



HM Government



Buckinghamshire Local Industrial Strategy

A Partner in the Oxford-Cambridge Arc

July 2019



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Foreword

“And above all, watch with glittering eyes the whole world around you because the greatest secrets are always hidden in the most unlikely places. Those who don’t believe in magic will never find it.” Roald Dahl

Roald Dahl created his own magic from a garden shed in Great Missenden, Buckinghamshire. He is widely regarded as one of the greatest children’s authors of all time and is one of the most popular with over 200 million book sales and an enduring legacy of film and theatre productions. As with magic, innovation and entrepreneurial spirit is not always created in the most obvious places and in Buckinghamshire we have some incredible examples to share. Storytellers and creatives, working collaboratively with engineers and scientists will be at the heart of this strategy, using pure imagination to release the potential of Artificial Intelligence and Virtual Reality and other emerging technologies to create new forms of magic.

Buckinghamshire has a highly productive and entrepreneurial economy with a dynamic and resilient employment base underpinned by a strong and high-quality business community.

This strategy, sets out the ways in which we aim to build on the momentum from current investment and the transformative infrastructure development already underway.

We aim to grow Buckinghamshire’s £16.4bn economy that currently produces the highest levels of productivity in the Oxford-Cambridge Arc (the Arc), into a world leading business location where investments flourish and innovation thrives. This Local Industrial Strategy will support the aims of the national Industrial Strategy which is government’s long-term plan to boost productivity by backing businesses to create high-quality, well-paid jobs throughout the United Kingdom, with investment in skills, industries and infrastructure.

In partnership with the government, Buckinghamshire will build our strategy around the future elevation and evolution of our global assets including: Westcott, where the innovation in space propulsion really is rocket science; Pinewood Studios, the home of the British film industry and the James Bond and Star Wars franchises; Stoke Mandeville, the birthplace of the global Paralympic Movement; and Silverstone, driving high-tech innovation out of the white heat of motorsport.

Together we will help these assets explore and conquer exciting new frontiers, enter new markets and discover new realities. We will do this by strengthening connections and relationships between these established assets and an innovative and vibrant SME base together with our universities, Catapults and academic centres of excellence.

Buckinghamshire is growing into a truly world class location for business investment with excellent connections to global markets via the Heathrow gateway and the global city of London. Our strategy will deliver major benefits:

- ▶ for the local area at a time of transformation as a growth area with the new establishment of one of the biggest non-metropolitan local authorities in the country;
- ▶ for the wider region in presenting Buckinghamshire’s key role in connecting, linking and presenting new bases for innovation; and
- ▶ for the national economy in providing an ambitious and attractive destination for investors seeking access to some of the smartest, most driven and entrepreneurial people on the planet.

From firm foundations, this Local Industrial Strategy lays the ground for a new relationship with government, building on a clear focus for the Arc and demonstrating the pivotal role Buckinghamshire will play in delivering further economic lift off for the UK.



Rt Hon Greg Clark MP
Secretary of State for Business,
Energy and Industrial Strategy



Andrew M Smith
Chair, Buckinghamshire Local
Enterprise Partnership

Executive Summary

This Local Industrial Strategy aims to ensure that Buckinghamshire continues to play a significant and increased role in the economy of the future.

It sets out how Buckinghamshire will deliver the national Industrial Strategy which aims to boost productivity by backing businesses to create high-quality, well paid jobs throughout the United Kingdom, with investment in skills, industries and infrastructure.

This is a time of transformation and great opportunity for Buckinghamshire: a highly productive area at the heart of some of Britain's most innovative and productive locations, in the Oxford-Cambridge Arc (the Arc) and the Thames Valley. Heathrow and strong connections with London directly link Buckinghamshire to the global economy.

Developed from clear evidence and building on a track record of strategic investment by Buckinghamshire Local Enterprise Partnership (Buckinghamshire LEP), in collaboration with local and national stakeholders, the Strategy builds upon Buckinghamshire's strengths - founded on entrepreneurial, highly productive small and medium sized enterprises (SMEs) - and identifies emerging global growth opportunities.

This strategy is one of a family of four linked Local Industrial Strategies covering the Arc, the others covering Oxfordshire, South East Midlands and Cambridgeshire and Peterborough

areas, reflecting the close collaboration and partnership working between LEPs across the region¹. All four share a common summary of the wider economic context and identify those priorities within each Local Industrial Strategy that can be developed at scale across the Arc, complementing the specific Buckinghamshire strategic objectives which sit at the heart of this document. This includes:

- ▶ Working together collaboratively across all of the foundations of productivity to ensure that the implementation of the four Local Industrial Strategies maximises the economic potential of the wider Arc region.
- ▶ Harnessing the collective strength of the Arc's research base - driving greater collaboration on science and research; developing a network of 'living labs' to trial and commercialise new technologies; and growing the role of the Arc as a global research and innovation hub.
- ▶ Bringing employers and skills providers together to understand the current and future skills needs, and planning provision to meet them.

- ▶ Maximising the economic benefits of new transport, energy and digital infrastructure within the Arc.
- ▶ Developing an improved business support and finance programme for high growth companies, a shared approach to commercial premises and an Internationalisation Delivery Plan to encourage greater trade and inward investment in the Arc.
- ▶ Embodying Government's 25 year Environment Plan and contributing to the Clean Growth Grand Challenge Mission to halve the energy use of new buildings by 2030.

Buckinghamshire's economy

Buckinghamshire is the fourth most productive area in England, with the highest employment rate in the Arc. The county has world leading assets and sectoral strengths in the space propulsion and film and television sectors, with the Westcott Space Cluster, Pinewood Studios and the National Film and Television School; and is also home to Silverstone Park and its associated Technology Cluster and a flourishing digital health sector.

Lying at the heart of the Arc, Buckinghamshire contributes to, and is set to benefit from, one of the UK's key growth regions. The Arc is currently experiencing a time of transformation and great opportunity, with major new government backed infrastructure works including East West Rail and the Oxford-to-Cambridge Expressway.

However, the overall trend shows that high levels of productivity growth are beginning to slow. Change is needed to ensure Buckinghamshire's economy remains fit for the future.

Buckinghamshire's Local Industrial Strategy will help to bring about that change. This document sets out how the economy will take full advantage of its global assets and maximise the Arc's opportunities to accelerate growth in productivity. To support this, it aims to transform the economic drivers underpinning the economy, in line with the national Industrial Strategy's foundations of productivity.

Mobilising Buckinghamshire's economic assets to drive growth

Buckinghamshire's economy is strong. That's why this Local Industrial Strategy places front-and-centre those areas where Buckinghamshire can lead the world:

- ▶ The Westcott space cluster: significant investment from government, Buckinghamshire LEP, and the private sector has nurtured local expertise in the space cluster. This is signified by the UK Space Agency's recent decision to invest £4.12m into Westcott Venture Park to develop the National Space Propulsion Test Facility. This Local Industrial Strategy sets out how partners will take the cluster to the next level, by working with businesses to address skills shortages for technicians and propulsion test specialists and

developing a long-term investment plan for Westcott to develop new R&D infrastructure and an established base for manufacturing excellence in the fields of space propulsion and in-orbit maintenance, based on working across value chains. Working with the Department for International Trade, the LEP will also seek to develop a Buckinghamshire Export and Inward Investment Partnership as a chapter of the wider Arc Internationalisation Plan. This plan will be based on Westcott's space assets and linked to other key sectors and global locations, including working with government to consolidate a global capability in the area.

- ▶ Pinewood Studios and the National Film and Television School at the heart of a creative industries cluster: home to Pinewood Studios, the National Film and Television School and the International eGames Committee, Buckinghamshire stands out in the creative media and entertainment sector. As this creative cluster evolves, Buckinghamshire aims to be at the forefront of future changes in the way in which creative content is developed and consumed. Working with the creative industries network, Buckinghamshire LEP will take action to work with government to consolidate a global industries capability furthering export capacity and inward investment in the sector, aiming to secure investment in and access to key research facilities and programmes.

- ▶ This Local Industrial Strategy also sets out to develop a new Screen Industries Global Growth Hub at Pinewood Studios to better link creative content providers with open access technical resources and with businesses and education networks, enhancing collaboration and providing opportunities for inspiration between businesses and education providers on skills development.

- ▶ Silverstone Park and technology cluster: Buckinghamshire's Silverstone Technology Cluster is a significant part of the Arc's high technology capability, and there exists major opportunity to stimulate potential high technology crossovers between, and across, sectors. To stimulate growth, Buckinghamshire LEP and the Silverstone Technology Cluster aim to focus business investment and financial incentives on SME innovation, and attract interest from the finance community, large corporates and overseas investors. Action will also be taken to support emerging technologies through improving links between firms and the knowledge base, developing the ecosystem to improve connectivity between businesses and universities, and improving networking across the Arc's 'super-cluster'.

- ▶ Digital health, med-tech and advanced artificial intelligence: Buckinghamshire benefits from significant assets in the digital health sector, including the Buckinghamshire Life Sciences Innovation Centre, Stoke Mandeville (the UK's national spinal centre)

- ▶ and global industry leaders such as GE Healthcare and Johnson and Johnson with well-established research bases within the area.

There are also opportunities to pioneer new approaches; Buckinghamshire is in the first wave of eight Integrated Care Systems, and major planned housing growth provides exciting 'Living Lab' prospects. Together with a new Health and Social Care network, Buckinghamshire LEP will aim to maximise this opportunity, using housing growth to test the application of new technology and remote health care, thereby exploiting the area's heritage as the birthplace of the Paralympic Movement. The goal is to position Buckinghamshire as the 'medical technology (MedTech) adoption accelerator' with dedicated medical device regulation degree apprenticeship programmes. Action will also be taken to support collaboration between businesses and health and care providers, to enhance the Integrated Care System and technology in adult social care and expand capacity to support spin-outs from R&D activity.

Underpinning these four economic assets are the five foundations of productivity set out in the national Industrial Strategy.

Ideas

In support of the government's target of 2.4 per cent of gross domestic product (GDP) going into R&D by 2027, Buckinghamshire will bolster knowledge transfer between its four major economic assets, its thriving network of micro, small,

and medium sized enterprises and world-leading research institutes and businesses across the Arc.

Buckinghamshire LEP will establish an Innovation and Enterprise Board. This board will develop 'Living Labs' for innovative businesses by:

- ▶ building on Buckinghamshire's unique capabilities and connect the innovation and entrepreneurial ecosystems to support ambitious businesses to rapidly translate new ideas into knowledge-driven growth in the area;
- ▶ brokering between local government, developers and service providers to exploit the potential of new housing developments, particularly at Aylesbury Garden Town, as test beds and commercialisation platforms for new and emerging technologies; extending step-out test facilities at the Westcott Venture Park to support the wider use of 5G applications within Health and Social Care, clinical and emergency services applications; and
- ▶ working with the planning system and developers to encourage the adoption of early stage technologies in all future developments.

People

Buckinghamshire has a major asset in its people. The population is highly educated and benefits from several significant technical education institutions. However, there are various challenges in Buckinghamshire's skills system - including apprenticeship pathways, mid-level occupations and

the need for increased social mobility, especially for those following vocational learning opportunities. This Local Industrial Strategy aims to address these challenges, by bringing about a skills and inspiration revolution.

The Skills Advisory Panel and Sector Skills Groups will ensure greater involvement from the private sector. Buckinghamshire will develop new employer-led models to address growing skills needs by:

- ▶ identifying areas of priority in the labour market for STEM skills through the Buckinghamshire Skills Advisory Panel;
- ▶ building upon high levels of business interest in the area, working with the Department for Education to engage with, and inform employers ahead of the roll out of T levels to boost the take up of industry placements, and in disciplines befitting the Buckinghamshire economy;
- ▶ complementing and championing the government's new technical education offer, establishing a prestigious, structured careers offer which provides clear pathways from school into work, for all. This will focus on reaching those less well-connected but also stimulate demand to meet skill shortages in high priority sectors, such as creative-tech careers; and
- ▶ addressing above average levels of 16 to 17 years old not in education, employment or training, working with employers across the area to facilitate effective use of the apprenticeship levy. This work

will feed into the broader Arc-level work with government to improve apprenticeship participation and achievement.

Infrastructure

Buckinghamshire is at the heart of significant infrastructure investment, with major planned transport projects and housing growth. However, Buckinghamshire's digital infrastructure lags behind its neighbours in coverage and quality of provision. The area's strong data-orientated sectors, computer consultancy businesses and creative-digital media sectors all need a robust digital spine in order to grow.

Buckinghamshire will establish the Productive Places Programme. This intends to:

- ▶ address digital connectivity bottlenecks and ensure digital infrastructure is part of new developments. In support of this, Buckinghamshire will map all digital coverage in the county and develop a new Digital Investment Strategy helping prioritise future investment in R&D hotspots including Enterprise Zone locations; work with major infrastructure providers to promote Buckinghamshire's digital connectivity interests;
- ▶ support businesses with high value potential, exploiting 'Smart City' concepts linked to Garden Town Developments; and

- ▶ ensure surface connectivity to Heathrow Airport and resilience for the rail access to London is improved to enhance, and develop, new economic relationships.

Business environment

Buckinghamshire's economy has a strong record in stimulating start-ups, supporting a thriving economy of micro, small and medium-sized enterprises. However, more can be done to underpin productivity improvements and support willing firms to scale-up. This Local Industrial Strategy sets out actions to ensure Buckinghamshire's economy is fit for the future.

