

**FALMOUTH
UNIVERSITY'S
IMPACT ON
CORNWALL'S
ECONOMY**
JUNE 2016



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EXECUTIVE SUMMARY

£58.3 m

Economic activity supported by Falmouth University and its students in 2014/15.

This is equivalent to 0.6 percent of the economic output of Cornwall.

1300 jobs

Supported by Falmouth University and its students in Cornwall in 2014/15.

This is equivalent to one in every 200 jobs in the local area.

Cornwall has among the lowest living standards in Europe.

In 2014, GDP per inhabitant in Cornwall and the Isles of Scilly was just 70 percent of the average for all 28 European Union Member States. It was also below the average for Lithuania, Slovakia, and Slovenia, and just higher than Hungary and Latvia.

Companies and institutions that contribute positively to the Cornish economy are vital in helping to raising living standards.

Falmouth University is one such institution, making a significant contribution to the county's economy.

In 2014/15, Falmouth University supported 1,300 jobs in Cornwall—equivalent to one in every 200 jobs in the county.

The University pays its staff an average full-time equivalent wage of £33,600. This is well above the median for full-time workers for people who live in the county of £23,346. It is also above the salary received by 75 percent of full-time staff who live in Cornwall, at £31,723.

The University's employees are highly embedded in the local community.

In 2014/15, 95 percent lived in the county, with some 36, 15 and 13 percent living in Falmouth, Penryn and Truro. Staff spending helps support local retail and leisure outlets.

In total, Falmouth University supported a value added contribution of over £58.3 million to the Cornish economy in 2014/15.

So £1 in every £155 of economic activity in the county was to some degree dependent on the University. Splitting out the University's contribution from that of its students and visitors to these students, shows that Falmouth University directly and indirectly contributed £42.9 million and that additional students contributed an additional £16.6 million in GDP.

In 2014/15, Falmouth University made a total tax contribution of £17.1 million to the UK Exchequer.

This was equivalent to an amount sufficient to pay the salaries of about 720 fire service officers, or 660 nurses in the South West.

1. INTRODUCTION

By one measure (GDP per inhabitant), people living in Cornwall and the Isles of Scilly have very low incomes. In 2013, GDP per inhabitant was 70.4 percent of the European Union average.¹ It was also below the national average for Slovakia (75 percent of the EU average), and Estonia, Lithuania and Greece (all 73 percent). It was the second lowest of any region in the UK, with only West Wales and The Valleys ranking worse at 67 percent of the EU average.

Any institution which contributes to the county's economy and is growing rapidly can help improve Cornish inhabitants' living standards. Falmouth University is one such institution. The expenditure it undertakes, and that of the students it attracts to the county and their visitors, stimulates economic activity across a broad spectrum of industries in Cornwall. This creates gross value added and employment, and generates tax receipts.

The University will also potentially play a big role in Cornwall's future by enhancing the supply side of the economy. One way it does that is to help local firms innovate. Its academics work with firms and other institutions across all five of the Smart Specialisation areas (namely, digital economy, e-health, agri-tech, marine and aerospace/space) to identify new opportunities and boost productivity.² The impact of the University

spreading the benefits of its research is recognised in the Cornwall and Isles of Scilly LEP Strategic Economic Plan 2014–2020 which states: "Falmouth, Exeter and Plymouth Universities and specialist research centres, can transform our R&D, innovation and commercialisation performance in key specialist areas and also address higher level skills pathways and opportunities."³

Another example of how the University enhances the productive potential of the Cornish economy is its Launchpad programme. Employment in the creative sector has been growing in Cornwall, rising by 17 percent over the past five years (2009 to 2014). It will be further boosted by the University's Launchpad programme, which helped graduates start five digital high-growth companies in 2015. The University hopes to expand this to 32 companies by 2019/20.

This report looks at the expenditure impact that the University has on the Cornish economy. It updates and expands a similar report that Oxford Economics undertook in March 2014 for Falmouth University and the University of Exeter.⁴ As before, we explore three standard expenditure channels that all economic impact studies use: operational spending undertaken at the University's facilities (direct impacts), expenditure on

inputs of goods and services required to provide the University's services (indirect impacts), and wages paid to staff, some of which are then spent at local providers of goods and services (induced impacts).

In addition to the standard impacts, the analysis also looks at Falmouth University's broader impact on Cornwall's economy. These are: the subsistence spending of the students the University attracts to Cornwall, spending by friends and family who visit these students in Cornwall, the University's capital expenditure, and the activities of the five digital spinoff companies that Falmouth University has helped launch.

¹ Eurostat, "Regional yearbook 2015", (2015)

² Department of Business, Innovation & Skills, "Smart specialisation in England: Submission to the European Commission", (2015).

³ Cornwall and Isles of Scilly Local Enterprise Partnership, "Cornwall & Isles of Scilly Strategic Economic Plan 2014 – 2020", (2014). Quotation from page 5. The definition of the creative industries is the same as used by in the Department for Culture, Media & Sport, "Creative industries economic estimates", (2016).

⁴ Oxford Economics, "The economic impact of Falmouth University, the University of Exeter (Cornwall) and Falmouth Exeter Plus", (2014)

INTRODUCTION TO ECONOMIC IMPACT ANALYSIS

The study undertakes a standard economic impact assessment, looking at three forms of expenditure (Fig. 1).

