# Economic Impact of the University of Warwick

A report to

# The Chancellor's Commission

Executive Summary 5<sup>th</sup> February 2016

### **BiGGAR Economics**

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#### The University of Warwick

The University of Warwick, located in Coventry and Warwickshire, is a highly ranked UK university (placed 6<sup>th</sup>) and one of the world's leading universities (80<sup>th</sup>). It is also one of the most successful recently established universities, ranked 9<sup>th</sup> out of the top 100 universities in the world under 50 years old.

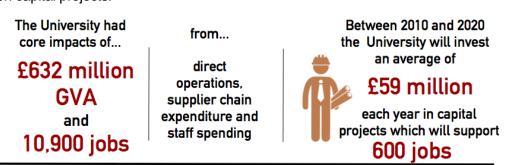


The highest ranking university in the West Midlands, the University of Warwick is an important driver of economic activity with over 25,000 students, more than 5.200 staff and an annual turnover of £512.8 million.

#### **Quantifiable Economic Impact of the University**

The University of Warwick makes an economic contribution to the economies of Coventry and Warwickshire, the West Midlands and the UK in a wide range of ways that stem from its high quality research and teaching. Some of this impact can be quantified and this study considers the impacts of the University through its core activities and research, its students and graduates, impacts on the tourism economy through attracting visitors to the area, its commercialisation activities, interactions with businesses and the University of Warwick Science Park.

In 2014/15 the University of Warwick had core impacts of £632.4 million Gross Value Added (GVA) and more than 10,900 jobs in the UK. Of this £473.6 million GVA and almost 7,840 jobs were retained in the West Midlands and £394.1 million GVA and 6,335 jobs in Coventry and Warwickshire. This impact was generated through people directly employed by the University, the University's expenditure on supplies, staff spending their wages in the economy and spending on capital projects.



Student expenditure, student part-time employment and student volunteering are worth a further £153.7 million GVA and 4,340 jobs in Coventry and Warwickshire, almost £190.0 million GVA and 5,030 jobs in the West Midlands and £205.8 million GVA and 5,340 jobs in the UK.

The students of the University of Warwick spent

# £151 million

within the Coventry and Warwickshire LEP area Students also contribute to the economy through part time employment and volunteering



hours of volunteering by Warwick Volunteers



of students work part time during term time

The total economic activity associated with the students of the University of Warwick was

# £206 million GVA and 5,300 jobs

Friends and family visiting staff and students at the University and people attending conferences, open days and events at Warwick Arts Centre are estimated to have spent £9.6 million in Coventry and Warwickshire. This additional spending supports the tourism economy in the area and is estimated to amount to £3.6 million GVA and more than 110 jobs in Coventry and Warwickshire.

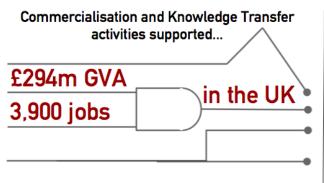
The University of Warwick contributes to the economy through the long-term returns from its teaching. In 2014/15, 9,432 students graduated from the University and it is estimated that over their working lives those graduates who remain in the UK will earn £571.4 million more than they would have without a degree.

The increased productivity of the University of Warwick's graduates support £288 million GVA over their working lives as a result of their university degree



The University of Warwick has wide and far-reaching impacts on the economy over and above its fundamental activities of teaching and research through the commercialisation activities of Warwick Ventures. In 2014/15 the University received £0.3 million in licensing income and had 29 spin-out and start-up companies which together employed almost 150 people and had a combined turnover of £4.4 million. This commercialisation activity is estimated to support £2.4 million GVA and almost 80 jobs in Coventry and Warwickshire, approximately £2.9 million GVA and 120 jobs in the West Midlands and £9.7 million GVA and more than 300 jobs in the UK.

The University of Warwick also works to transfer existing knowledge throughout the economy through the University's interactions with businesses. These activities include, professional training and education, commissioned research, consultancy projects, Knowledge Transfer Partnerships, facilities and equipment hire and access to technical expertise through Warwick Scientific Services. Together these activities are estimated to contribute an estimated £74.4 million GVA and 850 jobs in Coventry and Warwickshire, £113.3 million GVA and around 1,400 jobs in the West Midlands and £284.0 million GVA and more than 3,585 jobs in the UK.