Buckinghamshire Business First (BBF), a top-ranking Local Growth Hub, is ideally placed to co-ordinate this support. BBF will act to support scale-ups by:

- ▶ establishing mentoring and business leadership growth programmes;
- ▶ initiating a programme of supply chain development; supporting further inter-network innovation and promotion of cross sector ambitions to establish a new generation of growth-oriented firms;
- ▶ targeting Rural Business Support; and
- ▶ developing new and enhanced high quality incubation and co-working spaces.

Places

Buckinghamshire is at the heart of a region of innovation and ideas with ready access to global markets. It is uniquely placed as the keystone for the

Arc's success, with major infrastructure set to transform east-west connectivity aligned with improved north-south links, in particular to the major global gateway at Heathrow Airport. The area has exceptional natural capital assets, including much of the Chilterns Area of Outstanding Natural Beauty, that require sensitive handling. The county will develop a world-class economy set within an enhanced and world-class natural environment.

This Local Industrial Strategy sets out how actions will play out differently across Buckinghamshire, enabling all communities to flourish, based around:

- ▶ a 'commercialisation cluster', building on the advanced manufacturing base surrounding Silverstone and Westcott, increasingly integrated into the regional economy through the Arc;
- ▶ a 'Living Lab' for collaboration between the public and private sector, centred around Aylesbury and Stoke Mandeville; and
- ▶ a 'creative and digital cluster' around High Wycombe, the National Film and Television School, and Pinewood Studios.

Grand Challenges

The national Industrial Strategy sets out four Grand Challenges that will have a transformative impact on society and the economy: Ageing Society; Artificial Intelligence and Data; Clean Growth; and the Future of Mobility. This strategy identifies how each of these challenges relate to Buckinghamshire.

Introduction

This strategy sets out how Buckinghamshire will deliver the aims of the national Industrial Strategy, the government's long-term plan to boost productivity by backing businesses to create high-quality, well-paid jobs through investment in skills, industries and infrastructure. This strategy is founded on the nationally significant economic assets of Buckinghamshire, including:

- ▶ Westcott Space Propulsion Cluster;
- ▶ Pinewood Studios and the National Film and Television School Creative Cluster;
- ▶ Silverstone Park and Technology Cluster; and
- ▶ digital health, med-tech and artificial intelligence (AI) with a Stoke Mandeville Cluster.

Buckinghamshire will deliver this change by transforming economic drivers and the business ecosystem to drive productivity through:

- ▶ a skills and inspiration revolution;
- ▶ transformative investment in digital infrastructure;
- ▶ development of enhanced and long-term R&D collaborations as part of a Living Lab;
- ▶ advancement of commercial innovation; and
- ▶ boosting business scale-up and efficiency.

The strategy has been informed by a detailed analysis of a robust economic evidence and has been developed with local and national stakeholders, including business and social enterprises, universities and colleges, local authorities and community organisations. The strategy has been supported by a steering group drawn from across all of these sectors. It builds on and complements the foundations established in the Strategic Economic Plan and the Buckinghamshire Growth Strategy, focusing specifically on mobilising internationally important economic assets with the potential to significantly transform the local economy and lead growth for the national economy.

In addition to the specific shared commitments agreed with government, this Local Industrial Strategy also details how Buckinghamshire will work with a variety of local, national and international partners to deliver the strategy's ambitions.



Oxford-Cambridge Arc: economic context

The role of this strategy

This Local Industrial Strategy for Buckinghamshire articulates government and local partners' shared ambitions for the area at a granular level, outlining how specific interventions in the local area will drive future growth in Buckinghamshire, and across the Arc more widely.

It outlines the key priorities for Buckinghamshire for each of the five foundations of productivity: Ideas, People, Infrastructure, Business environment and Places, as well as those areas of work which will be progressed collectively at an Arc level.

A key driver of this strategy is to exploit Buckinghamshire's position at the centre of the Arc, to mobilise its economic assets to drive growth locally and nationally. This is particularly important in relation to three of the Arc's key growth sectors:

- ▶ space, taking advantage of Westcott's particular strengths in upstream space and the National Propulsion Test Facility;
- ▶ the creative and digital sector, to which Pinewood, the National Film and Television School and the creative industry cluster in the South of Buckinghamshire are critically important; and

- ▶ advanced manufacturing, with the Silverstone Park and Technology Cluster at its core.

The Arc is a national trailblazer area and the LEPs in the Arc are amongst the first, nationally, to develop and publish their individual Local Industrial Strategies. Each of the strategies should be read as 'local chapters' of the national Industrial Strategy² - outlining not only the ambitions for the local areas, but also how their strengths and assets will contribute to national objectives.

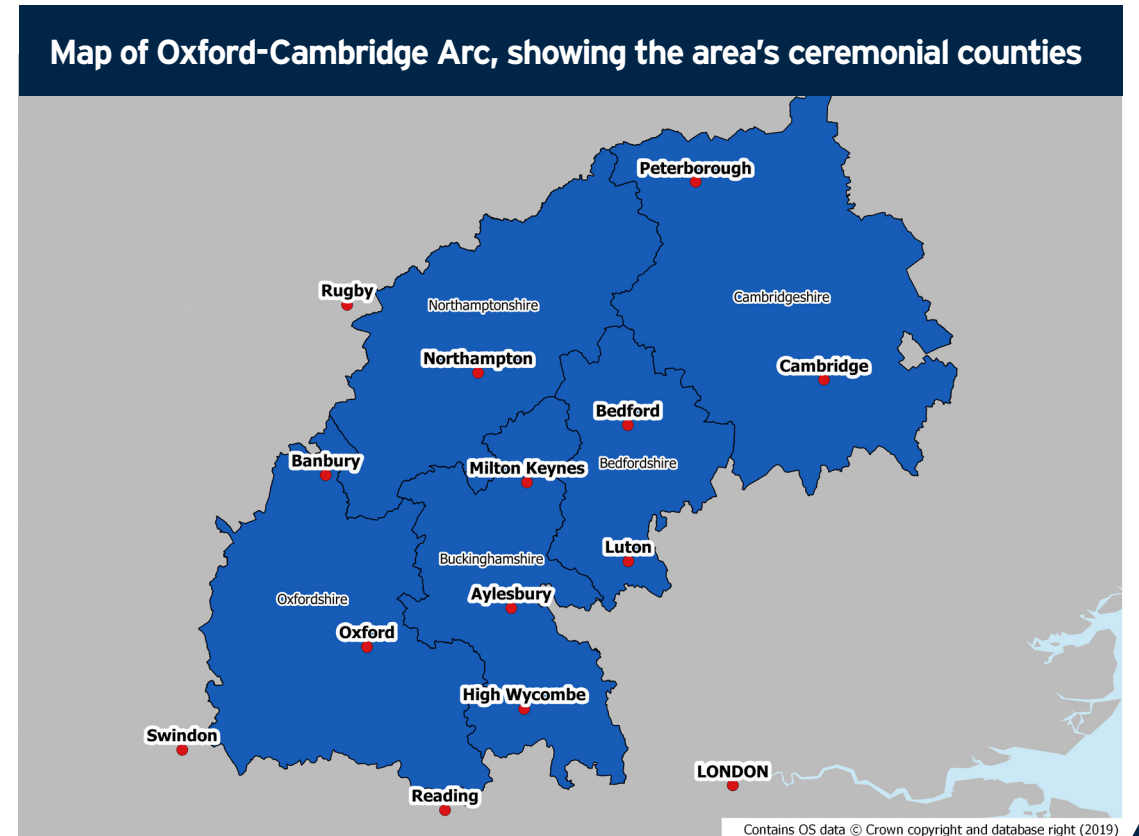
The economic opportunity presented by the Arc is significant. But it will not happen by itself. It will take concerted, and coordinated, work by both government and the local areas to ensure that the Arc remains an economic asset of international standing over the coming decades. This Local Industrial Strategy for Buckinghamshire, published alongside those for Cambridgeshire and Peterborough, Oxfordshire and the South East Midlands, shows how this will be done.

Introduction to the Arc

The Arc is a world leading economic area, underpinned by a high-quality environment, which has the potential to deliver transformational growth that will create jobs and boost local and regional economies for the benefit of existing and future communities. It currently has 3.7 million residents and over two million jobs, contributing £111bn of annual Gross Value Added (GVA) to the UK economy per year³ and the transformative economic potential to contribute around £191.5bn

by 2050. It is a highly productive and prosperous region with global strengths in science, technology and high-value manufacturing.

The Arc covers the ceremonial counties of Oxfordshire, Buckinghamshire, Northamptonshire, Bedfordshire and Cambridgeshire. The economic landscape is covered by the Oxfordshire, Buckinghamshire and South East Midlands Local Enterprise Partnerships and the Cambridgeshire and Peterborough Mayoral Combined Authority's Business Board.



The Arc as a whole is a strongly knowledge-intensive economy. It contains ten diverse universities⁴, including the Universities of Oxford and Cambridge, two of the world's greatest and most internationally recognisable centres of learning, and a network of cutting-edge science parks, research institutions, businesses and incubators.

The Arc is home to world-leading R&D and is already renowned as a place of global firsts - pioneering cures for disease, forging breakthroughs in engine technology, innovation in future energy and transport systems, and developing world-leading strengths in technologies that are shaping the twenty-first century. But it has the ambition and ability to go further. Its continued success will be critical if the UK is to meet its target of 2.4 per cent of GDP being spent on R&D by 2027, and its knowledge and innovation assets enable the area to be world-leading in industries that have rapidly growing global markets.

The Arc today: key growth sectors

Transformational growth of the scale envisaged across the Arc will need to build on the breadth of existing assets and strengths found across the local area.

The Arc has strengths across the field of space. The Harwell Science and Innovation Campus in Oxfordshire comprises 90 space organisations employing nearly 1,000 people and is the largest space cluster in Europe incorporating the European Space Agency, the Space Applications Catapult and the National Satellite Testing Facility. This is complemented by Westcott Venture Park in Aylesbury Vale with a growing space cluster with particular strengths in upstream space, and also home to the UK Space Agency's National Space Propulsion Test Facility. In aerospace, Central Bedfordshire's Cranfield University, which is home to the Aerospace Integration Research Centre and the UK's Aerospace Technology Institute, is building a Digital Aviation Research and Technology Centre that will spearhead the UK's research into digital aviation technology.

There are several leading creative and digital clusters within the Arc. In Buckinghamshire, Pinewood Studios and the National Film and Television School comprise two globally renowned state-of-the-art facilities. Milton Keynes, Peterborough, Cambridge, Luton, Northampton, Oxford, High Wycombe, South Bucks and Aylesbury all have highly concentrated creative and digital clusters with diverse specialisations. Oxfordshire is home to a range of strengths including computer games, software development, cybersecurity, high performance computing as well as film and TV including the new £78m studio facilities at Didcot opened by Rebellion. In Cambridge, the information and digital technologies cluster is highly concentrated, with a strong track record of establishing, and growing, globally significant companies. This high concentration of modern, creative, industries, have led to Arc businesses featuring heavily in the national Creative Industries Sector Deal.

The Arc is a world leader in advanced manufacturing, with specialisms in high-performance technology and motorsport engineering. Silverstone is home to 40 advanced manufacturing companies, testing facilities for materials and vehicles and the iconic F1 Circuit. More widely, there are over 4,000 businesses operating in 'Motorsport Valley'⁵, which extends from Northamptonshire into Oxfordshire and beyond - a £6bn global cluster of automotive, motorsport and advanced manufacturing companies.

The Arc is home to two globally renowned life sciences clusters in Oxford and Cambridge - the most productive life sciences clusters in Europe, which already compete internationally with the global leaders in San Francisco and Boston, Massachusetts. These clusters feature prominently in the UK's Life Science Sector Deals, published in 2017 and 2018. The Cambridge life sciences cluster alone is home to over 400 companies, with 15,500 employees and contributing around £2.9bn annually to the UK economy⁶. Oxfordshire is home to a world-leading bioscience cluster, with an estimated 180 R&D companies and over 150 companies in associated industries. It has world-class R&D facilities, with four new innovation centres at the Oxford BioEscalator, the Begbroke Accelerator, Harwell Science and Innovation Campus and Culham Science Centre. Buckinghamshire is also home to a growing medical technologies sector, and the county also houses national facilities, such as the spinal centre in Stoke Mandeville.

The Future of Mobility Grand Challenge features heavily across the Arc as a whole, specifically in the research, development and commercialisation of Connected and Autonomous vehicles. Key assets include: the RACE Centre at Culham Science Centre, which is a UK centre of excellence in robotics and autonomous systems; Millbrook Proving Ground in Central Bedfordshire; and at Milton Keynes, a hub of the Connected Places Catapult and the UK Autodrive project.

Policy Context

Recognising the importance of the area and the opportunity it provides for the UK, the government has already made significant investment to support local growth and productivity in the Arc over recent years. This has included:

- ▶ committing over £400m of Local Growth Funding to the LEPs in the Arc from 2015/16 to 2020/21, to fund growth enabling projects;
- ▶ agreeing over £800m of funding for economic growth, transport and skills through the Cambridgeshire and Peterborough Devolution Deal;
- ▶ continuing to invest in the four LEPs' Growth Hubs to provide business support across the Arc and investment in the Greater South East Energy Hub;
- ▶ supporting the accelerated development of key sites through the Enterprise Zone programme, including in Science Vale, Northampton Waterside, Aylesbury Vale and Alconbury Weald; and
- ▶ investing, through Innovate UK, £670m in 1000 businesses in the Arc since 2010 to help them develop and innovate new products and services.

