

# SRUC Vet School Economic Impact Assessment

21<sup>st</sup> November 2019





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# Executive Summary

The establishment of the SRUC vet school will make an economic contribution through its direct activities, its spending on goods, services and buildings, the spending of its employees and students, its collaboration with businesses and the impact it has on its graduates' lifetime incomes.

By 2030/31 the vet school could contribute:

- **£28.3 million Gross Value Added (GVA) and 238 jobs in Scotland, including**
- **£18.7 million GVA and 178 jobs in Aberdeen City and Shire**

Construction of new buildings could also contribute:

- **£12.9 million GVA and 212 job-years in Scotland, including**
- **£7.4 million GVA and 121 job-years in Aberdeen City and Shire**

Graduates from the vet school will be well placed to make a difference in their profession, through the real-world experience they will acquire throughout their degree.



# Executive Summary

The blended learning approach they will receive will also be helpful in attracting students from traditionally disadvantaged backgrounds, in line with Scottish Government and Scottish Funding Council's focus on widening participation

Graduates will then go on supporting the rural economy and the food and drink industry and in this way will contribute to:

- **exports**
- **regulation and compliance**
- **safeguarding the Scottish meat industry**

Businesses will also benefit by collaboration with the vet school by having access to the latest research and best practices and these will contribute to drive innovation locally and nationally.

These activities will be particularly important for the local Aberdeenshire economy, where the presence of a vet school would support practices in rural areas and contribute to the local economy through high value jobs and benefitting suppliers.



# Areas of Impact





# Economic Benefits



Food and Drink Industry



Sustainable rural veterinary practices



Distributed model and the graduate premium



Innovation impacts



Widening access



# Food and Drink Industry

## Trade and Export

Trade in live animals and animal products accounts for around 20% of Scotland's £6 billion Food and Drink exports. Veterinary surgeons are vital in ensuring the safety and quality of the domestic sector and maintaining the integrity of the export sector.

## Regulation and Compliance

Government service veterinary roles in the meat hygiene trade are particularly vulnerable because of pressures on the supply of vets. Reduced numbers of vets in these services could lead to risks of food fraud, animal welfare breaches and threats to public health.

## Safeguarding the Meat Industry

Increased numbers of veterinary science graduates is key to sustaining these roles, and in turn, Scotland's meat industry as a whole. SRUC's graduates will be prepared for fulfilling these posts, reducing this area of challenge for Scotland's Food and Drink industry, safeguarding productivity and exports.



# Sustainable Rural Veterinary Practices



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SRUC vet school will play an important role in supporting the sustainability of rural practices in the Highlands, where there are low returns for large animal veterinary practice.

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Sustainable veterinary practices create high value jobs in economically challenged rural areas, not just by employing veterinary surgeons, but also supporting wider clinical and para-clinical posts in allied veterinary professions.

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There are wider supply chain effects as well as local and social impacts of vibrant rural businesses.





# The Distributed Model and Graduate Premium

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SRUC's approach will ensure its veterinary graduates have experience in real-world settings, including first opinion and referral practices, farms, and abattoirs. The distributed model creates a different type of approach, not simply producing more vets, but vets specifically trained to meet the needs of the food and drink and agriculture industries.

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This will provide additional economic benefit, with work ready graduates able to add value earlier.





# Innovation impacts



## **Innovative practice**

Being partners in a teaching hospital will ensure the latest therapeutic and husbandry practices are in place across rural veterinary practices in the Highlands. This will help distribute innovative practices throughout the areas of influence of SRUC's vet school – farm practice, meat industry settings, and in the regulatory landscape.



## **Innovation Products and processes**

By driving innovation and entrepreneurialism in the market, innovative products and processes are likely to follow.



## **Innovative businesses**

SRUC's vet school and network will also help drive innovation in veterinary businesses, by influencing the uptake of new developments and innovations, beyond therapeutic areas. In the same way that SRUC already advises on farm businesses, the business development ethos will reach into veterinary practices.



# Widening Participation

Widening access is a key strategic priority of Scottish Government and Scottish Funding Council, one that poses challenges for entry to the professions.

UK Vet Schools want to increase participation of under-represented groups in veterinary education. Candidates who have experienced educational or financial disadvantage are less likely to gain entry to the profession.

Scottish universities have schemes in place to widen access, including contextualised offers from SIMD areas and for people from non-traditional backgrounds. A blended learning approach is a proven route to achieving diversity and wider access, not available for veterinary medicine in Scotland currently.

This proposal offers an opportunity to deliver this key target for Scottish Government.



# Introduction to Quantified Economic Impacts

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Measures and Sources of Impact





# Measures of Economic Impact



## Gross Value Added (GVA)

GVA is a measure of the value that an organisation, company or industry adds to the economy through its operations. The analysis uses the production approach to measuring this contribution, where the GVA is equal to the value of production less the value of the inputs used.



## Employment

The employment impact is measured differently depending on whether it is temporary or taking place annually. If temporary, as in the case of the construction jobs linked to SRUC's vet school, it is measured as job-years; if a recurring impact, it is measured in terms of full-time equivalent (FTE) jobs.



# Sources of Impact

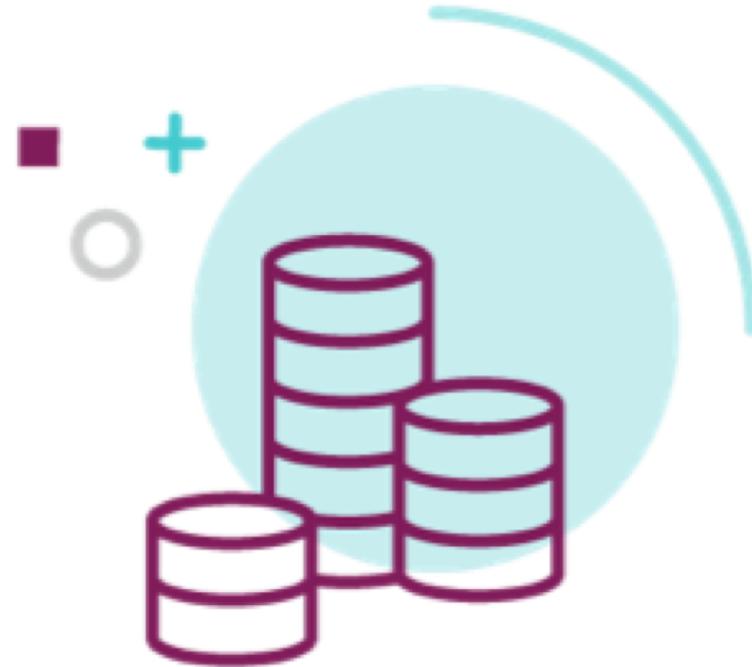
The analysis considers the following sources of impact:

- **core impacts**
  - direct impacts (from income and direct employment)
  - indirect impacts (bought in goods and services)
  - induced impacts (from spending of employees)
- **construction impacts (associated with new or refurbished facilities)**
- **student impacts (whilst they are studying)**
- **graduate impacts**
- **services to business**



