

# Stronger City Economy Scrutiny

17 April 2018

<b>Report title</b>	Supporting city businesses to innovate	
<b>Cabinet member with lead responsibility</b>	Councillor John Reynolds City Economy	
<b>Wards affected</b>	All	
<b>Accountable director</b>	Keren Jones, City Economy	
<b>Originating service</b>	City Economy	
<b>Accountable employee(s)</b>	Isobel Woods Tel Email	Head of Enterprise 01902 55 Isobel.Woods@wolverhampton.gov.uk
<b>Report to be/has been considered by</b>	Place Leadership Team	14 March 2018

---

## Recommendation(s) for action or decision:

The Stronger City Economy Scrutiny Panel is asked to consider:

1. How can the Council and its partners support more businesses in the city to innovate, as part of an overall strategy for growth and economic resilience?

## 1.0 Purpose

- 1.1 To provide an overview of how the city is encouraging local businesses to innovate. This includes an overview of the collaborative work being undertaken by University of Wolverhampton, the Black Country Growth Hub and the City of Wolverhampton Council.

## 2.0 Strategic Context

- 2.1 The UK Industrial Strategy published on 27<sup>th</sup> November 2017, is built on five well known foundations for economic growth:
- **Ideas:** encouraging research and innovation
  - **People:** improving skills and employment opportunities
  - **Infrastructure:** investing in transport, housing and digital networks
  - **Business environment:** providing business support and access to finance
  - **Places:** recognising that local place-making has a key role to play in shaping the UK's economic future.
- 2.2 All of five pillars are embedded in Wolverhampton 2011 -2026 City Strategy – Prosperity for All, and the refreshed document, the City's Strategic Economic Plan, which will be subject to formal consultation in 2018.
- 2.3 This scrutiny paper focuses on the first pillar of “innovation”, which, in an economic context, is more than simply research and development. Although innovation starts with a new idea, it isn't innovative until the idea has been developed and deployed to support entrepreneurial activity. The Industrial Strategy recognises that much more needs to be done to ensure that good ideas are turned into strong commercial products and services. For this reason, the Government are planning to invest £725 million in a new Industrial Challenge Fund programmes to capture the value of innovation for the benefit of the UK economy.

**Businesses** that invest in innovation can benefit in a number of ways:

- Become more competitive, if their innovation is based on a good understanding of changing market conditions
  - Become more resilient
  - Reduce costs and develop smarter ways of working, leading to higher productivity, and increased returns from investment in the longer term
- 2.4 **Places** also benefit from innovative businesses. The 2010 NESTA report, Driving Innovation in Cities states that innovation has become a mainstay of competitive advantage, and brings benefits to a city:
- Job creation (Just 6% of highly innovation companies were responsible for the majority of new jobs in the UK between 2005 – 2008)
  - Improved tax base
- 2.5 Innovative small and medium enterprises can bring particular benefits to a city.

- Contribute to local identity and distinctiveness
- Become engagement in the local community
- Generate a sense of loyalty and encourage local spend
- Contribute to the vibrancy of a place and its environmental appearance
- Contribute to a stronger tax base
- Employ local people

2.6 The “Driving Innovation in Cities” NESTA report states that innovation has become a mainstay of competitive advantage in cities and their priority sectors. A review of the approach taken in Greater Manchester to drive innovation in the city identified three key lessons:

- **Creating the right conditions for innovation and growth requires honest, evidence based analysis of the city’s strengths and weaknesses.**
- **Leadership should cut across administrative boundaries and draw in and empower local businesses and organisations outside government.** Leaders need to help a population coverage on a vision for innovation and then distribute the capacity for achieving it. Untapped ideas and motivated leaders in the business community may be a vital source of innovation.
- **Cities can encourage innovation by ensuring appropriate networks are in place for driving innovation,** particularly those that enable collaboration between different organisations, sectors, higher education and research institutions.

The remainder of this paper, explores these three criteria for success and what they could mean for the City of Wolverhampton.