1. The first channel of impact is the **direct effect**. This is the economic activity generated by the University itself, for example by employing academic and operational staff and by generating economic activity through its payment of wages and generation of surpluses.
2. The second channel of impact is the **indirect effect**, which is the employment and activity that is supported through the University's local supply chain, as a result of its purchases of inputs of goods and services from local suppliers.
3. The third channel, known as the **induced effect**, captures the economic activity supported by its staff, and those employed in its direct supply chain, spending their wages on goods and services in the local economy.

A final channel, called '**catalytic**' effects, is also quantified here. It includes the wider benefits of the University's activities, including the spending that students attracted to Cornwall engage in, spending by people who visit the students, capital expenditure by the university, and economic activity from university-initiated spinoff companies.

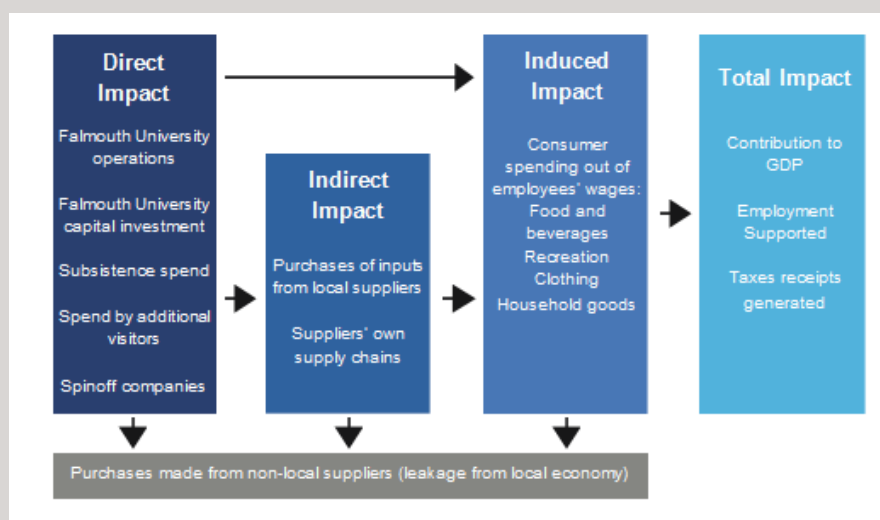
The indirect and induced impacts are calculated using multipliers derived from regional input-output tables. These are developed by combining ONS (2014) input-output data for the whole UK with techniques developed by Flegg, et al. (1995).⁵

Employment and tax estimates are calculated using ONS data on labour productivity, average earnings in each industrial sector and tax allowances rates for 2014/15.⁶

The scale of the University's impact for each of the three channels is measured using three metrics:

1. **Gross value added** is the contribution an institution or company makes to Gross Domestic Product (GDP). It is most simply viewed as the value of the output it produces less the value of inputs used in that output's production.
2. **Employment** is measured on a full-time equivalent (FTE) basis for direct impacts, and headcount basis for other impact channels.
3. **Tax receipts** are generated from income taxes, employee and employer national insurance contributions and other indirect taxes paid by employees (such as VAT).

Fig. 1. Channels of economic impact



2. DIRECT IMPACT

Falmouth University has a substantial impact on Cornwall's economy. This section of the report estimates the magnitude of the university's employment, gross value added, and tax contributions through the channels outlined in Fig. 1.

In the 2014/15 academic year, Falmouth University and Falmouth's share of FX Plus hired 1,730 people across the skills spectrum (Fig. 2).

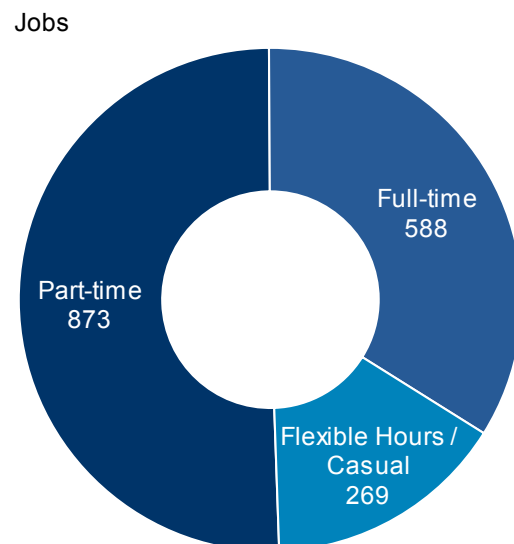
Because of the large number of part-time, casual, and one-off people Falmouth University employs, this report assesses the university's direct employment impact in full-time equivalent terms. Based on Falmouth University's annual accounts, and those of FX Plus, Oxford Economics estimates that Falmouth University directly employed 607 people in Cornwall on a full-time equivalent basis in 2014/15.⁷

Falmouth University and Falmouth's share of FX Plus earned £53.4 million in revenue in 2014/15 (Fig. 3). That revenue included tuition fees and education contracts, Falmouth's share of income from its joint venture (FX Plus), and funding council and research grants.⁸ During the same time period, the university bought inputs of

goods and services worth £18.8 million. The difference between the two, £34.7 million, is the gross value added contribution to GDP that Falmouth University and Falmouth's share of FX Plus created in Cornwall in 2014/15. That is 0.4 percent of all gross value added created in Cornwall in 2014.

