



HM Government



West of England Local Industrial Strategy

July 2019





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Foreword

The West of England — a region renowned for its collaboration, ingenuity and creativity.

The place we want to be

The West of England is a place where ideas flourish and businesses grow, where creative, digital and high tech meet traditional industry. It is at this interface that the solutions to the challenges of the future lie. The strength of the UK in the global economy is dependent on dynamic, globally competitive, outward looking and creative places like the West of England.

Across the region's towns and cities, there is an independence of spirit and pride in the diversity, creativity and ingenuity of local communities. Diversity is valued as an important contribution not only to social cohesion, but also to the success and vibrancy of the economy.

From Brunel and Concorde, to the latest developments in robotics and virtual reality, the West of England has long been at the cutting edge of technology. The region hosts the biggest aerospace cluster in the UK, financial and professional services are thriving and the region supports a world-renowned creative sector. From globally-recognised studios and broadcasters to smaller independent producers, West of England businesses generate a huge range of content for all types of platforms, all over the world.

Growing the talent our region needs

The region's highly skilled workforce is fed by four prestigious universities with retention rates among the highest in the country, fostering original ideas, and helping to make the West of England a world-leader. Through partnerships that are fuelling innovation and breaking down barriers, the universities, start-ups and multinationals work together to seize opportunities, harness expertise and think differently.

The West of England's ingenuity makes it a major force in the global marketplace. Historically, trade put the region on the map and it remains a critical gateway to the nation and to the world. At the crossroads of major motorways and rail networks, with an international airport and port, the region provides the right environment for businesses to thrive and grow.

Produced by the region, for the region

Developed by leaders and businesses from across the region, working closely with government, this Local Industrial Strategy draws on the unique strengths of the people and places across the West of England. It sets out the region's ambition to be a driving force for clean and inclusive growth.

At the heart of this approach are four key priorities:

- ▶ **Cross-sectoral innovation:** Strengthening the region's innovation ecosystem and driving productivity, by developing measures that will improve coordination and enable testing at scale. This includes a new Global Centre of Innovation Excellence and a new West of England Network of Living Labs, to test and prepare user-centred products and services for market. This will further enhance the region's reputation, nationally and internationally, as a place of innovation and collaboration.
- ▶ **Inclusive growth:** We want everyone who lives and works in the region to have the chance to both contribute to, and benefit from, its economic success. The West of England will work to help all residents achieve their full potential by ensuring that they are skilled and work-ready. With the right employment and skills provision, businesses will be able to find the talent they need to thrive. Improved physical and digital infrastructure will efficiently and seamlessly support this, linking everyone to jobs, training and services.
- ▶ **The productivity challenge:** The region is home to successful businesses, with strong growth of scale-ups and high rates of business survival.

This Local Industrial Strategy will support productivity and business growth by setting a West of England Productivity Challenge to encourage all businesses to improve performance and sustainability. It will promote uptake of modern technologies, innovation, management practices and cleaner business models, and a drive to increase exporting across the small and medium-sized business base. Green business measures, such as long-term sustainability and improved energy efficiency, are central to the region's ambitions for clean growth.

- ▶ **Innovation in infrastructure delivery:** The West of England is the first region in the UK to develop a joined-up strategic planning approach to set out how it will meet its housing and transport needs over the next 20 years. The Joint Spatial Plan and the supporting Joint Local Transport Plan set out a vision where, by 2036, the West of England will be one of Europe's fastest growing and most prosperous regions. The region will harness its powerful innovation assets to deliver these plans in a sustainable way, taking action without increasing carbon emissions. The region's commitment to tackling climate change and ensuring quality of life for current and future residents runs through this Local Industrial Strategy.

Through earlier measures such as insulating homes and local renewable energy generation, the region's carbon emissions have reduced by 32 per cent since 2005. At the same time, the economy has grown by 45 per cent, demonstrating that commercial growth and clean growth can go hand-in-hand.

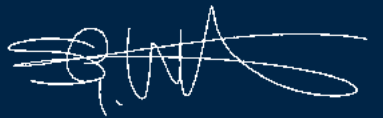
Working together to create a better future for all

The West of England is continuing a centuries-old tradition of innovation, breaking down the silos that have held industries apart and exploring the possibilities at the frontiers between them. As the world changes around us, we need a plan that helps us to stay ahead of the curve, embracing new technology and creating a stronger economy and a better place to live and work for all.

Developing this Local Industrial Strategy has been a collaborative effort and has brought us closer together, re-energising and re-focusing our region. We have a plan that will prepare us for a future where technology will be doing things that we haven't even dreamt of yet. Our capacity to face the future involves our people, businesses, regional leaders and government working together so that we continue to succeed.



Rt. Hon. Greg Clark MP
Secretary of State for Business
Energy & Industrial Strategy



Professor Steve West
Chair of the West of England
Local Enterprise Partnership



Tim Bowles
West of England Mayor

Executive Summary

The West of England has a strong tradition of innovation. It is a place where ideas flourish and businesses grow, where creative, digital and technology meet traditional industry. It is at this interface where the solutions to the challenges of the future lie.

Securely founded in robust evidence, this Local Industrial Strategy represents a strong partnership between local and national partners and a recognition of the shared ambition and opportunity for the region. In addition to working closely with national government, the West of England Combined Authority (WECA) and the Local Enterprise Partnership have collaborated with a wide range of partners across local government, business and universities, together with the voluntary and community sector. The result is a Local Industrial Strategy which identifies the strengths and challenges of the West of England and plans the foundations upon which the region will thrive, for the benefit of all its residents.

The West of England today

The West of England is already flourishing. Rich cultural heritage and attractive natural assets sit alongside thriving businesses and a diverse range of industrial clusters, which are often at the forefront of innovation. This partnership of cultural, natural and economic assets mean that people live, study and work in the region. However, this does not mean the region is inward facing. The West of England plays a central role in the UK economy, and is well connected along

the M5/M4 corridor to London, Wales and Birmingham. It also has important international connections through its port and airport. The West of England is committed to continue working collaboratively across the national economy to strengthen transport, business, and innovation links.

The West of England has three distinct and overlapping 'sector strengths' that drive innovation in the region. They are supported by their supply chains and the region's four world-class universities: advanced engineering including aerospace; creative, cultural and digital industries; and financial, business and legal 'tech' services. This Local Industrial Strategy looks to build upon these strengths to support further cross-sectoral innovation.

Despite its strengths, the West of England recognises that there are still challenges to be overcome if the region is to meet its full potential. Output per person has grown more slowly than the rest of the UK since 2009 and the region's population is growing faster than the UK average. Whilst this will potentially provide the region with a large and diverse future workforce, it will also increase pressure on the existing transport and housing infrastructure.

Therefore, it is important that economic growth and success is shared across the region and, conscious of the wider environmental challenge, is clean.

This Local Industrial Strategy recognises these strengths and challenges. It will aim to both maximise the West of England's many assets and also remove barriers to growth, to ensure that the West of England's economy will be fit for the future. In doing so, it will support the aims of the national Industrial Strategy, government's long-term plan to boost productivity and earning power across the United Kingdom.

West of England priorities

The robust evidence base underpinning this Local Industrial Strategy has identified four main priorities: cross-sectoral innovation; inclusive growth; addressing the productivity challenge; and delivering innovation in infrastructure delivery. These have been recognised as key to the West of England's economy, and are at the heart of the West of England's approach.

Cross-sectoral innovation

Fostering cross-sectoral innovation from research through to commercialisation.

The West of England has long been a leader of innovation, born out of its substantial innovation ecosystem of major research-intensive businesses, four universities, specialist engineering innovation centres, growing numbers of innovative small and medium-sized enterprises (SMEs) and a diverse economic base that brings together

complementary strengths in a broad range of specialisms. This is driven in particular by three significant sector strengths: advanced engineering including aerospace; creative, cultural and digital industries; and financial, business and legal 'tech' services. The opportunities that arise at the interface between these sectors are particularly valuable.

The West of England's ambition is to be recognised globally as a place of innovation, where leading designers, engineers, scientists and entrepreneurs combine with industry to create an innovation ecosystem that drives research, development and commercialisation - both within and across sectors.

This Local Industrial Strategy sets out how the West of England will focus and coordinate the region's pioneering innovation and sector strengths to maximise collaborative innovation. The West of England, in partnership with local partners, will develop a model for a Global Centre of Innovation Excellence (GCIE) to lead this work, and help address some of the barriers to success.

Alongside this, the West of England will consult with local partners and government to design a locally-led model of a network of Living Labs. Overseen by the GCIE, this programme will aim to test, develop and prepare for market new products and services. Government will use its expertise to provide input into the design of the GCIE model and network of Living Labs.

Inclusive growth

Ensuring that growth is inclusive, with a focus on opportunities for employment and progression for all.

Ensuring that economic growth is inclusive is at the heart of the West of England's ambition and vision for the region's future. It recognises that there are significant barriers to certain communities which constrain access to the opportunities the region offers.

The region has a high proportion of young people not in education, employment or training (NEET), a disparity in skills levels and opportunity, and a decreasing take-up of apprenticeships, all of which need to be addressed. The region's infrastructure also provides challenges with increasing house prices and rents and significant congestion limiting opportunity.

The West of England has already taken action to improve inclusive growth through the devolved adult education budget (AEB), which is being reformed to maximise its impact for the region's residents, business and communities.

This Local Industrial Strategy will build on this to target support in communities facing specific challenges, bringing together a broader range of budgets and interventions linked to addressing careers advice, worklessness, in-work progression, and both digital and physical infrastructure to better connect people to opportunities as set out in the West of England Joint Spatial Plan and Joint Local Transport Plan.

Government will work with the West of England to ensure interventions are focused in the right way, at the right people and to ensure effective partnership working to address national and regional priorities.

Productivity challenge

Addressing the productivity challenge, including adopting new technology and management practices and supporting businesses to trade.

The West of England is home to a range of innovative, dynamic and fast-growing businesses. Despite this, the region faces a productivity challenge. The growth of a large number of businesses in the region remains slow, with productivity gains held back by slow uptake of technology and modern management practices. The region has a particularly pronounced long-tail of lower productivity firms, which are holding back the region from reaching its economic growth potential.

The West of England aims for businesses of all sizes in its region to fulfil their potential, improving performance, resilience and sustainability, and enabling them to grow and offer a wide range of good quality jobs. It will ensure that businesses of all types and sizes have access to the space, networks and skills they need to thrive.

The West of England will therefore encourage greater access to economic opportunity and more inclusive supply chains. To deliver the productivity challenge the West of England will continue to co-ordinate regional business support services and build on Growth Hub funding and provision. This will ensure that specialist advice is available, tailored to different sectors and business life stages.

Government welcomes the West of England's approach to their productivity challenge and will reflect on and discuss opportunities to maximise its impact, including through coordination with Be the Business and steps that can

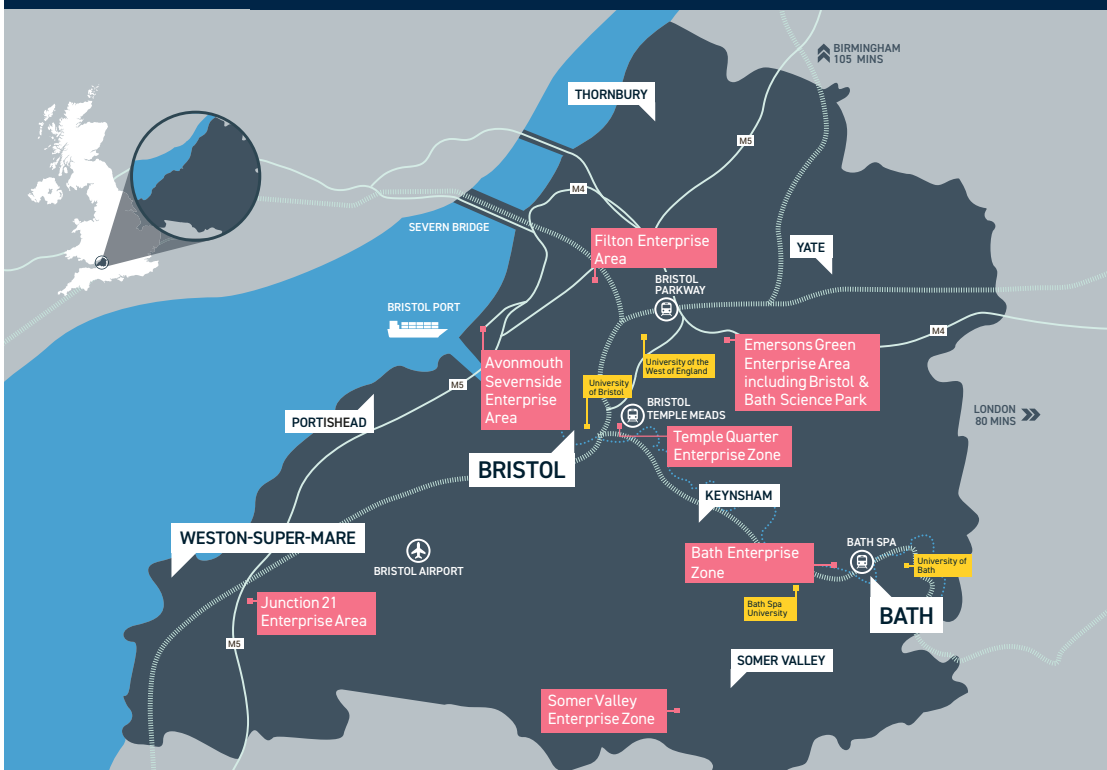
be taken to strengthen the Growth Hub and increase the productivity of the region's businesses.

Innovation in infrastructure delivery

Capitalising on the region's innovative strengths to deliver the infrastructure necessary for future growth.

Having the right infrastructure in place - both physical and digital - is key to unlocking productivity in the region, connecting rural and urban communities, and driving forward clean and inclusive growth and maximising the opportunities of the smart region.

Figure 1: The West of England Local Enterprise Partnership geography



The West of England's ambition is for the region's residents to be able to move seamlessly around the region, using affordable transport solutions that minimise the impact on the environment.

The West of England benefits from its strong road and rail links and its international connectivity. However, the region's infrastructure is coming under increasing pressure, making it harder for residents to move around the region for work and leisure.

Using its innovation assets, the West of England is looking to develop a smart region more in tune with the needs of its residents, one that uses digital expertise to improve connectivity and that can provide homes that can house the ageing population for longer and can be built more cheaply, quickly and more energy efficiently.

The region will also embed innovation in action to tackle the infrastructure challenges (including action focused on the future of mobility, mobility as a service, houses for an ageing population and modern methods of construction).

The West of England is exploring how it can address mobility challenges through a Mobility as a Service pilot as part of their network of Living Labs. The West of England Smart Home will aim to set the bar for new housing design to enable more people to stay in their homes for longer, development of which will also form part of the Living Lab programme of work.

The actions identified in this strategy will support the delivery of government's Grand Challenges including the need to drive down carbon emissions.



Strengthening the foundations of our economy

Ideas

Contributing towards reaching the national ambition of 2.4 per cent of gross domestic product (GDP) investment in research and development (R&D) by 2027, by ensuring innovative businesses can access the skills they need and that the innovation ecosystem is supported to maximise the benefits for the region and the UK.

The West of England has a long history of supporting new ideas, new ways of doing things, new products and services and new business models. Its four universities have a range of research specialisms, and the region also benefits from a substantial number of applied research and technology centres, through collaboration between universities and industry. The region's ideas are also driving business: spinouts and tech start-ups are rapidly growing in number thanks to some of the best incubator support in the world. Government Sector Deals will create significant opportunities to boost productivity, employment, innovation and skills both nationally and in places with a significant presence of relevant sectors.

In particular, the low carbon energy sector is a space in which the West of England thrives. It has flourishing businesses and commercial expertise, in addition to having strong capabilities in the aerospace and advanced manufacturing sectors. This expertise, together with digital skills and high-speed data infrastructure, means that the West of England is well placed to take up the opportunities of Smart Energy Technology, and benefit from the opportunities arising from the global transition to clean growth.

To support the continued development of ideas within the region, the West of England Employment and Skills Plan recognises the importance in developing an environment that cultivates ideas and delivers the high-level skills some of the region's sectors require.