It was part of recognising the national importance that in 2016 the government commissioned the National Infrastructure Commission (NIC) to undertake a study to strengthen the collective understanding of the area's economic growth potential. The NIC published its report⁷ - Partnering for Prosperity: A new deal for the Cambridge-Milton Keynes-Oxford

Arc - in 2017. The report concluded that, with the right interventions, the Arc could harbour transformational growth, even against its existing levels of output. It explained that meeting this long-term potential would require both significantly more homes to be built and significantly improved east-west transport connectivity.

In its response to the NIC report, published in 2018, the government designated the Arc as a key economic priority, outlining a breadth of actions to seize the opportunity for growth identified in the NIC's report. The government also affirmed its ambition to deliver more homes in the Arc, supported by measures such as the £215m Oxfordshire Housing and Growth Deal and the recent confirmation of £445m Housing Infrastructure Funding for the Arc. The government has committed to deliver transformational infrastructure projects to improve east-west connectivity across the Arc, most notably by completing the £1bn East West Rail scheme and the Expressway. Government is also working with partners to identify what utilities, digital and environmental infrastructure, planning and investment is required. Importantly, the government's response to the NIC recognised that delivering ambitious growth on this scale had to go hand in hand with environmental enhancement in order to maximise the benefits to local people and leave the environment in a better state for future generations.

Since then, the government and local leaders have been working in partnership across the Arc to match the level of ambition for the area. This includes working collaboratively to realise the area's potential through four inter-related policy pillars:

- ▶ Productivity - ensuring businesses are supported to maximise the Arc's economic prosperity, including the skills needed to enable communities to benefit from the jobs created;
- ▶ Place-making - creating places valued by local communities, through the delivery of sufficient, affordable and high-quality homes, to increase affordability and support growth in

the Arc, as well as wider services including health and education;

- ▶ Connectivity - delivering the infrastructure communities need, including transport and digital connectivity, as well as utilities; and
- ▶ Environment - investing in environmental infrastructure and ensuring growth leaves the environment in a better state for future generations.



Buckinghamshire and the Industrial Strategy

Buckinghamshire lies at the heart of the Arc, one of the UK's key growth regions with London and the UK's international gateway at Heathrow Airport on the southern boundary.

With a current total GVA of £16.4bn it is the fourth most productive Local Enterprise Partnership area in England. It has the highest employment rate in the Arc, at 81.8 per cent compared with 75.1 per cent for England. However, there remains strong global competition - for comparison - it would take a 33 per cent increase in GDP per capita for Buckinghamshire to currently register within the top 25 German regions.

The work to create the Local Industrial Strategy has looked at where there is strength in sectors to close the productivity gap on the leading international areas. Overall trends in the Buckinghamshire economy are beginning to show a slowdown in the rate of GVA per hour worked growth due to a growth in less productive sectors, compounded by the regional opportunities available for a local workforce.

Mobilising Buckinghamshire's internationally significant economic assets

This Local Industrial Strategy seeks to commit the anchor institutions in Buckinghamshire to new ways of working, and support collaboration to more effectively mobilise its economic assets and drivers.

Four key economic assets have the potential to make a significant contribution to the national drive to raise productivity and enable economic growth. These assets will be enhanced to deliver sector-leading productivity growth:

- ▶ Westcott Space Propulsion Cluster - where businesses are at the frontier of Britain's launch, in-orbit services and satellite technologies;
- ▶ Pinewood Studios and the National Film and Television School Creative Cluster - placing Buckinghamshire as the international leader in immersive content drawing on the pioneering development and use of augmented reality, virtual reality and other new technologies in storytelling;

- ▶ Silverstone Park and Technology Cluster - as the global location of choice for high-tech innovation, developing and manufacturing additive and digital technologies that will change the world; and
- ▶ Digital Health, Medical Technologies and Artificial Intelligence (AI) with a Stoke Mandeville Cluster - where Buckinghamshire is developing an innovative health and social care Living Lab, which has supported the creation of an efficient and effective health and social care model to build on commercial capability.

Buckinghamshire will also focus on reinforcing the five foundations of productivity set out in the national Industrial Strategy:

- ▶ **Ideas:** An Innovation and Enterprise Board - to help to deliver a focus which is attractive to key growth sectors and underpins Living Lab ambitions;
- ▶ **People:** A skills and inspiration revolution;
- ▶ **Infrastructure:** Putting Buckinghamshire at the forefront of a resilient and future-proofed physical and digital infrastructure network;

- ▶ **Business environment:** An export and inward investment partnership - to support aspirational businesses to innovate, become more resilient and stimulate international growth; and
- ▶ **Places:** A major opportunity presented for economic growth around towns and main transport hubs to deliver new housing and commercial stock.

Helping Deliver the Grand Challenges

This Local Industrial Strategy will also highlight how Buckinghamshire will focus on the delivery of the four national Grand Challenges:

- ▶ Ageing Society: pioneering the development of 'encore' careers;
- ▶ Artificial Intelligence and Data: establishing an open data store for services enabled by Artificial Intelligence;
- ▶ The Future of Mobility: reducing the reliance on car ownership; and
- ▶ Clean Growth: aiming to halve the energy use of new buildings by 2030.

Mobilising Buckinghamshire's internationally significant economic assets

The Westcott Space Cluster

The Westcott Venture Park and Enterprise Zone, established and managed by Buckinghamshire LEP is a centre of excellence for SMEs and larger companies engaged in rocket propulsion R&D. It is well located in terms of neighbouring anchor institutions within the Arc including the Satellite Applications Catapult at Harwell, the wider national network of satellite applications incubators and the National Space Centre at Leicester.

Government is already working in partnership with the Space Industry and Westcott to support the growth of this economic asset by investing £4.12m in Westcott Venture Park through the UK Space Agency. This investment will establish the National Space Propulsion Test Facility. Government has also designated parts of the Westcott site as an Enterprise Zone. The Buckinghamshire LEP has built on this national investment through Local Growth Fund resources, establishing incubation and innovation facilities and a 5G test bed on the site.

The challenge for Westcott, to build on this investment, is to develop a separate strategy which complements the capabilities of businesses in other areas in a commercially sustainable way. Westcott's capabilities and site designation mean that it is particularly well-suited to higher level specialist production, technology readiness level testing and demonstration activities. A significant opportunity exists for a distinct offer in relation to launch, 5G and in-orbit services. Buckinghamshire LEP with the Westcott Space Cluster will work with businesses to continue to establish critical business infrastructure and to address skill shortages for technicians and propulsion test specialists. This will result in a long-term investment plan for Westcott and support businesses in the cluster.

Pinewood Studios and the National Film and Television School

Pinewood Studios is a centre of excellence for film and TV production and has hosted internationally renowned franchises including Star Wars and James Bond. There are over 250 business on the site and major expansion is currently underway.

The National Film and Television School (NFTS) in Beaconsfield is the pre-eminent film, television and games teaching institution in the UK with alumni including multiple Oscar and BAFTA award winners. Last year, the school itself won a BAFTA for 'Outstanding British Contribution to Cinema' and the Queen's Anniversary Prize for Higher and Further Education. The NFTS, with partners from immersive theatre, gaming, film and television, performance capture and virtual reality, have been selected by the Industrial Strategy Challenge Fund Audience of the Future programme to establish a £20m Centre for Excellence in Immersive Storytelling exploiting cutting edge virtual, augmented and mixed reality technologies.

Buckinghamshire is also leading the way in e-sports. It is home to the International eGames Committee

and has an outstanding outside broadcast network. Buckinghamshire New University offers courses in audio and music production, film and TV production and animation.

The film and TV sector is facing major change, with boundaries blurring between different platforms. Businesses need to adapt to open new markets for experiential creative and digital content. Many SMEs in the creative sector are linked to Pinewood and the NFTS, making it essential to support their links to these and other anchor institutions, including universities and Catapult centres. A priority is to accelerate the adoption and diffusion of augmented reality and virtual reality technologies amongst such businesses, helping deliver the Creative Industries Sector Deal target of doubling inward investment growth in the film and high-end TV sector to £4bn by 2025.



Silverstone Park and Technology Cluster

The Silverstone Technology Cluster is an important component of the wider high technology cluster which spans the Arc. Over 4,000 businesses in precision engineering are located within a one-hour radius of Silverstone.

There is significant potential to enable further growth in this sector by growing and actively managing the Buckinghamshire LEP Silverstone Enterprise Zone to stimulate potential high technology crossovers. This means building a manufacturing base, utilising the specialist knowledge in areas such as additive manufacturing, aerodynamics and light-weighting to develop new linkages across automotive and advanced engineering sectors into the aerospace, space, clean-tech, health care, sport, materials and electronic sectors.

A major challenge for the development of the cluster will be drawing together sub-regional partners including in the areas of battery development and engineering capability from the University of Buckingham, Cambridge's cleantech, Pinewood Studios, Satellite Applications Catapult and UK Atomic Energy Authority, and major tech businesses such as Bosch, KWSP, RedBull, Delta Motorsports

and TotalSim. The Silverstone Technology Cluster proposes to stimulate growth of Silverstone as part of the wider technology 'super-cluster' by encouraging the application of capabilities across new markets including medical appliances, retail services including refrigeration and elite sports apparel.

Digital Health, Med-Tech and Artificial Intelligence

The Buckinghamshire Life Sciences Partnership is leading the development of The Buckinghamshire Life Sciences Innovation Centre. Buckinghamshire is in the first wave of eight integrated care systems which will pioneer new approaches to health and care which will be piloted locally. Buckinghamshire is home to a number of global industry leaders in healthcare including Janssen/Johnson & Johnson and GE Healthcare. Stoke Mandeville is the UK's national spinal centre, which has considerable experience in managing a nationally distributed patient cohort. The planned major housing growth in the area around Stoke Mandeville as part of Aylesbury Garden Town, and development of the Aylesbury Woodlands site and Enterprise Zone, provides Living Lab opportunities to test the application of new technologies.

The two locations of the Life Sciences Innovation Campus located at Stoke Mandeville and High Wycombe are in a position to draw in capability from distinct strengths in each location:

- ▶ Stoke Mandeville is located in proximity to the Silverstone and Cranfield advanced materials and performance technologies cluster;
- ▶ High Wycombe is home to a developed software and a digital consultancy cluster; and
- ▶ Buckinghamshire New University and the University of Buckingham Medical School are active in healthcare education. Buckinghamshire LEP has also funded The University of Buckingham to develop a new School of Computing and a Centre for AI, in which high performance computing could be applied in healthcare.

The forecasted housing growth for Buckinghamshire provides the locality with an opportunity to improve the connectivity between digital health and medical technology firms, house builders and health and social care providers; to deliver a new approach to create healthy new towns and communities. Buckinghamshire LEP together with a new Health and Social Care network will seek to capitalise on Buckinghamshire's position.

Mobilising Buckinghamshire's four Internationally significant economic assets

Ambition:

Buckinghamshire will capitalise on and exploit the growth potential of its four nationally and internationally significant economic assets.

To drive progress towards achieving this priority, Buckinghamshire LEP will:

Upstream Space

Develop a long-term investment plan for Westcott and support businesses in the cluster to:

- ▶ enhance networking across the space propulsion, launch, unmanned aerial vehicle and Satellite Applications value chains;
- ▶ raise the profile of UK capabilities in upstream space focussing initially on propulsion systems;
- ▶ develop a Buckinghamshire Export and Inward Investment Partnership as a chapter of the wider Arc Internationalisation Plan, developed with the Department for International Trade. This plan will be based on Westcott space assets and linked to other key sectors and global locations, including working with government to consolidate a global creative industries capability in the area;
- ▶ attract investment from the finance community, large corporates and overseas investors;

- ▶ enhance key education, research, development and test facilities across the Westcott Space cluster; and
- ▶ further collaborate on skills development initiatives between business and skills providers.

Creative and digital

Buckinghamshire LEP will work to:

- ▶ consolidate a global creative industries capability and further support exporting and inward investment in the film, TV and games sector;
- ▶ develop and enhance the Screen Industries Global Growth Hub at Pinewood Studios to improve links between creative content providers and the wider business and specialist education networks both on and beyond the Pinewood lot;
- ▶ secure investment in key research facilities and programmes; and
- ▶ through the Creative Sector Action Group and Skills Advisory Panel, the LEP will work to: improve collaboration between different parts of the education system; engage businesses in identifying local priorities and challenges; and supporting skills providers to respond to local economic priorities.

Silverstone and advanced manufacturing

There is significant potential to enable further growth in this sector by growing the Buckinghamshire LEP Silverstone Enterprise Zone to stimulate potential high technology crossovers. This means building a manufacturing base with linkages across automotive and advanced engineering sectors into aerospace, space, clean-tech, health care, materials and electronic sectors.

