

THE ECONOMIC IMPACT OF THE UNIVERSITY OF EXETER

Report prepared by Viewforth Consulting Ltd



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Executive Summary

This study was commissioned by the University of Exeter. It was undertaken in Summer 2017 and is a 'snapshot' of the economic impact generated by the University in the academic and financial year 2015/16 (the latest year for which data were available.)

The study undertook modelled analysis of the expenditure of the University of Exeter as well as the personal (non-fee) expenditure of University of Exeter Students. It also included analysis of the additional impact of the visiting families and friends of international students.

The University has campuses in both Devon and Cornwall, in Exeter, Penryn and Truro. The study included detailed modelled analysis of the distribution of university impact across the two Local Enterprise Partnerships (LEPS) covering Devon and Cornwall, the Heart of the South West LEP and the Cornwall & Isles of Scilly LEP as well as impact on the rest of the South West and on the UK as a whole.

Results showed the University of Exeter to be a significant player in the local economy, generating impact in Exeter, in the rest of Devon and the Heart of the South West Area, in Cornwall and also further afield in the rest of the South West and the UK as a whole.

Key Results for impact on the local and regional economy

Impact on Exeter

Output

- The University of Exeter generated £457.1m (directly and through secondary or 'knock-on' effects) in Exeter itself, with an additional £83m of output generated by the personal expenditure of students and their visiting family and friends, making a total of £540.1m of output in Exeter.

Employment

- The University directly provided 3490 full-time equivalent (FTE) jobs in Exeter and generated a further 1136 FTE jobs in the city. Added to this are the 720 FTE jobs in the City created by the personal expenditure of students and their visiting family and friends to make a total of 5346 FTE jobs in Exeter dependent on the University's activities. This is equivalent to 7.2% of Exeter 2015 employment.

GVA

- The University generated £281.7m of GVA (directly and through secondary or 'knock-on' effects) in Exeter itself, with an additional £38.8m of GVA generated in Exeter businesses by the personal expenditure of students and their visiting family and friends, making a total of £320.5m of GVA in Exeter. This was equivalent to just nearly 8% of Exeter GVA.

Impact on Devon¹

Output

- The University of Exeter generated £526.6m (directly and through secondary or 'knock-on' effects) across Devon (including Exeter), with an additional £135.1m of output generated by the personal expenditure of students and their visiting family and friends, making a total of £661.7m of output in Devon.

Employment

- The University generated 5334 full-time equivalent (FTE) jobs across Devon (including in Exeter). Together with 1171 FTE jobs in the county created by the personal expenditure of students and their visiting family and friends this made a total of 6505 FTE jobs in Devon dependent on the University's activities. This was equivalent to 1.7% of Devon 2015 employment.

GVA

- The University generated £315.7m of GVA (directly and through secondary or 'knock-on' effects) in Devon, with an additional £62.6m of GVA generated in Devon businesses by the personal expenditure of students and their visiting family and friends, making over £378m of GVA in Devon. This was equivalent to over 1.6% of Devon GVA.

Impact on the Heart of the South West LEP area

Output

- The University of Exeter generated £555m (directly and through secondary or 'knock-on' effects) across the Heart of the South West (HSW) LEP area with an additional £153.4m of output generated by the personal expenditure of students and their visiting family and friends, making a total of £708.4m of output in the Heart of the South West.

Employment

- The University generated 5623 full-time equivalent (FTE) jobs across the Heart of the South West. Together with 1329 FTE jobs in the HSW area created by the personal expenditure of students and their visiting family and friends this made a total of 6952 FTE jobs in HSW dependent on the University's activities. This was equivalent to just over 1.2 % of HSW 2015 employment.

GVA

- The University generated £329.6m of GVA (directly and through secondary or 'knock-on' effects) in the Heart of the South West, with an additional £71.7m of GVA generated in HSW businesses by the personal expenditure of students and their

¹ All Devon, including Plymouth and Torbay

visiting family and friends, making over £401m of GVA in the Heart of the South West. This was equivalent to 1.2 % of HSW GVA.

Impact on Cornwall and Isles of Scilly LEP area

Output

- The University of Exeter generated £50.8m (directly and through secondary or 'knock-on' effects) across the Cornwall & Isles of Scilly LEP area with an additional £22.6m of output generated by the personal expenditure of students and their visiting family and friends, making a total of £73.4m of output in Cornwall & the Isles of Scilly.

Employment

- The University generated 657 full-time equivalent (FTE) jobs in Cornwall & the Isles of Scilly directly and indirectly (including 405 FTE jobs on its own campuses). Together with 196 FTE jobs in the county created by the personal expenditure of students and their visiting family and friends this made a total of 853 FTE jobs in Cornwall dependent on the University's activities. This was equivalent to just over 0.5% of Cornwall 2015 employment.

GVA

- The University generated £32m of GVA (**directly** and through secondary or 'knock-on' effects) in the Cornwall & the Isles of Scilly LEP area with an additional £10.6m expenditure of students and their visiting family and friends, making nearly £42.6m of GVA in Cornwall & the Isles of Scilly. This was equivalent to nearly 0.5% of Cornwall & Scilly GVA.

Total Impact on the South West Region of England

Output

- The University of Exeter generated £787.5m (directly and through secondary or 'knock-on' effects) across the South West Region with an additional £302.6m of output generated by the personal expenditure of students and their visiting family and friends, making a total of £1090.1m (nearly £1.1 billion) of output in the South West.

Employment

- The University generated 8131 full-time equivalent (FTE) jobs across the South West. Together with 2625 FTE jobs in the South West created by the personal expenditure of students and their visiting family and friends this made a total of 10,757 FTE jobs in the South West dependent on the University's activities. This was equivalent to just over 0.36% of South West 2016 workforce jobs.

GVA

- The University generated £450.6m of GVA (directly and through secondary or 'knock-on' effects) in the South West, with an additional £141.4m of GVA generated in South West businesses by the personal expenditure of students and their visiting family and friends, making £592m of GVA in the South West. This was equivalent to 0.5 % of South West GVA.

Total Impact on the UK²

Output

- The University of Exeter generated £852.6m (directly and through secondary or 'knock-on' effects) across the UK with an additional £319.6m of output generated by the personal expenditure of students and their visiting family and friends, making a total of £1172.2m (£1.17 billion) of output in the UK.

Employment

- The University generated 8680 full-time equivalent (FTE) jobs across the UK. Together with 2750 FTE jobs in the UK created by the personal expenditure of students and their visiting family and friends this made a total of 11430 FTE jobs in the UK dependent on the University's activities.

GVA

- The University generated £483m of GVA (directly and through secondary or 'knock-on' effects) in the UK, with an additional £148.9m of GVA generated in UK businesses by the personal expenditure of students and their visiting family and friends, making a total contribution to UK GDP of nearly £632m.

UK Export Earnings

- The University is an important export earner for the UK. As well as attracting significant numbers of students from other EU and from Non EU countries, the University also earned money from abroad for research and other services. The University's own direct export earnings were estimated at £93m. When the off-campus expenditure of international students and visiting friends and family of international students is taken into account (nearly £70m), the University is responsible for £163m of export earnings in 2015/16.

² To take account of displacement issues, the impact of UK domestic students on the rest of the UK outside the South West is disregarded.

Background to the Study

This study was commissioned by the University of Exeter. It was undertaken in Summer 2017 and is a 'snapshot' of the economic impact generated by the University in the academic and financial year 2015/16 (the latest year for which data were available.)

The study undertook modelled analysis of the expenditure of the University of Exeter as well as the personal (non-fee) expenditure of University of Exeter Students. It also included analysis of the additional impact of the visiting families and friends of international students.

The University has campuses in both Devon and Cornwall, in Exeter, Penryn and Truro. The study included detailed modelled analysis of the distribution of university impact across the two Local Enterprise Partnerships (LEPS) covering Devon and Cornwall, the Heart of the South West LEP and the Cornwall & Isles of Scilly LEP as well as impact on the rest of the South West and on the UK as a whole.

Data Sources and Methodology

Data used included information relating to the University's income and expenditure, staff and student numbers from Higher Education Statistics Agency (HESA) data for 2015/16, supplemented by more detailed information on finance, staffing and student numbers by domicile of origin provided by the University of Exeter itself. Other data sources included the Office of National Statistics labour market and economic data (including NOMIS³ and other official data such as the International Passenger survey), strategy documents from the two Local Enterprise Partnerships and a number of University of Exeter's own published documents such as the Annual Report and Financial Statements.

Impact on the UK and South West Region was modelled using an input output model of the UK with a regional extension (using location quotients) for the South West. This model was purpose built for modelling higher education impact and has been used for many other university impact studies across the UK including those undertaken for major HE agencies and government departments as well as individual universities.⁴ The model includes analysis of direct and secondary effects.⁵

The distribution of regional impact across the Heart of the South West, Cornwall & the Isles of Scilly and the rest of the South West was then analysed through the construction of a University of Exeter-specific 'Gravity Modelling System.' This purpose-built Gravity Modelling System combined a range of mass and distance variables⁶ to model flow of impact out from 3 key points of initial impact in the South West (Exeter, Penryn and Truro) to reflect the 3 main centres of university campus activity. The distribution of impact from each initial point was modelled and the results were then combined to be able to present the overall flow of University of Exeter impact across the South West.

