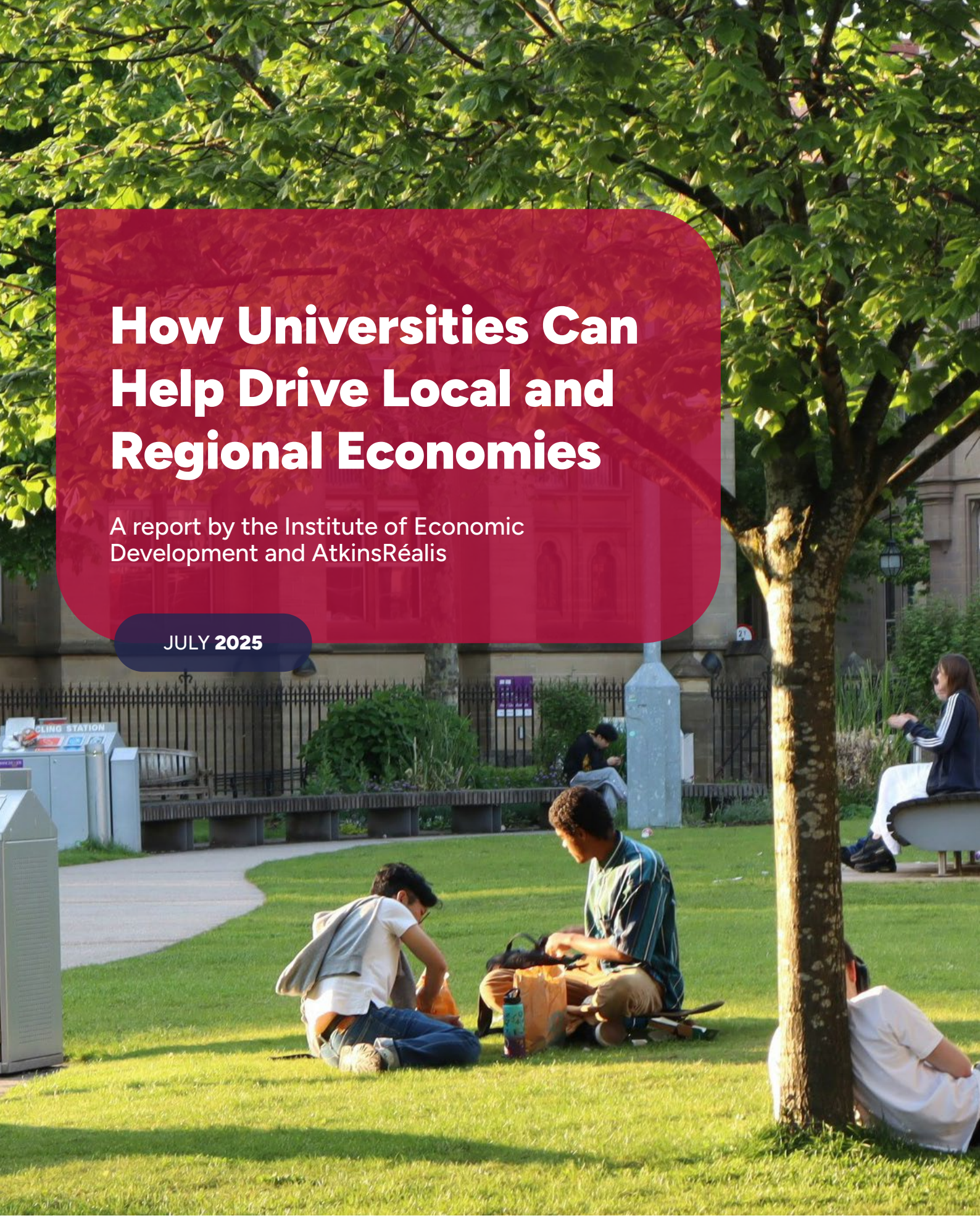

How Universities Can Help Drive Local and Regional Economies

A report by the Institute of Economic Development and AtkinsRéalis

JULY **2025**

INSTITUTE OF ECONOMIC DEVELOPMENT
INSPIRING PEOPLE - IMPROVING PLACES

AtkinsRéalis

About this Report

This report puts universities at the centre of the debate on how to generate growth in local and regional economies with national impact. How best can the academic world work with business, local government and policy makers; how can it make the most valuable contribution and what are the main issues and challenges? Given the current economic climate, the government's focus on growth and ongoing challenges facing many UK universities' finances this report should be timely and valuable.

The report is aimed at an audience of economic development practitioners seeking to drive more productive local and regional economies. This is particularly recognised by the varied situations, approaches and ambitions conveyed in the report's case studies and in the list of considerations for practitioners to contemplate that closes the report – considerations rather than recommendations given the wide variety of local and regional circumstances and histories across the UK. We are providing this research and analysis because we recognise both the substantial challenges and benefits of the key foci of this report: developing successful innovation districts and long-term multi-institutional economic partnerships.

Economic growth and productivity are not isolated fields and some links with urbanism, economic inclusion and environmental sustainability are also included. We have also included analysis of the national context and a set of national recommendations given the roles that government can play to support these agendas and their local and regional actors.

The **Institute of Economic Development (IED)** is the UK's leading independent professional body representing economic development and regeneration professionals working for local and regional communities. We are a not-for-profit body committed to demonstrating the value of economic development work, the pursuit of best practice in economic development and the attainment of the highest standards of professional conduct and competence.

AtkinsRéalis is a global engineering and professional services company with over 37,000 employees worldwide including over 11,000 in the UK. We are keen to continue to play a part in growing the UK economy by enabling the right infrastructure to get built in the UK, supported by private sector financing and delivered using the latest digital technology. Specifically we have a proven track record in infrastructure, regeneration, transport, energy, digital and housing.

Foreword

The need for growth and increased productivity across this country is urgent and, as outlined in our Grow Local, Grow National manifesto, the focus on how we work together to achieve it locally and regionally will only increase.

While much has been done historically to encourage collaboration between the three pillars of government (local and national), business and academia, more is needed. The increased profile of this 'triple helix' way of working is therefore welcome and in this report we focus on how the challenges of aligning institutions can be overcome to secure successful long-term delivery.

The report centres on a series of case studies that explore from a university's perspective how 'triple helix' partnerships can drive forward innovation districts and wider place-based local or regional economic partnerships, with due focus on furthering economic inclusion.

Universities play critical roles in this work due to their research, technologies, knowledge and expertise. They are distributed across the UK and their size makes them key anchor institutions in many places. Better harnessing this capacity and capability must be a concern of economic development practitioners locally, regionally, and nationally.

As such, we have made a series of recommendations to government on how to deliver the growth and innovation agendas that took further shape in the recent Spending Review and Industrial Strategy White Paper. The ways in which economic partnerships and their constituent institutions are supported, networked, incentivised and funded can help keep the UK at technological frontiers, drive productivity, regionally rebalance the economy and drive sustainable and inclusive local growth. It can also go some way towards assisting the many universities and local councils that are facing severe ongoing financial challenges, and the businesses that have experienced

for many years now, low growth in the UK economy.

We have also produced a set of considerations for economic development practitioners working in local and regional economic partnerships or driving forward innovation districts. We hope they are practical, useful and applicable to the variety of circumstances across the country.

The Institute of Economic Development, with members drawn from local and national government, universities, further education and business is well placed to convene discussions on economic partnerships and we are grateful to our partner in this report, AtkinsRéalis, for its chapter thoughtfully exploring the academia-business relationship.

We hope that this report is of value in guiding economic development practitioners towards solutions that harness the latent capacity of our institutions to drive the growth and productivity increases that this country and its communities require.

Tom Stannard
Chair
IED

Cardiff University
(www.ncuk.ac.uk)

The UK's productivity and growth challenges have been well documented. The real question is how we turn ambition into action - and partnerships into outcomes that deliver. As a major engineering services firm AtkinsRéalis helps to plan, fund and deliver the infrastructure, energy systems, networks and places that underpin local and regional economies. But to deliver lasting value we must go beyond project delivery. We must play an active role in building the ecosystems that enable innovation and economic resilience—especially through deeper collaboration with academia.

This report rightly places universities at the centre of this approach. They are hubs of research, talent and connectivity. But for their potential to be fully realised we must address the disconnect between invention and adoption. The UK ranks near the top globally for quality of research but much lower for knowledge absorption. Bridging that gap is a challenge that businesses, universities and government must take on together.

Over the past three years AtkinsRéalis has worked closely with Durham University and the N8 Research Partnership to explore how strategic, place-based collaboration can unlock growth in the north and beyond. These relationships have shaped our thinking and practice, particularly in applying the triple and quadruple helix frameworks to the delivery of place-based growth. Our contribution to this report reflects what we have learned about the structural barriers that still exist, the enabling conditions that make collaboration work and the importance of designing relationships, not just initiating them.

As an organisation, our purpose is clear, to engineer a better future for our planet and its people. That ambition demands long-term thinking, shared responsibility and innovation that is rooted in place. The academic–business relationship is central to this. We are therefore pleased to support this report and the broader efforts of the IED. We believe business must step forward as a proactive partner to share knowledge and experience that feed into policy and plans as well as projects. With the right structures, relationships, and shared purpose, the business–academia relationship can be a powerful driver of local and national prosperity.

We do not see it as our role to make political or policy recommendations to government, that is the proper role of bodies that influence and inform policy such as the IED. Therefore our recommendations are limited to those made in chapter 2 on the academia-business relationship and repeated in chapter 5 which covers recommendations. All other recommendations or comments in the report on policy matters fall under the IED's banner.

John Rayson
AtkinsRéalis

Research Scope and Methodology

The centrepiece of the research in this report is the in-depth case study work that has yielded highly valuable and insightful accounts from university perspectives of partnership and collaborative work in White City (West London), Barcelona, Greater Manchester, Edinburgh and South East Scotland, Lincolnshire, Teesside, and Yorkshire. We are grateful to everyone who supported this research, which was largely undertaken in the second half of 2024 and completed in Spring 2025. The report was finalised immediately after the 2025 Spending Review and Industrial Strategy White Paper given its focus on delivery. Senior practitioners at the IED with their decades of experience have contributed greatly to the report. In addition, we have drawn on the deep experience of our colleagues at AtkinsRéalis and key insights from academic colleagues including at Durham, Glasgow, Newcastle and Teesside universities.

Recommendations

Chapter 5 contains a section on 'National Recommendations' and one on 'Considerations Around Local Partnerships and Delivery' (comprising a series of considerations for practitioners in the field) both of which originate from IED. It also contains recommendations on the academia-business relationship which are authored by AtkinsRéalis. The company does not see its role as making political or policy recommendations to government, that is the role of thought leaders such as the IED.

Businesses see great value in local partnerships between the public sector, the private sector and universities, to drive technology adoption tailored to the needs of different sectors and geographies.

Technology Adoption Review,
UK Government, June 2025
Technology Adoption Review 2025

The University of Manchester

Durham University
(www.durham.ac.uk)

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Introduction

This report is aimed primarily at economic development practitioners and focuses on how universities can work with partners – notably businesses and local authorities – to increase their role and impact in regional and local economies while noting the wider national and international roles that universities can play. It does so via a focus on two types of partnerships – those founded in the hyper-locality of innovation districts and those of wider multi-institutional local and regional economic partnerships. We are providing this research and analysis because we recognise both the substantial challenges and benefits of both approaches. It is critical to growth agendas and the success of economic ecosystems that synergetic relationships form between anchor institutions, yet we recognise that the ambitions, financial frameworks and cultures of these institutions and their staff may not always align, including across sectoral boundaries, and that relevant revenue funding is often insufficiently provided. It is critical that government better incentivises universities and local government financially to focus on economic development, including via partnerships with sufficient capacity funding that support participants' career paths.

We believe this report to be timely given that the recent Comprehensive Spending Review announced that the most significant increase in government expenditure over the period to 2029 is for science, innovation and technology (up 7.9%)[1] while the Industrial Strategy White Paper noted the 'critical role' universities will play in its delivery. Innovation has thus become more central and vital to driving prosperity, including at local and regional scales, and the best possible delivery mechanisms are needed – well coordinated, resourced and incentivised with long-term horizons. We hope that this report unpacks best practice, aiding the successful delivery of these growth policies and agendas.

Universities Driving Growth

Innovation-driven growth is a key focus of this report given the need to increase UK productivity, which has fallen behind that of competitor countries since the financial crash of 2008, in part because of persisting substantial geographical variations across the country in output per capita and underlying investment. Innovation-led manufacturing is also vital to support the reshoring of UK supply chains that has emerged as a key priority for the government given current global geopolitical instability, and to cost-effectively delivering the government's 10-year infrastructure strategy with due environmental consideration. Universities play key roles in driving innovation that underpins business creation and growth.

Recent research on American data from 1950 to 2020 shows that 'public R&D spillovers are three times as impactful as private R&D for firm productivity and their impacts persist at the sector level[2].'

University-business relationships can play-out nationally and internationally, helping to link the supply and demand for technology and knowledge transfers. These relationships can boost UK industry and link the UK into advances on global technological frontiers often involving complex international collaborations. Universities also have important roles in local and regional economic partnerships – the focus of this report. These can involve university-to-business relationships as described in Chapter 2 but also wider roles that universities play in innovation districts (Chapter 3), and wider economic partnerships (Chapter 4): understanding economies, strategy and policy development; adding capacity and resilience; and employing their reputation and reach. We argue that the economic potential of universities is not fully utilised in the UK and consider that impactful economic partnerships are critical to every region maximising its potential, thereby helping to grow the national economy.

National Government Approach

The government's national mission to kickstart economic growth offers multiple opportunities for universities to help boost growth and to increase the resource and focus of local government and universities on doing so. Universities and local government will play vital roles in aligning the industrial strategy and related national government activities such as investment and innovation programmes with the successful development of local and regional economic ecosystems. This includes delivering in partnership the local growth plans, typically led by mayoral strategic authorities, for which government guidance was published in June 2025[3].

Investment has been a continuing key focus of this government with announcements in the Autumn budget of further support for R&D and plans to drive Canadian or Australian style pension investment funds, which led to an announcement in May 2025 that all multi-employer Defined Contribution pension schemes and Local Government Pension Scheme pools manage at least £25 billion in assets by 2030, facilitating more investment in UK infrastructure, housing, and fast-growing businesses[4]. Aligning business investment with the sort of productivity growth that universities can engender will be important.

1 Spending Review: The Implications for Economic Development, and Economic Growth - Institute of Economic Development

2 Public R&D Spillovers and Productivity Growth, Arnaud Dyèvre, 2024

3 Guidance for Mayoral Strategic Authorities on developing Local Growth Plans - GOV.UK

4 Pension plan to double £25 billion+ megafunds, boost investment and improve returns for savers - GOV.UK

For instance, the industrial strategy announced that the British Business Bank will be able to make direct equity investments – these can potentially support spinout businesses from universities or other firms that universities are supporting. This will help attract further private sector investment into these firms and reduce the chance of them moving overseas to seek finance[5].

Innovation funding is particularly relevant to this report, and at the end of 2024, the English Devolution White Paper committed the government to support businesses and research by working with established mayoral strategic authorities to develop a future regional innovation funding programme and through UK Research and Innovation (UKRI) extending its regional partnerships to other mayoral strategic authorities.

Later, in May 2025 came the welcome news that the government was committing to setting new ten-year budgets for R&D funding, recognising that the average £1 invested in public R&D leverages double that in private investment and generates £7 in net benefits to the UK economy in the long run. This will give greater certainty to research programmes, helping to attract greater private investment and grow the UK economy[6]. The Industrial Strategy White Paper notes that UKRI will increase support for the government's eight priority sectors (see section 1.7 below) by pivoting its programmes and budgets towards research and innovation priorities in the industrial strategy and sector plans[7]. This followed the June 2025 Comprehensive Spending Review providing a positive settlement for innovation with science and technology research and innovation funding reaching £22.9bn per annum in 2029[8]. Vivienne Stern, Chief Executive of Universities UK responded by saying:

5 British Business Bank back in the spotlight with £10bn UK growth mandate | Business | The Guardian
6 Government to set new ten-year budgets for R&D funding - GOV.UK
7 Industrial Strategy - GOV.UK
8 Transformative £86 billion boost to science and tech to turbocharge economy, with regions backed to take cutting-edge research into own hands - GOV.UK

'The government has made a smart investment in one of the UK's greatest strengths. The UK has a real opportunity to sow the seeds of long term growth, benefiting all parts of the UK - with universities spread right across the country working with industry and public sector bodies to turn discoveries into economic success. They stand ready to double down with government, building stronger links with sectors of the economy where we have real room to grow.'

This funding included The Local Innovation Partnerships Fund, which UKRI describe as providing up to £500 million for those who know their community best to work in partnership with: local authorities, local businesses and local researchers and innovators to grow local economies, jobs and skills, improving lives across the UK. It is designed to attract a further £1 billion additional investment, including from the private sector, and £700 million of additional value to local economies[9].

The Local Innovation Partnerships Fund draws from the ongoing Innovation Accelerators in the Glasgow City Region, Greater Manchester and the West Midlands, which support fast-growing industry clusters. Commentary on the use and success of this funding in the Glasgow City Region and Greater Manchester is found in Chapter 4 below. It will sit alongside national programmes that support universities to work with businesses such as the Higher Education Innovation Fund (HEIF) - named in the industrial strategy as a key mode for universities de-risking early stage innovation, providing business development support and boosting entrepreneurship training, suggesting further funding in future - and Research England's Connecting Capability Fund that promotes collaborations between universities and private sector partners to achieve more effective research commercialisation.

9 New fund will focus research investment on local priorities – UKRI

White City Innovation District (WCID) home to a range of leading organisations in fields such as biotechnology, health and health technology, healthcare, technology and media

Financial Changes

This type of economic work involving universities comes at a time when the sector is under financial strain and new efficiencies and solutions are being sought. On 12th June 2025, The House of Commons Education Committee launched an inquiry into the financial viability of the higher education sector in England. The inquiry will explore insolvency protections for institutions, international student policy, and the impact of possible market exits. The committee is interested in how higher education institutions contribute to growth in their local economies and how regional provision can be sustained[10].

This comes in tandem with the government considering a process of wide-scale reform in the higher education sector and is due to set out its plan for reform this Summer. Its five priorities include 'making a stronger contribution to economic growth' with a closer alignment to skills needs and growth plans for education and research respectively, all in line with a new industrial strategy. (The other four priorities cover access and outcomes for disadvantaged students, greater civic and regional engagement, improving teaching standards and delivering sustained efficiency and reform).

Action is much needed as this plan comes at a time when many universities are facing severe financial challenges with a forecasted 43% of universities in deficit in 2024/25 compared to 24% in 2020/21[11], with this percentage forecast by the Office for Students to rise to 72% in 2025/26[12]. Departmental or even institutional mergers are being discussed in parts of the sector. While it cannot solve the funding gaps that many universities face, and other 'bold reforms' are also needed such as those proposed by the recent 'Towards a New Era of Collaboration' report initiated by Universities UK[13], innovation-driven growth can open-up new revenue streams and provide a strong case to government and the public of the value of the higher-education sector in currently very tight fiscal settlements.

10 Universities on the brink? Education Committee launches new inquiry - Committees - UK Parliament
11 Four in 10 universities face financial challenges - BBC News
12 More mergers between universities could be on the cards, sector chief says | The Independent
13 Bold reform needed to transform universities facing critical financial pressures

Financial challenges are not confined to universities and in February 2024 parliament reported that 'the government must act now if local authorities are to survive the severe crisis and financial distress that they face'[14] and by October 2024 the Local Government Association reported that 'one in four councils are likely to need emergency government support in the next two years[15].' Creating more and better jobs in local authority areas can grow business rates, attract further investment and reduce the costs of public-sector support to a council of residents who find new or better employment opportunities. This combined with the Spending Review's 3.1% average real-terms core spending power increase for local government[16] can help address the sector's funding gaps, though we expect severe challenges to remain for some councils given the scale of their financial deficits.

Delivering Success

There are many long-term factors at play in the UK's productivity challenges, regional imbalances, and university and local government finances and we do not claim that this report is a panacea to them. We do argue though that universities working closely with business and local government is a critical delivery mechanism that will assist. Careful consideration followed by robust action must be put in place to ensure that institutions and their staff are incentivised to align, and that resulting economic partnerships have the sufficient capacity, resource, agency and stability to thrive. Sufficient revenue funding is vital to establish and grow these partnerships and wider economic ecosystems that through networking, collaboration and coordination underpin the establishment and growth of businesses, including supporting supply-chains, financing, skills, access to markets, technology adoption and other productivity gains. Capital investments, whilst important, are insufficient by themselves for driving the productivity growth the UK and especially some of its nations and regions needs. Developing and reinforcing economic ecosystems with coordinated actions between different programmes and interventions should be centralised at the heart of local and regional growth activities, building upon the UK government's direction that local growth plans should be 'the guiding star' that provides strategic direction for other relevant plans and strategies and the wider work of mayoral strategic authorities, their constituent local authorities and local partners[17].

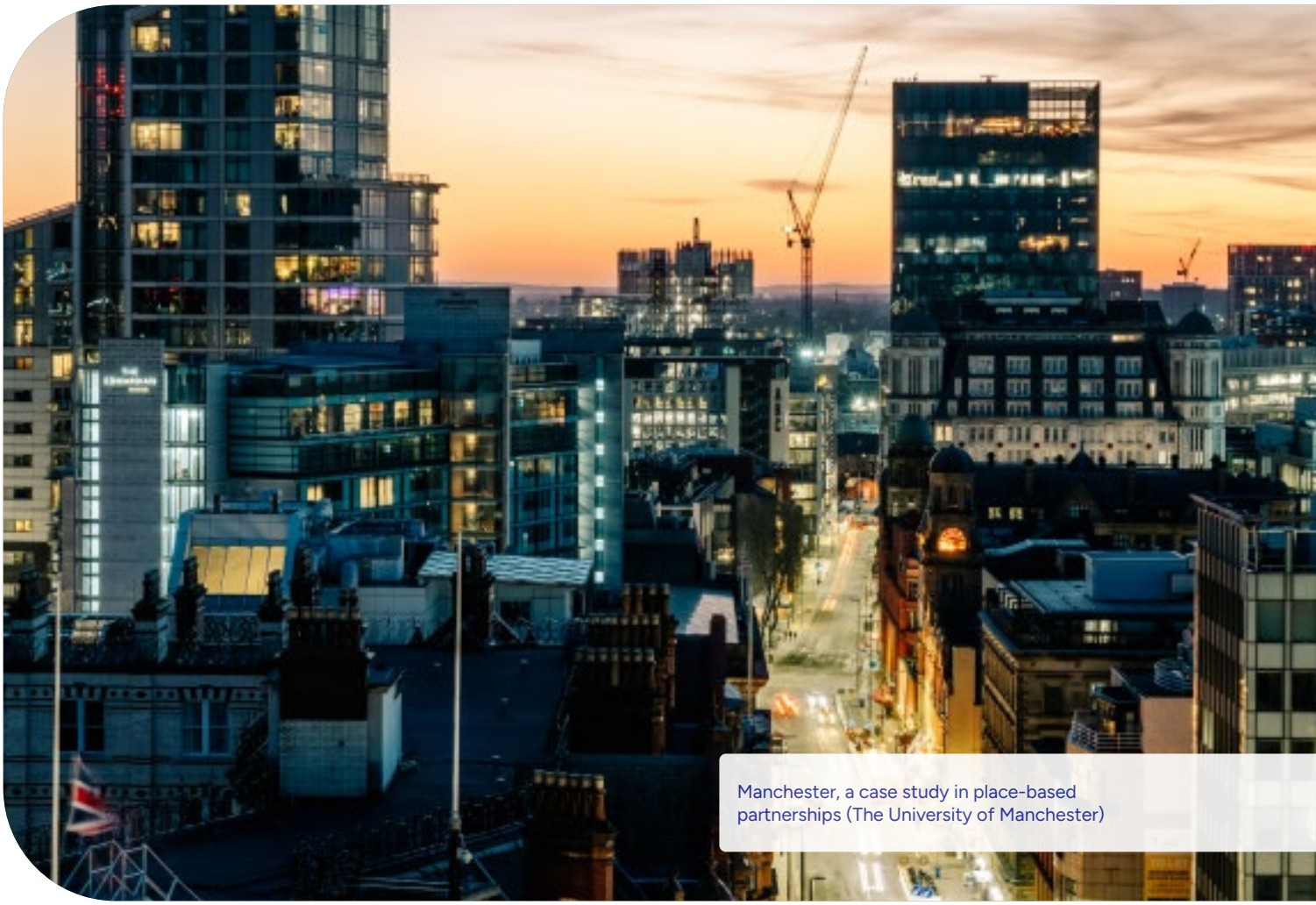
14 Financial distress in local authorities - Levelling Up, Housing and Communities Committee
15 1 in 4 councils likely to need emergency government support – LGA survey | Local Government Association
16 Spending Review 2025 (HTML) - GOV.UK
17 Guidance for Mayoral Strategic Authorities on developing Local Growth Plans - GOV.UK

How this is achieved is important and this report is therefore written largely for the benefit of economic development practitioners across a variety of different types of institutions, including universities and local government. Chapter 2 on the academic-business relationship is based on AtkinsRéalis' strategic work with universities over the past three years in helping to deliver place-led growth and innovation across regions in the north. The report then turns to focus on innovation districts in Chapter 3 and their potential to drive more productive economies with benefits for environmental sustainability and economic inclusion, informed by case studies from the 22@Barcelona innovation district and the White City Innovation District in London.

Chapter 4 then considers economic place partnerships across wider geographies such as counties, city-regions, and regions informed by case studies from Greater Manchester, Edinburgh and South East Scotland, Lincolnshire, Teesside, and Yorkshire. These consider matters such as innovation partnerships, maximising the benefits of major government investments, universities supporting economies in places where there are few other anchor institutions, driving economic clusters and how universities can partner amongst themselves.

Chapter 5 concludes with a set of recommendations for how national governments can better support the actors, places, networks and partnerships that underpin regional economic ecosystems. This chapter also sets out a series of questions for economic development practitioners to consider in their work: on building and maintaining impactful economic partnerships and strategies; interfacing with markets; and developing successful innovation districts. These are provided as considerations rather than recommendations because we recognise the wide variety of different circumstances and histories in local economies across the UK.

We hope that the insights, case studies and recommendations of this report prove helpful nationally and locally for the benefit of the UK's economy, universities, local government and businesses. We must work together if we are to maximise the potential for more productive, inclusive and sustainable economies across the UK.



Manchester, a case study in place-based partnerships (The University of Manchester)

Chapter 1 – The Context

Introduction

This chapter sets out the context facing UK universities and those committed to driving growth in regional and local economies. This includes the contribution that universities currently make and the scale of the productivity and regional inequality challenges that this country faces. There is also a section on the triple helix, the collaborative framework that is referenced frequently in this report, and how we recommend action is taken nationally and locally to strengthen these economic partnerships and the roles of individual institutions within them as a core component of driving local and regional economies – including through increased innovation and productivity – across the UK.

1.1 The Economic Contribution of Universities

Universities impact local and regional economies in many ways including:

- Training and educating workforces;
- The direct and indirect spend of staff and students including international students;
- Developing pipelines of staff and student talent poised to start or spin-out businesses;
- Creating, growing, and supporting businesses and social enterprises including via venture builders, product and service development, incubators, accelerators, funding and expert advice;
- Applied research and consultancy for the public, private and third sectors;
- Knowledge exchange and collaborative commercialisable R&D;
- Harnessing national and international links to attract investment;
- Networking and helping to coordinate actors within, and programmes that support local and regional economic ecosystems;
- Investment in land and buildings, including the attraction of funding for regeneration, and
- National policy impact with ramifications for local and regional economies.

A key challenge for universities as individual institutions, and when acting in partnerships with other organisations, is to join-up multiple elements of the above into an integrated offer coordinated to support local and regional economic ecosystems.

Universities UK believes that 'Universities contribute around £130 billion to the UK economy through employing staff and impact on other sectors....In 2020–21 there were more than 21,000 active spin-outs, start-ups and social enterprises that emerged from UK universities. In the same period businesses born at universities employed an estimated 96,000 people.'

The potential for the UK to have a thriving university-led R&D sector is high with 84% of UK university activity found to be world leading or internationally excellent in the 2021 Research Excellence Framework. The research, skills, expertise, networks and facilities of universities can help increase the size and productivity of businesses, helping the UK economy nationally and locally. The government too clearly recognises the crucial role that universities play with Skills Minister Jacqui Smith noting that 'universities are at the heart of our Plan for Change, driving economic growth and breaking down barriers for opportunity[18].'

Universities UK notes that 'R&D increases productivity in two ways: directly, by generating scientific breakthroughs that result in product/service and process innovation and indirectly, by speeding up the adoption of new technologies and ways of working. In particular, publicly-funded R&D (three quarters of which is conducted in universities in the UK) generates large productivity gains that far outweigh the costs of research and are more widely shared and significant than those from businesses' internal R&D. Estimates suggest that every additional pound of public science spending permanently raises business output by 20p; this is additional to the impact generated from the private R&D spending that this investment attracts[19].'

The economic impact of investing in universities appears competitive with other mechanisms for driving economic growth. A London Economics study evidenced that for every £1 of publicly funded research income, the UK higher education sector's research and knowledge exchange activities generate approximately £9.90 in economic impact across the UK[20]. This underpins an argument from Universities UK for viewing 'universities as another part of the UK's growth infrastructure, and one which can deliver economic and social benefits more quickly and effectively than others[21].'

18 Bold reform needed to transform universities facing critical financial pressures
19 GPP0017 - Evidence on Government's Productivity Plan
20 LE-UUK-Impact-of-university-TL-and-RI-Final-Report.pdf
21 New report reveals key role universities play in boosting growth and productivity across the UK

Many professionals believe that there is a strong case for increased focus – both from universities and councils – in driving more productive knowledge economies. This would help overcome a problem described by William Hague in The Times (19th November 2024): 'In California everyone understands that Stanford University was fundamental to Silicon Valley developing around it.....The UK is a higher-education superpower, with 12 universities in the top 100 in the world — joint second alongside China, while the United States has 38. Ranked by research environment we have eight of the top 100. Then comes the problem: we lag behind America in commercialising our ideas and only a handful of our universities are in the top leagues for producing entrepreneurs or working closely with industry.'

The Industrial Strategy White Paper offers 'three important aims for public sector investment: advancing basic curiosity-driven research; delivering on government priorities; and enhancing innovative company formation and growth.' Universities can help commercialise innovation in several ways, often best achieved in holistic packages of support that may encompass seed funding, incubator and then later as the firm grows, accelerator support, technology transfer and knowledge exchange, along with specialist business support around intellectual property and scaling a business. Universities can offer convening power, linking young businesses with the expertise of people who have trodden the path before them.

Business development and the attraction of foreign students help universities make a substantial contribution to the UK's balance of payments. Public First, a policy and research consultancy, suggests that 'higher education accounts for a gross export value of more than £20bn, not far behind the export value of the UK's pharmaceuticals industry (£24.7bn)[22].'

Universities' impact in local and regional economies can be further supported by: continued devolution of economic development power and funding; the provision of incentives from central government for institutions to focus on economic partnership working; and complemented by coordinated national programmes and policies that provide major investments directly to universities – perhaps to cornerstone or de-risk industry contributions - and which link the pursuit of knowledge driven economies with wider economic ambitions relating to regeneration, skills, business support, trade and investment, sustainability and inclusion. For instance, The Productivity Institute (2023) found that 'giving more weight to localised support for productivity enhancing innovation, particularly where it requires collaboration, may help to address specific local market failures. Recent evidence suggests both the strong business performance benefits of devolved innovation support and the strength of local spillovers from investments such as the catapults.'

22 Labour plots immigration blitz after Reform success at polls | The Observer

1.2 National Productivity Challenges

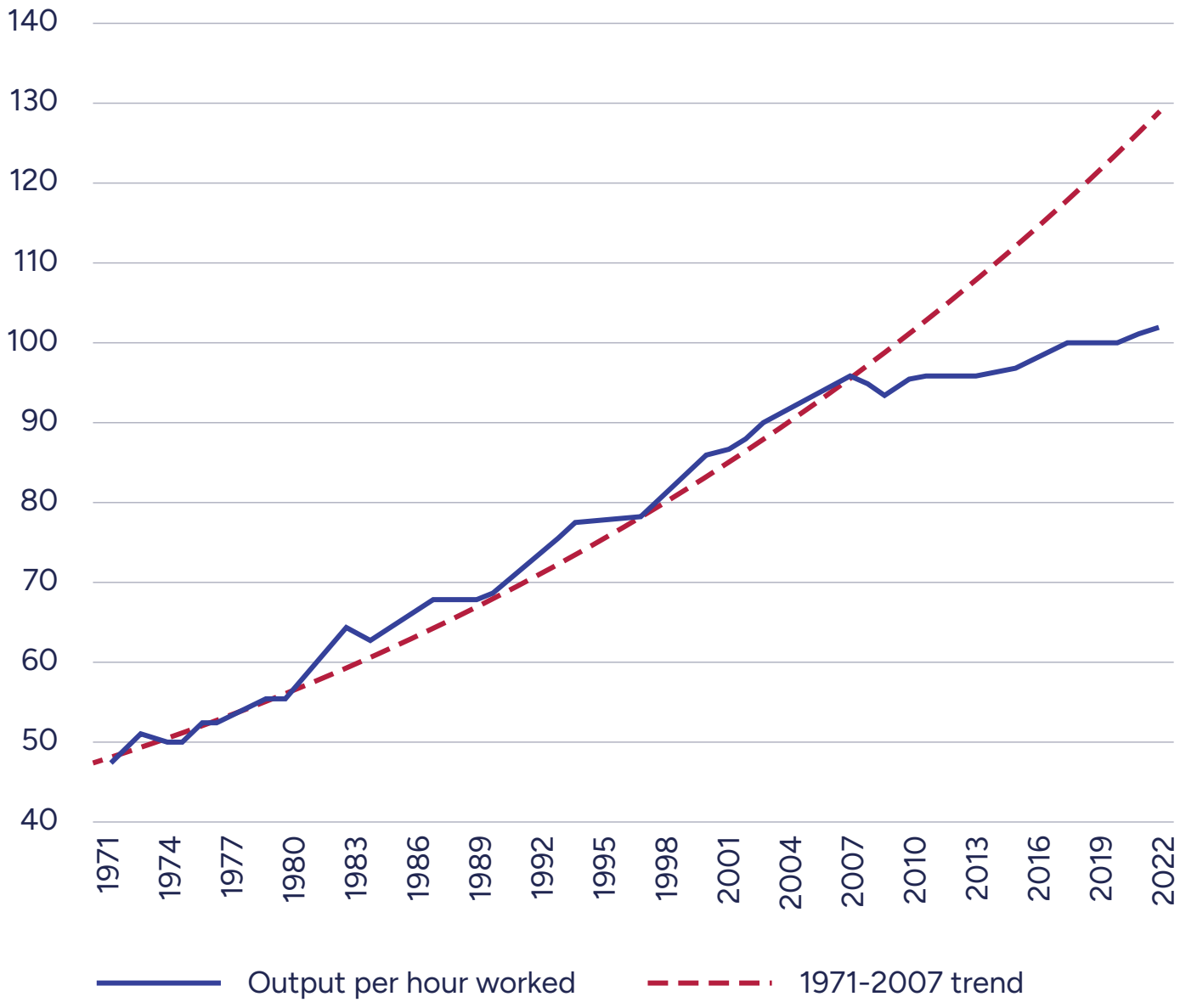
As the Office for National Statistics (ONS) notes, 'Increasing productivity over time allows businesses to produce more goods and services per unit of input. This ultimately enables higher wages, aids economic growth, increases profitability and boosts tax revenues.'