This includes impacts from spin-outs and startups, licensing, commissioned research, consultancy, KTPs, facilities and equipment hire, Warwick Scientific Services and professional training and education The University is a driver
of economic
development
through Warwick
Manufacturing
Group and industry
partnerships



The health and medical research undertaken at the University of Warwick will generate quality of life and Gross Domestic Product (GDP) impacts that will be realised over a long period of time. These impacts are estimated to contribute £1.4 million to the Coventry and Warwickshire LEP area, £8.8 million GVA to the West Midlands and around £100.0 million to the UK economy.

The University of Warwick supported

123 companies, employing 2,530 staff and generating £170m turnover across five

Science Parks



The University of Warwick Science Park, located across five sites in the West Midlands, supports by providing economic impact space businesses to locate in and grow thereby supporting informal knowledge sharing between the University and businesses. It also contributes to the inward investment proposition as the presence of knowledge infrastructures makes Coventry and Warwickshire a more attractive place to invest and locate. Across the five sites there are 123 companies, employing 2,530 staff and generating an estimated combined turnover of £169.7 million. It can be estimated that in 2014/15 the University of Warwick Science Park contributed almost £89.9 million GVA and almost 3,780 jobs in the UK, of which £83.8 million GVA and 3,456 jobs was in the West Midlands and £63.5 million GVA and 2,675 jobs in Coventry and Warwickshire.

All sources of impact together suggest that in 2014/15 the University of Warwick generated an estimated:

- £783.6 million GVA and supported 14,390 jobs in the Coventry and Warwickshire LEP area;
- £1.0 billion GVA and supported 17,930 jobs in the West Midlands; and
- £1.9 billion GVA and supported 24,000 jobs in the UK.

In 2014/15 the University of Warwick supported...



14,400 jobs and
generated
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Warwickshire
LEP

17,900 jobs and generated £1.0 billion GVA in the West Midlands

24,000 jobs and generated £1.9 billion GVA in the UK

To place this impact in context, the GVA impact of the University of Warwick is equivalent to 8.7% of the total GVA of Coventry. This indicates that although the University of Warwick is situated on the outskirts of Coventry it is an important driver of growth in the city. The University's impact in the Coventry and Warwickshire LEP area is equivalent to 4.1% of the total economy of the area.

The scale of this impact is substantial and implies that each £1 GVA directly generated by the University of Warwick contributes £5.61 to the UK economy and for every job directly created at the University, more than 4 jobs are supported in the UK. The University of Warwick also provides significant value for money as each £1 received by the University from the public sector supports a total of £32.07 GVA in the UK economy.

#### **Unquantifiable Economic Impact of the University**

The University of Warwick makes a far greater contribution than can be captured in the quantitative impacts described above and these unquantifiable impacts are discussed below. These wider impacts of the University are by no means a comprehensive list and are intended to demonstrate some of the various unquantifiable ways in which the University has impact.

#### Community Engagement and Cultural Contribution

The University plays an important role in the local area, with its social and community engagement through Warwick Volunteers and the local tourism and culture contribution that Warwick Arts Centre makes.

Student volunteering is actively encouraged at the University through Warwick Volunteers, which in 2014/15 had more than 2,360 volunteers registered with it,

volunteering an estimated 32,211 hours across more than 50 projects. Examples of community projects include extra-curricular activities, tutoring and foreign language teaching support in 56 schools in the local area. The value of this activity to society is much greater than can be quantified, as volunteers provide invaluable support to organisations that otherwise may not be able to offer the services required, service users experience a variety of benefits such as improved wellbeing and students themselves gain valuable skills.

Warwick Arts Centre supports cultural engagement in the local area through the events and performances it hosts as well as community-led productions by local schools and students. Warwick Arts Centre also undertakes outreach activities such as school-oriented workshops and productions, engaging with almost 50 schools in 2014/15, reaching over 15,000 people across 300 sessions.