# Quantified Economic Impacts

Assumptions and Estimates of the  
Economic Contribution from the SRUC  
Vet School





# Core Impact

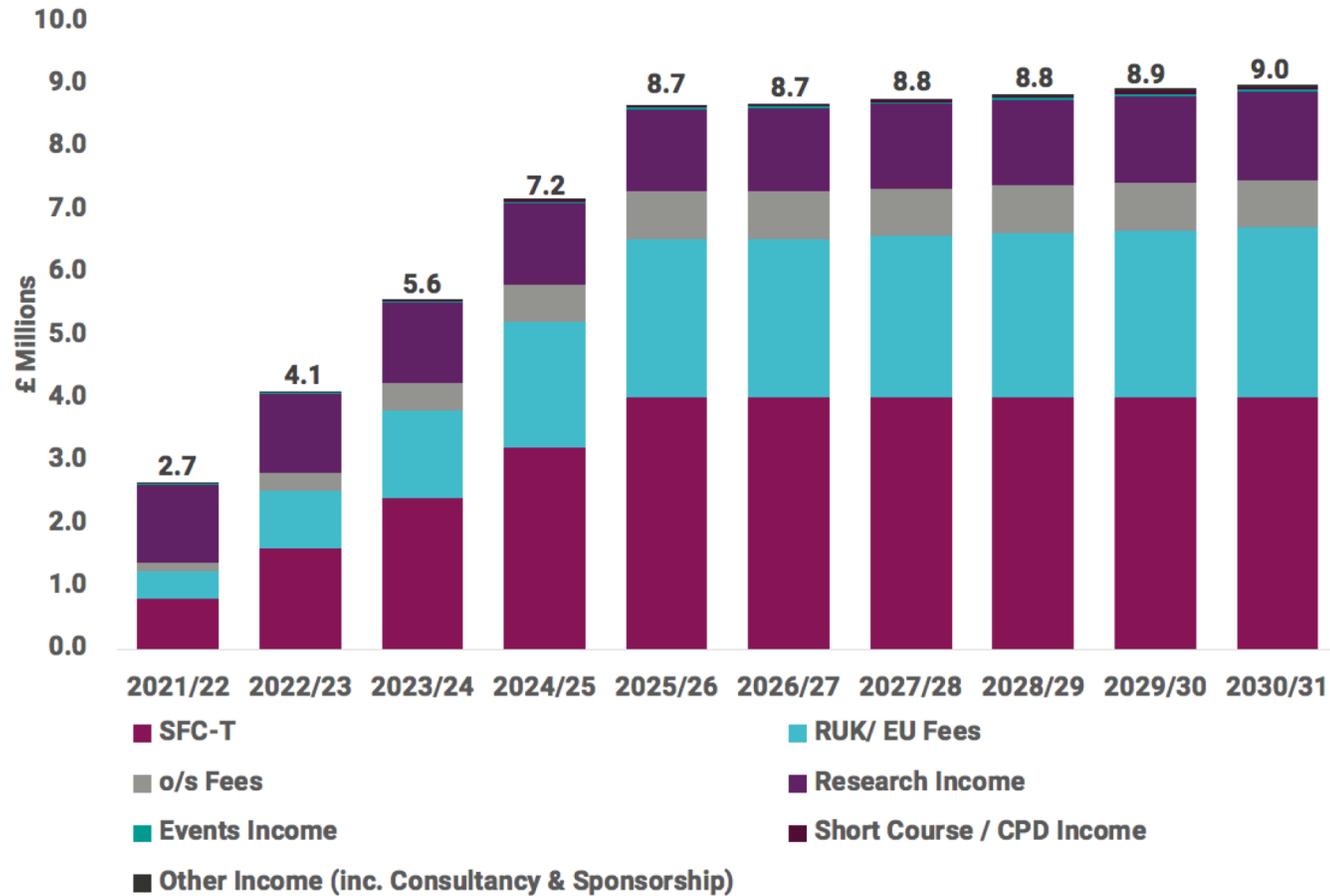
The core impact of the SRUC vet school results from three sources:

- **direct impact, which is the headcount employment supported and the income generated minus spending on goods and services**
- **supply spending impact, the economic activity supported by spending money on goods and services**
- **staff impact, the economic impact from staff spending the salaries and wages paid by the vet school in the national economy**