However, UK productivity has stagnated since the 2008 financial crash. Productivity would have been around 26% higher in 2022 had the 1971 to 2007 trend continued. ONS data reveals that average UK real wages today are much the same as in 2005.

The UK's productivity (GDP per hour worked) is significantly below that of France or Germany (Source: The Conference Board). Increased public and private sector investment in innovation, education and skills are among the policy solutions that many propose to increase UK productivity. Here there is a clear role for universities and the potential for this to be increased. In December 2024, parliament's Science, Innovation and Technology committee launched an inquiry to assess the role of the UK's innovation ecosystem in achieving the government's mission to kickstart economic growth across the country, considering factors such as regulation, policy, access to investment, research clusters and infrastructure that influence the success of start-ups and spin-outs and foster regional growth[23].

23 How can science and tech innovation boost regional economic growth? - Committees - UK Parliament

Graph 1: *UK annual output per hour worked from 1971 to 2022 using chained volume measure (2019 = 100). Source: ONS, 'Output per hour worked, UK', 26 April 2023.*



Scale-ups

Scaling businesses is a particular concern in the UK. For instance, in February 2025, The House of Lords Communications and Digital committee warned that 'the UK is at risk of becoming an "incubator economy" unless it does a better job supporting UK AI and creative tech startups to grow into global competitors[24].'

Previously, the OECD reported in 2014 that the UK was third in the world at startups but 13th at scaling up. The Scale-Up Institute was created in response and identified five key barriers to scale up: access to talent; markets, finance, infrastructure and leadership. They noted that although these barriers remain, 'today we see a 27 percent increase in UK scaleup numbers since 2013 with more getting bigger and forward movement in our international standings.'

The Scale-Up Institute argues that every local growth plan should have a scale-up plan and that 'local areas should continue to develop their local clusters, maps and hubs with scaleup resources, leveraging what works across the country.' The roles of universities are noted in many of their recommendations including in relation to proving finance, training and education, business support, sector specialist institutes and the supply of experienced staff.

Innovation

An important driver of relatively slow UK productivity growth is relatively low levels of investment in research and development (R&D). Despite the high quality of UK science there is a difficulty in translating scientific achievement into productivity which is reflected in low levels of R&D expenditures and low levels of patenting and innovation.

As the Economics Observatory describes, 'R&D is important for innovation and productivity, not just for pushing forward the technological frontier in itself but also making it possible for firms to learn about and absorb innovations from elsewhere including the output of basic science. Foreign direct investment can play a significant role in this 'technology transfer[25].

The UK ranks fifth out of 133 countries in the world IP global innovation index for 2024, but only 31st in terms of knowledge absorption[26]. The Industrial Strategy Green Paper noted that UK firms particularly lag in adoption of intermediate digital technologies[27].

24 UK risks becoming an 'incubator economy' if we don't take action to support our tech companies to scale up - UK parliament
25 The UK's productivity gap: what did it look like twenty years ago? - Economics Observatory
26 United Kingdom Ranking in the Global Innovation Index 2024
27 Invest 2035: the UK's modern industrial strategy - GOV.UK

Universities can help overcome these national challenges, including via training and skills interventions, collaborative programmes to increase private sector investment in R&D and commercialising research. Strong participation in local economic ecosystems can raise the reach, understanding and accessibility of universities.

1.3 Regional Inequalities

The UK – England in particular – has some of the deepest spatial inequalities and regional productivity divergence among the OECD countries. These differences have been increasing for over three decades with London's productivity now more than one and a half times the UK average.

For most of the 1980s, the productivity levels of the capital's economy were typically up to 128% of the UK average. From around 1988 onwards these gaps have rapidly increased to the point where London's productivity today is around 170% of the UK average. (Source: Bennett Institute for Public Policy).

As Professor Michael Parkinson, Ambassador for the University of Liverpool's Heseltine Institute for Public Policy, Practice and Place, notes Britain's second-tier cities have long lagged behind their European peers – from Munich and Amsterdam to Lyon, Barcelona, Milan and Copenhagen – on metrics related to economic productivity such as: innovation in processes, goods and services; economic and social diversity; the population's skill levels (its human capital); physical, digital and relational connectivity (nationally and globally); place quality (which includes the public and private provision of culture, healthcare, education and housing); and strategic capacity (the ability of a city's leadership to mobilise its resources to deliver long-term goals)[28].

Stronger regional economies are important to address the UK's productivity gap. As Martin Wolf argued in the Financial Times, 'Regional policy must be at the heart of any sensible strategy for growth.'

Universities are spread across the UK and therefore can play a substantial role not only in improving national productivity but in driving regional and local output. A slowing of growth in GVA disparities between regions is possible and with geographically targeted national support combined with locally devolved decision making, regional productivity disparities could be reduced – as they markedly have been following unification in Germany - with further knock-on effects for existing spatial variances in matters like educational attainment, health and life-expectancy.

28 www.liverpool.ac.uk

1.4 The Geographical Distribution of UK Universities

The UK's higher education institutions - universities, degree awarding colleges and conservatoires - are spread across the country.

Within this array of universities, research intensive universities are especially important in terms of capability and capacity to produce science, technology and engineering that can be commercialised.

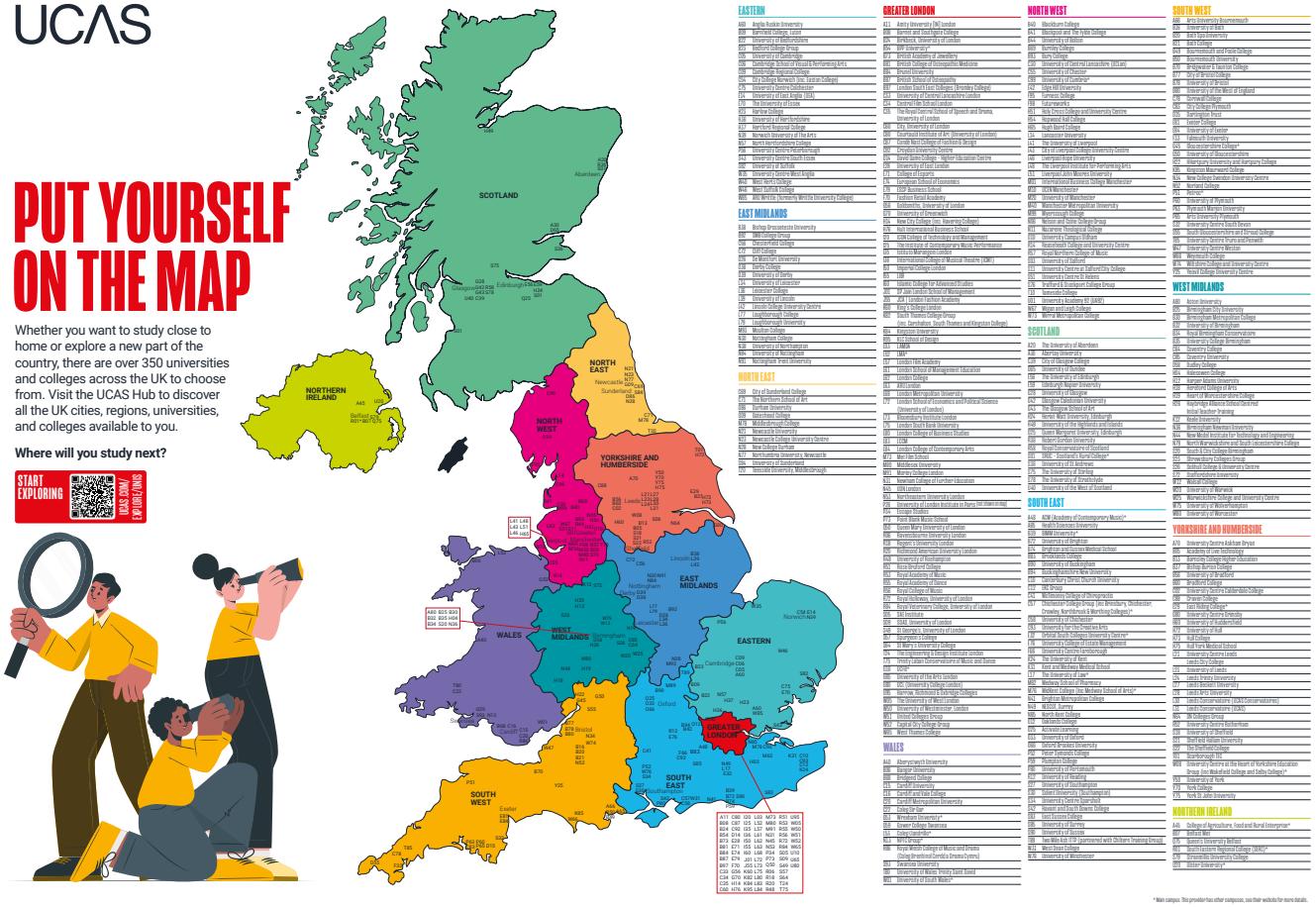
The Russell Group defines its 24 members as world-class, research-intensive universities. Its members secured 68.2% of recurring research funding from Research England.

The Russell Group website notes that they:

- Produce more than two-thirds of the world-leading research produced in UK universities and support more than 260,000 jobs across the country;
- Inject nearly £87 billion into the national economy every year;
- Undertake 23,000 contract research projects with businesses and others and collaborative research projects worth over £1 billion a year – nearly twice as much as the rest of the sector combined.

The University of Liverpool (www.liverpool.ac.uk)

UCAS 2024 map of universities and colleges (Source: UCAS)



It is not just that the many facets of universities that support local and national economies are important but also the scale of universities as economic assets. With austerity leading to real-terms reduction in the spending of most local councils many universities have become increasingly important to local economies in terms of economic impact and their role as a stakeholder. However in more recent years, the finances of many universities have also become increasingly challenged due to factors such as tuition fees falling since 2012 in real-terms, government not funding the full costs of undertaking research and declining numbers of overseas students in the latter years of this period.

The Public First research noted above calculated that the higher education sector is the single largest export industry in 26 ¬constituencies while it comes in the top three of the UK's 102 constituencies[29]. In many cities research intensive universities represent a substantial proportion of public sector R&D spending in their town or city. As recorded in the case study after Chapter 4, The University of Manchester receives 93% of government-funded research spending in Greater Manchester and is supporting economic growth in places at the edges of the Greater Manchester conurbation like Rochdale. Notably, many of the towns and cities with research intensive universities have few other major assets that would be classified so highly in a world ranking, underlining their importance as economic drivers around which strategies to improve productivity and prosperity can be centred.

However, there are signs of a small decline in the relative success of UK universities internationally. Of the 90 British universities ranked by QS for 2025, 20 rose since last year's rankings, but 52 universities' positions fell (18 remained stable). Jessica Turner, QS's chief executive, was widely quoted: 'This year's results suggest that British higher education has limited capacity remaining to continue excelling in the face of funding shortages, drops in student applications and ambiguity about the status of international students.'

We are living in an increasingly knowledge-based society and economy (including the advent of AI and machine learning), one that is faced by long-term challenges like the climate and ecological emergencies. A well-resourced university sector that is incentivised to be commercially orientated and work with key partners is not only a key constituent part of approaches to national, regional and local economic growth; universities' ability to conduct applied research is also important for attracting, preserving or growing their reputations.

29 Labour plots immigration blitz after Reform success at polls | The Observer

1.5 The Triple Helix of Innovation

The triple helix model of innovation sets out how universities, industry and government can mutually support each other to further innovation outcomes. Local and national government can both play important roles. The relationships can be tri-partite between the three sectors or bi-partite between any of the three pairings.

The framework was first theorised by Henry Etzkowitz and Loet Leydesdorff in the 1990s and is conceptualised in different ways by different proponents. The model can be further developed by placing greater emphasis on time and stages of innovation development, the public – including the media, civil society, and local communities - and consideration of the environment. As this report notes later, in their triple-helix model, Barcelona's innovation district also focused on demand for the products and services that they were offering.

The relationship between business and universities can include:

- **Training future and existing employees;**
- **Research and development;**
- **Consultancy;**
- **Encouraging entrepreneurship, including for students;**
- **Spin-outs, venture builders, incubators, accelerators, and other forms of business support including accessing funding and expert advice;**
- **Networking.**

The University of Exeter (wilkinsoneyre.com)

The focus on the relationship between university and business in the triple-helix model is generally local or regional but of course universities also hold many national or international relationships that if utilised can help to embed local economies in wider networks.

National and devolved government's role in the triple-helix model includes support for universities and innovation, local authorities and sectoral and place-based economic development e.g. funding, taxation, regulation and policy. There is clearly a role for central government to play in incentivising through stronger partnerships in local economies via policy institutional incentivisation that can drive resource allocation and cultural change and funding.

Local government's role can include provision of infrastructure, a high-quality public-realm and enabling town planning services. Local government can also play a convening role at the heart of a local economic ecosystem, offering links with employment, education and skills bodies and networking across businesses and business organisations. This can help place the role of a university at the heart of life-long learning, integrate businesses into local supply chains or help create places where students, workers and companies seek to locate and thrive.

Other conceptualisations of the helix include the quadruple helix that also includes a role for local residential communities in the leadership of the economic partnership. While we note that many UK economic partnerships are focused on inclusive growth or community benefits, community organisations do not always have a seat on the leadership team with this role being carried out by others, notably local government.

As noted in the introduction, success in triple or quadruple helix partnerships can be challenging to achieve given different regulatory, funding and stakeholder accountability frameworks in which each institution operates, impacting organisations and their staff alike. Addressing and overcoming this can require significant investment, leadership and cultural and operational incentives in local government and universities to drive partnership working along with well-resourced new infrastructures to span the boundaries. As the case studies in this report demonstrate, done well, the results can be substantial.

1.6 UK Evidence of University/ Business Relationships

The UK has a long history of seeking to accelerate the direct relationships between universities and businesses. Knowledge Technology Partnerships (KTPS) and business support programmes remain in place, whilst schemes with a more active intervention, such as incubators (focused on physical space) and accelerators (targeted business support linked to fast growth and funding), have proliferated.

In May 2023, the Centre for Entrepreneurs reported that there were over 700 incubators and accelerators in the UK, supporting an estimated 19,600 firms each year (although many will be repeat participants or tenants). The same study estimated that 269 of these were university-affiliated incubators and accelerators.

Beauhurst reports that there are 1,166 active university spin-out companies in the UK. These spin-outs are a small portion of the UK's high-growth business population, but they play a significant role, particularly in securing investment. In 2022, they secured £2.13 billion in equity investment which was 9.11% of all equity finance raised by UK companies that year.

The annual number of spin-outs, however, is fairly small, excluding student start-ups. The Higher Education Statistics Agency (HESA) estimated that UK Universities were responsible for an average of 247 spin-outs per annum. With 166 universities in the UK this amounts to just 1.5 companies per university per annum, although some will generate more than others.

The HEI sector has been seeking to address the equity finance available to drive further activity, particularly outside London and the South East through initiatives such as the Northern Gritstone equity fund. Whilst this is supportive, the conclusion is that structural change may also be required to develop a stronger pipeline of potential businesses.

1.7 Policy Setting

Policy has developed substantially since but it is worth reflecting on the foundational 2024 Labour Election manifesto and how it set out two key driving principles that relate to universities in an economic context within a single document. At the heart of our recommendations is that both ambitions must be linked if there is to be a symbiotic relationship between the R&D and wider local and regional economies in terms of skills, employment, supply chains and business networking, land and development, promotion, trade and investment and internationalisation.

- **'Labour will scrap short funding cycles for key R&D institutions in favour of ten-year budgets that allow meaningful partnerships with industry to keep the UK at the forefront of global innovation. We will work with universities to support spinouts and work with industry to ensure start-ups have the access to finance they need to grow. We will also simplify the procurement process to support innovation and reduce micromanagement with a mission-driven approach.**

- **'At the centre of our approach is a new statutory requirement for local growth plans that cover towns and cities across the country. Local leaders will work with major employers, universities, colleges and industry bodies to produce long-term plans that identify growth sectors and put in place the programmes and infrastructure they need to thrive. These will align with our national industrial strategy.'**

Whilst this report focuses on local and regional growth and the role of multi-institutional place partnerships, place-base practitioners should be cognisant of national economic drivers focused on science and technology that influence the relationships between government and universities. This includes the UK's industrial strategy focusing on supporting and growing eight key sectors, identified as having high growth potential and contributing to long-term, sustainable growth. These sectors are: advanced manufacturing, clean energy industries, creative industries, defence, digital and technologies, financial services, life sciences, and professional and business services[30]. Also, the delivery programmes such as UKRI's technology missions fund that aims to accelerate technology development, adoption and diffusion for the whole of science, policy and innovation, including through investing in national and regional hubs, centres of excellence and research and innovation clusters.

The foundations for using R&D as a foundation for economic growth were significantly strengthened in May 2025 when the government announced that it was committing to setting new ten-year budgets for R&D funding, recognising that the average £1 invested in public R&D leverages double that in private investment and generates £7 in net benefits to the UK economy in the long run. This will give greater certainty to research programmes, helping to attract greater private investment and grow the UK economy.

The criteria which will be used by departments and public bodies to identify and prioritise relevant ten-year funding proposals are distinctly economic in flavour, centred around four areas, the last of which is particularly relevant to the goals of this report[31]:

- **Infrastructure and core capabilities - where ten-year funding will allow recipients to develop or maintain core national infrastructure or support more impactful use of such infrastructure, which would not be possible under shorter funding cycles.**
- **Talent attraction and retention - where the skills development in a particular area is demonstrably vital to the UK growth agenda and longer-term funding would enable development of a pipeline of skilled researchers, scientists or engineers that otherwise would be difficult.**
- **International collaboration - where there are demonstrable, additional opportunities for international collaborations with wider strategic benefits.**
- **Partnerships and business collaboration - where there is demonstrable need for long term partnerships with industry – including charity and philanthropy – to tackle a significant challenge relevant to economic growth, and where shorter funding cycles would impede effective partnerships.**

Then in June 2025, the Spending Review announced the most significant increase in government expenditure over the period to 2029 as being for science, innovation, and technology (up 7.9%)[32]. Innovation has thus become more critical for driving prosperity including at local and regional scales. This includes new funding for fields such as Artificial Intelligence (AI), Advanced Manufacturing, and Life Sciences. A new Life Sciences Strategy is expected imminently at time of writing.

Place-based Partnerships

A small proportion of the £86bn funding The Local Innovation Partnership Fund (up to £500m to regions across the UK) recognises the importance of triple-helix partnerships and aligns with the thrust of this report, but it is also important that a variety of university partnerships, including some that are place-based, are key delivery vehicles for nationally allocated innovation spend.

A cutting-edge development in terms of university and place partnerships was £4.8 million (£6m including university investment) to accelerate inclusive growth and innovation collaboration via the UK's first cross-UK innovation partnership between Cambridge and Manchester, led by The University of Cambridge and The University of Manchester, and supported by the two mayoral combined authorities, city councils, alongside businesses and investors.

30 Invest 2035: the UK's modern industrial strategy - GOV.UK
31 Government to set new ten-year budgets for R&D funding - GOV.UK
32 Spending Review: The Implications for Economic Development, and Economic Growth - Institute of Economic Development

'Our partnership with Cambridge marks a new model of collaboration between UK universities. It brings together the distinctive strengths of each of our universities and cities, connecting two of the great innovation ecosystems to scale up what we can achieve. This new approach to innovation accelerates the time between discovery and impact, getting ideas into the real economy and our communities even more quickly to drive inclusive growth.'

President and Vice-Chancellor, University of Manchester, Professor Duncan Ivison

The devolved governments for Scotland, Wales and Northern Ireland also seek to drive forward innovation-rich, highly productive economies and all recognise the role of universities and local government in achieving this, including in partnerships. In Scotland, Regional Economic Partnerships (REPs) and their regional economic strategies[33] have already brought together groupings of anchor institutions including universities. The four regions of Wales are used as a geographical tier for coordinating some economic activities including via regional economic frameworks[34]. In Northern Ireland, the sub-regional economic plan is coordinating strategy, programmes and business engagement[35].

This report recommends that strong local growth partnerships and other similar economic partnerships, like the Scottish REPs that utilise triple-helix models, are a critical way of delivering national economic ambitions and should be considered across relevant UK and devolved economic strategies, including for R&D and innovation.

Local Growth Plans

June 2025 guidance sets out the key role that local growth plans, led by mayoral strategic authorities, will play in England.

Local growth plans provide a long-term 10-year strategic framework for growth in their region. They are produced and owned by mayoral strategic authorities, focused on the holistic needs and opportunities in their region, and should set out the priorities where the authority will focus its devolved powers and funding to drive productivity and growth.

Local growth plans are a key foundation of our growth mission, ensuring the benefits of a growing and future-facing economy are felt across the country. They also help to deliver the industrial strategy by building on places' economic strengths.

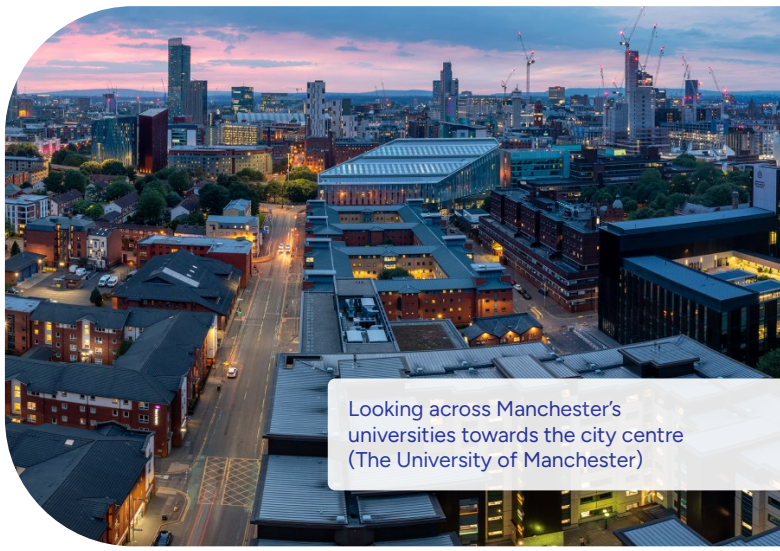
Local Growth Plans should be 'the guiding star' that provides strategic direction for other relevant plans and strategies and the wider work of mayoral strategic authorities, their constituent local authorities, and local partners. Other plans and strategies should align with the local growth plan where relevant to the achievement of its aims and ambitions.

The government requires every mayoral strategic authority in England to develop a local growth plan. This includes mayoral combined authorities, mayoral combined county authorities and the Greater London Authority. The guidance encouraged Foundation Strategic Authorities and local authorities in non-devolution areas to set out a vision for growth in their area that can help to attract investment and drive growth, building on existing local economic strategies where possible.

We welcome this approach. We hope that this report can help deliver the success that government seeks, but again caution that the partnerships needed to drive success must be given the foundations to thrive in the longer-term, including sufficient consideration of the relative goals of different institutions, due revenue and capacity funding, and that using the economic plan as a 'guiding star' must give substantial emphasis to building and developing economic ecosystems through networking, supporting and coordinating actors and programmes. Having universities as prominent partners in the development and delivery of strategy will be vital given their wealth of resources and expertise and importance as local anchor institutions.

Innovation and Regional Growth

These local growth plans link to an industrial strategy that is 'unashamedly place-based, recognising that stronger regional growth is critical for the competitiveness of the IS-8 (the government's eight priority sectors) and the resilience of the national economy.'



Looking across Manchester's universities towards the city centre (The University of Manchester)

33 Scotland National Strategy for Economic Transformation: Regional Economic Partnerships - evidence - gov.scot
34 Regional economic frameworks | GOV.WALES
35 Sub-Regional Economic Plan

The Industrial Strategy White Paper makes an interesting balance in terms of 'place' noting that 'we will focus our efforts on the city regions and clusters with the highest potential to support our growth-driving sectors, in England, Wales, Scotland, and Northern Ireland,' balanced by 'The IS-8's resilience in an unpredictable world which is also linked to the strength of foundational industries like steel and ports which supply critical materials, parts, and infrastructure. Just as high-growth sectors will benefit from a stronger economy, so the rest of the economy – and the jobs and communities it supports – will benefit from their success. The rising tide must lift all boats, throughout the country.'

Some questions emerge: firstly, how to integrate innovation at technological frontiers with wider growth within those sectors without which higher-tech firms will become isolated from labour, supply-chains and markets – this goes beyond drawing links with foundational industries; and secondly, how places without key strengths in the priority sectors can develop them rather than being reliant on demand from higher-growth sectors for their products and services in more foundational areas of the economy. We welcome the focus on driving growth in the UK's conurbations – many of which lag in terms of productivity behind European equivalents and see changes to the Green Book as helpful in these cities getting the investment needed to develop strong national and international economic roles. We argue that focusing approaches on triple-helix style partnerships with universities at their heart can amplify the effects in places with strong existing economic potential but can also grow the number of places that benefit from innovation, reducing risk of populations being left behind and not contributing fully to national growth.

Local and regional economic partnerships and the join-up between institutions can help ensure that fields such as R&D, investment and skills are central to the considerations of all anchor institutions in a place. This will help exploit some promising investments and economic foci that have emerged recently from government:

- Triple-helix economic partnerships will be vital to providing investable business, innovation, infrastructure and regeneration opportunities for the larger-scale pooled pension funds that government has suggested will increase domestic investment, drawing from evidence in Canada and Australia;
- Aligning local growth plans with the £86bn of funding announced at the spending review for science, innovation, and technology, much of which will be accessed by universities. The 2024 Autumn budget announced £40 million over five years in a proof-of-concept fund to turn pioneering university research into successful companies. The continuing growth of such companies will be supported by the sort of business environments and networks that triple-helix partnerships can encourage;
- Relationships between business, research institutions and the NHS will be critical to the opportunities from the life science innovative manufacturing fund. Geographical proximity again can aid such networks;
- 4,700 additional postgraduate places in engineering and science have been announced at British universities. Stronger links between universities and business will help beneficiaries gain a wider range of experience and help drive future prosperity through commercialisation of innovation;
- The extension of the Innovation Accelerator Programme as a devolved place-based programme with emerging signs of success in supporting business and attracting investment, is welcome, as is the £500m for the Local Innovation Partnership Fund which will hopefully further embed collaborative ways of working across institutions.
- Delivery of the eight industrial sector plans, five of which are now published[36] (Advanced Manufacturing, Creative Industries, Clean Energy Industries, Digital and Technologies, Professional and Business Services).
- Specific support for regional economies such as: a new £500 million Mayoral Recyclable Growth Fund available to mayors in the north and midlands with an integrated settlement, allowing them to provide financial investments for growth projects; a network of investment zones with £160 million in funding over 10 years to stimulate growth in key clean energy clusters, including in North East Scotland, North East England, South Yorkshire and the East Midlands and West Midlands; and a new Creative Places Growth Fund devolving £150 million over three years to six mayoral strategic authorities, alongside support for the Tees Valley Creative Investment Zone, which will receive over £160 million in funding over 10 years[37]. The geographical distribution of these funds goes some way to rebalancing the geographical focus of the industrial strategy, which as Centre for Cities have shown, typically focuses on sectors with greater prevalence in the Greater South East of England[38]. Again, we see universities as key to spreading growth in these sectors across the UK.

1.8 Funding and Incentivisation

This report comes at a time when both the universities and local government sectors are making repeated calls for additional funding due to acute shortages. For local government, key pressures have included funding settlements from government that have not kept pace with inflation and rising demand for housing, including temporary accommodation, and social services.

36 Sector Plans - GOV.UK
37 The UK's Modern Industrial Strategy – local authority policy announcements | Local Government Association
38 Eight sectors, one story: The geography of the Industrial Strategy | Centre for Cities

Several local authorities in England have issued Section 114 notices (when expenditure will exceed their income and ability to meet it, which would be unlawful). Direct central government intervention has often then been required. Others have had to apply to capitalise costs to protect frail revenue budgets. The 2025 Spending Review gave an average annual terms increase in overall local authority core spending power of 3.1% across the spending review period between 2024 and 2029.

This is welcome, but we expect many local authorities to continue to experience financial challenges given their current positions. The District Councils' Network responded by stating that 'overall funding for councils will fail to keep pace with rising demand for services, inevitably leading to pressure and service cuts.' [39]

For universities, declining numbers of domestic and international students, caps on fees for domestic students reducing this income-stream in real terms since 2012 and higher costs are causing severe concern in the sector including that some universities may close. Universities UK state that the proportion of English universities reporting an in-year deficit increased from 5% (2015–16) to 32% (2019–20). The Office for Students (OfS) predicts that up to 72% of universities in England could be in deficit by 2025–2026. The Office for Students also calculated that recent increases in tuition fees will be more than absorbed by increased employer national insurance contributions[40].

The long-term financial situations of many local authorities and universities, the pressing need for increasing UK growth, and the benefits of triple-helix partnership working underline that it should prove prudent and impactful for government in future budgets to further support place partnerships that both universities and local authorities are involved in as a delivery mechanism. The case study from the Greater Manchester in this report shows the importance of stable long-term partnerships in delivering inclusive economic growth and the case study from Edinburgh and South East Scotland shows how government funding (in that case a growth deal), when injected with the objective of strengthening place partnerships, can increase inclusive economic outcomes, not only from the programme or project itself but more widely.

Incentivisation is important in encouraging organisations to focus on economic development including through multi-institutional partnerships. The 2024 IED manifesto recognises this and calls for statutory economic development functions and services. Giving local authorities a legal duty over economic development would create a clear accountability structure, which in turn would make it simpler and more attractive to UK and international firms and financial institutions to invest in places. It would also enable the development of local strategic economic development plans that respond to the views of local businesses as well as the wider community, helping to increase productivity and reduce inequality.

Equally in universities, only a small minority of funding is given explicitly for knowledge transfer and economic development as opposed to teaching and research excellence. We recommend additional funding that grows this proportion to help drive universities' capacity for, and wider institutional interest in, economic development. This could be linked to universities providing additional training and support for innovation-focused positions and perhaps changes to career pathways including promotion structures to encourage commercialising research[41].

Direct capacity funding for local growth partnerships themselves would also be useful to aid coordination and focus and to help forge stronger strategies and make the investment decisions that benefit their economic ecosystem in the longer-term.

1.9 Concluding Remarks

This chapter has presented several issues facing national and local economies in the UK including challenges facing productivity and regional imbalances that impact economic efficiency and equity. These we argue can in part be addressed by strong investment and operational incentives from government for universities and local government to participate more fully in local and regional economies. This includes sufficient focus in policy and revenue funding to ensure that developing and reinforcing local and regional economic ecosystems is at the forefront of growth agendas, guiding capital investment programmes rather than an adjunct to them.

Closer economic partnerships between universities, businesses and local authorities in a triple helix model can plan and deliver stronger, more productive, inclusive and sustainable local and regional economies with national benefits and that this will be vital to successful joint delivery of the government's industrial strategy, local growth and innovation agendas. But these partnerships need careful attention and planning, including mutual understanding of the relative culture, ambitions and financial drivers of each institution and their staff, embedding long-term approaches, and sufficient capacity funding. Government must encourage organisations and their staff to reach across institutional boundaries and strive for success for their places; concurrently the forthcoming industrial s strategy must provide sufficient coordination across national government.

39 Core spending power for councils to rise by 2.6% | Local Government Chronicle (LGC)

40 National insurance hikes outweigh income from UK tuition fee rise

41 Innovation-focused academics need their own career track

The University of Edinburgh

Chapter 2 – The Academia-Business Relationship: Making Collaboration Work

Introduction

Strengthening the relationship between academia and business is critical. The UK ranks among the global leaders in research excellence, placing 5th in the 2024 Global Innovation Index for innovation input. But it lags in translating that knowledge into economic value—ranking just 31st for knowledge absorption. This disconnect between invention and impact reflects a structural weakness in how ideas, talent and technologies move from universities into the wider economy.

This challenge has become more urgent as government policy pivots towards locally driven place-based growth. Its industrial strategy calls for a new phase of regional economic development, underpinned by innovation and skills. Universities UK's 2024 Opportunity, Growth and Partnership report recommended that higher education institutions become 'critical partners in local growth plans'—cementing their role as regional anchors. In parallel, the National Centre for Universities and Business (NCUB) continues to champion productive academia–industry partnerships across the UK.

For organisations like AtkinsRéalis this is not an abstract issue. The success of growth strategies depends on our ability to connect with research, innovation and talent pipelines in structured, sustained and mutually beneficial ways. We rely on these partnerships to drive innovation across infrastructure, decarbonisation and digital transformation—and to access the skilled people we need to grow our business.

Progress is being made. Initiatives like University Enterprise Zones (UEZs), backed by government and Research England, have supported co-location and cross-sector collaboration in sectors such as health tech, aerospace and digital innovation. Flagship examples include Keele University's science park, Loughborough's science and enterprise park and the University of Southampton's science park. While a full evaluation is still pending, early evidence and strong support from Universities UK suggest these zones are helping embed universities more deeply into regional innovation systems.

Alongside UEZs, collaborative platforms supported by the NCUB and emerging models of virtual co-location are helping to extend the reach of academia–business interaction. But the lessons of both success and limitation must guide the next phase. Without deeper alignment through governance, culture and shared outcomes, systemic change will remain out of reach.

This chapter explores how to strengthen the academia–business relationship. It identifies common challenges and systemic barriers, highlights enabling models to address this and offers practical recommendations for building more productive, resilient and future-facing local economies, drawing on experience from partnering with leading academic institutions across the UK.

2.1 Challenges in the Current Relationship

Despite a shared interest in innovation structural tensions remain, particularly around divergent incentives, timeframes and operational cycles.

