



UNIVERSITY OF  
BIRMINGHAM

CITY-REGION ECONOMIC  
DEVELOPMENT INSTITUTE

THE CITY-REDI – WM REDI

CITY  
REDI

WM  
REDI

2020

REVIEW

Supporting inclusive economic growth  
in the West Midlands and across the UK



# FOREWORD



By **Professor Sir David Eastwood**,  
Vice-Chancellor and Principal,  
the University of Birmingham



**Regional economies are complex and diverse. As policy-makers seek to empower regions and rebalance the economy from over reliance on the capital city, our regional strengths are coming increasingly to the fore.**

New business models and technologies continue to evolve, shaping and transforming production and global distribution. This, along with regional devolution of resources and decision making, is creating huge potential for city-regions to take greater control of their economic growth, and presenting exciting opportunities for academic institutions and business to flex their collective talents to effect and embed real transformational change.

Until recently, regional development has been supported by research underpinned by disciplinary-based studies. However, our economies are increasingly demanding integrated research and policy approaches to help them tackle an array of multidisciplinary issues. We saw this coming to the fore with bodies

such as the Northern Powerhouse, and created our own exemplar in the shape of the City Region Economic and Development Institute (City-REDI), which was established in 2015. The success of this initiative means that we are now evolving the institute into WM REDI, which will support inclusive economic growth in our city-region, acting as a catalyst for a step change in regional collaboration.

Our vision is to establish a world – leading research institute, focusing on city-regions to better understand and influence regional and national economic growth policies. As a hybrid institute, we have brought together our world-leading research team and respected consultative professional services to offer a unique systemic approach across Birmingham. This body of excellence is a distinctive international research platform, taking us away from the traditional strands of disciplinary research and moving us towards an overarching conceptual framework of multidisciplinary collaboration.

It was a bold, dynamic and exciting step for us to take and I am immensely proud of what we have achieved to date, and am confident that in the guise of WM REDI we will continue to make profound impacts locally, nationally and globally in the years to come.

City-REDI quickly established itself as part of the fabric and narrative of Birmingham and the West Midlands, providing a space for public sector innovation and research collaboration.

Amongst many other things, our research team has been proactively engaged in local policy development, helping to shape approaches in this arena, and

have worked in an advisory capacity on the development of pan-regional, regional and Local Enterprise Partnership Strategies. We have also hosted and facilitated workshops and events which create space for open policy discussion, and successfully delivered several Birmingham Economic Reviews aimed at businesses in the region, helping them to make strategic business decisions based on an evidenced-based understanding of the region.

These are key developments for our region, as we strive towards our ambition of regional equality, seeking to enrich the lives of residents, support our local business and political agenda and informing wider strategic policy.

I am proud of City-REDI for all it has been, all it has become and all it will be as it continues to evolve.

**PROFESSOR  
SIR DAVID EASTWOOD**  
Vice-Chancellor and Principal

# FOREWORD



By **Professor Simon Collinson**,  
Director of City-REDI



**Social and economic factors influence us all in our day-to-day lives. By taking a multidisciplinary approach and bringing together policymakers, industry and researchers, City-REDI has become a regional powerhouse making huge strides in developing a deep and more applicable understanding of our regional economy than any that has come before.**

Balanced growth and inclusivity are key ambitions which we have been seeking to achieve through our projects and will consistently continue to strive for. We use a wide range of quantitative and qualitative methods, data analysis, surveys, case studies and interviews to better-understand how regions work and what could help them work better. We have a new Socio-Economic Impact Model (SEIM-UK) as one element within our tool kit for comparing a wide range of economic and social indicators across and within UK regions.

Our research is offering new insights into the uneven distribution of household

income and consumption and the unequal distribution of both business investment and different public investments and services. We have revealed, for example, how much different UK regions are exposed to different Brexit scenarios, showing how some of the poorer UK regions are likely to be impacted most severely.

We know how much more Londoners receive per head in transport subsidies than people in any other UK region and we know the level of rebalancing needed across the rest of the country. Of course, many of the challenges we face in our region are shared across the UK, including an ageing population and a shrinking working population. Competing with emerging economies and rewarding those that create wealth while also having a strong welfare system for those that need it. Meeting these challenges with strong solutions has been at the heart of the ambition and vision of City-REDI.

By harnessing the unique set of resources, institutions, enterprises, people and capabilities in the West Midlands, we are better understanding the demographic, economic, social and cultural challenges and discovering how to act on them locally.

Already, we are at the forefront of academic debate on local and regional economic growth, evidenced by high-quality research outputs. City-REDI utilises a systemic and interdisciplinary approach to understanding and facilitating economic development in city-regions. But we also operate on a global scale, developing key international research partnerships.

The output of City-REDI is designed for practical application, as we translate high-level academic reports into practicable, useful recommendations for practitioners, alongside longer-term intelligence and research papers.

What we are seeing here is strategic intelligence on an unprecedented scale. Since its launch, City-REDI has been pivotal in stimulating and shaping investment in the region to promote growth, which has wide-reaching benefits. By continuing to build on our collaborative strengths, we are contributing to the creation of a powerful city-region which is also a national driving force, inspiring our local communities, shaping and influencing policy and establishing Birmingham as an innovator of change.

**PROFESSOR SIMON COLLINSON**  
Director of City-REDI and Deputy Pro-Vice-Chancellor for Regional Engagement, University of Birmingham.

FOREWORD

# { ABOUT CITY-REDI

## A united approach to creating inter-regional equality

Established in 2015, the City Region Economic Development Institute (City-REDI) was made possible by a generous investment from the University of Birmingham. It was created in response to an increasing need for a multidisciplinary approach to regional challenges.

With city-regions fast becoming the drivers of change and in a global

economy where the importance of place is growing, the need for an overarching, joined-up approach was clear.

Based within the Business School at the University of Birmingham but including researchers from a range of disciplines, City-REDI focuses on developing an academic understanding of major city regions across the globe.

Its local focus is Birmingham and the West Midlands, which, in common with all city-regions, offer a unique combination of skills, people,

infrastructure and firms. To intelligently shape future growth, we need research, knowledge and expertise, developed through local public-private partnerships. These drive local policy solutions which, in turn, help to shape national policy agendas.

City-REDI delivers policy, strategy and research which supports economic growth and prosperity by undertaking work that explores the complex and inter-related way in which people and systems work across urban areas. ■

# { ABOUT WM REDI

## Next steps... WM REDI: a new champion for our region

TOTAL FUNDING AMOUNTS TO  
**£11.5**  
MILLION

City-REDI has achieved significant results. Now taking up the reins is a new research institute, the West Midlands Regional Economic Development Institute (WM REDI), with the remit to support inclusive economic growth in our city-region and regions across the UK.

This is made possible by a major award from the Research England Development (RED) Fund, together with matched funding from the University of Birmingham and regional stakeholders. Total funding amounts to over £11.5 million.

WM REDI will begin its work immediately on the University of Birmingham Edgbaston campus and move into the University of Birmingham | The Exchange in early 2021. The building is a Grade II listed Old Municipal Bank, founded by Neville Chamberlain in Centenary Square next to HSBC's UK headquarters and is the University of Birmingham's new facility for engaging more closely with the city-region.

“

“The opportunity that WM REDI is going to provide is a massive step-up, especially given its central location at the heart of the city based at the University of Birmingham’s The Exchange, with a strong presence and wonderful facilities. This will enable WM REDI to bring together talent right across the region to be at the centre of research excellence, and that’s a very exciting proposition.”

”

TIM PILE, Chair.  
Greater Birmingham Chamber and Solihull Local Enterprise Partnership.