# Core Impact – Income

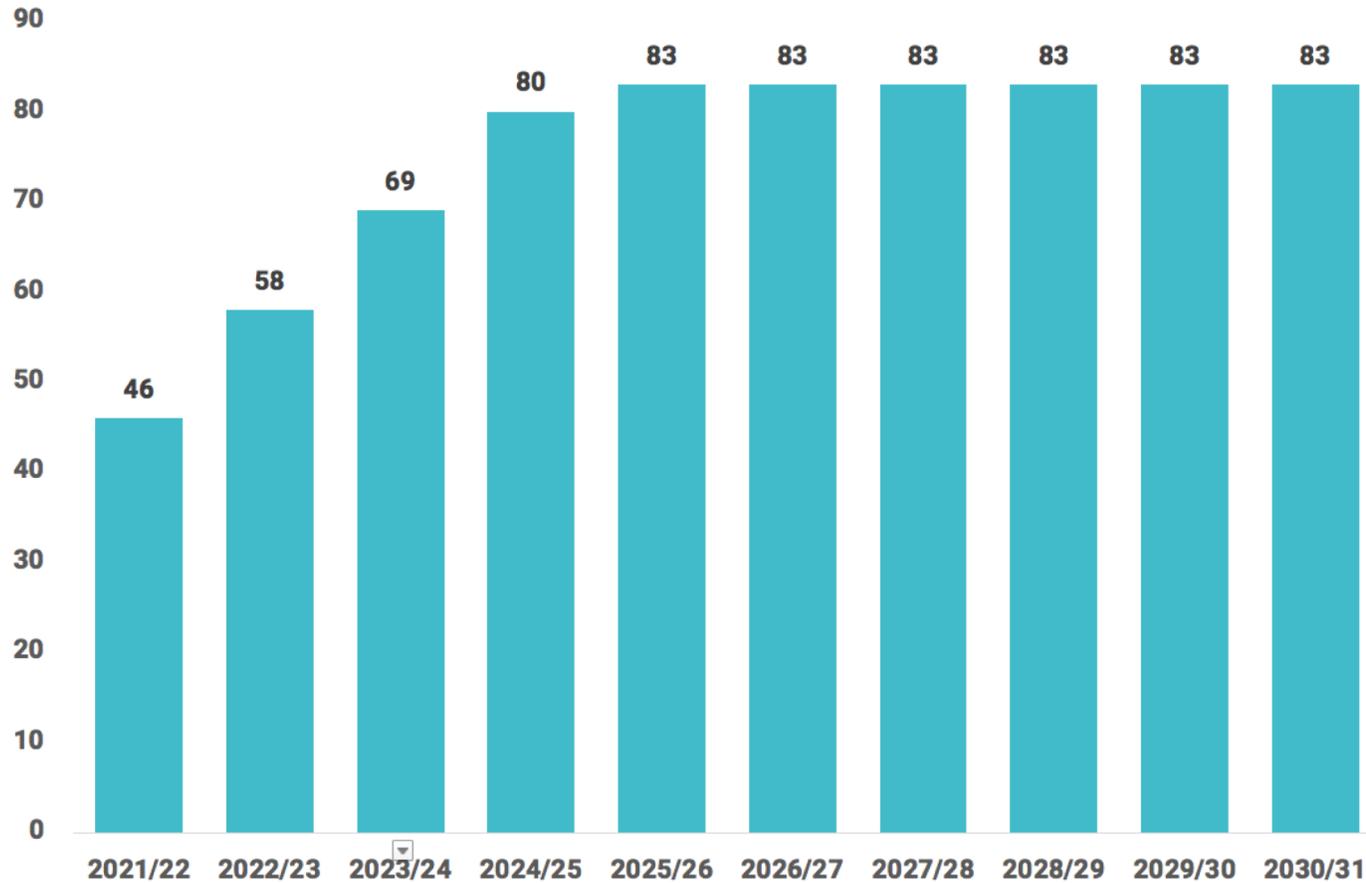


The estimation of total income includes the most recent projections on SFC-T income and tuition fee income. Events income and consultancy income were set equivalent to CPD income.

Over the period 2021/22 to 2030/31 income is expected to increase more than three times, from **£2.7 million** to **£9.0 million**.



# Core Impact – Employment



The direct employment supported by the vet school is expected to increase from **46** full-time equivalent (FTE) **jobs in 2021/2022** to **83 FTE jobs in 2030/31**.

Staff recruitment will be completed by 2025/26.



# Core Impact – Staff Assumptions



Staff Numbers: from **46** FTE in 2021/22 to **83** FTE in 2030/31

*Source: SRUC*



**67%**: Staff spending taking place in Scotland

Based on BiGGAR Economics' analysis of *the Scottish Government (2018) 'Input-Output Tables 2016'*



**8%**: UK household average spending on Value Added Tax (VAT)

*Source: European Commission (2013), 'A study on the economic effects of current VAT rate structures'*



**91%**: Staff resident in Scotland

Based on BiGGAR Economics' experience with the University of Aberdeen



# Core Impact – Supply Spending Assumptions



**59%:** Share of supply spending relative to staff costs

*Source: Ratio of Staff Costs and Other Operating Expenditure and Interest and Finance Costs from SRUC Report and Financial Statements 31<sup>st</sup> March 2018*



Sectors of supply spending were based on BiGGAR Economics experience with the University of Aberdeen and were defined based on the *ONS (2009), 'UK Standard Industrial Classification of Economic Activities 2007 (SIC 2007)'*



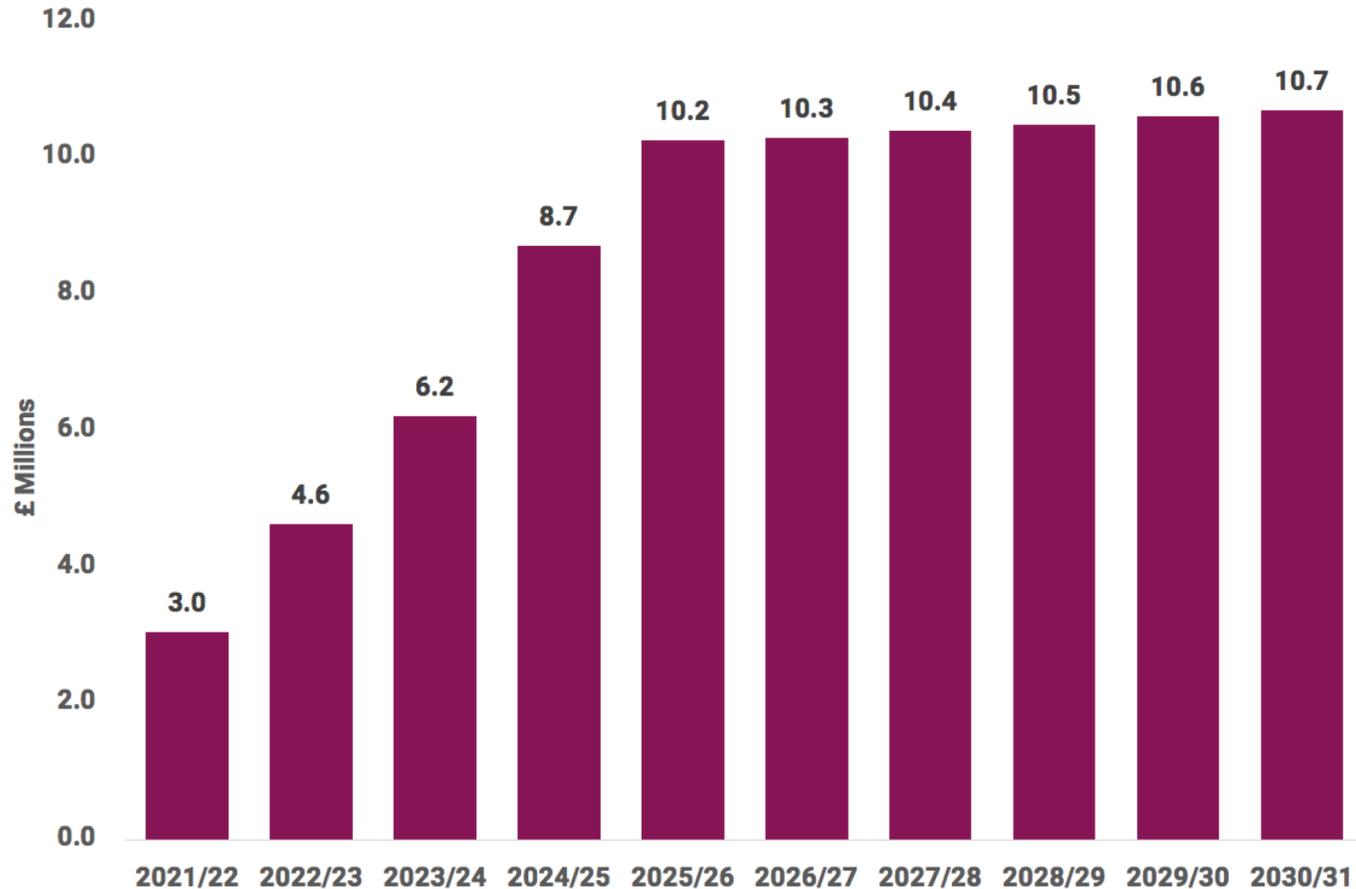
**£750,000:** Spending on placements that will benefit local veterinary practices. This was assumed to take place from Year 4, given the expected curriculum structure.  
*Source: School of Veterinary Medicine: Feasibility Statement*



**70%:** Spending on supplies taking place in Scotland  
Assumption based on BiGGAR Economics' experience with the higher education sector



# Core Impact



The SRUC vet school will make an economic contribution through the income it generates, its expenditure on supplies and its staff spending their wages and salaries.