Universities are guided by research excellence frameworks, publication metrics and competitive funding cycles. Businesses, meanwhile, are driven by market pressures, customer demands and the need to deliver near-term value. While both sectors are committed to progress they often approach innovation on different footings and with differing expectations of outcomes.

This divergence appears in several persistent ways:

- **Incentive misalignment:** Academic institutions are typically rewarded for producing new knowledge—through publications, citations and research grants—rather than for how that knowledge is applied in practice. Businesses, by contrast, are focused on solving immediate problems and responding to emerging opportunities. As a result, shared agendas can be difficult to establish unless both sides can find common ground.
- **Time horizons and planning cycles:** Research funding is commonly awarded through longer-term grants while commercial projects often demand agility and fast results. These differing timelines do not preclude collaboration but they do require partnership models that are flexible, transparent and designed for long-term relevance.

- **Limited institutional interfaces:** Many partnerships still rely on individual relationships or one-off project collaborations. Without dedicated structures or clearly defined points of contact even promising engagement can be difficult to sustain or scale. Stronger institutional frameworks can make collaboration easier to initiate—and more resilient over time.
- **Cultural and communication gaps:** Academics and business leaders often bring different mindsets to the table. Whether in language, approach to risk or definitions of value, these differences can lead to misunderstandings or missed opportunities. Businesses may see academic research as too abstract or slow to deliver practical outcomes while academics may perceive commercial priorities as overly tactical or narrowly focused. Bridging these gaps requires not just goodwill but efforts to build shared understanding and respect.
- **Practical barriers to engagement:** In addition to these systemic issues, many organisations face day-to-day obstacles that limit collaboration. Small and medium-sized enterprises (SMEs), in particular, often lack the time, resources or capacity to navigate university structures or initiate research partnerships. Larger firms, too, may struggle to identify the right academic contacts or work through complex internal processes—especially when institutional pathways for engagement are unclear.

Yet these barriers are not fixed. They are increasingly recognised across sectors and there is a growing appetite—within universities, industry, and government—to do things differently. Addressing the foundational misalignments of incentives, timelines and institutional roles is not only possible but essential. With better-designed interfaces and intentions, academia–business collaboration can become a powerful driver of regional growth and resilience.

2.2 Barriers to Collaboration

The challenges outlined in the previous section, misaligned incentives, mismatched timescales and limited engagement mechanisms, stem from deeper structural and systemic barriers that shape how universities and businesses operate, interact and allocate resources which are set out below:

- **Lack of shared governance structures:** Few partnerships operate with clear, joint governance arrangements. Without mechanisms to align priorities, oversee delivery and adapt over time, collaboration often depends on informal relationships and goodwill—limiting its durability and strategic impact.
- **Fragile relationships and limited continuity:** Engagement frequently hinges on a small number of individuals, making it vulnerable to staff turnover or shifting priorities. Without institutional memory or succession planning, momentum can stall and hard-won progress may be lost.
- **Insufficient capacity for knowledge exchange:** Many universities and businesses have limited dedicated capacity for managing relationships, translating insights or brokering collaboration. This lack of connective infrastructure makes it harder to sustain engagement or respond to emerging opportunities.
- **Operational friction and limited integration:** While co-location and innovation hubs can provide a physical basis for collaboration, practical integration is often lacking. Without shared processes, tools or rhythms of work, co-presence rarely translates into true partnership.
- **Data sharing and IP constraints:** Issues around confidentiality, ownership and usage rights frequently complicate collaborative research. Without mutual trust and pre-agreed protocols these concerns can slow or prevent meaningful joint working.
- **Fragmented regional ecosystems:** In many places, universities, businesses and local authorities operate in parallel rather than as part of a joined-up system. The absence of integrated regional strategies or convening mechanisms can leave even aligned interests disconnected.
- **Geographic and sectoral mismatch:** While the UK's university system is geographically diverse, local economic ecosystems are uneven. High-quality academic institutions may be located in areas with limited industrial presence while innovation-hungry firms may struggle to access nearby research expertise. In some cases, universities and businesses specialise in adjacent but non-overlapping sectors—further complicating meaningful collaboration.

These barriers reflect the absence of what might be called relational infrastructure, the formal and informal systems that make collaboration natural rather than exceptional. Addressing this requires more than pilot funding or policy ambition. It calls for thoughtful design, sustained investment and a cultural shift towards co-creation and shared value.

The next section explores how some regions and institutions are beginning to address these issues or barriers by building the frameworks, behaviours and partnerships needed to unlock the full potential of academia–business collaboration.

2.3 Designing Collaboration that Lasts

One of the most powerful enablers is co-location, both physical and virtual. Purpose-designed innovation spaces, university-affiliated research centres and shared labs create opportunities for informal exchange and practical collaboration. The Advanced Manufacturing Research Centre (AMRC) at Sheffield and WMG at the University of Warwick are both widely regarded as exemplars of this model where academic research and industrial application operate side by side in shared facilities.

Just as importantly, new forms of virtual co-location, shared digital platforms, project portals and hybrid working models are helping institutions collaborate across geographic boundaries. Whether in person or online, what matters is not simply being present but designing systems that support ongoing interaction and mutual problem-solving.

Another critical enabler is the growing investment in knowledge transfer infrastructure. Many universities now have business engagement teams, knowledge exchange units or innovation offices that act as institutional interfaces. Meanwhile, forward-looking companies are establishing roles or teams to lead engagement with academia, including secondments, academic fellows and liaison positions. These intermediaries help to bridge differences in language, pace and culture—enabling partnerships to move more speedily from shared interest to shared value.

Where collaboration is most effective it is often challenge-led and place-based. Joint initiatives built around specific local priorities, such as skills shortages, net zero targets or inclusive growth can give partnerships a clearer focus and stronger stakeholder buy-in. The collaboration between AtkinsRéalis, Durham University and the N8 Research Partnership reflects this approach, with joint research helping to shape local economic strategy, workforce development and innovation capacity in the north east.

Some regions are embedding these approaches within more structured cross-sector models, including the use of triple or quadruple helix frameworks. These frameworks bring together universities, businesses, government and civic actors under shared strategies or delivery programmes. While not always labelled as such, many of the UK's most resilient local innovation ecosystems reflect this kind of systemic collaboration to align funding, governance and priorities around collective outcomes.

Within these ecosystems, strong bilateral or institutional relationships continue to play a vital role. At the core of many successful approaches is a shift from one-off engagements to long-term institutional partnerships. These are often formalised through memoranda of understanding, joint steering groups or shared investment in infrastructure or staff. Moving beyond transactional relationships allows for deeper trust, greater risk-sharing and more coordinated planning over time.

Finally, leadership and convening power remain essential. In many of the most effective examples, strong local leadership, whether from anchor institutions, local authorities or influential individuals, has played a catalytic role in setting ambition, aligning stakeholders and keeping collaboration on track.

Across these models the common thread is deliberate design. These are not accidental successes but the result of investment in people, relationships and structures. Together, they show that effective collaboration between academia and business is not just possible but achievable and increasingly vital to attaining inclusive, innovation-led growth at a local and regional level.

The next section explores common characteristics of effective partnerships and offers lessons for wider application.

2.4 Six Ingredients for Effective Collaboration

Successful collaboration between academia and business is rarely the result of chance. While each partnership reflects its own priorities and constraints, the most effective ones consistently demonstrate a core set of characteristics, both structural and behavioural.

These features create the conditions for trust, shared value and long-term impact. They are visible across many of the UK's most resilient innovation ecosystems and provide a practical benchmark for institutions, businesses and policymakers seeking to make collaboration not just possible, but productive.

1. **Shared vision and aligned outcomes**
   Strong partnerships begin with a clear sense of purpose. They take time to establish mutual priorities, co-develop goals and agree on factors of success, balancing academic depth with practical application. Both sectors must often revisit traditional metrics of success such as publication outputs or market share and embrace more integrated, outcome-focused KPI's.

2. **Long-term orientation**
   Enduring collaborations are built on multi-year commitments. These allow partners to share risk, deepen trust and invest in people, systems and innovation beyond short-term funding cycles. Process and project incubators as advocated by Durham University can be a particularly powerful tool for sustaining long-term alignment on tangible challenges.

3. **Strong governance and clear roles**
   Shared governance provides structure and resilience. From joint steering groups to memoranda of understanding, effective partnerships define how decisions are made, how progress is tracked and how responsibilities are distributed, even as people and priorities evolve.

4. **Early and meaningful engagement**
   High-performing collaborations bring businesses into the conversation from the outset. Whether shaping research agendas, co-designing curricula or informing regional skills strategies, early engagement improves relevance and accelerates impact.

5. **Investment in relationships and people**
   Partnerships thrive on trust. Time spent building relationships, developing shared language and fostering cross-sector fluency through secondments, joint roles or informal networks are often what sustains collaboration through change. Research from Durham University has evidenced that it is often the individual relationships within institutional dyads that make the decisive difference.

6. **Connection to place and purpose**
   The strongest partnerships are grounded in context. Whether aligned with a region's growth strategy or a sector's transformation agenda they respond to real-world needs and build legitimacy through long-term engagement and delivery. Co-location, physical or virtual can help turn these relationships into embedded, everyday practice.

Examples such as WMG at Warwick, AMRC in Sheffield and the 22@ innovation district in Barcelona demonstrate these ingredients in action. In each case, universities are not peripheral participants, they are central to the economic and innovation fabric of their region.

While the form of collaboration will vary, these six ingredients offer a strong foundation. Institutions that invest in these are better placed to unlock the full potential of academia–business collaboration and deliver shared economic value at scale.

A View from Academia: Insights from Durham University

As part of this work we asked Professor Kieran Fernandes, Associate Pro-Vice Chancellor at Durham University, to share his perspectives on how academia–business collaboration can be improved in practice. He offered five reflections:

1. **Rethink success metrics**
   Both sectors need to revisit how they define and measure success. Traditional KPIs such as publication impact or market share often diverge, creating friction. Real partnerships require aligned expectations and a willingness to compromise.

2. **Invest in knowledge transfer facilitation**
   Businesses should establish dedicated roles or teams to translate academic research into practical, commercial strategies. Warwick's WMG and the AMRC at Sheffield offer valuable templates.

3. **Move beyond physical incubators**
   Rather than focusing only on shared spaces both sectors could experiment with project and process incubators, vehicles for collaborating on specific, out-focused challenges.

4. **Co-locate strategically**
   Proximity still matters. Investment in shared working spaces such as innovation hubs and embedded research teams helps to foster everyday collaboration. Models at Warwick, Cranfield, and IBM's collaboration with York demonstrate the power of physical connection.

5. **Unlock real-time business data**
   Academic research could be significantly enhanced by access to real-time operational data from industry. While currently rare, finding safe and structured ways to share data could be transformative for both sectors.

Professor Fernandes' reflections align strongly with the themes in this chapter, particularly around co-location, structural alignment and the need for both sectors to rethink traditional roles. They reinforce the value of deep, intentional collaboration as a foundation for innovation-led, place-based growth.

2.5 Concluding Remarks

Translating these insights into action require coordination across institutions, sectors and policy frameworks. To support this, in the final chapter of this report (chapter 5: Recommendations) we set out a series of clear, actionable steps to strengthen the role of academia–business collaboration within place-based economic strategies. These recommendations draw directly from the challenges and opportunities explored here and are intended to support more durable, scalable and impactful partnerships.

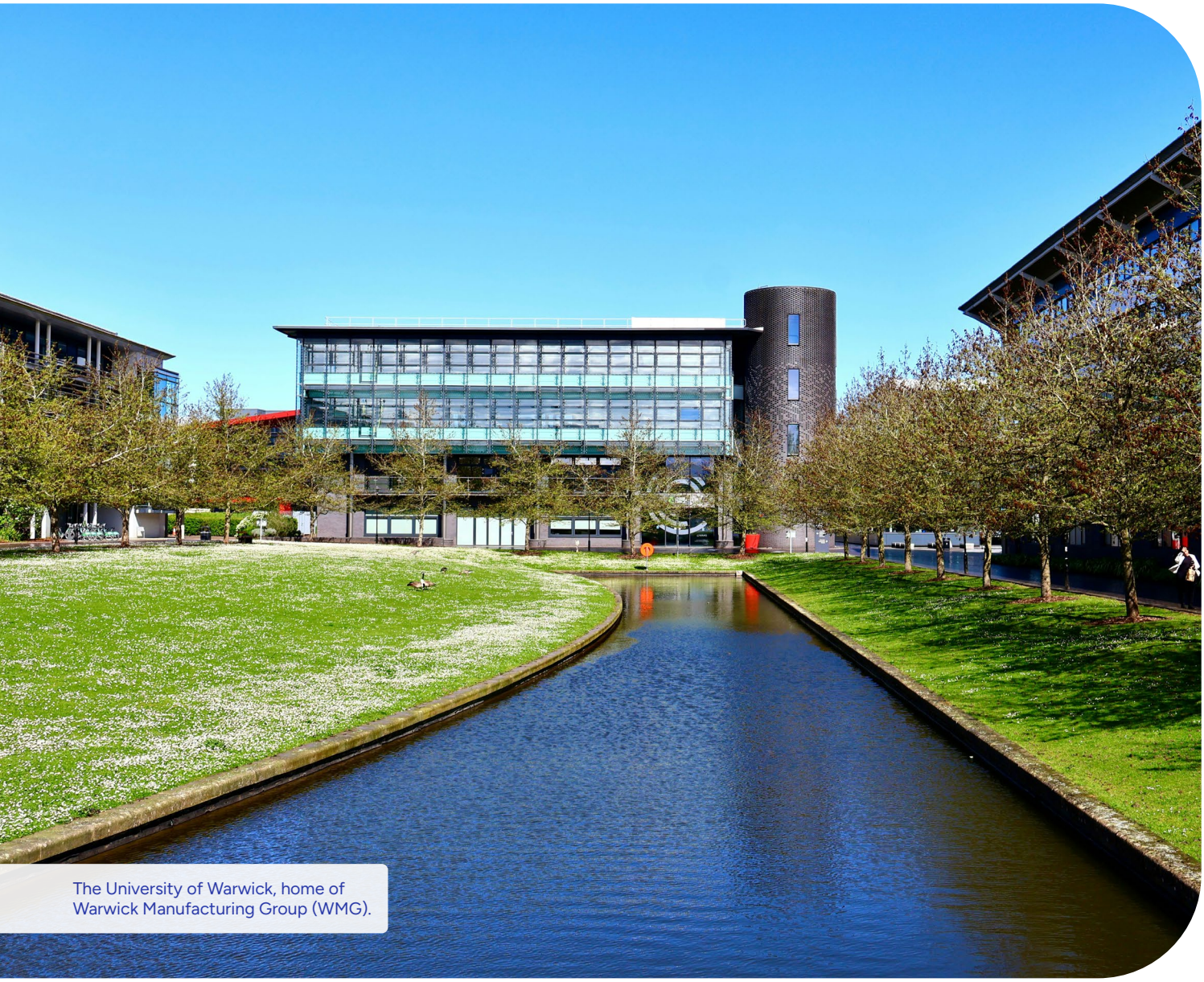
Stronger collaboration between academia and business is not just desirable—it is essential to building more productive, inclusive and resilient local economies. While the barriers are well understood they are increasingly being addressed through new models, shared infrastructure and deeper partnership working.

The most effective collaborations are grounded in shared goals, transparent alignment and long-term commitment with universities acting as integral partners in regional growth and innovation. Realising the full potential of these relationships requires conscious effort, designing governance structures, investing in knowledge exchange, building trust across sectors and embedding partnerships in place and purpose.

At AtkinsRéalis we are deeply invested in enabling the infrastructure, systems and innovation needed to support sustainable economic growth. As a global engineering services and nuclear company with a global footprint, innovation is at the heart of our business, from advanced technologies, security, materials and modern methods of construction to the development of digital platforms such as the National Underground Asset Register (NUAR) that boost productivity and streamline the delivery of critical infrastructure. Our partnerships with academic institutions are fundamental to this work.

Over the past three years, we have collaborated closely with Durham University and the N8 Research Partnership to examine the role of academia in regional rebalancing, the perspectives of young people on place, and the practical application of quadruple helix frameworks. These efforts have been captured in a series of reports, Regional Rebalancing (2022), Next Generation (2023), and Place-Based Growth, Innovation and the Quadruple Helix (2024). This body of work reflects our belief that people and communities are the true drivers of place-led growth and that universities are integral to that process.

As policy continues to shift towards more devolved, locally driven models of growth, the role of business must evolve accordingly. We see it as our responsibility not only to respond to innovation, but to help shape it, working alongside academia and the public sector to co-create solutions that are context-aware, strategically aligned and capable of delivering lasting public value.



The University of Warwick, home of Warwick Manufacturing Group (WMG).

Chapter 3 – Economic Clusters, Science Parks, and Innovation Districts

Introduction

Chapter 2 has explored how universities work with businesses, locally and nationally. Due to the geographical proximity of institutions leading to various types of relationships forming, often these relationships are place-based. These place-based relationships can involve local area definitions such as science parks, University Economic Zones (UEZs) or innovation districts, or may occur across a wider urban or regional area.

Conversations with people in the field revealed that place-partnerships were perceived as a less researched area in the UK compared to the roles of individual institutions e.g. universities, central or local government, research and development or individual economic sectors. The next two chapters explore three pertinent issues to contemporary economic development practitioners:

1. The importance of economic clusters and the rise of the innovation district and the possibilities that innovation districts can offer above those of the more traditional science park;

2. Wider place-based partnerships and how the current policy focus on devolution and combined authorities is driving greater interest in them; and

3. Partnerships between universities that help coalesce the efforts of universities across a region.

This chapter focuses on clusters and innovation districts, chapter 4 then focuses on wider place partnerships and networks of universities.

3.1 Economic Clusters

'If one man starts a new idea, it is taken up by others and combined with suggestions of their own; and thus it becomes the source of further new ideas.'

Alfred Marshall, 1920

Alfred Marshall, the economist writing in the late-nineteenth and early twentieth century, noted the original factors that led to localised groupings of industry e.g. access to raw materials, climate, demand and labour. Marshall also noted how in time, concentrations of particular industries developed in more sophisticated industrial districts. These included specialised and hereditary skills, the growth of subsidiary trades (supply chains and services), specialised machinery, multi-organisational leadership and the introduction of novelties that become adopted by other companies – now more commonly thought of as innovation[42].

Industrial and business clusters have been studied by many researchers in disciplines such as economics and economic geography. In the 1990s Michael Porter argued that business clusters within globalised economies helped organisations within them to innovate, drive productivity and support new entrants. Porter claimed that 'clusters are not unique, however; they are highly typical—and therein lies a paradox: the enduring competitive advantages in a global economy lie increasingly in local things—knowledge, relationships, motivation—that distant rivals cannot match[43].'

In 2006, Joseph Cortright at the Brooking Institute produced a useful summary of advice for policy makers and practitioners reproduced on the page below[44]:

42 Public R&D Spillovers and Productivity Growth, Arnaud Dyèvre, 2024. The Cambridge school Fiorenza Belussi and Katia Caldari, Cambridge Journal of Economics 2009, 33, 335–355

43 Clusters and the New Economics of Competition, Michael E. Porter, Harvard Business Review 1998

44 Making Sense of Clusters: Regional Competitiveness and Economic Development (brookings.edu)

1. Clusters are the key organizational unit for understanding and improving the performance of regional economies. The foundation of a regional economy is a group of clusters not a collection of unrelated firms. Firms cluster together within a region because each firm benefits from being located near other similar or related firms. The firms in a cluster have common competitive strengths and needs.

2. Cluster thinking matters because it orients economic development policy and practice toward groups of firms and away from individual firms. It is more important and fruitful to work with groups of firms on common problems (such as training or industrial modernization) than to work with individual firms. The cluster approach leads to little if any reliance on economic development subsidies and recruitment efforts aimed at individual firms; if these individual, firm-based policies are used at all, they should be focused on firms that fit within existing clusters.

3. Cluster thinking offers important lessons for economic development policy and practice. Cluster thinking teaches policymakers and practitioners to:

- **Build on the unique strengths of their regions rather than try to be like other regions.** Different regions have different sets of economic development opportunities. Not every place can or should become another Silicon Valley.
- **Go beyond analysis and engage in dialogue with cluster members.** Many policymakers and practitioners treat research on and analysis of clusters as the only elements of a cluster strategy. In fact, they are only a starting point for a cluster strategy. Identifying a cluster's competitive strengths and needs requires an ongoing dialogue with the firms and other economic actors in the cluster. Although the public sector cannot be the exclusive driver of cluster policy it can play a central role in convening cluster members and working with private-sector cluster organizations.
- **Develop different strategies for different clusters.** Clusters vary from industry to industry and from place to place and operate in many different dimensions. Different clusters have different needs. There is no one set of policies that will make all clusters successful. For example, a technology cluster may require help with research or capital, while a metals industry cluster may require assistance with job training or technology deployment.
- **Foster an environment that helps new clusters emerge rather than creating a specific cluster from scratch.** It is difficult for public policy to create new clusters deliberately. Instead, policymakers and practitioners should promote and maintain the economic conditions that enable new clusters to emerge. Such an environment might, for example, support knowledge creation, entrepreneurship, new firm formation and the availability of capital. Cluster policy

3.2 Growth in the Economic Roles of UK Universities

The nineteenth century saw a substantial expansion of universities in the United Kingdom. Only six UK universities have roots prior to 1800 – Oxford and Cambridge in England and St Andrew's, Glasgow, Aberdeen and Edinburgh in Scotland.

The reasons for the development of nineteenth century universities vary and include serving a fast-growing population, universities being seen as part of the traditional offer of a successful town or city, increased needs for training and a rise in demand for secular or non-conformist institutions in England, notably in London, taking in part from traditions that had already developed in Scotland in terms of universities beginning to take a stronger economic role, notably in professional and technical training and the exchange of innovative ideas including internationally[45].

As the industrial revolution accelerated the demand for more universities existed alongside a demand for more mechanics institutes, technical colleges and other educational institutions, some of which later developed into universities, often in the early years of the twentieth century.

UK universities in the early years of the twentieth century typically supported businesses by providing relevant teaching that was accessible to the middle-class and by providing research that improved scientific standards and innovated in areas such as science, technology, medicine and engineering, both generally and in specific collaborations with companies that typically at this time relied on external institutions to provide research and development functions.

45 The University in the United Kingdom in the 19th Century, Matthaios Dimitriou, European Journal of Education and Pedagogy

3.3 The Development of Science Parks – Stanford, USA, and Cambridge, UK

In the late 1940 and early 1950s a new model for business and university co-location was developed in California. The Stanford Industrial Park opened in 1951 because of: i) businesses looking to recruit Stanford-educated engineers (whose numbers had increased due to the war) and to access training for their workers; ii) the university owning substantial land holdings proximate to their campus which its endowment prohibited the sale of; iii) the university looking to address financial challenges related to the performance of their endowment; and iv) a desire from some key figures at the university to retain graduate talent locally and further research that would be aided by industrial partnerships.

Aspects of the plans for the Stanford Industrial Park were inspired by a combination of, firstly, the close operational and geographical relationships between the Massachusetts Institute of Technology (MIT) and its business partners and, secondly, a new Colorado parkland residential estate.

Santa Clara County zoned 50 acres for light industrial with restrictions relating to density, parking and smokeless industries that set a parkland feel for the area. The university did not fence the area to make it feel more like a residential suburb. It was one of several developments that the university took forward including retail and housing. Today, Stanford Research Park continues to be one of the world's most successful industrial clusters, set in an attractive landscape next to a world-leading university with a string of sports, cultural and arts offers at the heart of the wider Silicon Valley innovation ecosystem including funding opportunities from world-leading venture capital firms.

UK science parks followed though not for some time afterwards. Cambridge Science Park opened in the early 1970s and though some firms were attracted by proximity to the university's world-class research, take-up from companies was initially slow due to a science park being an unfamiliar concept in the UK. The number of companies accelerated in the 1980s following the growth of an initial cluster, the opening of shared facilities to improve facilities and assist interaction, greater provision of business space for smaller firms, growing numbers of spin-outs from university research and the arrival of venture capitalists. The twenty-first century saw further expansion, the development of further shared amenities and corporate partnerships and the provision of facilities to encourage specialisms and collaborations in areas such as deep tech and bio-innovation in addition to other more flexible multi-sector facilities to encourage collaborations across industrial specialisms.

Today there are many science parks in the UK. Other early adopter places included Warwick, Edinburgh, Manchester and Birmingham and today there are around 150 science parks in the UK employing around 120,000 people.

Sci Tech Daresbury, a leading science and technology park in Cheshire, defines the difference between a science park and a business park, noting that 'science parks are tailored to research, development and innovation. They provide an ecosystem where high-tech companies, particularly those in sectors such as biotechnology, engineering and software development, can thrive…they are essential hubs for translating academic research into commercial success.' Sci Tech Daresbury argues that 'science parks almost without exception have strong connections with universities, research institutions or a research-intensive technology corporation. Often this provides access to specialised facilities and talent and access to funding and business opportunities that can give businesses a critical edge.'

They note that 'business parks, by contrast, are more generalised in their purpose. They are designed to accommodate a broader variety of businesses, from professional services to retail. Consequently, you find little or no collaborative interaction between companies on business parks and rarely a strategic partnership with a university or research institution. Business parks provide cost-effective office spaces, commercial services and essential infrastructure for day-to-day operations. Unlike science parks the focus is less on innovation and R&D and more on delivering functional office environments for companies across all sectors.'

Cambridge Science Park (cambridgesciencepark.co.uk)

3.4 Defining Innovation Districts

If one accepts Sci Tech Daresbury's useful description of the difference between a science park and a business park, how then is an innovation district distinguished from a science park? In both categories businesses benefit from access to research (often academic), a mix of accommodations to support a range of smaller and large firms, shared facilities that support lifestyles and inter-organisational collaboration, leadership and networking across the cluster, access to finance, talent and skills and any raised local demand for their products or services.

Synthesising research from organisations like the Brookings Institute with our own insights, this report argues that there are three key categories of difference:

1. The first stems from geography – that innovation districts are typically in central urban locations while science parks are often suburban or rural. This allows innovation districts to offer easier access by public or active travel, potentially increasing access across wider geographies and stronger opportunities to align with local retail and leisure offers including night-time economies;

2. The second stems from boundary definition. Innovation districts are much less likely to have a defined or physical boundary than a science park, they are more closely integrated with the wider public realm, allowing opportunities for greater permeability, both real and imagined, increasing throughflow of people and likely socio-economic inclusion and vibrancy;

3. Innovation districts are more likely to have multiple land-owners than science parks. This can lead to a more diverse offer of business accommodation, anchor institutions and sectoral mix; more diverse retail and leisure facilities on-site; and a greater likelihood of residential accommodation being co-located, including with a variety of purchasing and tenancy options. Mixes of ownerships, or at least a variety on offer, can support different cultures, financial models and more organic bottom-up initiatives.

Knowledge Quarter Liverpool (www.ukinnovationdistricts.co.uk)

This potential for innovation districts to offer greater vibrancy and vitality should make them increasingly competitive in the following ways in a post-Covid world and associated trends in on-line working and studying:

- A focus on science and technology provides facilities inaccessible from home;
- Co-location provides greater opportunities for students and workers to explore and engage with;
- They become destinations for people not working there which underpins diverse retail, cultural and leisure offers making them more attractive still as employment destinations – hybrid working talent can be attracted to travel longer distances if commuting fewer days a week;
- Their permeability can support integration with other economic assets across a city-region e.g. distributed university campuses and off-site industry helping to centre innovation districts within wider economic policy;
- When overlaid with special economic policies such as University Enterprise Zones they benefit a wide range of economic interests and ambitions.
- The White City case study in this report explores in a local context many of these issues from within the context of one of the UK's most successful innovation districts at a time when the number of innovation districts is fast growing in the UK. This is because of:
- Their frequent success globally;
- Their versality: as Josep M. Piqué, a key player in the development of 22@Barcelona's innovation district noted when interviewed for this report, 'an innovation district can be developed in any urban setting where there's a strong research institute with potential commercial outputs';
- Their ability to grow high value sectors, including from an embryonic state, priority sectors, that are not yet present in a city economy e.g. see Barcelona in the section below;
- The potential to spot and leverage commonalities between organisations based in close proximity e.g. Pittsburgh's new AI Avenue initiative to make its Bakery Square innovation district the 'premier destination for AI ventures, setting the standard for tech ecosystems worldwide';
- Growing interest from financiers both in terms of investing in strong growth sectors such as biotech and increasingly in supporting the real estate aspects of innovation districts.

3.5 Critical Success Factors in Innovation Districts

From the case studies in this report – principally White City and 22@Barcelona – combined with other literature, some success factors for innovation district have been identified. Co-locating businesses is insufficient.

Leadership is vital and considered separately in subsequent sections of this chapter. The bilateral relationship between business and universities or other research institutes is critical and has been explored in Chapter 2. The White City case study shows the advantages of having multi-disciplinary facilities and alignments, a variety of ways to commercialise and own research and development with a range of financial packages and working cultures and business spaces on offer to start-up and scaling businesses. The dynamism of an innovation district relies on the birth and growth of smaller companies which can provide resilience to the area through mutually supportive networks, retail and leisure spend that adds vibrancy and by providing innovation to larger organisations.

London King's Cross Knowledge Quarter (www.lbic.com)

These innovation networks must be encouraged. They can offer further mutual support between smaller organisations, advice from larger organisations e.g. on scaling-up, penetrating markets and exporting along with the initiation of business relationships between small organisations and anchor institutions. The sharing of knowledge is essential to enabling creative collisions that generate new ideas, propelling further innovation and business growth. This is true within sectors, of different sectors converging and of transformative cross-sectoral technologies such as AI being innovated and adopted.

Sufficient revenue spend should be available for communications and events with generous administrative support to allow innovators to focus on innovation rather than organising. A range of spaces to meet is important: more formal business or innovation spaces provided by an institution; 'third spaces' with a greater sense of shared ownership; well-curated outdoor spaces where people choose to dwell; and retail and leisure that will be well-used by innovators and their networks based both at the innovation district and beyond.

The White City case study shows how important the culture of an innovation district is, that innovators and disrupters must not be stifled by financial models or institutional risk management. Into this culture must come new talent and this includes university students participating in relevant learning including exposure, where possible, to applied research. As an innovation district thrives land prices will rise and the model must ensure that innovation is not priced out as an economic activity. Patient finance, planning gain negotiations and re-using buildings to potentially offer cheaper business space (and retain the distinctiveness of the area) can all assist. Economic inclusion and sustainability are also critical.

As noted above, with innovation districts often in central urban locations and woven into the wider urban fabric they tend to be more accessible by public and active transport and more permeable than campus-based developments. Careful planning of land use, urban design and the public realm can increase throughflow of people and a shared sense of ownership including at night-time. Consideration should be given to where public access to buildings can be provided to increase permeability,

This should be coupled with outreach supported by all the anchor institutions to raise aspirations in schools, encourage interest in the activities of the innovation district, offer clear skills and employment pathways including via working with FE to ensure that relevant jobs are advertised locally, and to provide wider community benefits.

The quadruple helix model places community organisations in the leadership of the innovation district giving greater agency to help shape economic inclusion. Institutional leaders should also consider how their innovation can be used to benefit society and the environment.

3.6 Globally Exemplar Innovation Districts

Successful innovation districts such as Kendall Square in Cambridge, Massachusetts (in the Boston conurbation) and 22@Barcelona have developed strong leadership models. Kendall Square is widely regarded as the world's first innovation district while 22@Barcelona, the first in Europe. They are therefore useful examples given their longer histories of operation and of spearheading vibrant urban regeneration and transitions from industrial to high-tech economies. More attention is given here to 22@Barcelona given the distinct advantages Kendall Square holds in having universities like Harvard and MIT. Perhaps the greatest lesson from Kendall Square is for national government in the UK: as a consideration for UK funding regimes, Kendall Square demonstrates the extent to which wealthy world-leading universities can power a large post-industrial city economy that does not benefit from being a national government or financial capital.

Kendall Square

Kendall Square, termed the most innovative square mile on the planet, has been transformed from a former industrial district that was becoming a sterile office-dominated neighbourhood to one of the world's leading centres for biotech and IT research and innovation with an associated growth of hotels, restaurants and shops. Development has acknowledged the importance of the pedestrian realm: active frontages; open space at the level of the pavement to encourage loitering or al-fresco eating and drinking, nightlife; and a diverse food and drink offer that encourages in-vogue local businesses[46]. The Massachusetts Institute of Technology describes its role at Kendall Square in terms that show its support for business and local communities as part of its underpinning of the ecosystem, 'delivering uses including housing, lab and research space, retail, innovation space, open space and a dedicated facility for the MIT Museum.'

This attention to the area's cultural and public realm feel has underpinned a growth in knowledge-based industries that was already occurring. Research and office facilities support companies that range in scale from start-ups to giant multi-nationals such as Novartis, Biogen, Pfizer, Sanofi in bioscience and Google, Facebook, and IBM in information technology. Boston is now regarded as the world's leading life sciences cluster.

The Kendall Square Board spans universities (Harvard and MIT), innovative businesses, real estate, local government and bodies that support local communities; a quadruple helix model.

The Kendall Square Association (KSA) enables the future by connecting the people changing the world. In the fall of 2008 a group of Cambridge leaders realized that Kendall had rapidly evolved into something extraordinary and that it was important to think about its future in a more deliberate way. Located next to MIT and surrounded by life sciences and information technology companies, as well as many research institutions, Kendall was already an epicenter for innovation. What was also needed was a greater ability for people to connect and exchange ideas and the creation of equally vibrant and compelling activity at the street level in Kendall.

KSA was launched at a meeting for leaders in the Kendall community to discuss this innovation ecosystem's unique characteristics. More than 100 people offered ideas about how to improve, promote, and protect Kendall Square. That input resulted in the establishment of the KSA which had its first annual meeting in March 2009. The mission has always been to build partnerships, host events, advocate for public policy issues and tell Kendall's story of transformation from an industrial center to a global innovation hub.

https://kendallsquare.org/about/

46 https://www.cambridgema.gov/-/media/Files/CDD/Planning/Studies/K2C2/finalreports/k2c2_kendall_final_report.pdf

Kendall Square (kendallsquare.org)

Case Study: 22@Barcelona

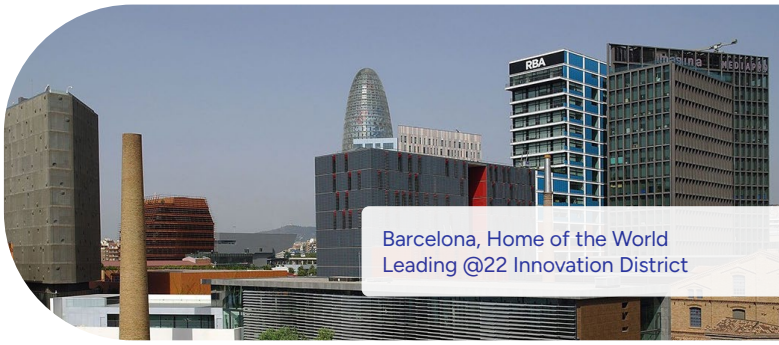
The 22@Barcelona innovation district was formed at the turn of the twenty-first century, one of the first European innovation districts. 22@Barcelona has played a key part in the city's economic renaissance, again demonstrating the power of city government and agencies, universities and businesses working strategically and deeply together.

