



HM Government



West Midlands Local Industrial Strategy

May 2019





Professor Lord Bhattacharyya

The Local Industrial Strategy for the West Midlands builds on the heritage of the region's manufacturing, research and technology sectors.

The strategy sets out how the West Midlands will take advantage of the incredible skills, infrastructure and innovation of our region.

In that spirit, we dedicate this strategy to the life and achievements of Professor Lord Bhattacharyya, founder of WMG at the University of Warwick.

He was personally responsible for bringing millions of pounds of investment to the West Midlands. Professor Lord Bhattacharyya played a key role in the renewal of Jaguar Land Rover and the West Midlands' automotive sector.

Most recently the National Automotive Innovation Centre and the UK Battery Industrialisation Centre were direct results of his advocacy.

Professor Lord Bhattacharyya was a constant champion of the West Midlands and a key figure in its industrial renaissance. It is our profound hope that this strategy will build on his vision and achieve his ambition of making the West Midlands a world leader in manufacturing, technology, innovation and skills.

Contents

Foreword	04
Executive summary	07
Strategic opportunities	17
An inclusive, clean and resilient economy	39
The five foundations of productivity	
Ideas	43
People	50
Infrastructure	60
Business environment	68
Places	73
Implementation	81

Foreword

The West Midlands is undergoing a renaissance.

The West Midlands is a global force and a major part of the UK economy, generating £99bn of GVA – five per cent of UK output. The region is growing fast, with output up 27 per cent over the past five years. A record number of people are in work and the lowest number are out of work. Productivity is increasing too, at twice the rate of the UK in 2017/18. Carbon emissions have reduced by 18 per cent over the last five years.

The West Midlands is large and diverse, consisting of three interlinked but distinctive economic areas. Its cities, many towns and rural areas are home to communities with very different characteristics. All share a long history of creative design, manufacture and production. Doing things differently and leading the way is what defines the West Midlands. This is a legacy that survived the industrial restructuring of the 1970/1980s and is now the engine of current and future success.

Firms across the region have been supplying components and assembling vehicles from the first bikes to today's autonomous pods. They built the world's first production line and now create virtual worlds for testing new products based on real data.

They provide the real-life testing needed to get new medicines from the lab to patients. They provide modern components and materials to global supply chains in a wide range of industries. The region's digital creative businesses create games played across the world.

Universities and commercial research and development centres across the region are central to the UK. They are developing the skills, products and processes the UK will need tomorrow, as well as being major employers and core to the future of the towns and cities that host them.

Shared leadership to support the delivery of the national modern Industrial Strategy

The modern Industrial Strategy sets out a path to increasing productivity and earning power across the country.

It formed a partnership of innovators, job creators and world-class businesses positioning the United Kingdom to seize the global opportunities of the new industrial revolution. And it acknowledged the vital role of ambitious local business and civic leaders to deliver prosperity.

Our collective national and local ambition is for the West Midlands Local Industrial Strategy to demonstrate this approach in action through our collaborative national, regional and local leadership.

Developed locally and agreed with government, this Local Industrial Strategy sets out the priorities to increase the productivity of the West Midlands and our national economy. It belongs to the West Midlands and has been developed in collaboration with hundreds of businesses, civil society organisations and citizens.

But it also marks a change in the way government is working to support the region. It represents the next phase of long-term partnership and builds on important foundations set in place since 2010. These include the previously agreed City Deals, Devolution Deals, Strategic Economic Plans, work across the Midlands Engine and recent packages to support delivery on local ambitions on skills and housing.

Focus

The West Midlands aims to continue growth and success, while ensuring a more inclusive and balanced economy, where all communities and residents benefit and no one is left behind.

In partnership with the government, the West Midlands aims to drive growth and meet government's national Future of Mobility Grand Challenge. The region's research strengths across its universities – and its leadership in battery industrialisation – are well-established. This Local Industrial Strategy shows how partners will combine these strengths with manufacturing expertise and world-class supply chains in towns such as Darlaston, Walsall and Bloxwich. The country's first Future Mobility Zone – between Birmingham, Solihull and Coventry – will host the testing of new technologies.

Other priorities – ranging from health-care innovation to modern services and creative content – show how the region is looking towards shaping future markets. This Local Industrial Strategy also makes clear how the region will boost productivity across the Industrial Strategy's five foundations and maximise the impact of major public and private investment over the coming years. High Speed 2 will soon start to strengthen the region's connectivity. Coventry is the UK's City of Culture in 2021. Birmingham will host the Commonwealth Games in 2022.

**Evidence led, inclusive
and forward looking**

This Local Industrial Strategy and its supporting documents published locally are based on a robust evidence base developed by independent commissions and research over the last three years. Led by the West Midlands Combined Authority with Local Enterprise Partnerships, it has been co-designed with the involvement of over 350 organisations.

Collectively, we have worked with national and local leaders and with a wide range of businesses, sector groups and the civil society sector as part of a public consultation during the autumn of 2018.

It is not a strategy set in stone and will continue to evolve as the economy changes, working together with the communities and businesses of the West Midlands, including them fully in its implementation.



Rt Hon Greg Clark MP

Secretary of State for Business,
Energy and Industrial Strategy



Andy Street

Mayor of the West Midlands



Cllr Ian Ward

Leader of Birmingham City Council and
West Midlands Combined Authority
Portfolio Holder for Economic Growth



Jonathan Browning

Chair of the Coventry & Warwickshire
Local Enterprise Partnership
and Chair of the West Midlands
Combined Authority's Strategic
Economic Development Board

Executive Summary

This Local Industrial Strategy comes at a pivotal time in the West Midlands' history.

The West Midlands is in renaissance: output is up 27 per cent over the past five years. Productivity increased last year at twice the rate of the UK average. High Speed 2 will further strengthen the region's connectivity with national markets - 90 per cent of which are already within a four-hour drive. The West Midlands, working with partners in the Midlands Engine, is also a growing international force: foreign direct investment projects have trebled since 2011. Carbon emissions have reduced by 18 per cent over the last five years.

This Local Industrial Strategy demonstrates how the West Midlands is forging its future and building an inclusive and balanced economy. Together with the supporting documents published locally, it shows the West Midlands is taking action to continue growth in productivity and earning power for all.

It also makes clear how government is backing these efforts, working in partnership with local leaders, business and stakeholders across the region to help realise the West Midlands' potential.

Seizing opportunities for the future

Building on its distinctive strengths - from transport innovation to data-driven health and life sciences and globally competitive supply chain firms - this Local Industrial Strategy sets out the steps the West Midlands will take to:

- ▶ drive growth by strengthening the foundations of productivity; contributing towards the Grand Challenges; and taking advantage of market driven opportunities in mobility, data-driven health and life sciences, modern services, creative content, techniques and technologies; and

- ▶ ensure all communities can contribute to and benefit from economic prosperity whilst protecting and enhancing the environment; investing further in social infrastructure; measuring progress; and
- ▶ designing actions using a balanced set of inclusive indicators.

Led by the Mayoral Combined Authority, working with Local Enterprise Partnerships and local authorities, this Local Industrial Strategy marks the next stage of the West Midlands' long-term partnership with government.

It is built on strong foundations. Since 2010, local leaders, working in partnership with government, have delivered historic City Deals with Greater Birmingham and Solihull, Coventry and Warwickshire and the Black Country. Having secured significant Growth Deal funding, the West Midlands then came together as one to take on important new powers and secure new leadership through two successful Devolution Deals.

Since the launch of the Industrial Strategy, this partnership has gone from strength to strength. This includes the West Midlands and government agreeing an historic Skills Agreement, unlocking up to £69m to help equip people with the skills they need to get on, as well as an ambitious outline Housing Package. And, working with the Department for International Trade, the West Midlands is building on positive trade growth and supporting high potential exporters reach global markets.

The West Midlands will build on these strengths and address barriers to growth. Some of the approaches within this Local Industrial Strategy are region wide; others are focused on specific spatial needs or opportunities. It highlights a range of programmes that are already in train and sets out long-term but deliverable ambitions for the future.

Driving growth: Future of Mobility

The Industrial Strategy's Future of Mobility Grand Challenge recognises the unprecedented change in transport technology expected over the next decades.

Building on its significant existing strengths in research and firms from original equipment manufacturers to connected supply chains in rail, automotive and aerospace, the West Midlands is well placed to shape the UK's responses to this challenge.

The West Midlands is the centre of transport innovation in the UK, leading the smart, low carbon movement of people and goods. It will build on the UK Battery Industrialisation Centre to consolidate its role as a battery research, development (R&D) and manufacturing hub. By combining the opportunities of 5G, the Future Mobility Zone, High Speed 2 and the Commonwealth Games, it will also create a more connected region.

To continue driving progress towards this priority, the West Midlands will:

- ▶ partner with local specialist manufacturers and R&D centres to help create new markets and foreign direct investment opportunities, such as those in Electric and Connected Autonomous Vehicles and battery manufacturing;

- ▶ develop an innovative and integrated transport network, including delivering the UK's first large-scale 5G testbed to enable a new approach to real time data and user management across the whole transport system.

The government is already working in partnership with the West Midlands to support this priority through investments including £20m for the Future Mobility Zone between Birmingham, Solihull and Coventry; and up to £50m for 5G trials across the West Midlands.

There is significant public and private investment already in place to help realise these opportunities. To further complement locally led commitments, the government and West Midlands will:

- ▶ work with local partners to maximise the region's contribution to achieving government's existing ambition to deploy three world-leading trials of connected autonomous vehicles by 2021 in the UK, with the West Midlands aiming to deploy the first fully operational connected autonomous vehicles in the region in advance of the 2022 Commonwealth Games;
- ▶ help drive up greater foreign direct investment in electric vehicle manufacturing. This includes completing the development of the UK Battery Industrialisation Centre and maximising the impact from the Faraday Battery Challenge; and
- ▶ build on its existing partnership that has supported the development of the

West Midlands High Speed 2 Growth Strategy. The government will work in partnership with the West Midlands to maximise the benefits that High Speed 2 will bring to the region.

Data-driven health and life sciences

The West Midlands is a growing centre for testing and proving health innovation, working in partnership with businesses and patients.

Building on investment in the Institute of Translational Medicine and 5G, the West Midlands' ambition is to build on its growing cluster to deliver improved clinical care and health outcomes, alongside significant business growth and scale-up success. This will be through accelerating the commercialisation of treatments and technologies to drive business and patient benefits - this will support the national Life Sciences Industrial Strategy.

To continue driving progress towards this priority, the West Midlands will:

- ▶ continue to invest in the business support and networks needed to drive health innovation cluster development;
- ▶ improve health outcomes and provide the healthcare jobs of the future through new technical career pathways in local healthcare; more personally-targeted care; and digitally-enabled care;

- ▶ convene partners across the West Midlands and Midlands Engine to maximise opportunities through the Strength in Places Fund and other national competitive funds.

To complement locally led commitments, the government will work in partnership with the West Midlands to:

- ▶ support the development of a locally led West Midlands Translational Medicine and Med-Tech Commission. This brings together national and local public leaders, government, universities, entrepreneurs and start-ups, and builds on the strengths of the West Midlands life sciences cluster, underpinned by robust evidence. The Commission will advise on the development of a locally led roadmap to accelerate commercialisation around the region's 'lab to patient' ecosystem.
- ▶ continue to support the West Midlands' international investment offer in healthcare technologies with the Department for International Trade and local partners, through the existing **Midlands Engine Trade and Investment Programme Board**. This will explore opportunities in international markets for new therapies, devices and techniques, to drive business growth through increased commercialisation of healthcare technologies.
- ▶ build on existing and new partnerships between Government, industry, universities and the NHS in driving innovative product development to

form part of West Midlands' efforts to maximise its contribution to the Artificial Intelligence and Data Grand Challenge mission to transform the prevention, early diagnosis and treatment of chronic diseases, such as cancer, diabetes, heart disease and dementia by 2030.

Modern Services

The West Midlands aims to build its reputation as a **high-value business and professional services** location benefiting from a highly diverse and highly skilled local workforce, through investments in the construction sector, the business environment, infrastructure and skills.

To drive progress towards achieving this priority, the West Midlands will:

- ▶ continue to accelerate construction of varied high-quality housing, high-grade employment spaces and improved connectivity, maximising the opportunities of High Speed 2 and Birmingham Airport;
- ▶ continue to foster innovative partnerships between firms and education institutions, opening up opportunities with clear progression and entry routes for diverse communities and ensuring the availability of the technical skills that are in high demand; and
- ▶ design locally led peer-to-peer networks to support and improve the productivity of local firms and bring together professional business services to provide a visible and trusted offer to local firms. Both

of these will build on findings and approaches set out in the forthcoming Business Productivity Review.

To complement locally led commitments, the West Midlands Skills Agreement with government will help support more young people and adults to get the skills they need to benefit from the forecast increase in jobs, as well as upskilling and retraining local people of all ages.

Creative content, techniques and technologies

The West Midlands is well placed to take advantage of the global growth in creative content, techniques and technologies, building on a history of success in transforming products, processes and services.

To build on this opportunity, the government and the West Midlands will;

- ▶ continue to maximise the opportunities arising from the Department of International Trade's High Potential Opportunities scheme within the gaming sector in Leamington Spa (Coventry and Warwickshire).

The government and West Midlands will build on the opportunities of the Commonwealth Games and Coventry City of Culture, to develop and showcase digitally-led approaches to resident and visitor services and experiences. The West Midlands' ambitions will also be supported by the new Digital Skills Partnership.

Ideas

The West Midlands aims to further drive up levels of business innovation and the commercialisation of research and development, working in partnership with government, across the Midlands Engine and internationally. The West Midlands will draw on the expertise of its universities, Catapult centres and research strengths, with a focus on mobility, life sciences, digital, and developing the supply chains of the future.

To drive progress towards achieving this priority, the West Midlands will:

- ▶ ensure the availability of both space and finance for innovation, encourage cross-sectoral innovation, and deepen the business-led and peer-to-peer networks;
- ▶ create new support programmes targeted at local supply chains and smaller, high potential firms, including through demonstrator projects, enabling accessible investment opportunities and access to finance products on attractive terms; and
- ▶ create a new foresight programme to generate new ideas and promote awareness of the latest market demand for innovative SMEs and new technologies.

To further complement locally led commitments, the government will work in partnership with the West Midlands to deliver local priorities and achieve the West Midlands' full role in the national 2.4 per cent research and development target by:

- ▶ continuing to support the development of the locally led West Midlands Innovation Framework and new programmes. This will consider, where appropriate, how the opportunities identified in the Local Industrial Strategy could provide an organising framework for bids by local partners into the Strength in Places Fund and other national competitive funds delivered by UK Research and Innovation; and
- ▶ helping to build the optimum environment for foreign direct investment in battery R&D and electric vehicle manufacturing.

People

The region is highly diverse with a wealth of talent and enterprise, and the devolution of the Adult Education Budget represents an opportunity for the West Midlands to provide more targeted support for local people and to ensure adult education provision best meets local need and supports labour market access and wage progression.

The West Midlands Combined Authority secured a Skills Agreement with government in July 2018, unlocking up to £69m to boost digital and technical skills, job opportunities and productivity across the region. This will help support more young people and adults into work, as well as upskilling and retraining local people of all ages.

This Local Industrial Strategy and the ambitious **West Midlands Regional Skills Plan** show how the Skills Agreement will work for the

entire region. To further complement locally led commitments detailed in the Regional Skills Plan, and building on the work of the West Midlands Inclusive Growth Unit, the government and West Midlands will:

- ▶ support the development of two Institutes of Technology (IoT) to deliver higher technical education in the West Midlands. Government will work with the IoT, led by Dudley College to redevelop land to provide teaching facilities for higher level skills programmes. The IoT, led by Solihull College, will focus on advanced manufacturing and Industry 4.0 through greater collaboration of further and higher education and creating pathways from level three to level six apprenticeships;
- ▶ continue improving labour market access and opportunities for disadvantaged communities through the existing locally led Employment Support Framework taskforce. This would include exploring barriers for underrepresented groups, such as women, as demonstrated through the gender employment gap; and
- ▶ continue to strengthen early intervention and preventative services. Working with existing local and national resources, this work will continue to bring together national and regional organisations - including Public Health England - supporting economic inclusion and social change.

Infrastructure

The Industrial Strategy recognised the transformative effects of High Speed 2 on strengthening the economies and communities of cities, towns and rural areas across the country. The West Midlands is well-placed to realise this potential and deliver a region-wide, digitally enabled, integrated transport system.

The West Midlands has received £332m of the government's £2.25bn Transforming Cities Fund. This will support the extension of the West Midlands' Metro System, with an initial focus on connecting cities towns between Wednesbury and Brierley Hill in the Black Country.

The West Midlands is also committed to delivering an ambitious Housing Package. The government is supporting the West Midlands' growth potential through the Urban Connected Communities Project. This marks the next step in the national 5G Testbed and Trials Programme.

In addition to ongoing and locally led commitments, the government will work in partnership with the West Midlands, including:

- ▶ the Department for Business, Energy and Industrial Strategy will continue working with the West Midlands, Energy Capital, regulators and industry partners to explore locally led options on potential new local institutional models for managing regional energy investment and markets; and
- ▶ building on its existing partnership that has supported the development of the West Midlands High Speed 2 Growth Strategy, the government will work in partnership with the West Midlands to maximise the benefits that High Speed 2 will bring to the region.

The collaboration on energy, aims to bring together the right stakeholders and collectively manage energy investment efficiently, particularly when innovative technologies are being commercialised or require strategic infrastructure investment.

Business Environment

Working in partnership with the government and building on the strengths of its existing Growth Hubs, the West Midlands aims to boost business dynamism and productivity. This also includes ongoing work to increase the Midlands Engine's international reach and success.

To drive progress on this priority, the West Midlands will also support businesses by:

- ▶ developing a wrap-around innovation, research and development offer, including facilitating the development and sharing of intellectual property for collaborative innovation and considering where it can improve innovative firms' access to finance;
- ▶ supporting high growth-potential business with the skills needed to innovate through programmes in universities, Catapults, and technology innovation networks;

- ▶ developing a range of supply chain programmes, supporting innovation and the switch to electric vehicles, services and the transfer and adoption of new technologies across a wide range of sectors; and
- ▶ supporting businesses by establishing a locally led virtual Productivity Factory targeted at SMEs. This will facilitate expert industry benchmarking, coaching, and management masterclasses for firms within the West Midlands, and will draw on learnings from the forthcoming Business Productivity Review.
- ▶ continue to work with councils to help transform and revitalise town centres through the Regional Town Centres Task Force. This will complement locally led work to develop expressions of interest to the national Future High Streets Fund and form the basis for intensive work to deliver the government's Stronger Towns Fund objectives;
- ▶ build on the ground-breaking work of the West Midlands Inclusive Growth Unit by developing Inclusive Growth Corridors that put communities at the centre of investment decisions and incorporating the West Midlands Inclusive Growth Framework into decision-making, ensuring that all public expenditure targets the wider set of economic, health and social outcomes which the West Midlands has agreed; and

Places

The West Midlands is home to interlinked but distinctive cities, towns and rural areas in three connected economic areas. The Local Industrial Strategy celebrates this, and the region's wider connections, demonstrating how the strengths of each add up to more than the sum of their parts.