The government has already agreed a series of Sector Deals in partnership with industry that will support the development of ideas and increase productivity in the West of England including in aerospace, artificial intelligence, creative industries, nuclear and offshore wind.

People

Delivering the West of England Employment and Skills Plan which sets out an action plan to support residents to achieve their potential and businesses to find the skills and talent they need to innovate, add greater value and thrive. The people and communities across the West of England are the region's greatest asset.

It is a highly skilled region that attracts a diverse range of people, and has a strong, dynamic workforce that drives growth and productivity.

However, it is not without challenges. The population of the West of England is growing faster than the England average, with the 65+ population expected to grow by 24 per cent by 2030. Supporting older workers who need or wish to remain in work will become increasingly important. Moreover, the health of people in the West of England varies between the most and least deprived areas. The region is focused on improving the health of the workforce, improving quality of life, improving productivity and reducing staff turnover.

This Local Industrial Strategy also recognises there are challenges in the region's skills provision. The region's population is well qualified and there is a strong demand for high-level skills in particular. However, skills shortages and gaps remain at all skill levels which are impacting productivity and preventing the effective functioning of essential public services.

Building on existing provisions and those outlined elsewhere in the strategy, the West of England is committed to delivering on the ambitions of the Employment and Skills Plan, which has been developed alongside this Local Industrial Strategy. As part of this, the West of England will work with government through the actions identified in this strategy to support the effective delivery of T Levels and to drive uptake and diversifications of apprenticeships to meet the demands of employers in the region and improve equal opportunities for all residents.

Infrastructure

Delivering the region's ground-breaking strategic transport and spatial plans including new homes and jobs properly supported by infrastructure.

The West of England's housing and transport infrastructure has come under increasing pressure over recent years, constraining growth and making it harder for residents to move around the region for work and leisure.

House prices and rent levels have become increasingly unaffordable, with house prices rising to 9.3 times average earnings. Congestion is also increasing, with an impact on commuters and the environment. Employment locations are also in need of better infrastructure, with some being poorly served by physical and digital infrastructure. This Local Industrial Strategy sets out the West of England's significant ambition to improve connectivity and housing through clean and inclusive growth.

The region is already making headway. Their ground-breaking Joint Spatial Plan (JSP) aims to secure the delivery of high-quality and sustainable places to live. This sits alongside the Joint Local Transport Plan (JLTP) which has directed government and local funding into major transport improvements to provide the necessary infrastructure to unlock and accelerate the development of new homes, as well as working to promote more sustainable modes of transport such as cycling and walking.

To ensure the region's infrastructure drives forward productivity, the West of England will embed innovation in tackling major infrastructure challenges following the scale of ambition set out in the JSP and JLTP. These documents are supported by the Green Infrastructure Strategy, which acknowledges the significant challenges of climate change and the necessity for clean and sustainable growth through Green Infrastructure.

Committed to tackling climate change, the region will look to contribute to the Clean Growth Grand Challenge mission. As set out in the West of England Strategic Energy Framework, the West of England looks to build on energy strengths to deliver a diverse, resilient, and affordable energy system that enables economic growth whilst reducing greenhouse gas emissions.

This strategy offers an opportunity to build on the existing government support in this space such as the Transforming Cities fund, funding for the South West Energy Hub and discussions with Natural England around the promotion of Green infrastructure.

Business environment

Establishing the West of England Scale-up Programme to capitalise on a rich and diverse business support ecosystem, further targeting businesses with the potential for high-growth and providing the support they need to flourish. A refocussed inward investment service will target high value foreign direct investment to add to the region's competitiveness and productivity.

The West of England has a thriving business environment that encourages companies to grow. Its scale-up sector is flourishing, supported by a strong network of incubators and shared working spaces, a highly-skilled workforce, and a diverse and collaborative culture. The region wants to cement its strength in nurturing high-growth businesses and ensure this is sustained beyond start-up. However, there is a gap for finance and investment into innovative scale-ups, and there are difficulties in finding appropriate working space and employees with the required skills.

This Local Industrial Strategy sets out how West of England will tackle these obstacles to growth, to ensure all businesses are supported to reach their potential.

The West of England will build on the region's innovative Scale-up Generator to deliver a high impact enterprise scale-up programme, including specialist coaching support, space for business growth, and a West of England scale-up investment fund. Working with the British Business Bank (BBB), the region will help SMEs to access the finance they need to grow their businesses through considering the role of the BBB's current programmes.

The region will also work with partners to develop a tailored programme of support to address the specific needs of the different groups of businesses, and will call on the support of businesses to help to enhance the impact of their supply chains. It will also improve local government procurement to increase market access, in line with Scale-up Taskforce recommendations.

The West of England will work with government to attract further high-value inward investment. The West of England will reposition their Invest Bristol & Bath (IBB) service to maximise its impact on productivity by focusing on significant investment opportunities. It will work more closely with the Department for International Trade (DIT) to provide the best service to potential investors and exporters

and help raise the awareness of the region's business opportunities and economic assets overseas through Her Majesty's Trade Commissioners.

Places

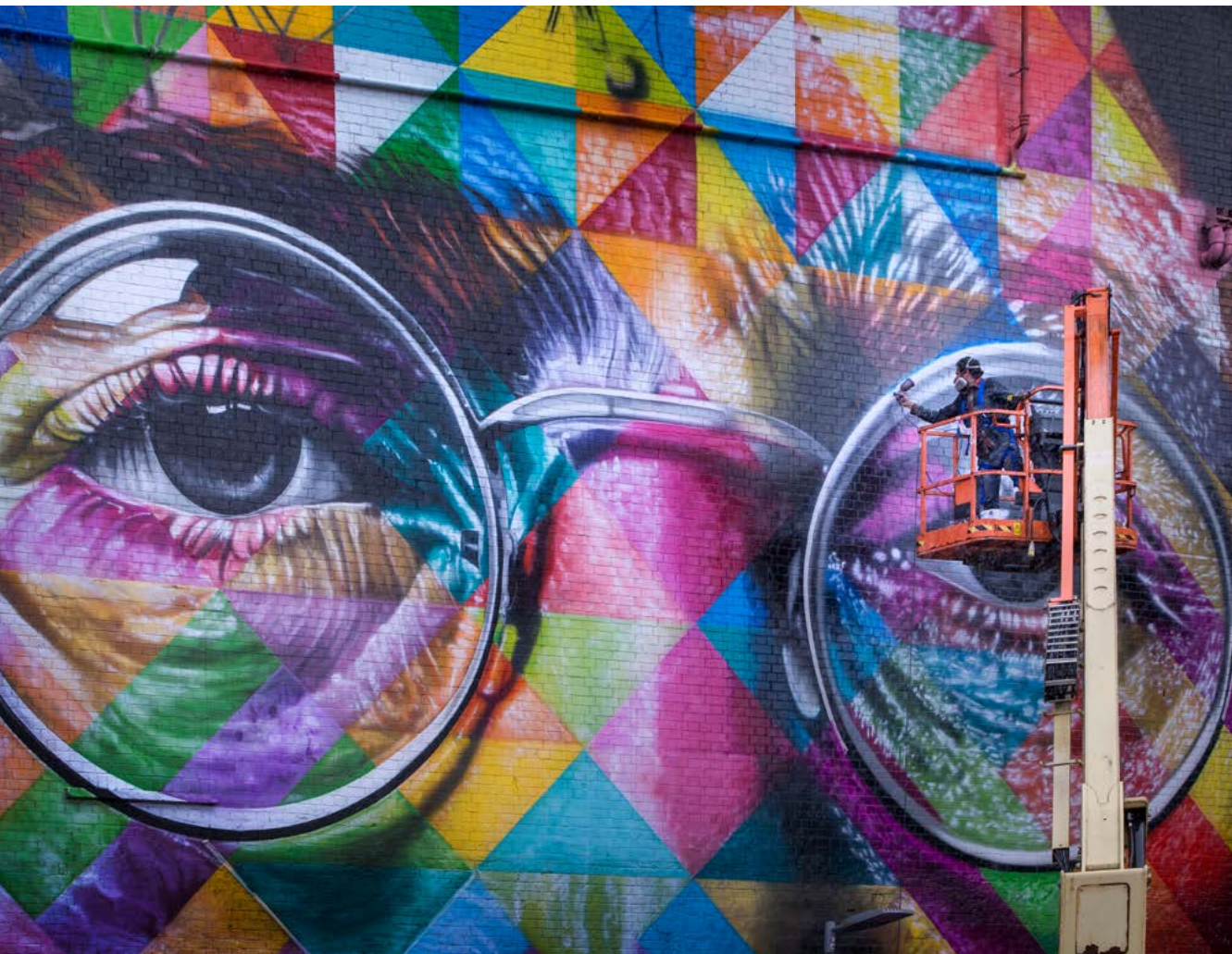
Supporting the development of sustainable, thriving places that offer opportunities and enhance the quality of life for communities. This will include helping businesses find premises to suit their changing needs and developing an understanding of what prevents some locations attracting businesses.

The West of England is a vibrant, diverse and creative region. It includes the two thriving cities of Bristol and Bath along with diverse towns and communities. As a whole, it is well-recognised as a national and international cultural and tourist hot spot, with a vibrant mix of urban, rural and coastal areas providing an exceptionally diverse cultural ecology. Quality of place is crucial to economic performance as well as social cohesion and well-being.

The West of England is working in partnership with Arts Council England to develop a Cultural Strategy to build on the existing strong offer. The region is also exploring opportunities to strengthen existing joint working on tourism to maximise its capacity to support the ambitions set out in the Tourism Sector Deal.

However, whilst overall the West of England is a prosperous region, this picture is not universal; there are pockets of high levels of deprivation, meaning the region's strengths are not benefiting all. This Local Industrial Strategy will aim to address this challenge, in addition to maximising its assets, to support the development of sustainable, thriving places that offer opportunities and enhance the quality of life for communities across the region.

Building on the regional Love our High Streets fund, the West of England will pilot innovative ways in which to diversify commercial activity, help to unlock and connect locations and sector activity through the provision of the necessary infrastructure, and encourage a mix of employment premises to facilitate innovation. To do this, it will also explore opportunities through national initiatives such as the Future High Streets Fund and the Stronger Towns Fund which could support local areas' plans to make high streets and town centres fit for the future.



The West of England's priorities

This Local Industrial Strategy is underpinned by a robust evidence base that explores the strengths of the region and the challenges it faces.

The evidence base was developed in collaboration with partners across the region and highlighted four key priorities partners agreed should be at the heart of the West of England's approach:

- ▶ fostering cross-sectoral innovation from research through to commercialisation;
- ▶ ensuring that growth is inclusive, with a focus on opportunities for employment and progression for all;
- ▶ addressing the productivity challenge, including adopting new technology and management practices and supporting businesses to trade; and
- ▶ capitalising on the region's innovative strengths to deliver the infrastructure necessary for future growth.

Across these priority areas and the foundations of productivity set out in the national Industrial Strategy, the West of England is focused on ensuring actions support sustainable, clean economic growth and tackle climate change.

The West of England Local Industrial Strategy, focused around these priority areas, will secure the region's position as the place to develop and test innovative solutions to future challenges.

It will help to raise productivity and drive economic growth in a way that is sustainable and offers opportunity to all residents. It will support the aims of the national Industrial Strategy, government's long-term plan to boost productivity and earning power across the United Kingdom.

Cross-sectoral innovation

This Local Industrial Strategy will confirm the region's position as a globally-significant innovation ecosystem. The combination of a diverse economic base, incorporating a number of significant sector strengths and four universities with world-class teaching, research or community engagement, together with the geographical size of the region, supports interaction between sectors. This has resulted in world leading innovation from Concorde to the application of virtual reality in business. It is at the interface between the creative, digital and technology industries, and more traditional sectors of activity where many of these innovations occur.

The West of England will strengthen the innovation ecosystem, improve coordination and ensure innovation can be tested at scale.

To support this cross-sectoral innovation and drive productivity the region will:

- ▶ establish a Global Centre of Innovation Excellence to focus the region's pioneering innovation and mobilise it to address national and international challenges such as an Ageing Society and Clean Growth; and
- ▶ establish a West of England Network of Living Labs, a programme to test, develop and prepare new products and services for market. This will happen in a collaborative and user-centred way, with focus on the four Industrial Strategy Grand Challenges AI and Data, Clean Growth, Ageing Society and Future of Mobility and beyond.

Inclusive growth

The West of England is determined to ensure that all residents have the chance to both contribute to and benefit from the region's success. The West of England wants to remain a place where businesses are keen to locate, where people want to live and where residents have aspiration.

For many in the region the picture is already very positive, but experience varies significantly. Inclusion promotes a diverse workforce, sparking creativity and innovation and contributing to increased productivity. It helps create strong communities and tackle barriers to community integration. But inclusion does not happen without action. There are already steps in place but the Local Industrial Strategy will build on this by:

- ▶ targeting support in communities facing challenges. The region will identify a small number of places and communities where levels of deprivation are higher. It will bring together and better coordinate a broad range of existing budgets and interventions in those communities to test the impact of aligning the work of local and national partners. This will go beyond the region-wide approach to infrastructure investment that is already in place. The intention is to have a demonstrable impact on indicators such as engagement in the labour market, NEET rate and health inequalities;
- ▶ delivering the West of England Employment and Skills Plan, which sets an ambition to ensure people are skilled, healthy and able to access a ladder of opportunity to achieve their potential. This will be fundamental to driving inclusive growth. The plan also reiterates the ambition of the region to ensure employment and skills provision supports businesses to find the skills and talent they need to thrive; and
- ▶ setting out the ambition that the region should have the physical and digital infrastructure in place to link people to jobs, training and services in ways that are safe, affordable, accessible, sustainable and low carbon.

Productivity challenge

The West of England is home to a diverse range of innovative, dynamic, and fast-growing businesses.

The region creates successful businesses, with strong growth of scale-ups and high rates of business survival. However, the overall rates of start-up are lower than average, the record on exporting is mixed, and the national challenge of a 'long tail' of low productivity firms is particularly acute here.

To address this the West of England wants to ensure that businesses of all types and sizes have access to the space, networks and skills they need to thrive. Businesses must be able to exploit the productivity benefits of adopting new technology, management and leadership practices and increased exports.

In alignment with the ambition of the Clean Growth Grand Challenge, which aims to maximise the advantages from the global shift to clean growth for UK industry, the West of England will also support firms to transition to low carbon business models, reducing costs and building long-term sustainability. This recognises that innovative 'green' business approaches and energy efficiency measures can help boost productivity by reducing costs and increasing employee wellbeing.

The Local Industrial Strategy will support productivity and business growth by:

- ▶ setting a West of England Productivity Challenge to tackle low productivity by encouraging all businesses to improve performance and sustainability. This will promote uptake of modern technologies, innovation, management practices and cleaner business models, and drive increased exporting amongst small and medium-sized businesses; and
- ▶ encouraging greater access to economic opportunity and more inclusive supply chains through encouraging communities to engage with business and building on progress to widen access to public procurement for small businesses.

Innovation in infrastructure delivery

The West of England is the first region in the UK to develop a joined-up strategic planning approach to set out how the region will meet its housing and transport needs over the next 20 years. The Joint Spatial Plan and the supporting Joint Local Transport Plan set out a vision where, by 2036, the West of England will be one of Europe's fastest growing and most prosperous regions with the gap between disadvantaged and other communities closed and a rising quality of life for all.

The West of England will harness its powerful innovation assets to:

- ▶ develop a 'Smart Alliance' of local partners which will enable a step change in the region's ambitions for a world class digital infrastructure to underpin and enable work to deliver this Local Industrial Strategy's vision for a Smart region and to facilitate the development of a West of England Network of Living Labs; and
- ▶ embed innovation in action to tackle the region's infrastructure challenges (including action focused on the future of mobility, mobility as a service, houses for an ageing population and Modern Methods of Construction).

Clean growth

Commitment to tackling climate change and ensuring quality of life for current and future generations is embedded throughout this Local Industrial Strategy, recognising the opportunities from the global shift to clean growth. It is reflective of a widely recognised environmental conscience that is part of the identity of the place. For example:

- ▶ proposals to develop a pipeline of work for the Global Centre of Innovation Excellence and West of England Network of Living Labs looking to address clean growth challenges;
- ▶ ensuring communities are connected to jobs, training and services in a sustainable and low carbon way, addressing air quality and improving health;

- ▶ supporting businesses to drive productivity through adopting new clean technology and energy efficiency measures; and
- ▶ investment in the right infrastructure, that reduces energy demand and carbon emissions whilst being resilient to the impacts of climate change.

