

# Economic Impact Assessment of Durham University

A report to



November 2022



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# 1.

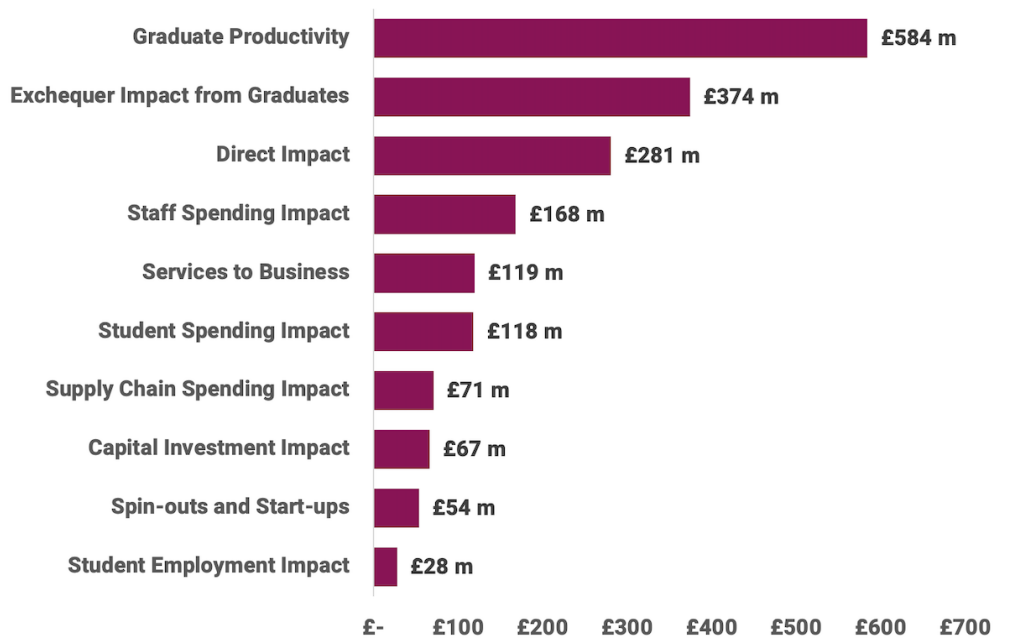
## Executive Summary

Durham University is a significant and growing driver of economic growth for County Durham, the North East and the UK.

In 2020/21, Durham University generated:

- £1.9 billion Gross Valued Added (GVA) and 17,320 jobs in the UK;
- including £668 million GVA and 10,790 jobs in the North East;
- of which, £489 million GVA and 8,170 jobs were in County Durham.

Figure 1-1 UK Economic Impact of Durham University, 2020-21, GVA by Source



Source: BIGGAR Economics Analysis

Durham University is a **prestigious University** that consistently ranks in the top 10 universities in the UK and in the top 100 universities in the world, and is particularly recognised for world-leading research. The University continues to **invest in its estate**, ensuring it can accommodate the implementation of its strategic priorities.

The University’s 4,155 full-time equivalent staff (which represents 5% of County Durham’s total employment) and more than 20,000 students, around 30% of whom are from outside of the UK, make a significant contribution through their **spending, working and volunteering**, enriching the City, the County and the Region.

The University is focused on **deepening its engagement with the local area**, with an increasing share of students coming from disadvantaged backgrounds where there



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has historically been low participation in higher education. Programmes such as the £1 million Durham Inspired North East Scholarships are designed to increase this further, as is the Durham Mathematics School, which the University is co-developing with Durham Sixth Form Centre.

The University also engages with local schools and community groups through its **culture, heritage and science outreach programmes**, building on its School of Education's engagement with local schools. As a result, it enriches the lives of people in the community and raises the aspirations of school pupils throughout the North East.

**Graduates of Durham University** generate productivity growth across the UK, and internationally, with a substantial graduate premium and lifelong benefits associated with studying at the University.

The supply of high quality graduates also **attracts inward investment** to County Durham and the North East, including Atom Bank (a financial technology start-up), and the UK Government's Darlington Economic Campus (which will co-locate part of six Government departments and agencies).

The University's **business engagement activities** are drivers of local economic activity and national economic impact. The University supports a wide range of businesses in County Durham and the North East, including at NETPark, a science park where over 600 people are employed, which is expanding significantly.

The University is encouraging student entrepreneurship and supporting the growth of small and medium sized enterprises and has **strategic partnerships** with a number of larger industrial partners including Procter and Gamble, Northumbrian Water and Ørsted.

The University continues to support the **creativity, culture and heritage sector** as a key partner in Durham's UNESCO World Heritage Site with Durham Cathedral, managing a number of cultural attractions in the Site, and supporting a number of festivals, such as the Lumiere Festival. As a result, the local area benefits from improved cultural opportunities as well as the visitors that are attracted, supporting local tourism.

As a result of its cultural expertise and leadership role in County Durham, the University is able to advocate for and **support culture-led regeneration** across County Durham, building on the work undertaken for the UK City of Culture bid.

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**In 2020/21, Durham University generated £4.80 of economic impact in the UK for every £1 it received in income.**

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## 2.

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# Introduction

Durham University is one of the UK's leading research-intensive universities and one of the oldest in the country. This report summarises the economic impact of the University in Durham City, County Durham, the North East and the UK.

## 2.1 Background

Durham has been a centre for learning and knowledge since the Middle Ages, with a legacy of learning from Bede and St Cuthbert. After being founded by an Act of Parliament in 1832, Durham University received its Royal Charter in 1837, making it one of England's oldest universities. The University now employs 4,115 full-time equivalent (fte) staff and has a student population of over 20,000.

The University is organised into a collegiate structure. The 17 colleges are mixed communities of staff and students for a wide variety of subject areas, offering a range of student-led activities in sports, theatre and music. The University offers over 200 undergraduate courses, over 100 taught postgraduate courses and various research degrees over its four faculties (Business; Arts and Humanities; Science; and Social Sciences and Health), which include 26 different schools.

Durham University has several sites in Durham City. Several colleges and departments are located at the centre of the UNESCO World Heritage Site, which includes Durham Castle, Durham Cathedral and the Palace Green.

Durham University ranks 5<sup>th</sup> in the Guardian's UK University Rankings<sup>1</sup>, 6<sup>th</sup> in the UK in both the Complete University Guide<sup>2</sup> and the Times and Sunday Times Good University Guide, and 92<sup>nd</sup> in the world in the QS World University Rankings<sup>3</sup>. In the QS World University Rankings by Subject, 19 Durham subjects placed in the top 100 in 2022, with 12 placing in the top 50.

The University delivers outstanding research. In the 2021 Research Excellence Framework exercise, 90% of Durham University's submissions across 24 subject areas were rated as 'world leading' or 'internationally excellent', with the University placing 1<sup>st</sup> in Geography, 2<sup>nd</sup> in Archaeology and 2<sup>nd</sup> in Education compared to other UK higher education institutions.

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<sup>1</sup> The Guardian, (2022). The best UK universities 2022.

<sup>2</sup> The Complete University Guide, (2022). University League Tables 2022.

<sup>3</sup> QS Top Universities, (2022). QS World University Rankings 2023.



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## 2.2 Report Structure

The report is structured as follows:

- Chapter three introduces the framework for the study and discusses the methods used to undertake the research and analysis;
- Chapter four quantifies the impacts associated with graduates' contribution to the economy;
- Chapter five describes and quantifies the impacts associated with innovation and knowledge exchange activities;
- Chapter six quantifies the impacts arising from the operation of the University;
- Chapter seven contains an assessment of the economic impacts arising from students;
- Chapter eight describes how the University contributes to creativity, culture and heritage;
- Chapter nine describes how Durham University drives growth in County Durham, the North East and the UK;
- Chapter ten provides a conclusion on the economic, social and cultural impacts of Durham University in County Durham, the North East and the UK; and
- Appendix A considers how the methodology adopted compares to other economic impact studies in the universities sector.



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## 3. Framework, Approach and Definitions

This section discusses the pivotal role universities play in driving economic growth before outlining the approach to the Durham University economic impact assessment.

### 3.1 Theoretical Framework

The role played by universities in economic development has long been recognised. As key sources of research and development, they play a central role in supporting industry clusters and make a significant contribution to economic growth.

A number of influential economists have published work which sets out a theoretical and empirical case for the role that high level skills and innovation play in boosting economic competitiveness and addressing inequalities in society.

In the late 1950s, Robert Solow's work demonstrated that it was not the savings rate or increases in factors of production (labour and capital) which determined the long-run growth rate, but that it depended on increases in productivity.

In the early 1960s, Kenneth Arrow's research on 'learning by doing' showed that almost all economic growth could be accounted for by innovation. This referred to innovation from new ideas emerging from research, as well as improving productivity through 'learning by doing' during the production process.

Building on this, Joseph Stiglitz has argued that productivity is the result of learning and, consequently, a focal point of policy should be to increase learning within the economy. The observation is made that even within countries and within industries there can be large gaps between the most productive and the others.

This diffusion of knowledge and innovation results in productivity gains and consequently economic growth, highlighting the crucial role which universities can play in local, national and international economic development.

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**Universities drive economic growth and boost competitiveness by diffusing knowledge which raises productivity**

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## 3.2 The Role of Universities in Economic Recovery

The Covid-19 pandemic has delivered the greatest shock to the global economy in modern times. Universities have a powerful, long-term role in strengthening economic resilience in a way which is sustainable, equitable and transformative. Investment in education and in research provides a foundation for long-term economic and fiscal recovery, and can also support ambitions for the green transition that is required to respond to climate change.

The wealth of countries is distinct from the economic success of companies or individuals. While companies and individuals can keep rewards from extracting wealth from the economy, at a national level, the wealth of the country can only be based on wealth creation. The transformative role universities can play in this context include:

- securing and providing high quality employment;
- providing the human and intellectual capital necessary for both economic recovery and transformation;
- driving innovation for new and existing businesses and public sectors;
- reducing and avoiding youth unemployment, in particular avoiding life-long scarring effects for those unemployed as a result of the pandemic;
- building the resilience of public services, including the health and care sectors;
- supporting the net zero challenge and the green recovery, helping to provide the intellectual and human capital on which it will be based;
- providing leadership in economies as well as in wider civic society; and
- rebuilding the tax base to help ensure a net positive fiscal return which will help to pay for the cost of government assistance.

Universities have a crucial role to play in any advanced economy and they are particularly important in a time of uncertainty and change, which is the nature of the current economic climate. In order to be sustainable and resilient, economic recovery and transformation needs to be based on knowledge and innovation. The education sector, and higher education in particular, will be the primary source of the human and intellectual capital required to make this a reality.

## 3.3 Study Approach

This study estimates the total economic contribution made by Durham University in 2020/21. The approach taken has been to record all impacts which are generated by the University and, in this sense, it represents the *additional* impact which Durham University alone creates on the economy. The key assumption is that these impacts *could not be created* without Durham University.

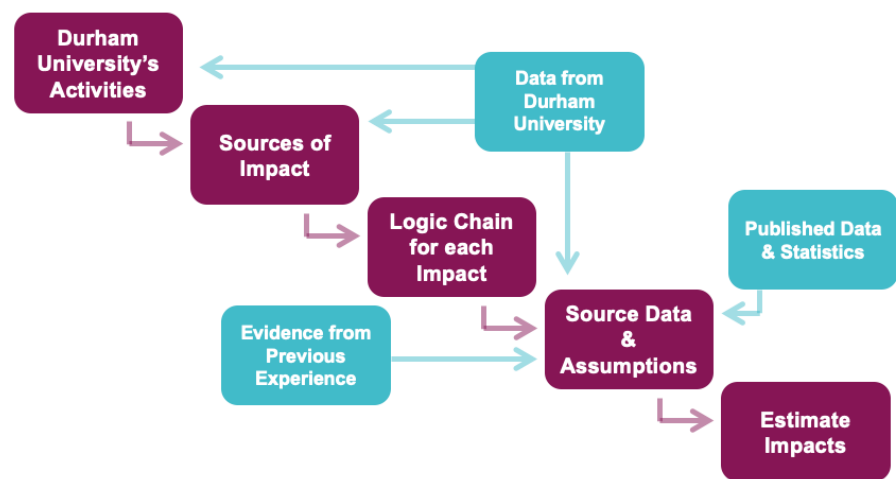
The methodology followed has been tried and tested, having been applied to around 200 university economic impact studies in recent years. This includes studies for individual universities in the UK and Europe, as well as university consortia across



Europe, including in Finland, France, Switzerland and Flanders. The methodology was also used in assessing the economic impact of the League of European Research Universities (LERU), a consortium of 23 research-intensive universities in Europe which includes the University of Oxford, the University of Cambridge, University College London and the University of Edinburgh. The methodology is broadly comparable with other methodologies, though in general includes a broader array of economic impacts (see Appendix A).

The overall approach is illustrated in Figure 3-1.

**Figure 3-1: Study Approach**



Source: BiGGAR Economics

The starting point for analysis was to consider the various activities undertaken by the University and identify those that were likely to generate an economic contribution. Logic chains were then developed to describe how each type of activity generates economic value. The next step was to consider how the value of each activity could be measured and what data would be required to do this. For most activity, two types of information were required:

- **source information** about the scale of activity, which was supplied by Durham University; and
- **other data and published statistics** which could be used as the basis for assumptions to measure economic value. Where University data was not available, an appropriate assumption was made based on BiGGAR Economics' previous experience of comparable institutions.

The key statistical sources used were the UK's Input-Output Tables published by the Office for National Statistics and the Annual Business Survey. Further assumptions were informed by referring to published reports and official statistical sources which are referenced throughout the report where appropriate. The data was used to populate an economic model which estimates the value of each source of



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contribution from the University and this was aggregated to produce an estimate of the total contribution made.

Beyond the quantifiable impacts, Durham University makes a strong contribution to wider society through its central mission of transforming lives. To understand its important social role, a series of consultations were held with University staff to highlight the University's distinctive strengths and the social impacts these create.

### **3.3.1 Metrics of Assessment**

The quantifiable economic impacts have been assessed using two widely accepted economic measures:

- Gross Value Added (GVA): which measures the monetary contribution that an organisation adds to the economy through its operations; and
- Employment: which is measured in terms of headcount jobs supported.

These measures provide a convenient way of capturing the entire economic contribution in a single number. However, monetary figures highlight only part of the value of an impact. This report recognises that it is not possible to quantify all of the impacts of a higher education institution because:

- the data for monetisation of many of the benefits is at an early stage of research;
- not all economic and social impacts can be converted into monetary value;
- monetary value does not capture aspects such as quality and equality; and
- monetary value is static and does not capture the dynamic activities that drive economic and social impact.

### **3.3.2 Study Areas**

The impacts are reported at three geographic levels:

- County Durham;
- North East England (including County Durham); and
- the UK (including the North East).

### **3.3.3 Types of Impact**

The economic impact assessment captures the full impact of the original activities, including knock-on effects further down the supply chain and through increased consumer spending.

For each area of activity, an assumption was made about the proportion that would occur in each study area and they were then assigned a sector. On the basis of these sectors, economic ratios and multipliers were derived, which were then used to estimate economic impacts.

There are three significant types of economic impact:

- direct impact: the employment and GVA generated directly by the University;



- indirect impact: this is the impact associated with suppliers of goods and services to the University; and
- induced impact: this is the impact associated with staff spending their wages in the wider economy.

## 3.4 Impact Time Frame

### 3.4.1 Covid-19

The economic analysis measures the impact created by Durham University over an academic year, which in this case is 2020/21. This marked an exceptional time with the impact of the Covid-19 pandemic affecting all aspects of the University and wider public life since March 2020. In academic terms, courses were delivered online for most of this academic year with a gradual and limited return to campus happening when the easing of Government restrictions allowed.

Some aspects of Durham University's income and expenditure were affected more than others by the pandemic. For example, the closure of University buildings and student accommodation and the cancellation of events affected income from these sources quite significantly. Meanwhile, the drive to facilitate remote working and learning resulted in unexpected expenditure on IT systems and equipment while the requirement to make campuses compliant with social distancing rules led to additional expenditure. It has been noted in the report where the pandemic resulted in a significantly different pattern of expenditure than would otherwise have been the case.

