development Goals (SDGs) index which would be used to assess the progress level of West Midlands SDGs actions. The SDGs are not a regulatory framework, but a new global governance method which uses a simple three-layered structure

- **17 global goals**, which represent the vision for the ideal sustainable world;
- **169 global targets**, which set out quantitative and qualitative objectives to reach the goals; and
- **232 global indicators**, which review the progress of SDGs actions against global targets.

Sustainable development is the “development that meets the needs of the present without compromising the ability of future generations to meet their own needs” (WCED, 1987: 43). The term first emerged in the early 1980s with the rise of the modern environmentalism, and in 1983, it was placed in the global agenda by the report called “Our Common Future”.

SDGs takes a more universal and comprehensive approach to promote social, environmental, and economic sustainability in all countries. With the "Leave no one behind" philosophy, the SDGs give a sense of ownership to everyone including national governments of both the "Global North" and the "Global South", as well as local authorities, private organisations, and individual citizens. The important thing to remember is all countries are still “developing countries” in terms of sustainable development, and therefore we all need to take actions. A particularly significant contribution is needed from local authorities because they are the closest organisations to citizens’ lives and are likely to be able to come up with realistic and effective policies which respond to the unique local socio-economic characteristics of each area. It is even suggested that about 65% of the global targets will not be reached if local authorities are not fully engaged.

The State of the Region 2020 metrics were developed following a workshop with regional partners using the best available data to monitor the seventeen SDGs but to note these indicators are pre-Covid-19. The SDGs are a call for universal action to end poverty, protect the environment and ensure that all people enjoy peace and prosperity by 2030. The key metrics also incorporate the importance not only of growth and productivity improvements, but also the contribution of vibrant communities and resilient citizens in creating economic success and places that people want to live and work in.

1. No Poverty – End poverty in all its forms everywhere

The WMCA average household income after housing costs was £24,950 in 2018, with the national average standing at £28,296. This has increased by 8.2% (+£1,886) since 2016 which is above the national increase of 3.4%.

In 2019, the WMCA unemployment rate was 5.5% (109,500 people) which is above the UK average of 4.0%. When compared to 2018, this has increased by 0.1 percentage points (pp) or 4,200 people which is contrast to the UK drop of 0.3pp. To reach the UK average would require 30,320 less people to be classed as unemployed in the WMCA.

There were 602,900 residents aged 16-64 that were classed as economically inactive in 2019, 106,700 (17.7%) of these residents stated they wanted a job which has increased by 1.0pp since 2018.

The average annual full-time earnings for WMCA residents was £29,422 in 2019, this increased at the same rate as the UK from 2018. The WMCA average resident earnings were 97% of the UK average of £30,353, there is a shortfall of £931.

In 2019, 79.3% of WMCA employees were earning above the national living wage foundation rates which has increased at a slightly faster rate at 3pp compared to 2.8pp. However, earnings earning above the national average in the WMCA is still below the UK average of 79.9%.

There were 207,635 claimants aged 16 years and over in May 2020 in the WMCA (3 LEP) –this is an increase of 36,390 claimants since April 2020. This increase equates to 21.3% for the WMCA (3 LEP) compared to 26.6% growth for the UK. There were 41,225 youth claimants in the WMCA (3 LEP) area in May 2020, this is an increase of 8,775 people compared to April 2020. This equates to an increase of 27.0%–while the UK increased by 32.3%. .

Similar patterns can be seen for claimants aged 18-64 years old in the WMCA, with 169,850 claimants in April 2020, an increase of 67.2% since March 2020. The UK has increased by 67.2% since the previous month.

2. Zero Hunger - End Hunger, achieve food security and improved nutrition and promote sustainable agriculture

Gross Disposal Household Income (GDHI) per person in 2018 was £17,752 and has grown by 13.3% since 2014. The UK GDHI per person is £21,109 and has increased by 13.2%. in the same period. GDHI per person needs to increase by £3,357 in the WMCA to be in line with the UK.

Across the West Midlands 7 Met. area, 22.1% (110,113) of all pupils in state funded nurseries and schools were known to be eligible for and claiming free school meals in 2019. This is above the England average of 15.0%. Following national trends, this has increased from 19.7% (97,054) in 2018, while England has increased from 13.2%.

Prevalence of overweight (inc. obesity) for those in reception was 24.3% (9,044) in WM 7 Met 2018/19 – England 22.6%. Prevalence of overweight (inc. obesity) for those in year 6 was 40.2% (15,048) in WM 7 Met 2018/19 – England 34.3%. Prevalence of overweight or obese for adults aged 18+ was 65.5% in WM 7 Met 2018/19 – England 62.3%.

Between the 1st April 2018 and 31st March 2019, the Trussell Trust's food bank network distributed 142,234 three-day emergency food supplies to people in crisis in the West Midlands Region. This accounts for 9.0% of UK total of 1.6m. The latest mid-year statistics (April – September 2019) shows that 73,575 three-day emergency food supplies given by Trussell Trust foodbanks. This accounts for 8.9% of the UK total (823,145).

	Num. of 3 day emergency food parcels given	% of Total
Scotland	210,605	13.3%
Northern Ireland	36,783	2.3%
North East	88,708	5.6%
North West	222,722	14.1%
Yorkshire & The Humber	89,841	5.7%
East Midlands	75,659	4.8%
West Midlands	142,234	9.0%
Wales	113,373	7.2%
East	156,081	9.9%
London	166,512	10.5%
South East	148,640	9.4%
South West	132,510	8.4%
UK	1,583,668	

3. Good Health and Wellbeing - Ensure healthy lives and promote well-being for all at all ages

In 2018, the infant mortality rate for the WMCA was 6.7 per 1,000 live births which is above the national average of 3.9. Each of the seven metropolitan authorities is worse than the England average, but Birmingham shows particularly poor results with 7.4 per 1,000 live births. It is worth noting that the number of infant deaths has decreased from 786 in 2017 down to 779 in 2018, however per 1,000 live births the rate has increased from 6.6 per 1,000.

The healthy life expectancy is lower for males in the West Midlands 7 Met. area than the national average at 59.6 years compared to 63.1 years in 2018, this leading to a gap of 3.5 years. Compared to 2017, the healthy life expectancy has decreased by 0.3 years while the national average remained the same. Similar patterns can be seen in the healthy life expectancy of females in the West Midlands 7 Met. where it is estimated to be 59.8 years with the national average of 63.6 years leading to a gap of 3.8 years. Compared to 2017, the healthy life expectancy for females in the West Midlands 7 Met. area decreased by 0.3 years with the national average remaining the same.

In May 2018/19, 29.5% (978,700) of adults were inactive which increased by 0.1pp (+9,200 people) since May 2017/18. Nationally there was an average of 24.8% of adults classed as inactive, this is a decrease of 0.4pp. To reach the national average of physical inactive adults, the WMCA requires 156,456 people to become more active.

Exploratory analyses into Covid-19 and health inequalities Research Case Study

Background: We know that Covid-19 is likely to exasperate existing health inequalities, both through the direct impacts of the virus, and the indirect impacts of the control measures imposed. The PHE Population Intelligence Hub is carrying out some exploratory analyses to understand local authority area characteristics which are disproportionately impacted by Covid-19.

Aims: The aim of the research is to identify key areas of focus in mitigating the impact of Covid-19 on health inequalities in the region, including over the longer term. The piece will support the WMCA in the relationship between health & wealth and places inclusive growth within its broader context of an inclusive economy. The piece aims to explore three key overlapping areas of impact on local authorities, these are mortality, economy and social wellbeing.

Process: The themes will be divided into three stands for exploration but are not independent of each other. The Population Intelligence Hub is collaborating with WMCA Office for Data Analytics and Research to produce analyses and findings for the economic impacts strand. Area characteristics which will be explored for their association with economic outcomes include area demographics, deprivation, economic activity, jobs across sectors, vulnerable population (including health needs and other needs) and rurality.

4. Quality Education - Ensure inclusive and equitable quality education and promote lifelong opportunities for all

The average Progress 8 score in the West Midlands 7 Met. area has increased from -0.14 in 2018 to -0.08 in 2019. Birmingham was rated as ‘Above Average’; both Solihull and Wolverhampton as ‘Average’; while Coventry, Dudley, Sandwell and Walsall were deemed ‘Below Average’.

Between the 2018/19 academic year, there were 31,740 apprenticeship starts across the WMCA area, 2,540 more than in 2017/18. This equates to an increase of 8.7%. Nationally, the number of people participating in an apprenticeship in England, increased by 4.7%. Advanced Level apprenticeships increased by 10.3% compared to the national increase of 5.1% and Higher Apprenticeships increased by 60.7% compared to 55.7% nationally.

The West Midlands 7 Met. area in 2018, had a 10.0% persistent absentee rate at a primary school level, which is above the national average of 8.7%. At a secondary school this figure rises to 14.3% in the West Midlands 7 Met. area, which matches the national trend but is higher than national average of 13.9%.

There are 861,700 people qualified to NVQ Level 4 in the WMCA area. This is an increase of 4.4% on the previous year or 36,200 people, comparable to the national growth rate of 2.9%. Despite this positive trend, 33.5% of the population are qualified to NVQ Level 4 compared to 40.2% for the UK – a shortfall of 173,249 people. The proportion of WMCA residents with no qualifications increased from 11.0% (283,700) in 2018 to 11.3% (290,500) in 2019. An increase of 6,800 people. The number of women with no qualifications increased from 130,300 to 136,200 (+4.5%), and men increased from 153,400 to 154,400 (+0.7%). Overall, to reach the current UK average (7.9%) requires a further upskilling of 87,115 people.

Education and Skills Research Case Study

Skills Advisory Panels aim to bring together local employers and skills providers to pool knowledge on skills and labour market needs, and to work together to understand and address key local challenges. This includes both immediate needs and challenges and looking at what is required to help local areas adapt to future labour market changes and to grasp future opportunities. This will help colleges, universities and other providers deliver the skills required by employers, now and in the future. Skills Advisory Panels aim to strengthen the capabilities of Local Enterprise Partnerships and Mayoral Combined Authorities, or local areas from hereafter, to carry out high quality analysis which will be used to identify their skills and employment needs and priorities, as well as inform their skills agenda, and improve their economic outcomes. This will assist local areas to develop action plans to address skills issues which, in turn can give more people in the local community access to high quality skills provision that leads to good jobs. The analysis produced will underpin the ‘People’ element of their Local Industrial Strategy.

In the West Midlands mapping and gapping of data needs by the Office for Data Analytics identified as skills data as a key evidence and data gap in the region. WMCA with WMREDI partners are developing the SAP Analysis and wider skills analysis, the following sections are the emerging key points from this work.

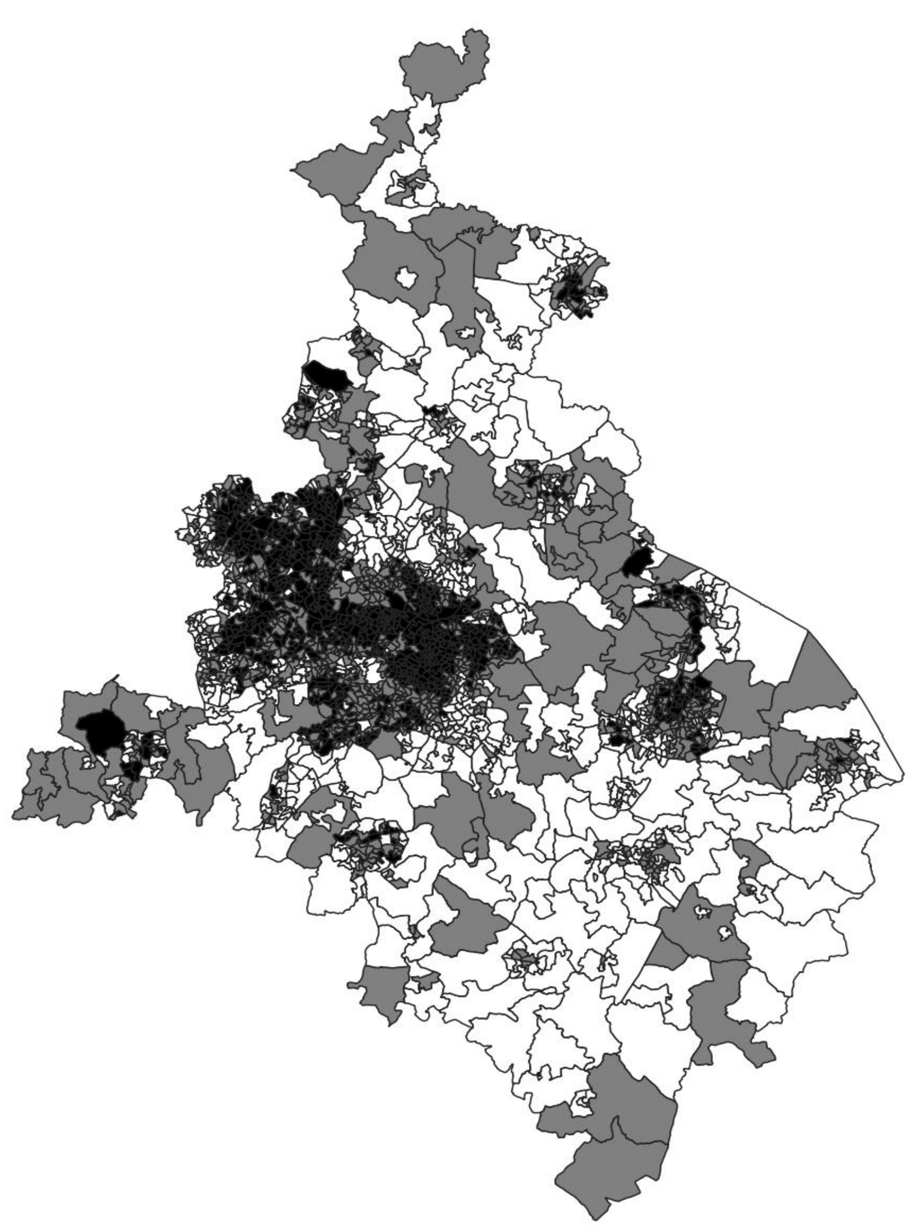
4. Quality Education - Ensure inclusive and equitable quality education and promote lifelong opportunities for all

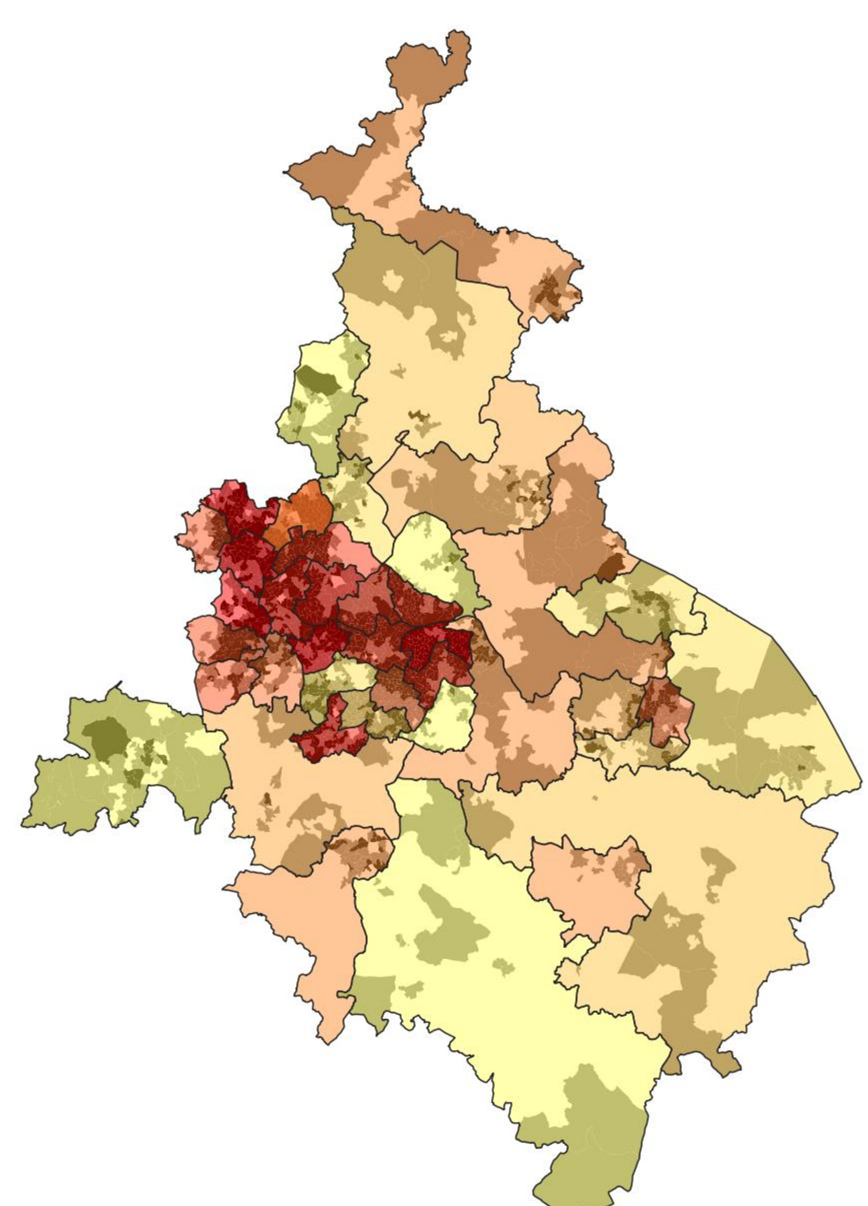
The West Midlands Region faces a significant qualification gap. By placing qualifications in a hierarchy based on the equivalent National Vocational Qualification, we can see the co-incidence between a high proportion of the population with no qualifications and a high score on the Indices of Multiple Deprivation, an ranking of Census areas based on the different dimensions of deprivation
The proportion of the population with no qualifications at all for each three LEP areas compared to the UK average (**7.9%**) with Coventry and Warwickshire within the margin of error at **7.3%**, followed by GBSLEP at **10.0%** and the Black Country far behind at **16.7%**. The skills deficit in the Black Country is still apparent when looking only at the metropolitan area, with the highest percentage in Sandwell at **20.3%**. This difference may be partly explained by the population in this area being older and more likely to have performed manual work which did not require formal qualifications.

Trends: Across the full 3-LEP area, the proportion without qualifications has fallen from **18.2%** to **11%** in the last ten years (2009 to 2019). Across the UK, it fell from **13.7%** to **8%**. This is a greater reduction in absolute numbers in the West Midlands, versus the UK, but a smaller one proportionally (a **65%** reduction in 'no qualifications' status over ten years in the West Midlands, vs **71%** in the UK).

Levels: Across each qualification level (as below), Coventry and Warwickshire LEP is consistently within the margin of error of the UK (suggesting a similar performance), with GBSLEP behind (most notably at the NVQ4+ level) and the Black Country further behind. The contrast at NVQ4+ between the Black Country (**24.7%**) and the UK (**40.2%**) is particularly striking. The importance of up-skilling people at the NVQ3 level to higher levels will be discussed further in the comparison of supply and demand.

Comparison of Indices of Multiple Deprivation alone (left – the darker the colour the more deprived) and with overlay of NVQ qualification level (right the redder the tone the less qualified). It is clear from this comparison that deprivation and lack of qualifications do largely, but not completely, coincide





4. Quality Education - Ensure inclusive and equitable quality education and promote lifelong opportunities for all

Average of Dec 2018, Jan 2019 and Feb 2019, the percentage of 16 – 17 year old NEETs in the WM 7 Met area was 6.6% (4,400 people), England was 5.5%. Compared to average of Dec 2017, Jan 2018 and Feb 2018 there has been a decrease of 5.0% (or 0.5pp, -230 people) in the WM 7 Met. area while England decreased by 9.2% (or 0.5pp).

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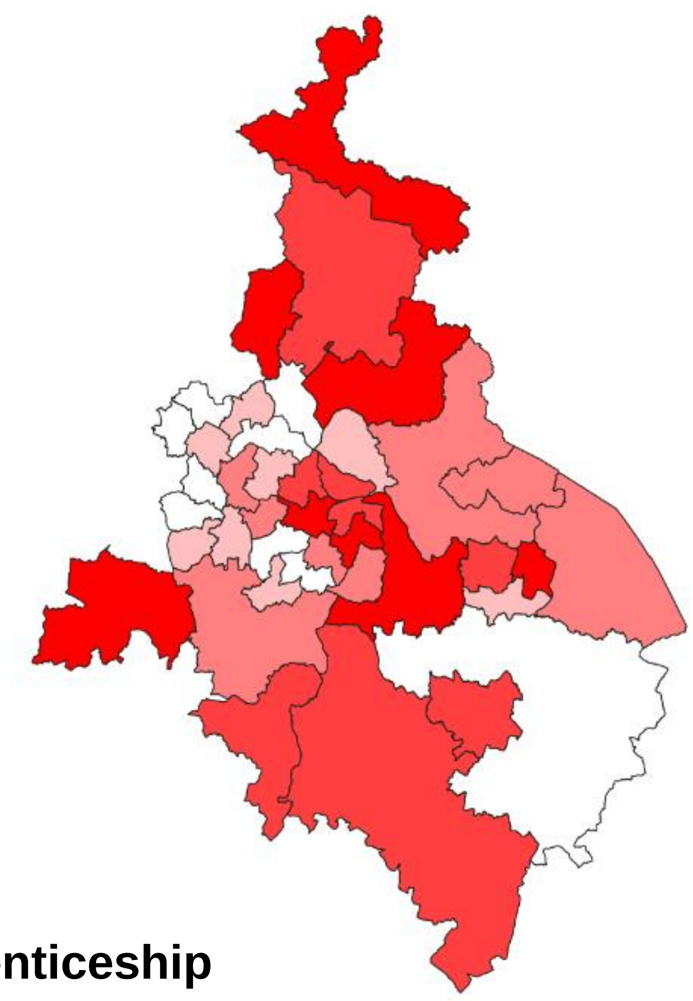
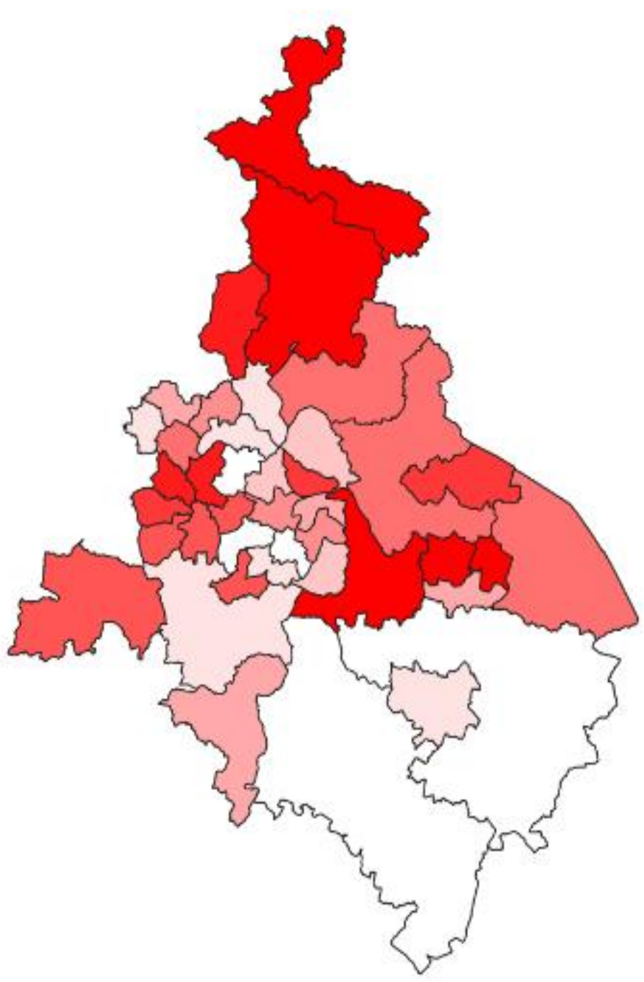


Furlough - Within the LEP areas, total numbers of workers on furlough are particularly concentrated in the Greater Birmingham and Solihull LEP area. As a result, this area is likely to be particularly exposed to the impact of the phasing out of the scheme. In the Black Country, on the other hand, has a lower number of furlough workers, indicating that a larger share of their working-age population are either in key roles, have lost employment, or were not economically active prior to the pandemic

Apprenticeship Location Quart Darke more appre s)



Apprenticeship Location: Mapping learner locations by parliamentary constituency for 2019/20 Q1 and Q2 does not indicate a clear relationship to general commuting patterns or population density.

This is likely a result of the fact that, as Department for Education research shows, apprenticeships are largely and increasingly concentrated in large employers. Research by the Sutton Trust suggested that the Covid-19 crisis may exacerbate this situation, with larger employers better able to retain their apprentices and continue to recruit.

This also suggests that transport is a significant limitation on connecting learners to providers, unless more small firms participate in the future.

Apprentices in the region appear to have a slightly younger age profile than further education in general, with **57%** aged under 25 in the West Midlands versus **51%** for further education in the metropolitan area for which data is available. The ethnic breakdown of apprenticeships closely matches the general population, as summarised below for apprenticeships of all levels. There are no significant differences in ethnic breakdown across the different levels of apprenticeship. Top course categories echo the largest industries in the regional economy, though it is clear that some sectors place more emphasis on apprentices than others. Administration, accounting, and finance are somewhat over-represented in apprenticeships.

However, the larger share of manufacturing in the regional economy compared to the UK is not reflected in the apprenticeship figures. As the later section on demand will discuss, most job postings result from replacing existing workers and not from expansion of the sector, meaning that the slow decline of manufacturing employment in the region does not necessarily explain this shortfall in apprenticeship numbers.

5. Gender Equality - Achieve gender equality and empower all women and girls

There are significant pay gaps between males and females within the WMCA and as the UK as a whole. The average full-time annual wage for a male in the WMCA stood at £32,335 in 2019, while in the full-time annual wage for females was £24,462, leading to a gap of £7,873 within the WMCA. The UK has a gap of £6,108 where male full-time earn on average £32,882 and females earn £26,774. When compared to 2018, the average male earnings have increased by 1.5% (+£492) which is a much slower growth rate when compared to the 4.4% (+£1,036) increase for female earnings in the WMCA.

The overall employment rate for females in the WMCA was 66.9% (865,100) while for men this was 77.9% (1,004,900) in 2019. However, when compared to 2018, the overall employment rate for females has increased by 1.1pp, with the male employment rate increasing at a slower rate of 0.4pp.

When split into part-time and full-time employment rates, in the WMCA, there were 38.4% (331,800) of females in employment working part time in 2019, this has decreased by 0.2pp since 2018, the UK average was 39.4% which has decreased by 0.7pp. While, 9.2% (92,600) of males in the WMCA in employment working part time, this has decreased by 0.6pp when compared to 2018. In contrast the UK experienced a slight increase from 11.2% in 2018 to 11.2% in 2019.

In 2019, there were 61.5% (531,900) of females in employment working full time in the WMCA, this has increased by 0.2pp since 2018, the UK average was 60.5% which has increased by 0.8pp. There were 90.4% (908,400) of males in the WMCA in employment working full time, this has decreased by 0.4pp when compared to 2018, while the UK has remained the same at 88.6%.

Income Inequality Research Case Study

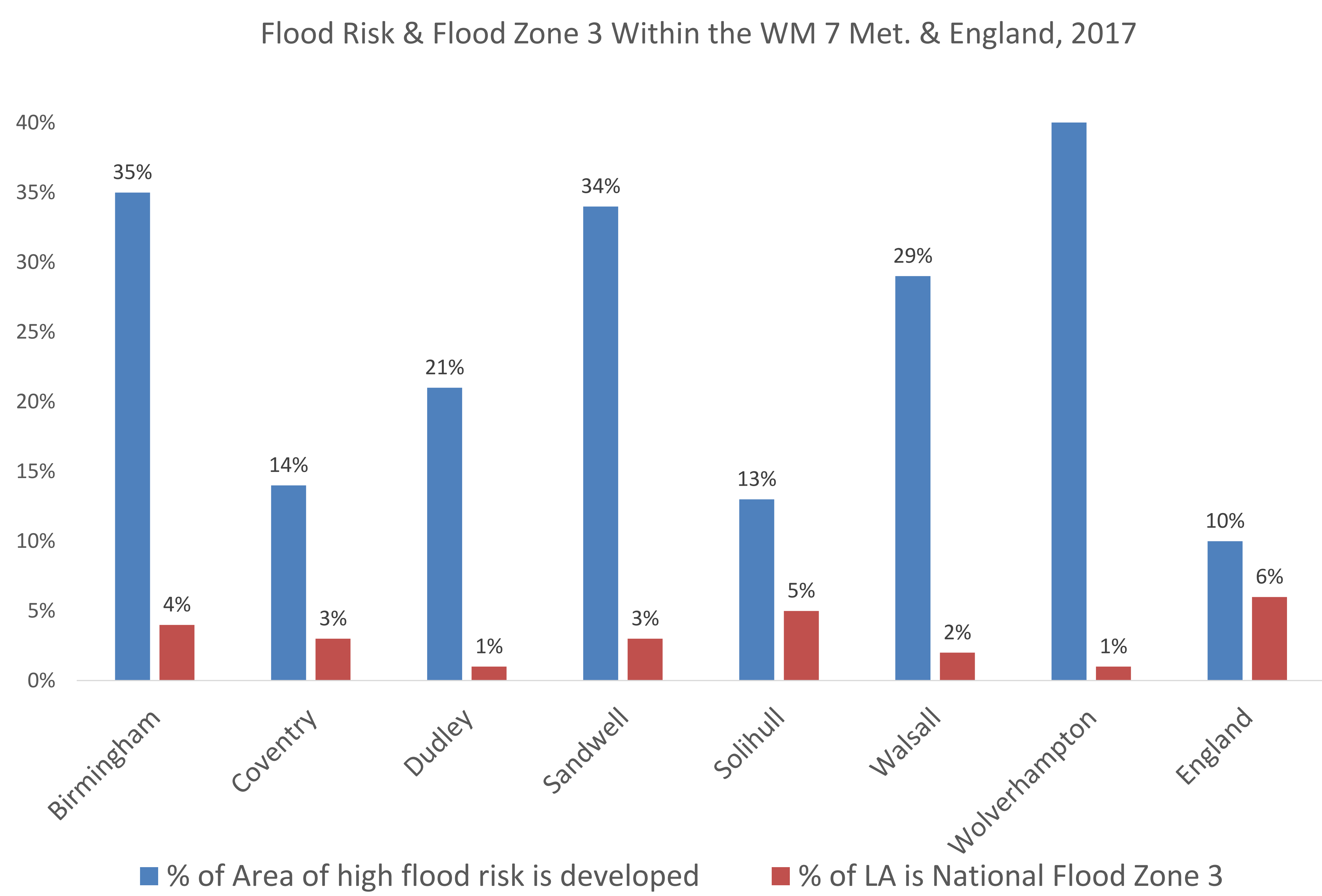
In 2019, the Office for Data Analytics carried out work looking at the gaps in data and evidence in the region. This mapping and gapping exercise developed a number of use case opportunities, which were prioritised one of which was better understanding of inequality. As part of addressing this we have started looking at income inequality through an analysis of HMRC data for the West Midlands region, including gender inequalities. Initial findings show:

- 72% of people have a total income below the regional so 7 out of 10 are below the average of £23,200 (national average £24,400)
- The West Midlands is the 5th most unequal region measured by the GINI index
- Men are wealthier than women. However at lower income there is far greater equality, disparity happens at the higher income levels where 8 out of 10 of the richest people are men. But there is more inequality within the income distribution of men than between genders and inequality between males contributes more to overall inequality.
- This is largely because of wider income opportunities for men, through better pensions, financial investments and property earnings. Also the sectors that men and women work in affect their ability to earn at equal levels, but there is also great income inequality within sectors.

These findings point to the importance of financial security and management skills and the ability for women to access other sources of income, entrepreneurship and opportunities to improve inequality. It also highlights women are more likely to be in part time and insecure work.