# University of Birmingham | The Exchange



**WM REDI represents an unprecedented consortium of regional stakeholders.** The West Midlands Combined Authority (WMCA), the Greater Birmingham and Solihull Local Enterprise Partnership (GBS LEP), the West Midlands Growth Company (WMGC), the Black Country Consortium Ltd., Coventry and Warwickshire LEP, the GBS Chamber of Commerce, Aston University, Birmingham City University (BCU) and the Business Professional Services consortium (BPS) are all co-investors, with a shared commitment to solving local challenges. We have additional support from Birmingham City Council and all seven metropolitan Local Authority Chief Executives in the West Midlands, the University of Warwick and the Midlands Engine.

This institute will take regional collaboration to new heights. Dedicating this space to co-locate secondments from regional stakeholders, providing policy workshops and training programmes, and engaging national partners will enable better policy insights through collaborative research, creating new channels for knowledge exchange to help to rebalance the UK economy and create inclusive local economies. We will focus on bridging the gap between university-based R&D and research users in the UK, including firms and public sector organisations, to better leverage our intellectual capital, assets

and capabilities for economic growth and social development.

It will also strengthen regional knowledge exchange, address challenges and opportunities in university commercialisation policy and practice, maximise the economic and social benefits from established research units and enhance impact through economic and social innovation. It will also exemplify the University's commitment to its civic contribution.

As the country looks to increase R&D spending to a level of 2.4 percent of

GDP (the OECD average) it is essential that there is better alignment between universities and these stakeholders, together with other partners, in collaborative innovation efforts to improve our economy and our society.

A central goal is to produce robust data and analysis to connect the micro-foundations of growth and change with the aggregate effects, to inform targets for policy interventions and insights into inherent trade-offs, in the context of local and regional economic development strategy. ■

## Delivering transformational change through collaboration

**At City-REDI, policymakers and industry come together to focus on how we create strategy, policy and programmes which deliver not just change but transformational change.**

This inclusive approach has seen us working with private, social and public sector bodies, along with

local and national government, to better understand latent competitive advantages of regions. This strategic intelligence can act as a major catalyst, stimulating and shaping investment to promote inclusive growth and improve the well-being of local citizens.

We have had a significant impact locally, nationally and internationally, helping to enhance the success of city-regions and the future of inclusive economies. ■



# { THE IMPACTS SO FAR

201



research papers published

4



Birmingham  
Economic  
Reviews,  
every year  
since 2016

Over

150



events

In just four years, City-REDI has made some huge impacts in the region. These include:

## TRANSFORMING THE WAY PROJECTS ARE ASSESSED AND PRIORITISED IN CITY-REGIONS

We have created a 'best-in-class' portfolio of analytical tools to examine the economic strengths and weaknesses and social challenges of city-regions. This includes a regional growth model to forecast the economic impact of skills and business support interventions, to help prioritise interventions in local industrial strategy development. It has also been used to look at the impact of apprenticeships, careers events and placements for the city-region. We also have developed expertise in the evaluation and acceleration of different kinds innovation commercialisation pathways in terms of local and national impacts.

## INFORMING NATIONAL DEBATES AT PARLIAMENTARY LEVEL AND RAISING AWARENESS OF THE IMPACT OF NATIONAL POLICY TO THE REGIONS

We delivered one of the first pieces of research assessing the potential impact

of Brexit to the regions and devolved nations of the UK. This has quickly become one of the key sources for reliable, independent evidence. The research has been presented to the European Parliament, UK Parliament, EU Committee of the Regions and the UK Treasury. It shows how trade dependencies affect regions very differently, leaving many of our less resilient regions most at risk from the Brexit process. We are proud to be an important part of a wider message to central government, demonstrating that the regions outside of London and the Greater South East need more investment.

## CHANGING THE WAY A KEY REGIONAL SECTOR IS PERCEIVED AND PRIORITISED

City-REDI, working in partnership with BPS Birmingham (the regional sector body), was commissioned to carry out a deep-dive review of the Business and Professional Services sector, going on to carry out the national sector deal research for the Industrial Strategy. This is now seen as an exemplar for all regional sectoral deep dives. As a result of this project, the sector is viewed in a new light by regional bodies and has changed the way the region promotes itself on a national and international

stage, driving a different investment strategy and providing a focus for foreign direct investment and skills development approach.

## PRODUCTIVITY AND SKILLS

The link between skills, productivity and wages is key to creating an inclusive economy. Our work, supported by the Joseph Rowntree Foundation, explored the thinking behind wage setting and links to productivity. There is much work to be done on supporting workers in low-paid industries, along with reskilling people to bring them into the workforce as valued employees. We have contributed to, and synthesised the evidence to inform employment support. We have completed the largest ever survey of West Midlands firms in a study of regional productivity and prosperity, funded by the Economic and Social Research Council (ESRC), revealing some of the key reasons behind the UK productivity lag. ■

# PROMOTING SUSTAINABLE, INCLUSIVE GROWTH

**Today, most of the global population lives in city-regions and more than 80% of global GDP is generated in cities.**

However, cities also consume almost two thirds of the world's energy and account for more than 70% of global greenhouse gas emissions. By increasing productivity and enabling innovation to combat the challenges of transport and energy infrastructures, affordable housing and

basic services, we can ensure the growth of city-regions is sustainable and beneficial.

We are also determined that this growth is inclusive, that government policies and corporate practices improve the life chances of everyone in the region. This is why reducing inter-regional inequality across the UK and intra-regional inequalities in the West Midlands is a central goal.