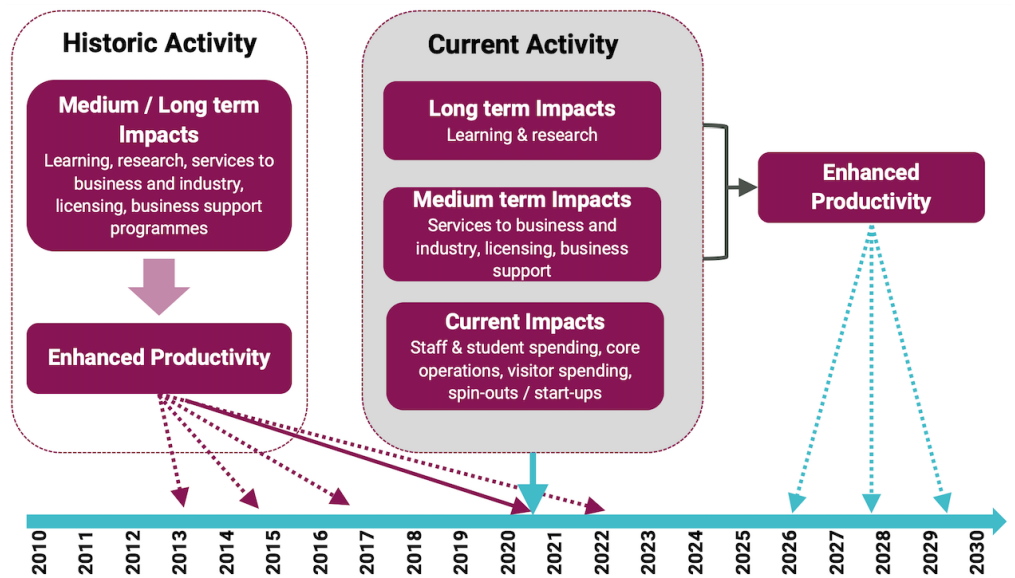
### 3.4.2 A Snapshot in Time

This study is intended to provide a measure of the University's impact at a snapshot in time for 2020/21. However in designing this approach, it is recognised that some of the University's activities generate economic impact immediately, for example, staff and student spending, while for most activities the economic impacts will occur over a longer time frame, for example, research. Therefore, the impact generated in 2020/21 will be the cumulative impact of historic activity plus some immediate impacts of spending in that year.

Limitations in data mean that it is generally not possible to estimate the true impact of historic activity that is realised in any particular year. To overcome this issue, the report makes the simplifying assumption that activity in 2020/21 generates impact in 2020/21. The rationale for this is that although the impact of some activity that occurs in 2020/21 will not occur until a later date, some of the impact that was realised in 2020/21 will have been generated by historic activity and no attempt is made to quantify the impact of this. Figure 3-2 summarises the different types of activity considered in the report and the timescale over which they generate impact. The blue arrows represent impact generated by current activity and the purple arrows represent impact generated by historic activity. The dashed arrows represent future impacts and the solid arrows represent impact in the current year.



Figure 3-2: Impact Time Frame



Source: BIGGAR Economics



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## 4.

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# Learning Impacts

Graduates of Durham University will increase their skills and productivity as a result of their experience at the University, and will make a greater contribution to the economy, including receiving additional lifetime earnings.

Other benefits include higher profitability associated with the skills and knowledge that graduates possess, as well as increased tax revenues. Graduates also have higher levels of life satisfaction than non-graduates. This is associated with other life outcomes, such as improved health and higher job satisfaction.

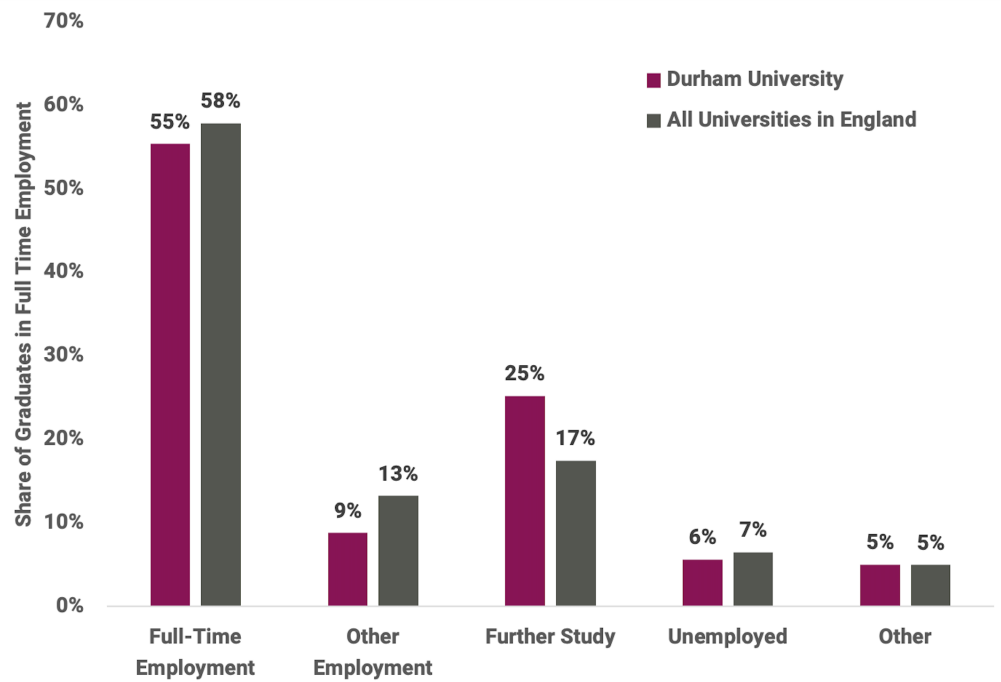
## 4.1 Outcomes for Durham University Graduates

### 4.1.1 Employment Profile

People who earn a university-level degree have better outcomes in the labour market than those who do not. These include higher levels of employment and higher earnings in employment.

Graduates of Durham University were less likely to directly enter the labour market in the years after leaving the University compared with the universities sector as a whole. Of those who graduated from Durham University in 2018/19, 64% entered employment. Across England, 71% of graduates that year entered the labour market. The main reason for this difference was that 25% of graduates of Durham University entered further study, compared to 17% of all English university graduates. This advanced education will increase the long-term productivity potential of these graduates. Therefore, the labour market outcomes of graduates of Durham University are likely to be better than average in the long term.

**Figure 4-1 Destination of Graduates of Durham University**

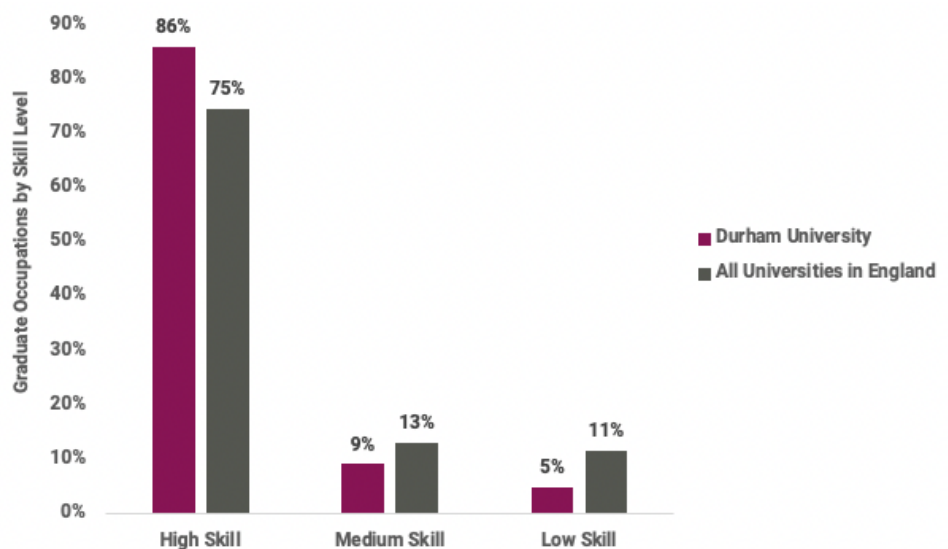


Source: HESA (2021) HE Graduate Outcomes Data, 2018/19 cohort

#### 4.1.2 Occupational Level

When they enter the labour market, the graduates of Durham University are highly likely to enter high skilled employment<sup>4</sup>. The share of Durham University graduates who were in high skill occupations was 86%, which is 11% points more than average.

**Figure 4-2 Occupation Level of Graduates**



Source: HESA (2021) HE Graduate Outcomes Data, 2018/19 cohort

<sup>4</sup> High Skill is defined as Standard Occupation Classification levels 1 – 3, Medium Skill are levels 4 – 6 and Low Skill are levels 7 – 9.



### 4.1.3 Sectors of Employment

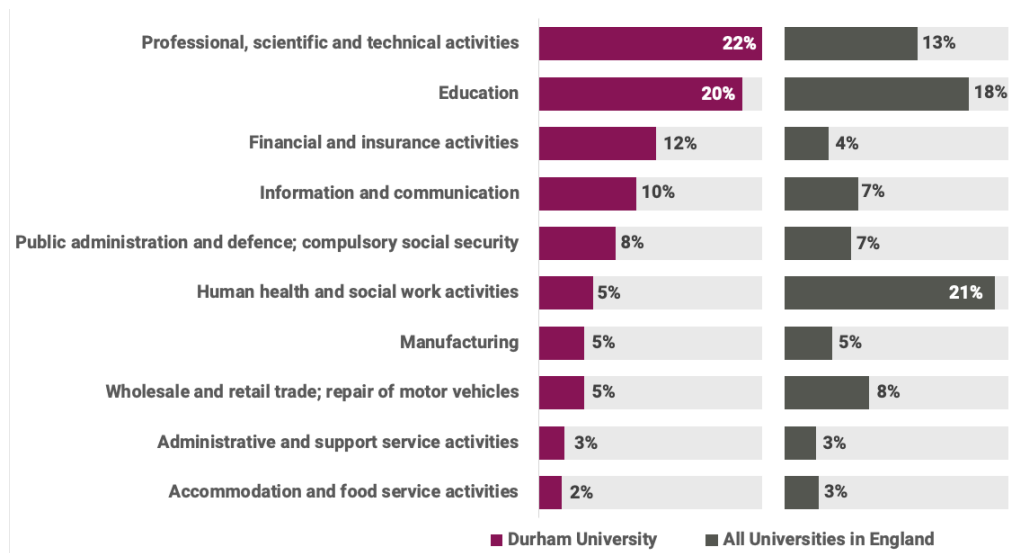
The high proportion of employed graduates of Durham University in high skill occupations results from the sectors that they are employed in and the types of jobs that they do in those sectors.

The sectors of graduate employment are shown in Figure 4-3 for Durham University and all English universities. This shows that the sector which employs the greatest number of Durham University graduates is professional, scientific and technical activities, which employs 22% of graduates of Durham University, compared to an average of 13% across England.

This is followed by the education sector, which employs 20% of the graduates of Durham University, compared to an average of 18% across England. The sector which employs the most graduates across England is the human health and social work activities, which employs 21% of all graduates from English universities. However, only 5% of the graduates of Durham University work in this sector.

Graduates of Durham University are also much more likely to work in financial and insurance services (12%), compared to their peers (4%). This is one of the highest paying sectors of the UK economy.

**Figure 4-3 Sectors of Graduate Employment**



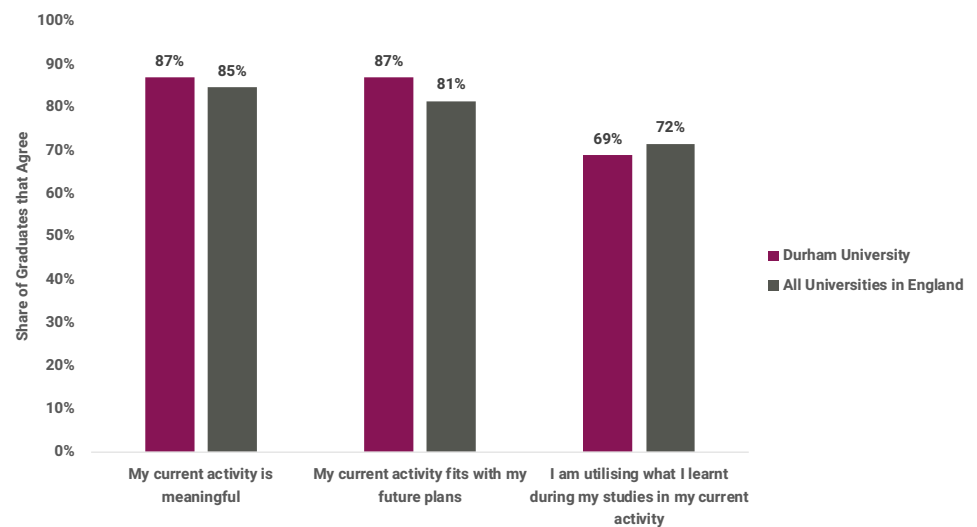
Source: HESA (2021) HE Graduate Outcomes Data, 2018/19 cohort

### 4.1.4 Wellbeing Indicators

The graduates of Durham University are highly likely to find meaning in their work. The proportion of Durham University graduates in full-time employment who agreed with the statement ‘My current activity is meaningful’ was 87%. This is higher than the average for England, which was 85%. Similarly, graduates of Durham University were more likely to agree that their current activity fits with their future plans. Graduates of Durham University were less likely to feel like they are using what they learnt during their studies in their employment.



**Figure 4-4 Perceptions of Employment and Wellbeing of Graduates**



Source: HESA (2021) HE Graduate Outcomes Data, 2018/19 cohort

The ability to find meaning and purpose in employment is an important contributor to individual wellbeing. Studies<sup>5</sup> have found that in addition to improved professional outcomes, such as lower absenteeism, lower employee turnover and higher job satisfaction, a higher sense of meaning and purpose at work also leads to improved outcomes outside the workplace such as self-reported levels of happiness. Therefore, the ability of Durham University to prepare its students for meaningful employment is a significant contributor to their lifelong wellbeing.

## 4.2 Assessing Lifetime Productivity Impacts

By completing their studies at university, graduates acquire skills that make them more productive than they would otherwise have been. The personal graduate premium includes the additional earnings that the graduate can achieve from having their degree, plus the fiscal contribution they make to the Exchequer, less the costs they incurred in studying, which is largely accounted for by student loans.

Graduates are also more likely to be employed than those without a university education. In 2017<sup>6</sup>, the employment rate of graduates in the UK labour market was 82%, compared to 78% for individuals with A Level or equivalent qualifications. Therefore, the decision to go to university not only means that the graduates are more productive when they are employed, but they are also more likely to be in employment than individuals who chose not to go to university. Although not quantified, the increase in labour market participation is also an economic benefit to the economy.

<sup>5</sup> Steger, Michael. (2016). Creating Meaning and Purpose at Work. 10.1002/9781118977620.ch5.

<sup>6</sup> ONS (2018) Graduates in the UK Labour Market 2017. \*These are the latest available data at UK level comparing graduates' outcomes and outcomes for individuals with A Level qualifications.



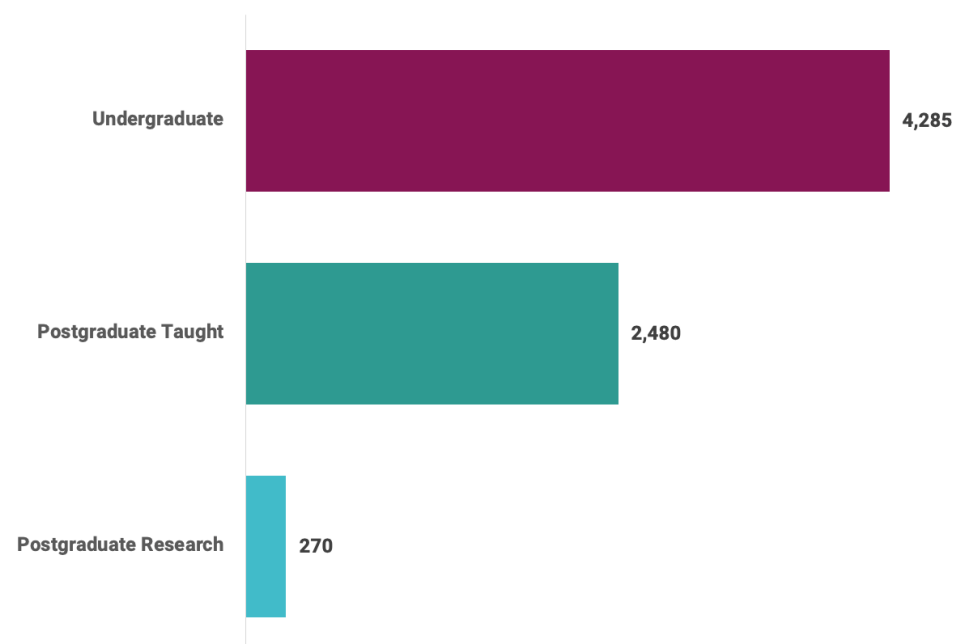


Beyond this, businesses that employ graduates become more profitable and can generate a greater economic impact than they would otherwise have done. The GVA and productivity gains that they realise include the additional profits that employers can generate by employing graduates and the additional employment costs they are willing to pay to generate these additional profits.