The West Midlands Future of Mobility priority, for example, draws on strong manufacturing supply chains across the Black Country and clusters of R&D intensive firms in Coventry and Warwickshire. This Local Industrial Strategy also shows the spatial impacts of actions on each foundation of productivity, and how High Speed 2 will improve connectivity across the West Midlands.

To drive forward economic opportunities across the region, the West Midlands will:

- ▶ establish a virtual Productivity Factory targeted at SMEs. This will facilitate expert industry benchmarking, coaching, and management masterclasses for firms within the West Midlands, and will draw on learnings from the Business Productivity Review.

In addition to locally led commitments, the government will work in partnership with the West Midlands to:

- ▶ work with local partners to maximise the long-term impact of the new UK Shared Prosperity Fund once details of its operation and priorities are announced following the Spending Review.

West Midlands Local Industrial Strategy - approach

This strategy and its supporting documents are based on a robust evidence base developed by independent commissions and research over the last three years.

Led by the West Midlands Combined Authority with Local Enterprise Partnerships and local authorities, it has been co-designed with the involvement of over 350 organisations. Local leaders also worked with a wide range of businesses, sector groups and the civil society sector as part of a public consultation during the autumn of 2018.

The economy has been considered from two perspectives. This has led to the identification of:

- ▶ new market driven opportunities for growth; and
- ▶ specific barriers and opportunities that exist for each of the foundations of productivity, together with their spatial distribution.

This West Midlands Local Industrial Strategy sets out actions targeted at each of those barriers based on the evidence and where the market alone will not deliver the outcome required. These actions will support the whole of the West Midlands to take advantage of the strategic opportunities ahead. Place is woven throughout, with each foundation section being clear about the spatial distribution of barriers and opportunities. This Local Industrial Strategy does not set new targets. In 2016, the West Midlands agreed a comprehensive approach to monitoring the overall performance of the economy across a wide range of indicators designed to drive an inclusive economy. The Mayor and Combined Authority Board keep these targets under review and publish progress in an annual State of the Region report.

Major new market opportunities

Future of mobility

Data driven health and life sciences

Creative content, techniques and technologies

Modern services

A distinctive economy - Creative and innovative, with global supply chain strengths a diverse and young population, well connected, trading and entrepreneurial. Unique opportunities ahead in the Commonwealth Games and City of Culture.

Sector strengths

Low carbon technology

Energy and clean growth

Aerospace

Precision component manufacturing

Logistics / transport technology

Future mobility

Metals & materials

Innovative supply chains

Life sciences

Devices
Diagnostics, real life testing

Professional skills

Skills and a full services sector

Rail

Digital rail
High Speed 2

Construction

Offsite modern manufacturing
Land remediation

Creative

Games, Next Gen content, process and product design and designer maker

Food & drink

Machinery, food & fluid control tech, Photonics R&D

Automotive

Battery development
Drive train
CAV

Tourism

Shakespeare's England
Commonwealth Games
Business
City of Culture

Actions to unblock barriers to productivity and growth, integrated in places and communities to drive inclusion

Foundations of productivity - drivers and enablers of growth

People, skills & employment

Infrastructure & environment

Ideas / Innovation

Business environment

Place

West Midlands and the Future of Mobility

The West Midlands as the centre of transport innovation in the UK, leading the smart, low-carbon movement of people and goods and connecting communities to new opportunities.

Mobility will change radically

The next decade will be a period of large-scale change to how people and goods move, with significant innovation in mobility and continued changes to consumer preferences and global markets. This includes not only the shift to electric and connected autonomous vehicles but also rapid technological change such as 5G, with the West Midlands already the home to the UK's first 5G test-beds.

Adapting to these challenges will create huge economic opportunities nationally and for the West Midlands, driving benefits across the Midlands Engine. The West Midlands will maximise these opportunities by combining advances in data science, artificial intelligence and sensing technology while completing large-scale infrastructure projects such as High Speed 2 and improving the transport network across the region. This involves a range of initiatives, including maximising the impact of the £322m secured for the West Midlands through the Industrial Strategy's Transforming Cities Fund.

The scale of the challenge requires local and national collaboration. The government and the West Midlands are already working together to meet the ambitions of the Future of Mobility Grand Challenge. Building on significant investment to date, the West Midlands, working in partnership with the government, commits to the next phase of plans to realise shared goals. This includes:

- ▶ working with local partners to maximise the region's contribution to achieving government's ambition to deploy three world-leading trials of connected autonomous vehicles by 2021 in the UK, with the West Midlands aiming to deploy the first fully operational connected autonomous vehicles in the region in advance of the 2022 Commonwealth Games;



▶ building the optimum environment for additional foreign direct investment and electric vehicle manufacturing. This will include completing the development of the UK Battery Industrialisation Centre and maximising the impact of funding from the Faraday Battery Challenge; and

▶ building on its existing partnership that has supported the development of the West Midlands High Speed 2 Growth Strategy, the government will work in partnership with the West Midlands to maximise the benefits that High Speed 2 will bring to the region.

The West Midlands as a global centre of transport and mobility

A history of automotive and cross-sector collaboration

The West Midlands cluster includes cutting edge research and development and established original equipment manufacturers. These are supported by globally competitive, robust and interconnected supply chain firms, including in aerospace, automotive, rail and the crucial supporting industries of metals and materials.

These supply chain strengths underpin the West Midlands' manufacturing expertise and will drive the wider innovation needed to secure a successful and balanced transition to new mobility solutions, the manufacture of batteries, connected autonomous vehicles and electric vehicle powertrain components, for example, at firms such as Westfield in Dudley, ZF Lemforder in Darlaston and Teepee Electrical in Bloxwich (Walsall).

Business and university partnerships embedding digital and creative techniques

The West Midlands has global research and business strengths in digital and ultra-light rail, logistics, the largest connected autonomous vehicles (CAV) testbed 'Midlands Future Mobility' and the leading specialist CAV vehicle manufacturers in Westfield and RDM.

There is also a concentration of highly innovative supply chain firms, working across the full range of manufacturing, materials, design, testing and data services that make up the future mobility industry, including components for future battery manufacture.

These strengths and assets provide the platform for creating, developing, testing and building global and national solutions to the future of mobility and associated supply chains. This includes large scale battery manufacture and successfully managing the move to electric vehicle (EV) powertrains across the full range of transport modes and supply chains.

Connecting all communities of the West Midlands to High Speed 2

This cluster of skills, sectors and assets is matched with significant and locally agreed plans to upgrade public transport infrastructure through High Speed 2, suburban rail, trams and smart buses. This will maximise the opportunity for Transport for West Midlands to transform customers' experience of travelling around the West Midlands and wider UK, improving connectivity to jobs and skills opportunities. Wider work through the Midlands Connect partnership will enhance connectivity across the Midlands.

Opportunities

The future success of the West Midlands lies in the ability to influence and adapt to long-term trends in mobility. These include:

- ▶ creating new markets, such as those in electric and connected autonomous vehicles (CAV) and mobility as a service, through the Future Mobility Zone;
- ▶ stimulating further innovation in key areas such as battery research and manufacturing, 5G, and data, with benefits to the supply chain and whole economy;
- ▶ taking advantage of growing global markets in very light rail, digital rail and electric and autonomous flight, in firms of all sizes; and

- ▶ continuing to develop a clean, integrated transport network, maximising the opportunities presented by High Speed 2, optimising the value of the Transforming Cities Fund and other locally led investments and working smartly with Midlands Connect.

The size of the potential prize is truly significant. CAV alone is worth between £50 and £100bn to the UK economy and an integrated transport network and arrival of High Speed 2 could add £4bn to the West Midlands' economy, driving major centres of growth such as UK Central Solihull.

Creating new markets

Electric vehicles

Business and university partnerships will embed digital and creative expertise in electric vehicle design and manufacturing and support the development of new supply chains. For example, Coventry University's National Transport Design Centre and the Advanced Manufacturing and Engineering Institute provide industry-ready graduates and research in electric vehicle and powertrain technologies.

The West Midlands will continue to establish enabling infrastructure to support the development of local charging and energy transmission systems for electric vehicles across the region to enable the future market, with location and approach driven by demand.

Connected autonomous vehicles (CAV)

CAVs could form the majority of cars on the roads in 15 years, with truly self-driving vehicle trials for the public due to begin in the UK in 2021.



The national Industrial Strategy has backed over 200 companies working in consortia on 90 world-leading projects on self-driving and connected technologies. As part of this commitment, the West Midlands aims to deploy the first fully operational CAV in the West Midlands in advance of the 2022 Commonwealth Games.

Between now and then, the region will be testing progress on a network of over 50 miles of roads in Coventry, Birmingham and Solihull. This area is now a globally leading 'real world' UK testbed for developing the next generation CAVs following over £50m of recent investment from government and the private sector.

£20m

to establish the UK's first **Future Mobility Zone** between Birmingham, Solihull and Coventry.

£50m

into **5G trials** in Birmingham, Coventry and Wolverhampton, awarding West Midlands preferred partner status as part of the Urban Connected Communities scheme.

Stimulate further innovation

Battery research and development

Partners will complete the development of the UK Battery Industrialisation Centre, part of the Faraday Battery Challenge, and consider local options to enhance its specifications and energy supply. Collaboration between local public and private sector partners will continue to build the optimum environment for additional foreign direct investment to accelerate battery development and production. This includes local work to build on the West Midlands' plans to develop a local case for a Gigafactory.

Technology innovation and testing

There are plans to build on government and local investment of up to £50m for the UK's first large-scale 5G testbed to enable a new approach to real-time data and user management across the whole transport system. This includes integration with CAV design, testing and operation. Collaboration with other 5G testbeds, including Worcester Manufacturing and the Midlands Engine 5G project, will deliver productivity improvements for the wider supply chain.

Deploying mobility technology into other sectors

Innovation and manufacturing expertise will be applied to West Midlands supply chain firms at all tiers, through new demonstrator and support programmes. For example, stimulating innovation in connected mobility will underpin a new approach to distributed, connected factories and supply chains with significant gains for the wider UK economy and local supply chains across the region and wider Midlands Engine area.

Develop a 21st Century transport system

Future mobility and developing mobility as a service

Build on the £20m Future of Mobility Zone government investment, together with £80m locally, to support the development of the underlying systems capability to create an environment to deploy new mobility services. Building the robust digital information layer required to increase journey predictability will be critical. This will be tested in the UK's first Future Mobility Zone between Birmingham, Solihull and Coventry.

Develop an integrated transport system in the West Midlands

Continue a significant programme of transport investment to develop an integrated, clean, multi modal system linked to the locally led High Speed 2 Growth Strategy. This will improve air quality and directly address productivity challenges by connecting people to new job opportunities and skills provision, improving access to healthcare and green space. It will also be integrated with the 5G network to drive a new traveller-centric system and approach.

Locally led commitments

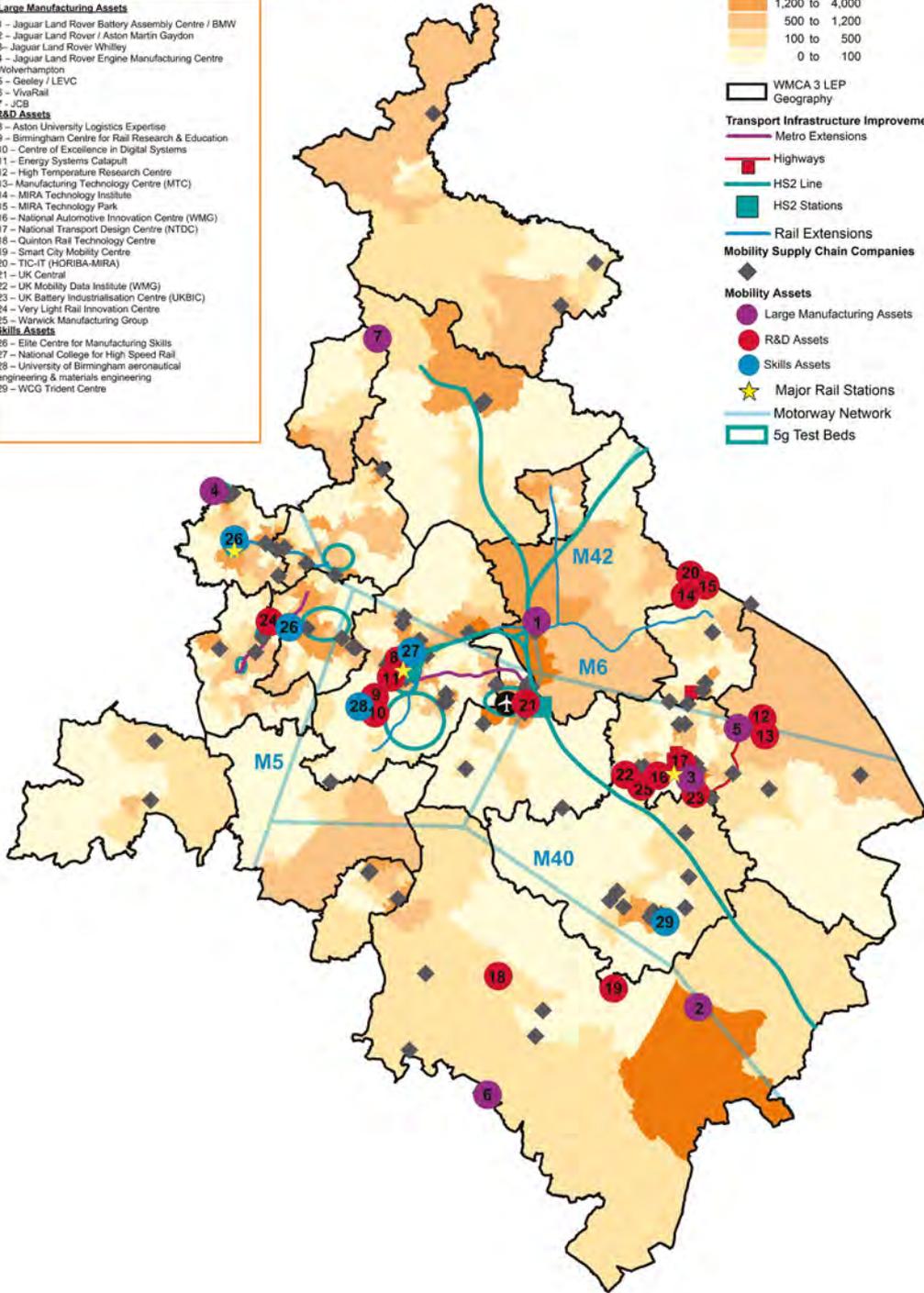
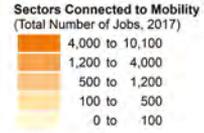
- ▶ To make the West Midlands a UK hub for battery research, development and manufacturing;
- ▶ To have the highest electric vehicle adoption and CAV share of vehicle use anywhere in the UK.
- ▶ To be the national centre for CAV, electric motor manufacture and supply chains for the full range of electric vehicles; and
- ▶ To reduce congestion and journey times through significant ongoing investment in clean, low emission public transport ensuring that every part of the West Midlands is close to local and national opportunities - and the rest of the world - via air, road, rail and digital at UK Central's international gateway.

The following map shows the spatial distribution of the opportunity.

FUTURE OF MOBILITY

Large Manufacturing Assets

- 1 - Jaguar Land Rover Battery Assembly Centre / BMW
 - 2 - Jaguar Land Rover / Aston Martin Gaydon
 - 3 - Jaguar Land Rover Whitley
 - 4 - Jaguar Land Rover Engine Manufacturing Centre Wolverhampton
 - 5 - Geesley / LEVC
 - 6 - VivaRail
 - 7 - JCB
- R&D Assets**
- 8 - Aston University Logistics Expertise
 - 9 - Birmingham Centre for Rail Research & Education
 - 10 - Centre of Excellence in Digital Systems
 - 11 - Energy Systems Catalyst
 - 12 - High Temperature Research Centre
 - 13 - Manufacturing Technology Centre (MTC)
 - 14 - MIRA Technology Institute
 - 15 - MIRA Technology Park
 - 16 - National Automotive Innovation Centre (WVG)
 - 17 - National Transport Design Centre (NTDC)
 - 18 - Quinton Rail Technology Centre
 - 19 - Smart City Mobility Centre
 - 20 - TIC-IT (HORIBA-MIRA)
 - 21 - UK Central
 - 22 - UK Mobility Data Institute (WVG)
 - 23 - UK Battery Industrialisation Centre (UKBIC)
 - 24 - Very Light Rail Innovation Centre
 - 25 - Warwick Manufacturing Group
- Skills Assets**
- 26 - Elite Centre for Manufacturing Skills
 - 27 - National College for High Speed Rail
 - 28 - University of Birmingham aeronautical engineering & materials engineering
 - 29 - WCG Trident Centre



Data-driven healthcare and life sciences

The West Midlands' aim is to become a centre for testing and proving health innovation and commercialisation, working in partnership with businesses and patients across the region to deliver improved health outcomes, clinical care and business growth.

The global market for testing and proving new devices and techniques is changing

Artificial intelligence (AI) and large data techniques are driving new approaches to healthcare. The increasing use of data and new technologies to enable patient stratification and improved targeting of healthcare interventions is allowing innovations from across different sectors to be applied to the patient. New entrants and established firms across the full range of health and life sciences are driving new and innovative approaches. There is a critical need to de-risk innovations in diagnostics, software and devices.

The UK's ability to respond and adopt new approaches within its healthcare system will be crucial to shaping these future markets. And testing and evaluation in a relevant real-world environment will be vital if the UK is to commercialise these opportunities to their fullest extent and maximise benefits to health outcomes.

With its distinctive culture, infrastructure and environment, the West Midlands is well-equipped

to become a centre for testing and proving health innovation. In doing so, it will help underpin the wider delivery of the government's Life Sciences Industrial Strategy.

In particular, the development and translational medicine strengths of the West Midlands healthcare innovation ecosystem position it well to help meet the government's national mission 'to transform the prevention, early diagnosis and treatment of diseases like cancer, diabetes, heart disease and dementia by 2030.'