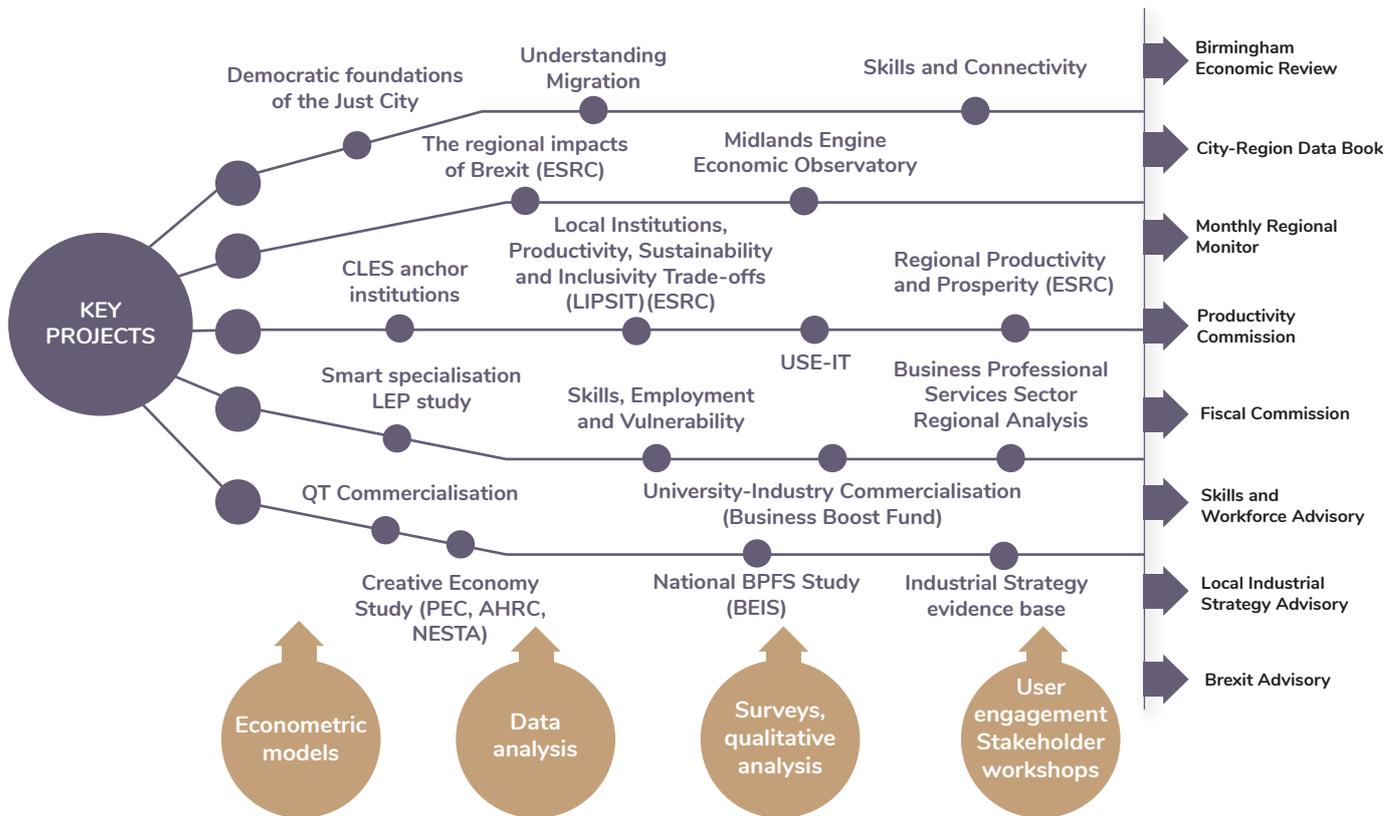
# CITY-REDI'S GLOBAL IMPACT

City-REDI has partnerships in the USA, Europe and China, formed with the aim of improving our comparative analysis of city-regions and sharing policy and practice experience globally. As the institute develops, we will continue to expand our international network and global impact.

# OUR CORE OBJECTIVE

is to help accelerate inclusive and sustainable economic growth in the West Midlands city-region.

## Some of our key projects to date include:

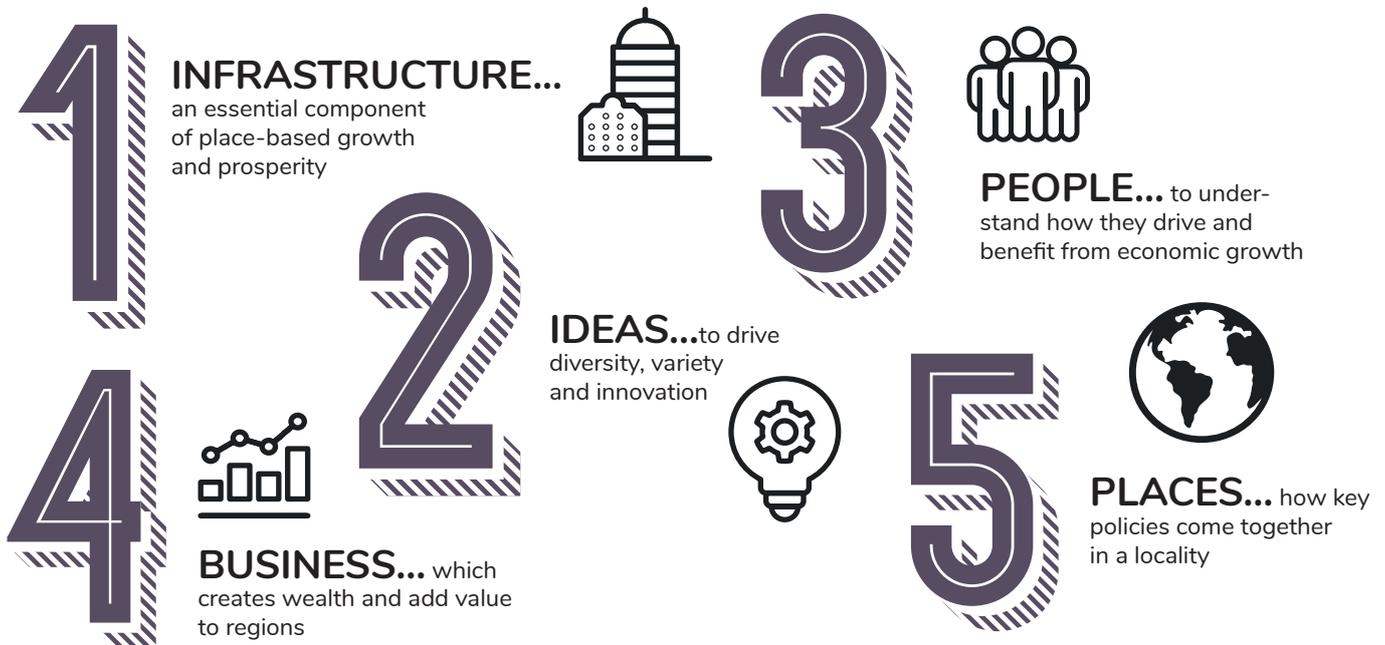


- Advising the Cabinet Office, Central Government on Industrial Strategy
- Advising on the GBSLEP Strategic Economic Plan, the Combined Authority Strategic Economic Plan and Midlands Engine Strategy, providing advice on targets and monitoring, economic growth and policy development
- A review of performance indicators on how to measure success for the Skills and Productivity Commission, producing the West Midlands State of the Region report and ongoing regional monitoring with the Black Country Consortium Economic Intelligence Unit
- Productivity and Prosperity, funded by the ESRC, focused on the regional causes and effects of low productivity
- Productivity from Below, with Aston University and the University of Warwick, funded by the ESRC, on addressing the productivity challenges of micro-businesses
- Delivering the Midlands Engine Economic Observatory, and the Independent Economic review
- ESRC Brexit research, an international group of academics looking at the impact of Brexit on Europe and the UK and its cities
- International research on the Just City and approaches to housing
- Local Institutions, Productivity, Sustainability and Inclusivity Trade-offs (LIPSIT), ESRC-funded project on regional policy trade-offs
- Input into the National Assembly for Wales Inquiry into Poverty in Wales and making the economy work for people on low incomes
- Advising the West Midlands Mayor on Brexit, industrial strategy and devolution deals
- Analysis for BEIS and Local Enterprise Partnerships looking at financial and professional services, creative industries and innovative healthcare
- Workforce challenges of delivering healthcare in rural settings with the National Centre for Rural Health and Care
- Evaluation of Connecting Communities, in partnership with the Institute of Employment Studies
- Writing the Wolverhampton Economic Assessment, which shapes local investments and strategies
- Collaborating with the West Midlands Growth Company on research looking at migration and diversity in the region
- Collaborating with the Birmingham Chambers of Commerce on the Birmingham Economic Review, now in its second year informing business in the region of key trends and impacts
- Establishing the Analystsfest, with three events attended by over 70 analysts across the region to look at better ways of collaborating and sharing data and research
- Developing the evidence base for the Skills and Productivity Commission
- Sponsoring and presenting on housing, infrastructure and productivity at the West Midlands APPG
- Developing a skills gap analysis for the West Midlands
- Providing evidence for the Barrow Cadbury research into Anchor institutions in Birmingham
- SEIM-UK Socio-economic Impact Modelling for the UK regions
- Contributing to the Rebuilding Macroeconomics Network by looking at the Long-Run Consequences of Adverse Economic Shocks, analysing UK Regional and Urban Inequalities
- Urban Living Birmingham programme, with 39 stakeholders and academics across the University
- Delivering three ESRC funding LEP projects on supply chains, apprenticeships and automated data dashboards
- USE-IT, part of a cross university (GEES) programme on developing solutions for poverty in Birmingham. ■

## City-REDI's areas of expertise includes:

- Systemic economic modelling
- Policy development and evaluation
- Skills and employment support
- Firm-level innovation and productivity
- Spatial planning
- Public sector leadership
- Corporate social responsibility & social enterprise
- University commercialisation processes
- Entrepreneurship and SME growth analysis
- Analysis of employment and non-employment
- Inclusive growth and community economic development
- Transport systems analysis
- Inward investment
- Universities and their contribution to city regions
- Business and professional services
- High value manufacturing
- Supply chain analysis
- Impact analysis

## Our projects fall largely into five key themes, which are expanded on in the coming pages:



“There are significant challenges facing Birmingham... Mitigating and managing the impact of Brexit on the local economy, ensuring that economic growth harnesses the potential of communities across the region and adapting the way we live and work to ensure that our legacy is environmentally sustainable are priorities for business leaders and stakeholders across the city.

