

# Industrial Strategy Green Paper: West of England Response

## Summary

The West of England is a prosperous city region that is a **significant driving force for economic growth in the UK**. Growth has exceeded the national average over the past 15 years, productivity is highest of all the core cities and we are a **net contributor to the UK economy**. But the region is not without **challenges in particular around infrastructure and inequality**. We need to nurture the success of the region to enable it to play a full role in national economic growth and deficit reduction. There is a real risk that, without investment to tackle our challenges, we could lose what makes us unique.

## Key Points



### **Investing in science, research & innovation**

Government support Bristol North Fringe as a market leader in High-Value Design with a new Innovation Centre at Filton to support the powerful Aerospace and Engineering sector. Government maximise the opportunity for a high-profile and sector-led base here with the **relocation of Innovate UK**.



### **Developing skills**

Government support the West of England's proposal for **an Institute of Technology** to build on the region's strengths in HE, FE and industry and to deliver a network of integrated pathways reaching under-represented communities and providing clear routes to future employment opportunities.



### **Upgrading infrastructure**

Government support a **Housing Investment Fund** to inject a delivery focus into the local housing market tackling blockages to commencement and viability constraints limiting affordable housing numbers.



### **Supporting businesses to start and grow**

Government support West of England Combined Authority in delivering and expanding upon the **Better Business for All** principles.



### **Encouraging trade & inward investment**

Government support to help **build resilience** for our multi-national businesses with strength in Europe (availability of finance, clarity of state aid, post ERDF support etc).



### Delivering affordable energy & clean growth

Government work with West of England and South Wales Authorities on a **combined Severn Estuary Energy Strategy** to maximise the opportunities from emerging technologies.



### Creating the right institutions to bring together sectors & places

Government continue to work with the West of England Combined Authority to explore **further devolution and investment** that helps to unblock the challenges faced by the region and enable inclusive growth.

In addition we would welcome a **ministerial champion** to promote the region on a national and international stage.

As a **net contributor** to the Treasury and a **connected city region**, with a track record of innovation and entrepreneurialism, a high skilled workforce, and with a new devolved governance structure, the West of England offers huge **potential to test innovative and ambitious proposals** and the productivity and economic uplift arising. We have an opportunity with the establishment of the West of England Combined Authority to work together across the region to address the challenges but also to represent the region as a whole nationally and internationally. We are determined to ensure that the West of England continues to play its role as a **key driving force for economic growth** in the UK and we would like to work with Government in pursuit of this to pilot new ways of working and building on our unique economic strengths. This is not a story of reversing economic decline, but rather one of a high performing region with the potential, given the right support, to make a significant contribution to **improving the UK's historically poor productivity** performance.

### Context

The West of England is a prosperous city region that is a **significant driving force for economic growth in the UK**. Growth has exceeded the national average over the past 15 years, productivity is highest of all the core cities and we are a **net contributor to the UK economy**.

At the heart of this success lie some of the regions core strengths:

- It is an **open trading economy both nationally and internationally** – the region is outward looking and diverse. The motorway, rail, air and port infrastructure make this a **truly super-connected city region** and this connectivity facilitates a high proportion of local businesses competing internationally
- We have a **pool of high skilled talent** as a result of three interdependent factors:
  - World class **universities** producing high quality graduates
  - Employers offering **high quality jobs** attracted to the region by the university output creating self-sustaining clusters creating good career mobility. The region is home to the

strongest tech cluster outside London in the UK, and a cutting edge advanced engineering economy supporting the second largest Aerospace cluster in Europe. We have a global reputation for creative output and a globally focused financial and professional service cluster.

- A strong **vibrant and diverse cultural and leisure offer** making it an attractive place to live. Bristol is the 2017 best place to live in the UK according to the Sunday Times and the region is home to world heritage city and areas of outstanding natural beauty.
- **Clusters of world leading industrial sectors** e.g. aerospace, financial and professional services, creative and digital, and proto-clusters in emerging sectors such as robotics, AI, Driverless Cars, and Assisted Living supported by Smart Cities and Smart Housing.

However, this strong performance and the region's contribution to the wider economy cannot be taken for granted. The **West of England faces challenges that pose a real threat to future prosperity.**