### 3.0 Access to information and data

3.1 In 2017, as part of the development of the Wolverhampton Strategic Economic Plan, a comprehensive Economic Assessment was undertaken of the city’s economic performance. The knowledge economy (defined as sectors including medical devices; pharma and biotechnology; IT services; communications; computing and advanced electronics; other technical consultancy services; aerospace and transport; creative content; software; and high tech financial services)<sup>1</sup> in Wolverhampton’s is growing at a faster rate than other areas in the region, albeit from a relatively low base.

3.2 **Smart city ambitions:** Increasingly at the heart of innovation is the application of new digital technologies. This cuts across all sectors and all organisations. The City of Wolverhampton’s City Board has identified becoming a ‘smart city’ as a key area of priority. A Smart City utilises digital technologies to manage data in a way that helps support, inform and manage decision-making and operational tasks as well as providing new business opportunities and empowering citizens.

---

<sup>1</sup> As per the ONS operational definition  
(<https://www.ons.gov.uk/businessindustryandtrade/changestobusiness/businessbirthsdeathsandsurvivalrates/adhocs/006051demographicanalysesoftheknowledgeeconomybyregion>)

- 3.3 As part of delivering our ambition to be a Smart City, a city open data platform, WV Insight, is being developed. This will host a range of open data sets, including the comprehensive evidence base that has been compiled to support the development of the Strategic Economic Plan, and the council's Corporate Plan. It will also provide a platform for publishing data sets from across the public sector, which will enable businesses and residents to have access to robust, reliable and up to date information to support the development of innovative ideas, products and services that meet local needs and opportunity. Work has also been developed with the University of Wolverhampton's Computer Science department, including the development of 'hackathon' sessions to build networks between the public sector, students, researchers and local businesses. For example, the University's 'Datafest 2018' was held around transport, and students worked with data from the West Midlands Combined Authority. The council are also developing a stronger working relationship with the West Midlands Open Data Forum, and Wolverhampton will be hosting a session of the group in July 2018.
- 3.4 **Digital infrastructure** is a key enabler of a Smart City. In respect of innovation, it enables easier access to data and collaboration across organisations. Superfast broadband coverage in Wolverhampton is strong, however there are key gaps in particular our city centre and some business areas. The Broadband Delivery UK (BDUK) funded local broadband plan has increased Black Country coverage to 98.78% (excluding Wolverhampton City Centre). £4.9 million local full fibre network funding has been secured for a public sector fibre broadband network for Wolverhampton aimed at connecting 196 public sector sites across Wolverhampton. This in turn would increase the availability of fibre broadband to both residents and businesses across the city as well as filling the gap in Wolverhampton City Centre. Our bid has also included a request for Gigabit Vouchers for businesses who do not currently have access to fibre broadband.
- 3.5 To support the rollout of fibre broadband across Wolverhampton and the Black Country and benefit to businesses, the Council are a partner in the University of Wolverhampton's **Digital Passport** project which aims to support businesses to become more digitalised. The project will offer SMEs one-to-one and group support activities; awareness workshops covering topics such as web design, online marketing, social media, cyber security and networking and a voucher scheme for connection or specialist support.

#### **4.0 Leadership across organisational boundaries**

- 4.1 The City of Wolverhampton has a strong track record in partnership working. The City Board, through its conference programme provides a platform for showcasing joint working and encouraging collaboration across the public, private and voluntary sector. Each part of the partnership structure has a particular role to play. For example, whilst the City Board is championing the Smart City agenda, the Economic Growth Board's new action plan for 2018/19 will include exploring how the data collected through public sector commissioning and procurement processes can inform where there are local gaps in the market, thus identifying where there are local business opportunities for new services and products.
- 4.2 Increasingly, partnerships at the regional level through the West Midlands Combined Authority and the Black Country LEP will be important in identifying and enabling

innovation at scale, both economically and socially. However, leadership and partnerships at the local level are also very important, and should not be overlooked. The council hosts an annual ideas festival, Make:Shift which encourages local people to 'change Wolverhampton with an idea'. Now in its sixth year, Make:Shift has helped to bring ideas such as the Wednesfield Community Organic Garden into fruition.

- 4.3 At Make:Shift in November 2017, the city's new civic crowdfunding initiative, Crowdfund Wolves was unveiled. Crowdfund Wolves is an online platform, where people with project ideas can build support from their community, ensure their plans are viable, pitch for funding from the crowd, partners and external grant funders at the same time and then share the impact they have created.