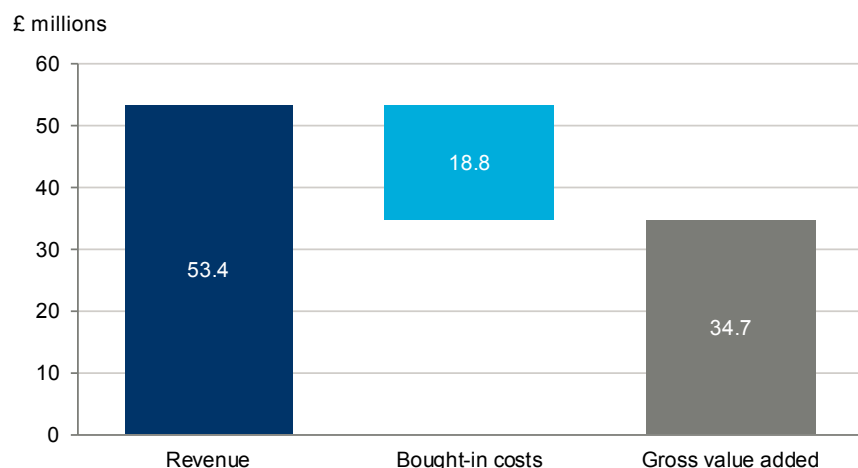
In addition, based on Falmouth University's employment, Oxford Economics estimates that the university, its share of FX Plus, and its employees paid £6.9 million in national insurance contributions and income tax.⁸

Fig. 2. People employed by Falmouth University, 2014/15



Source: Falmouth University

Fig. 3. GVA created by Falmouth University in Cornwall, 2014/15



Source: Falmouth University

⁷ That includes Falmouth University's employees and 69 percent of FX Plus employees, which is equal to the student split between Falmouth University and the University of Exeter (Cornwall). According to official annual financial statements, Falmouth University employed an average of 429 full-time equivalents in 2014/15, while FX Plus employed an average of 308 full-time equivalents. Falmouth University's share is thus $429 + 308 \times 69\% = 642$. KPMG LLP, "Falmouth University: Consolidated financial statements, year ended 31 July 2015," 2015 and KPMG LLP, "Falmouth Exeter Plus: Consolidated Financial Statements for the Year to 31 July 2015," 2015. Based on anonymised postcode data provided by Falmouth University, an estimated 95 percent of the 642 full-time equivalent employees (which is 607) lived in Cornwall in 2014/15.

3. SUPPLY CHAIN IMPACT

During the 2014/15 academic year, Falmouth University spent £18.8 million on inputs of goods and services from UK suppliers. Based on postcode data supplied by Falmouth University, Oxford Economics estimates that £5.4 million of that amount was spent in Cornwall.

This spending supported a wide range of local businesses, including architects, print shops, caterers, social landlords, car hire outlets, plumbers and electrical fitters, builders, photography studios, and computer equipment retailers. Categorising spend into 17 broad categories, Fig. 4 shows that Falmouth University's procurement stimulated activity across a wide range of businesses in Cornwall. Around 15 percent of the total was spent with local retail and wholesale outlets, 12

percent with local fitters and builders, and 11 percent on real estate services organisations (for example, social landlords).

In 2014/15, as Fig. 5 shows, nearly 60 percent of the total procurement spend fell within ten Cornish wards: Falmouth Arwenack (13 percent of the total); Carn Brea South and Mabe (8 percent each); Camborne Central and Penryn West (5 percent each); Truro Boscawen, Falmouth Trescobeeas, Chacewater, and Kenwyn (4 percent each); and Falmouth Gyllyngvase and Redruth North (3 percent each).

The largest spend categories were for a caterer, a social housing organisation, and a building and engineering firm. The remaining 40 percent of Falmouth University's procurement expenditure was widely dispersed, and

reached nearly every corner of Cornwall. Fig. 6 illustrates the relative magnitude of the spend by postcode and whether the expenditure was by the University itself or FX Plus.

Beyond the initial recipients, this spending created ripples of economic activity as local businesses went on to purchase goods and services from their suppliers, and so on. Using our bespoke input-output model for Cornwall to quantify these ripple effects, Oxford Economics estimates that Falmouth University's spending on suppliers located in the county supported a £2.8 million gross value added contribution to Cornwall's GDP, 98 jobs, and £1 million in tax receipts for the Exchequer in 2014/15.⁸