#### Maximising Impact Locally

The University of Warwick works in a number of ways to maximise impact locally. This includes the University's capital investment in the area, contribution to the labour market and improving skills in Coventry and Warwickshire, as well as the civic leadership the University provides to drive regional economic development.

The University's significant capital investment (£59 million each year on average) is part of its commitment to investing in the local area. In order to maximise impacts locally the University employs construction and maintenance staff in long-term roles thereby providing stable long-term employment opportunities locally. To meet skills shortages, the University has developed strong relationships with local colleges to provide training and apprenticeships to young people in the local area.

As the highest ranked University in the West Midlands the University of Warwick plays an important role in attracting and retaining talent in the area with almost a quarter of the University's graduates remaining in the West Midlands after graduation. The University also plays an important role in realising local potential and growing local skills capacity through its Centre for Lifelong Learning, which enables adult learners to develop new skills through the world-class education of the University, irrespective of background. As well as this, the University, through Warwick Manufacturing Group (WMG) has established the WMG Academy for Young Engineers which aims to provide 14-18 year olds with the opportunity to learn business and engineering skills in an environment that integrates world-class academic learning with practical experience. Building on the success of this, a second Academy is scheduled to open in Solihull in late 2016.

The University of Warwick is committed to supporting economic development regionally and works in close partnership with the Coventry and Warwickshire Local Economic Partnership (LEP) to achieve this. The University is also an active participant in a wide variety of partnerships with local and regional organisations. As a driver of economic growth in the region this enables the University to work in collaboration with many businesses and organisations for the wider benefit of the area locally and regionally.

#### Warwick Manufacturing Group: A Model of University-Business Interaction

For more than 30 years WMG has been engaged in collaborative research and development with industrial partners, providing a bridge between academia and industry and successfully integrating fundamental and applied research, long before others had realised the full potential of university-business interaction.

The WMG approach is one characterised by research-led innovation with industrial partners. WMG works with several large firms including Jaguar Land Rover (JLR), Rolls-Royce and BAE Systems, as well as SMEs to apply cutting-edge research to specific real world business problems that can help produce new and improved products and processes. This is exemplified through WMG's support for the automotive sector, which has a long history in the West Midlands. The sector had been decline but the continuing presence and success of the automotive sector in the region can be attributed to WMG and its long standing industrial partnerships with companies like JLR.

The proposed National Automotive Innovation Centre, a joint initiative of JLR and WMG provides a further example of business-university collaboration, in this case working to further strengthen the automotive sector in the region. The Centre aims to provide a critical mass of research capability and will be a hub for JLR's advanced research teams with 600 staff co-locating at the Centre alongside University researchers and academics.

In addition to this, WMG provides world class teaching and education, offering a range of education opportunities for every stage of the career path, including undergraduate and postgraduate degrees as well as professional training and education courses. The professional education courses have been designed by WMG to align with business and market needs and to suit people of any educational background. In doing so, WMG provides a streamlined and integrated approach to professional education, designed to meet industry needs.

WMG therefore provides a model of university-business collaboration, where university research and teaching is directed by industry and market needs and is undertaken in partnership with businesses thereby driving innovation and economic growth.

#### Supporting Economic Sectors

The University of Warwick, and particularly WMG through its business-university partnerships, has helped to cement an industrial cluster based on advanced manufacturing and engineering in Coventry and Warwickshire. The Strategic Economic Plan for the area highlights the importance of the sector as a key driver of economic growth and a major strength for the area.

The University also has influence in other sectors in the economy such as health and education. By providing a consistent supply of trained professionals, the University enhances the healthcare and education provision available locally, regionally and nationally. In addition, the University's interdisciplinary research approach aims to address complex real-world problems, which presents opportunities in the future for the development of other high-value sectors in the area.

#### Conclusion

The University of Warwick aims to be a world leader in research and teaching, while serving its local region - academically, culturally and economically. The economic impacts associated with any learning institution are often seen to be incidental to the running of such an institution. However, the University of Warwick takes active steps to ensure that it maximises the purposeful economic impacts, in ways that are quantifiable and unquantifiable. Through these purposeful impacts the University ensures that the local region benefits academically, culturally and economically from its global profile as a world leading University.