By 2030/31, through its core activities, the SRUC vet school will contribute to the Scottish economy:

- **£10.7 million GVA**
- **168 jobs**



# Student Spending Impact - Assumptions

Students at the SRUC vet school will have an impact on economic activity through their spending on goods and services during their studies.



Student numbers: from **100** in 2021/22 to **560** in 2030/31\*

*Source: SRUC*



**34 and 52**: weeks spent by undergraduate and postgraduate students at the vet school  
Based on BiGGAR Economics' work with the higher education sector



**£283**: average weekly student spending

*Source: Department for Education (2018), 'Student income and expenditure survey 2014 to 2015', figures were adjusted for inflation*

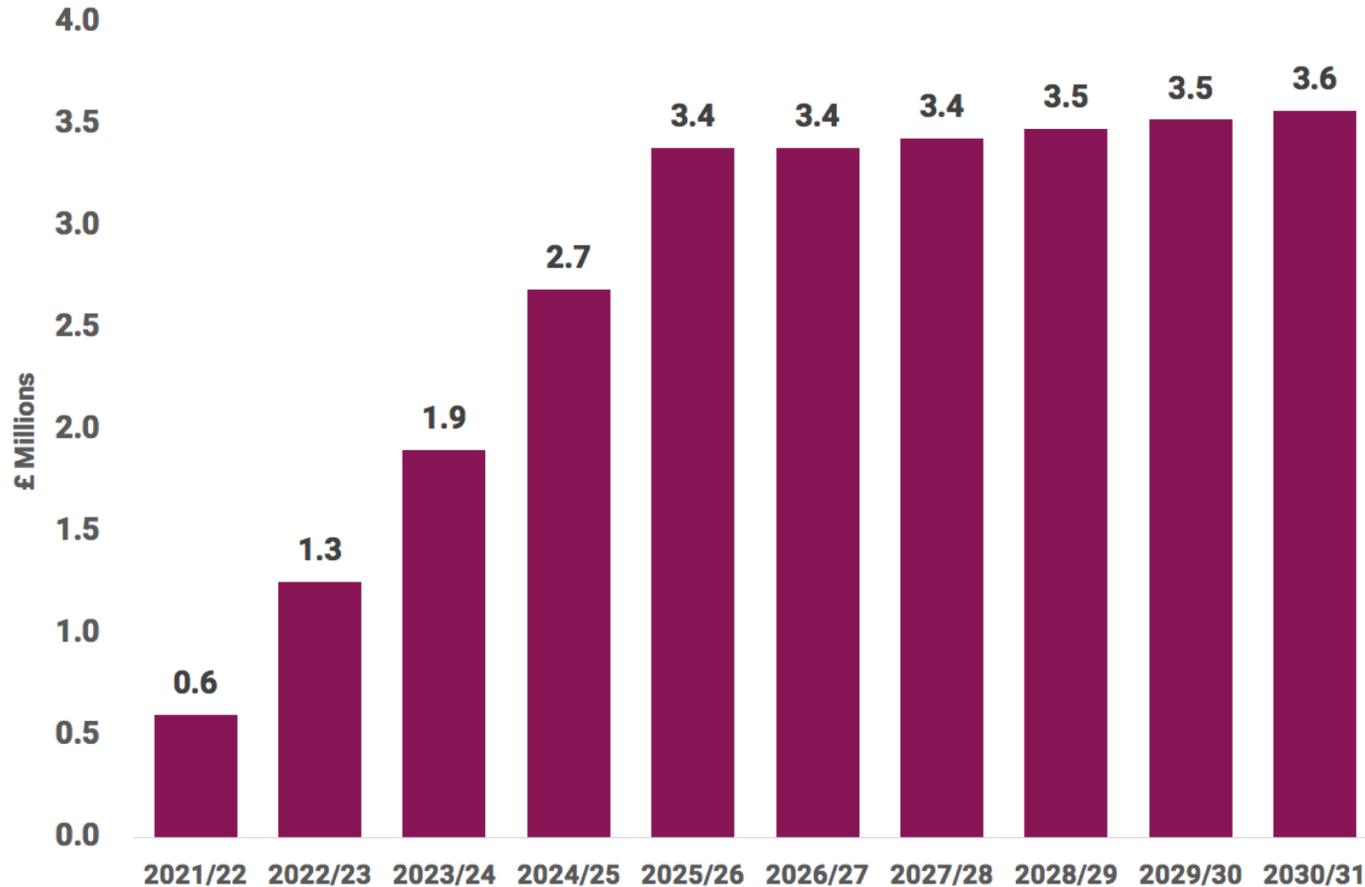


**100%**: Students resident in Scotland

Based on BiGGAR Economics' experience with the higher education sector



# Student Spending Impact



The SRUC vet school will generate an economic impact through the spending of its students.

By 2030/31, this will contribute to the Scottish economy:

- **£3.6 million GVA**
- **67 jobs**

The student impact, both in terms of jobs supported and GVA generated, is expected to increase over time following changes in the number of students.



# Services to Business Impact – Assumptions

The SRUC vet school will have an economic impact through its engagement with business either through the organisation of Continued Professional Development (CPD) courses or by providing consultancy.



Turnover from consultancy activity was based on the existing projections for CPD courses



**6 years:** time for the returns of collaboration to be realised

*Source: DAMVAD (2012), 'Measuring the Economic Effects of Companies Collaborating with the University of Copenhagen'*