“With that said, there is no doubt that Birmingham is on the precipice of a triumphant return to the world stage. Perceptions of the city are now changing in recognition of its young, diverse population, a strong services sector, and vibrant start-up and digital tech ecosystems.”

“City-REDI has helped organisations like ours by providing the intelligence and insights that are needed to map the region’s challenges and solutions, focus on its strengths and opportunities and help shape a brighter future.”



**PAUL FAULKNER**  
CEO, Greater Birmingham Chambers of Commerce

# 1 { INFRASTRUCTURE



“City-REDI has empowered industry leaders to make decisions in a more considered and informed way than ever before, bringing together urban development trends and data from the private sector, public sector and academia. It’s also combined the hyper local – a much-needed focus on the West Midlands conurbation and its unique characteristics, with best practice from around the world. This combination of insight is essential if a global city like Birmingham is to meet its full potential.”

MARIA MACHANCOSES, Director, Midlands Connect



**Robust infrastructure is an essential component of place-based growth and prosperity. Infrastructure investment is one of the most significant ways governments and local public sector stakeholders can influence the economy. But by nature, it is large scale and long term. It needs consistent and stable policies, which in turn need consistent and stable government at national and local levels.**

City-REDI looks at how transport, housing, energy, communications and digital networks, as part of an integrated system, can strongly influence how regions grow and prosper. It is vital that investment of this scale is grounded in evidence and approached holistically, across all kinds of infrastructure, at the right geographical level. We seek to understand how combinations of people, technologies and markets attract investment in infrastructure.

By developing tools and methodologies to help design and develop the right infrastructure in the right places, we are working to boost the potential of people, communities and businesses.

Good infrastructure does not just improve regional economic efficiency, it improves people’s lives and life chances, from high-quality housing, access to education and employment, clean and affordable energy, clean safe air, reduced crime and better mental health and wellbeing outcomes. ■



## Powering the Midlands Engine

Extending beyond Birmingham to encompass the whole of the Midlands, the Midlands Engine is a dynamic collaboration of Councils, Local Enterprise Partnerships, a Combined Authority, universities and businesses from the region, with a united ambition to improve the region’s infrastructure and present and promote the Midlands as an attractive investment proposition.



It has five priority focus areas:

- **TRANSPORT AND CONNECTIVITY**  
Connecting the Midlands by maximising new technologies to radically transform the region’s transport network.
- **SKILLS PROGRAMME**  
Tackling the mismatch between business skills needs and the skill levels of residents
- **TRADE AND INVESTMENT**  
Growing international trade and investment in existing and new markets.
- **INNOVATION AND ENTERPRISE**  
Creating an environment where our science and innovation strengths can be maximised
- **SHAPING GREAT PLACES**  
Promoting the Midlands as a great place to live, visit, learn and work.

City-REDI leads the Midlands Economic Observatory. This pan-regional consortium is designed to ensure balance across the region, supporting the Engine's strategic programme of activity and providing practical analysis to inform policy decision making. It is supported by the Black Country Consortium, SQW, Cambridge Economics and Nottingham Trent University and complements the range of economic observatories and intelligence units already in the region. Together, this collaboration increases access to funding for research, evaluation and policy development.

Part of its remit is developing an Independent Economic Review, generating evidence and insight to raise

productivity in the Midlands and bring it into line with the rest of the country. It also highlights the region's unique strengths and opportunities. Delivering a robust, intelligent and insightful evidence base across the Midlands Engine, it complements and provides added value to existing evidence. Ultimately, it supports investment priorities which will lead to raised productivity.

**The evidence work includes:**

- A review of evidence to date on the performance of the Midlands region
- A review of the impact of Brexit and supply chains
- Individual LEP profiles, looking at the

strengths and contributions each LEP makes to the Midlands

- A review of the appropriate levels at which interventions should be made and the role of geography
- A review of funding into the region and disparities across policy areas and geography
- Regional and local forecasts and scenarios
- A survey of businesses looking at their needs and what the Midlands engine should be tackling
- Final reporting pulling all the evidence together. ■

“City-REDI has empowered industry leaders to make decisions in a more considered and informed way than ever before”

MARIA MACHANCOSES, Director, Midlands Connect



## Changing behaviours, changing infrastructure

**Practices and behaviours are often so deeply embedded within an institution that it can be difficult to effect change. A renewed focus on local economies and communities has informed a new approach to economic development. The Centre for Local Economic Strategies (CLES) set up its Local Wealth Building project to tackle, explore and address the issues surrounding the current agenda, which often fails to generate the potential benefits for local economies and people.**

City-REDI worked closely with CLES to provide essential research to drive the project in Birmingham, which focused on a number of ‘anchor’ institutions – the City Council, the University of Birmingham, the Office of Police and Crime Commissioner, local hospitals, housing providers and further education colleges. The project sought to establish what existing patterns of behaviour

were in place and how these could be shifted to operate on a more local level. Could procurement be changed, so we are collectively sourcing products and services more locally, using greater numbers of smaller firms, ensuring ethical, inclusive and diverse practices?

Getting to the root of entrenched behaviours, it encouraged influential regional organisations to take the lead in playing a defining role in shaping and boosting the local economy. City-REDI’s input was into the University of Birmingham case study, providing salary analysis, exploring the levels of influence the University has, mapping data to understand the impact on deprived communities, and evaluating procurement spend.

The project also explored the concept of community wealth building, as frustrated people across the UK seek alternatives to business-as-usual models. Local wealth building ideas have been applied in communities across the UK, energising supply chains, boosting the number of local businesses, creating jobs and increasing spending – all giving back to the local economy.

**The report outlined three future priorities for Birmingham:**

- **GENERATING INDIVIDUAL ANCHOR STRATEGIES** which span the breadth of local wealth building activities and working together to mobilise the resources and support to put these into practice.
- **ADVOCATING FOR THE ANCHOR APPROACH** across Birmingham and the wider West Midlands and encouraging a shift in policy and practice on procurement, workforce and land, property and asset management.
- **CONSTRUCTION AND BUILDING** All four anchor institutions who undertook an analysis of their procurement spend as part of the project identified that a significant proportion of the money which leaks out of the Birmingham and West Midlands economy relates to construction projects. This presents an opportunity to address this collectively in the context of the imminent investment in the facilities for the Commonwealth Games in 2022. ■

## Improving connectivity

**The way we live and work means a strong reliance on a robust road and rail network and we are increasingly seeking ways to improve and enhance connectivity. Birmingham is already served by a range of major transport infrastructure, with further schemes in development. The most important is HS2, one of the largest infrastructure projects in Europe. Indeed, it is potentially the most significant transport infrastructure development since motorways were introduced in the UK.**

The economic impacts of the project are set to be meaningful, bringing high

levels of anticipated growth. Together with improvements in intra-regional transport systems, it will enable goods, services and people to move more efficiently into and around the region. More inclusive growth will be possible as improved connectivity enables workers in residential communities to travel to businesses needing workers.