The regeneration and renaissance of Barcelona pre-dates the 1992 Olympics with the re-emergence of democratic city councils in the 1970s an important juncture though the city struggled with high unemployment in the 1980s in part due to deindustrialisation. After the Olympics, with the city seeking to enter a new phase of economic renewal and rebound from an economic downturn in 1993-1995, ideas were formed leading to the publication of the 1998 document 'Poblenou: The Renovation of Industrial Areas. Planning Criteria, Goals and General Solutions.' This is considered the starting point of the 22@Barcelona project to transform an inner-city industrial area to the east of the city centre into an innovation district of highly productive new industries supported by universities and wider regeneration including housing. In 2000 the 22@Barcelona municipal company was formed to coordinate and drive progress.

The process started in 2000 with an initial phase of urban renovation including the provision of high- quality infrastructure such as public realm. As an initial catalyst the city council helped moved some public companies and universities to the district to anchor industrial clustering, a top-down approach to the creation of strategic clusters.

In 2004, 22@Barcelona approached a new era of intense economic and social renewal; several strategies were developed aiming to create urban clusters of innovation focusing on various emergent sectors which Barcelona considered should be represented in the city's economy. They were media, information and communication technologies (ICT), medical technologies and energy. In some cases these sectors were clearly rooted in the local economic geography like media or ICT; others were strong growth sectors nationally or internationally that it was felt could be attracted into and grown in Barcelona. In 2009, design was added as an additional priority sector.

The 22@Barcelona agency was created to manage the district from the very beginning. It had a clear role to network research, education and knowledge transfer and to promote Barcelona's success in this internationally. Meanwhile the city council led on physical regeneration.



Barcelona, Home of the World Leading @22 Innovation District

Josep M. Piqué, Executive President of Technova Barcelona, believes the success of 22@Barcelona's innovation district is underpinned by its leadership's strategic use of the triple helix model which fosters collaboration between academia, industry and government. This approach has driven 22@Barcelona's transformation into a hub of innovation and economic growth. Over time, mayors of Barcelona have played a key role by championing this vision and ensuring that municipal support facilitates collaboration, particularly in setting up regulatory and infrastructural frameworks. This leadership has attracted investment and created public-private partnerships, enhancing clusters like digital, media, design, health and clean energy.

The 22@ Association plays a central role in driving this collaboration. Piqué explained how members from academia, industry and government engage through structured events, meetings and working groups such as the '22@Breakfasts' and various commissions. The association fosters a culture of transparency, trust and open communication which has sustained the triple helix model's success. This governance structure allows all stakeholders to align on shared objectives and create an inclusive, innovation-driven district. The association's responsibilities range from promoting innovation, talent development and economic growth to fostering social inclusion and networking opportunities.

The association also emphasises demand generation for the products and services developed within 22@ Barcelona. One of the key initiatives is the Barcelona Urban Lab which acts as a testing ground for innovative technologies and services created by local businesses with citizens helping to determine which innovations are adopted. By integrating these innovations into the city's infrastructure, such as smart city projects, the Urban Lab helps demonstrate the real-world applications of local innovation, effectively creating demand and visibility for new products and services. This initiative aligns the government's role as both a facilitator and an early adopter, further amplifying the district's global reach.

What can We Learn?

Looking in more depth beyond the strengths of the triple-helix model, five specifics stood out as potential learning points in the Barcelona model.

1. Demand generation

Barcelona's strategy has been built on the triple-helix model. They also posit a fourth dimension to this, demand for products and services. Barcelona places substantial focus on international connectivity including hosting many major conferences and events and forming and joining international networks and partnerships. Local demand for SME products and services is also stimulated at the Urban Lab (see below).

2. Place promotion

An interesting aspect of Barcelona's approach to place promotion is its inward investment team engaging policy makers directly to encourage conversation and understanding of the Barcelona model, keeping it fresh in economic development practitioners' minds and subsequent conversations as a form of indirect marketing.

3. One stop shop

22@Barcelona offers a building (MEDIATIC) that acts as a single front door to the innovation district, whether the visitor is looking to upskill, gain employment, locate a business or invest. This improves access and inclusion within the innovation district.

4. Barcelona Urban Lab

This is an excellent example of the state helping to innovate cities, raise interest and inclusion in technological and urban development and help to test and create demand for the products of local SMEs. Development costs become less of a risk with this state support for experimentation coupled with a higher chance that innovations like intelligent lighting or locating empty parking spaces will be trialled on the city's streets before potentially reaching wider markets.

5. Infrastructure provision

Further devolved funding and powers in the UK could help local government focus attention and accelerate the provision of hard infrastructure in the way that Barcelona's city council has at 22@ Barcelona. In terms of soft infrastructure many local authorities across the UK with now depleted economic development teams would struggle to support local business bases in the way that 22@ Barcelona does.

While some local authorities may wish to consider refocusing spending onto this sort of activity and to form stronger partnerships to pool resources with other anchor institutions there seems a clear role for national governments across the UK in terms of making economic development a statutory function and providing additional revenue funding for business networking, place-promotion and inward investment activity.

3.7 Leadership in an Innovation District

As demonstrated by Kendall Square and 22@Barcelona coordinated leadership across the quadruple or triple helix is important in aligning interests and taking a coordinated approach to developing an innovation district. There is no single model of innovation district governance and partners may choose aspects of the leadership that are kept unilateral or bilateral but ambitions that a shared governance structure or association for the innovation district may want to consider, are:

1. Supporting research-to-business and business-to-business networks;
2. Place marketing and promotion and attracting occupiers and investors in growth companies or infrastructure and real estate, including via working with business agents and regional and national government agencies. It is important that this captures genuine differentiated opportunity coupled with investable propositions;
3. Engaging and influencing national government in terms of economic, industrial and innovation funding and policy;
4. Town planning and public realm; and
5. Encouraging sustainability and socio-economic inclusion.

There may be tensions such as the potential for an innovation district association that includes the local authority to then lobby the local authority or for promotional materials to balance different interests but the adoption of partnership models of leadership exist across many successful innovation districts and can:

1. Introduce or advance relationships between anchor institutions;
2. Harness integrated action on shared ambitions such as the five listed above;
3. Generate funds to spend on agreed aims within the innovation district (like a BID model);
4. Lever greater support from individual anchor institutions including by helping demonstrate the value of partnership and by multi-level governance structures engaging different layers of organisations involved in leadership and delivery; and
5. Provide a 'front door' to help government and markets engage partners.

3.8 Government's Role in Innovation Districts

Innovation districts benefit from hyper-locality driving interaction and are often best when organic growth can take place and when innovators and disrupters are not stifled by financial models or institutional risk management. Yet there are clear roles for government to play nationally.

Firstly, that a national approach to innovation districts recognises them as sometimes having multi-organisation leadership and broader and more complex economic ecosystems that may be harder to understand or compartmentalise than standalone innovation institutes, but understands that they are assets of national importance that government should proactively engage and support.

Secondly, a national approach for innovation districts could take from the Industrial Strategy Action Plan Zones[47] and the proposed AI Growth Zones in terms of investing in capital, skills and business attraction and growth, but must build on it to ensure it encourages the unique qualities of innovation districts.

A national approach could also coalesce multi-departmental/agency funding for innovation, business support, physical regeneration, housing, leisure, economic inclusion and sustainability, thereby streamlining delivery and reducing risk and complex sequencing. This would include funding for universities that encourage multi-disciplinary innovation initiatives across departmental and faculty boundaries and respond to increasingly dynamic and high-technology modern economies.

Thirdly, it would recognise the benefits of generous funding. As critical nodes in the UK's innovation infrastructure, with the potential to spur wider physical regeneration in our towns and cities, it is important that capital funding for innovation districts creates distinctive, welcoming places that attract occupiers and investors and encourage a sense of aspiration and ownership amongst local communities. Revenue funding must generously underpin and network the economic ecosystem, supporting businesses who would not be able to access technology, space and support at market prices and allow for risk taking and failure.

47 Industrial Strategy Zones Action Plan - GOV.UK

The Spine Building, Liverpool Knowledge Quarter (www.ukinnovationdistricts.co.uk)

Case Study: The White City Innovation District (WCID)

'A key foundation for the success of innovation districts is the ability of knowledge-based anchor-led institutions to build on some opportunism, to give direct and convened support with broad ambitions for highly productive industries that includes but goes beyond real estate delivery.'

John Anderson, Chief Investment Officer,
Imperial College London

(www.whitecityinnovationdistrict.org.uk)

Imperial College London's I-HUB provides a home for businesses to work directly alongside Imperial's academics, to share ideas and turn scientific and technological discoveries into new products and services (Imperial College London)

Introduction

White City Innovation District (WCID) is one of the UK's leading clusters of highly productive industries across a range of sectors. It is largely centred on Wood Lane in West London and is home to a range of leading organisations in fields such as biotechnology, health-tech and healthcare, technology and media, including Imperial College London (Imperial), Hammersmith Hospital, BBC, ITV, Novartis, L'Oréal and Autolus. Although some activities have been located there for longer, in particular the BBC's presence, the district has emerged as a true innovation ecosystem since Imperial acquired 23 acres of post-industrial brownfield land from 2009-2013 to establish a second 'Deeptech' campus.

The pace and quality of progress has been underpinned by strong commitment from the local council, the London Borough of Hammersmith & Fulham (H&F). This resulted in the emergence of a shared local industrial strategy via a novel partnership between Imperial and H&F. Therefore the district has evolved as a classic triple-helix innovation district model with strong emphasis placed on growing an ecosystem of high-value activities and increasing socio-economic inclusion.

Overview

Imperial's White City 'Deeptech' campus undertakes fundamental academic research, hosts strategic partnerships with business and provides flexible and highly serviced facilities to promote the commercialisation of research. It builds on the long standing local clinical research relationship with Hammersmith Hospital as part of the Imperial College NHS Trust.

The key Imperial buildings at White City include:

- I-HUB which houses knowledge intensive Imperial institutes, companies looking to commercialise scientific research and supranational network groups. It operates across 17.5k square metres with the operational flexibility to support lab-based life sciences, AI and machine learning and defence and security.
- The Molecular Sciences Research Hub, providing very highly serviced laboratory-based interdisciplinary space centred on the Department of Chemistry with specialised scientific equipment and postgraduate teaching. Here university scientists work at the early stages of ideation with commercial partners to advance research in areas such as clean energy, chemical biology and personalised healthcare.
- The Sir Michael Uren Biomedical Engineering Hub that provides highly adaptable research environments to scale up the emerging discipline of Biomedical Engineering and its relationships with materials science and clinical practice.
- The School of Public Health where Imperial's previously disparate community of epidemiologists, data scientists and the public health faculty have been brought together.
- Scale Space, including the Imperial White City Incubator, which offers flexible laboratory space for new and growing deep tech companies with curated and subsidised facilities for up to a three-year incubation period in the context of wider grow-on space to allow them to graduate within the ecosystem.

Scale Space is operated in partnership with Blenheim Chalcot, one of Europe's leading digital venture builders, an arrangement established following direct intervention by H&F.

Scale Space offers a range of facilities and spaces at costs managed to support a wide range of tech and life science scaleups. Strong emphasis is placed on it being a permeable and highly networked community.

Well in excess of 100 individual organisations now form the innovation cluster across WCID ranging from global anchors like Novartis and NATO to significant UK and international scale ups like Autolus, ADC Therapeutics and Liberis plus a plethora of spin-outs and spin-ins from Deeptech university research such as RFC Power and Avacta.

To the west of Wood Lane from Imperial's emerging campus are other parts of the innovation district with more focus on cultural and creative industries. This includes Television Centre, which has successfully been regenerated into a mixed-use building including BBC Studios since the BBC presence reduced with the opening of Media City in Salford and the consolidation of journalism at Broadcasting House. To the north of Television Centre are the offices of several large organisations including L'Oréal, One Web and the Royal College of Art.

The original Westfield London shopping centre lies immediately to the south of the innovation district retaining its status as the UKs largest retail centre and providing a diverse and growing range of retail, leisure and entertainment in addition to that found on Wood Lane which ranges from street food to facilities like Soho House.

The latest addition to the environment is Ed City, an ambitious venture in partnership between Ark Academy and H&F to develop an EdTech cluster and provide direct educational and support for the youth community of the borough.

Professor Mary Ryan (Vice Provost Research and Enterprise, Imperial College London) speaks at White City Innovation District's inaugural life science summit (Imperial College London)

Benefits of an Innovation District

John Anderson, Chief investment Officer at Imperial, believes that WCID's mixed-used and permeable nature, in contrast to the standalone university campus of the past, has materially helped development. This has embedded the university in the culture and community of White City where proximity and thoughtful engagement has forged multiple links between different organisations and gives occupiers choice on whether to occupy policy driven spaces operated by the university vs the more agnostic and traditional offers from other landlords.

Some scale-ups saw being on campus as having expectations of an institutional existence in culture and in action. This was desirable or worth the subsidy for some but not for others. A pure campus would be more exclusive and limiting, reducing the range of activities and applications to those most valued by the university or the state innovation agencies. This could also limit the range and quality of the leisure, food and beverage and retail facilities.

Anderson also notes that having an innovation district allows a focus on place-based activities and developments, facilitating more detailed and tangible actions and outcomes. This he contrasts with the sometimes high-level and principle-based civic contracts agreed between universities and other local authorities that undoubtedly have positive intentions but can be focused on policy debate and discussion over direct activity.

Opportunities and Tensions when Developing an Innovation District

Anderson notes that several factors pushed and supported Imperial to develop a new 'Deeptech' campus in the context of an innovation district. The most obvious is the university's world class strength and narrow focus on science, technology, maths, medicine, engineering and business but with a charter obligation to apply that research and scholarship via industry for the benefit of society.

The ability of Imperial to maintain and scale that mission sustainably had stalled due to insufficient space at their main South Kensington campus to establish new disciplines and grow corporate partnerships. This was in direct contrast to the environments in which the likes of MIT and Stanford - globally leading universities with stronger financial foundations - were operating. Anderson notes that Imperial's approach constantly iterated and evolved, allowing factors like the now critical strategic relationship with H&F to shape the nature of development and also ensuring very significant and flexible long term development capacity to ensure opportunities are 'shovel ready' as and when serendipity provides new sources of partnership, funding or occupational growth.

Anderson also points to a potential tension that Imperial seeks to understand and tolerate, that innovation districts benefit from being liberal, agnostic and free. This 'sandbox' environment allows occupiers to attempt to do disruptive and difficult things. Universities are by contrast institutional, managed, controlled environments. As more of the core university comes to WCID the more of a traditional campus feel and mentality springs up. The early adopters at White City were often pioneers who were limited in capacity within the traditional model and needed cross-organisational work or links such as the commercialisation of their work or other collaborations with business and a less established location to progress. These collaborations were economically risky and attracted or enabled activity without a critical mass of faculty and so a differentiated 'tribe' of workers formed the early community of WCID dominated by the entrepreneurial academic founders.

Anderson notes that this sub-type that emerges at many universities but rarely dominates is drawn to these more commercial or partnership focused spaces and that institutional strategy or financial incentives can only take you so far – pioneers and innovators need space and freedom to disrupt with institutional patience and sufficiently loose governance controls vital to permit and scale the growth activity that emerges.

This causes a permanent tension between the necessary protocols and reputational risk management of large high-profile institutions and the fluidity and dynamism of those on the ground of an innovation district. This can play out in terms of recruitment, procurement and the handling of financial risks.

Anderson notes for example that Scale Space – Imperial's partnership with Blenheim Chalcot which is a private venture builder to support start-up and scale-up businesses – feels more liberal and relaxed than Imperial's Ihub (innovation hub with offices and labs) which is a more controlled environment. The two models have begun to complement each other but only through the sharing of experience and integrating community management across both.

Anderson also notes two other tensions around land economics. The first is that as an innovation district flourishes the cost and value of land increases risking innovation-rich developments being priced-out by other land uses. The second is to provide early-stage firms with low or deeply subsidised rents while needing to pay for complex and expensive buildings to be erected, maintained and operated with multiple occupants. Successful innovation requires an embracing of failure and the ability to house many innovators some, indeed most, of whom will fail, especially if the metric of success is unicorn status. This tension can be reduced with focused public sector support or through the re-use of existing infrastructure such as at Here East where buildings from the 2012 Olympics have been repurposed as an education and innovation hub.

Successful Partnerships

The success to date at WCID stems from close working between the university, hospital system and a range of businesses and H&F built on respect, tolerance, patience, judgement and mutual interests but most crucially trust.

With H&F Anderson notes that the council responded to the potential of Imperial as a powerful anchor institution and then acted to co-create WCID. Through the industrial strategy H&F provided a framework with a local democratic legitimacy and a differentiated ambition to do things at a larger scale across education, enterprise and more equitable growth: genuine regeneration. That visible and voluble political commitment to good growth then makes individual actions easier.

Anderson notes the important role that the leader of the council played in personally driving the agenda, including networking organisations with mutual interests, such as introducing Imperial and Blenheim Chalcot who rapidly identified shared interests and delivered action via Scale Space. H&F and Imperial also co-fund Upstream, an organisation that since 2018 has connected, supported and promoted the science, tech and creative sectors in H&F with a focus on WCID. This shared investment in 'Network Infrastructure' has provided professional, trusted and consistent convening support and has been regularly refocused on new and emerging sectors to promote new growth. Upstream's work is 'driven by the belief that local networks, which facilitate collaboration and learning can accelerate the growth of organisations and places.'

In terms of the classic role that councils play in planning and facilitating development Anderson notes the importance of having mature and direct conversations around planning density, planning uses and planning gain that leave room for university developments that do not maximise short-term returns from development, and instead facilitate long-term economic benefit to the place such as through a thriving innovation scene that provides opportunities for local workers, new businesses, and over time, a strong business rate base.

With Blenheim Chalcot

Anderson outlined the strengths of the partnership between ICL and Blenheim Chalcot at Scalespace. It is a 50:50 equity partnership in terms of operating the business and ecosystem but the equity is a minority of capital invested with Imperial, as an anchor, providing ground leases and term debt capacity.

Imperial has benefitted from aspects of the project which reduced risk: that while Imperial ultimately underwrote the Scale Space building, construction was delivered through a contractual JV to get the benefit of Blenheim Chalcot's agility and market understanding of specification. Blenheim Chalcot's community of digital and tech ventures became the largest occupational group, expanding the ecosystem into digital and further up the growth curve. The building itself is modular and flexible in use so it can be adapted depending on changing need.

Anderson notes that ICL could push up or down the mission curve depending on outcomes. Had Scale Space not been successful, other uses – academic, commercial, and industrial – could have been introduced.

Anderson also notes that Scale Space is affordable to business by design. The range of facilities from shell and core 'boxes' to fully fitted laboratory and the flexibility of pricing that they can offer is due to having the right combination of landowner, occupiers and operator. Blenheim Chalcot's support is commercially focused and this combines well with Imperial's longer-term support for research and its translation into applied uses. This allows focus on the occupiers and the ecosystem making it active and populated rather than being overly orientated around stretched financial returns.

Imperial College's Scale Space is a partnership between Imperial College London and Blenheim Chalcot (Imperial College London)

With Hammersmith Hospital

Hammersmith Hospital is a specialist hospital with long-standing and strong research connections. It offers a range of services including renal, haematology, cancer and cardiology care and provides the regional specialist heart attack centre. It is also a major base for Imperial's clinical research including when it is required that a hospital setting and research facilities co-exist on site together.

Imperial and the trust have made significant investments on the historically isolated Du Cane Road site including: the development of Queen Charlotte's, dedicated to maternity, women's health and neonatal care supported by the Wolfson and Weston Research Centre; the imaging facilities developed in collaboration with GSK; and the Centre for Translation and Experimental Medicine that focused on the bench to bed approach only possible on clinically active sites. Most recently the MRC delivered exceptional new facilities for the long-standing Laboratory of Medical Sciences on the site. The geography of the White City 'Deeptech' Campus has begun to measurably reduce that sense of isolation with complementary research disciplines and with broader sectors and communities locating and scaling in close proximity, with both locations now sitting comfortably in the context of WCID.

Internationalisation

In addition to Imperial's already widespread international networks H&F has worked to internationalise WCID. This includes the borough signing agreements with innovation districts or institutions in Barcelona, Buenos Aires, Melbourne, Milan and Oslo focused on mutual support between global tech nodes that can support businesses, research institutions or students. Via engagement from H&F, WCID was a founder member of an 'International Association of Science Parks and Areas of Innovation' alliance of innovation districts. Increased engagement with the Department of Business and Trade and London & Partners further supports place promotion and engagement with investment markets.

Socio-Economic Inclusion

Increasing socio-economic inclusion is a key goal of partners such as Imperial and H&F. John Anderson notes that application and acceptance rates for the White City learner community to degree courses at Imperial have significantly increased while more broadly the shared ambition and dedicated outreach function to increase interest and participation in science, including via employment, certainly makes WCID feel more accessible.

1. **Ed City**
   A partnership between H&F and education charity Ark is creating a £150m investment in an education hub, new affordable homes, a modern office building and improved community facilities to White City which will fully complete in 2025.

   In terms of education pathways there is a new nursey school, a new primary school shares facilities with a multi-activity youth zone and a transformed adult community education centre will offer training and life-long learning opportunities for local residents with the main aim of supporting people back into employment.

   A key goal has been to better physically link WCID with surrounding residential areas notably the White City Estate, a largely socio-housing residential area of just over 2000 homes. The Ed City development does this through the provision of a new boulevard linking White City Estate with the innovation district.

2. **Invention Rooms and Maker Spaces**
   Imperial College's Invention Rooms provide cutting-edge facilities to inspire a new generation of inventors, entrepreneurs and makers from the local area. There is a wide range of programmes including a tech drop-in session for older residents, coding clubs for young people and a range of pop-up events and activities throughout the year. The facilities also operate to support prototyping and 'hackathons' across communities and business.

3. **Engagement with schools**
   H&F Council has coordinated engagement between businesses and schools as part of the council's industrial strategy. This aims to inspire children into Science, Technology, Arts, Engineering or Maths (STEAM) related careers and to provide insight, training and employment opportunities.

Next Steps

John Anderson believes that government (national, regional, and local) has a key role to play in supporting universities and places committed to the innovation agenda. This includes the provision of genuinely affordable space, including high-quality and well-run lab space, where businesses can set-up and take risks with low relative capital demands and enjoy freedom, time and tolerance in trying to succeed. Ideally this activity is alongside university scientists who are institutionally incentivised to work in innovation environments perhaps including new PhD structures that establish commercial and entrepreneurial skills along with academic rigour. A plurality of goals is important, the ability to combine academic work with other activities in spin-outs, consultancy or advisory. This could form part of a wider new contract which national government has with universities with greater focus on innovation, impact and translation - provided the costs and risks of expanding the role are equitably shared.

Anderson also believes that government and its agencies seem to have stronger confidence in dealing with emerging 'focused research organisations' such as the Alan Turing, Francis Crick or Franklin Rosalind Institutes than with the more multi-faceted innovation districts anchored by universities. Anderson believes this underlines the importance of multi-organisational innovation districts having a partnership structure that provides national government with a reliable and consistent point of contact to navigate the richer activity base within those districts.

But this must be managed to avoid the unintentional imposition of control and there is clearly opportunity for the FROs to operate within - and even as co-anchors of - full-scale innovation districts.

At White City ever more physical assets will continue to be built on Imperial's 'Deeptech' campus but Anderson notes the importance of networking continuing to be supported if the ecosystem is to keep flourishing. This includes across the anchor institutions and also the all-important smaller organisations and individuals. Smaller firms often innovate for larger organisations so keeping this mix is vital to long-term success. Anderson notes that this network, this eco-system, still has room to grow and integrate further between different sectors and sub-sectors at WCID, blending tech, creative, healthcare and science further together in developing the solutions for tomorrow.

As well as the strengthening local networks and the clear focus on internationalisation, WCID also has a growing opportunity to impact further across the UK economy. WCID is located around a mile south of the Old Oak Common 'Transport SuperHub' which will open-up faster links to Oxford, Bristol and South Wales and up to the Midlands and North of England in addition to enhancing intra-London connectivity to Paddington Life Sciences and the Knowledge Quarter. This already committed and progressed infrastructure mega project offers the potential for WCID to become more immersed in a national constellation of innovation hotpots that can grow with the right national and local support and practice.

Old Oak Common Station (www.hs2.org.uk)

Chapter 4 - Place Partnerships and University Networks

Introduction

Universities can be drivers of growth - and regeneration in places that face economic challenges - by increasing local employment, spending and footfall; supporting local skills through supporting access, degrees and professional training; and by taking strong civic roles in partnerships that drive local economies.

There is also significant potential for universities to become stronger drivers of local and national growth as part of a renewed emphasis on economically-orientated place partnerships, aided by the quality, diversity, number and geographical spread of universities across the UK and the widespread perception that the potential of universities to drive economic growth is not yet fully fulfilled.

Innovation delivered by universities can assist the UK with tackling its productivity problem that stems back to the 2008 global economic recession while there are also roles for universities in using their national and economic networks to support places: as anchor institutions that can underpin partnerships through rigour and reputation; as centres of professional expertise across many sectors of the economy including social science, humanities, and the arts; and as research and analytical support for public policy, both locally and nationally.

It is critical though that initiatives to better harness university's expertise and assets for the benefit of local businesses are set in wider economic development initiatives to increase the demand from local and regional businesses for innovation via funding and encouraging cultures of engagement. Otherwise, absorptive capacity in local firms may be insufficient especially in less economically advantaged places. This risks universities becoming more detached from their local economies as they need to look nationally and internationally for business collaborators with the capacity to engage[48].

48 What drives university-industry collaboration? Research excellence or firm collaboration strategy? - ScienceDirect

4.1 National Policy – Universities in Place Partnerships

Industrial Strategy White Paper

The Industrial Strategy White Paper notes that 'universities are crucial to regional and local economic impacts and are anchor institutions in their local communities, with research showing they are in the top three exporters in 102 constituencies in the UK.' The interface between universities, innovation and business is covered in several places within the White Paper, underlining the value government places in how universities support business and growth. The chapter on 'Supporting the UK's city regions and clusters' offers welcome focus on place-based growth, within which the importance of universities is clear in references for the Cambridge x Manchester partnership, the Oxford-Cambridge Growth Corridor, and in the 'strengths and opportunities' overviews of Scotland, Wales, and Northern Ireland.

However, there is a missed opportunity for the White Paper to focus further on the driving role of universities in local and regional economies, including via economic partnerships. Even the sections on the Local Innovation Partnerships Fund do not showcase the value of universities and the central roles they must play. Similarly absent within the White Paper is the role of universities as anchor institutions, providing the capacity, networks and expertise to support local economies and communities including via routes beyond innovation.

The White Paper notes that 'city centres are where businesses, skilled workers, Higher Education providers, and innovation networks connect; and where knowledge-intensive service sectors flourish.' As this report sets out, geographical proximity is important. Government should go further to encourage this. This includes via town planning and subsidising the development of assets in locations that encourage agglomeration and sustainable equitable access by being close to public transport hubs rather than risking the market moving economic activity to disparate greenfield sites reliant on cars. It also means investing revenue funding in the networks that can better glue businesses, universities and workers – increasing and improving interfaces and raising mutual understanding, including of universities, which are often large and complex institutions.

Delivering the Industrial Strategy

Subsequent national and local government action that builds on the Industrial Strategy White Paper and Local Growth Plan guidance should include a focus on bringing together institutions within regions, using the quadruple helix to drive inclusive and sustainable growth. This will give universities a more explicit role in driving innovation-led growth in the places government has identified for their high potential.

The potential of universities as economic anchor institutions that provide employment, spending power, capacity, networks and expertise can also underpin the economies of places with lower economic potentials, especially where there is an institutional thinness in the private sector. Universities in these places can also play key roles in helping to drive economic activities up value chains to help their places contribute more to the industry strategy's national ambitions.

These types of approach can already be seen in Scotland where universities are key partners in regional economic partnerships (REPs) and their regional economic strategies as per the Edinburgh and South East Scotland case study in this report.

Universities should be critical partners in local growth plans and partnerships, both in their creation and delivery, raising awareness in other organisations of universities' economic capabilities and impact and informing planning for how university assets and expertise can best be supported and harnessed. Within this, coordination across a university is important in coalescing multiple economic functions and interfaces. This can help drive the impact of the university and offer a single interface to government, business and investment markets and other constituent parts of an economic ecosystem.

These local growth partnerships should include in their governance structures collaboratives that focus on driving innovation for wider economic benefit across the geography.

These innovation focused collaborations should ensure: i) that universities and mayoral strategic authorities and councils are agreed on common targets to maximise long-term institutional buy-in, including from senior leaders, stretching organisations beyond their traditional boundaries; ii) focus on using innovation to spur economic growth, increase environmental sustainability and reduce economic inequality; iii) avoid risk of innovation being crowded out by other local economic priorities or stymied by insufficient demand from business; and iv) contextualise higher-tech functions within wider and often lower-tech economic sectors that help underpin clusters of higher-tech functionality and which themselves have productivity-growth demands that universities can assist with.

Nationally led incentives to help align university teaching and research with economic opportunities would also be helpful as there can be disconnects between: i) drivers such as research excellence and journal citations; and ii) business needs, evolving cross-cutting technologies and sectoral opportunities.

Furthermore, universities have key roles to play in local growth partnerships in terms of skills planning and coordination in tandem with further education colleges and across all areas of economic interest in terms of adding research and analytical capabilities. They also have wider roles to play in terms of using their capacity, reach and reputation to help partnerships strategize and develop policy, bid for public sector funding and engage in investment markets and with local business and communities.

Devolution or Delivery?

There is an interesting potential tension in the government's plans, namely that the local growth plans must not only identify and support local growth sectors but also ensure that the plans align with the forthcoming national industrial strategy. Previously, to ensure fit with national ambitions locally developed drafts of the 2013 LEP multi-year strategic economic plans and the later 2018 local industrial strategies were submitted to the UK Government for review and approval.

Any government review should be light-touch and allow local places to determine their own priorities and delivery mechanisms assuming sufficient clarity and quality in the plans. This supports devolution and avoids substantial iteration between central and local government on individual plans, distracting resources from delivery. The guidance issued in June 2025 appears to run in this direction, that 'Mayoral Strategic Authorities should publish their Local Growth Plan publicly as soon as practicable after co-determining their shared priorities with government. This is essential so that organisations required to use the Local Growth Plan can clearly understand their role in delivering its ambitions.'

Doing so will avoid local growth plans being symptomatic of a wider tension that has been reported by economic development practitioners: that while government plans further devolution to mayoral strategic authorities via their spread across England, and has awarded some mayoral strategic authorities additional powers in June 2025, there are perceptions within combined authorities that government - notably the Treasury - can view combined authorities as delivery vehicles for national policy rather than truly devolved bodies.

The i website reported that one mayor told it, 'The Treasury is saying to the mayors, "This is the national strategy; we see you as just implementing our strategy." They don't see it as devolution or "you have control and you decide." They just see us as a mechanism for delivering their national plans.'

Engagement between national and local politicians will be critical in ensuring that regions have sufficient scope to set their own agendas whilst contributing to national objectives, as will increased interaction between civil servants and local government officers, universities and businesses – directly and through professional bodies.

4.2 Building on Previous Support for Place Partnerships?

There is a long history of place-based economic interventions from national government in the UK. An early example is the Special Areas Act of 1934 which offered incentives for companies to relocate into areas of high unemployment during the great recession where heavy and extractive industries had declined.

A couple of recent examples particularly relevant to universities and innovation are the Strength in Places Fund and The Innovation Accelerator programme.

Strength in Places Fund

UK Research and Innovation's (UKRI) £316m Strength in Places fund helps areas of the UK build on existing strengths in research and innovation to deliver benefits for their local economy based on self-defined geographies.

It aims to:

- **Support innovation-led regional growth;**
- **Enhance local collaborations involving research and innovation.**

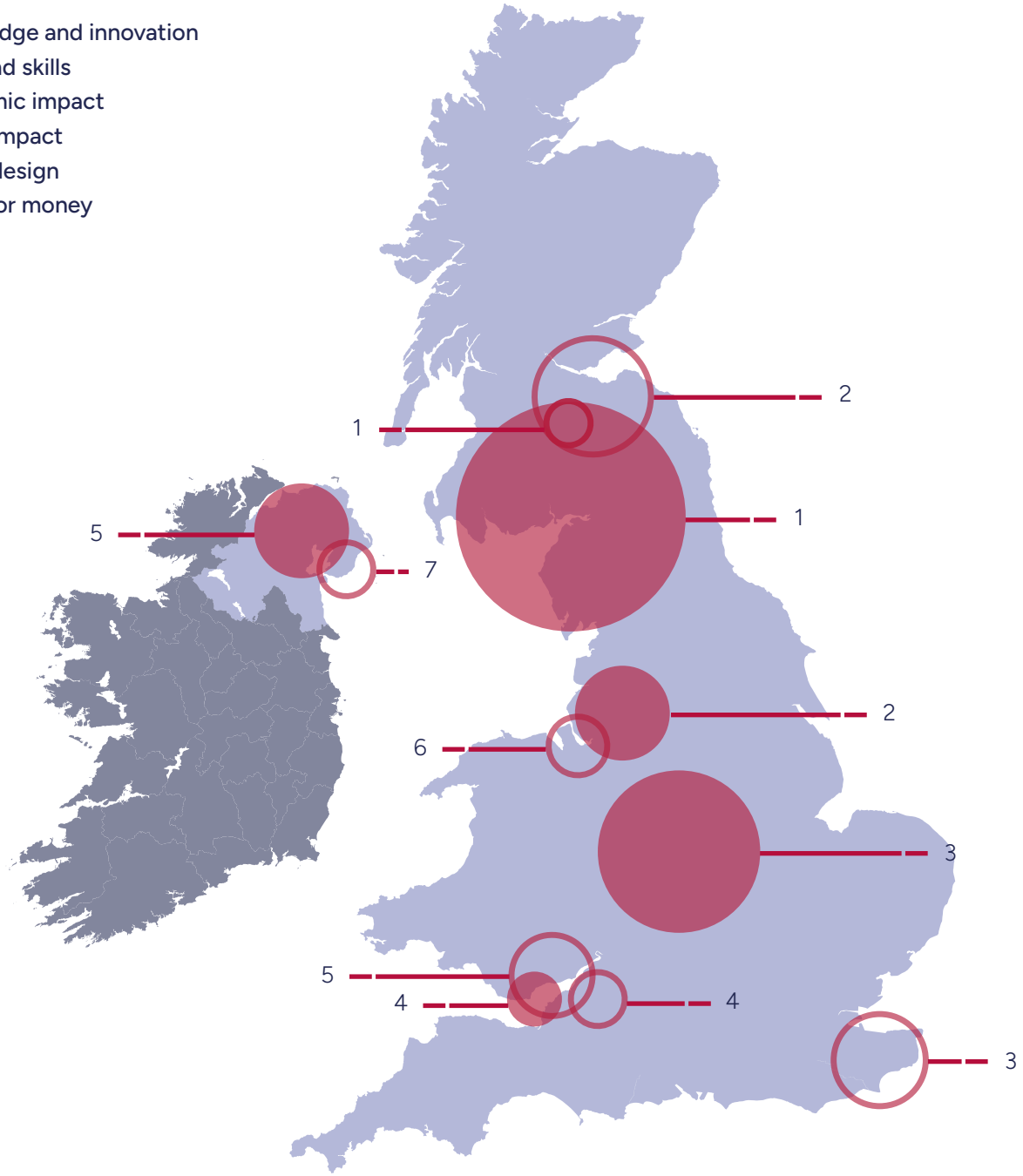
All projects are collaborative and are led by consortia that include both research organisations and businesses. Consortia needed strong engagement from local leadership partners.

