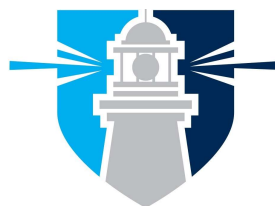


# AN ELEPHANT IN THE ROOM

The hidden economic value of public engagement  
and knowledge exchange in UK universities

This is a preliminary analysis of the economic value generated by the pro-bono public engagement and voluntary knowledge exchange activity of UK university staff. The analysis draws on survey data of staff across different UK universities to estimate the 'hidden' economic value. Results suggest that, for the UK as a whole in 2017, the shadow economic value of this activity was £3.2 billion and the work effort was equivalent to 24,493 full time equivalent qualified jobs.

[Abstract](#)



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## Note on this report

This analysis was carried out and made available by Viewforth Consulting as part of our mission to improve the policy-relevant evidence base on higher education social and economic value. The team members involved in this study were [Ursula Kelly](#), [Emeritus Professor Iain McNicoll](#) and [Dr Deirdre Kelly](#). It was undertaken in our own time with our in-house resources. It was not funded by any external body.

Any views expressed are those of the authors.

## Summary

This is an analysis of the pro-bono public engagement and knowledge exchange which is undertaken by many UK university staff. This engagement is typically voluntary and unpaid, does not form part of any financial contracts between the universities with external bodies and frequently goes ‘under the radar.’

The analysis was based on data collected from stratified sampling of 1093 university staff in 3 different UK universities. University staff were asked to estimate the average amount of time (if any) that they spent in a typical year on a range of voluntary unpaid or nominally paid engagement, knowledge exchange and public service activities. Time spent included essential preparation and travel time for the relevant activity. The sample was grossed up to the entire UK university population by stratified sample groups to obtain estimates of total hours delivered. These were separately shadow-priced using market consultancy rates for different levels of implied qualification level and expertise.

### Headline results

- We estimated that UK university staff delivered over 40 million hours of pro-bono public engagement and knowledge exchange in 2015/16.
- This was equivalent to 24,493 FTE jobs.<sup>1</sup>
- The majority of activity - 28.6 million hours - was delivered by academic staff, with non-academic professional, management and administrative staff delivering 11.8 million hours.
- The overall economic value of UK university staff pro-bono activity was estimated at £3.2 billion per year.
- The economic value of academic staff pro bono activity was calculated as £2.6 billion with that of non-academic staff priced at £611 million.
- Pro-bono work of university staff is worth nearly as much to the economy as all the collaborative research, consultancy and continuing professional development contracts held by the UK Universities (currently put at £4.2 billion.)<sup>2</sup>

This evidence indicates that university staff, with the approval and encouragement of their host institutions, provide a large and economically significant volume of public service and knowledge exchange to UK society on a voluntary basis.

Therefore, it is strongly recommended that in setting the parameters for the proposed Knowledge Exchange Framework or any other higher education evaluation framework, full cognizance is given to this large, albeit underrecognised and hitherto unquantified, existing contribution of universities and their staff to knowledge exchange and public engagement.

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<sup>1</sup> Based on the Research Council and TRAC methodology recommended measure of 1650 hours for one working year.

<sup>2</sup> Data is collected in the Higher Education – Business and Community Interaction Survey on the financial value of collaborative and consultancy contracts held by the University. Together with income from CPD and intellectual property this was recorded as being worth £4.2 billion in 2014/15

## Introduction

The Viewforth Consulting team have worked in the field of higher education impact analysis for over 25 years, as university researchers and subsequently as higher education impact consultants. We have developed an extensive knowledge base and awareness of the many ways in which a university can impact on its host economy and have developed a range of approaches to capturing the economic and social value generated by higher education.<sup>3</sup> The importance of universities to the economy is now better understood than it was when we began work in this area in the early 1990s; however we remain concerned that few of the policy developments relating to evaluation of universities take a holistic view of higher education.

Funding policy for universities has become increasingly tied to universities' ability to demonstrate their impact and to show 'value' in what they do. However the concept of higher education's economic role has been 'diced and sliced' into different policy compartments, with research being treated separately from teaching and wider public engagement or 'knowledge exchange' treated separately from both.

The 'value' of research is assessed through the Research Excellence Framework (REF) with a requirement to show longer-term research outcomes through 'impact case studies'. The 'value' of teaching is ranked through the Teaching Excellence Framework (TEF) with an emphasis on student employment outcomes. The establishment of the new 'Office for Students' is stated as intending to: "ensure that students are receiving a good deal for their investment in higher education".<sup>4</sup> There is now the proposed development of a new 'Knowledge Exchange Framework' (KEF) to run in parallel with the REF and the TEF. The former Universities and Science Minister has explicitly stated that the purpose of KEF is "to benchmark the performance from university-business collaboration ..."<sup>5</sup>

With the current compartmentalisation of higher education policy there is a clear danger that swathes of economic and socially valuable university activity which cut across all areas of endeavour are at risk of being overlooked. University staff have traditionally been very actively engaged with the wider public, with government, charities and civil society as well as with business. This goes across all disciplines as well as transcending formal job roles and contractual boundaries – many non-academic staff are known to be actively engaged in knowledge exchange activities alongside their academic colleagues. Extensive survey analysis published by the National Centre for Universities and Business<sup>6</sup> has already highlighted the wide range of external engagement activities, including non-commercial interactions, of university academic staff of all disciplines. However, the prevailing policy narrative about 'Knowledge Exchange' focusses almost entirely on business collaboration and commercialisation of research through patents, spinouts and licensing.

This is the context for the current analysis. As Viewforth Consulting we work with universities across the UK and Republic of Ireland, exploring many different aspects of their economic, social and cultural impact. Drawing on our prior research and in our application of a range of modelling

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<sup>3</sup> See, for example: Kelly, U., & McNicoll, I. (2011). *Through a glass darkly: Measuring the social value of universities*. Bristol: National Co-ordinating Centre for Public Engagement. Available at [http://www.publicengagement.ac.uk/sites/default/files/publication/80096\\_nccpe\\_social\\_value\\_report.pdf](http://www.publicengagement.ac.uk/sites/default/files/publication/80096_nccpe_social_value_report.pdf)

<sup>4</sup> Government Statement on the Office for Students ( January 2018) <https://www.gov.uk/government/news/new-universities-regulator-comes-into-force>

<sup>5</sup> <https://www.gov.uk/government/news/universities-and-science-minister-calls-on-universities-to-do-more-to-commercialise-uk-research-and-innovation>

<sup>6</sup> See: *The changing state of knowledge exchange* Hughes et al ( NCUB 2016) <http://www.ncub.co.uk/reports/national-survey-of-academics.html>

approaches we have been exploring the broader economic value of the public engagement, public service and knowledge exchange that is delivered by university staff on a regular basis. We have found that there is a significant amount of activity which goes unseen in current debates about higher education institutional impact. It is typically additional unpaid and unpriced work which is not part of formal research and teaching nor is it part of commercial collaborations.<sup>7</sup> Neither is it contractually required of staff to fulfil as part of their job. However the volume and extent of such activity is substantial and it needs to be acknowledged in policy discussion and evaluation of the contribution made by universities to society. Therefore, to inform the policy debate we have conducted a preliminary analysis based on the information available to us and made estimates of the extent and value of this unseen activity across the UK higher education sector.

## Overall Methodological approach

### Data Sources

Data was collected from University staff in 3 different UK universities, with 3 online surveys taking place at different times between 2015-2017. University staff were asked to estimate the average amount of time (if any) that they spent in a typical year on a range of voluntary unpaid or nominally paid engagement, knowledge exchange and public service activities. Time spent included essential preparation and travel time for the relevant activity.

Each online survey was conducted separately but used the same common survey framework and asked the same types of questions.<sup>8</sup> All staff, both academic and non-academic, were invited to complete the online survey.

Each survey was anonymous, and responses collected directly by Viewforth Consulting, without being seen by the universities. No personal data was collected, and no individual could be identified through their responses. Across the three universities 1093 useable responses were collected. Taking into account the size of the invited target population, this represented an overall response rate of approximately 14%, with a response rate for academic staff of 11 % and non-academic staff of 17%.<sup>9</sup>

### Criteria for type of engagement to be included

Key criteria were that the engagement should be:

- Voluntary activity (i.e. not a compulsory part of the person's paid job)
- Unpaid activity, or attracting only a token payment (honorarium/expenses)
- Linked to the individual's professional standing or standing as a university employee (i.e. purely 'hobby' or leisure interests did not count)
- Involving non-academic audiences, organisations or individuals. This could include organisations with a mixed academic and non-academic membership (e.g. those

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<sup>7</sup> There is a single question included in the current Higher Education – Business and Community Interaction Survey which touches on some of this activity ( Question 4: Social, Community and Cultural) but it is very limited in scope and the data gathered is not included in any assessment of value from university interactions.

<sup>8</sup> The survey was first piloted in a UK university in 2014. After feedback and refinements it was developed for subsequent use in the 3 additional universities from which the current database of responses was compiled. Surveys were undertaken as part of studies of the economic and social impact of each university. The aim of surveying university staff was to explore the extent to which staff are engaged in voluntary non-commercial public engagement and knowledge exchange activities and to estimate the 'hidden' economic value of this work

<sup>9</sup> The total headcount staff number for the three universities together was in the region of 7,800 and all staff were given an open invitation to respond, through their universities.

intended to improve professional practice). However, 'voluntary' activity with a primary 'academic' focus such as journal peer review or involvement with purely academic learned societies was excluded (as this could be regarded as routinely expected as part of an academic job, with the benefits primarily accruing within the academic world itself).

Fully remunerated activity such as paid consultancy or collaborations as part of commercial contracts were explicitly *excluded* as the economic value of such activity is represented by the price paid and data on such work are already collected elsewhere.<sup>10</sup>

### Grossing Up Strategy

The survey sample was grossed up to the 2015/16 UK higher education staff population, using HESA data on staff categories and salary groups. To minimise response bias and maximise sampling efficiency the surveys had used detailed stratified sampling across 10 – 14 different sub groups of staff. Grossing up was then undertaken by the different categories of staff sampled to obtain an estimate of the total hours delivered by each staff category. Manual staff were excluded from the analysis as data on their activities were limited and so the sample was grossed up on the basis of staff included in SOC groups 1-4 only.<sup>11</sup> Differential shadow-pricing was also applied to reflect the output value of an hour of staff time. The output value applied was a typical average 'market rate' for consultants of different levels of qualification and experience, ranging from junior assistants to senior and expert consultants. The rates applied ranged between £17 - £121 per hour, depending on the seniority, job role and implied qualification levels of the relevant staff groups. In reality some university professors could command considerably higher hourly rates as consultants, depending on their specific discipline, and hence the prices applied could be considered conservative.

## Findings of the analysis

### Headline results

- We estimated that UK university staff delivered over 40 million hours of pro-bono public engagement and knowledge exchange in 2015/16.
- This was equivalent to 24,493 FTE jobs.<sup>12</sup>
- The majority of activity - 28.6 million hours - was delivered by academic staff with non-academic professional, management and administrative staff delivering 11.8 million hours.
- The overall economic value of UK university staff pro-bono activity was estimated at £3.2 billion per year.
- The economic value of academic staff pro bono activity was calculated as £2.6 billion with that of non-academic staff priced at £611 million.
- Pro-bono work of university staff is worth nearly as much to the economy as all the collaborative research, consultancy and continuing professional development contracts held by the Universities ( currently put at £4.2billion. )<sup>13</sup>

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<sup>10</sup> Data is collected in the Higher Education – Business and Community Interaction Survey on the financial value of collaborative and consultancy contracts held by the University. Together with income from CPD and intellectual property this was recorded as being worth £4.2 billion in 2014/15

<sup>11</sup> Staff in SOC1-4 made up 90% of all HE staff in 2015/16 (368,135)

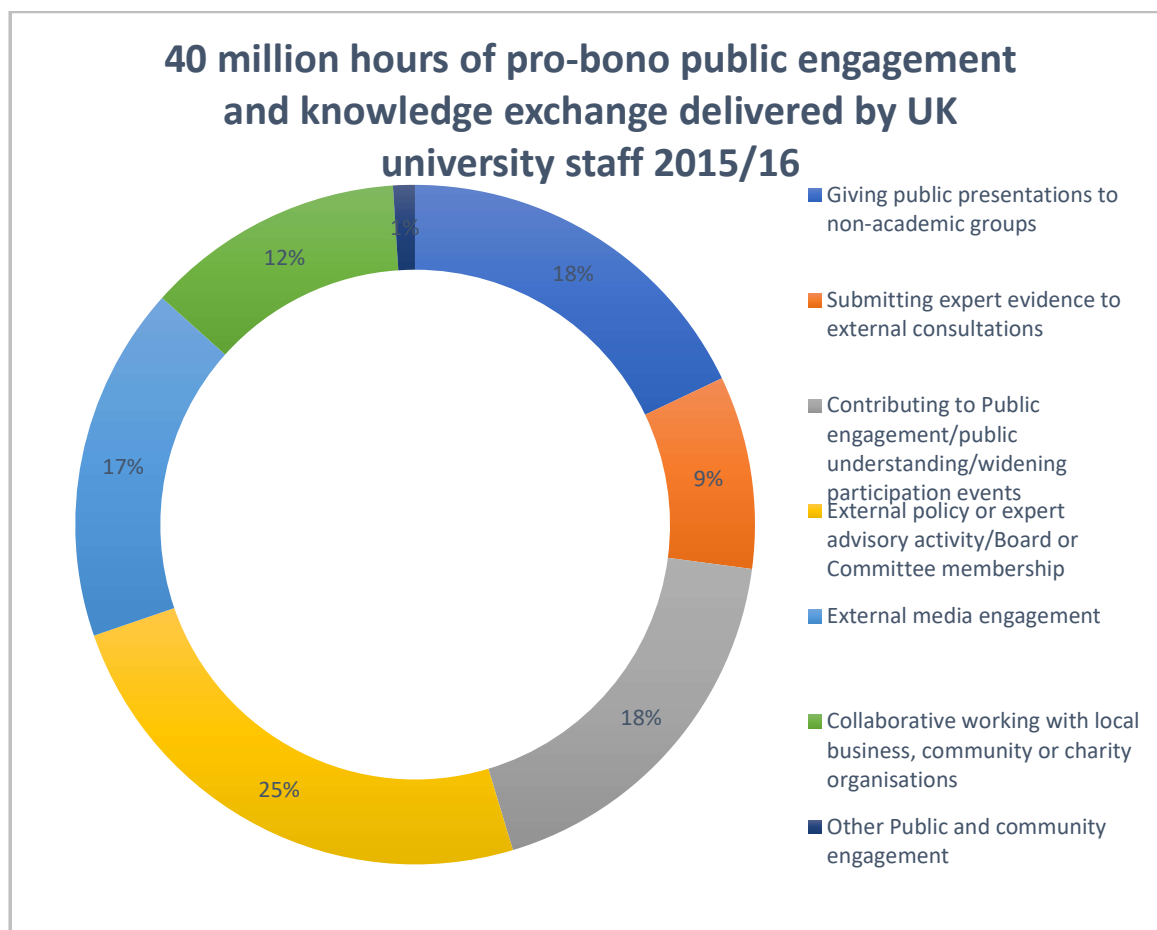
<sup>12</sup> Based on the Research Council and TRAC methodology recommended measure of 1650 hours for one working year.

<sup>13</sup> Data is collected in the Higher Education – Business and Community Interaction Survey on the financial value of collaborative and consultancy contracts held by the University. Together with income from CPD and intellectual property this was recorded as being worth £4.2 billion in 2014/15

## Estimated hours delivered and types of activities

We estimated that UK university staff delivered over 40 million hours of pro-bono public engagement and knowledge exchange in 2015/16.

Figure One: Hours of pro-bono public engagement and knowledge exchange delivered



Source: Viewforth Analysis

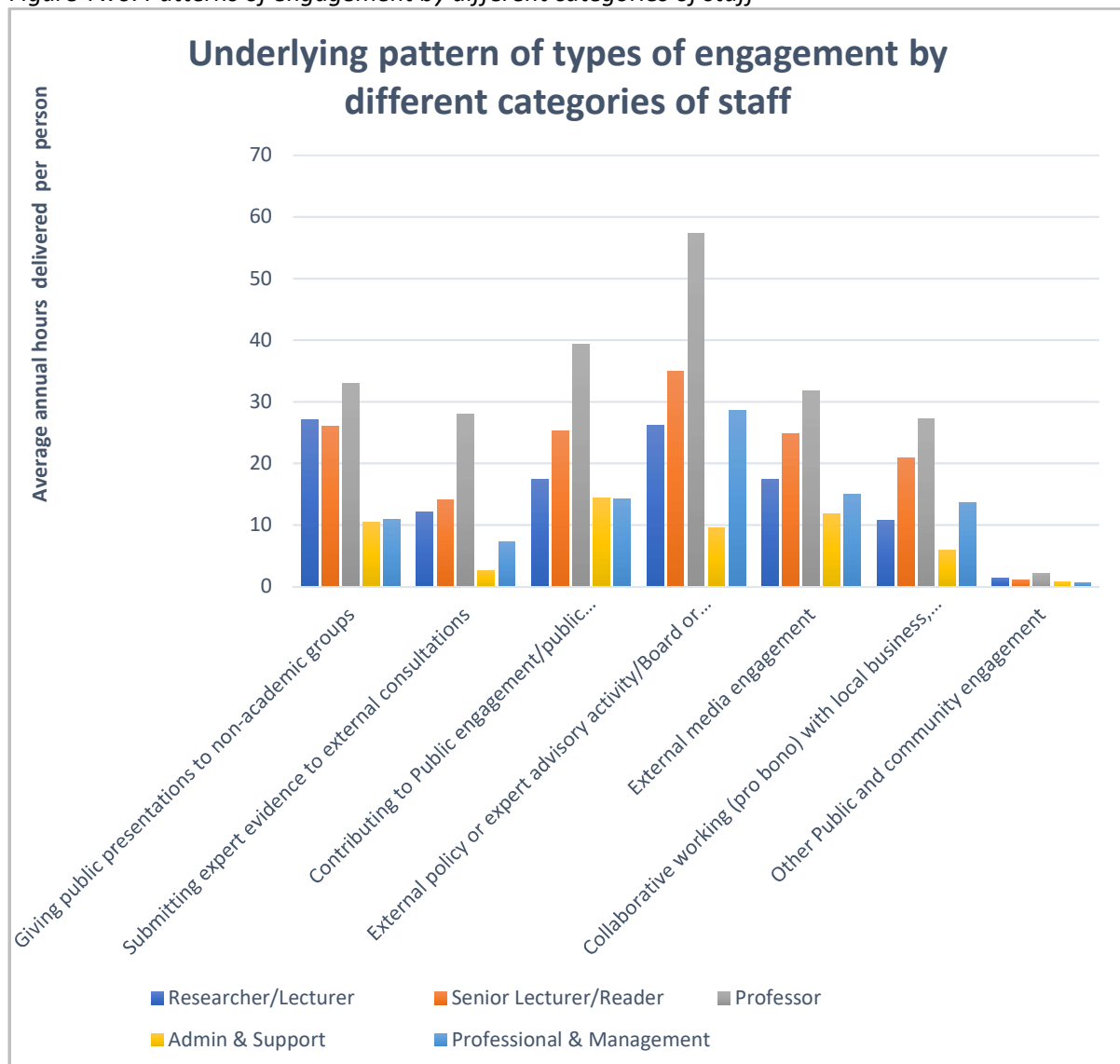
Activities were broadly classified into 6 areas. These included: staff acting as expert advisors to government bodies; contributing expert input to public consultations and inquiries; giving public presentations and lectures to non-academic groups; acting as an source of expertise for the public through the media ( both traditional and social media channels); supporting public understanding of science or social science events and events aimed at widening participation in higher education; unpaid work with business, charities and social enterprises. These areas of activity had been identified in our previous research as covering the majority of non-commercial engagement activities of University staff.<sup>14</sup>

<sup>14</sup> See, for example, *Towards the estimation of the economic value of the outputs of Scottish Universities* Kelly, McNicoll & McLellan (2005) <https://pure.strath.ac.uk/portal/files/161273/strathprints003107.pdf> and Kelly & McNicoll Fraser of Allander Economic Commentary (2009) Vol 33 No1 p55ff [https://www.strath.ac.uk/media/departments/economics/fairse/backissues/Fraser\\_of\\_Allander\\_Economic\\_Commentary,,\\_Vol\\_33,,\\_No\\_1.pdf.pagespeed.ce.AOKDk7yeVT.pdf](https://www.strath.ac.uk/media/departments/economics/fairse/backissues/Fraser_of_Allander_Economic_Commentary,,_Vol_33,,_No_1.pdf.pagespeed.ce.AOKDk7yeVT.pdf)

Academic staff were responsible for most of the engagement and knowledge exchange undertaken (28.6 million hours and 71% of the total), but a significant amount – 11.8 million hours was also delivered by non-academic staff. This shows that the contribution of non-academic staff should also be taken into account in any assessment of the overall impact of university knowledge exchange activity.

The pattern of reported activity differed according to different staff groups. The overall amount of engagement increased with levels of seniority, which is likely to reflect both increasing levels of expertise and increasing demand for that expertise. Professors reported proportionately more activity than Senior Lecturers, who in turn reported more than Lecturers. The more senior Professional and Management staff reported more activity than Administrative and other Support staff. The types of activity also varied by staff group with, for example, Professors being most likely to report acting in an advisory role to a government body or serving on a specialist government committee. Non-academic staff spent more of their time supporting public understanding of science and widening participation events than on other activities.

Figure Two: Patterns of engagement by different categories of staff



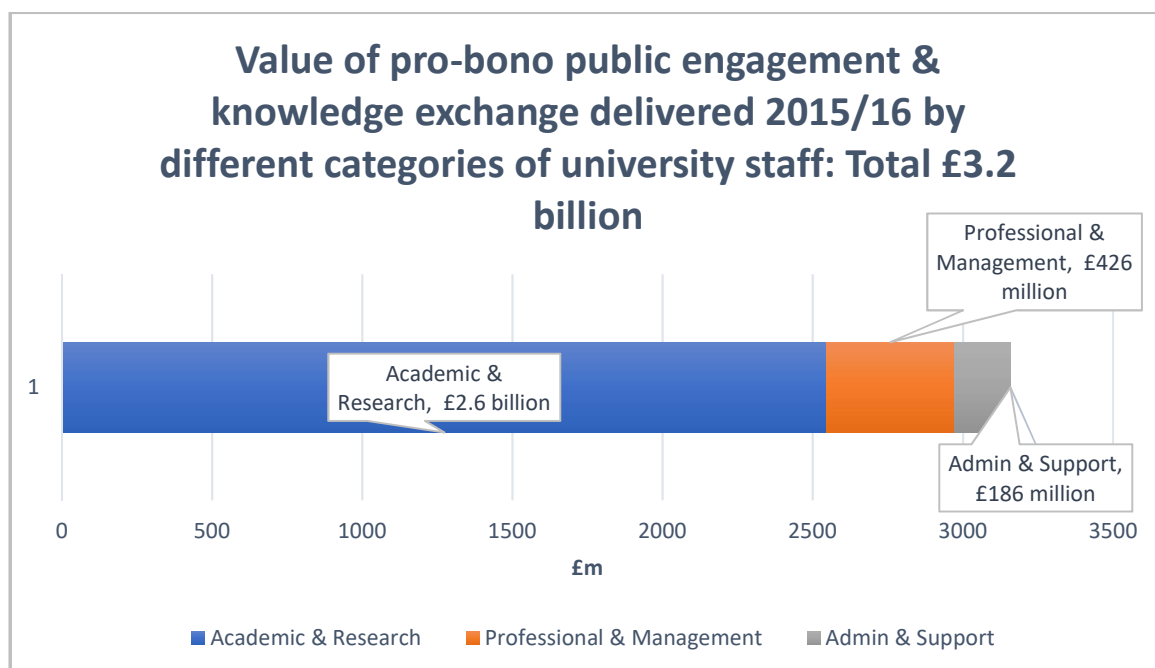
Source: Viewforth Analysis



## Economic value of engagement

The total value of the pro-bono public engagement and knowledge exchange delivered by UK university staff in 2015/16 was estimated to be £3.2 billion.

Figure Three: Economic value of pro-bono engagement and knowledge exchange delivered



Source: Viewforth Analysis

The estimated economic value of the contribution of academic staff came to £2.6 billion which was proportionately greater than that of non-academic staff. This is not only because of more hours delivered but also because of the generally higher qualification levels of academic staff and the fact that, due to their specialised expertise, most academics would be able to command a higher market consultancy rate than their non-academic colleagues. However, the economic value delivered by non-academic staff is still significant, coming in at £611 million.

Number and value of hours delivered, by all staff groups.

Table 1: Number and value of hours delivered, by staff groups

	Hours delivered	Value £million
Academic & Research Staff	28,604,696	2546
Professional & Management Staff	6,273,954	425
Admin & Support Staff	5,534,070	186
<b>Total</b>	<b>40,412,720</b>	<b>3158</b>

Source: Viewforth Analysis

## Why do staff engage?

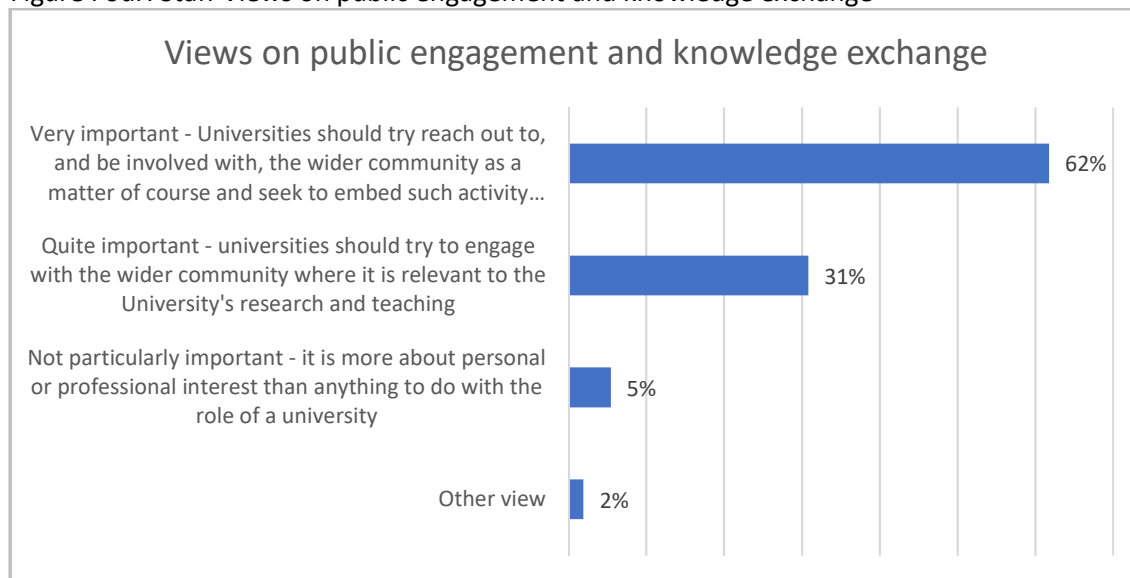
None of the activity included in the surveys is a compulsory part of staff formal jobs or workloads but is undertaken in addition to their core university roles. It is dependent on their goodwill and broader commitment to the public good. Some of the activity may carry modest internal recognition – for instance serving on a high-level government committee may be regarded as an ‘indicator of external esteem’ and some universities may have reward systems that recognise such positions. However, much of this work appears to be ‘unsung’. A number of survey respondents stressed that their engagement activity was not recognised and de facto was done in ‘own time’. For some this severely limited their capacity to engage, even though they felt it was activity supporting the mission of their university.

Staff were asked about their overall views on the types of engagement activity covered by the survey and its relevance to the University’s role in the community. 75% of those taking the surveys responded to this question, including those who had reported they were *not* currently actively engaged. A clear majority of responding staff (62%) felt that non-commercial engagement and knowledge exchange was a very important part of the role of a University and that it should be embedded in day to day activities. This would suggest that university staff have a strong commitment to using their expertise for the more general public good.

A significant proportion of staff (31%) gave a slightly more qualified response, in that they expressed the view that engagement was important but should be relevant or related to the university’s teaching and research.

Very few (5%) did not consider it important at all with a small number (2%) expressing some slightly more nuanced views, including that there needed to be more support for this activity if it was to continue.

Figure Four: Staff Views on public engagement and knowledge exchange



Source: Viewforth Analysis of survey responses

## Conclusions

This is a preliminary analysis of the extent and economic value of hitherto invisible pro-bono public engagement and knowledge exchange activity of UK university staff.

This evidence indicates that university staff, with the approval and encouragement of their host institutions, provide a large and economically significant volume of KE to UK society on a voluntary basis. However, since voluntary, this activity has to be regarded as fragile. There is a danger that unless the broader engagement of university staff is acknowledged and recognised, both their capacity for action and the good will to undertake it could start to dissipate, to the detriment of society at large. In particular, any evaluation framework which targets and rewards only a visible subset of universities Knowledge Exchange activities (e.g. patents, licences etc.) is in danger of suffering from the 'law of unintended consequences'. This has been seen before in other sectors.

In this case, the danger is that staff will simply abandon their voluntary work to concentrate on 'recognized' alternatives. If such displacement reaches 100% then the ultimate contribution of the introduction of the KEF to actual higher education knowledge exchange for UK society would be effectively zero. Therefore, it is strongly recommended that in setting the parameters for the KEF or any other evaluation framework, full cognizance is given to this large, albeit underrecognised and hitherto unquantified, existing contribution of universities and their staff to knowledge exchange and public engagement. To take a specific example, the evidence suggests that in a single year HEI staff contribute the equivalent of 5,723 person years of voluntary time on government committees, advisory groups, etc. However, their civil service counterparts on the same groups are paid for this as part of their jobs. The clear inference is that such work by university staff either needs to be recognized as a valid contribution to KE, or the government needs to pay for it in conventional consultancy terms.

This analysis also shows that:

- the full value of higher education to the economy and to society goes beyond purely financial transactions and is not captured in metrics that are focussed entirely on business and industry interactions, on patents and spin-outs;
- staff from all disciplines and job roles deliver real KE value to UK society, not only those directly involved in STEM disciplines;
- it is possible to find practical ways to develop indicators for the value of non-commercial public engagement and knowledge exchange activities;
- the revealed economic value of these activities is sufficiently high for it to be worth the investment effort of including it in any evaluation framework.

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