Impact results are presented in terms of impact on output, FTE employment and GVA. Outcome multipliers were calculated for the University (i.e., for example, how many jobs are generated

³ See: <https://www.nomisweb.co.uk/>

⁴ This model was originally constructed as part of work for Universities UK in modelling UK higher education impact. The full mathematical specification of the model can be found in annexe B of the 2014 Universities UK report *The impact of universities on the UK economy* <http://www.universitiesuk.ac.uk/policy-and-analysis/reports/Pages/impact-higher-education-institutions-uk-economy.aspx>

⁵ Secondary effects incorporate **both** indirect and induced effects.

⁶ (Labour Market data from *Nomis* <https://www.nomisweb.co.uk/> combined with travel time by road)

outside the University for every job inside the University) and these are included in Appendix Two. It is important to note that this study involved detailed and bespoke analysis of the University of Exeter and its impact. It did not use or 'borrow' multipliers from any other study or modelling system – the outcome multipliers presented are University of Exeter-specific and are derived from the modelled results. This is only possible in studies which comprise original and bespoke modelling.

About the University of Exeter

The University of Exeter is one of the leading UK Universities, with a turnover of £371.6million, over 21,600 students and more than 4000 staff. It is located in the South West Region of England, with the majority of its activity and main campus sites in Exeter in Devon. It has expanded in recent years to develop a new campus at Penryn in Cornwall and also has a base in Truro, Cornwall, with the Knowledge Spa located at the Royal Cornwall Hospital in Truro. It was granted a Royal Charter as the University of Exeter in 1955, but it has roots going as far back as 1851 to the School of Art established in Exeter by Sir Stafford Northcote.

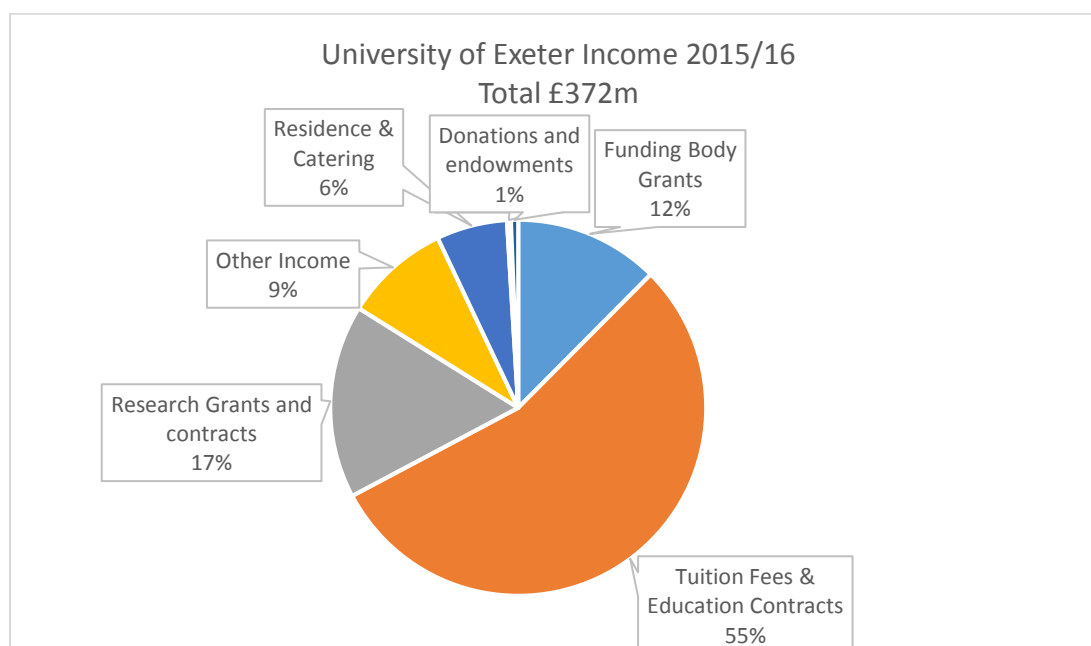
The modern University of Exeter conducts teaching and research in a very broad range of subjects, across 4 Colleges (Engineering, Mathematics and Physical Sciences; Humanities; Life & Environmental Sciences; Social Sciences & International Studies), a Business School and a Medical School. A member of the UK 'Russell Group' of research intensive universities, it is in the top 200 Universities worldwide (QS World University rankings) and ranked 9th in the UK by [The Times and the Sunday Times Good University Guide](#) . It has consistently been rated highly by students in the National Student Survey with 13 subjects ranked in the top 10 in the UK.

Finance, Students and Staffing

Finance

In 2015/16 the University reported a total income of £371.6m of income with expenditure in the same year of £357.6m. The majority of university income came from tuition fees (55%) and research grants and contracts (17%). Higher Education Funding Council grants accounted for a further 12%. The University also earned income from its residence and catering operations (6%) and other services (9%) with donations and endowments making up 1% of its overall income (Figure 1.)

Figure 1: Income of the University of Exeter 2015/16



Source: University of Exeter

The scale of the University's turnover places it in the top 25 UK Universities by turnover, out of the 163 higher education institutions included in HESA for 2015/16 and one of the few universities of such scale to be located outside a large city.

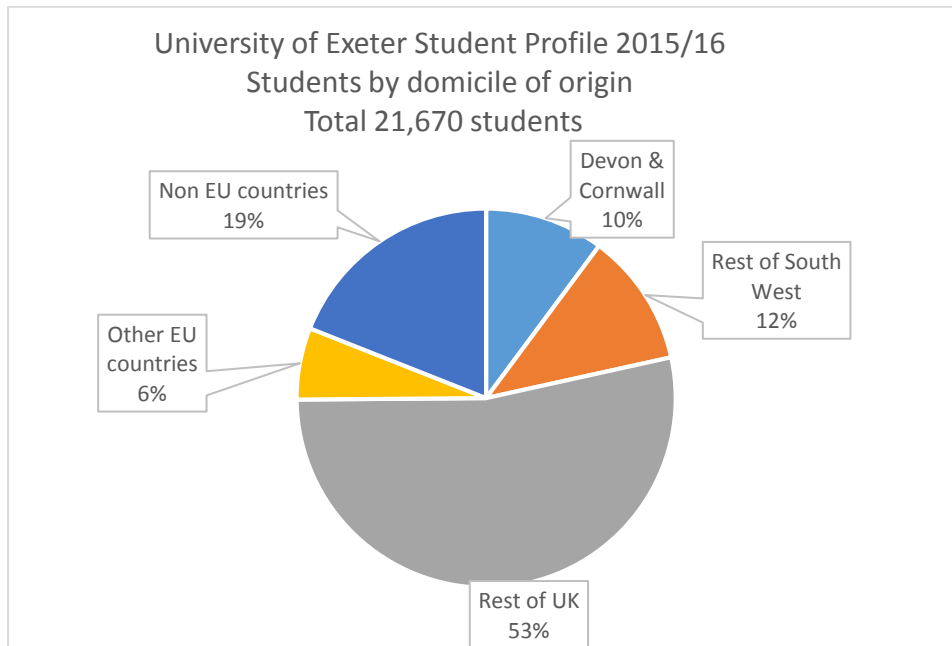
The University's direct export earnings (i.e. revenue attracted from international sources) were estimated as coming to nearly £93m. This included £58.7m non EU Student fees, an estimated £10.1m of fees from other EU students, £14.2m for research and nearly £10m for other services (including residence & catering provision to overseas students and visitors.⁷)

Students

With over 21,600 students, the University provides opportunities for local students as well as acting as a magnet to attract highly qualified applicants from the rest of the UK and further afield. Figure 2 shows where students come from. In 2015/16, 10% of students came from Devon and Cornwall, with a further 12% attracted into Devon and Cornwall from other parts of the South West. 53% of students came from other parts of the UK and 25% of the overall student population were international students (with 19% from non-EU countries and 6% from EU countries.)

⁷ Non-EU student fee income and international research income were sourced from HESA 2015/16. EU student fees were estimated as the average fee paid by UK & EU students x numbers of EU students. Residence and Catering income from international students was estimated on the basis that approximately 30% of international students were living in University accommodation. (The University has c. 5500 bedspaces , covering c. 25% of the student population but normally a higher proportion of international students live in halls than domestic students.) Overall £93m is likely to be an underestimate of the University's direct export earnings as an element of consultancy and other services rendered may also delivered to overseas clients.