The West of England's approach

Development of the West of England Local Industrial Strategy has been a collaborative effort, led by the West of England Combined Authority and the Local Enterprise Partnership, and involving a wide range of partners across local government, business and universities, together with the voluntary and community sector. Extensive research has been carried out to explore the foundations of productivity in the region, including in-depth research into particularly innovative sectors and the Grand Challenges. This evidence, published in February 2019, provided a basis of common understanding for discussion on the strategic challenges facing the region. Through workshops and online engagement, over 100 organisations from across the region have had input into development of the strategy. These discussions have led to clear understanding of the region's priorities and the shaping of a collective approach to meeting them.

Cross-sectoral innovation

The West of England has long been a leader of innovation. From Brunel and Concorde to the pioneering application of haptic technology in virtual reality.

Innovation in the West of England is driven by the combination of: designers, engineers, scientists, creatives and entrepreneurs; high value research and development; and industrial strengths in engineering, digital tech, creative and professional services. Together they make the region unique.

The region's substantial innovation ecosystem includes major research-intensive businesses and their supply chains, four universities with outstanding teaching, research or community engagement, specialist engineering innovation centres, growing numbers of innovative small and medium-sized enterprises (SMEs) and a diverse economic base that brings together complementary strengths in a broad range of specialisms.

Business research and development spend is above the national average at £1,022 per employee compared to £811 in England and demonstrates the research-intensive nature of industry within the region. Science and technology account for a quarter of all jobs, having risen since 2009.

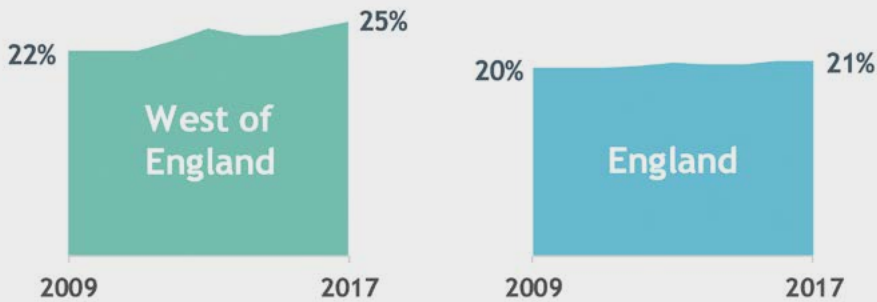
It is the 'place' that makes this ecosystem thrive. As set out in the SQW report on the Bristol and Bath Innovation Cluster, the size of the region is 'small enough and big enough' for cross-sectoral collaboration.

The West of England's ambition

The West of England is recognised globally as a place of innovation, where leading designers, engineers, scientists, creatives and entrepreneurs combine with industry to create an innovation ecosystem that drives research, development and commercialisation - both within and across sectors.

This Local Industrial Strategy sets out how the West of England will nurture cross-sectoral collaboration, research, development and innovation to drive productivity for the region and the UK as a whole.

Figure 2: Science and technology accounts for a rapidly increasing proportion of total employment



Sources: Business Register and Employment Survey, ONS; Science & Technology SIC Classifications, ONS

The attractiveness of the region as a place to live, work and study means people are attracted and remain. The region is renowned for its highly networked, collaborative, open and 'edgy' culture. The combination of innovation assets, research intensive industry, supply-chains, a diverse population and cultural assets set the region apart and create a blend of innovation and creativity that is unique to the West of England.

Sector Strengths

The West of England cross-sectoral innovation ecosystem is driven by three distinctive and overlapping sector strengths and their supply chains: advanced engineering including aerospace; creative, cultural and digital industries; and financial, business and legal 'tech' services. These sectors are globally significant, but the opportunities that arise at the interface between these sector strengths are particularly valuable.

Advanced engineering and aerospace

The West of England is a high-value engineering and design heartland, with major international businesses such as Airbus, GKN, BAE Systems, Rolls-Royce and Boeing. Their supply chains are leading the way in aerospace research, development and design, feeding the manufacture of aircraft, helicopters, military transport, satellites and communication systems across the country and on a global scale. 14 of the world's 15 major aerospace giants have bases in the wider South West centred on the cluster in Filton, South Gloucestershire. This leading engineering design capability is a crucial part of the UK aerospace system and anchors the aerospace sector within the UK. The sector accounts for over 28,000 jobs in the West of England.

Case Study: History of aerospace in the West of England

High-value engineering and design capability is grounded in the history of the West of England. The origins of the Bristol aerospace industry can be traced back to the early 1900s when the British Aeroplane Company (BAC) was set up in Filton with the aim of manufacturing aircraft commercially. Two World Wars generated considerable demand for aircraft and the new business grew quickly. Eventually BAC became BAE Systems and Airbus, Rolls-Royce and GKN all have a direct lineage to BAC and

Filton. In the 1960s and 70s, the Bristol aerospace industry based around Filton Airfield played a significant role in the design and development of leading aircraft such as Concorde. The wings, integrated fuel systems and landing gear for nearly every Airbus commercial aircraft in its 50 year history have been designed and developed in Bristol, as well as the manufacture of military aircraft wings. It continues to be a world centre of excellence in future wing technology.



Creative, cultural, and digital industries

The Creative Industries Sector Deal describes the West of England as a 'globally significant, high-growth creative cluster'. It forms a hugely dynamic part of the West of England innovation ecosystem; and works as a catalyst, providing imaginative, artistic and inspired solutions to challenges across many different industrial sectors.

The UK Creative Industries have been one of the fastest growing industrial sectors for the past decade and this is reflected in the West of England, with 27 per cent growth in digital and creative employment between 2015 and 2017. The ability to combine creativity and technology is a significant strength and Bristol is one of only two cities outside London which feature in the top 10 for both creative and high-tech clusters.

Bristol is one of the BBC's three key sites, along with London and Manchester and the BBC Natural History Unit is a core part of the region's production activity. It will also shortly be home to a Channel 4 Creative Hub. Bristol and Bath have been cited by Tech City UK (2017) as the third largest and the most productive tech cluster in the UK; with over 36,000 digital workers to date and an £8.1bn digital tech turnover.

Creative and cultural industries

Creative technology is a growing and distinctive strength for the region with a number of nationally significant projects underway:

- ▶ Bristol-based Aardman Animations are part of the successful consortia awarded funding by UK Research and Innovation through the Industrial Strategy Challenge Fund as part of their 'Audiences of the Future' programme to explore cutting-edge and immersive experiences; and
- ▶ WECA has secured funding from the Department for Digital, Culture, Media, and Sport to pilot a two-year Creative Scale-Up programme that aims to help creative firms access finance through an intensive business readiness support programme that will commence in autumn 2019.

The region's four universities play a pivotal role in the creative sector via research, investment and knowledge sharing. A successful bid was led by the University of the West of England to become one of eight Arts and Humanities Research Council creative clusters - a partnership aiming to improve the performance of the creative industries in the region, bringing together the four universities and industry partners to develop understanding about user engagement with new platforms including 5G connectivity, virtual and augmented reality.

Case Study: Open Bionics

Open Bionics combine advanced robotics with Disney designs from the Star Wars, Marvel and Frozen universes to deliver the Hero Arm - affordable, assistive devices that enhance the human body and

turn children with limb differences into bionic heroes. They have produced the world's first medically certified 3D-printed bionic arm, with multi-grip functionality and empowering aesthetics.

Financial, business and legal 'tech' services

The West of England has a vibrant professional services cluster, employing 58,000 people, and these businesses are increasingly harnessing the region's digital expertise to develop new products and ways of working. Bristol is home to the largest cluster and its diverse industry offering is coupled with a burgeoning fin-tech community. Financial and related professional services make a significant contribution to exports, which for the wider south west were valued at £4.6bn in 2016, a 19 per cent increase from 2015. The region's strength in digital technology is being applied by financial services firms and legal and tax specialists, as well as in new and emerging markets such as blockchain and in supply chain technology for recruitment, specialist marketing, and data visualisation.

In addition to these existing and well-established strengths, other sectors are also growing at pace. For example, the number of health and life science businesses has increased by 25 per cent in the last three years, in line with the national average.

This growth has built on the strengths of university research and the opportunities offered by the application of digital tech. Co-location with the region's strong sectors is accelerating research, development and commercialisation within the life sciences sector, especially health tech robotics, and has the potential to set the region apart. The region is also home to world leading companies developing the underpinning digital technologies such as cybersecurity, artificial intelligence, high performance computing and quantum technologies.

Our approach: maximising collaborative innovation

Whilst the evidence base for this Local Industrial Strategy found that the West of England has a strong innovation ecosystem, it identified a number of barriers to further growth including, above all, a challenge to improve its profile and improve levels of coordination:

- ▶ R&D investment is below government's national ambition of investing 2.4 per cent of GDP by 2027;

- ▶ the region's profile as a place of innovation could be strengthened to attract further investment;
- ▶ greater coordination of the innovation ecosystem could boost collaboration, the fusion between sectors and technologies, and innovation;
- ▶ skills shortages in some sectors including artificial intelligence, composites and robotics;
- ▶ demand for specialist business support, and flexible employment space is higher than existing capacity; and
- ▶ opportunity to test and diffuse innovation at scale and pace within communities and 'real life' settings.

Immediate action to support the West of England's ambition

Building on the region's distinctive strengths, as identified in the South West England Science and Innovation Audit and addressing the barriers to further growth identified, the West of England has the opportunity to enhance its reputation as a globally recognised centre of collaborative innovation through better integration of industrial strengths. This would drive further innovation and economic success for the region and the UK while retaining the UK's attractiveness to investment including from increasingly mobile global aerospace companies.

Low carbon technology

To help realise the national pledge for net zero carbon emissions by 2050 and to address the Clean Growth Grand Challenge, the West of England is leading the way in the design and trial of innovative technologies from smart energy efficiency measures to the next generation of efficient aeroplane wings. Strong capabilities in engineering, science, design and financial models together with digital skills, technologies and natural assets mean that the West of England is well placed to take advantage of the global opportunities of clean growth.

Reinforcing the West of England's innovation ecosystem through the Global Centre of Innovation Excellence

In order to achieve this step-change in collaboration and profile, the West of England is looking to establish a world class means of driving the West of England innovation ecosystem, helping the region to reach its potential, and address the barriers to further growth identified above. It will be a new approach to innovation and technology development across the region's diverse but linked sectors. This Global Centre of Innovation Excellence (GCIE) will provide strategic direction and coordination across a range of different sectors and innovation assets. It will provide the platform for the fusion of ideas, expertise, design and industry innovation and will have government input in its design.

The GCIE will aim to turn ideas into reality by enabling innovative collaboration; helping the region's most innovative designers, engineers, researchers, scientists, creatives and entrepreneurs to come together and work on a range of complex challenges from new product design for an ageing population to reducing the carbon emissions of transport.

It will help business with every step of the innovation journey, providing tailored and specialist business support that addresses the current capacity barrier and enables business to innovate, compete, grow and succeed in national and international markets. It will market and promote the West of England as a world leading innovative region, attracting inward investment, national and international business-to-business collaboration and trade.

Linking with the business competitiveness proposals, the Centre will support businesses to build a stronger innovation culture. Supporting leadership and modern management practices will help businesses to adopt new technologies and to harness the innovative potential of their employees.

In response to the barriers to growth identified by industry and working with a wide range of partners the Global Centre of Innovation Excellence will:

- ▶ attract increased investment in research and development;

- ▶ seek the expertise of partners across the innovation ecosystem, including at UKRI, to foster a coherent and effective approach to capitalising on the region's assets and driving up business innovation and applied R&D;
- ▶ use its convening powers to enable innovative collaboration and support for leading industry to collaborate and stimulate bids by local partners into national competitive funds to secure national and international inward investment;
- ▶ stimulate and catalyse a pipeline of innovation activity initially in the Grand Challenge areas (Ageing Society, Future of Mobility, Clean Growth, Artificial Intelligence and Data);
- ▶ provide incubation and scale-up support for existing and future exporting businesses;
- ▶ provide affordable, flexible, specialised workspace tailored to the needs of industry;
- ▶ market and promote West of England as a world leading innovative region attracting inward investment via strategic brand coordination; and
- ▶ identify and adopt best practice and new approaches.

There will be a focus on the region's above identified sector strengths to maintain and grow their upward innovation trajectory, especially through collaboration, business incubation, investment in key skills and by attracting investment.

New digital technologies such as 5G, the 'Internet of Things', and artificial intelligence, are transforming these sectors. Further investment in these digital technologies, including digital skills development, will enable the region to accelerate innovation and capitalise on global demand.

Government recognises the strength of the West of England's innovation ecosystem and will input into the design of the GCIE.

Working in partnership with the region's universities, businesses and research centres, it will align its ambitions with national policy and learn from national and international best practice. The Centre will contribute to the national ambitions for the UK to be the most innovative country in the world and to drive up R&D investment to 2.4 per cent of GDP by 2027.

Figure 3: The West of England Global Centre of Innovation Excellence



West of England network of Living Labs

The region has a strong culture of testing innovation in a real-life setting, exemplified in its existing living lab activity. This includes Knowle West Media Centre which is a member of the European Network of Living Labs, where they use technology and the arts to come up with creative solutions to problems and explore new ways of doing things to make positive changes in local communities. However, the opportunity to do more and test and diffuse innovation at scale and pace was cited by industry as a barrier to growth.

The West of England will establish a network of Living Labs to address this barrier, build on best practice and offer industry and academia the opportunity to test and diffuse innovations at scale, in a collaborative and user-centred way. This will also provide the opportunity to identify the human-centred, regulatory, and system constraints that need to be addressed as innovations are refined and that may only emerge when ideas are subject to large scale testing.

The network of Living Labs offers the opportunity to explore solutions to well recognised challenges. For example, to help realise the aspirations set out in the Ageing Society Grand Challenge, the West of England is looking to develop a Living Lab that designs and supports people to age well through advancements in technology.

Similarly, there is a local ambition to create a Future of Mobility Living Lab which will develop, test and evaluate new modes of transport, such as driverless cars, helping industry to get ready for market.

The Network of Living Labs will be overseen by the Global Centre of Innovation Excellence; working at pace to bring together industry innovation with real life living lab test platforms and accelerating the commercialisation process.

Government acknowledges the opportunity that an effective network of Living Labs could have in addressing local and national challenges and welcomes the ambition to develop a network of Living Labs in this Local Industrial Strategy. The West of England will consult with local partners to help design a locally-led model that attempts to meet the needs of all partners and government will input on the design in an advisory role. At the national level, government will continue to ensure that the regulatory system supports the rapid and safe introduction of technological innovation, as set out in the 'Regulation for the Fourth Industrial Revolution' White Paper.

Inclusive growth

Ensuring that economic growth is inclusive is at the heart of the West of England's ambition and vision for the region's future. Inclusion drives growth through championing diversity, innovation, and increased productivity.

The West of England's ambition

The West of England values its people. It is a place where residents have the opportunity to both contribute to, and benefit from, the opportunities that come with economic growth. The region's diverse workforce sparks creativity and innovation

and contributes to increased productivity and shared prosperity.

Infrastructure planning and investment ensures people across the region are able to physically and digitally access the opportunities that exist.