Buckinghamshire LEP and the Silverstone Technology Cluster propose the following actions to stimulate growth of Silverstone as part of the wider technology cluster:

- ▶ ensure that business investment and financial incentive packages are focussed on SME innovation;
- ▶ support the development and application of emerging technologies in companies in the Silverstone Technology Cluster. This will be done by improving the linkages between firms within the cluster and the knowledge base and enabling investment in the participating firms;
- ▶ develop the innovation ecosystem to improve connectivity between businesses, and between businesses and universities; taking advantage of the network of entrepreneurs associated with the University of Buckingham with a track record of innovation and commercialisation and other centres of research excellence;
- ▶ attract interest from the finance community, large corporates and overseas investors; and

- ▶ continue to build the capacity of the Silverstone High-Tech Cluster to improve networking opportunities across a wider 'super-cluster' from across the Arc.

Health and social care model

Buckinghamshire LEP, together with a new Health and Social Care network, will develop Buckinghamshire's position to:

- ▶ support collaboration between businesses and health and care providers who will deliver the Integrated Care System by using technology in adult social care; expanding the capacity to support business spin-outs from the Health Care Trusts and the Universities;
- ▶ exploit the area's heritage as the birthplace of the Paralympic Movement positioning Buckinghamshire as the MedTech adoption accelerator to conduct product testing at-scale and provide degree apprenticeship programmes dedicated to medical device regulation; and
- ▶ use the opportunities offered by housing growth in the Aylesbury Garden Town and surrounds to test the application of new technologies which will provide further care directly in people's homes, and to advance the use of technology within clinical settings for remote healthcare monitoring and virtual clinical consultation supporting delivery of the Ageing Society Grand Challenge.

Government is already working in partnership with Buckinghamshire LEP to support the delivery of these priorities through:

- ▶ allocating £73m through the Local Growth Fund allocation, including £1.8m of funding to the National Film and Television School (NFTS) in Beaconsfield to build a new Immersive Technology and Digital Content Production Training Studios;
- ▶ designating Westcott and Silverstone Park and Aylesbury Woodlands with Enterprise Zone status with tax breaks for business and retention of business rates growth for reinvestment by the LEP;
- ▶ £4.12m of investment by the UK Space Agency in Westcott Venture

Park to establish the National Space Propulsion Test Facility; and

- ▶ being part of the £150m Creative Industries Sector Deal - Buckinghamshire LEP is a partner in one of nine successful bids to host an ambitious R&D partnership aimed at boosting the UK's creative sector. The Story Futures project, part of the Arts and Humanities Research Council Creative Industries Clusters Programme, will be led by Royal Holloway University of London and bring together world leading creative and technology companies with the region's SMEs to tackle the challenge of next-generation storytelling.



Ideas

Buckinghamshire: a 'Living Lab' and the home to new innovation

Buckinghamshire's ambition

Buckinghamshire's businesses will seek to double their investment in R&D through enhanced, deep and long-term R&D collaborations. The public, private, academic and community sectors will work more closely together to underpin a high-quality environment for testing, developing and commercialising innovation. An enhanced innovation ecosystem supported by closer collaboration between businesses and universities will enable Buckinghamshire to drive commercial innovation at speed and scale advancing the use and development of the latest technologies in the fields of health and social care and clean energy. In turn it will exceed the national target of 2.4 per cent of GDP going into R&D by 2027, leading to major improvements in businesses leadership; the development of new products and markets; and access to talent.

Buckinghamshire is home to nationally significant business agglomerations and innovation assets: from the Westcott Space Cluster, to Silverstone Circuit, Pinewood Studios and the area's digital health cluster. Together, these are key players in increasing innovation across the Arc and the wider UK, as well as forging international collaborations. More needs to be done to build on these assets and ensure that Buckinghamshire's innovation ecosystem can thrive.

Despite high absolute productivity, Buckinghamshire's productivity growth over the last five years has failed to match that recorded across the United

Kingdom, suggesting that constraints are resulting in diminished returns to otherwise strong economic assets. Buckinghamshire needs to be at the forefront of government plans to increase R&D investment to 2.4 per cent of GDP by 2027, however with fewer than one in five businesses undertaking R&D, Buckinghamshire currently ranks only 28th among LEPs on this measure. Nevertheless, at 38.1 per cent, Buckinghamshire has the highest proportion of businesses undertaking product or service innovation, of the 38 LEPs, and ranks second for new to the market product and service innovation, with Arc LEPs taking all four top places.

Buckinghamshire LEP also ranks fifth for the share of innovating firms engaged in collaboration for innovation⁹.

More can also be done to support the emerging clusters and networks that support Buckinghamshire's nationally significant business agglomerations. There is greater scope for universities, research organisations and centres of expertise in Buckinghamshire to support the development of innovative businesses by stimulating graduate entrepreneurship, business spinouts and knowledge transfer to support innovative businesses with the potential and ambition to grow.

Buckinghamshire will aim to grow business capability to move ideas into commercialisation at pace. The ability to move early-stage ideas into a commercial position can be hampered by the limitations of existing non-disclosure agreements. There may, for example, be a need to develop an 'innovation protector', as standard non-

disclosure agreements only go so far.

The med-tech proposition in this Local Industrial Strategy will help to support further risk-taking in innovation, but this must be delivered at a scale and pace that delivers real commercial opportunities. In addition, the formation of a new unitary council for Buckinghamshire presents an opportunity to stimulate local innovation through its commissioning role.

An additional challenge within the region is businesses managing to scale-up due to a tightening labour market and the need to strengthen leadership skills. Significantly, the region has a low share of mid-sized growth businesses, with few businesses making the journey from micro to medium-sized enterprise. More needs to be done to support scale-ups so that more businesses achieve their potential.

Driving innovation and R&D

Significant progress has already been made to ensure that Buckinghamshire's economy is ready for the future. A developing network of innovation centres and support activities are starting to nurture innovative start-up businesses in Buckinghamshire's key sectors. To date, government investment has been through Innovate UK programmes; Local Growth Fund investment in - for - example, the collaboration space at Westcott's Incubation Centre and the Centre for Entrepreneurs at the University of Buckingham; and funding for the Growth Hub. Private investment has included a new Bosch Innovation Centre at its R&D headquarters in Denham.

There is now an opportunity to harness these assets and major developments to drive innovation through new 'Living Labs'. The scale of new development envisaged in Buckinghamshire, provides an even greater opportunity to develop and roll out leading-edge products, services and solutions in real-life situations, to support their commercialisation. This would draw on existing expertise in the area, and beyond including the Satellite Applications Catapult, The University of Buckingham, the Regional Energy Hub, the Connected Places Catapult and patient trials at Stoke Mandeville Hospital. This driver will be key to delivering Buckinghamshire's Grand Challenge ambitions around the Ageing Society and Clean Growth.

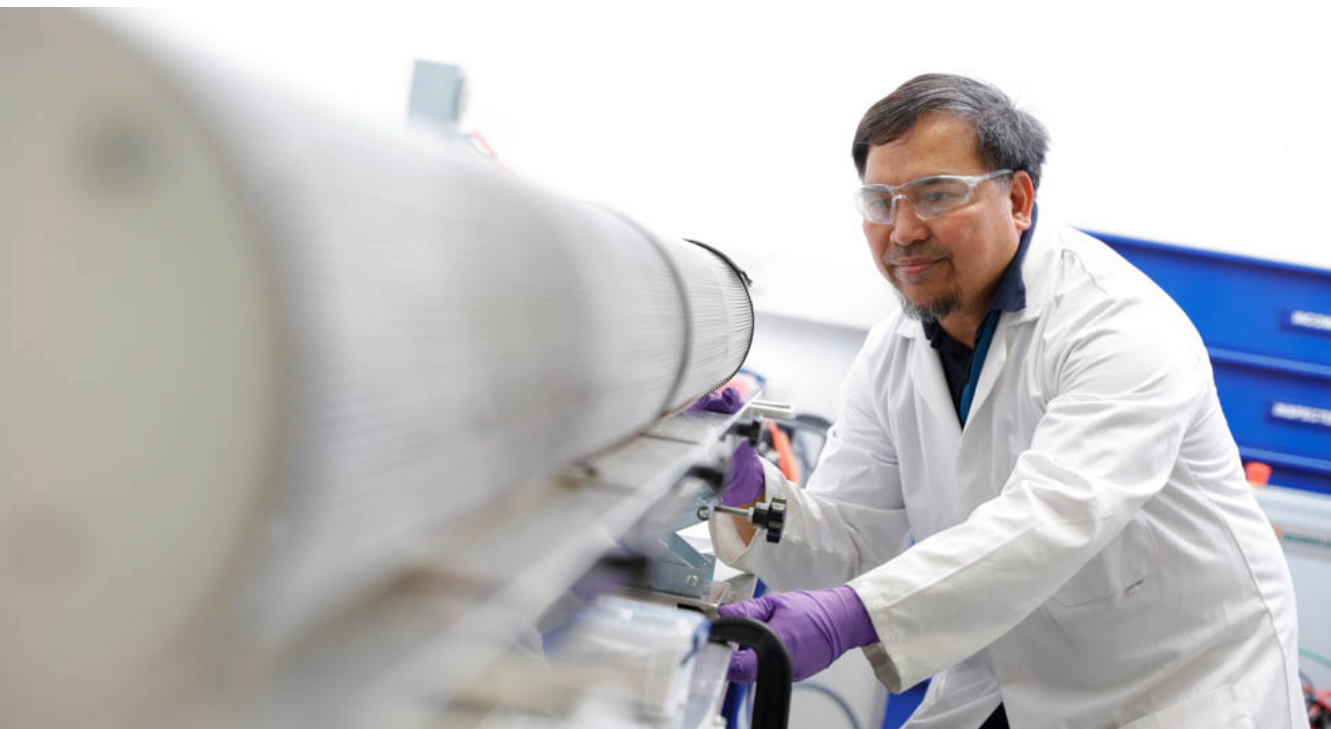
Actions

Buckinghamshire LEP is proposing to establish an Innovation and Enterprise Board to secure maximum benefit from the engagement of relevant institutions and agencies in Buckinghamshire and the national bodies that support innovation and business growth.

This will provide strong regional engagement between the Growth Hub, universities, Innovate UK and other relevant local and national stakeholders to shape a bespoke and sector-focussed innovation programme that builds upon initiatives already underway.

The Board will guide development of the enterprise and innovation stands of future programmes to support both new to market innovations, the diffusion of such innovation and best practice to increase the productivity of other businesses, their entrepreneurial skills and access to essential finance that ambitious businesses require.

The Board will foster links with institutions, agencies and LEPs in neighbouring areas, for example, across the Arc, and in other areas of the UK and beyond with complementary strengths. Through these actions, the Board will ensure that the benefits of programmes that support, innovation, technology readiness and adoption, and entrepreneurship are effectively delivered to result in more knowledge-driven growth in Buckinghamshire.



A living lab and the home to new innovation

Ambition:

Buckinghamshire's businesses will seek to double their investment in R&D through enhanced, deep and long-term R&D collaborations. This will enable Buckinghamshire to drive commercial innovation at speed and scale, advancing the use and development of the latest technologies in health and social care and clean energy. In turn the county will exceed the national target of 2.4 per cent of GDP going into R&D by 2027.

To drive progress towards achieving this priority, Buckinghamshire will:

- ▶ Establish an Innovation and Enterprise Board comprising key local and national stakeholders that will build on Buckinghamshire's unique capabilities and connect the innovation and entrepreneurial ecosystems to support ambitious business and so rapidly translate new ideas into knowledge-driven growth in the area.
- ▶ Drive innovation through new 'Living Labs', including the Aylesbury Garden Town. These 'Labs' will bring together existing expertise in the area and beyond - including the Satellite Applications Catapult, the University of Buckingham, the Regional Energy Hub, the Connected Places Catapult and patient trials at Stoke Mandeville Hospital - to test emerging technologies in real world environments. Bucks LEP

will act as a broker, bringing together business and public expertise to drive innovation where there is demand.

Working with local partners across the Arc, Buckinghamshire will also:

- ▶ Harness the collective strength of the Arc's research base will be essential. The new Arc Universities Group will act as the focal point from cross-Arc collaboration on science and research, identifying and delivering joint R&D projects and providing a pipeline of talent to knowledge-intensive businesses.
- ▶ Strengthen its ability for businesses to commercialise ideas coming out of its universities, research and commercial centres. Key to this will be a network of 'Living Labs' that both trial technologies linked to new developments across the Arc and help address the Grand Challenges. Arc partners will also use assets such as Westcott, Silverstone and Pinewood to establish new networks that support the convergence of technologies across sectors and seek to develop emerging innovation hubs and locations.
- ▶ Seek to grow its role as a global research and innovation hub, acting as a UK magnet for international talent, R&D, foreign direct investment and research collaborations. The LEPs and MCA will work with the Department for International

Trade, the Arc Universities Group and others to channel foreign investment in the assets and projects that will make the biggest impact on Arc-wide and UK growth.

Buckinghamshire businesses will collaborate more effectively with the whole skills and labour market system to ensure the available talent is inspired and equipped with the necessary skills to support the future growth of the economy whilst supporting those who face barriers to entering and progressing in work. High quality career paths, beginning with inspiring work experience opportunities, will provide the workforce of the future with the aspiration and skills to work in Buckinghamshire's leading businesses in creative, space, digital health and high value manufacturing sectors

Government is working in partnership with Buckinghamshire LEP to support the delivery of this priority through:

- ▶ £73m Local Growth Fund allocation including:
 - Westcott Incubation Centre and 5G Testbed;
 - Silverstone Innovation Centre;
 - Buckinghamshire Life Sciences and Innovation Centre at Bucks New University in High Wycombe and at Stoke Mandeville Hospital; and
 - The Vinson Centre for Entrepreneurship at the University of Buckingham.