Figure 2: University of Exeter Student Profile 2015/16



Source: Student data from the University of Exeter and from HESA Students in Higher Education 2015/16 (HESA 2017)

Staff

The University directly employed over 4,200 staff, which translated into 3895 full-time-equivalent (FTE) jobs. 90% of staff were based at the Exeter campuses with the remaining 10% working at University of Exeter campuses in Penryn and Truro. The majority of staff live relatively close to where they work. Around 80% of Exeter-based staff live in Exeter, a further 11% in other parts of Devon and Cornwall and the remainder further afield, mainly in other areas of the South West. Around 92% of Penryn and Truro staff live in Cornwall. ⁸

Modelling economic impact

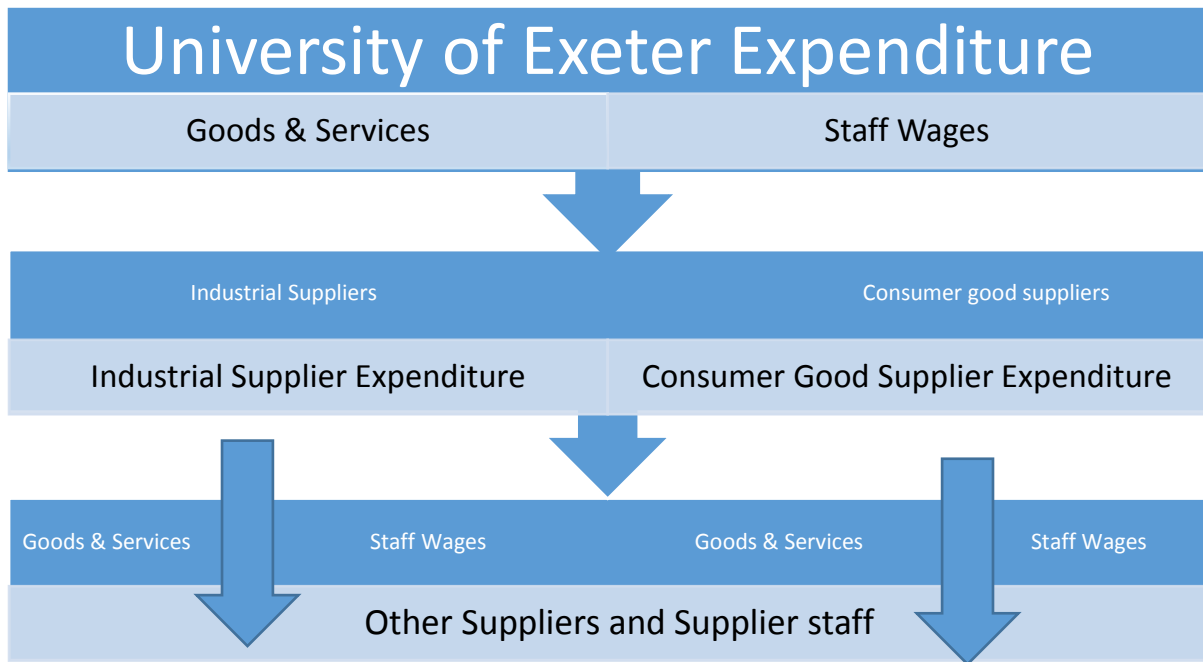
University of Exeter Impact on the UK

The University of Exeter spent nearly £358 million in 2015/16. Through this expenditure (including staff costs as well as general operating expenditure) the University generated employment and output throughout the economy as well as contributing to GDP. Figure 3 illustrates the process through which this is achieved.

In order to fulfil University of Exeter orders, University of Exeter suppliers spend money with their own suppliers, who in turn hire staff and buy in supplies from others, who in turn would spend money with their suppliers and so on, with impact rippling through the economy. University staff expenditure in shops and on consumer goods creates income and generates demand for other consumer goods and service, and so on.

⁸ Source: University of Exeter HR Office

Figure 3: University of Exeter Expenditure generating economic activity



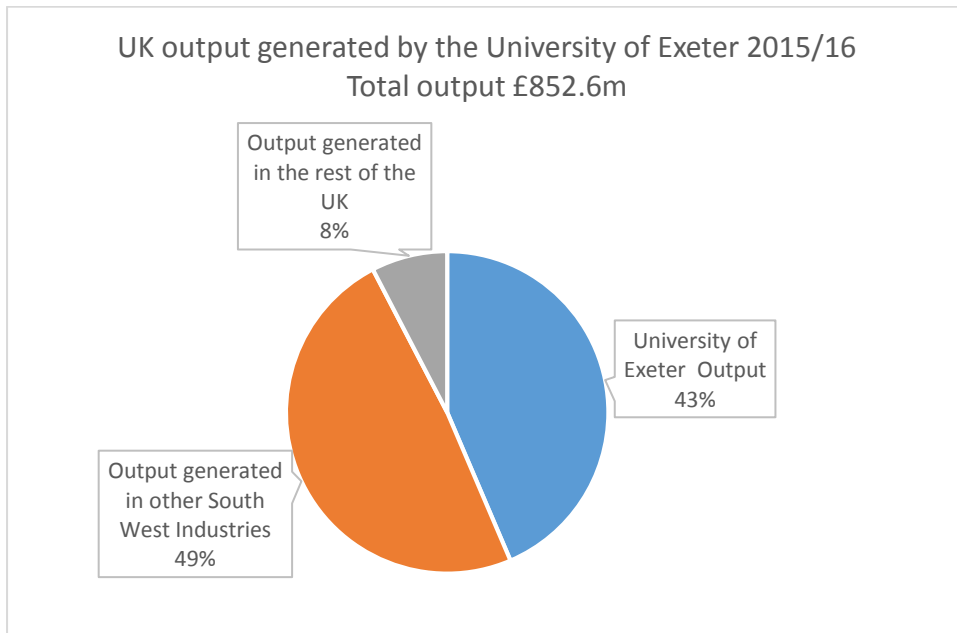
Impact on UK Output

The direct output of the University of Exeter came to £371.6m.⁹ It generated additional output of £481.1m in other industries through its expenditure. Overall the University of Exeter generated total output in the UK of £852.6m. This is shown in Figure 4.

The majority of the impact (92%, including the University's own output) was in the South West region with 8% flowing to other parts of the UK.

⁹ The income or 'turnover' of the University is equivalent to its direct output.

Figure 4: Total Output Impact on the UK and South West of England

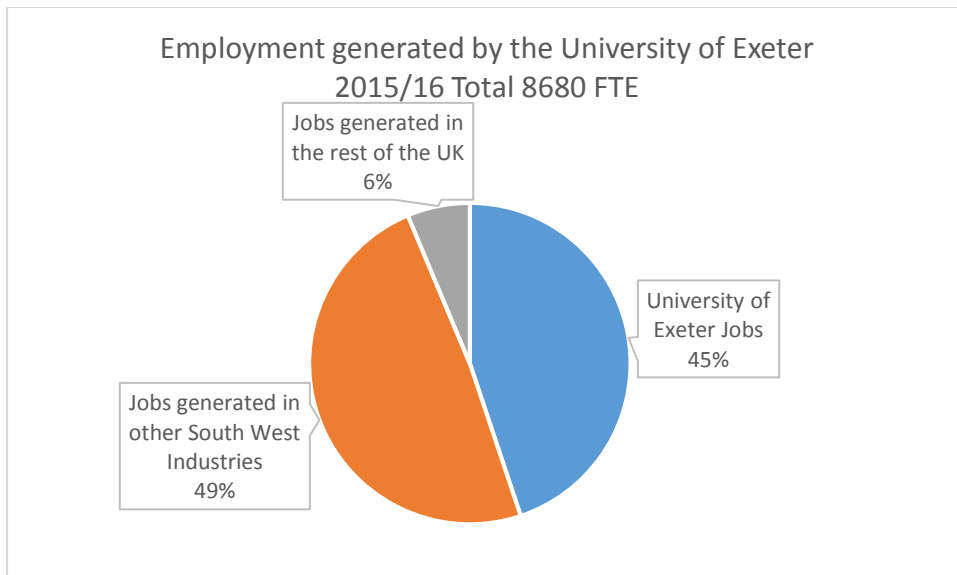


Source: Viewforth Modelled Analysis 2017

Impact on UK employment

Total employment generated by the University came to 8680 full-time-equivalent jobs in the UK. 3895 of these were jobs in the University itself, with a further 4237 created outside the University in other parts of the South West and additional 548 FTE jobs in the rest of the UK. This is shown in Figure 5.

Figure 5: Total UK Employment generated by the University of Exeter 2015/16

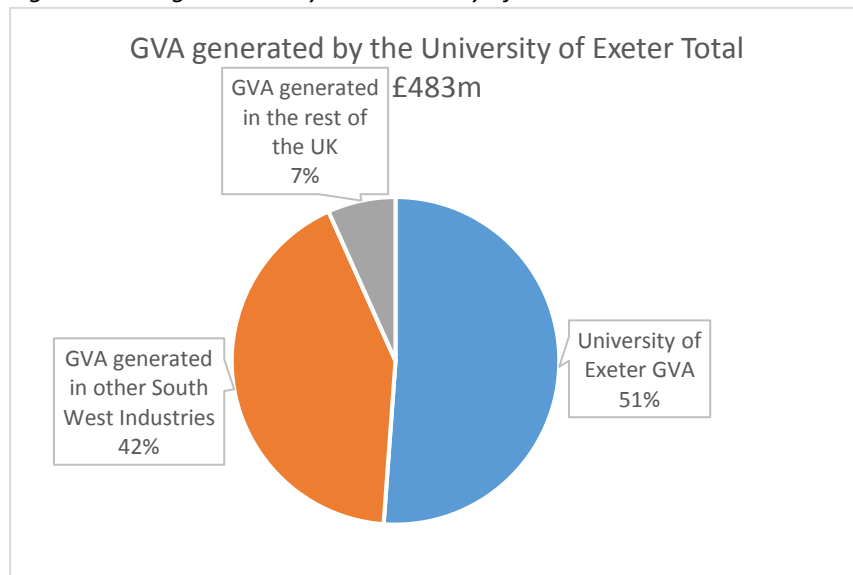


Source: Viewforth Modelled Analysis 2017

Impact on GDP

The total impact on UK GDP¹⁰ of the University of Exeter amounted to £483m. This includes the University of Exeter's direct GVA¹¹ of £247m (51% of the total) and a further £204m in other South West industries and £32m in the rest of the UK. This is shown in Figure 6.

Figure 6: GVA generated by the University of Exeter



Source: Viewforth Modelled Analysis 2017

Additional impact on the UK of international student personal spending.

Results for the impact of all student personal expenditure on the economy is presented as part of the impact on the regional and local economies. However when considering total UK impact only expenditure of international students would normally be considered as only international student personal expenditure is 'additional' to the UK economy.