6. Clean Water and Sanitation - Ensure availability and sustainable management of water and sanitation for all

Across the WM 7 Met. area all the local authorities have a higher percentage of area that is developed and classed as a high flood risk then the 10% for England. Wolverhampton has the highest percentage of area of high flood risk that is developed at 41% down to 13% in Solihull



7. Affordable and Clean Energy - Ensure access to affordable, reliable, sustainable and modern energy for all

In 2018, there was an estimated 193,915 households living in fuel poverty, this equates to 11.5% of all households, this is above the England average of 10.3%. However, when compared to 2017 this is a decrease from the 218,644 households living in fuel poverty in the WMCA which equated to 13.1%.

In the WMCA geography, 736,150 MwH of renewable electricity generation was produced in 2018, with 45.8% (337,304 MwH) generated from Photovoltaics. Since 2017, the amount of renewable electricity generated has decreased in the WMCA area by 7.5% (-60,044 MwH) while the UK experienced an overall increase by 11.4%. When taking in to account consumption to the generation of renewable electricity, this equates to a 4.5% total renewable generation rate.

Across the WM 7 Met. 42.1% of buses have low emissions engines and 70.4% of train journeys use electric engines.

Ultra Low Emissions Vehicles Case Study

Energy Capital have been awarded £250k through the WMCA investment programme to develop a cohesive strategy for supporting infrastructure to allow the transition to Ultra-Low Emission Vehicles (ULEV) across the West Midlands Region. The programme aims to draw together a comprehensive evidence base of current and future requirements, build a picture of the work streams that Constituent Members are already undertaking, identify any gaps or barriers and develop recommendations as to how WMCA could further support and accelerate the transition.

So far, and in partnership with Transport for West Midlands, CENEX have been commissioned to develop the foundational evidence base and technology roadmaps. This included all major classes of private and public transport and potential transition routes including electrification, hydrogen, biofuels and other sources. In particular reference to the electrification of private vehicles, it projected that over 10,000 on-street charging bays would be required by 2040 under their medium scenario. The full report was published in January 2020.

Concurrently, a series of working groups were arranged with all Constituent Members to ascertain work done to date, aims and objectives of their own programmes and appetite for joint working. A board paper was presented to the WMCA in February 2020 which proposed to continue working collaboratively as well as explore the potential of a spine network of ultra-rapid chargers to enable EV users to confidently travel in, out and around the West-Midlands without range anxiety.

Energy capital has been leading on this programme to ensure that the energy infrastructure which will underpin the transition are in place and will not form a barrier to deployment. We have been advising on the electric bus charging work stream with Transport for West Midlands on grid capacity and potential mitigation of barriers. We have been working closely with National Grid and WPD to capture opportunities for more effective processes in the transition and highlight individual opportunities for potential energy hubs.

The programme aims to leverage private or government funds to ensure the West Midlands leads the transition, supporting our vitally important automotive sector and ensuring local business and residents have the opportunity for clean mobility options.

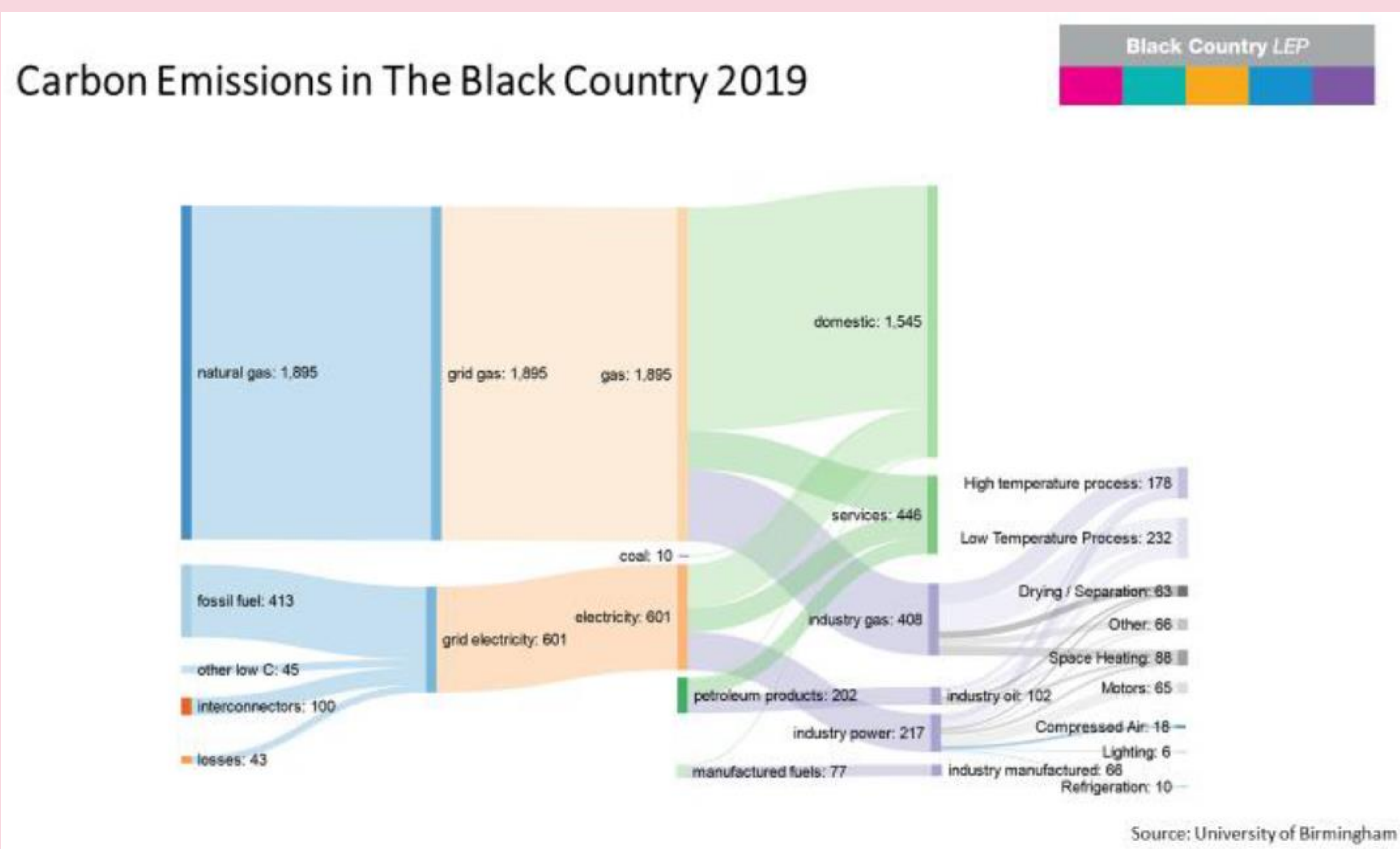
Repowering the Black Country Research Case Study

Research has been carried out to underpin the prospectus which sets out an ambitious and bold plan to deliver the world's first zero carbon industrial cluster in the Black Country. It will enable clean GVA growth of £16bn by 2030, creating or safeguarding at least 20,000 skilled jobs. This project was part-funded by Innovate UK and delivered by a partnership led by the Black Country Consortium and Camirus. It was an effective collaboration between industrial and academic partners who provided match funding: CR Plus, Kew Technology Ltd, Pro Enviro, Skewb and Camirus. The University of Birmingham and WMG contributed their academic expertise and the project was delivered under very challenging circumstances with much goodwill from all parties. The Black Country project team has strong links to local academic institutions with strong track records and expertise and able to support this agenda. In particular:

- The European Bioenergy Research Institute at Aston University
- The Birmingham Energy Institute at the University of Birmingham
- WMG at the University of Warwick
- The University of Wolverhampton

The completed Roadmap Project (phase 1) has identified four key priorities to stimulate the large-scale private sector investment and commercial development required to deliver the vision (Figure 12. These are:

1. A structured approach to identifying circular economy opportunities appropriate to the Black Country's existing industrial base; and development and testing of a methodology for designing and facilitating the development of zero carbon circular manufacturing/energy hubs.
2. A catalytic and immediate programme of support to Black Country businesses, engaging them at scale in the vision and assisting them to optimise their processes to minimise carbon emissions and reduce energy costs.
3. Effective integration of the vision and hub development methodology into the spatial and economic plans of the Black Country, as well as wider existing economic, R&D and business support programmes and efforts to secure inward investment.
4. Establishing a portfolio of targeted financial mechanisms to support hub and cluster development.



8. Decent work and economic growth - Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

In the WMCA total GVA continues to increase and in 2018 was £105.1bn, since 2017 this has increased at a higher rate than the UK average (4.0% growth compared to 3.4%). The WMCA accounts for 5.5% of the total UK GVA.

GVA per head in the WMCA was £25,183 in 2018, below the UK average of £28,729 - leading to a £14.8bn output gap. The output gap is impacted by skills levels, employment levels and the productivity of our business base. Notably, the output gap has decreased since the previous year by nearly £44m.

The WMCA has received 906 Foreign Direct Investment (FDI) projects from 2011/12 to 2018/19. This has led to the creation of over 50,000 new jobs from 2011/12 to 2018/19. The number of FDI projects in the WMCA area has more than doubled from 49 in 2011/12 to 131 in 2018/19. This far exceeds the average growth rate for the whole of the UK which grew by 26.7% in the same period.

In 2018, the West Midlands 7 Met. area exported £16.6bn worth of goods across the world and imported £15.3bn, leading to a trade surplus of £1.3bn. The West Midlands 7 Met. area has a trade surplus with 53 countries, the highest was with the USA at +£2.9bn where £3.8bn worth of goods exported to the USA and £0.9bn imported from the USA – the largest trade surplus than any other NUTS 2 area.

The WM 7 Met. area had the second highest percentage of people who work satisfactory hours at 82.9% across all city regions, this is also above the UK average of 80.3% in 2018. When using two-thirds of the UK median pay to define the threshold of satisfactory pay, the WM 7 Met. was the third highest for residents in quality work at 74%.

In 2018, the WMCA had a business base of 170,475 active enterprises, this has increased at a faster rate than the UK average growth (3.3% compared to 0.5%) since 2017. Positive trends can also be seen in enterprises births with the WMCA increasing to 24,640 (+1.7%) while the UK experienced a decreased (-0.3%). The WMCA enterprise births per 10,000 population is above the UK average (59 per 10,000 population compared to 58 for the UK).

79.3% of employees are earning above the Living Wage Foundation wage rates, which is below the UK average of 79.9%. However, when compared to 2018 the WMCA area has increased at a faster rate (+3pp compared to +2.8pp for the UK).

Annual levels of jobs have decreased since last year’s State of the Region down to 1.85 m people working in the WMCA area, with 1.16m employed in the transformational sectors and 699,100 in the enabling sectors in 2018.

As seen in the following table, there were 5 sectors that have a higher percentage of jobs when compared to the England average, examples include; advanced manufacturing (11.3% vs 8.0%), retail (16.6% vs 15.3%) and logistics & transport technologies (5.9% vs 4.9%). The highest number change for the WMCA was seen in the public sector including education at 8,000 equating to a growth rate of 3.4% above the England average growth of 0.6%.

8. Decent work and economic growth - Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

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	WMCA 2017	WMCA 2018	% of Total	Difference	% Change (WMCA)	% of Total (Eng.)	% Change (Eng.)
Business, Professional & Financial Services	397,840	402,040	21.80%	4,200	1.10%	22.90%	0.50%
Retail	305,000	306,000	16.60%	1,000	0.30%	15.30%	1.50%
Public Sector Inc. Education	234,000	242,000	13.10%	8,000	3.40%	12.90%	0.60%
Life Sciences & Healthcare	243,000	239,000	12.90%	-4,000	-1.60%	12.70%	-0.40%
Advanced Manufacturing & Engineering	204,920	209,400	11.30%	4,480	2.20%	8.00%	0.30%
Cultural Economy Inc. Sports	160,100	135,150	7.30%	-24,950	-15.60%	9.90%	0.60%
Construction (Building Technologies)	125,000	121,000	6.60%	-4,000	-3.20%	7.10%	0.30%
Logistics & Transport Technologies	111,145	109,355	5.90%	-1,790	-1.60%	4.90%	2.40%
Digital & Creative	48,995	49,320	2.70%	325	0.70%	4.40%	-0.70%
Low Carbon & Environmental Technologies	32,325	28,615	1.60%	-3,710	-11.50%	1.80%	2.00%
Total	1,862,000	1,846,000		-16,000	-0.90%		0.60%
Transformational	1,163,225	1,158,730	63.00%	-4,495	-0.40%	61.90%	0.40%
Enabling	699,100	683,150	37.00%	-15,950	-2.30%	38.10%	0.60%

Growth Hubs assessing the impact of CV19 and development of sector plans Research Case study

The pandemic accelerated the need for greater granularity of intelligence, to help regional policymakers understand what decisions businesses were making and the need for real time qualitative and quantitative information. The 3 regional Growth Hubs put in place weekly surveying of businesses which enabled the capturing of data presented earlier in this report.

The 3 LEPs also began the process of revising their sector plans and WMCA reviewed the Local Industrial Strategy, this process took on board the changing environment and developed an understanding of the local impacts.

This review also necessitated an update of the baseline sector dashboards with summary data, assets and assessment of the strengths in the region. The following section is based on the developing Local Industrial Strategy sector plans and evidence for those plans

8. Decent work and economic growth - Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

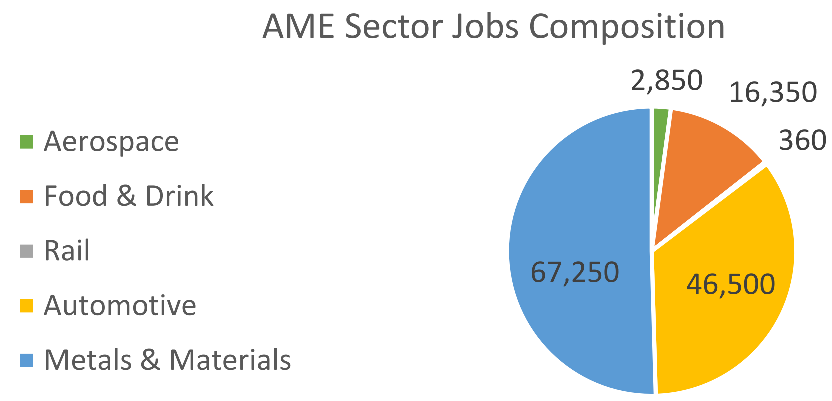
Advanced Manufacturing and Engineering – Summary Statistics

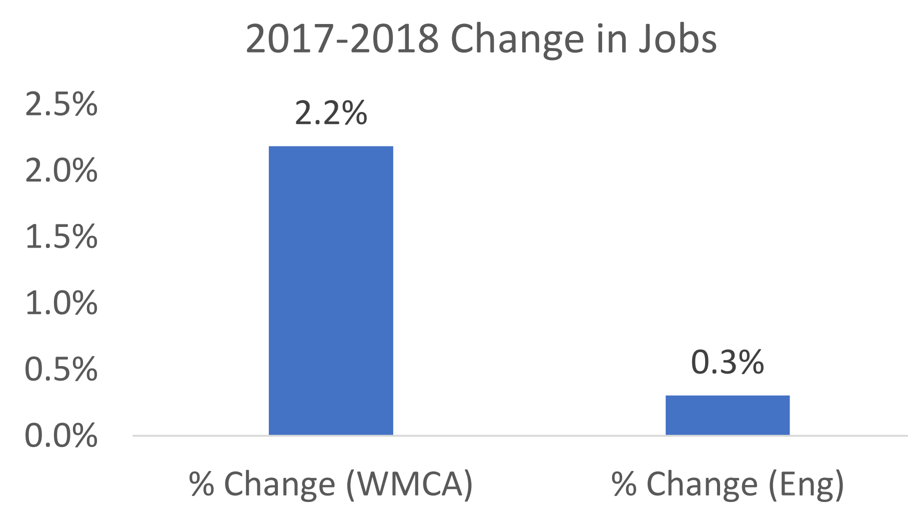
£16.4bn WMCA GVA is attributed to AME, which is 14.1% of the whole economy. This makes AME the second largest sector behind BPFS. The **2030 GVA ambition for this sector is £19.7bn**

There are **209,400 jobs** attributed to AME in the WMCA area, 11.3% of overall employment.

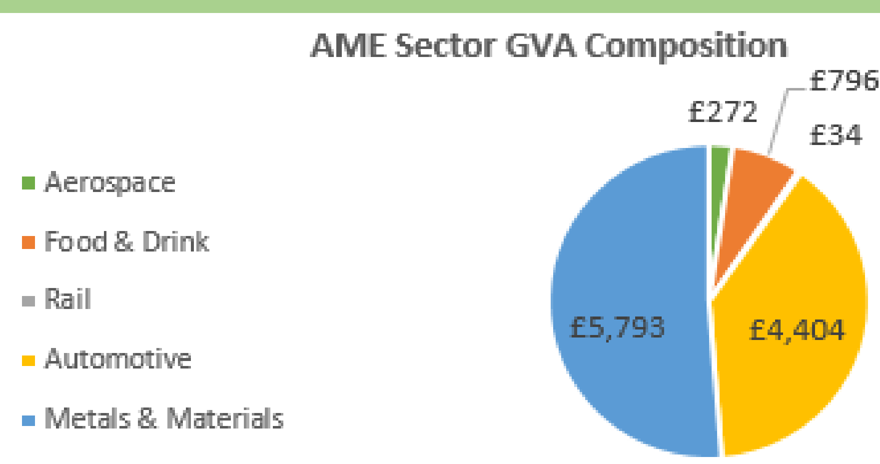
Since 2010, GVA in **AME has grown 65% in the WMCA**, far higher than the 24% growth for the sector in the UK overall.

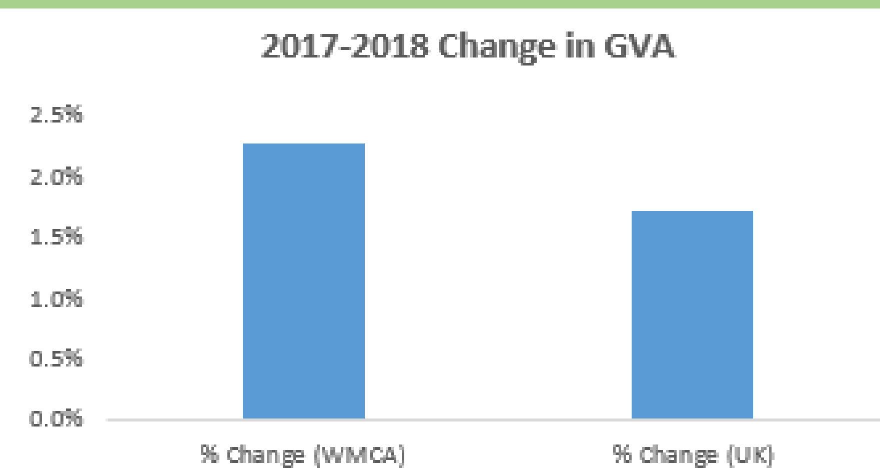
Metals & Materials is the largest Advanced Manufacturing subsector in terms of GVA, jobs and businesses.



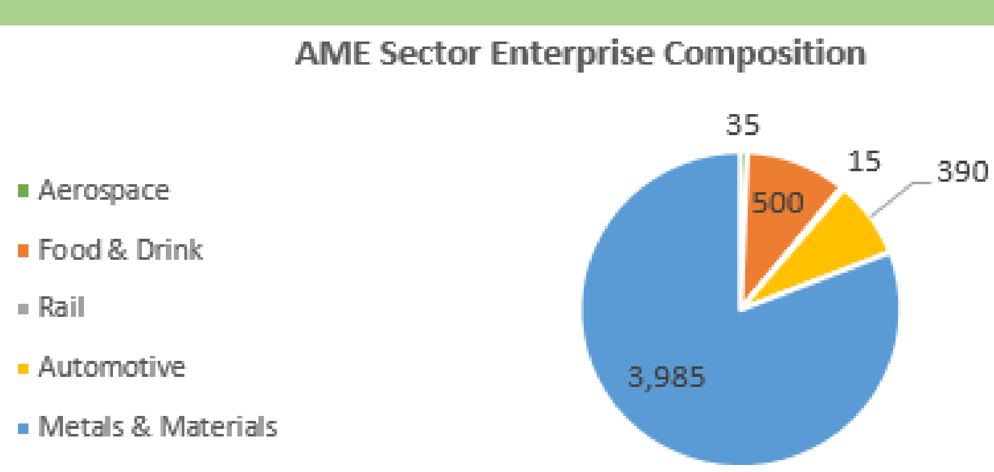


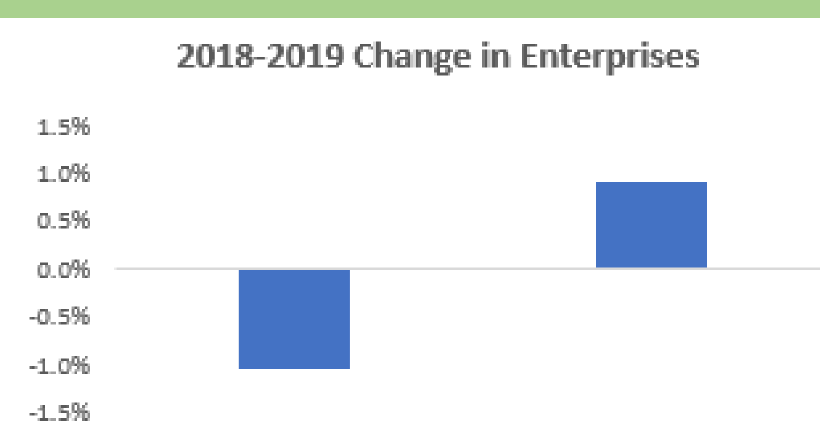
GVA Current: **£16.4bn** 2030 Ambition: **£19.7bn (+£3.3bn)** **65% growth** since 2010





Businesses Current: **10,095** **-1% change** since 2018





Jobs Current: **209,400** **2.2% growth** since 2017

AME Sector Jobs Composition

2017-2018 Change in Jobs

Sources
- Business Register and Employment Survey (BRES)
- UK Business Counts
- Regional gross value added (balanced) by industry: all NUTS level regions
- Oxford Economic Model

8. Decent work and economic growth - Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

Automotive – Summary Statistics

Estimated **£4.4bn GVA** attributed to automotive manufacturing in WMCA.

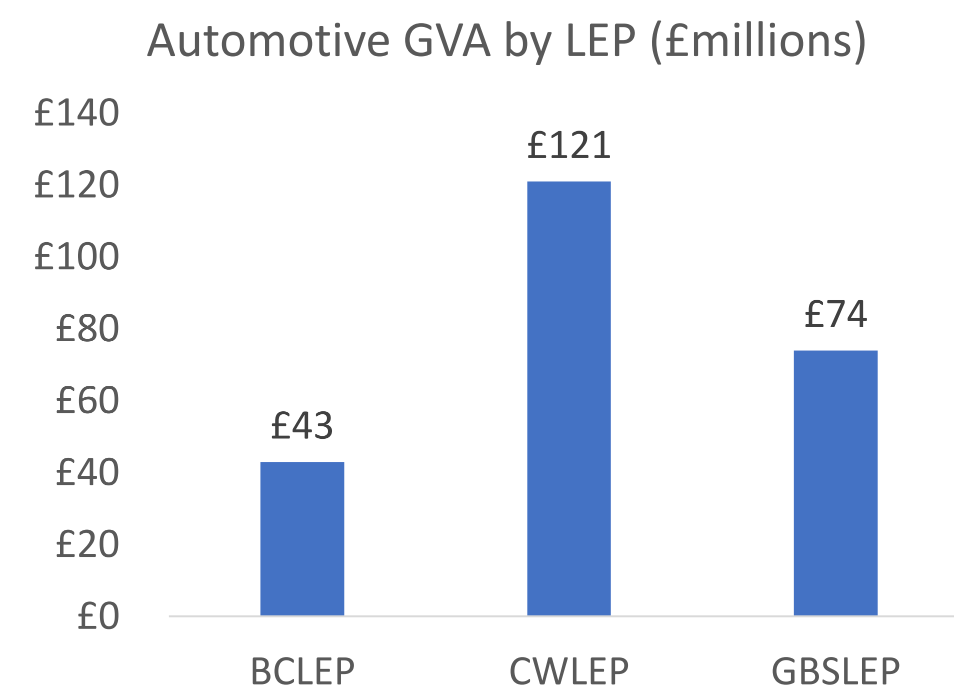
46,500 jobs in the sub-sector locally. GBSLEP & CWLEP have the **most automotive jobs of all English LEP areas.**

390 businesses in the sub-sector locally.

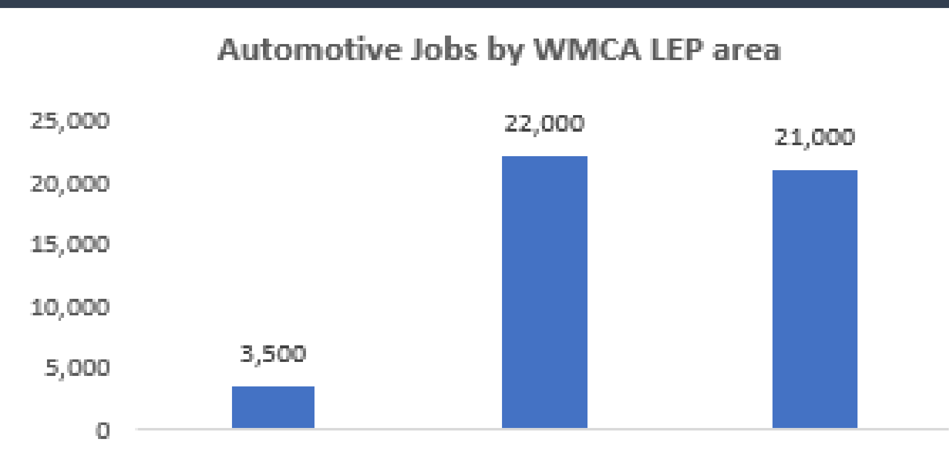
Estimated £94,444 GVA per employee.

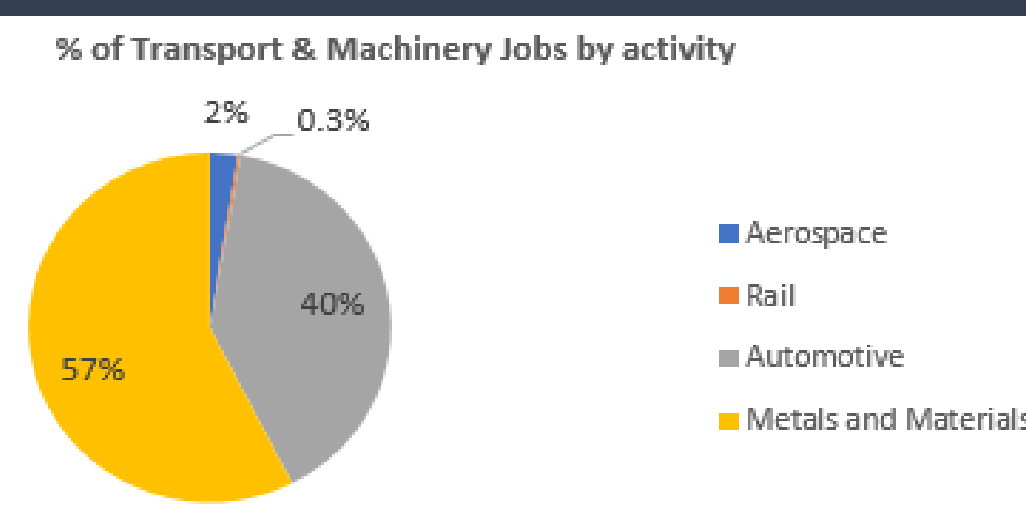
There is **high location quotients** across automotive SIC codes for the region, suggesting a significant cluster of activity compared to other parts of the UK.

This analysis is based on the SIC code 29, which underestimates the automotive manufacturing industry.

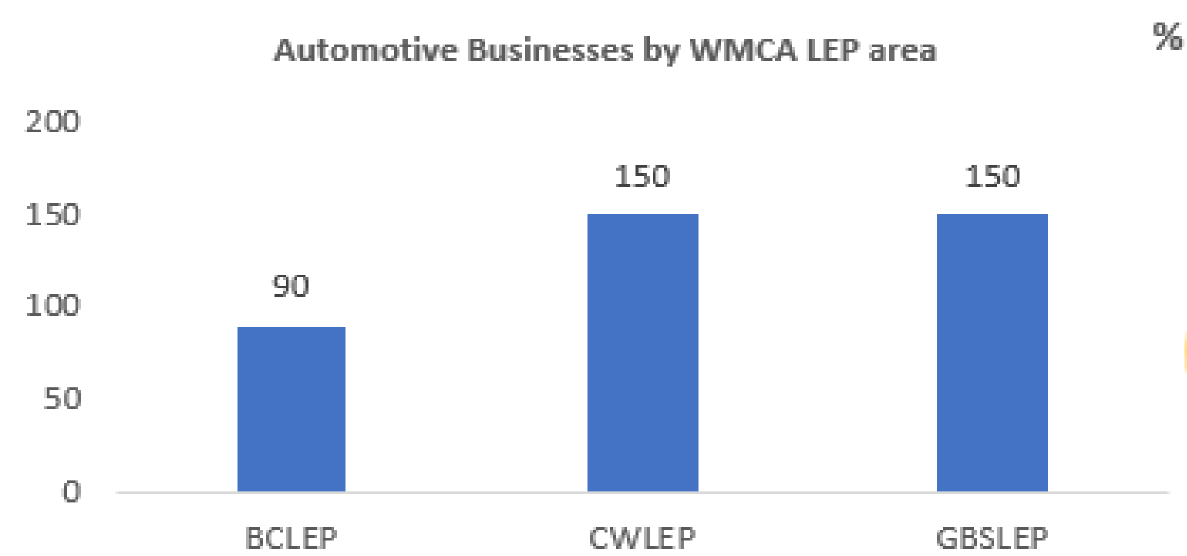


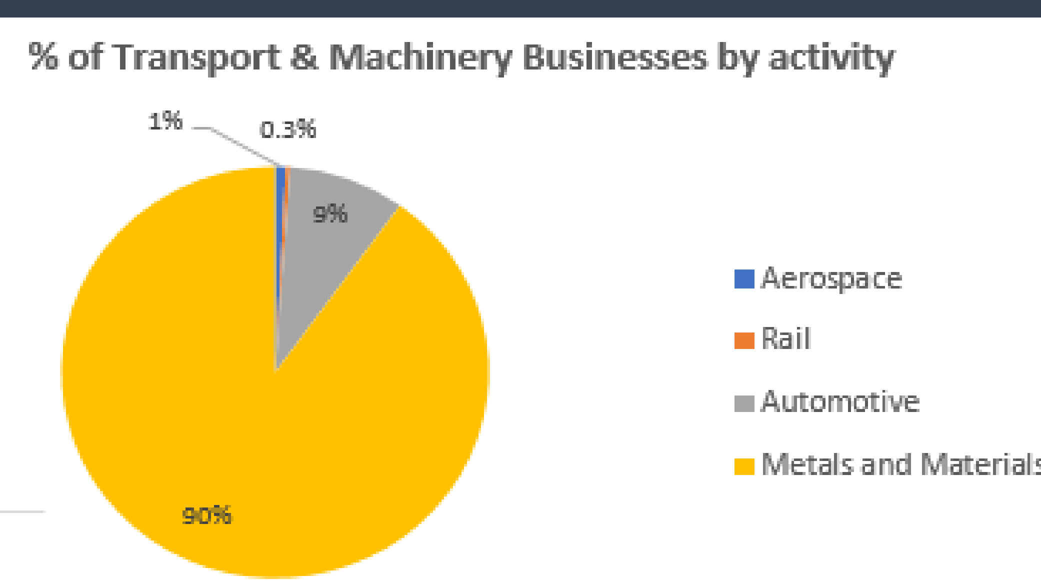
Jobs **Current:** 46,500 in automotive manufacturing





Businesses **Current:** 390 in automotive manufacturing





GVA **Current:** £4.4bn in automotive manufacturing

Sources
- Business Register and Employment Survey (BRES)
- UK Business Counts
- Regional gross value added (balanced) by industry: all NUTS level regions
- Oxford Economic Model

8. Decent work and economic growth - Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

Automotive Industry Profile

Our Competitive Advantage

Strong cluster presence with **20 vehicle manufacturing sites, 35 automotive and off-highway OEM brands**
26 OEM Vehicle R&D Centres, 8 Automotive Centres of Excellence and 4 Low Carbon Centres of Excellence
Good **access to auto supplier base**
Good connectivity with well developed road and train network and international airport
The WM region has **export expertise in machinery & transport goods** (71% of all goods exports compared to 41% nationally)
High quality, sector focused science & research facilities and institutes
GBSLEP (22,000) & CWLEP (21,000) have the most automotive jobs of all LEP areas
The Midlands ranks as **a top global destination for automotive FDI**

Products , Services & Brands

JLR's Engine Manufacturing Centre is home to the high technology, low emission Ingenium diesel engine for the Range Rover Evoque, Discovery Sport and Jaguar XE cars
Geely LEVC's factory for the Txe City Taxi is the **first UK purpose built factory for EVs**
CAB Auto, IAC, Lear, IM Kelly, Grupo Antolin produce interiors for major OEMs, including JLR, Aston Martin & Nissan
Leading location in UK for **automotive R&D**.; including **CAV and EV** battery and energy storage
CAB Auto's seating goes into the cars of some of the biggest automotive manufacturers, including JLR, Aston Martin & Nissan
Rimstock PLC is a **world leading producer of alloy wheels**
The region **produces 1/3 of all cars made in the UK**

From 2014-2017, there were 82 successful WMCA FDI projects in automotive, creating 10,000 new jobs and safeguarding a further 3,000
In 2017-18, successful FDI investments have included:
Aston Martin Lagonda 130,000sqft unit
Geely LEVC – new HQ & factory open
JLR Gaydon – Triangle and NVH

Centres of Excellence/Assets

Innovation:
Advanced Propulsion Centre, University of Warwick
National Automotive Innovation Centre (NAIC), University of Warwick
The National Transport Design Centre, Coventry
HORIBA-MIRA Consultancy and MIRA Technology Park
Battery Prototype Centre, Warwick
Wton Science, Technology & Prototyping Centre
UK Battery Industrialisation Centre (UKBIC)
Wton Science, Technology & Prototyping Centre
Changan UK Research and Development Facility
SMMT Industry Forum

Training:
Rolls-Royce University Technology Centre, Birmingham
EEF Technology Training Centre
WMG Academy for Young Engineers
Black Country Skills Factory
Lloyds Bank Advanced Manufacturing Centre
Institute for Advanced Manufacturing

Production Processes:
Manufacturing Technology Centre (MTC)
Warwick Manufacturing Group (WMG)

8. Decent work and economic growth - Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

Rail Summary Statistics

Estimated **£34m GVA** attributed to rail manufacturing in WMCA. The 2030 ambition for this sector is £38m

360 jobs in the sub-sector locally.