## 5.0 Networks and collaborations for innovation

- 5.1 At a strategic level, the £4.7 billion Industrial Strategy Challenge Fund is aimed at bringing forward innovation that responds to major societal change. The projects that are funded need to have a benefit to society as well as a benefit to business. Research that's often done in universities through building prototypes need to be converted into real deployments in the real world. The funding is being made available through a series of calls. The current call, due to close in April 2018 is for four key themes:

- Artificial intelligence and the data economy
- Clean growth
- The future of mobility
- Meeting the needs of an ageing society

- 5.2 Given that funding bids need to be made in partnership with the business community, there is potentially an enabling role to be played by the Black Country Local Enterprise Partnership (LEP), Black Country Growth Hub and University of Wolverhampton and the City of Wolverhampton Council to promote opportunities to promote any opportunities for local business to be involved in collaborative bids.

- 5.3 The Black Country LEP is targeting five transformational sectors which have significant export potential and supply chain opportunities: advanced manufacturing, building technologies, transport technologies, business services and environmental technologies. Initiatives include **High Value Manufacturing City** a series of interventions to accelerate the growth of high value manufacturing businesses in the Black Country, including action to improve the quality of existing employment locations.

- 5.4 **Black Country Growth Hub** is the gateway to business support and referrals to specialist support including innovation support and is based at Wolverhampton Science Park. Currently the specialist innovation support available, including that funded by European Structural and Investment Funds, includes:

- The **Intellectual Property Office** offers free Intellectual Property (IP) Health Check online tool, intellectual property course and IP Equip to help teach businesses about intellectual property rights such as trade-marks, patents, copyright and designs.
- The **Innovative Product Support Service (IPSS)** programme supports businesses through the early stages of developing a new product or process. Businesses will

initially receive a two-day review of their proposed product/ technology. The results of the review will be used to select businesses with the most viable propositions to undertake a second phase of the programme that offers a further four days of funded support

- **Innovation Vouchers** worth £2,500 funds access to external expertise with knowledge base organisations (research institutes) to support an innovation project. Businesses can also access free support in the form of workshops designed to help business become more competitive and manage growth effectively
- **Smart Concept Fund** offers a 'Proof of Concept' grant, designed to support the commercialisation of new technologies. It can award successful applicants a grant of up to £30k at an intervention rate of up to 60% to help fund an approved product development project.
- **Innovation Networks** provide support through grants to Small Medium Enterprises (SMEs) who are collaborating with at least 2 other SMEs on the development of an innovative product, process or service. The grants can cover external development costs, including parts, materials, prototype development, testing, IPR, marketing, machinery tooling etc., or skills that the business is lacking.
- **Manufacturing Growth Programme:** support Manufacturing SMEs to improve processes through one-to-one support.
- ERDF funded **Environmental Technologies and Resource Efficiency Support Service (EnTRESS)** supports Black Country SMEs on the adoption of environmental technologies and resource efficiency processes. It is part of the University of Wolverhampton's Faculty of Science and Engineering.
- **Built Environment Climate Change Innovations (BECCI)** benefits SMEs in the Black Country by providing free support in the development of products and services that reduce carbon usage
- **Product Innovation Accelerator** supports manufacturing SMEs to participate more actively in research and development, develop, test and demonstrate new products based on access to leading edge technology and applications and innovation support to bring ideas to commercial reality.
- **Focus Digital:** supports the acceleration to market and/or internal implementation of new products, services and process within the digital media/ICT domain. It supports SMEs through a combination of workshops, development support, usability studies and grants.
- **Knowledge Transfer Partnerships (KTP)** help businesses in the UK to innovate and grow. It does this by linking them with an academic or research organisation and a graduate. The academic or research organisation partner will help to recruit a suitable graduate, known as an Associate. They will act as the employer of the graduate, who then works at the company for the duration. The scheme can last between 12 and 36 months, depending on what the project is and the needs of the business.

5.5 A key partner in stimulating innovation in Wolverhampton is the **University of Wolverhampton** which centres a lot of their innovation activity around Wolverhampton Science Park. Wolverhampton Science Park is host to over 100 enterprises operating in a range of technological and creative sectors. The University of Wolverhampton attracted almost £20 million of innovation income and funding in 2014/15 and has a track record of delivering innovations that are industry relevant and has been ranked 9<sup>th</sup> in the delivery of Knowledge Transfer Partnerships for the 2010-2016 period.