City-REDI has advised HS2 growth company on the potential methodologies for impact assessment, and potential approaches for future evaluation, reviewing wider investments and identifying potential impacts across the wider geography, informing the case making for continued investment. As part of our partnership with KPMG we also supported the development of impact scenarios which informed basis of the initial impact assessments.

As part of a wider team that delivered the Urban Living Birmingham project we took

an innovative approach to place-based characterisation of the city working with over 39 partners. We developed a much clearer picture of what we don’t know about places because of gaps in data which is now feeding into the work of the Office for Data Analytics. ■



# 2 { IDEAS

“City-REDI has massively increased the quality of economic policy conversation within the West Midlands. Its energetic engagement with partners has meant the policy conversation in the West Midlands focuses on the application of the high-quality research that it conducts. That has led to a strong relationship outside the board so board members pursue the implementation of relevant research in policy settings, meaning that research is at the heart of the dialogue.”

PATRICK WHITE, Industrial Strategy Director, Metro Dynamics



**City-REDI sees the generation of new ideas as essential for creative, successful and resilient regions, acting as drivers for diversity, variety and innovation in firms and public sector organisations.**

Working together with the public and private sector, we are exploring new ways of innovating, ensuring that local excellence in discovery translates into industrial and commercial applications which, in turn, increase productivity through wider adoption. This means placing a strong focus on turning exciting ideas into strong commercial products and services, and innovations in public sector delivery.

We are developing new tools to understand impact pathways for ideas



and innovations and how they can improve productivity, or reduce the burden on the public sector through better wellbeing outcomes. Further work in this theme includes exploring ways in which government and the private sector

can increase investment in research and development, and select and promote the right projects to achieve the greatest impact for people, businesses, local areas, regions and countries. ■

## Pathways to commercialisation

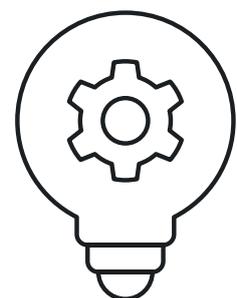
**Great ideas and innovative research ultimately work for the greater good when they are translated into real-life applications. Our commercialisation project ‘Bridging the University-Industry Gap’ sought to discover pathways to effectively direct research and development findings, either into a commercial function or filtering into public services to improve processes or reduce costs.**

It’s about discovering which ideas will have the most significant impact and establishing the best market opportunities for them. The gap between university and industry is age-old. Our engaged academic research sought to counter this, identifying and developing effective frameworks to support, improve and facilitate the commercialisation process in various sectors.

Initially focusing on specific technologies in development, the project then moved onto mapping commercialisation pathways for these, gain deeper insights into the potential future economic impacts following adoption and diffusion.

Ideas can change lives. They can also boost our economy. A great example of this is our innovation pathway for an early diagnostic tool in healthcare. Precise and early identification of specific illnesses,

supported for example by clever data analytics, can result in earlier remission and a vast improvement in quality of life. An early return to work also has both commercial and welfare benefits, raising productivity, or for those from vulnerable households, creating welfare savings. Research, discovery, mapping, implementation – we are taking ideas across the full spectrum from their initial seed to their growth and ultimate manifestation. ■



## Creativity and technology: boosting local economies

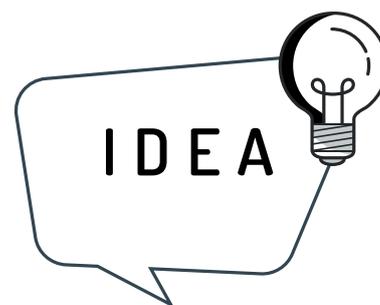
**New start-ups are the beating heart of every vibrant local economy. Attracting them, investing in them, supporting them... it's important they are encouraged in every way. Creative businesses have higher-than-average-incomes, generating ideas and simultaneously boosting employment. They also bring a buzz, a lively addition to any region's business portfolio.**

Birmingham has the youngest population in the EU and the most diverse outside

London. Which all points in the right direction for our creative offerings. Our Creative Economy project explored the labour and housing market effects of creative industry firms, workers and freelancers, seeking to discover more about the local spillovers associated with these industries and the creative economy.

Meanwhile, technology companies are also continuing to gather apace. Many of these operate in a cluster system, and we are conducting a research project to evaluate the causal impact of flagship UK technology cluster programme Tech City, based in East London. This is bringing us new insights about the role of incubators and how they can function to best advantage.

While cluster policies are popular with policymakers, they can present complexities and challenges. Our research seeks to understand impacts on jobs, revenue and productivity. ■



## Building capacity to generate and assess new ideas



**At City-REDI we are interested in developing a deeper understanding of how universities can create greater benefits for regional economies and support local policy makers to support interventions to create inclusive growth.**

In partnership with SQW we have comprehensively reviewed novel qualitative evaluation methodologies to assess the impact for knowledge exchange activities undertaken by universities to support economic growth and public policy. The work commissioned by Research England looks to understand how universities impact on commercialisation and public sector development. This will help them evidence value for money from its programme of activities and shape future priorities.

We have a drive for understanding knowledge exchange and benchmarking places within an international good practice context, understanding how places can shape the development, sharing and growth of idea creation to drive productivity. We mapped international examples of knowledge exchange activities within cities, identifying potential learning and metrics for benchmarking success.

Our findings show the importance of national policy context for local innovation systems, and the need for strong leadership to drive through activities which support sharing and adoption of good ideas at a local level. ■

# 3 { PEOPLE



“What City-REDI has given the region is a robust, impartial and evidence-based resource, which has allowed the region to motor forward and inform policy-making at a local and regional level. This is now comparable with analytical infrastructure in peer city regions and mayoral combined authorities, and therefore can be called on at critical moments in the West Midlands devolution story.”

JONATHAN TEW, Assistant Chief Executive, Birmingham City Council



**At City-REDI we are focused on creating successful places through people. This means understanding how people drive economic growth, by applying their skills, knowledge and expertise in firms, public and third sector organisations to add value. It is also about how people benefit from growth, and why these benefits are persistently unevenly and unequally distributed within and between regions.**

Our research looks at how we can create the conditions for inclusive growth at a

local level. This includes understanding wider social aspects and impacts of growth, and the underlying capabilities of people which underpin the growth potential of places.

People compete for jobs, firms compete for talented people and places compete for both. In an increasingly knowledge-based global economy regions need to attract skilled people and innovative firms. In our work City-REDI is examining the national skills deficit and regional and local mismatches between the demand for and supply of different kinds of labour.

The efficient operation of local labour markets underpins both the productivity of firms and the well-being of people in regions. We seek to understand how we narrow disparities between communities

in education and skills and remove barriers faced by workers from under-represented groups in realising their potential.

City-REDI is looking to explore how everyone can improve their skills throughout their lives, increasing their earning power, contributing to productivity improvements and adding more value to the places they work and the communities in which they live. We are developing new methodologies to understand the potential of interventions to influence structural and emerging challenges faced by people and their communities now and in the future.

Cont page 16.