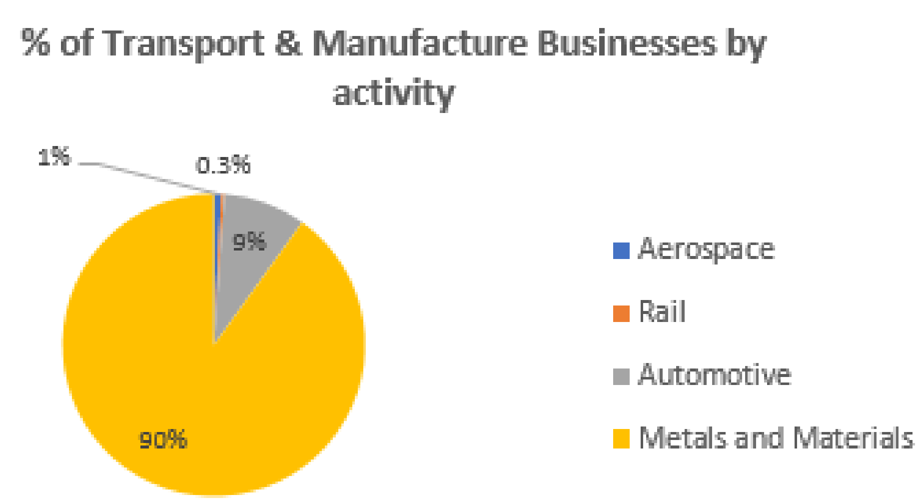
69% of WMCA rail jobs are in CWLEP (250).

Rail is small sub-sector of transport & machinery manufacturing, making up **0.3% of GVA and jobs in this sub-sector.**

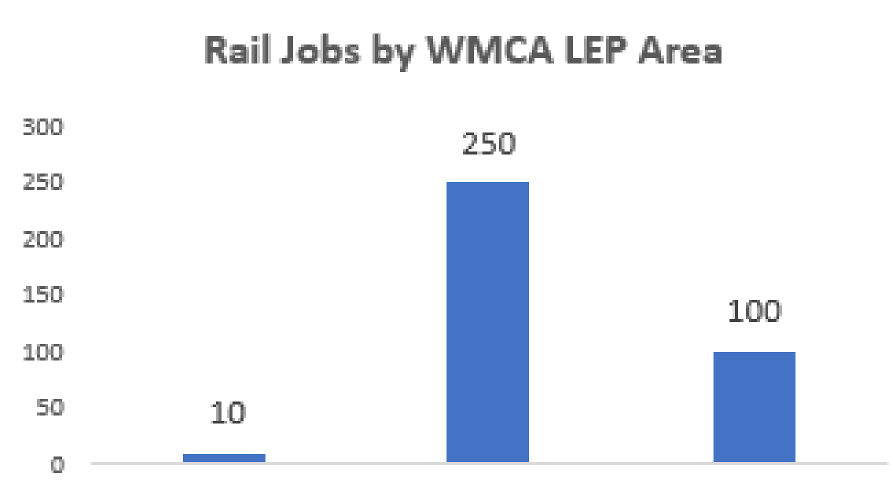
Rail manufacturing has an LQ of 1.2 in the WMCA.

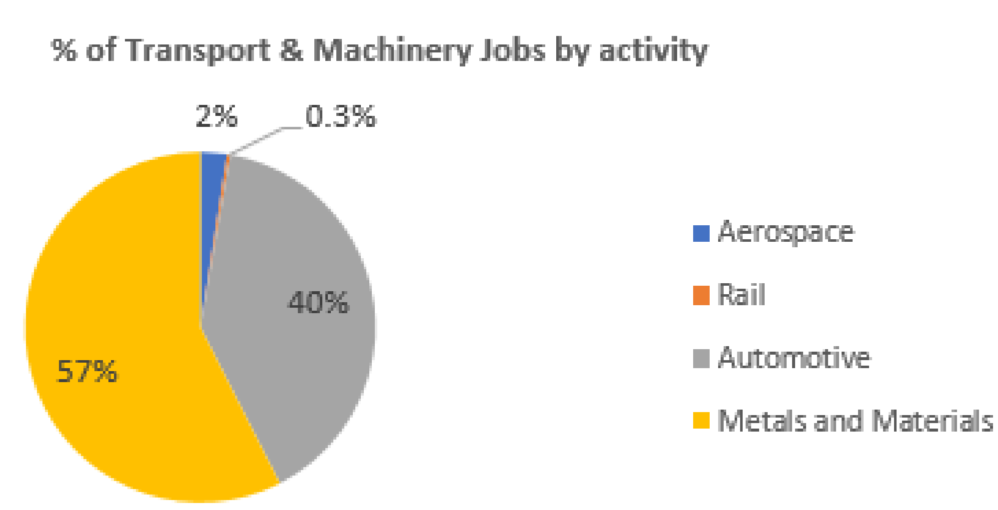
This data reflects the SIC code: 30.20 Manufacture of railway locomotives and rolling stock, which understates the extent of rail activity in the area. Wider evidence suggests a much broader rail sector locally, with a **stronger cluster of activity in the WM region than suggested here.**

Businesses: Rail manufacturing accounts for 15 businesses in the WMCA



Jobs: **Current:** 360 in rail manufacturing





GVA: **Current** £34m **2030 Ambition:** £38m (+£4m)

8. Decent work and economic growth - Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

Rail Industry Profile

Our Competitive Advantage

HS2 – 2 West Midlands stations will add £3bn GVA to the local economy.
OnTrackWM – rail supply chain virtual procurement tool (a part of HVM City).
High quality, sector focused **science & research facilities and institutes, including very light rail research; battery and energy storage R&D.**
Good connectivity with well developed road and train network and international airport
Cluster of **rail construction specialists & consultancies** (AECOM, TDI etc) & presence of **international transport advisors** (Arup, WSP, Atkins etc)
The WM region has **export expertise in machinery & transport goods** (71% of all goods exports compared to 41% nationally).
Heavy **cross-over relationships with significant local automotive/aerospace/other manufacturing activity. WMCA cluster of all this manufacturing (particularly transport) activity** has an agglomeration affect for the rail sector.
The intertwined nature of these industries means that many firms won't work explicitly in the rail sector. This ensures that the **activity figures suggested using SIC code analysis often underestimates the size & impact of the sector** locally
Lightweighting and battery/energy storage expertise
Rail creates high quality jobs within the region.

Products , Services & Brands

HS2 HQ - based in Birmingham, for HS2 construction and supply chain, national control centre and rolling stock centre.
Wabtec AM Rail - provide signalling services for the UK market and rail consultancy through out the UK and globally.
AECOM – Rail construction specialists.
DK Rewinds – Specialise providing parts and repairing traction motors that power Central line trains to London.
Wednesbury to Brierley Hill Metro Extension
OnTrackWM
Midland Metro will see the country's first battery-operated trams on the streets in 2019
Between 2014-17 there was **2 major FDI projects, creating 70 jobs**
HQ of Rail Alliance
National High Speed Rail College will be creating 300 engineers of the future every year.
VLR Innovation Centre & Rail Line
Major **HS2 contractors** setting up bases in and around the region (Balfour Beatty, VINCI etc).
Light rail test facilities at the **QRTC (Quinton Rail Technology Centre)**, Long Marston

Centres of Excellence/Assets

Innovation:
- Birmingham Centre for Rail Research and Education
- UK Railway Research and Innovation Network (UKRRIN) led by University of Birmingham.
- WMG at the University of Warwick - very light rail; battery and energy storage
- Very Light Rail Innovation Centre & Test Track
- Quinton Rail Technology Centre - the only private test track in the UK.
- The National Transport Design Centre, Coventry
- MIRA Technology Park
- Advanced Propulsion Centre
- Wton Science, Technology & Prototyping Centre
- UKBIC (UK Battery Industrialisation Centre)

Production:
- Institute For Advanced Manufacturing and Engineering
- Manufacturing Technology Centre

Training:
- Network Rail Training Centre, Walsall
- National College for High Speed Rail, Aston
- EEF Technology Training Centre
- WMG Academy for Young Engineers

8. Decent work and economic growth - Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

Aerospace Summary Statistics

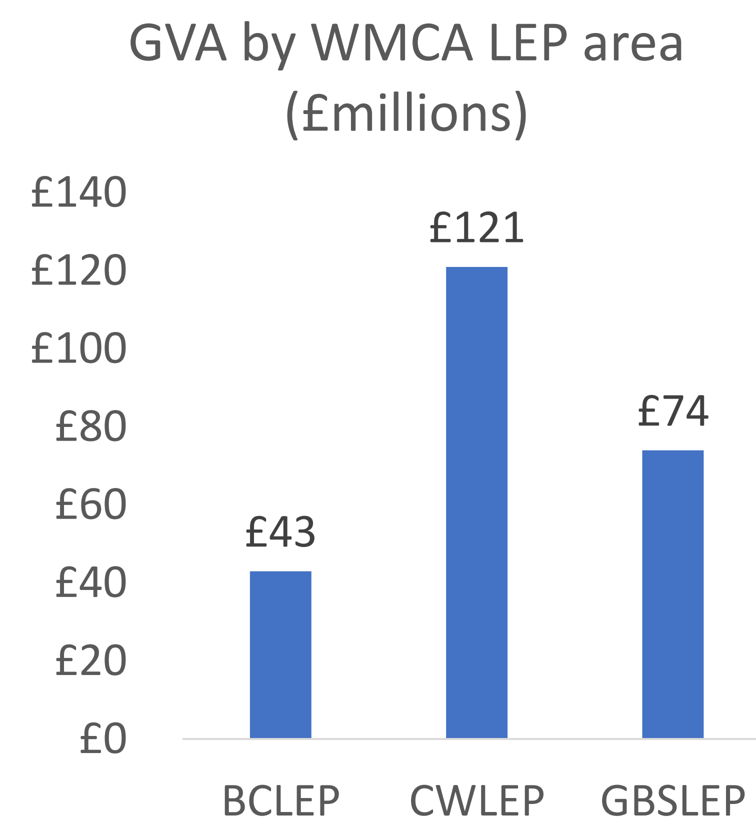
Estimated **£272m GVA** attributed to aerospace manufacturing in WMCA. The 2030 ambition for this sub-sector is £367m. There are **2,850 jobs** in the sub-sector locally.

However, this data understates the extent of aerospace activity in the WMCA, as it only reflects the SIC code: 30.30 Manufacture of air and spacecraft and related machinery. Wider evidence suggests a much broader aerospace sector locally, with **a stronger cluster of activity in the WM region than suggested here (see earlier slides)**

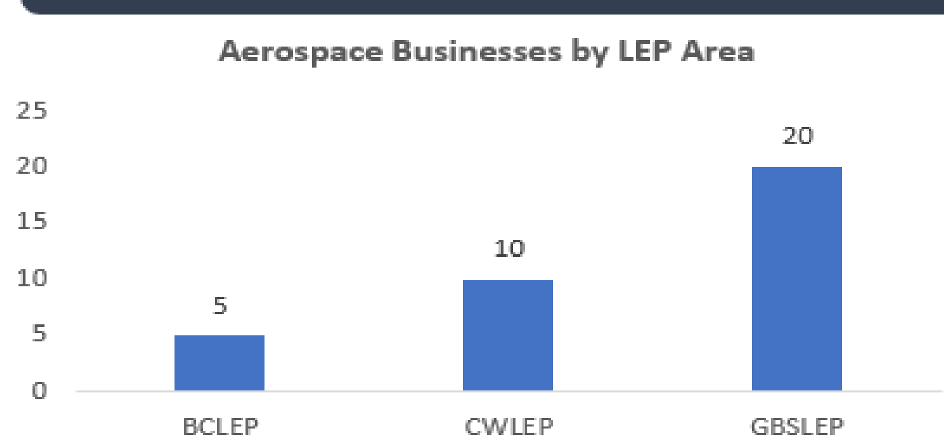
National body ADS estimate UK aerospace turnover of £35bn. The West Midlands is roughly 10% of the sector nationally, thus representing approx. £3.5bn turnover. ADS estimate that GVA is 30% of turnover in aerospace so **aerospace GVA in the WM is around £1bn.**

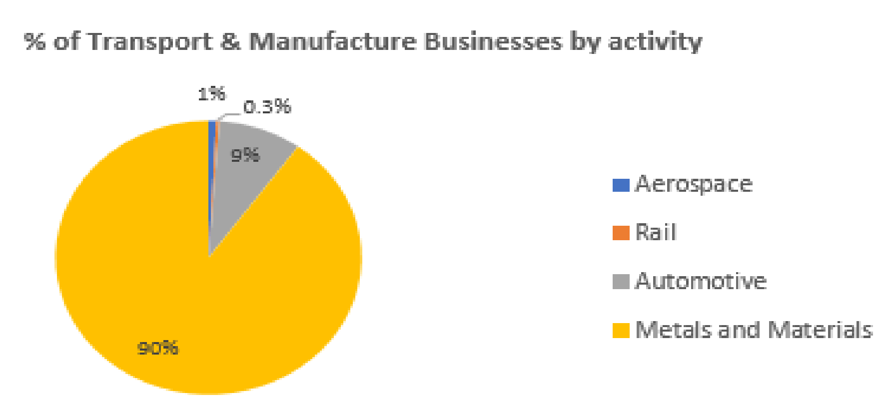
ADS estimate that there are 123,000 direct aerospace jobs in the UK, and double this when you include indirect jobs. This means that around **25,000 jobs in the WM are aerospace.**

Only measuring for SIC 30.30 ensures that much activity that is primarily for aerospace is not recorded. This aerospace activity is disguised as 'metal working' or 'electro-mechanical equipment'.

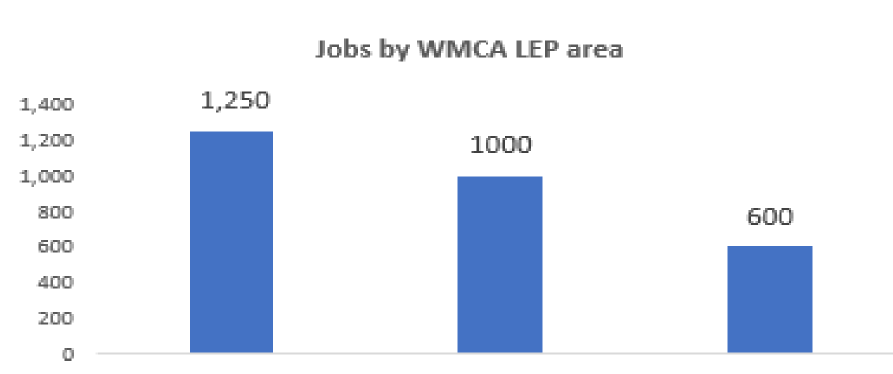


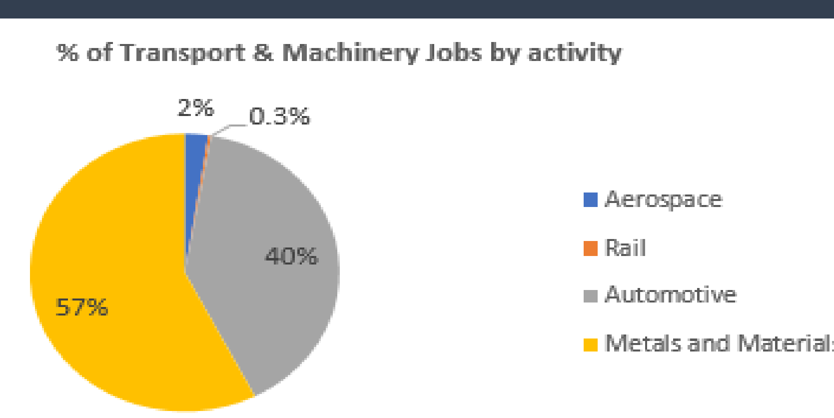
Businesses: Aerospace Accounts for **35 businesses** in the WMCA





Jobs: Current: **2,850**





GVA: Current: **£272m** 2030 Ambition: **£367m**

8. Decent work and economic growth - Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

Aerospace Industry Profile

Our Competitive Advantage

25% of UK aerospace sector is based in the Midlands (7% of Europe's & 3% of the world's)
Midlands Aerospace Alliance (over 300 members) represents the **largest aerospace cluster in Europe**
WM represents around 10% all UK aerospace jobs
High quality, sector focused **science & research facilities and institutes,** mainly used by OEMs.
Unrivalled lead in **component design and manufacture**
Base of aerospace companies throughout a **well-integrated supply chain.**
Close proximity to Rolls Royce global HQ & production centre in Derby.
Good connectivity with well developed road and train network and international airport
The WM region has **export expertise in machinery & transport goods** (71% of all goods exports compared to 41% nationally)
Strong position in aerospace's growth sectors (e.g. strengths in supplying large civil aircraft).

Products , Services & Brands

UTC Aerospace Systems – Specialise in wing and engine actuation and heat exchangers
Meggitt – focus on wheel and brake, fluid conveyance and heat exchangers.
Rolls Royce – Engine control systems and mechanical parts, defence engines repair and overhaul.
Moog – wing actuation, helicopter rotor actuation.
Timet – Titanium for aircraft engines.
Arconic – aerostructures
Local manufacturers are focused on the development of **high technology systems, engines and motors, components and control systems.**
Between 2014-17 there was **5 major aerospace FDI projects, creating 191 jobs & safeguarding 97.**
Coventry & Warwickshire Aerospace Forum – a grouping of advanced engineering businesses collaborating with leading UK universities and associations
Major new factory local moves/modernisations in recent years: Moog to i54, R-R to Birmingham Business Park, Meggitt to Ansty Park (£130m facility operational by 2019)

Centres of Excellence/Assets

Innovation:
The National Transport Design Centre, Coventry
MIRA Technology Park (inc. Southern Extension with CWLEP investment); Advanced Propulsion Centre
Wton Science, Technology & Prototyping Centre
Rolls-Royce University Technology Centre, Birmingham
National Battery Prototype Centre, Warwick
Engineering and Computer Science Research Centre
Centre for Manufacturing and Materials Engineering, Coventry. High Temperature Research Centre, UoB/Ansty
The Proving Factory, Coventry

Production:
Institute For Advanced Manufacturing and Engineering
Warwick Manufacturing Group
Manufacturing Technology Centre

Training:
EEF Technology Training Centre
WMG Academy for Young Engineers
Black Country Skills Factory
The Aerospace Academy, Solihull College
Centre for Advanced Aeronautical Provision

8. Decent work and economic growth - Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

Metals and Materials Summary Statistics

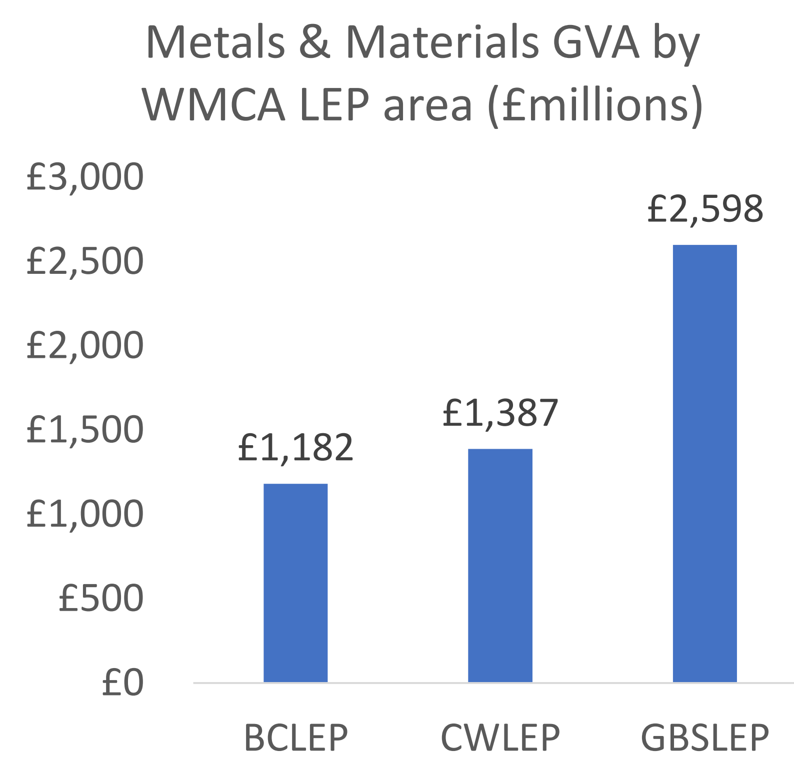
£5.8bn GVA attributed to Metals and Materials in WMCA, 5.5% of total. With a **2030 ambition of £6.1bn**

67,250 jobs in the sub-sector locally, 3.6% of WMCA total.

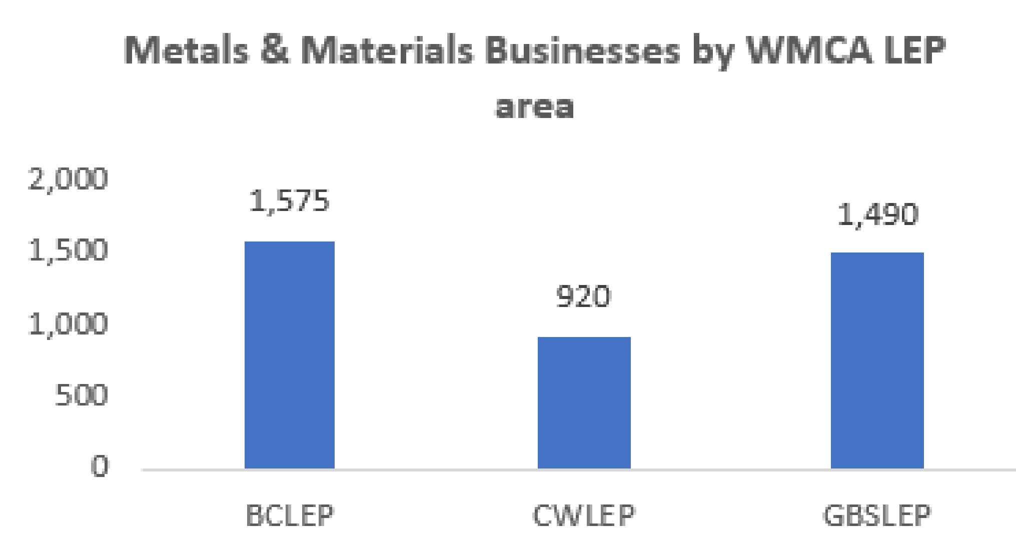
£86,141 GVA per employee in this sub-sector, higher than the average for the region of £56,908.

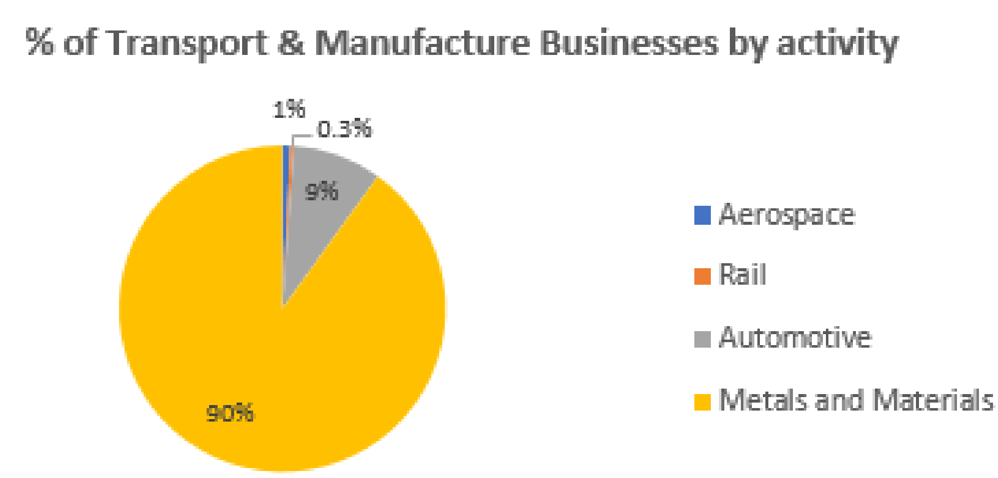
1,575 businesses in this sub sector

Only measuring for SIC codes 22-25 ensures that much activity that is primarily for the metals & materials sector is not recorded.

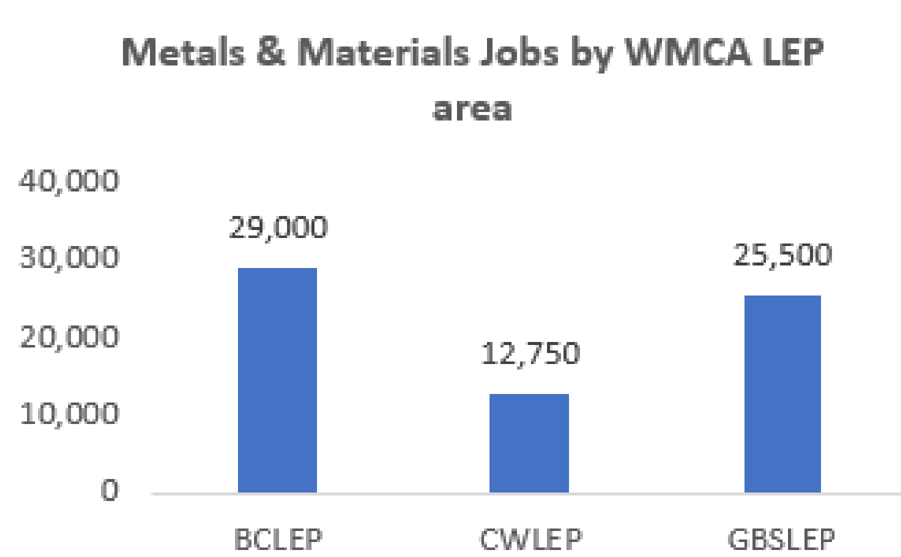


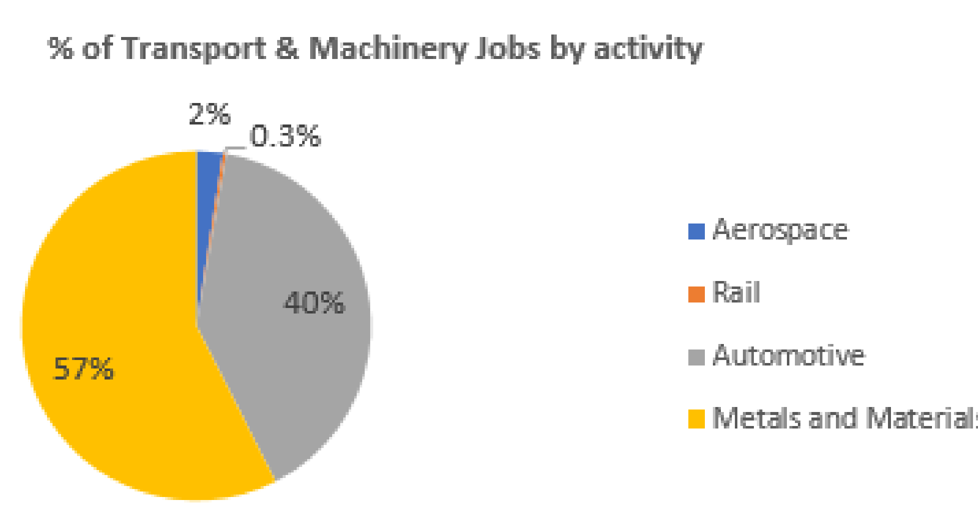
Businesses: Metals & Materials accounts for **1,575 businesses** in the WMCA





Jobs Current: **67,250** **4% growth** since 2010





GVA Current: **£5.8bn** 2030 Ambition: **£6.1bn (+0.3bn)** per employee: **£86,141**

8. Decent work and economic growth - Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

Metals and Materials Industry Profile

Our Competitive Advantage

Historic presence within metals & materials manufacturing & metals treatment, leading to a significant concentration of infrastructure like furnaces and foundries.
Leading innovation from the region's universities is helping develop materials for industrial use and future applications.
The significant presence of automotive, aerospace and rail in the area ensures a strong number of metals & materials firms, feeding into these industries' supply chains. There is **widespread demand for these products locally.**
Good connectivity with well developed road and train network and international airport
Highly concentrated industry in WM
Major infrastructure investments in the region (HS2 etc).
The West Midlands has the **largest concentration of materials related jobs in the UK**. (WMGC)
The WM region has **export expertise in machinery & transport goods** (71% of all goods exports compared to 41% nationally)
Representation from **key industry bodies** locally – e.g. UK Metals Council, RAPRA

Products , Services & Brands

Assa Abloy - World's largest lock manufacturer
Mitsubishi Chemical Carbon Fiber and Composites – Key suppliers in manufacturing specialist materials.
Nord Composites – Major composite material business, specialising in sealant and adhesive materials.
Precision Chains make the chains for the London Underground escalators.
RMD Kwikform helped install the roof of the Aquatics Centre for London 2012.
ZF Lemforder's Darlaston factory supplies suspension control arms to Jaguar,

Centres of Excellence/Assets

Innovation:
The National Transport Design Centre, Coventry
MIRA Technology Park
Advanced Propulsion Centre
Wton Science, Technology & Prototyping Centre
Rolls-Royce University Technology Centre, Birmingham
Engineering and Computer Science Research Centre
Automotive Composites Research Centre

Production:
Institute For Advanced Manufacturing and Engineering
Warwick Manufacturing Group
Manufacturing Technology Centre
Advanced materials characterisation and simulation hub (AMCASH)
Alternative Raw Materials with Low Impact

Training:
EEF Technology Training Centre
WMG Academy for Young Engineers
Black Country Skills Factory

8. Decent work and economic growth - Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

Food and Drink Manufacturing Summary Statistics

£796m GVA attributed to food & drink manufacturing (FDM) in WMCA. The 2030 ambition for this sub-sector is **£2.05bn**.