- ▶ Investing £25m to support research and innovation in Buckinghamshire through Innovate UK's competitive bidding rounds.
- ▶ Supporting R&D of new transport systems and technologies across the Arc through investment by the Centre for Connected and Autonomous Vehicles (CCAV), the Office for Low Emission Vehicles (OLEV), UKRI, Zenzic (formerly known as Meridian Mobility) and Innovate UK.
 - ▶ Working with the LEPs within the Arc and other local partners, including England's Economic Heartland, to:
 - support the delivery of the Future of Mobility Grand Challenge mission and Road to Zero Strategy: utilising the considerable R&D assets within the Arc to put the UK at the forefront of the design and manufacturing of zero emission vehicles, supporting government's commitment to end the sale of new conventional petrol and diesel cars and vans by 2040;
 - build on the Arc's existing role as a testbed for new transport technologies, such as automated vehicles and drones, working with government and Zenzic to access existing R&D support, and identify further opportunities to trial new mobility services within the Arc; and
 - support local authorities within the Arc to implement the Principles of the Future of Mobility Urban Strategy, providing guidance on design and planning to ensure new communities are designed and built to enable new approaches to mobility.

People

A skills and inspiration revolution

Buckinghamshire's ambition

Buckinghamshire businesses will collaborate more effectively with the whole skills and labour market system to ensure the available talent is inspired and equipped with the necessary skills to support the future growth of the economy whilst supporting those who face barriers to entering and progressing in work. High quality career paths, beginning with inspiring work experience opportunities, will provide the workforce of the future with the aspiration and skills to work in Buckinghamshire's leading businesses in creative, space, digital health and high value manufacturing sectors.

High quality career paths, beginning with inspiring work experience opportunities, will provide the workforce of the future with the aspiration and skills to work in Buckinghamshire's leading businesses in creative, space, digital health and high value manufacturing sectors.

Buckinghamshire has a highly productive economy with a dynamic and resilient employment base underpinned by a strong and high-quality SME business community. Its labour pool has a wide employment catchment with a range of opportunities in neighbouring areas especially London.

The demographic profile of Buckinghamshire shows that the population in the 20-30 age group is 10 per cent below the national average, largely as a result of young people not returning to the area after completing University courses.



By providing more relevant and informed careers information through the schools system, highlighting inspiring career opportunities available within the local area, Buckinghamshire will help to retain more talent within the locality.

Moreover, Buckinghamshire has a very well-educated population, with 48.2 per cent of working age residents with NVQ level 4+ (the fourth highest of all LEP areas) and a high proportion working in the high-tech sector (1 in 10).

Anchor Institutions & Partnerships in Buckinghamshire

- ▶ **Buckinghamshire Association of Secondary Headteachers** a network of all secondary school and academy headteachers in the Buckinghamshire LEP area, helping provide an effective link for the growing Enterprise Advisor network.
- ▶ **Bucks University Technical College (UTC)** specialising in developing education and skills with relevance to the construction computing sectors. Its industry partners, which include Taylor Wimpey, Cisco and McAfee, ensure students gain skills, motivation and access a genuine work-related learning experience improving employability.
- ▶ **Silverstone University Technical College (UTC)**, provides a centre of excellence for young people wanting to break into specialist fields of high-performance engineering and business & technical events management.
- ▶ **Buckinghamshire Education, Skills and Training (BEST)** partnership between Buckinghamshire College Group & Buckinghamshire New University, works across educational boundaries to bring a new holistic approach to working with employers and individuals to provide flexible and creative education and training solutions.
- ▶ **Buckinghamshire Skills Hub** was established by Buckinghamshire Local Enterprise Partnership to address the challenges identified above, in partnership with Buckinghamshire Business First (BBF). The Hub participates in national programmes as well as developing local solutions. The under 19 Skills Programme promotes links between employers and educators, delivering through a range of national and local programmes to deliver the Gadsby benchmarks.
- ▶ **University Campus Aylesbury Vale** providing higher and further education courses, including apprenticeships, with a strong emphasis on working with employers.

To tackle the skills challenge, Buckinghamshire partners need to work across the whole skills system to address productivity issues relating to skill shortages through a skills and inspiration revolution, particularly in creative-tech careers. This programme will ensure that a high-quality choice is available to all, raising aspirations and ambitions, leading to inspiring career paths and exciting well-paid jobs. This will ensure a radical approach to technical and vocational education can be adopted. The Local Industrial Strategy will be delivered in such a way as to ensure that the planned interventions around enterprise advice, careers networks and improvements to STEM and technical skills are met effectively through private sector relationships.

The opportunity is to build on what is already there and to build long-term sustainability into programmes that have shown a clear and direct impact. Established programmes such as Young Enterprise and the activities of the Buckinghamshire Skills Hub are doing good work in making connections between school and the world of work but suffer from limited and short-term resources which do not match the challenge. T levels, new flagship technical education programmes,

represent both a significant opportunity at a national level but a challenge for Buckinghamshire. The roll out of T levels will support opportunities for expanding the current vocational learning opportunities. There are clear opportunities around industry placements to work with businesses to commit to a minimum of 45 days of work experience and to develop occupationally specific practical and technical skills.

Actions

In delivering this new generation of technical education, the Buckinghamshire business base is readying itself through the refreshed Skills Advisory Panel (SAP) and embryonic Sector Skills Groups to ensure greater involvement from the private sector to set and drive the agenda. The Skills Advisory Panel will build the local evidence base on skills challenges and ensure provision locally is fit for purpose if people are to be supported to enter, remain and progress in work throughout their lives.

A skills and inspiration revolution

Ambition:

High quality career paths, beginning with inspiring work experience opportunities will provide the workforce of the future with the aspiration and skills to work in Buckinghamshire's leading businesses in creative, space, digital health and high value manufacturing sectors.

To drive progress towards achieving this priority, Buckinghamshire LEP will:

- ▶ Develop new employer-led models to address growing skills, aiming to:
 - build on current engagement with the Careers and Enterprise Company, the National Careers Service and the Buckinghamshire Careers Hub, to establish a prestigious, structured careers offer which provides clear work pathways from school into work. This work will be overseen by the Skills Advisory Panel;
 - in addition, the SAP will build upon the high levels of business interest to work with the Department for Education to boost industry placements in disciplines befitting the Buckinghamshire economy. This will include engaging with and encouraging employers to build capability ahead of the roll out of T levels;

- work with employers across the area to facilitate effective use of the apprenticeship levy through transfer flexibilities; and
- inspire the workforce of the future to work in Buckinghamshire's leading businesses in space, creative, high value manufacturing and digital health.

Working with local partners across the Arc Buckinghamshire will also:

- ▶ Review labour market intelligence across the Arc, to gain a better understanding of how skills provision is currently delivered and funding utilised. This will include working closely with the Department for Education and providers across the Arc to consider how local provision supports objectives within this strategy and support the collaborative ambitions of the Arc Universities Group.
- ▶ Work with local employers to increase apprenticeship uptake across the Arc, supporting employers to maximise their Apprenticeship Levy contributions and drive social mobility.
- ▶ Work with local employers and Jobcentre Plus to support the effective role of T levels and utilise local labour market intelligence to work with providers to consider how the local T level offer will support local businesses.

- ▶ Establish an Arc-wide skills marketplace, enabling the LEPs to continue to build on the positive working relationships with the Careers Enterprise Company and other careers services. This will utilise the evidence provided by each Skills Advisory Panel, connecting businesses with skills providers and people with targeted support including apprenticeships, STEM skills, T levels, technical and degree apprenticeships.

Government is working in partnership with Buckinghamshire LEP to support the delivery of this priority by:

- ▶ Developing a Skills Advisory Panel to build the local evidence base on skills challenges and provision in Buckinghamshire.
- ▶ Establishing the Buckinghamshire Careers Hub as part of the Phase 1 programme supported by the Careers and Enterprise Company.

- ▶ Building on the existing Silverstone UTC and Bucks UTC to provide specialist vocational opportunities for under-16s.
- ▶ Allocating £73m through the Local Growth Fund including:
 - transforming Buckinghamshire College Group's Estate;
 - establishing world class training facilities including the world's first 4K film studio in a learning environment at the National Film and TV School; and
 - developing innovation hub and community digital outreach facilities for the University College Aylesbury Vale.

Infrastructure

Buckinghamshire's Digital Super-Highway

Buckinghamshire is at the heart of a number of nationally significant infrastructure initiatives.

Transformative east-west infrastructure including the Oxford-Cambridge Expressway and East West Rail will improve connectivity for many of Buckinghamshire's businesses and residents, but the benefits will only truly be delivered if the major road network and local roads are linked to the new developments. This connectivity will service the needs of the new economy, reducing pressure on first-mile-last-mile to support a more productive business base. It is important that much needed north-south connectivity including surface access to Heathrow through schemes such as Crossrail, western access to Heathrow and a new access to Old Oak Common via the Chiltern Line service are delivered alongside the east-west investment.

The England's Economic Heartland Sub-national Transport Body supported by the Buckinghamshire LEP will lead on the connectivity programme for the Arc and recognise the significance of these connections for the benefit of the regional economy. This will ensure that Buckinghamshire can realise the full benefits of wider investment in large-scale infrastructure - be that Crossrail, Aylesbury Vale Garden Town or the proposed Oxford-Cambridge Expressway, to build beyond the current investment pipeline in a way that is future-proof and ensures an improvement to the overall environment.

In delivering this large-scale infrastructure investment, there is an opportunity to address relatively low levels of connectivity to improve the 'digital spine' with a compelling case for focusing on digital infrastructure to raise productivity in Buckinghamshire especially within Enterprise Zone sites and areas of high R&D potential. Data oriented sectors in Buckinghamshire have been the strongest driver of growth in terms of new business formation and employment¹⁷, and Buckinghamshire has a high location quotient for computer consultancy and creative-digital media sectors.

These sectors have benefitted from the expansion of infrastructure provision leading to employment and productivity growth.

Buckinghamshire has significant assets to support future growth in digital sectors, both established and emerging. It has a very high skills base¹¹, high levels of entrepreneurialism¹² with advantages in terms of the maturity and acumen of local business leaders¹³. It has an established cluster and network; and the University of Buckingham is expanding its School of Computing and AI. Commercial routes to market in London and wider demand for digital media content are supported through commercial anchors such as Pinewood, while the healthy start-up and micro-business base provide local demand for specialist computer management consultancy services.

Despite these assets, however, action must be taken to address the coverage and quality of broadband provision. While action has been taken to significantly reduce the gap in coverage and close the difference with the national benchmark, coverage remains below the national average¹⁴. In terms of the quality of coverage, Buckinghamshire has, to some extent, benefitted from the application of 'inside out' approaches to ultra-fast provision. While targeting under-served areas this is yet to deliver quality improvements targeted

at the areas of highest growing demand and high levels of disparity in coverage require a more broad-based whole-area approach to address.

Across Buckinghamshire, the percentage of premises that are able to receive 'superfast' broadband (24-30Mbps download) is low across much of the rural geography, despite recent investment. Buckinghamshire remains behind national levels of fibre to the premises coverage with a current coverage in the county of 3.6 per cent compared to four per cent nationally. Across the Arc, Buckinghamshire remains behind its counterparts: in superfast coverage and download speeds accessed the imperative to solve this market failure is of strategic importance to Buckinghamshire.

In addition to the increase in broadband coverage, the LEP has also overseen the development of new innovative technology clusters. Local Growth Fund investment in 5G test bed facilities within Westcott Enterprise Zone, has put Buckinghamshire at the forefront on the next level of innovation in telecommunications. Furthermore, 15 community fibre partnerships have either been signed or have already been completed within Buckinghamshire since the start of 2016, showing an appetite for locally sourced and funded digital solutions.

Actions

This strategy will ensure that Buckinghamshire benefits from the planned investment in road and rail across the Arc and develop a stronger relationship with Old Oak Common. Investment in infrastructure will be required to deliver this programme of activity on digital connectivity reflecting the importance of digital infrastructure to the local economy.

Resilient and future-proofed physical and digital infrastructure will support Buckinghamshire businesses to boost productivity. Advanced investment in major transport infrastructure alongside a range of different digital technologies will create a diverse and buoyant telecommunications marketplace. Investment in ‘state of the art’ infrastructure technologies will support businesses and individuals to adopt and exploit ‘cutting edge’ digital applications.



Buckinghamshire's digital super highway

Ambition:

Resilient and future-proofed physical and digital infrastructure will support Buckinghamshire businesses to boost productivity.

To drive progress towards achieving this priority, BLEP / Buckinghamshire will establish the Productive Places Programme.

- ▶ Putting Buckinghamshire at the forefront of digital innovation by addressing digital connectivity bottlenecks and ensuring that digital requirements are planned in as a basic infrastructure requirement for new developments.
- ▶ Working with major infrastructure providers to promote the digital connectivity interests of Buckinghamshire, particularly in cases such as HS2, Expressway, East-West Rail and Heathrow where the benefits will impact not only Buckinghamshire, but partners within the growth corridor and in turn national productivity.
- ▶ Supporting businesses with high value potential in, for example, the digital and care sectors, exploiting “Smart City” concepts linked to local planned Garden Town Developments’

- ▶ Support work on surface connectivity to Heathrow Airport and resilience for the rail access to London is maintained by helping to progress the business plan for the old Oak Common connection for the Chiltern Rail Network and to deliver on schedule the approved key East-West connections.