The West Midlands' track-record

The UK has established clusters that lead the world in healthcare and medicine discovery and research. The West Midlands has strengths which complement these as a centre for testing and proving new innovations, approaches and their commercial application.

The West Midlands has developed an integrated eco-system to translate new innovations into patient care at pace and scale. The West Midlands has a track-record in working

with patients and their data and making sure that value is returned to the patient, the wider NHS and to the region's businesses.

The West Midlands possesses nationally-recognised strengths in healthcare data informatics, systems and digitalisation of health care services. These are aligned to strengths in genomics medicine and diagnostics, medical technologies evaluation and clinical trials. Home to the largest NHS England Genomics Laboratory Hub, the Genomics Medicine Centre has been the largest contributor to the 100,000 Genomes programme. The West Midlands also leads the Health Data Research UK Midlands Site, the Midlands and Wales Advanced Therapies Treatment Centre and has four regional NHS England Global Digital Exemplars.

These strengths are underpinned by other significant national, competitively-won investments, including over £30m of Innovate UK funding in the last two years. These have been integrated to provide the translational environment to develop the testing, evaluation, validation and application of new technologies from other UK and global clusters.

The West Midlands has also forged partnerships for long-term success. Birmingham Health Partners - a strategic alliance between the University of Birmingham and two NHS foundation trusts - sustains this integrated translational medicine system across the region. It connects

facilities and expertise across all six universities and brings together the region's NHS trusts through the West Midlands Academic Health Sciences Network.

To build on this partnership working, government will support:

- ▶ the development of a locally led West Midlands 'Translational Med-Tech Commission' bringing together national and local public leaders, government, universities, entrepreneurs and start-ups, and building on the strengths of the West Midlands life sciences cluster, underpinned by robust evidence. This will advise on the development of a locally led roadmap to accelerate commercialisation around the region's 'lab to patient' ecosystem.

In addition:

- ▶ the Department for International Trade and local partners will continue to support the West Midlands' international investment offer in healthcare technologies through the existing **Midlands Engine Trade and Investment Programme Board**. This will explore opportunities in international markets for new therapies, devices and techniques, to drive business growth through increased commercialisation of healthcare technologies.

The West Midlands is working to align academic, NHS and industry capabilities across the West Midlands, based on a shared mission to break down sector boundaries and create stronger partnerships with patients. At the core

of the West Midlands' translational offer is the cluster centred on the Queen Elizabeth and Birmingham Women's Hospitals and University of Birmingham campus and the Institute of Translational Medicine, including a locally led proposal for the Birmingham Life Science Park development. These have the potential to deliver the full range of facilities needed for the development, validation and real-world testing of new healthcare innovations.

The West Midlands' distinctive strengths

Crucially, the region's offer and expertise are complementary and distinctive to other UK clusters in providing the:

- ▶ co-located translational environment and access to a diverse population. The West Midlands is able to reach six million patients across 17 regional NHS Trusts. The West Midlands Genomic Medicine Centre's connected data systems have the ability to scale

innovations to over 20 million patients;

- ▶ ability to speed up and de-risk translation. Strong partnerships between businesses, universities and the regional NHS underpin the West Midlands' ability to support the rapid adoption of new technologies;
- ▶ real-world and diverse environment testing coupled with the regulatory innovation. This ensures the ability to scale innovations nationally and internationally;
- ▶ required technical, leadership and entrepreneurial skills within the region. The West Midlands possesses the largest teaching hospital in the country and high quality relevant graduate training at other universities; and
- ▶ Integrating and testing 5G technology in healthcare with the University Hospital Birmingham playing a leading role.





Nationally recognised strengths in:

- ▶ Genomics medicine and diagnostics
- ▶ Clinical trials
- ▶ Medical technologies evaluation and healthcare data informatics and systems
- ▶ Digitisation of healthcare services

400 life science businesses in the WMCA area and around **11,000 employees**, generating approximately **£4bn turnover**

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

Industry strengths and global competitiveness for FDI in high tech medical devices R&D and manufacture

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

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

Opportunities

Improving the health of the population

The West Midlands' approach to supporting innovation will be anchored in partnership with the NHS and the patient population. Through this approach, the West Midlands aims to translate healthcare innovation and commercialisation directly into better health outcomes for citizens across the region. Addressing the critical health challenges of the population, the West Midlands will drive new innovations based on clinical need and tested in an enabled and inter-connected real-world environment. This will include developing new approaches to using technology to drive prevention and increase investment in preventative services, creating opportunities for SMEs and social enterprise, alongside improved health outcomes.

Developing the West Midlands' cluster

National and global firms see the commercial opportunity in the region. The West Midlands has a growing cluster of both large and small firms and an associated supply chain which has raised at least £35m of investment in the last 12 months. It will continue to invest in the business support and networks needed to drive cluster development across the region. Further significant private sector investment will underpin the region's offer as the UK centre for testing and proving health innovation. The West Midlands' aim is that firms will be able to access the full spectrum of support needed to develop and commercialise new health innovations.

Enabling innovation and realising value

The West Midlands will build on recent, competitively won investments of over £150m across the Birmingham Health Partners campus. By leveraging existing translational infrastructure and expertise across the regional health partnership, the West Midlands aims to establish itself as a flagship location for the development, validation and real-world testing to adoption of healthcare innovation. This includes the locally led proposal for the Birmingham Life Sciences Park development.

Developing the future workforce

This eco-system will nurture employment and enterprise opportunities for local communities across health and life sciences and encourage the flow of techniques and skills from technology and advanced manufacturing sectors. The West Midlands will deliver new programmes from entrepreneurship to technology leadership, in order to provide the workforce with the required skills to deliver the leadership required to enable commercialisation and adoption of new healthcare innovations. This will also train a cadre of new skilled workers who can best exploit the opportunities provided by technological innovation to reduce the burden and improve the outcomes of new healthcare interventions.

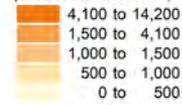
The following map shows the spatial distribution of the opportunity.

DATA DRIVEN HEALTHCARE INNOVATION

Innovation & R&D

- 1 - Coventry University Health Technology Design Institute (HTDI)
 - 2 - Coventry University Alison Gingell Building
 - 3 - Institute for Translational Medicine & Medical Devices Testing & Evaluation Centre (MD-Tec)
 - 4 - Aston Brain Centre
 - 5 - Birmingham Research Park including The Biokub Birmingham
 - 6 - Severn Digital Health Incubator & Innovation Engine
 - 7 - University of Wolverhampton Research Institute in Healthcare Sciences
 - 8 - Centre for Clinical Haematology
 - 9 - West Midlands Academic Health Science Network
 - 10 - Birmingham Life Sciences Park Development
 - 11 - Birmingham Health Partners
 - 12 - Royal Centre for Defence Medicine
 - 13 - Medicines Discovery Catapult
- ### Medical Schools
- 14 - Warwick Medical School
 - 15 - Birmingham Medical School
 - 16 - Aston Medical School
- ### Hospitals
- 17 - C&W NHS Trust
 - 18 - George Eliot Hospital
 - 19 - Warwick Hospital
 - 20 - Leamington Spa Hospital
 - 21 - Stratford Hospital
 - 22 - Ellen Badger Hospital
 - 23 - South Warwickshire NHS Foundation Trust
 - 24 - Hospital of St Cross
 - 25 - Queen Elizabeth Hospital
 - 26 - Alexandra Hospital
 - 27 - Birmingham Children's Hospital
 - 28 - Birmingham Women's Hospital
 - 29 - Cannon Chase Hospital
 - 30 - City Hospital, Birmingham
 - 31 - Good Hope Hospital
 - 32 - Heartlands Hospital
 - 33 - Kidderminster Hospital
 - 34 - Walsall Manor Hospital
 - 35 - Moseley Hall Hospital
 - 36 - New Cross Hospital
 - 37 - Queen's Hospital
 - 38 - Royal Orthopaedic Hospital
 - 39 - Russells Hall Hospital
 - 40 - Sandwell General Hospital
 - 41 - University Hospital Coventry & Warwickshire
 - 42 - West Health Hospital
 - 43 - Solihull Hospital

Sectors Connected to Health & Life Sciences (Total Number of Jobs, 2017)

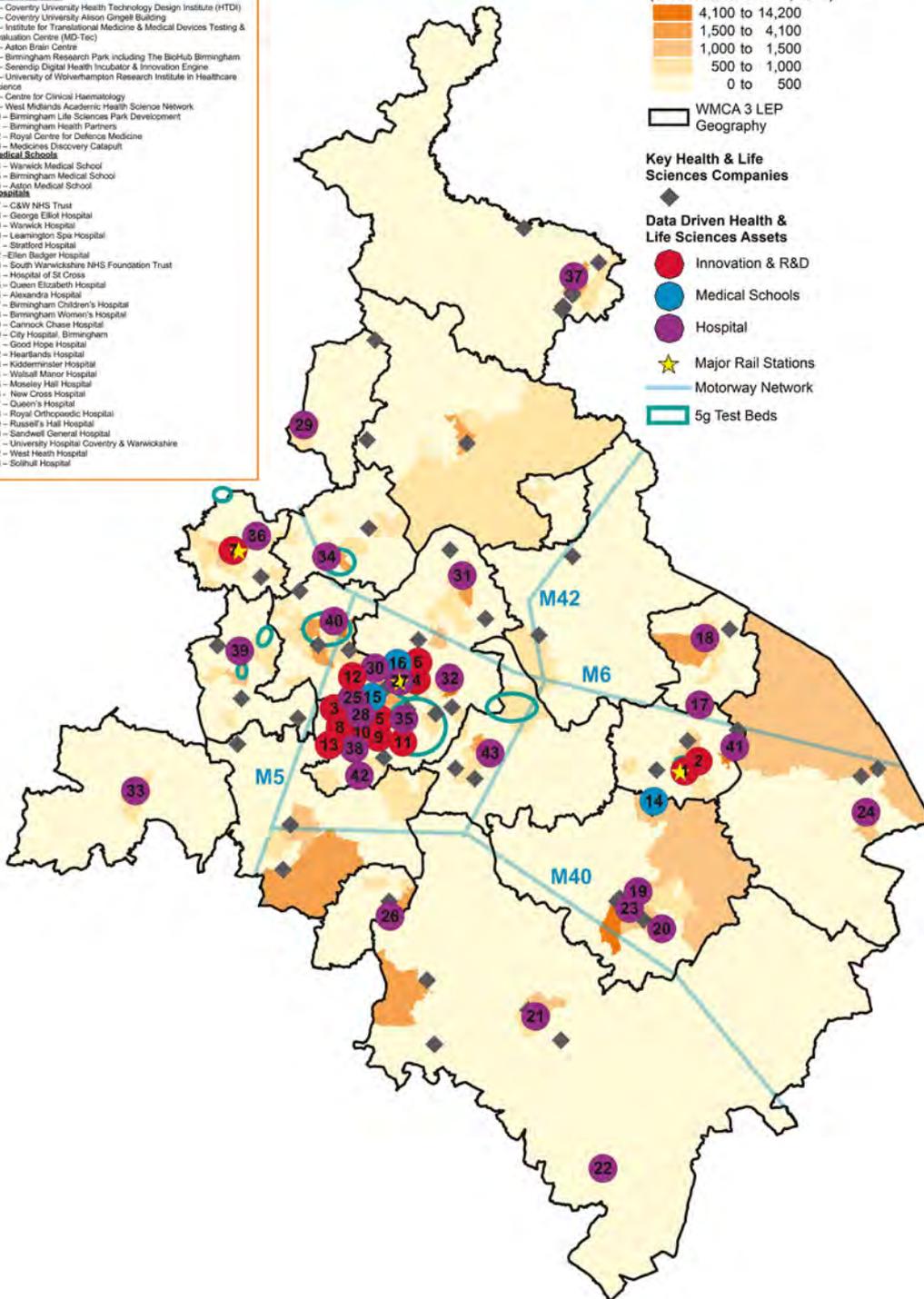


WMCA 3 LEP
Geography

Key Health & Life Sciences Companies

Data Driven Health & Life Sciences Assets

- Innovation & R&D (Red)
- Medical Schools (Blue)
- Hospital (Purple)
- ★ Major Rail Stations (Yellow Star)
- Motorway Network (Blue Line)
- ▭ 5g Test Beds (Green Outline)



Modern services

The West Midlands is driving innovation and demand through a 'full modern services' offer that benefits the wider local economy, including highly paid, highly skilled roles for all communities.

Technology and the move to services is driving innovation and demand across many sectors

The global trend towards services and the innovative use of business, finance and professional service skills is increasingly important for the long-term growth and success of firms in all sectors and to the vitality of local economies.

Existing business and professional services firms across the West Midlands region, nationally and globally will need to adapt to and adopt new technology, new processes, products and services. Firms in all sectors are rapidly changing their commercial models and skill sets to shift to a more service-based business model. Put simply, the relationships and value-creating opportunities between core business and professional services firms and other sectors will become increasingly sophisticated. The West Midlands aims to continue to position itself at the forefront of this transition.

Evidence locally suggests that highly trained accountants and other professionals moving into different tiers of manufacturing companies is common.

New working patterns are emerging whereby core professional services firms are encouraging and supporting professionals to take on dual roles in firms in other sectors. Talented people with the right experience, networks and ability to innovate in these areas are in strong demand across all parts of the economy and supply chains. New working patterns, lifestyle choices and flexible business models are increasingly driving cross-sector approaches. The West Midlands is ambitious in being proactive in building on the success that firms have had in increasing employment from our diverse communities.

Growing connectivity, output and workforce

The core 'full modern service' strengths of the West Midlands are clustered in Birmingham, Coventry and Warwickshire. Internationally esteemed business schools at Warwick, Aston and Birmingham have more business students than any other location outside London and the South East.

The West Midlands provides the largest 'full service' offer outside London, with a highly distributed global client base. It is home to all modern services apart from high-end financial management. Most nationally significant firms have a full-service team operating locally.

Companies have cited the availability and loyalty of skilled talent, the choice of locations, office space and attractiveness of the place to retain talent, as strong drivers of future growth. Birmingham has high and growing levels of graduate retention.

This growth is driven partly by the region's distinctive distribution of business and professional occupations, which tend to be highly-skilled. The West Midlands is also home to an increasing number of senior business services roles

across a wider range of sectors.

Many larger construction firms, for example, now have many hundreds of business service roles each in the West Midlands. There is a major opportunity to continue to develop and foster innovative partnerships and links between firms and education institutions, such as the forthcoming National Brownfield Institute at the University of Wolverhampton. The West Midlands aims to continue opening up job opportunities to communities that may not otherwise see them as accessible and ensuring the availability of the technical skills that continue to be in high demand. The West Midlands is ambitious in being proactive in building on the success that firms have had in increasing employment from our diverse communities.

Opportunities

Significantly higher than average expected GVA growth and new, highly skilled jobs

Total business, professional and financial services GVA is forecast to double to £50bn between 2015-2030, with growth forecast across all parts of the sector. Employment is currently 400,000 and is expected to grow, with job numbers also rising significantly outside the core sector. Graduates in relevant disciplines from local universities are in high demand nationally, commanding a salary premium. This provides the opportunity to ensure local people from

underrepresented communities access these highly skilled and well paid roles.

Driving business performance across all sectors

The West Midlands is seeing the increased application and use of professional business services skills across different parts of the economy. The West Midlands Regional Skills Strategy aims to ensure the long-term availability of a distinctive, skilled labour pool and strong talent pipeline of graduates and school leavers into business services role.

The Advanced Services Group at Aston Business School is a globally recognised centre of research excellence on servitization, providing cutting edge support to over 150 business from SMEs to global companies such as Goodyear, Ishida and Nederman with the transition to advanced services.

Application of new technologies and 5G

Changes for which the West Midlands is well placed to take advantage include AI, automation, cyber security and machine learning. With small technology firms, regionally embedded larger firms and expertise in the universities, the West Midlands is a testbed for business innovation to access and embed new applications and techniques, helping core business services firms and wider sectors deliver next generation services locally, nationally and globally. The West Midlands' 5G network will create new markets and lead to new services.

Improving transport infrastructure to attract talent

The West Midlands is already well connected. HS2 will build on this. Further expansion of Birmingham Airport, through delivery of its locally led Airport Master Plan, aims to increase the West Midlands' attractiveness to high value business and professional services. Further expansion of Birmingham Airport, through delivery of its locally led Airport

Master Plan, aims to increase the West Midlands' attractiveness to high value business and professional services. Rapid expansion of different types of high-quality housing, high grade employment spaces and improved connectivity within the region will do the same. The West Midlands will also aim to continue to secure significant additional private investment.

Centre for fast growth, highly productive business services

The demand for business services skills across all sectors will drive overall growth and wider productivity gains. The West Midlands will continue to maintain and expand its position as a centre for full modern services. Central to this will be continued investment across the whole regional economy, including in its low emission, integrated transport system; housing; partnerships between universities and businesses; and wider regional skills system.

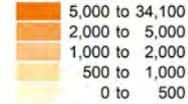
The West Midlands will design locally led peer-to-peer networks to support and improve the productivity of local firms and bring together professional business services to provide a visible and trusted offer to local firms. Both of these will build on findings and approaches set out in the forthcoming Business Productivity Review.

The following map shows the spatial distribution of the opportunity.