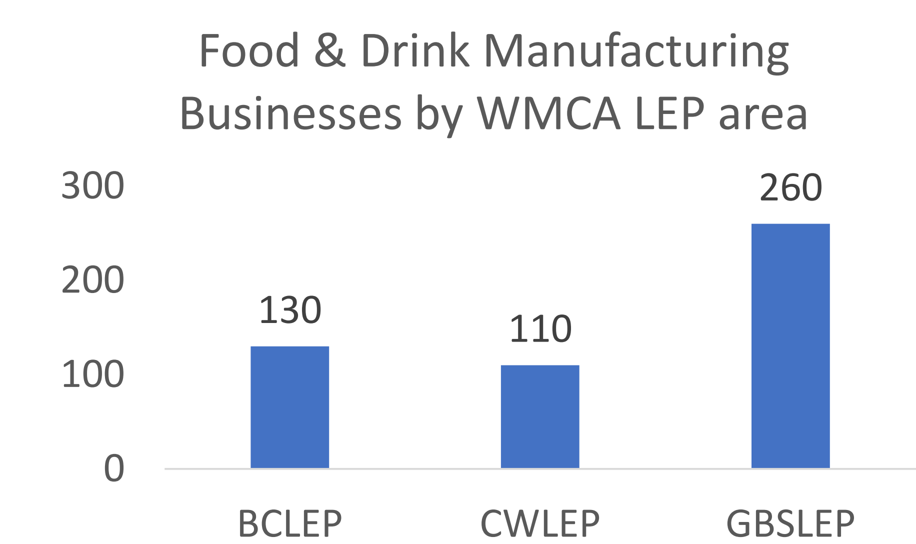
16,350 jobs in the sub-sector locally, with an ambition to have 22,000 in 2030.

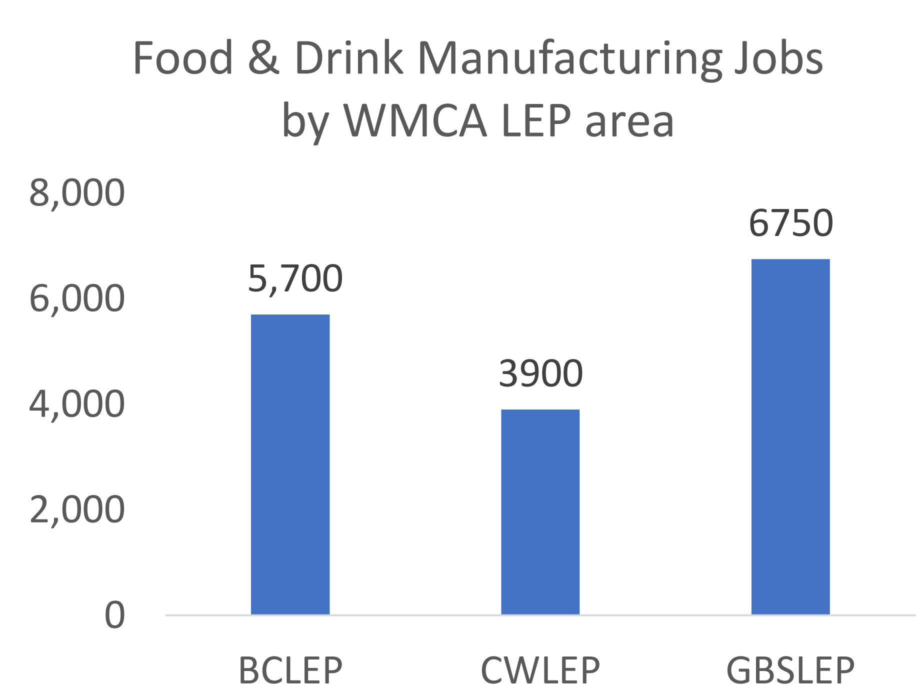
There are **500 businesses** in the sub-sector locally, making up 0.3% of total businesses in the area.

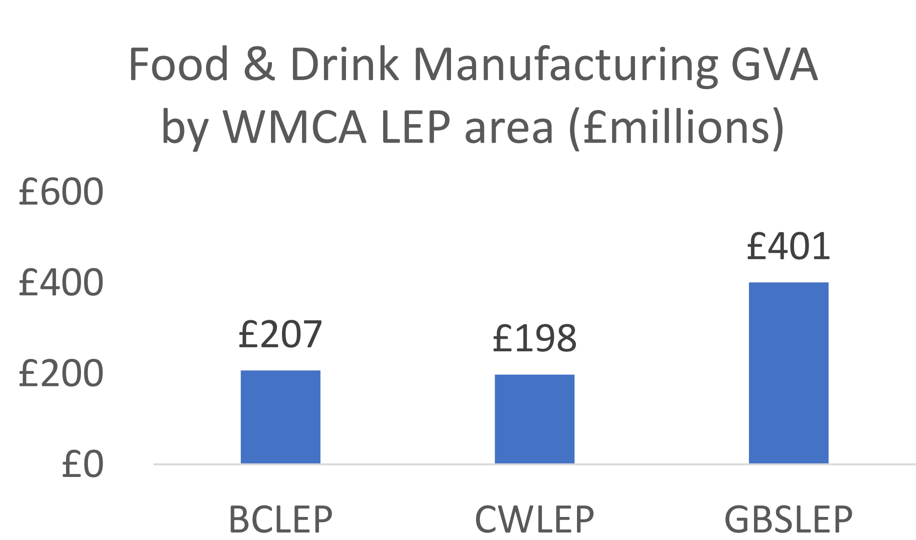
£48,685 GVA per employee.

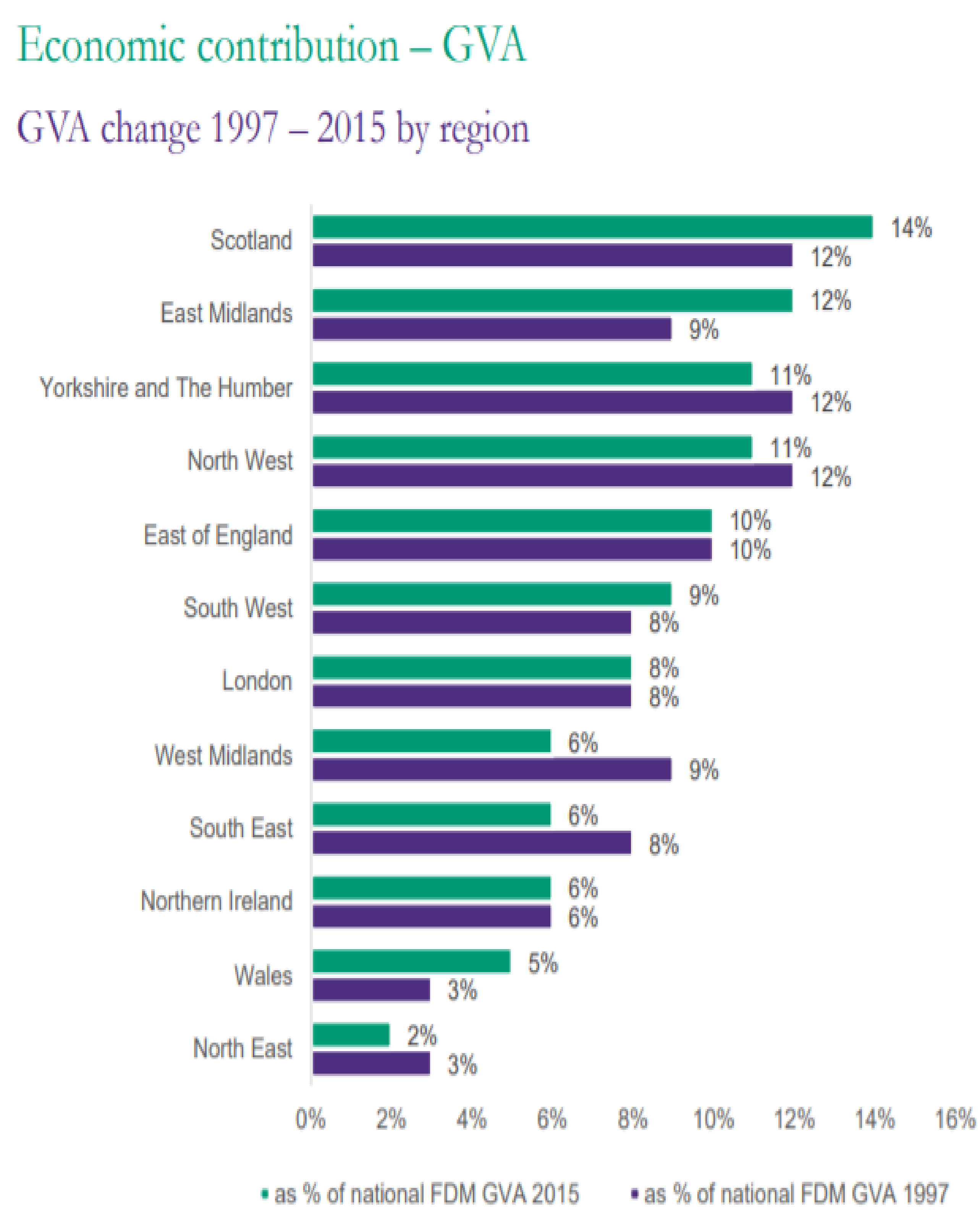
A 2017 report by the Food & Drink Federation suggests that the **West Midlands region has had the greatest long-term growth in FDM of the 12 UK regions/**

The report finds that the West Midlands **share of national FDM GVA rose from 6% in 1997 to 9% in 2015** – the largest percentage point rise of all regions.









Source: Food & Drink Federation

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Food and Drink Industry Profile

Our Competitive Advantage

Access to a large domestic market, a long pedigree in production and R&D and a first-class logistical network.
Supply chain centre with large cluster of logistics companies and major supermarkets distribution.
Skills and experience in the food supply chain and processing.
Good connectivity with well developed road and train network and international airport.
Strong food and drink within local universities, notably Birmingham University's **Formulation Engineering Department and UCB's Food Innovation Facility.**
Strong tradition of **photonics** R&D
Leader in **food and drink machinery & equipment**
A strong base of fast growing SMEs and micro businesses which are driving growth and job creation.

Products , Services & Brands

Birthplace of great British food and drink icons **Cadbury, Typhoo Tea, Bird's Custard & Marston's.**
East End Foods alone produces 30,000 lines for more than 3,500 retailers and is one of the largest importers and suppliers of ethnic foods in Europe.
Mondelez International houses its **global chocolate research and development centre** at Bournville.
Healthy levels of inward investment, **with over 25 new food and drink FDI projects in the West Midlands since 2009**
Burton-on-Trent is the home of brewing in the UK

Centres of Excellence/Assets

Innovation:
W'ton Science, Technology & Prototyping Centre
Engineering and Computer Science Research Centre
Food Science research at University College Birmingham
UCB's Food Innovation Facility
Birmingham University's Formulation Engineering Department
Food and Drink Advanced Manufacturing Project, James Watt College (BMET)
Food Technology Hub for Skills Excellence, University College Birmingham

Production:
Institute For Advanced Manufacturing and Engineering
Warwick Manufacturing Group
Manufacturing Technology Centre

Training:
EEF Technology Training Centre
WMG Academy for Young Engineers
Black Country Skills Factory

8. Decent work and economic growth - Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

Business, Professional and Financial Services Summary Statistics

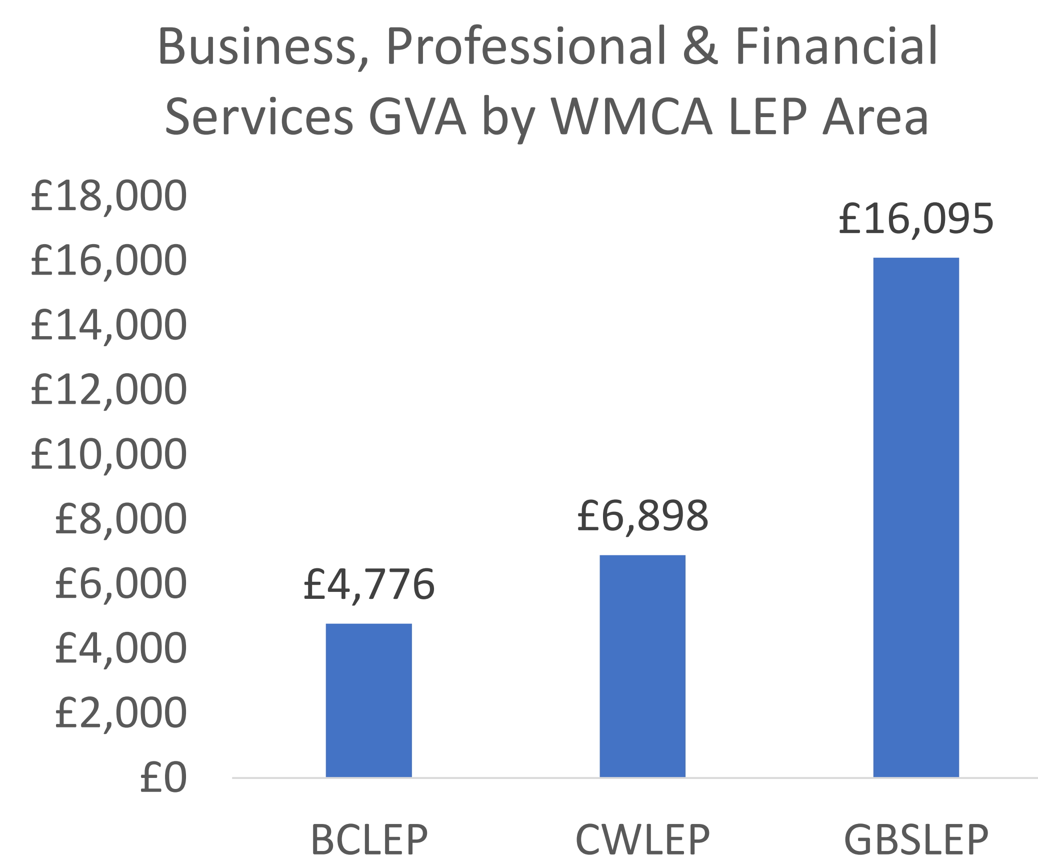
£27.8bn WMCA GVA is attributed to BPFS, which is 26.5% of the whole economy. This makes BPFS the largest sector in the WMCA area.

There are **354,600 jobs** attributed to BPFS in the WMCA area, 19.2% of overall employment. This ensures BPFS is the largest sector for employment also.

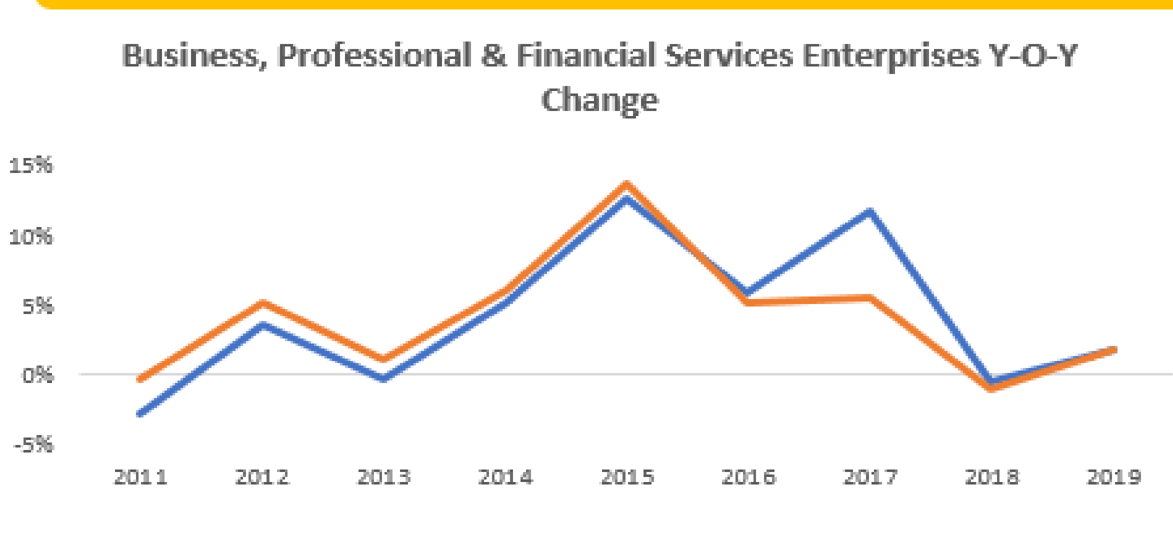
41,865 businesses attributed to BPFS in the WMCA, 28.9% of all businesses in the area – the largest of any sector.

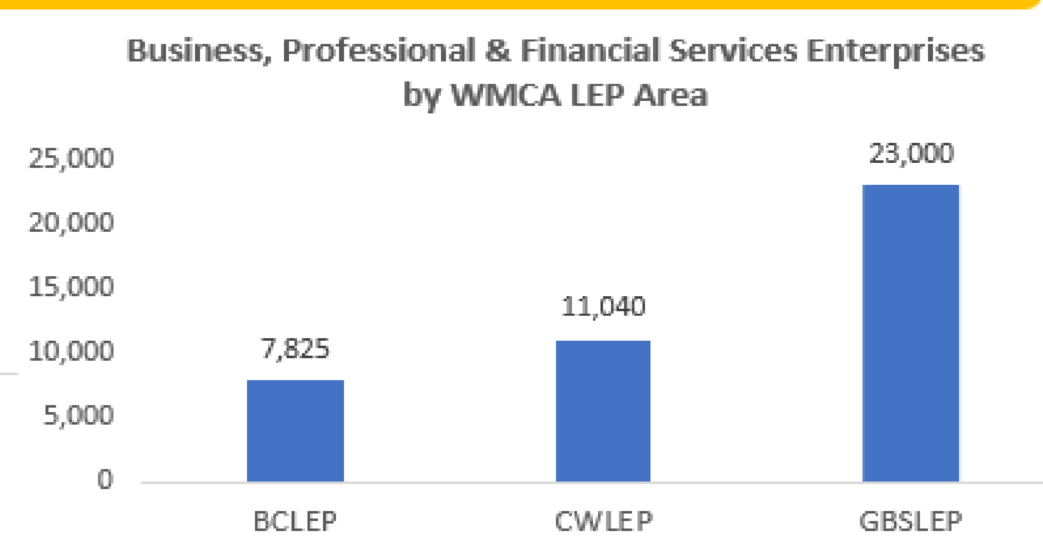
The sector also contributes £28.8bn in GVA to the region.

GVA per employee of **£78,364**, above the average of £56,908.

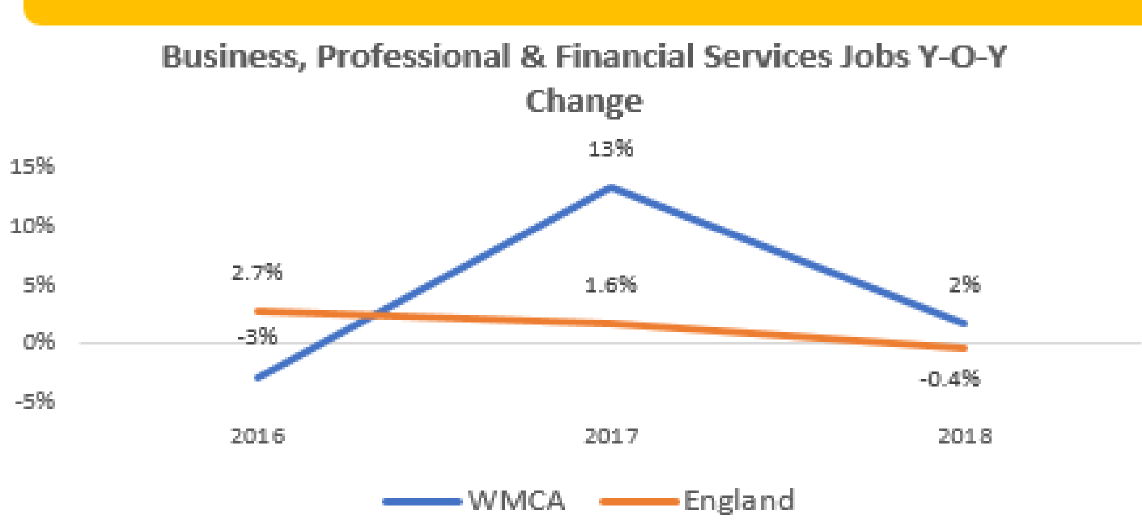


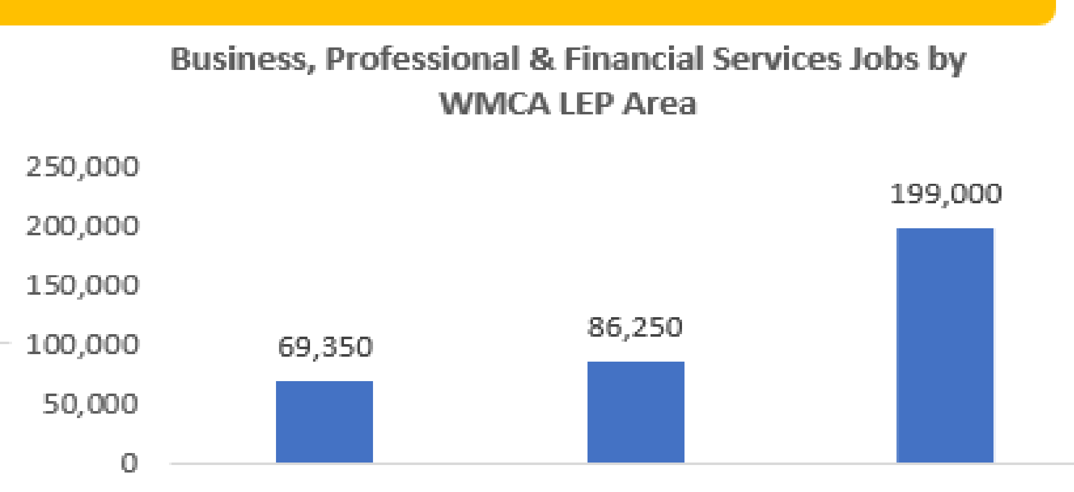
Businesses Current: **41,865** 28.9% of total WMCA businesses.





Jobs Current: **354,600** 19.2% of total WMCA employment





GVA Current: **£28.8bn** 26.5% of total WMCA GVA

8. Decent work and economic growth - Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

Financial Services Industry Profile

Our Competitive Advantage

Re-location of large firms (HSBC)
Birmingham is the **only full-service UK offering outside London where any services can be accessed**
Strong talent pool & excellent links to London
UK's **largest regional banking and professional services cluster.**
Readily available **cutting-edge city centre office space** in new developments across the region.
More business students – 16,275 – than any city outside London.
City-Redi deep dive found that the West Midlands has a different distribution of occupations to the national picture, with a **higher skilled, higher value profile of occupations.**
The recent growth in building offer such as Snowhill frees up other **high quality offices and there is a movement up the value chain, this opens up better office accommodation for the growing mid tier** (City –Redi deep dive)

Products , Services & Brands

Home to **HSBC's new ring-fenced UK banking headquarters**
Deutsche Bank
Major banking offices such as **Lloyds Bank** & **Barclays**
Full-service offering
Services match local specialisation and the local client base, i.e. advanced manufacturing advice and guidance, exporting etc.
Islamic Finance - Britain's first sharia compliant retail bank is headquartered in Birmingham

NFU Mutual · BARCLAYS · HSBC · RBS · Deutsche Bank · Legal & General · Santander · LLOYDS BANK · RSA · MARSH · WESLEYAN

Centres of Excellence/Assets

Business Schools
Warwick Business School
Birmingham Business School
Aston Business School
Coventry Business School
Wolverhampton Business School
Colleges
Professional Services Academy, BMet
Trade Representatives
BPS Birmingham
The CityUK

LEP Programmes/Investment

Invest Black Country
DY5 Enterprise Zone
Black Country Growth Hub
i9 Wolverhampton
Black Country Transformational GOLD
Friargate, Coventry
Black Country Innovation Fund (pipeline)
Wolverhampton City Council Broadband (pipeline)

8. Decent work and economic growth - Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

Legal and Accounting Services Industry Profile

Our Competitive Advantage

Re-location of large firms (PWC investment)
Only **full-service UK offering** outside London
Strong talent pool & excellent links to London
UK's **largest regional legal & insurance cluster and the largest accountancy cluster outside London.**
Readily available **cutting-edge city centre office space** in new developments across the region.
Birmingham is in **the top 3 cities** (outside London) for both legal sector floorspace, number of legal offices and number of fee earners.

Products , Services & Brands

PWC's **largest regional office is set to house 2,400 people**
Charter Court Financial Services owns Precise Mortgages, an intermediary mortgage lender and Charter Savings Bank, one of the UK's leading challenger banks with over 40,000 savings accounts and balances in excess of £2billion since its launch in March 2015.
All of the **"big 4"** with major operations in Birmingham

pwc
EY
Gateley Plc
Deloitte.
Pinsent Masons
GOWLING WLG
IM irwinmitchell
KPMG
Grant Thornton
BDO
EVERSHEDS SUTHERLAND
RSM

Centres of Excellence/Assets

Business Schools
Warwick Business School
Birmingham Business School
Aston Business School
Colleges
Professional Services Academy, BMet
Trade Representatives
BPS Birmingham
LEP Programmes/Investment
Invest Black Country
DY5 Enterprise Zone
Black Country Growth Hub
i9 Wolverhampton
Friargate, Coventry
Black Country Transformational GOLD
Black Country Innovation Fund (pipeline)
Wolverhampton City Council Broadband (pipeline)

8. Decent work and economic growth - Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

Construction Summary Statistics

£7.1bn GVA attributed to construction in WMCA, with 2030 ambition of **£10.9bn.**

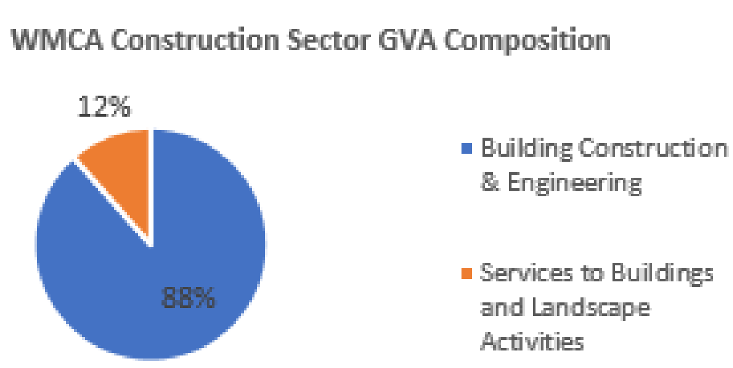
121,000 jobs in the sector locally. In 2030, the ambition is to have 234,000 construction jobs in the WMCA area.

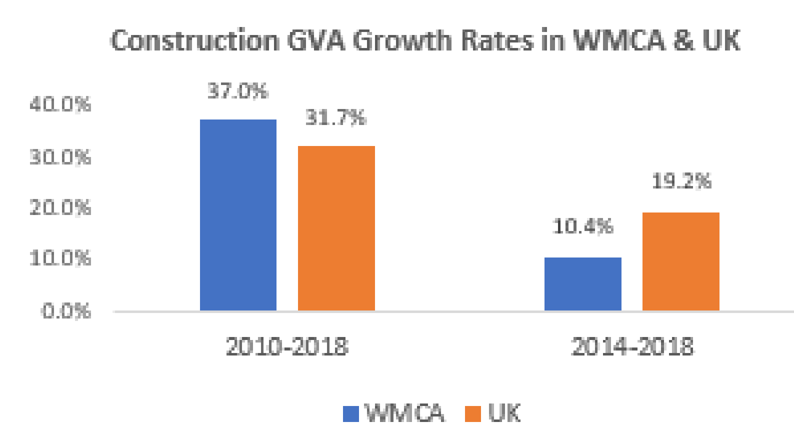
The **majority (69%) of jobs & GVA (89%)** appear within the 'Building Construction and Engineering' SIC code category.

Construction GVA has **grown faster in the UK overall than in the WMCA** over the past 8 years, but slower in the past 4 years.

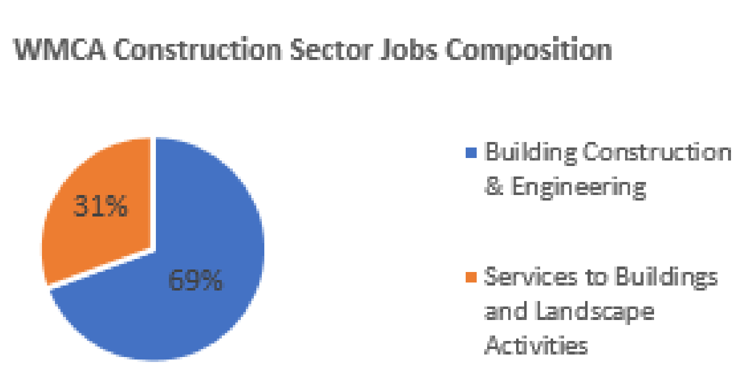
Analysis produced using SIC codes 41, 42, 43 and 81. The following SIC codes that make up the Mining and Quarrying sub sector are also.

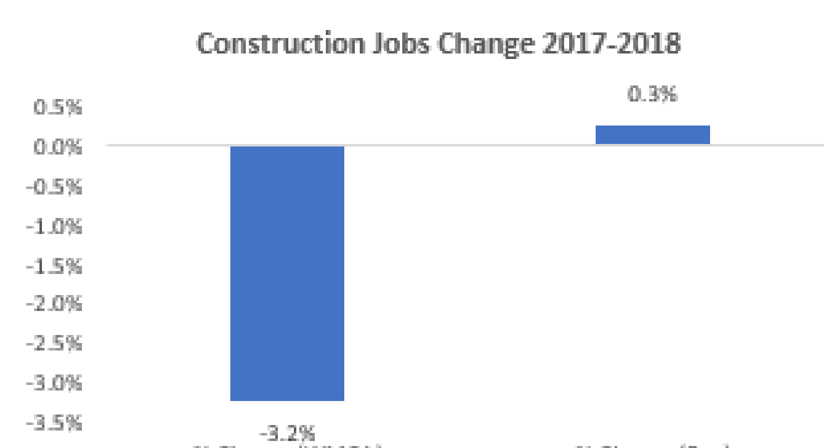
GVA Current: **£7.2bn** 2030 Ambition: **£10.9bn (+£3.7bn)** **37% growth** since 2010



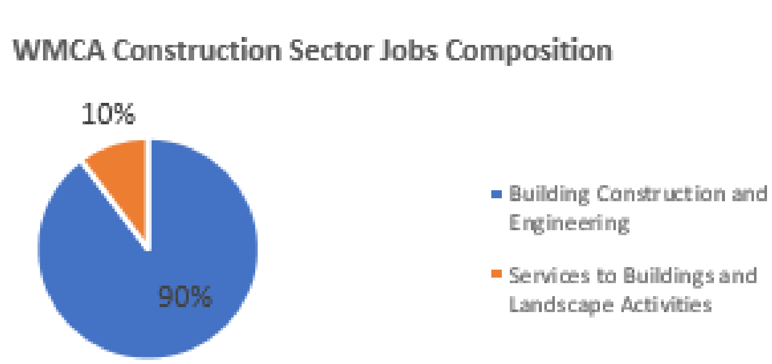


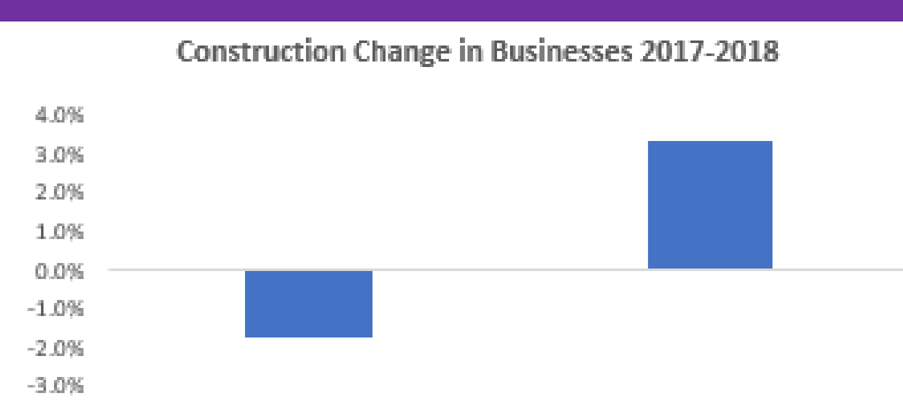
Jobs Current: **121,000** 2030 Ambition: **234,000 (+113,000)** **12% growth** since 2010





Businesses Current: 18,855





8. Decent work and economic growth - Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

Construction Industry Profile

Our Competitive Advantage

Major infrastructure investment in the region (i.e. HS2).
Ambition to build **215,000 homes by 2031**, with backing from government through a Housing Deal.
SIA identified **"Sustainable Construction" as one of four Market Strengths.**
R&D and commercial deployment by industry of **energy efficient and lower carbon building technologies**.
Opportunities of BIM technologies, building materials and technologies, and zero-carbon building and efficiency measures.
High LQ's confirm presence of a construction sector in WMCA (see next slide)
Links in well with significant presence of manufacturing sectors.