The fund was open to any sector, area of technology or research discipline and there were two stages of funding:

- **£2 million 'seed corn' funding for 40 projects;**
- **£314 million allocated to 12 full stage projects shown in the map on the below page.**

In 2023 a consortium of companies led by Frontier Economics published an evaluation of the Wave 1 projects against six themes as sub-criteria for each:

1. Knowledge and innovation
2. Jobs and skills
3. Economic impact
4. Social impact
5. Policy design
6. Value for money



Key

- Wave 1
- Wave 2

Wave 1	Wave 2
1. The Living Laboratory	1. Digital Dairy Value Chain
2. GOFCoE	2. Advanced Machinery & Productivity Initiative
3. Growing Kent & Medway	3. Midlands Industrial Ceramics Group
4. MyWorld	4. media.cymru
5. CSconnected	5. Smart Nano NI
6. iicon	
7. Decarbonisation of Maritime Transportation	

Source: UKRI

The evaluation questions are shown below to demonstrate how success is being considered. The final evaluation is due in 2026.

Theme	Associated Impact Evaluation Questions
Knowledge & Innovation	**EQ1:** Did SIPF increase the regional quality and quantity of academic research in key research fields? To what extent was long-term capacity for such research increased? To what extent did this leverage existing local strengths?
	EQ2: Did SIPF increase the quantity and quality of regional commercial R&I in key industries? To what extent was long-term capacity for such R&I increased? To what extent did this leverage existing local strengths?
	EQ3: Have the technologies and new knowledge supported by SIPF progressed innovations and helped create new businesses? If not, why not?
	EQ4: Have the innovations, technologies, and new knowledge supported by SIPF been adopted more widely? If so, how are they being used? If not, why not?
Jobs & Skills	**EQ5**: Did SIPF improve the job prospects, in terms of the number, variety, and profile of jobs available within the targeted regions? If not, why not?
	EQ6: Did SIPF increase the skills base and/or alter the profile of skills in targeted regions? If not, why not?
Economic Impact	**EQ7:** Did SIPF funded-activities contribute to improved economic performance, particularly within targeted industries and regions? If so, was the improvement sustained? If not, why not?
	EQ8: Did SIPF contribute to closing gaps in economic performance across UK regions? If not, why not?
	EQ9: Did SIPF enhance and sustain the nature of collaboration and the collaboration infrastructure within targeted industries, research fields, and regions? If not, why not?
Social Impact	**EQ10:** Was the reputation for R&I of targeted regions and sectors enhanced as a result of the SIPF funding and outputs? If not, why not?
	EQ11: To what extent (and how) have SIPF projects fostered an equal, diverse, and inclusive research and business environments, and how well do SIPF projects align with UKRI EDI aims?
	EQ12: Did the outputs of SIPF improve the health, wellbeing, and environment of individuals in targeted regions?
Policy Design	**EQ13:** To what extent has the evidence base around the impact of locally targeted R&I spending in the UK been improved?
	EQ14: Did the learnings from SIPF influence and improve the design of R&I policy?
Value for Money	**EQ15:** To what extent does the SPF represent value for money given the overall impact on knowledge, economy, and society relative to the size of the investment?

Evaluation Framework For The Strength In Places Fund (ukri.org)

The Innovation Accelerator Programme[49]

The Innovation Accelerator programme is investing £100 million in 26 transformative research and development projects to accelerate the growth of three high-potential innovation clusters: Glasgow City Region, Greater Manchester and the West Midlands.

The programme is led by Innovate UK and is intended to accelerate the growth of these three major innovation clusters in some of the UK's largest urban areas with diverse economies and robust governance structures. The projects were expected to continue until March 2025 with a further year's extension given in the October 2024 Budget.

The Innovation Accelerator programme is designed to attract private investment, catalyse regional economic growth, lay the foundation for future technologies and create high value jobs. UKRI states that 'as a pilot for national to local co-creation it also provides evidence for the success factors necessary to:

- **Grow innovation clusters across the UK;**
- **Inform future policy for research and development (R&D);**
- **Cement the UK's position as a science and technology superpower.'**

Twenty-six R&D projects selected by the three city regions have received funding to:

- **Attract private sector R&D co-investment;**
- **Make improvements to productivity;**
- **Create high-quality jobs that will enrich the lives of the local community;**
- **Boost regional economic growth;**
- **Develop the technologies of tomorrow.**

Glasgow will boost extensive venture capital investment in key growth innovation sectors including advanced manufacturing, space and precision medicine.

Greater Manchester will lead the way in sustainable advanced materials and manufacturing, digital and tech, health innovation and technology to become carbon neutral by 2038.

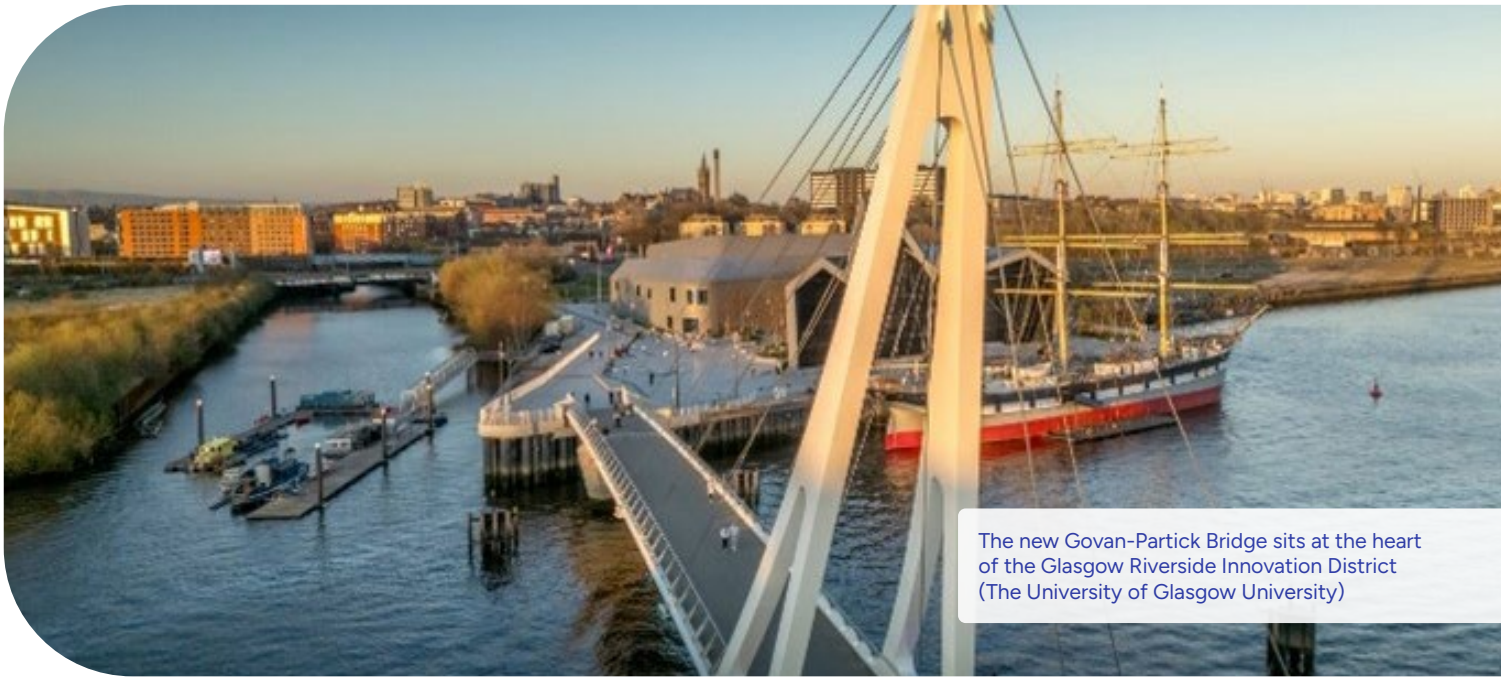
West Midlands will accelerate R&D and innovation strengths in greener technologies and improved personalised and digital healthcare, diversifying its economy while boosting supply chains and creating new local jobs.

The funding has been well received by partners in these urban areas. The Greater Manchester case study in this report describes how the Innovation Accelerator programme shows that it was recognised that Greater Manchester could help deliver government's national objectives, including geographical rebalancing of the UK economy, via tackling regional productivity gaps.

Glasgow University offered us the following insights:

'The Innovation Accelerator Programme and its successful participant projects demonstrates the strength of the UK's innovation economy and the thriving innovation potential in the Glasgow city region cluster with its leading R&D assets. The University of Glasgow is delighted to host six of the city's projects.

49 https://www.ukri.org/what-we-do/browse-our-areas-of-investment-and-support/innovation-accelerator-programme/



The new Govan-Partick Bridge sits at the heart of the Glasgow Riverside Innovation District (The University of Glasgow University)

'The funding helps the university and its partners across the public and private sectors to support the application of new technologies in a wide range of sectors. It has allowed for the progression of highly innovative concepts towards commercialisation and wider impact in our economy evidenced not only in the development of the broad application of their research potential but in the significant employment opportunities generated as a result.

'The region, its research, industrial base and community welcome initiatives that stimulate our innovation ecosystem and that can be aligned to wider infrastructure development. It was therefore positive to see the Innovation Accelerator Programme extended in the recent budget, allowing projects additional time and resource to develop their proof of concept and commercialisation pathways and demonstrate that all-important commitment from government and its partners to the high-potential innovation cluster present in the Glasgow city region.'

Mike King, Director of Economic Development, University of Glasgow

Local Innovation Partnership Fund

Feedback about the programme has been positive (from the University of Glasgow above and the University of Manchester in the Greater Manchester case study) and its successes have informed the recently announced Local Innovation Partnership Fund that will invest at least £30 million for each of 10 regions across the UK, including one in each of the devolved nations. It will do so to:

- **Put local expertise in the lead, empowering local authorities, businesses and researchers to shape decisions, in consultation with their communities, so funding will make the most impact**
- **Invest in local strengths, including those in the industrial strategy**
- **Drive regional growth by helping regions and nations use innovation to support business growth, create more and better jobs, and expand access to skills training**[50]

4.3 Support for Universities

Knowledge Exchange Framework

Research England, part of UKRI, publishes scores for universities according to different types of knowledge exchange. They note that 'higher education providers such as universities teach students and undertake research that creates new and useful knowledge. But they also work with many different types of partner to ensure that this knowledge can be used for the benefit of the economy and society - this is known as knowledge exchange (KE).'

Knowledge Exchange Framework (KEF) dashboards are produced to provide an overview of the performance of higher education providers across seven broad areas of knowledge exchange activity known in the KEF as 'perspectives,' displayed as a polar area chart 'KEF dashboard' (sample below in Figure 1) which shows the areas of evaluation.

There is not a league table of KEF results, instead, recognising the diversity of the sector, higher education providers are clustered by type and characteristics to allow easier comparisons with their peers in terms of relative performance across the different categories.

Proponents of the KEF system appreciate the comparisons it affords universities in recognising their relative strengths in each of the different fields shown in Figure 1 below, helping them to recognise success, challenges and to prioritise resources. Detractors point to their being no link between the KEF and funding or other incentives while needing university resources to make the returns to Research England.

Tilting university funding and recognition to the sort of outcomes measured in the KEF would help focus on the economic growth agendas this report advocates and de-risk possibilities of universities retracting from roles beyond core teaching and research missions which we are informed is already happening at some universities. Additional funding could do likewise whilst going some way to recognising the current financial challenges that universities face. Either way, encouraging knowledge exchange should improve the economic outputs of universities and by routes such as the retention of intellectual property or equity shares in spin-outs, raise revenue.

Civic Universities Network

The Civic University Network (https://civicuniversitynetwork.co.uk/) is an initiative to harness the collective power of the higher education sector to drive societal, economic and environmental advancements in the places they call home. It is a consortium of organisations led by Sheffield Hallam University aiming to help universities deepen their civic impact and amplify their contributions. Economic impact is one of the seven domains of their civic impact framework and they consider key questions to be:

- **How could our university's work create more prosperous places and address and reduce economic inequality?**
- **What impact is it having now?**
- **Can we articulate and promote a coherent vision of a flourishing local economy in partnership with local stakeholders?**

50 New fund will focus research investment on local priorities – UKRI

They have set out some progress levels for universities to consider in terms of increasing economic impact:

1. **Mapping** – where are we now?
2. **Partnering** – where do we want to go and with whom?
3. **Agreeing** – who will do what and when?
4. **Resourcing** – how are activities supported?
5. **Evaluating** – how are we doing?
6. **Learning** – what will we change and how?

4.4 Different Universities, Different Roles

As the case studies in this report show, many universities are well-established in place partnerships but there is room in many parts of the country for such partnerships to develop further. The UK government requirement for universities and further education colleges to be involved in the development of statutory local growth plans should solidify these partnerships further.

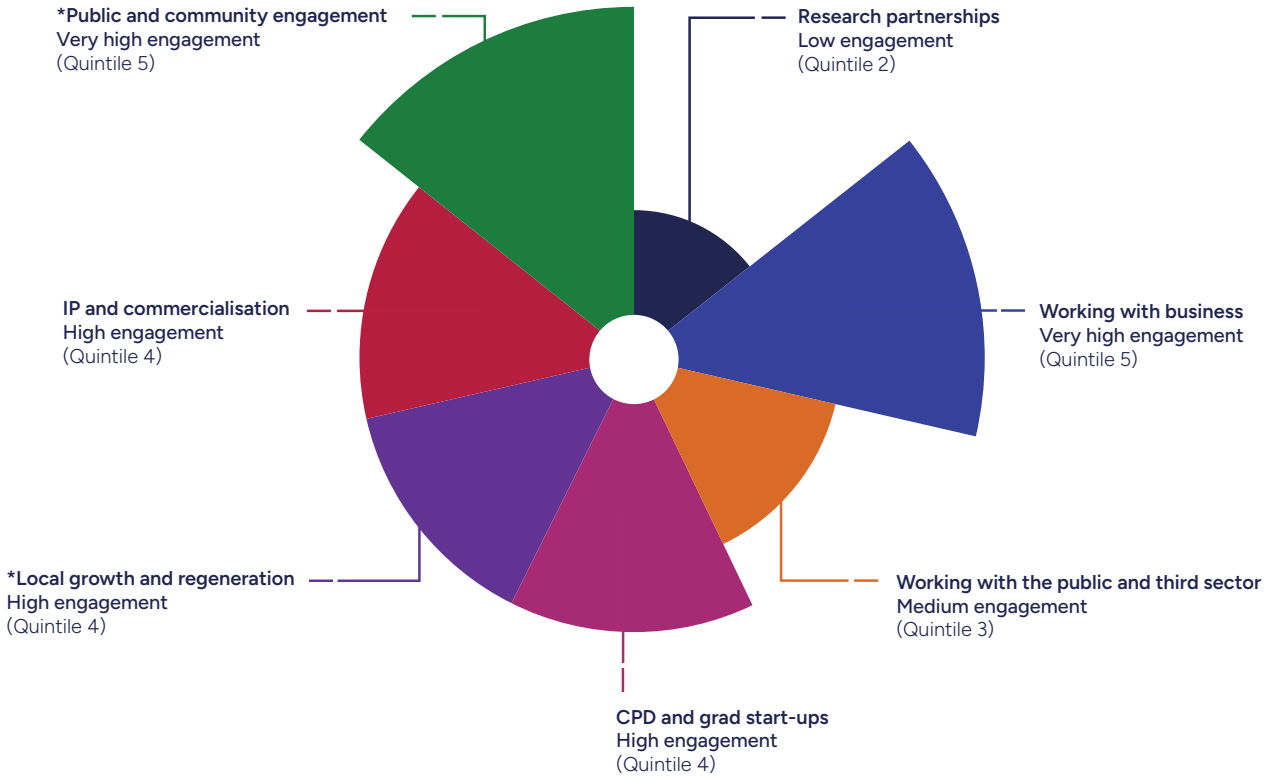
A key consideration is the nature of the university or universities that are to be involved. As noted in Chapter 1 universities in the UK are numerous and geographically widespread. Research intensive universities are also geographically dispersed as the table below shows though research funding is certainly not evenly spread between them. Additional research funding to universities in places where economies have widespread economic need and that are more heavily reliant on HEIs (Higher Education Institutes) as economic drivers would assist regional rebalancing, especially where the demand for technology transfers exists or can be stimulated. Professor Louise Kempton notes that 'economically challenged places often depend more on their universities due to lower capacity and resources, and institutional thinness, which creates additional pressures on universities.' This is reflected in our case study of how The University of Lincolnshire is supporting business and communities across Lincolnshire. These geographical trends and needs could be recognised in conjunction with rewarding genuine commitment to, and success in, supporting regional innovation and economic growth as recognised by structures like the KEF.

This would respond in part to a 2020 NESTA report that calculated that compared to the Greater South East of England average 'large parts of the UK, including North England, the English Midlands, and South West of England, together with Wales and Northern Ireland, have been missing out [on public sector R&D funding] to the tune of £4 billion a year. For regions where the state has under-invested in R&D, there is a double loss. Since the private sector tends to invest on average twice as much as public spending, those regions are missing out on the £8b billion private sector multiplier of that £4 billion too[51].'

51 The Missing £4 Billion: Making R&D work for the whole UK

Figure 1: *Sample KEF Dashboard*

*Supporting narrative statement available. Tap or hover over the chart segment to show a summary of the narrative, and a link to the full version.



The potential to drive economic growth via applied university research and knowledge transfer is aided by each of the UK's 12 International Territorial Level 1 areas (formerly known as NUTS1 areas) having at least one Russell Group university (an association of research-intensive universities). These are shown below also, listed alongside the university's ranking in the 2025 QS World Rankings (QS = Quacquarelli Symonds, a higher education analytics firm).

UK Nation or Region, including count of Russell Group universities within it	Russell Group Universities with 2025 QS World Rank
Scotland (2)	University of Edinburgh (27)
	University of Glasgow (78)
Wales (1)	Cardiff University (186)
Northern Ireland (1)	Queen's University Belfast (206)
East of England (1)	University of Cambridge (3)
London (5)	Imperial College London (2)
	Kings College London (40)
	London School of Economics and Political Science (50)
	Queen Mary University of London (120)
	University College London (9)
South East of England (2)	University of Oxford (5)
	University of Southampton (=80)
South West of England (2)	University of Bristol (54)
	University of Exeter (169)
East Midlands (1)	University of Nottingham (108)
West Midlands (2)	University of Birmingham (=80)
	University of Warwick (69)
North East (2)	Durham University (89)
	Newcastle University (129)
North West (2)	University of Liverpool (165)
	University of Manchester (34)
Yorkshire and The Humber (3)	University of Leeds (82)
	University of Sheffield (105)
	University of York (184)

Note: The University of St Andrews (104), Lancaster University (141), University of Bath (150), and the University of Reading (172) also appeared in the Top 200 of the 2025 QS World University Rankings but are not Russell Group members.

However, it is also important for emerging or developing place-partnerships to consider how the starting point and role of different universities can differ. While research intensive universities offer many advantages that can be harnessed for local economies including in science and technology-based innovation, Professors Mark Tewdwr-Jones and Louise Kempton argue that different forms of universities have different challenges to overcome to play more fulsome roles in regional economies:

'Younger institutions are more likely to be regionally orientated than older, research-intensive universities. However, younger institutions also lacked the institutional capacity and resources to support effective engagement, often being overlooked in favour of higher profile, older HEIs. Smaller HEIs also tended to be more specialised in areas that do not necessarily map onto the regional economic structures while larger institutions are less likely to align their research around regional need because of their national (even international) perspective on research and recruitment.'

4.5 Universities in Economic Partnerships

The case studies in this report demonstrate successful working partnerships in different parts of Britain to forward economic growth including in terms of harnessing university innovation. Triple or quadruple helix models with focus on inclusive growth are typical although bilateral relationships within those models are also important.

In **Greater Manchester** its Innovation Partnership builds upon the success of a strong and long-lasting local authority partnership, a collaboration between the 10 local authorities that extends to nearly 40 years and a strong track record of public-private-academic collaboration. Local collaboration in the 2010s resulted in major investments in national research infrastructure such as the National Graphene Institute and the Henry Royce Institute for advanced materials research and innovation. This success helped to make the case for universities, local government and business to come together in a formal city-region-wide innovation partnership (Innovation Greater Manchester).

The University of Manchester's receiving 93% of government-funded research spending in Greater Manchester demonstrates the importance of research-intensive universities being critical to innovation-led growth, though, as noted in Section 4.4 above, other higher education institutes also have important economic roles to play. Greater Manchester's approach has influenced UK government thinking on using innovation to drive regional growth and rebalancing, has attracted over £100m of funding (principally through the Innovation Accelerator and Investment Zone programmes), supported business growth in the conurbation including in post-industrial areas further from the regional centre and shows that local networks may have the potential for leveraging in higher rates of private sector funding for innovation projects.

In tandem, and complementing the strategic role being provided by Innovation Greater Manchester, The University of Manchester has developed a new capability, Unit M, backed by £5m of the university's own seed funding, to own and drive a new regional innovation strategy for the university. Unit M's mandate is to unlock the full innovation impact of the university by making its world-class research, innovation assets and talent more accessible and by developing new capabilities to solve real world challenges. Unit M will address key regional and national challenges in productivity, sustainability and inclusion by working with partners to tackle all parts of the innovation challenge - from R&D to innovation adoption to talent and skills - in a cohesive way that responds to business needs and opportunities.

Key learnings are:

- **Having an innovation partnership offers a coordinated voice for engaging with government, investment markets and encouraging private sector companies to invest more in R&D locally;**
- **Locally or regionally-led innovation support can have a greater density of spend and interventions than national programmes, offering a broader package of support to business and local knowledge means it can be much more effectively targeted on the specific issues and opportunities businesses in a region face;**
- **Innovation Greater Manchester has influenced wider economic strategy across the city-region, building a strong role for innovation by connecting the R&D assets in the city centre with growth plans in town centres and manufacturing sites across the conurbation including the Atom Valley mayoral development zone, a large-scale advanced manufacturing development in Rochdale, Bury and Oldham;**
- **Innovation partnerships need delivery capacity in their member organisations to execute strategic plans at pace and scale and to feed-back learnings from and into regional scale policy and programme development.**

In **Edinburgh and South East Scotland** the benefits of a £1.33bn Growth Deal Investment from the Scottish and UK Governments have been maximised by strategically focusing on local economic strengths like data driven innovation and propelling a regional partnership that has brought anchor institutions closer together, working beyond their traditional boundaries. This has driven long-term inclusive growth across the region, increasing economic integration between places and increasing benefits to local communities including skills and employment.

Key learnings are:

- Understanding local and national economic situations helps focus economic programmes. Having data driven innovation at the heart of the growth deal programme built on existing research and business strengths in the city-region economy could support cross-sectoral opportunities and is a growing field globally with increasing opportunities. It also provided a foundation for supporting employment and skills programmes, join-up between institutions and projects and gave the city-region a distinctive and compelling narrative with governments and in investment markets;
- Alignment of national government and anchor institutions can help drive substantial support for effective sectoral action, regional partnerships and wider long-term economic, environmental and social sustainability;
- That anchor institutions should engage all stakeholders including private sector and community partners as early as possible. This fosters a sense of ownership and ensures that projects and programmes align with the needs and priorities of all parties involved and that momentum continues.

University of Lincoln Students (www.lincoln.ac.uk)

The University of Lincoln, set-up to be a civic university, has worked in **Lincoln and Lincolnshire** to support city centre regeneration to support sometimes relative geographically remote coastal and post-industrial areas and several key economic sectors for the county including defence, agri-tech, and food processing, aligning their research and teaching activities with business opportunities and socio-economic need. Cultural interventions support local creative industries, enhance their courses through practical experience and improve the quality of life locally which also helps to retain local talent and businesses.

Facilities like the Lincoln Science & Innovation Park and the Lincoln Institute for Agri-food Technology support commercialisable research & development in partnership with industry. Their approach also focuses on upskilling people for employment, increasing local employment to provide job opportunities. For instance, they created an engineering department to retain Siemens in the city through mutual use of facilities and co-designed training for existing and future staff which includes work placements at Siemens. The support of the university in terms of training and the improved city centre offer has helped to increase Siemens' graduate retention in Lincoln to around 90%, cementing them in the city. The strength and depth of that partnership won multiple national awards as an example of industry-university collaboration.

Key learnings are:

- The University of Lincoln is one of only a few anchor institutions in Lincolnshire. As such it has a critical role in supporting partnerships in a wide range of socio-economic activities across the county by listening to partners and flexibly using its capability, capacity, reach and reputation to support;
- The university campus is relatively new with the first building opening in 1996 on a derelict former rail goods yard adjacent to the city centre. This central location has underpinned regenerative impacts on the city centre with over 16,000 students and 1,800 staff making a substantial contribution to local retail and leisure spend, improving and diversifying the offer;
- Rather than taking a traditional approach of seeking to attract or grow defence manufacturers in Lincolnshire it was more effective to focus on data science, secure communications, cyber and simulation – fields that are growing and are often more lucrative and less location dependant. This focus plays to the strengths of local businesses and the university and with the defence sector offering opportunities in cross-sectoral fields such as analytics, machine learning, artificial intelligence and data visualisation, growing local strengths in these fields will lead to commercial opportunities in other sectors. This approach is applicable to other areas of the country.

In the **Tees Valley**, Teesside University has worked with local government and business to support the growth of creative and digital industries including a cluster of computer game software firms.

Key learnings are:

- **Universities investing in local businesses can have substantial economic returns. The most recent and final EDRF (European Regional Development Fund) funded project evaluation showed that for every £1 invested in supporting digital and creative businesses project, £11 was returned to the local economy;**
- **Linking campus-based incubators with business hubs - e.g. Middlesborough's Boho Zone - helps firms to progress and move location once ready to leave a university incubator while retaining links to university talent. Placing the Boho Zone near the railway station in Middlesborough Town Centre has widened access and assisted regeneration;**
- **Long-term relationships have provided business with better tailored support and overcome the short-termism of some funding opportunities.**

Some Guiding Principles Emerged from the Case Studies:

- **Setting-up an economic partnership**

Strong long-lasting economic partnerships should be formed with senior-buy-in around principles (as opposed to individual projects) and later a strategy – plus possibly KPIs – that all institutions buy into and have a stake in. These should relate to the economy of the place or specific aspects of it such as innovation-driven growth. The principles and strategy that flow from it should be resilient to changes in national policy and funding, economic circumstances and technological advances.

- **Maintaining a successful economic partnership**

The partnership should operate in a 'third space,' offering a balance between members. Organisations should understand each other operationally and culturally and what each offers the partnership and how this can ebb and flow depending on circumstance. Resilience is important to overcome set-backs and changes in personnel. Incentives for both institutions and the individuals representing them should flow from the partnership's work. The partnership structure should be legible to other actors e.g. local businesses, communities, national government and investment markets, demonstrating focus, coherence and value.

Teesside University Campus Heart, Middlesbrough

- **Universities within Economic Partnerships**

Universities can play a key role in terms of:

1. **Provide analytical capabilities to support research, analysis and strategy setting;**
2. **Aligning their activities, including research, to support the economic strengths and opportunities of the place;**
3. **Using research and knowledge exchange to support business through commercial partnerships, consulting, shared facilities and developing spin-outs and graduate businesses with the potential for this to benefit the university in terms of applied research programmes and more varied career opportunities for staff;**
4. **Helping focus their activities, locations and spending in support of regeneration;**
5. **Using their reputation to underpin partnerships and funding bids and their national and international networks for civic advantage;**
6. **Working across the triple-helix to develop inward investment strategies that consider the university's offer to business and the ability to develop business clusters around them e.g. at university enterprise zones;**
7. **Forming part of wider skills networks that underpin growth (see section below);**
8. **That economic inclusion and environmental sustainability should be foundational principles reiterated in each individual project (see section below);**
9. **Having the scale and breadth to develop new capabilities in response to local and national business or government needs, including in terms of technology diffusion, management training and sectoral-focused innovation centres.**

4.6 Universities and Wider Roles in Local and Regional Partnerships

There has been much focus on the role of innovation from universities in driving growth, including at local and regional levels, and as shown above, this has been a focus in national policy and funding.

As demonstrated in the case studies of this report there are also many other roles for universities in local partnerships. For example, The University of Lincoln case study shows how they use their capacity, capabilities, reach and reputation – in a county with relatively few anchor institutions – to support a wide range of socio-economic activities and partnerships. Also, while The University of Lincoln is heavily involved in innovation-driven growth in fields such as defence and agri-tech, other fields such as arts and heritage also have important roles to play locally, not only in terms of working with business but also in community projects.

There are also roles for subjects in the arts, humanities and social sciences to play in terms of understanding place-dynamics and attributes, advising on economic strategy and other local policies that ensure that economic goals are not seen in isolation, supporting communities to ensure inclusion and approaches to environmental sustainability.

An example of a partnership focused on knowledge exchange is Insights North East, a collaboration between Newcastle and Northumbria Universities, the NHS, and local authorities. Insights North East harnesses investment in research and regional knowledge assets for the long-term benefit of the north east by:

- **Producing accessible and actionable insights for north east policymakers;**
- **Developing capacity and capability of regional policymakers and academics so that policy evidence engagement becomes a sustainable, embedded and systemic activity.**

The University of York (www.york.ac.uk)

Their areas of focus are climate action, health and wellbeing, inclusive growth and a cross-cutting approach to data.

Another case study in this report is for Yorkshire Universities, a regional collaboration of twelve higher educational institutions that:

- **Empowers and encourages member institutions to lead in the civic agenda by connecting public policy with informed evidence, practice and knowledge transfer;**
- **Supports and champions Yorkshire knowledge and skills and its universities' collective aspirations on global questions such as skills, infrastructure, innovation, talent attraction and retention; and**
- **Brokers and leads partnership working and promotes the value of higher education by creating opportunities to create strategic networks that generate new ideas, fresh insights and innovation to address shared opportunities and challenges.**

Yorkshire Universities sees the potential for building stronger relationships between teaching, learning, research and knowledge exchange in universities and that this is something that could be encouraged and supported by government and the HE regulator. Mayoral combined authorities and local authorities provide opportunities to generate formal structures and more informal relationships that can support shared areas of interest between partners including skills and talent, research and development, knowledge exchange, business support and inward investment.

4.7 Economic Inclusion

The OECD defines this as 'economic growth that is distributed fairly across society and creates opportunities for all.' Inclusion can cover factors like income, health, gender, ethnicity and geography – with some communities disadvantaged in terms of access to higher-quality jobs by location. Increasing economic inclusion can therefore focus on increasing individuals' access to skills, employment and careers prospects and also interventions in economies to make more and better jobs available, be this between the UK's regions or at a more local scale between different towns or neighbourhoods. The role of economic partnerships in places is important in encouraging inclusion, as is the role of national government in ensuring that economic inclusion is built into policies and funding for programmes and projects. This type of approach from government underpinned the approach of regional partners in driving inclusive growth through the Edinburgh and South East Scotland growth deal.

The case studies in this report demonstrate a range of ways in which place-partnerships that include universities have sought to boost economic inclusion. These include:

- **Focusing innovation on outcomes that improve people's lives.**

Innovation Greater Manchester aims to support technologies that are socially and environmentally useful and ethical and by avoiding potential misuse of technologies like AI. This includes overcoming any innovation gaps in fields such as low carbon housing and materials production to support the mayor's commitment to deliver net-zero in Greater Manchester. In Edinburgh and South East Scotland, Advanced Care Research Centre (ACRC) focuses on improving the quality of life for older people through innovative care solutions while the Smart Data Foundry unlocks the power of consumer and SME financial data as a force to improve innovation, productivity and people's lives by addressing challenges such as fair access to credit, property ownership and saving for long life. The University of Lincoln has been involved in work to increase food supply and to reduce air pollution from industry on the Humber Estuary.

- **Working across county or city region geographies to support places facing economic challenges.**

In Greater Manchester the Turing Innovation Catalyst has a presence in the digital co-working hub in Rochdale town centre providing AI and business community support to companies there. Rochdale also hosts an advanced materials project while the Atom Valley development aims to build a major research-driven advanced manufacturing hub in the north of the conurbation. In Edinburgh and South East Scotland the growth deal has had a strong focus on ensuring projects maximise economic inclusion in terms of increasing the economic participation of more deprived communities.

The University of Lincoln has supported many smaller coastal and post-industrial towns across Lincolnshire that are often quite geographically remote through understanding the needs of places and partners and responding appropriately as an anchor institution and encouraging education and skills pathways for people there, including access to university. Teesside University has supported a growth of digital and creative jobs in Middlesborough town centre, an accessible location for people travelling across the Tees Valley. 58% of their graduates stay and work in the Tees Valley, providing talent for the 18,000 business there.

- **Widening benefits socially**

Examples from the case studies include Greater Manchester's focus on widening participation in the innovation-led economy including supporting more women into tech roles through targeted training delivered by the Turing Innovation Catalyst. This responds to male-dominated tech workforces both locally and nationally.