- Recently **productivity growth has dipped** and jobs created across growing industries (e.g. health activities, architectural & engineering activities) have failed to offset big job losses in other areas (e.g. public admin & defence, insurance).
- In addition, **skills shortages** remain a barrier to growth across key sectors that are important to the economy e.g. advanced manufacturing, construction, creative and digital, health and life sciences. The region is also now identifying the scale of demand and necessary skills resources for several generations of employment opportunities in and around the nuclear sector.
- The region's **infrastructure is under significant strain**. Congestion is currently amongst the highest in the UK, and coupled with the additional pressure created by the projected population growth of 19% by 2025, this presents a real threat to the region's productivity. Public transport plays a much smaller role in the region than in other areas, only 6% of residents of the West of England use public transport to get to work which adds to the problem of congestion. The West of England's position as a transport hub means that problems on the region's road and rail network have knock on effects for neighbouring regions. Connectivity across the country remains a priority for the growth of local industry, not least the opportunity that electrification of the rail line to London would have offered.
- **Housing availability is increasingly constrained**, house prices in the West of England are the highest of any core city relative to median earnings and whilst delivery of new homes is increasing, there are challenges of the capacity of the industry and also viability of sites which impacts on the number of affordable homes. Build-out rates do not reflect the number of planning permissions granted or the provisions in local plans.
- Across the region the speed and connectivity of **broadband is variable**, particularly (but not exclusively) a problem in rural areas.
- Delivery of the West of England's **ambitious emissions targets**, targeting a 50% reduction of CO<sup>2</sup> equivalent emissions by 2025 from the 1990 baseline. Alongside this, the wider aim is to reduce CO<sup>2</sup> equivalent emissions by 80% by 2050.

Added to this, **inequality is a significant challenge**. Although the region performs well on most indicators of poverty, the **headline figures mask pockets of deprivation**. Each council has particular challenges:

- **Bristol:** has the highest unemployment rate, at 5.4%- over double that of South Gloucestershire and above national average. It also has a level of overall worklessness, out of work benefit and median hourly earnings that are worse than the national average.
- **Bath and North East Somerset:** has low lower quartile earnings compared to the average (the only council in the area that does), and higher house prices as a percentage of median income.
- **South Gloucestershire:** has a low percentage of its population with NVQ4+ qualifications- below the national average. It is a less successful performer academically than any other council in the region, with 51.7% of pupils attaining at least 5 A\*-Cs at GCSE- the only council below the national average.
- **North Somerset:** whilst generally a prosperous area, there are wards in Weston-Super-Mare which fall into the most deprived 1% nationally. In addition, residents' wages tend to exceed workers' wages; an imbalance reflecting the out commuting of residents to higher paid jobs in Bristol.

The Establishment of the West of England Combined Authority provides the opportunity to build on the cooperation at regional level to address the challenges faced and to draw on the strengths of the region to ensure that **the benefits of growth are shared by all our residents**. The West of England Combined Authority is developing a strategy for the region, this strategy will be finalised by the Mayor once he or she is in post. Emerging themes that are likely to feature in the strategy include:

- business that fulfil their potential
- world class skills for employment
- effective, resilient infrastructure

We will seek to ensure that the West of England strategy is closely aligned with the Government's industrial strategy and that it paves the way for further discussions with Government about greater devolution to the West of England Combined Authority, recognising the strengths of a statutorily defined strategic authority in delivering a local industrial strategy (Localis Report: The Making of an Industrial Strategy).

## **10 pillars**

### **Investing in science, research & innovation**

The West of England has a strong track record on innovation and knowledge intensive industries; the transistor chip was invented here, Concorde first took flight here, the use of composites in aircraft was pioneered here and mobile phone technology first became usable here. Some of the world's first autonomous robots were also developed in Bristol by Grey Walter, a tradition followed by Bristol Robotics Laboratory (BRL), the UK's largest centre for multidisciplinary robotics and AI research and development. We are also set to provide a lead role in nuclear innovation and the University of Bristol has led a consortium working on the Small/Medium Reactor prototype identifying a significant export opportunity for this.

The region proudly hosts the Bristol and Bath Science Park which the UK Government has designated as one of three strategic national assets for the development of advanced technology. The site is host to the National Composites Centre and we are supporting them to provide additional equipment to support innovation within the aerospace and advanced manufacturing industries. The North Fringe of Bristol is home to a powerful cluster of aerospace and engineering activity.

The region is home to world class universities, high tech industry clusters and a large number of innovative SMEs and forms part of the area covered by the South West England and South Wales Science and Innovation Audit. The audit evaluated scientific excellence and growth potential across one of the most vibrant regions in the UK and identified advanced engineering and digital innovation as the key strengths of the West of England. These strengths are reflected in our continuing industrial priorities at the heart of the region's Local Growth Fund Round 3 submissions and have been positively acknowledged by the Government in the LGF3 allocation. The Great West Taskforce for Science and Innovation has been established with involvement from Bath, Bristol, the University of the West of England the LEP and others beyond the region to represent an authoritative voice on advanced engineering and digital innovation. In addition, the South West Nuclear Hub, a partnership between Universities of Bristol and Oxford, is delivering innovative underpinning science, engineering solutions and technologies, which have a positive impact on the local economy by helping to raise technology readiness levels and increasing commercialisation.

As part of the developing strategy for the West of England Combined Authority we are keen to explore how to support the life cycle of innovation from idea to commercialisation and to retain that activity within the region and would be keen to explore thinking with central government on this. We also intend to use the tools available to us such as our growth hub and wider innovation networks to offer assistance and guidance to companies looking to secure funding through the Industrial Strategy Challenge Fund.