International students are a very important source of international revenue for the UK as a whole. As well as paying fees to the University, international students incur living costs – they spend money on accommodation, food, clothing and entertainment. In many ways they can be regarded as 'long stay tourists' – they may not spend as much on a daily basis as short break visitors but they stay for considerably longer.

The personal spending of the 5440 International students attracted by the University of Exeter (students from both non EU and EU countries) was estimated to be £75.4 m(£65.6m spent off-campus).¹² To put this into context, the off-campus spending of University of Exeter international students was

¹⁰ Gross Domestic Product

¹¹ Gross Value Added - the industry and firm level measure of contribution to GDP

¹² International Student off-campus expenditure was estimated by drawing on the detailed analysis of International student expenditure carried out for the HM Government *International Education Strategy Paper International Education: Global Growth and Prosperity* (July 2013) and updated by the CPI. Overall student spend figures were adjusted downwards to reflect an estimated amount spent on campus (for residence, catering etc. This was to avoid double counting as amounts spent on campus are already included in the University impact. The analysis by BIS of international student expenditure took account of 'UK-sourced' income e.g. from part-time work and excluded UK-sourced income so that only expenditure from non-UK sources was counted – hence can be reliably classed as export earnings.

considerably higher than the total £52m spending of ALL international visitors to Exeter in 2016.¹³ Student expenditure also generates economic activity and creates jobs.

International student off-campus expenditure generated £98.4m of output, 833 FTE jobs in the UK and contributed £45.6m to UK GDP.

Impact of International Visitor Spending

As well as attracting international revenue from students into the economy, the University also attracts short-term visitor spend with many international visitors in a typical year. Like international students, the expenditure of international visitors contributes to overall impact at UK level as their spending is additional to the country and represents export earnings. These are a combination of international business visitors (visiting researchers, study visit groups from other countries and conference delegates) and visiting friends and family of international students. Information is not routinely collected on the overall numbers of business visitors which meant that their impact can only be noted rather than formally modelled. However it was still possible to make an estimate of visiting friends and family by drawing on International Passenger Survey data¹⁴ for international visitors to Exeter in 2016. This provided information on average expenditure and length of stay (which varied depending on whether they came from North America, Europe or other parts of the world). This information was taken together with detailed analysis of the composition of the University student international population and their countries of origin. Overall there were an estimated 7773 visitors associated with international students (friends and family) over the course of the year, spending around £4.3m.¹⁵ This equates in itself to over 8% of all international visitor expenditure to Exeter in 2016. It also generated £5.5m of UK output, created 47 FTE jobs and contributed £2.6m to GDP.

Regional and local impact

Modelling distribution of impact across the South West

Modelling the local and regional dimension of the University of Exeter impact was of particular interest for this study. As well as the importance of the University in supporting regional innovation and growth through its research and teaching, as one of Devon and Cornwall's largest employers¹⁶ the University has a de facto important influence on the local economy.

In order to analyse the more local impact, we constructed a University of Exeter-specific gravity modelling system. A gravity model takes an intuitive approach to modelling impact distribution. It combines indicators of economic 'mass' (in this case concentrations of employment) together with measures of distance (in this case travel time by road) from the source of the impact. It enables a better representation of where impact generated by the University eventually flows.

A large part is likely to be concentrated in the host town but not all the Institution's requirements (nor those of its staff) will be met by suppliers in the immediate locality, and not all the needs of *their* suppliers will be met in the local area. Hence impact flows further afield to where those requirements are most likely to be met – concentrations of economic activity moderated by distance. The further away from the original source of impact, the weaker the flow.

¹³ *Travel Trends 2016* Table 4.13

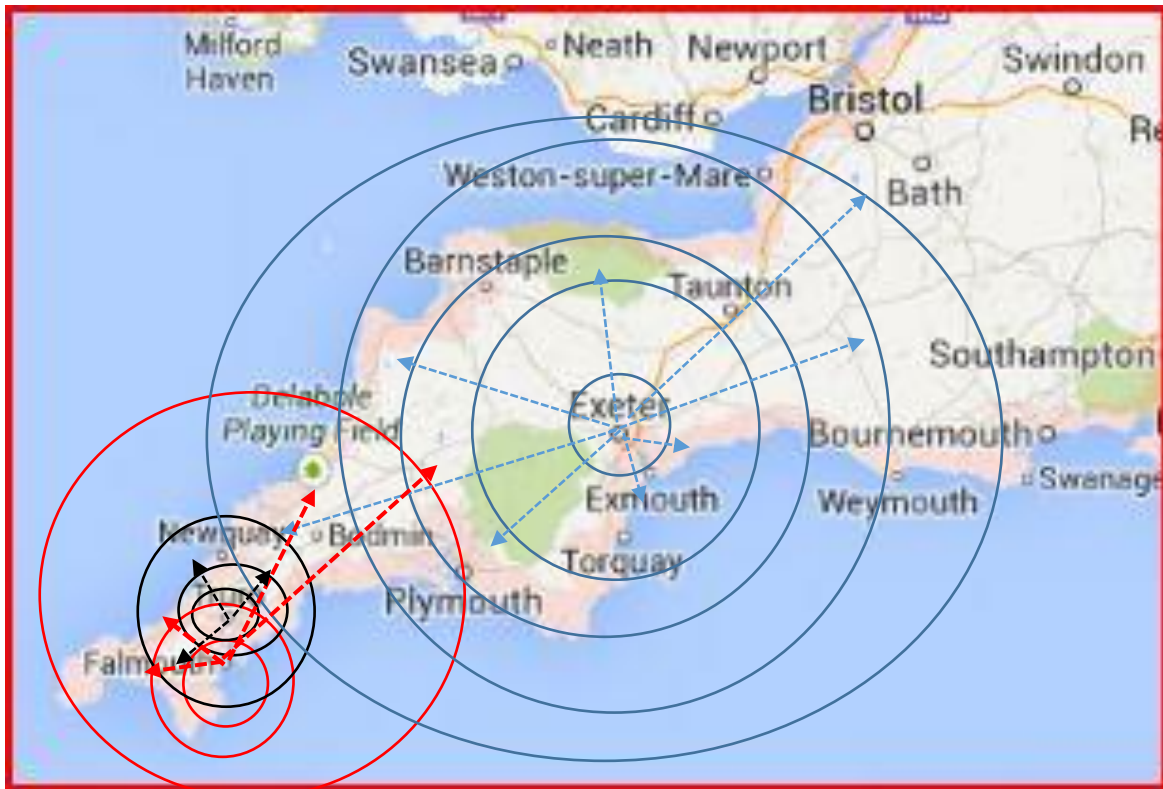
¹⁴ *Travel Trends 2016*

¹⁵ It was assumed that 70% of international students each had 2 visitors on one occasion during the course of the year, all staying for the typical length of stay in Exeter that short stay visitors from North America, Europe or other countries were recorded as staying in Exeter from *Travel Trends*.

¹⁶ The University would be placed around 3rd or 4th largest in terms of private sector employers in Devon and Cornwall when compared to the 'Top 150' List of Businesses in Devon and Cornwall (Western Morning News Annual Business Guide 2016 <http://www.plymouthherald.co.uk/western-morning-news-annual-business-guide-2016/story-29572168-detail/story.html>)

With the University of Exeter, while the majority of expenditure originated in Exeter, there were also two other initial points of impact in Truro and Penryn. The gravity modelling system incorporated all 3 initial points of impact and modelled flow from those points separately. This was then combined to present the overall picture. There are overlapping flows of impact from each point so that, for example, expenditure in Exeter will still have an impact in the Cornwall area. Some of the expenditure in Cornwall will also flow into Devon. The concept is illustrated in Figure 7.

Figure 7: Modelling distribution of impact flow



Institutional impact on local and regional output

Looking initially at the impact from flow from the University alone (i.e. not including student expenditure), the majority of University impact (which includes direct and secondary impact) can be seen to be in the Heart of the South West, with most of that concentrated in Exeter. Table 1 shows the distribution of the overall impact of the University (£852.6m) and Figure 8 focusses on the distribution within the South West (£787.6m.)