Fig. 4. Falmouth University's spending with Cornwall suppliers, 2014/15

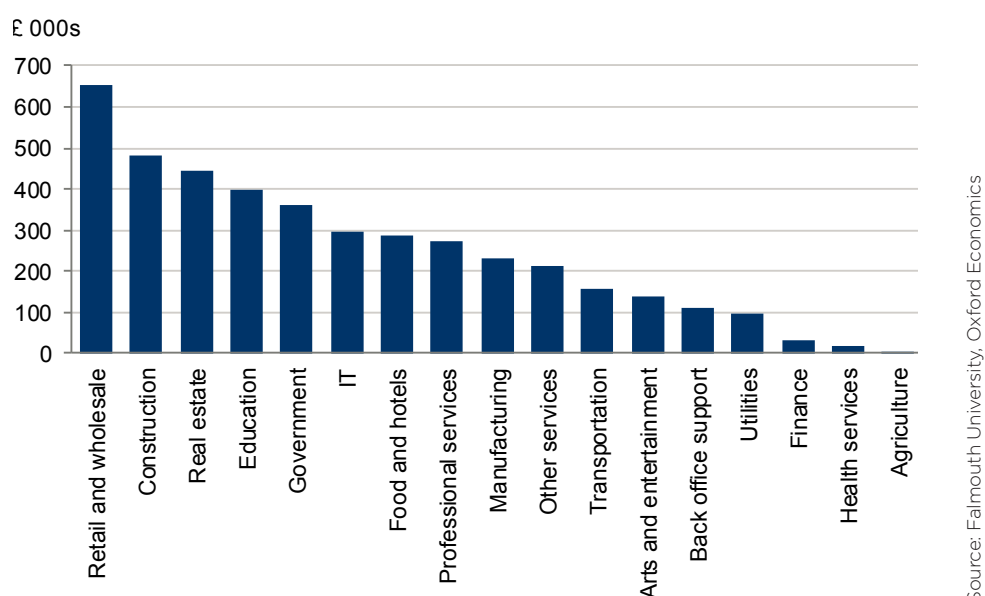
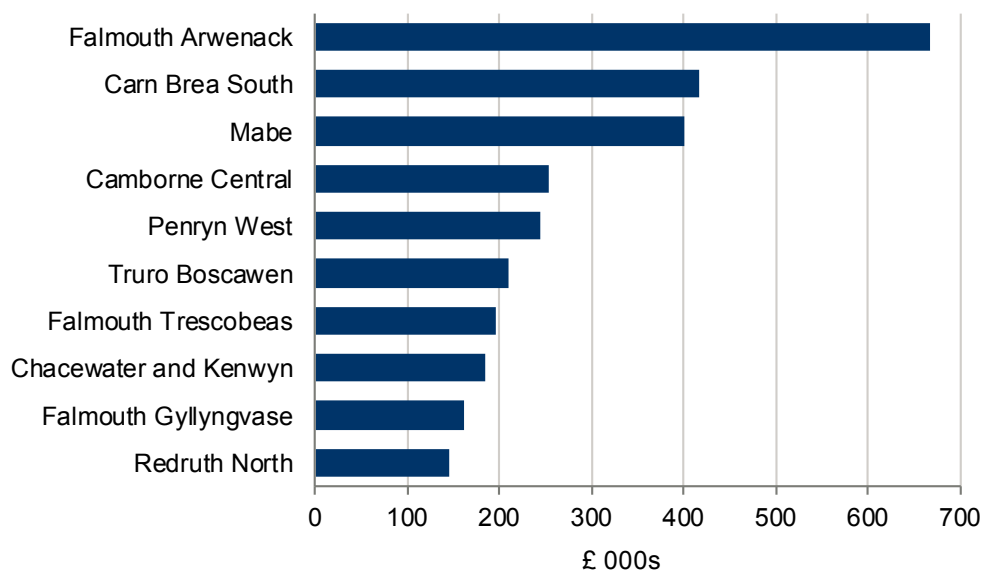
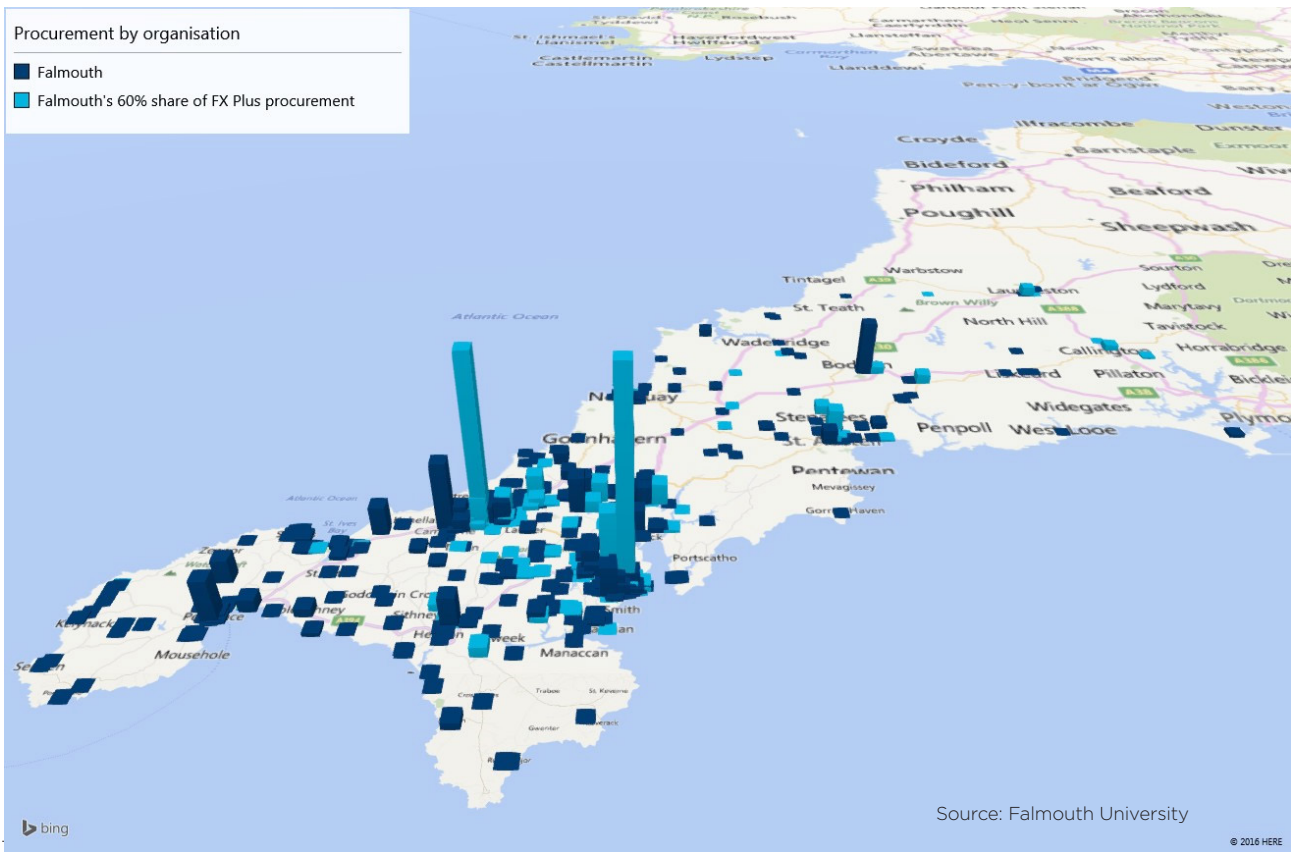