MODERN SERVICES

- Sector Bodies**
- 1 – ICAEW Regional Office
 - 2 – BPS Birmingham
- Education**
- 3 – Warwick Business School
 - 4 – Birmingham Business School
 - 5 – Aston Business School
 - 6 – Coventry Business School
 - 7 – Wolverhampton Business Academy, BMet
 - 8 – Professional Services Academy, BMet
 - 9 – University of Law
- Other**
- 10 – Coventry & Warwickshire First pro
 - 11 – Friargate Development, Coventry
 - 12 – DYS Enterprise Zone

Sectors Connected to Services
(Total Number of Jobs, 2017)

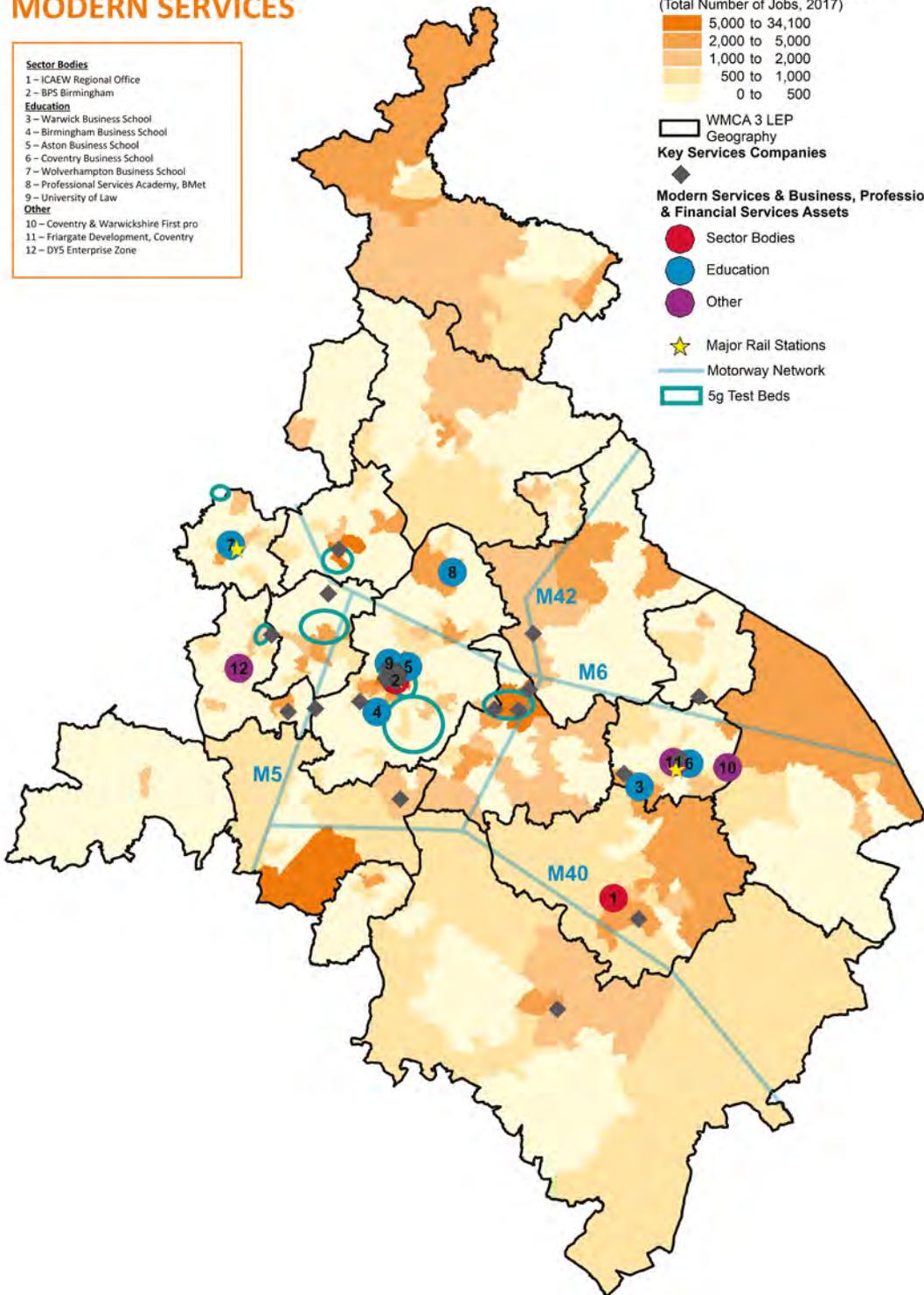


WMCA 3 LEP
Geography

Key Services Companies

Modern Services & Business, Professional & Financial Services Assets

- Sector Bodies (Red)
- Education (Blue)
- Other (Purple)
- ★ Major Rail Stations (Yellow)
- Motorway Network (Light Blue)
- ▭ 5g Test Beds (Green)



Creative content, techniques and technologies

The West Midlands is growing its core creative industries and creative design skills and techniques as part of the transformation of products, processes and services.

Creative skills and techniques are driving innovation in all industries

Factories of the future will be constructed by designers, data analysts and visualisation specialists, powered by 5G connectivity and involve the rapid design, build and deployment of virtual and physical components. These approaches, such as a 'distributed factory', will be developed and adopted in the West Midlands, as our manufacturing and transport supply chains evolve for the future.

Creative content and products continue to evolve and develop new techniques and new markets. The 2021 Coventry City of Culture and 2022 Commonwealth Games will provide significant opportunities to develop and showcase new, creative and digitally-led approaches to resident and visitor services and experiences, with the Commonwealth Games venues acting as real-life testbeds and demonstrators for new products and services. 5G connectivity will enable new platforms for content, information and services, creating new market opportunities, with a new "plug and play" 5G accelerator providing rapid product and process

development access for digital and creative firms and innovators.

The West Midlands as a centre of creative design, making and business

The West Midlands has a long history of creative business success, from the earliest development of industrial design and processing techniques, to 90,000 creative jobs today. A major feature of the economy is the extent to which the creative communities are engaged in both the core creative industries and in using creative and design skills and techniques in the transformation of products, processes and services in a wide range of future global markets.

The West Midlands' core creative industries have strengths in next generation creative and commercial content creation and as a production centre for higher budget content. Demand is driving investment in new high value TV and film production capacity and a proposed Media Campus at the National Exhibition Centre.

Population growth and new devices are driving increased demand from consumers for creative experiences, such as theatre, performance and live music, which are stimulating the market for the region's cultural offer.

In Greater Birmingham and Solihull alone, nearly 60 per cent of design jobs are outside core creative industries with creative skills driving innovation in a wide range of industries. The area in and around Leamington is dubbed 'Silicon Spa' for the nationally significant concentration of gaming companies with increasing crossovers with other sectors. The following examples show a very distinctive hallmark of the West Midlands economy:

- ▶ design-led thinking originating in the gaming industry is combined with virtual reality (VR) and augmented reality (AR) to develop, prototype and test new vehicles across automotive, aerospace, rail and last mile logistics as well as the wider digital manufacturing sector;
- ▶ creative techniques for visualising and manipulating large and complex data sets are driving new approaches to healthcare, personal finance and insurance services, mobility, tourism and culture, and retail environments;
- ▶ VR and superfast connectivity are being used to train the next generation of paramedics, engineers and surgeons in environments that are as close to real life as possible;
- ▶ modular construction of high quality, low energy homes begins with design-led solutions to components and build. Modular construction is estimated to be worth £2-3bn per year in the UK, with modular build growing by 25 per cent per year;
- ▶ design-led production of new components and diversification into new markets, often with cross-sector impacts; and
- ▶ increasing digitisation of services and innovation within culture and media to develop new ways of engaging 'audiences of the future'.

Opportunities

The West Midlands has the skills, firms, innovative supply chains and assets needed to take advantage of global growth in this creative future for content, techniques and technologies across all the region's sectors and sub sectors. With a core sector generating over £4bn of GVA through 10,000 firms and 10 per cent of the UK games industry based in Silicon Spa. To support this the government will;

- ▶ maximise the opportunities arising from the Department of International Trade's High Potential Opportunity

programme within the gaming sector in Leamington Spa.

However, the creative economy is about far more than just the strengths in creative industries. The evidence shows that Birmingham and Solihull alone have the potential to add nearly 4,000 new creative enterprises and 30,000 new related jobs with the opportunity to scale this across the West Midlands.

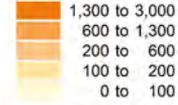
The following map shows the spatial distribution of the opportunity.



CREATIVE CONTENT, TECHNOLOGIES & TECHNIQUES

- Innovation & R&D**
- 1 – Coventry University Technology Park
 - 2 – University of Warwick Science Park
 - 3 – Warwick Innovation Centre
 - 4 – Wolverhampton Science Park
 - 5 – Innovation Birmingham Campus
- Education**
- 6 – Serious Games Institute
 - 7 – Centre of Disruptive Media
 - 8 – Institute of Coding
 - 9 – Birmingham Ormston Academy
 - 10 – Birmingham Metropolitan College Digital & Creative Career College
 - 11 – Birmingham City University Faculty of Arts, Design & Media
 - 12 – Centre for Art, Design, Research & Experimentation (CADRE)
- Clusters**
- 13 – Digbeth Creative Quarter
 - 14 – Performance Cluster centred on Royal Shakespeare Company
 - 15 – Black Country Living Museum part of Dudley Castle Quarter
 - 16 – Wolverhampton Arts & Culture
 - 17 – Springfield Campus
 - 18 – Leamington Spa Creative Cluster 'Silicon Spa'
 - 19 – Jewellery Quarter
 - 20 – Coventry City of Culture
- Incubation & Business Support**
- 21 – Alithorpe Enterprise Hub
 - 22 – Arch Creative co-working space
 - 23 – 24th Incubator
 - 24 – Court Steel Creative Arches
 - 25 – The Warehouse 44
 - 26 – Electric Wharf
 - 27 – Fargo Village (Fargo)
 - 28 – The Quadrant
 - 29 – Venture House
 - 30 – The Longbarn Village (Alicester)
 - 31 – STEAMhouse

Sectors Connected to Creative Content
(Total Number of Jobs, 2017)

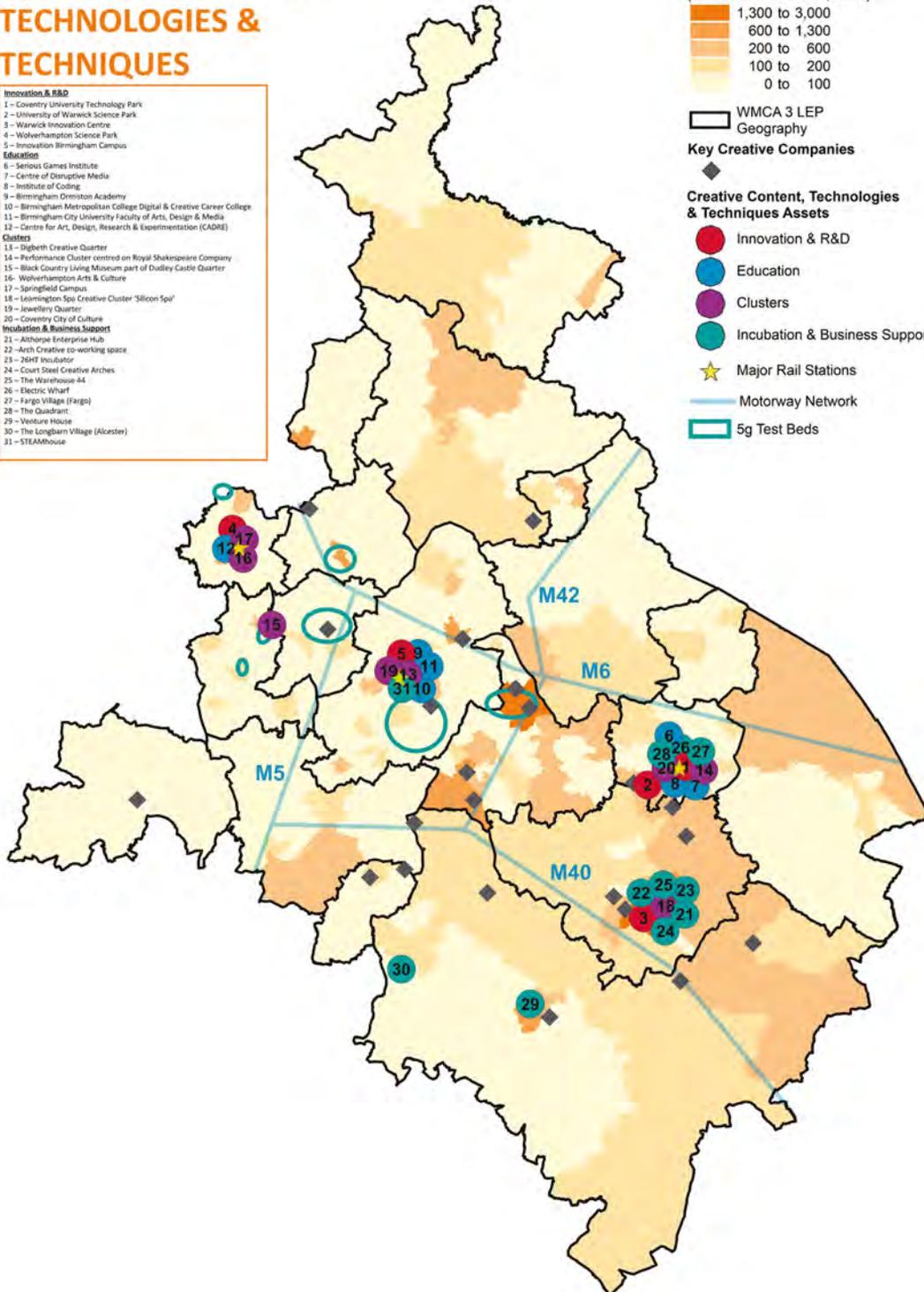


WMCA 3 LEP
Geography

Key Creative Companies

Creative Content, Technologies & Techniques Assets

- Innovation & R&D
- Education
- Clusters
- Incubation & Business Support
- ★ Major Rail Stations
- Motorway Network
- 5g Test Beds



An inclusive, clean and resilient economy

The West Midlands is committed to driving a more inclusive economy: connecting more of its people with economic opportunities; improving employment and progression; enhancing the environment; increasing wellbeing; and maximising the potential and success of our diverse population.

The West Midlands' current suite of devolved powers, combined with an economy of renaissance, offers the region a real opportunity to make inclusive growth happen. The West Midlands has agreed a set of indicators and targets that include health and wider social outcomes and is committed to putting these at the heart of local decision making processes. Local powers and flexibility mean that interventions can be designed, tested and implemented based on the needs of local people, businesses and places – including recognising the specific and different challenges facing cities, towns and rural areas and the potential for social enterprise to help deliver smarter, targeted and inclusive approaches.

By designing actions and investments using a wide set of indicators, the West Midlands will ensure that the commitments at the heart of this strategy will enable businesses, a broad range of public partners, and the civil society sector to make the West Midlands more inclusive.

The West Midlands Combined Authority has agreed to develop a local 'Single Commissioning Framework' to guide decision-making on specific, existing housing and land investment funds. The aim of this is to ensure these existing, local investments make the maximum contribution to the broad set of outcomes as agreed by the Combined Authority.

The West Midlands is committed to setting out more detailed actions in a West Midlands Inclusive Economy Plan and will locally continue investing in the capacity needed to ensure that all strands of this strategy are delivering the wider social impacts that reflect local partners' ambitions.

Local partners are determined to ensure that all residents and communities can experience the benefits of rising prosperity. This commitment is supported by independent commissions on leadership and productivity, which concluded that the region will be most successful if it benefits from the creativity, talent and ideas in all its communities.

The opportunity is to build from the action in this Local Industrial Strategy, harnessing the potential of a young and growing population to act boldly where the region has the levers to do so. Partners will seek to pilot new initiatives designed to deliver more inclusive growth. These will build on existing projects such as 'Thrive West Midlands', which is working with several hundred businesses and thousands of employees to improve awareness of workplace mental health.

Raising the living standards of all West Midlands' residents and addressing the low productivity, low pay cycle that some residents experience requires an integrated response across multiple policy areas. The West Midlands has a unique opportunity to do things differently. Partners across the region will implement a West Midlands approach in piloting, experimenting and evaluating what works in the region.

For example, the West Midlands is working with the NHS, government and national partners to continue strengthening early intervention and preventative services. These will be focused on targeted interventions to boost innovation in prevention against some of the most pressing public health issues. This will leverage the region's 5G status and the convening role of the West Midlands Combined Authority to bring digital innovation into the system in response to some of our critical demand pressures. Better services will deliver better health outcomes and a more innovative care system will create economic benefits.

The West Midlands has identified priority issues on which to develop and test new approaches through a new **Inclusive Growth Unit** led and funded by the West Midlands Combined Authority. It aims to blend analysis, policy advice and practical action to achieve results.

It has established the Inclusive Growth Framework and Inclusive Growth Toolkit, both of which continue to evolve and be refined, and will be used in developing actions and monitoring the delivery of wider social, environmental and economic outcomes, including this Local Industrial Strategy.

The West Midlands has identified priority issues on which to develop and test new approaches:

- ▶ **low pay sectors:** exploring labour supply and demand, and locally adapted and targeted training and skills, meeting local needs with local innovation and exploring new local approaches to support those in low pay;
- ▶ **in-work progression:** increasing the support available to people to access in-work progression opportunities, including through encouraging more flexible approaches to working patterns and childcare. This will be particularly focused on employers and residents working in historically lower paying sectors, where technological change will open up new, higher skilled roles;
- ▶ **encouraging and supporting women** into sectors which women are currently underrepresented;



- ▶ **commissioning and procurement:** maximising local value, local supply chains, local skills development and local ownership in infrastructure projects. This includes High Speed 2, City of Culture and Commonwealth Games related procurement;
- ▶ **diversity:** on which the Combined Authority and partners can lead by example to promote diversity and increase the employment rate of ethnic minorities by implementing the Leadership Commission's recommendations;
- ▶ **bespoke solutions for individuals:** focusing on mental and physical health, and barriers to work alongside the wider determinants of wellbeing. Coventry and Warwickshire will run a Year of Wellbeing in 2019 driven by the European City of Sport and develop wellbeing and productivity;
- ▶ **youth unemployment:** developing a fresh new approach by targeting particular groups with tailored interventions, including working with young people through the Transition to Work scheme to create a sustainable pipeline of young talent in the region;
- ▶ **social enterprises:** diversifying the types of economic activity available to create opportunities and improve wellbeing and productivity for people and communities. This will include committing to growing the size of the social economy within the West Midlands; exploring a regional and/or mayoral financing mechanism to support this (such as a regional social enterprise bank or social investment fund) and the drawing together

of support mechanisms for social enterprise start-up and scaling; and

- ▶ **vulnerability:** prioritising mental health and complex needs. Delivering a number of interventions via the West Midlands Combined Authority and other partners, this work will focus on relationships between vulnerability, wellbeing and work. These will include interventions such as Individual Placement Support trials (developed with DWP's Work and Health Unit), Thrive at Work, and partnerships with Public Health England, the West Midlands Fire Service, West Midlands Police and the Office of the Police and Crime Commissioner focused on prevention.

Natural capital

The strategic opportunities and actions set out in this strategy will ensure the West Midlands makes a significant contribution to the UK's clean growth goals, while continuing to improve the local environment. The West Midlands is home to highly productive low carbon and environmental technology firms, at the forefront of responding to changes in mobility, services and manufacturing processes. This Local Industrial Strategy reflects the West Midlands' view that the effective stewardship of natural capital is fundamental to long-term social and economic goals.

The West Midlands is committed to celebrating and improving the high-quality natural environment, public spaces and biodiversity that make the region a great place to succeed

and is integrating the environment into all its decision-making.