Therefore, the total economic contribution includes the graduate premium plus the additional corporate profits and taxes that they generate. In this way, the total graduate premium gives the combined personal economic benefit that the year's graduates will obtain rather than the increase in national productivity associated with the degree, which will be higher. It is an under-estimate of the total economic impact associated with increased graduate productivity as it does not include the corporate profit associated with each graduate.

The starting point in estimating the graduate premium associated with Durham University was to consider the number of awards delivered. In 2020/21, Durham University awarded over 7,000 degrees. The majority (61%) of these were Undergraduate degrees, followed by Postgraduate Taught (35%) and Postgraduate Research (4%).

**Figure 4-5 Number of Awards by Type**

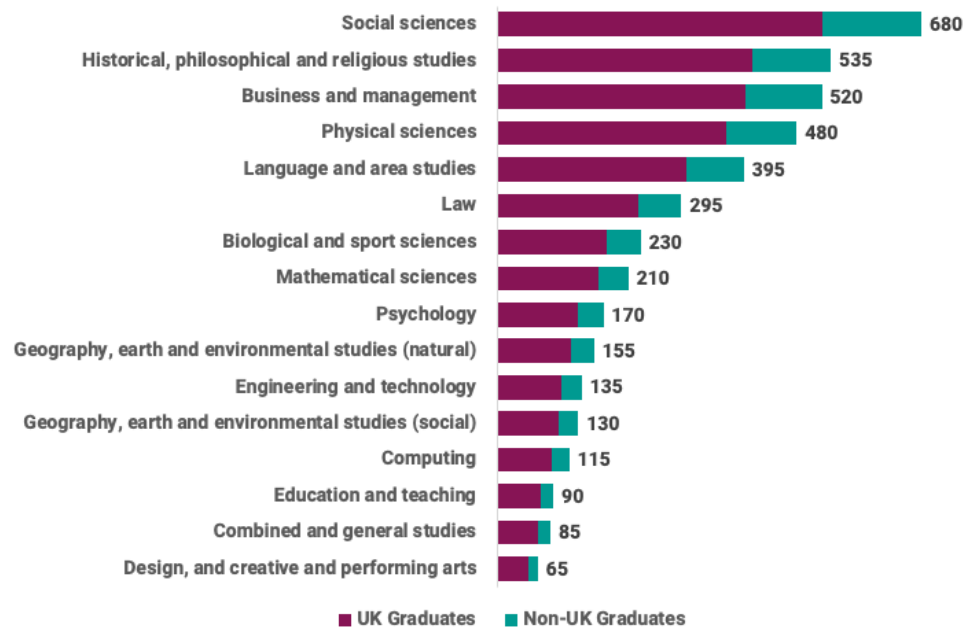


Source: HESA

To estimate both the personal and fiscal graduate premium from undergraduate degrees it was necessary to consider the number of awards by subject. As shown in Figure 4-6, social sciences was the subject area with the largest number of graduates, followed by historical, philosophical and religious studies and business and management.



**Figure 4-6 Number of Undergraduate Awards by Subject**



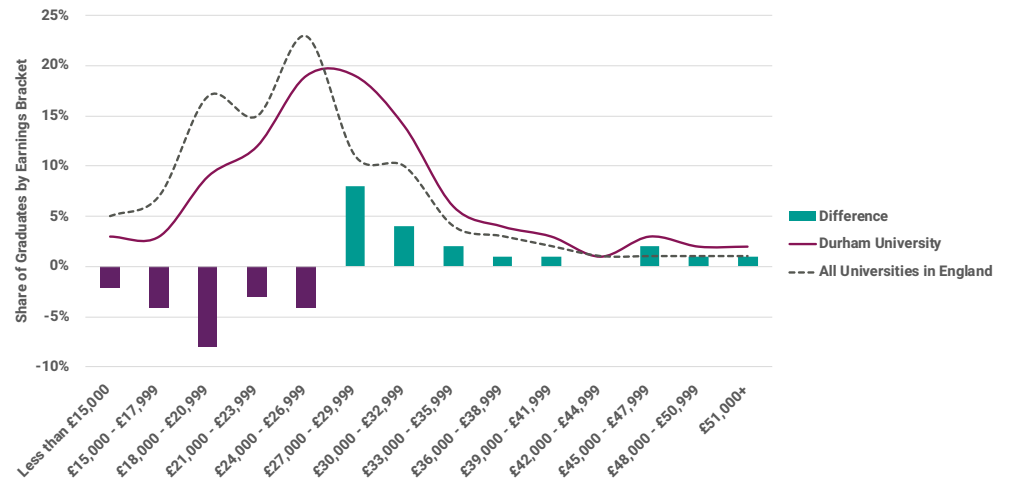
Source: HESA

The estimate of personal graduate premium relies on data for discounted lifetime earnings from different degrees. These were sourced from a 2021 study by the Institute for Fiscal Studies (IFS) on the impact of undergraduate degrees on lifetime earnings<sup>7</sup>. The IFS study estimated discounted lifetime earnings across different types of universities and accounted for the background of students, including their sex, ethnicity, and participation of local areas (POLAR) status.

Durham University, as a member of the Russell Group of universities, is associated with graduate earnings by subject which are higher than the sector average. This is supported by data from HESA that shows that the earnings of recent graduates of Durham University are higher than the average for England as a whole. In particular, three years after graduation, those from Durham University were more likely than their peers to be high earners. In total, 35% of the graduates of Durham University were earning more than £30,000 compared to 23% of all graduates from English universities.

<sup>7</sup> IFS (2021), The Impact of undergraduate degrees on lifetime earnings.

**Figure 4-7 Graduate Earnings Profile**



Source: HESA

The average premium per graduate, for both the personal returns and the benefits to the Exchequer as a result of obtaining an undergraduate degree are shown in Table 4-1 for the degree subject areas relevant to Durham University. This shows that of the subject areas awarded by Durham University, law is the subject linked with the highest earnings premium and highest benefit to the Exchequer for each undergraduate degree awarded. This is followed by mathematical sciences and business management.



**Table 4-1 Graduate Premium and Exchequer Impact by Subject per UG Award**

	Personal Premium	Exchequer Impact
Law	£415,200	£346,600
Mathematical sciences	£309,300	£265,900
Business and management	£289,700	£209,000
Engineering and technology	£245,300	£191,600
Computing	£221,900	£158,200
Education and teaching	£193,600	£69,500
Geography, earth and environmental studies (natural sciences)	£174,500	£124,400
Geography, earth and environmental studies (social sciences)	£174,500	£124,400
Historical, philosophical and religious studies	£158,400	£103,200
Combined and general studies	£158,400	£103,200
Social sciences	£86,100	£12,000
Physical sciences	£85,500	£42,700
Psychology	£78,700	-
Language and area studies	£62,300	£20,800

Source: BiGGAR Economics Analysis of IFS Data

The total undergraduate productivity impacts, including the personal graduate premium and the Exchequer impacts of this increased productivity, were estimated by multiplying the number of graduates by their respective premiums. In total this found that those who received an undergraduate degree from Durham University in 2020/21 would earn at least £916 million over their lifetimes as a result of their education, of which £357 million would be paid in taxes to the Exchequer.

The economic impact from postgraduate awards was based on evidence from the ONS<sup>8</sup>. This found the lifetime earnings associated with those holding postgraduate qualifications are 10% larger than for those with an undergraduate degree. To estimate the extra premium from a postgraduate degree, the undergraduate premium was then applied to the distribution of postgraduates by subject and then weighted by 10%. In this way, it was estimated that the extra benefits (i.e. excluding those for also having an undergraduate degree) from being awarded a postgraduate degree at the Durham University are £22,700. This figure was then multiplied by the

<sup>8</sup> ONS (2019), Human capital estimates in the UK: 2004 to 2018, available at: <https://www.ons.gov.uk/peoplepopulationandcommunity/wellbeing/articles/humancapitalestimates/2004to2018>



number of postgraduate awards to estimate the premium associated with postgraduate degrees. A similar approach was taken for fiscal impacts.

The geographic distribution of the graduate productivity impacts is dependent on where the graduate lives and works. Data provided by Durham University found that:

- 8% of graduates lived in County Durham;
- 17% of graduates lived in the North East,
- 92% of graduates lived in the UK; and
- 8% lived outside the UK.

In this way, the total graduate productivity impacts were estimated to be:

- £52 million from graduates living in County Durham;
- £112 million from graduates living in the North East; and
- £959 million GVA from graduates living in the UK.

**Table 4-2 Productivity Impacts of Graduates of Durham University**

	County Durham	North East	UK
Graduate Productivity	32	68	584
Exchequer Impact	20	44	374
Total	52	112	959

Source: BiGGAR Economics Analysis, note totals may not sum due to rounding

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## 5. Supporting Innovation

The research and business collaboration activity of Durham University is an important part of the local, regional and national innovation system.

The knowledge and research within a university can directly support business innovation and job creation through its knowledge transfer and innovation activities. This includes:

- providing research services to companies seeking to innovate, either through consultancy, contract/collaborative research, continuing professional development or facilities hire;
- licensing new technologies and approaches to existing companies;
- supporting/enabling the creation of companies directly out of innovative ideas generated at Durham University, such as spin-out or start-up companies; and
- placing students, including Knowledge Transfer Partnership students, within companies to enable them to directly benefit from Durham University knowledge.

Each of these aspects highlight the University's role in supporting the innovation system and in creating quality jobs through its status as a leading research university.

### 5.1 Services to Business and Industry

Economic impacts are created when Durham University provides services to businesses and supports knowledge transfer within the wider industry. Through collaboration with the University, businesses benefit from leading research and best practice which can enhance their own productivity and profits. A more productive workforce is likely to benefit from higher wages which support the economy when spent.

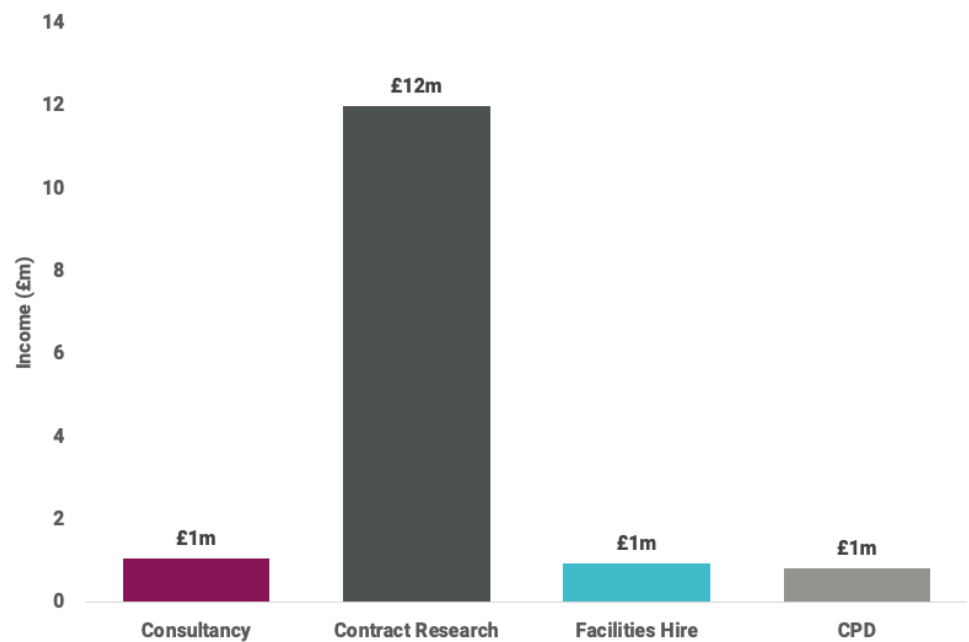
This section considers the following services that Durham University provides to business and industry:

- consultancy;
- contract research;
- facilities and equipment hire; and
- continuing professional development (CPD).

During the year 2020/21, Durham University received a total combined income of approximately £15 million from these sources, £12 million (81%) of which came from contract or collaborative research agreements within the UK.



**Figure 5-1 Income from Services to Business and Industry by Source, £m**



Source: Durham University

The value to an individual business of collaboration with the University will vary considerably between projects. It will be based on the type of work done, the stage in the development process that the project relates to and the capacity of the company to absorb the knowledge and developments that result from the collaboration. However, in order to quantify this impact, it was necessary to assume what the value would be to a company based on typical returns from these collaborations.

The economic impact associated with spending on engagement with a university partner was assumed to be 340%. This was based on the evidence from a study by Department of Business, Enterprise & Regulatory Reform<sup>9</sup>, which found that interventions in Science, R&D and innovation infrastructure had achieved cumulative GVA equivalent to 340% of the cost of the projects in the short to medium term and up to 870% in the long term. This study is representative of the evaluation literature which finds similar rates of return from business collaboration with universities.

In this way, it was estimated that Durham University's services to businesses during 2020/21 supported £7 million GVA and 20 jobs in County Durham, £20 million GVA and 50 jobs in the North East and £119 million and 300 jobs across the UK.

<sup>9</sup> PriceWaterhouseCoopers, Impact of RDA spending – National report – Volume 1 – Main Report, March 2009, DBERR.



**Table 5-1 Services to Businesses and Industry Impact**

	County Durham	North East	UK
GVA (£m)	7	20	119
Employment	20	50	300

Source: BIGGAR Economics Analysis

### 5.1.1 Durham University Business School

Durham University Business School is one of the world's leading business schools, with high impact research and collaborative relationships with several leading businesses, such as IBM, Boeing and Nvidia. The Business School is triple accredited and plays a pivotal role in attracting students to Durham University through its long-established reputation.

One of the School's focus programmes is the Durham MBA (online) programme and in 2022, the programme was ranked 7<sup>th</sup> in the world by the Financial Times<sup>10</sup>. The School's MSc Economics programme is another key area of focus for the department. Each of the School's programmes aspire to support innovative ideas and produce insightful leaders, with 3,500 students based at the School in 2020/21.

Durham University Business School has numerous areas of research that generate economic, social and environmental impacts in communities and businesses across the globe. One such focus is on sustainability, with recent research into improving recycling chains to address environmental issues surrounding the use of plastics. Another area of impact is on urban development and the impacts of technology and 'smart cities' on urban populations. This area of research has resulted in the creation of an 'indexDNA framework' that seeks to blueprint how such cities should be designed.

<sup>10</sup> <https://www.durham.ac.uk/business/>





## Procter and Gamble Strategic partnership

The University supports Procter and Gamble to improve new products and services.

One of the University's strongest strategic partnerships is with Procter and Gamble, a multinational consumer goods company. This partnership began in 2009 and has strengthened over time, with the most recent large-scale project being a £5.6 million grant with Durham University and Imperial College London to accelerate the development of improved and sustainable products.

The University's collaboration with Procter and Gamble has won awards and been exhibited as an example of a successful academia-industry partnership, including in a report to the US Congress. This has led to the University working with teams across the globe, including in Reading, Cincinnati and Shanghai. It has also supported Procter and Gamble's centre of excellence in Newcastle.

Over the period of the University's collaboration with Procter and Gamble it has worked on over 100 projects and secured leveraged research funding worth tens of millions of pounds, contributing to product ranges worth billions, which are used by consumers across the world on a daily basis.

A particular area supported by the University is the development of new cleaning products, including dishwasher tablets and laundry detergent. Using cutting-edge technology, including building the world's smallest washing machine, the University has helped to create compounds and enzymes that are able to clean products using much less energy (for example, a wash at 30 degrees rather than 40 degrees). This has helped to contribute to Procter and Gamble (which owns the Ariel brand), reducing its emissions by 50% since its collaboration with the University began, and will support the net zero ambitions of the company and countries around the world.

Other areas that the University has worked on include using quantum mechanics to improve the construction of nappies, developing new methods for testing make-up to reduce animal testing and applying imaging technologies to detect counterfeit products.



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## 5.2 Contribution to the Regional Economy

### 5.2.1 Attracting Investment

Durham University has played a key role in attracting investment to the region and supporting economic activity. Several University spin-outs are based at NETPark (see case study later in this chapter), a science park that the University helped to found in Sedgefield, County Durham, and many of the University's graduates work there.

Atom Bank, a UK banking start-up valued at \$589 million<sup>11</sup>, is supported by the University's collaborative research with ongoing Knowledge Transfer Partnerships (KTPs) and many graduates, particularly those in computer science and maths, working at the company. The company was set up by a former graduate of the University, and part of the reason for locating the new business in County Durham was to benefit from close collaboration with the University and its supply of graduates.