To achieve this, Buckinghamshire will:

- ▶ Begin mapping digital coverage including cellular, 5G and broadband to support wider commercial development.

Action will also be taken to:

- ▶ Work with the England’s Economic Heartland and emerging Sub-Regional Transport Body to progress local ambitions on: east / west connectivity, improving resilience through north / south routes and strengthening access through Old Oak Common.
- ▶ develop a new digital investment strategy to help target investment into gigabit connectivity;
- ▶ secure broadband provision through community fibre partnerships; and
- ▶ support businesses to take advantage of the benefits of digital infrastructure.

Working with local partners across the Arc Buckinghamshire LEP will also:

- ▶ collaborate with Department for Transport, Highways England, the East West Rail Company and England's Economic Heartland to expand the economic benefits of planned strategic transport links and improvements to the Major Roads network across the Arc and develop the first-mile-last-mile connections to them;
- ▶ work with government to develop a shared evidence base for the current and future energy needs of the Arc, including through the identification of opportunities to test new energy policies or approaches within the Arc;
- ▶ work with government to identify and diffuse best practice on digital infrastructure planning in the Arc and explore opportunities to align new transport infrastructure with digital infrastructure in the Arc. This will aim to support industry to accelerate the roll-out of full fibre networks, enabling accelerated growth of 5G technologies across the Arc;
- ▶ work to standardise public data where possible, and with support from government policy experts, to ensure that the opportunities to collect and capitalise on data are utilised - with a view to addressing Grand Challenges around the Future of Mobility, the Ageing Society, and Clean Growth; and

- ▶ work with government across the wider Arc to explore proposals for new approaches to funding infrastructure, as set out in government's response to National Infrastructure Commission Report at Autumn Statement 2018.

Government is working in partnership with Buckinghamshire LEP to support the delivery of the digital infrastructure priority by:

- ▶ Allocating £73m through the Local Growth Fund including:
 - the Connected Counties Project - connecting homes and businesses to superfast broadband;
 - the Westcott 5G test bed;
 - delivery of the Aylesbury Eastern Link Road (Southern) and Stocklake Link (Rural);
 - delivery of the A355 Improvement Scheme connecting Amersham and the A413 to the north and Beaconsfield and the M40 to the south;
 - a town Centre transport improvement package in High Wycombe; and
 - enhanced rail connectivity between Marlow and the Crossrail service at Maidenhead.
- ▶ Funding Buckinghamshire LEP to develop its local Energy Strategy and supporting implementation via the South East Energy Hub.



Business environment

Capitalising on scale-up potential

Buckinghamshire needs to grow its overall productivity and therefore its overall contribution to the UK economy by helping businesses to improve their productivity, their desire to innovate and reduce their costs. In order to do so, a targeted programme of high calibre business support is required to encourage aspirational businesses to innovate, reduce costs and enhance their resilience in the face of increased global competition. The ability to future-proof the support offer and secure commitment for funding for locally defined support will be critical.

Buckinghamshire is largely a micro firm economy, with a small number of large, international firms and a strong track record for new business start-ups. This profile is maintained by a strong track record of stimulating start-ups and encouraging business survival, but more could be done to support businesses to enhance their productivity and advance scale-up to achieve their full potential and contribute more to the economy.

Encouraging entrepreneurs and firms to invest in business improvement activities is generally made easier by business stability, high levels of public investment in business support and the overall continuity and quality of delivery. However, businesses

have expressed concerns about the difficulties they face in engaging with universities in a meaningful way and the focus of much investment and incentive packages on large businesses rather than SMEs who are often put off accessing current support services due to time constraints, match funding commitments and the bureaucratic nature of some programmes.

In Buckinghamshire, one of the major opportunities to stimulate growth stems from 'locking-in' the value of potential growth into the locality by improving the connectivity between these opportunities and local supply chains (using a well-established model of local wealth creation).

With respect to opportunity Buckinghamshire LEP has high levels of entrepreneurialism¹⁵ with advantages in terms of the maturity and acumen of local business leaders¹⁶. Buckinghamshire has established new clusters and networks through the 12,000 Bucks Business First Growth Hub members representing one third of all businesses in Buckinghamshire. Commercial routes to market in London and wider demand for digital media content are supported through commercial anchors such as Pinewood, while the healthy start-up and micro-business base provide local demand for specialist computer management consultancy services.

Data oriented sectors in Buckinghamshire have been the strongest driver of growth in terms of new business formation and employment and digital technology - namely growth in computer consultancy - is driving creative growth which will be further stimulated by the Buckinghamshire LEP through LGF investment in a new school of computing and artificial intelligence at the University of Buckingham. The digital sector itself is the fastest growing 'major' employment sector since 2010 in Buckinghamshire LEP (+59 per cent; +6850 jobs). A significant portion of creative industry strength therefore lies in its connection with the high-tech sector.

Buckinghamshire can draw on different spheres of tech expertise across the corridor. There are also significant potential benefits from Silverstone's position at the centre

of the wider high technology cluster which has a prime location between London and the Midlands Engine.

More needs to be done to support scale-up so that more businesses achieve their potential. This includes the better use of data to target growing businesses; enhanced leadership and access to talent; access to and take-up of finance; improved access to markets through international trade and government procurement and better supply chain support.

The achievement of this goal is dependent on the better use of data to identify supply chain opportunities and target businesses with scale-up potential; inspiring businesses to invest in business improvement; driving the take up of leadership and management development programmes; improving the quality and relevance of skills programmes; improving investment

readiness services and access to finance; and supporting businesses to access new markets, through more effective international trade and public sector procurement opportunities.

Buckinghamshire Business First with its unprecedented business reach, and its top-ranking Local Growth Hub is ideally placed to integrate and co-ordinate this support, to provide businesses with a holistic set of solutions, packaged to meet their particular needs. It can also provide valuable intelligence to inform the development of new business support solutions, to meet the articulated needs of business.

Actions

To support the growth of ambitious businesses, Buckinghamshire needs to plug gaps in the specialist support marketplace that can have a direct impact on helping to scale-up ambitious businesses, particularly if the county

is to respond to the challenges and opportunities posed by EU exit and address the long tail of productivity.

Future proofing the existing offer to secure a commitment to continuity of funding for locally delivered support and strengthen the offer to better inspire and make possible the growth aspirations of the region's businesses and entrepreneurs is required. This should include:

- ▶ establishing a strong eco-system of business support - plugging gaps and making links with the specialist services that can have a direct impact on scaling up ambitious businesses; and
- ▶ stimulating growth aspiration - working with ambitious entrepreneurs to promote a highly positive culture of business investment.

Turbo charging Buckinghamshire's entrepreneurial businesses

Ambition:

Buckinghamshire will nurture a highly positive culture of business investment helping businesses to thrive and compete in increasingly competitive markets.

Through the Local Growth Hub Buckinghamshire will take action to stimulate business productivity, reduce business costs and commercialise innovation to support the growth of small and start-up businesses in Buckinghamshire.

These actions include:

- ▶ leadership and management development: expanding mentoring and business growth programmes delivered by a range of providers such as Be the Business, particularly in Enterprise Zone and Business Improvement Districts, to be coordinated by the Local Growth Hub, to support business scale up aspirations and capability;
- innovation support: A programme of direct Growth Hub stimulus to encourage innovation and to incentivise investment in R&D;

- ▶ supply chain development: a programme of supply chain mapping and development driven by a detailed analysis of market need, trade flows and opportunities for investment at scale;
- ▶ rural business support: an offer that fits the rural economy which can be broken into strong land and food-based parts of the local economy but also homeworkers in rural locations;
- ▶ incubation and co-working spaces: develop new and enhanced high quality business accommodation with access to plug and play services combining 3D printers, ultrafast broadband and collaborative working practises. This will deliver the leadership capacity that firms need to grow into new domestic and overseas markets;
- ▶ collaboration tools: creating a new sharing platform where employers can share resources, facilities etc. to prevent down time and the risk of incurring additional costs;



- ▶ establishing an innovation and enterprise board comprising key local and national stakeholders that will build on Buckinghamshire's unique capabilities and connect the innovation and entrepreneurial ecosystems to support ambitious business and so maximise knowledge-driven growth in the area; and
- ▶ working with the Department for International Trade, the LEP will seek to develop a Buckinghamshire Export and Inward Investment Partnership as a chapter of the wider Arc Internationalisation Plan. This plan will be based on Westcott space assets and linked to other key sectors and global locations, including working with government to consolidate a global creative industries capability in the area.

Working with local partners across the Arc Buckinghamshire LEP will also:

- ▶ work with government, within existing budgets, to develop improved, joined-up business support for high-growth firms across the Arc, developing an Arc-wide offer to different kinds of business;
- ▶ work with the British Business Bank to help SMEs in the Arc to access the finance they need to grow their businesses. Local partners across the Arc will also explore the existing landscape and any gaps in finance for businesses, as well as the establishment of an Arc-wide business angel network to better engage with early-stage investors;
- ▶ work with government to develop a shared understanding of market failures in creating new commercial premises within the Arc, bringing together a range of analysis already being undertaken locally, regionally, and nationally; and
- ▶ work with the Department for International Trade to encourage greater trade and inward investment, building on existing engagement at LEP level and including the development of an Oxford-Cambridge Arc Internationalisation Delivery Plan.

Government is working in partnership with the Buckinghamshire LEP to support the delivery of this priority by:

- ▶ maintaining and strengthening the Local Growth Hub - as the first stop shop of support.
- ▶ allocating £73m through the Local Growth Fund including:
 - supporting Arla / Woodlands as a key employment location by putting in place infrastructure to facilitate business growth to open up the Enterprise Zone site for commercial development;
 - a package of Local Growth Funding to support an open Innovation Centre at Silverstone with access to world leading wind tunnel and aerodynamics testing facilities; and
 - the establishment of incubation facilities for the digital and health sectors in Aylesbury, Stoke Mandeville and High Wycombe.



Places

Buckinghamshire is a long county running from the global gateway at Heathrow and London on its southern boundary and the midlands to the north and will play a critical role as the keystone of the Oxford-Cambridge Arc.

The current population is around 550,000 and supports a business base of almost 34,000 registered companies.

The action proposed in this Local Industrial Strategy to mobilise Buckinghamshire’s economic assets exploits the power of the area’s geography (see Figure 3), with:

- ▶ Pinewood and the National Film and Television School at the heart of a creative industries cluster in the South of Buckinghamshire taking maximum advantage of the connectivity to London and Heathrow;
- ▶ Stoke Mandeville and the planned housing growth at Aylesbury Garden Town creating the conditions for the living lab in the centre of Buckinghamshire;
- ▶ the nature of the site at the Westcott Venture Park and its location in the Arc enabling it to form a key element in the UK’s space infrastructure; and
- ▶ the location of the Silverstone Park and technology cluster in the north of Buckinghamshire putting it at the core of the Arc’s world leadership in advanced manufacturing.

There is a high level of academic attainment, particularly from the Buckinghamshire grammar school system, and the two universities - University of Buckingham which has successfully pioneered two-year degrees and Buckinghamshire New University which provides a focus on vocational learning. Further education in Buckinghamshire has been strengthened by the establishment of a new Buckinghamshire College Group.

The economy of Buckinghamshire enjoys a close relationship with Milton Keynes, (which is part of the ceremonial county of Buckinghamshire), Oxford and through into the wider Thames Valley. Transport connections have been traditionally strong with London but less so with many neighbouring areas: this will change with major East West investment, but these benefits will only be fully realised if the connections to the major and local road network are enhanced. Many major national infrastructure projects are being delivered within or close to the county over the next decade including High Speed 2, the global gateways as part of Heathrow and Luton Airport expansions, Western Access to

Heathrow and Crossrail in addition to the East West Rail and Expressway projects highlighted previously.

There is a major opportunity presented for economic growth around main transport hubs including Chiltern Rail routes, a potential new rail connection to Old Oak Common and development of the wider M40 corridor. There are important natural constraints on growth with almost 50 per cent of the area being designated Green Belt and/or an Area of Outstanding Natural Beauty. Significant housing growth is proposed which will be supported by further business infrastructure investment to grow local employment opportunities, minimise unnecessary journeys, increase productivity and to help enhance the natural environment which is one of Buckinghamshire’s most important assets.

High Wycombe is just 23 minutes from Marylebone and for the first time in almost 100 years now has a direct rail connection to Oxford. It is the traditional gateway to the Thames Valley and a university town with a strong base in the creative and digital sectors, the opportunity exists to build on the towns economic strengths through the development of the central station quarter and other key town centre locations.

Aylesbury is the fastest growing town or city in the county having increased in size by 16.6 per cent since 2011 with significant growth to follow over the next 10 years. The town has secured Garden Town Status. The use of Garden Town-planning principles, new technologies and disruptive housing delivery will form a technological testbed to integrate new communities and improve the quality of life for existing residents.

Outside of the main settlements, some of Buckinghamshire’s most important economic assets, including Pinewood Studios, Westcott Venture Park and Silverstone Park, have adapted to grasp new opportunities and forge international reputations from established rural locations and capitalise of the unique global talents of their respective workforces and wider business ecosystems.