The West Midlands will:

- ▶ seek to use innovative solutions to address urban challenges like air quality, flood water management, overheating in urban areas and climate change adaptation. We will 'green' existing transport routes and improve access for walking and cycling;
- ▶ remain committed to developing a long-term plan for Natural Capital and to the principle of an annual net gain for natural capital, developing the tools that enable us to work towards reversing the current trend in biodiversity loss;
- ▶ improve air quality through a West Midlands Combined Authority led Low Emissions Strategy and Action Plan. This aims to improve health and wellbeing and provide new clean growth opportunities including working with the private sector, the region will accelerate charging infrastructure for zero emission vehicles across the region, driven by demand; and
- ▶ continue to reduce carbon emissions while driving productivity to meet the current targets, through the actions in this strategy. The West Midlands is working with other global cities and the UK Climate Change Committee to review goals over the course of 2019.

Ideas

The West Midlands aims to drive up levels of business innovation and the commercialisation of research and development, targeting varying needs in different parts of the region, working in partnership with government, the Midlands Engine and internationally.

The West Midlands is underpinned by a sophisticated innovation ecosystem. It is a UK manufacturing heartland, grounded in history as the place where the first industrial revolution was commercialised. The West Midlands' mix of universities, anchor companies, research and development facilities, knowledge networks and skilled workforce provides the foundations of 21st century industry.

At the same time, the West Midlands' productivity gap is in large part an innovation gap; around 40 per cent of the output gap between the West Midlands and the UK average is due to weaker performance in competition, investment, enterprise and innovation.

Business demand and capacity

Overcoming barriers to business innovation, driving up business demand and improving capacity to absorb new approaches will be crucial to closing this gap. While the West Midlands hosts excellent university research and innovative businesses, the Science and Innovation Audit shows there are still too many businesses that are innovation inactive.

There are many instances of small-scale commercial research and process innovation by firms in supply chains which find it difficult to engage with the wider ecosystem.

The West Midlands needs to increase business capacity to adopt new techniques and technologies – such as Industrial Digital Technologies championed by the Made Smarter Commission – and improve local diffusion between frontier firms and universities into wider supply chains.

Research

The West Midlands is home to a range of universities, consistently ranked in the top 20 nationally for the quality of their blue skies and applied research. Knowledge from these institutions spills over into industry through commercially-engaged academics, science parks, incubators and the largest concentration of accelerators in the country. The West Midlands also hosts two of the UK's strategically important High Value Manufacturing and Energy Systems Catapults.

These research strengths are central to the West Midlands' overall productivity effort; helping create new technologies, solutions and business models to address the strategic opportunities set out in this Local Industrial Strategy. For example, WMG and the Advanced Propulsion Centre will be central to the West Midlands' ambition to be a global hub for battery research and development, while the Birmingham Institute of Translational Medicine (ITM) will be at the core of the approach to data-driven healthcare. This impact will only be maximised if the extent and pace at which research is translated into business and markets is improved.

The West Midlands innovation system

The West Midlands innovation ecosystem is defined by three core strengths. First, its **diverse, cross-cutting research and innovation base**. The West Midlands brings together a range of sectors, services and technologies together in a single place. The capabilities in research and development, design and production span multiple industries, including advanced manufacturing and engineering, next-generation transport systems, data-driven healthcare technologies, energy generation and storage, and data and systems integration.



West Midlands firms are at the forefront of innovation across as well as within sectors. The West Midlands has also put in place innovative programmes to enhance the transfer of skills and techniques between the creative industries and other sectors. The four opportunities identified in this Local Industrial Strategy have a strong relationship with the West Midlands' research and innovation strengths and provide a chance to drive up cross-sectoral innovation.

Second, the West Midlands is an **engine of private sector research and development**. Businesses across the West Midlands invested £2.3bn in R&D in 2016, representing 10 per cent of all UK Business Enterprise expenditure on R&D (BERD) and making it the 4th highest region in the UK. Overall R&D investment is on the rise. The West Midlands performs above average in Innovate UK funding awards, though there are spatial variations, primarily driven by the nature of the region's business base.

The West Midlands is a leader in R&D intensive industries such as automotive – with Europe's largest automotive R&D facility in the National Automotive Innovation Campus at the University of Warwick – which as a sector has played an increasingly important role in driving UK business R&D. The West Midlands will play a strong role in delivering the Industrial Strategy's target of increasing UK R&D investment to 2.4 per cent of GDP by 2027.

Working in partnership with government, the West Midlands will help to build the optimum environment for foreign direct investment and electric vehicle manufacturing. This will include completing the development of the UK Battery Industrialisation Centre and maximising the impact of £80m of funding from the Faraday Challenge.

Finally, the West Midlands is home to **dense innovation networks and clusters**. Innovation takes place across the region, but it is also highly concentrated in clusters of original engineering manufacturers, universities and firms in strategic sectors. These can be found in: Birmingham, Coventry and Wolverhampton city centres; Edgbaston's life sciences cluster; the area surrounding Birmingham Airport; the automotive and future mobility cluster around Coventry and Warwickshire; and Leamington Spa's 'Silicon Spa' cluster of computer game companies.

This is underpinned by significant physical infrastructure. Universities, developers and the public sector have invested across the West Midlands. The region's accelerators, incubators and translational research centres bring together established companies, start-ups and research expertise to turn ideas into new products and services.

The West Midlands also has strong partnerships, such as Innovation Alliance West Midlands and the West Midlands Academic Health Science Network, that bring universities and other public sector organisations together to drive innovation. Together these assets and networks will continue to be the pillars of the West Midlands' innovation ecosystem.

West Midlands businesses and universities are linked into innovation chains across the wider Midlands Engine. The West Midlands will continue to support collaboration at the Midlands Engine level.

The region also has significant links with businesses, universities and investors abroad. For example, West Midlands universities have established collaborations with peers in China, the USA, India, Brazil and other international markets. The West Midlands will deepen these links through leveraging the Midlands Engine brand to attract investment and identifying innovations to scale internationally – for instance in translational medicine and data-driven healthcare.

STEAMhouse case study

STEAMhouse is a co-working space for businesses, artists and academics designed to enable small companies and artists to work together on new projects and business ideas. There are facilities such as 3D printers, laser cutting machinery, virtual reality and printing studios.

STEAMhouse will drive innovation and research to create business solutions that fuel long-term economic growth through a combination of industry-led

workshops, access to product development facilities, partnership working and SME grant-making. The first phase of STEAMhouse launched in spring 2018 and will engage with at least 200 SMEs in the Greater Birmingham Solihull Local Enterprise Partnership (GBSLEP) area over a three-year period. The second phase of STEAMhouse is already in development with construction due to commence in spring 2019.

The West Midlands' approach: strengthening business innovation

The West Midlands' priority is to drive up levels of demand-led business innovation across all areas of the region, by deepening innovation networks and supporting improvements to business capacity. The West Midlands will ensure the availability of both space and finance for innovation, encourage cross-sectoral innovation, and deepen the business-led and peer-to-peer networks that evidence shows are most effective in helping firms innovate. The West Midlands will encourage businesses of all sizes and sectors to innovate and support collaborative working to make it easier for businesses to access R&D assets and new support programmes.

The West Midlands is developing a locally led Innovation Framework and new programmes to drive a region-wide approach to innovation. This will prioritise the five core pillars of an effective innovation ecosystem:

- ▶ **networks and linkages:** supporting business networks and programmes to join up R&D assets and entrepreneurs, and help identify the opportunities for collaboration across sectors, technologies and supply chains;
- ▶ **investment programmes:** creating new support programmes integrated with local supply chains, including crucial Tier 2 and Tier 3 firms through demonstrator projects, supporting broad and accessible investment and access to a good supply of appropriate finance products on attractive terms;

- ▶ **talent:** equipping high growth potential businesses with the skills needed to innovate, through programmes in universities, catapults and technology innovation networks;
- ▶ **intelligence:** creating a foresight programme to generate new ideas and promote awareness of latest market demand from large firms and the public sector for innovative SMEs as well as technology drivers of change; and
- ▶ **culture:** creating opportunities to showcase the impact and importance of innovation across the West Midlands' public and private sectors.

This approach will be taken forward by a set of targeted, high-impact interventions, which will complement national-level interventions by UKRI and others, including:

- ▶ using planned procurement of capital investment in infrastructure and housing to drive business innovation;
- ▶ ensuring wrap-around business support with innovation and R&D at its centre;
- ▶ integrating the approaches described above into a new locally led Productivity Factory, acting as an access point for peer-to-peer mentoring and repayable grants for project design and implementation; and

- ▶ sharing and developing intellectual property (IP) for collaborative innovation and considering where IP finance can improve access to finance for innovative companies.

The West Midlands will consider, where appropriate, how the opportunities identified in the Local Industrial Strategy could provide an organising framework for bids by local partners into the Strength in Places Fund and other national competitive funds delivered by UK Research and Innovation.

Innovation delivering inclusive growth

A more innovative West Midlands will be a more productive and competitive business environment that in turn

creates and attracts better paid and more highly-skilled jobs. But the West Midlands will not limit its efforts to boost business innovation to the most productive businesses, technologies or sub-regions.

The West Midlands Local Industrial Strategy commits to encouraging a broader and more inclusive approach to innovation policy that helps SMEs move into new markets and supply chains, focuses on addressing societal and environmental challenges, and harnesses the ideas and energy of its young population.

The map on the following page shows the main West Midlands innovation assets.

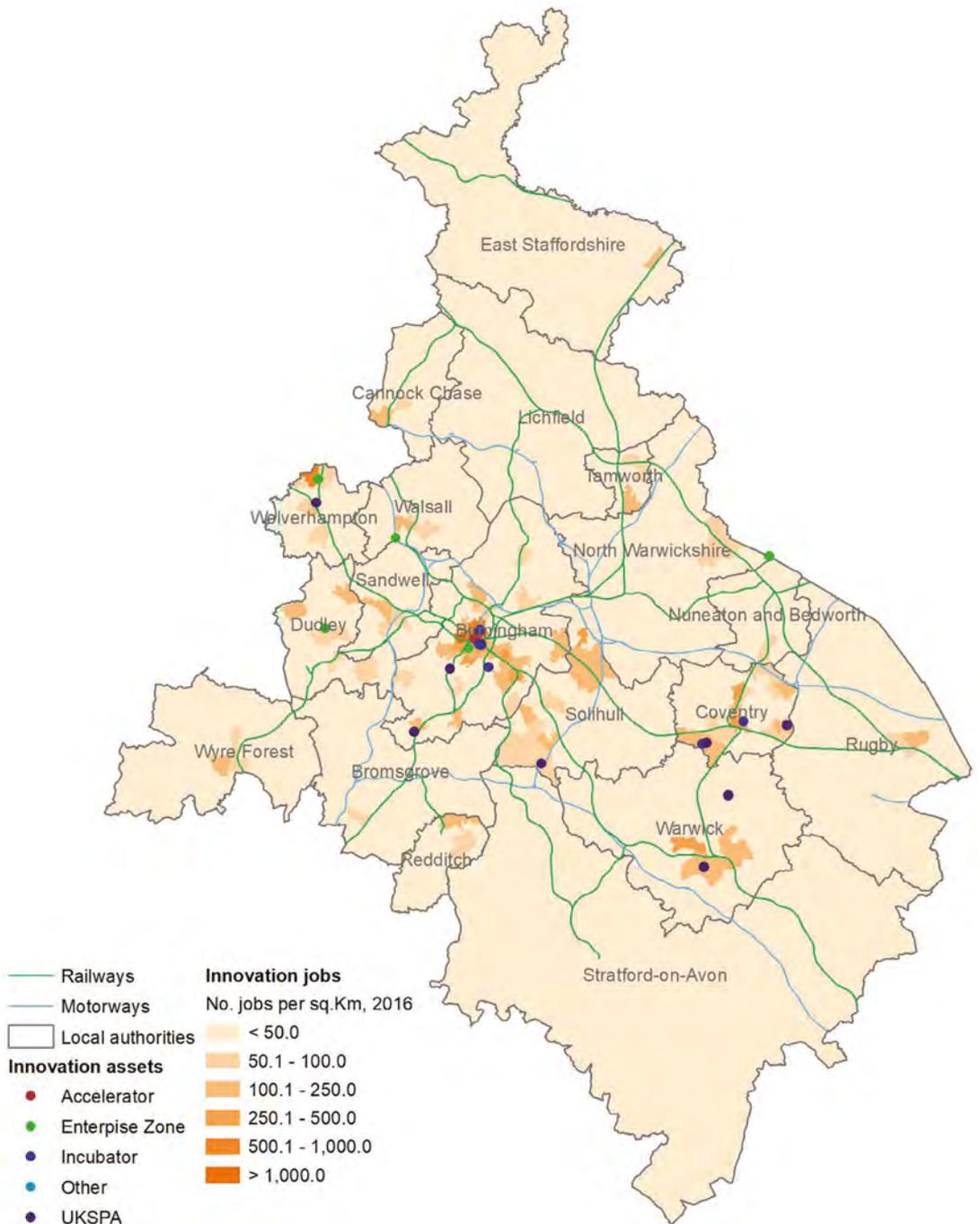
WMG case study

WMG is one of the world's leading research and innovation groups. Since its inception in 1980, WMG's mission has been to improve the competitiveness of organisations through the application of value-adding innovation, new technologies and skills deployment, bringing academic rigour to industrial and organisational practice.

WMG is a pioneer of innovative technology, leading major multi-partner projects to create and develop new products and processes that can be adopted by organisations.

WMG's new National Automotive Innovation Centre is the largest of its kind in Europe and the product of partnership with Jaguar Land Rover and Tata Motors. The centre will focus on automotive research, combining expertise from industry, university academics and supply chain companies. It is intended to support advances in technology to reduce dependency on fossil fuels and vehicle emissions while also developing the talent required for the demands of emerging technology. This is in addition to the existing facilities.

Innovation assets and jobs (2016)



People

West Midlands is undergoing a renaissance.

The West Midlands has a young and diverse population. Nearly one in three people in the region are under 25. This makes the West Midlands the youngest region in the country outside of London. Of the 52,000 graduates from the eight universities across the West Midlands, 71 per cent stay on to work in the region. Since 2013, the number of people with higher level skills has increased by 137,800 – faster than the national average. The number of people with no qualifications is also falling faster than the UK average. The West Midlands is committed to ensuring that it is a place that benefits all its residents.

Employment is at record levels and continues to grow. The employment rate is growing faster than the UK as a whole and the West Midlands has the lowest number of people out of work for ten years.

Benefits of growth

But the West Midlands also has concentrations of deprivation, many of which are close to growth areas. In these communities, social mobility, wage growth and access to opportunities have persistently fallen behind neighbouring areas. It also has a growing gender employment gap that is greater than other combined authority areas.

This means too many people have missed out on the benefits of growth,

£3bn

lost output through **insufficient skills levels**

£5.2bn

Fewer residents in **employment**

£6.9bn

Weaker performance in **competition, investment, enterprise and innovation**

and the economy has missed out from the potential contribution of the wider population. In output terms, this equates to £3bn less through lower skills levels and £5.2bn through fewer residents in employment. Together they account for 54 per cent of the output gap.

Despite the stronger than average employment growth, the West Midlands still has one of the lowest employment rates of any Mayoral Combined Authority at 71 per cent. It has an higher than average unemployment rate of 5.7 per cent, with greater concentrations in parts of Sandwell, Birmingham and Wolverhampton.

Black and minority ethnic employment rates are 15 per cent lower than for white groups. For women from an ethnic minority background the



employment rate is much lower than for white women. There are similar disparities for those with disabilities and low or no qualifications.

Around 50 per cent of five-year-old children in the West Midlands do not achieve a good level of development compared to 34 per cent nationally. Nearly a third of children in the region grow up in poverty and by Year Six almost a quarter are obese. Healthy life expectancy is lower than the UK average.

The West Midlands also performs below the national average on educational attainment. Spatial analysis highlights a general pattern of poorer outcomes in the west of the Combined Authority area and a more positive picture in the east.

On basic skills, some 11 per cent of West Midlands residents had no qualifications in 2018 compared to eight per cent nationally, and parts of the Black Country have the highest proportion of the working age population with no

qualifications or NVQ1 in the country. There is a 'missing middle' of technical skills at levels two and three.

Less than a third of West Midlands residents are qualified to NVQ Level 4+. Matching the national average will require a further 181,538 people to be qualified to this level.

Significant elements of these skills and employment rates relate to connectivity, with actions described in the relevant section below. But the challenges go much wider, requiring targeted labour market interventions and a focus on the wider determinants of inequality and exclusion.

The devolution of the Adult Education Budget represents an opportunity for the West Midlands to provide more targeted support for local people and to ensure adult education provision best meets local need.

The locally owned Regional Skills Plan sets out how this will be done. Its delivery is underpinned by the

historic Skills Deal with the government, which could unlock up to £69m to boost digital and technical skills, job opportunities and productivity across the West Midlands. This work will be informed by the newly

established Skills Advisory Panel. The two recently announced Institutes of Technology will also play a pivotal role in creating a world class technical education offer in the region.

Manufacturing Technology College's Advanced Manufacturing Apprenticeship Centre case study

A £36m Advanced Manufacturing Training Centre (AMTC) has been developed at the Manufacturing Technology Centre in Ansty Park, Warwickshire to provide a flagship facility for advanced apprenticeship programmes. Named as one of the UK's top 100 apprentice employers, courses at AMTC are setting the standard as the future of advanced manufacturing apprenticeships.

Apprentices learn the latest technology in areas such as intelligent automation, additive layer manufacture, robotics, metrology, mechatronics, computer-aided design and computer-aided machining. Apprentices will be able to test and develop their skills in sponsored placements, including through international assignments with Manufacturing Technology Centre members and supporters.