## PEOPLE, PAY AND PRODUCTIVITY

The ‘low pay problem’ has long been a critical social issue, and low wage sectors contribute to the productivity gap between the UK and comparable countries. Exploring and understanding the correlation between productivity and pay – in particular for low earners – is key if we are to effectively address the low pay problem. However, evidence is currently fairly limited in this area.

Supported by the Joseph Rowntree Foundation, City-REDI undertook a research project looking at the role of productivity in employers’ wage setting decisions in low-paid sectors. We asked how employers understand, think about and measure productivity, and how productivity could be improved to justify wage increases.

As well as drawing on an evidence review of the academic and grey literature, our researchers got to the heart of the issue by going directly to those who could inform them: employers. These were selected from three low wage sectors – hospitality, manufacturing and retail – in Greater Birmingham and the West Midlands. Our findings and development of policy implications were then tested at an expert workshop.

Interestingly, our findings showed that firms only had a partial understanding of productivity and often found it difficult

to effectively measure. Many also lacked the capacity and capability to clearly analyse productivity performance data. In terms of how wages were set, it seems that this was mainly dictated by staff availability, retaining labour and local pay norms. Indeed, few firms were able to describe the link, if any, between productivity and wages.

For many, the National Living Wage (NLW) was the deciding factor in wage setting, with any increases to the NLW serving as a de facto pay review. In these cases, firms would seek to increase productivity to compensate for these prescribed wage rises. This often then manifested in firms attempting to get more from their workforce, simplistically by asking them to work harder. While investment in skills development is likely to lead to more long-term productivity increases, it seems that some of those with a low wage, low skills business model are reluctant to choose this as a route to improve productivity.

But crucially, what does this mean for the people of our region? There appears to be a relationship between productivity and pay. Productivity and growth is key for economic prosperity and living standards. But employers focus more predominantly on areas such as profitability, in particular when pure business survival is their pressing aim.

Interestingly – and reassuringly, perhaps – our research indicated that many regional employers do have a desire to ‘do things better’. But there is limited

evidence as to what practices to raise productivity ‘work well’ across the board rather than in isolation.

It’s clear that our organisations need more support from key business organisations for practical advice on shaping effective productivity metrics. Government, too, must play its part. For example, by investing in initiatives to enhance management practices, and considering and consulting on new models for co-investment in skills linked to raising productivity. We are exploring these issues in on-going research.

Our research findings showed that raising productivity does not always increase the wages of low-paid workers. Considerations for helping them to benefit more include better representation on workers’ boards, ‘good employer’ kitemarks, and an improved narrative on productivity linking to fair pay and reward. While the NLW has in some cases stimulated firms to focus more on productivity – and offered a welcome increase to those on low pay – it’s clear that there is much room for improvement for supporting both workers and organisations in these low wage sectors. ■

“Productivity and growth is key for economic prosperity and living standards.”

## Migrants: understanding needs and developing strategy

**Migration into the Midlands has long been an important aspect in shaping the landscape of the region. Bringing with them a range of skills and expertise, people from across the world have chosen to make the Midlands their home and place of work.**

Indeed, Coventry has welcomed people from Syria, Iran, Africa and Afghanistan, as well as several European countries. It has the largest Syrian resettlement programme in the region, and a large asylum seeker population, with a migrant population of over 350,000. While many of these settle well and thrive, we know there is more we can do to support the more vulnerable groups – asylum seekers and refugees. Our Migrant Needs Assessment sought to develop a greater understanding of the needs of migrants in the city.

The research included a multi-faceted programme of work, with in-depth analysis and mapping using official published data and intelligence as well as information collected by stakeholders. This was supported by a stakeholder workshop, survey and interviews, a series of focus groups and one-to-one interviews with key migrant groups.

Overall, we looked at specific needs, good practice and provision gaps in Coventry, making a series of recommendations in terms of health, education, housing, employment and skills. These recommendations aim to shape service provision and identify areas for further partnership working.

Further research looked at the region more broadly, in terms of building a cohesive migration strategy for the West Midlands.

To do this, we assessed key data around current and potential needs surrounding migration, with the aim of identifying key gaps in provision and understanding emerging trends. In turn, this would enable us to support the development of some regional interventions, allow better local authority planning and provision and ultimately drive a more coordinated regional approach in the future delivery of services.



**Our work involved the development of three key building blocks of data and intelligence:**

- A review of data on trends and patterns in migration
- Commentary on the issues and needs of key migrant groups
- Consultation with stakeholders and service providers to review current service provision and local and regional support structures and processes

This has resulted in a robust assessment of migration and related provision and needs for the region, helping to inform and shape future provision. We have identified pressure and saturation points, enabling stakeholders to strategically plan support services and infrastructure accordingly.

A regional planning toolkit now provides information and guidance for planners, funders and practitioners.

### **This includes:**

- Heat mapping
- Fact sheets highlighting characteristics of each priority migrant client group
- Current numbers and growth trends, key issues, barriers and support needs
- A report setting out key conclusions and recommendations including practical steps to improve current support service. ■

# 4 { BUSINESS

“City-REDI has managed to successfully achieve bringing together partners across the region to work collaboratively. The institute has used their research and intelligence to effectively support the policy delivery framework for the combined authority and other key regional stakeholders. This strength has enabled the combined authority to embed academic and research excellence in the delivery of policies that foster inclusive growth, right across the West Midlands.”

DEBORAH CADMAN, Chief Executive West Midlands Combined Authority

”

**Businesses create wealth and add value to regions. Through their own spending power and that of their employees, they create multiplier effects which spread through to other businesses and underpin regional economies. But firms have different levels of impact on regions, according to the location of their value chains and supply networks. One of City-REDI’s main objectives is to help policymakers understand this variation so regional growth policies can focus on the right businesses.**

**With the right interventions, we can increase the regional impact of businesses to enhance economic performance and inclusivity.**

The UK faces a productivity challenge. For regions outside of London and the South East, this challenge is greater and the underlying causes are more embedded. City-REDI is carrying out research at the firm level, across business sectors and supply chains to understand the regional dimensions of the productivity puzzle. Investment in skills and research and development, along with the development of innovative capabilities, new products, services and processes, are all key factors which drive productivity.

More productive firms enhance regional competitiveness and attract more skilled employees on higher incomes, creating stronger multiplier effects. We are studying how policies can promote this virtual cycle, which benefits businesses, people and places.

City-REDI also examines entrepreneurship, start-ups, spin-outs and scale-ups as part of the regional innovation system. Strong clusters of R&D-intensive firms, linked to research-active universities, can create high-value jobs and attract new firms to regions. Some new technologies also have an enabling effect, improving productivity across a wider range of businesses and supporting broader regional competitive advantages. ■



## Tackling the productivity challenge

**As part of the ESRC-funded Productivity and Prosperity project, City-REDI has conducted the largest survey on the regional causes of firm-level innovation and productivity performance. It shows how the shortage of skills and other local factors constrain innovation and improved productivity in firms, but with very different impacts on different kinds of firms. This research is critical for us to understand what local conditions need to be improved to enhance the performance of local firms, this in turn can provide higher wages and positive multiplier effects for the region.**

With our partners, Warwick Business School and Warwick Manufacturing Group, the Productivity and Prosperity project is providing practical insights for businesses and policymakers. The focus on key industry sectors, retail and hospitality, advanced manufacturing and business, professional and financial services (BPFS) is designed to contrast high-skills and high-wage businesses with low-skills, low-wage sectors in the West Midlands.