Products , Services & Brands

Homeserve PLC provide home emergency and repair services to over 7 m homes worldwide.
A **Balfour Beatty** joint venture has be awarded HS2 contracts valued at circa £2.5 billion.
Barhale was awarded a £21 m contract by the ODA, to design and construct a primary foul sewer and pumping station, as part of the Olympic Park development.

Centres of Excellence/Assets

University Centres
The Built Environment, Information Systems & Learning Technology Research Centre, University of Wolverhampton
The Centre for Environment and Society Research (CESR),Birmingham City University.
The Centre for Low Impact Buildings, Coventry University
Institute for Future Transport and Cities, Coventry
Department of Civil Engineering at UoB
Colleges
Stourbridge College Construction Centre
University of Wolverhampton's Springfield Campus, home to the West Midlands Construction UTC.
Other
HS2's national construction HQ
Alternative Raw Materials with Low Impact
LEP Programmes/Investment
School of Architecture and Built Environment (SOABE)
Dudley Brownfield Land Improvement Phase 1
Dudley Advance and Innovation Centre

8. Decent work and economic growth - Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

Creative Industries Summary Statistics

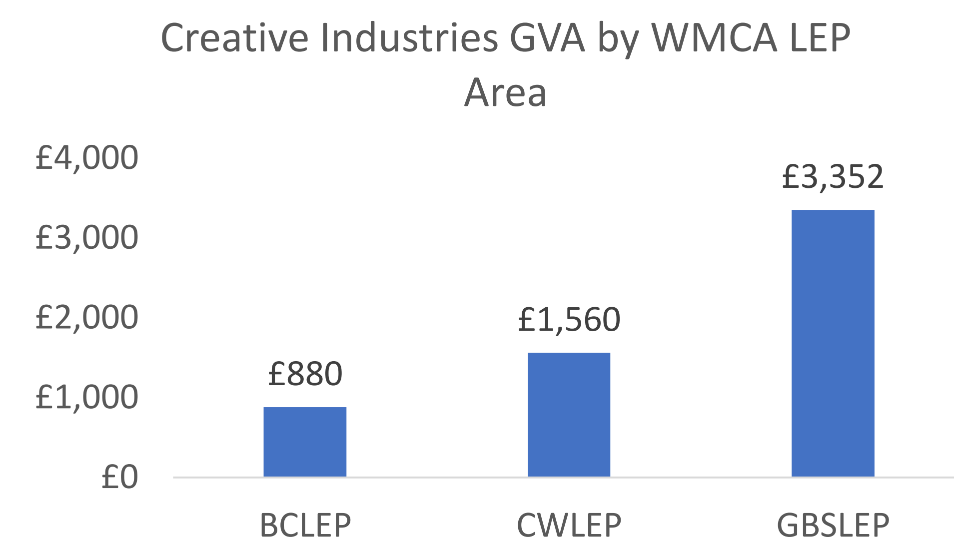
Estimated **£5.8bn GVA** attributed to the creative industries sector in the WMCA. The 2030 ambition for this sector is £38m

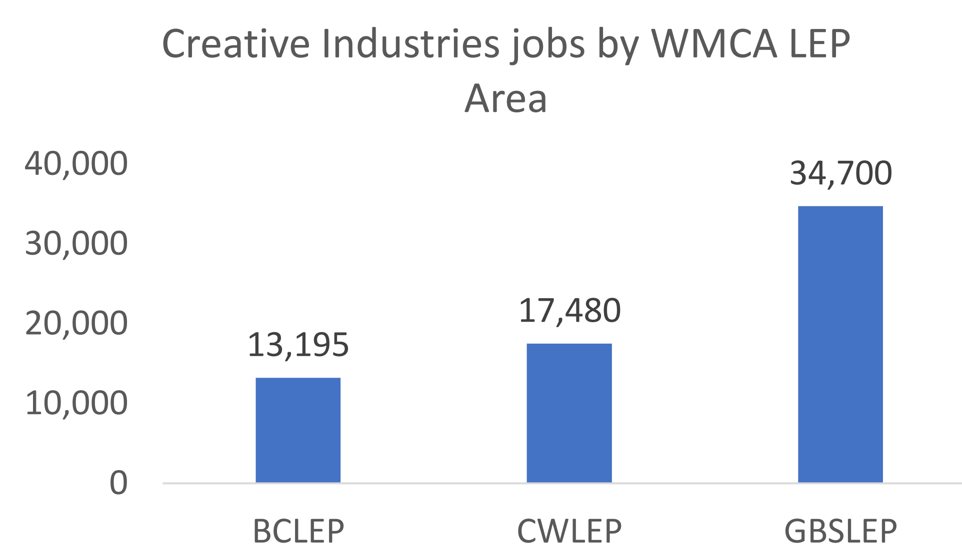
65,375 jobs in the sub-sector locally.

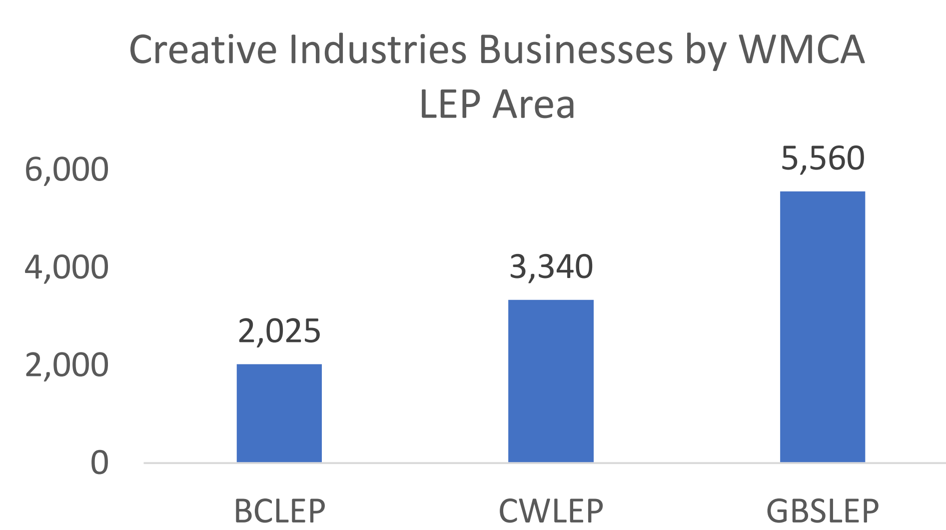
53% of jobs are in CWLEP.

10,925 businesses across the WMCA in this sector.

GVA per employee of **£88,635**







Super Strengths

Games Production
10% of UK games industry, significant major games companies in region, strong connections into digital manufacturing

Next Generation Content Creation
Strengths in **Innovative and Immersive Content Creation** amplified by our **Young, Digital and Diverse** population and BBC3 moving its youth programming to the region

Creative Collaboration
Identified strengths **in creative and cross-sectoral collaborations** are driving growth across all sectors

Design
Substantial **advertising and marketing sector** with strengths including **web, product and fashion design, PR** and **data analysis**

Designer-Makers
Largest **Jewellery, high-value 'designer maker' and crafts cluster** in UK, including hand crafting within automotive production

8. Decent work and economic growth - Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

Creative Industry Profile

Our Competitive Advantage

Nationally significant **Games Cluster** centred on Leamington Spa, more than 10% of UK gaming jobs
Substantial strengths around **Advertising & Marketing, Design ICT & Web-based services**
Strengths in **Next Generation Content Creation** amplified by our **Young and Divers**e population as creators of **'content, experiences, services and originals'**
Largest high-value **Designer-Maker, Jewellery** and **crafts cluster** in UK, includes hand-crafting for automotive
Strengths in **Creative and Cross-sectoral Collaboration**, with new **creative specialisms** and a **diverse ecosystem,** will drive product development and growth (NESTA 2018)
5G Test Bed give's first-mover advantages to region
Strong **Digital & Tech** sector compliments our creatives
Digbeth has one of the largest creative clusters in the UK
Significant cultural cluster centred around **'Performance', theatre** and **dance**
Commonwealth Games and **Coventry City of Culture** will drive our region's profile and investibility beyond 2022
Start-ups and SMEs benefit from **attractive business costs, expert professional advice and access to centres** of academic excellence; Emerging potential as a High-End Production Centre

Products , Services & Brands

DCA Design one of the world's leading product design and development consultancies
Codemasters one of the UK's most successful games developers with global success for **McCrae, F1** and **Forza**
SEGA Hardlight –for all of SEGAs mobile game products
Ubisoft – games developer, including the **DJ Hero** game
Virtual Reality (VR) and **Augmented reality (AR)** Market Leaders - including **Holosphere** and **Daden**
BBC3 bases production of its youth channel in the region
Father Brown, produced at **BBC Birmingham**, now sells to an extraordinary 220 territories worldwide
Major Performance Organisations - including **Royal Shakespeare Company** and **Birmingham Royal Ballet**
Film Birmingham, Studio facilities, Location Services for high-end production and a 700 strong freelance database

Centres of Excellence/Assets

University Centres:
STEAMhouse (BCU, Birmingham)
International Centre of Excellence Serious Games
Institute Centre of Disruptive Media (Coventry)
National Institute of Coding (Coventry)
With many other centres with strong industry links…
Other Centres:
BBC Academy
Digbeth Creative Quarter: 350+ businesses in Birmingham
Birmingham Jewellery 'designer maker' Quarter, largest in UK
Creative Quarter, Leamington Spa (pipeline)
Performance Cluster centred on Royal Shakespeare Company
International Dance Cluster, centred on Birmingham
Royal Ballet and International Dance Festival
Birmingham Ormiston Academy – regional centre for digital, creative & performing arts
Birmingham Metropolitan College: Digital & Creative Career College
26HT Business Incubator
Well-coordinated and creatively driven propositions around skills, both formal and informal: Creative Alliance, BOA, BMet Digital & Creative Career College, Quickcode Labs.
Digital Infrastructure:
Region-wide 5G Test Bed , 1-10Gb Fibre across parts of region

8. Decent work and economic growth - Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

Life Sciences and Healthcare Industries Summary Statistics

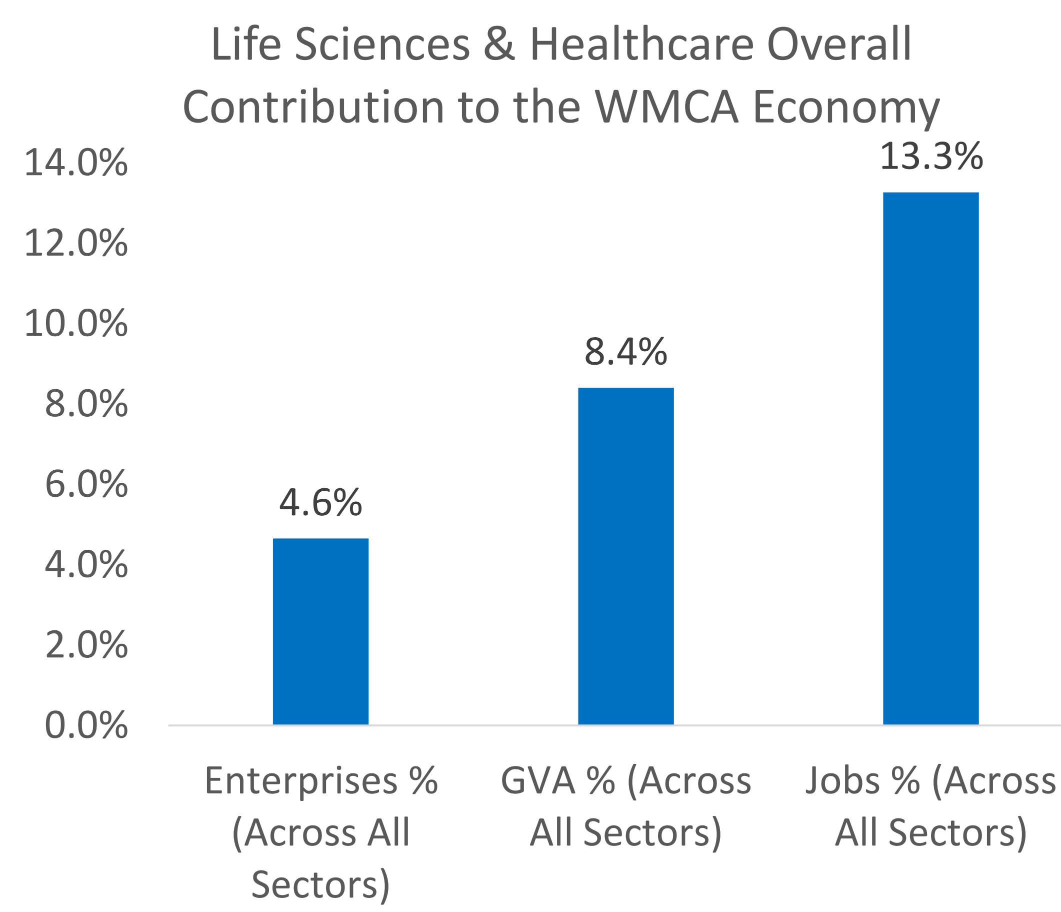
£8.8bn GVA, 244,940 jobs and 6,730 businesses

5th largest UK concentration of life sciences employment – after the 'golden triangle' (London-Cambridge-Oxford) and the North West (HMG, 2016)

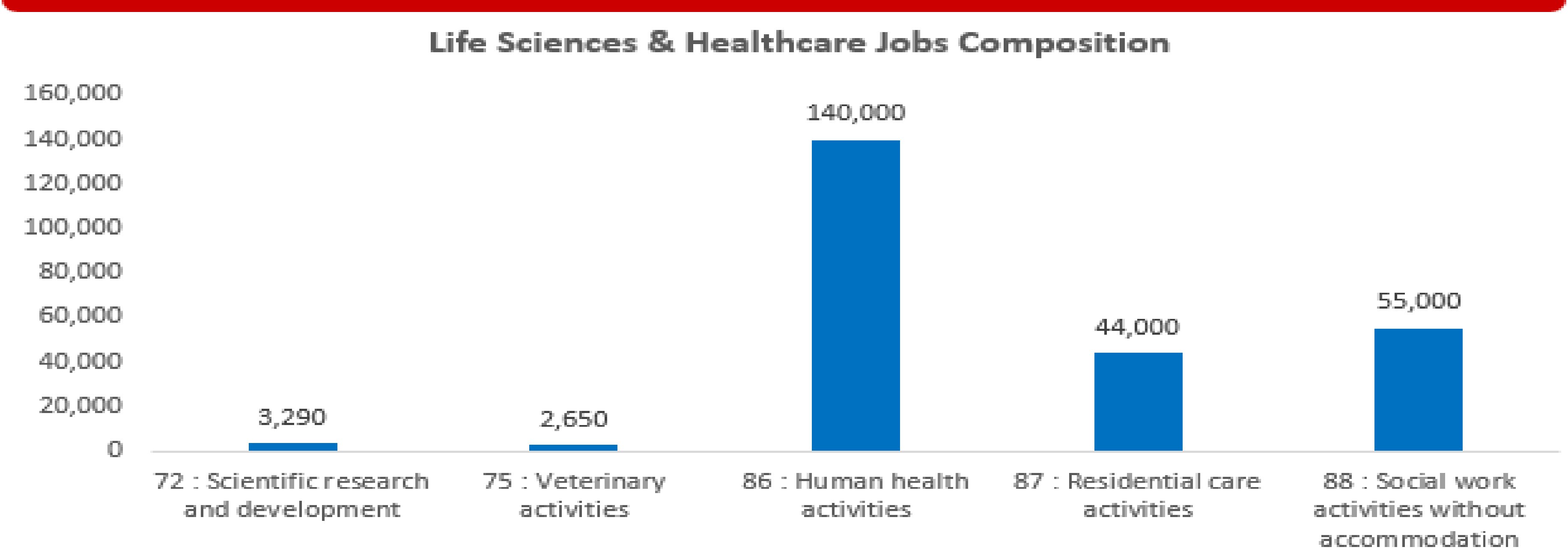
Established medical technologies cluster, covering the R&D, design and production of devices, diagnostics and software as a medical device (SQW, 2017)

Established clinical trials capability including cost effective access to a integrated clinical and genomic data sets for a diverse patient population and trials networks for accelerated trials (IBM-PLI, 2017)

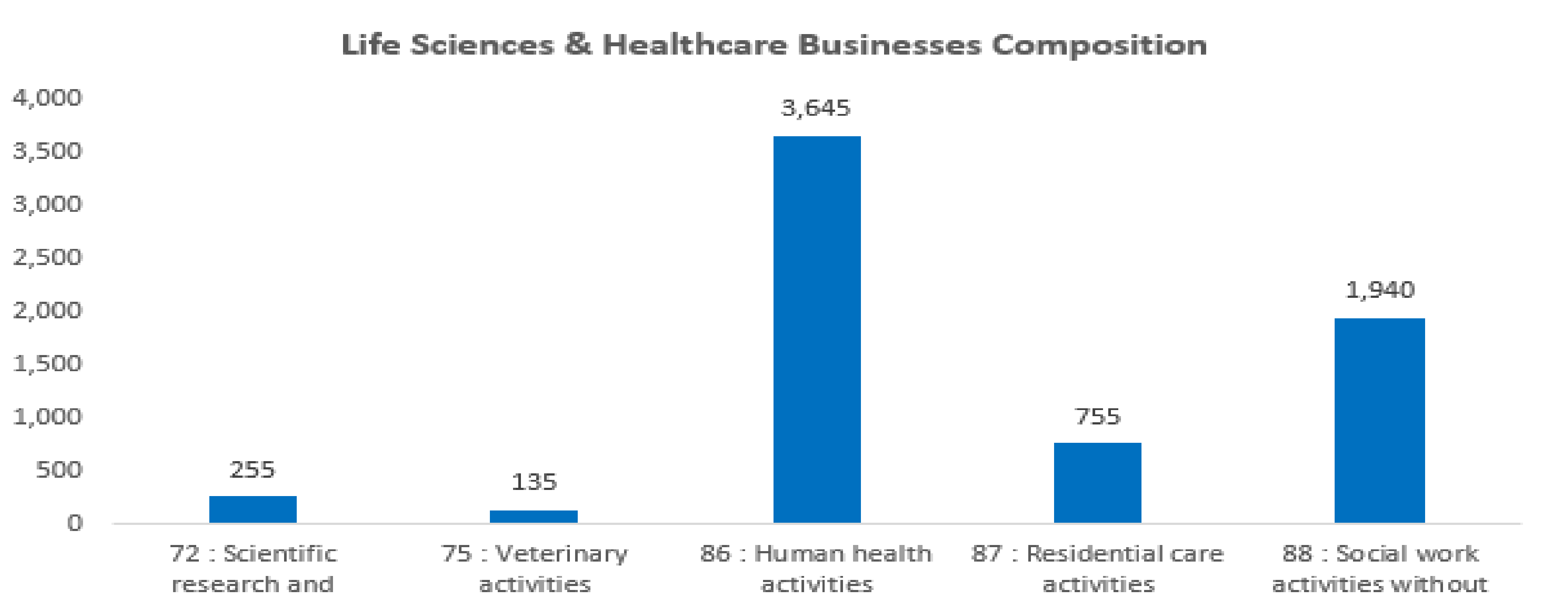
Competitiveness for FDI in high value medical technologies R&D and manufacture drawing on regional strengths advanced manufacturing and digital (source: IBM-PLI, 2017)



Jobs Current: 244,940 2030 Ambition: 314,742



Businesses Current: 6,730



8. Decent work and economic growth - Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

Life Sciences and Healthcare Industry Profile

Our Competitive Advantage

Industry strengths and global competitiveness for **FDI in high tech medical devices R&D and manufacture** drawing on region's innovative and high tech manufacturing capabilities (IBM-PLI, 2017)

Clinical trials and data capabilities – largest clinical trials base in Europe outside Oxford including Cancer Trials Unit and accelerated trials networks and access to large, integrated patient data sets for a diverse, stable population

Strength of our clinical and academic centres of excellence including the Queen Elizabeth hospital site which is one of the largest in Europe

Strong innovation ecosystem including translational partnerships and facilities and a network of science parks, specialist incubations and innovation support

Strong supply of graduate talent with three medical schools in the region

Products , Services & Brands

Medical devices – e.g. stoma care (Salts Healthcare), procedure packs (Kimal), orthopaedic

Specialist diagnostics e.g. immunodiagnostics (The Binding Site), cancer diagnostics, Alzheimers

Software as a medical device/digital health e.g. Safe Patient Systems, Evolyst, CCBT Ltd

Precision medicine including expertise in genetic/genomic testing and patient stratification

Clinical trials – largest clinical trials base in Europe outside Oxford

Centres of Excellence/Assets

In addition to numerous clinical and academic centres of excellence and translational facilities covering a wide range of disease areas:

Medical Devices - MD-TEC Medical Devices Testing and Evaluation Centre; NIHR Trauma Management Med Tech Cooperative; Manufacturing Technology Centre

Digital & Data - Institute of Translational Medicine; Health Data Research UK site (HDR-UK); Four NHS Global Digital Exemplars; West Midlands Genomic Medicine Centre; Digital Health West Midlands; Institute of Digital Healthcare at University of Warwick

Clinical Trials - No. of academic centres of excellence, e.g. Aston Brain Centre; Trials Acceleration Programme - Centre for Clinical Haematology

Graduate/College Base

3 Medical Schools (UoB, Warwick and Aston); Advanced Life Sciences @ Solihull College

Specialist incubation, innovation support and clusters

Life Sciences Park in Edgbaston, Birmingham; The BioHub Birmingham; Serendip® Digital Health Incubator @ Innovation Birmingham; Edgbaston Medical Quarter WMAHSN Meridian Innovation & Adoption Service

8. Decent work and economic growth - Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

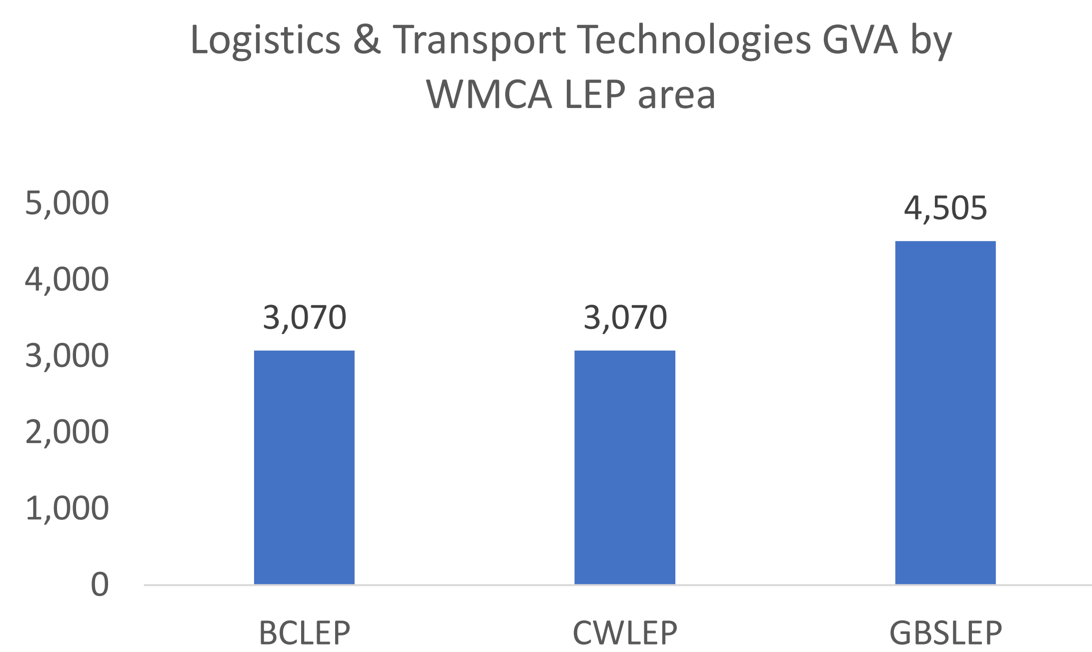
Logistics and Transport Summary Statistics

£5.0bn GVA attributed to logistics & transport in WMCA, with a 2030 ambition of £7.1bn.

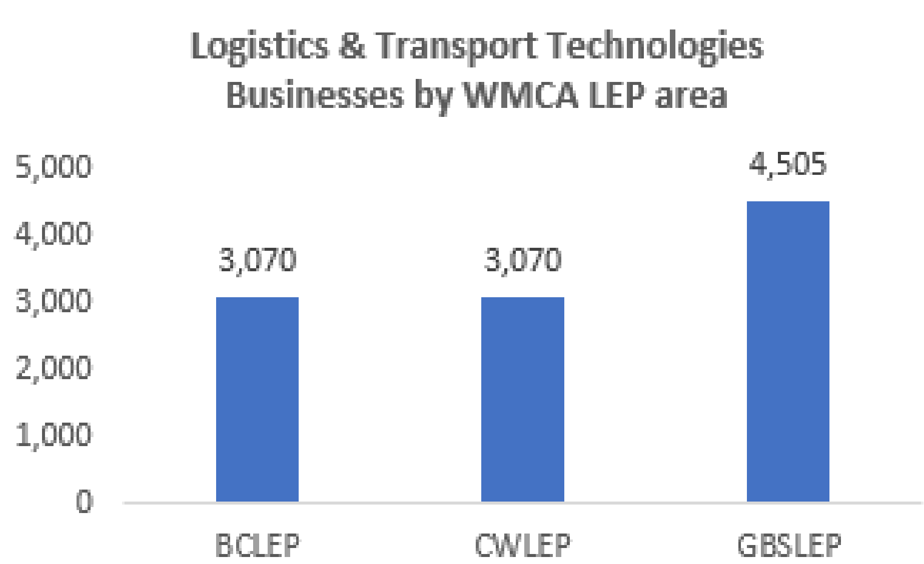
109,335 jobs in the sector locally. In 2030, the ambition is that 125,000 jobs will exist in logistics & transport.

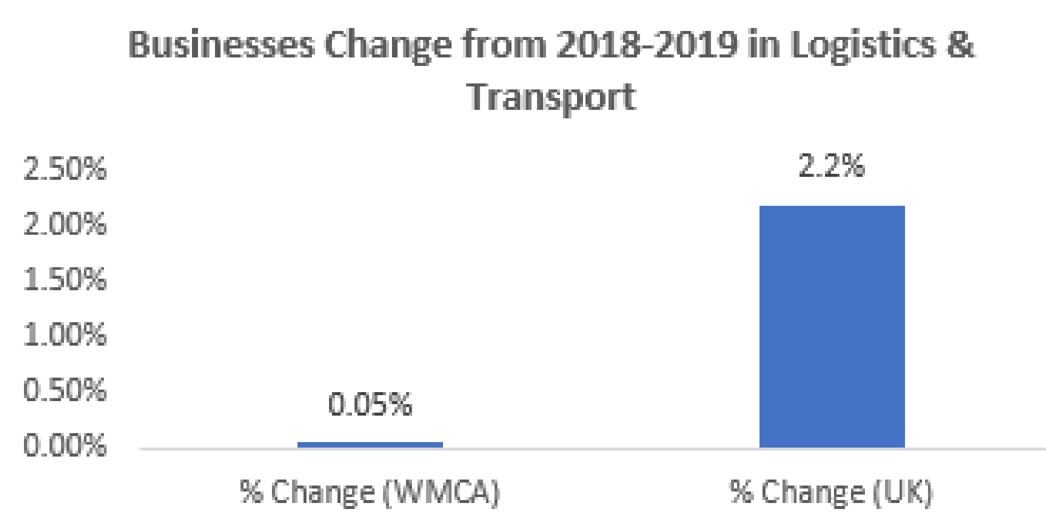
Estimated **GVA per worker of £46,116**.

10,445 businesses attributed to logistics & transport in WMCA.

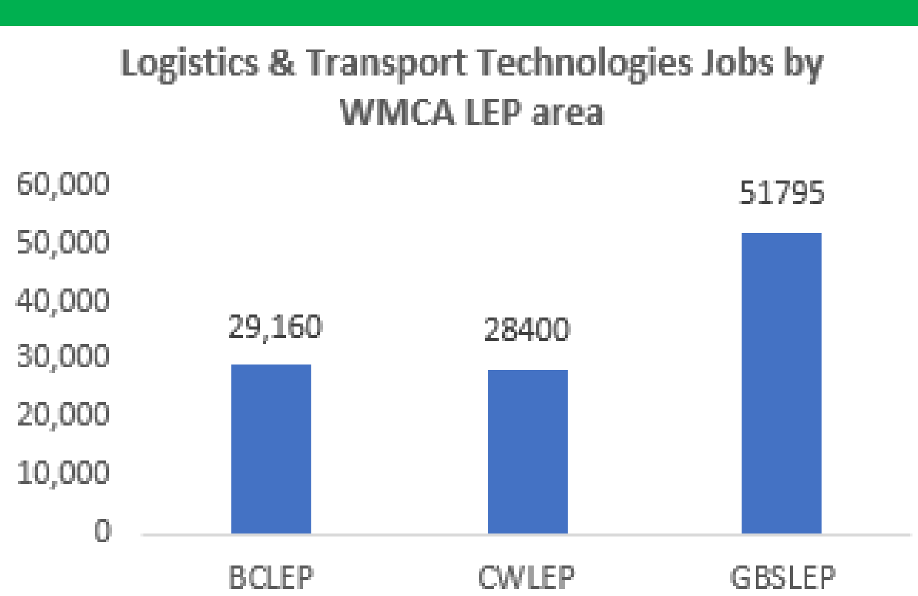


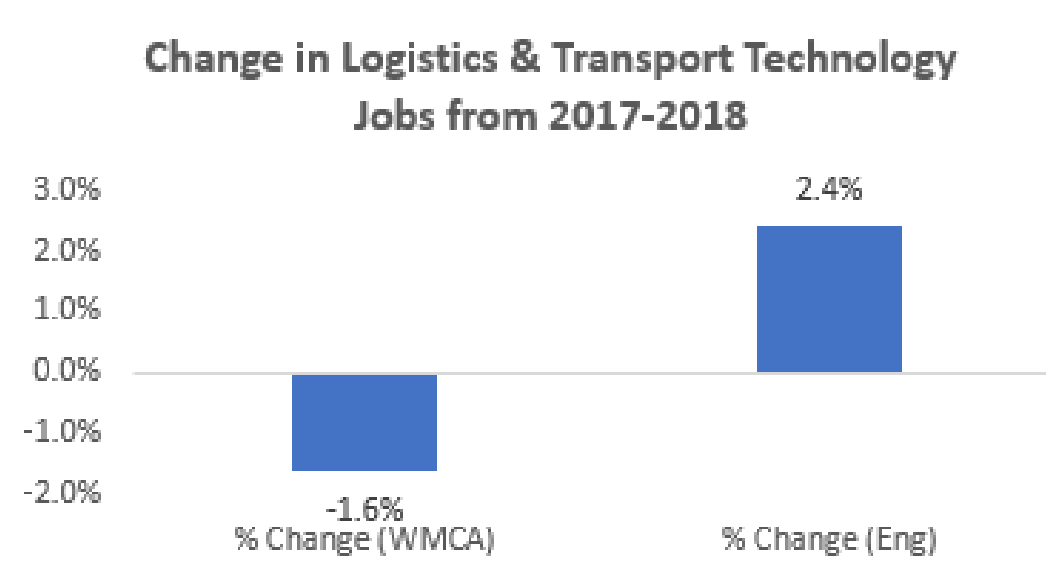
Businesses Current: **10,445** 0.05% **growth** from 2018-2019





Jobs Current: **109,355** 2030 Ambition: **£125,500 (+16,000)** **-1.6% change** since 2018





GVA Current: **£5.0bn** 4.8% of total WMCA GVA

8. Decent work and economic growth - Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

Logistics and Transport Industry Profile

Our Competitive Advantage

Central location with **good connectivity and strong logistics network**, underpinned by excellent access to the motorway network.