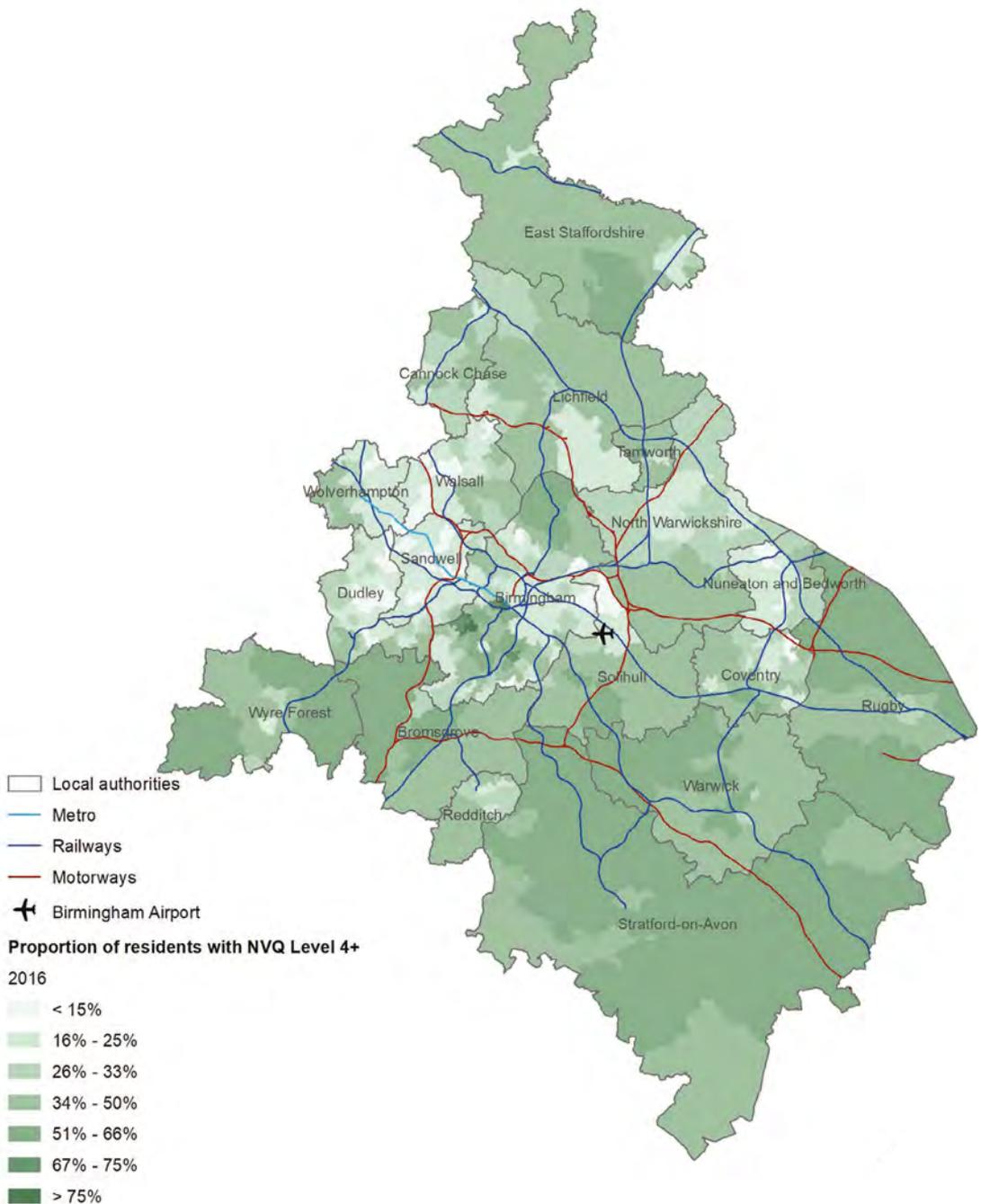
Connecting Communities case study

The Connecting Communities Programme is an innovation pilot funded through the Department for Work and Pensions as part of West Midlands Combined Authority's first devolution deal. A connection with the local community is the only criterion for the employment support provided by the Programme.

Here is an early example of how the project is making a real difference, from the perspective of one of the contracted providers:

'K heard about the project running from the local library and approached the project accompanied by his father. He was very reserved and reluctant to communicate without support from his father. After building both rapport and trust, it was identified that K has autism and finds it difficult to talk to new people. Through developing an action plan, we were able to support K towards making the next step into employment.'

Proportion of residents with NVQ Level 4+ (2016)



A strategy for an inclusive economy

Recognising the challenges set out above, the West Midlands is committed to hardwiring an inclusive approach throughout the Local Industrial Strategy.

Partners across the region are committed to acting to improve accessibility through reforming public services, transport and digital infrastructure and flexible approaches to working, and through raising awareness of the jobs and opportunities that are available, particularly for communities that have historically been disconnected from growth.

Working with providers, the West Midlands will use existing devolved powers and funding to deliver a high-quality and responsive regional skills and education system, to provide people with the skills they and businesses need for the future.

Major stakeholders from across the public and private sector have come together to form the West Midlands Skills Advisory Board to oversee the development and delivery of our skills plans. This Board will have a key role in bringing government and West Midlands partners together to deliver the people-focused aims and actions of the Local Industrial Strategy.

The Board will act as the Skills Advisory Panel (SAP) for the region and use SAP analysis to further shape and refine priorities and actions. This will ensure integration with the

actions undertaken across the other foundations of productivity detailed in this Local Industrial Strategy.

As well as delivering on the West Midlands' inclusive growth ambitions, the Skills Advisory Board will oversee labour market and skills actions which support the opportunities in this Local Industrial Strategy.

The West Midlands' Regional Skills Plan sets out five strategic interventions. Actions most directly targeting inclusive growth and productivity are summarised:

Prepare our young people for future life and work

The West Midlands' new approach to tackling youth unemployment identifies the need for individualised support across the existing silos in careers, mental and physical health, travel, housing, childcare, and others. This involves measures to prevent and tackle youth unemployment and ensure that young talent is nurtured, including by:

- ▶ creating a West Midlands Career Hub to enhance the impact of careers education and advice;
- ▶ extending the Mayor's Mentors programme to encourage more young people to access regional opportunities;
- ▶ working with the Department for Work and Pensions to support the testing of progression coaches in Birmingham and Solihull. The coaches will support

and mentor unemployed and disadvantaged young people as they work towards gaining and progressing in an apprenticeship or other job; and

- ▶ delivering the **Apprenticeship Promise**, a commitment to working with local employers to make sure an apprenticeship or training place is available to every young person in the region that wants one.

Create regional networks of specialist, technical education and training to help drive skills and productivity

The West Midlands will address shortages of specific skillsets which support the region's strategic opportunities. It will boost the uptake of vocational training through apprenticeships, prepare to deliver T-level routes and better match skills provision to employer needs.

The West Midlands will:

- ▶ through the devolved Adult Education Budget, increase the volume of qualifications delivered at all levels and develop flexible models of learning to support working adults to upskill and progress in their careers, including focussing £10m of the devolved **Adult Education Budget** on training for low paid, low skilled employees; and using existing local budgets to make English as a second language at levels 1, 2 and 3 in priority places free for adults who earn the living wage or less.
- ▶ create employer-led taskforces and sector action plans for sectors delivering key local priorities;

- ▶ ensure the successful roll-out of T-levels across the region by bringing together networks of schools, colleges, training providers and employers to identify the right pathways and facilities to invest in, and providing high-quality industry placements;
- ▶ launch the new **Digital Skills Partnership** to link the region's existing and emerging digital offer with national and sector-based initiatives;
- ▶ boost in-work progression for workers in retail, logistics, hospitality and other low-paying sectors, including through the promotion of flexible working and carer friendly practices. This will help support underrepresented groups including women, for example through the evaluation of the gender pay and employment gap, and support retraining for those who are at risk of losing their job to automation or due to their age or a health condition; and
- ▶ through the devolved **Adult Education Budget**, increase the volume of qualifications delivered at all levels and develop flexible models of learning to support working adults to upskill and progress in their careers.

To reinforce these local commitments, government will:

- ▶ support the development of two Institutes of Technology (IoT) to deliver higher technical education in the West Midlands. Government will work with the Dudley IoT to redevelop land to provide teaching facilities for

higher level skills programmes. The Greater Birmingham and Solihull IoT will focus on advanced manufacturing and Industry 4.0 through greater collaboration of further and higher education and creating pathways from level three to level six apprenticeships. Both IoTs form a key part of the joint ambition to create a world class technical education system in the West Midlands.

Accelerate the take up of good-quality apprenticeships across the region – double the number by 2030

The West Midlands offers a range of apprenticeship programmes, which will:

- ▶ maximise Apprenticeship Levy investment for the West Midlands through a regional campaign targeting employers, young people, employees and key stakeholders to consider apprenticeships; and aims to unlock £50m in Apprenticeship Levy funding to support more apprenticeships for SMEs, targeting science, technology, engineering and mathematics (STEM) skills in priority sectors and supply chains;
- ▶ provide a brokerage service to employers to promote apprenticeships as a key tool for workforce development. These will support them to identify the best apprenticeship programme and training provider to meet their business needs; and
- ▶ establish a regional pre-apprenticeship and traineeship offer, including

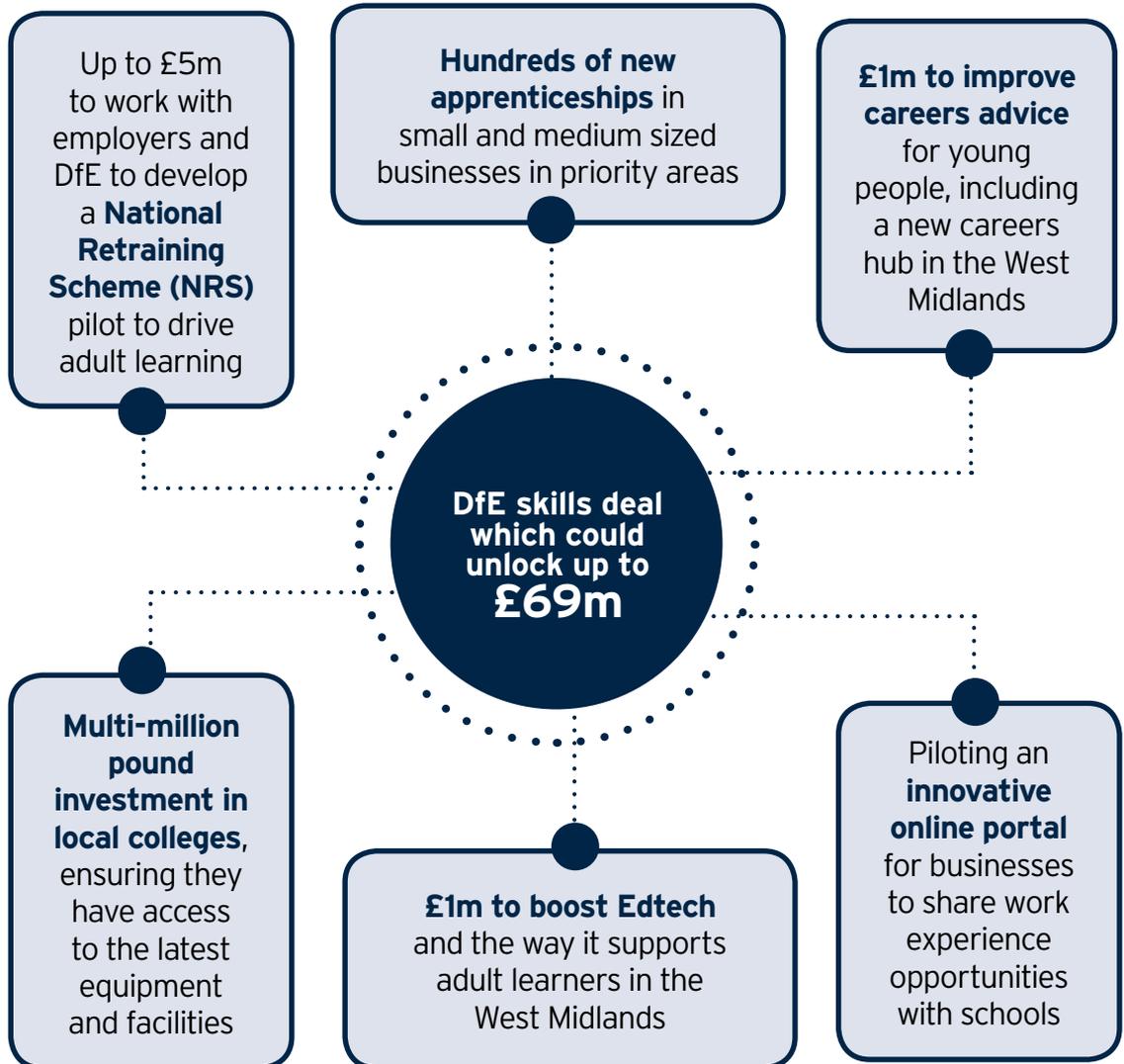
through access to apprenticeships pilots in growth sectors and promote apprenticeships in underrepresented sectors to young girls and women.

Deliver inclusive growth by giving more people the skills to get and sustain good jobs and careers

One of the most direct ways of improving inclusivity is through good quality employment with the opportunity to progress. The West Midlands will tackle low employment and high unemployment in specific areas by:

- ▶ supporting those out of work and on low incomes in targeted communities – starting with the £4.7m employment support pilot, Connecting Communities – to test and learn more about what works;
- ▶ providing a new employment support service for people with a mental health and/or physical health condition in primary and community care through the Thrive into Work project. This will shape the roll out of the Individual Placement Support model for other cohorts; and
- ▶ delivering £120m+ of investment in future training and skills provision through the devolved **Adult Education Budget** and £10m of retraining funds, upskilling of low-paid and low-skilled residents to bolster their long-term career and earning potential.

Department for Education skills deal



Sandwells case study

Sandwell's population is one of the youngest and most diverse in the West Midlands and is forecast to continue to expand faster than the UK average whilst continuing to get younger. Employment rates and skills levels are lower than elsewhere in the West Midlands, but numbers of jobs, employment and skills have all increased faster than the national average in recent years, as have the number of knowledge based, higher skills roles. With a significant manufacturing and supply chain base productivity is higher than elsewhere in the Black Country, but has grown less than the UK average in recent years. Ensuring that businesses adapt

and that residents have access to the opportunities and skills needed to help them succeed is a major priority.

Significant investments include the metro extension and Commonwealth Games Aquatics centre, with plans to maximise access to new jobs and commercial opportunities, involving local communities. The local authority have been working with residents and businesses to agree the Sandwell 2030 vision and an inclusive growth plan to develop new approaches to delivery and investment, to maximise the contribution that Sandwell makes to the West Midlands and the benefits this has to residents.

Collaboration between partners to achieve even more collectively

The West Midlands works with a broad range of partners to support the skills agenda and its Skills Advisory Board brings together the key influencers from across the West Midlands skill system. Close working relationships are in place with the further and higher education sectors as well as LEPs and local authorities.

Local partners are working together to develop an approach that will further integrate the West Midlands' investment in transport, skills and services to target specific communities and groups in focused inclusive growth corridors or locations. The aim is to improve

the overall impact of investment, and accessibility to skills, jobs and business opportunities for all local people. The West Midlands and local partners will:

- ▶ work closely with community-based organisations to develop local access and progression pathways; and develop local learning routeways from compulsory education, through further, higher, and career development learning.

Skills Factory case study

The Black Country Skills Factory is an employer-led education and training collaboration which aims to address the shortfall of skills in the Black Country and increase the pipeline of suitably skilled staff to respond to growth.

It has been a highly successful project in addressing skills shortages in the advanced manufacturing sector.

The aspiration is to fundamentally shift the relationship between employers

and education providers to develop a networked approach to skills delivery: one that is needs-driven by industry demand for skills while also meeting general best practice standards.

Training and education courses are co-developed and co-delivered using shared facilities and industry trainers. This results in the provision of bite-sized skills training courses which fit the current and future needs of highly technical industries.

Construction Gateway

The Construction Gateway has been established by the Combined Authority in response to major projected growth in the demand for construction jobs driven by HS2, local transport investment and the Housing Package including the growing brownfield construction cluster in Wolverhampton. This offers new opportunities for offsite manufacturing and are all driving demand for skills, particularly in the Black Country.

It is crucial the West Midlands ensures that local people can access these opportunities so that employers looking for skills, or people looking for a job, an apprenticeship or a move up, know where to go for help and support. The establishment of an Institute of Technology, led by Dudley college, will provide vital

investment to support this challenge.

The Combined Authority has a £5m three-year programme to train over 2,000 new recruits linked to specific major projects. A partnership of the Further Education Skills and Productivity Group network of colleges, training providers, Job Centres and local authorities will work closely with developers to provide a supply of recruits across the whole range of skills areas and levels.

The emphasis is on providing the training and support needed to enable more unemployed and/or low-waged entrants to develop the skills needed to enter and sustain employment in the construction sector. This will include accreditation through the Construction Skills Certification scheme.

Infrastructure

Transport, mobility and digital

The West Midlands is a well-connected region. 90 per cent of UK markets are no more than a four-hour drive away. It has one of the UK's fastest growing airports and High Speed 2 will put the centre of Birmingham within 50 minutes of central London.

Recent growth has put the existing transport system under pressure, leading to poor air quality and costly congestion. There is an over-reliance on the road network and private transport. Only 41 per cent of residents can access three or more strategic centres by public transport within 45 minutes at peak times, making physical access to jobs and skills an issue for too many people.

Many of the more rural areas continue to face transport challenges. There are also too many communities that are close to major growth centres and corridors are poorly connected to opportunities for skills and jobs. They face inequality of access to natural space, which has a significant detrimental impact on the most disadvantaged communities.

Actions planned

The West Midlands will build a fully integrated and seamless multi-modal transport system across the whole region. This means:

- ▶ maximising the impact of the £322m Transforming Cities Fund, by extending the Metro system, including the East-West Metro extension to Dudley/Brierley Hill. Local plans are also advanced towards extending further from East Birmingham to North Solihull and the High Speed 2 Interchange station;
- ▶ creating a new integrated control centre to deliver the smartest streets and best managed network and reduce congestion. This will be key during High Speed 2 construction and in anticipation of major events such as the 2022 Commonwealth Games;
- ▶ ensuring the region's future transport investment leads to environment and biodiversity improvements through proposed, local investment in natural capital. This is central to the West Midlands' ambition to support better connected, healthier and more productive communities;

- ▶ maximising the opportunity of High Speed 2 – including the national High Speed Rail College—to create regional supply chains and the skills to service the network. This includes the wider locally led infrastructure projects, providing dedicated support to businesses;
 - ▶ continuing to support the development of the locally led High Speed 2 Growth Strategy. This includes developing the Curzon Masterplan, the Interchange station in Solihull and other transport schemes. This will connect High Speed 2 stations to local transport networks and communities, including rural areas;
 - ▶ setting out plans to develop inclusive growth corridors. This will ensure infrastructure is integrated with other programmes locally to maximise impact on employment and skills, high quality housing and development viability and improved public green space and air quality;
 - ▶ driving procurement excellence, social and environmental value and innovative behaviour through contracts, particularly focusing on construction and digital infrastructure; and
 - ▶ continuing to ensure more consistent superfast coverage to address the significant variations in superfast broadband, full fibre and gigabit capable broadband coverage.
- Continued work on maximising the opportunities of integrating emerging technologies and mobility services include:
- ▶ building on the West Midlands' position as the UK's first large-scale, multi-city 5G test bed, through the Urban Connected Communities Project. This is the next step in the government's 5G Testbed and Trials Programme, and will develop a large-scale, 5G pilot across the region, with hubs in Birmingham, Coventry and Wolverhampton; and
 - ▶ building on the transport innovation programme, including the Meridian programmes, and Future Mobility Zone as an integrated innovation and R&D system, attracting global investment.