Although a great deal of policies focus on manufacturing in the region, the BPFS sector is larger and hugely important for future employment growth. BPFS firms are also critical to the resilience of our regional economy, supporting growth in other sectors and playing a key role in raising productivity and inclusivity. Employing over 400,000 people and contributing over £24 billion of Gross Value Added (GVA) to the West Midlands economy via high-quality, highly skilled jobs, the sector is clearly a key player in our economy. However, regional GVA per employee is £16,072 below the UK average.

As part of its aim to develop a Local Industrial Strategy, the West Midlands Combined Authority for the Skills and Productivity Commission asked us to

conduct a 'deep dive' into the sector to understand how it operates and what challenges it faces, recommending solutions to address these issues. The research, 'An investigation into the foundations of productivity for Business, Professional and Financial Services in the West Midlands Combined Authority Area' was in partnership with BPS Birmingham, the regional sector body for BPFS. We also worked with sector champion Deloitte and The Black Country Consortium.

**To ensure an overarching approach and optimal data, we devised a mixed methodology for the research. This included:**

- Mapping questions to national research for benchmarking
- Defining the sector to focus on BPFS businesses with the most impact on GVA
- Interviewing senior leaders from larger businesses
- Using UK Industrial Strategy criteria: ideas, people, infrastructure, business environment and places, for maximum transferability
- Reviewing 54 interventions, initiatives and activities in the BPFS sector in the WMCA area to assess existing measures to address productivity-related challenges.

Interestingly, our findings made the case for greater levels of intervention. This normally self-sufficient sector was approaching a tipping point, and continued complacency could lead to an imported workforce and non-inclusive growth.

**Findings included:**

- Increased diversification of the workforce is necessary to fill future requirements, including innovation in developing products and services
- The occupational structure of BPFS sector in the West Midlands is biased towards professional and technical occupations, rather than 'back office' functions
- As the sector is highly reliant on wider business demand for services, this requires government and sector

collaboration to boost demand for services which raise productivity across the economy

- Locally sensitive differentiated policy interventions are required and a better engagement with the sector from government on wider business support delivery
- Birmingham is seen by the profession itself, as the only place outside London that a full service is on offer from firms. Where any activity and service can be found, from its large, highly specialised and expert workforce.

The research has supported changes in how policymakers target the West Midlands, situating the region as a destination of choice for firms and workers, and showing how the BPFS sector is a 'macro asset' providing a full range of good quality high-value job opportunities. In fact, the West Midlands Investment Prospectus now actively highlights the BPFS cluster. BPFS is now also identified in the 2019 Local Industrial Strategy as one of four regional major market opportunities, with a regional delivery plan now being put in place to ensure growth happens, based on our research. ■

EMPLOYING OVER

400,000



PEOPLE

CONTRIBUTING  
OVER

£24b GVA

££



## The Economic Impacts of Brexit on the UK, its Regions, its Cities and its Sectors

Funded by the ESRC as part of a larger programme of research on the UK in a Changing Europe, this project has been a game-changer in the policy world. Our research on trade-dependencies across Europe revealed the true impacts of various Brexit scenarios on UK regions. We found that the UK cities and regions which voted for Brexit are also the most economically dependent on EU markets for their prosperity

**and viability. They are therefore the most at risk of suffering economic decline and increased unemployment in the face of a 'no-deal' or 'hard' Brexit.**

City-REDI led an international consortium including universities in Groningen, Rotterdam, Sheffield and Utrecht alongside other partners including BEIS, IPPR, Policy Scotland and the WMCA. The findings were presented at the European Commission and the UK Parliament, as well as at numerous regional meetings and in the press. Regional and sectoral differences need to be very carefully taken into

account in the context of any radical policy change which will affect trade and investment flows. Getting this wrong will mean a worsening of economic and social inequalities across the UK.

At the local level these and other City-REDI research findings helped shape discussions of the Mayor's Brexit Advisory Group and other regional bodies set up to help mitigate the local impacts of Brexit in the West Midlands. ■

# 5 { PLACES

“In my experience City-REDI’s leadership of the Midlands Engine Economic Observatory has made a transformational impact. The Midlands Engine has struggled with a lack of evidence available at a pan-Midlands Engine scale and the data that the team lead by City-REDI is starting to deliver has made a real difference to the ability of the engine to think strategically about its priorities for investment. I now hear the observatory referenced regularly in the discussions of the Midlands Engine by LEPs and other stakeholders from across the region.”

HELEN TURNER, Director, Midlands Innovation



**City-REDI is focussed on places and how key policies come together in a locality. Furthering our knowledge and understanding of how regions can capitalise on their heritage, assets and capabilities to improve their potential for growth. Looking at how cities, towns and rural areas have competitive (dis)advantages that will be essential to shaping their economic and social future. We focus on modelling places, their attributes and relationships to one another**

**to enable us to understand potential futures, impacts and risks to place-based growth, productivity and inclusivity.**

We are also developing our understanding of how resilient regions are in the face of shocks – technological, political, economic or social. Our study of the regional impacts and implications of Brexit has shown how trade dependencies and other kinds of linkages to other parts of the world can constrain or benefit regional economies in the face of radical external change.

Key to our research is understanding how places can realise their full potential and how different growth pathways represent different trade offs in terms

of positive or negative outcomes for different stakeholders. Policy interventions can affect the growth and performance of businesses and the work opportunities, income levels and life chances of people and communities. Policymakers face the challenge of supporting both, with limited resources. City-REDI works in partnership with local leaders and stakeholders, developing tools and methodologies which strengthen decision making in Local Enterprise Partnerships, Mayoral Combined Authorities and pan-regional bodies like the Midlands Engine to enable better growth for all. ■

“In my experience City-REDI’s leadership of the Midlands Engine Economic Observatory has made a transformational impact.”

HELEN TURNER, Director, Midlands Innovation

## The Brexit effect on business

**Brexit uncertainty has loomed over the UK since the 2016 referendum. But how does this effect EU citizens running businesses in the UK? Our research project undertook to discover what the future might hold for migrant businesses, and how they have been coping with the ambiguity and insecurity surrounding Brexit.**

Interviewing 15 Polish family businesses and seven families from Latvia and Lithuania operating businesses in Birmingham, our team set out to find the impact Brexit could have on their businesses, their sense of belonging and cohesiveness of the communities in which they operate. We also examined

how the potential loss of EU-run business could lead to direct and indirect job losses, and a reduction in tax, National Insurance and Business Rate contributions.

With a strong rhetoric surrounding Brexit coming from politicians and the media, we sought the responses to this from the business owners, also asking them about their lived experiences of life and work in Birmingham for themselves and their children, including any feelings of attachment and how they have been welcomed. We explored this in relation to identification with the UK, future aspirations and investment decisions, and how these have evolved during the drawn-out Brexit process.

In other research projects we have examined the role of migrant workers in the construction sector. Non-UK

born workers have long played an important role in the construction sector nationally, giving employers flexibility to respond to their labour needs at all skills levels. Working with IFF Research and the University of Warwick our research the extent to which employers will face greater challenges in recruiting migrant workers as the UK's immigration regime changes. Inter-regional competition for skilled workers is likely to increase as shortages in the London construction sector push up wages. The fundamental role of housing and transport infrastructure in driving broader economic growth in the West Midlands and other UK regions means that this will be a critical area for policy intervention in the coming years. ■

## Playing to our regional strengths

**By placing a firm focus on sectors and technology which are particularly strong in a region we can offer these areas a real boost in terms of investment, strategy and employment.**



Our research on 'Realities, Challenges and Strengths of the External Funding Environment at LEP level' in collaboration with the Smart Specialisation Hub sought to better understand our local environment and the potential for innovation and specialisation and seeking

to understand challenges and highlight existing strengths. Using a combination of web searches, quantitative and qualitative analysis and case studies of major projects, we investigated LEPs and their partners' experiences of securing funding. The first report of its kind, it also examined whether available funding matches local-level needs and requirements.