The West of England demonstrates a maturity in collaborative working which helps stimulate innovation, research and design. The areas strengths in creative tech have led to the emergence of pervasive technologies being applied across sectors. This has been supported by the universities through the establishment of creative shared workspaces such as the Engine Shed allowing collaboration between companies to take place. FutureSpace at UWE was set up with investment from BIS, the LEP and UWE to bring new start ups into the region and grow new high tech companies closely aligned to the Robotics, AI and Assisted Living environment creating a world leading cluster. One of the strengths of the area is a recognition that clustering / collaboration does not need to be vertical within sectors; horizontal working across sectors has brought about technologies to enable change. Informal networking opportunities have also helped develop a culture of collaboration in the area.

#### Actions:

1. Government **support Bristol North Fringe as a market leader in High-Value Design** with a new Innovation Centre at Filton to support the powerful Aerospace and Engineering sector. Government maximise the opportunity for a high-profile and sector-led base here with the **relocation of Innovate UK**.
2. Government **support the development of sites of innovation such as the Bristol & Bath Science Park**, by recognising the value of; appropriate planning restrictions on use; rapid

delivery of grow-on space to aid clustering and information sharing; expansion of Enterprise Areas; and local flexibilities to support development through business rates, CIL etc.

3. Government **support for bringing forward world class nuclear research and innovation** programmes including expansion of the SW Nuclear Hub
4. Government commitment **to increase the net national spend on R&D** which currently lags behind other leading Countries and could be hit by the loss of ERDF funding. This should take a **whole RD&I life cycle approach** including ‘proof of concept’ grant funding for SME led innovation as well as emphasis on commercialisation at early-mid ‘technology readiness’ stages.

### **Developing Skills**

The West of England is characterised by a high proportion of highly educated residents. The region attracts graduates from elsewhere as well as retaining graduates from the four major universities; Bristol, Bath, Bath Spa and the West of England. These universities result in Bristol having the second highest concentration of first degree education employment in the UK, after Oxfordshire. These academic institutions, coupled with a highly skilled and educated population, are recognised as key assets to deliver future growth. The region is also home to four well-distributed further education colleges which respond to the needs of local learners and employers.

The headlines on our highly skilled workforce masks a disparity in attainment within the region and the higher level skills that characterise much of our local employment are not accessed by all local residents.

Basic Skills:

The West of England welcomes recognition that the current system of retaking GCSEs is not successful for all people, repeated requirements to retake reinforces a sense of failure and reduces motivation to engage in future learning.

A new approach is required to ensure that our residents have the skills they need to progress in work. The proposed solution of a transition year for young people will increase the capacity in the system to support those who need additional learning, however we believe that a more nuanced approach is required. The link between aspiration and learning should be recognised and the impact of careers education, advice and guidance should be evaluated to better understand this link.

Institute of Technology:

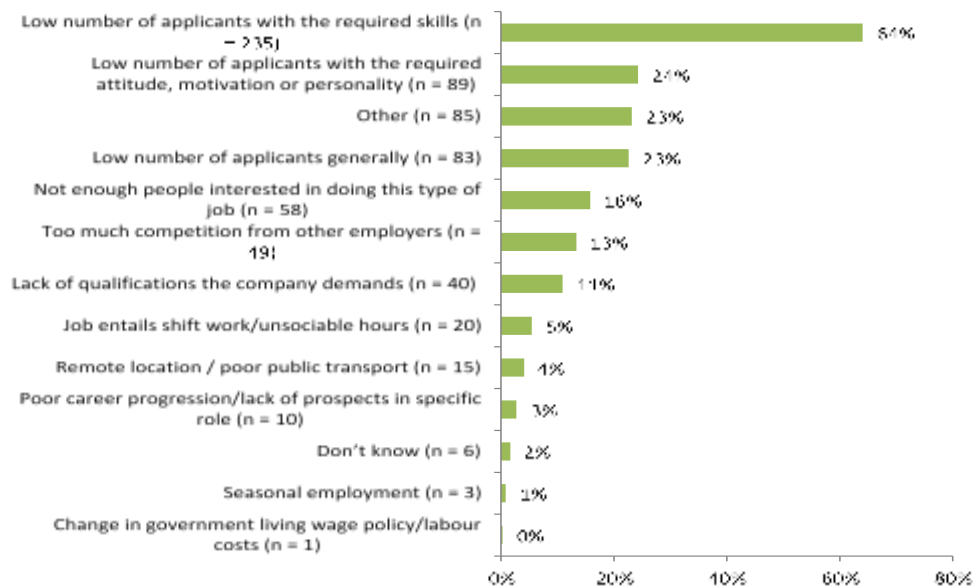
We welcome the Government’s commitment to supporting the creation of new Institutes of Technology and are working with senior Department for Education colleagues to develop a full proposal for the West of England Institute of Technology (IoT). Responding to recognised industry demands for STEM skills at Levels 3-5 across a range of sectors important to the local economy, our IoT will build on the region’s established strengths and assets within existing FE, HE and industry. Working closely with employers and other local partners, the IoT will deliver a geographically distributed integrated network of integrated, high-quality, employer-led pathways reaching under-represented communities and providing line-of-sight to future employment opportunities for all.