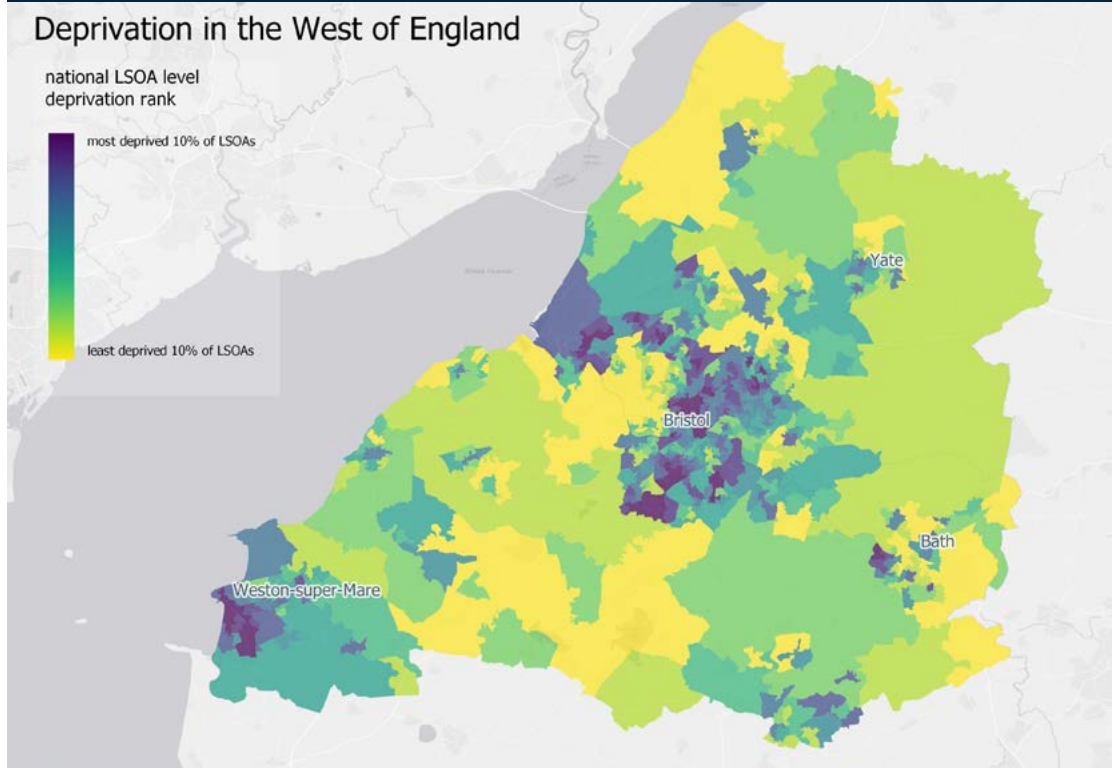
The West of England is a place where diversity is valued and the contribution it makes not only to social cohesion but also to the success and vibrancy of the economy is well understood.

Whilst for many residents the region offers opportunity and a high quality of life, this experience is not shared by all, and significant barriers constrain access to the opportunities the region offers. Across the West of England there are places and communities experiencing high levels of deprivation.

Places facing higher levels of deprivation across the region have different characteristics. Some are urban, some rural, some coastal, and some are located close to numerous job opportunities and housing whilst others are not. The variation in the challenge places face requires differentiation in response.

The actions set out in this Local Industrial Strategy will enable the region to go further in driving inclusion and addressing inequalities.

Figure 4: Deprivation in the West of England



Skills

The West of England has a high employment rate (79 per cent) which has continued to increase over the past three years and the region has a highly skilled workforce with 48 per cent of the working age population having an NVQ4+ (an undergraduate degree or equivalent).

However, the job market is changing and the region has seen a shift towards high-skilled jobs with an increase in employment for professional, associate and technical occupations and a decline in sales and customer service occupations.

One possible result of this is that the region currently has a high proportion of young people not in education, employment or training (NEET), particularly in the City of Bristol where almost 10 per cent of 16-17 year old males are NEET and in North Somerset, where NEET levels are above the national average. NEET levels for young people with Special Educational Needs or Disabilities (SEND) are higher than average in Bristol and in Bath and North East Somerset.

What's more, all four of the West of England authorities have a larger attainment gap at Key Stage 4 between disadvantaged pupils and all other pupils than the England average, participation rates in Higher Education among young people in some parts of the region are low and take-up of apprenticeships has decreased over the past three years. In some communities across the region, health outcomes need to be improved, ensuring the region has an active and healthy workforce in the years to come.

Action to address skills related barrier to inclusion is already underway, the proposals set out in this strategy build on this work.

Action to increase participation and improve outcomes for residents and businesses

- ▶ **Adult Education Budget:** Using devolved responsibilities and funding to ensure the provision of adult skills equips residents with the skills to take advantage of local employment opportunities, realising their productive potential. The adult education budget (AEB) is devolved to the West of England from the start of the 2019-20 academic year. A transition (with scrutiny) year of delivery will pave the way for more fundamental evidence-led changes to delivery from 2020-21 onwards and a more strategic relationship with a smaller number of AEB providers, helping to maximise impact for the region's residents, businesses and communities.
- ▶ **Future Bright Programme:** Helping residents to progress in their careers through a government funded £4m pilot programme launched in Spring 2018. It will support 3,000 residents, who are in paid work and claiming benefits to top up their incomes, and 400 businesses across the region. Career Progression Coaches work directly with residents, focusing on increasing their confidence, knowledge, skills and/or incomes. The programme also works with employers, promoting good employment practices and helping them develop approaches to learning and development that will grow their businesses and progress their employees.
- ▶ **West of England Careers Hub:** Supporting people to improve career opportunities by developing understanding of the range of future opportunities available to them. Following recent expansion, the Hub is now working with all schools and colleges to support improvements in career opportunities and work experience for young people, allowing them to make more informed choices. The Hub will help schools and colleges improve links with employers, develop a Hub network to enable good practice to be shared, and provide support from Enterprise Advisors.

► **Women into Digital:** In March 2019, the West of England secured £238,000 funding from the Department for Digital, Culture, Media and Sport for a new programme to support women into digital jobs, education and training (WIDJET). The programme launched in Spring 2019 with taster sessions and courses offered in skills including virtual reality, VFX design and software development. WIDJET will work with women across the region, providing digital skills and training from entry-level taster sessions through to high-level industry specified courses. Participants can take part in a range of skills courses, training or seminars designed directly with business needs in mind, with the aim of them securing jobs in digital roles.

Infrastructure

The West of England is an attractive place to live with a diversity of people and places and a rich cultural offer. Between 2011 and 2017 the population of the region grew by 6.9%. This, along with good economic growth between 2011 and 2017 has increased the pressures on housing and infrastructure which have struggled to keep pace with rising demand.

House prices and rents have increased significantly, with the average house price now 9.3 times average earnings, rising to 16.5 times earnings for the lowest 10 per cent of earners. Rents have increased significantly, in particular in the lower quartile. In Bristol, lower quartile rents have increased by 24 per cent in the last two years.

The cost of renting a room in South Gloucestershire has increased 10 per cent over a two-year period, over the same period the increase was 9 per cent in Bath and North East Somerset (compared to four per cent nationally). Housing development rates need to increase substantially to meet the need of the growing population as well as addressing affordability of all tenures.

Transport and congestion can also present a barrier to inclusion. The National Infrastructure Commission recognises parts of the West of England as among the most congested places in the country. Bristol is the seventh most congested place outside London. As well as the cost to the local economy (approximately £300m per year), it also negatively impacts the environment and health of residents. Congestion decreases the geographical range of employment options available to some residents and the affordability, reliability and reach of public transport can limit access to opportunities for individuals in both rural and urban areas. Work is underway to provide new transport infrastructure and travel options, as well as renewing existing provision across the region.

The region is developing infrastructure plans to ensure residents have access to clean, safe, accessible, affordable and reliable transport and housing in locations where they can access skills and employment opportunities.

Infrastructure and inclusion

To deliver inclusive growth, the West of England is focused on implementing infrastructure plans that ensure places across the region are well connected, so that residents are linked to employment opportunities and a diverse range of vibrant communities are supported to flourish:

- ▶ The West of England Joint Spatial Plan, which is currently being assessed, sets out priorities that will drive inclusive growth. The plan sets out ambitions to:
 - ensure more homes are built of the right type and mix, and in sustainable locations that people and businesses need;
 - support businesses to be able to locate where they can be most efficient and create jobs;
 - enabling people to live, rent and own homes in places which are accessible to where they work; and
 - ensure regional transport and infrastructure provision enables all residents and communities to access opportunities across the region.
- ▶ The draft Joint Local Transport Plan sets a vision to deliver a transport system that connects people and places for a vibrant and inclusive West of England. This strategy is focused on:
 - supporting sustainable and inclusive economic growth, including ensuring all residents have access to transport systems that enable them to access good employment;

- enabling equality and improving accessibility, including ensuring both urban and rural communities have access to transport services that will enable regional growth to reach all parts of the conurbation;
- addressing poor air quality and taking action against climate change, delivering a transport system that improves quality of life and health outcomes for all residents;
- contributing to better health, wellbeing, safety and security, ensuring road safety is improved for transport users, particularly those most at risk; and
- creating better places, including ensuring the transport network supports neighbourhood renewal and regeneration of deprived areas.

In delivering on the ambitions of the Plans set out above and in this Local Industrial Strategy, the West of England will give positive consideration to putting the building blocks in place to support the development of zero carbon homes. Consideration will be given, where viable, through the planning system and local procurement routes, ensuring the region is developing the skills needed to build these homes and supporting the innovation and technological development required to move this type of development squarely into the mainstream. This will contribute to addressing the Clean Growth Grand Challenge mission to at least halve the energy use of new buildings by 2030.

Digital infrastructure can connect communities to training and job opportunities but access is not consistent across the region, connectivity 'not spots' and variable speeds create barriers to access for some communities, including in rural areas. Access alone is not sufficient to enable people to benefit from digital connectivity, digital skills are crucial - both basic skills to access services online and take advantage of savings and out of hours access as well as high-level skills for employment opportunities into some of the new and emerging sectors.

Immediate action to support the West of England's ambition

Developing solutions to the challenges faced by the West of England - and ensuring a focus on inclusive growth is at the heart of regional activity - depends on a thorough understanding of the range of barriers and requirements of the diverse range of communities across the region.

The West of England is already taking active steps to address the issues that hold back inclusive growth. The success of Bristol's bid to host one of the Channel 4 creative hubs is an example of this. The decision reflected an understanding that the region would support Channel 4 to access a diverse workforce, and a broad talent base across the region.

The West of England is already taking action to address disparities in skill levels and opportunity by actively supporting residents through action such as the devolved adult education budget and programmes such as Future Bright and West of England Works. The proposals set out in this strategy build on this work.

The region is focused on ensuring the building blocks of an inclusive economy are in place and accessible to all residents, addressing barriers to employment and economic inclusion. This includes focusing on careers information and employability training. Where needed, the alignment and integration of support around these issues will be an important area of focus for the region.

To ensure challenges are effectively addressed, the West of England will test the impact of aligning services, investment and support to communities in a small number of places. Bringing together a range of provision to help address the barriers people face to taking advantage of the opportunities growth brings. This will go beyond the alignment in infrastructure investment that is already in place across the region.

The region will work with the priority communities identified with the aim of having a demonstrable impact on indicators such as increasing engagement in the labour market, (particularly for under-represented groups), reducing NEET rate, and addressing the health inequalities being experienced by people living in areas of higher deprivation. Opportunities to bring together existing funding sources will be taken, focusing activity on the needs of local people. This will include existing funding sources such as the regional Love our High Streets Fund, and the recent successful bids to the national Strength in Places Fund, as well as other interventions such as the Living Labs programme will be taken forward to maximise impact. The aim will be to understand the impact genuinely aligned investment, intervention and community engagement can have on addressing the region's objectives.

To address the skills barriers to inclusive growth, the West of England has developed an Employment and Skills Plan alongside this Local Industrial Strategy. Delivery of the plan will be informed by a newly established Skills Advisory Panel that will provide expert oversight and advice.

The Plan details a range of priority groups the region will work to support, including retention and retraining among the over 50s, improving engagement in the labour market for people facing complex barriers to work, and ensuring people of Black, Asian or minority ethnic (BAME) origin, women and those with disabilities are supported to progress in employment.

As well as working with residents to help improve employment and skills opportunities, the region will work with major employers to ensure the voice of business is central - developing the skills base employers in the region need both now and in the future. For example, the region will:

- ▶ work with business to improve work experience by building direct links between employers, communities, schools and training providers - in the first instance targeting this activity in communities which currently experience challenges in linking to the local labour market. Alongside this, the region will promote a wide range of skills opportunities, such as the introduction of T levels, ensuring developments such as industry placements to support local needs;
- ▶ continue to deliver support for employees and employers to ensure health and well-being is prioritised in the workplace;

- ▶ build on the new West of England Institute of Technology, led by Weston College, which draws together industry, education and research, to design and deliver flexible higher-level technical learning to equip young people and those already in work with the skills to fully exploit new technologies and digital innovation. The Institute will be funded by a share of £170m of government funding through the Institutes of Technology programme;
- ▶ work with major employers and SMEs to develop procurement practice, ensuring local SMEs are able to access contract opportunities, and helping SMEs to develop the skills and experience needed to be successful in winning contract opportunities; and
- ▶ build strong links between businesses and schools to ensure the voice of business helps shape the offer to young people. Raising aspiration among young people in the region is recognised as a challenge that requires action from a wide range of partners.

Government and the West of England will work together to support:

- ▶ continued collaboration on employment programmes: The West of England and government recognise that in-work progression is a significant challenge for the region, as is unemployment in some

pockets. Government committed £4m to the Future Bright fixed-term innovation pilot in the West of England which is now in its second year and will engage with local partners to learn the lessons from the pilot and other trials to inform future policy;

- ▶ employment support for groups facing challenges in accessing the labour market: There are a number of groups across the region that are underrepresented in the labour market, including women, people from BAME groups, and those with disabilities. Within the West of England, those facing challenges to access the labour market currently receive preparatory, wraparound and additional employment and skills support through provision funded from the European Social Fund in addition to local Jobcentre Plus services and mainstream adult education budget funded provision. The West of England and government will continue to work together through ongoing engagement with local Jobcentre Plus services to prioritise support for these groups. Government and the region will also work together to better target support for these groups by utilising the analysis provided to the newly formed Skills Advisory Panel;

- ▶ effective partnership working to address national and regional employment and skills priorities: An important part of the regional support system is Jobcentre Plus. Government and the West of England agree that Jobcentre Plus must, with employers and learning providers, play a central role through the Skills Advisory Panel in enabling more strategic conversations across key stakeholders to drive prioritisation, innovation, and collaboration with other local partners, especially around the uptake of apprenticeships, T levels and traineeships;
- ▶ a strong and well-targeted Careers Information Advice and Guidance system (CIAG): Government recognises the importance of a strong and well-targeted system of Careers Advice and Guidance and welcomes the use of Skills Advisory Panel funding by the West of England to develop a detailed understanding of existing CIAG provision within the region. This analysis will allow the West of England to prioritise their local intervention according to strategic need. To support a sustainable and strategically focused careers advice offer, government will continue to ensure strong coordination with important actors in this space including the Careers and Enterprise Company, Jobcentre Plus and the National Careers Service, to best align their work with local priorities as set out in the West of England Employment and Skills Plan;
- ▶ implementation of the devolved adult education budget: Government will also continue to work with the West of England to consider the impact of the devolved adult education budget as it transitions to a commissioning-led approach, including its important role in delivering against regional ambitions to support local residents to upskill, get back into work, retrain and undertake apprenticeships and T levels to build the skills needed across the economy; and
- ▶ effective retraining opportunities to support enhanced productivity growth across the region: Whilst the West of England is a prosperous city-region, productivity has flatlined, and there is a skills shortage impeding growth in sectors including advanced-manufacturing, construction and creative and digital. A significantly enhanced and digitally enabled workforce will help address the challenges posed by new disruptive product developments. Government and the West of England will continue to support the development of the National Retraining Scheme, which will help local people to respond to the changing labour market, redirect their careers and secure better jobs.

Getting the region's skills and employment provision right will improve access to jobs and lift residents' earning potential. And healthy, more highly skilled workers will be better prepared for the evolving world of work.

Airbus A330

Slide: 3 of 10

Fuel tank has a capacity of 139,090 Litres equivalent to 421,485 cans of fizzy drink!



mo-sys



The productivity challenge

The West of England is home to a diverse range of innovative, dynamic, and fast-growing businesses.

However, the growth of a large number of businesses in the region remains slow with gains held back by the slow uptake of technology and modern management practices. Challenges also remain in the diversity of entrepreneurship within the region. Businesses could do more to take the opportunities to lift their productivity, and to spread the benefits of growth to their employees.

The national Industrial Strategy recognises that the country has some of the most productive businesses, people and places in the world but also a 'long tail' of underperformance, which is constraining productivity. This national challenge is particularly pronounced in the West of England.