In Edinburgh and South East Scotland ESESCommunities.org allows community groups and good causes to submit requests for community benefits to match the support offered by city deal suppliers to deliver such benefits. In Lincolnshire there has been work to support transient agricultural workers - e.g. in farming and food packing and processing – and make them feel part of the place.

4.8 Skills and Local Growth – London South Bank University Group

The focus of this report is not on skills but they are of course a critical underpinning for any innovation district or wider economic partnership.

London South Bank University (LSBU) explained how, around 2018, they saw a clear divide between those who were able to follow an academic route into university and those who were not. This issue was encapsulated clearly in the 2021 census which showed that the most common skills attainment across the UK is Level 4+ (e.g. higher education from the equivalent of an HNC and above) followed by not having any qualifications at all. LSBU was keen to help a broader range of people with the potential to reach university, to do so. Noting that some qualification routes were less easy to navigate than some of the more traditional paths (e.g. GCSEs then A-Levels, then university) it formed alliances with schools and further education colleges, eventually forming a group of institutions – the London South Bank University Group (LSBU Group). This comprises:

- London South Bank University: a civic university providing high quality professional and technical education;
- The Passmore Centre: an institute of professional and technical education with a focus on apprenticeships and work-based education;
- South Bank Colleges: comprising a gateway college and a technical college;
- South Bank Academies: comprising an academy school and a technical sixth form;
- South Bank Innovation: the Group's commercial and enterprise arm.

Engineering at London South Bank Technical College (South Bank Technical College)

LSBU Group brings together a collection of like-minded but distinct specialist organisations which work together under one academic framework to provide educational pathways. This coordination, including central leadership and avoiding competing for students or funding, helps deliver better academic outcomes including clearer educational routes for students with a choice of courses and learning environments and support for transitions to more advanced courses. This enhances the skills offer in the local economy including technical skills. This fully integrated model is not always replicable but demonstrates the benefit of strong coordination between different forms of educational institutions.

LSBU Group works with employer partners to drive research, innovation and ensure course currency. This has supported local businesses in terms of:

- **LSBU having relationships with over 2000 companies for which it provides education and training, including over 3300 apprenticeships;**
- **The inclusion of South Bank Colleges in the LSBU Group means that the university is growing these employer relationships by providing a seamless 'all-through' offer from Level 2 to Level 8 with wrap-around English and maths support for the candidates who need it;**
- **Over half of LSBU's courses are accredited by professional statutory and regulatory bodies and active industry and professional advisory groups help ensure their curricula remains current;**
- **SMEs make up 99% of businesses but can find it difficult to interact with universities and get support to grow and innovate. Having an Institute for Professional Technical Education helps provide a single front door for businesses to engage LSBU Group through, to receive assistance, rather than having to navigate multiple institutions;**
- **LSBU has helped over 400 SMEs improve their management practices through its Help to Grow: Management Programme and, in partnership with South London Partnership, will support more than 450 businesses through its UKSPF funded BIG Innovation and Inclusive Supply Chain Programmes.**

Partnerships with local employers offer placements and assistance for students to progress through skills systems and where there are shortages in labour supply for specific roles, the opportunity to increase income as a training provider.

4.9 Conclusion

The case studies in this report demonstrate a wide range of activity driven by place-based partnerships to support inclusive economic growth via alignment of business funding and support (for spin-outs, start-ups and scale-ups), technology diffusion, resident needs and skills support and the attraction of private and public investment. In the case studies we see how the triple-helix of local government, universities and business, supported by the right conditions for individual professionals to thrive, can drive innovation-led economic growth and wider economic agendas that mutually support institutions. Universities can benefit from the commercialisation of research, the long-term benefits from the attractiveness of places that support student and staff attraction and retention, work experience along with graduate career destinations that enrich courses and offer career destinations. Insights North East shows how universities can support other public sector bodies with research, analysis, strategy and policy development. The Yorkshire Universities case study shows how higher education institutions can mutually support each other.

The impact of technologies will continue to increase, leading to changes in how organisations operate and a continuing need to ensure that UK research remains world-class and that its commercialisation benefits economies across the UK. This, and organisational changes that will occur in local government in many areas of England, combined with speculation around potential mergers of universities that are facing financial challenges underline the need for economic place partnerships to be built on agreed long-term economic principles that can flex to circumstance and are resilient to change. Universities have key roles to play in understanding evidence, strategizing, adding capacity, capability and resilience, and networking. They can operate successfully in economic fields such as business support, exploiting innovation, attracting inward investment and encouraging exports and there is potential for them to do more.

A set of questions is provided in the final chapter to help spark thinking amongst economic development practitioners around economic partnerships and to help steer delivery.

Although much can be done locally and regionally and devolution underlines that places should take the lead, government should provide a national framework that encourages institutions culturally, operationally and financially to work beyond their institutional boundaries to ensure that growth is inclusive and sustainable and that there is sufficient financial capacity to deliver it. This should not be seen only through the lens of the guidance for local growth plans. The role of economic place partnerships should continually be integrated into many national economic policies including for industry, innovation and regional rebalancing. This includes how government interfaces with, incentivises, and supports the anchor institutions that form triple-helix partnerships.

Case Study: Greater Manchester

'As a country, we need to pivot from seeing economic development as principally investment in buildings and physical infrastructure to investment in the people and programmes that fuel regional innovation ecosystems'

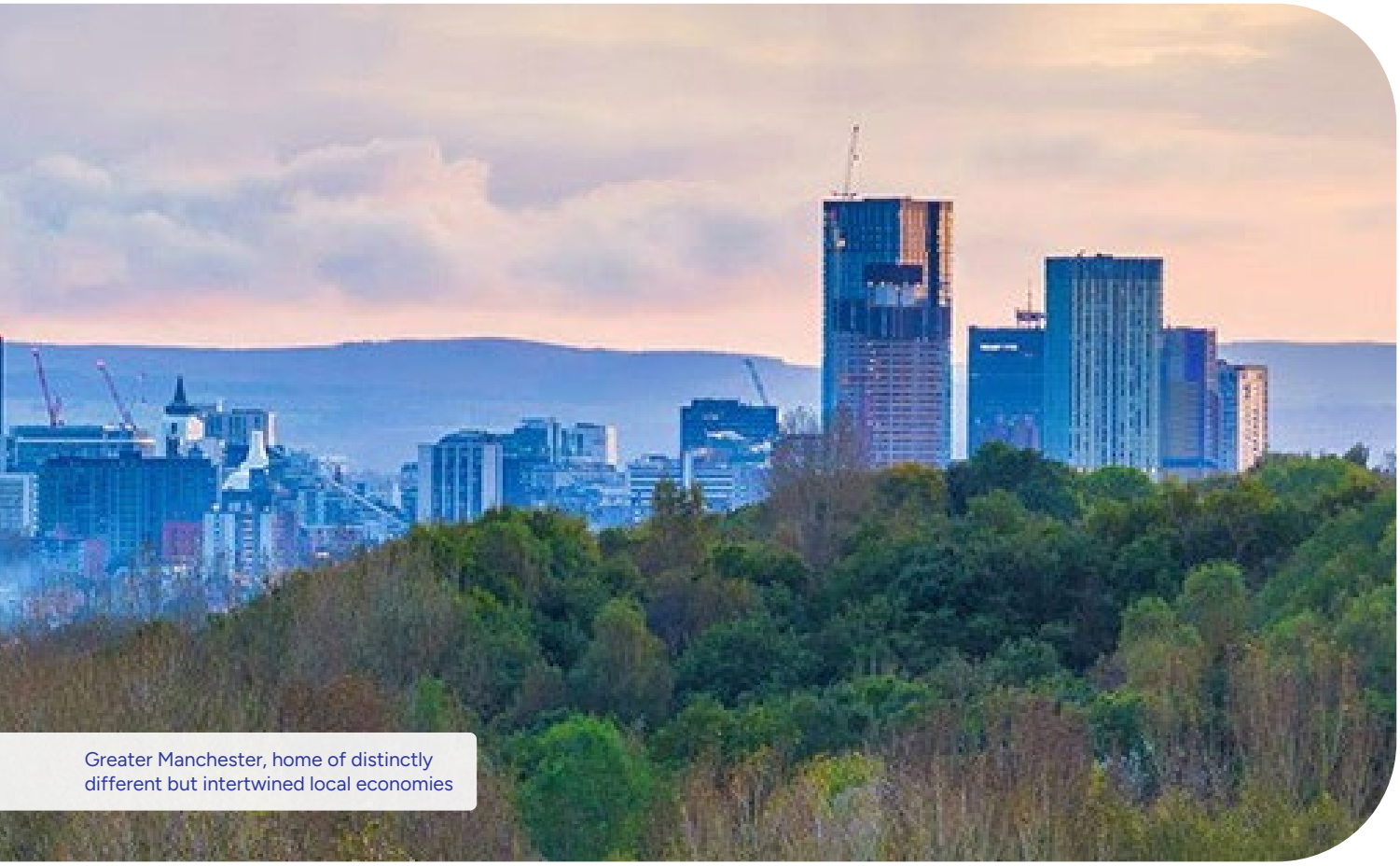
John Holden, Associate Vice-President for Major Special Projects, The University of Manchester

Introduction

Greater Manchester provides an informative case study of place-based partnership working between universities, businesses and local government and focused on raising productivity across distinctly different local economies within the conurbation.

This renewed focus on innovation-driven growth builds upon previously successful innovation investments in Manchester, the long and successful history of integration between Greater Manchester's ten local authorities and synergistically stands alongside deeper-rooted regeneration, real estate, infrastructure, skills and business development agendas.

There is strong interest in using innovation to drive growth across the city region including in those northern areas of Greater Manchester that have still not recovered from industrial decline and where it is felt that knowledge-based industries, aligned with local manufacturing traditions, can provide the high-quality jobs of tomorrow, lessening the economic reliance on commuting to the regional centre of core economic activities around Manchester city centre, the universities and Salford Quays/Media City. This is in addition to strengthening the core of the conurbation as a genuine alternative to the golden-triangle as a location for clusters of knowledge-based industries and public and private investment in them.



Greater Manchester, home of distinctly different but intertwined local economies

Partnership Working

Greater Manchester has a strong tradition of partnership working between its ten local authorities. The Association of Greater Manchester Authorities (AGMA) was set up in 1986 following the abolition of the Greater Manchester County Council by the UK government. A key innovation of AGMA was to spread the responsibilities for various statutory functions such as fire, waste, transport and grants around the ten districts thereby increasing integration between councils.

Pan-Greater Manchester economic development organisations formed and their roles were strengthened following the dissolution of the North West Regional Development Agency and other regional structures in 2010.

Based on this strong tradition of joint working the Greater Manchester Combined Authority (GMCA) was established in 2011 and in 2014 the GMCA and the UK government signed a devolution agreement that gave the region more control over its budget, local transport and planning. Further devolution has followed and a single financial settlement from the UK government to GMCA is now being negotiated.

Andy Burnham was first elected Mayor of Greater Manchester in 2017 and is now serving a third term. The mayor and ten indirectly elected members, each a directly elected councillor from one of the ten metropolitan boroughs that make up Greater Manchester, form the 11 members of the GMCA. The GMCA can make collective decisions across council boundaries giving the region more strategic control over issues that affect residents across the 2.8 million population conurbation.

Innovation Partnerships

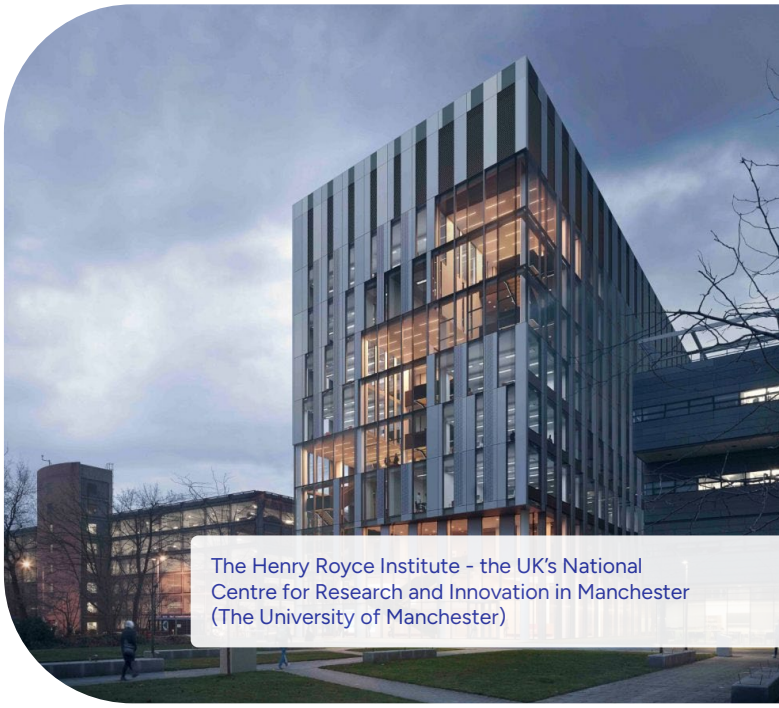
Innovation Greater Manchester (IGM) builds on this bedrock of strategic governance, shared strategy setting and track record of delivery and implementation. It also follows some major one-off investments in innovation assets such as the National Graphene Institute and the Henry Royce Institute for advanced materials research and innovation, both part of the University of Manchester, as innovation has become much more central to the region's economic growth strategy over the past decade.

Innovation Greater Manchester describes itself as "a business-led partnership that harnesses the collaborative power of businesses, universities, and local government to drive productivity through collaboration, research, and innovation.

"Innovation Greater Manchester's goal is to build an innovation ecosystem and ensure the whole city region benefits from the excellence created and developed, through high-quality education and training, high-quality jobs, good healthcare, affordable houses, spaces to support new and scaling businesses and good infrastructure with improved connectivity for all.

"Innovation Greater Manchester will enable our city region to be a leader of the fourth industrial revolution, known globally for the strength of its innovation ecosystem. By 2030, clusters of innovation-led businesses, centred on our frontier sectors, will fuel productivity growth and prosperity across the north in ways that can be replicated across the UK."

IGM's membership is made up of the 'triple helix' of local government, business, and academia. Its board membership includes senior representatives from the GMCA, businesses and business organisations and The University of Manchester, Manchester Metropolitan University and The University of Salford. Chief Executive and Vice-Chancellor representation underlines the importance of the partnership to the city region. This senior leadership team from different backgrounds offers strategic oversight, checks and challenges and an ability to put their organisations behind a shared innovation strategy for Greater Manchester that recognises where public and private investment would be most appropriate in linking innovation assets and opportunities with the wider economy. This approach led to the Innovation Accelerator Programme which demonstrated that Greater Manchester could help deliver the government's national objectives including in terms of geographical rebalancing of the UK economy via tackling regional productivity gaps. It was recognised by the UK government that a major cause of low productivity growth in the UK was insufficient public and private sector R&D spending and related crowding-in of further private sector investment, particularly outside London and the greater south east.



The Henry Royce Institute - the UK's National Centre for Research and Innovation in Manchester (The University of Manchester)

Innovation Accelerator Programme

Greater Manchester was asked by the UK government in 2023 to pilot the Innovation Accelerator Programme alongside the Glasgow city region and the West Midlands. The programme provides a total of £100m over two years shared across the three regions as well as national government policy support for developing each area's innovation ecosystem.

The funding, awarded by the Department for Science, Innovation and Technology (DSIT), is allocated to innovative projects in sectors where Greater Manchester has existing research strengths including advanced materials, artificial intelligence (AI), diagnostics and health innovation and net zero. Projects are supporting businesses with adopting new technologies and people developing new skills while attracting private R&D investment, creating jobs, and stimulating economic growth.

Innovation Greater Manchester worked with Innovate UK and DSIT to select projects and co-design an Innovation Plan.

www.greatermanchester-ca.gov.uk

John Holden, Associate Vice-President for Major Special Projects at The University of Manchester described how IGM's formation stemmed from the pandemic spurring collective thinking in Greater Manchester about what the next steps in their economic journey would be, including how they would build back better. It was clear that the innovation economy would be a key driver of future prosperity and that universities would be critical to it. The University of Manchester accounts for 93% of government-funded research spending in Greater Manchester. Holden reflected that The University of Manchester is a huge innovation asset for the city region but it was acknowledged that it needed to do things differently to help unlock growth across the whole conurbation.

It was recognised that the strongest innovation areas in the world have a triple-helix based governance structure to drive knowledge-based growth and so Greater Manchester used this model in the Innovation Greater Manchester partnership.

Achievements

In terms of successes, Holden notes that the UK government's commitment to increase R&D spending outside the Golden Triangle by 40% was likely in part driven by effective case making from Greater Manchester, particularly a combination of universities and business using their strong voices and routes to government on innovation issues supported by the mayor and local authorities.

A strength of the Innovation Greater Manchester partnership is not only the combined voice of the partnership for strategic case making and lobbying of government but also that it has a clear emphasis on encouraging private sector companies to invest more in R&D locally.

Other successes are more local and noticeably place-based. The investment zone is under development and links the R&D commercialisation on the Oxford Road corridor (on which The University of Manchester and Manchester Metropolitan University and major teaching hospitals are located), the commercially-focused innovation district development Sister (adjacent to the two Oxford Road universities), and developments around Salford University with plans for large scale manufacturing and commercialisation of innovation at Atom Valley (the creation of a high-tech manufacturing district in Bury, Oldham, and Rochdale that is been driven as a mayoral development zone). Holden notes that explicitly linking Greater Manchester's investment zone policy to research strengths and scale-up journeys was underpinned by having Innovation Greater Manchester in place.

The University of Manchester's Graphene Engineering Innovation Centre (GEIC) helps companies develop and launch new technologies, products and processes that exploit the remarkable properties of graphene and other 2D materials (The University of Manchester)

The **Greater Manchester Investment Zone** will drive growth and innovation in the advanced manufacturing and materials sector. Key locations include:

- **Innovation District Manchester**
- **Salford Crescent**
- **Atom Valley** in Bury, Oldham and Rochdale

Funding will be used to accelerate the Innovation District Manchester, Salford Crescent and Atom Valley developments, with support for research and innovation to grow the knowledge economy and infrastructure funding to unlock laboratory and manufacturing space.

Additional funding will be provided for opportunities outside these three developments to strengthen the wider innovation ecosystem include a multi-million-pound revolving investment fund to provide debt and equity finance to local advanced manufacturing and materials businesses across the whole of Greater Manchester and £5 million to support skills development. Taken together, local partners expect these proposals to create 32,000 jobs and leverage £1.1 billion investment over the next 10 years.

The Greater Manchester Investment Zone is supported by The University of Manchester, Manchester Metropolitan University, The University of Salford and The University of Bolton.

Investment Zones in England - GOV.UK (www.gov.uk)

In terms of more sectoral focused approaches Holden believes that most national programmes would not have the same density of spend and interventions in local economic ecosystems as the Greater Manchester's Innovation Accelerator. For instance, the Turing Innovation Catalyst works with early-stage AI companies bringing them together as a community and a network and developing a broad package of support measures including start-up accelerator, collaborative R&D, skills training and network building programmes. National programmes tend to focus on funding for a specific part of a firm's R&D needs. The Greater Manchester approach is more tailored to a firm's needs with specialist staff working with businesses to understand how best a firm can be supported to grow and scale its technologies. This could include interventions to help with workforce skills, deep technical knowledge from a university or more generic business skills such as business planning or pitching for investment. Greater Manchester has had previous successes in these types of holistic sectoral interventions such as the Alliance Project that supported substantial growth in the textiles sector, both locally and nationally, by securing UK government investment to reskill, rebuild supply chains, help move firms into more productive sub-sectors and improve links between education and business.

Statistics showing economic outcomes will come in time with the Innovation Accelerator Programme expected to produce a 2:1 ratio of private to public investment and a wider programme of output and outcome monitoring evaluated by Innovate UK. Holden notes that this 2:1 match ratio is higher than usual for an Innovate UK funded project, part of a hypothesis currently being tested that locally run programmes that link R&D into wider economic ecosystems may secure a greater economic return than many national innovation programmes.

Inclusion and Sustainability

Some of the thinking behind Greater Manchester's Innovation Strategy was in terms of socio-economic inclusion. As is typical in UK city regions there is a patchwork of wealthier and more economically challenged neighbourhoods. However, headline measures of economic prosperity generally show that the south of the conurbation is on average wealthier than the north, reflecting historical patterns of development, the location of the universities and airport, strong neighbouring jobs markets in north Cheshire and links to London. Some commentators noted that previous plans for growth in some parts of northern Greater Manchester were reliant on transport, including new Metrolink lines, shuttling commuters into Manchester city centre and could lead to former manufacturing towns such as Oldham and Rochdale increasingly becoming dormitory settlements.

Spatial inclusion is a priority in Greater Manchester. A key objective is to link world-class innovation assets, predominantly but not exclusively on the Oxford Corridor, with job opportunities across the conurbation including in more industrial or post-industrial areas. This includes but is not exclusive to the Atom Valley developments. For instance, the Turing Innovation Catalyst has a presence in the digital co-working hub in Rochdale town centre providing AI and business community support to companies there and Rochdale also hosts an advanced materials project.

There is also a focus on widening participation in the innovation-led economy, including supporting more women into tech roles through targeted training. This responds to male-dominated tech workforces both locally and nationally.

There is also thought going into what technologies are developed through Innovation Greater Manchester including technologies that are socially and environmentally useful and ethical and avoiding potential misuse of technologies like AI. This includes overcoming any innovation gaps in fields such as low carbon housing and materials production to support the mayor's commitment to deliver net-zero in Greater Manchester.

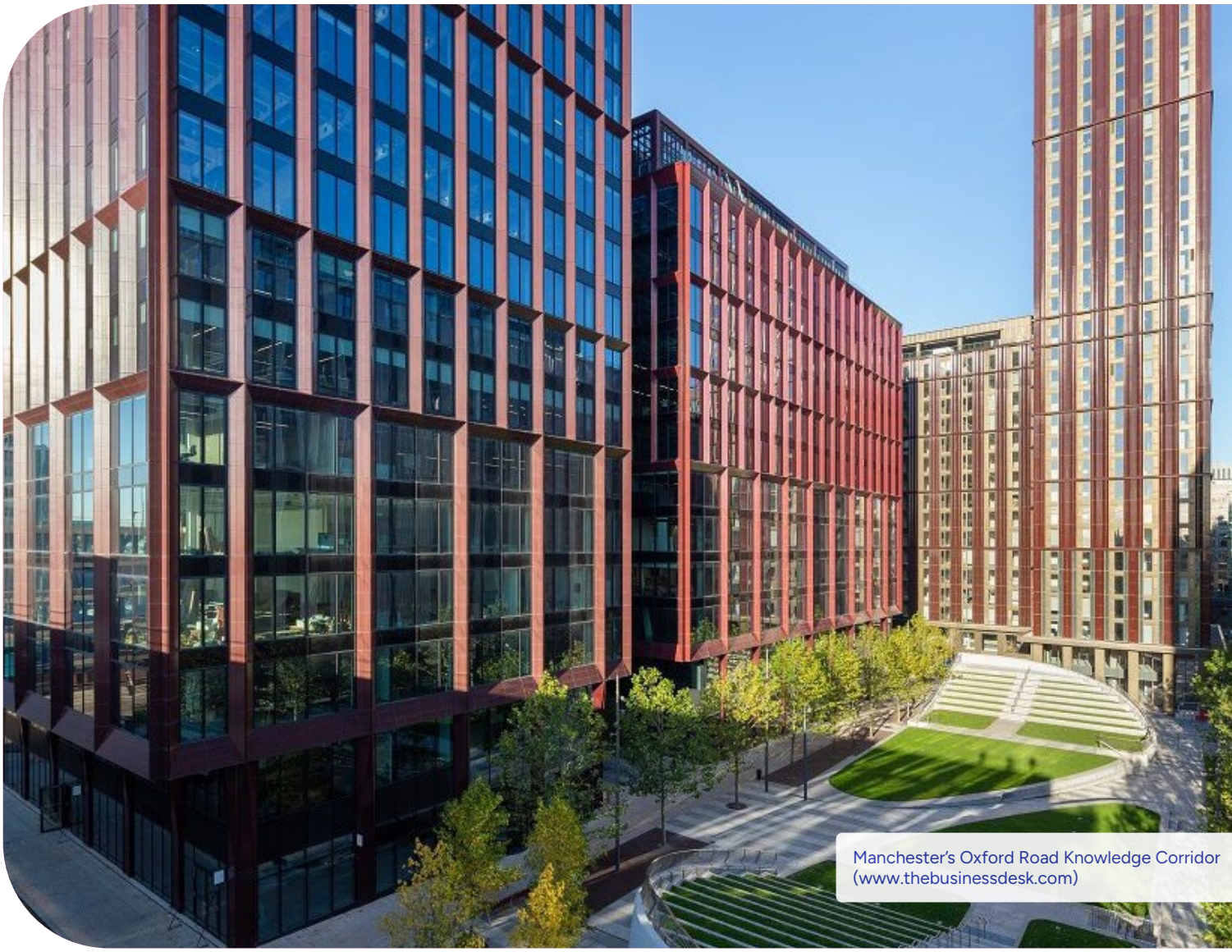
Next Steps

Next steps for Greater Manchester include time for the innovation partnership to mature. The collaboration between local government has solidified for many years but the more formalised collaboration with universities and industries is much newer and continues to bed-in.

This will hopefully provide the people and the programmes to exploit the physical infrastructure that has been developed in the city.

Greater Manchester's devolved single settlement should give more flexibility for the combined authority to allocate funding according to local priorities and more discretion to invest in innovation activities and to coordinate this with other investments.

John Holden believes that nationally we need to revise some economic evaluation processes to allow more risk in investing in technologies versus physical assets. This will help grow stronger economic ecosystems in higher-tech sectors across a greater range of places, increasing long-term productivity to drive local and national prosperity.



Manchester's Oxford Road Knowledge Corridor (www.thebusinessdesk.com)

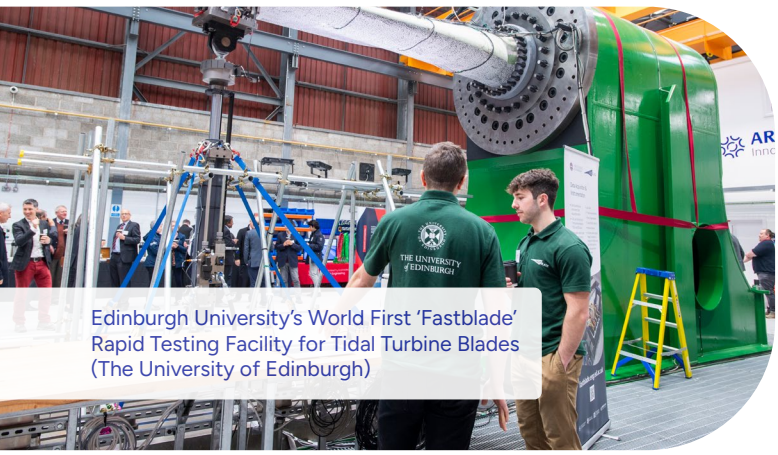
Case Study: Edinburgh and South East Scotland City Region

Introduction

'Our commitment to the Edinburgh region goes beyond traditional academia. As Scotland's oldest civic university we are proud to continue our long-standing tradition of public service. Through the City Region Deal and initiatives like the Data-Driven Innovation platform and the Data Skills Gateway we are fulfilling our civic duty to drive inclusive growth, foster innovation, and strengthen our role as a cornerstone of inclusive regional development. This is about creating lasting impact—within our communities and far beyond.'

Peter Mathieson. Principal & Vice-Chancellor, The University of Edinburgh.

The Edinburgh and South East Scotland City Region Deal (ESES CRD) has been selected as a case study to demonstrate the impact that place-based investment can have in catalysing strong and long-lasting partnerships that grow the impacts of projects and programmes and go on to create further benefits for local economies, including institutions – such as local councils and universities – embracing roles beyond their traditional boundaries.



Edinburgh University's World First 'Fastblade' Rapid Testing Facility for Tidal Turbine Blades (The University of Edinburgh)

Launched in August 2018, the ESES CRD is a 15-year £1.33 billion investment across five themes: research, development and innovation (RDI) (£791m); an integrated regional employability and skills (IRES) programme (£25m); transport (£140m); culture (£45m) and housing (£313m). £300m was invested by the Scottish government and a further £300m by the UK government with the remaining £730m match funding anticipated from the region's local authorities, universities, private sector as well as inward investors and other UK funding sources.

Edinburgh Futures Institute - a new futures-focused space for learning, research, and innovation at the University of Edinburgh (The University of Edinburgh)

The aim of the deal is to create 23,000 new job opportunities driven by a significant programme of construction in the short term and sustained over the medium and long term by ongoing investment across the region with a novel Data Driven Innovation Platform and the IRES Programme alongside improved transport and housing provision, ensuring that businesses and communities across the region will benefit and take advantage of these job opportunities.

The ESES CRD is a significant milestone in regional development, reflecting the critical role that partnerships - between the public sector, private sector and academia - can play in driving economic growth and innovation. As such, this case study examines:

- **Pre-Deal context:** where opportunities for longer-term planning and greater coordination with the private and public sector – as well as the constraints to realising such opportunities – informed the development of the ESES CRD bid;
- **Achievements:** highlighting tangible project and programme examples of successful partnership working, the governance structures in place to support their implementation, the culture and working relationships established as a result of the deal and, specifically, the impact on and of universities;

- **Future Direction:** considers how partners can best build upon current partnerships and working practices to ensure long-term, sustainable and sound growth for the region going forward; and
- **Lessons Learned:** from partnership working in delivering the ESES CRD.

Pre-deal Context

Before agreement to the ESES CRD partners recognised the importance of the private sector to driving economic growth and how local government can best support such growth. As stated by the Scottish Cities Alliance in 2014:

'Around 80% of total investment in the economy comes from the private sector and stimulating this is key. Cities are well placed to do this by taking a coordinated and demand-led approach to spatial planning and infrastructure investment, taking advantage of local relationships with business to develop priorities[52].'

Similarly, this work identified various challenges to realising such future benefits, including the need for a demand-led 'project pipeline' aligned with private sector needs and investment plans and 'appropriate governance'[53] across public and private sector partners. Addressing these issues was central to the design and development of the ESES CRD. The pre-deal phase involved extensive stakeholder engagement which was instrumental in shaping the CRD's focus and ensuring it aligned with regional needs and national priorities. Early identification of governance issues and a commitment to flexible, adaptive structures laid the groundwork for the successful partnerships that would follow. As recognised in the Deal document:

'To deliver cross-regional city region deal projects effectively in the short-term and to create future regional infrastructure in the long-term, partners are working to enhance existing and develop new regional collaboration for strategic coordination across transport, housing and economic development[54].'

Achievements

Below are examples of successful private and public sector interactions that have directly resulted from the operation of ESES CRD.

52 Scottish Cities Alliance Delivering Sustainable Economic Growth through Effective City Investment Planning: Summary Paper, 27th March 2014

53 "The appropriate governance arrangements for the framework, addressing the frameworks vision, plans and priorities, criteria and processes for development of the project pipeline, which parties might be involved (including both public and private sector partners), and which economic geographies might be relevant"

54 https://static1.squarespace.com/static/55c87967e4b05aa55020f656/t/5c263201898583ec74c01146/1546007049724/ESESCR+Deal+Document+6+August+2018+signed.pdf

Advanced Care Research Centre (ACRC)[55]

In 2020 Legal and General invested £20 million in the ACRC. As part of The University of Edinburgh's ESES CRD Data Driven Innovation Programme[56] the ACRC focuses on improving the quality of life for older people through innovative care solutions by leveraging data to develop new, more efficient, and effective care models[57].

'Research has become much more multidisciplinary. Real world challenges require diverse and multidisciplinary teams and the ACRC is a superb example. If you want to pursue research aimed at delivering affordable, sustainable, high-quality care to an ageing population that is growing in volume and in the complexity of its needs you require clinicians, nurses, social scientists, engineers and computer scientists and more all to work together.'

Professor Ian Underwood, the leader of the ACRC Academy.

55 https://ddi.ac.uk/case-studies/advanced-care-research-centre/

56 https://ddi.ac.uk/

57 The ACRC works with DataLoch (https://dataloch.org/) to enhance its data structure using techniques such as Natural Language Processing (NLP) and Artificial Intelligence (AI) to extract value from free-text data. This data and other data collected by researchers then has the potential to be used for various projects. For instance, in relation to bio-sensors, going beyond existing technologies that notify third parties if an older person has fallen, towards fall probability prediction then implementation of fall probability reduction and minimisation protocols

The University of Edinburgh BioQuarter, a centre of excellence for life sciences, research and development; co-locating academic research, clinical delivery and commercial research at scale (The University of Edinburgh)

Smart Data Foundry[58]

Established in 2020 with Strength in Place funding the Smart Data Foundry[59] works with various private sector banks such as NatWest Group and other financial services organisations including Sage, Equifax, MoneyHub, and FreeAgent to unlock the power of consumer and SME financial data as a force to improve innovation, productivity and people's lives by addressing challenges such as fair access to credit, property ownership and saving for long life. The Foundry's positive impacts extend beyond the Edinburgh City Region as per this quote from the former First Minister:

'I've been told about the excellent work that East Renfrewshire Council is doing with the Smart Data Foundry in terms of their cost-of-living dashboard. It's now a year on since the pioneering partnership began and the findings show that financial wellbeing shifts up and down for different demographics over a period of time. Data, we know, if used correctly, if used appropriately, if used wisely, can be one of our greatest tools in terms of how to target our resources where they're needed the most.'

Humza Yousaf, then First Minister of Scotland

ESESCommunities.org

ESESCommunities.org is an online community benefits portal matching communities and good causes with suppliers and businesses in the ESES CRD area. Funded by the deal this website allows community groups and good causes to submit requests for community benefits to match the support offered by CRD suppliers to deliver such benefits. To date the portal has 72 registered suppliers that have completed 101 requests. Contributions include apprenticeships, cash and in-kind contributions to specific community projects and broader community engagement programmes[60].

'This type of activity allows us to contribute to delivering against our sustainability strategy, Building New Futures, across multiple outcomes at once. We are reducing waste and positively impacting our communities in one single activity.'

Balfour Beatty's Social Impact Manager, Duncan Gardiner

Fife Innovation Zone[61]

The Fife Innovation Zone currently hosts 18 firms. These businesses have created or safeguarded 144 jobs. 15 have committed to paying the real living wage and the innovation zone has already leveraged an additional £438,000 of private sector investment.

58 https://smartdatafoundry.com/
59 https://gtr.ukri.org/projects?ref=107135
60 As detailed at p7 of: Microsoft Power BI
61 https://esescityRegionDeal.org.uk/new-blog/2023/9/26/fife-innovation-park

Data Driven Innovation (DDI) Programme

The DDI Programme has supported 623 currently active early-stage, high-potential innovation companies, creating an environment where start-ups can thrive. These companies have subsequently raised over £200 million investment, showcasing the strength and vibrancy of the entrepreneurial ecosystem fostered by the ESES CRD.