While the collaboration is still in its early stages, it is understood that the University has also supported the development of the UK Government's Darlington Economic Campus. This will be a significant economic opportunity for County Durham, with at least 750 government roles at six government departments expected to relocate to the campus, including the Treasury, Office for National Statistics and the Department for Education. This is intended to support the Government's levelling-up aspirations.

### 5.2.2 Northumbrian Water

Northumbrian Water, based in Durham City, is a long-standing strategic partner of Durham University.

The University has delivered a range of projects that reduce water waste, make water safe and reduce sewage waste. This has included developing a sustainable method to prevent plant roots from damaging pipes and developing processes to remove harmful elements from water.

An important example of this relationship is the Water Hub, which has been funded by the European Regional Development Fund in collaboration with Durham County Council, the Environment Agency and Durham University. As part of this project small and medium sized businesses in the region are supported to develop products that solve water-related problems such as water efficiency, water cleaning and flooding.

Northumbrian Water also host an annual Innovation Festival, which the University is a partner in.

### 5.2.3 Durham Energy Institute

The University has worked in collaboration with a number of companies in the energy sector through the Durham Energy Institute.

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<sup>11</sup> CB Insights (February 2020). Digital bank Atom Bank hits \$389 million valuation. Atom Bank competitors include Monzo, N26, Tide and Starling Bank.



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This includes working with Ørsted, one of the world's largest wind energy developers, for over a decade, as well as supporting other energy companies in the region. Initially the University's partnership with Ørsted was focused on supporting Master's and PhD students with expertise in renewable energy and in more recent years it has expanded to support the Durham Energy Institute, with a Chair in Renewable Energy funded directly by Ørsted. Other aspects of this partnership include the Centre for Energy Systems Integration (along with a number of other partners), and a Prosperity Partnership with Ørsted and Siemens Gamesa (one of the world's leading wind turbine manufacturers).

The University has also helped to develop the wider renewables energy sector, including addressing issues of how the power generated can be integrated into the grid and how excess energy can be used to produce hydrogen.

It has also helped to support the energy sector in the North East of England, particularly in Teesside, where an offshore wind cluster is being developed. The University has also contributed to the Aura Centre for Doctoral Training, which undertakes research and training to support the offshore wind cluster at Humberside.

The University is also working on other innovations in the energy, such as extracting energy from used coal mines (see case study).



# Geothermal Energy

## Using abandoned coal mines to heat homes

Durham University has been involved in a scheme to use water from the UK's abandoned coal mines to heat buildings using district heating.

A significant proportion of the UK's energy needs relate to heating homes and workplaces. Generally, this requires burning natural gas and this has proven difficult to decarbonise, contributing about 30% of the UK's emissions of greenhouse gases. Researchers at Durham University have developed a novel approach to heating that could be rolled out at scale.

In 2017, they began research to determine whether water from abandoned coal mines can be used to heat homes, exploiting the relatively constant temperature of the water and using heat pumps to extract heat which can then be used to produce hot water for homes through a district heating system. This research found significant potential, with enough low-carbon, geothermal heat in the UK's mines to heat a significant portion of the UK's housing stock.

This will involve drilling boreholes a few hundred metres underground, extracting the water and extracting some of the heat from the water and then returning the water, now a few degrees cooler back into the mines to be reheated. The extracted heat can be upgraded with a heat pump and the overall electricity required for the process is only about one quarter of that which would be needed using electric fires or radiators. The warmed water is circulated around a district heat network which can serve domestic properties, offices, municipal buildings and more.

Durham University researchers have been working closely with councils in County Durham, South Tyneside and elsewhere in the UK to bring this low carbon heat into homes and improve the nation's energy security. Demonstration projects are already underway in North East England.

Another research project worth £1.4 million has been announced by the University which will explore whether this concept can be scaled-up and coupled with solar thermal energy and use the Earth as a heat battery, charging it during the summer with heat from the Sun and liberating the heat in the winter when it is needed. Other goals of the research include addressing wider engineering problems and determining the regulatory and financial framework required to ensure that the concept can be rolled out at scale. If successful, these schemes would be combined with new housing developments and other schemes to deliver low to zero carbon heating for former coal mining communities.



## 5.3 Licensing

One of the ways in which research activity is translated into economic activity is through licensing agreements with industry. Licensing agreements give companies the legal right to use a particular technology or other type of intellectual property (IP) to generate additional sales, reduce costs or otherwise improve their profitability. In return, companies pay royalties to the University. In 2002, Goldschneider<sup>12</sup> analysed the returns from licensing agreements by industry sector and found that the royalties rate varied between 2.8% and 8.0%.

Data provided by Durham University indicates that the University accrued £33,000 in intellectual property revenue during 2020/21. In order to estimate the turnover linked to the licences, the revenue derived from royalties was divided by 4.9%, which represents the median royalty rate paid across the sectors in the Goldschneider study. Previous analysis of the location of licence holders indicates that 98% of licence holders were based in the UK, of which 82% were located in County Durham.

The companies that held these licences were estimated to have increased their turnover by an additional £0.7 million across the UK as a result of the technologies developed by Durham University. It was therefore estimated that these licences supported less than £1 million GVA across County Durham and the North East and around £1 million GVA across the UK.

**Table 5-2 Licensing Impact**

	County Durham	North East	UK
GVA (£000's)	<1	<1	1
Employment	10	10	10

Source: BiGGAR Economics Analysis

## 5.4 Knowledge Transfer Partnerships

Durham University is an academic participant in the KTP programme. This programme recruits graduates to work on joint industry academic projects, in which companies use the research expertise of universities to overcome certain challenges that they are facing. These placements last for approximately three years.

The economic impact arising from KTPs stems from the increased productivity the industrial partner achieves from overcoming the issue they were looking to address.

To estimate the impact of the entire KTP programme at Durham University it is necessary to use project evaluation data that covers the entire UK-wide programme. An evaluation study<sup>13</sup> found that in the six years after their completion, each KTP

<sup>12</sup> Goldschneider et al., (2002). Use of the 25 Per Cent Rule in Valuing IP.

<sup>13</sup> Regeneris Consulting (2010), Knowledge Transfer Partnerships Strategic Review



contributed £826,000 GVA to the UK economy and supported three jobs throughout the country. While a KTP is ongoing its economic impact is assumed to be a lot smaller as the benefits of any research will not be realised in the early stages of development.

Analysis of the KTP Online database<sup>14</sup> indicates that Durham University has completed 28 KTPs in the last ten years and has two ongoing projects. By applying the findings of the evaluation study to the number of KTPs in each study area, it is estimated that the KTP programme at Durham University supported £0.8 million GVA and 20 jobs in County Durham, £3 million GVA and 60 jobs in the North East and £4 million GVA and 80 jobs across the UK.

**Table 5-3 Knowledge Transfer Partnerships Impact**

	County Durham	North East	UK
GVA (£m)	1	3	4
Employment	20	60	80

Source: BiGGAR Economics Analysis

## 5.5 Spin-out and Start-up Companies

Research undertaken by the University can be commercialised directly through the creation of a spin-out company to bring a specific new product, service or technology to market. In addition, students of the University can set up their own companies.

In 2020/21, Durham University had 22 active spin-out companies, which collectively employed 550 people across the UK and had a combined estimated turnover of £39 million. In addition, the University had 38 active graduate start-ups, employing 26 people and an estimated combined turnover of £0.2 million.

Where turnover data was available, this was used to estimate direct GVA by applying sector appropriate turnover to GVA ratios. Where a company had employees but no reported turnover, it was assumed that it was in the early stages of product development and may not yet be generating revenue, and therefore the GVA impact was estimated by applying staff costs per employee for the relevant industry. The registered location of each company was then assigned to the relevant study area to attribute the impact geographically.

In this way, it was estimated that the activity of spin-out and start-up companies of Durham University generated £9 million GVA and supported 380 jobs in County Durham, £12 million GVA and 500 jobs in the North East and £54 million GVA and 1,810 jobs across the UK.

<sup>14</sup> See [info.ktponline.org.uk](http://info.ktponline.org.uk)



**Table 5-4 Spin-out and Start-up Companies Impact**

	<b>County Durham</b>	<b>North East</b>	<b>UK</b>
GVA (£m)	9	12	54
Employment	380	500	1,810

Source: BIGGAR Economics Analysis

The development of spin-outs at Durham University is supported by the Northern Accelerator, a collaboration between the North East’s universities to drive a step change in the commercialisation of university research and strengthen the North East’s knowledge economy. Academics can apply for seed funding and expert support in order to develop their idea or technology into a viable business.

For example, Sphera is an early stage spin-out of the University which is developing its zero-carbon aggregate concrete block, which is made from plastic waste and is the first technology of its kind in the world. It has been supported by the Northern Accelerator and several other organisations and recently raised £1.9 million in funding.



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## NETPark

### The University played a key role in the development of NETPark, a science park in County Durham.

NETPark is a science park in Sedgefield, County Durham, providing facilities to over 40 companies which employ more than 600 people in high value sectors, such as science, engineering and technology. The science park is run by Business Durham, an economic development organisation, and has strategic partnerships with Durham University and the Centre for Process Innovation.

The University played a key role in the founding of the science park. It developed the initial idea and set up the first research institute on-site, as well providing the first commercial tenant, Kromek, a spin-out of the University and now one of the largest tenants. The University's research also provided the critical mass needed to attract other companies and institutions. It continues to supply a stream of high quality graduates to on-site companies, provides access to facilities and provides services to businesses, such as consultancy and contract research.

There are three national innovation centres on-site, including the National Innovation Centre for Printable Electronics, the National Innovation Centre for Formulation and the National Innovation Centre for Healthcare Photonics. There are also two National Catapult Centres based on-site, the High Value Manufacturing Catapult and the North East Centre of Excellence for Satellite Applications. In addition, the University's Centre for Advanced Instrumentation is based at NETPark, delivering leading research into the development of astronomical and biophotonics instrumentation and supports companies based on-site.

Orbit, the University Enterprise Zone, was opened on-site in June 2021, having received funding of £2.3 million from Research England and the European Regional Development Fund. It offers ambitious science and technology companies access to low-cost accommodation and facilities, as well as access to the University's networks and expertise and tailored business support.

Due to reaching full capacity, NETPark has significant expansion plans. Phase Three of its development, which will cost £50 million, is underway and is expected to add 270,000 square feet of new laboratory, office, production and storage space. It could create up to 1,250 high value jobs, with a further 2,200 jobs in the wider economy.





## 5.6 Student Placements

Placements provide students with an opportunity to develop skills in the workplace and allow employers to benefit from the knowledge that students have acquired during their studies.

In 2020/21, 605 Durham University students undertook placements. Of this total, 435 undertook school placements as part of their education course, either as an undergraduate or as part of a postgraduate diploma. The University's School of Education plays a role in strengthening the educational offering of County Durham and creating regional impacts through educating and placing students in local schools during their placements. The remaining 170 students undertook year-long industrial placements as part of their course in departments such as accounting, bioscience, chemistry, computer science, economics and finance, psychology and sociology.

The contribution students on placement make to the organisations they are placed in is lower than the average output expected by a worker in the sector and would require more time spent training. To reflect this, it was assumed that the GVA of students undertaking a placement is 33% of the GVA generated by a sector's average worker. Economic ratios and multipliers were then applied to estimate the economic impact of student placements.

In this way, it was estimated that workplace placements undertaken by students at Durham University in 2020/21 contributed £2 million GVA supported 50 jobs in County Durham, £3 million GVA and 70 jobs in the North East and £5 million GVA and 110 jobs across the UK.

**Table 5-5 Student Placements Impact**

	County Durham	North East	UK
GVA (£m)	2	3	5
Employment	50	70	110

Source: BiGGAR Economics Analysis

### 5.6.1 Durham Internships and Collaborative Enterprise

The Durham Internships and Collaborative Enterprise (DICE) project is a partnership with Durham City Council, launched in 2018. The project aims to support small businesses, encourage graduates to stay in the region and support graduate entrepreneurship, and has three strands:

- a subsidised internship programme for start-ups and small businesses;
- the Durham City Incubator; and
- enterprise interventions aimed at Durham University students.



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A summative assessment<sup>15</sup> of the programme was undertaken in 2021 which found that the programme had led to improved outcomes for small businesses, graduates being more aware of local opportunities in small and medium sized enterprises and more likely to stay in the region, and more University enterprise.

### **5.6.2 Supporting local education**

Each year, Durham University produces hundreds of high quality teaching graduates at both primary and secondary level (there were 190 in 2020/21), and its Centre for Teacher Education was rated as Outstanding by Ofsted, leading to a difference in the lives of students who are educated by these teachers.

The University has extensive links with local schools, with over 300 involved with the Durham University Initial Teach Education Partnership. These placements lead to improved relationships with the community and higher quality teaching, as well as increasing the aspirations of students at these schools by providing positive role models.

The School of Education undertakes world-leading research and was ranked equal first for impact as part of REF 2021. In particular, its Pupil Premium Toolkit provides evidence on the effectiveness of a wide range of educational interventions, as well as the potential cost. It is consulted by more than two thirds of headteachers in England, and has been used in Scotland, Australia, Spain, Latin America, the Middle East and Cameroon.

The University also supports education through its engagement and outreach programmes in culture and heritage and science, which are discussed in Chapter 8.

## **5.7 Innovation Impacts Summary**

Drawing together the innovation related sources of impact, Durham University's contribution to the innovation system is estimated to generate:

- £19 million GVA and support 470 jobs in County Durham;
- £38 million GVA and support 690 jobs in the North East; and
- £183 million GVA and support 2,320 jobs across the UK.

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<sup>15</sup> Ideas for Change Consulting (2021), The DICE project: Summative Assessment: January 2021



**Table 5-6 Innovation Impacts Summary**

	County Durham	North East England	UK
<b>GVA (£m)</b>			
Services to Business and Industry	7	20	119
Licensing	<1	<1	1
KTPs	1	3	4
Spin-outs & Start-ups	9	12	54
Student Placements	2	3	5
<b>Total</b>	<b>19</b>	<b>38</b>	<b>183</b>
<b>Employment (Jobs)</b>			
Services to Business and Industry	20	50	300
Licensing	10	10	10
KTPs	20	60	80
Spin-outs & Start-ups	380	500	1,810
Student Placements	50	70	110
<b>Total</b>	<b>470</b>	<b>690</b>	<b>2,320</b>

Source: BIGGAR Economics Analysis. Note: totals may not sum due to rounding.

## 5.8 Health Research

In 2018, Durham University’s School of Medicine, Pharmacy and Health, which was based at its Queen’s Campus, was transferred to Newcastle University, joining the Faculty of Medical Sciences there. As a result, the types of health research undertaken by the University have changed as has its vision for health research.

**‘Unbound from clinic, we frame health differently. Our vision for health is for people to thrive in the places they live. We embrace physical, mental, social and environmental wellbeing, and envision health as a synergy of beliefs, culture, family, community and environment.’ Health@Durham**

The University’s Wolfson Research Institute for Health and Wellbeing is central to its health research and supports a number of affiliated research centres within the University. These centres incorporate interdisciplinary approaches, are aligned to the



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Sustainable Development Goals and have a holistic approach to improving health, ensuring that issues of race, mental health and physical activity are incorporated into the research.

An example of the University's health research is the Durham Infancy and Sleep Centre, which helps to improve global infant sleep and reduce potential health conditions. It developed the Baby Sleep Information Source, which provides accessible infant sleep guidance to parents and professionals. Its research and guidance on parent-infant co-sleeping has led to changes in guidance related to Sudden Infant Death Syndrome, contributing to a 50% reduction. It has also undertaken research into how different cultures perceive infant care, allowing messages to parents from minority groups to be tailored.

### **5.8.1 Quality of Life Impact**

In 2019/20, Durham University received £1.6 million in income from the Medical Research Council, though this may underestimate the total health-related research income that it receives. The research associated with this income generates wider economic and social benefits.

The value of health gains was assessed by the Wellcome Trust research using the quality adjusted life years (QALY) method<sup>16</sup>. This is a widely used method developed by health economists to assess how many extra months or years of life of a reasonable quality a person might gain as a result of treatment. The Wellcome Trust research considered two areas of medical research expenditure, for cardiovascular disease and mental health. The value of the health benefit was presented as a return on initial expenditure on the research (IRR). In order to apply these IRRs to the wide range of medical research undertaken at Durham University, the average of the two best estimates was used. In this way, it was assumed that every £1 invested in medical research would result in health gains with a value of £0.08 each year in the UK for perpetuity.