Fig. 5. Falmouth and FX Plus procurement by ward in Cornwall, 2014/15



Source: Falmouth University

Fig. 6. Falmouth University's procurement expenditure in Cornwall, 2014/15



4. WAGE SPENDING IMPACT

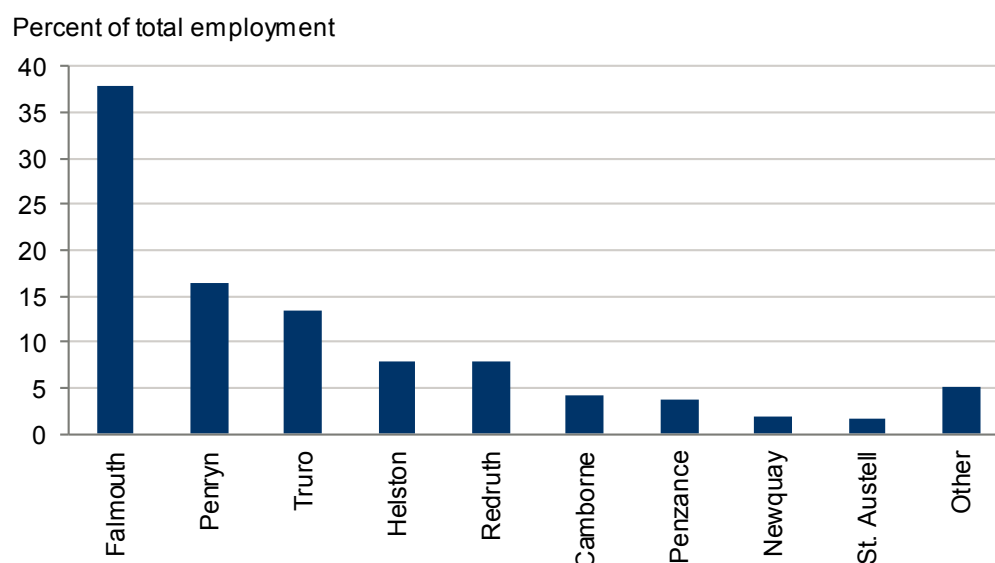
When Falmouth University and FX Plus pay their staff wages, recipients will spend some or all of their disposable income with local restaurants, pubs, retailers, and housing providers. These impacts will occur primarily where staff live: Falmouth (where 38 percent of Cornwall staff live), Penryn (16 percent), Truro (13 percent), Helston (8 percent), and Redruth (8 percent) as shown in Fig. 7.¹⁰

Falmouth University and Falmouth's share of FX Plus paid £22 million to their staff in wages and salaries in 2014/15. Of that amount, based on anonymised postcode data of where staff live, we estimate that £20.4 million was paid to staff living in Cornwall, or £33,600, on average, per full-time equivalent person employed by Falmouth

University in Cornwall. That is more than 40 percent higher than the median gross annual pay for full-time workers who live in Cornwall, which is important in the context of raising living standards in the county. As stated earlier, Eurostat data show that living standards, as measured by GDP per inhabitant, are just 70 percent of the EU 28 average, lower than Lithuania, Slovakia, and Slovenia, and just higher than Hungary and Latvia.¹¹