90% of the UK population is within four hours' drive to the West Midlands. London is commutable in under 70 minutes and from just **45 minutes by 2026 due to HS2.**

Established transport manufacturing industries (automotive, aerospace, rail) provide **useful sector cross-overs and collaboration opportunities.**

Key location in the development of **next generation transport**, as identified in the SIA (electric vehicles, CAV). These are disruptive technologies within logistics & transport.

Digital cluster (particularly in Birmingham & Leamington) has the **potential to apply AR/VR technologies etc to logistics.**

In WMCA (7MET), Transportation and storage has the **third largest location quotient of all broad sectors (1.2).** At **1.7, for Postal and Couriers, WMCA (7MET) has the highest location quotient of all UK NUTS2 areas,** meaning the region has the largest share of employment in this sub-sector in the country.

Products , Services & Brands

Birmingham Airport is the country's fastest growing airport, handling 13 m passengers a year flying to 150 destinations.

UK HQ of DPD in Smethwick.

Rotala's registered bus services carry more than **29,000,000 passengers every year.**

National Express, HQ'd in Birmingham, carries out **more than 882 m journeys** worldwide each year with its **fleet of over 29,000 vehicles.**

Centres of Excellence/Assets

Innovation:

The National Transport Design Centre, Coventry
Very Light Rail Innovation Centre
Advanced Propulsion Centre, University of Warwick
Birmingham Centre for Rail Research and Education
Wton Science, Technology & Prototyping Centre
Rolls-Royce University Technology Centre, Birmingham
National Battery Prototype Centre, Warwick
The Digital Media Technology Lab, BCU

Training:

Network Rail Training Centre, Walsall
National College for High Speed Rail, Aston

Production Processes:

Manufacturing Technology Centre (MTC)
Warwick Manufacturing Group (WMG)

8. Decent work and economic growth - Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

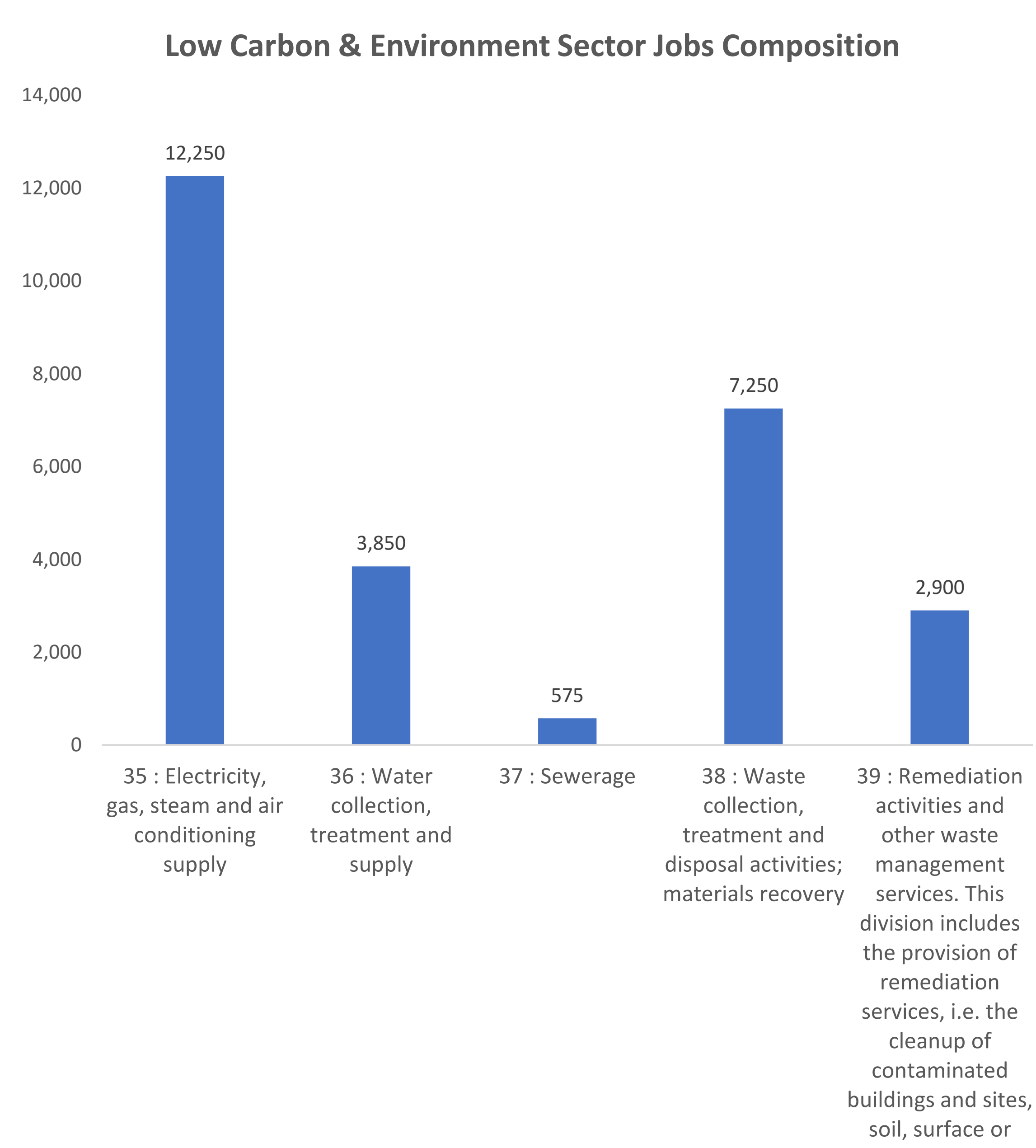
Low Carbon and Environment Summary Statistics

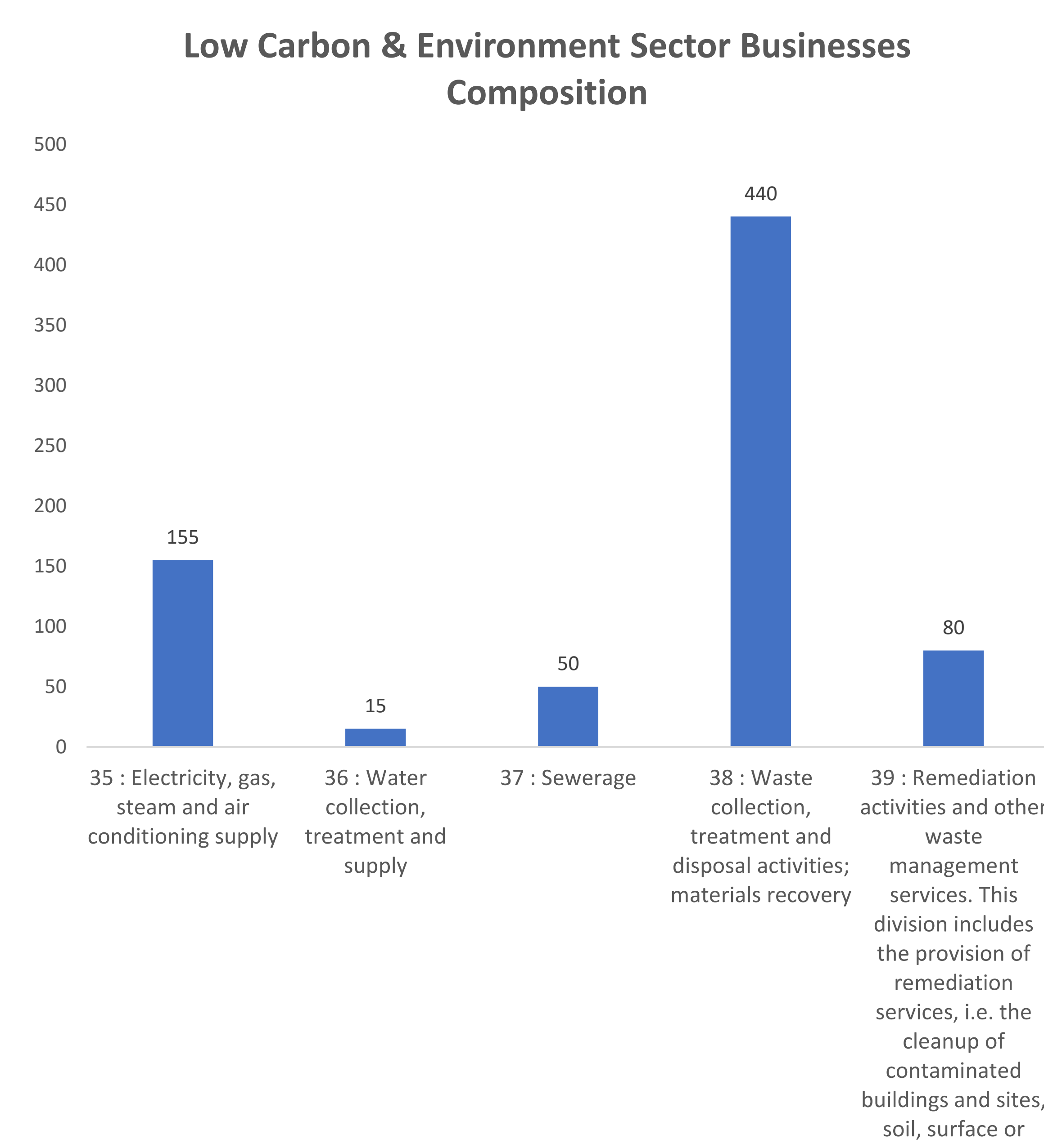
The core Low Carbon & Environmental Tech sector contributes £3.6bn in GVA to the WMCA economy.

- There are **22,750 jobs** in this sector in WMCA.
- This sector contributes £3.6bn in GVA across the WMCA.
- There are 740 businesses in the WMCA that operate directly in this sector.
- GVA per employee of £156,764 – the highest of any WMCA sector.

Identifying the exact amount of activity outside our narrow sector definition is difficult, but it's likely that additional activity **takes the number of jobs associated with Low Carbon & Environmental Tech to above 50,000** in the WMCA area. Employment figures below give examples of the type of additional sub-sectors we are talking about; of course not all of the jobs in these sub-sectors will be related to Energy & Environment (particularly engineering activities), but it allows us to estimate.

Supporting Industry	Employment (2018)
Manufacture of coke and refined petroleum products	295
Manufacture of other organic basic chemicals	500
Manufacture of electric lighting equipment	700
Other professional, scientific and technical activities n.e.c	9,250
Engineering activities and related technical consultancy	14,000
Technical testing and analysis	1,750
Crop and animal production, hunting and related service activities	4,900
Forestry and logging	610
Fishing and aquaculture	55
Other mining and quarrying	285
Mining support service activities	15





8. Decent work and economic growth - Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

Low Carbon and Environment Industry Profile

Our Competitive Advantage

WM has an **inbuilt natural global competitive advantage** in its energy infrastructure, energy sector skills, diversity of local markers and innovation asset base in energy systems.
Home to the **UK headquarters of some of the most significant energy and water businesses** in the country (for example National Grid, Cadent, E.ON, Severn Trent).
Hosts a **significant portion of the UK's energy innovation and research and deployment capacity** in the Energy Systems Catapult, our universities and various technology consultancies.
WMCA's (7MET) LQ in Electricity, gas, steam & air conditioning supply of 1.4 is the **joint highest for all broad sectors (with manufacturing) in the area.**

Products , Services & Brands

South Staffordshire Water supplies high quality drinking water to approximately 1.3m people and approximately 35,000 commercial customers.
Alutrade was involved in the recycling of materials from the opening ceremony of the London Olympic Games - specifically the Olympic Rings and the mock-up of Big Ben. The aluminium recycler was involved in the removal of seating from the water polo venue too.
ELG Carbon Fibre have developed the CARBISO™ product range, an innovative line of reclaimed carbon fibre products. CARBISO™ stands for high quality isotropic reclaimed carbon fibre products.

Centres of Excellence/Assets

Research Centres
Energy Systems Catapult, Birmingham; Energy Research Accelerator; European Bioenergy Research Institute, University of Aston; Energy Innovation Centre, Warwick Manufacturing Group; Centre for Cryogenic Energy Storage, University of Birmingham; Centre for Fuel Cell Research, University of Birmingham; Brownfield Research & Innovation Centre (BRIC), Wolverhampton

Training
EPSRC Centres for Doctoral Training, University of Birmingham

Programmes

Climate-KIC Accelerator programme
Energy Capital; Tyseley Energy Park access to road (to unlock site for pipeline below); Hydrogen Buses
European Bioenergy Research Institute;
Low Carbon SMEs; Accelerating Thermal Energy Technology Adoption

LEP Programmes/Investments
Built Environment Climate Change Innovations (BECCI)
Environmental Technologies Resource Efficiency Support Service (ENTRESS)
Low Carbon Growth Support

8. Decent work and economic growth - Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

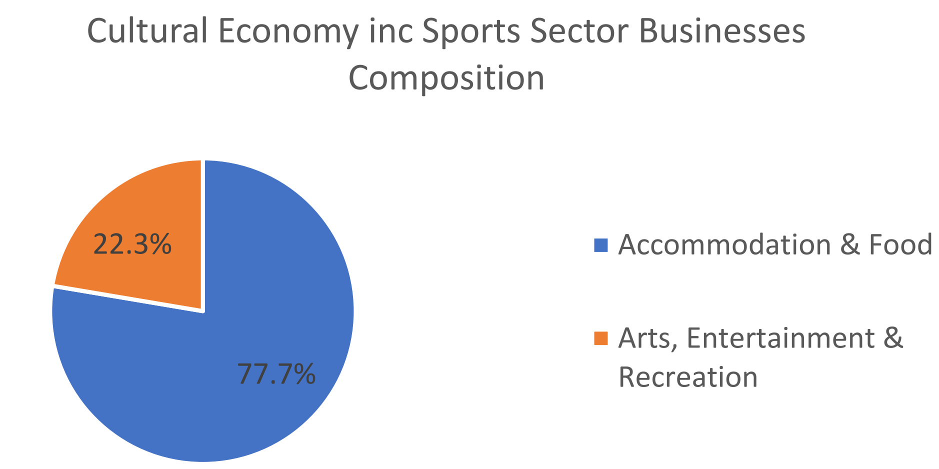
Cultural Economy (sports and tourism) Summary Statistics

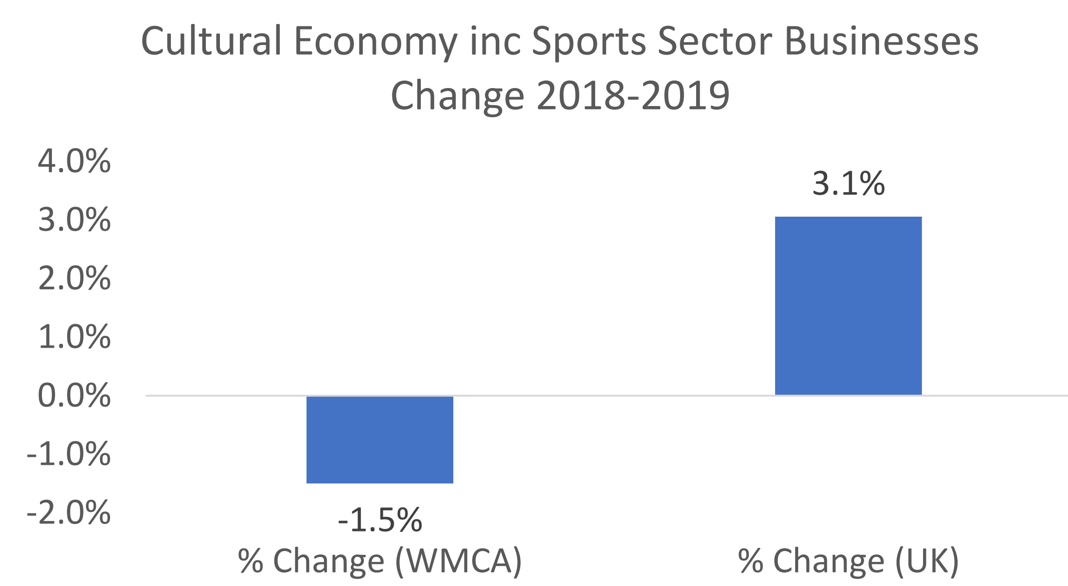
£4.3bn GVA attributed to the cultural economy in the WMCA, with a 2030 ambition of £6.1bn.

135,000 jobs in the sector locally. In 2030, the ambition is that 213,000 jobs will exist in tourism, an increase of 50,000.

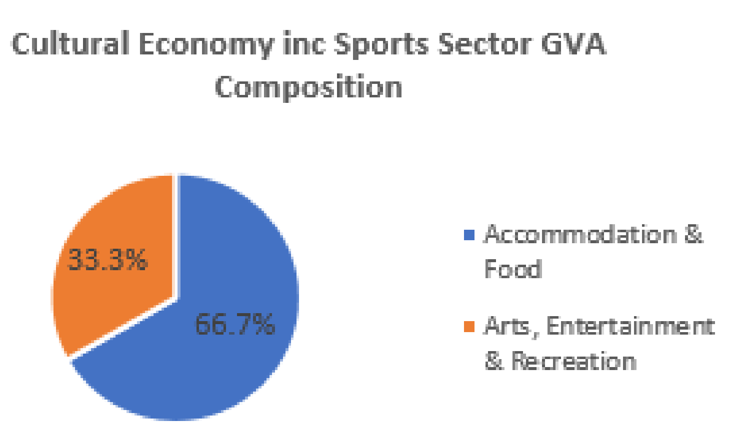
The **Arts, Entertainment and Recreation sub-sector dominates in terms of GVA and jobs**, making up around three-quarters of GVA in the WMCA.

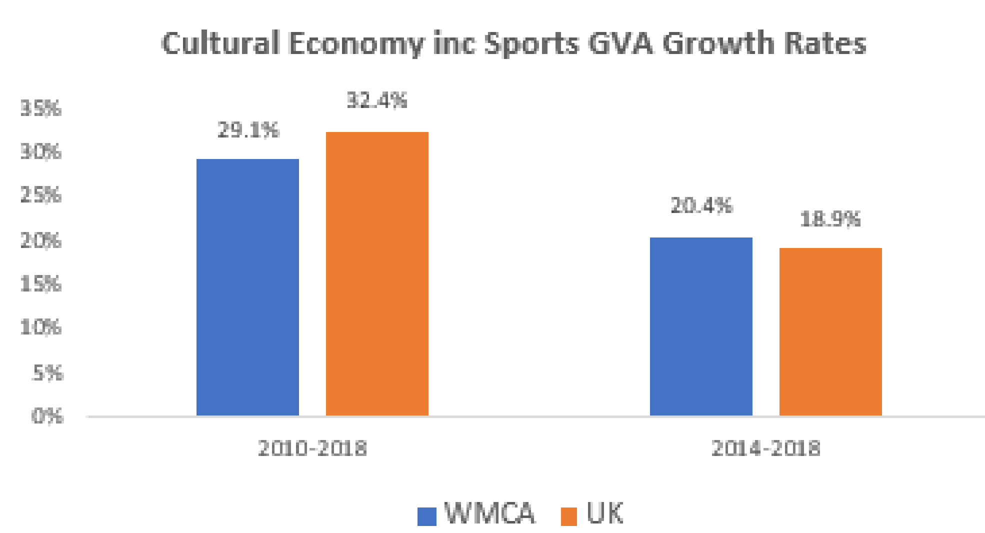
This data reflects the initial tourism (cultural economy including sports) WMCA sector definition.



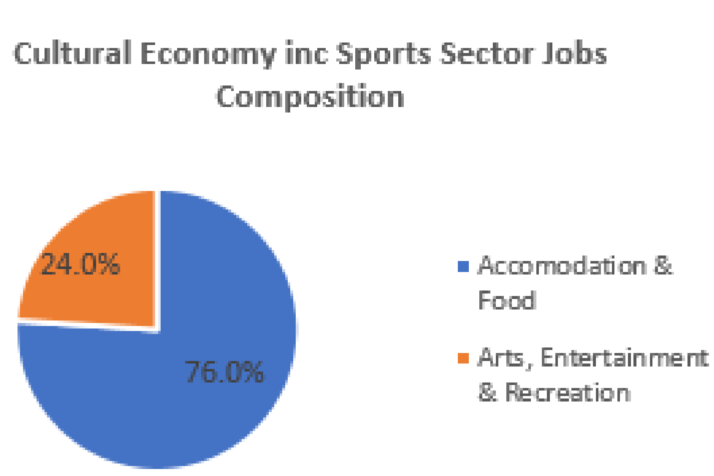


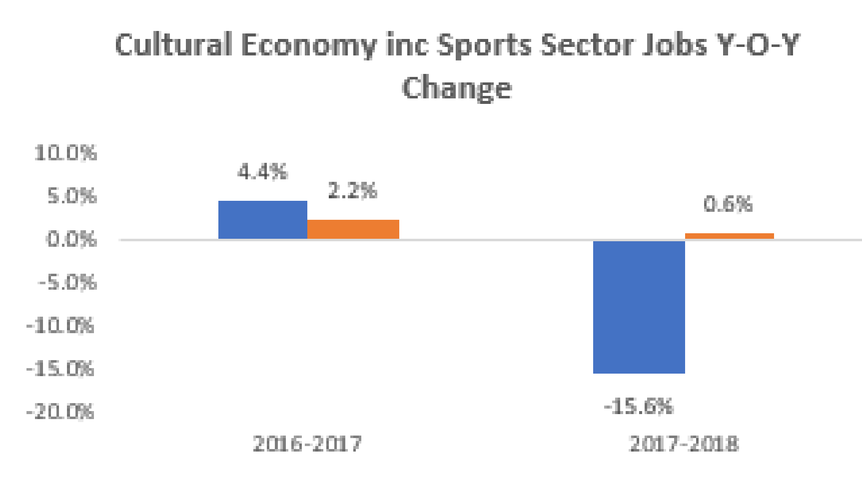
GVA Current: **£4.3bn** 2030 Ambition: **£6.1bn (+£1.8bn)** **20% growth** since 2010





Jobs Current: 135,150 2030 Ambition: **213,427 (+78,000)** **-12% change** since 2016





Businesses Current: 135,150 2030 Ambition: **213,427 (+78,000)** **-1.5% change** since 2018

8. Decent work and economic growth - Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

Cultural Economy (sports and tourism) Industry Profile

Our Competitive Advantage

The **West Midlands is the UK's fastest growing region for international visitors** – attracting a record 2.3 m overseas visits in 2017, up by nearly 50% over the previous six years.

For **business visitors, Birmingham outperforms other regions**, driven by the gateway effect and BHX, accounting for ½ all business trips and 1/3 of all day visits.

Business, conference and exhibition tourism is a particular strength. Stratford is one of the UK's largest cultural tourism draws, with **around 4.9 m people visiting Shakespeare's England every year.**

WM has unique chance to capitalise on role as host of two global sporting and cultural events (**Coventry City of Culture in 2021 and the Commonwealth Games in 2022)** – with the opportunity to drive economic growth and leave lasting community legacies.

Opportunity to generate economic benefits by growing numbers of overnight stays through **leveraging cultural and heritage assets of the region**, as well as increasing GVA and job creation by strengthening region's images through developing business tourism via high profile events and conferences.

The sector employs the **youngest and most diverse workforce** of any sector in the region.

Products , Services & Brands

Coventry: UK City of Culture 2021
Birmingham: Commonwealth Games 2022
Birmingham Royal Ballet
City of Birmingham **Symphony Orchestra**
Shakespeare's England
Black Country Living Museum
Home to the UK's most popular theatre, the **Birmingham Hippodrome**
An array of art venues with leading collections and varied programmes, such as the **New Art Gallery in Walsall, the Herbert Art Gallery & Museum in Coventry and Ikon Gallery in Birmingham**
Birmingham has more green open space than any other city in the country.

Centres of Excellence/Assets

Centres:
Digbeth Creative Quarter: 350+ businesses in Birmingham
Birmingham Jewellery 'designer maker' Quarter, largest in UK
Performance Cluster centred on Royal Shakespeare Company
International Dance Cluster, centred on Birmingham Royal Ballet and International Dance Festival
Birmingham Ormiston Academy – regional centre for digital, creative & performing arts
Birmingham Metropolitan College: Digital & Creative Career College
Digital Infrastructure:
Region-wide 5G Test Bed, 1-10Gb Fibre across parts of region

9. Build resilient infrastructure, promote inclusive and sustainable industrialisation and foster innovation

96.5% (1,768,211) of premises have access to ultrafast and superfast broadband in the WMCA in 2019. The percentage has slightly decreased since 2018 by 0.2pp due to the number of all premises increasing at a faster rate than the number of premises with ultrafast and superfast broadband access. Across the WMCA, the overall median data usage was on average 178GB in 2019.

In December 2019, the metro punctuality across the WM 7 Met. was recorded at 96.4%, compared to the same month in 2018 this has slightly decreased from 97.0%. The latest data (March 2020) for the West Midlands Rail Public Performance Measure (PPM) was 89.2% slightly below the target of 90.0%.

MIT Regional Entrepreneurship Acceleration Program Research Case Study

In March 2020, MIT launched a pilot in the UK of a 'lite' version of its global 'Regional Entrepreneurship Acceleration Programme' (REAP), aimed at helping UK regions with achieving greater productivity, employment and returns from research and innovation activity. This programme seeks to deepen the collective efforts and community of practice of entrepreneurship and innovation. The benefit of MIT's theoretical and practice-based expertise and regional leadership, focused on this new initiative to support productivity growth, is a defining factor in the delivery of the UK's local Industrial Strategies. The West Midlands Combined Authority (WMCA) is one of six regions currently part of the programme.

The West Midlands Team 'lite' REAP team is sponsored by the GBSLEP, BCCLEP and the West Midlands Combined Authority (WMCA), whilst also representing the Coventry & Warks LEP area. WM REDI is part of this team, which includes representatives from Government, Academia, Corporates, SMEs, and Risk Capital. Other organisations involved include the WMCA (Innovation Lead), Innovate UK, GBSLEP, Black Country Growth LEP, West Midlands Combined Universities, Aston Centre for Growth, Birmingham University, Midlands Aerospace Alliance, KPMG, Greater Birmingham Chambers, Black Country Chamber, Innovation Alliance West Midlands, and the British Business Bank. The goal of the MIT REAP-UK Initiative is to support regional teams of leaders representing Entrepreneurs, Risk Capital Providers, Corporates, Academia, and Governments in an evidence-based approach to supporting innovation and entrepreneurship in each team's local region. The initiative draws on the frameworks founded and established through the MIT REAP global program and translates them into the UK context with a cohort composed of entirely UK-based teams. Initial research is now being developed along 4 themes:

Customer Research – surveying entrepreneurs (SMEs) and Risk capital providers to analyse their view of the innovation ecosystem. We aim to understand our regional portfolio of innovation actors (sector, maturity, profile, etc.) and identify the most vulnerable sectors and those that have the biggest economic impact on the region, so we can match them to appropriate business support.
Assessing the ecosystem – developing a set of indicators to assess the capability to support Innovation and Entrepreneurship in the region.
Mapping Current Business Support – this will let us see if we as a region are supporting the development and growth of 'innovation-driven enterprises' (IDEs) and if not what areas of business support need to change / gaps need to be addressed. For example, is there appropriate business support available to help firms to build resilience post Covid-19, around the re-purposing, re-positioning, and re-validating of their business?
Identification of Innovation Driven Enterprises – these companies pursue global opportunities based on bringing to customers' innovations, which have a clear competitive advantage and high growth potential

9. Build resilient infrastructure, promote inclusive and sustainable industrialisation and foster innovation

Future Mobility and the Covid-19 Impact on Transport – Case Study

Transport for West Midlands has been reviewing its evidence base and monitoring the impacts of Covid-19 on the current delivery and strategy for transport. The following provides ab outline of the analysis and work to date and the impacts on transport in the region.

Since the start of the Covid-19 lockdown, the UK transport sector has faced the biggest crisis in modern times as the pandemic affects the country's way of life. Unprecedented steps had to be put in place, following strict Government public health guidelines, for passengers and commuters to limit non-essential travel and avoid social interaction. This resulted in significant reductions in bus and rail services throughout the West Midlands and nationally.

Impacts of Lockdown

Public transport usage declined by approximately 90% in the first weeks of the introduction of lockdown, and motor vehicle usage also declined significantly.

As a result of significantly reduced passengers and revenue, public transport operators had to reduce their services. Steps were taken to ensure that operators were able to maintain an agreed level of service so that key workers could still travel.

In response to the challenging environment faced by the rail industry, the Department for Transport temporarily suspended normal franchise agreements, and transferred all revenue and cost risk to the government for an initial period of six months.

Outside of London however, bus and light rail services operate in a deregulated market, and therefore responses were more challenging to coordinate and implement in comparison. The government, as well as Transport for West Midlands, recognised the importance of maintaining bus services for key workers, and additional financial and policy measures were put in place.

Transport for West Midlands was able to further support NHS workers by facilitating free bus and tram travel for all NHS staff and using Ring and Ride services to shuttle frontline staff between hospitals and free Park and Ride sites.

Remobilising the transport network

In May the Government set out its strategy for lifting the lockdown restrictions which sought a balance between the risks of incurring a second wave of Covid-19 and enabling a restart to the economy.

9. Build resilient infrastructure, promote inclusive and sustainable industrialisation and foster innovation

The West Midlands transport recovery is being implemented in collaboration with our local authority partners and we have set out 5 key objectives for our response.

- Travel that is safe and secure
- Getting workers and businesses back up and running (where safe)
- Supporting travel to schools and keeping children and families safe
- Keeping the clean air, reduced carbon emissions and physical exercise
- Supporting a green recovery

We are taking action to support the transport system to recover and to off-set the potential for a mass reversion to car use in our urban areas. Work was required to understand how transport services could be remobilised and support an increase of passengers. This was especially challenging, as on board social distancing requirements meant that vehicles would only be allowed to carry around 20% of capacity. As a result, services would still not be commercially viable and funding support would need to continue. Further challenges remained on how to ensure that transport services matched expected demand, as trip patterns and demand is likely to change as different lockdown measures ease as part of a phased approach.

Positive impacts

With transport usage down considerably during lockdown, there were a number of noticeable improvements to the environment, including:

- In early April, monitoring suggested there had been considerable drops in nitrogen dioxide levels compared to the previous five year average for the same time period; for Birmingham, this was suggested to be by around 42%
- There have been reductions in carbon emissions related to recent reduced traffic levels. UK figures from SIA Partners show UK emissions have reduced by 36% from the start of lockdown to early May.

Indeed, as public transport and motor vehicle usage declined, there was also a noticeable increase in walking and cycling across the UK, whether for recreation or commuting purposes.