## Sector Specific Skills Gaps:

The LEP has developed Sector Skills Statements which are informed by an annual business skills survey supplemented with local and national economic intelligence. These Statements identify sector-based business priorities, such as apprenticeship growth and improved careers information, advice & guidance. The Statements promote alignment of skills provision to local needs and are reported annually to education and training providers.

Our most recent employer survey, collated in December 2016, shows that of all applications who struggled with hard-to-fill vacancies 64% cited a low number of applicants with the required skills as the reason, these vacancies impact on the productivity of businesses.

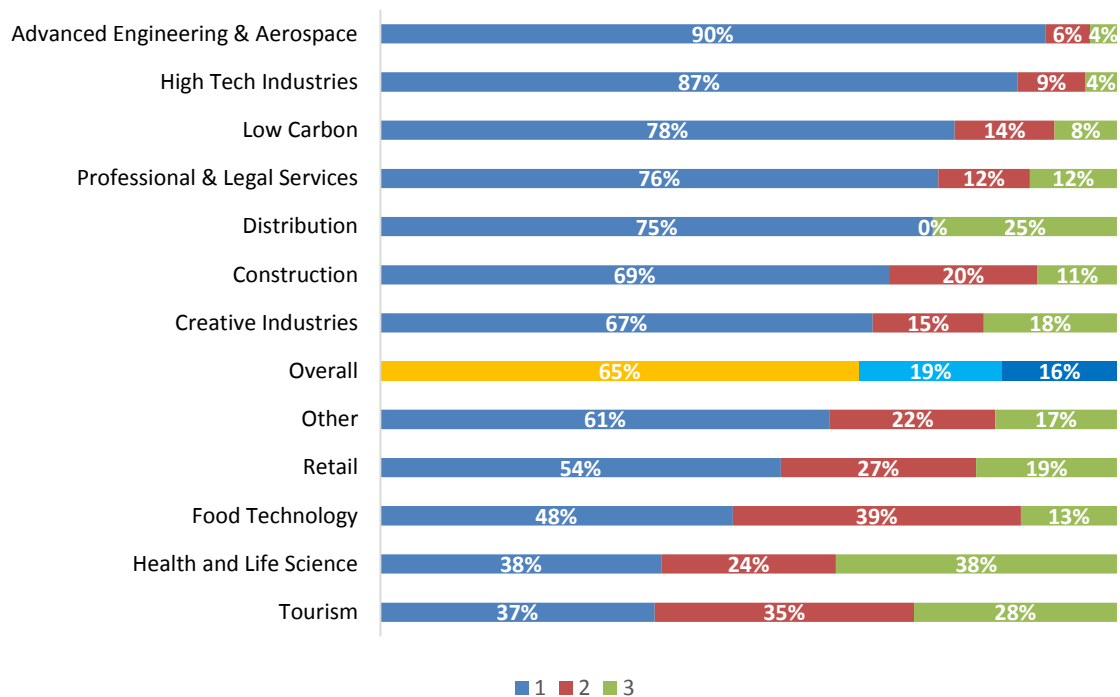
### What were the main reasons your vacancies were hard to fill?



Base: 367

Businesses in sectors which underpin the West of England ambition as set out in this document were most likely to cite technical skills as most important to their business:

% who ranked technical skills as most important to business growth by sector



The current skills system does not deliver the technical skills that businesses need and this mismatch creates a clear challenge for our local growth ambition. In the West of England there is a shortage of software developers and one local employer, supported by pilot funding from Department of Business, Innovation and Skills (as was) set up their own solution – the Maiden Academy. In 16 weeks the Academy produces work-ready software developers and although ‘graduates’ from the academy have achieved employment in a relevant role, the course is unaccredited and sits outside the existing skills system. This has the knock on effect of making the course unattainable to anyone who is not self-funding. This is now our local problem to solve and we have facilitated discussions with our local FE provider to try and develop a solution.

Careers Information, Advice and Guidance:

In some areas of the West of England, secondary education is characterised by low aspirations and lack of achievement. Tackling this requires innovative approaches to the curriculum and development of practical applications of skills at earlier stages of Secondary education and onwards.

The West of England welcomes the opportunity to deliver the objectives of the Careers and Enterprise Company locally and would be pleased to work with Government in defining future iterations of the programme. Providing young people with clear career paths and opportunities to access apprenticeships across a range of sectors can give some parity for those seeking vocational and/or academic pathways from 16+.