Following the approach used by the Wellcome Trust, the Net Present Value (NPV) of medical research was estimated by applying the Treasury approved 3.5% discount rate. In this way, it was estimated that the £1.6 million income for health and medical research received by Durham University would have a total impact of around £1.7 million over the next twenty years across the UK. The impact in each of the other study areas is assumed to be proportional to their respective populations.

### **5.8.2 Economic Impact**

The Wellcome Trust has considered the effect of medical research expenditure on economic output. It considered the impact this would have in stimulating investment in private sector research and development and social returns to private investment stimulated by publicly funded medical research. This found that a £1 investment by a

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<sup>16</sup> Wellcome Trust (2008), Medical Research: What's it worth? Estimating the economic benefits from medical research in the UK



public body in medical research and development stimulated an increase in private research and development investment of between £2.20 and £5.10.

As with the estimates for the Quality of Life IRR, the research finds that there is a range of estimates for the IRR for economic output impacts. The lowest estimate for IRR is 20% and the highest is 67%. The best estimate given is 30%. Therefore, it was assumed that every £1 invested in medical research results in £0.30 in economic output each year in the UK in perpetuity.

As with the previous calculation, the Net Present Value (NPV) of medical research on economic output was estimated, applying the Treasury discount rate of 3.5%. Over a 20-year period, it was estimated that medical research would result in £6.6 million across the UK.

### 5.8.3 Total Returns to Health Research

The total expected return to health research, including the economic impact and the improvement in quality of life is estimated to be less than £1 million in County Durham and the North East and £8 million in the UK.

**Table 5-7 Returns to Health Research Summary**

	County Durham	North East England	UK
Health Research Returns (GVA)	<1	<1	8

Source: BiGGAR Economics Analysis



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## 6. Core Impacts

This section outlines the economic impact generated through the University's core operations, including employing staff, buying in goods and services, and undertaking capital investments.

### 6.1 Direct Impact

The direct impact that is generated by Durham University is captured through its direct GVA and employment. Direct GVA is estimated as the sum of total income minus non-staff-related costs, which resulted in a total direct GVA of £281 million for Durham University in 2020/21.

Over the year, Durham University employed a staff body of 8,195, equivalent to 4,155 full-time equivalent (FTE) jobs. This represented around 5% of total employment in County Durham in 2020.

The staff body at Durham University has grown by about a third over the past five years, representing a period of expansion for the University particularly for departments experiencing significant growth, such as mathematical sciences, computer science, psychology, English, history and law. Expansion of the University's staff body was necessary to support the growth in students at the University and represents an increase in both people employed and spending in the local economy.

### 6.2 Supply Chain Spending Impact

Durham University's expenditure on goods and services creates an economic impact by increasing turnover and employment of companies in its supply chain. In 2020/21, Durham University spent £113 million on purchasing goods and services, £9 million of which was retained in companies located in County Durham and a total spend of £19 million in companies located within the North East. The year represented additional expenditure in the supply chain in relation to expenses related to the Covid-19 pandemic, including on ventilation, testing and PPE.

It was estimated that the University's expenditure on goods and services generated a total impact of £6 million GVA and supported 120 jobs in County Durham, £16 million GVA and 320 jobs in the North East and £71 million GVA and 1,400 jobs across the UK.



**Table 6-1 Supply Chain Spending Impact**

	County Durham	North East	UK
GVA (£m)	6	16	71
Employment	120	320	1,400

Source: BiGGAR Economics Analysis

## 6.3 Staff Spending Impact

In 2020/21, Durham University directly employed 8,195 staff (4,155 FTEs), each of whom generated an economic impact when they spent their salaries. The spending of the staff employed by the University supports the businesses they buy from, allowing these businesses to maintain their operations and support their own workforces.

During the year 2020/21, Durham University’s staff costs totalled £217 million. The distribution of this spend, and the associated economic impact, is primarily determined by where staff live. The majority of staff directly employed by the University (64%) reside in County Durham, with a further 24% living elsewhere in the North East and 11% living elsewhere in the UK. The remaining 1% live outside of the UK.

Based on analysis of household spending patterns in the UK<sup>17</sup>, it was possible to estimate where staff spend their salaries by study area, to which economic ratios and multipliers were applied. In this way, it was estimated that, through the spending of their salaries, staff employed by Durham University contributed £27 million GVA and supported 750 jobs in County Durham, £89 million GVA and 2,480 jobs in the North East and £168 million GVA and 4,830 jobs in the UK.

**Table 6-2 Staff Spending Impact**

	County Durham	North East	UK
GVA (£m)	27	89	168
Employment	750	2,480	4,830

Source: BiGGAR Economics Analysis

## 6.4 Capital Investment Impact

Durham University supports economic activity when it undertakes significant capital investment projects, such as the construction of new buildings or investment in new equipment. The University has recently purchased Boldon House at Pity Me where it intends to create a professional services hub for hybrid working staff in the north of the city. Additionally, Durham University has invested in a new mathematics school in

<sup>17</sup> ONS (2021). Family spending in the UK: April 2019 to March 2020



collaboration with schools in the region. The specialist institution is intended to open in 2025 and will provide sophisticated maths, physics and computer science classes to around 150 students. This investment represents the University’s contribution to the region as the school will cater to areas where pupils currently lack access to advanced education in such subjects.

Spending on capital projects often fluctuates from year to year, and so an average has been taken of the University’s capital spending over the past five years and projected spend over the next five years. On this basis, average annual capital expenditure was estimated at £98 million. Data provided by the University indicates that 65% of such spending is spent with UK companies, 22% of which are in the North East and 13% of which are in County Durham.

Capital spending is typically concentrated in the construction and manufacturing sectors. Across the university sector, 77% of capital expenditure is on construction and the remainder invested in equipment<sup>18</sup>.

Therefore, as a result of its capital expenditure, in 2020/21, Durham University generated £8 million GVA and supported 110 jobs in County Durham, £16 million GVA and 210 jobs in the North East, and £67 million GVA and 900 jobs across the UK.

**Table 6-3 Capital Investment Impact**

	County Durham	North East	UK
GVA (£m)	8	16	67
Employment	110	210	900

Source: BIGGAR Economics Analysis

## 6.5 Core Impacts Summary

During the year 2020/21, Durham University’s core, operational impacts generated a total of:

- £323 million GVA and supported 5,140 jobs in County Durham;
- £403 million GVA and 7,170 jobs in North-East England; and
- £587 million GVA and 11,290 jobs across the UK.

<sup>18</sup> Frontier Economics (2015). A Review of HEFCE Capital Expenditure





**Table 6-4 Core Impacts Summary**

	<b>County Durham</b>	<b>North East England</b>	<b>UK</b>
<b>GVA (£m)</b>			
Direct Impact	281	281	281
Supplier Spending	6	16	71
Staff Spending	27	89	168
Capital Spending	8	16	67
<b>Total</b>	<b>323</b>	<b>403</b>	<b>587</b>
<b>Employment (Jobs)</b>			
Direct Impact	4,150	4,150	4,150
Supplier Spending	120	320	1,400
Staff Spending	750	2,480	4,830
Capital Spending	110	210	900
<b>Total</b>	<b>5,140</b>	<b>7,170</b>	<b>11,290</b>

Source: BIGGAR Economics Analysis. Note: totals may not sum due to rounding.

# 7.

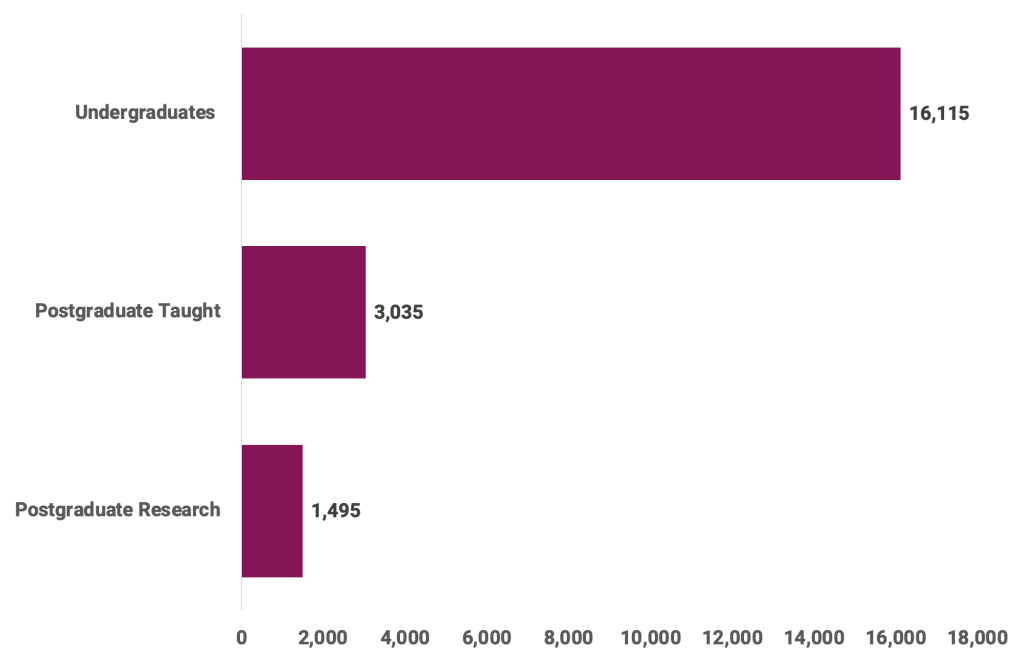
## Student Impacts

Students at Durham University make an economic contribution as a result of their spending in the economy, part-time work and volunteering.

### 7.1 Student Profile

In 2020/21 there were 20,640 students at Durham University. Of these, 16,115 (78.1%) were undergraduate students, 3,035 (14.7%) were postgraduate taught students, and 1,495 (7.2%) were postgraduate research students.

**Figure 7-1 Number of Students by Type, 2020/21**



Source: Durham University

Of all the undergraduate students at the University in 2020/21, 90% lived in County Durham, 91% in the North East and 96% in the UK. In terms of postgraduate students, 84% lived in County Durham, 91% in the North East and 96% lived in the UK.

#### 7.1.1 Widening Participation

In recent years, the University has increasingly focused on widening participation and levelling-up activities across Durham and the wider region. These activities are designed to encourage and support applicants to the University from a wider range of backgrounds who might typically be discouraged from doing so.



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For example:

- using a contextualised admissions approach which takes into account applicants' backgrounds, rather than simply grades achieved;
- in 2020, the University launched the £1 million Durham Inspired North East Scholarships scheme to support students from low-income backgrounds in the North East to encourage them to study at Durham University;
- through the Sutton Trust Summer School programme, Durham University further supports students from disadvantaged backgrounds to achieve the necessary grades required to study at the University;
- Levelling Up: Aspire Higher is a programme offering University tutoring and mentoring to Year 12 and 13 pupils studying A levels in chemistry, physics and maths. They receive support from tutors and academics, giving them an introduction to studying at Durham University;
- through its outreach programmes in culture, heritage and science the University is raising aspirations and broadening the horizons of local school pupils; and
- opening the Durham Mathematics School, in conjunction with the Durham Sixth Form Centre, which will provide talented pupils across the North East with the opportunity to take post-16 mathematics education which they may not have currently.

Since 2016, the proportion of students from the lowest participation neighbourhoods has almost doubled, from 4.2% to 7.6% in 2020. In the next lowest participation neighbourhoods this has increased from 9.5% to 13.8%<sup>19</sup>. In 2020/21, 860 of the total 20,645 students at Durham University were originally from the County Durham area.

The recent Access and Participation Plan produced by Durham University for the next five years commits to improving inclusivity further and is shaped by the typically low ethnic diversity of the North East.

### **7.1.2 Broadening Perspectives**

As part of a reform to its curriculum, the University has been working closely with a range of staff and students, including international students, to help alter the teaching at the University. The aim of this is for the Students' Union and the University to co-create a new curriculum that better reflects the diversity of students and staff. A series of recommendations arose from the process which seek to transform the module and course offerings available to students at the University, which can lead to impacts in terms of the types of careers students pursue and in their volunteering opportunities whilst studying.

Durham University has a number of strategic international educational partnerships, collaborating with other top-ranked universities in regions across the globe through the Matiriki Network of Universities and the Coimbra Group, with partner universities in the USA, Canada, China and Singapore. The University also has a strategic partnership with Tübingen University in Germany, and Durham City has been twinned

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<sup>19</sup> Office for Students (2022), Access and Participation Data Dashboard 2020-21



with Tübingen for over 50 years. Creating strategic partnerships with global universities is part of the University’s aim to diversify its relationships with other countries, enabling a more diverse and inclusive cultural experience for its students.

Durham University’s students come from a diverse range of socio-economic and cultural backgrounds and enhancing cultural awareness enables students to learn leadership skills and traits that can help them achieve senior roles in their future careers. Several of the University’s alumni have gone on to high level positions in large organisations across the globe.

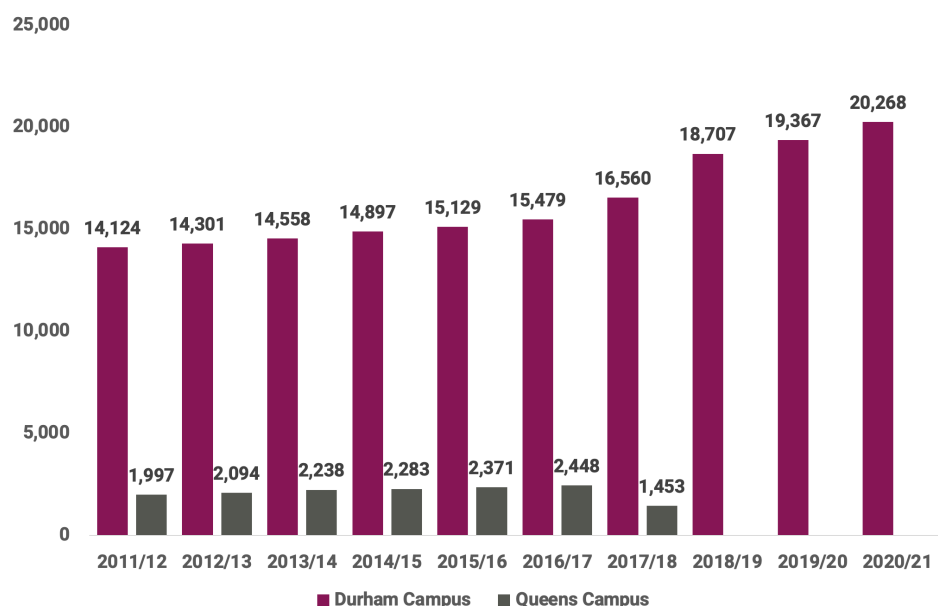
## 7.2 Student Number Trends

The number of students at Durham University has increased by 44% between 2011/12 and 2020/21, rising from 14,124 to 20,268. The Queens Campus has been repurposed as a home for Durham University International Study Centre, with students moving to the Durham campus, causing a rise of 13% from 2017/18 to 2018/19 in the students based in Durham.

In 2021/22, the University had over 22,500 students, which exceeds its target of hosting no more than 21,500 students by 2027. This was as a result of the increase in student numbers arising from students sitting A Levels during the Covid-19 pandemic and achieving higher than expected grades, with more young people to be able to qualify for university. The UK Government put temporary measures in place to address these circumstances.

This is a temporary increase in student numbers at the University and given that this study focuses on impacts generated during the 2020/21 academic year, does not alter the findings of this report.

**Figure 7-2 Students on Durham and Queen’s Campus, 2011/21 to 2020/21**



Source: Durham University, (2021). Institution Summary



# International Study Centre

## The former Queen's Campus at Durham University became the Durham University International Study Centre.

The Durham University International Study Centre is (DUISC) an affiliate partner of the University, supporting international students by offering pathway programmes to support qualifications which will guarantee a place at Durham University.

The Queen's Campus was established in 1992 at Stockton-on-Tees, with the original aim of supporting the development of skills in the area. There were around 1,800 students at the campus, mainly in vocational programmes such as pharmacy and psychology.

The campus was repurposed in 2017 to support international students, with 700 students currently studying preparation programmes in specialist academic and English language modules, allowing them to meet the entry requirements at the University before moving onto undergraduate or postgraduate study.

The Centre plays a pivotal role in strengthening Durham University's global diversity and attracts students from all around the world to the University and the North East. International students are welcomed to the DUISC with language and academic support as well as support in adjusting to life in the UK and settling into the student culture at Durham University.

The economic impact associated with the spending of students at the DUISC was estimated to support £5 million in GVA and 90 jobs in the North East.



## 7.3 Student-Related Economic Impacts

### 7.3.1 Student Spending

Students at Durham University made an economic contribution through their spending during term-time which supported turnover and employment in local businesses. The analysis has focused on full-time students as their spending patterns, labour market participation and volunteering differ from those of part-time students and are more likely to be additional.