Housing

The rate of housing completions in the West Midlands is rising, but housing costs are increasing faster than local salaries. Most areas in the West Midlands are in the top fifth of house price increases nationally. The West Midlands median increase is six per cent – more than double the national average. This has been exacerbated by a lack of supply, quality, choice and mix of affordable and social housing. Typically, only 10 per cent affordable housing is being delivered as part of city and town centre housing schemes. With the population set to increase by over 500,000 by 2030, the West Midlands is committed to ensuring new and retrofitted housing meets the full spectrum of housing needs.

The scale of construction activity in the West Midlands in the decades ahead provides a once in a generation opportunity to work with the sector to transform productivity, methods, and create new long-term skilled careers. New assets, including the University of Wolverhampton's Springfield Campus, set to be the largest construction and built environment campus in Europe, will drive this change, including through enabling the adoption of new technologies and techniques in high growth potential supply chain firms in offsite and modern methods of construction.

Local actions

The West Midlands will:

- ▶ increase the rate of housing delivery in line with the Housing Package agreed with government;
- ▶ invest in land remediation, bringing sites forward and developing the skills required through the National Brownfield Institute in Wolverhampton;
- ▶ deliver quality through a West Midlands sustainable design charter to make good design the norm for new buildings and make high quality design a criteria in commissioning for all devolved housing and land funds;
- ▶ remain committed to encouraging diversity and new entrants to the market to support this increased delivery, such as through modular

build, and supporting the provision of new skills as the industry changes; and

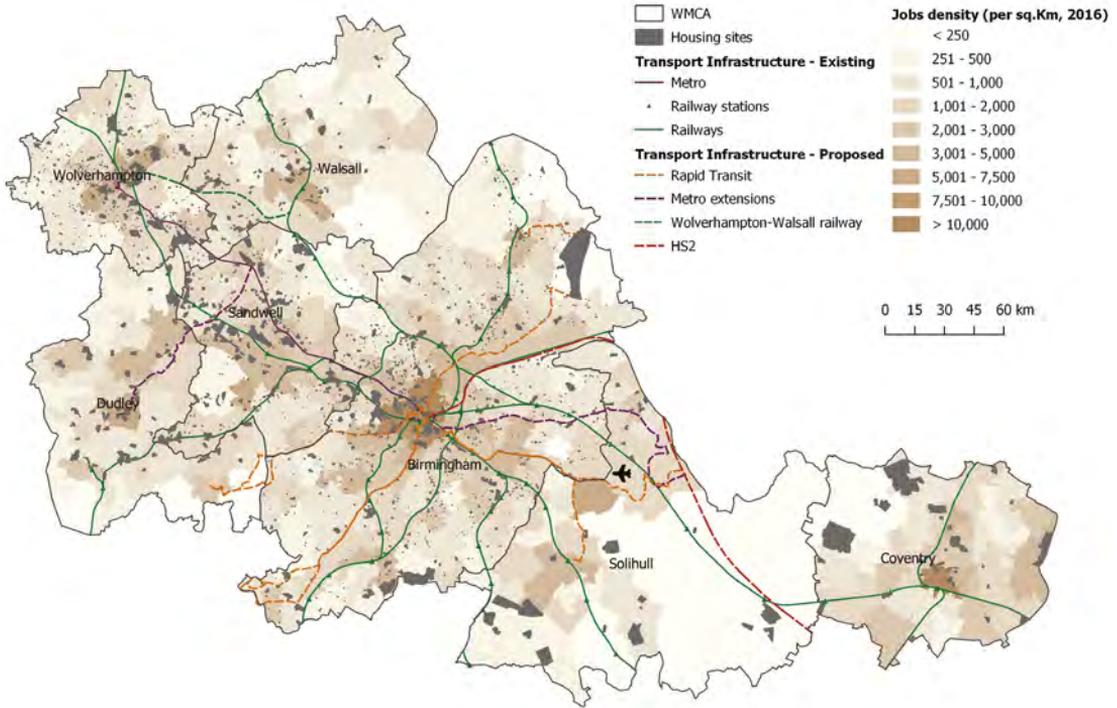
- ▶ work with the construction sector to accelerate the use of data and innovative processes and products in the construction industry. This means enhancing process innovation via modern methods of construction, including through the Manufacturing Technology Centre core innovation hub and building information modelling. It also means incorporating innovation in houses as they are being built, working with housing associations and other providers. Given the housing and infrastructure investments coming into the region, the West Midlands has a strong opportunity to boost quality, sustainability and productivity through the use of modern methods of construction.

Employment land

The West Midlands Land Commission concluded that the 'shortfall of land for employment space is at least as pressing as the shortage of land for new homes, and possibly more so'. This is most strongly the case in relation to those large scale, strategic sites that can have the greatest net additional impact on growth and jobs.

Similarly, there is a challenge for incubation space as well as grow on space to support agile and mobile economic activity. These issues are most severe in Coventry and Warwickshire, but across the region there is a significant gap in good quality employment land.

Integrated Transport Network - linking high employment density and housing sites (2016)



National Brownfield Institute and Springfield Campus case study

A crucial asset for tackling land availability shortages for housing and employment land is the National Brownfield Institute at the University of Wolverhampton. It's home to a team of specialist researchers, consultants and industry experts who will advise on all aspects of brownfield development, from dealing with contaminated land to repurposing buildings and sites.

The National Brownfield Institute will be a part of Wolverhampton's developing Springfield Campus. The site of the former Springfield brewery is being transformed into Europe's

largest specialist construction and built environment campus bringing together businesses and the education sector to maximise the impact on the economy. As the home of the West Midlands Construction University Technical College, the University's School of Architecture and Built Environment, and the Elite Centre for Manufacturing Skills, Springfield Campus is a central part of the region's growth ambitions, particularly in the construction sector—this is further supplemented by Dudley Advance II, Dudley College's new centre dedicated to advanced building technologies.

The Black Country Land and Property Investment Fund (LPIF) aims to provide a solution to the shortfall through investment in projects which will support the re-use of brownfield land and buildings and the delivery of supporting infrastructure. This includes in the redevelopment of major employment land sites, such as Phoenix 10 in Walsall and the proposed extension of i54 in Wolverhampton.

Local actions

Work is underway to scope the need for employment land through the West Midlands Strategic Employment Site Study 2019. This will consider £10bn worth of existing opportunities in identified investor-ready sites, and the West Midlands will implement a strategic programme of employment land development. This will be based on up-to-date locally led evidence of requirements in different parts of the region.

Energy

Work on a regional energy strategy has been underway for several years, with the Regional Energy Policy Commission reporting in 2017. There are significant challenges in the region around the energy infrastructure that will underpin housing, industry and electric vehicles, as well as the issues of clean air and fuel poverty. West Midlands industry spends over £2bn each year on energy and £15bn additional expenditure is expected between now and 2030.

The West Midlands Science and Innovation Audit highlights the region's innovation strengths in energy systems and storage. The West Midlands is home to a range of major energy companies including National Grid, Eon, Baxi and Cadent. The scale of demand for energy services provides a strong pull factor for global investment and commercialising new energy technologies.

The West Midlands is committed to demand side management around vehicles and buildings. Local authorities are also exploring the implementation of clean air zones, where relevant, to tackle air pollution.

Actions

The West Midlands is committed to delivering successful new approaches to clean energy generation, storage and distribution integrated within the transport system and major employment sites. Future mobility and the industrial base that will be at the forefront of this change will require specific additional energy requirements that need to be addressed and catered for. The West Midlands will explore how best to meet the forecast need of the West Midlands' manufacturing sector, new transport system, increased use of electric vehicles and additional houses in new communities.

The refurbishment of existing housing stock to address fuel poverty is an opportunity both for local supply chain firms and to tackle inclusion. The West Midlands will work in partnership with obligated energy suppliers to explore approaches to this challenge which maximise impact on the economy and communities.

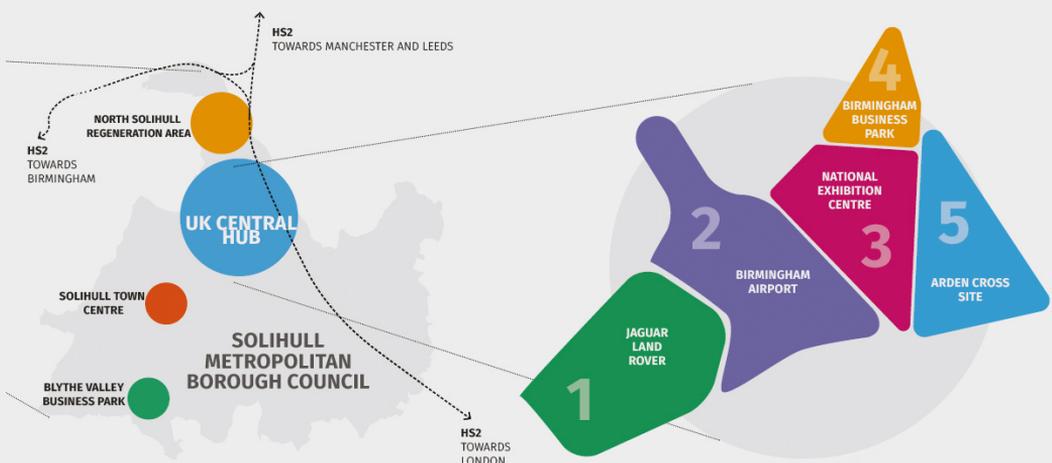
UK Central - Solihull

UK Central Solihull reflects the huge potential of the West Midlands and the integrated approach to delivery that makes it achievable.

Solihull is an area of strong growth and high demand that is a net contributor to the Exchequer. UK Central brings together Solihull's world class business, transport and leisure assets to deliver a unique proposition in a high value environment. At its core is the Hub, which is already home to Birmingham Airport, the National Exhibition Centre (NEC), Jaguar Land Rover and Birmingham Business Park. The international transport connectivity and existing growth drivers will be bolstered by the arrival of High Speed 2 at Arden Cross, the redevelopment

of Birmingham International Station and major housing and commercial growth over the next few years.

The scale of opportunity is unprecedented in the region: 775,000m² of new commercial and mixed-use floor space; up to 5,000 new homes, up to 77,500 new jobs delivering up to £4.1bn additional GVA each year. Investment in the Hub across a range of programmes interact and is coming together to deliver new energy provision, multi modal transport innovation and large-scale business growth opportunities - including in EV manufacture and new, digital, business services firms. New communities are planned based on a modern interpretation of garden town principles.



Business environment

The West Midlands has a diverse, dynamic and growing business base.

It also contains a strong ecosystem of business support, including business schools and a wide range of: university and business partnerships; active supply chain networks; and the largest concentration of accelerators in the country. The West Midlands' ambition is to grow as a leading UK entrepreneurial region where businesses of all sizes and sectors can grow and boost their productivity.

Business growth and productivity

Business dynamism and productivity performance is mixed in the West Midlands. GVA per employee varies significantly across sectors, with average GVA per employee below the national average.

Low carbon and environmental technologies is the most productive sector, followed by digital and creative business, professional & financial services (BPFS) and advanced manufacturing and engineering.

Like most of the UK, the West Midlands business base is a mix of firms in the high-productivity "frontier" and low-productivity "long tail". The region's firm productivity index is 16 per cent below the national average. This suggests lower overall productivity is due to relatively low productivity firms rather than the West Midlands' industrial structure. Therefore, a targeted, firm-

level approach will be key to addressing the overall productivity challenge.

The West Midlands does not yet have enough high-growth firms. The vast majority of the West Midlands business structure is composed of SMEs. Half of these are 'lifestyle businesses' and the West Midlands also has a lower number of larger companies and original equipment manufacturers. There is a correlation between lower business growth rates and lower productivity at LEP level, but there is also strong evidence that many more factors than revenue and jobs are important in improving firm productivity.

Between 2016/2017, the total number of businesses in the West Midlands increased by 9.6 per cent, compared to national growth of 6.1 per cent. Despite this recent performance, the West Midlands needs to continue to increase its business stock. This will be crucial in order to reach the national average and correct the legacy of historically lower periods of business creation following industrial restructuring.

There is a key role for social enterprise in supporting the delivery of a more productive and inclusive economy and local measures aim to improve overall firm-level productivity.

Exports and investment

Businesses in the West Midlands are linked to markets across the world. It is the fastest growing UK region for goods exports and experienced 27 per cent growth between 2015 and 2017. Outside London and the South East, the West Midlands exports the most by value of any region: over £33bn in 2017. Local supply chain firms are competitive in a range of global markets for aerospace, materials, rail, automotive, healthcare devices and marine.

Between 2011 and 2018, 775 Foreign Direct Investment (FDI) projects have created nearly 46,000 new jobs, and the number of projects per annum has more than doubled. FDI success has a significant impact on supply chain firms and related jobs, many of which are concentrated in the Black Country.

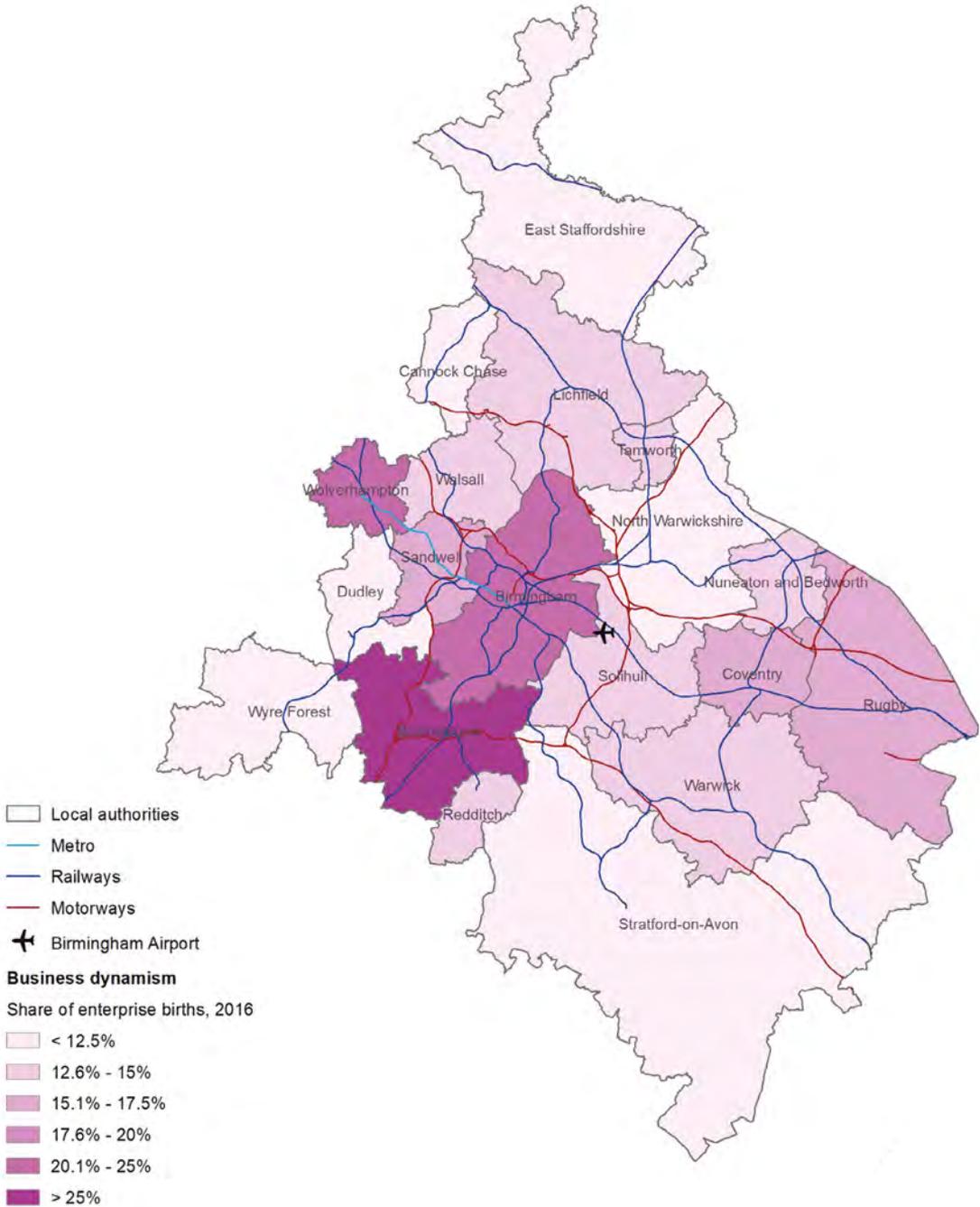
The West Midlands will continue to work closely with the Department for International Trade to capitalise on the region's positive trade growth and emerging opportunities by supporting high potential exporters to reach the global market and maximise awareness of the region's key assets to increase foreign direct investment and capital investment into the area.

Our approach

The West Midlands will take a targeted approach that focuses on working with businesses through sector action plans, and identifying the needs of different kinds of businesses and the tailored offer they need to grow. This differs across different parts of the region and will require coordinated action by Growth Hubs, business networks, existing business advisors and business schools. The Local Industrial Strategy prioritises three areas of business growth.

The first priority is the provision of dedicated scale-up support for high potential companies across all sectors and sizes that will address barriers to growth and help position them to provide the good jobs of the future. This will be focused on segmented business and supply support aimed at businesses in high-growth industries. For example, investing with the Department for Digital, Culture, Media and Sport (DCMS), and Creative England in SME growth and support programmes with creative industry-specific pathways. Delivery and commissioning will reflect the most effective pathway for different clusters and sectors. This will include support for high potential social economy organisations, which are a major part of ensuring balanced and more sustainable growth.

Business dynamism: Share of enterprise births (2016)



Access to finance will be a key pillar of support, working in close collaboration with the British Business Bank to maximise the benefit of its programmes in the West Midlands. Firms continue to report issues with finance from both the supply and demand side. This is both about maximising uptake of existing loan and equity finance and attracting more private investment. It also means working with businesses to ensure that they are investment ready through business planning, support and advice from entrepreneurs.

The second priority will be boosting business productivity among SMEs. In line with the principles of the forthcoming Business Productivity Review, the West Midlands will take a business-led approach that focuses on peer-to-peer networks, technology adoption, and industry benchmarking. This will include working with business-led initiatives to boost productivity such as Be the Business. The West Midlands will champion the importance of upskilling business owners through increasing leadership and management capability, with an ambition for businesses from the West Midlands to make best use of the Small Business Leadership Programme and local assets such as the Centre for Ethnic Minority Entrepreneurship at Aston University, Europe's leading centre on diversity and enterprise.

The final priority will be to help West Midlands businesses to internationalise through opportunities in trade, investment and the visitor economy.