To make it easier for people to walk and cycle, the Government announced the 'Emergency Active Travel Fund' in May to support temporary schemes such as pop up cycle lanes and widening pavements.

There is potentially a positive long-term legacy following lockdown if this sustainable travel behaviour remains, helping to lock in health and environmental benefits.

Long-term impacts

As of late June 2020 in the West Midlands, traffic on the Strategic Road Network was back to 80% of the normal pre-Covid level. Metro was up to almost 50%, and bus had recovered by about 35%. Rail on the other hand remained low at about 10% of normal levels. The longer-term impact of Covid-19 on travel behaviour is not yet fully known, but it is evident that it might be potentially significant. Whilst there could be some positive travel behaviour changes, including more working from home and more walking and cycling, there could also be negative impacts. The message to avoid public transport during the crisis may remain in people's mind long after the pandemic has finished, meaning a decrease in long-term passengers. This may result in greater car usage, which is not only detrimental for economic recovery through increased congestion, but detrimental to the environment – specifically air quality and carbon emissions.

9. Build resilient infrastructure, promote inclusive and sustainable industrialisation and foster innovation

The West Midlands has set an ambitious target to achieve net-zero carbon by 2041. Transport accounts for around one third of carbon emissions and has seen little overall change in emissions. With passenger numbers still low, and on-board social distancing in place, there is likely to also be a long-lasting impact on the viability of public transport services; state intervention may be necessary to continue to support the provision of services which could influence the future role of local and national government in public transport delivery. Covid-19 has exacerbated many already underlying inequalities and has the potential to create new ones in the region. Certain groups are disproportionately affected, be it through having a higher risk contracting it, or being most impacted by its knock-on effects, including:

- Older people
- BAME groups
- Younger people
- Those living in deprived wards
- Lower income earners
- Lone parents
- Disabled people
- Women

These groups are less likely to own a car, be on a lower income, live in more deprived areas and be more reliant on public transport compared to higher income groups. If accessible and affordable public transport is therefore not available in both the short and long term, there is a risk of further exacerbating inequalities in the region.

Looking to the future of government spending, there is also uncertainty over how the government will seek to address increased borrowing and the predicted economic downturn. Large scale infrastructure projects could be a tool for significant economic stimulation, or victims of tighter fiscal policy. For the West Midlands, it is vital for investment into the transport network to continue. The region is rolling out a programme of pop up cycle infrastructure to respond to the immediate need to support people to travel where public transport is currently not an option. As we move out of the crisis into recovery it is critical that we continue to review our transport policies and programmes to ensure a fairer, greener, healthier and more sustainable West Midlands is achieved for the long-term.

Understanding and planning for the impacts of Covid-19
As the UK went into lockdown, TfWM's Policy, Strategy & Innovation team were tasked with developing an understanding of the impacts on the West Midlands transport network. A combination of statistics on transport usage, relevant news items and key messages were collated into a website to provide daily monitoring. Further analysis tools were developed to support the transport planning around getting key workers to the essential services destinations, reflecting the reduced frequency of public transport.
For monitoring public transport usage, Swift Card data was produced daily and used to reflect the public transport impact across bus, Metro and trains. For highways usage, TfWM signed up to Waze for Cities, to provide real-time highways disruption information. The programme allowed for the monitoring of speeds based on 6 corridors on the Key Route Network, helping to monitor the effect of lockdown on easing of congestion, and any issues with speeding as a result of reduced traffic. In order to coordinate the support and availability of public transport for key workers, TfWM collated and mapped information to identify areas of high public transport dependency – helping to ensure that key workers could still travel.

9. Build resilient infrastructure, promote inclusive and sustainable industrialisation and foster innovation

In April an online survey was promoted via WMCA social media channels and emailed directly to members of WMCA/TfWM data bases:

- 6188 responses were received in total, of which:
- 2940 (48%) would like to receive further updates
- 2859 (46%) would like to take part in future research

The survey also provides further evidence of the increases in walking and cycling during the lockdown and the key sentiments from the survey were that people wanted to see change/ learn lessons to keep:

- cleaner air (81%)
- reduced traffic on roads/ reduced car use (75%), f
- a better work/life balance (67%).

This research is being used to inform our response to the pandemic in partnership with key stakeholders including local authorities and operators. A second wave of the survey has also been undertaken in late June. As the transport network remobilises, monitoring the transport network continues to be vital, and can help to ensure that supply matches demand, especially with strict on board social distancing in place on public transport.

The fast paced nature of the COVID impact has resulted in the development of additional insight. The legacy of this work will be the ability to continue to monitor the transport network on a daily basis and start to use the intelligence we have gathered to start to model changes in travel behaviour in response to both short term changes e.g. either relaxation or tightening of lockdown restrictions and changes to social distancing and into the longer term as the realities of a 'new normal' is better understood.

Utilising the combined data sources of the Census, the Human Intelligence COVID survey and a variety of other sources there has been a mapping of the zones where people reside that work in specific industries and that commute by certain modes. This enables the understanding of the public transport provision to specific industries that cannot work from home, in addition those areas where there is an increase in localised journeys as a result of being able to work from home has also been identified. The most granular data analysis is taking place as a result of the bus operators sharing the boarding data by time of day, enabling the busiest bus stops to be identified, so the travel demand management team can work with nearby businesses and education institutions, and also facilitating the impact of capacity changes to be estimated, effectively identifying where a bus is likely to be at capacity along its route. The operators are using this data to help realign services form those of least or little demand to those that require additional support. The data analysis is now moving to corridor based impact and also the increased change in localised journeys, as more data has become available then more impact analysis is undertaken.

10 . Reduced inequality within and among countries

Employment rates by ethnic groups vary across the WMCA with the Indian and White groups displaying the highest rates at 77.5% and 76.5% respectively, down to the Pakistani/Bangladeshi group with an employment rate at 51.4% in 2019. In part this is a function of lower employment rates for women in the later group.

Compared to 2018, the employment rate has increased by 6.1pp for the Mixed ethnic group and Indian ethnic group in the WMCA, while for the UK there was an increase of 2.4pp and a decrease of 0.3pp respectively. However, in the WMCA the Other ethnic group employment rate has decreased by 3.9pp compared to an increase of 1.8pp across the UK and a 2.2pp decrease for the Pakistani/ Bangladeshi group while the UK decreased by 1.0pp.

The healthy life expectancy gap within the WM 7 Met. area is significant for both men and women. The healthy inequality gap between the most and least deprived areas across the WM 7 Met. geography has increased among males to 8.8 years (+2.6years since 2017) and for females to 8.5 years (+1.2 years) in 2018.

Overall deprivation is high in the WMCA; the proportion of LSOA's within the top 20% and top 10% most deprived areas in England stands at 34.5% and 19.2% respectively whilst compared to 33.4% and 18.9% in 2015.

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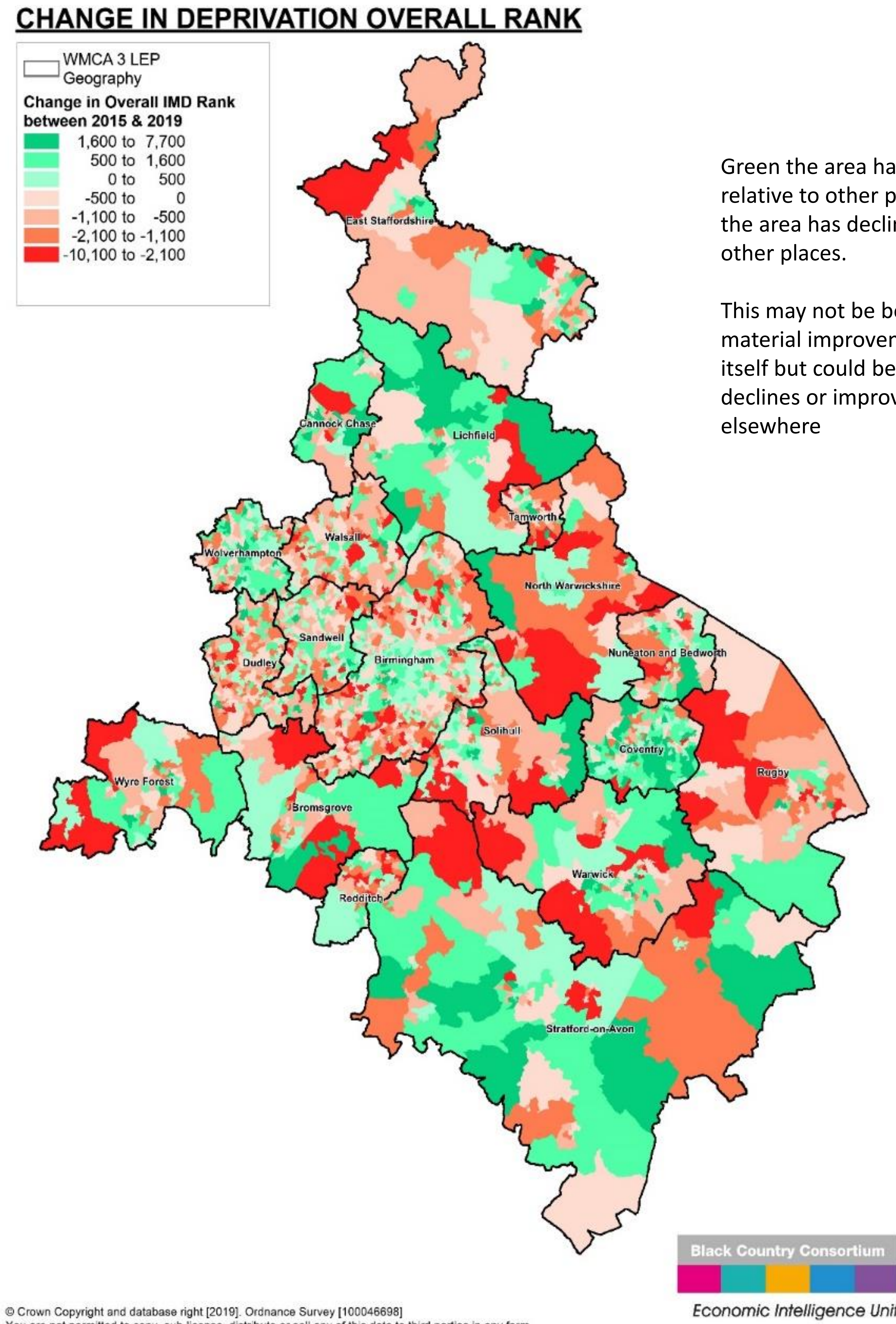
	WMCA 2018		UK 2018	WMCA 2019		UK 2019
	Number	Percent	Percent	Number	Percent	Percent
White	1,449,500	75.1%	76.7%	1,441,500	76.5%	77.3%
Mixed Ethnic Group	18,900	56.6%	67.0%	25,200	62.7%	69.4%
Indians	109,200	71.4%	76.0%	132,600	77.5%	75.7%
Pakistani/Bangladeshi	103,800	53.7%	57.1%	111,300	51.4%	56.1%
Black or black British	112,300	63.6%	66.9%	103,000	61.9%	68.8%
Other Ethnic Group	50,200	58.7%	62.0%	56,600	54.8%	63.8%

10 . Reduced Inequalities Reduced inequality within and among countries



Green the area has improved relative to other places and red the area has declined relative to other places.

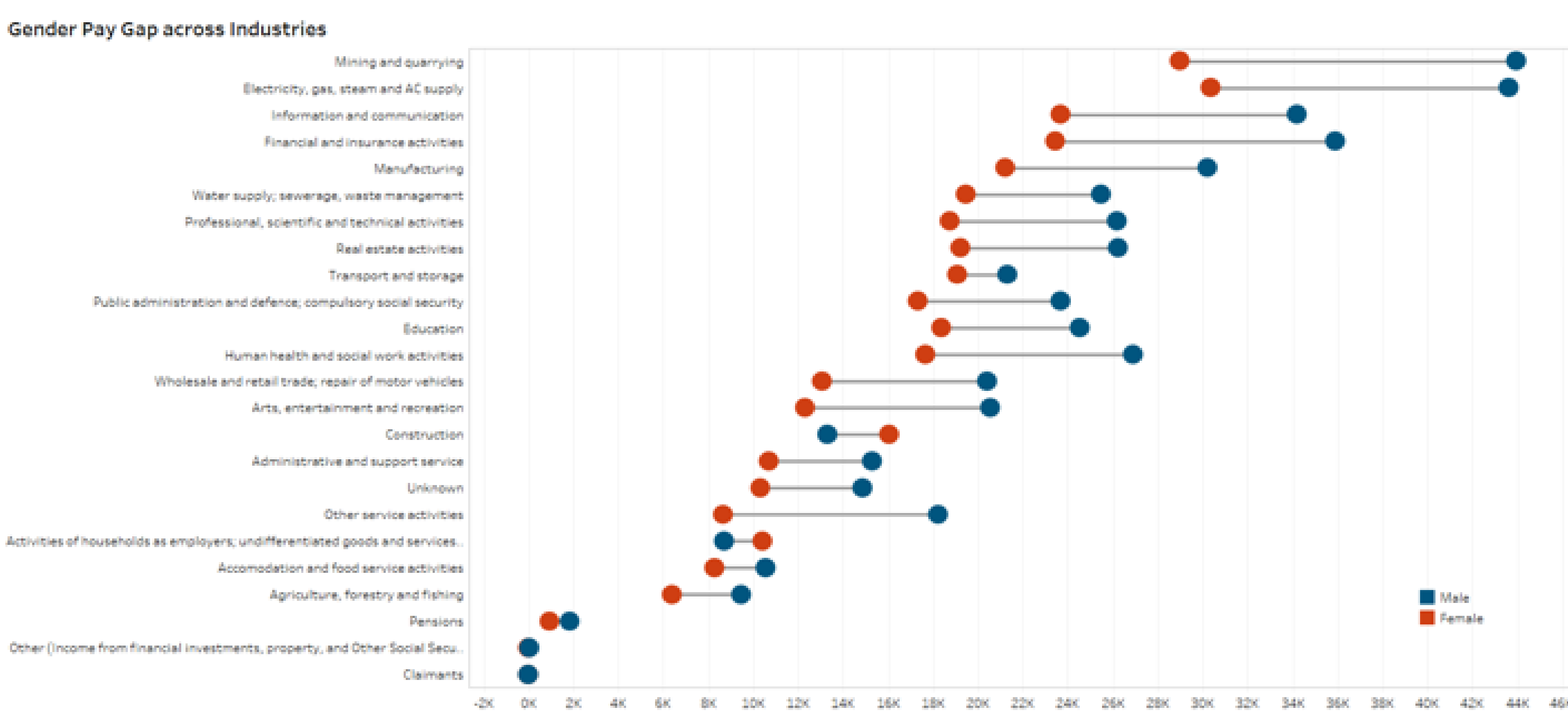
This may not be because of any material improvement in the place itself but could be because of declines or improvements elsewhere

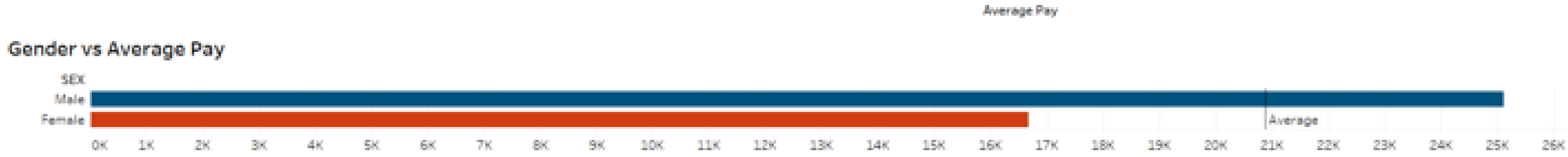
10 . Reduced Inequalities Reduced inequality within and among countries

Income inequality Research Case Study

As noted in SDG 5 research has been carried out through an analysis of HMRC income data looking at inequality. Early findings show that:

- 72% of people have a total income below the regional average. So 7 out of 10 are below the average of £23,200 (national average £24,400)
- The region is the 5th most unequal region measured by the GINI index
- Poorer more deprived areas have less inequality (strikingly so) and richer areas are more unequal, skewed by very high outliers
- People get richer in their middle age and the older they get the more unequal the incomes become reaching maximum income inequality in 55-64 age range. But this divergence is set early in life and continues to diverge, suggesting that income inequality set up by inheritance or differences in backgrounds early on and compounded later on by unequal opportunities e.g. in education, career etc. Middle age inequality contributes most to the overall age element of income inequality
- Employment is the main source of income for people cross all income levels, followed by ‘Other’ source of income for the poorest, ‘Partnership’ for the richest and ‘Occupational pension’ for the rest of people in the region. The older you get the more important occupational pensions become.
- The sector that people work in is the largest of the four income dimensions (source, gender, age and industry) in terms of the contribution to inequality. With significant inequality within the sectors also occurring. High employment sectors (such as retail) contribute most to inequality but some sectors have significant within sector disparity often ones dominated by sole traders and entrepreneurs
- These findings point to the importance of financial security and management skills and the ability for people to access other sources of income, entrepreneurship and opportunities to inequality; and also how we prepare young people for the future and change pathways which are established early in life.

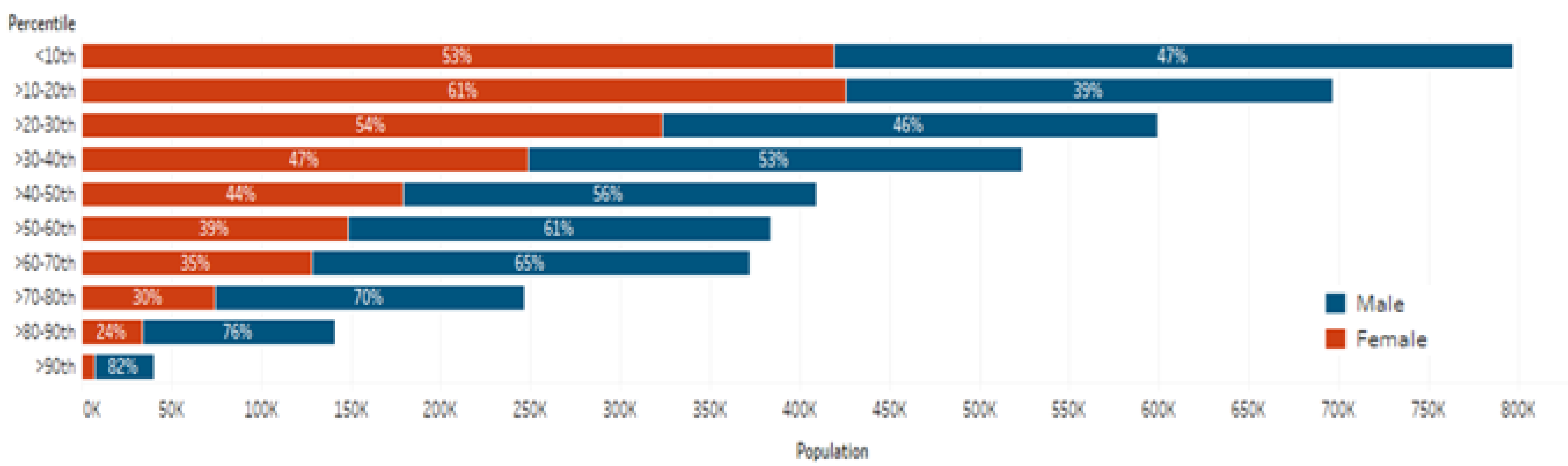


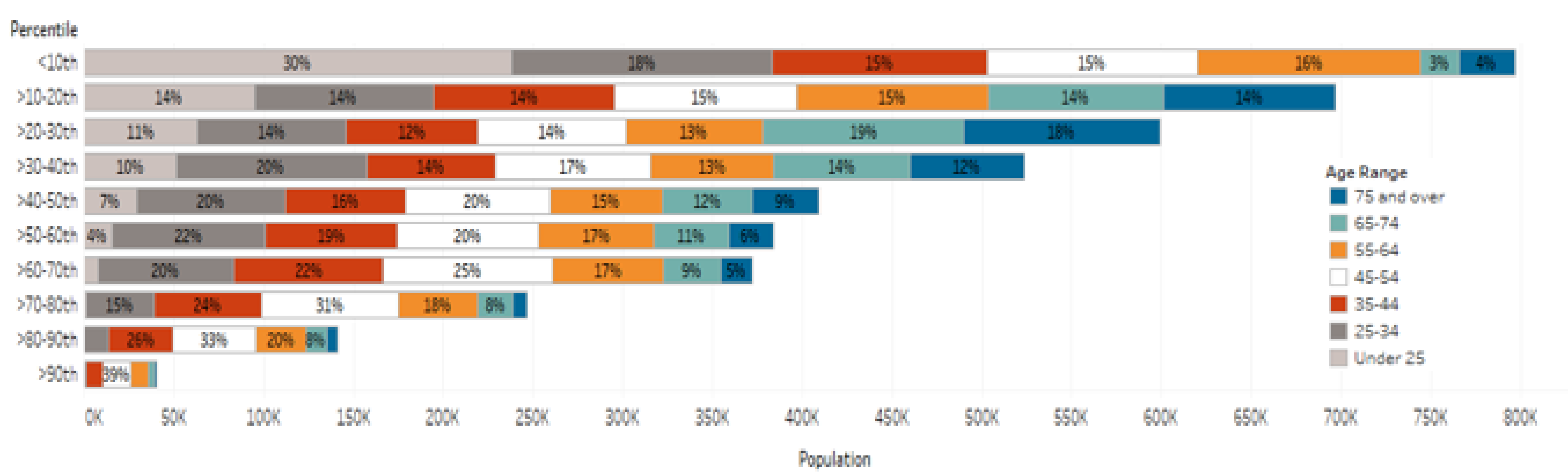


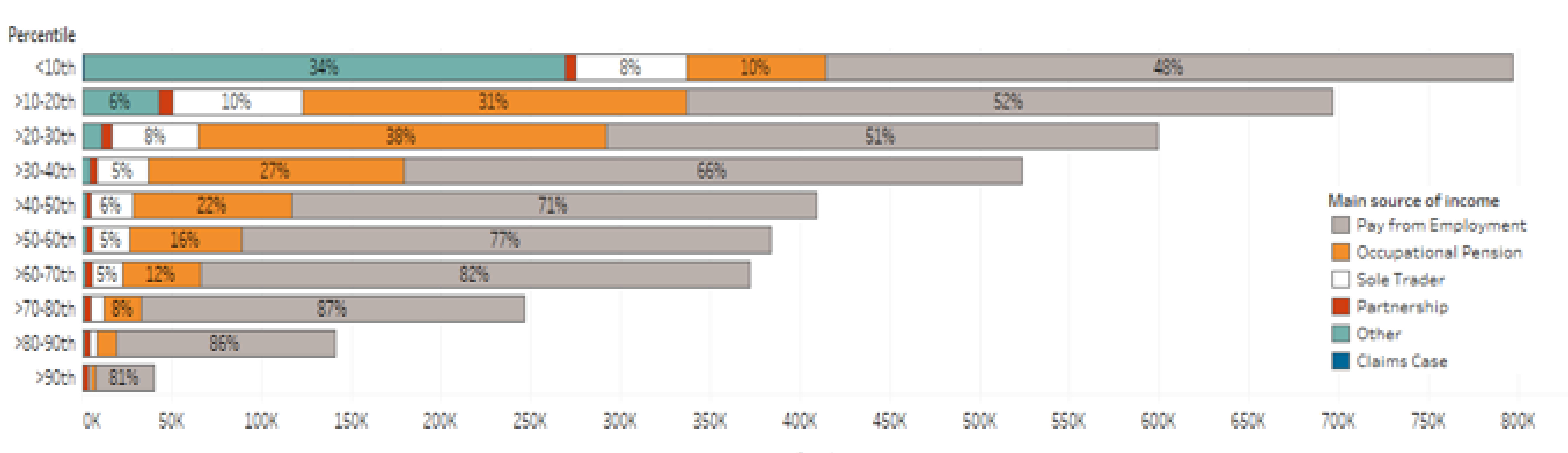
10 . Reduced Inequalities Reduced inequality within and among countries

The graphs below indicate that:

- Men tend to be wealthier than women. There are almost equal shares of men and women in bottom percentiles with women numbering slightly more than men. The number of men increased from 39% in second percentile and grew steadily reaching 82% in last tenth percentile, meaning that 8 out of 10 individuals among the richest people in West Midlands are males.
- People tend to get richer in their middle ages. Age ranges represented almost ideally equally in bottom percentiles with middle ages of 45-54 y.o dominating among tops with smaller shares of people younger 35 y.o and older 65 y.o
- Employment is the main source of income for people across all percentiles followed by 'Other' source of income for the poorest, 'Partnership' for the richest and 'Occupational pension' for the rest of people in the region.







11. Sustainable Cities and Communities - Make cities and human settlements inclusive, safe, resilient and sustainable

Across the WM 7 Met. area the percentage of the local authority designated as Green Belt land varies from 67% in Solihull down to 12% in Wolverhampton which is the only local authority below the England average of 13%.

Overall, for the WMCA, the 2019 election results for turnout (the number of valid votes cast as a proportion of the electorate) is 63.1%, this is below the UK average of 67.3%. Compared to 2017, the turnout has decreased from 65.6% for the WMCA.

There were 5,564 reported traffic collisions in the WM 7 Met. area in 2018, this has decreased by 5.0% (-291) since 2017.

In 2018/19 there was a total of 3,822 additional affordable dwellings completions across the WMCA, this has increased by 353 when compared to 2017/18. There were also 1,960 additional affordable rented dwelling completions in 2018/19 which has increased by 238 since 2018/19.

There are 1.36 households in temporary accommodation in the WM region compared to 2.66 per 100,000 households nationally. Birmingham is worst at 5.47. 9% of homes in Birmingham are classed as overcrowded – the second highest rates in the UK)

Children and Young People with a care experience In the West Midlands region overall, 82 children per 100,000 (10,560 children) are in care – this is higher than the national average of 65 per 100,000 . 20.3% of **Children in low income families** in WM region (224,965 children) versus 17% nationally. In the West Midlands region overall, 82 children per 100,000 (10,560 children) have had an experience of care. At a local Authority level this varies Birmingham (67 per 100,000); Coventry (89 per 100,000); Dudley (95 per 100,000); Sandwell (109 per 100,000); Solihull (90 per 1000,000); Walsall (90 per 100,000) and Wolverhampton (102 per 100,000)

Percentage of population within 300/900m of a park, public garden or playing field
Source Ordnance Survey 2020

	Ethnicity				
Within	White	Mixed/multiple ethnic groups	Asian/Asian British	Black/African/Caribbean/Black British	Other ethnic groups
900m	94%	97%	98%	99%	98%
300m	51%	55%	55%	58%	56%

11. Sustainable Cities and Communities - Make cities and human settlements inclusive, safe, resilient and sustainable

Housing and Regeneration Case Study

In the West Midlands, there are over 200,000 jobs in construction, alongside considerably more in related professional, support and specialist services. In recent years, the urban renaissance in the region has seen major investment in key infrastructure such as HS2, new employment opportunities create, facilities for the Commonwealth Games delivered, a national reputation for brownfield regeneration achieved and a record increase nationally in the number of new homes delivered each year. Covid19 has placed some significant challenges on that positive trajectory. Viability was already a challenge on development sites (especially brownfield sites) hence the need for major public sector investment and intervention, town centres in our region were facing significant retail voids and declining rents and housing affordability was a growing challenge.

In response to the emerging impacts of the pandemic, the WMCAs Housing and Land Delivery Board commissioned a review of the Portfolio's business plan to revise, refine and renew the work programme that includes town centres, advanced methods of construction, housing delivery, affordable housing, industry diversity, brownfield regeneration, public-private partnerships, the disposal and development of public land and alignment between transport and real estate.

To inform this work we have established two working groups of our existing stakeholder forums and round tables to co-develop and shape our portfolio recovery planning work, providing critical evidence and market intelligence and ensuring we have key business and public sector engagement throughout. One is a working group of lead regeneration and housing officials of our local councils, LEPs and Homes England; the second is a working group of lead real estate investors, housing associations and developers from our Commercial Property Forum we operate jointly with the British Property Federation.

We are also working very closely with and seeking advice, ideas and sounding from the Overview and Scrutiny housing group, LEPs, the British Property Federation, the wider real estate and property community and our expert taskforces such as the AMC (Advanced Methods of Construction) taskforce and the Town Centre Taskforce led by Jon Bramwell of HSBC.

This engagement is critical to understanding the emerging picture for housing and regeneration in the region, providing insight and evidence to inform our collective response and ongoing recovery work. Some of the key themes that have emerged throughout this engagement include:

- Market demand for housing post-lockdown, including types of homes and tenures
- Impact on investor confidence, acquisitions and schemes being brought forward
- Future demand for commercial office space, retail units and town/urban centre locations
- The impact on local authority resources, prioritisation and capacity
- The need for timely, local evidence to inform policy and decision making

This work is ongoing and will be crucial to identifying and understanding the key emerging trends in the emerging post-lockdown environment, as the West Midlands looks to regain the momentum seen pre-pandemic.

12. Consumption and Production – ensure sustainable consumption and production patterns

In 2018/19 there was a total of 1,274,588 tonnes of local authority waste collected across the WM 7 Met. area, this drops down to 1,094,011 tonnes when restricting to household waste. However, when compared to 2017/18 the WM 7 Met. area has increased by 7,377 tonnes for total local authority collected waste and by 2,267 for household waste.

The proportion of local authority collected waste that is sent for either recycling, composting or reuse has decreased from 31.0% in 2017/18 to 30.5% in 2018/19. Similar patterns can be seen when restricting to households where 31.9% was sent for recycling, composting or reuse in 2017/18 to 31.1% in 2018/19.

Institutions collaborate to address the impact of Covid-19 on the Birmingham economy

The Birmingham Anchor Network – which represents seven of the City's largest institutions, a combined workforce of over 50,000 people and budget of over £5bn – have released an Action Plan for response to the impact of Covid-19 on the Birmingham economy. This co-ordinated response is believed to be the first of its kind anywhere by a network of anchor institutions. Members include:

- Aston University
- Birmingham City Council
- Bournville Village Trust
- Office of the Police and Crime Commissioner West Midlands
- The Pioneer Group
- The University of Birmingham
- University Hospitals Birmingham NHS Foundation Trust

The Birmingham Anchor Network Action Plan builds on two years of work developing the Network by the economic think tank, the Centre for Local Economic Strategies, funded by the independent charitable foundation for socially just change, Barrow Cadbury Trust. Last year the members of the Network committed to progress joint action to utilise their spending power, workforces and land and assets to build a more inclusive and equitable city economy.

As well as setting out the immediate steps that the anchor institutions in the Network will undertake to address the economic and social impact of the pandemic, the Action Plan has within it a number of bold steps that will lead to long term reform of the Birmingham economy. This includes exploring how to link existing opportunities for employment in the health sector to residents who are facing redundancy due to Covid-19 and how locally-owned construction firms can access new work from the backlog in housing association building repairs created by the lockdown.

13. Climate Action – take urgent action to combat climate change and its impacts

Air quality across the West Midlands region has improved and in 2019 was down to 37 days of poor air quality per year (rated 4 or higher on the Daily Air Quality Index); a decrease of 9 days less than the previous year.

CO_2 emitted in the WMCA area in 2017 was 20,581 kt CO_2, this equates to 5.0 tonnes per capita which is slightly below the England average of 5.1 tonnes per capita. Compared to 2016, the WMCA has reduced emissions by 3.6% (-775 Kt CO_2). The tonnes per capita figure has decreased by 3.8%, from 5.1 to 5.0. England's overall emissions have decreased by 3.6%, with tonnes per capita falling from 5.4 in 2016 to 5.1. in 2017.

Emissions are broken down into four categories which can be seen in the following figure. Within the WMCA, the highest category to emit emissions was transport (8,212 Kt CO_2) in 2017. In contrast the Land Use, Land Use Change and Forestry (LULUCF) was -78 Kt CO2 for the WMCA.