Actions

Place is a central theme of this strategy. The actions have a core place focus and intend to use the planned major development in Buckinghamshire as a platform for testing, applying and commercialising ideas and innovations. There is also commitment to ensuring that action is taken to make the area a more attractive and affordable place to live, work and invest.

Mobilising Buckinghamshire's economic assets



Investing in Buckinghamshire's future

Ambition:

Maximising Buckinghamshire's geography to mobilise internationally significant economic assets.

To drive progress towards achieving this priority, Buckinghamshire LEP will:

- ▶ use local capital budgets to capitalise on connections to the major and local road network;
- ▶ build on its traditional manufacturing base through the development of the central station quarter at High Wycombe and other key town centre locations;
- ▶ Build on Aylesbury's garden town status by considering locally led options to deploy new technologies and disruptive housing delivery, which could support the development of a technological testbed to help integrate new communities and improve the quality of life for existing residents around the town.
- ▶ ensure new and existing growth areas are linked and serviced by sustainable infrastructure; and
- ▶ working with local partners to develop the business case for a Productive and Healthy Places Programme to support the delivery of the place strand of this Local Industrial Strategy.

Working with local partners across the Arc Buckinghamshire LEP will also:

- ▶ consider ways to contribute towards the government's Clean Growth Grand Challenge mission to at least halve the energy use of new buildings by 2030, supporting the Arc's wider ambition to create clean, energy efficient and sustainable communities for all.
- ▶ Ensure that the environment in the Arc is left in a better state for future generations:
 - embodying England's 25 Year Environment Plan which sets out our comprehensive approach to improving landscapes and habitats, and the aspiration to move to a policy of net environmental gain in future;
 - engaging with government to co-design a local natural capital planning approach for the Arc, ensuring that the wider work on productivity is aligned;
 - using intelligent and sensitive design in new housing and infrastructure developments; and
 - considering ways to maximise environmental expertise across the Arc and to empower the business community to champion and support the Arc's natural assets.

Government is working in partnership with Buckinghamshire LEP to support the delivery of this priority by:

- ▶ investing over £280m, since 2010, through Homes England, to support housing delivery across Buckinghamshire and supporting future Housing Infrastructure Fund programmes in Aylesbury.

Buckinghamshire Productive Healthy Places Programme

Action to make the towns in Buckinghamshire attractive to businesses and employees in the creative and digital sector is key to delivering the LIS. As is the design and development of Aylesbury Garden Town in a way which supports Buckinghamshire’s living lab ambitions. The proposed Buckinghamshire Productive Healthy Places Programme, bringing together local partners to deliver this programme including:

- ▶ a collaboration between local government, developers and service providers to exploit the potential of new housing development, particularly at Aylesbury Garden Town, as a test bed and commercialisation platform for new and emerging technologies;

- ▶ the extension of the test facilities at the Westcott Venture Park to support the wider use of 5G applications within Health and Social Care, clinical and emergency services applications;
- ▶ working with England’s Economic Heartland programme and local partners to explore provision for extended community access to the digital capacity alongside the new transport corridors including East West Rail, High Speed 2 and the Expressway;
- ▶ work with the planning system and developers to encourage the adoption of early stage technologies in all future developments; and
- ▶ support for future town centre investment programmes stimulating the innovation and advanced use of digital services and retail investment.

Grand Challenges

Buckinghamshire’s focus is to:

- ▶ lead the way in the development of ‘encore’ careers in the UK in a way which increases the productivity of micro businesses and supports an Ageing Society;
- ▶ establish an open data store to support the commercialisation of new goods and services and public service reform to develop AI and data opportunities;
- ▶ reduce the need for car ownership by providing greater public transport accessibility and choice to support the Future of Mobility Challenge; and
- ▶ work with government to halve the energy use of new buildings by 2030.

Ageing Society: pioneering the development of ‘encore’ careers

The demographic pressures of the ageing society are more acute in Buckinghamshire than in many other places. The population in the 20-30 age group is 10 per cent below national average and conversely for the 80+ age group is 10 per cent above the national average. A distinctive feature of Buckinghamshire is the large number of micro businesses. Encore careers provide an opportunity to link these two features. Encore careers come towards the end of people’s working lives and provide both fulfilment and an income, contributing to people’s health and wellbeing.

Buckinghamshire aims to become a centre of excellence for supporting encore careers with a particular focus on micro businesses. This would form an element of the work programme to stimulate business productivity which would provide businesses support to encore career entrepreneurs and enable networking and collaboration between them.

AI and Data: establishing an open data store

The creation of a new unitary council in Buckinghamshire provides a unique opportunity for a new approach to the collection, availability and use of data. Data is key to driving public service transformation and to creating opportunities for new commercially provided products and services.

It is also relevant to the exploitation of Buckinghamshire's economic assets and drivers.

Developing an open data store would transform the scope for collaboration between businesses and public service providers in Buckinghamshire, creating new business opportunities and improved services for residents including, for example, transport information, encouraging physical activity and providing health and care in people's homes.

The Future of Mobility: reducing car ownership

Unless directly addressed there is a danger that additional economic growth and development in Buckinghamshire will generate increased congestion. This will have significant implications for productivity, health and well-being and the attractiveness of the area as a place to live and work.

Concepts such as the peer-to-peer sharing economy and waste minimisation will be applied in the transport field to reduce both car ownership and use. Locations such as Silverstone, Westcott and Cressex in High Wycombe are already looking at demand-led transport services and car and bike sharing schemes have also been explored. Possible pilot projects include:

- ▶ giving priority to a public fleet of e-vehicles in key locations and routes;
- ▶ introducing responsive transport services between major business locations and transport hubs; and
- ▶ working with England's Economic Heartland to establish a connected and autonomous vehicles testbed across the Arc.

Clean Growth: minimising the energy use in new buildings

Buckinghamshire has been designated as a major growth area and it is important that the latest construction methods are included in new housing and commercial properties.

Buckinghamshire partners will work with government to ensure major new developments incorporate the latest technologies to minimise energy usage in construction and across the lifetime of the premises. The Aylesbury Garden Town development will act as a 'living lab' to test new applications and construction methods.

Action on the Grand Challenges

Buckinghamshire LEP will address the Grand Challenges by:

- ▶ **Ageing Society:** Buckinghamshire aims to become a centre of excellence for supporting encore careers with a particular focus on micro businesses. This would form an element of the work programme to Stimulate Business Productivity which would provide business support to encore career entrepreneurs and enable networking and collaboration between them.
- ▶ **AI and Data:** Establish an open data store to support the commercialisation of new goods and services and public service reform; maximise the opportunity for a new approach to the collection, availability and use of data opened by the creation of a new authority.

- ▶ **Future of Mobility and Clean Growth:** Pilot projects: giving priority to a public fleet of e-vehicles in key locations and routes; introducing responsive transport services between major business locations and transport hubs; working with England's Economic Heartland to establish a connected autonomous vehicles testbed across the Arc.
- ▶ Consider with government ways to address the **Clean Growth Grand Challenge** mission to at least halve the energy use of new buildings by 2030 as part of ambitions to build more homes across the Arc.

Priorities across the Oxford-Cambridge Arc

This Local Industrial Strategy has started to set out how shared priorities for Buckinghamshire fit with a wider range of activity being taken forward locally, regionally and nationally.

The Oxford-Cambridge Arc cuts across boundaries and affects each of the four areas in the Arc in similar ways. These offer government and local partners the opportunity to act at scale, with a consistent approach and, as with the preceding local priorities, they can be structured around the foundations of productivity:

- ▶ **Ideas** - innovation, including the Future of Mobility;
- ▶ **People** - skills;
- ▶ **Infrastructure** - energy and digital;
- ▶ **Business environment**; and
- ▶ **Places** - including environment.

Local partners will work together collaboratively across all of these Foundations to ensure that the implementation of the four Local Industrial Strategies maximises the economic potential of the wider Arc region as a whole.

Ideas

The Arc has unrivalled science and technology capabilities - from the renowned research centres in Oxford and Cambridge, to their surrounding technology campuses such as Harwell, and commercial testbeds in the 'Connected Core' of the Arc. Bringing these many assets together at scale would create a driver of growth and innovation for the UK.

However, the Arc is not yet a single innovation ecosystem and has potential to drive greater economic growth and productivity - more can be done to connect its numerous assets in a manner which demonstrably adds value. Achieving this will involve both building existing strengths such as life sciences and providing the best environment possible for the emergence of disruptive technologies. The prize is higher R&D investment in support of the Industrial Strategy's 2.4 per cent R&D target, UK leadership in transformative technologies, and a continued post-EU Exit future as a global centre for science, research and innovation.

In order to achieve this, Arc partners will work with government, UK Research and Innovation and others on the following priorities:

- ▶ harnessing the collective strength of the Arc's research base will be essential. The new Arc Universities Group will act as the focal point for cross-Arc collaboration on science and research, identifying and delivering joint R&D projects and, providing a pipeline of talent to knowledge-intensive businesses;
- ▶ the Arc will strengthen its ability for businesses to commercialise ideas coming out of its universities and others. Key to this will be a network of 'Living Laboratories' that both trial technologies linked to new developments across the Arc and help address the Grand Challenges, developed by industry and local partners across the Arc. Arc partners will also use assets such as Harwell, Silverstone and Cranfield to establish new networks that support the convergence of technologies across sectors and, seek to develop emerging districts such as West Cambridge; and
- ▶ the Arc will seek to grow its role as a global research and innovation hub, acting as a UK magnet for international talent, R&D, foreign direct investment and research collaborations. The LEPs and MCA will work with the Department for International Trade, the Arc Universities Group and others,

to channel foreign investment in the assets and projects that will make the biggest impact on Arc-wide and UK growth.

As outlined earlier, the Arc's R&D strengths also makes it well placed to address the Future of Mobility Grand Challenge, with many assets such as Culham, Cranfield, Millbrook and Silverstone playing an important role in developing and testing new transport technologies.

To achieve this, government will work with the LEPs within the Arc and other local partners, including England's Economic Heartland, to:

- ▶ utilise the considerable R&D assets within the Arc to meet the Future of Mobility Grand Challenge and government's Road to Zero strategy. This will put the UK at the forefront of the design and manufacturing of zero emission vehicles, supporting government's commitment to end the sale of new conventional petrol and diesel cars and vans by 2040;
- ▶ build on the Arc's existing role as a testbed for new transport technologies, such as automated vehicles and drones, working with HMG and Zenic to competitively access existing R&D support, and scoping further opportunities to trial mobility services within the Arc; and
- ▶ support local authorities within the Arc, as set out in the Future of Mobility Urban Strategy, by providing guidance on design and planning to ensure new communities are designed and built to enable new approaches to mobility.

People

The Arc is starting from a strong position with a well-functioning labour market - across the Arc employment is high compared to national averages and education attainment rates are generally good. The Arc is home to many world-leading higher education institutions that drive the knowledge rich economy.

It is vital that the Arc continues to build on this solid foundation in order for all people and communities across the Arc to have access to these opportunities and businesses have access to the workforce they need to meet future ambitions.

Businesses across the Arc consistently cite attracting and retaining a sufficiently skilled workforce as a particular challenge. Through the newly established Skills Advisory Panels, LEPs will bring local employers and skills providers together to understand current and future skills needs and put in place activity to address these local challenges. Through these Panels the four LEPs and government will work together to understand the challenges that businesses across the Arc face in securing the workforce they need to meet their future ambitions.

Whilst recognising the strong overall employment position of the Arc, it is also essential that work to drive growth across the region considers how best to address inequalities and challenges certain groups face in accessing and progressing in the labour market. Delivering transformational growth necessarily requires actions to support the key growth sectors identified in the economic context chapter above. But doing so in an inclusive and sustainable way will also require all partners to consider how best to: encourage good quality employment across the whole economy; support progression for those in low pay and low skilled employment and, support workers to stay in employment when they are at risk of losing their jobs due to issues such as age, health or automation.

To do this the LEPs will continue to build on the well-established relationships with local partners to address these deep-rooted challenges. This will include ongoing engagement with Jobcentre Plus, local education providers and community organisations.

Across the Arc the LEPs will work with government through Skills Advisory Panels to:

- ▶ review labour market intelligence across the Arc, to gain a better understanding of how skills provision is currently delivered and funding utilised. This will include working closely with the Department for Education through local Skills Advisory Panels and providers across the Arc to consider how local provision supports the ambitions set out throughout these strategies;
- ▶ work with local employers to increase apprenticeship uptake across the Arc, supporting employers to maximise their Apprenticeship Levy contributions and drive social mobility;
- ▶ work with local employers to support the effective role out of T levels and utilise local labour market intelligence to work with providers to consider how the local T level offer will support local businesses; and

- ▶ coordinate the work of Skills Advisory Panels to bring together training providers from across the Arc, with a view to establishing an Arc-wide skills marketplace. This will build on the LEPs' positive working relationships with the Careers and Enterprise Company and other careers services, and work to improve provision across the Arc. This will utilise the evidence provided by each Skills Advisory Panel, connecting businesses with regional and national skills providers and people with targeted support including apprenticeships, STEM skills, T levels, technical and degree apprenticeships.

There will also be continued collaboration across the higher education sectors through the Arc Universities Group to ensure alignment between the higher education offer and the emerging needs of breakthrough businesses, including top quality leadership and management training supported by the business school network.