The starting point in estimating the impact from student expenditure was to consider how much students spend each week. This was based on the Department for Education’s ‘Student income and expenditure survey 2014/15’<sup>20</sup>, with figures updated for inflation. Adjustments were made to account for the types of accommodation that students occupy (for example, those living at home will spend less than those renting) and to remove spending on University accommodation (which has already been included as income for the University).

However, it was necessary to account for the effects associated with Covid-19 restrictions during 2020/21. This is expected to have reduced student expenditure and therefore it was assumed that the impact of student spending would be 66% of a typical year.

Therefore, it was estimated that in 2020/21 full-time students of the University spent £157 million in the wider economy of County Durham in 2020/21. This spending covered housing costs, entertainment, travel and other living costs.

Applying appropriate economic ratios and multipliers it was estimated that this spending generated £68 million GVA and 1,160 jobs in County Durham, £88 million GVA and 1,480 jobs in the North East and £118 million GVA and 1,970 jobs across the UK.

**Table 7-1 Student Spending Impact**

	County Durham	North East	UK
GVA (£m)	68	88	118
Employment	1,160	1,480	1,970

Source: BiGGAR Economics Analysis

### 7.3.2 Student Working

Students created an economic impact through their part-time work, which allows businesses to deliver their services and benefit their individual supply chains as a result. Based on the labour force survey<sup>21</sup>, it was assumed that 33% of full-time

<sup>20</sup> Department for Education (2018), Student income and expenditure survey 2014 to 2015.

<sup>21</sup> ONS (2021) Labour Force Survey, Table A06: educational status economic activity & inactivity of young people – average of employment rate of those aged 18 – 24 in full time education, Aug 2020 – Sept 2021



students worked, for an average of 14 hours per week<sup>22</sup> in a range of economic sectors and this was converted to FTEs. Students were assumed to work where they live. Not all of these jobs will be additional as some may displace non-students, so an adjustment was made to account for the youth unemployment rate in each of the study areas.

The impact of student employment was converted into GVA and employment impacts by applying appropriate sectoral ratios and multipliers. It was assumed<sup>23</sup> that the majority of students in part time employment were employed in either the retail or hospitality sectors. Both of these sectors experienced significant restrictions on their ability to trade and as a result the economic contribution that the staff of these sectors were able to make diminished significantly during these restricted periods.

As with student spending, an adjustment was made to account for the effects of Covid-19, which had a significant impact on student employment. Therefore, it was assumed that 66% of the usual activity took place. Some students also worked for the University and these have been excluded from this calculation as their impacts have been counted elsewhere.

Based on the industries of employment, it was estimated that Durham University students working during term time generated £20 million GVA and 1,150 jobs in County Durham, £21 million GVA and 1,200 jobs in the North East and £38 million GVA and 1,560 jobs in the UK.

**Table 7-2 Student Working Impact**

	County Durham	North East	UK
GVA (£m)	20	21	28
Employment	1,150	1,200	1,560

Source: BiGGAR Economics Analysis

### 7.3.3 Student and Staff Volunteering

Students (and staff) at Durham University created an economic impact through their activity as volunteers. While this enabled them to acquire useful skills, it also allowed the organisations where they volunteer to deliver their services.

Students volunteer across a range of 200 charities and numerous initiatives, with recent examples including supporting the crisis in Ukraine. Students at the University fundraised in the local community, and across the University, to donate to the DEC Humanitarian Appeal and many students have volunteered an hour's worth of time

<sup>22</sup> National Union of Students (2010), Still in the Red: Student finance in 2010

<sup>23</sup> Department for Business Innovation and Skills (2013) BIS Research Paper Number 142: Working While Studying



each week, for 10 weeks, to teach English to refugees so that they can better adjust to life in the UK.

As part of National Volunteer Week this year, volunteers at Durham University visited a local food bank to help with donations and warehousing activities at a time when more and more people are relying on their services.

Staff at Durham University are also actively involved in volunteering, with a total of 271 staff members being registered volunteers. Staff volunteers run with challenges throughout the academic year, which has included a beach clean-up in Crimdon as part of Earth Day this year.

Evidence from the University suggests that in 2020/21 Durham University staff and students volunteered around 40,000 hours, though this may represent an underestimate. The University expects the number of hours volunteered to increase to 60,000 by 2025.

To estimate the contribution made through volunteering activity, the total hours volunteered were multiplied by £8.20, which represents the minimum wage for 21-22-year-olds from April 2020 to March 2021<sup>24</sup>.

In this way, it was estimated that volunteering by Durham University students in 2020/21 generated £0.3 million GVA.

**Table 7-3 Student Volunteering Impact**

	County Durham	North East	UK
GVA (£m)	0.3	0.3	0.3

Source: BiGGAR Economics Analysis

#### 7.3.4 Student Impacts Summary

Adjusting for Covid-19 effects, impacts arising from the University's students were estimated to generate:

- £89 million GVA and support 2,310 jobs in County Durham;
- £109 million GVA and 2,690 jobs in the North East; and
- £146 million GVA and 3,540 jobs across the UK

<sup>24</sup> UK Government (2022), National Minimum Wage and National Living Wage rates





**Table 7-4 Summary of Student Impacts**

	<b>County Durham</b>	<b>North East</b>	<b>UK</b>
<b>GVA (£m)</b>			
Student Spending	68	88	118
Student Part-Time Work	20	21	28
Student Volunteering	<1	<1	<1
<b>Total</b>	<b>89</b>	<b>109</b>	<b>146</b>
<b>Employment</b>			
Student Spending	1,160	1,480	1,970
Student Part-Time Work	1,150	1,200	1,560
<b>Total</b>	<b>2,310</b>	<b>2,690</b>	<b>3,540</b>

Source: BIGGAR Economics Analysis. Note: Totals may not sum due to rounding.



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## 8. Creativity, Culture and Heritage

Durham University makes a significant contribution to creativity, culture and heritage in County Durham.

### 8.1 An Anchor Institution

Durham University plays a pivotal role in supporting Durham's outstanding cultural offering.

The University is situated in a UNESCO World Heritage Site, which includes Durham Cathedral and Durham Castle. This designation can have substantial benefits for an area, including greater cultural impact, clearer strategic direction and increased visitor numbers<sup>25</sup>.

The University makes a significant contribution to the Site, including managing the World Heritage Site Visitor Centre and Durham Castle and is a principal partner along with Durham Cathedral. It is also one of the main owners of land and buildings in the Site, including University colleges. Since the 14<sup>th</sup> Century, the area has been a centre of education and innovation, supporting the community and embedding local traditions. In addition to the University's continuing contributions in these areas, it hosts a number of collections, attractions and festivals. All of these activities contribute to the UNESCO designation.

Four of the University's collections have been deemed to be nationally significant by Arts Council England:

- the Egyptian collection;
- the Chinese collection;
- Cosin's Library (which includes a Shakespeare first folio dating from the 1600s); and
- the Sudan archive (with artefacts from the period of British administration of Sudan).

These collections form part of a number cultural attractions that the University owns and manages, including:

- the Palace Green Library, which hosts the Cosin's Library and is free for visitors to enter;

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<sup>25</sup> United Kingdom National Commission for UNESCO (2020), Value of UNESCO Designations to the United Kingdom



- 
- the Oriental Museum, which is devoted to the art and archaeology of cultures from North Africa and across Asia, including modern China;
  - the Museum of Archaeology, which has strong links to the Department of Archaeology and showcases artifacts from pre-history and ancient history; and
  - the Botanic Gardens, which are open to the public and offer a wider variety of landscapes.

The University has plans in development to create a new Centre for Heritage Science, ensuring that heritage continues to be preserved and valued, as well as an art gallery, an expansion of the Oriental Museum and a performance and rehearsal space for the Music Department.

The University has also supported a number of successful festivals and exhibitions, such as the Lumiere Festival, in which the University is a major partner and sponsor. It is the largest outdoor light festival in the UK, attracting 140,000 visitors in November 2021, making a return after not being held due to Covid-19. For the first time, the Festival was expanded beyond Durham City to include other areas in County Durham.

Other festivals where the University has played a supporting role (i.e. strategic partner, providing venues, accommodation and sponsorship) include the Durham Book Festival, the Greenspace Festival, the Durham City Run Festival, the Durham Drama Festival, Durham Pride, the Durham Fringe Festival and the Summer in the City Festival. Each of these festivals contributes to creativity, culture and heritage in Durham.

Through the University's support of the World Heritage Site, its collections, its cultural attractions and festivals and its role as a regional stakeholder, it contributes to the cultural life of County Durham, raises the aspirations of pupils through outreach and attracts visitors to the area.

## 8.2 Contribution to County Durham

The University recognises that creativity, culture and heritage can be an agent driving positive change across the region and across the globe.

In 2022, Durham University was a key partner in County Durham's UK City of Culture 2025 bid. The University provided significant funding and staff time to prepare the bid, including seconding one of the Library Service's team to the bid development full-time.

The bid and the University's contribution focused on identifying areas of need and deprivation in County Durham, underpinned by analysis undertaken by Durham University Business School, and developing a culture-led path to regeneration. While the bid was unsuccessful, it generated increased visibility for the area and a number of elements of the bid are expected to be implemented.



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The UK City of Culture bid forms only one part of the contribution the University makes to County Durham. The University also plays a pivotal role in supporting Durham's culture and heritage and is an active participant in the local community. Staff employed by the University also operate on boards for cultural organisation and specialist interest groups, both regionally and nationally.

This includes serving on the Regeneration Partnership Board for Bishop Auckland, with the University providing support to the regeneration of Auckland Castle, including undertaking archaeological works on the castle for the first time (known as the Big Dig). The University will also support further education opportunities related to the restoration with a new facility, in addition to its £1.6 million International Centre for Research into Spanish and Latin American Art, which is located in Bishop Auckland and opened in 2016.

During the Covid-19 pandemic, Durham University collaborated with the local community in Blackhall to revitalise one of the area's streets. The ex-mining community has large pockets of deprivation, and the University shared its expertise in culture and creativity to create a gallery of art. Community curators were appointed and 3D images were scanned and printed to put in windows along the street. Involving the community in the University's engagement work contributed both to revitalising a deprived area and strengthened the relationship between the University and the community. The University has also supported the open air Beamish Museum, improving the understanding of heritage associated with the area.

The expertise of the University is not limited to the region. It has been involved in high profile international heritage and archaeology, such as the excavation of the Forbidden City. The University has the distinction of being the first non-Chinese University to have been invited to work at the site.

## 8.3 Outreach

A key focus of the University is its outreach programmes, ensuring that its culture, heritage and science contribution reaches as many people as possible, particularly children and young people.

### 8.3.1 Culture and Heritage

Many of the University's attractions are freely available for the public to access and it often hosts engagement activities with special interest groups, including local faith groups. During the Covid-19 pandemic, the University pivoted its visitor experience to 'visit from home' and provided online collections that people could engage with, a service which has remained as the attractions have re-opened. As part of this service, Durham University's Library and Collections Team received the award for best education story at the Shorthand digital platform awards.

The University also works specifically with school groups. In 2021/22 the University engaged with around 9,800 pupils across more than 250 schools. However, due to



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the Covid-19 pandemic, this was significantly lower than in 2018-19 when the University engaged with almost 26,200 pupils across almost 700 schools.

Pupils can visit exhibitions and explore collections at the University's cultural attractions, gaining historical and cultural insights that they would otherwise be unlikely to come across. The workshops are intended to promote independent learning and primary source analysis in the context of a university-style learning experience. An evaluation of one of the University's programmes suggests that these workshops make pupils much more likely to consider University as an option.

The University also emphasises the importance of maintaining heritage, as well as potential careers in the field. Some pupils aged over 16 undertake work experience within the University's heritage attractions through its 4Schools programme, where pupils learn basic curatorial, archivist and conservation skills while gaining an insight into the kinds of careers available with the heritage sector and more exposure to universities. This can take the form of either a five-day on-site work experience or a three-day online work experience.

### **8.3.2 Science**

In addition to its culture and heritage outreach, the University also supports science outreach and engagement. This is intended to stimulate engagement and interest in science among young people, their teachers and the wider community.

One of the main activities of the University's outreach is its Celebrate Science Festival. This is an annual three-day science festival, held during the October holidays, which is aimed at children aged 7-11 years old and highlights the breadth of opportunities offered by science in an engaging community event. Since its inception in 2010, over 60,000 people have come to the event, and in 2019 it attracted over 6,000 people with more than 200 staff and students taking part.

In response to the Covid-19 pandemic, the University created Celebrate Science at Home where children can do experiments at home. In 2021, over 2,000 packs were sent to key stage 2 pupils in 26 primary schools across the North East. The Celebrate Science Festival has returned in 2022.

The University has developed the Durham University Schools' Science Festival, which is aimed at 13-15 year olds across the North East and has been running for over 25 years. Pupils take part in hands-on workshops with staff and students, deepening their interest in science. In the most recent festival in 2019, almost 800 pupils from 26 secondary schools took part, and over the five most recent festivals over 4,000 pupils have taken part. The festival is expected to return in 2023.

Another programme developed by the University is the Science into Schools programme which builds on the School of Education's presence in schools throughout the North East. Third-year undergraduates are placed in primary and secondary schools to work on a special project with school pupils for 40 hours over ten weeks. This builds enthusiasm and knowledge of science and over 500 University students have worked with schools since the project's inception in 2006.



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Building on the School of Education's expertise and local network, the University also provides CPD and resources to teachers. This includes CPD focused on better teaching of physics, attracting around 85 primary school teachers and around 60 secondary school teachers a year, as well as teaching packs and materials on space and other physics-related topics.

The University's Science Ambassadors programme involves training pupils in science and giving them ongoing support, increasing their understanding of science and the opportunities associated with STEM and providing opportunities to meet academics and like-minded peers. Importantly, it also supports pupils to communicate their interest and enthusiasm to others, creating wider, knock-on effects. Since 2011, over 2,500 pupils from 145 schools have become Science Ambassadors.

The University has also delivered a range of other programmes and events, such as the Schools Physicist of the Year award, training doctoral students to deliver outreach activities, and providing online talks and workshops, such as STEMfest in Space, which 14,500 pupils and teachers took part in.

### **8.3.3 Education**

In addition to its outreach work, the University has also pushed to embed creativity within the curriculum. In 2019, the Durham Commission, a collaboration between Durham University and Arts Council England, released a report which recommended embedding teaching for creativity in education for all young people<sup>26</sup>.

The report made a number of recommendations, including the development of a national pilot collaboration, recognition of creativity teaching in schools, more focus on digital technology's role in creative education and inclusion of arts teaching at key stage 3. A subsequent report, released after the Covid-19 pandemic, highlighted the potential barriers to creativity as a result of lack of access to digital skills<sup>27</sup>.

In addition, in 2019 Durham University partnered with Classics for All to develop resources and outreach for state schools in the North East to introduce classical subjects, such as Ancient Greek, to the curriculum. This is intended to raise the aspirations of pupils and broaden their cultural horizons.

### **8.3.4 Sport and Recreation**

The University also provides access to its Maiden Castle Sports and Wellbeing Park, which has a number of high quality pitches, tracks, a gym and other indoor facilities. Schools and the wider public benefit from opportunities in sports and recreation.

Around 50 primary schools have benefited from having access to the facilities as a direct result of the University's involvement in local community partnerships such as County Durham Sport and County Durham's School Sports Partnership. It also hosts sports days for a number of education providers in the area, including Durham High

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<sup>26</sup> Durham Commission on Creativity and Education (2019), First Report

<sup>27</sup> Durham Commission on Creativity and Education (2021), Second Report



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School and The Independent Grammar School Durham. This has led to over 1,000 school children using the University's sports facilities each year.

The University has a long-standing reputation for supporting Durham Institute of Sport, which helps young athletes to develop their sporting potential through access to sporting professionals and mentoring schemes. This improves access to sports, particularly for young people in the City and would be unlikely to exist without the University.

Durham University has a partnership with Hartlepool United, with the club using the Sports and Wellbeing Park at the University to train during the week. This partnership offers opportunities for student placements and develops close collaborations with the sector. The Sport and Wellbeing Park is also home to Durham Women FC who will now be training at the centre full-time. The University has recently hosted Team Zambia's athletes prior to the Commonwealth Games this year, providing free access to all the University's sports facilities and transport to events.

## 8.4 Economic Contribution to Tourism

Durham University supports the local tourism economy by attracting visitors and their associated expenditure to County Durham. These visitors spend money in the area during their visit and this spending increases turnover in local tourism, retail and hospitality businesses, which in turn supports local employment.