This will seek to identify those smaller businesses that will benefit most from exporting, work collaboratively with partners across the Midlands Engine and capitalise on the business opportunities created by the Commonwealth Games.

Local actions

To support high-growth businesses and clusters, the West Midlands will:

- ▶ develop further dedicated, cluster-focused business support aimed at the highest growth potential industries, including improving competitiveness of our globally significant concentration of leading advanced manufacturing and engineering businesses through supply chain SME support led by businesses for businesses;
- ▶ explore options to launch a fund for new industry co-investment to provide wraparound support for businesses looking to grow into new sectors, supply chains and markets need to invest in new technologies and capital to grow into those markets;
- ▶ use business support channels to help businesses understand the importance of flexible working patterns, employee engagement and wellbeing, support for carers and childcare in boosting in-work progression and supporting more women into employment, including in more leadership roles; and

- ▶ establishing a locally led virtual Productivity Factory targeted at SMEs. This will facilitate expert industry benchmarking, coaching, and management masterclasses for firms within the West Midlands, and will draw on learnings from the forthcoming Business Productivity Review.

To help businesses internationalise the West Midlands will:

- ▶ increase internationalisation by continuing to leverage national resources and the Midlands Engine brand. This will focus on high-value contracts, new exporters and securing first overseas orders. It will include identifying and accessing new markets with a particular focus on smaller businesses that may not currently be supported; and use the opportunity of the Commonwealth Games and City of Culture to provide targeted support to drive productivity through the visitor economy.

This will include developing bespoke qualifications for staff looking to step into management roles, providing key underpinning skills and competencies together with the business insights required, including through focussed support to extend the season and further increase business tourism. It will also involve firm-level interventions to boost productivity ahead of the Commonwealth Games with Be the Business and other partners.

Places

With a diverse mix of city centres, major towns, high quality natural environment and rural areas, the West Midlands is investing in driving up housing numbers, improving the environment, connecting transport and targeting major development sites, and ensuring communities and businesses can thrive, improving health and wellbeing outcomes.

The West Midlands Combined Authority has set out its commitment that all areas should benefit from growth and devolution, recognising that not all would benefit in the same way, or at the same time. This Local Industrial Strategy builds on that commitment, recognising that parts of the West Midlands still underperform on important indicators.

Overview of the region

The West Midlands has a distinctive set of 'places' and assets. It contains the three cities of Coventry, Wolverhampton and Birmingham; historic towns including Warwick, Lichfield, Nuneaton, Rugby and Leamington Spa; and the industrial supply chains and social and geological heritage of Dudley, Sandwell and Walsall in the Black Country.

The region is home to the National Exhibition Centre, which is one of the UK's premier leisure and conference destinations, and major cultural centres and assets including Stratford-upon-Avon and Birmingham Symphony Hall.

It also boasts major theatres and commercially thriving creative hubs including the Birmingham jewellery quarter and gaming industry.

The West Midlands natural environment, including its extensive river and canal network, is a major asset and is important for the quality of life. A rich ecological network lies within and links to the region's cities, towns and rural areas. This supports a wide variety of wildlife including plants, small mammals, pollinators, other insects and birds. Providing vital space for physical activity, improved air quality and flood alleviation.

High Speed 2 will create further growth across the region, with globally significant development sites at UK Central and Birmingham Curzon Street. It is also a catalyst for investment in transport infrastructure over the next 10 years. The West Midlands aims to connect the region so that its population is more mobile, and new opportunities are more accessible than ever before.

Too many of the region's communities do not have access to jobs, skills and support for enterprise to help them realise their potential. And too many parts of the West Midlands have worse than average levels of childhood obesity, adolescent and young adult mental health, school readiness and healthy life expectancy. The West Midlands has amongst the lowest employment rate of any mayoral combined authority, 71 per cent, and an above average unemployment rate of 5.7 per cent. There are particular spatial concentrations of this, including in parts of Sandwell, Birmingham and Wolverhampton. Educational attainment varies considerably, with outcomes in general better in eastern parts of the combined authority.

Furthermore, pollution and congestion impact on quality of life and limited transport options make it difficult for people living in some parts of the region to reach the jobs and opportunities elsewhere.

Work is underway to ensure high streets across the region are made fit for the future. Many West Midlands centres will need to reinvent themselves to meet these challenges head on and provide a centre that meets the needs of residents.

West Midlands ambition

The West Midlands' vision is that the region should be a place of opportunity for everyone. A young person should have the same choices and opportunities wherever they grow up. To that end, local partners are investing in affordable homes and are putting in place the resource to pilot and innovate to deliver radical inclusive growth solutions.

The distinctive strengths and requirements of different places are reflected in all the interventions set out in this Local Industrial Strategy. They are all based on a spatial analysis of each of the foundations of productivity and what drives growth in the West Midlands. Interventions are place and cohort specific, or region wide, depending on the evidence.

The West Midlands' long-term aim for a fully-integrated and seamless multi-modal transport system across the whole region is crucial. This will support the local ambition to ensure our towns, cities and rural areas are all thriving, liveable places where residents have the same opportunities to benefit from increases in prosperity. In addition to these interventions, the West Midlands are devising a number of place-specific approaches.

Town centres

The cities of Birmingham, Coventry and Wolverhampton account for about half of the region's population (c.1.7 million). In other boroughs much of the population live in towns ranging in size from 10,000 to over 100,000, including the towns of Walsall, West Bromwich, Shirley and Nuneaton. In the Black Country, some 70 per cent of the population lives in towns. Many of the region's towns prospered during and after the industrial revolution but over recent decades have not experienced the growth and economic uplift of the region's cities. Alongside vacant industrial sites, the decline of the traditional High Street is leaving many towns facing difficult and sustained challenges.

The West Midlands is ambitious for its town centres and determined to help them evolve. Providing the support required is a major delivery priority, to enable town centres to re-establish themselves as vibrant social and economic hubs that meet the needs of residents and local businesses and provide accessible locations for public services in attractive environments. By doing so they will remain viable centres with a changed retail function, provide good locations for business and community uses, support the wellbeing of residents and contribute to the inclusive growth for communities that would otherwise be left behind.

The government's Stronger Towns Fund and the Future High Streets Fund provide the basis of dedicated funding to support a long-term, sustained national programme. The West Midlands Combined Authority, Local Enterprise Partnerships and councils have committed to come together to implement the most comprehensive town revival programme seen in the UK. One that will involve communities and local businesses so that benefits are maximised by concentrating spend in the local economy. One that will live the values of the West Midlands Leadership Commission to ensure that our communities can shape, lead and sustain what is set in train for the future.

The ambition is not just to tinker with small changes and initiatives but to fundamentally change the future for our towns. The West Midlands is already committed to making a start through the locally led Town Centre Programme and Regional Town Centre Task Force; a collaborative approach that will work with residents and other stakeholders so that for each place our strategic investment framework builds on their knowledge and ambitions and ensures that they have a stake for the future. The West Midlands is focusing initially on a number of pilot areas.

Walsall

Walsall Council, local partners and the West Midlands Combined Authority are working together to develop a strategic approach to unlocking and seize the opportunities within the centre which could complement a canal side location and provide the opportunity for high quality residential

and mixed use development. The vision is to capitalise on the strengths and facilities that the town centre has to provide opportunities for more events, social enterprise and a focus on the centre as a leisure and community destination.

And in tandem with focused attention on towns, the planned investment in road, rail, tram and bus services means that towns and cities in the West Midlands will be better connected so that people and businesses can access the wider opportunities driven by this Local Industrial Strategy. Our skills development programmes will also ensure that residents can take advantage of the new employment opportunities in our revitalised town centres.

The West Midlands will also continue to explore ways to maximise the benefit of close partnerships with and between anchor institutions.

Inclusive Growth Corridors

The West Midlands is bringing together investment in targeted and locally agreed Inclusive Growth Corridors. This is a bold and potentially game-changing approach to clean growth and reform which aims to transform the lives of residents, generating additional social and economic growth at scale through collaboration. The

West Midlands aims to create a different and more holistic approach for investment and delivery, which goes beyond 'site-by-site' development and embeds whole-system thinking.

Partners in the West Midlands are exploring four priority inclusive growth corridors:

- ▶ Wolverhampton to Walsall
- ▶ Sandwell to Dudley
- ▶ Perry Barr and the A34
- ▶ Greater Icknield to Smethwick

The Inclusive Growth Corridors approach:

- ▶ brings together the influence and devolved powers of the West Midlands Combined Authority with local authorities and other partners in an integrated approach to place-based change—with the aim of leveraging significant private investment into the region;
- ▶ embeds inclusive growth goals and a 'social baselining' at the heart of these changes, ensuring

that the return on investment deliberately targets a step change in environmental, social and economic outcomes through new forms of public-private-social partnership;

- ▶ recognises that this way of working is vital to closing the productivity gap and that while one size does not fit all the core principles of integration, coordinated, and collaborative investment should underpin our approach;
- ▶ demonstrates the West Midlands' commitment to spatially targeting and prioritising action across a wide range of partners; and
- ▶ begins with citizen voice - to ensure that our flagship investments are about improving the lives of people within these corridors, and that communities can see clearly the relationship between investment and the issues they want addressed.

International examples from Singapore, Australia and the UK show how productive this integrated approach can be. The West Midlands' commitment to inclusive growth means that partners want to take the best of elsewhere and go further.

Inclusive Growth Corridors use the growth potential of the area to reimagine an underlying social infrastructure that can turn changes in the built and natural environment into changes in life chances that are tangible and measurable.

Wolverhampton

Wolverhampton is currently enjoying record levels of private and public investment, with £4bn being injected into regeneration projects city wide. An impressive and compelling mix of projects, both geographically and sectoral, are being developed so that the city embraces future opportunities and maximises its potential as a place.

In the city centre, the £55m leisure-led Westside scheme will be key to opening up Wolverhampton, providing a multiplex cinema, restaurants, retail and leisure space and high-quality city living. Additionally, Wolverhampton's connectivity will be further boosted by a flagship transport interchange project—£132m private and public investment into a single integrated city centre transport hub, supported by brand new prime office and retail accommodation at i10 and i9 within a new commercial district, and a £35m refurbishment of the city's main retail centre.

The integration of transport modes - bus, rail and metro - will support accessibility to Wolverhampton attractions, both existing and to be developed. Wolverhampton's industrial strength made it the place it is today and reinforcing this manufacturing cluster remains a priority. The i54 strategic employment site north of the city centre has become a successful hub for sector-leading firms within high-value manufacturing, such as Jaguar Land Rover and Moog. i54 is also the country's most successful enterprise zone. Furthermore, Wolverhampton has an ambition to advance its construction strength, driven by investment in the University's Springfield Campus development. The site of the former Springfield brewery is being transformed into Europe's largest specialist construction and built environment campus, bringing together businesses and the education sector to maximise the impact on the economy.

Dudley

Dudley is utilising its industrial heritage and unique geological make-up to both build a well connected and flourishing place for the future and ensure that residents and firms benefit from and contribute to the strategic opportunities and actions in this strategy. The thriving Castle Quarter – including the Black Country Living Museum, Dudley Zoological Gardens and the emerging Black Country Geopark – will connect to other key assets, such as Dudley College and its emerging Institute of Technology, via a Very Light Rail line being developed in conjunction with WMG.

The Midland Metro extension through Dudley, and a new public transport interchange that is planned for the town will catalyse further development, notably the Portersfield scheme—a major leisure and retail complex that will create a bustling town centre environment and connect

with other key attractions. The integrated town centre regeneration programme will deliver a package of interventions that will improve and enhance leisure attractions, boost connectivity for residents and businesses, and increase prosperity. Ultimately enhancing Dudley's economy and appeal as a place to live in, work and visit.

The Metro extension on to Brierley Hill is an important growth corridor, with the opportunity to generate major community benefits across the borough, connect residents to economic opportunities and develop brownfield sites and help to regenerate borough towns. An inclusive growth skills and employment pilot is being run in Brierley Hill to cover a 2km area from the final Metro stop to provide opportunities to local residents.

Investment sites and delivery plan

The West Midlands has major investment and development sites and has prioritised engagement with the investment market around a clear investment package implemented by the West Midlands Growth Company, Combined Authority and local authorities.

To underpin delivery of the 215,000 additional homes set out in the infrastructure section, the West Midlands is finalising a spatial investment and delivery plan, supported by a pipeline of all significant housing sites in the region. This ensures that all partners have a clear, shared view across boundaries of the provision made in local plans and the long-term site pipeline.



Implementation

Monitoring and governance

Through the West Midlands Combined Authority, the region has a proven governance and delivery structure. Elected members on the Combined Authority Board take responsibility for specific portfolios, with a Board advising on each. Relevant elements of this strategy, such as housing, transport, innovation, skills, inclusive growth and the environment will be coordinated by the relevant Combined Authority Board. Firms of all sizes and across supply and value chains will contribute to and benefit from its successful implementation.

A fully integrated investment planning system ensures alignment across the portfolios and allows the West Midlands Combined Authority to measure progress against set metrics. Delivery reporting on the key programmes and activities related to the Local Industrial Strategy will be integrated so that the Combined Authority Board, local partners and government are able to monitor progress and collectively we can align inputs.

Implementation will be coordinated by the Strategic Economic Development Board, reporting to the Combined Authority Board. The West Midlands will monitor the impact of this strategy on the economy through a locally agreed set of economic and social performance measures, Annual reports on the West Midlands'

economic and social performance will be published here: www.wmca.org.uk/what-we-do/economy/

Implementation

Government and the West Midlands are clear that the Local Industrial Strategy sets out an agreed and shared view of opportunities for the West Midlands, as well as the challenges that need to be addressed, to maximise its contribution to UK productivity and earnings growth.

This Local Industrial Strategy does not include any new spending commitments outside of existing budgets. Instead, it will inform the strategic use of local funding streams and, where relevant, spending and decisions at the national level. It will also help the West Midlands 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.

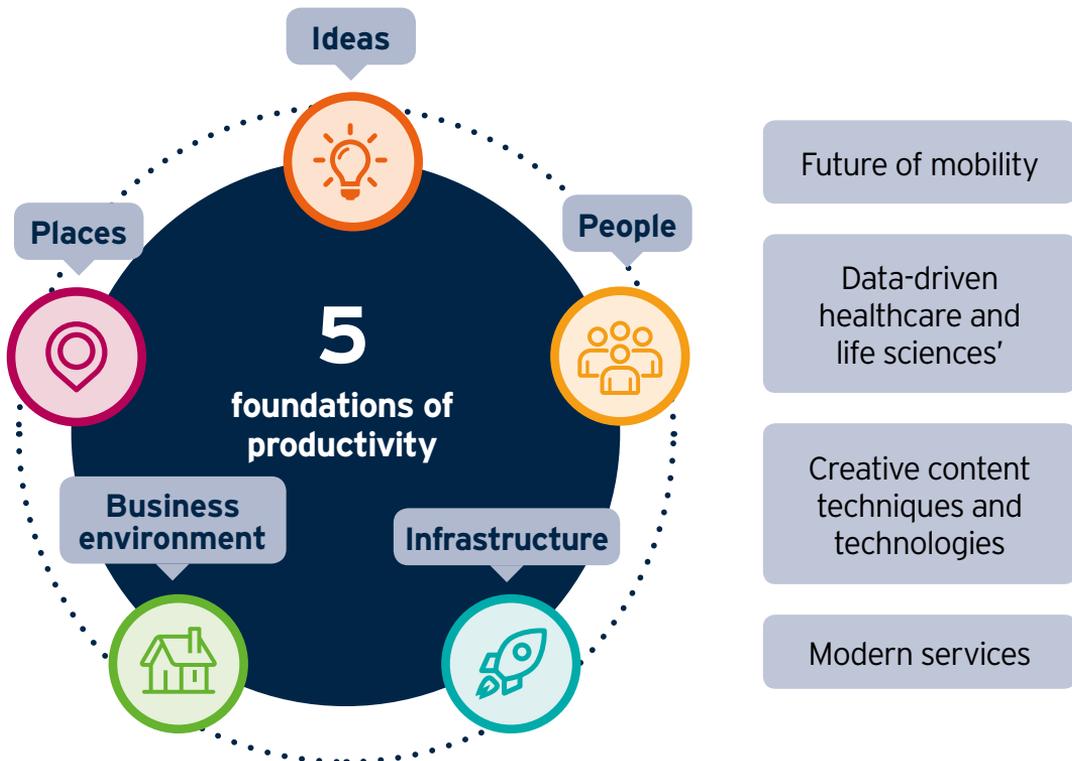
To demonstrate progress towards the long-term vision set out by this Local Industrial Strategy, the Strategy contains a number of specific actions. Where these actions are locally led, these will be drawn from local budgets which exist for those purposes; where actions are shared between West Midlands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

This Trailblazer Strategy does not represent all the priorities and action being developed in the West Midlands. As detailed in this Strategy, the West Midlands 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.

Over the medium term, a wide range of local partners will work together to keep this strategy relevant and drive implementation of both new programmes and established priorities. This includes through the development of the inclusive growth roadmap.

Implementation will recognise that the West Midlands is distinctive information: it functions as an area of three distinct but interrelated economies. The West Midlands Local Industrial Strategy will be implemented by the West Midlands Combined Authority and Local Enterprise Partnerships working together.

The West Midlands sees the implementation of the Local Industrial Strategy as an important opportunity to further strengthen delivery and capacity across the West Midlands at local and regional level.



Source material

The West Midlands has developed a comprehensive evidence base covering all aspects of the local economy, including through the work of a number of independent commissions. The collated evidence base, including detail on the businesses base and productivity can be found here: www.blackcountrylep.co.uk/about-us/west-midlands-combined-authority/local-industrial-strategy-evidence-base/

Further sources are listed below:

- ▶ **West Midlands Land Commission** - www.wmca.org.uk/what-we-do/research-analysis/
- ▶ **West Midlands Productivity and Skills Commission** - www.wmca.org.uk/what-we-do/research-analysis/
- ▶ **West Midlands Mental Health Commission** - www.wmca.org.uk/what-we-do/research-analysis/
- ▶ **West Midlands Leadership Commission** - www.wmca.org.uk/what-we-do/research-analysis/



© Crown copyright 2019

This publication is licensed under the terms of the Open Government Licence v3.0 except where otherwise stated. To view this licence, visit nationalarchives.gov.uk/doc/open-government-licence/version/3 or write to the Information Policy Team, The National Archives, Kew, London TW9 4DU, or email: psi@nationalarchives.gsi.gov.uk. Where we have identified any third party copyright information you will need to obtain permission from the copyright holders concerned.

This publication is available from: www.gov.uk/beis

Contact us if you have any enquiries about this publication, including requests for alternative formats, at: enquiries@beis.gov.uk