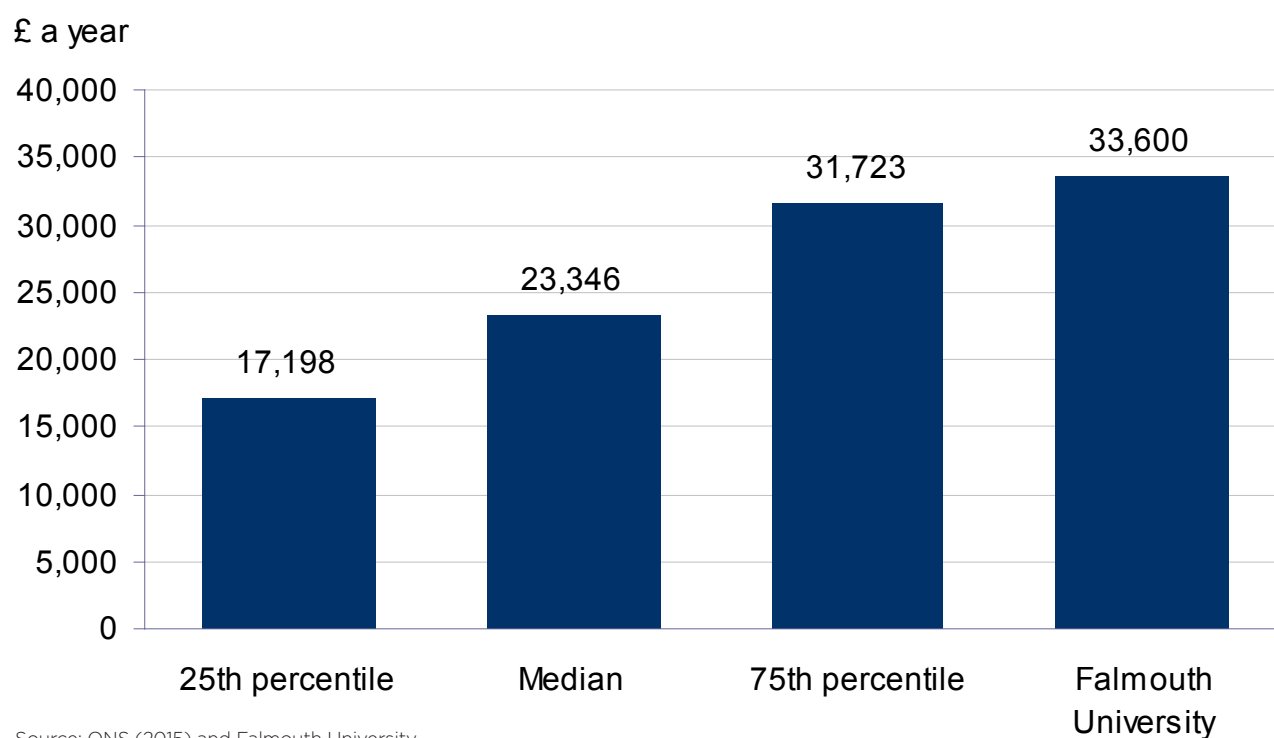
Oxford Economics estimates that in 2014/15, Falmouth University's and FX Plus's wage payments to their employees supported a £5.4 million gross value added contribution to Cornwall's GDP, 156 jobs in the local economy, and £1.7 million in tax receipts for the Exchequer.

Fig. 7. Falmouth and FX Plus staff location by town, 2014/15



Source: Falmouth University

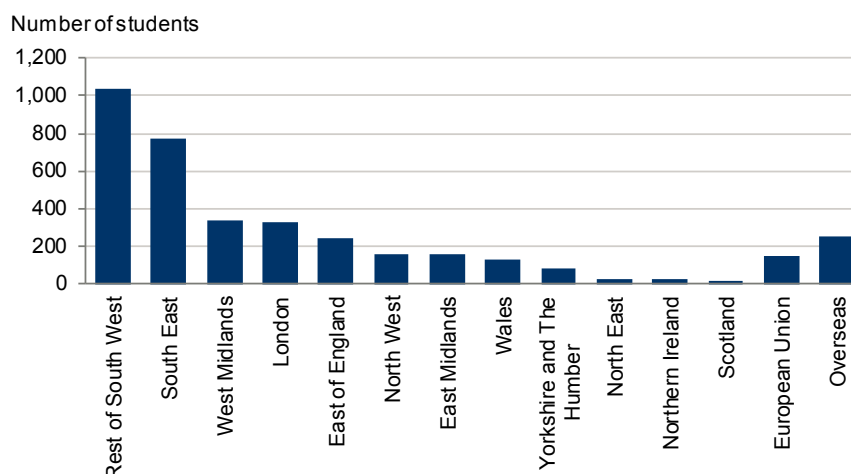
Fig. 8. The annual average pay of people who work full-time and live in Cornwall compared to those who work at Falmouth University, 2014/15



5. STUDENTS' SUBSISTENCE SPENDING IMPACT

Falmouth University attracts a wide range of students to Cornwall, many of whom come from elsewhere in the UK or another country. Of Falmouth's 4,339 students (including undergraduates, graduates, research, and foundation students), an analysis of Falmouth's postcode database shows that 3,316 of these students applied from outside Cornwall and 404 of these students applied from outside the UK (Fig. 9). These students are deemed 'additional' to Cornwall—if they had chosen a university elsewhere, the assumption is that they would not be in Cornwall spending money with local retailers, housing providers, and entertainment venues.

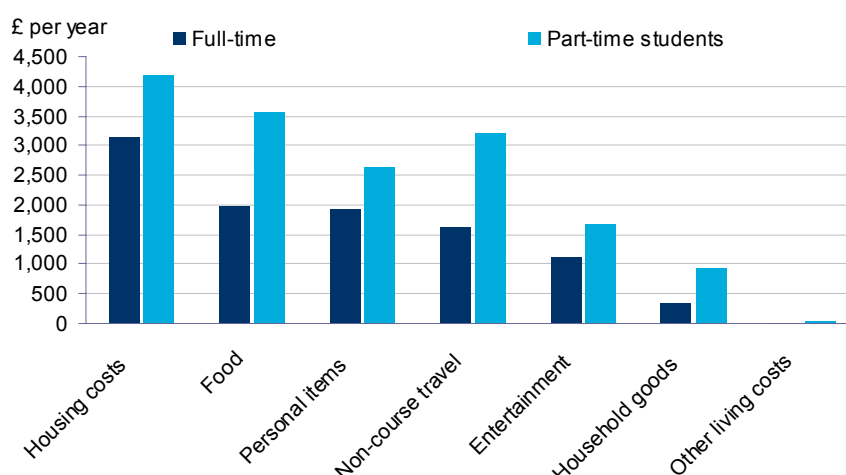
Fig. 9. Location from which 2014/15 students applied to Falmouth University