Infrastructure

The Arc as a whole is already experiencing infrastructure constraints - especially in energy, transportation, water and housing. Realising shared ambitions around economic and community growth will require the development of the right infrastructure to meet the needs of existing and new communities, supporting the economy of the Arc and championing the UK's global competitiveness.

As well as getting the basics right, there is the opportunity for a step-change in connectivity. Government and Arc partners are working to deliver East West Rail and the proposed Expressway which are central to enabling the long-term housing and business growth ambitions within the Arc. However, greater connectivity will not be fully delivered without the challenge of the 'first-mile-last-mile' being addressed. The Arc suffers from significant congestion which local partners are looking to address through innovations such as the proposed Cambridge Autonomous Metro and Luton DART (Direct Air Rail Transit).

The LEPs have already produced local energy strategies, documenting the energy needs of their local areas. These will be the starting point to consider the energy needs of the Arc as a whole; drawing in new evidence, joining up local energy strategy delivery and using the opportunities created through the growth of the Oxford-Cambridge Arc as a catalyst for a transformation of energy generation, distribution and use across the Arc.

Digital and data coverage in the Arc is good relative to much of the UK - with world-leading infrastructure in some of the region's specialist facilities - though it remains patchy, especially in rural areas. This holds back growth given the opportunities for knowledge-intensive home-working and 5G-enabled innovations in the rural economy throughout the Arc.

The area's natural capital and environmental infrastructure underpins and supports the local economy, offering flood protection and providing clean water and natural spaces. The changing climate will affect existing infrastructure resilience and future infrastructure needs, requiring us to create climate resilient places and infrastructure. In addition, the Arc presents a unique opportunity to deliver flood risk and water management through strategic activity across local authority and LEP boundaries.

The growth anticipated across the Arc gives us a chance to test innovative approaches to: improving digital and data connectivity; minimising energy demand and increasing energy supply; and addressing the Grand Challenges. The scale of growth also offers the chance to explore new ways of coordinating and funding the delivery of new infrastructure across the Arc. To seize these opportunities, the Arc Local Industrial Strategies announce that:

- ▶ local partners will collaborate with Department for Transport, Highways England, the East West Rail Company and England's Economic Heartland to expand the economic benefits of planned strategic transport links, improvements to the Major Roads network and the first-mile-last-mile connections across the Arc;
- ▶ government and local partners will conduct a review of recent evidence work at local, regional and national-level, to develop a shared evidence

base for the current and future energy needs of the Arc. This could provide opportunities to test new energy policies or approaches within the Arc;

- ▶ government and local partners will work to identify and diffuse best practice on digital infrastructure planning in the Arc and explore opportunities to align new transport infrastructure with digital infrastructure in the Arc. This will aim to support industry to accelerate the roll-out of full fibre networks, enabling accelerated growth of 5G technologies across the Arc;
- ▶ local partners will work to standardise public data where possible - such as through the opportunity created by local government unitarisation in Buckinghamshire and Northamptonshire - and with support from government policy experts, to ensure that the opportunities to collect and capitalise on data are utilised. This will be done with a view to addressing Grand Challenges around the Future of Mobility, the Ageing Society, and Clean Growth; and
- ▶ government and local partners will work together across the wider Oxford-Cambridge Arc to explore proposals for new approaches to funding infrastructure, as set out in government's response to National Infrastructure Commission Report at Autumn Statement 2018.

Business environment

The Arc is home to a dynamic business base and a range of high-growth and innovative firms. However, businesses across the Arc still encounter barriers to growth, particularly in accessing the support they need to scale-up rapidly, securing the right finance and access to the right commercial premises to start and grow.

The Arc's collective ambition is to become a world-leading ecosystem for high-growth businesses: with an environment that enables them to commercialise technologies, grow to scale, and export. Central to the Arc's approach will be developing a Global Growth Network of internationally-focused businesses, scale-ups and sectoral clusters. Together, this will foster a breakthrough growth region and a driver for the UK economy.

Partners across the Arc will work with government and others across the following priorities:

- ▶ local partners will work with government, within existing budgets, to develop improved, joined-up business support for high-growth firms across the Arc. Central to this will be a network of the four Growth Hubs across the Arc, who will work and with existing support

programmes to develop an Arc-wide offer to different kinds of business. They will profile the firms that can deliver the biggest shift in growth, productivity and exports in places, diagnosing barriers to growth in the firm's capacity to innovate and increase productivity. As part of this, Arc partners will identify new ways to establish peer-to-peer networks linking firms within and between sectoral clusters;

- ▶ local partners and the British Business Bank will work together to help SMEs in the Arc to access the finance they need to grow their businesses. Local partners across the Arc will also explore the existing landscape and any gaps in finance for businesses, as well as the establishment of an Arc-wide business angel network to better engage with early-stage investors;
- ▶ local partners will work with government to develop a shared understanding of market failures in creating new commercial premises within the Arc. This will bring together a range of analysis already being undertaken locally, regionally, and nationally. This will ensure that the right premises are planned for, prioritised locally within any bids for future government funding, and built; and

- ▶ finally, partners across the Arc will work with the Department for International Trade to encourage greater trade and inward investment. This will build on existing engagement at LEP level and include the development of an Oxford-Cambridge Arc Internationalisation Delivery Plan and quarterly meetings of the Arc-wide trade and inward investment group. However, much more needs to be done if the Arc is to reach its potential as a global player able to compete with innovation-growth zones like Seoul, Helsinki, San Francisco and Toronto. This will include an Arc presence at MIPIM Cannes in March 2020 and an updated investment-led Oxford-Cambridge Arc Brochure and Investment Prospectus which identifies investable opportunities. Work will also continue to better integrate Arc sector propositions into the Department for International Trade's sector and market priority campaigns, linking the Arc's key sectors into the ten highest potential export and inward investment markets to drive Arc growth globally. This will involve analysis of available data on success across the Arc by sector and market. Each of the partners will work with DIT to develop a LEP-level 'chapter' for the Internationalisation Delivery Plan, based on the priorities and assets set out in their Local Industrial Strategy.

Places

Taken as a whole, this package of Arc-wide interventions, which sits alongside existing interventions being progressed by government and local partners, will support sustainable growth across the region, benefitting its residents, communities, businesses and the country more widely. Delivering transformational growth in this way will create opportunities across the Arc - spreading the benefits both to its prosperous centres and its more deprived communities, and across its urban and rural areas.

Doing so will require a holistic approach and partnership working with government and industry, to achieve growth and improve place-making, developing sustainable, resilient and culturally vibrant communities. This aims to provide a high quality of life for residents - now and in the future. The scale of growth envisaged across the Arc also offers the opportunity to plan for and build exemplar developments with high design standards; places where people want to live and work.

Heating and powering buildings accounts for 40 per cent of the total energy usage in the UK. By making new communities within the Arc more energy efficient and embracing smart technologies, energy demand and household bills can be cut, and economic growth boosted while meeting the country's targets for carbon reduction.

Conserving and enhancing the natural environment is at the heart of ambitions for the Arc; growth offers an opportunity for environmental enhancement, in turn driving productivity and innovative place making. Government and local partners have agreed to embed 'natural capital' thinking throughout the approach to the Arc; harnessing nature to adapt to climate change, manage flood risk and deliver broader benefits to businesses and communities.

As the national Industrial Strategy set out, we will work not just to preserve, but to enhance our natural capital - the air, water, soil and ecosystems that support all forms of life - since this is an essential basis for economic growth and productivity over the long term. To ensure that the environment in the Arc is left in a better state for future generations, local partners and government agree that:

- ▶ England's 25 Year Environment Plan sets out our comprehensive approach to improving landscapes and habitats, and the aspiration to move to a policy of net environmental gain in future. The policy for the Arc should embody this approach in line with national policy, so local partners will work with government to explore opportunities for local delivery of the Plan within the Arc, including considering issues such as climate resilience, water management and biodiversity net gain;

- ▶ local partners will also engage with government to co-design a local natural capital planning approach for the Arc, ensuring that the wider work on productivity is aligned;
- ▶ intelligent and sensitive design should be used in new housing and infrastructure developments to create or enhance habitats in line with national policy; and
- ▶ government and the LEPs will also consider (i) ways to maximise environmental expertise across the Arc, creating opportunities to share best practice across public and private sectors; and (ii) how to empower the business community to champion and support the Arc's natural assets, working together to attract and retain the skilled workforce of the future.

Implementation and Evaluation

This Local Industrial Strategy will set the direction for Buckinghamshire's economy. Built upon solid foundations of clear evidence, it highlights where Buckinghamshire and government will work together to maximise key strengths and tackle major challenges.

Governance

At the local level, Buckinghamshire's LEP will lead the implementation of this Local Industrial Strategy through its existing governance and delivery structures, embedding the strategy's priorities into its annual Delivery Plan and wider programme of activity. The Cities and Local Growth Unit will work with the LEP to engage government in delivery at the local level as necessary.

At a regional level, the four LEPs, supported by the MHCLG Oxford-Cambridge Unit and Cities and Local Growth Unit, will collaborate through the productivity group of the wider Oxford-Cambridge Arc governance, to deliver the shared Arc level commitments set out in all four Arc Local Industrial Strategies. This work will report to the Arc Leader's Board, ensuring this workstream is aligned to shared work on place-making, connectivity and the environment, as well as central government's national governance structures, such as the Local Industrial Strategy Implementation Board and the cross-Whitehall Oxford-Cambridge Arc inter-departmental board and Arc advisory group.

Funding

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 Buckinghamshire decide on its approach to maximising the long-term impact of the new UK Shared Prosperity Fund once its details and priorities are announced at Spending Review.

To demonstrate progress towards the long-term vision set out by this Local Industrial Strategy, this document 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 Buckinghamshire 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 Buckinghamshire.

As detailed in this strategy, Buckinghamshire 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.

Buckinghamshire will comply with all of the monitoring and evaluation requirements of each particular funding source, in addition to the wider requirement to monitoring the implementation of the Local Industrial Strategy as a whole.

Monitoring Outcomes

As well as setting out specific short-term actions, this Local Industrial Strategy has also set out Buckinghamshire’s long-term aspirations and the specific outcomes local partners are aiming to achieve. These will help guide future action and evaluate progress.

By 2050 Buckinghamshire will aim to have secured:

- ▶ increased productivity driven by innovative businesses which are well-led and managed, trading and investing globally;
- ▶ a greater number of high-quality, technology driven opportunities in strategic sites across Buckinghamshire, supporting a more productive manufacturing base, close to transport links and population centres;

- ▶ fully integrated and digitalised health and care system, which is recognised as the UK’s healthcare innovation adopter, helping people stay in the labour market and stay productive for longer;
- ▶ achievement of carbon neutrality in a way that improves quality of life for residents, minimises the productivity impact on current businesses and maximises commercial opportunities across Buckinghamshire;
- ▶ recognition as one of the world’s leading locations for business investment in the future knowledge economies supported by the latest digital and cellular connectivity;
- ▶ an advanced skills and work system that enables people to have greater choice in realising their potential, supports emerging industries, and is responsive to employers; and
- ▶ a coordinated infrastructure system, with a transport network that provides clean and effective transport options, utilising intelligent mobility systems and a reduced reliance on vehicle ownership.

In order to ensure the opportunities in this Local Industrial Strategy are met, Buckinghamshire will monitor the progress of the outlined commitments by developing a local Implementation Plan setting out clear milestones, deliverables and timings for the actions set out in this strategy.

In line with the national Local Enterprise Partnership Assurance Framework, the Buckinghamshire LEP will produce an annual delivery plan and a qualitative end-of-year report to evaluate how they, and other partners, have contributed towards achieving the objectives of this Local Industrial Strategy.

Evaluation

The government is committed to devolution where there is a strong evidence-base, robust governance and a delivery track-record in place. Robust evaluation is an essential element of demonstrating these competencies.

Buckinghamshire will put in place an overarching process and impact evaluation to assess the efficacy of government and Buckinghamshire in delivering against the objectives set out in this strategy. Results will be reported annually to both Buckinghamshire LEP and government. A three-year review will be undertaken, in July 2022, on the quantitative impact of the strategy, recognising that interventions will have a lag before taking effect. This should include an assessment of whether the current set of interventions are effecting the desired change and assessing the latest evidence on ‘what works’ in collaboration with independent experts.



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9. Source: Enterprise Research Centre (2019) Benchmarking local innovation, <https://www.enterpriseresearch.ac.uk/publications/benchmarking-local-innovation-the-innovation-geography-of-england-2019/>
10. A typically micro-business sector, 'digital' has accounted for 59 per cent of jobs growth 2010-2016, adding 6,850 new jobs to the area.

11. '47.7 per cent of residents hold a degree or higher compared to 38.6 per cent nationally.
12. 'ONS business demography 2018.
13. <http://i4j.info/wp-content/uploads/2013/05/i4jDaneStanglerDemographicsandEntrepreneurship-1.pdf> At the start of the Connected Counties Programme, Buckinghamshire trailed behind that of England as a whole by 5.5 per cent
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15. 'Local demographic analysis; <http://i4j.info/wp-content/uploads/2013/05/i4jDaneStanglerDemographicsandEntrepreneurship-1.pdf>
16. A typically micro-business sector, 'digital' has accounted for 59 per cent of jobs growth 2010-2016, adding 6,850 new jobs to the area.

Images

Cover

Students at the National Film and TV School in Beaconsfield working in the world's first 4K studio in a educational facility, funded by Buckinghamshire LEP through the Local Growth Fund.

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