Integrated Regional Employability and Skills (IRES) Programme[62]

The IRES skills projects engage with private-sector employers to facilitate employment opportunities for those in the later stages of the employability pipeline. A key example is the Integrated Employer Engagement project which aims to drive a more proactive, regional and sectoral-specific approach to early skills and new skills development appropriate to local labour market conditions. The programme has secured over 1,800 job outcomes and engaged with over 800 private sector employers to facilitate job, upskilling and training opportunities.

'We're excited to announce that the IRES programme has officially committed to the Community Wealth Building Pledge This commitment means we will embed the principles of Community Wealth Building into our work under the City Region Deal. Pledge One: Supporting the growth and development of SMEs. Pledge Two: Promoting other progressive forms of ownership. Pledge Three: Advancing progressive employment practices.'

Andy Nicol Head of ESES CRD PMO

FinTech Scotland[63]

Fintech Scotland was established in 2018 to secure Scotland's place as one of the top five global fintech centres.

To realise this ambition Fintech Scotland undertakes various activities to bring together entrepreneurs, the established financial sector, the public sector, accelerators, investors, consumer groups, technology and service firms, universities and skills agencies. The University of Edinburgh was one of the founding partners. It provided residence to Fintech Scotland in one of the DDI Innovation hubs – the Bayes Centre - to allow it to co-locate with fintech companies at Bayes and access on-site fintech research and accelerator programme support. Fintech Scotland has helped grow the Scottish fintech community from 25 in 2018 to over 225 by 2023. By 2031 Fintech Scotland aims to create up to 30,000 extra jobs in Scotland and increase economic value (GVA) by more than 330% - from £598 million to more than £2 billion[64].

62 https://esescityRegionDeal.org.uk/ires
63 https://www.fintechscotland.com/
64 Scotland-FinTech-Roadmap-March-2022-lowres.pdf (fintechscotland.com)

Governance

The deal governance structure involves a project management office (PMO) that reports directly to a joint committee comprising all leaders of each local authority, both governments and representation from the private sector. In addition, the regional enterprise council specifically engages businesses and enterprises across the region, allowing all partners to have input on the governance of the deal.

Culture

A strong culture of trust, collaboration and transparency has been a cornerstone of the ESES CRD's success. Regular communication and joint problem-solving across the UK and Scottish governments, local authorities, academia and the private sector have fostered a collaborative environment where issues are addressed collectively. This culture has enabled the ESES CRD to navigate complex challenges effectively, ensuring that all partners remain committed to the region's long-term goals.

The "Data Education in Schools" (DES) project in Edinburgh aims to improve data literacy and data citizenship skills in learners aged 3-18. This initiative is part of the broader Edinburgh and South East Scotland City Region Deal Data Skills Programme. (The University of Edinburgh)

Universities[65]

Without CRD funding six data-driven innovation hubs – the Bayes Centre, Edinburgh Future Institute (EFI), Easter Bush, the Usher Institute, Edinburgh International Data Facility, and National Robotarium in partnership with Heriot-Watt University – would unlikely to have been built nor the range or type of projects indicated above been taken forward with industry partners.

In addition this programme has now expanded beyond the CRD boundaries. Live lessons have attracted a national and international audience and the Data Skills Credit scheme attracted interest and additional funding from the Scottish government for wider application. The College CPD programme has been opened out to neighbouring regions and other additional elements of the programme have also been adopted by other city region deal areas.

Future Direction

The regional partners are already working collaboratively beyond the deal and are committed to shaping the future vision for the region. In 2022 partners endorsed the Regional Prosperity Framework, a 20-year vision for regional development and the region's first integrated regional economic development strategy since the 1990s.

Developed collaboratively by Innovate UK, Edinburgh and South East Scotland City Region, and Scottish Enterprise, the Regional innovation Action Plan was launched in March 2025 and aims to build a strong, resilient and investment-attractive economy by leveraging regional strengths and capabilities.

These frameworks respond to changes in national governance arrangements and priorities in order to maintain strong relationships with the Scottish and UK governments (and relevant agencies) to ensure ESES plays a key role in contributing to national economic development agendas.

Lessons Learnt

Implementing the ESES CRD has provided valuable lessons that will inform future regional development initiatives:

1. **Importance of early and continuous engagement**
   One of the most significant lessons is the value of engaging all stakeholders, including private sector partners, from the earliest stages of the deal. Early involvement fosters a sense of ownership and ensures that deal projects and programmes align with the needs and priorities of all parties involved. Early and continuous engagement throughout the deal's lifecycle has been vital in maintaining momentum and addressing challenges as they arise.

65 https://ddi.ac.uk/about-us/ddi-hubs/

2. **Flexibility in governance structures**
While robust governance structures are essential, remaining flexible and adaptive has been critical. The ESES CRD has benefited from a governance model that allows adjustments as opportunities (e.g. the Regional Prosperity Framework) emerge. This flexibility has enabled the deal partners to respond effectively to a dynamic market and political and environment changes, ensuring that projects remain relevant and impactful.

3. **Cultivating a culture of trust and collaboration**
The success of the ESES CRD is deeply rooted in the strong culture of trust, collaboration and transparency among partners. Building and maintaining this culture requires ongoing effort, including regular communication, joint problem-solving and a shared commitment to the region's long-term goals. This collaborative approach has been vital in navigating complex issues and achieving collective success.

4. **Aligning regional and national priorities**
Another important lesson is aligning regional initiatives with broader national strategies and priorities. The ESES CRD has demonstrated that when regional projects contribute to national goals they are more likely to receive support and funding. This alignment has also helped leverage additional resources and ensure that regional efforts contribute to the country's overall economic resilience.

5. **Leveraging data and innovation:**
Data and innovation have been central to driving regional economic development. The ESES CRD's focus on data-driven innovation has attracted significant private investment and positioned the region as a leader in emerging industries. Investing in the infrastructure and skills needed to support data-driven projects has proved a key driver of success and will be a priority in future regional projects and programmes.

6. **Long-Term vision and sustainability:**
Finally, maintaining a long-term vision emphasising sustainable growth is crucial. The projects and programmes within the ESES CRD have been designed not just for immediate impact but with a view towards long-term economic, environmental and social sustainability. This approach ensures that the deal's benefits will continue to accrue to the region well into the future.

The Bayes Centre, Edinburgh (www.ribaj.com)

Case Study: The University of Lincoln

'Our focus is on realising the bright future ahead for this university and the communities and businesses we serve. There is a huge amount of work still to be done to tackle regional inequalities and yet there are many reasons to be optimistic, whether it's the first graduates from our Lincoln Medical School joining the local NHS workforce as junior doctors, our world-class agri-tech research leading innovations in the UK's £110bn food industry or our work supporting our region's vibrant arts and cultural sector.'

Professor Neal Juster, Vice Chancellor, University of Lincoln

Introduction

Although it has roots in nineteenth century educational institutions, The University of Lincoln is a new university. It gained university status in 1992 as the University of Humberside before developing a Lincoln campus and transitioning to become The University of Lincoln in 2002.

The Lincoln campus was spearheaded by Lincolnshire County Council along with the business community as a vehicle for the regeneration of Lincoln and the wider economic development of the county.

The University of Lincoln was chosen as a case study to demonstrate the value that a university can add to a place when it has a clear civic vision of supporting people, places and businesses. This includes wider benefits to the national economy that have been achieved through collaboration. The University of Lincoln approach focuses on upskilling people for employment, increasing local employment to provide job opportunities, cultural interventions to support local creative industries and to improve the quality of life locally, which also helps to retain local talent and businesses.

Julian Free, Deputy Vice Chancellor (Regional Engagement) at the University of Lincoln described how the university was born of the city and seeks to make good this civic commitment to local people whilst supporting the economy and wealth of the region. Through its presence, growth and actions the university has proved successful in tackling and reversing the demographic, economic, and prosperity challenges faced by the city of Lincoln in the late twentieth century whilst providing further support across the wider county of Lincolnshire.

The University of Lincoln leads and manages the Barbican Creative Hub (The University of Lincoln)

The University's Role in the Regeneration of Lincoln

Lincoln is a historic English city with a population of 104,000 at the 2021 census. During medieval times it was one of the largest and wealthiest cities in England and is now an attractive county town. The University of Lincoln's campus was built on a derelict rail goods yard at Brayford Pool, a natural widening of the River Witham in Lincoln City Centre. This waterfront setting provided an attractive opportunity for leisure-led regeneration in tandem with the development of the university campus across the water from the historic core of Lincoln's city centre. The first university building here opened in 1996 and over £400m has been invested since in the estate.

The development of the campus not only regenerated the Brayford Pool area but also the wider city centre. With over 16,000 students and 1,800 staff there is a substantial contribution to local retail and leisure spend leading to an improved and diversified offer in the city. In 2021, the Guardian reported that 'local residents say the university has transformed Lincoln from provincial backwater to a culturally thriving, diverse city, with new shops and restaurants springing up to accommodate students and the graduates who stay to work in hi-tech businesses supported by the university.'

The university's relationship with Lincolnshire Co-operative has been particularly important. Lincolnshire Co-op is a major landowner and developer in the county and has turned the crank on the regeneration of the city, proving physical change in part spurred by economic and creative activity that the university has generated and supported. Sukhy Johal, Director of the Centre for Culture & Creativity at the university underlined that this regeneration is 'streets, not just a few buildings, it's literally streets that the Co-op has been critical in regenerating.'

The Co-op is also a partner in the development of the Lincoln Science & Innovation Park (LSIP), which is adjacent to the university. LSIP is a 75% Co-op-25% university development, which has created the infrastructure for companies to locate close to the university to access academics and R&D facilities to innovate, develop new products, and recruit graduates. The partnership has drawn money from the Greater Lincolnshire Local Enterprise Partnership and the EU to fund preparation of the site and build infrastructure. LSIP is a key part of the Defence & Security Sector cluster growing in Lincoln to support national assets at RAF Waddington and RAF Digby.

In addition to university-related spend and footfall adding vibrancy and vitality in the city centre, Johal notes that 'if you think there's the spin-outs and supply chains and all the rest of it, there's something about urban centres that enables that to happen, including the collision between strong sectors, because again, that's where the jobs of the future and innovation are likely to be.'

The University of Lincoln has redeveloped the Brayford Pool area of the city and underpinned the regeneration of Lincoln City Centre.' (www.lincoln.ac.uk)

Urban centres provide a mix of retail, leisure and transport opportunities in addition to the sectoral strengths and agglomeration effects that Johal refers to and he believes that, like on a campus or a science park, facilitated engagement is possible to increase interactions and 'bump effects' and to strengthen intra and inter sectoral economic networks, helping for instance smaller firms to connect with larger firms and win work.

The university has also helped anchor other large firms in Lincoln, keeping the spend of their employees. For instance, the creation of the university's engineering department helped retain Siemens in Lincoln through mutual use of facilities and co-designed training for existing and future staff which includes work placements at Siemens. The support of the university in terms of training and the improved city centre offer has helped to increase Siemens' graduate retention in Lincoln to around 90%, cementing them in the city. The strength and depth of that partnership won multiple national awards as an example of industry-university collaboration. To enhance the offer, computer science, maths and physics were later located in the same building.

A Culture of Working Successfully in Partnerships

Perhaps the best starting point for understanding The University of Lincoln's strong practice is to note the issues that often divert universities from civic engagement. As Sukhy Johal says, 'Universities are teaching and research institutions and it's very easy sometimes to not have those grassroots links to where you are because research investment lands wherever it happens to suit that research which is often not linked to place; your students are from wherever and they don't necessarily stay in the place that that you're in.'

Julian Free noted that a financial incentive for universities to engage more in place and partnerships arises because the student fee does not cover the cost of their education, so if reducing the quality and level of education is to be avoided then other income streams are necessary. With demand from international students reduced across the UK, commercial income is becoming more important. This provides a financial imperative but is it clear that The University of Lincoln is also very culturally committed to its civic role – this commitment spreads far beyond monetary reasons, especially short-term drivers like contracts.

Within the university Free notes that the leadership has championed the need to focus more on skills provision for business and the wider public sector, commercial partnerships and other forms of income generation. The university tries to provide career paths for people who are attracting commercial income in addition to those who are securing academic grants and demonstrating research excellence. Free believes this is often easier for new universities to achieve than for research intensive universities whose reputation is largely built on research excellence rather than their civic role. He believes career routes that offer a mix of academic and business practice form useful interfaces and should be encouraged.

Free notes that the university plays important roles in partnerships due to its convening power, intellectual credibility and capacity, reputational strength and organising capacity. He notes the importance of the university understanding the county to spot opportunities. It has responded to challenges with poor health in many rural areas, an ageing population, a brain-drain and a shortage of doctors with the opening of a new medical school which then has helped the local hospital become a teaching hospital. The university has plans to expand into dentistry given a shortage of qualified dentists working in Lincolnshire. Equally, looking nationally, the university saw the opportunity to build on its work with the Air Force locally to win a large training and education contract with the Royal Navy.

Lincoln Arts Centre (lincolnartscentre.co.uk)

Johal outlined his beliefs regarding the importance of institutional culture in ensuring a strong role for Lincoln and other institutions as civic universities in meeting these challenges and exploiting opportunities. He is a firm believer in the maxim that 'culture eats strategy for breakfast,' which he largely attributes to strategy being more temporary than culture. He sees three types of roles for universities in partnerships –'leading, enabling or supporting.' He adds, 'You must act with humility,' working out with others which of these roles it is best for the university to play on a particular partnership, programme or project. Free described how the university needs to work differently with the different geographies and layers of local government, including planning a relationship with the forthcoming combined authority, whist supporting rather than denuding the roles of FE colleges. This includes the university working regionally. Although it is not the only Lincolnshire player in this space the university can also be an informed voice in regional conversations around the Midlands Engine initiative that tend to be centred around larger cities such as Birmingham or Nottingham. By feeding in the voice of Lincoln and Lincolnshire, the university can then share locally information around regional and national initiatives and help galvanise local responses to them.

Johal noted that Lincoln works successfully as a civic university because it is willing to invest in partnerships and projects where there is not always a short-term gain for the university. Part of this is that the university has the capacity and size to be 'broad-shouldered' as Johal puts it while longer-term benefits for the university can include increasing the attractiveness and success of Lincoln and Lincolnshire as places to live, study, work visit or invest. Also the university gains reputationally, helping the partnerships that it is part of to take on more difficult and rewarding projects and to be trusted to deliver them. Partnerships also present opportunities for applied research, helping the university academically.

The University of Lincoln's Great Central Library Warehouse (The University of Lincoln)

Johal also described the importance of upstreaming relationships and long-term principles in partnerships. This allows for strong co-creation and delivery of projects. He advises that conversations between organisations in a partnership start from a third space of what is good for a place - its economy, community, and environment – and when you have defined those goals, to work backwards and consider if this is a good place for us all institutionally and personally.

Mutual trust helps different anchor institutions take different responsibilities and shoulder different proportions of the burden at different times and overcome junctures where key people leave or funding streams finish. Johal also notes the criticality of having confidence in each other, your mutual goals, and the place and people that you are seeking to support. He also advises to expect setbacks. 'You just have to accept that they're part of the path. If you accept that from the start, I think you arrive at a healthier expectation around the contours you'll travel.'

Free described how the close engagement with Lincolnshire partners provides the university with the insight and understanding to pivot scarce resources according to where, when and for what they are needed most. Similarly, Johal noted the need to understand which projects and programmes the university should lead, which they should support and which they should enable. This allows the university to take different roles to maximise value and efficiently spread resource. This includes being an accountable body or an anchor institution that undersigns a project to build wider trust, including with funders, or providing technical expertise, policy direction or strategic support. The university brings reputation, trust, financial scale, an ability to court major funders, guarantee and certainty.

Johal argues that this has been increasingly important in the last 15 to 20 years as the roles of local government have retrenched due to financial pressures. He asks, 'If the local council is not taking the lead, who is?' In places like Lincoln with relatively few anchor institutions the role of a civic university is particularly important. He also notes that there may be times when local authorities have more resources than universities, again underlining the importance of long-term partnerships for mutual benefit. Johal also makes an interesting point that, when there have been occasions when anchor institutions have not been able to deliver on issues for the place partnerships, the other anchors notice and miss the contribution, which helps them value each other's role more in the longer-term.

Free and Johal both note the importance of institutions employing people with experience in other sectors to give stronger mutual understanding and cultural and operational read across. Johal's background is in local and central government whilst Julian Free was for many years in the military. There is also learning from how Free's role developed with the university and him seeing opportunities for him to develop regional engagement based on his interests, skills, availability in Lincolnshire and developable links with and understanding of the defence sector and industry. Organisational agility and understanding of its assets were successfully in play.

Working with Business

The university also collaborates with local employers to create highly skilled jobs. Free noted that they were very successful pre-Brexit in securing European funding for business development. This developed the skillset of a department that continues to draw in funding for business development, including supporting start-ups and scale-ups and providing professional support for small businesses across the county.

The university has also reviewed its research base and course provision to ensure alignment with the needs of the county's key economic sectors whilst continuing to offer a broad and popular educational offer. This has led to substantial expansions of its science and technology departments, increasing the scope for the university to undertake commercial collaborations because they align with its research and academic capabilities. Via the Lincolnshire LEP, the university understood the high demand for a chemistry masters degree which it then implemented.

The university has developed a science and innovation park as well as partnerships with Siemens, which expanded its presence in Lincoln as a result, and Lincolnshire Co-operative. It also founded the Lincoln Institute for Agri-food Technology to support Lincolnshire's role in producing 12% of the UK's food supply. Free notes that the university's links with businesses can be stronger than those of councils due to its role in commercial collaborations and that its reach stretches beyond Lincolnshire while councils tend to concentrate on their own jurisdictions across or within the county.

The university works in a diverse range of sectors across the county, for instance supporting decarbonisation on the Humber Estuary which due to the nature of its industrial base, including petrochemicals, is the biggest regional emitter of carbon in the UK. Here The University of Lincoln is working in collaboration with The University of Hull on fields such an innovation and skills provision. There is a clear local need to assist with reducing pollution and supporting people into new green energy industries which the university seeks to support. Also, in terms of business planning, these are useful sectors to be in with alignment to national environmental and industrial policy positions. This is likely to produce future opportunities for income generation from government in addition to the support that the university provides to individual companies on the Humber Estuary as part of the freeport initiative.

The university is also supporting skills development for the construction and operation of the new nuclear fusion power station at West Burton, North Nottinghamshire, which has a build time of 25 to 30 years with many skilled construction jobs and which will be the node for major industrial developments and service provision in and around Lincolnshire. The university does not have a nuclear research department but is involved because of the scale of the economic opportunity for Lincolnshire's businesses and labour market and its provision and expertise in related disciplines, such as engineering, physics and mathematics.

Lincolnshire Institute of Technology

The Lincolnshire Institute of Technology (IoT) is a multi-site initiative across Lincolnshire that stemmed from the university leading a bid to government for technology institute funding, one of 12 successful bids out of 150 that showed initial interest. It is a partnership of education providers (FE and HE) and employers who coordinate the courses offered and the way they work together around technology subjects. They do this so that people in and around Lincolnshire have access to a range of educational options and pathways that can enhance the area's ability to deliver modern digital, technological, mechanical and data driven industries through a well-trained workforce.

Facilities provided include the remodelling of the former council building in Scunthorpe to provide both the Scunthorpe based IoT facility alongside another project to create, with the DN Colleges Group, University Campus North Lincolnshire. The IoT's objective is to strengthen productivity, skills and career pathways in the technology industries. Julian Free notes that the geographical distribution of such facilities is critical in a rural county such as Lincolnshire where it is often very difficult for young people to commute large distances from one town to another. There is now more confidence in delivering online elements of courses post-Covid, given the pandemic forced acceleration of practice, but purely online courses are generally not wholly optimal and definitely not when specialised machinery or facilities are needed.

Also, part of the IoT is the National Centre for Food Manufacturing (NCFM) at Holbeach in south Lincolnshire, offering courses in the areas of food and drink manufacturing, operations, food science and technology and food operations management and leadership. The university offers a range of facilities to support firms in sectors such as food manufacturing and food technology including apprenticeships, short business-focused courses, laboratory and meeting/conference spaces, technical and consultancy advice services and research. Current research initiatives include: digitalisation of the food sector to optimise productivity and advance quality assurance; industry-focused carbon net zero and sustainability agendas; and application of analytical techniques that unlock specific challenges of food quality, safety and nutritional performance.

Free notes the importance of emerging technologies in agriculture such as the role of robotics and Artificial Intelligence (AI) in fruit-picking e.g. for strawberries, AI can help robots know which fruit are ripe and how to pick them without damaging the crop.

In November 2023 the University of Lincoln was awarded the Queen's Anniversary Prize for its work supporting the success and sustainability of the UK's food and farming industries through innovations in research, education, and technology.

Defence and Security

Lincolnshire is home to a strong defence sector including Royal Air Force bases with major investments in ISTAR technology for the security of the UK. ISTAR stands for intelligence, surveillance, target acquisition, and reconnaissance, a capability that links several battlefield functions together to assist a combat force in employing its sensors and managing the information they gather. Julian Free notes how the traditional approach of economic development partners has been to seek to attract or grow large scale manufacturing facilities, but the scope for this has declined while opportunities in data science, secure communications, cyber and simulation are growing often more lucrative and less location dependant. For the university its capabilities in these and other related areas such as machine learning and AI are also better aligned with the capabilities of local firms working with and being created to support the security sector based in the region.

With the defence sector offering opportunities in analytics, machine learning, artificial intelligence and data visualisation to help people make quicker, better decisions, the university could see opportunities to expand Lincolnshire's network of companies.

Free notes that they also identified overlaps between the defence, space, energy and agri-food sectors meaning that if they could serve defence they could serve aspects of these sectors too, providing further commercial opportunities for businesses and the university alike.

Continuing the theme of being alive to opportunities, the publication of the 2019 UK Defence Industrial Strategy referenced Regional Defence Security Clusters (RDSC). Free notes how Lincolnshire representatives then visited the cluster comprising Herefordshire, Worcestershire, and Gloucestershire to understand more.

Free was subsequently co-opted onto the Greater Lincolnshire LEP to form a Defence and Security Strategic Advisory Board to assess and take forward opportunities in Lincolnshire where it has capabilities and strategic advantage. 'Having large international companies on our board helps our understanding of their demand for products, services and skills which we can then work to provide, with the SMEs and educational institutions on the board being able to discuss fulfilment with the firms sitting upstream in the supply chains.'

Free describes how Lincolnshire partners then spoke with the Ministry of Defence's Defensive and Security Accelerator (DASA) about establishing an RDSC. 'As part of the process, we were able to show that our network had sufficient mass, interest and capability including in critical ISTAR technologies. In 2022 the Greater Lincolnshire RDSC was recognised by DASA which has increased the profile of our SMEs and the opportunities in the county and increased our ability to encourage new firms to locate in Lincolnshire. Our inward investment strategy focuses on growing our SME base, highlighting the opportunities and innovation being generated by the cluster and expanding the footprint of the large defence and security multi-nationals supporting the ISTAR force based in Lincolnshire.'

Free outlined some success stories such as an American defence company, SRC UK, that was attracted to the Lincoln Science & Innovation Park with five employees. It will soon employ 200 people in Lincoln. This growth has led to another American firm, Lone Star, an AI and data analytics company, choosing to locate in Lincoln rather than more established centres for technology and defence like Cambridge and Bristol. These firms have substantial growth potential because their capabilities can be applied to fields like health as well as defence. There are also crossovers between defence and another major Lincolnshire sector, agri-tech. For instance, drones with sensors used for military applications have been used to develop drones that can be used to decide when to harvest crops.

Free notes that a key local goal for industrial growth in these sectors is to establish a critical mass of firms that will allow people not just to land a job but to build a well-paid and fulfilling career in Lincolnshire.

Place Partnerships

Towns Fund boards

The university is represented on six Towns Fund boards in places across Lincolnshire meeting UK government criteria for population size and income deprivation. These are: Scunthorpe, Grimsby, Mablethorpe and Skegness (combined as Connected Coast), Boston and Lincoln. This representation helps the university integrate a range of social, economic and environmental issues across the county with a wide range of partners and to learn from and spread best practice.

The university is also represented on the Newark town board despite it being just over the border in Nottinghamshire where Lincoln College has invested in an Air & Space Institute. Examples of interventions include the university supporting small businesses with digital capabilities in Lincoln through, for example, the Lincoln Be Smarter programme and working with SMEs to increase their digital literacy and improve exploitation of digital capabilities. The university provided a programme manager to the Connected Coast project Campus for Future Living to manage project initiation, the contracting process and to begin the construction phase.

As part of the Boston Town Fund the university has established, in partnership with Boston College, the Centre for Food and Fresh Produce Logistics which provides business support, workforce development and assistance with technical and scientific projects to improve business productivity through research, innovation and new technologies such as robotics.

Arts Projects

Johal notes that the university has been involved in place partnerships supporting arts projects across the county, such as 'Transported,' which is a community-focused programme that aims to get more people in Boston Borough and South Holland enjoying and participating in arts activities. The programme is overseen by the Centre of Culture and Creativity at the University of Lincoln and is funded by the Creative People and Places fund from Arts Council England. With the Arts Council funding the project, the university's role is focused on providing management experience and reputation, chairing the management group and employing the staff team.

The programme has been very successful and secured Town Deal funding to provide further projects. Work to support transient agricultural workers - e.g. in farming and food packing and processing – and make them feel they belong as have interventions in public art and the public realm which led to the university supporting Boston's wider town development plan.

Cultural Work

The university supports the creative and cultural industries sector for several reasons. In part the cultural offer of Lincoln as a city and county and its many of ways enhancing quality of life helps attract and retain staff and students including via employment opportunities. The university has a large college of the arts, social sciences and humanities with relevant teaching areas; staff, students and graduates benefit from access to interfaces with the broader sector such as learning, collaboration, work and consultancy opportunities. This includes for courses such as fine arts, photography, music, heritage and media studies. Julian Free points to the increasing read-across with technology in some areas of the arts and heritage such as when the university analysed old layers of paint when helping to restore Big Ben and HMS Victory. This meshing of art and science helps drives collaboration across the university and provides interesting niches for academics to work in that also generate income and exposure.

The university also identified creative and cultural industries as a sector where it could add value due to Lincoln having fallen behind the offer of comparable places without facilities like a cultural and creative hub being available and with it not having traditionally been a priority sector for economic development bodies. Yet it is a sector with great potential and Johal noted that in the year from April 2023 10% of new registered start-ups in Lincoln were in the creative and cultural industries.

The university as a relevant and large anchor institution can help give the sector greater visibility including in terms of smaller firms accessing business-to-business opportunities with major regional employers that the university connects with e.g. in defence, energy, agri-food and agri-tech. This includes services such as website development, marketing, advertising and design and architecture where local firms can sometimes be overlooked. Johal also notes that in economic development the business-to-business services of cultural and creative industries are conceptually disproportionately overshadowed by their business-to-consumer work.

Regenerating Historic High Streets

Historic England has a national programme of revitalising town and city centres and high streets via High Street Heritage Action Zones (HAZ) funding. The University of Lincoln co-crafted the city's cultural chapter for the Heritage Action Zone in partnership with City of Lincoln Council, helping the council to secure £120,000 of investment. The strategic catalyst programme was specifically designed to build capacity in the local creative sector post pandemic, leading to a more robust, thriving cultural sector including supporting organisations that need additional funding and events such as festivals, contributing to active and vibrant high streets.

Barbican Creative Hub
(www.barbicancreativehub.com)

Barbican Creative Hub

The Barbican Creative Hub (a Lincoln Town Fund project) will launch in 2025 in the heart of the city. It will provide a mix of studios, flexible co-working spaces, 'white cube' event space, meeting rooms, creatives in residence and a café bar. The project has resulted from a three-way partnership between the University of Lincoln, Lincolnshire Co-op and City of Lincoln Council with funding from the government's Levelling Up Agenda and through the Town Deal scheme, the High Street Heritage Action Zone from Historic England and Lincolnshire Co-op.

The university, working with a specialist creative consultant (Tom Fleming) helped understand the scale and nature of the creative and cultural industries sector across the county including its development needs and growth potential. Through the study it was determined that there was significant growth potential and a detailed options appraisal was undertaken across the city to maximise the dual ambitions of regenerating and diversifying away from retail, as well as supporting the creative and cultural sectors growth. The approach adopted learning from other cities across the UK of clustering and catalysing the sector.

The Barbican was a derelict Grade II listed Victorian railway hotel and was chosen for its location and scale and to bring back into use a heritage asset with local attachment that would add to the streetscape and provide an attractive and inspiring setting for the hub. Derelict for some 20 years it was not the easiest location to develop but £1.7m of Town Deal Investment matched by the Lincolnshire Co-op with a further £300,000 from the Heritage Action Zone funded the £3.7 million capital project. The strength of partnership also meant that broader aims could be considered e.g. the Barbican's heritage value and how to translate that into innovative outcomes and sharing best practice.

The hub will take a long-term lease and support a range of larger and smaller organisations developing rather than presenting creative work. An R&D space will provide a unique environment for creative businesses to prototype, test and develop product and engage the public in product and service development. There will also be a strong focus on supporting business-to-business supply chains which Johal notes is an under-estimated part of the creative sector which is often perceived only to be focused on providing products and services to the public as consumers as opposed to servicing and supporting other large industrial sectors.

The Barbican as a 'Third Space'

'I think genuine innovation normally happens in between spaces not in any one domain and when you have those real deep conversations with organisations you can share concerns. Those insights, those perspectives, come from that dialogue and that conversation and it becomes a much richer proposition that has been challenged from a range of points of view.'

Sukhy Johal

The university was keen that its location was in the city centre rather than on campus so it offered budding entrepreneurs the type of collaborative 'third space' environment that they needed and so the building better interfaced with the wider business and creative community, visible to the public, complementing the work of the arts school in other forms of community engagement and participation. Johal believes that if the hub was on their campus it would appeal to a narrower range of businesses and organisations and would not be in the same sweet spot of marrying the offers of different organisations e.g. the design and creative support of the university with the business development work of the county council and the local growth hub and its integrated, easy to navigate support for businesses and other creative and cultural organisations accessing regional and national programmes. Johal notes that the strong partnerships in place mean genuine co-curation of activity and not needing to insource advice to do so.

Encouraging Inclusion and Sustainability in the Local Economy

The university seeks to be underpinned by a funding model that is 'fair to students, fair to graduates, and fair to universities,' reflecting the benefits the university brings to graduates who stay on in the county and to wider populations who did not study or work at the university.

Lincoln targets pupils in local schools. Many recruits are from deprived post-industrial rural and coastal areas and schools often note they would not have considered university options outside their region. As well as its more obvious role in education the university also seeks to help spread opportunities across the county including for those who did attend the university as students. For instance, Free notes the importance of planning how the residents of more deprived towns in the county access new job opportunities such as in the expanding nuclear industry.

The university having its campus in Lincoln city centre is also an important facet of sustainable and inclusive growth as it drives an immediate connection to the city. This plays out in terms of social, economic and environmental benefits e.g. that university students and staff can more easily access the city centre making active travel the principal mode of travelling between the campus and the historic core of the city and conversely the university is more visible to the wider community, reducing a sense of its being differentiated from the wider city i.e. an ivory tower.

Johal believes that 'the university is dependent on the city and its infrastructure and they're dependent on us because the university is such a large player in terms of the regional ecology and the impact that the university has as a major employer of 2,000 staff right in the heart of the city. So there is that co-dependence. I think for many institutions which are not based in their town or city centre there isn't that immediate dependency and therefore there is less imperative to support local people, businesses and facilities.'

The University of Lincoln (www.lincoln.ac.uk)

Case Study: Teesside University

For more than 20 years, Teesside University has supported the Tees Valley's tech sector through DigitalCity, helping to promote and enhance the area's digital offering. In this time it has supported more than 650 digital and creative businesses and has made a significant contribution to the local economy. The most recent and final ERDF funded project evaluation showed that for every pound invested in the project it has returned more than 11 times that amount to the local economy.

At the heart of the economic development programme has been a partnership that has been instrumental in driving innovation and nurturing talent in the area. The university has worked with local authorities across the Tees Valley and the Tees Valley Combined Authority (TVCA) to drive growth in digital as a key enabling sector and to support businesses to start, innovate and grow. Middlesbrough Council has been instrumental in developing the Boho zone in its town centre which has seen graduate start-up businesses move from the university campus-based incubator into high-quality creative spaces as they grow and employ more of the talent graduating from the university.

Animex is an international festival of animation, games and VFX (visual effects) hosted every year for the past 25 years by the university. Global names from across the industry convene in Middlesbrough to share, inspire and network about their latest projects with peers and the future talent of the industry.

Success has seen the growth of the Boho zone which is now home to video game companies such as Double Eleven, Radical Forge and Behaviour UK.

Recently the UK Tech Jobs report showed that Middlesbrough ranks as the top spot for tech growth outside of London, securing sixth place nationwide.

'Teesside University has had a shared vision for the growth for the digital and creative sector within Tees Valley and particularly Middlesbrough for over 20 years,' said Lynsey Robinson, Deputy Director, Economic Development & Operations at Teesside University.

'Working with partners flexibly has enabled us to develop projects in line with funding opportunities and government priorities over time. Enabling a long-term approach to innovation-led economic development is vital in an area like Tees Valley. Short-term funding opportunities have often finished before the businesses can access them. Building relationships and understanding the needs and opportunities of the sector is vital to the growth we have seen in Tees Valley. Connecting place-based infrastructure approaches with skills, enterprise and innovation support has enabled support to be tailored to business needs.

'However, we need to do more to ensure agile creative and digital sectors flourish in the centre of our towns. Our young people need to understand they represent opportunities for them to build careers and flourish in highly rewarding sectors. We are currently working with TVCA to develop an investment zone for the digital and creative sector in Tees Valley. This 10-year investment has the potential to create a step-change in attracting investment and supporting businesses to accelerate growth. It represents an exciting opportunity to build on the legacy of innovation-led support from the last 20 years, with Teesside University continuing to collaborate with the public and private sectors to grow opportunities for our local communities.'