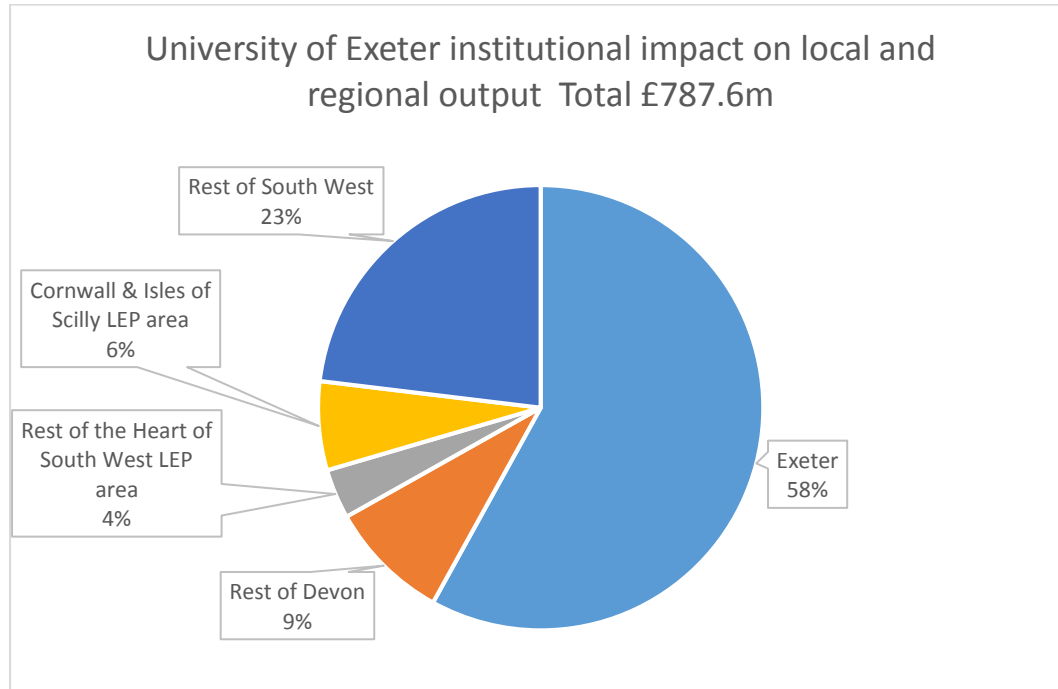
Table 1: University of Exeter institutional impact on all UK output

Output	Direct £m	Secondary £m	Total Impact £m
Exeter	345.6	111.5	457.1
Rest of Devon	0	69.5	69.5
Rest of the Heart of South West LEP area	0	28.4	28.4
Cornwall & Isles of Scilly LEP area	26.0	24.8	50.8
Rest of South West	0	181.8	181.8
Rest of UK	0	65.1	65.1
Total	371.5	481.1	852.6

Source: Viewforth Modelled Analysis 2017 Totals may not sum due to rounding

Figure 8 shows that 71% of impact was felt in the Heart of the South West LEP area (67% in Devon overall), with 6% in Cornwall & Isles of Scilly and 23% flowing to the rest of the South West.

Figure 8: University of Exeter institutional impact on local and regional output



Source: Viewforth Modelled Analysis 2017

Institutional impact on local and regional employment

The picture is similar for employment generated (Table 2 and Figure 9), with the majority of employment generated (5623 FTE jobs) being in the Heart of the South West(including Exeter).

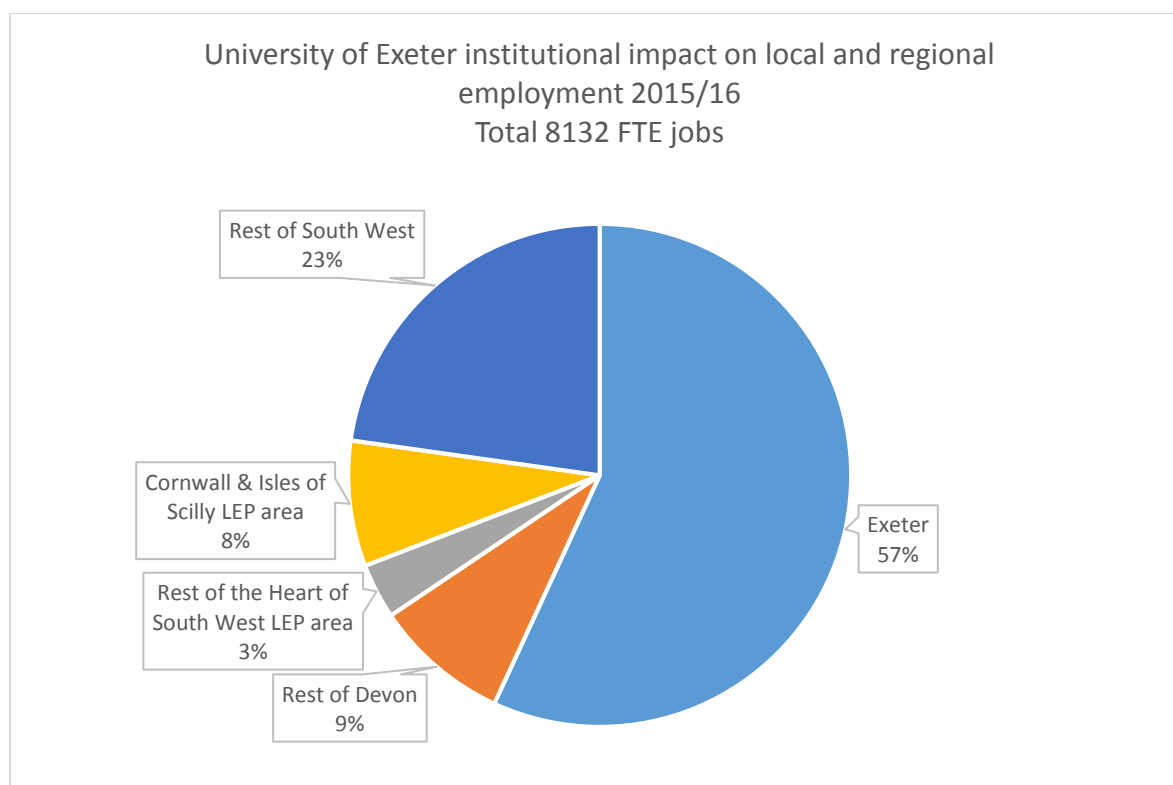
Table 2: University of Exeter institutional impact on all UK employment

Jobs FTE	Direct FTE	Secondary FTE	Total Impact FTE
Exeter	3490	1136	4626
Rest of Devon	0	708	708
Rest of the Heart of South West LEP area	0	289	289
Cornwall & Isles of Scilly LEP area	405	252	657
Rest of South West	0	1852	1852
Rest of UK	0	549	549
Total	3895	4786	8681

Source: Viewforth Modelled Analysis 2017 Totals may not sum due to rounding

Figure 9 shows the proportional regional distribution of employment, with 69% of all South West employment generated being in the Heart of the South West (66% in Devon), 8% in Cornwall and Isles of Scilly and the remaining 23% elsewhere in the South West.

Figure 9: University of Exeter institutional impact on local and regional employment



Source: Viewforth Modelled Analysis 2017

Institutional impact on local and regional GVA

Table 3 and Figure 10 shows the distribution of GVA, again showing the majority of GVA generated (which includes the University's own direct GVA) to be in the Heart of the South West.

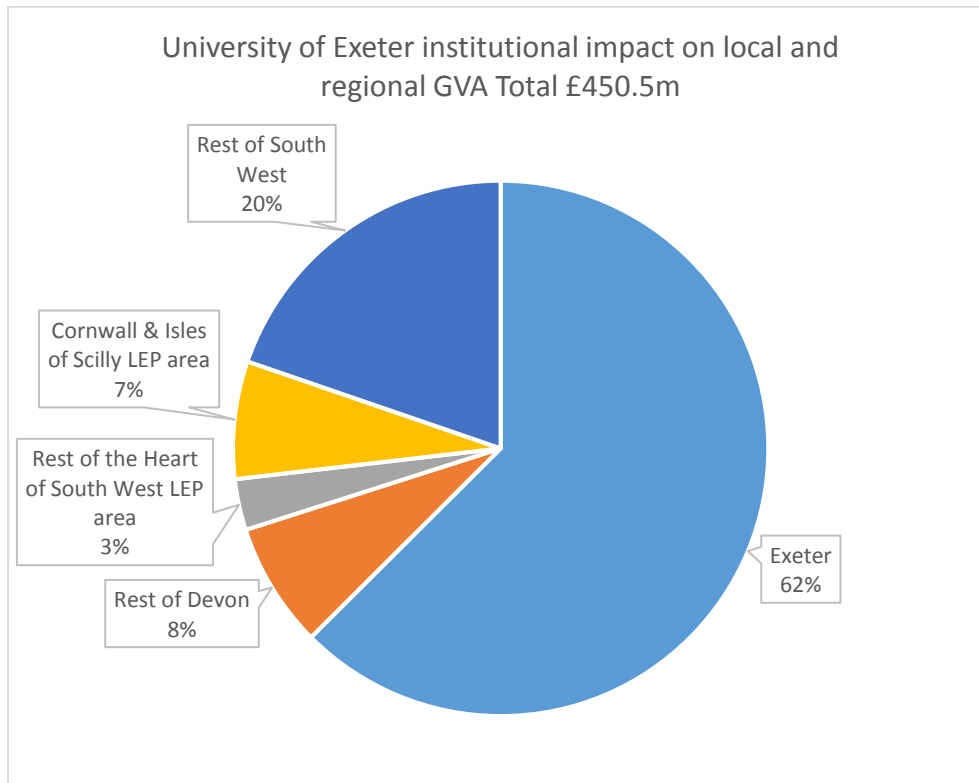
Table 3: All UK GVA impact of the University of Exeter

GVA	Direct £m	Secondary £m	Total Impact £m
Exeter	227.2	54.5	281.7
Rest of Devon	0	34.0	34.0
Rest of the Heart of South West LEP area	0	13.9	13.9
Cornwall & Isles of Scilly LEP area	0	12.1	12.1
Rest of South West	19.9	88.9	108.8
Rest of UK	0	32.4	32.4
Total	247.1	235.9	482.9

Source: Viewforth Modelled Analysis 2017 Totals may not sum due to rounding

In Figure 10 the regional proportions are shown. The relatively larger share of GVA accruing to Exeter (62% compared to 58% output and 57% employment) is because most of the University's direct GVA is attributed to its main base in Exeter where the majority of staff are employed. As a particularly high skill organisation the University will tend to have a higher GVA relative to most of its suppliers.