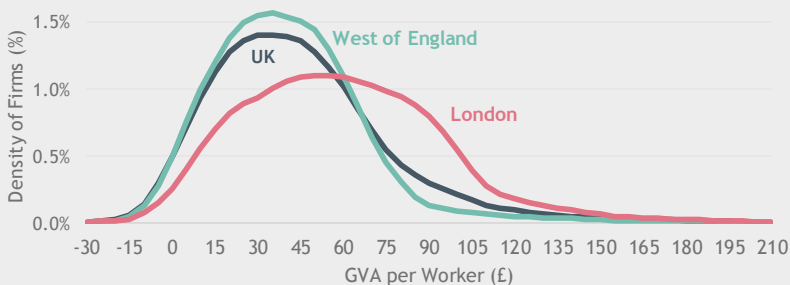
The West of England's ambition

Businesses of all sizes in the West of England will fulfil their potential, improving performance, resilience and sustainability, and enabling them to grow and offer a wide range of good quality jobs.

The West of England will set a productivity challenge for the region's businesses to improve their performance by putting modern technology, inclusion, and leadership practices at the heart of their operations.

Figure 5: The West of England has more low-productivity firms compared to the UK

Productivity distribution at firm level for 2014:



Source: Regional firm-level productivity analysis for the non-financial business economy, ONS

This long tail of lower productivity firms risks holding back the region's growth, wages and living standards.

This is a complex challenge, but research undertaken on both a local and national level have highlighted a number of factors that may be contributing to this situation:

- ▶ slow technology adoption, and slow uptake of modern management practices. Step changes in these areas can reduce costs, improve outputs and make businesses more efficient;
- ▶ companies with a more diverse workforce are more likely to produce strong financial results suggesting increased diversity can improve productivity. With a diverse population and communities, the West of England has a real opportunity here;
- ▶ only 39 per cent of start-ups were based in the 50 per cent most deprived areas of the West of England in 2018. The ambition outlined in the 'Inclusive Growth' chapter recognises the importance of ensuring everyone has access to opportunities; and
- ▶ total exports of goods and services in the region are estimated at 26 per cent of gross value added, compared to 33 per cent for Great Britain as a whole. This relatively low level of trade may contribute to low productivity. However, exports of services from the region are fairly strong, with the most valuable categories being insurance and pension services, travel and financial services.

Growth Hub and Invest Bristol & Bath

The region's enterprise and inward investment services are delivered through the West of England Growth Hub and Invest Bristol & Bath.

The Growth Hub offers free and impartial support to all businesses, linking them to the best providers to help them invest, export, innovate and grow. This year, the Growth Hub hosted the region's first Scale-Up Summit, bringing together over 70 entrepreneurs with finance and business growth experts to harness the potential of the region's high growth businesses.

Invest Bristol & Bath, funded through the West of England City Deal, provides a range of free services to businesses who are looking to locate or expand in the region. It targets international businesses that fit with the region's capabilities and which will help address the priorities of this strategy, managing a diverse and substantial pipeline of leads, leveraging its strong relationships with existing business networks, sectors and clusters. Services include support on accessing land and property, skills and talent, funding and expert advice for existing businesses.

Immediate action to support the West of England's ambition

To address this challenge, the West of England will expand and tailor the support available to businesses. By supporting management and leadership within businesses, the region will encourage stronger strategic direction and more innovative and growth-oriented cultures within firms. This will help firms to raise their competitiveness and resilience by adopting practices to improve staff performance, embracing more efficient technology, increasing exporting and creating more sustainable business models.

The West of England will deliver a suite of new products and services building on existing Growth Hub provision and coordinating with a range of existing regional programmes, such as Enterprising West of England. The evolution of the West of England Growth Hub will be key, so that it can deliver enhanced services including:

- ▶ tailored specialist advice, masterclasses, and SME export support;
- ▶ specialist technical support and exemplars of technology to SMEs on resource efficiency, building on the West of England Low Carbon Challenge Fund and specialist low carbon business support facilities such as Filwood Green Business Park to drive clean growth. Working with as wide a range of businesses as possible will be critical for identifying and sharing effective models of reducing the region's carbon emissions;
- ▶ fostering networks that allow businesses to learn from trusted peers, based on specific places or across sectors, including new technology demonstrations from the region's business innovators, and virtual and face-to-face communities to allow SMEs to share best practice and collaborate (aligned with Be the Business's insights to building collaborative peer networks elsewhere in the country);
- ▶ the West of England will work with Be the Business to develop a plan to support firm-level productivity growth and to provide the inspiration, practical tools (including benchmarking) and guidance to deliver through the West of England Growth Hub to encourage SMEs to become more productive;
- ▶ strengthening engagement in business and entrepreneurship across diverse communities by extending outreach into harder-to-reach groups via 'pop-ups' at community hubs. For example, building on work with the Department for Business, Energy and Industrial Strategy through Better Business for All to explore the issues faced by first generation BAME-led businesses in accessing regulatory business support; and the region's current programme that brings together Engine Shed and Ashley Community Housing to provide business support outreach to less engaged communities; and

Case study: Productivity through People programme

The Productivity through People programme at University of Bath, delivered with Be the Business, is an innovative example of how partners across the region, including large and small businesses, can work together to improve performance

The programme delivers 'mini-MBAs' to small-business leaders. Sponsored by major employers including EDF, Cavendish Nuclear, Leonardo, and BAE Systems, the course combines benchmarking of the business, practical masterclasses and online learning, best practice visits to major businesses, critical review through action learning sets, and mentoring from business experts.

Participants in the first two cohorts reported that the course helped them transform their businesses through the empowerment of their workforce. Sarah Rodgerson, managing director of BIE Magnum, an engineering firm in Bristol, took part in the programme and has since significantly improved the business's practices. 'The company had done things the same way for many years and I was finding it difficult to initiate change. Productivity through People has given me a clear picture of what good looks like and helped me make a plan to get there.'

- ▶ communication of the offer in terms that speak more effectively to all the region's businesses and residents. This will cover both start-ups and more established businesses to ensure that support is sustained, encouraging a more diverse range of entrepreneurs and businesses to grow.

To deliver the Productivity Challenge, the West of England will:

- ▶ continue to co-ordinate regional business support services and build on Growth Hub funding and provision. This will ensure that specialist advice is available, tailored to different sectors and business life stages;

- ▶ benchmark performance compared with peers which will help target support effectively and demonstrate progress;
- ▶ work with existing strong private sector networks, business incubators, and trusted intermediaries, these networks will help bring together leading companies with small firms, to share their expertise and demonstrate how new working practices can be implemented;
- ▶ encourage community leadership; and
- ▶ test ways of building capacity, including strengthening the strategic role of boards for larger firms given the importance of leadership skills.

The West of England will encourage greater access to economic opportunity and more inclusive supply chains. The region will ensure that more of the collective spending power of the public sector and universities (estimated at £1.7bn annually in the region) can be accessed by the SME base. This will include local initiatives:

- ▶ exploring the scope to establish a 'good employment standard', engaging with key employers in the region to promote good practice, employment diversity, involvement in skills planning such as apprenticeships and T levels, and inclusion and sustainability across supply chains. This will build on relationships and tools established with the Future Bright programme and Careers Hub and will help provide exemplars for others across business networks. Helping business to engage more proactively with stronger regional SME supply chains will help to build greater resilience and efficiency;
- ▶ widening the access for SMEs to public procurement by building the capacity of SMEs to bid for contracts and facilitate a 'consortium based' bidding approach. This includes support to access lower-tier contracts, both through leadership skills and practical steps such as bid writing and accreditations. Local Authorities in the region have developed strong social

value approaches supporting local employment and small businesses. The region will continue to drive towards the government's planned target for a third of all its spending to be with small businesses and civil society organisations by 2022; and

- ▶ exploring how social value procurement can maximise the employment and supply chain benefits of WECA's own spending.

Government welcomes the West of England's Productivity Challenge and will reflect on and discuss opportunities to maximise its impact. The West of England Growth Hub will play an important part in addressing the region's productivity challenge, and its key ongoing role in helping to deliver a range of strong public and private sector support to the region's businesses. Government and the West of England will continue to review how the existing activities of the Growth Hub can be strengthened to meet shared objectives.

Focusing activity on increasing the productivity of the region's businesses will benefit a large number of firms across the region. Relatively small productivity gains in each have the potential to have a significant impact on the overall productivity rates in the region.

Innovation in infrastructure delivery

The West of England benefits from strong links to other economic centres, at a crossroads on the motorway network and with fast rail connections to London, Birmingham and Cardiff.

Infrastructure assets such as the port and airport provide strong international connectivity. However, in recent years the infrastructure within the region has come under increasing pressure, constraining growth and making it harder for residents to move around the region for work and leisure and impacting on air quality.

Through the West of England Joint Spatial Plan (JSP) and supporting Joint Local Transport Plan (JLTP), the West of England has set out a clear strategy to address many of these challenges. The details of these Plans are set out in the 'Infrastructure' chapter. The region will use its strengths in innovation to deliver these priorities and help address some of the UK's Grand Challenges.

Immediate action to support the West of England's ambition

The scale of ambition set out in the JSP and JLTP, alongside the region's powerful innovation ecosystem, offers the opportunity to embed innovation into tackling major infrastructure challenges.

The West of England's ambition

Residents of the West of England will be able to move seamlessly around the region between work, home and leisure activities using affordable transport solutions that minimise the impact on the environment. range of housing types will be available that are high-quality and more affordable.

Having the right infrastructure in place - both physical and digital - is key to maximising productivity in the region, connecting rural and urban communities and driving forward clean and inclusive growth and maximising the opportunities of the smart region.

For example the region has long-term ambitions to:

- ▶ develop a world class digital platform which enables smart technologies and innovation;

- ▶ build low carbon sustainable homes, with embedded smart technologies adaptable to the changing needs of an ageing population; and
- ▶ trial and develop solutions in support of the Future of Mobility Grand Challenge, keeping the region moving and helping the UK to be a leader in the way people, goods and services move. The region's longer term vision is to be a place where private car ownership is greatly reduced as a regional mobility service would allow movement around the area in a more efficient and cost-effective way.

The specific actions identified in this chapter will contribute to, and complement, these long-term ambitions.

Smart region

At the heart of the region's innovation infrastructure delivery ambitions lie developments in digital technology for which the region is well recognised. Building on the success of 'Bristol is Open' which delivers research and development initiatives that contribute to the development of a smart city, the West of England is developing ambitious plans to become a Smart region.

Central to realising this ambition is the digital infrastructure which will provide the platform for future activity. The region has already demonstrated its strength in both wireless and fixed next generation connectivity with the government and industry funded 5G testbed and smart tourism trial and regional engagement on fibre and broadband stimulation programmes.

Recognising the government's ambition for the UK to be a world leader in 5G technology, the region will establish a Smart Alliance between local partners to identify strategic priorities and guide future investment plans and funding bids. This strategic approach to digital infrastructure design principles includes developing a joined-up approach to exploiting public assets to maximise investment in and early roll out of next generation wireless and broadband connectivity, including 5G and fibre to the premise.

Developing a world class digital platform will help the region to realise its ambition to become a Global Centre of Excellence for Innovation and to develop a West of England Network of Living Labs. It will build on the existing strengths of the region, with the ambition to position the West of England as a globally significant demonstrator for digital technologies and existing proposals around the Future of Mobility and Smart Homes to support an Ageing Society. It is also an important stepping stone to the realisation of the AI and Data Grand Challenge, developing and normalising the technologies, in a safe and ethical way, that will support the roll out of AI-enabled services now and in the future, helping to put the UK at the forefront of the AI and data revolution.

Future of Mobility

The West of England is exploring options for a local Mobility as a Service Living Lab that will co-design and test replicable transport innovations that can improve connectivity, enhancing regional productivity, widening access to employment and creating globally significant use cases to drive investment.

Building on the JLTP, the West of England will consider the role of a Future Mobility Living Lab concept in developing, testing and evaluating new modes of transport. This will support the local ambition to better connect people and places to create a vibrant and inclusive West of England, whilst helping industry to prepare for new modes and models of transport.

In developing the Future of Mobility Living Lab concept, the West of England will work with local communities, stakeholders and international innovators to trial and demonstrate innovation solutions that can help to overcome these challenges, through:

- ▶ using data analytics, enhanced data collection techniques and data simulation to develop a deeper understanding of network performance and responsiveness;
- ▶ exploring a Mobility as a Service solution, including how mobility credits could be used to improve access to employment and skills; and
- ▶ considering trialling a range of new modes including micro-mobility solutions and dynamic demand responsive travel - using autonomous technologies where feasible.

In opening up the West of England to transport innovations, the region aims to harness the market opportunity offered by future mobility, which is estimated to be £1.4 trillion by 2030. With global industry players interested to demonstrate locally - including Nissan, Uber, Ola and Enterprise Cars - the West of England is well primed for inward investment and growth from this growing market.

Smart homes for an Ageing Society

As the population ages, consideration must be given to how housing and health technology adequately meets need, both now and in the future.

Enabling more people to stay in their homes for longer, the West of England Smart Home will aim to set the bar for new housing design, delivery and retrofit, and provide a new industry standard for housing developments, equipped for home working, independent living and energy efficiency and contribute to addressing the Clean Growth Grand Challenge mission to at least halve the energy use of new buildings by 2030. Development of this proposal will form part of the Living Lab programme of work.

Developer appetite for investment in Smart Homes technology is growing and innovation in design and application can already be found within the region. For example, SPHERE, a large research collaboration led by the University of Bristol involving the development of home sensors.

Innovation in construction

WECA has set up a pioneering Joint Assets Board (JAB). The JAB enables collaboration across the public sector to use land more efficiently, transform services and strengthen local communities. Through the Joint Asset Board the West of England is developing an ambitious approach to modern methods of construction (MMC) and other housing innovations e.g. co-living communities, smart homes, carbon/energy efficiency homes. A West of England Small Sites (Housing) Strategy is being developed, which is likely to be expanded to provide a wider MMC strategy.

To maximise the potential for new innovations in housing, the West of England will work with government to ensure continued engagement in the JAB. Government and the JAB will work together to bring about the provisions contained within the West of England's Devolution Deal particularly working across departments to consider innovative approaches to public sector land.

The region will continue to support innovation in housebuilding and accelerate the development of carbon neutral homes, supporting the Clean Growth building mission. This will include exploring ways to encourage and incentivise sustainable building practices and retrofit, for example via incentives for developers.

To support the ambition to drive innovation in this space, WECA will work with businesses to help them develop ambitious and competitive bids into the government's £170m Transforming Construction Fund and Home Building Fund. These national funds aim to modernise construction processes and techniques to support SMEs, Custom Builders and developers using innovative methods of construction who cannot access finance elsewhere.

These actions will ensure the West of England's significant innovation strengths are used to explore new approaches to addressing infrastructure challenges. They will embed pioneering thinking and product development in the delivery of the region's vision for the future of housing and transport.

The five foundations of productivity



Ideas

The Industrial Strategy sets out how science, research and innovation are critical to increasing productivity and boosting earning power across the UK.

The West of England has a long history of supporting new ideas, new ways of doing things, new products and services, and new business models. The region's universities, industries and strong sectors where ideas are born and skilled workforce contribute to the development of ideas that have changed the world.

The 'Cross-sectoral Innovation' chapter sets out the West of England's approach to nurturing cross-sectoral collaboration, research, development and innovation. This chapter sets out the foundations this activity will build on.

Research base

The West of England's ecosystem is underpinned by a strong public and private R&D base, centred around major research-intensive businesses and their supply chains, universities and specialist engineering innovation centres.

The West of England's four universities and further education colleges provide highly skilled graduates as well as cutting edge research and development to support these sectors. Over 53 per cent of students study STEM (Science, Technology, Engineering and Mathematics) subjects, compared with 46 per cent nationally, and many are staying in the region.