These impacts are generated by:

- friends and relatives who visit students and staff;
- visitors to public conferences and events held at the University; and
- visits to local attractions during University visits.

This section would also typically include tourism impacts arising from visits to open days hosted by the University to attract students for the following academic year. However, given that open days were held virtually during 2020/21, this source of impact has been excluded from the analysis. As a result of this, and an overall decrease in visitor numbers arising from the restrictions imposed by the Covid-19 pandemic, the economic impacts arising from tourism activity associated with the University are not reflective of a typical year and are thus likely an under-representation of the true level of impact the University supports.

When assessing the economic impact supported by visitors, it is important to consider how much of this tourist activity is additional to each study area, i.e. how many of these visits would have been made to the area anyway, in the absence of the University. The additionality of the tourism activity is greater at the County Durham level than any of the larger study areas because it was assumed that the visitors would have made trips to other attractions in the North East or in the rest of the UK had they not visited County Durham.



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It was also necessary to categorise visitors by either 'day visitors' or 'overnight visitors' as the spending habits of each tend to differ, with overnight visitors spending more as a result of accommodation spend, for example.

#### **8.4.1 Visits to Friends and Relatives**

Visits to friends and relatives (VFR) generate economic activity in the area from people who would not ordinarily have visited the area. Their purpose for coming to the area is therefore connected to the presence of the University in County Durham. These additional visitors come from all across the UK as well as from overseas.

The study year of 2020/21 represented an atypical year in terms of VFR as a result of travel and visiting restrictions placed on society as a result of the Covid-19 pandemic. As such, adjustments were made to 2019 visitor figures to each of the study areas to account for a decrease in tourist activity. Using estimates provided by VisitBritain<sup>28</sup>, the number of visitors in 2020/21 was estimated to be 61% of total domestic visitors in 2019 and 18% of total overseas visitors.

By applying these assumptions to the total number of students and staff living in each of the study areas, it was estimated that VFR generated a total spend of £0.8 million in County Durham, £1.0 million in the North East and a further £0.9 million across the UK.

Applying this spend to the economic ratios and multipliers for sectors associated with the tourism economy, it was estimated that visits to friends and relatives at Durham University generated £0.5 million GVA and supported 20 jobs in County Durham during 2020/21. In the North East this totalled £0.7 million GVA and 20 jobs and across the UK, a further £0.2 million GVA and 10 jobs.

#### **8.4.2 Public Events**

Despite the challenges imposed by the restrictions associated with the Covid-19 pandemic, Durham University attracted a total of 372,120 visitors to public events hosted by the University in 2020/21. These included:

- public lectures;
- performance arts (music, dance, drama);
- exhibitions (galleries and museums);
- other public events (such as school education and widening participation events, media appearances and community engagement activities).

Assumptions were made on the additionality of visitors to these events to each of the study areas. It was assumed that all visitors had a similar spend profile as UK day visitors and were mostly additional to the County Durham area<sup>29</sup>.

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<sup>28</sup> Kantar TNS (2020), The GB Day Visitor 2019

<sup>29</sup> This is consistent with the previous study of the University's impact. Assuming that all visitors are day visitors is a conservative assumption, as overnight visitors spend more.





In this way, it was estimated that attendees to public events hosted by Durham University in 2020/21 contributed an additional £5 million GVA to the County Durham economy and supported 220 jobs in the area.

### 8.4.3 Cultural Attractions

Visits to the University’s cultural attractions, such as the Palace Green Library and the Botanic Gardens, can in part be attributed to the presence of Durham University. Visitor numbers were forecasted based on visitor data from 2011-2015, collected by the University. A Covid adjustment (61%) was then applied to this forecast to account for the decline in tourism over the period 2020/21.

The latest data indicates that during 2020/21, 94% of visitors to County Durham were day visitors, with the remaining 6% being overnight visitors. These assumptions were then used to estimate the total spending of visitors to the attractions during 2020/21. To avoid double counting, it was also assumed that 10% of visitors were accounted for in VFR or as visitors to public events. Additionally, as visitors are often likely to visit more than one attraction during their visit, it was also necessary to make assumptions about the proportion of visitors that visited multiple sites to avoid double counting.

In this way, it was estimated that Durham University supported £0.5 million GVA and 20 jobs in County Durham from visits to its attractions.

### 8.4.4 Summary of Tourism, Culture and Heritage Economic Impacts

In 2020/21, by attracting visitors to County Durham, the University contributed £6 million GVA and 250 jobs to the local economy.

**Table 8-1 Tourism, Cultural and Heritage Impact Summary**

	County Durham	North East England	UK
<b>GVA (£m)</b>			
VFR	1	1	<1
Public Events	5	4	4
Cultural Attractions	<1	<1	1
<b>Total</b>	<b>6</b>	<b>5</b>	<b>5</b>
<b>Employment (Jobs)</b>			
VFR	20	20	10
Public Events	210	200	150
Cultural Attractions	20	20	30
<b>Total</b>	<b>250</b>	<b>240</b>	<b>190</b>

Source: BIGGAR Economics Analysis. Note: totals may not sum due to rounding.



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## 8.5 Summary of Creativity, Culture and Heritage

The University makes a significant contribution to the World Heritage Site, of which it is a principal partner with Durham Cathedral. It also operates a number of cultural attractions within the Site, some of which host nationally significant collections of artefacts and documents, and attracts and supports a range of festivals such as the Lumiere Festival.

It works to increase the impact of culture throughout County Durham, through culture-led regeneration in disadvantaged areas, such as the Big Dig and its International Centre for Research into Spanish and Latin American Art based in Bishop Auckland.

Key to the University's cultural and scientific mission is its outreach to schools and communities. As a result, it enriches the lives of people in the community and raises the aspirations of young people throughout the North East.

# 9. Durham University as a Driver of Growth

Durham University has been a key driver of growth for County Durham, the North East and the UK.

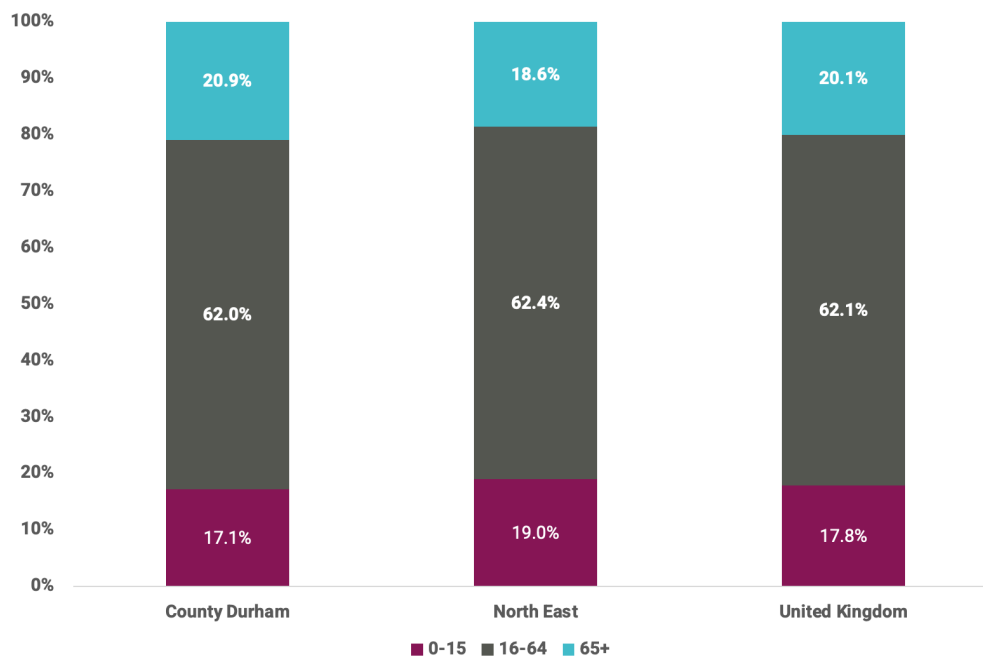
## 9.1 Socio-Economic Context

This section presents key socio-economic indicators for County Durham compared to the UK and gives important context for Durham University's role and impact at the County level.

### 9.1.1 Population Estimates

County Durham has a population of over 533,000, 20% of the total population of the North East. The population structure of County Durham is similar to the UK as a whole.

Figure 9-1 Population Estimates, 2020



Source: ONS, (2021). Population Estimates-local authority based on a single year of age.

### 9.1.2 Population Projections

The population of County Durham is projected to increase by almost 34,500 from 2018 to 2043, an increase of 6.6%, compared to a projected 3.9% increase in the North East as a whole.



However, the population structure is projected to change substantially, with increases in the older population meaning that the numbers of people over 65 are projected to increase by more than one-third in both County Durham and the North East.

The working age population of County Durham is projected to fall as a share of the population, but is expected to remain static in absolute terms. This contrasts with the North East as a whole, which is projected to lose 3% of its working age population.

**Figure 9-2 Population Projections, 2018-2043**

	County Durham		North East	
	2018	2043	2018	2043
<b>Total</b>	<b>527,000</b>	<b>561,500</b>	<b>2,657,900</b>	<b>2,767,100</b>
0-15	17.2%	15.9%	17.9%	16.2%
16-64	62.2%	58.1%	62.5%	58.4%
65+	20.6%	26.0%	19.7%	25.4%

Source: ONS, (2020). Population projections-local authority based on a single year of age

### 9.1.3 Economic Activity

County Durham and the North East have lower economic activity rates than the UK. The unemployment rate in County Durham is lower than in the North East and the UK, which suggests that the economic activity rate might reflect the student population.

Median earnings in County Durham are higher than the North East as a whole but lower than that for the UK.

**Figure 9-3 Economic Activity, 2021**

	County Durham	North East	UK
Economic Activity Rate (Aged 16-64)	74.2%	74.7%	78.2%
Unemployment Rate (Aged 16-64)	4.1%	6.1%	4.5%
Median Annual Earnings (Residents)	£28,300	£27,600	£31,300

Source: ONS, (2022). Annual Population Survey 2021. ONS, (2022). Annual Survey of Hours and Earnings 2021.

### 9.1.4 Industrial Structure

The Business Register and Employment Survey reports that there were 177,000 people employed in County Durham in 2020, 16.5% of North East employment.

The employment structure in County Durham is broadly in line with that of the North East and the UK. The main difference is employment in the manufacturing sector,



which was higher in County Durham (13.0%), compared to the North East (9.8%) and the UK (7.7%). Employment in education in County Durham (11.9%) is also higher than the regional (9.5%) and national average (8.6%).

**Figure 9-4 Industrial Structure, 2020**

	<b>County Durham</b>	<b>North East</b>	<b>United Kingdom</b>
Agriculture, forestry and fishing	2.5%	1.2%	1.6%
Mining and quarrying	0.3%	0.2%	0.2%
Manufacturing	13.0%	9.8%	7.7%
Electricity and gas	0.4%	0.7%	0.4%
Water supply and waste	1.1%	0.7%	0.7%
Construction	5.1%	4.3%	4.9%
Wholesale and retail trade	14.1%	13.6%	14.7%
Transportation and storage	5.1%	4.8%	5.0%
Accommodation and food service	8.5%	8.7%	7.1%
Information and communication	1.0%	3.0%	4.3%
Financial and insurance activities	1.1%	2.2%	3.4%
Real estate activities	1.4%	1.7%	1.9%
Professional, scientific, technical	3.4%	5.0%	8.8%
Administrative and support services	5.6%	7.9%	8.6%
Public administration and defence	7.9%	6.4%	4.4%
Education	11.9%	9.5%	8.6%
Human health and social work	14.1%	16.7%	13.2%
Arts, entertainment and recreation	2.0%	2.0%	2.3%
Other service activities	2.0%	1.9%	2.0%
<b>Total</b>	<b>177,000</b>	<b>1,074,000</b>	<b>30,547,000</b>

Source: ONS, (2021). Business Register and Employment Survey 2020.

### 9.1.5 Socio-Economic Context Summary

Overall, socio-economic indicators suggest that the Country Durham economy is outperforming that of the North East as a whole, with lower unemployment and higher wages.

The population of County Durham is projected to increase at a higher rate than for the North East as a whole over the next two decades. The working age population is projected to be static whilst it falls in the region as a whole. This emphasises the role of Durham University in maintaining the working age population in the County.



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## 9.2 Durham University as a Driver of Growth

### 9.2.1 A Driver of Growth

Durham University is a key driver of growth in Durham City and County Durham, and also plays a role in supporting the tourism and heritage sector and driving innovation activity.

Durham University is one of the largest employers in County Durham and the North East, with 4,155 FTE employees in 2020/21, many of whom have high skilled jobs. The average salary per FTE is around £40,600, significantly higher than the median earnings for a full-time worker across County Durham (£28,300) and the North East (£27,600).

An estimated 1,420 staff (34% of the total) live in Durham City with a further 1,200 (29%) living elsewhere in County Durham, including in Langley Park, Lanchester, Sherburn, Bowburn and Spennymoor. A further 620 staff (15%) live elsewhere in the North East and 835 live elsewhere in the UK (20%), including in the Yorkshire and Humber region. As a result, the benefits associated with staff spending are spread across County Durham.

The University also had over 20,000 students in 2020/21, with 87% of these living in Durham City. A further 2% lived elsewhere in County Durham and 3% elsewhere in the North East. Both staff and students support jobs in the local area through their spending, including in the high street, which has struggled in many towns and cities in the UK. They also support the creative arts as well as local restaurants and cafés, making the area a more vibrant place to live.

The University plays a key role in the tourism economy of Durham City, another driver of the economy. For example, it is a principal partner in the World Heritage Site with Durham Cathedral, owns and maintains several buildings in the Site and operates the World Heritage Site Visitor Centre and Durham Castle as well as number of other visitor attractions. The University also attracts visitors through its open days, graduations and other events, and students make a significant contribution to the tourism workforce.

The University's knowledge exchange and commercialisation activities support growth throughout County Durham related to its knowledge transfer activities, spin-outs, inward investment (e.g. Atom Bank) and role in NETPark. As a result, there are more high quality employment opportunities in the area, which drives productivity and population growth.

While the University is a driver of economic growth in County Durham, many towns in the North East of England have struggled to develop drivers of economic growth and as a result have seen low rates of economic and population growth. A 2019 study<sup>30</sup> published by the University of Cambridge's Bennett Institute for Public Policy notes

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<sup>30</sup> Bennet Institute for Public Policy Cambridge (2019), Townscapes: 1. The North East



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that towns (with a population of 10,000-175,000) across the North East are doing relatively less well than elsewhere in Britain, with a legacy of declining industries, negative population growth and poor business growth. It also found that the regional economy is fragmented, with the largest urban cluster (Newcastle, Middlesbrough and Sunderland) failing to support towns across the region.

Partly as a result of the University's presence and the opportunities it creates, the population of County Durham is expected to grow more quickly than the North East over the coming decades, and it will maintain the size of its working age population, while that of the North East will decline.

### **9.2.2 University Size and Shape**

As the University has increased its operations and student numbers it has planned accordingly.

As stated in its 2017-2027 Strategy, the University intended for its student population to increase to 21,500 by 2027. However, due to changes in the system for grading students in England as a result of Covid-19 and an increased proportion of students receiving high marks, the University reached this target in 2021/22. No further overall expansion is planned.

In its 2017 Estates Masterplan, the University set out plans for 4-6 new colleges by 2027. To achieve this, the University recently completed its £80 million, 1,000-capacity Mount Oswald development, which hosts its new South College and relocated John Snow College. Investment is taking place at the University's Leazes Road site, currently home to its Hild Bede College, and plans have been submitted for an 850-bed privately built development near Mount Oswald.

### **9.2.3 Durham University as a Driver of Growth Conclusion**

The University is a major driver of growth in County Durham. While it is difficult to establish a counterfactual of what would happen if the University was not located in County Durham, it seems reasonable to conclude that Durham City and County Durham would have experienced the lack of economic drivers that has been seen elsewhere in the region.

## **9.3 Durham University in the Community**

As well as contributing to the economy of County Durham through its staff and students and their wider spending, the University also contributes to the economic and community infrastructure of the area. For example, it has a strategic partnership with Durham County Council, and has a Memorandum of Understanding in place, which was initially signed in 2017 and updated in April 2022<sup>31</sup>.

The Memorandum of Understanding has several key objectives.

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<sup>31</sup> Durham University/Durham County Council (2022), Memorandum of Understanding for the Strategic Partnership between Durham University and Durham County Council



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### **9.3.1 Objective 1: Economic Development**

The first objective is aimed at fostering and encouraging economic development in County Durham through the development of the wider innovation landscape.