Figure 10: University of Exeter Institutional impact on local and regional GVA



Source: Viewforth Modelled Analysis 2017

Additional impact of student personal expenditure

The fees that students pay to the University form part of the University income and expenditure flows and hence the impact of student fees paid is captured within the institutional impact that has already been presented. However the personal (non-fee) expenditure of students is substantial and is of significant importance at a local level, with many local businesses dependent on the student trade. In total the personal (non-fee) expenditure of students amounted to an estimated £273m, with £245m of this being money brought *into* Devon and Cornwall by students from outside the area – from the rest of the South West, from the rest of the UK and from other countries (the remaining £28m being local Devon & Cornwall Student expenditure.)

Students spend money on food, accommodation, clothing, travel, and entertainment generating business for local landlords, shops, bars and restaurants. Some spending will not be entirely local (for instance where online purchases are concerned.) However much personal consumer expenditure by its nature has to be local (e.g. spending in bars, restaurants, coffee shops, etc. as well as on personal services such as hairdressing.) The thriving environment of the campus and environs will be very dependent on the student pound.

The detailed results for student impact, disaggregated by different groups of students (Devon & Cornwall students, Students from the rest of the South West, Students from the rest of the UK, rest of EU and Non-EU students) is presented in in Appendix One. While at a UK level only international student expenditure is usually regarded as relevant (as only international student expenditure is additional to the UK as a whole), the impact of all student expenditure is of interest at regional and local level. In this study we assume that the impact of all student expenditure is important, on the basis that the money is either

being attracted into the local economy from elsewhere (90% of the 2015/16 expenditure was estimated as coming *into* Devon and Cornwall or being *retained* in the Devon & Cornwall economies (10% of the total expenditure was retained) as students stay in their local area rather than go elsewhere. The detailed disaggregation of the impact each group of students' expenditure is provided in Appendix One for information and also for use where needed in different policy fora.

Overall, student personal expenditure¹⁷ generated £297.8 of output, £168.2m of GVA and 2585 FTE jobs in the South West region. Around 50 % of this was in the Heart of the South West LEP area (27% in Exeter), a further 8 % in the Cornwall & Isles of Scilly LEP area and the remaining 42% elsewhere in the South West. The distribution of employment impact is shown in Table 4 and Figure 11.

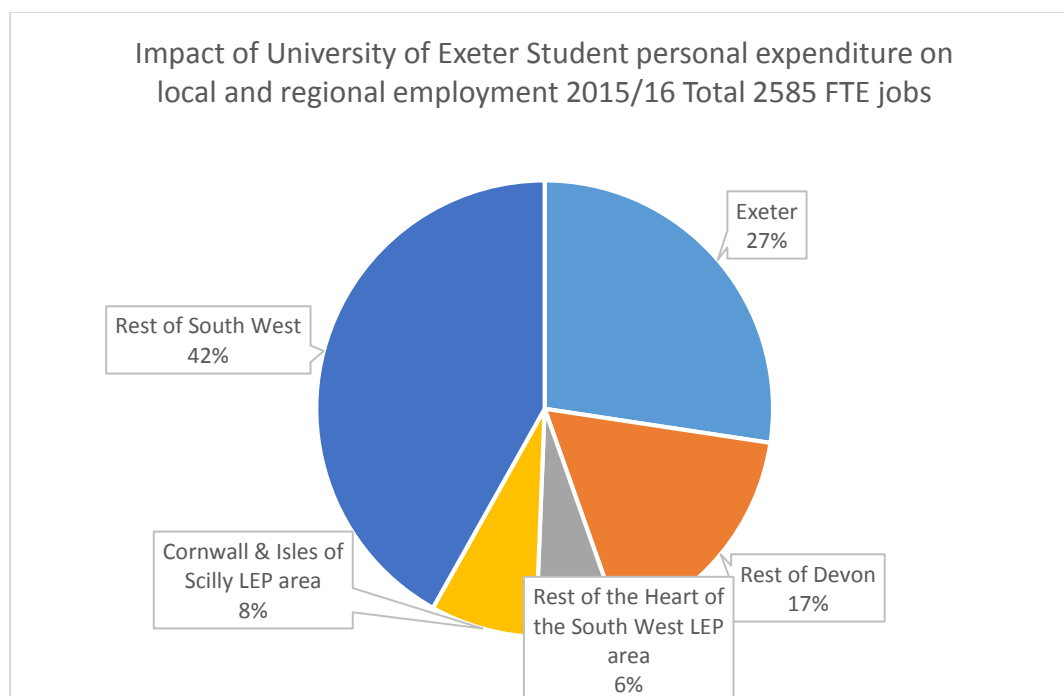
Table 4. Impact of University of Exeter Student Personal Expenditure on local and regional employment

Impact of Student Personal Expenditure	FTE Jobs generated
Exeter	708
Rest of Devon	445
Rest of the Heart of the South West LEP area	156
Cornwall & Isles of Scilly LEP area	194
Rest of South West	1082
Total	2585

Source: Viewforth Modelled Analysis 2017

The distribution of employment impact from student expenditure is more dispersed across the South West than that of the University mainly because the University's impact includes its own employees.

Figure 11: Impact of University of Exeter Student personal expenditure on local and regional employment



Source: Viewforth Modelled Analysis 2017

¹⁷ Domestic Student Expenditure was estimated through drawing on the most recently available Student Income & Expenditure Survey (Institute of Employment Studies for BIS), uprated by the CPI.

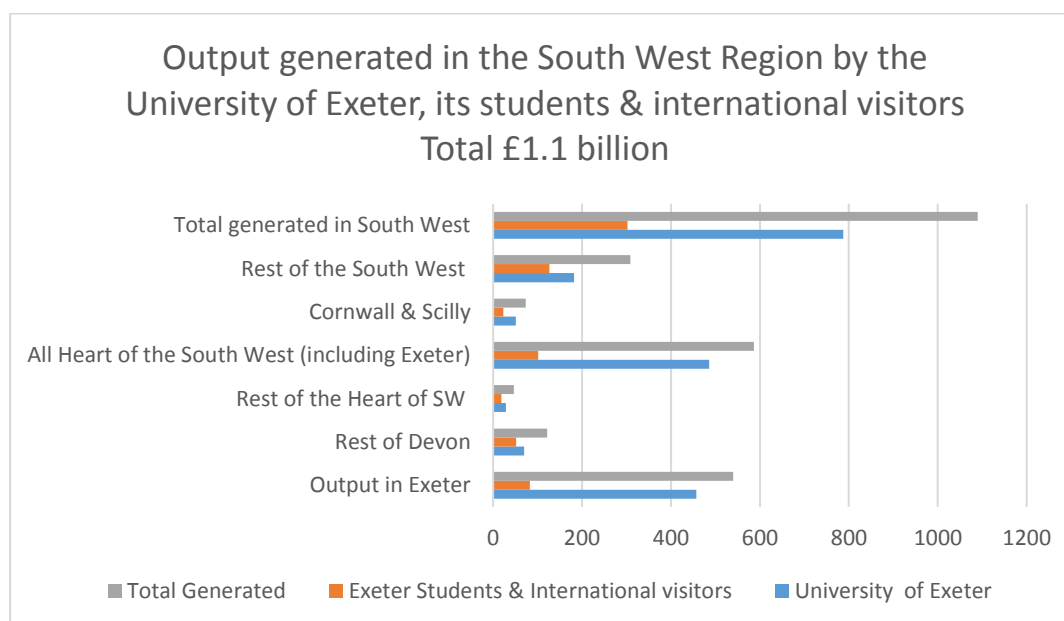
Local and Regional impact of the University of Exeter and its students and international visitors

This section presents the local and regional impact of the University of Exeter together with the impact of student personal expenditure and also includes the element of international visitor impact. This gives the most comprehensive picture of the importance of the University of Exeter to the South West economy.

Figures 12, 13 and 14 present the overall impact on the South West Region (Direct and Secondary) in terms of output, employment and GVA with the proportions of impact accruing to Exeter, the rest of Devon¹⁸, the rest of the Heart of the South West LEP area, the Cornwall & Isles of Scilly LEP area and the rest of the South West. It can be seen that, across every measure, the majority of impact is in the Heart of the South West - between 64-67%, with additional impact in Cornwall (between around 6.5-8%)and just over one quarter (c. 25-28 %) being in the rest of the South West. **Full disaggregated detail is included in Appendix One.** This section illustrates some of the results and puts these into context.