- 5.6 The University of Wolverhampton is home to two **Visualisation Centres**, one at the University of Wolverhampton Science Park. Visualisation Centres act as a practical showcase for new technologies creating a hub for technological innovation to benefit local businesses and offering advice to businesses on how to adopt a range of cutting edge technology including:
- Touch tables
  - Multi touch screens
  - Advanced Video Conferencing Solutions
  - 3D scanning and printing (Rapid prototyping applications)
  - Streaming delivery
  - Drone training and hire
- 5.7 The new £10.1 million, three-storey **Science Technology and Prototyping** centre at the Science Park provides 4,000 square metres of space with category one and two laboratories, workshop space, and configurable offices ideal for scientific-based businesses aiming to enhance their research and development activities.
- 5.8 The University of Wolverhampton's **Midlands Simulation Group Centre** is focused on providing research and development in computer simulation for engineering and related industries (Science and Innovation Audit, Midlands Engine). The University of Wolverhampton is also part of the Midlands Enterprise Universities consortium which focuses on improving productivity and growth in the region.
- 5.9 The site of the former Springfield Brewery is being transformed into Europe's largest specialist construction and built environment campus including a centre of excellence for construction and the built environment, home of the West Midlands Construction University Technical College, the University's School of Architecture and Built Environment, and the Elite Centre for Manufacturing Skills, supporting business growth. The investment of £100 million to establish a dedicated campus with new facilities for the School of Architecture and Built Environment will include a unique centre of excellence known as the **Brownfield Research and Innovation Centre (BRIC)** will bring together academia with key public and private sector stakeholders to develop cost effective and sustainable solutions to brownfield development. The proposed functions of BRIC include:
- **Data Centre** – a centralised database of geotechnical, geochemical, geophysical, economic and ecological data associated with site development, to allow more robust phase 1 and phase 2 site investigations to be delivered, reducing developer uncertainty and providing more accurate remediation costings.
  - **Information Hub** – will offer advice and guidance on site remediation based on previous experience and real life case studies.
  - **Guidance Collaborative** – informal lobbying function to Government to limit the over specification of sites
  - **Brownfield Resource** – pooling what limited specialist resources the local authorities have within this field to provide greater impact across the region.
- 5.10 The Black Country LEP recently approved funding of £7.6 million for an **Elite Centre for Manufacturing Skills** with its hub based on the University of Wolverhampton's

Springfield Campus. The Elite Centre will provide specialist training in Toolmaking; Foundry; Patternmaking; Metalforming / Forging; Advanced CNC; Manufacturing Management, Leadership and Project Management. These skills underpin HVM performance, productivity and growth and were identified as current barriers to growth by the Black Country Skills Factory following extensive consultation with businesses across the Black Country.

- 5.11 The University of Wolverhampton also deliver a range of undergraduate and postgraduate courses including an MSC Innovation and Entrepreneurship. This course introduces business tools and techniques and theories, theoretical concepts of innovation, practical application of innovation, and the management skills required to affect the organisational change necessitated by innovation.

## **6.0 Questions for Scrutiny to consider**

- 6.1 How can we better work with key innovation partners to stimulate innovation in the city of Wolverhampton and encourage Wolverhampton businesses to take up support?

## **7.0 Financial implications**

- 7.1 The report provides an update on innovation activities, as yet there are no further proposals and current financial obligations are stated, therefore there are no financial implications arising directly from this report. [HM/06042018/B]

## **8.0 Legal implications**

- 8.1 As there are no actual proposals yet, there are no specific legal implications arising from this report. When proposals have been formulated, a new reflection as to legal implications will be required. [RB/06042018/G]

## **9.0 Equalities implications**

- 9.1 Innovation and smart technologies can result in positive equalities implications.

## **10.0 Environmental implications**

- 10.1 Innovation and smart technologies can result in positive environmental implications.

## **11.0 Human resources implications**

- 11.1 There are no human resource implications.

## **12.0 Corporate landlord implications**

- 12.1 There are no corporate landlord implications.