**100%:** activity in support of businesses to take place in Scotland

*Source: Assumption based on the vet school having a regional focus*

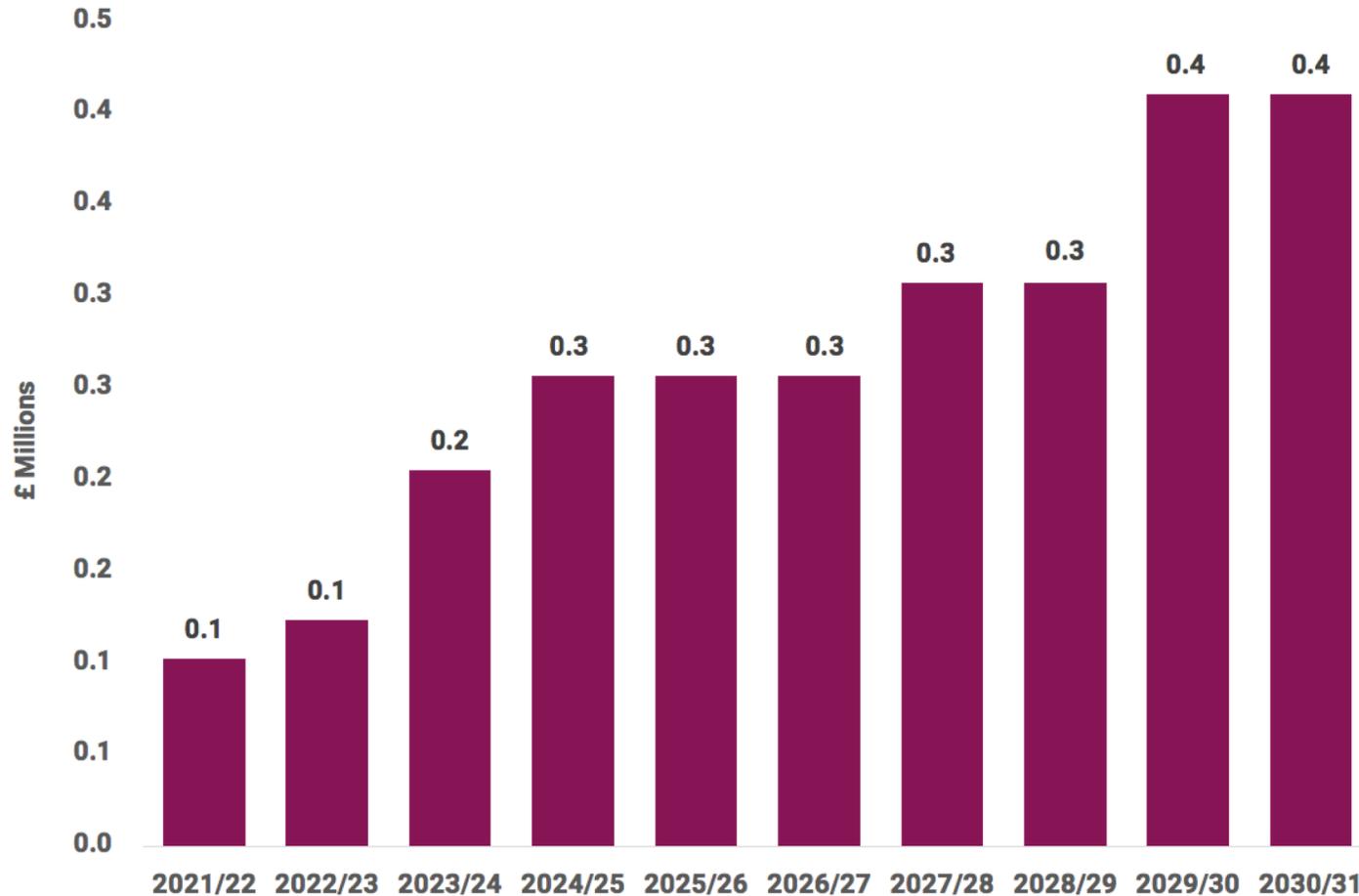


**340%:** GVA return from activities in support of business

*Source: PWC (2009), 'Impact of R&D Spending'*



# Services to Business Impact



The SRUC vet school will generate an economic impact through its interaction with businesses in the form of consultancy and CPD activities.

It was estimated that by 2030/31, this will contribute to the Scottish economy:

- **£0.4 million GVA**
- **1 job**

The impact from these activities is expected to grow steadily over time.



# Construction Impact – Assumptions

The construction of the vet school and/or the refurbishment of existing buildings is expected to have a temporary economic impact and to support employment and activity within the construction sector.



**£23 million:** construction cost

This was based on the cost of building the University of Edinburgh's (UoE) vet school, the student and staff numbers at UoE vet school and student and staff expected at SRUC's vet school



**70%:** expenditure to take place in Scotland

Assumption based on BiGGAR Economics' experience in construction projects



**100%:** spending benefitting the Construction sector

Assumption based on BiGGAR Economics' experience and the information available at this stage



# Construction Impact

The impact from construction is expected to take place at a different timescale compared to the other impacts considered, since it will occur prior to the opening of the vet school. The impact will be temporary, though it is expected that once operational some capital spending will still take place to support the activities at SRUC's vet school.



GVA impact: **£7.4 million GVA** in Aberdeen City and Shire and **£12.9 million GVA** in Scotland

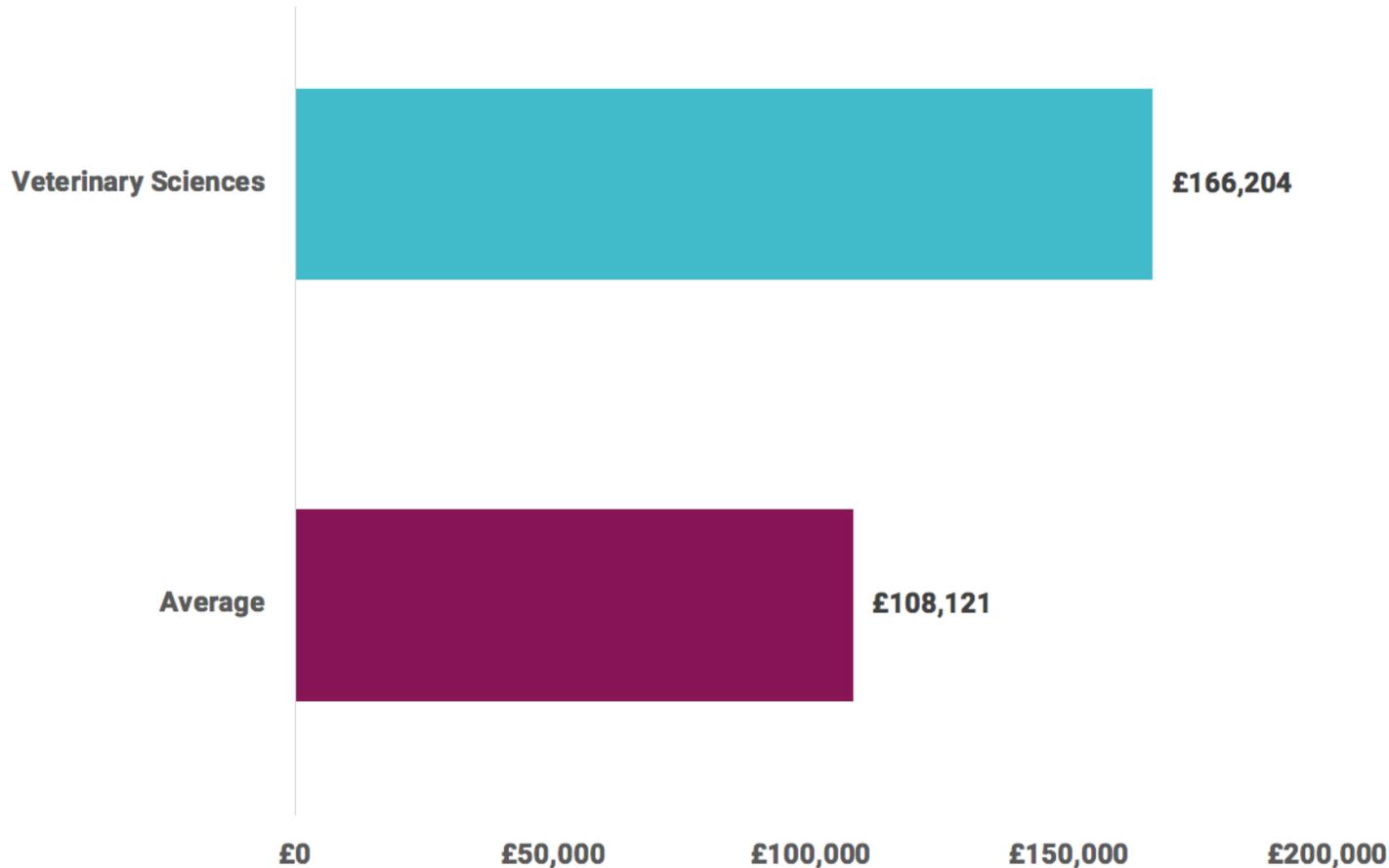


Employment impact: **121 job years** in Aberdeen City and Shire and **212 job years** in Scotland





# Graduate Premium in Veterinary Sciences



A 2011 study\* commissioned by the Department for Business Innovation & Skills (BIS) found that the average graduate premium for someone being awarded a degree in veterinary sciences was over **£166,000**.

