



RUSSELL GROUP

Strong foundations for UK research, innovation and education

Infrastructure investment ensures our universities remain competitive and efficient

The investment universities make in their physical and digital infrastructure:

- **Protects the quality of education:** Upgrading teaching facilities including labs allows universities to update curricula and deliver education to meet future skills needs.
- **Enables cutting edge research and innovation (R&I):** Access to the latest technology means our researchers can be at the forefront of their disciplines and helps attract talent to the UK.
- **Creates local jobs:** New construction, repair and renovation of facilities ranging from medical schools to farms and arts centres creates a range of local jobs.
- **Attracts private investment:** As capital investment is a long-term commitment it provides the confidence for businesses to co-invest.
- **Improves efficiency:** Modernising older buildings improves efficiency, reduces operational costs and supports Net Zero ambitions.

This paper provides examples of the benefits of university-focused capital projects, outlines the sector's current ability to invest and suggests four potential opportunities for growth: maintaining, upgrading and improving efficiency of current infrastructure, meeting new student needs, meeting the needs of future R&I landscape and delivering Net Zero.

In addition to investment, streamlined planning approvals would ensure public funds can be used efficiently and effectively. The final section of this paper sets how a new R&I guarantee in the National Planning Framework could help fast track application process for R&I facilities and stimulate economic growth.

Building for Success

University capital projects are delivered frequently with public or private sector partners. In many cases developments are also the centrepiece of wider local and regional economic development plans.

Projects like these are not only creating jobs now, they are helping ensure businesses and public services across the UK have access to the human capital they need to grow in future.

The **University of Manchester** and commercial partners are working to deliver a £1.7bn, innovation district that will help to commercialise cutting-edge research in the North West, creating incubators, collaboration spaces and supporting the commercialisation of breakthroughs in fields like advanced materials. ID Manchester will create over 10,000 new jobs, over 1,500 homes and deliver education, apprenticeship and training opportunities for local communities.

The **University of Bristol's** Temple Quarter Enterprise Campus (TQEC) is a new £500m campus due to open in 2026 with state-of-the-art facilities will help create a thriving ecosystem for learning, research, innovation, enterprise, and social inclusion. TQEC will deliver an estimated £626m of employment and financial benefit to the regional economy over the next decade, contributing to the research, innovation and skills required to drive the global competitiveness and success of Bristol and the West of England.

With breakthroughs in new fields changing the way we live and work, university capital investment is delivering upgrades to facilities vital to ensuring students gain the skills they need to succeed.

The **University of York** has invested in new teaching facilities which allow students to explore their subjects using virtual, augmented and extended reality, and simulation and digital twinning. New resources available to students include networked professional recording studios with VR functionality, state-of-the-art hardware for virtual and extended reality, mobile body, brain, head, eye and motion tracking and monitoring equipment, and an industry focussed XR Stories R&D Lab.

Imperial College London's carbon capture pilot plant is the only facility in the world where undergraduate students are able to learn to operate CCS technology, providing practical experience of features chemical engineering graduates will encounter in the 'real world', and giving them skills that will be essential in their future careers.

The Capital Investment Landscape

While Russell Group universities invested more than £2bn in capital projects in 2020/21, across the sector rising costs mean growing capital requirements cannot be met by universities without impacting on core activities.¹ The pre-Covid 2019 sector deficit for universities in England reached £2.8bn, and universities within the devolved nations are under similar, if not greater, pressures. Factors increasing cost pressures include:

- **Research funders covering a lower proportion of R&D costs.** In 2016, on average Research Councils funded 72% of the full economic costs of R&D projects. In 2021, this fell to 69%.
- Frozen student fees and real terms drop in government funding for educating students has meant that in 2022 English universities on average **supplemented the costs of teaching each home undergraduate student by £2,500 per year.**
- Growing demand for universities to **support their local communities** with limited external funding to deliver these activities.

Despite the economic, social, environmental, and cultural benefits for the UK, Government funding for capital projects in universities has declined in recent years.

Capital investment for education: In 2021/22, the whole sector could access £150m of support for capital projects through a mixture of project specific funding and a small amount of formula funding. This is significantly less than when the funding peaked in 2009/10 at £572m. New infrastructure costs therefore often far exceed the funding available to institutions. For example, a new student centre at UCL cost over £67m to build and was financed primarily from the university's own funds.

Specific public funding initiatives for maintenance of existing facilities do not exist and due to constrained resources, many universities will end up allocating less than needed. To invest 3% of asset value for annual maintenance, a medium-sized Russell Group university with a £500m education estate would need to allocate £15m per year for running costs and maintenance, which is equivalent to the income from 1,600 UK students paying the maximum fee.