Engaging employers in education should not only offer the opportunity for young people to better understand the pathways into the jobs that are crucial for the region, but also for employers to better understand the content of curriculum and provide feedback about the basic skills they are looking for from young people entering the workplace.



The Government might consider stronger incentives for businesses actively demonstrating their role in upskilling the local workforce (tax credits for engagement with local schools, colleges, apprenticeships etc). By working with local areas on the programme of work of the Careers and Enterprise Company and utilising local delivery partners, we can, together, ensure that this activity is directly relevant to the needs of the local economy. Targeted intervention will contribute to the wider aims of improving basic skills, increasing the take up STEM subjects, increasing take up of technical training and understanding of progression through a breadth of career paths.

The region has developed apprenticeship strategies of which South Gloucestershire has been particularly successful ensuring 9% of learners are on programme, placing it in the top quartile. The strategies have taken time to build and implement and they reflect strong partnership working between Local Authorities, providers, employers and learners. Apprenticeships can often be viewed as old fashioned and focused on more traditional trades so some consideration of the branding to ensure they are clearly positioned as an alternative route into a career would be welcome.

#### Lifelong learning:

We welcome the inclusion of life-long learning and enabling adults to gain the skills that they need to progress in work. In particular, adults who are not currently in employment or are in low-paid insecure work need support to develop workplace skills. There should be a clear line of sight from entry level skills development to the technical, professional and managerial skills we know the economy will increasingly need over the next ten years. There is an opportunity to upskill / retrain older generations to fulfil skills shortages that are apparent now e.g. opportunity to tackle the growing care challenge through the 40+ age group. Recognition of the additional effort from providers required to support people who are returning to education after a considerable period of time should be stated.

Increased resources for individuals are welcomed, such as the maintenance loans suggested, and when devising those loans, key barriers such as childcare should be a priority consideration. Improved coordination and simplification of information, costs and support will enable local agencies to better support individuals.

Local areas are well placed to support the government in improving take up of skills development for our residents. The Local Authorities and other agencies have developed trusted relationships with many of our most vulnerable residents through programmes of work such as Troubled Families. We regularly engage more widely through services such as children's centres and through partner links such as the GPs embedded within the community. Investment in adult skills should be seen as a positive preventative action which can reduce reliance on the public sector later in life.

The establishment of the West of England Combined Authority coupled with reforms to apprenticeships and technical education and a place-based approach to developing an integrated employment and skills system, present a timely opportunity for the successful delivery of a clear education, employment and skills strategy for the region.

#### Actions:

1. Incentivise **engagement in education across the business community** in the region, and particularly in the areas important for future growth in the region where clear routeways from education into jobs can help address specific skills shortages.
2. Support for the West of England's proposal for an **Institute of Technology** to build on the region's strengths in HE, FE and industry.
3. Enable local areas to **harness the benefits of cluster growth** in order to promote local workforce development and to support vocational career development from post-16.
4. Improve the ability of providers to **respond to employer demands**. More flexibility is required to ensure that we are supplying employers with the workforce that they need. We would welcome the opportunity to review with Government the detailed example of the Mayden Academy and current challenge that it presents.
5. The next stages of the **Careers & Enterprise programme** should be co-produced with devolution areas to ensure local relevance
6. An increased role for local institutions to **support adults to access life-long learning** should be promoted to capitalise on all of the contact points between Government and residents and to continue to improve coordination with wider public services.

### Upgrading infrastructure

The West of England's infrastructure is increasingly under strain.

- Housing availability is increasingly constrained, and house prices in the West of England are the highest of any core city relative to median earnings. Current build-out rates are not fast enough to meet the requirements to deliver existing planning permissions and major housing sites as allocated in statutory plans.
- Congestion and reliability of public transport is a growing problem; levels of congestion are amongst the highest in the UK, public transport plays a much smaller role than in other areas – only 6% of residents of the West of England use public transport to get to work
- The Joint Transport Study, undertaken by the four unitary authorities, has already identified a transport infrastructure deficit of more than £7.5bn to meet the region's existing and future development needs to 2036; at least twice as much as the West of England Councils are currently spending on building transport schemes.
- There is a significant variation of broadband speed and connectivity across the region especially (but not exclusively) in rural areas
- And the workforce is set to grow a further 5.2% over the next 10 years, adding to the pressure.
- The natural and historical environment is an asset and an attractor for business and people coming to the area, and for business and workforce retention; but inevitably the commitment to sustaining that environment constrains the area and requires more innovative approaches to address development demands in the area.
- The distinctive natural environment of the region offers opportunities such as energy generation in the Severn estuary, but also challenges to the resilience of our region making effective flood defences crucial.

The West of England's position as a transport hub means that problems on the region's road and rail network have knock on effects for neighbouring regions.