A degree in veterinary sciences carries a considerably higher return (**53%**) than that of the average degree subject and is among those offering the highest graduate premium.



# Graduate Premium Impact – Assumptions

Being awarded a degree in veterinary sciences will have an impact on lifetime outcomes and earnings of graduates from the SRUC vet school. The graduate premium includes the additional earnings graduates can achieve as a result of their degree, plus the tax contribution that they make, less the costs they incurred in studying, largely accounted for by student loans.



**£166,000:** graduate premium from an undergraduate degree in veterinary sciences

**£55,720:** graduate premium from a postgraduate taught degree

**£6,675:** graduate premium from a PhD following a Masters' degree

*Source: BIS (2011), 'The Returns to Higher Education Qualifications'*



Number of graduates including undergraduate and postgraduate degrees: **0 until 2024/25, 145 by 2030/31**

*Source: Analysis of Financial Plan SRUC*

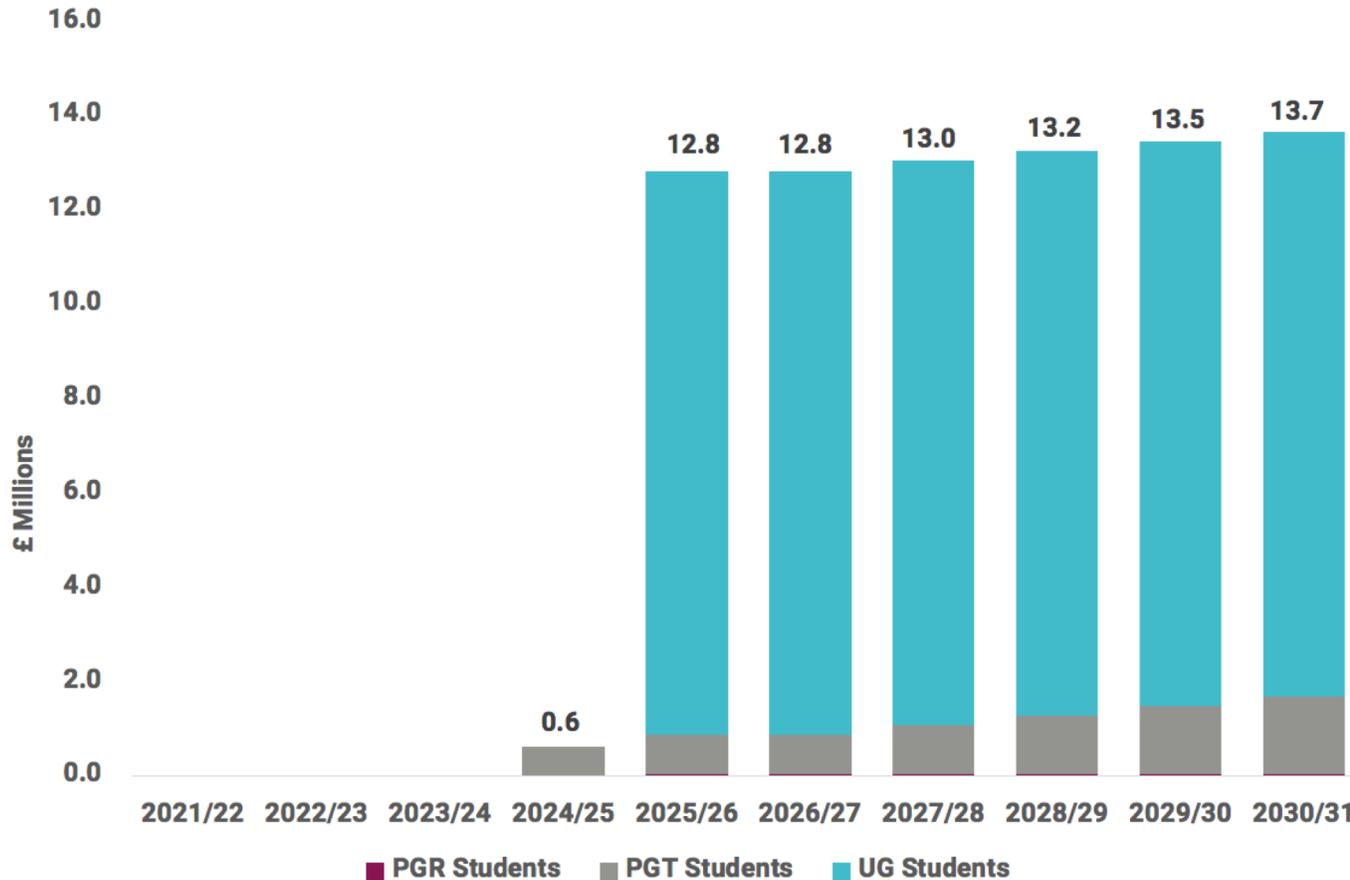


**75% and 15%:** share of **UK** (including Scottish) and **overseas** students remaining in Scotland after graduation

Assumption based on BiGGAR Economics' experience with University of Aberdeen and *BIS (2012), 'Tracking International Graduate Outcomes 2011'*