The University will continue to support NETPark, which it was instrumental in the development of, as well catalysing the development of the Aykley Heads, which will provide office space with capacity for 300 jobs in its first phase, with the potential to support up to 4,000 jobs. The County Council hopes that the site will enable the City to retain talented young people educated at the University.

The two organisations will also work together to catalyse and support start-ups and entrepreneurship, building on the Durham City Incubator and the University Enterprise Zone. The University will also continue to develop relationships with local businesses and support inward investment through existing strategic partnerships.

### **9.3.2 Objective 2: Research**

The University aims to leverage its research expertise to improve the quality of life in County Durham.

This includes a wide range of research themes, including energy, poverty, health and education. For example, a recent report<sup>32</sup> part-authored by Durham University academics has documented poverty in the North East of England and highlighted the negative effects that it can have over the lifetime of young people, including £13.2 billion in lost wages. It also suggests a number of recommendations to tackle inequalities, including increased government investment in welfare, health and social care systems, increased child benefit and universal school meals.

In addition, the Durham University Evidence Centre for Education promotes and delivers high quality education research with a focus on translating into practice. Research has included how to attract and retain teachers, the effect of the pupil premium, and the effect of Covid-19 on teachers' workloads. Education students from Durham University also undertake placements in the community.

### **9.3.3 Objective 3: Culture and Heritage**

The University and the County Council will work together to be a focal point for culture and heritage in the North East.

The University has made significant contributions to culture and heritage in Durham City, particularly through its management of the World Heritage Site Visitor Centre. The MoU commits the University and County Council to continue to develop the region's offering, to develop and support festivals and cultural events, and to promote sport, wellbeing and physical activity.

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<sup>32</sup> NE Research Partnership/Northern Health Science Alliance (2021), The Child of the North: Building a fairer future after Covid-19





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#### **9.3.4 Objective 4: Place**

The University is committed to building and supporting sustainable communities in Durham City and developing a sense of place.

This includes a range of activities, such as providing access to the University's Maiden Castle Sports and Wellbeing Park. The University's wider estates programme also delivers high quality, green spaces that can be enjoyed by residents as well as its students. For example, the University manages 46 hectares of woodland including the Great High Wood, a haven for wildlife and a semi-ancient woodland. It is well known and enjoyed for its well-preserved and rare English bluebells. The University also manages the World Heritage Site Visitor Centre and surrounding woodland.

The University's staff and students are encouraged to volunteer in the local community, contributing their time, energy and skills. The University works with over 200 charities and has been recognised with the Queen's Award. Activities include:

- education: tutoring, taking part in clubs and mentoring, particularly children from disadvantaged backgrounds;
- social inclusion: working with organisations that deliver support to disadvantaged groups, such as those with mental disabilities, the elderly and a wide range of other groups;
- the environment: gardening projects and supporting local families in need with food donations; and
- culture: supporting youth groups for refugees, as well as teaching primary and secondary students about different cultures and hosting a language café.

The University has also offered support to Ukrainian refugees and others affected by the war in Ukraine. In addition to vigils and support to Ukrainian students, the University has offered six fellowships through the Council for At-Risk Academics, twinned with Zaporizhzhia National University and has registered as a sponsor of the Government's 'Homes for Ukraine' scheme. The University has also joined the Durham County Council's Humanitarian Steering Group and is providing linguistics support in Ukrainian, Russian and Polish.

#### **9.3.5 Objective 5: Education and Skills**

The University will work to meet the educational needs of existing and prospective employers.

In addition to producing high quality graduates across a range of subjects, the University delivers continuing professional development to local employers. These are tailored courses designed to meet the needs of employers. The University also supports the delivery of education in County Durham and the North East through its education graduates.

As discussed throughout the report, the University has been supporting widening access efforts within County Durham and further afield, increasing the share of pupils from disadvantaged and low participation backgrounds. Through its efforts it



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also raises the aspirations of local children who may go on to study at Durham University or at other leading institutions.

#### **9.3.6 Objective 6: Strategic Communications**

Through strategic communications both organisations will promote the regional, national and international profile of County Durham. For example, by promoting Durham as the home of a world-leading research University.

## **9.4 National Policy**

As a leading research university, Durham University contributes to policy development in many areas. This can occur via a number of mechanisms including as a result of research outputs contributing to the evidence base on which policy decisions are made, the work of graduates who establish careers in policy development and the role of staff on local, national and international advisory groups.

This contribution to policy development can generate a range of positive effects, including delivering economic, social and cultural benefits.

The role of Durham University in influencing policy decisions during the Covid-19 pandemic (see below) provides an example of influence that resulted in significant impacts in the UK economy.



# Test To Release: HGV Drivers

## Getting goods moving again during the Covid pandemic.



In October 2020, Durham University was asked to undertake an evaluation of using lateral flow testing at scale. The recommendations emerging from this work meant that lateral flow tests, which had previously been administered by healthcare professionals in a medical setting, could be done at home by individuals and so the aspiration of 'testing the nation' could become a reality.

In the spring of 2021, Durham University launched a new Test to Release scheme for its students, facilitated by the derogation that was in place for the evaluation activity. This meant that if a student tested positive, rather than a household of 20 requiring to isolate, to relocate the infected student and for the other students in the household to be released, subject to daily lateral flow tests. Monitoring of this scheme found that the prevalence of Covid was lower than for the population as a whole, indicating that such an approach could be adopted with no added risk.

The UK Health and Security Agency's Chief Medical Advisor has confirmed that this evidence led to the rollout of Test to Release to Heavy Goods Vehicle drivers in July 2021. Previously, substantial numbers of HGV drivers had to repeatedly isolate due to brief interactions with people who were Covid-19 positive, resulting in supply chain disruption and reduced productivity. The new scheme allowed drivers to continue working, and so ensure that trade could continue and supply chains could recover.

The evaluation of the national impact of testing more broadly is still in progress and the economic benefit is difficult to calculate with accuracy. This policy change was implemented at a time of uncertainty in freight transport, including issues with global supply chains and the end of the post-Brexit transition arrangements. The scale of the economic benefit would be measured in billions, since Test to Release made a significant difference to the road freight transport sector over a two-to-three-month period in the late summer and early autumn of 2021. At this time, there was concern that retailers would not be able to remain stocked and manufacturing would be undermined by supply chains that could not operate effectively and efficiently.

The Durham University evidence had a significant beneficial impact on a sector that each year exports and imports more than five million tonnes of goods and carries some 1.3 billion tonnes of goods domestically<sup>33</sup>. The road freight sector makes an estimated contribution to the UK economy of around £10 billion each month<sup>34</sup>.

<sup>33</sup> Office for National Statistics, International Road Freight Statistics and Domestic Road Freight Statistics

<sup>34</sup> The Road Haulage Association estimates that the industry is worth £124 billion each year to the UK.



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# 10.

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## Conclusions

Durham University makes a substantial contribution to local, regional and national economies, and delivers social impacts to the people of County Durham.

### 10.1 Quantitative impacts

#### 10.1.1 Economic Impact In 2020/21

Taking account of all the quantifiable impacts considered in this report, it is estimated that during the academic year 2020/21, Durham University generated:

- £1.9 billion GVA and 17,320 jobs in the UK;
- including £668 million GVA and 10,790 jobs in the North East;
- of which, £489 million GVA and 8,170 jobs were in County Durham.

A breakdown of GVA and employment by source of impact and study area is provided in the tables below.



**Table 10-1 Economic Impacts Generated by Durham University 2020/21**

	County Durham	North East	UK
Graduate Productivity	32	68	584
Exchequer Impact from Graduates	20	44	374
<b>Learning Impacts</b>	<b>52</b>	<b>112</b>	<b>959</b>
Services to Business	7	20	119
Licensing	<1	<1	1
Knowledge Transfer Partnerships	1	3	4
Spin-outs and Start-ups	9	12	54
Student Placements	2	3	5
<b>Supporting Innovation</b>	<b>19</b>	<b>38</b>	<b>183</b>
<b>Health Impacts</b>	<b>&lt;1</b>	<b>&lt;1</b>	<b>8</b>
Direct Impact	281	281	281
Staff Spending Impact	27	89	168
Supply Chain Spending Impact	6	16	71
Capital Investment Impact	8	16	67
<b>Core Impacts</b>	<b>323</b>	<b>403</b>	<b>587</b>
Student Spending Impact	68	88	118
Student Employment Impact	20	21	28
Student Volunteering Impact	<1	<1	<1
<b>Student Impacts</b>	<b>89</b>	<b>109</b>	<b>146</b>
Visiting Friends and Relatives	1	1	<1
Public Events	5	4	4
Cultural Attractions	<1	<1	1
<b>Culture and Heritage</b>	<b>6</b>	<b>5</b>	<b>5</b>
<b>Total</b>	<b>489</b>	<b>668</b>	<b>1,888</b>

Source: BIGGAR Economics Analysis. Note, totals may not sum due to rounding.



**Table 10-2 Employment Impacts Generated by Durham University 2020/21**

	<b>County Durham</b>	<b>North East</b>	<b>UK</b>
Services to Business	20	50	300
Licensing	10	10	10
Knowledge Transfer Partnerships	20	60	80
Spin-outs and Start-ups	380	500	1,810
Student Placements	50	70	110
<b>Supporting Innovation</b>	<b>460</b>	<b>690</b>	<b>2,320</b>
Direct Impact	4,150	4,150	4,150
Staff Spending Impact	750	2,480	4,830
Supply Chain Spending Impact	120	320	1,400
Capital Investment Impact	110	210	900
<b>Core Impacts</b>	<b>5,140</b>	<b>7,170</b>	<b>11,290</b>
Student Spending Impact	1,160	1,480	1,970
Student Employment Impact	1,150	1,200	1,560
<b>Student Impacts</b>	<b>2,310</b>	<b>2,670</b>	<b>3,540</b>
Visiting Friends and Relatives	20	20	10
Public Events	210	200	150
Cultural Attractions	20	20	30
<b>Culture and Heritage</b>	<b>250</b>	<b>240</b>	<b>190</b>
<b>Total</b>	<b>8,170</b>	<b>10,790</b>	<b>17,320</b>

Source: BiGGAR Economics Analysis. Note, totals may not sum due to rounding.

### 10.1.2 Impact of Covid-19

The year 2020/21 was unusual due to the impact of Covid-19, and without this the impact would have been higher, particularly the impacts related to student spending and part time working.

In the absence of Covid-19 it was estimated that the impact of Durham University in 2020/21 could have been:

- £535 million GVA and 9,360 jobs County Durham (9% and 15% higher respectively);
- £724 million GVA and 12,170 jobs in the North East (8% and 13% higher); and
- £2.0 billion GVA and 19,150 jobs in the UK (4% and 11% higher).



**Table 10-3 Covid-19 Economic Impact Comparison, 2020/21**

	County Durham	North East	UK
<b>GVA</b>			
Impact with Covid-19	489	668	1,888
Impact without Covid-19	535	724	1,963
<b>Difference</b>	<b>46</b>	<b>56</b>	<b>75</b>
<b>Employment</b>			
Impact with Covid-19	8,170	10,790	17,320
Impact without Covid-19	9,360	12,170	19,150
<b>Difference</b>	<b>1,190</b>	<b>1,380</b>	<b>1,820</b>

Source: BIGGAR Economics Analysis

### 10.1.3 Impact Multipliers

In 2020/21, Durham University had an income of £393 million, generated £281 million in direct GVA and directly employed 4,155 people. Therefore:

- for each £1 of GVA the University generated as a result of its direct operations, it supported £6.70 GVA in total benefits across the UK economy;
- for each person it directly employed, the University supported 4.2 jobs across the UK; and
- for each £1 of income received, Durham University generated £4.80 in economic impact across the UK.

**Table 10-4 Durham University Impact Ratios, 2020/21**

	UK
Direct GVA: Total GVA	6.7
Direct Jobs: Total Jobs	4.2
Income: Impact	4.8

Source: BIGGAR Economics Analysis

## 10.2 Social and Cultural Impacts

### 10.2.1 Culture and Heritage

Durham University makes a significant contribution to Durham City’s tourism and cultural sector. As well as the impact of visitors to University events and friends and relatives of staff and students, the University operates a number of attractions in Durham City. These include the Palace Green Library, the Museum of Archaeology, the Oriental Museum and the Botanic Gardens.



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It is a principal partner in the World Heritage Site, with Durham Cathedral, and owns and maintains a number of buildings in the Site. This includes Durham Castle and the World Heritage Site Visitor Centre, both of which are operated by the University.

The University also hosts a number of festivals which contribute to the visitor economy and culture of County Durham. This includes the Lumiere Festival, the Greenspace Festival and the Summer in the City Festival, and the University also supports a number of festivals such as the Durham Book Festival.

The University's attractions also provide an important historical and cultural role, with a large number of collections of artefacts and documents. Four of these collections have been recognised as nationally significant in historical terms and the University ensures that these are available to the academics and the wider public. Throughout Covid-19 it has worked to digitise the collections so they can be viewed more widely.

As a result of its expertise and leadership role in County Durham, the University is able to advocate for and support culture-led regeneration in areas across the County, such as Bishop Auckland. The University intends to take forward some of the proposals that it developed in the County Durham UK City of Culture bid, for which it provided crucial support.

### **10.2.2 Education and Outreach**

Durham University education and outreach activities raise aspirations and widen the horizons of pupils.

Its leading School of Education is integrated into the community through its student placements in 300 schools across County Durham and the North East, raising attainment. As well as improving educational attainment, these placements raise the aspirations of students from deprived areas. It also produces high impact research that benefits teachers across the UK and further afield.

The University also has extensive outreach programmes focused on culture, heritage and science. Through its culture and heritage attractions, the University engages with community groups and schools, including through its 4Schools programme, where school pupils can engage with artefacts to learn about history, culture and religion and life at university.

In addition, the University supports science outreach including through its Science into Schools project, its Science Ambassadors and annual events such as the Celebrate Science Festival and the Durham University Schools Science Festival. This outreach encourages students to pursue STEM subjects, particularly those from low-participation neighbourhoods.

Pupils and the wider community are also able to access the University's high quality sports pitches and other facilities.





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### **10.2.3 Widening Participation**

In recent years, the University has increased the participation of students from deprived backgrounds and low-participation neighbourhoods. This trend is expected to continue and the University has put in place a number of measures to support disadvantaged students.

This includes launching the Durham Inspired North East Scholarships, a £1 million programme for low-income students in the North East, running summer schools for those who do not have the required grades, deploying a contextualised admissions process and opening the Durham Mathematics School to improve post-16 mathematics education in County Durham.



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# 11.

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## Appendix A: Note on Methodology

This section compares the methodology used in this study with other economic impact studies in the universities sector.

BiGGAR Economics' methodology for assessing the economic impact of universities is robust and well-established and has been applied to around 200 higher education institutions in the UK and Europe, including being applied to groups of universities in Finland, France, Switzerland and Flanders. The methodology was also used in assessing the economic impact of the League of European Research Universities (LERU), a consortium of 23 research-intensive universities in Europe which includes the University of Oxford, the University of Cambridge, University College London and the University of Edinburgh.

The methodology is broadly comparable with other methodologies, though in general includes a broader array of economic impacts.

For example, the methodology used by London Economics to estimate the economic impact of the Russell Group, which found that they generated £86.75 billion in 2015/16<sup>35</sup> from university operations, is broadly similar. However, the economic impact associated with students included only the spending of non-UK students, and tourism impacts were not included, while the methodology used to assess Durham University's economic impact includes UK-based students and tourism impacts. In addition, the methodology for estimating impacts related to research also differed.

Analysis by Oxford Economics<sup>36</sup> found that in 2014/15 the university sector as a whole contributed £53 billion GVA from its operation and the spend of international students and visitors. Separately, it was estimated that universities made a contribution to human capital of £63 billion and that the impact of research was £29 billion. The analysis did not include the spending, working and volunteering of UK students, or the contribution of UK visitors, which are considered as part of BiGGAR Economics methodology. The methodology used for estimating the contributions to human capital (e.g. graduate premium) and arising from university research also differed from BiGGAR Economics methodology.

Analysis undertaken on behalf of the N8 Universities by Viewforth Consulting found that they had an economic impact of £6.6 billion GVA in the North East<sup>37</sup>. This

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<sup>35</sup> London Economic (2017), The economic impact of Russell Group Universities 2015/16

<sup>36</sup> Oxford Economics (2017), The Economic Impact of Universities in 2014-15

<sup>37</sup> N8 Research partnership (2015), The Power of 8: Knowledge, Innovation and Growth for the North



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considered the impact of university operations, as well as the impact associated with the student spending, but did not consider the impact associated with knowledge transfer and health research, the graduate premium and tourism, which are all considered as part of the BiGGAR Economics research.

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