Source: Falmouth University

Their annual spend can be considerable. Fig. 10 shows the average living costs for students in England in 2014/15, including housing (£3,200 for full-time students and £4,200 for part-time students), food (£2,000 for full-time; £3,600 for part-time), and personal items like clothing (£1,900 full-time, £2,600 part-time).¹²

Fig. 10. Average living costs for students in England, 2014/15



Source: Department for Business, Innovation and Skills (2013)

Based on research by the Department for Business, Innovation, and Skills on what students spend their money on, Oxford Economics estimates that this additional expenditure in 2014/15 supported a £15.8 million gross value added contribution to Cornwall's economy, 390 jobs, and £4.8 million in tax receipts for the Exchequer.

6. IMPACT FROM VISITS OF FRIENDS AND RELATIVES

Students living in Cornwall are likely to attract visits from friends and relatives, who will spend money on food, hotels, transportation, and retailers during their stays in Cornwall. Similar to the analysis of students' subsistence spending above, our analysis counts only the 'additional' visits—the ones that occur to students who applied to Falmouth University from outside Cornwall, and therefore would be unlikely to occur if those students had chosen a university elsewhere.

To be conservative, Oxford Economics assumes that each student receives one visit. Expenditure per visitor, and in the case of international students, expenditure attracted by international students, are sourced from Visit Cornwall and the Office for National Statistics' International Passenger Survey and the latest UK census.¹³

Oxford Economics estimates that in 2014/15 these visits supported a £780,000 gross value added contribution to Cornwall's GDP, 40 jobs, and £270,000 in tax receipts for the Exchequer.

¹³Visit Cornwall, "Value of Tourism 2011: Cornwall," 2011, Office for National Statistics, "UK Census," 2011, and Office for National Statistics, "International Passenger Survey," 2012

7. IMPACT FROM CAPITAL EXPENDITURE

Falmouth University and FX Plus spend money to keep buildings and facilities up-to-date. To do so they purchase materials, services, and equipment from local suppliers, including local builders and suppliers of advanced electronic equipment.

Falmouth University and its share of FX Plus engaged in £2 million in capital expenditure in 2014/15. An estimated 37 percent of the total, or £740 million was spent in Cornwall. Oxford Economics estimates that this spending supported a £350,000 gross value added contribution to Cornwall's GDP, 6 jobs in the local economy, and £90,000 in tax receipts for the Exchequer.

8. HELPING START DIGITAL HIGH-GROWTH COMPANIES

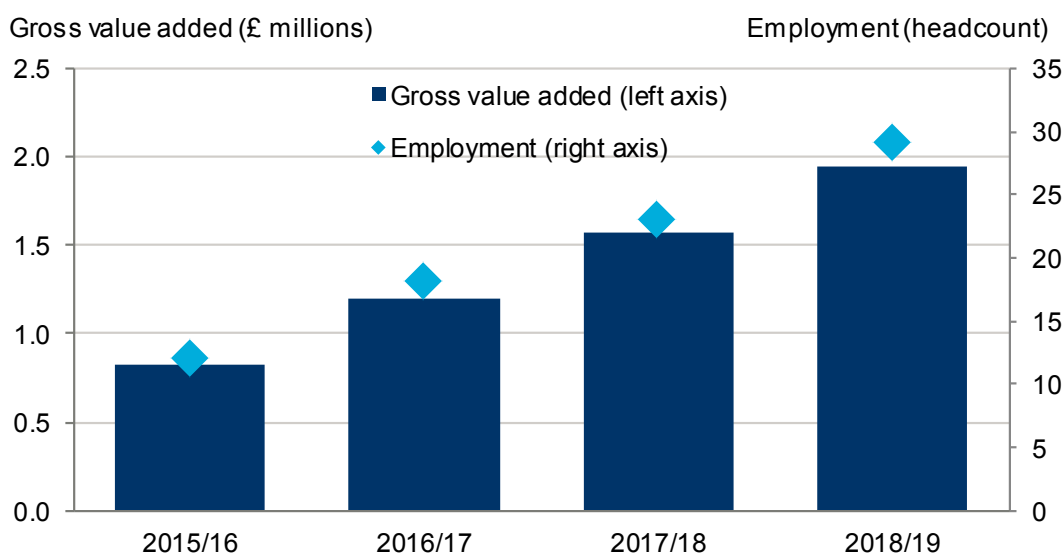
Falmouth University may also make a lasting impact on Cornwall's economy through its one-year programme (which is now complete) that helped graduates launch fast-growing digital games companies. The programme, called Falmouth Launchpad 2015, supplied entrepreneurship training to graduates, contacts in the digital games industry, and a stipend of £16,000 to participants.

According to a February 2016 assessment of the Launchpad programme, a conservative estimate is that five out of six companies launched will go on to be viable companies.¹⁴ If that outlook is realised, the report

suggests that the companies could directly generate a £825,000 gross value added contribution to Cornwall's GDP and employ 12 people by 2015/16. It forecasts a nearly £2 million gross value added contribution to Cornwall's GDP from these start-ups, and suggests that they could employ 29 people by 2018/19.