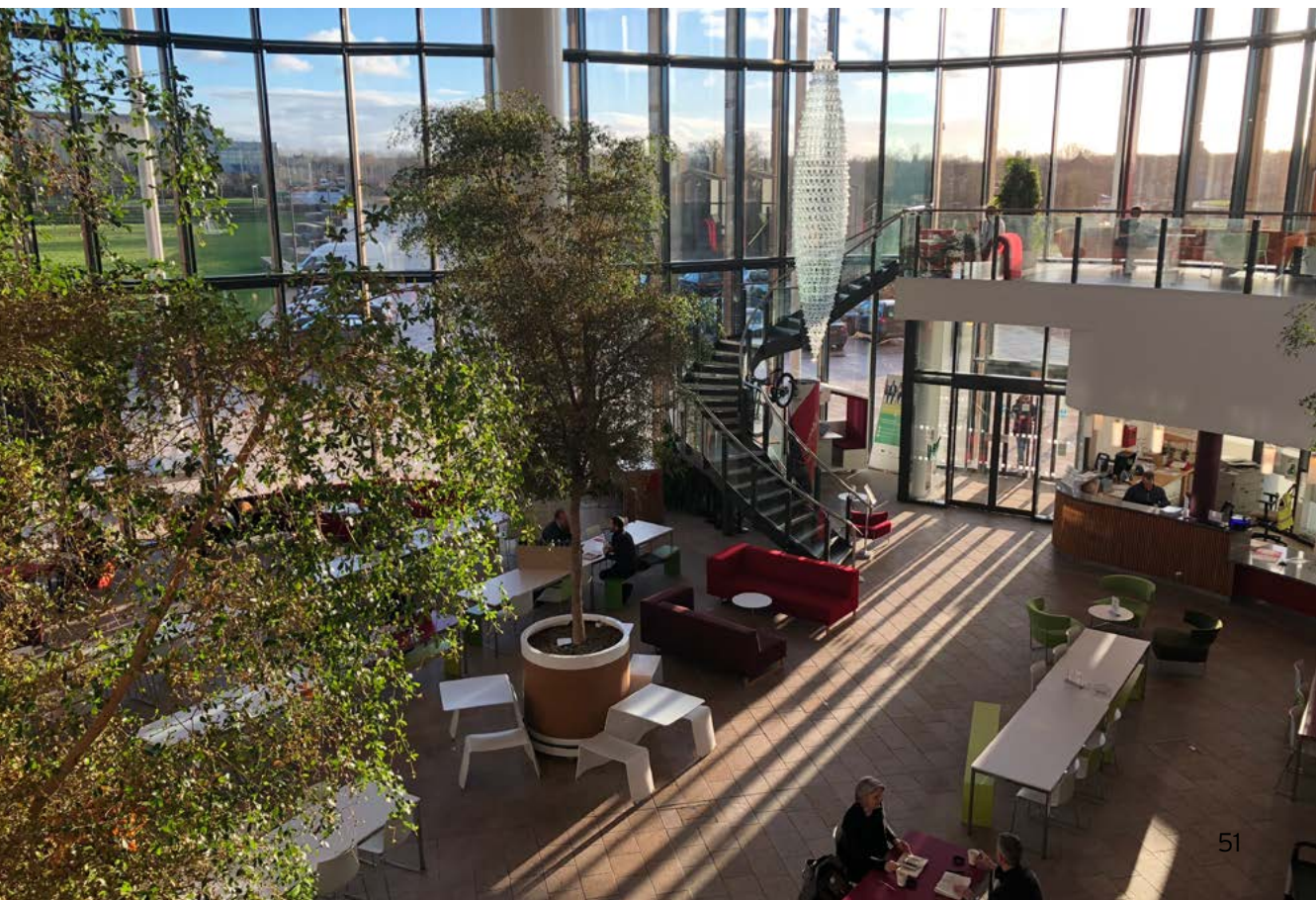
Boosting the pipeline of high-level skills is vital to sustaining the growth of the innovation ecosystem, and in particular Science, Technology, Arts, Engineering and Maths skills (STEAM).

Each university has applied research and technology centres that support the region's industrial strengths. Their research specialisms range from engineering and manufacturing and applied mathematics to the 'Internet of Things' and virtual reality. The universities collaborate closely with other universities and businesses around the world helping to fuel industrial innovation in the region.

The West of England has a substantial number of applied research and technology centres. These include:

- ▶ **Bristol Robotics Lab** - a collaboration between the universities of Bristol and the West of England and is the largest academic centre for multi-disciplinary robotics research in the UK;
- ▶ **National Composites Centre** - the world leading authority on composites. It works in partnership to accelerate the adoption of high-value, sustainable engineering solutions in composites. It is owned by the University of Bristol and is part of the national High Value Manufacturing Catapult;

- ▶ **Institute for Advanced Automotive Propulsion Systems** - led by the University of Bath and opening in 2020, this specialist hub will support collaborative research with the automotive industry to develop future generations of ultra-low and zero emission vehicles;
 - ▶ **Bristol Digital Futures Institute** - Government has recently invested £28.9m for a new institute at the University of Bristol with co-investment of £71.9m from industrial partners. This supports government's wider work to support innovation in digital technologies; and government is committed to continuing to work closely with the University of Bristol to further develop plans for the Institute; and
 - ▶ **Bristol VR lab** - a collaboration between the universities of Bristol and the West of England and Watershed providing a co-working space for companies and individuals working in the fields of virtual, augmented and mixed reality technology.
- The universities are a significant source of new business, with successful spinouts and tech start-ups growing in number. These are supported by world leading incubation support including a University Enterprise Zone and SETsquared Centres in Bristol and Bath - the world-leading University-run incubators.



Although imperfect, patent applications provide one measure of the number of ideas being translated into viable innovations. The West of England makes patent applications at more than twice the rate per person than the UK average, the 11th highest area, above Inner London. Patents in the region are focused around aviation and civil engineering, highlighting the strength of this sector and its contribution to innovation within the region.

Sector Deals

The Industrial Strategy recognised the role sectors play in driving productivity and the importance of removing barriers to sector success. The government has agreed a series of Sector Deals in partnership with industry that will support the development of ideas in the West of England. These deals will create significant opportunities to boost productivity, employment, innovation and skills nationally and in places with relevant sector strengths including:

- ▶ the **Aerospace Sector Deal**, which highlights the significant contribution made by the West of England. It includes a potential £125m of government funding for innovative projects under the Future Flight programme. In the West of England, Airbus has already invested in an Advanced Wing Integration Centre in recent years, with support from the government, to build on the region's capability in the design and testing of wings;

- ▶ the **Artificial Intelligence Sector Deal**, which identifies how research and development partnerships can support national growth. For example, the University of Bristol is providing research expertise in a five year programme with BT to create artificial intelligence-powered next generation data infrastructure for the UK;

- ▶ the **Creative Industries Sector Deal**, which recognises the West of England's 'globally-significant, high-growth creative cluster'. As part of the deal, the government has committed to investing £21m to support digital companies and start-ups across the UK via a series of support hubs; two hubs will be based in Bath and Bristol;

- ▶ the **Nuclear Sector Deal**, which proposes a national advanced manufacturing and construction programme for nuclear. Both the University of Bristol and the University of the West of England are partners in the National Centre for Nuclear Robotics, a collaborative research project focussed on developing cutting-edge technology to solve the problem of nuclear waste. And the construction of Hinkley Point C in neighbouring Somerset presents an opportunity to make use of the region's engineering and construction strengths. The West of England and Heart of the South West LEPs are working together to maximise these opportunities; and

▶ the **Offshore Wind Sector Deal**, which will fund research, development and demonstration activities in the sector, with focus on next generation technologies. The deal supports the West of England's existing strengths in research institutions and businesses; for example, the National Composites Centre has recently delivered a state of the art Large Scale Resin Infuser which will improve offshore wind manufacturing capabilities.

Skills for innovation

To support the continued development of ideas within the region, the West of England Employment and Skills Plan recognises the importance of developing an environment that cultivates ideas and delivers the high-level skills some of the region's sectors require. The Employment and Skills Plan sets out the region's ambition to support key Growth Sectors and its innovation 'ecosystem', and "ensure that the region's residents are able to access pathways of opportunity to achieve their potential" by:

- ▶ investing locally to ensure a steady pipeline of talent/skills to support regional competitive advantages (including the Global Centre of Innovation Excellence detailed in this Strategy);
- ▶ maximising the value of the West of England Institute of Technology, which will deliver a range of new technical higher skills and training programmes; and
- ▶ addressing Digital Diversity through Women into Digital Jobs, Employment or Training (WIDJET).

Low carbon innovation

Government estimates that the low carbon economy could grow 11 per cent per year between 2015 and 2030, four times faster than the projected growth of the economy. The region's strong capabilities in energy, high value design and innovation, together with an ambitious and engaged community sector means it is well-placed to address the Clean Growth Grand Challenge and benefit from the opportunities arising from the global transition to clean growth.

The region has thriving businesses and commercial expertise in the low carbon energy sector. These include: DNV GL, a global renewable energy consultancy; OVO Energy; and other innovative and sustainable firms such as Thrive Renewables, Aspire Technology, Pure Planet, Ecocetera and Solarsense. Many of the region's law firms, planning and engineering consultancies have a strong renewable energy expertise, and Triodos Bank delivers finance on social and environmental criteria.

Aerospace and advanced manufacturing is playing its part in both industry and academia. The region is home to one of the largest clusters of composite materials researchers and engineers in the world, working together to deliver lighter-weight and more energy efficient aircraft, vehicles and ships. For example, Airbus is designing the next generation of aeroplane wings, making them more fuel efficient and reducing emissions.

While In partnership with University of Bristol, Italian helicopter company Leonardo won a national award for innovation for its 'green' electric drive rotor blades, reducing the environmental impact of helicopters.

Strong capabilities in energy, together with digital skills and high-speed data infrastructure such as 5G, means that the West of England is well placed to take up the opportunities of Smart Energy Technology, which is starting to transform energy systems across the world.

Research and development growth

The Industrial Strategy sets a target to increase investment in R&D across the whole economy to 2.4 per cent of gross domestic product by 2027. The action set out in this Local Industrial Strategy will ensure the region contributes to delivering the national target through:

- ▶ the proposed Global Centre of Innovation Excellence which will coordinate local innovation activity and raise the profile of the West of England as a world leader in innovation, maximising its potential to attract R&D investment, enabling ideas to flourish;
- ▶ a network of Living Labs to test and diffuse innovation to address local and national challenges at scale and at pace;
- ▶ development of the skills needed for the region's innovative businesses using the devolved adult education budget, the new Institute of Technology and other targeted skills programmes such as WIDJET; and
- ▶ promoting the take up and development of low carbon technologies.

People

The strong and dynamic people and communities across the West of England are the region's greatest asset, driving growth and productivity.

The West of England is a highly skilled region that attracts a diverse range of people, it is an area with high employment rates, a strong labour market and diverse economic development, but this is offset by some weaknesses that hold it back.

Just as the government's modern Industrial Strategy sought to build on Britain's strengths and tackle its weaknesses - such as utilising the UK's world class higher education institutions to meet national future skills needs, and transforming the UK's underperforming technical education system so it too is world class - this local Industrial Strategy aims to do the same for the West of England. This strategy is about reinforcing the West of England's advantages, but most crucially about tackling the disadvantages that is holding its people and businesses back.

The West of England regional strengths

The UK is a higher education superpower, and the West of England is at the core of that global strength. The strength of the West of England's higher education provision is reflected in its labour market, with nearly half of its workforce with a NVQ4+ qualification (higher skill level qualification - usually

a university degree), while 36 per cent of its new recruits have this level of qualification. Half of local jobs are highly skilled, which is reflected in average pay being higher than the national average.

This highly skilled workforce is the foundation for enabling some of the UK's most prestigious, globally recognised and technologically advanced companies to thrive in the region - engineering giants such as Rolls-Royce and GKN Aerospace, or major financial services companies such as AXA Life, Lloyds TSB.

Engineering, tech, financial services, creative design - these are the jobs of today that are only set to grow as the Fourth Industrial Revolution is set to change the change the nature of work and the economy. The West of England has these jobs in abundance and is well placed to thrive as digital technology, artificial intelligence and biotech becomes more and more abundant.

The 65+ population of the West of England is expected to grow by 24 per cent between 2017-2030 and the ageing demographic of many workers, particularly in key sectors such as advanced manufacturing and aerospace, is a major risk to future productivity that needs to be addressed through

support for older workers who need or wish to remain in work will and replacing the skilled workers that are being lost.

In order to meet the future demand, the region's universities will need to produce even more of the STEM skills that these sectors crave to meet future skills demands, but given that most of the 2030 workforce are already in work today then supporting the local population to reskill into these new roles will be particularly essential.

To maintain the region's strength and support people across the region to contribute to the economy of tomorrow, the West of England will:

- ▶ build on the new West of England Institute of Technology which will draw together industry, education and research, to design and deliver flexible higher-level technical learning to equip young people and those already in work with the skills to fully exploit new technologies and digital innovation.
- ▶ promote the uptake and effective delivery of T levels to meet the demands of employers in the region's strong sectors - advanced engineering, financial and business services, and creative and digital. Government and the West of England will work together to reflect on initial impact and assess employer needs to support the effective delivery of T levels; and
- ▶ use its regional leadership role to support its businesses (utilising its Growth Hub and Invest Bristol & Bath services) to engage with and inform the local skills offer. This will include

engaging a range of employers, including SMEs, in the provision of high-quality apprenticeships and industry placements as part of T level delivery, building on the region's existing employer-led Apprenticeship Ambassadors Network, regional Apprenticeship Hub, and a new Skills Advisory Panel.

The West of England regional challenges

While the West of England has many strengths, it also faces challenges in education outcomes and employment outcomes in many parts of the region. Like England more widely there is a gap in outcomes for people from more disadvantaged backgrounds (including those with SEND and care leavers). What's more, fewer young people who grow up in the area go on to study at a higher level. Poor outcomes for people from disadvantaged backgrounds is holding the entire region back from fully prospering.

This disadvantage in the West of England is exacerbated in the transition between education and work. About forty per cent of school leavers enter the workforce with qualifications below A-levels and a small but not insignificant 3.5 per cent have no qualifications at all. In a region with a greater number of higher skilled jobs, employment rates for those with lower skill levels are about 15 per cent lower than for those with higher qualifications. The region also has a higher number of young people not in education, employment or training (NEET) than the England average.

This problem is a particular challenge for the West of England as the number of low and mid skilled jobs in the region are lower than the England average, and this number is only set to shrink by 2030. This means fewer opportunities for its low skilled population to take advantage of, which could lead to them falling even further behind. Amongst adults, there remain 128,500 people without a Level 2 qualification which means that higher numbers of skills gaps are reported for lower skilled occupations. The lack of lower level skilled workers mean that the productivity of many of the region's businesses and the efficiency of public services are also suffering.

These social mobility challenges translate to ethnicity too, with employment rates for the region's Black, Asian and minority ethnic people lower than other workers in the region. This is particularly true in the creative industries where there is a distinct lack of ethnic diversity which does not reflect local demographics.

Health

Mirroring the national picture, the health of people in the West of England varies between the most and least deprived areas. While Bristol performs below the England average for a large number of health indicators, inequalities exist across the region, for example there is a nearly 10 year age gap between the life expectancy for men between the least and most deprived parts of North Somerset.

The region is focused on improving the health of the workforce, improving productivity and quality of life and reducing staff turnover. With 24 per cent of sickness absences nationally caused by musculoskeletal conditions and 11 per cent by mental health issues, including work-related stress, there is scope to reduce these absences by introducing workplace interventions.

In order for the region to continue to thrive, the weaknesses in the system need to be addressed. To do this the West of England has developed an Employment and Skills Plan alongside this Local Industrial Strategy ensuring the region is focusing on developing the skills and support required to meet the needs of residents and employers across the region.

The West of England Employment and Skills Plan

The vision set out in the Employment and Skills Plan highlights that the plan will play a role in driving a sustainable, inclusive and diverse economy, providing a high quality of life, prosperity and opportunities for residents and employers across the region.

The plan is fundamental to the region's ambition to drive clean and inclusive growth. To support residents across all parts of the region to reach their potential.

It will:

- ▶ ensure the region is developing the skills needed to deliver on the ambitions of the Local Industrial Strategy, linking residents to opportunities and promoting inclusive growth, for example addressing health-related barriers to employment and progression;
- ▶ ensure employers across the region are able to access the skills they need both now and in the future, helping businesses grow;
- ▶ ensure there is a strong talent pipeline of high-skilled people contributing to future growth in the high-value sectors that are key to the regional economy, ensuring the West of England remains a region where innovation flourishes;
- ▶ ensure the region has the skills required to deliver on its infrastructure ambitions while also supporting clean growth by exploring opportunities to promote clean construction and retrofit skills, leading the way in developing techniques that will have global reach; and
- ▶ address health-related barriers to work and progression, supporting the aspiration for a long-term reduction of pressures on health and social care services.