Capital investment for R&D: Some capital funding is available to universities through UKRI as part of Research Council grants, for example to purchase items of equipment or other materials vital for research. Specific funding initiatives have also been made available, including the UK Research Partnership Investment Fund (UK RPIF) and Research Capital Investment Fund (RCIF). Whilst this funding is welcome, the trend has increasingly been to tie R&D capital funding to bidding processes for specific projects rather than being distributed by formula. This makes the process of securing funds more costly for universities.

Opportunities for Growth

Research and commercialisation activities alone at Russell Group universities contributed £37.6bn to the UK economy in 2021/22.² Investing in university capital projects would support and sustain this economic growth from R&I activity and help deliver the skilled workforce that businesses and our public services need for the future. Areas that would benefit from targeted investment include:

1. Maintaining, upgrading and improving efficiency of current infrastructure

Investing in maintaining, upgrading and improving facilities instead of building new ones can be a cost-effective way for the Government to support universities to adapt to changing education and R&I needs and improve performance and efficiency.

The need for additional investment is becoming critical as many buildings and facilities at the UK's research-intensive universities haven't been significantly updated for over 50 years, leaving some technical and support functions and facilities outdated to the point of inoperability. These updates are expensive; one Russell Group university has estimated between 2018 and 2022 they increased their spending on IT and digital provision by 160% to £24m, and they are expecting this to increase by at least another 45% over the next five years.

2. Meeting new student needs

To ensure we are creating graduates ready to meet the future skills needs of our economy, Government can help universities invest in cutting-edge technology, labs, and innovative teaching resources that align with the needs and expectations of student and businesses.

UCAS predicts 131,000 additional 18-year-old school and college leavers in the UK will seek to enter universities by 2030.³ Supporting these students effectively is vital to building the skilled future workforce the UK needs to drive economic growth. Universities will need new and expanded lecture halls, labs, IT and library facilities and student accommodation to accommodate more young people and help them succeed in their studies.

3. Meeting the needs of future R&D landscape

R&D breakthroughs in fields such as AI are changing the world, but progress in new fields requires capital investment in areas like compute capacity as well as traditional labs and other facilities to keep the UK at the cutting edge. We would recommend delivering this through formula funding such as the former Science Research Investment Fund (SRIF) which is a low cost delivery mechanism for UKRI and universities and would help scale up work to protect and enhance the UK science base. The final report on the last round of SRIF noted that it had been "remarkably effective" in meeting its aims, with over 90% of projects entirely or largely satisfying their original objectives.⁴

4. Delivering Net Zero

Through research into renewable energy and other clean technologies, Russell Group universities are playing a leading role as the UK works to hit Net Zero targets responsibly. However, at many universities efforts to cut emissions on campus are slowing due to low levels of capital funding available and increasing external financial pressures.

Given the scale and historic nature of many Russell Group universities they face significant challenges in updating their estates to reduce carbon emissions and ensure they are running campuses at the lowest economic and environmental cost possible. Several Russell Group universities estimate that achieving this would cost upwards of £100m per institution.

Whilst the challenge is significant, universities provide a unique environment in which to test infrastructure solutions that could be scaled up for use by local councils such as sustainable transportation, land use and waste reduction. Delivering capital investment through DESNZ's existing Net Zero Innovation Portfolio would provide the funding that is currently missing from the sector and accelerate progress not just in universities but across multiple sectors and in local communities.

Removing blockers to capital spend

Improving planning processes has a crucial role to play in unlocking successful capital investment:

Reduce delays: When working to deliver new facilities to support teaching and R&I, universities often face significant delays and added costs because of slow planning approvals and planning rejections. Examples include one Russell Group university seeking to develop a new life sciences cluster that has been blocked for five years by local planning committees despite the plans being consistent with national and local economic development strategies.

National Planning Policy Framework (NPPF): a guarantee for R&I in the NPPF would help to fast-track applications prioritising the building of economically beneficial R&I facilities. This would reduce delays and help attract more private investment to the UK.

Reforming VAT rules for new research facilities shared with business: VAT rules allow the construction costs of buildings used solely for a relevant charitable purpose to be zero-rated for VAT. Publicly funded or charitable research qualifies for VAT relief, as long as the building is used solely for this purpose for at least 10-years after its construction. HMRC define 'solely' as 95% of the use of a building, with a 5% allowance for commercial activities. These rules disincentivise business-university engagement. To encourage collaboration with businesses and attract investment, these rules could be modified by charging the appropriate amount of VAT dependent on how much commercial R&D is happening in the building year-on-year.

¹ <https://russellgroup.ac.uk/policy/policy-documents/briefing-university-business-model-explainer/>

² <https://realisingourpotential.russellgroup.ac.uk/transforming-the-economy/index.html>

³ <https://www.ucas.com/about-us/journey-million/what-journey-million>

⁴ [Evaluation of Research Capital Funding to Higher Education Institutions 2006 to 2008](#)