# Graduate Premium Impact

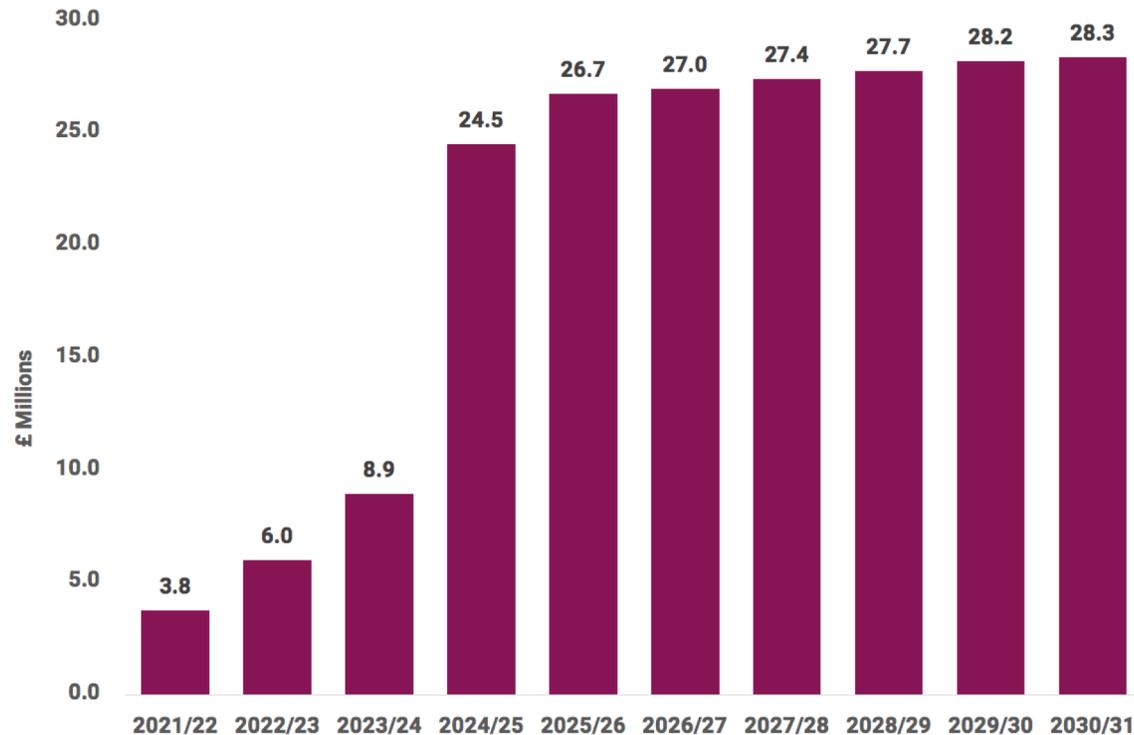


It was estimated that by 2030/31 the annual graduate premium in Scotland associated with graduates from SRUC's vet school will be around **£13.7 million**.

The evolution of annual graduate premium over time follows the changes in the number of students studying at the vet school and starts levelling in **2025/26**.



# Total\* Impact Scotland – GVA



\*includes the graduate premium impact

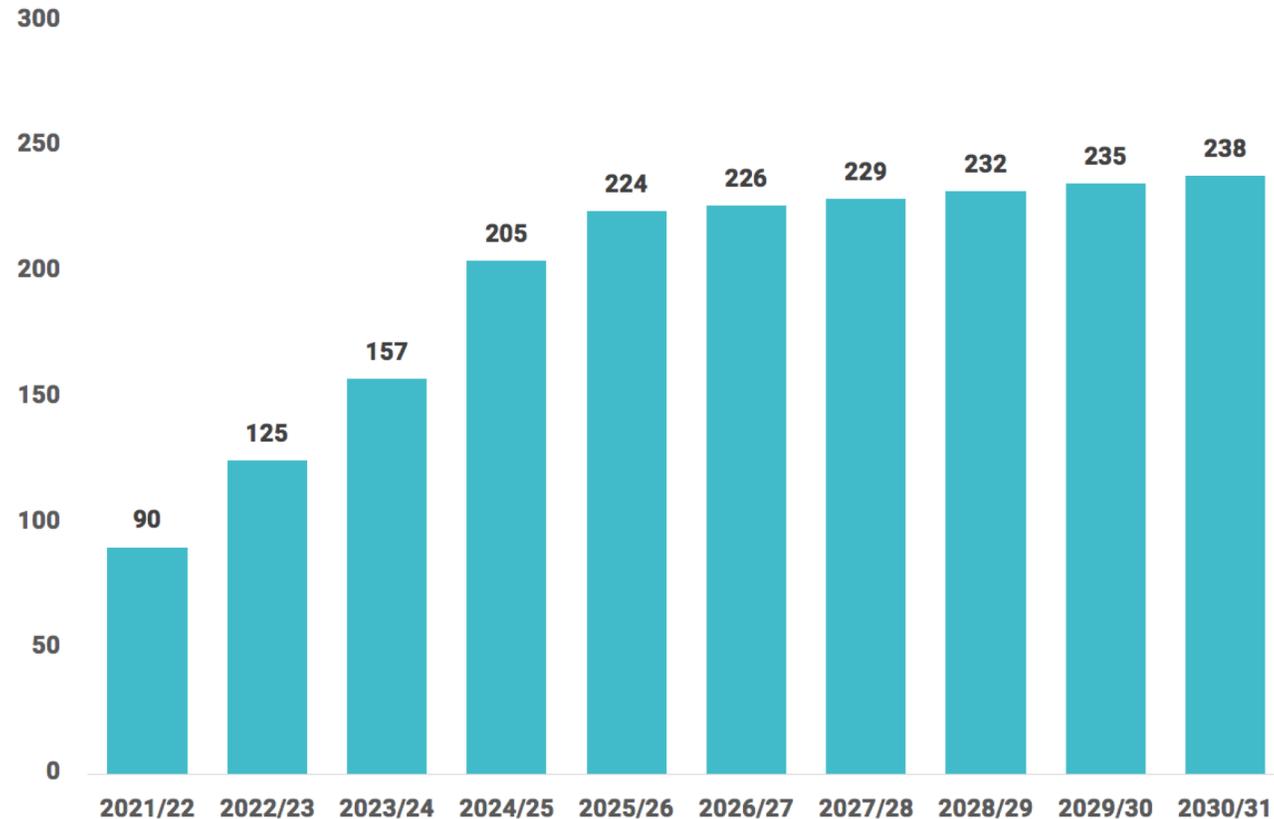
Once fully operational the SRUC vet school will generate **£28.3 million GVA** in the Scottish economy

The contribution is expected to increase over time, as the vet school will reach its capacity. As a result the economic impact will increase steadily up until 2025/26 and then slowly go up until 2030/31.

Most of the increase after 2024/25 is expected to take place as a result of the lifetime impact that the vet school will have on the students that will graduate from it.