As well as the actions set out in the Employment and Skills Plan, the West of England will look to drive increased uptake and diversification of apprenticeships within the region.

To achieve this:

- ▶ the West of England will explore locally-led enhancement of existing regional provision such as the West of England Apprenticeship Hub to offer a brokerage system, enabling levy transfers for the benefit of employers who do not pay the apprenticeship levy, helping to develop the supply chain of apprenticeships and recognising the high proportion of SMEs within the regional business base. Government will provide policy advice in the design of this system, signposting to national best practice;
- ▶ through the forthcoming, locally funded, West of England Workforce for the Future programme (focused on supporting SMEs develop the skills they will need for future growth) the region will explore the opportunity to use an apprenticeship brokerage system to enhance the apprenticeship brand in the marketplace leading to an increase in the take-up of apprenticeships across the SME base; and
- ▶ government and the West of England will work together to ensure there is a two-way flow of information to ensure development of regional apprenticeship provision is well-informed and responsive to the needs of employers and residents, using forums such as the Skills Advisory Panel to facilitate conversations between key stakeholders.

Infrastructure

The West of England's housing and transport infrastructure has come under increasing pressure over recent years, constraining growth and making it harder for residents to move around the region for work and leisure.

House prices have risen to 9.3 times average earnings and rental levels have also become increasingly unaffordable. Congestion is increasing: two-thirds of commutes are by car and two out of five of those journeys are of less than two kilometres, contributing to significant greenhouse gas emissions and a cost of congestion of £300m a year. With a 25 per cent increase in trips projected by 2036, the regional infrastructure and public transport provision must improve if the economy is to keep moving.

Good digital infrastructure can enhance the attractiveness of employment locations outside of favoured areas but speeds are variable across the region and 'not spots' remain.

The natural environment is an asset that contributes to quality of life and promotes health and well-being amongst residents. It makes the region attractive, encouraging residents to stay in the area and attracting people from elsewhere.



It's not just the region's natural assets that make it an attractive place to live, work and visit; Bristol and the wider region has been named Britain's Coolest City by Rough Guides, this accolade was awarded due to the first-rate nightlife, thriving creative and tech industries and proximity to the great outdoors. This attractiveness as a place to live is one of the factors leading to the region having access to the range of workers businesses need to thrive, encouraging businesses to locate in the region. Solutions to the infrastructure challenges facing the region must therefore be designed to avoid compromising natural assets.

Climate Change presents clear risks to the region, including flooding and the loss of habitats. North Somerset, the city centres of both Bristol and Bath and the Severnside Enterprise Area are at risk of flooding. Local Authorities across the region have recognised the climate change challenge and joined the pledge to be net carbon neutral. To help realise this aspiration work is already underway to increase energy efficiency, grow renewable energy generation, improve air quality, protect habitats and biodiversity and grow green industries.

A strategic approach to planning and transport

The West of England is leading the way nationally in aligning strategic transport and spatial plans to deliver much needed new homes and jobs supported by infrastructure, while promoting sustainability and maintaining the environmental assets and quality of life unique to the area.

The JSP is the first such joint planning approach in the UK. It considers the impact that development in one area has across council boundaries. The JSP sets the strategic framework to deliver 105,000 homes of all types, including affordable homes, across the region by 2036, linked to the necessary transport infrastructure as set out in the Joint Local Transport Plan (JLTP).

The JSP will be supported by a locally developed Infrastructure Investment Delivery Plan to maximise public investment and deliver the plan priorities. The region is exploring a strategic partnership with Homes England, to bring together the capacity, expertise and investment of partner agencies on shared priorities to drive housing supply. This will include a focus around strategic settlements in line with National Infrastructure Commission recommendations.

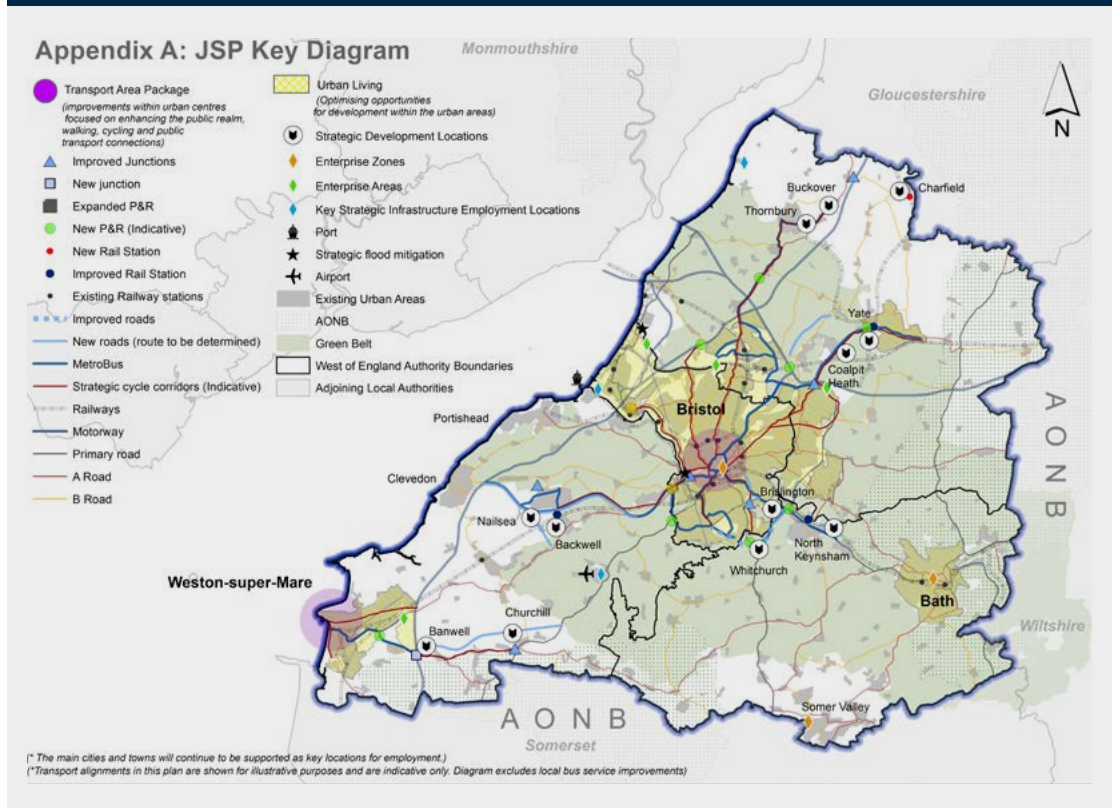
The Combined Authority has long-term ambitions to improve connectivity and increase housing supply in the region. This includes plans to bring about major improvements to Temple Meads Station and the A4 strategic growth corridor (between Temple Meads and Keynsham). These ambitions have been developed in partnership with Network Rail, the University of Bristol and other public and private sector partners.

The specific actions identified in this chapter will contribute to, and complement, these long-term ambitions.

The JSP aims to secure the delivery of high-quality and sustainable places that respond to and enhance the natural, built and historic environment. It states that: *'...new development must contribute towards / minimise energy demand and maximise the use of renewable energy, where viable meeting all demands for heat and power without increasing carbon emissions'*.

The West of England is committed to delivering high-quality places through the JSP. WECA has committed to produce a Placemaking Charter, which will set out quality standards expected in the region, which developers, architects and house builders will be encouraged to sign up to. WECA is also supporting partners to develop a new independent review service to support high-quality design, called Design West.

Figure 6: The Joint Spatial Plan in summary



Work on the JSP and JLTP is supported by a Green Infrastructure Strategy setting out the evidence base, strategic measures and mechanisms to assess Green Infrastructure at a regional and Local level, embedding the benefits into local planning policy.

Green Infrastructure

The West of England will grow its natural capital by supporting locally identified priorities to support nature recovery, ensure gains in green infrastructure and biodiversity, and maximise the multiple benefits of green infrastructure. This will help meet the aspirations set out in the 25 Year Environment Plan, including the ambition for 'leaving our environment in a better state than we found it' and 'connecting people with the environment to improve health and well-being'.

Working in partnership with the West of England Local Nature Partnership, which includes Natural England, the West of England will explore forms of support for this ambition, including access to better quality open-sourced data to help enable the identification of local green infrastructure priorities.

Keeping the region moving

Significant investments have already been made into addressing the local transport challenges improving connectivity and alleviating congestion through the Transforming Cities Fund and the WECA Investment Fund.

This includes £59.3m investment into Metro West Phase 1 including support from government through the Local Growth Fund, which will see the re-opening of the Portishead Line and enhanced local passenger train services on the Severn Beach and Bath to Bristol lines. The plans include a new rail station at Portishead and the reopening of the former station at Pill. The West of England has locally-led ambitions to further improve the suburban rail network, including exploring the viability of moving towards 'turn up and go' services. Local partners will continue to maximise the impact of discuss these ambitions with Network Rail, GWR and other partners.

The JLTP includes local ambitions for new and expanded rapid and mass transit services across the wider Bristol area including over Local Authority boundaries to the North and East as well as to Bath and the airport. The vision would be transformative, providing fast and reliable journeys for residents and visitors. It will be supported by comprehensive walking, cycling, bus and rail networks that enable people to get to stops and stations quickly and easily. The quality and coverage of this supporting network is critical, as the first and last mile of any journey is often the most important factor in determining choice of transport. To further promote a modal shift from the privately-owned car towards more sustainable modes of transport WECA is developing a Local Cycling and Walking Infrastructure Plan.



Case Study: GENeco

GENeco was created by its parent company, Wessex Water, in 2009 to help it become more sustainable. It now treats huge volumes of varied wastes and transforms them into useful products. This includes the food waste recycling from all of Bristol and Bath’s residents, and sewage sludge from over one million people.

From this waste, GENeco produces enough renewable energy to power over 10,000 homes, and heavily reduces the environmental impact of local businesses and the community. The by-product of its recycling processes is a nutrient-rich biofertiliser which is used on farms in the region, keeping valuable bio-resources in the local area.

The JLTP includes the locally-led ambition to address poor air quality and act against climate change. The region will explore:

- ▶ new technology on older buses to reduce emissions;
- ▶ 110 new gas-powered buses;
- ▶ improvements to cycle accessibility; and
- ▶ support to taxi operators to move to low emission vehicles.

The specific actions identified in this chapter will contribute to, and complement, these long-term ambitions.

Energy

Commitment to tackling climate change and ensuring quality of life for current and future generations is part of an environmental conscience that is part of the identity of the West of England. As a result, the region is home to a wide range of energy efficient initiatives, including some of the UK's leading community not-for-profit energy co-operatives. Since it was established in 2010, Bath and West Community Energy, has played a role in the development of community-owned renewable energy, and now generates enough capacity to meet the equivalent annual electricity demand for around 4,000 homes.

In 2016 Bristol City Council launched Bristol Energy as a 'force for social good', a gas and electricity supplier providing enough energy to power around 10,000 households and businesses across the UK.

It seeks to keep energy prices low and invests profits in the local community including local renewable energy generation. Looking to the future, Bristol aims to bring £1bn investment into the city's energy system through its pioneering City Leap initiative which is looking to strategically develop, co-ordinate, deliver and facilitate a smart, interconnected energy system.

South Gloucestershire Council is working with Horizon Nuclear Power to deliver new generation, low carbon, and affordable nuclear power. Bath and North East Somerset Council's Keynsham Civic Centre, opened in 2015, is a low energy consuming public building.

Building on the regional energy strengths, the West of England Strategic Energy Framework sets out the region's ambition for a diverse, resilient, and affordable energy system that enables economic growth whilst reducing greenhouse gas emissions. An action plan to achieve this is in development.

Whilst the level of housing growth identified in the JSP will increase energy demand across the region, there is also an opportunity through modern methods of construction and other innovations to minimise energy demand and maximise the use of renewable energy, where viable. The aim is to meet all demands for heat and power without increasing carbon emissions and while contributing to the Clean Growth Grand Challenge mission to at least half the energy usage of new buildings by 2030.

South West Energy Hub

The West of England Combined Authority hosts the South West Energy Hub. This £3.5m project, funded by government, supports projects that reduce energy use and increase clean energy capacity.

The Low Carbon Challenge Fund

The Low Carbon Challenge Fund (LCCF), a £4.2m European Regional Development Fund, awards grants, in addition to technical support and advice, to support the delivery of projects of the following types:

- ▶ SME energy efficiency projects delivering greenhouse gas savings;
- ▶ community-led small-scale renewable energy generation schemes, delivering additional MW output and CO₂ savings; and
- ▶ programmes of works, or specific projects, to improve the energy efficiency of public sector buildings, including housing.

The project will run for a three-year period from spring 2019 to spring 2022. It will benefit SMEs who implement energy efficiency measures to their premises or business operations; entities bringing forward small-scale renewable energy schemes; and public-sector organisations (and wider resident communities) or social landlords bringing forward projects to improve the energy efficiency of public buildings and housing.

This will drive a move towards a more sustainable low carbon economy and result in reduced greenhouse gas emissions in the West of England.

The national Industrial Strategy highlights the importance of high-quality infrastructure in enabling growth and prosperity. The West of England has agreed investment strategies that will set the foundation of productivity growth for the long term. A better-connected region will open up opportunities for businesses to collaborate, innovate, and grow, with access to a wider range of skills. By improving environmental infrastructure, and driving cleaner energy use, the region will remain an attractive place to live and work and will be resilient to future challenges.

Business environment

The West of England has a thriving business environment that encourages companies to grow.

The UK and global economy is transforming, as digitisation, autonomous systems, and the challenges of climate change cut across traditional industries and create new business models. Business cannot stand still, and with the region's innovative mentality and dynamic workforce, there is a significant opportunity to exploit.

In recent years, the region has seen a greater rise in the number of fast-

growing scale-up firms than almost anywhere else in the country. This success has been supported by high-performing incubators and accelerators, strong business networks and interactions with local universities, and well-established inward investment and business support services. The West of England will need to reinforce this ecosystem to ensure that innovative and disruptive new businesses can continue to grow in the region.

Figure 7: Growth in the number of scale-up businesses was higher in the West of England than in comparator areas between 2014 and 2017



Source: ScaleUp Landscape Report, ScaleUp Institute

Scale-ups

The West of England wants to cement its strength in nurturing high-growth businesses and ensure this is sustained beyond start-up.

The West of England has a thriving scale-up sector which will be important for future growth. Scale-up businesses expand quickly and have high turnover or employment growth. Scale-ups are on average 42 per cent more productive than their peers. Support for scale-ups is therefore a priority for the region.

The West of England has a large scale-up population with the sixth largest number of scale-ups per person of all LEP areas in 2017. Scale-up success is partly explained by the range of established innovation spaces such as SETSquared, Engine Shed, the Guild and the Bristol Robotics Lab which provide employment space and support to growing businesses. Other factors such as the highly-skilled workforce, attractiveness as a place to live and diverse and collaborative culture, also help to attract new businesses and employees.

An influential network of incubators and accelerators

The region has developed a strong network of incubators and shared working spaces that have been influential in supporting new and innovative businesses. These have increasingly helped to ensure the availability of employment space that meets the needs of a fast-growing business base:

- ▶ Future Space, in the University Enterprise Zone, has offices, workshops and lab-space for science and technology-based businesses, and has been explicitly designed to encourage innovation, collaboration and inspiration. Future Space supports businesses working in high-tech areas including robotics, digital and creative technologies, health tech and biosciences. It is estimated that it will bring an economic boost of £85m, as well as over 450 new jobs to the region over the next 10 years;
- ▶ This year's work started on the new food and drink innovation centre, FoodWorks SW, at the heart of the Junction 21 Enterprise Area, in North Somerset. Funded through the Local Growth Fund, it will provide a range of specialist facilities such as product testing space, and technical support for food and drink manufacturers across the region;
- ▶ A collaboration between Bristol City Council, the University of Bristol and the West of England LEP, Engine Shed is a unique hub where businesses, entrepreneurs, academics, social innovators, and corporates collaborate. Engine Shed showcases the strengths and innovations of the region by providing space, creating encounters, and running projects that inspire, enable, and challenge. Phase 2 will provide additional space and growth capacity for fast growing firms. It also hosts the University of Bristol's SETSquared Centre, with its four partner centres including in Bath (below) currently the world number one University Business incubator;

- ▶ The SETSquared University of Bath Innovation Centre supports entrepreneurs, start-up and scale-up companies across a range of high-tech and high-growth areas of activity including sustainable technologies, digital platforms, advanced engineering and social enterprise. It has helped over 1,000 start-ups to raise more than £1bn of investment; and
- ▶ Unit DX is a science incubator based in Bristol city centre, providing specialist laboratory facilities and science-focussed business support. It was established in 2017 and has rapidly grown to house 32 businesses. It also works with Engine Shed and Ultrahaptics to provide science outreach days to students at local schools.