Impact on the South West Region

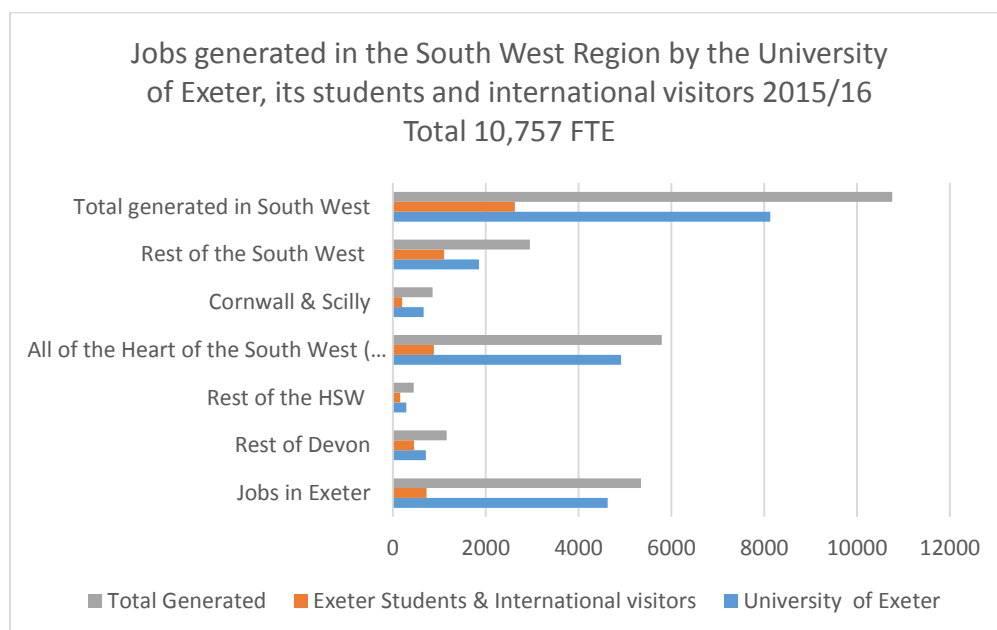
Figure 12: Output generated in the South West Region by the University of Exeter, its students and international visitors



Source: Viewforth Modelled Analysis 2017

¹⁸ The rest of Devon includes the rest of the Devon County Council area, Plymouth and Torbay

Figure 13: Jobs generated in the South West Region by the University of Exeter, its students and international visitors



Source: Viewforth Modelled Analysis 2017

In total, 10,757 FTE jobs were generated across the South West. 5346 of these were in Exeter, a further 1160 in the rest of Devon, 448 in other parts of the Heart of the South West, 853 in Cornwall & the Isles of Scilly and 2950 in the rest of the South West. The 10,757 FTE jobs generated represent 0.36% of all South West Region employment, which is very significant for a single organisation in such a large region.¹⁹

At a more local level the significance is even more striking.

- The 5346 FTE jobs in Exeter were equivalent to 7.2% of all Exeter employee jobs.²⁰
- Total Devon employment (6505, including Exeter) was equivalent to 1.7% of all Devon employee jobs.²¹
- Total Heart of South West employment impact (including Exeter) of 6952 represents just over 1.2% of all Heart of South West employee jobs.²²
- The share of Cornwall and Isles of Scilly employee jobs came to just over 0.5%.²³

¹⁹ All South West employment in 2016 came to 2.97million (ONS 2016)

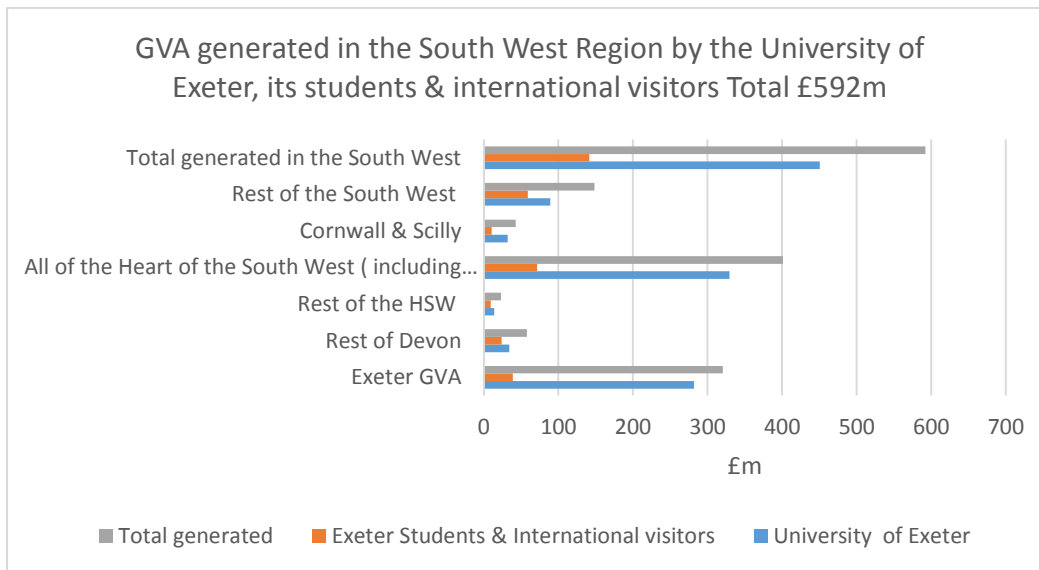
²⁰ Nomis (2016). There were 89,000 Exeter employee jobs in 2015. (The definition of employee jobs excludes self-employed, government-supported trainees, HM Forces and all farm-based agriculture. However it is also a headcount figure whereas the impact jobs are FTEs so in practice this may understate University's impact may be understated as a share of all employment. By translating the part-time jobs into Fulltime on the basis of 2 x Part time jobs = 1 Fulltime job, the numbers are more compatible – making 74,000 full time employee jobs in Exeter. We have used this full time approximation throughout for comparisons.

²¹ Nomis (2016) In this context Devon includes Devon CC, Plymouth & Torbay (Total employee jobs headcount 465,000, FT translation 381,500)

²² Nomis (2016) There were 682,000 headcount HSW employee jobs in 2015, FT translation 561,500.

²³ Nomis (2016) there were 201,000 (headcount) employee jobs in Cornwall & the Isles of Scilly in 2015, FT translation 162,500.

Figure 14: GVA generated in the South West Region by the University of Exeter, its students and international visitors



Source: Viewforth Modelled Analysis 2017

For comparison, the total regional GVA generated of £592m as equivalent to nearly 0.5% of 2015 South West Regional GVA.²⁴ Total GVA generated in Exeter (£320.5m) was equivalent to nearly 8% of Exeter GVA.²⁵ The £378.3m of GVA in Devon as a whole was equivalent to over 1.6% of all Devon GVA.²⁶

The GVA generated across the Heart of the South West (including Exeter) of £401.2m was equivalent to 1.2% of all Heart of the South West GVA.²⁷ The £42.6m of GVA generated in Cornwall made up nearly 0.5% of all Cornwall & Isles of Scilly 2015 GVA.²⁸

Conclusions

This study analysed the economic impact of the University of Exeter in the academic and financial year 2015/16. Results are presented for the impact of the University in terms of impact on output, employment and GVA at local, regional and UK level. Additional analysis was undertaken of the impact of student personal (non-fee) expenditure, with a particular emphasis on the importance of student expenditure at the local level. Estimates were also made of numbers of international visitors and their impact analysed. The element of impact attributable to international visitors is likely to be an underestimate of the contribution of this element of university activity as data on the numbers of academic business and conference visitors attracted by the University are not routinely collected and hence the international visitor impact included in this study relates only to estimates of 'family & friend' leisure visitors associated with international students.

²⁴ ONS (2016) South West GVA came to £126,007 million

²⁵ ONS (2017) Exeter 2015 GVA was estimated as £4085m.

²⁶ ONS (2017) 2015 Devon GVA was £23,122m.

²⁷ ONS(2017) 2015 Heart of South West GVA was £34,271m

²⁸ ONS(2017) 2015 Cornwall & Isles of Scilly GVA was £9,911m.

This study shows that the University of Exeter is of major importance to both the local and the wider regional economy. The University is clearly making an important contribution across the South West but is of particular importance to Exeter, Devon and the Heart of the South West as a whole, with the jobs generated in Exeter being equivalent to 6% of Exeter employment, those in Devon overall being 1.4% of Devon jobs and jobs generated in the Heart of the South West overall being equivalent to 1% of all Heart of South West jobs.

While the University's current activity in Cornwall is on a smaller scale than that in Devon, its campuses in Penryn and Truro are still vital in a local context. Overall the impact on Cornwall was equivalent to 0.4% of Cornwall and Isles of Scilly employment and responsible for nearly 0.5% of Cornwall & Isles of Scilly GVA.

Appendix One: Disaggregated results for impact of the University of Exeter, Exeter students and international visitors 2015/16.

Output Impact £m									
	University Direct	University Secondary	NON EU Students	REU students	Rest of UK students	Rest of South West Students	Devon & Cornwall Students	International visitors	TOTAL
Exeter	345.6	111.5	18.6	6.0	45.8	9.8	1.4	1.4	540.1
Rest of Devon	0.0	69.5	10.8	3.5	26.6	5.7	4.7	0.8	121.6
Rest of Heart of South West	0.0	28.4	3.8	1.2	9.4	2.0	1.6	0.3	46.7
Cornwall & Scilly	26.0	24.8	3.3	1.1	8.2	1.7	8.1	0.2	73.4
Rest of South West	0.0	181.8	25.8	8.3	63.5	13.6	13.4	1.9	308.4
Rest of UK	0.0	65.1	12.2	3.9	0.0*	0.0*	0.0*	0.9	82.0
TOTALS	371.5	481.1	74.5	24.0	153.5	32.8	29.2	5.6	1172.2
Employment Impact FTE Jobs									
	University Direct	University Secondary	NON EU Students	REU students	Rest of UK students	Rest of South West Students	Devon & Cornwall Students	International visitors	TOTAL
Exeter	3490	1136	161	52	397	85	13	12	5346
Rest of Devon	0	708	94	30	231	49	40	7	1160
Rest of Heart of South West	0	289	33	11	81	17	14	2	448
Cornwall & Scilly	405	252	29	9	71	15	70	2	853
Rest of South West	0	1852	224	72	551	118	116	17	2950
Rest of UK	0	549	89	29	0*	0*	0*	7	673
TOTALS	3895	4785	630	203	1332	284	254	47	11430
GVA Impact £m									
	University Direct	University Secondary	NON EU Students	REU students	Rest of UK students	Rest of South West Students	Devon & Cornwall Students	International visitors	TOTAL
Exeter	227.2	54.5	8.7	2.8	21.4	4.6	0.7	0.7	320.5
Rest of Devon	0.0	34.0	5.1	1.6	11.9	2.7	2.2	0.4	57.8
Rest of Heart of South West	0.0	13.9	1.8	0.6	4.9	0.9	0.8	0.1	22.9
Cornwall & Scilly	19.9	12.1	1.6	0.5	3.8	0.8	3.8	0.1	42.6
Rest of South West	0.0	88.9	12.1	3.9	29.7	6.3	6.3	0.9	148.1
Rest of UK	0.0	32.4	5.4	1.7	0.0	0.0	0.0	0.4	39.9
TOTALS	247.1	235.9	34.5	11.1	71.8	15.3	13.7	2.6	631.9

Source: Viewforth Modelled Analysis 2017 *To acknowledge issues of displacement, the expenditure impact of UK students on the rest of the UK outside the South West is disregarded.