The West of England authorities are working together to address these challenges with a strategy to plan transport infrastructure and houses together – the first of its kind in the UK. The 'joint spatial plan' (JSP) will be a Statutory Development Plan document that will provide a strategic overarching development framework for the West of England to 2036. Along with the parallel 'Joint Transport Study', these plans will allow strategic decisions to be made to deliver integrated housing, employment and transport opportunities so we can build sustainable, diverse communities which are well connected to job opportunities.

Broadband connectivity and speed is variable across the region with Bristol and Bath and North East Somerset ranked fairly well on download speeds and superfast broadband availability, but North Somerset and South Gloucestershire rank in the bottom 100 authorities. All authority areas suffer from notable no-spots including some city centre locations.

As an international gateway, a net contributor to the Treasury, and a region with a new devolved governance, the West of England offers huge potential to test innovative and ambitious proposals to deliver effective infrastructure and identify the economic uplift arising. As set out in the West of England's response to the National Infrastructure Commission call for evidence, we would like to work with the Infrastructure Commission on a focused piece of work to explore the potential for funding arrangements, partnership working and pilot projects to address these challenges locally. That submission sets out a number of bespoke example opportunities that could be tested locally and developed on a national scale.

#### Actions:

1. Support the West of England proposal for a bespoke **Housing Investment Fund** to inject a delivery focus into the local housing market tackling blockages to commencement and the viability constraints limiting affordable housing numbers
2. Commit to working with LPAs and housebuilders to identify the real **barriers to housing delivery** and revisit the viability, 5 year housing land supply, land banking issues that contribute to both stalled market development and 'planning by appeal' where authorities cannot deliver the necessary infrastructure
3. Consider using the West of England as a **test bed for new innovative technology** such as driverless cars or new High Tech housing design, manufacture and delivery
4. Provide strategic authorities with the full suite of **traffic management powers** to deal with congested areas (moving traffic offences, clean air zones etc.)
5. Create an equal risk and reward framework to encourage more third **party investment in the rail network**
6. Increase the rate of **broadband fibre installation** in the West of England and enable Unitary Authorities to invest in and 'light up' the fibre to make it available to local businesses. State Aid rules currently make this investment difficult and high risk.

#### Supporting businesses to start up and grow

The West of England has a strong business base with 61 enterprises per 1,000 residents and is ranked 1<sup>st</sup> out of 8 city regions. The regions business growth rate is fuelled largely by relatively low death rates (1<sup>st</sup>/8 city regions) rather than high birth rates (6<sup>th</sup>/8 city regions). Understanding what is behind these dynamics will be crucial to ensuring we can build on what is working well. We are keen to work with the new Chief Entrepreneurial Advisor, Professor Tim Dafforn to explore the reasons behind the West of England's unique position in this respect.

The region has strong entrepreneurship and innovation networks, enhanced by the globally leading business accelerator SetSquared, BRL Technology Incubator and Future Space Innovation Centre, and the strength of the legal and professional services sector as well as the more informal support networks that the vibrant creative culture has produced. We will look to enhance this support through our Growth Hub and by using ERDF funding to support two distinct support programmes, one to support business starts and growth and a second to specifically focus on scale up companies, where existing growth and potential for future growth is much more significant.

The productivity constraints outlined above around congestion and house prices are often the primary concerns expressed by local businesses at any scale. Addressing these challenges and delivering superfast broadband across the region to provide location or work from home alternatives will be critical to providing new business opportunity and supporting SME growth.

The wider South West is set to host two consecutive nuclear new build power stations, leading to substantial opportunities for local companies over a significant number of years. The challenge is to ensure that these are opportunities and to avoid the pitfalls of harming other business sectors through displacement of workforce and assets and also boom and bust by ensuring that the opportunities are truly sustainable and provide long term benefits and legacy.

The West of England has engaged with Nuclear South West in responding to the Industrial Strategy and would strongly support the commitment to forming linkages with other national nuclear activity and programmes to support high productivity business growth in this region. The South west Nuclear Hub will build on the strengths identified in the SW and Wales Science & Innovation Audit and will support a 65% supply chain source from the South West. A consortium led by the SW Manufacturing Service has successfully tendered for a 3 year £1m programme funded by the Heart of The South West and West of England LEPs and operating under the Nuclear SW umbrella. The contract provides flexibility to broaden support to other areas of the nuclear sector, including defence.

The region is also creating new companies, and new value/supply chains in new sectors such as robotics, autonomous vehicles and nuclear/hazardous environments through Bristol Robotics Laboratory, which is also developing new technologies to enhance productivity in existing sectors.

In the growth of the region's devolution deal, an issue arising from the business community and one already acknowledged by Government was the challenges for start-up businesses arising from regulation, particularly the lack of centralised resource/information to manage multiple regulatory pressures (i.e. a food business meeting planning, building control, food safety, air quality, noise, littering regulations etc.). Supporting strategic authorities in resourcing the development of the Better Business for All Model is likely to have a great benefit in business sustainability, productivity and a growing culture of business support.