These facilities complement the region's network of Enterprise Zones and Areas.

However, there are barriers for high-growth and innovative businesses: for example, local organisations have identified a gap for finance and investment into innovative scale-ups. Furthermore, businesses report that finding flexible and affordable working space can be difficult, and certain sectors report a shortfall in employees with the skills that they require.

As scale-ups grow their workforce rapidly, skills shortages present a particular constraint on growth. There is a strong demand for high level skills in particular, reflecting the large proportion of knowledge intensive businesses in the area.

Immediate action to support the West of England's ambition

Alongside the region's wider support for innovation and skills, the West of England will explore options for a locally funded high impact enterprise scale-up programme - focused on coaching, investment and working space. The programme will design and deliver a co-ordinated regional scale-up programme, delivering the kind of support that has been identified by companies as critical and shown in evaluations to be effective. It will build on the region's innovative Scale-up Generator and will complement the Creative Scale-Up programme being delivered by WECA and the Department for Digital, Culture, Media and Sport.

Government acknowledges the importance of supporting scale-ups to drive productivity and the impact that a programme like this would have in the West of England. This programme will include:

- ▶ specialist coaching support - targeting businesses identified as high growth potential with strategic advice to develop a cohesive growth strategy for realising opportunities;
- ▶ a West of England scale-up investment fund - to provide scale-up firms with access to risk capital and provide guidance on access to finance, driving growth and attracting additional private sector investment. This will provide highly innovative and creative businesses support for expansion. The West of England will explore mechanisms for this including existing

regional funding and working in partnership with neighbouring areas and the private sector. The West of England and the British Business Bank will work together to help SMEs in the West of England to access the finance they need to grow their businesses.

They will consult with and consider the role that the British Business Bank's current programmes play, considering in particular the Bank's equity programmes such as the Regional Angels Programme, Enterprise Capital Fund and British Patient Capital; and

- ▶ space for business growth - specialist 'grow-on' space and facilities focussed on Enterprise Areas and Zones and other strategic locations, and in sectors where the region has competitive advantages.

The West of England and the government are committed to increasing trade and investment performance across the region. To achieve this the West of England will continue to deliver Invest Bristol & Bath - the region's inward investment service - with the dual focus of attracting and supporting high-growth potential firms, and ensuring any subsequent foreign direct investment enhances the region's existing business base and delivers social benefits.

The service was established to attract new businesses to the area. It has achieved a great deal and worked well with government to secure significant foreign direct investment.

To increase performance further, Invest Bristol & Bath will become an even closer partner with the Department for International Trade to promote the area's strong and emerging sectors, and to ensure businesses receive the right support at the right time so they can invest and grow.

Invest Bristol & Bath will be structured around:

- ▶ a team dedicated to selling the region as a destination for investment;
- ▶ an enquiry handling service which will assemble virtual multi-agency and disciplinary teams to encourage firms to invest in the area; and
- ▶ an expanded account management service for existing foreign investment, high value indigenous companies and fast-growing firms to help them trade and growth within the West of England.

Centred on a strong alliance between local authority partners, the service is funded by the region's Economic Development Fund.

The West of England will work with Her Majesty's Trade Commissioners and their teams to help raise the awareness of the region's business opportunities and economic assets overseas. The government's action through the Export Strategy presents an opportunity to join up and enhance the region's Growth Hub and Invest Bristol & Bath support to businesses.

This will help to ensure more businesses can access the right support at the right time.

The West of England will work with partners, (including public and private sector providers, universities and chambers of commerce) to develop this tailored programme of support to address the specific needs of the different groups of businesses, and will call on the support of businesses to help to enhance the impact of their supply chains.

Together, these measures will ensure scale-ups can fulfil their potential, strengthen their productivity and grow successfully, enabling them to offer a wide range of good quality jobs. Fostering start-ups from a wider range of communities across the region will create more innovative businesses and employment opportunities.

Figure 8: The West of England’s approach to building business competitiveness will provide specialised support to different segments of the business population



Places

The West of England is a vibrant, diverse and creative region, which includes the two thriving cities of Bristol and Bath.

The diverse towns and communities across the wider region make the West of England a place that attracts people from across the world.

While overall the West of England is a prosperous region, this picture is not universal. In some areas, such as parts of South Bristol, central Weston Super Mare, and parts of Bath, high levels of deprivation are found. The actions set out in the inclusive growth chapter and throughout this Local Industrial Strategy will help to address these challenges.

Culture and Tourism

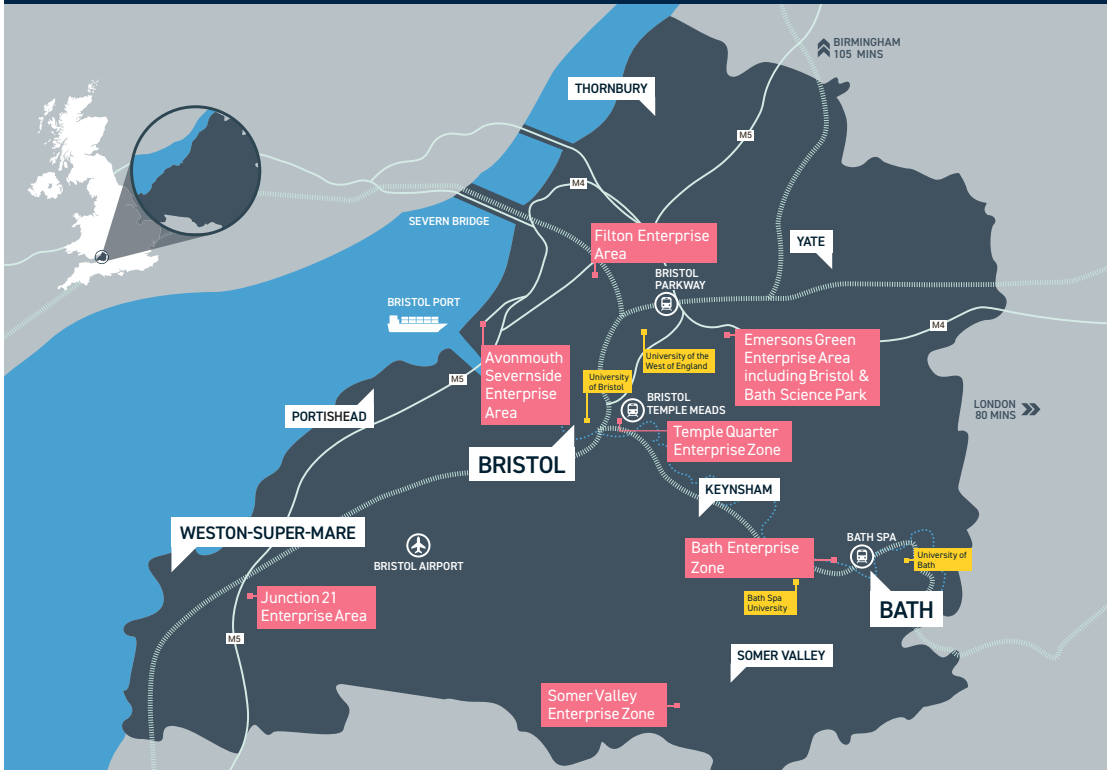
While some places across the West of England face challenges, the region as a whole is a well-recognised national and international cultural and tourist hot spot. During 2018, Bristol airport had 8,699,529 passengers and there were over 4.1 million visitors to attractions in Bristol and the UNESCO World Heritage site of Bath in 2018. The diversity and depth of cultural activity is one of the defining features with the vibrant cities complemented by the range of natural environment to both the north and south of the region. This mix of urban, rural and coastal areas provides an exceptionally diverse cultural ecology and the attractiveness of the region and the range of cultural activities are reflected in a vibrant tourism sector.

The West of England is working in partnership with Arts Council England to develop a Cultural Strategy which defines the role of culture in driving economic growth, identifies new mechanisms for funding cultural activity and articulates the role of culture in supporting wellbeing. This will deliver a narrative and framework that will help to prioritise regional activities that build on distinctive strengths and address key weaknesses.

Progress so far has seen:

- ▶ A 5G Smart Tourism Project, led by WECA and part-funded by DCMS, brought together 19 organisations and oversaw the creation of a testbed to demonstrate 5G capability and its potential to transform tourism and commercial activity in the region as well as supporting the emergency services and managing safety at events.
- ▶ The £40million Discover England Fund, launched by DCMS in 2016, has also funded the development of a range of bookable tourism products in the West of England, aimed at international visitors. These include England's Originals, which links up a number of England's most historic cities - including Bath - via rail itineraries. Similarly, England's Great West Way is a touring route following the Avon

Figure 9: Enterprise Zones and Areas in the West of England



and Kennet canal from London to the centre of Bristol, featuring many of the area's top attractions.

The region is also exploring opportunities to strengthen existing joint working on tourism to maximise its capacity to support the ambitions set out in the Tourism Sector Deal. The Tourism Sector Deal sets out how the government and industry will work in partnership to boost productivity, develop the skills of the UK workforce and support destinations in developing their visitor offer.

Culture-led placemaking

There is a strong history and track-record of re-purposing industrial spaces as part of culture-led placemaking. WECA has established a locally funded £10m Love our High Streets fund to support work with communities to transform key high streets and support wider regeneration through pilot projects in Bath, Kingswood and Bristol.

Enterprise Zones and Areas

The West of England has established three Enterprise Zones and four Enterprise Areas. They free up key development sites, consolidate infrastructure, attract business and create jobs. These areas deliver long-term, sustainable growth based on cutting-edge technology and enterprise. They are priority growth locations and play a major role in creating the right conditions for business to thrive. These include:

- ▶ the Bristol Temple Quarter Enterprise Zone is home to rapidly growing clusters of small and start-up businesses, particularly in the creative, digital and high-tech sectors. It is one of the largest urban regeneration projects in the UK, covering over 100 hectares of land;
- ▶ Bath and Somer Valley Enterprise Zone offers much needed land for contemporary workspace, new homes and supporting cultural and leisure facilities which will boost the economic success of Bath and North East Somerset and the region;
- ▶ the Filton Enterprise Area is home to the UK's largest aerospace cluster. Plans are underway for a new aerospace park with a focus on high value design, advanced manufacturing, defence and research, and major development on Filton airfield;
- ▶ the Junction 21 Enterprise Area is North Somerset's major employment, innovation and enterprise location. It is home to the Food WorksSW, a regionally significant food and drink development centre that is currently being developed;
- ▶ Avonmouth/Sevenside Enterprise Area is currently a mix of industrial and former industrial areas and greenfield sites immediately adjacent to the M5 and M49 motorways. Warehousing and Storage, Large Scale Distribution and Logistics and Environmental technologies will benefit from its infrastructure and connectivity; and
- ▶ Emersons Green Enterprise Area home to the Bristol and Bath Science Park which includes the already highly acclaimed National Composites Centre, providing a focal point for the coming together of science, innovation, technology, creative and digital media.

Developing sustainable, thriving places

As part of the ambition to ensure the benefits of a successful economy are shared, the West of England will support the development of sustainable, thriving places that offer opportunities and enhance the quality of life for communities across the region. This is critical to those that live or study in the West of England, to visitors and to a workforce which is increasingly mobile. Quality of place is crucial to economic performance as well as social cohesion and well-being.

Plans include a range of co-ordinated activities to help businesses find premises to suit their changing needs. Building on the Employment Land Assessments produced by the Local Authorities and business intelligence gained through the Growth Hub; the West of England and the Local Authorities will develop an understanding of the issues which prevent some locations attracting businesses.

Building on the lessons learned and relationships established through the £10m Love our High Streets fund, the region will look to:

- ▶ pilot innovative ways in which to diversify commercial activity in some locations, such as high streets, industrial estates, office parks;
- ▶ help to open up and connect locations and sector activity through the provision of the necessary infrastructure; and
- ▶ encourage a mix of employment premises to facilitate innovation.

To do this, it will also explore opportunities through national initiatives such as the Future High Streets Fund and the Stronger Towns Fund which could support local areas' plans to make high streets and town centres fit for the future.

This Local Industrial Strategy will support the development of sustainable, thriving places across the West of England so residents are able to access opportunities and enjoy an enhanced quality of life.

Implementation and evaluation

Implementation and collaboration

This Strategy sets out the government's and the West of England's view of opportunities for the region, as well as the challenges that need to be addressed to enable increased productivity and growth.

This Local Industrial Strategy does not include any new spending commitments outside of existing budgets. Instead, it will inform the strategic use of local funding streams and, where relevant, spending and decisions at the national level. It will also help the West of England decide on its approach to maximising the long-term impact of the new UK Shared Prosperity Fund once its details and priorities are announced following the Spending Review.

To demonstrate progress towards the long-term vision set out by this Local Industrial Strategy, the Strategy contains a number of specific actions. Where these actions are locally-led, these will be drawn from local budgets which exist for those purposes; where actions are shared between the West of England and government, they will be funded from existing local and departmental budgets, with funding allocated for those specific purposes.

This Strategy does not represent all the priorities and action being developed in the West of England. As detailed in this Strategy, the West of England will regularly review the latest evidence to continue designing the most effective approaches and interventions to be at the forefront of the future UK economy.

The actions set out here will be implemented alongside existing plans and broader regional strategies, including the Joint Spatial Plan which is currently being assessed, the Joint Local Transport Plan and West of England Employment and Skills Plan. The West of England will regularly review the latest evidence to continue designing the most effective approaches and interventions to be at the forefront of the future UK economy. This Strategy sets out long term ambitions and will continue to evolve as the economy changes.

Successful implementation of this Strategy will require the coordinated efforts of a wide range of partners, including local and national government, business, wider public services, universities, and community and voluntary organisations. The Local Industrial Strategy is therefore a further route to strengthening the focus of the strong partnerships in place within the region.

Implementation of this plan will also depend on collaboration with partners beyond the regional boundaries. The West of England will engage with partners in neighbouring regions, along key routes, such as the M4 corridor and within strategic groupings such as the M9 group of Mayoral Authorities to ensure the success of this Local Industrial Strategy in driving clean and inclusive growth within the region and beyond.

Evaluation

The West of England will put in place an evaluation programme for this Local Industrial Strategy. This will form part of the existing overall regional Monitoring and Evaluation Framework agreed with government. The framework will be reviewed annually and will include:

- ▶ Project evaluations for the specific schemes that are implemented as part of this Local Industrial Strategy;
- ▶ All projects funded as part of the Local Industrial Strategy will be subject to robust evaluation. Wherever possible and proportionate, cutting-edge independent evaluation methods will be used from the outset of programmes. The results of these evaluations will be published to meet the requirements already set out in the West of England's assurance frameworks; and

- ▶ Results will be reported annually through existing West of England reporting arrangements both locally and to government, including reporting to the national Industrial Strategy Council.

A wider review on the impact of the strategy will be included alongside the scheduled five year 'gateway' reviews of the WECA Devolution Deal.



Further information

In preparing the Local Industrial Strategy, the West of England has developed a substantial evidence base, identifying the region's current position and opportunities against the five foundations of productivity. This evidence was published in February 2019 and formed the basis of discussions to develop the region's priorities. The full reports can be found here:

[West of England Local Industrial Strategy: evidence base](#)

Additional sources include:

- ▶ [West of England Joint Spatial Plan](#)
- ▶ [West of England Joint Local Transport Plan](#)
- ▶ [West of England Employment and Skills Plan](#)
- ▶ [South West England and South East Wales Science and Innovation Audit](#)

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