Appendix Two: University of Exeter Multipliers

The Modelling system used for this analysis enables multipliers to be derived for the University of Exeter (institutional impact only). These multipliers are derived from the tailored analysis. They are *outcomes* from the analysis.

Output Multipliers

UK: 2.29

Regional (South West): 2.12

Heart of South West: 1.56

Devon: 1.49

Exeter: 1.30

Cornwall & Isles of Scilly: 1.07

In other words, every £1m of the University's own output generates an additional £1.29m in the UK:

£0.07m in Cornwall & Isles of Scilly

£0.23m in Exeter

£0.19m in the rest of Devon

£0.07m in the rest of the Heart of the South West

£0.56m in the rest of the South West

£0.17m in the rest of the UK

Employment Multipliers

UK: 2.23

Regional (South West): 2.09

Heart of South West: 1.55

Devon: 1.47

Exeter: 1.29

Cornwall & Isles of Scilly: 1.06

In other words, for every FTE job inside the University as a whole, the University generates an additional 1.23 FTE jobs in the UK:

0.06 FTE in Cornwall & Isles of Scilly

0.23 FTE in Exeter

0.18 FTE in Devon

0.08 FTE in the rest of the Heart of the South West

0.54 FTE in the rest of the South West

0.14 FTE in the rest of the UK

GVA

UK: 1.95

Regional (South West): 1.82

Heart of South West: 1.41

Devon: 1.36

Exeter: 1.22

Cornwall & Isles of Scilly: 1.05

In other words, every £1m of the University's own GVA generates an additional £0.95m of GVA in the UK:

£0.05m in Cornwall & Isles of Scilly

£0.17m in Exeter

£0.14 in the rest of Devon

£0.05m in the rest of the Heart of the South West

£0.41m in the rest of the South West

£0.13m in the rest of the UK

FTE jobs per £1m of University output

Every £1m of University of Exeter Output generates 23.4 FTE jobs:

10.5 in the University

3.1 elsewhere in Exeter

1.9 in the rest of Devon

0.8 in the rest of the Heart of the South West

0.7 in Cornwall & Isles of Scilly

4.9 in the rest of the South West

1.5 in the rest of the UK

Appendix Three: Per Capita Impact of international students

Money brought into the UK by international students represents export earnings and a contribution to the UK Balance of Trade. Students pay fees to the University and also have personal (non-fee) expenditure, on living costs – rent, accommodation, food, clothes, travel etc. The overall impact of impact of fee payments made is included in the analysis of the University’s impact and the overall impact of student personal expenditure has been analysed and presented in the report. However it is of policy relevance to consider the **per capita** impact of international students, which gives greater insight into the impact of changes in international student numbers.

Therefore we extracted the element of university impact that is attributable to international student fee payments and analysed the overall impact (fee and personal expenditure) attributable to international students to derive a per capita impact figure. According to HESA²⁹ the 4115 Non- EU students paid a total of £58.7m in fees to the University in 2015/16. HESA does not currently separate out EU fees from UK domestic fees as the fees paid by EU students are usually the same as UK students. However, by looking at the total fees paid and the proportion of EU to UK students, it was possible to estimate the fees paid by the 1325 students from the rest of the EU as amounting to £10.1m. Students also pay other money to the university – for instance for residence and catering where they stay on campus. For Exeter students this had been estimated as approximately 13% of personal expenditure and the off campus modelled impact had been adjusted downwards accordingly as that would be included in the university impact. In assessing impact achieved through the money paid to the University therefore that 13% of overall international personal expenditure was included with the fees paid to the University. This gave an overall estimated spend as follows:

Estimated International Student Expenditure in 2015/16	Non EU Students	EU Students
Money paid to the University (Tuition fees and other payments e.g. residence)	£66.1m	£12.5m
Off Campus personal expenditure	£49.6m	£16.0m
Total	£115.7m	£28.5m
Per Capita	£28,121	£21,471

Source: Viewforth Consulting Analysis

The modelled impact achieved through the student payments to the University was extracted from the University’s overall impact and combined with the Students’ personal expenditure to more clearly present the total economic impact due to international students and also to be able to derive a per capita impact figure. This gives a better idea of the potential impact on the economy of an increase or decrease in international student numbers.

Per Capita Impact Results

Each Non EU student at the University of Exeter generated:

- £50,831 of UK output in 2015/16 (£45,380 of which was in the South West Region)
- £26,931 of UK GVA (£24,382 of which was South West GVA)
- 0.49 FTE jobs (0.44 of which was in the South West) . So every 100 Non EU Students generate 49 FTE jobs in the Uk.

Each student from another EU country at the University of Exeter generated:

- £39,707 of UK output in 2015/16 (£35,102 of which was in the South West)

²⁹ HESA *Finances of HEIs 2015/16*

- £20,626 of UK GVA (£18,498 of which was South West GVA)
- 0.37 FTE jobs (0.34 of which was in the South West) . So every 100 EU Students generates 37 FTE jobs in the UK.

The detailed results are presented in the tables below.

Overall and Per Capita Impact of international Students

4115 Non EU Students at the University of Exeter	Output Impact on the UK	Output Impact on the South West	GVA Impact on the UK	GVA Impact on the South West	Employment Impact on the UK (FTE)	Employment Impact on the South West(FTE)
Impact achieved through the money paid to the University (fees & related payments e.g. for accommodation)	£134.71	£124.43	£76.31	£71.19	1371	1284
Impact achieved through additional off-campus personal expenditure	£74.46	£62.31	£34.51	£29.14	630	541
TOTAL IMPACT	£209.17	£186.74	£110.82	£100.33	2001	1825
PER CAPITA IMPACT OF NON EU STUDENTS	£50,831	£45,380	£26,931	£24,382	0.49	0.44
1325 Students from other EU countries at the University of Exeter	Output Impact on the UK	Output Impact on the South West	GVA Impact on the UK	GVA Impact on the South West	Employment Impact on the UK (FTE)	Employment Impact on the South West(FTE)
Impact achieved through the money paid to the University (fees & related payments e.g. for accommodation)	£28.63	£26.45	£16.22	£15.13	292	273
Impact achieved through additional off-campus personal expenditure	£23.98	£20.06	£11.11	£9.38	203	174
TOTAL IMPACT	£52.61	£46.51	£27.33	£24.51	494	447
PER CAPITA IMPACT OF STUDENTS FROM OTHER EU COUNTRIES	£39,707	£35,102	£20,626	£18,498	0.37	0.34

Source: Viewforth Consulting Analysis

Overall and Per Capita distribution of international student impact across the South West and rest of UK

Output

Output impact	NON EU Students £m	Per Capita £	Output impact	Rest of EU Students £m	Per Capita £
Exeter	90.80	22066	Exeter	21.33	16100
Rest of Devon	21.79	5296	Rest of Devon	5.81	4388
Rest of Heart of South West	8.28	2013	Rest of Heart of South West	2.18	1642
Cornwall & Scilly	11.33	2754	Cornwall & Scilly	2.77	2092
Rest of South West	54.53	13252	Rest of South West	14.41	10878
Rest of UK	22.43	5450	Rest of UK	6.10	4607
TOTALS	209.17	50831	TOTALS	52.61	39707

Source: Viewforth Consulting Analysis

GVA

GVA impact	NON EU Students £m	Per Capita £	GVA impact	Rest of EU Students £m	Per Capita £
Exeter	53.20	12928	Exeter	12.26	9251
Rest of Devon	10.43	2534	Rest of Devon	2.77	2090
Rest of Heart of South West	3.97	965	Rest of Heart of South West	1.04	783
Cornwall & Scilly	6.61	1607	Cornwall & Scilly	1.58	1189
Rest of South West	26.12	6347	Rest of South West	6.87	5185
Rest of UK	10.49	2550	Rest of UK	2.82	2127
TOTALS	110.82	26931	TOTALS	27.33	20626

Source: Viewforth Consulting Analysis

FTE employment

FTE jobs impact	NON EU Students FTE jobs	Per Capita FTE	FTE jobs impact	Rest of EU Students FTE jobs	Per Capita FTE
Exeter	892	0.22	Exeter	207	0.16
Rest of Devon	206	0.05	Rest of Devon	54	0.04
Rest of Heart of South West	79	0.02	Rest of Heart of South West	20	0.02
Cornwall & Scilly	133	0.03	Cornwall & Scilly	31	0.02
Rest of South West	516	0.13	Rest of South West	134	0.10
Rest of UK	176	0.04	Rest of UK	47	0.04
TOTALS	2001	0.49	TOTALS	494	0.37

Source: Viewforth Consulting Analysis

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