### Actions:

1. Resource Strategic Authorities such as the West of England Combined Authority in delivering and expanding upon the **Better Business for All** principles.
2. Work with **Chief Entrepreneurial Advisor** to understand the dynamics of start-up and survival in the region to identify how we can build on the regions successful track record.
3. Develop **regional finance and banking options** (e.g. Finance Birmingham) both for investment ready but under-financed SMEs and larger businesses and to drive entrepreneurship and an 'inclusive' start up and growth model to replace ESIF from 2020.

### Improving procurement

The establishment of the new West of England Combined Authority provides an opportunity for the region to consider how best to derive greater local social and environmental value from national and regional and local public procurement activity. We are considering this as part of the work to develop the strategy for the new combined authority moving forward and would welcome further discussions on this as our thinking develops. We will also want to consider the potential opportunity provided by Brexit to enable or accelerate local and regional procurement with local supply chains and possible import substitution.

### Actions:

1. Continued **dialogue with government** as thinking develops and as the implications of Brexit become clearer.

### Encouraging trade and inward investment

The West of England's global transport links and economic strength make it an attractive place for business. The area has considerable strength in export heavy sectors of the economy such as financial services, manufacturing, information and communication and professional scientific and technical communications. The West of England has 520 companies with annual revenue of over £1m in these sectors. An impressive 59% of these companies have subsidiaries overseas. This is driven both by international companies and expanding globally competitive small companies. Clearly, the West of England economy is important not only nationally, but internationally. An analysis of the nature of this strength is reflected in the diversity of these ties. Whilst US offices proliferate (with 70 overseas subsidiaries), the economy also has close ties with the European Union: Spain has over 50 offices, followed by France, Denmark, the Netherlands and Ireland.

West of England export market is heavily weighted towards Europe, with over 60% of our exports going to the EU, predominantly to Germany and France. The uncertainty surrounding Brexit poses real risks to the region here and Government support in minimising the uncertainty will be crucial. We must ensure that the strengths of the region are properly represented and consistently articulated through one narrative for the region.

Invest Bristol and Bath (IBB) supports investment by companies that intend to create additional jobs or invest quantifiable capital in the region which has a direct link to the region's economic development priorities. IBB helps businesses expanding to new destinations by providing a range of support services including bespoke research and provision of regional economic information to support business planning; simplified access to relevant council, regional business services, suppliers and key contacts; support in identifying the right property and location; and introductions and connections to supply chains and network companies. IBB is on track to exceed its target of supporting the creation of 5,300 jobs by attracting business inward investment over five years by 2020.

The region's international connectivity is a key driver of trade and investment. Bristol Airport and Bristol Port offer international connectivity and both have significant growth plans, with the airport seeking expansion from 10m up to 20m passengers per annum, and additional deep water container capacity proposed at the Port. However, plans for the expansion of the airport are constrained by the surrounding infrastructure, and the productivity growth of the Port risks being curtailed by the withdrawal of the rail electrification proposals.

Actions:

1. Government support to help **build resilience** for our multi-national businesses with strength in Europe (availability of finance, clarity of state aid, post ERDF support etc.)
2. Continued support for **Bristol Port and Airport expansion plans**

**Delivering affordable energy and clean growth**

As was highlighted in the West of England's response to the National Infrastructure Commission's recent Call for Evidence, the distinctive geography of the region offers opportunity, with the expansive Severn Estuary already subject to two nationally significant nuclear projects set to provide 12% of the nation's energy. The addition of an innovative nuclear cluster to the already world class engineering cluster offers huge potential for other opportunities in clean energy development. The estuary also affords opportunities for innovative energy solutions, combined with flood defence schemes that can open economically viable areas of the existing flood plain. The Devolution Deal for the West of England recognised the potential offered by the estuary to make a significant contribution to the UK's electricity generation. As was set out in the region's response to the National Infrastructure Commission call for evidence, we would urge that the impacts on the environment and established users of the estuary are fully understood and mitigation developed.

We also know that the way we produce, distribute and consume power is transforming rapidly and that we must shift to a low carbon economy; the latter being enshrined in legislation (Climate Change Act 2008). We are working to capitalise on the opportunities created as a result of these changes, such as encouraging technological advancement and ensuring the commercialisation of those advances are rooted in the West of England. The West of England LEP has successfully bid for BEIS support to develop a West of England Energy Strategy. It is envisaged that the strategy will take a whole place/systems approach, meaning that in addition to translating our local targets (such as a 50% reduction of CO<sup>2</sup> equivalent emissions by 2025 from the 1990 baseline) into West of England

action, we will also seek to understand what energy infrastructure we will need into the future. As an example, on the supply side, distributed generation has increased significantly, and on the demand side, electric vehicles sales are increasing. We will also seek to understand what we can do to maintain our energy resilience and security, whilst also keeping energy clean and affordable.

The new West of England Combined Authority would welcome Government's continued support in tackling the above challenges and capitalising on the opportunities.