The regional development environment is evolving rapidly, meaning this type of research is much needed and timely. Offering up-to-date analysis to LEPs, it supports them in developing effectively targeted funding strategies.

### We found that:

- Comparing funding allocations at LEP level is complicated by uneven LEP geographies
- The value of funding differs considerably by LEP and funding programme
- Small rural LEPs struggle the most to secure funding
- ESIF funding is an important source for LEPs with lower-per-head GDP rates
- The presence of one or more research-intensive university correlates with

areas which have received the highest awards for Horizon2020 and research Council/Innovate UK funding

- LEPs operate differently in relation to strategic direction in the external funding environment. The report identified four different types of LEPs: (1) direct action; (2) collaborative, partnership; (3) convening, supporting; and (4) internal challenge LEPs
- Considerable extra effort needs to be put into defining subsidiarity. It is very important that LEPs and Combined Authorities are given sufficient time to establish their structures and core responsibilities to maximise their impact and long-term outcomes.

There are clearly a number of new pressures, but also new opportunities, for LEPs, as they play an increasingly important role in developing Local Industrial Strategies.

**Our findings help to shape the design and implementation of future funding support for LEPs. ■**

## Empowering communities from within

**Tackling poverty and raising community engagement in deprived areas is a key factor for every region. We were part of an extensive collaboration, led by Birmingham City Council. The USE-IT (Unlocking Social and Economic Innovation Together) project with partners in Geography which sought to conduct community-based research, embedding it by connecting residents to urban development opportunities. We developed an analysis of skills needs, designing research tools and training community researchers we have helped create a community led approach which is now seen as an exemplar project.**

The three-year EU-funded project is focused on an area of persistent poverty and deprivation in inner city Birmingham. Working to identify and recognise assets within the local community, the project harnesses three mechanisms to tackling urban poverty: Community Research, Skills Matching and Social Enterprise.

Via the Community Research Strand, local residents are encouraged to work with project partner institutions, becoming trained into doing their own community research work – boosting skills in the local area. The scheme was widely supported by residents, and created a new pool of experts within the city-region. These researchers worked with traditionally hard-to-reach groups to gather data, offering a previously unheard voice to local communities and empowering the researchers with a valued contribution.

Moving beyond mainstream regeneration from above, this type of mechanism works with communities from within,

offering a ripple-effect in terms of skills, feeling valued and no longer ignored. Community researchers can train new recruits, keeping the concept alive and embedding it further.

The USE-IT programme has created a powerful platform for our local communities, offering up new, innovative ways of bringing opportunity and inclusivity where it is needed most, with a pervasively positive effect on the wider regional economy. ■



“Tackling poverty and raising community engagement in deprived areas is a key factor for every region.”

# { ADVISORY BOARD MEMBERS



**ANDY ARGYLE**  
HEAD OF DEVOLVED  
GOVERNMENT  
AND INFRASTRUCTURE FOR  
THE MIDLANDS, KPMG



**IAN BARNES**  
DIGITAL TAX PRACTICE FOR UK,  
DELOITTE



**RICHARD BLACK**  
PRO-VICE-CHANCELLOR AND  
HEAD OF THE COLLEGE OF  
SOCIAL SCIENCES, UNIVERSITY  
OF BIRMINGHAM



**TONY BRAY**  
AREA DIRECTOR, SOUTH WEST  
ENGLAND AND WEST  
MIDLANDS, BEIS



**ANDREW CARTER**  
CHIEF EXECUTIVE, CENTRE  
FOR CITIES



**PAUL FAULKNER**  
CHIEF EXECUTIVE, GREATER  
BIRMINGHAM CHAMBERS OF  
COMMERCE



**MARIA MACHANCOSES**  
DIRECTOR, MIDLANDS  
CONNECT



**SIMON MARKS**  
CITY EXECUTIVE –  
BIRMINGHAM, ARCADIS



**SARAH MIDDLETON**  
CHIEF EXECUTIVE, BLACK  
COUNTY CONSORTIUM



**TIM PILE**  
CHAIR, GREATER BIRMINGHAM  
AND SOLIHULL LOCAL  
ENTERPRISE PARTNERSHIP



**NIGEL ROBINSON**  
PARTNER, PA CONSULTING



**JONATHAN TEW**  
ASSISTANT CHIEF  
EXECUTIVE, BIRMINGHAM  
CITY COUNCIL



**COUNCILLOR LISA  
TRICKETT**  
BIRMINGHAM CITY COUNCIL



**DR HELEN TURNER**  
DIRECTOR, MIDLANDS  
INNOVATION



**PATRICK WHITE**  
DIRECTOR, METRO-DYNAMICS

# { CITY-REDI STAFF



**PROFESSOR SIMON COLLINSON**  
DEPUTY PRO-VICE-CHANCELLOR FOR REGIONAL ECONOMIC  
ENGAGEMENT AND DIRECTOR OF CITY-REDI



**ANNE GREEN**  
PROFESSOR OF REGIONAL ECONOMIC DEVELOPMENT



**RAQUEL ORTEGA-ARGILÉS**  
PROFESSOR OF REGIONAL ECONOMIC DEVELOPMENT



**REBECCA RILEY**  
BUSINESS DEVELOPMENT DIRECTOR



**DR CHLOE BILLING**  
RESEARCH FELLOW



**GEORGE BRAMLEY**  
SENIOR ANALYST



**BEN BRITTAIN**  
POLICY AND DATA ANALYST



**DR ANDRE CARRASCAL INCERA**  
RESEARCH FELLOW



**DR MAGDA CEPEDA ZORRILLA**  
RESEARCH FELLOW



**DR DIANA GUTIÉRREZ POSADA**  
RESEARCH FELLOW



**DR SARA HASSAN**  
RESEARCH FELLOW



**DR CHARLOTTE HOOLE**  
RESEARCH FELLOW



**SARAH JEFFERY**  
CENTRE MANAGER



**DR TASOS KITSOS**  
RESEARCH FELLOW



**STUART MITCHELL**  
CENTRE MANAGER



**DR MASSIMILIANO NUCCIO**  
RESEARCH FELLOW



**DR FENGJIE PAN**  
PRODUCTIVITY RESEARCH FELLOW



**DR JULIANE SCHWARZ**  
RESEARCH FELLOW



**DR DENIZ SEVINC**  
RESEARCH FELLOW



**MATT PATTERSON**  
ADMINISTRATIVE ASSISTANT



**JOSH SWAN**  
POLICY AND DATA ANALYST



**DR ABIGAIL TAYLOR**  
POLICY AND DATA ANALYST

CITY  
**REDI**

WM  
**REDI**

[birmingham.ac.uk/research/city-redi](http://birmingham.ac.uk/research/city-redi)

[birmingham.ac.uk/wm-redi](http://birmingham.ac.uk/wm-redi)



UNIVERSITY OF  
BIRMINGHAM

Edgbaston  
Birmingham  
B15 2TT  
United Kingdom

Main Switchboard:  
Tel: +44 (0)121 414 3344

Sarah Jeffery, Centre Manager  
Tel: +44 (0)121 414 9673  
Email: [s.jeffery@bham.ac.uk](mailto:s.jeffery@bham.ac.uk)

Stuart Mitchell, Centre Manager  
Tel: +44 (0)121 415 8785  
Email: [s.mitchell@bham.ac.uk](mailto:s.mitchell@bham.ac.uk)

 @WM\_REDI

 @CityREDI