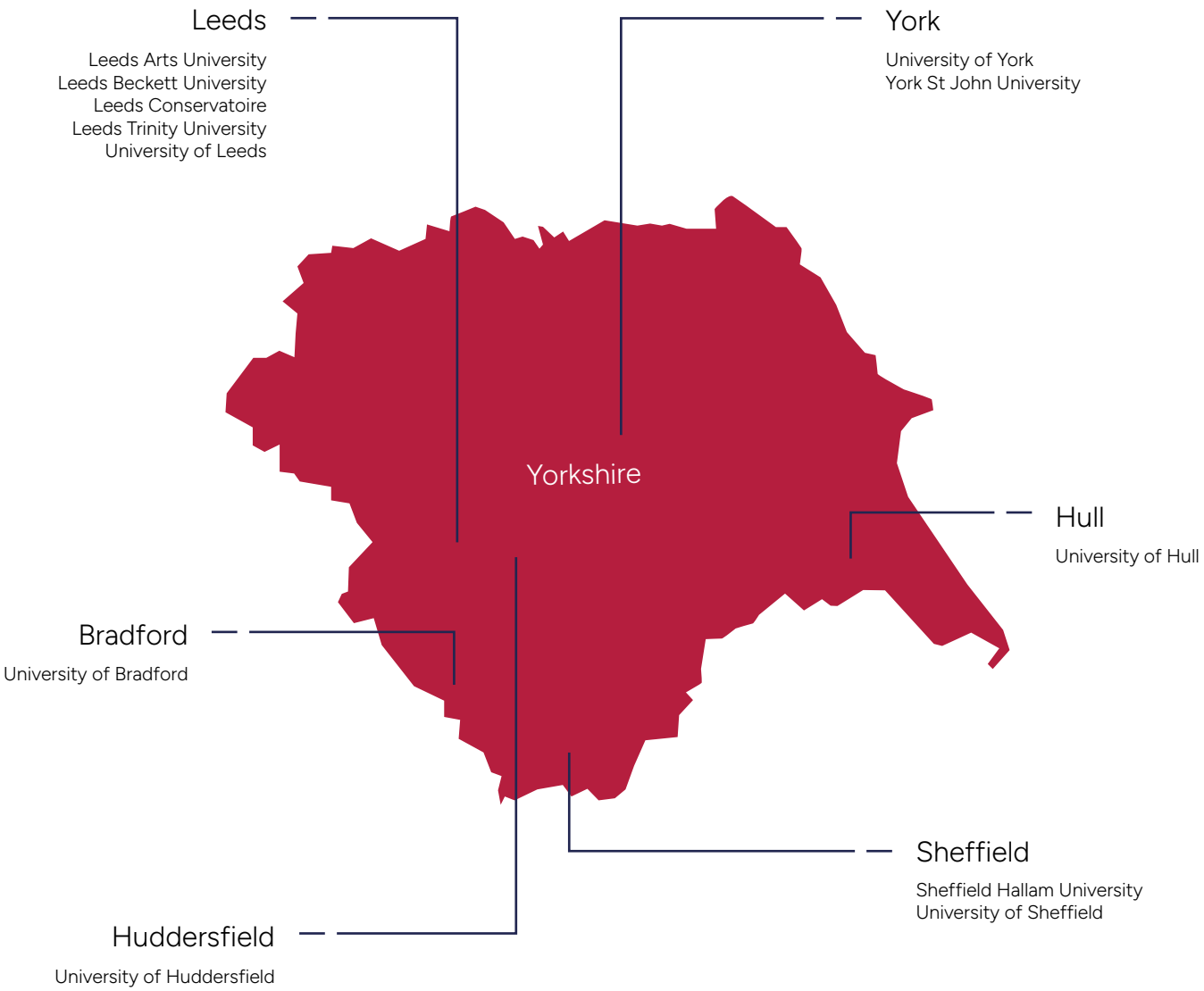
Teesside University is a long-standing supporter of the vibrant local tech sector with DigitalCity nurturing digital businesses for over 20 years and the recent completion of the Digital Life Building (Teesside University)

Case Study: Yorkshire Universities

About Yorkshire Universities

- Yorkshire Universities is a regional partnership of twelve higher education institutions. Funded by the universities themselves and some grants secured from national government, they empower member institutions to lead in the civic agenda by connecting public policy with informed practice and knowledge transfer;
- It supports and champions Yorkshire knowledge and skills and universities' collective aspirations on global questions such as skills, infrastructure and innovation; and
- Brokers and leads partnership working and promotes the value of higher education by creating opportunities for strategic conversations that generate new ideas, fresh insights and innovation.

Hull is home to one of the 12 higher education institutions that comprise Yorkshire Universities



Source: *Yorkshire Universities*

Partnership Working

Peter O'Brien, Executive Director of Yorkshire Universities, explained the value of his partnership and how he sees the role of universities in economic place-shaping developing.

O'Brien sees the diversity of the universities sector as a national and Yorkshire strength, with universities ranging substantially in size and scope and having varying ambitions. Yet they do compete at times and O'Brien believes that governments have encouraged that. He therefore believes that partnership working is a particularly useful counterbalance and that government - notably the Department for Business and Trade and UK Research and Innovation (UKRI) - should provide greater strategy and incentives for collaboration, particularly across places and regions, encouraging universities to be globally excellent and locally relevant.

Within universities O'Brien would like to see a stronger relationship between teaching, learning, research and knowledge exchange. He thinks that there is much more to be done in that space by universities themselves, encouraged and supported by government and the regulator.

O'Brien notes that there are also many aspects of post-18 tertiary education that could be better integrated. He points to a recent pilot where students applied their learning on sustainability directly in work with businesses and community groups, solving particular challenges. It helped the students develop employability skills and understanding about enterprise including the issues facing SMEs. But equally there was a building of a knowledge exchange system and platform between universities and those outside the sector. O'Brien notes that this sort of experiential learning is more common in the USA and should be developed further in the UK.

Ziff Building, University of Leeds (www.luu.org.uk)

Mayoral Combined Authorities and Place-based Partnerships

He thinks that the increasing role of mayoral combined authorities (MCAs) will be important in this space and it is important that universities closely align with them, especially given the continued push for devolution of R&D funding and functions. Such integration includes formal structures and more informal relationships that can support shared areas of interest including skills and talent, research and development, knowledge exchange, business support and inward investment.

Inward investment is a field where O'Brien thinks there is substantial scope for universities to work more systematically on, going beyond attending meetings to use the university's capabilities to attract individual businesses. O'Brien would like to see clear strategies, structuresand collateral, demonstrating a coordinated approach involving collections of universities to attracting inward investment, harnessing the universities' networks and assets including facilities, professional education resources and credibility in-market in terms of skills and research provision. O'Brien notes good work in the Midlands in these respects.

O'Brien also notes that the role of individual councils should not be overlooked in the MCA model given their vital roles in working with universities on many aspects of place-shaping. O'Brien believes that local government should review its own delivery models ensuring that it has the right resources at its disposal and is not reduced to crisis management. He also believes that MCA geography and structures could provide a stronger basis for collaboration between HE and FE providing clearer education and career paths and reducing unnecessary competition.

O'Brien sees a need for greater funding for place-based partnerships working to jointly deliver the motivations, ambitions and mission of a place involving co-design and delivery of a single strategy that different institutions share responsibility for and creating strong mutual understanding of each institution's role, ambitions and offer to others. He thinks that both councils and universities need more latitude and more flexibility in how they are regulated and funded to focus more on this type of work, with more spaces opened-up for collaboration.

He notes that for partnerships specifically, a little extra funding would go a long way in terms of capacity building. This would help create more systematic and durable place-partnerships, less reliant on individual relationships between interested people. O'Brien notes that there are plenty of other people with interests in such fields who are currently less involved than they would like to be given other responsibilities and the way success is measured in their jobs.

With universities making a loss on teaching and research O'Brien thinks that conversations will be needed as to how universities can financially support devolution of R&D responsibilities to combined authorities, perhaps via a share of funding into places, or that UKRI should directly help the universities to free-up capacity and capability in support of place-based initiatives e.g. to provide additional staff in fields like knowledge exchange or to refocus academic time.

He also notes the important role of people moving between sectors or going on placements to improve mutual understanding of how councils and universities work and how they can partner.

O'Brien also considers that greater join-up in the UK government between economic development and education policies would be helpful as would the government giving more local and regional leeway on matters such as local skills improvement plans; and once such plans are in place, to not replace them too quickly with a similar initiative.

Regional Collaboration

He also notes the benefit of wider regional organisations like his own in geographically joining-up work that universities do with businesses and local and combined authorities and in putting together joint policy positions and funding bids. Yorkshire Universities can offer economies of scale, working for the universities together on regional development more efficiently than they could have individually.

He believes that multi-level governance and relationships work well in Yorkshire, citing that both the West Yorkshire Combined Authority and Leeds City Council have successful economic conversations with the universities in Leeds. Yorkshire Universities can also provide a single regional body for government to converse with, offering policy insight, expertise, intelligence and understanding from the university sector. Yorkshire Universities also provides an interface for inter-regional collaboration and engagement with other university groupings such as the N8 Partnership, a group of research-intensive universities across the north of England.

The Horton Building, Bradford University, UK

The University of Sheffield, Art Tower View

Chapter 5 - Recommendations

Introduction

The focus of this report is how partnerships involving universities can drive local and regional economic growth and rebalancing with national impacts. Chapter 1 set the national context, Chapter 2 focused on university and business partnerships, Chapter 3 on innovation districts and Chapter 4 on economic partnerships across wider local and regional geographies, often built around the triple-helix of universities, business and local government.

The report is aimed at economic development practitioners – across multiple types of institutions - in support of increasing the number and success of local and regional economic partnerships across the UK. These should harness the networks, convening power, research, expertise, technology and facilities of universities working with partners such as mayoral strategic authorities, local authorities, further education, other research institutions and businesses. Such partnerships can be difficult to form and sustain successfully because the cultures, aspirations, accountabilities, success drivers and career paths of different organisations may not align. Yet if such challenges are overcome the value can be substantial. National government must also play its part.

This chapter provides recommendations and considerations that draw on the case studies within this report, other interviews, and wider research. It is presented in three parts: the first two, along with commentary in this introductory section, have been authored by IED, the third by AtkinsRéalis.

The first part considers the role of national government in the UK and given much of economic development is devolved in the UK, the devolved governments too. As a key principle we advise that central government should provide a supportive policy and funding framework across nations that helps partnerships respond to local conditions and ambitions across scales from hyper-local innovation districts to much wider regional economies, by: i) having a substantial degree of autonomy; ii) incentivising and investing in individual institutions to seek sustained fulsome roles in economic partnerships; and iii) providing capacity funding for the partnerships themselves. Government should also recognise the varied contexts of different institutions, both organisationally and geographically, and fund according to a combination of local and regional economic opportunity and need and commitment to deliver. Doing so will help deliver the ambitions of the 2025 Comprehensive Spending Review, its related announcements for innovation and local growth, and the recent UK Industrial Strategy White Paper.

Part two of this chapter provides a set of considerations designed primarily for economic development practitioners. They aim to aid the formation and delivery of successful economic partnerships and innovation districts that drive productivity, growth, inclusion and sustainability in local and regional economies. The IED as a professional body and AtkinsRéalis, as a partner in delivering infrastructure solutions, place-led masterplanning and economic development consultancy, have crafted this report to support economic development professionals in delivering solutions on the ground. Recognising the myriad different starting-points and circumstances facing different places in the UK, this section is presented largely as a set of questions rather than prescriptive recommendations. We hope that in addition to the case studies, these provoke thought and action and spread good practice.

The third part, on the academia-business relationship, has been authored by AtkinsRéalis. As a business the company stands ready to make its contribution to support place-led growth, working with partners across the regions and nationally. However, it does not see its role as making policy recommendations to government, that is the proper role of thought-leaders such as the IED. Therefore, though the company has supported the research in this report its recommendations are limited to those made in chapter 2 on the academia-business relationship and in the third section of this chapter. All other recommendations or comments in the report on policy matters fall under the IED's banner.

Queens University, Belfast (www.qub.ac.uk)

Part 1: National Recommendations

We believe that closer and more productive links between universities, business and local government (local authorities and mayoral strategic authorities) are critical to kickstarting UK growth and tackling national challenges such as productivity, scaling businesses, and regional disparities in economic performance and therefore people's opportunities. There are important roles for other local parties too including communities – which need to be engaged with more effectively - investors and further education. National government should assist by ensuring sufficient financial, performance and cultural incentives for institutions and individuals to focus more deeply on triple or quadruple helix type partnerships, and to ensure that these economic partnerships are sufficiently resourced for important roles in driving innovation and wider economic growth, responding to local and regional economic conditions. Agendas and structures may differ between the agendas of the UK and devolved governments, but these principles are long-term and consistent.

1. Government must ensure that the UK remains at technology frontiers for economic benefit including in terms of innovation, adoption and regulatory frameworks via successful delivery of the £86bn announced for science and technology research and innovation just ahead of the 2025 Spending Review. This includes taking due account of the powerful potential of multi-institutional partnerships and encouraging their proliferation and success. The £86bn is welcomed as an increase in this vital area of government expenditure that represents a small percentage of total UK government spending yet offers substantial potential to support UK growth, productivity and exports. Opportunities to 'invest to save' stem from innovation supporting a larger tax base and efficiency in public service delivery. The current focus on scaling businesses is important as the UK benefits from a flagship university sector – e.g. 15 of the 2025 QS Rankings top 100 universities globally – with evidence of the strong economic benefits of public R&D investment, and an improving start-up landscape, but lags competitors in aspects of commercialising university research and especially scaling technology-rich companies. The Local Innovation Partnership Fund (up to £500m to regions across the UK) recognises the importance of triple-helix partnerships and aligns with the thrust of this report, but it is also important that a variety of university partnerships, including some that are place-based, are key delivery vehicles for nationally allocated innovation spend, which makes up the vast majority of the £86bn total.

2. Government should maximise national coordination across its approaches to industrial strategy, policy and delivery for universities, skills and local growth to kick start UK economic growth. This includes greater national cohesion when developing innovation, economic and business initiatives stemming from the UK's industrial strategy alongside relevant devolved economic strategies and frameworks in Northern Ireland, Scotland and Wales. Due consideration, for instance, should be given to growing the capacity of firms, and skills of workers, to absorb innovation in-tandem with funding the innovation itself and that universities provide critical support to businesses beyond their roles in innovation. This type of holistic approach is vital to growing sectors and geographical clusters containing higher-tech firms – not doing so risks higher-tech firms becoming dislocated from domestic supply-chains (upstream and downstream) and labour markets.

   Long-term visibility, scale and certainty from national government makes it easier to engage partners including academics and industry. National approaches should also be able to respond to local priorities and initiatives that emerge upwards through processes such as local growth plans. Strong alignment between the Department for

Science, Innovation and Technology (DSIT) and the Department of Business and Trade (DBT) is vital, for instance in transmission mechanisms to progress relevant scalable DSIT-funded innovation projects and companies into wider business support, inward investment and export programmes, under DBT.

3. The relative contribution of different sectors to regional growth is difficult to rank, but a London Economics study evidenced that for every £1 of publicly funded research income, the UK higher education sector's research and knowledge exchange activities generate approximately £9.9 in economic impact across the UK[66]. This is certainly a relatively high return and underpins an argument from Universities UK for 'viewing universities as another part of the UK's growth infrastructure, and one which can deliver economic and social benefits more quickly and effectively than others[67].'
These economic impacts combined with the severe financial challenges that many universities are suffering demonstrate the value of government providing additional funding for universities to increase their economic impact, including in local and regional economies. This includes via starting and scaling businesses, knowledge exchange and technology transfers along with wider roles in supporting economic ecosystems at local, regional and national scales via their reputation, networks, convening power and ability to attract investment.

Government should also consider how to tilt incentives for universities and their staff to better reward support for economic activity including inter-disciplinary initiatives, commercialising research and working with businesses and wider economic partnerships. This would include working with universities to ensure greater recognition for externally facing economic roles within career paths. The Knowledge Exchange Framework (KEF) could be evolved as a starting point for evaluating universities relative impacts for funding.

4. The geographical distribution of universities including research-intensive universities across the UK offers the potential to drive productivity in regions with lower outputs per capita. Investing in universities provides a strong return generally as shown above but can be particularly important in places with challenged local economies where a university can help exploit economic opportunities; government should harness this as a tool for both increasing national output and rebalancing economic opportunities between populations, including spreading the eight priority sectors of the industrial strategy. The regional funds announced alongside the Industrial Strategy White Paper go some way in this direction and universities can help drive impact from them.

Some universities are also important because they form a larger proportion of the local economy or their qualities are particularly relied upon due to a thinness in the number or capacity of other powerful anchor institutions in the university's hinterland. Many UK places are home to universities ranking in, say, the top 200 globally, yet have few other globally resonant economic assets.

Translating university technology and expertise into innovation-rich businesses can help develop stronger national and international roles for local economies across the UK, reducing pressure on housing markets and infrastructure in over-heating parts of the UK while remaining cognisant of our leading universities and their business clusters needing to compete with the world's best.

5. Government funding for driving economies should pivot in part from being mostly targeted at investment in buildings and physical infrastructure to investing in the people, networks and technologies that fuel regional innovation ecosystems. This includes government revising some economic evaluation processes to allow more risk in investing in technologies and also providing greater support for businesses to better seek and absorb technology transfers from, and enter collaborations with, universities. There is growing evidence in the UK that the ability of local anchor institutions to immerse themselves in local ecosystems can deliver strong economic returns from programme funding as recognised previously with the advent of local industrial strategies. Success requires sufficient revenue funding, not just for individual sectors, but to also drive economic

Cardiff University (www.cardiff.ac.uk)

66 LE-UUK-Impact-of-university-TL-and-RI-Final-Report.pdf
67 New report reveals key role universities play in boosting growth and productivity across the UK

ecosystems via technological advances and multi-institutional and multi-sectoral collaborations.

6. Making economic development a statutory function for local authorities would help generate additional capacity to support wider partnerships as would additional revenue funding to support and grow economic ecosystems in terms of R&D assets, business support and networks, attracting investment and supporting inclusion. This would encourage local authorities to ensure a holistic approach to regeneration, widening approaches that can sometimes overly focus on capital interventions such as property development and local road infrastructure.

7. Although links with national strategies are important, and some national coordination and direction monitoring is vital, devolution in England should be a mode for delivering greater autonomy to mayoral strategic authorities, allowing them and their partner institutions such as universities greater control of economic planning and delivery, aiding autonomy and speed of delivery. The Spending Review represented another staging post in the continuing devolution of powers across England but government in the UK remains more centralised than in most of our comparator nations with many commentators arguing that this stifles elements of local and regional economic growth.

   Government should welcome and fund well-planned and evidenced local economic initiatives in a tilt to bottom-up approaches born from the needs of individual places. These principles apply across the UK though models are likely to differ somewhat in the devolved nations e.g. in Scotland where regional economic partnerships with regional economic strategies already exist. Local authorities collaborate on regional economic initiatives across Wales's four regions and via Northern Ireland's sub-regional economic plan.

   Government published guidance for developing local growth plans in England alongside the 2025 Spending Review, noting the importance of working with stakeholders including business groups and higher education institutes. We welcome this and underline the importance of strong, long-lasting economic partnerships delivering the local growth plans over their ten-year planning periods.

8. Capacity funding provided to triple-helix partnerships can encourage their proliferation, longevity and impact including their ability to make long-term strategy and investment decisions for their economic ecosystems. This should be delivered directly to the partnership to aid institutional balance and to encourage institutions to work beyond their traditional boundaries. These partnerships delivering some nationally or regionally derived funding programmes will also assist in harnessing the focus and capacity of anchor institutions.

9. In return for funding, government should ask that local growth partnerships work towards shared long-term goals, held by all institutions, which will help bind them and ensure focus and delivery. Although progress has been made, at present place-based economic partnerships are

Liverpool Science Park (bruntwood.co.uk)

a core focus of too few UK institutions due to how organisations and individuals within them are incentivised in terms of funding and career opportunities. Longevity and stability of partnerships will also help avoid 'jam-spreading', ensuring that the most valuable interventions are returned to in the long-term via different programmes and policies. Long-term continuous focus also ensures 'good growth' and due focus on economic inclusivity and environmentally sustainability.

10. Innovation districts should be embraced by national government to drive productivity growth in urban areas across the UK and benefits for local populations, reinforcing existing innovation districts and aiding their proliferation. This includes government offering innovation funding that combines research, technology, business and networking support. This should be underpinned by physical infrastructure funding from other government departments that recognises in cost-benefit-analysis the innovation and economic imperatives of clusters of highly productive activities. The Industrial Strategy Zones model could be adapted into a new form that meets the specific needs of innovation districts and support their growth and proliferation. There could be some read-across with the proposed AI Growth Zones.

    This innovation district funding should support diverse and vibrant places, cultures of collaboration and spaces where it is safe to disrupt and at times fail. Innovation funding should not be based on overly prescriptive KPIs. Generous revenue funding is vital to support economic ecosystems including networks, collaborations and support for university spin-outs, start-ups and scale-ups. As per the Industrial Strategy Zones model, the Department of Business and Trade and Office for Investment should provide a focused international profile and FDI pipeline opportunities for innovation districts

11. To aid economic agglomeration, inclusion and sustainability, national government should look to support innovation districts being set-up in or proximate to urban centres even if land values are higher than in out-of-town settings; similarly, any additional costs to encourage high-quality, permeable and engaging urban realms that widen participation and sense of ownership alongside programmes to raise aspirations, skills, and employment opportunities for people who might not otherwise access jobs there.

Part 2: Considerations Around Local Partnerships and Delivery

As noted in the chapter introduction this section is aimed at economic development practitioners working in local and regional economic partnerships and/or innovation districts. Recognising the diversity of institutions and economies across the UK, it is set out as a set of considerations rather than prescriptive recommendations. We recognise the challenges in forming successful economic partnerships and innovation districts and hope this section helps overcome them.

2a: Partnerships

There are variations on it, but the triple-helix of government (often local), business and universities is at the heart of many local economies that are innovation rich or become more so. To this we recommend including organisations that represent community interests, forming a quadruple helix. Environmental interests should also be considered, typically by all parties in the helix.

Key questions here include:

Actions and Culture of Individual Organisations

- How do organisations ensure culturally, operationally and financially that sufficient resource is given to developing more productive local economies, including in partnerships, and that this benefits local residents?
- Is there sufficient senior management and political support?
- Can new income streams be developed for universities when supporting local economies?
- Can long-term benefits of partnership action be better understood to encourage short-term resource outlay?
- How will the organisation recognise and reward individuals who contribute to the success of the partnership culturally and perhaps financially?
- How can useful career paths for participants in partnerships be strengthened within and across institutions?

Setting Up a Partnership

- How can relationships and work best be up streamed to foster a sense of common ownership and agree sets of common long-term principles rather than simply respond to a variety of projects?
- What can be learned from previous or other existing economic partnerships?
- Some partners may have longer histories of collaboration than others. How is this managed?
- Is there sufficient diversity of representatives on partnership committees to maximise capacity and represent a wide range of pertinent interests?
- How can 'third spaces' be created outside the jurisdiction of any one institution to generate stronger collaborations?

Maintaining a Partnership

- How can you build trust, enabling different anchor institutions to play different roles in different scenarios e.g. leading, enabling, supporting?
- How can bodies best learn about each other including engaging complex management and responsibility structures and learn from one another? Do people have, or can people gain, experience of working in a different institution to grow mutual understanding?
- How do bodies best share responsibility and interest in delivery, including outside their traditional institutional role?
- How does the partnership best engage with the third sector and local communities?
- Can the partnership provide a helpful single point of contact with markets and government?
- How can bodies work together to increase the amount of public and private sector funding secured?
- How is reputational gain through partnership working best secured for the place, the partnership and the individual institutions?
- Consider how best to form, curate and motivate the partnership and wider networks of activators. What does each organisation offer and how does each organisation benefit and how could this evolve? For example:
  - How can university data, research and analysis capabilities best support local policy development, decision making and delivery?
  - How can universities best support a local eco-system of businesses that help to commercialise research?
  - How can councils or combined authorities use their convening power to convene and inspire economic actors?
  - Can large institutions (e.g. universities, hospitals, local government) source more from local business? Are there procurement barriers to be tackled?
  - Are the needs of business well understood in the education and skills system including in councils, schools, further education colleges and universities (research, degrees and professional courses)? Are skills and employment pathways coordinated and streamlined across organisations? How best can the collective voice of business be heard and actioned by multiple organisations working collaboratively?
- How are successes measured and shared to ensure continuing or growing support for the agenda in terms of institutional commitment, cultures, funding and partnership engagement?
- How are principles and delivery reviewed against institutional ambitions and the passage of time?
- How can you best ensure that the collaboration continues if there are set-backs, people leave or funding streams cease?
- How can places support and benefit from wider regional – e.g. the Oxford-Cambridge Arc, Yorkshire Universities – national (e.g. Manchester-Cambridge) or international partnerships?

2b: Strategy

Design

- Is there a shared understanding of local economic challenges and opportunities? How best can this be formed?
- What can be learned from other places in the UK and internationally?
- With the pace of economic change increasing is the strategy agile enough?
- Does the strategy set suitable realistic long-term ambitions yet can be adjusted to fit with evolving national policy and programmes?
- Are tangible outcomes going to be delivered in addition to high-level principles that legitimise and support growth and acceleration of economic activity?
- Can shared targets be agreed to form a more cohesive multi-organisational approach that increases buy-in from all organisations and firmly integrates different activities and minimises risks of siloed working?
- How will the strategy be evaluated? Is there sufficient room to allow for elements of failure and to encourage a focus on newer or riskier fields such as in technology rather than focusing on well-trodden ground such as real estate?

Networks

- Is sufficient weight in local or regional economic planning and policy given to building economic ecosystems and increasing productivity?
- Are university research and teaching strengths understood by industry and vice versa; are interfaces sufficient?
- How can universities use their intellectual heft to help with the research and analysis that underpins economic strategies. This includes social science, economic, business and STEM disciplines.
- Can further and higher education provision, careers advice, work experience and employment opportunities be better aligned in a tertiary education system?
- Are supply chains understood and supported and reinforced with buy-in from larger firms and differentiation between business-to-business and business-to-consumer opportunities?

Sectors

- To what extent will sectors be prioritised within the strategy versus general business growth and cross-sectoral interventions?
- What are the key sectors and sub-sectors in the local economy, how do these relate to strengths in local universities?
- What is the absorptive capacity of business for technology transfers? How can this be increased?
- Can the university's teaching and research offer evolve to better match the current and future local economy?
- How do these sectors relate to place? What and where are the key nodes? Can clusters be grown or strengthened? How will approaches to each cluster vary?
- Why did areas of industry develop in your place – what can be learned from that history?
- What sectors are large but under threat of decline?
- Are there sectors that are growing nationally or internationally but are under-represented locally but could be harnessed?
- Is the local view of sectoral opportunities too traditional e.g. perhaps focused on manufacturing rather than data, tech or service opportunities in the same sector?
- How can cross-cutting technologies be developed and used to support other sectors?
- Can technological advances solve local industrial challenges? Should these be prioritised?
- Is business support sufficiently tailored to specialised needs and how can universities help in this e.g. in scaling technologies?
- Local cultural assets are very important in attracting and retaining talent. How can this be centralised as a shared economic ambition? What can universities do in this space in terms of access to their own facilities, intellectual support and collaborations?

Inclusion and Sustainability

- How can the benefits of a more productive economy be spread across the geography in question and to different communities?
- How can access to education, training and business support – including innovation - be spread geographically and amongst different communities? This could include universities coming off their campus to reach out to manufacturers in economically challenged towns or ensuring a spread of facilities across areas where public transport is weaker.
- Is economic inclusion considered coherently across people's lifetimes?
- Does the economic strategy relate to relevant social strategies e.g. health?
- Are key policy goals around inclusion and sustainability woven into all strategic considerations? Can a community wealth building approach assist?
- Is there a focus on developing technologies that will improve people's lives, support biodiversity and limit climate change?

2c: Interfacing Markets

Inward Investment and Place Promotion

- How does the local or regional inward investment strategy relate to strengths and priorities in innovation and productivity?
- What are your genuine competitive advantages in terms of costs, skills, economic strengths and access? How do you communicate these effectively in different sections of the market from place-marketing through to meeting the specific requirements of a company seeking to locate in your place?
- How can the reputation, innovation and assets of universities be woven into your inward investment strategy and how can universities see inward investment as a key goal?
- Who will support your approach and advocate for you? For example, through shared marketing across institutions and businesses and reaching-out to sympathetic others such as university alumni networks.

Business Growth

- How best can businesses be supported to access growth capital via local institutions such as the university, the Department of Business and Trade, the British Business Bank or the wider private sector?
- How can universities best exploit their national and international links with research communities and businesses to support the local economy, including securing themselves and local businesses commercial contracts?
- How can the amount of private sector funding for

research be increased, including via increasing the number and diversity of private sector partners?

- Is sufficient focus given to increasing or meeting demand for locally produced products and services? Are export opportunities sufficiently understood across the triple-helix?

2d: Innovation districts

Location

- If an innovation district (or another type of economic campus) is to be developed where is the best location for it?
- Can it be developed in a location with strong public and active travel links to improve sustainability and increase geographic inclusion to a variety of communities?
- Can a location in an urban centre increase co-dependence between education and business sectors and other agglomeration effects?
- Can an innovation district be used to regenerate an area, perhaps part of an urban centre?

Leadership

- How are organising principles and a governance structure developed between partners?
- How can partners come together to support key issues for an innovation district, such as:
  I. Networking of research and business including events;
  II. Raising the national and international profile and improving connections with government, businesses, investors and other innovation-rich clusters;
  III. Management of the public realm;
  IV. Ensuring economic inclusion?
- How can a leadership group best raise mutual funding to support the innovation district?
- How can it be ensured that small businesses and local communities have a voice on an innovation leadership group?

Economic Ecosystems

- How can business-focused inter-disciplinary projects best be funded by universities, bridging departmental or faculty boundaries?
- How will low-cost rents be provided to businesses in buildings that are often costly to construct or refit? How will the development of innovation facilities be funded - via reserves, borrowing or partnering with business? Are risks and returns well understood and communicated? Will the financial model allow for sufficient space including shared space being available to smaller firms for low costs and significant expenditure continually being available for supporting, networking and promoting the economic ecosystem?
- How best is an economic ecosystem developed? How are different organisations and people best networked? How can this best be reflected in the cultures and metrics of success?
- How best are innovation ecosystems preserved as organisations scale-up and perhaps become less reliant on external collaboration?
- How do large organisations balance governance and risk-management with the need for fluidity and agility in an innovation district?
- Are different options available for businesses to locate, be it in terms of size, cost and nature of space, including shared spaces; and in terms of different cultures and leasing policies set by having varied land-owners and anchor institutions e.g. universities versus businesses or other providers? Is there room to experiment, disrupt and sometimes fail?
- Can multiple land ownerships be used to develop different but synergetic offers both for innovation-rich businesses and for ancillary activities like food and drink?
- How can large organisations ensure that they provide agile support to research opportunities including the commercialisation of them and partnerships with business? How can small organisations best support innovation in larger anchor institutions?
- How is access to university capabilities and expertise funded? There needs to be sufficient investment in successful interfaces between research institutions and proximate businesses.
- Is there sufficient administration support so that economic actors can focus higher-value activities more easily? For instance, how easy is it to set-up an event and be able to focus on its content?
- How can mutual use of facilities including tech and machinery be encouraged?
- Is sufficient advice available from experts in the field on how to start and scale a business?

Town Planning and Real Estate

- Does local planning policy designate sufficient land for employment uses?
- Do negotiations on planning gain allow sufficient headroom for the development of buildings that provide a long-term economic return rather than a maximised shorter-term gain?
- As an innovation district thrives, land prices will rise. How do you avoid innovation being priced out as an economic activity? This may include mechanisms for affordable workspace.

Design

- Does the area feel high-quality and welcoming?
- Is it permeable and does it encourage networking?
- Does it feel like you are in an innovation district?
- Is it vibrant with diverse uses including at night-time?
- Are historic assets used to support a sense of authenticity and creativity?

Inclusion

- Does the public realm feel welcoming to all?
- Innovation districts can inspire people including children. Does the physical design reflect that ambition, including public realm and art; maybe a playground?
- Could signage or 'demonstration stations' be used to showcase on the exterior the activities that take place within a building?
- Does the urban realm link sufficiently with neighbouring areas to encourage access, integration and a through-flow of people with benefits including natural surveillance?
- Public access to buildings may be challenging when secure space is needed or expensive machinery is used but is there a way of establishing a physical front door to the innovation district? Can this be used by multiple users e.g. for general interest and enquiries about employment, training, business space, research and investment?
- Are suitable outreach and engagement programmes in place? Are these coordinated between councils, schools, further education, universities and businesses to inspire, provide education pathways and routes to careers? Are they variable to suit different people with different backgrounds, abilities and ambitions? Can specific pathways be used e.g. for children in care and care leavers? Can student time and interest coupled with university facilities be harnessed to provide children with additional educational insight and support?

Part 3: The Academia-Business Relationship

These insights and recommendations have been authored by AtkinsRéalis.

Building stronger, more durable collaboration between academia and business is a strategic imperative for place-based economic growth. As explored in depth in chapter 2 of this report, successful partnerships depend on structural alignment, cultural understanding and long-term commitment. The recommendations below are grounded in those insights and drawn from real-world practice across the UK and internationally. They are designed to support economic development practitioners in translating ambition into impact.

1. **Establish shared governance and clear mandates**
   Create formal governance structures such as joint steering groups, shared advisory panels or co-owned strategies to align objectives, track progress and provide a stable foundation for collaboration across political and institutional cycles.

2. **Invest in brokerage and knowledge exchange capacity**
   Support dedicated roles and teams that can act as translators and brokers between sectors. This includes university business engagement offices, industry liaison roles and civic intermediaries who can facilitate co-design, build on trust and knowledge mobilisation.

3. **Prioritise long term, challenge-led collaboration**
   Encourage multi-year, place-based partnerships that focus on shared local priorities from infrastructure and net zero to skills and digital transformation. Challenge-led funding models and locally governed initiatives are key to building relevance and resilience.

4. **Anchor partnerships in place and purpose**
   Ensure that academic–business collaboration is aligned with regional economic strategies, sectoral transformation goals and community needs. This grounding in real-world context strengthens legitimacy, stakeholder engagement and long term impact.

5. **Support early and meaningful business engagement**
   Engage business partners from the outset of academic programmes, research projects and innovation initiatives. Co-designing priorities, shaping curricula and contributing to shared agendas improve outcomes for all parties.

6. **Build the cultural and relational infrastructure**
   Recognise that relationships, not just structures, underpin successful collaboration. Invest in time, trust, and continuity, through joint appointments, secondments and regular opportunities for informal engagement.

   These recommendations are not exhaustive, but they reflect the essential conditions for success. Those who embed these principles into their local economic strategies will be better placed to unlock the full value of collaboration and deliver inclusive, innovation-led growth.