Actions:

1. Government work with the West of England and South Wales Authorities on a combined **Severn Estuary Energy Strategy** to maximise the opportunities from emerging technologies.
2. Direct elements of the **Industrial Strategy Challenge Fund** towards this agenda e.g. encouraging low carbon goods and services SME spin outs from our universities.
3. **Low Carbon Investment Fund** emulating what has been achieved in other areas of the country such as London and Manchester.

**Cultivating world leading sectors**

The West of England is home to a diverse range of world class sector clusters. A mix of global leaders in specialised fields and supporting smaller companies make the region one of national importance to Britain's high-tech and high productivity manufacturing industry. It has the largest UK aerospace and defence cluster and one of the largest concentrations of aerospace activities in Europe, and 14 of the 15 world's leading aerospace companies have supply chains in the region.

The Centre for Modelling and Simulation, based at the Bristol & Bath Science Park, is supported by Rolls Royce, Airbus, SMEs and Universities. It is developing a centre of excellence supporting the supply chain across the aerospace, automotive and civil engineering industries. The aim is to support the cycle of innovation, drive productivity and develop innovative approaches to component design.

In addition to this manufacturing, the West of England also has UK-leading high-tech industry in its area. The West of England employs the third highest number of people in computer manufacturing in the UK (after Cambridge and London) and has the second highest concentration after Cambridge. This is driven by global firms such as Roland DG (a Japanese world leader in wide-format inkjet printers) and Datatote (a global betting firm) basing themselves in the area.

The West of England is recognised as one of the three key creative and digital centres in the country alongside London and Manchester. Major production companies are based in the region including Aardman animations, BBC Factual Features and Wildlife divisions.

The West of England is also nationally important for infrastructure and engineering consultancies. 10,400 people are employed in these industries – making the West of England the largest and most concentrated LEP in the UK. Global engineering consultants such as BuroHappold Engineering are headquartered in Bath, whilst Opus International (infrastructure consultants) has its UK headquarters in South Gloucestershire.

Clusters are also complemented and fuelled by the education and research specialisms that have evolved within the areas world class universities. For example:

- University of Bristol Computer Sciences Department – pioneering radiowave technology, high performance computing and cloud software engineering – allowing Toshiba to revolutionise mobile communications, BluWireless to commercialise 5G wireless communication tools, Graphcore to raise £20m to develop the software essential for artificial intelligence and for Oracle to launch a global Cloud Accelerator.
- University of Bath’s centre for Advanced Sensor Technologies and Centre for Sustainable Chemical Technologies
- Bristol Robotics Laboratory – a collaboration between the University of the West of England (UWE) and the University of Bristol, and the UK’s largest academic centre for multi-disciplinary robotics research.
- University of the West of England, University of Bath and University of Bristol collaboration at the Bristol & Bath Science Park which includes the National Composites Centre.

The proximity to the nuclear sites at Hinkley and Oldbury coupled with the nuclear hub at Bristol University and nuclear research in partnership with Oxford University provides the opportunity to build world leading expertise in this area. Collaborators in this hub already include EDF, Magnox, Hitachi, Nuclear Decommissioning Agency, LEPs.

Bristol Robotics Laboratory and the University of the West of England, in partnership with the Universities of Manchester and Birmingham, and National Nuclear Laboratories, are leading a major new initiative to develop new robotic and autonomous systems that will operate effectively in nuclear / hazardous environments. Other industry partners in this £5m programme include Sellafield Ltd, EDF energy, UKAEA and NuGen.

### **Driving growth across the whole country**

The West of England is uniquely positioned to support and unlock growth across the country. Geographically the region is a hub connecting the South West to the Midlands and beyond, and South Wales to the rest of the UK. The airport and port act as an international gateway for people and businesses beyond the boundaries of the region. Investment in the infrastructure of the region could support growth and productivity across the region’s cities and rural areas but also beyond the regional boundary. The West of England’s position as a net contributor to the exchequer means that with the right support to continue to prosper, the region can play its role in supporting other areas of the country.

### **Creating the right institutions to bring together sectors and places**

We wholeheartedly support the fact that the emphasis on place and location has become recognised as a core component of the successful delivery and implementation of the Government’s industrial



strategy. This will allow the strategy to be tailored to the specific requirements within and across regions recognising that the strengths and challenges faced vary tremendously.

The new Combined Authority brings together the Unitary Authorities, Local Enterprise Partnership, Invest Bristol and Bath with the new mayoral authority. This new authority represent a region that is a powerful economic force in the UK but that has considerable challenges, not least in terms of congestion, housing and inequality. The new authority provides an opportunity to take an overview across local authority boundaries to ensure that economic growth works for the West of England as a whole as the new authority begins to develop we will also need to consider whether gaps remain in the institutional landscape.

Actions:

1. Government continue to work with the West of England Combined Authority to explore **further devolution and investment** that helps to unblock the challenges faced by the region and enable inclusive growth