Falmouth University has plans to expand the Launchpad programme. If the programme's expansion proceeds according to plan, the University will help launch 32 companies, each with four or more employees, by 2019/20. The University expects to receive £2 million per year in dividend income from these ventures from 2020/21 and beyond.

Fig. 11. Falmouth University's projected gross value added and employment in digital high-growth spinoff companies, 2015/16 to 2018/19



Source: Falmouth University's projections

¹⁴Amion Consulting, "Evaluation of Launchpad: A Report," 2016.

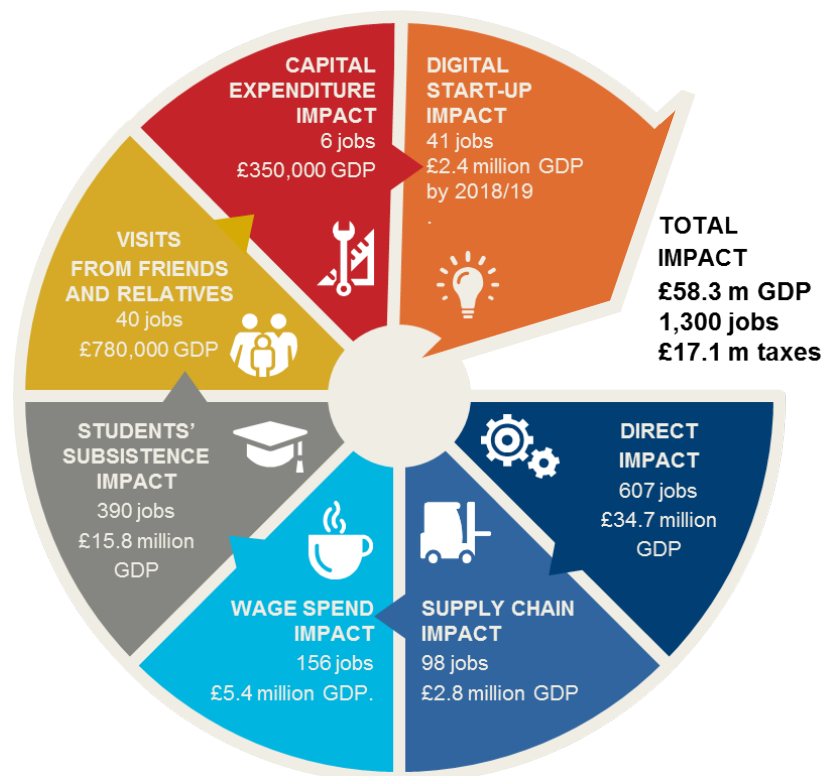
9. CONCLUSION: TOTAL IMPACT OF FALMOUTH UNIVERSITY

Falmouth University made a sizeable contribution to economic activity in Cornwall in 2014/15. Including direct impacts, supply chain impacts, impacts from wage payments, student subsistence spending, visitor spending, the university's capital spending, and the University's digital high-growth spinoff companies, Oxford Economics estimates that Falmouth University supported a £58.3 million gross value added contribution to Cornwall's economy (0.6 percent of Cornwall's total), 1,300 local jobs (0.5 percent of Cornwall's

total), and £17.1 million in tax receipts in 2014/15. Those tax receipts were equivalent to the wages and salaries of 720 fire service officers or 660 nurses in the South West.¹⁵

Falmouth University's expectations for growth in student numbers and the size of its operations suggest that the organisation is likely to continue to support Cornwall's economy for years to come. This support will be vital as Cornwall seeks economic growth to improve living standards for the people who live in the county.

Fig. 12. Falmouth University's total economic impact on Cornwall's economy in 2014/15



10. GLOSSARY

The following terms are used throughout this report:

Currency values: All currency values are quoted in current prices.

Falmouth Exeter Plus: Falmouth Exeter Plus, or **FX Plus**, is a joint venture between Falmouth University (50 percent ownership) and the University of Exeter Cornwall (50 percent ownership). FX Plus delivers services to staff and students at both universities.

Falmouth's share of FX Plus: Falmouth University's share/responsibility for FX Plus' revenues and costs varies from 50 percent to 69 percent depending on the particular line item; the variation is due to the allocation of FX Plus' efforts to each organisation, which was provided for this report by Falmouth University. The share can be as high as 69 percent because Falmouth University has 69 percent of the combined number of students attending Falmouth University and University of Exeter Cornwall.

Full-time equivalent employment: One full-time equivalent job could be one person working full time for a year, two people working half a working year, 100 people working 100th of a year, and so on. We use this measure to quantify direct employment impacts because Falmouth University hires many casual and one-off employees that, individually, are just a fraction of a full-time equivalent employee; summing to full-time equivalent employees gives the most accurate picture of the university's direct employment footprint.

Gross domestic product (GDP): The value of all goods and services produced within a country's borders in a year. It is the sum of gross value added of all organisations within the economy (with adjustments for taxes and subsidies). Gross domestic product is the most commonly cited indicator of the UK economy's health and is frequently used to gauge when the economy has entered or exited a recession.

Gross value added: At the level of a single organisation, like Falmouth University, this is the difference between total revenue and the cost of the goods and services that are used up to create that revenue. Gross value added across all organisations in an economy is equal to gross domestic product (after adjustments for taxes and subsidies).

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June 2016

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The Exchange, photographed by Artur Tixilski courtesy of The Cartel

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