# Total Impact Scotland - Jobs



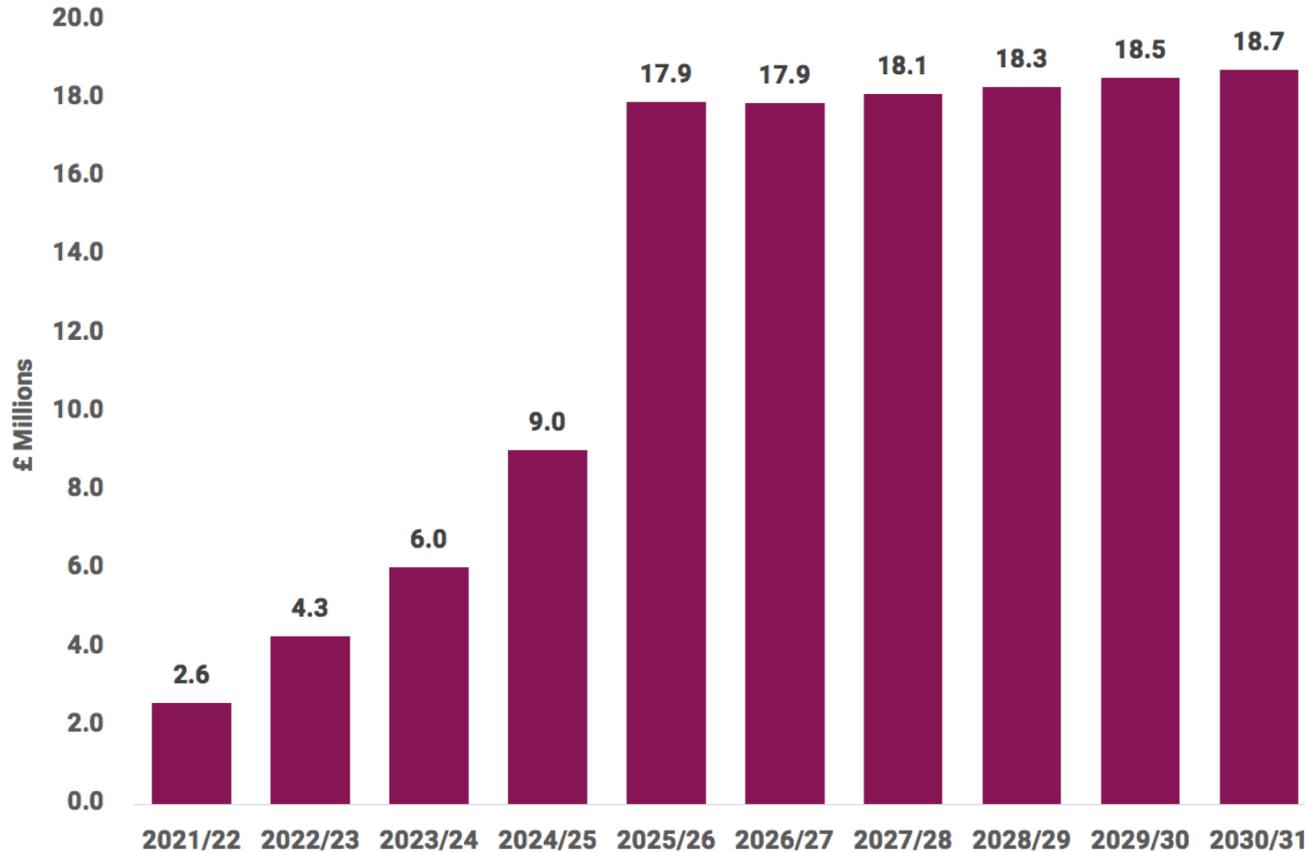
The total number of jobs supported by the SRUC vet school in 2030/31 will be **238**.

The number of jobs supported is expected to increase over time from **90** in 2021/22, the first year of operations.

Most of the growth in the number of jobs supported will take place by 2025/26.



# Total\* Impact Aberdeen City and Shire – GVA

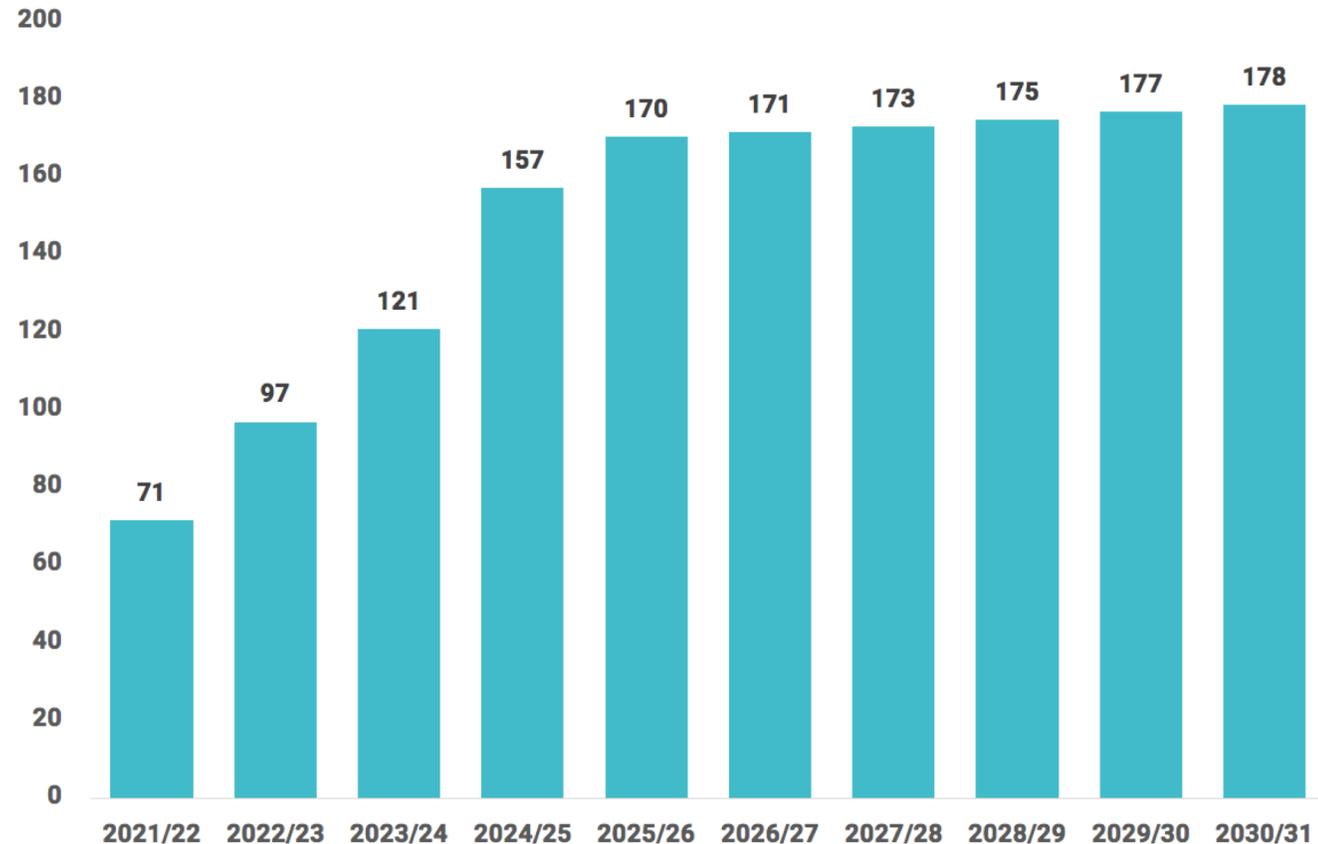


The vet school will also have an impact on the economy of Aberdeen City and Shire. It was estimated that by 2030/31, the vet school will contribute **£18.7 million** GVA to Aberdeen City and Shire.

\*includes the graduate premium impact



# Total Impact Aberdeen City and Shire – Jobs



The vet school will also have an impact on employment in Aberdeen City and Shire.

It was estimated that by 2030/31, the vet school will support **178** jobs in the area.



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