	Industry & Commercial	Domestic	Transport	N.LULUCF	Total	Per Capita Emissions (t)
BCLEP	1,442	1,668	1,664	-8	4,766	4.0
CWLEP	2,419	1,348	2,953	-30	6,690	7.2
GBSLEP	2,714	2,855	3,595	-39	9,125	4.5
WMCA	6,575	5,871	8,212	-78	20,581	5.0

WM2041 Case Study

In June 2019, the WMCA declared a climate emergency. In July 2019 the Combined Authority Board received a research paper from the Tyndall Centre outlining the trajectory that would be necessary in order to reach net zero carbon emissions by 2041. This work includes two interim carbon budgets of 36% reduction by 2022 and 69% reduction by 2027. The focus in on rapid transition towards a zero-carbon future where action must be 'front-loaded' – we will need to meet year-on-year carbon emissions reductions of 13% to reach that target. Following the production of the target, a 'green paper' was written to indicate how the region could take action in order to reach net zero carbon emissions by 2041. Extensive consultation was carried out with 415 responses. On May 6th , the UK's Committee on Climate Change wrote to the Prime Minister urging a low carbon recovery from COVID-19. They outline 5 areas that should be expanded immediately (all of these appear below in the WMCA plans):

- Investments in low-carbon and climate-resilient infrastructure.
- Supporting reskilling, retraining and research for a net-zero, well-adapted economy.
- Upgrades to our homes ensuring they are fit for the future.
- Making it easy for people to walk, cycle, and work remotely.
- Tree planting, peatland restoration, green spaces and other green infrastructure.

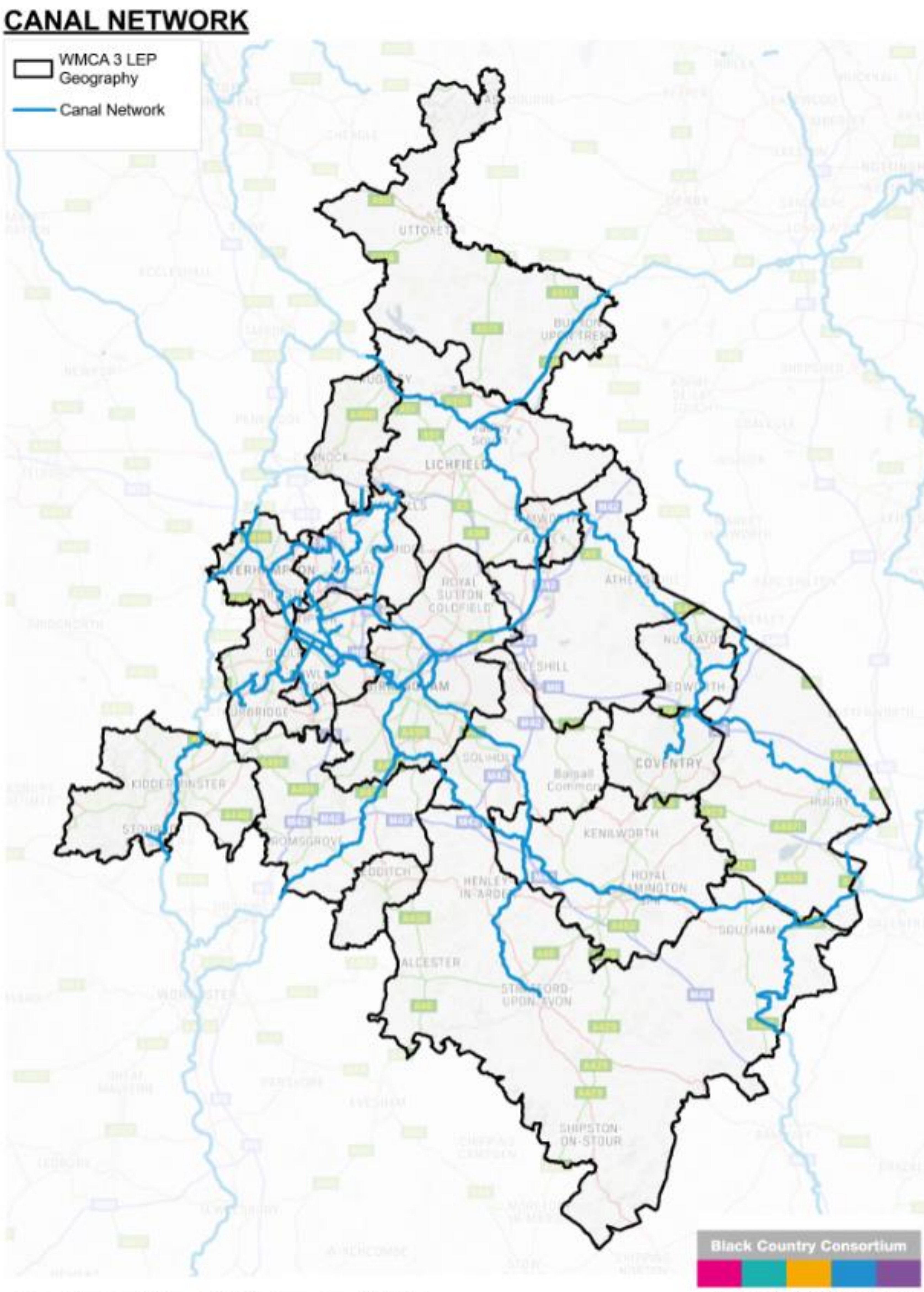
It is currently unclear as to exactly what a recovery 'timetable' is going to look like but it is likely that it will involve a series of steps as we transition from lockdown.

Activities that will have immediate impact and/or set a clear direction of travel for the kind of recovery we expect in the West Midlands. These include:

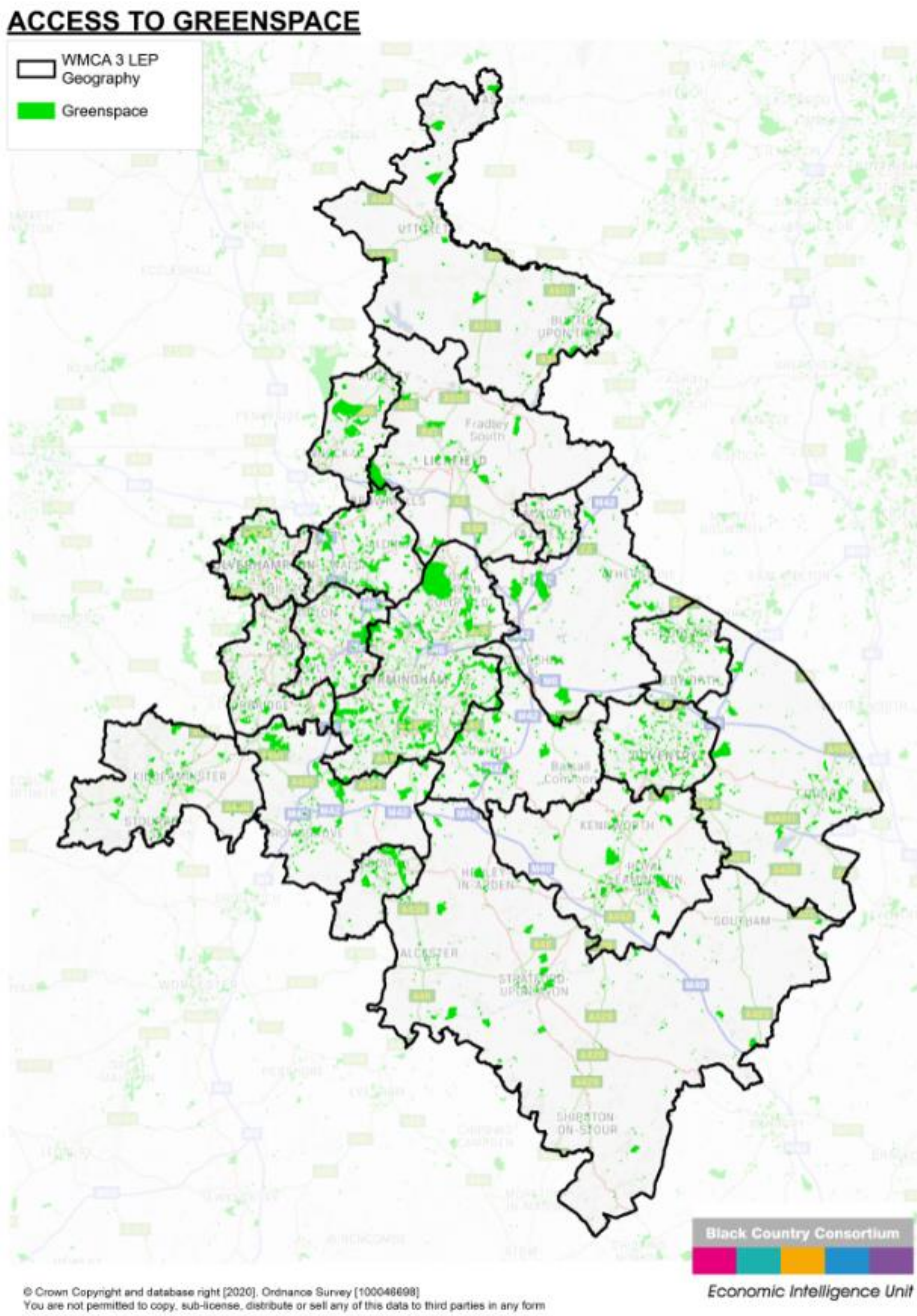
- West Midlands Green Financing
- West Midlands Clean Growth Challenge
- WM Circular Economy Taskforce
- Community Green Grants
- Reinforcing the region's energy infrastructure to support green growth
- Active Travel
- Urban Transformation Fund (Brownfield sites)
- Communications and behaviour change

14. Life below water – conserve and sustainably use the oceans, seas and marine resources for sustainable development

Across the WMCA, there are 520km of canal networks, notably 51% of the population in Birmingham live within walking distance of a local canal. These canals are central in the national network



15. Life on land – protect restore and promote sustainable use of terrestrial ecosystems, sustainably manage forest, comment desertification, and halt and reverse land degradation and halt biodiversity loss



16. Peace and Justice - Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels

There were 87,780 reports of violence against the person in 2019. This has increased by 24.4% since 2018, while the national average increase was 9.4%. In 2019, violence against the person was 30.1 per 1,000 population which is slightly above the England average of 29.1 per 1,000 population.

The number of first-time entrants to the youth justice system in the WM 7 Met. area has decreased from 399 per 100,000 in 2018 to 308. Similar patterns where seen across England with a decrease from 296 per 100,000 in 2018 to 239.

Citizen's Panel Research Case Study

A new Citizens' Panel has been set up to help guide the West Midlands' recovery from Covid-19.
The group, which is made up of 36 people representing the diverse make-up of the region, will spend the next month learning about the impact of Covid-19 on communities and will help guide what recovery plans should focus on.

This community engagement will complement the region's ongoing economic recovery work, which is being spearheaded by the Economic Impact Group, which brings together business leaders, central government, banks, trade unions and local authorities.

The Citizens' Panel has been commissioned by the West Midlands Recovery Co-ordination Group (RCG) - a collaboration of senior officials from the region's local authorities, emergency services and Local Enterprise Partnerships.

The panel will share their experiences, consider evidence on impacts from expert witnesses, and deliberate over challenging trade-offs, before putting forward a set of recommendations to the RCG.

The RCG will use the recommendations of the Citizens' Panel to help inform the region's political leaders on their post-Covid-19 recovery plans.

The programme is being delivered by BritainThinks, an independent insight and strategy agency, and is supported by Engage Britain, which is a charity focused on bringing together people with different views, knowledge and experience to help tackle the biggest challenges facing the country.

17. Partnership for Goals – Strengthen the means of implementation and revitalize the global partnership for sustainable development

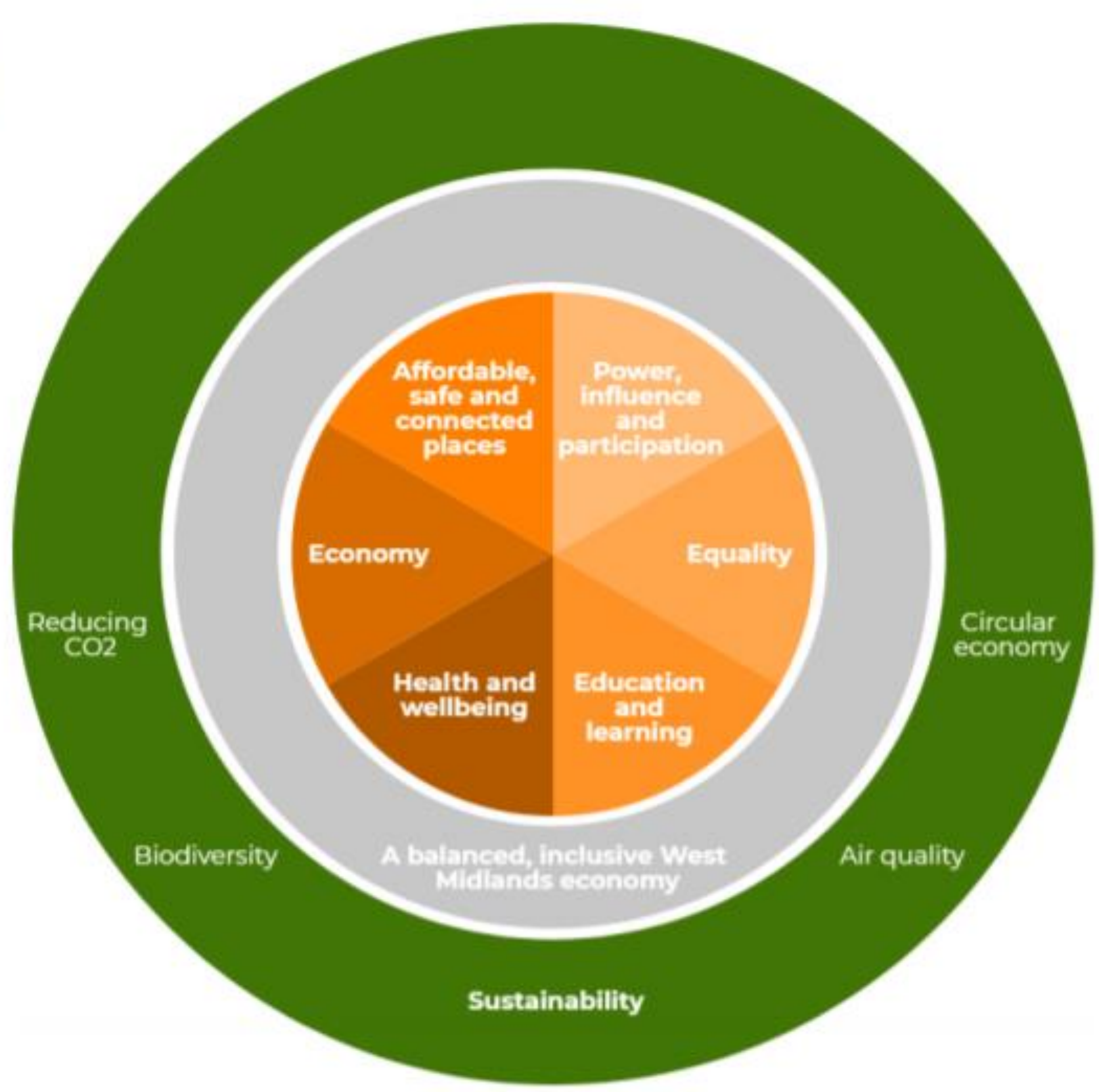
There are currently no indicators that can be used to measure this goal. However, the WMCA will carry on working with various partners to provide detailed reports in a range of topics as well as sharing the same visions and goals to reach targets

Research Case Study - WMCA Inclusive Growth Unit (IGU).
The IGU, which is embedded within the WMCA, was established to build the confidence, evidence base and tools to support sustained inclusive growth in the West Midlands. Partners include the Joseph Rowntree Foundation, Barrow Cadbury Trust, TUC West Midlands, Public Health England, and WMREDI all of which bring different expertise to bear in translating inclusive growth from a concept into practice. The IGU has developed and introduced a set of specific products:

- Inclusive Growth Framework – this sets out the goals of inclusive economic growth in the West Midlands, and the progress that the region is making against those goals. These are not exclusively economic in nature, but are also social, environmental, and democratic. As such, the Framework establishes a virtuous circle between economic activity and public service outcomes
- The Inclusive Growth Decision-Making Toolkit – this provides decision makers with a practical way of embedding the same inclusive growth goals into key policies, strategies and delivery plans. It represents a shift in how collective investment works, and will need to be piloted in order to assess its operational implications.
- A set of Inclusive Growth 'Tests' – a way to interrogate policy proposals by asking a set of focused questions. These were developed at the request of the Overview & Scrutiny Committee, which requested that each WMCA report should account for its inclusive growth impact

These tools are currently being rolled out with partners including East Birmingham Board and the implementation of its Inclusive Growth Strategy, and on shaping the regeneration of Kingshurst in North Solihull. The tools were also used to shape #WM2041 around inclusive growth outcomes.

Figure 1 The Inclusive Growth Framework, illustrated to show the balance between meeting needs and aspirations, and working within environmental limits



Regional Outcome Indicators

The region continues to monitor change through the comprehensive list of monitoring indicators to help us understand the performance of the region

The following section provides the detail of those indicators and the how the region has faired. This data is largely pre covid-19

Appendix 1

Regional Outcome Indictors – full details

The Regional Outcome Indicators covered in this report provide a clear framework to monitor progress and the economic changes required to achieve our vision and the ambitions set out in the Strategic Economic Plan and further developed in the West Midlands Local Industrial Strategy. The Regional Outcome indicators are composed of a selection of strategic headline indicators, which measure the impact of all activity across the 3 LEP areas by all stakeholders. These indicators have been aligned to the 17 SDGs and those highlighted in pink are new additions to help towards monitoring progress.
The performance against these indicators are impacted by a number of factors including external factors like the global economy which are outside of the control of regional partners.

Work is ongoing to demonstrate the impact of investment and outputs on achieving our required outcomes and impact utilising logic chains

Outcomes	Measures of Success	Where we are now	Change over the last year	Direction of Travel Relative to UK average since 2013	Scale of the Challenge
1. No Poverty	Employment Rate	72.40%	+0.7 pp	+5.2 pp WMCA +4.4 pp UK	Employment rate 75.6% +82,370 People
	Income & Expenditure Balance	-£9.4bn	+1.2 bn	-£2.1bn (-17.9%) (-67.0%) UK	To achieve no fiscal gap
	Annual average earnings of full-time working residents	£29,422	£784	£3,155 +12.0% WMCA +12.4% Eng.	£931
	Youth Claimants Aged 18 - 24	32,245 (Apr. 2020)	13,170 69.00%	-2,305 -6.7% WMCA -6.1% UK	No Claimants
	Claimant Count Aged 18-64	169,850 (Apr. 2020)	70,010 70.10%	41,415 +32.2% WMCA +36.6% UK	No Claimants
	Percentage of employees earning above UK living wage	79.30%	+3.0pp	N/A	+0.6pp

Income and Expenditure - Please note these figures are not comparable with those reported in previous years as the methodology has been updated to be completely consisteny with the ONS Country and Regional public sector finances. In previous years the analysis only focused on identifiable expenditure and the figures are now based on total managed expenditure which is made up of current expenditure (total non-identifiable/ total identifiable /total outside UK) and capital expenditure. The figures are produced by the ONS by region and these figures are subtracted from the total receipts and proportioned by population to give an estimated WMCA net fiscal balance.

Regional Outcome Indictors – full details

Outcomes	Measures of Success	Where we are now	Change over the last year	Direction of Travel Relative to UK average since 2013	Scale of the Challenge
2. Zero Hunger	Gross Disposable Household Income (GDHI) per Person	£17,752 -2018	£780	£2,639 +17.5% WMCA +16.7% UK	£21,109 GDHI per Person +£3,357 GDHI per Person
3. Good Health and Wellbeing	Healthy Life Expectancy (HLE) at Births – Males & Females	Males (M) = 59.6 years (WM 7 MET)	- 0.3 years	+0.3 years WM 7 Met 0 years UK	63.1 years
		Females (F) = 59.8 years (WM 7 MET)	- 0.3 years	- 1 years WM 7 Met -0.2 years UK	63.6 years
	Gap in employment rate for those in contact with secondary mental health services and the overall employment rate	64.00% (WM 7 MET)	+2.8 pp	+ 4.7pp WM 7 Met +2.9 pp Eng.	Below national
	Rates of suicide (per 100,000)	9.5% (Average) (WM 7 Met)	+0.3pp	- 0.5pp WM 7 Met -0.4 Eng.	No suicides - 651 suicides
	Percentage of Physically Active Adults	57.40%	-0.7pp	- 0.8pp WMCA +1.2pp Eng. (2015/16)	63.30% + 191,834 Active People
	Infant Mortality	6.7 per 1,000 Live Births (WM 7 Met)	+0.1 per 1,000 Live Births	+0.4 per 1,000 live births WM 7 Met No Change Eng.	0 Preventable Deaths

Regional Outcome Indictors – full details

Outcomes	Measures of Success	Where we are now	Change over the last year	Direction of Travel Relative to UK average since 2013	Scale of the Challenge
4. Education	Percentage of children achieving a good level of development at the end of reception	68.60% (WM 7 Met)	+0.3pp	+18.9pp WM 7 Met +20.1pp Eng.	+3.2pp
	Progress 8 Score	-0.14 (Below Average)	0.02	N/A	-0.03 + 0.11 points
	NEETs aged 16-17	4,400 6.60% (WM 7 Met)	-230 -5.00%	N/A	5.50% - 711 NEETs
	No. of Apprenticeships starts	31,740	2,540 8.70%	-4,270 - 11.9% WMCA -9.5 % Eng.	84,000 +52,260 apprenticeships
	% of Working Age Population (WAP) with No Qualifications	11.30% 290,500 People	2.40% +6,000 People	- 20.0% WMCA - 72,500 People - 16.6% UK	7.9% -87,115 People
	% of WAP with NVQ1	10.50% 271,000 People	-7.50% -21,900 People	-13.10% -40,700 People - 14.6% UK	Ahead of UK
	% of WAP with NVQ2	17.40% 446,800 people	2.10% +9,200 People	+3.8% WMCA +16,400 people -4.4% UK	Ahead of UK
	% of WAP with NVQ3	16.70% 430,700 People	-5.20% -23,400 people	-1.2% WMCA -5,100 People +0.6% UK	16.8% +1,816 People
	% of WAP with NVQ4+	33.50% 861,700 people	4.40% + 36,200 People	+25.3% WMCA +174,000 People 17.5% UK	40.2% + 732,249 People

Regional Outcome Indictors – full details

Outcomes	Measures of Success	Where we are now	Change over the last year	Direction of Travel Relative to UK average since 2013	Scale of the Challenge
5. Gender Equality	Wage Gap Between Males and Females	£32,335 Males	£492 1.50%	+ 11.7% (+£3,382) WMCA +12.3% UK	Full Time Earnings: £32,882 +£547
		£24,462 Females	£1,036 4.40%	+11.0% (+£2,430) WMCA +13.5% UK	To Reach Male Full Time Earnings (UK) +£8,420
	Employment Rates by Males and Females	77.9% Males	+0.4pp	+4.4pp WMCA +3.5pp UK	To Reach the UK Male Employme nt Rate (79.7%) +23,230 Males
		66.9% Females	+1.1pp	+5.9pp WMCA +5.4pp UK	To Reach the UK Male Employme nt Rate (79.7%) +165,023 Females
6. Clean Water & Sanitation	% of Waterbodies in good condition	To be developed			
7. Affordable & Clean Energy	Households Living in Fuel Poverty	193,915 Household s 11.50%	-24,729 Household s -11.30%	-38,030 Household s -16.4% WMCA +2.3% England	No Household s in Fuel Poverty
	Amount of Renewable Electricity Generated	4.50%	-0.4pp	+1.7pp WMCA +8.8pp Eng. (2014)	Reach the England Average of 24.1%

Regional Outcome Indictors – full details

8. Decent Work & Economic Growth	Gross Value Added (GVA) per head	£25,183	£801	£4,258 +20.3% WMCA +15.8% UK	GVA per head £28,729 +£3,545 GVA per head
	GVA per Hour	£31.07	£0.93	£3.63 +13.2% WMCA +8.8% UK	GVA per hour £33.65 +£2.58 per Hour
	GVA per employee	£56,877	£2,639	£7,014 +14.1% WMCA +10.1% Eng.	GVA per employee £63,261 +£6,384GVA per employee
	GVA in transformational sectors	£76.6bn	+£2.8bn	+15.9bn +26.2% WMCA +20.5% UK	£147bn WMCA SEP Ambition +£70.4bn GVA
	No. of Enterprise Births	24,640 Enterprise births 59 per 10,000 population	-3,315 Enterprise births	5,425 Enterprise births +28.8% WMCA +10.3% UK	Ahead of UK
	Five - year Enterprise Survival Rate of businesses born in 2012	42.10%	-1.4pp	N/A	42.40%
	Jobs in Transformational Sectors	1.2m	-4,495 jobs	148,525 +14.7% WMCA +12.7% Eng.	1.5m WMCA Transformational SEP Ambition + 336,775 Transformational Jobs
	Total Jobs	1.8m	-16,000	+172,000 Jobs +10.3% WMCA + 10.2% Eng.	2.4m WMCA SEP Total Jobs Ambition +554,000 Jobs
	Employees working satisfactory hours	82.90%	N/A	N/A	To Stay Above the UK Average
	Number of FDI Projects	131	-9 -6.4% WMCA -14.0% UK	-7 -5.1% WMCA +0.5% UK	
	Number of Jobs from FDI Projects	4,666	-3,267 -41.2% WMCA -24.1% UK	-2,748 -37.1% WMCA -13.2% UK	

Regional Outcome Indictors – full details

Outcomes	Measures of Success	Where we are now	Change over the last year	Direction of Travel Relative to UK average since 2013	Scale of the Challenge
9. Industry, Innovation & Infrastructure	Broadband Connectivity	96.50% 1.8m premises	-0.2 pp		100% coverage
	Percentage of Innovative Businesses (Regional)	52.00% -2017	-0.3pp -2015	+8.6pp WM +4.6pp UK	
	Traffic Collisions	5,564 WM 7 Met. (2018)	-291 (-5.0%) WM 7 Met.	+449 (+8.8%) WM 7 Met.	Reduce the Number of Collisions
	% residents able to access 3 or more strategic centres including Birmingham City Centre, accessible by public transport within 45 mins travel time in the am peak	43% (WM 7 Met)	+0.9 pp	- 1.6 pp (Oct 2013 vs Jan 2019)	75% + 32pp
	Bus time reliability	To Be Developed			
	Total Dwelling Stock Estimates	1,735,709	16,515	+73,214W MCA	172,514

Regional Outcome Indictors – full details

Outcomes	Measures of Success	Where we are now	Change over the last year	Direction of Travel Relative to UK average since 2013	Scale of the Challenge
10. Reduced Inequalities	Reduce % of people in top 10% most deprived areas	19.20%			10% of people
	Social Mobility (2018)	Based on 326 Local Authorities Lowest Ranked: North Warwickshire: 307 Highest Rank: Bromsgrove 48	+15 places	N/A	All the West Midland Local Authorities in the Top Quarter Ranking
	Health inequality gap by years between the most and least deprived areas	M = 8.8 years F = 8.5 years (WM 7 Met)	M = +2.6 years F = +1.2 years	M = +1.4 F = +0.1	No gap Reduce gap by 8.8 years for males and 8.5 years for females
	Ratio of median house price to median gross annual residence-based earnings	7.21	0.08	+1.35 WMCA +1.07 Eng.	
	Employment Rates by Ethnic Group	Highest: 77.5% Indians	+6.1pp WMCA	+10.4pp WMCA +6.7pp UK	
		Lowest: 51.4% Pakistanis/Bangladeshis	-2.2pp	+10.5pp WMCA +7.6pp UK	

Regional Outcome Indictors – full details

Outcomes	Measures of Success	Where we are now	Change over the last year	Direction of Travel Relative to UK average since 2013	Scale of the Challenge
11. Sustainable Cities & Communities	Mode Share of all Journeys:	i) Non-sustainable:	i) Non-sustainable:	i) Non-Sustainable:	45% car mode share
	i). Mode Share of all journeys by non-sustainable and sustainable	(Car) 68%	(Car) +1%	(Car) +4%	Car (- 23%)
	ii). Percentage of car journeys single occupancy	Sustainable: 32% ii) 73%	Sustainable: -1%	Sustainable: - 4%	
	-2018	(WM 7 Met)			
	Total Additional Affordable Dwellings	3,822 (2018/19)	353	+988 WMCA (2013/14 – 2018/19)	
	Number of Additional Affordable Rented Dwellings	1,960 (2018/19)	238	+467 WMCA (2013/14 – 2018/19)	
	Visitor Numbers	131m Visitors (2018)	+2.6% (+3.4m)	-	Increase the Number of Visitors into the Region
12. Responsible Consumption & Production	Local Authority Recycling Rates	30.5% (WM 7 Met.)	-0.5pp	-3.3pp WM 7 Met. (2014/15)	
	Tonnes of Waste Collected	1,274,588 Tonnes (WM 7 Met.)	+7,377 Tonnes	+3,529 Tonnes	Reduce the Amount of Waste produced and Collected

Regional Outcome Indictors – full details

Outcomes	Measures of Success	Where we are now	Change over the last year	Direction of Travel Relative to UK average since 2013	Scale of the Challenge
13. Climate Action	CO_2 emitted within SEP area by transport, businesses and homes	20,581 $ktCO_2$	-775 $ktCO_2$ -3.60%	-17.1% WMCA -20.2% Eng.	WMCA target: 40% reduction in carbon by 2030 from 2010
	No. of days poor air quality per year (rated 4 or higher on the Daily Air Quality Index)	37 Days WM	-9 Days		WMCA target: 1 day by 2030 -36 days
14. Life Below water	Canal Network (kms)	520km			
15. Life on Land	Increased the quantity & connectivity of green infrastructure	To Be Developed			
	Canopy Cover/Tree area as a proportion of total land area				
16. Peace, Justice & Strong Institutions	Total recorded crime (per 1,000 population)	262,188 89.9 per 1,000 population (WM 7 Met)	7.20% +7.8 per 1,000 Pop. (WM 7 MET)		Below the England average
	Proven Rates of Reoffending for Adults	28.60%	-11.60%	-14.00% -30.0% Eng. and Wales	Below the England Average
	No. of first-time entrants to Youth Justice System (per 100,000)	308 per 100,000 (WM 7 MET)	-22.80%	- 37.7% WM 7 Met - 46.9% Eng.	-70 per 100,00 first-time entrants
17. Partnerships for the Goals	To Be Developed				

Supporting documents and references

Recovery Coordination Group Initial Impact Assessment WMCA June 2020
West Midlands Industrial Strategy Sector Summaries Update Black Country Consortium Economic Intelligence Unit, June 2020
Functional Geography of the West Midlands, WMREDI June 2020 Prof Anne Green
Midlands Engine Independent Economic Review, Midlands Engine Economic Observatory 2020
Inclusive Growth Update; WMCA Board May 2019
Quarterly Monitoring Dashboard (Qtr 3 and 4 2019 and 1 and 2 2020); Strategic Economic Development Board, WMCA 2020
Investment Board Forecasts, West Midlands Growth Company June 2020
Repowering the Black Country, Black Country LEP June 2020
Covid-19 Policy Review, WMREDI June 2020

Additional Covid-19 Analysis and references can be found in the collection of:

Weekly Monitor; **Editions 1 to 17 from March 2020 to July 2020**, West Midlands Regional Economic Development Institute, University of Birmingham

Disclaimer

The contents of this document are based on the latest data available as at June 2020 and the contribution of regional partners in a fast paced environment, therefore we urge caution in its use and application

For any queries please contact the lead Authors:

Rebecca Riley R.L.Riley@bham.ac.uk
Delma Dwight Delma_Dwight@blackcountryconsortium.co.uk
Prof Anne Green A.E.Green.1@bham.ac.uk

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The West Midlands Regional Economic Development Institute
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City-Region Economic Development Institute

In partnership with: