The future of Scotland’s universities

Universities Scotland’s submission to the Scottish Government 2020/21 budget
We’re ambitious for our contribution to our nation’s success. That’s why we’ve published a Vision for higher education in 2030. This sets out how we can be:

- a world leader in education, research and innovation;
- a vital source of Scotland’s strength in a competitive, connected and collaborative world; and
- a core part of Scotland’s identity as a prosperous, inclusive and outward-looking nation.

That Vision is aligned to delivering on many of the aspirations of the National Performance Framework (NPF). We demonstrate higher education’s broad contribution to the outcomes and indicators of the NPF in some detail in this submission.

To make this contribution in full we need the Scottish Government to invest at a level consistent with our shared ambitions for Scotland. To keep the sector performing strongly, delivering for those who depend on it and ensuring that Scotland succeeds in troubled times, we need to see a real terms growth in Government investment in universities’ teaching and research grants in this budget.

Higher education funding has seen a recurring pattern of annual real terms cuts to core budgets. Over five years these cuts add up to a significant strategic concern:

- there has been an 11.6% real terms cut to higher education resource funding since 2014-15;
- that means there is now £127.6 million less invested each year into universities than five years ago; and
- there is now almost £700 less spent on the undergraduate higher education of each Scottish domiciled student compared to five years ago.

In our sector, current performance often reflects decisions and investment made over a decade or more before. If the general pattern of real-terms cuts in public funding for universities over the last five years is not reversed it will lead to an increasingly significant and long term decline in the performance of the HE sector. Our competitors, in other small prosperous countries in Europe and beyond, have seen investment increase as they build their knowledge economies and develop highly skilled workforces.

We are asking the Scottish Government to choose to invest in its higher education sector at a level that supports our nation’s success. This will deliver the highly skilled graduates and postgraduates that a thriving economy needs. It will enable research that changes lives in Scotland and across the globe, addressing the major challenges of our time. It will support many of the ambitions set out in the National Performance Framework.

We want the Scottish Government’s 2019 budget to commit to:

1. **A 2% real terms increase in universities’ teaching and research grants.** This would reverse the recent pattern of decline in public funding, and lay the foundation for future growth, which universities would look to fund from both public and other sources. This publicly funded increase would cost £39.4 million in 2020/21.

2. **An additional investment of £12.5 million in university estates,** taking it to £50 million, still only half of its level in 2009.
Structure of this submission

In Section A of this document we outline the sector’s contributions to the outcomes of the NPF. For each outcome we set out the quantifiable contribution that higher education has made in recent years, mirroring the approach taken in the NPF, and additionally we offer illustrations of impacts which are mirrored in all institutions across the country. Finally, we outline our ambitions to make an even greater contribution in the future, if higher education secures a real terms increase in investment in the December budget as part of a longer term return to sustainable funding levels.

The contribution higher education makes to the NPF is built on a foundation of high quality of which Scotland can be proud of. That foundation is built on decades of investment and development. However, the funding decisions of recent years mean that it is at risk.

Section B considers the significant and concerning financial pressures facing the sector. Financial pressures that carry the real risk of decline in performance. If that is allowed to go further, it will adversely affect what universities can deliver in absolute terms and as Scotland’s universities seek to find a competitive edge over higher education in other countries across the world; many of which are investing significantly in their universities.

Finally, Section C sets out our detailed ask for the 2019 budget. It is grounded in a realistic assessment of Scotland’s public finances but also in our opinion the fact that we cannot give up on ambition for our sector and what that could mean for Scotland’s future.

We are asking Scottish Government to back that ambition.

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1 SFC Resource Budget for allocation to sector excluding controlled subjects, GDP deflators as per June national accounts.
2 SFC subject prices are 9.6% lower in real terms than in 2014/15, average funding per fully funded place in 2019/20 is £7,153, therefore average funding is £686 less.
3 £39.4 million is our estimate of a 2% real terms increase on SFC resource budget as set for 2019/20 using GDP deflators at the time of writing.
4 Not including financial transactions.
A.  Higher education’s contribution to national outcomes now, and into an uncertain future 6
   A.1 Education, Children & Young People 8
   A.2 Economy, Fair Work & Business 16
   A.3 International & Human Rights 22
   A.4 Culture 28
   A.5 Environment 34
   A.6 Health 40
   A.7 Communities & Tackling Poverty 46

B.  A system under pressure: the risks faced by universities 50

C.  Our ask for the 2020/21 budget 58
Higher education’s broad role in delivering for learners, the economy, society and internationally means that universities make a significant contribution to the 11 national outcomes in the National Performance Framework (NPF) as Scotland’s definition of what it means to be a successful country.

In this section we provide an overview of the higher education sector’s current contribution to the NPF, mapping directly against the national indicators and grouping some of the outcomes together for brevity. Often it is not possible for us to use the same data set in the NPF to highlight the contribution made by higher education, as the NPF metric is specific to another sector or the data set tracks at a macro-level and does not pinpoint the contribution of higher education. Where it’s not possible for higher education to use the exact NPF data metric, we have provided complementary indicators to show the sector’s contribution to the outcome, using robust data from the higher education sector.

Universities make a strong contribution, directly contributing to 28 of the indicators in the Framework, that we believe we can easily demonstrate using data. Our contribution to some outcomes is inevitably more rounded – or at least easier to measure – than in others. We’re able to show a very thorough account of universities’ contribution to the indicators in the education, economy, business and fair work outcomes, whilst it is more challenging to do that against the set of indicators in the poverty and environment outcomes. But that is where our broader role of education and research comes in. It’s not as easy to wrap that impact into a quantifiable metric but the work of Scotland’s universities has something to contribute to the achievement of almost every indicator.

It is important that overall performance does not lead people to the wrong conclusions. Higher education’s contribution rests on the financial sustainability of the sector. Continued performance cannot be assured as budgets continue to tighten.5

Looking ahead, we also set out how we want to drive that contribution forward, with sustainable investment, to help Scotland to adapt and succeed in changing times.

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5 In managing annual budgets over the last few years, universities have prioritised their core performance and protected the quality of their teaching and resources, taking other difficult decisions to drive efficiencies. It’s reasonable to assume that if the current funding trajectory of annual real terms cuts continues, universities’ performance against the NPF would start to fall from “performance improving” as it is now, for most indicators, to “performance maintaining” or “worsening” based on the current funding trajectory. The impact of increases or decreases to HE budgets takes more than a couple of years to take full effect in the institution and most data sets are time lagged by a year or two back from 2019.
Scotland’s universities make a direct and easily quantifiable contribution to:

- **Economy outcome**: 6/10 indicators
  - 2 Improving
  - 1 Maintaining
  - 2 Mixed performance

- **International outcome**: 3/6 indicators
  - 2 Improving
  - 1 Mixed performance

- **Human Rights outcome**: 2/4 indicators
  - 2 Improving

- **Culture outcome**: 2/4 indicators
  - 1 Improving
  - 1 Maintaining

- **Environment outcome**: 2/8 indicators
  - 1 Improving
  - 1 Worsening

- **Health outcome**: 3/9 indicators
  - 1 Improving
  - 1 Maintaining
  - 1 Worsening

- **Fair Work and Business outcome**: 4/9 indicators
  - 4 Improving

- **Children and Young People outcome**: 1/7 indicators
  - Improving

- **Education outcome**: 6/8 indicators
  - 5 Improving
  - 1 Maintaining

28 of the 81 national indicators across 9 of the 11 national outcomes.
**Universities’ contribution to the National Performance Framework over the last couple of years:**

### Educational attainment
**Performance Improving**
- The number of people graduating with first degrees has increased very modestly by 1.8% over the last two years to 2018.°
- The number of people graduating with postgraduate degrees has increased by 12.5% over the same period.°
- Over 92% of graduates were in “positive destinations” of work or further study six months after graduation in 2016/17, which has continued to grow from the high of 90% in 2012.°

### Young People’s Participation
**Performance Improving**
- 39% of school leavers went directly into HE in 2017/18, up from 38.3% the year before.°
- Universities are increasing participation of under-represented groups. 15.6% of undergraduate entrants were from SIMD20 areas in 2017/18 compared to 13.7% two years earlier.°
- A 10% increase in articulating students over three years to 2017-18 now standing at 9,763 entrants from college. There has been a 15% increase in HN entrants getting advanced standing and entering direct into year 2 or 3 of a degree depending whether they have an HNC or HND.
- A sector-wide guaranteed offer of a place to care experienced applicants if they meet new minimum entry qualifications set for all courses. The average adjustment made in minimum entry requirements is two grades but it goes as far as four grades or one Higher qualification for some courses.

### Skill profile of the population
**Performance Maintaining**
- 25% of Scotland’s workforce was educated to degree level in 2013, steady from 24.6% the year before.°

### Workplace learning
**Performance Improving**
- 23% increase in the number of people taking continuing professional development from a university between 2016 and 2017.
- In just one year, more than 31,000 people went to universities for some professional development.°

### Skills underutilisation
**Performance Improving**
- 75% of graduates who get a job within six months of graduation are working in professional and/or managerial roles. This has increased year on year, up from 70% in 2012/13.°
- For the sixth consecutive year, more businesses have expanded their graduate intakes than have cut back on graduate recruitment, cumulatively raising the number of graduate openings.°
Skill shortage vacancies

In key skill shortage areas like STEM and ICT universities have increased graduate numbers:

- The number people graduating with STEM degrees increased by 9% over the last two years and 11% over five years.\(^\text{15}\)
- The number of people graduating with computer science degrees increased by 2% over the last two years, following an earlier, more rapid increase of 13.1% over a five year period.\(^\text{16}\)

Children’s (& young people’s) voice

- 73% of students felt positive about their voice in their academic experience. The 2019 score is up from 71% in 2018.\(^\text{17}\)

\(^\text{6}\) HESA (2018) Student Record.
\(^\text{7}\) Ibid.
\(^\text{8}\) HESA (2017) Destinations of Leavers of Higher Education. Methodological changes to the DHLE since 2017 have meant a pause in annual data returns on graduate destinations.
\(^\text{9}\) Scottish Government (2019) Summary Statistics for follow-up Leaver Destinations Table 1.
\(^\text{10}\) Scottish Funding Council (2019) Report on Widening Access 2017/18, Statistical Publication. SIMD20 refers to the most deprived 20% of neighbourhood areas or datazones in Scotland, measured using a model called the Scottish Index of Multiple Deprivation.
\(^\text{11}\) Scottish Government Statistics Data Cube. Qualifications of Working Age Adults.
\(^\text{12}\) Scottish Funding Council (2017/18) Knowledge Transfer Metrics.
\(^\text{13}\) HESA (2017) Destinations of Leavers of Higher Education. Methodological changes to the DHLE since 2017 have meant a pause in annual data returns on graduate destinations.
\(^\text{14}\) Universities Scotland (2019) Tomorrow’s People.
\(^\text{15}\) HESA Student Record (2019) For this purpose, STEM draws on JACS code 3,6,7 & 9 which is: biological sciences, physical sciences, maths and engineering and technology. Graduates in medicine or subjects allied to medicine have not been included in these STEM graduate numbers.
\(^\text{16}\) HESA Student Record (2019) JACS code 8.
\(^\text{17}\) Office for Students (2019) National Student Satisfaction Survey results. Aggregate score for student voice based on 3 questions about student input into academic aspects of their HE experience (e.g. opportunities for feedback and feedback is acted on).
A.1.1 Higher education’s wider contributions to education, children and young people

The National Performance Framework offers a broad structure for universities to demonstrate the varied contributions they deliver for Scotland. However, it doesn’t cover everything in universities’ remit. This section expands on a few areas not in the NPF and those not easily covered by metrics, including universities anticipatory work to help future-proof Scotland.

A.1.2 Employer demand for graduates

The need for graduates in the workforce is only likely to increase in the future. Contemporary survey data\(^\text{18}\) show that 79% of employers predict growth in jobs requiring higher skills in their companies whilst two-thirds lack confidence about being able to fill those vacancies.

The survey data also finds that:

- the value of graduates to business is clear, with graduates having higher levels of employment, lower levels of economic inactivity, and higher levels of earnings on average compared to non-graduates;
- close to nine in ten (87%) of businesses that employ graduates have maintained or increased their levels of graduate recruitment over the past year;
- for the sixth consecutive year, more businesses have expanded their graduate intakes than have cut back on graduate recruitment, cumulatively raising the number of graduate openings; and
- employers increasingly value the wider and highly transferrable graduate attitudes and aptitudes in addition to the depth of knowledge that comes from a specific formal qualification.\(^\text{19}\)

A.1.3 Student-side demand for higher education

In this context of high employer demand, alongside high levels of student satisfaction and continuously strong employment outcomes, more people are seeking a university education.

We know that this rising tide of demand will be strengthened as the number of 18 year olds in the population begins to increase from 2020 with a 15% growth to 2027. Scotland has seen a demographic dip in 18 year olds for the last few years, but next year marks a reversal of that; with a steady bounce-back projected that would see the projected number of 18 year olds climb by 18 per cent from 2020 and for the best part of the next decade. We can also anticipate a continuing improvement in school attainment, adding to the number of individuals seeking university study.

School-leavers form a key group of entrants to university but are far from the only entrants to undergraduate degree programmes. Scotland has seen continued increases in “mature” entrants, defined by UCAS as the age bracket 21+ years of age. Acceptances from 21+ year old Scottish domiciled students has increased, with some fluctuations, over recent years from just shy of 9,000 in 2014 to 13,600 in 2018.\(^\text{20}\) Mature students are a significant and important minority of the undergraduate population and have meant entrance numbers to university have remained steady even throughout a demographic dip of school-leavers. This group of entrants is also integral to the achievement of the 2030 SIMD20 access targets.

In summer 2016, Audit Scotland found that it had “become more difficult for Scottish applicants to be offered a place at a Scottish university”. Universities Scotland has updated Audit Scotland’s data with the data for 2016 which showed that the offer rate has fallen further to 49.6% from 57.2% in 2010.

Scottish universities provide CPD courses for 3,000 Scottish organisations every year

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\(^{19}\) Universities Scotland (2019) Tomorrow’s People.

A.1.4 Other models of higher education delivered by universities

The full-time undergraduate degree is only one side of the higher education that we deliver. The role we play in CPD for individuals, companies and organisations makes Scotland’s universities a major training provider.

We anticipate an increasing demand for short-cycle study for re-skilling and up-skilling and for a growth in diverse pathways to a degree including Graduate Apprenticeships.

Scotland’s universities are open to different routes to a degree so that students can choose one that suits them. We have been pleased to work with SDS and with employers to create graduate apprenticeships. Fourteen of our nineteen universities are now involved with graduate apprenticeships. More than 1,300 Graduate Apprentice work-based learning opportunities are being delivered by universities in partnership with SDS and industry. These are work-based learning opportunities up to master’s degree level in sectors such as civil engineering, digital and cyber security and data science.
A.1.5 Playing our part in an effective and efficient learner journey

Our partnership with the college sector is essential in offering opportunity and choice to learners. We have made ‘articulation’ between college and university a priority of our work to improve the learner journey and to widen access. Amongst our sector-wide commitments under Working to Widen Access\(^2\) we committed that every university will undertake a fundamental review of its ability to increase the number of students who articulate direct into the second or third year of university, giving full credit to their existing qualification.

We are building on a good foundation. Between 2014/15 and 2017/18 we saw a 10% increase in articulating students overall to 9,763 and a 15% increase in those articulating with advanced standing where prior study is given full academic credit.

Our partnership with the school sector is most obvious in our training of thousands of school teachers each year and in research into teaching practice.

However, where it offers operational and educational benefit, we are also entering into partnership to deliver provision.

Our outreach programmes also enrich the delivery of the Curriculum for Excellence across disciplines, from science to modern languages.

We are also working with the Early Learning and Childcare sector to deliver professional qualifications.

The Advanced Higher Hub – a partnership between Glasgow Caledonian University, the City of Glasgow and the Scottish Funding Council – employs teachers to deliver seven Advanced Higher subjects on the university campus, providing ambitious young people from across the city with first-class educational facilities and opportunities to learn.

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\(^2\) Universities Scotland (2017) Working to Widen Access
The Open University (Scotland) Young Applicants in Schools Scheme (YASS) gives S6 students the unique opportunity to study a range of university level modules in school alongside their other studies.

Over 7,500 young people from more than 250 schools have taken Open University modules through YASS in modules including science, engineering, business studies, IT and computing, arts, mathematics and languages.

University of the West of Scotland offers MEd Early Years primarily aimed at professionals working in the Early Learning and Childcare sector in its widest definition, including practitioners, teachers, leaders of educational settings, and those working in healthcare and social work. The programme equips participants with knowledge, understanding and skills that will support them to pursue positions of responsibility in the areas of Early Learning and Childcare. It is currently offered online using the University’s virtual learning environment, Moodle.

The University of the Highlands and Islands STEM team offers a range of fully funded programmes to nursery, primary schools, secondary schools and youth organisations in the Highland Council area.

Programmes include coding, DNA science and renewable energy.
A.1.6 Looking ahead: the sector is ambitious to do more

The investment we seek from the 2020/21 budget would support more progress with the following national indicators:

<table>
<thead>
<tr>
<th>Specific contribution from universities</th>
<th>National indicator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attainment of Commission on Widening Access 2021 and 2030 targets for percentage of entrants from SIMD20 data zones.</td>
<td>Young people’s participation</td>
</tr>
<tr>
<td>Retention rates for learners from disadvantaged backgrounds converging with retention rates for learners from more advantaged backgrounds.</td>
<td>Young people’s participation</td>
</tr>
<tr>
<td>Development of increased articulation routes from college to university.</td>
<td>Young people’s participation</td>
</tr>
<tr>
<td>Increase in the success rate of qualified applicants in getting a place in Scottish higher education.</td>
<td>Young people’s participation</td>
</tr>
<tr>
<td>Further progress in embedding work-based learning, including graduate apprenticeships, within universities’ portfolio of provision.</td>
<td>Skill profile of the population</td>
</tr>
<tr>
<td>Development of increased opportunities for people already in the workforce to up-skill/ re-skill.</td>
<td>Skill profile of the population</td>
</tr>
<tr>
<td>Pastoral and academic services to support students’ success protected and enhanced.</td>
<td>Skill profile of the population</td>
</tr>
</tbody>
</table>

The need for graduates in the workforce is only likely to increase in the future... we anticipate an increasing demand for short-cycle study and for a growth in diverse pathways to a degree.
A.1.7 Where we’re aiming for by 2030

This budget will be the beginning of a decade defined by change. Our institutions will need to continue to adapt and we look to the Scottish Government to support the sector in this whilst ensuring that change is effected from a position of strength and sustainability.

Our vision is that over the next decade:

• we will have increasingly flexible and truly lifelong offerings for learners, with people accessing higher education at diverse stages of their lives and careers;

• learners will progress through higher education at the pace that meets their needs, supported by the seamless interaction of technology and human input to create new and inspiring learning environments;

• learning will cross the boundaries of academic disciplines, enabling people to develop the broad attributes and knowledge to succeed in multiple careers throughout their lives; and

• we will be agile in meeting re-skilling needs of people in the workforce, through degrees, work-based learning and tailored professional development.
### A.2 Economy, Fair Work & Business

We have a globally competitive, entrepreneurial, inclusive and sustainable economy.

We have thriving and innovative businesses, with quality jobs and fair work for everyone.

**Universities’ contribution to the National Performance Framework over the last couple of years:**

<table>
<thead>
<tr>
<th>Economic growth</th>
<th>International exporting</th>
<th>Entrepreneurial activity</th>
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<tbody>
<tr>
<td><strong>Performance Maintaining</strong></td>
<td><strong>Performance Improving</strong></td>
<td><strong>Performance Improving</strong></td>
</tr>
<tr>
<td>• 45% of innovation-active companies surveyed see universities as collaborative partners in delivering their innovation projects, higher than public agencies and commercial R&amp;D partners.22</td>
<td>• A £1.94bn net economic contribution through the export of education, research and commercialisation23 which equates to a 2.4% share of Scotland’s exports, higher than tourism.26</td>
<td>• 94% of Scottish universities provide entrepreneurship training to staff and graduate start-ups.</td>
</tr>
<tr>
<td>• The Gross Value Added of Scottish HE is estimated to be £8bn in 2019.</td>
<td></td>
<td>• 83% of all Scottish universities now have an on-campus incubator to support graduate &amp; staff start-ups.</td>
</tr>
</tbody>
</table>

<table>
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<tr>
<th>Productivity</th>
<th>Spend on R&amp;D</th>
<th></th>
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<tbody>
<tr>
<td><strong>Performance Maintaining</strong></td>
<td><strong>Performance Maintaining</strong></td>
<td><strong>Performance Improving</strong></td>
</tr>
<tr>
<td>• Skill level is one of four main elements of productivity and Scotland’s skill level, based on the tertiary (HE &amp; FE) attainment rate is in the top quartile.23</td>
<td>• Scottish HE research leverages over £750m of research and innovation funding into Scotland. This performance is broadly constant with recent years.</td>
<td>• 89% of Scottish universities have embedded enterprise and entrepreneurship within degree programmes.</td>
</tr>
<tr>
<td>• Long-range economic modelling suggests that one third of the UK’s productivity gains of 34% between 1994 and 2005 were due to the accumulation of graduate skills in the workforce.24</td>
<td></td>
<td>• 78% of Scottish universities deliver entrepreneur-led events.</td>
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<table>
<thead>
<tr>
<th>Spend on R&amp;D</th>
<th><strong>Performance Worsening</strong></th>
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</tr>
<tr>
<td>• Scottish HE research leverages over £750m of research and innovation funding into Scotland. This performance is broadly constant with recent years.</td>
<td>• SFC research funding has been cut by 12% in real terms since 2014/15.</td>
<td>• 100% of Scottish universities organise work placements for students and 79% of institutions offer placements or internships with entrepreneurs and small businesses.</td>
</tr>
<tr>
<td></td>
<td>• The share of RCUK research funding that Scottish universities win in competitive process has been declining from 15.6% in 2017/18 to 13.97% in 2013/14.</td>
<td></td>
</tr>
</tbody>
</table>

16 | The future of Scottish universities
The number of (high growth and innovative) businesses  
Performance Improving
- Scotland is the most successful part of the UK for spin-out company formation in 2016/17.\textsuperscript{29}
- A big step up in the number of spin-offs to come out of universities, without HE ownership from 55 to 95 between 2016/17 and 2017/18.
- A 15\% increase in graduate start-ups in one year & a 53\% increase over the last three years.\textsuperscript{30}

The gender balance in organisations  
Performance Improving
- Universities have achieved a gender balance (defined as 40:40:20) on their governing bodies.
- 16 of the 18 universities eligible are members of Athena Swan, which promotes the careers of women academics.
- Universities are working to tackle the gender imbalance amongst professor level staff. There was a 39\% increase in the number of female professors over four years to 2015.\textsuperscript{31}

Employee voice  
Performance Improving
- Staff unions now sit on governing bodies & staff elect Chair of Court. The first elections were held at Dundee and Aberdeen Universities in 2019.
- 28\% of HE academic staff are a member of the UCU union and 13\% of non-academic staff HE are a member of UNISON.\textsuperscript{32}

Carbon footprint  
Performance Improving
- Universities’ non-residential carbon emissions (scope 1 & 2) have decreased by 8\% between 2016/17 and 2017/18 and are on a downward trend both in absolute terms (kg CO2e) and per FTE staff/student.\textsuperscript{33}

\textsuperscript{22} Scottish Enterprise (2016) A Strategic Review of Innovation Support. “Innovation-active” is defined as companies that have received innovation support from H&IE or SE at any point over the last decade.
\textsuperscript{26} Ibid. p45.
\textsuperscript{27} Ernst & Young (2019) Attractiveness Survey for Scotland.
\textsuperscript{28} Ernst & Young (2018) Attractiveness Survey for Scotland.
\textsuperscript{29} HEBCI 2016/17, figures for active formal spin outs.
\textsuperscript{30} HESA, HE-BCI for all these data points.
\textsuperscript{31} HESA Staff Record (2015). Data not available for 2016/2018.
\textsuperscript{32} Figures supplied by University & Colleges Employers Association. Other staff unions are recognised by universities.
\textsuperscript{33} HESA (2018) Estates data set.
A.2.1 Higher education’s wider contributions to the economy, fair work and business

This section expands on a few areas not in the NPF and those not easily covered by metrics.

Universities are key to meeting Scotland’s aims for enhanced productivity and inclusive growth. Indeed, the Sustainable Growth Commission noted that: “Scotland’s university sector is a key comparative advantage for any growth strategy”.

This advantage is built both on the economic impact of our own operations and growth alongside our wide and significant impact in the economy as a whole.

A.2.2 Economic and fiscal benefits of higher education

Over recent months we have worked with Biggar Economics to examine the evidence for the economic and fiscal benefits from the investment in higher education and R&D made by advanced economies.

In advance of publication in the early autumn, the findings, drawing on OECD and other data, show that there is clear evidence that a higher investment in higher education and in R&D delivers:

- higher economic output;
- higher growth;
- higher participation in the economy; and
- lower youth unemployment.

The study will further explore how these benefits deliver a significant fiscal benefit which should be considered in assessing the costs and economic and fiscal benefits of investment.

A.2.3 The HE role in supporting economic growth of business

Survey and outcomes data already point to universities working with a significant proportion of Scotland’s company base. However, more could be done by the public agencies to develop companies’ appetite for partnership with universities and to make them aware of the many opportunities for projects funded by Scottish, UK and EU sources. In parallel, we will continue to enhance our openness to business.

With ambition, the number of companies accessing such support could be increased significantly. To this end we look forward to working closely with the new portal, FindBusinessSupport.gov.scot.

As we look to contribute to the Scottish Government’s ambition to double business R&D, we want Scotland to benefit in full from the UK-wide commitment to invest 2.4% of GDP in research and development in order to boost productivity and create good jobs. The UK Industrial Strategy offers significant opportunity with an overall investment of £7bn. The Strategic Board for Enterprise and Skills has set an ambition to maximise leverage of these funds. As of April 2019 Scotland had secured £88m for projects under the Industrial Strategy Challenge Fund, which equates to 7% of the UK total. To meet the Board’s ambition and leverage the maximum possible benefit for Scotland, we need co-ordinated action and investment.

Scotland’s universities work with 20,000+ organisations each year on R&D, consultancy & bespoke professional development.

Source: SFC KTG Metrics

International students bring a £1.94bn net economic contribution to Scotland.

Source: A Trading Nation

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34 Sustainable Growth Commission page 108.
A.2.4 Driving export growth and foreign direct investment

Our own exports are significant. The Scottish Government’s export plan *A Trading Nation* notes that international students bring a £1.94bn net economic contribution to Scotland and that through a range of indirect contributions: “the education sector is key to our aims of delivering increased exports”.

We face continuing challenges in attracting international students. One of the challenges is the limit in our ability to invest in the education and broader experience we offer, in ways that an increasing number of global competitors are able to do.

In *A Trading Nation* the Scottish Government sets out an intention to support universities: “to access international opportunities and support our universities to build strategic research collaborations with markets that are investing heavily in research”. However, recent budgets mean that there is now no capacity amongst the Scottish agencies to invest in such partnerships.

Our Connected Scotland approach, which began in 2014, to work more closely with public partners is an exemplar of the kinds of partnership sought as part of the Enterprise and Skills Review. We would like to equip it to deliver enhanced impact.

We are partners in *Scotland is Now* and have worked closely with the Scottish Government in the development of *A Trading Nation*, the Scottish Government’s plan for growing exports. This plan notes the centrality of universities across both priority markets and sectors. It is a role that the sector wants to grow.

We are working with Ministers to give effect to the shared ambition of growing higher education exports, the exports of companies right across the economy, and to increase foreign direct investment. This includes new ideas as to how we can collectively engage the alumni community to mutual benefit.

Right across the country university facilities are supporting companies from every sector of our economy.

For instance, The DART (Dynamic Advanced Response Training) simulation suite is a joint venture between Robert Gordon University and KCA Deutag Ltd. It operates under Energy Transition Institute. It includes a drilling and wells simulator and a decommissioning simulator, providing realistic, real-time training within a virtual drilling environment with significant cost savings and efficiencies for the companies accessing the facilities.

Bright Red Triangle at Edinburgh Napier University offers a one-stop shop for extra-curricular innovation and enterprise activities. It is open to students, staff and graduates, as well as local businesses and community organisations. To date it has supported over 400 start-ups with free business advice, mentoring and facilities. Over 1,500 students have used the resources and there are currently over 180 student or graduate businesses trading as a result of the support of the Bright Red Triangle.
A.2.5 Looking ahead: the sector is ambitious to do more

The investment we seek from the budget would support more progress within the following national indicators. If Scotland faces exit from the EU, then the capacity of universities to fulfil their role as drivers of economic growth will be crucial.

<table>
<thead>
<tr>
<th>Specific contribution from universities</th>
<th>National indicator</th>
<th>National outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increase in the leverage of investment into the Scottish economy from research contracts.</td>
<td>Spend on research &amp; development</td>
<td>Economy</td>
</tr>
<tr>
<td></td>
<td>International exporting</td>
<td></td>
</tr>
<tr>
<td>Sustained employment in high-quality research and teaching roles, and sustained tax contribution from these roles.</td>
<td>Economic growth</td>
<td>Economy</td>
</tr>
<tr>
<td>Development of clusters of innovative businesses around universities.</td>
<td>Innovative businesses</td>
<td>Fair work &amp; business</td>
</tr>
<tr>
<td>Increased leverage of Industrial Strategy funding to Scotland, through university/business collaborative bids.</td>
<td>Innovative businesses</td>
<td>Fair work &amp; business</td>
</tr>
<tr>
<td></td>
<td>High growth businesses</td>
<td></td>
</tr>
<tr>
<td>Attraction of fresh talent to Scotland, helping to address our demographic and skills challenges.</td>
<td>Scotland’s population</td>
<td>International</td>
</tr>
<tr>
<td>Increased university involvement in co-developing products, processes and people with business.</td>
<td>Innovative businesses</td>
<td>Fair work &amp; business</td>
</tr>
<tr>
<td>Further growth in entrepreneurship across our student and staff communities.</td>
<td>Entrepreneurial activity</td>
<td>Economy</td>
</tr>
<tr>
<td>Support for start-up and spin-out companies and the further development of innovation park capacity across Scotland.</td>
<td>Entrepreneurial activity</td>
<td>Economy</td>
</tr>
<tr>
<td>Attraction of an increased level of external investment in Scotland’s research and innovation base.</td>
<td>International exporting</td>
<td>Economy</td>
</tr>
<tr>
<td>From a strong base, enhance Scotland’s FDI performance with universities playing their full part in enhancing the attraction and deployment of investment.</td>
<td>International exporting</td>
<td>Economy</td>
</tr>
</tbody>
</table>
A.2.6. Where we’re aiming for by 2030

Our ambition is for universities to be at the heart of Scotland's economy, thriving over the course of a decade which will be characterised by disruption.

Enabled to pursue our diverse ambitions, we will play our part in:

• making Scotland the ‘go-to’ nation for businesses globally who seek talent and creativity.

• attracting more inward investment into Scotland. Scotland is already Europe's success story but we want to do more. Higher education’s research, our graduate talent and the ease of doing business with us will be key pull factors.

• placing research excellence at the centre of new clusters of innovative businesses – both home-grown and inward investors – driving prosperity in our cities and regions.

• making universities the obvious choice for businesses looking for help to innovate; and

• ensuring that our business schools are deeply connected with SMEs to develop leadership and innovation capacity, and university facilities – our laboratories, our studios, our estates – are well utilised by business.
A.3 International & Human Rights

We are open, connected and make a positive contribution internationally

We respect, protect and fulfil human rights and live free from discrimination

Universities’ contribution to the National Performance Framework over the last couple of years:

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**A positive experience for people coming to Scotland**

*Performance Improving*

- 90% of current international students are satisfied with their learning and support experience at university.

**Scotland’s reputation**

*Performance Maintaining*

- Scotland’s international reputation for educational qualifications, using the Nation Brand Index, increased from 4.6 to 4.7 between 2016 to 2018. But the rank decreased from 15th to 19th – showing that all improvement is relative in a fiercely competitive global market for education.

*Performance Worsening*

- The number of Scottish universities in the world’s top 200 fell from five to four between 2017 and 2018.

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**International networks**

*Performance Improving*

- 11.6% student mobility amongst undergraduates at Scotland’s universities, with France, Spain and the US top destinations.
- 77% of international students at UK universities say they are more likely to do business with the UK as a result of studying in the UK.
- 81% of international students at UK universities intend to build professional links with organisations in the UK.
- Scotland’s universities have 4,000 formal links with countries across the world including student and staff exchange and research projects.

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**Quality of public services**

*Performance Improving*

- Student satisfaction with the overall quality of their course in a Scottish university stood at 84% in 2019, up 1 percentage point from 2018.

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**Influence over local decisions**

*Performance Improving*

- 28% of HE academic staff are a member of the UCU union and 13% of non-academic staff HE are a member of UNISON.
- Every university now invites the public to an annual meeting with their governing bodies following the sector-led development of a new Code of Good HE Governance.
A.3.1 Higher education’s wider contribution to international and human rights

This section expands on a few areas not in the NPF and those not easily covered by metrics.

Universities are central to Scotland’s place in the world. Our campuses host students from over 180 countries across the globe and we are delivering a Scottish higher education abroad for over 38,000 students through models of transnational education.

A.3.2 Playing our part in international partnerships

Our formal overseas partnerships with institutions, companies and governments, and the many thousands of alumni across the world, offer a foundation for mutually beneficial work in global markets. Our research and teaching is delivered in partnership with colleagues across the globe, tackling the UN sustainable development goals.

We are using the Global Challenges Research Fund to create transformative links. For instance, aligned with the Scottish Government’s Malawi Development Programme, between 2016 and 2018 Scotland’s universities established over 40 projects focused on agriculture, health, education and energy.

A.3.3 Rights, services and participation

In other sections of this document we set out how we contribute to our communities, to our culture, to the quality of public services and to public engagement with, and understanding of, our changing world.

All of these are at the core of our missions with each institution making a contribution shaped by its strengths.
The University of Dundee is host to the Drug Discovery Unit (DDU) which is a centre of excellence in drug discovery. Expertise from the biopharmaceutical industry combined with a powerful academic environment has created a unique environment for industry-ready drug discovery research. The DDU, based in the University’s School of Life Sciences, was established to help address the unmet medical needs for infectious diseases of low- and middle-income countries which kill millions of people every year and threaten almost half of the world’s population – the half that can least afford it. For these diseases, there is a need for new, safe and efficacious medicines, not least to stay one step ahead of the rising tide of drug-resistance prevalent in diseases like tuberculosis (TB) and malaria. The DDU is also partnering with pharmaceutical companies around the world to develop innovative discovery science for conditions including inflammation, skin diseases, cancer and Alzheimer’s disease.

The Roslin Institute, part of the University of Edinburgh, has established a Centre for Tropical Livestock Genetics and Health in an innovative joint venture with Scotland’s Rural College (SRUC) and the International Livestock Research Institute (ILRI). With £10 million funding from the Bill & Melinda Gates Foundation, along with additional funding from DFID, BBSRC and JOA, the new Centre – with nodes in Edinburgh, Kenya and Ethiopia – is focused entirely on the genetic improvement of farmed livestock in developing countries.
A.3.4 Our work to achieve equality and respect for our communities of staff and students

Scotland’s universities are actively working to address the inequalities that exist within our community of over 48,000 staff and 247,000 students and to make sure that our culture is one that is respectful and enabling.

Gender

Gender has been a key focus at both staff and student level in higher education. Universities have achieved gender balance at the most senior levels of university governance; in the appointments to the role of Chair and in the membership of their courts or governing bodies. This positive role modelling is important but universities are clear it needs to filter down through all levels of senior management, professorial appointments and crucially, senior management and professorial appointments.

Higher education wants to tackle the gender imbalances that persist at subject level. Universities each have a gender action plan with a bold ambition to ensure that by 2030 no subject studied at university has a gender imbalance exceeding 75% of one gender. There’s also a broader goal to reverse what has been a gradual decline in the number of men studying at undergraduate level.

Inextricably linked to the sector’s wider work on gender equality, universities have made delivery of the Equally Safe strategy a key priority since 2017 to signal there is no place for gender based violence (GBV) in higher education and to ensure a safe and respectful environment in which to learn and study. The roll out of the Equally Safe Toolkit across all universities began in 2018, with high levels of interest from universities in being early adopters. This was complemented by initiatives like the GBV support cards, delivered at the start of the 2018 academic year in partnership with the college sector and Emily Test, to ensure that all staff have to hand the basic information needed to support a student making a disclosure of gender based violence. Work to prevent and address GBV in higher education has high levels of senior management buy-in and one of the next developments in Scotland will be to revise the guidance on how to handle student misconduct where it may also constitute a criminal offence. The revision will acknowledge the role of trauma as experienced by victims and better reflect the gendered policy approach adopted throughout Scotland.

Race

Race is also a key focus for universities and the sector proactively led a review, in partnership with the National Union of Students, into the attainment of black, Asian and minority ethnic (BAME) students in 2019. Scotland’s universities have welcomed the report’s set of recommendations and will focus on implementation. In Scotland, BAME participation in higher education is broadly representative of the population as a whole. Retention and attainment rates for BAME students are more complex and require a more sophisticated interpretation with some ethnicities outperforming the average, whilst others do not.

Socio-economic deprivation

Though not a protected characteristic as such, the link between socio-economic deprivation and representation at university has, deservedly, had a lot of focus in Scotland. Scotland’s universities have taken a series of steps to try to level the playing field for students as a result of inequality that impacts on lives and limits opportunities by the time people are even considering applying to university:

- Every university in Scotland with entry requirements set new minimum entry requirements for undergraduate degree programmes in 2019 which take effect for students applying in the 2019/20 admissions cycle. Care experienced applicants and applicants living in the 20% most deprived areas of Scotland are eligible to apply at the minimum entry requirements.
- Universities went one step further to support care experienced applicants. Any care experienced applicant meeting the minimum entry requirements will be guaranteed an offer. This commitment was welcomed by organisations representing care experienced students including Who Cares? Scotland, MCR Pathways, CELCIS and others.

Progressive and sector-wide policy measures such as these, coupled with universities own longstanding initiatives to widen access, are starting to have an impact and the data is shifting confidently towards the interim 2021 target that 16% of all entrants to first degrees should be from the most deprived 20% of neighbourhoods (known as SIMD20).
### A.3.5 Looking ahead: the sector is ambitious to do more

The investment we seek from the 2019 budget would support more progress with the following national indicators:

<table>
<thead>
<tr>
<th>Specific contribution from universities</th>
<th>National indicator</th>
<th>National outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increased economic impact from increased number of international students, attracted by sustained quality of Scottish higher education.</td>
<td>Scotland’s population</td>
<td>International</td>
</tr>
<tr>
<td></td>
<td>International networks</td>
<td></td>
</tr>
<tr>
<td>Continued progress to improve the accessibility of higher education to everyone with the potential to benefit whatever their circumstances. This includes students with protected characteristics, care experience or socio-economic disadvantage. To deliver a curriculum and learning experience that recognises, reflects and supports the full diversity of individuals.</td>
<td>Public services treat people with dignity and respect</td>
<td>Human Rights</td>
</tr>
<tr>
<td></td>
<td>Scotland’s population</td>
<td></td>
</tr>
<tr>
<td></td>
<td>International networks</td>
<td></td>
</tr>
<tr>
<td>To continue progress towards the achievement of an equally safe environment on campus and in our institutions so we provide a safe and respectful environment in which to study and to work and in which there is no place for gender based violence.</td>
<td>Public services treat people with dignity and respect</td>
<td>Human Rights</td>
</tr>
<tr>
<td></td>
<td>Scotland’s population</td>
<td></td>
</tr>
<tr>
<td></td>
<td>International networks</td>
<td></td>
</tr>
<tr>
<td>Ensuring that all of our students are ‘global citizens’, equipped to succeed in a globalised economy.</td>
<td>Scotland’s population</td>
<td>International</td>
</tr>
<tr>
<td></td>
<td>International networks</td>
<td></td>
</tr>
<tr>
<td>The continuing attraction of highly skilled people to live in Scotland.</td>
<td>Scotland’s population</td>
<td>International</td>
</tr>
<tr>
<td></td>
<td>International networks</td>
<td></td>
</tr>
<tr>
<td>Building on Ministerial discussion, the delivery of mutually-beneficial work with our alumni community, helping to drive up exports and FDI.</td>
<td>International networks</td>
<td>International</td>
</tr>
<tr>
<td>In the face of strong and growing international competition, maintaining the reputation of Scotland’s higher education system on which outcomes are built.</td>
<td>Scotland’s reputation</td>
<td>International</td>
</tr>
</tbody>
</table>
A.3.6 Where we’re aiming for by 2030

The coming decade will be marked by the acceleration of internationalisation, with higher education playing an important role. Scotland’s university sector is in relative decline in the face of strong patterns of investment by countries across Europe and beyond. If Scotland chooses to invest, then by 2030:

• Our research and education will have made a crucial contribution to addressing worldwide sustainability challenges.

• Our research and education will be a key export industry, as synonymous with Scotland as whisky and salmon.

• Scotland’s universities will have maintained close research and educational links with our European partners, whilst also deepening our worldwide relationships. We will be leaders in offering higher education in partner nations, based on the Scottish traditions of excellence and inclusion.

• We will be Scotland’s critical nexus of ‘soft power’, through our deep relationships with universities, business and government worldwide. Our worldwide network of alumni is a key national asset, giving Scotland ‘ambassadors’ in every nation and opening doors to business, cultural and philanthropic opportunities.

• We will continue to develop confident and respectful global citizens, meeting contemporary challenges and making their way in different contexts and cultures.
A.4 Culture

We are creative and our vibrant and diverse cultures are expressed and enjoyed widely.

Universities’ contribution to the National Performance Framework over the last couple of years:

Attendance at cultural events or places of culture & participation in a cultural activity

• Performance Improving
  • Over 4.25 million people attended free cultural events held by Scotland’s universities in 2017/18. Of that, 1.3 million people attended educational events at university museums, over 720,000 people attended concerts, plays and dance events, over 675,000 people attended art exhibitions and over 250,000 attended public lectures.
  • Attendance at all forms of cultural activity are up on the previous year.\(^45\)

People working in arts & culture

• Performance Maintaining
  • Around 3.7% of all graduates to go straight into the workforce on graduation do so within the arts and entertainment industries as defined by standard occupational classifications. As a percentage of all graduates in employment within six months, this figure has been steady for the last couple of years.

Higher education’s wider contribution to culture

This section expands on a few areas not in the NPF and those not easily covered by metrics.

With students and staff drawn from across the world, all of our campuses are an exciting mix of cultures. Higher education has an undeniable pull-factor and this attracts individuals to study and live in Scotland, contributing to our economy and improved demography and the vibrancy of our culture.

Further, the sector includes world class arts and cultural institutions, attracting the very best talent from across the world and placing Scotland on the map.

That talent ensures a flow of talent into our vital cultural industries.

All institutions are making a strong cultural contribution, in diverse ways, across Scotland. We help to support Scotland’s cultural sector to grow and to be enjoyed and valued right across our communities.

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\(^{45}\) HE-BCI (2019) for latest year 2017/18, Social, Community & Cultural Engagement.
A.4.1 Cultural activity and raising participation

We are responsible for numerous accredited public museums and galleries, often run in partnership with Local Authorities and other partners.

We are also at the heart of the provision of venues and performance across Scotland with hundreds of thousands of individuals attending exhibitions and events each year. Without universities’ contribution, Scotland’s cultural capacity would be diminished significantly.

Our world-class specialist art-based institutions are working with the community to widen access and participation.
The Byre Theatre in St Andrews is operated under the management of the University of St Andrews, having reopened in October 2014 thanks to an agreement between the University, Fife Council and Creative Scotland. The theatre is committed to being an artistic and cultural hub at the heart of St Andrews and a focal point for the arts in North East Fife and beyond. The year round programme of events at the Byre includes professional, student and amateur performances.

Located at the heart of the University of Stirling, Macrobert Arts Centre is a cultural hub for Stirling, the Forth Valley and Scotland, making active connections with people, communities and ideas, for entertainment, wellbeing and understanding. The Centre offers a huge variety of activities with over 400 live performances. With family friendly comedy, dance, music, opera and art exhibitions, plus a year round cinema programme, there's a range of opportunities for all ages to get involved.

Through a partnership between the University of Glasgow, Glasgow City Council, Glasgow Life, Heritage Lottery, Historic Scotland and National Libraries of Scotland, the Kelvin Hall has undergone a £60m refurbishment to transform this landmark building into a centre of health and wellbeing, public engagement, teaching and research. The new and improved site will host a sports and cultural centre – including Scotland's largest public gym space, library and museum which will feature Glasgow University's Hunterian Collection as well as Glasgow Museum's collection.
The Royal Conservatoire of Scotland offers a portfolio of short courses and an exciting selection of weekly and weekend courses for children, young people and adults across music, dance, drama, production and film. These can lead onto participation in the Junior Conservatoire. As part of its fair access programmes, the Conservatoire offers the Transitions initiative which aims to provide funded training for those wishing to study the performing or production arts.

The Glasgow School of Art’s Open Studio offers day, evening and weekend courses for adults and young people, including Kid’s Summer School and week-long courses in spring. The range of programmes and short courses draw on the range of skills and expertise across the Art School, providing the community with the opportunity to study for leisure, as a route in to higher education or for continuing professional development.
A.4.2 Growing our cultural economy

We are working to ensure that cultural industries grow significantly, leveraging investment into Scotland. Our students and staff create new companies in the sector and are essential to the skills pipeline across the culture sub-sectors. Our excellent skills and research offering is an important element in driving the choice of companies to invest in and grow in Scotland.

InGAME is a multi-million pound games innovation partnership to establish a dedicated research and development centre for the Dundee video games cluster with a view to driving product, service and experience innovation across the industry. Led by the city’s Abertay University, in partnership with the University of Dundee and the University of St Andrews, the partnership includes Creative Dundee, Creative Scotland, Dundee City Council and a host of leading games companies.

A.4.3 Looking ahead: the sector is ambitious to do more

The investment we seek from the 2019 budget would support more progress, with the following national indicators:

<table>
<thead>
<tr>
<th>Specific contribution from universities</th>
<th>National indicator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Further development of our partnerships for the delivery of cultural events, places and activities, including a continuing widening of participation across our communities.</td>
<td>Attendance at cultural events or places of culture</td>
</tr>
<tr>
<td>Contributing to an increase in the number of businesses in, and overall income generated by, the cultural sector. With entrepreneurship and start-up support at the heart of the curriculum and broader experience in the relevant disciplines.</td>
<td>Growth in the cultural economy</td>
</tr>
<tr>
<td>Contributing to a growth in the number of jobs in the Creative Industries Growth Sector, including the formation of, and leverage of investment into, significant concentrations of public and private actors and investors.</td>
<td>Growth in the cultural economy</td>
</tr>
</tbody>
</table>
A.4.4 Where we’re aiming for by 2030

The new Culture Strategy for Scotland will set the context for the years ahead. Investment will enable the sector to play a full part in delivering a step change in how society and government view and value culture, leveraging further resources from the UK and beyond.

We will play our full part in delivering a vision for:

• culture in Scotland that is innovative, inclusive and open to the wider world;
• delivering cultural excellence – past, present and emerging – that is celebrated and is fundamental to future prosperity and wellbeing; and
• ensuring that culture’s empowering and transformative power is experienced by everyone.

Maintaining our excellence in education and research will be a foundation for continued company creation and inward investment.

We will see culture at the heart of interdisciplinary work to address our greatest societal and economic challenges.
A.5 Environment

We value, enjoy, protect and enhance our environment

Universities’ contribution to the National Performance Framework over the last couple of years:

State of historic sites

- Performance Worsening
  - Collectively, universities are responsible for over 1,800 buildings, which include listed buildings and sites of national significance, many of which are ageing twentieth century buildings in need of repair or replacement.

Waste generated

- Performance Improving
  - The amount of total waste recycled by universities has increased to more than 20,000 tonnes in 2017/18, up from 15,000 three years ago.

Universities are leaders in the protection and enhancement of our environment.

As owners of large and complex estates, and as responsible organisations, universities are transforming their own operations to reduce the environmental impact they have, working in partnership with local partners. We are reducing our production of greenhouse gases and taking action to remove single-use plastics from our operations. More broadly, through our research and education we are enabling the adaptation of our economy and society to the climate challenge whilst also raising our collective understanding and appreciation of our environment and the effects of human actions.

In doing so, we are fostering partnerships across the world, leveraging investment into new technologies and making Scotland one of the world’s pacesetters in creating and deploying new technologies.

The National Indicators of Carbon Footprint and Greenhouse Gas Emissions are listed under the Economy Outcome and the contribution of the HE sector is reported on under that section.
A.5.1 Responsible organisations delivering change and development

We are working with local and international partners to meet our responsibilities to deliver change. In 2016 all universities signed up to the Universities and Colleges Climate Commitment for Scotland which required each institution to develop a five year Climate Change Action Plan.

A.5.2 Playing our part in decarbonising Scotland’s energy needs

We are a close partner with industry, communities and government in pursuing the Scottish Energy Strategy. Universities are making a contribution to the development and deployment of renewable energy sources and to enhanced ‘energy productivity’. We are building on our research expertise and staff and student talent to play our role in catalysing transformative investment by both private and public sectors.

All institutions have reduced their scope 1 and 2 carbon emissions per student and staff member.

Source: HESA, Scope 1 & 2 carbon emissions per HE student and staff full time equivalent (FTE) (non residential), of the 14 institutions for which a timeline is available.

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46 HESA (2017/18) Buildings and Spaces Record.
The Power Networks Demonstration Centre (PNDC) at the University of Strathclyde offers an ideal platform to accelerate the development of smart grid technologies needed for the delivery of the future low carbon electricity network. Founded through support from the University, The Scottish Funding Council, Scottish Enterprise, Scottish Power and Scottish and Southern Energy, the Centre has attracted a range of important member companies.

The biomass Energy Centre at Eden Campus is the first of many new initiatives central to the University of St Andrews’ strategic drive to lead the sector in energy carbon neutrality. Ground and rooftop solar projects generating electricity for Eden Campus will supplement the biomass Energy Centre. The Campus will also be home to a new energy generation, conversion and storage commercial research facility, as well as a hub for both SPEN and SGN, creating new innovative facilities for the wider communities of St Andrews and NE Fife.

In St Andrews, a series of major improvements are also underway to reduce energy demand in the university’s existing estate, while all new buildings are being designed to meet the highest sustainability standards. The biomass district heating network is to be extended in phases and the combination of all these strategies will create the first energy carbon neutral university in the UK.
ReFLEX (Responsive Flexibility) Orkney will demonstrate a first-of-its-kind Virtual Energy System (VES) interlinking local electricity, transport and heat networks into one controllable, overarching system.

The aim is to create a ‘smart energy island’, demonstrating the energy system of the future, which will reduce and eventually eliminate the need for fossil fuels.

Leveraging resources from the UK Industrial Strategy, the £28.5 million project is being led by the European Marine Energy Centre (EMEC). The project brings together an expert consortium of Orkney-based partners – Heriot-Watt University, Solo Energy, Aquatera, Community Energy Scotland and Orkney Islands Council – as well as multinational energy company Doosan Babcock.
A.5.3 Our broader contribution to addressing climate change

Our research and innovation is addressing energy use and greenhouse gas emissions across the sectors of the economy.

Administered by Edinburgh Napier University, the Construction Scotland Innovation Centre provides the construction sector and its clients with a ‘single entry point’ to a range of innovation support.

One of four key areas of operation for the next five years is Building Sustainably – focusing on the industry factors related to energy and de-carbonisation, design for an ageing society, smart and sustainable materials and the circular economy.

A.5.4 Looking ahead: the sector is ambitious to do more

The investment we seek from the 2019 budget would support more progress with the following national indicators:

<table>
<thead>
<tr>
<th>Specific contribution from universities</th>
<th>National indicator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Growth in our use of energy from renewable sources, as universities, and reduction in Scotland’s carbon footprint and greenhouse gas emissions;</td>
<td>Energy from renewable sources</td>
</tr>
<tr>
<td>Our research, innovation and skills contributions, through which we will play our part in Scotland’s decarbonisation. We will place Scotland at the heart of innovative approaches and green industrial growth.</td>
<td>Energy from renewable sources</td>
</tr>
<tr>
<td>Working with civic partners, the maintenance of, and enhanced public access to, the 20% of our estate which has listed status.</td>
<td>State of historic sites</td>
</tr>
<tr>
<td>Reductions in waste.</td>
<td>Waste generation</td>
</tr>
</tbody>
</table>
A.5.5 Where we’re aiming for by 2030

Our ambition is to be at the forefront of how society tackles the significant environmental challenges that it faces. Our research and talent is delivering already, helping Scotland to progress under the Climate Change Plan.

The declaration of a ‘climate emergency’ and a new Plan only reinforces the need for research and education.

We will be leaders in the progression to a low-carbon society, both through our expertise and through the management of our own environmental impact.

We will research and practice to tackle the environmental challenges including energy, agriculture, transport, construction and manufacturing.


Universities’ contribution to the National Performance Framework over the last couple of years:

**Mental wellbeing**

◆ **Performance Worsening**

- Large increase in students reporting mental ill health.

**Physical activity**

◆ **Performance to be confirmed**

- 46% of university students studying in Scotland meet the CMO recommended activity levels of more than 150 minutes a week. Another 43% fall in the fairly active bracket of 31 to 149 mins.\(^{48}\)

**Journeys by active travel**

◆ **Performance Improving**

- The number of cycle spaces provided by universities for staff and student use has grown by 7% over the last three years to nearly 13,500.
- Cycle spaces are on track to outnumber the number of car parking spaces available as that number decreased by 9% over the same period.

Alongside universities’ close partnership with the NHS, we are innovators in therapy and practice. Our impact also includes innovations to support healthy ageing and community access to our facilities and services – often in partnership with the public sector.

*Each year we welcome thousands of new students seeking careers in Medicine, Dentistry, Nursing and Midwifery.*

**Intake targets for AY2019-20:**

- Dentistry **135**
- Medicine **949**
- N&Midwifery: **4,006**

Source: Scottish Funding Council 2019/20 Intake Targets

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\(^{48}\) UK Active (2017) Scottish Active Students Survey.
A.6.1 A strategic partner of the NHS

Universities deliver key professional training for our health service, working in close partnership with NHS Education for Scotland. We have strategic partnerships with Health Boards across the country.

University research and our academic skills set offer the NHS real support in meeting the need to continuously improve patient care and outcomes whilst driving efficiency. Scotland is not alone in facing the huge challenges of an ageing population and endemic social problems that result in chronic patient conditions. Universities are a source of the innovation and skills base that support those transformations.

The Laboratory for Innovation in Autism at Strathclyde University is working with the NHS to reduce waitlist times for diagnosis for children with autism spectrum disorder. Currently children can be on the waiting list for months or even years before diagnosis is achieved due to staff shortages, complexity of the condition, and multidisciplinary routes to diagnosis. Strathclyde’s Engineering and Education experts are working with commercial partners to provide a fast, efficient iPad-based diagnostic instrument fun for children to engage with, reducing waitlist times, and enabling care and support for children with autism in the earliest years, when it is most effective.
The University of the West of Scotland and Alzheimer Scotland have delivered a joint programme to teach over 800 Dementia Champions amongst qualified NHS staff to improve dementia care across Scotland. These are health and social care professionals who complete an eight-month UWS-led programme. The programme has had a transformational impact on the knowledge and skills of the participants and was praised by the Mental Welfare Commission for Scotland.

Professor Bob Steele, based at the University of Dundee, was a fierce advocate for the introduction of cancer screening programmes to allow early diagnosis of bowel cancer. He led the implementation of the Scottish Colorectal Cancer Screening Programme, which has become a model for how better screening can improve survival rates and his research has helped develop more sophisticated screening and cancer detection methods.

In February 2018, statistics showed a record number of Scots are now taking part in the screening programme, with the biggest increase among those living in the most deprived areas.

Thanks to a partnership between NHS Lanarkshire, the University of the West of Scotland and Glasgow Caledonian University, all three of Lanarkshire’s acute hospitals have been awarded university status. University status will help deliver new and improved ways of working, bringing frontline healthcare professionals and academics together to tackle healthcare challenges facing people in Lanarkshire. One of the early initiatives likely to benefit patients is embedding of exercise interventions to reduce patient falls and promote active ageing.
A.6.2 At the heart of our life sciences sector

Our research and our partnership with Scottish and international companies is transforming therapy and practice and our understanding of how lifestyle affects health.

Our research places Scotland at the forefront of the life sciences sector. We attract 16.8% of all UK funding from the Biotechnology and Biological Sciences and Medical Research Councils, an investment of more than £115 million each year and that quality attracts further talent and investment. Research has an economic impact but it is also very directly enhancing treatment and public health.

Scotland is working to become a world leader in precision medicine and the Stratified Medicine Scotland Innovation Centre is at the heart of this exciting field. The Centre is a unique collaboration comprising the Universities of Glasgow, Edinburgh, Dundee and Aberdeen; NHS Greater Glasgow and Clyde, NHS Grampian, NHS Lothian and NHS Tayside; and the key business partners, global biotechnology company, Thermo Fisher Scientific, and biomedical informatics company, Aridhia Informatics. It therefore exemplifies a collaborative approach that brings both enhanced outcomes and efficiency.

A two-year study involving experts from Glasgow Caledonian University, Glasgow and Strathclyde universities, and NHS Greater Glasgow and Clyde has found that vaccinating schoolboys against the potentially deadly human papillomavirus (HPV) could reduce HPV related head and neck cancers in men in the long term, alongside the routine vaccination of schoolgirls leading to a dramatic drop in cervical disease later in life. The Scottish Government has agreed to implement an HPV vaccination programme for adolescent boys in Scotland.
The Digital Health and Care Institute (DHI) works to meet some of the challenges involved with ageing populations. Some of the solutions are smart, technology-led monitoring of well-being and improving access to personal data for self-management. Strathclyde University leads the academic partners with Glasgow School of Art as a partner for the embedded design capability.

The DHI is leading a project with NHS Lanarkshire to transform future stroke and cardiology services in Scotland, with the University of Strathclyde, The Glasgow School of Art and Edinburgh Napier University all involved.

Stroke patients will wear a new CE marked cardiac ambulatory monitor continuously for up to 7 days to detect episodes of irregular heart rhythm and arrhythmias. This is a big improvement in monitoring over the current service. Early diagnosis of atrial fibrillation can lead to crucial changes in the patient’s treatment plan to reduce the risk of further stroke.

A.6.3 A key partner in community access to leisure and sports facilities

Every university with sports facilities makes these available to the local community. Where it adds value, we have developed these in formal partnership with local and national partners.

The Aberdeen Sports Village and Oriam, Scotland’s sports performance centre, are both founded on partnerships between universities (the University of Aberdeen and Heriot-Watt University), the respective local authorities and sportscotland. Their joint investments provide the universities, their surrounding communities and Scottish performance sport with world class facilities that would have been prohibitively costly to pursue individually.
A.6.4 Looking ahead: the sector is ambitious to do more

The investment we seek from the 2019 budget would support more progress with the following national indicators:

<table>
<thead>
<tr>
<th>Specific contribution from universities</th>
<th>National indicator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Investment in preventative services and an effective response to mental illness in our staff and student community.</td>
<td>Mental wellbeing</td>
</tr>
<tr>
<td>Enabling the transformation of Scotland’s public service providers to target resources efficiently where they are most needed.</td>
<td>Quality of care experience</td>
</tr>
<tr>
<td>The provision of venues and activities that support people in living an active and healthy life.</td>
<td>Physical activity</td>
</tr>
<tr>
<td>Enhancements in the quality and efficiency of care provision.</td>
<td>Quality of care experience</td>
</tr>
<tr>
<td>People making healthier life choices.</td>
<td>Health risk behaviours</td>
</tr>
<tr>
<td>The creation of new businesses and products that transform treatment.</td>
<td>Quality of care experience</td>
</tr>
<tr>
<td>The development of new approaches to ‘healthy ageing’, transforming care and treatments.</td>
<td>Healthy life expectancy</td>
</tr>
</tbody>
</table>

A.6.5 Where we’re aiming for by 2030

Scotland’s demography, advances in treatment and societal health challenges will all make the coming decade a period of challenge and opportunity.

With investment, we will maintain and grow Scotland’s position in leading research and practice to tackle these major 21st century challenges, from child development to healthy ageing.

Our research will change approaches to public health and to treatment, creating efficiencies and the delivery of quality services.

We will address the needs, and harness the talents, of an increased ‘third age’ population.
A.7 Communities & Poverty

We live in communities that are inclusive, empowered, resilient and safe

The focused nature of the indicators in the national outcomes for community and poverty mean that there is no easy equivalent or comparative data sets that we could draw on from within the higher education sector.

However, universities are committed to the role they play in their wider communities. They have important statutory and values-based roles in reducing all forms of inequality in their staff and student population. More widely, they have a clear role in addressing the negative impact of poverty through their widening access work and creating more opportunities through education.

Universities also have a role in ensuring that the leverage of their investments in estates and facilities delivers benefits far beyond the immediate university community and in working with partners to ensure the development and regeneration of attractive cityscapes, of which people feel shared ownership and a sense of pride.

We tackle poverty by sharing opportunities, wealth and power more equally

Universities are equally vital to the places in which they are located and reliant on the partnership and support of their local communities. We strive to truly be ‘civic institutions’, playing our role to the fullest in our locality.

As noted above, we are significant actors locally in the creation and operation of cultural and sports facilities. Further, our partnership with communities offers capacity in a breadth of contexts such as education, services and public debate.

A.7.1 Transforming infrastructure and social capital

Through our civic role we are significant partners in setting out a vision for the development of city regions right across Scotland. Our role as major employers and in leveraging investments day-to-day has been evident in our centrality to City Region Deals across Scotland.

Abertay University and The University of Dundee were founding partners alongside the Dundee City Council and Scottish Enterprise in the development of the proposition for the V&A Dundee. As Scotland’s first design museum, the V&A has been a key element in the city’s waterfront regeneration. The “V&A effect” is already changing perceptions of the city around the world. Since it’s opening, the Wall Street Journal, Lonely Planet and CNN have highlighted Dundee amongst the world’s “must visit” places.
Across the country, we are playing our part in driving forward City Deal investment and action.

Queen Margaret University is leading the development of the Edinburgh Innovation Park, which will focus on growing food and drink businesses as part of a community focused scheme that will provide a range of facilities including retail, coffee shops, health and fitness, hotel and residential accommodation.

As part of the Inverness and Highland City-Region Deal, the University of the Highlands and Islands is establishing commercialisation, academic and clinical capacity to deliver projects in health, social care and life sciences. This includes a custom-built facility on the Inverness Campus operating as a flexible open access unit, supporting the interaction between the health service, the academic sector and commercial partners. Resulting projects will generate new products and services, business start-ups and licensing deals, as well as service quality improvements and new models for clinical delivery for the NHS.

Brian Evans, Professor of Urbanism at The Glasgow School of Art, has been appointed as Glasgow’s first City Urbanist. One of the UK’s leading urbanists, Professor Evans will work with Glasgow City Council to help develop and embed an approach to ‘place quality’ in all of the plans and strategies that are implemented. Professor Evan's approach will be to consider Glasgow as the international and metropolitan city it is but also as the everyday city of residents, businesses and visitors.
The Lightweight Manufacturing Centre, formally launched in Renfrew in 2019, provides services to Scotland’s aerospace, automotive renewable energy, oil & gas, and marine industries and is changing the way Scottish industry interacts with high-value manufacturers across the world. The highly experienced team in the Centre, as part of the National Manufacturing Institute in partnership with Strathclyde University, assist with the design and development of the next generation of technically enhanced components to meet the required industry targets and efficiencies.

A.7.2 Enhancing vital local services

We are also a close partner with key public services. Our graduates are key to the operation of local government in professions such as social work and planning and of services such as policing. Our research is delivering innovation in service delivery that both enhances outcomes and saves resource.

The Scottish Institute for Policing Research (SIPR) is a strategic collaboration between 14 of Scotland’s universities and Police Scotland, established to carry out high quality, independent research and to make evidence-based contributions to policing policy and practice. Drawing on international links, the Institute informs and evaluates reform and considers policing issues such as public perception and trust in the face of fast-changing challenges.
A.7.3 Looking ahead: the sector is ambitious to do more

We are committed to our universities as a power for the common good. This ranges from our commitment to making a difference to the local communities we serve, to our role in addressing global challenges.

With investment we can play our role as anchor institutions to the full:

<table>
<thead>
<tr>
<th>Specific contribution from universities</th>
<th>National indicator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Through our own operations, leverage of investment and partnership with the private, third and public sectors we can deliver regeneration of communities, both through research expertise and through creation of jobs and opportunities.</td>
<td>Perceptions of local area</td>
</tr>
<tr>
<td>Our capacity to invest allows us to create and maintain facilities which are open to all, with inclusive spaces for the communities around us.</td>
<td>Places to interact</td>
</tr>
<tr>
<td>In our own operations we will be exemplars of fair and satisfying work and will have fully tackled legacy issues of gender inequality.</td>
<td>Wealth inequality</td>
</tr>
<tr>
<td>As our society faces change we will continue to be a key part of the fabric of democracy, providing a space for reasoned debate that draws on our expertise and insights and those of the communities we serve.</td>
<td>Social capital</td>
</tr>
</tbody>
</table>
B. A system under pressure: the risks faced by universities

We are ambitious to grow our contribution and to tackle the challenges that Scotland faces over the coming decade. However, we are at high risk of being unable to do so – and of higher education making a reduced contribution to our nation’s success – because of serious erosion of the funding of higher education combined with escalating costs that are beyond institutions’ control.

This has already been recognised internationally. The European University Association has identified Scottish higher education as “a declining system under pressure”\(^49\) as a result of funding cuts.

In Scotland, NUS Scotland passed an emergency motion in March 2019 expressing concern about higher education funding cuts and their impact on students.

A range of indicators demonstrate that the sector is under substantial stress, and that this is already compromising our contribution.

B.1 Overall cuts in Scottish Government funding through the Scottish Funding Council (SFC) and the SAAS fee

The higher education sector has faced a real-terms cut in SFC resource funding of £134m, or 11.6%, since 2014/15.

Added to this has been the development of systemic post-budget, transfers out of the SFC resource budget which significantly diminish the SFC’s capacity to invest.

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Since 2013/14 SFC has been required to transfer funds to SAAS to make a contribution to both fees and bursaries. Whilst the fee element of this transfer supports universities, this approach artificially increases the SFC’s budget presented to Parliament. Meanwhile, the transfer for bursaries does not support universities. While we strongly support investment in a student support system that enables students from all backgrounds to succeed in higher education, we believe this should be funded directly by Scottish Government rather than cut from university funding.

The fee of Scottish domiciled and EU students is paid by SAAS. The undergraduate fee of £1,820 for an undergraduate course has been frozen since 2010/11, a 14% real terms cut.

The SFC capital budget has fallen sharply from £100m in 2009/10. The budget of £37.5m in 2019/20 is a 1.4% real terms decrease since 2014/15. This follows a sharp, earlier decline since 2010 when SFC’s capital funding was £95m.

**Figure 3: Systemic transfer of funding from SFC to SAAS**
Borrowing at record levels

The higher education sector has record levels of borrowing. Much of this is to make some progress towards an estate that is fit for modern purpose; some of it is to sustain institutions’ core activities in the face of declining public funding. Such investment is essential for institutions to compete in the global competition for students and staff in which competitor institutions across the world can access increasing levels of public investment. The sector’s overall borrowing now stands at £1.3bn, which is greater than the annual SFC grant to the sector.

![Figure 4: Sector External Borrowing at year end (YE) 2013-2018](image)

Institutions in deficit

The inevitable impact of reduced public funding is that institutions are being pushed into deficit. University leaders are keen to sustain the breadth of what their diverse institutions can offer to students, society and the economy; but that comes at a cost that government is increasingly unwilling to meet.

15 out of 18 institutions were in a worse position in 2017/18 than the year before with 10 of them in deficit.

Likewise, the financial buffer that institutions are able to use to guard against unexpected challenges is being eroded. 12 out of 18 Scottish institutions had fewer days of liquidity in the bank in 2017/18 than the previous year. Average liquidity amongst Scottish institutions dropped from 115 to 98 days, with a majority falling below three months. The average for institutions UK-wide was 139 days.

Job cuts

Universities are major employers in their own right, employing 48,000 people in high quality jobs. Those jobs are dependent on the financial sustainability of institutions, including their ability to leverage resources from outside Scotland on the basis of quality.

Staff talent is the lifeblood of higher education. Funding cuts are forcing institutions to make difficult decisions about the size of the staff team they can afford. Across the sector, institutions are working to minimise redundancies but the reality is that valuable talent is being lost from higher education which would have been retained in a better funding environment.
B.2 Pressure on the teaching grant: cuts in funding per student

Students are at the heart of what universities are for, and of the value we offer to society and the economy. Scottish Government funding for teaching, through the SFC, does not just support teaching: it also supports the wide range of support that institutions offer for students’ welfare and academic success, including the more intensive support offered to students from widening access backgrounds, so that every student has the best possible opportunity for a successful outcome that will advance their career. You can read more about this in *The Real Value of T.*

Our support for students is placed under increasing stress by year-on-year reductions in funding per student.

Since 2014/15 there has been a 9.6% cut in funding per student.

This means that institutions have almost £700 less of Government investment to spend on each student’s undergraduate education per year than they did then.

We face increasing demand from well-qualified learners from across society, and we are pressing ahead with our specific commitments to expand recruitment from the most disadvantaged parts of society. The school-leaver population will increase over the next decade, added to increased demand from mature learners changing direction in a changing economy. Over the coming years, as we face continuing technological and societal change, many more thousands of people will want to gain new skills throughout their lives. We want to build on our substantial offering of bespoke CPD and masters courses and add further, often short-cycle, opportunities. Similarly, we want to create capacity to expand new approaches such as Graduate Apprenticeships.

In 2016 Audit Scotland found that it had “become more difficult for Scottish applicants to be offered a place at a Scottish university”.\(^{50}\) Universities Scotland has updated Audit Scotland’s data with the data for 2016 which showed that the offer rate has fallen further to 49.6% from 57.2% in 2010.

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100 Audit Scotland (2016) *Audit of Higher Education in Scottish Universities.* P43.
B.3 Pressure on the research grant: reduced success in leveraging investment to Scotland

Scotland’s identity as a nation with world-class research is fundamental to our international brand proposition. It is a key export earner, and is at the core of our ability to attract high-value ideas-driven international investment and high-talent inward migration.

Using the SFC’s research funding as an essential foundation, each year the sector leverages more than £750m of competitively won research funding from UK and international sources, supporting more than 15,000 researchers and 13,000 research students, generating an immediate £3 of income to Scotland for every £1 of investment alongside broader leverage effects. This is secured in the face of strong global competition.

This critical aspect of Scotland’s strength is provided at a loss to universities. We work within a ‘dual support’ model where Scottish Government grants through the SFC support our basic research infrastructure and staff, and competitively-won funds for research projects principally support the marginal costs of that project. Taken together, on average these sources only cover around 80% of the full economic cost of research.\(^{51}\)

Our success is constrained by cuts. SFC research funding has been cut by 12% in real terms since 2014/15. These cuts mean that funding is now so far from the full economic costs of research that institutions are in some cases choosing not to compete for research grants in key areas of their strength. Winning that funding would have meant jobs in Scotland and a strengthened research base which supports innovation, company creation and FDI.

We are already seeing a fall in our share of competitive UK Research Council funding. That is a loss to Scotland of tens of millions in funding, hundreds of researcher posts and the wider benefits that flow from the work of those staff.

Research excellence also underpins our case for investment in major science and innovation facilities. Scottish institutions host major facilities due to our strength in relevant fields. If we allow decline then we will not see investment in Scotland in these key, business-facing developments.

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\(^{51}\) Scottish Funding Council (2016/17) Transparent Approach to Costing.
B.4 A university estate under stress

Our facilities – the physical estate and, increasingly, the digital infrastructure – are essential to our ability to teach, research and provide services to businesses and communities.

Keeping this estate in fit for purpose condition – let alone investing to create the environment that students and others deserve and reaching modern standards of carbon efficiency – is an increasing challenge. Almost a third of our estate is of 1960s or 1970s design and construction, at or beyond its design life and below modern energy efficiency standards. A fifth of our estate has listed status: a major cultural asset but a constraint on fitness for modern purpose.

Scottish Government capital investment, at £37.5m in 2019/20, is at a level far removed from the needs of the higher education estate. Analysis for the Scottish Funding Council points to the need for an ongoing investment of £250m per annum to maintain the current estate even if it were all in good condition.

Meanwhile, the backlog maintenance cost – the investment needed to return all of the estate to a sound, operationally safe condition – now exceeds £850m.

Figure 7: Percentage of UK Research Council funding received by Scottish HEIs (Source: HESA)

Figure 8: Total cost (£m) to upgrade sector estate in conditions C&D to Condition B (Source: HESA)
B.5 Competitive pressures

Scotland’s internationally competitive university sector is a major source of economic growth. The talent of our staff and students and the knowledge and skills flowing into our economy are a success story. As a result Scotland has the strongest graduate outcomes; leads the UK in its research impact, the attraction of FDI and the creation of successful spin-out companies.

This is secured in the face of growing global competition. It is created by our high quality staff, attracted and retained in a global market. It requires constant adaptation of approach and currency of facilities and equipment.

In the next decade Scotland must increase its competitiveness as a generator of ideas and talent. That will create, retain and attract companies and investment. We should be the focal point for communities of businesses shaping and exploiting technological advance, such as the use of data and automation.

However, a range of indicators show a decline in the Scottish university sector’s competitive position, both in terms of investment and in terms of reputation.

Other small advanced economies are consciously choosing to invest in higher education as an engine of growth and productivity.

As illustrated below, countries across Europe which we would wish to collaborate and compete with have chosen a path of investment in their university sectors, recognising the significant strategic economic, cultural and social benefits of doing so. Scotland’s choice over the same period is markedly different.

Figure 9: European nations with institutions in the world’s top 300: change in investment patterns.
Nominal change in public funding

Between
2008 to 2017: Norway, Germany, Austria, Belgium, Denmark, Sweden, France, Italy, Spain, Ireland
2010 to 2017: Scotland
2008 to 2015: Switzerland

Sources: Top 300 – THES World Rankings 2019
Scotland’s relative disinvestment in higher education, compared to competitors’ prioritisation of higher education, is already reflected in worldwide rankings. Countries that are increasing investment in their HE sector are seeing the outcome in the number of institutions ranked highly. Indeed, some nations have made an increase in institutions’ position a specific strategic priority. For example, China has a strategic aim under its *Double World-Class Project* to create over 40 world class institutions.52 Those reducing investment, including Scotland, are seeing a slip in position.

### B.6 Increasing costs

The impact of declining public funding is compounded by increased costs beyond higher education institutions’ control. For instance, institutions face major pensions cost increases, including:

- The UK Government decision to increase employer contributions to the Scottish Teachers’ Superannuation Scheme (STSS) and the NHS Pension Scheme which many university staff are members of;
- The UK-wide Universities Superannuation Scheme is currently planning a series of increases in employer contributions.

We estimate that, when implemented, these changes will cost the Scottish sector in excess of £20m.

We are committed to fair and competitive remuneration for our staff, but against the background of reduced public funding, each 1% increase in our pay bill amounts to £16m per annum.

### B.7 Major uncertainties

**Brexit**

There remains considerable uncertainty on what path Brexit will take. We have set out the wide and significant implications for the sector and how these might be mitigated. Some effects are already being felt, for instance the increased costs of purchasing equipment and consumables in foreign currency.

Brexit risks to attainment of our vision include:

- Our continued ability to attract and retain EU staff talent, some 4,500 of our academic staff come from EU27 nations – 20% of the total.
- Continued student mobility, including Erasmus through which more than 2,000 students at Scottish HEIs access study abroad each year.
- Uncertainty over replacement for European Structural and Investment Funds: for instance Graduate Apprenticeships and a range of teaching and infrastructural provision in the Highlands and Islands are currently funded from this source.
- Uncertainty over future participation in European research networks. We win over £90m per annum from EU sources, 12% of all of our competitively won research income.53
- Uncertainty over the future fees regime for EU students, with the risk that a sharp fall in EU students will destabilise institutions and their provision of subjects important to the Scottish economy.

We are pleased that the Scottish Government has committed, through the full use of its devolved powers, to do all it can to address the risks of Brexit, supporting the sustainability and competitiveness of Scotland’s tertiary system. This will include the attraction of students from the EU, enriching the experience of all students, and supporting our economy, public services and culture.

### Post-18 Review, England

We do not yet know how the Augar Report will be implemented, but Scotland’s universities face a risk that the UK Government will make choices that restrict students’ ability to choose the right course for themselves wherever it is in the UK, in a way that is financially sustainable for institutions. Moreover, the impact on the income of Scottish institutions could be over £35m annually. It should be remembered that income from rest-of-UK students is an essential part of the funding settlement set out in the context of ‘Putting Learners at the Centre’ in 2011.54

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53 In 2017-18 the Scottish sector won £95.8m of research contracts from EU Government sources. Source: HESA Finance Record.

54 Scottish Government (2011) *Putting Learners at the Centre: Delivering our Ambitions for Post-16 Education.*
Scotland faces a choice. We have the opportunity now to pivot to an upwards trajectory for Scottish higher education and its contribution to our nation’s success. Making that choice now can turn the situation around quickly: any further delay will make it increasingly difficult to address the challenges outlined in this paper and for our sector to maintain its international standing.

Policy and funding should be focused on maximising our current contribution and on meeting our vision for 2030, with the economic, cultural and societal benefits that would bring.

Do we choose now to support our universities to offer opportunity and economic growth, matching the ambition of other small countries across Europe and beyond?

We are realistic in our ask, recognising continued challenges to the public finances in the short term.

We ask for:

- A 2% real terms increase in the SFC HE resource budget. This would increase the budget by £39.4m to £1,065m and would enable the SFC to make a first step towards core funding at a sustainable level, enabling real-terms increase in core grants for teaching, research and knowledge exchange. This would need to be sustained by further real-terms increases in future years, with the medium term goal of ensuring that all teaching meets its full economic costs. Further, increasing the SFC part of the dual support system would help to move funding for excellent research significantly closer to meeting full economic costs.

- A rise in the SFC capital budget to £50m in 2020/21, a cash increase of £12.5m, as a first step towards capital funding at levels that meet the sector’s needs and helps to maximise its role in transforming Scotland’s facilities and built environment.
• **SFC’s budget for higher education to be committed in full to higher education institutions.** In the 2019/20, more than £10m of the SFC budget for higher education was transferred to the Student Awards Agency for Scotland to pay for students’ living costs, part of an almost £30m systemic transfer every year. We support an effective student support regime, but believe this should be funded directly by Scottish Government.

• **Brexit remains a source of significant uncertainty and risk for the sector.** We look to the Scottish Government to make full use of its devolved powers to ensure the sustainability and competitiveness of universities. This should include a commitment now to retain within higher education any savings realised if there was to be a post-Brexit change fees policy for EU students. This would give institutions some capacity to plan in an uncertain environment. As recommended by the Commissioner for Fair Access, this would support the shared priority of widening participation to learners from disadvantaged backgrounds by enabling creation of further funded places for Scottish-domiciled learners. Further, it would enable the sector to meet growing demand more broadly and to meet Scotland’s increased needs for high-level skills.

• **Support for the sector to make its contribution to the Scottish Government’s target for doubling business research and development in Scotland between 2015 and 2025.**

As part of this we want to realise the full potential of UK Industrial Strategy investment for Scotland. Building on success to date with Scotland securing around 7% of the UK total, we want to contribute to the Strategic Board’s objective of supporting Scotland’s businesses to leverage maximum funds from the Industrial Strategy Challenge Fund. The opportunity is significant with a total investment of £2bn across the UK in 2020/21.

To achieve this we are looking for a multi-year Scottish Government commitment to pass on to Scottish higher education the full Barnett consequentials of increased Industrial Strategy investment in English universities, so that we can compete on a level playing field to leverage major business-focused projects to Scotland.

• **A Scottish policy response to the post-18 Review in England that protects rest-of-UK students’ ability to choose courses in Scotland in a way that is financially sustainable for institutions.** This would be consistent with Scottish Government policy in *Putting Learners at the Centre.*