UKRI Research England

The condition of the research estate and the financing of its upkeep and renewal

Executive Summary

Research England's Condition of the Estate programme provides the evidence that research infrastructure across English universities is ageing, deteriorating, and increasingly subject to under-investment. Responses from 72 universities, representing 72% of sector research income (measured by HESA), combined with the Estates Management Record (EMR) data show a sector under growing pressure from rising costs and declining capital investment.

- A substantial proportion of the research estate is in poor condition. The median provider reports **25%** of its research estate in **Condition C or D** (either major repair needed or inoperable and presenting a serious risk of major failure), and **17 of 69** report **half or more** in these categories. Some of the most research-intensive universities are among those most exposed, with several facing "a need to invest urgently at levels much greater than their peers."

Providers estimate **£3.6bn** is required to bring their estates to a fully operational standard; scaled to the whole sector, the need is **£5.2–£5.3bn**.

Despite these pressures, capital investment has fallen sharply. Between 2017–18 and 2022–23, total non-residential capital and maintenance spending dropped **28%** (inflation adjusted), with capital expenditure alone falling **34%**. This reflects wider financial strain, reduced cross-subsidy, and paused capital programmes.

Research England's Research Capital Investment Fund (RCIF) provides valuable, targeted support and reinforces the importance of long-term investment. However, responsibility for maintaining and enhancing research infrastructure rests primarily with research providers, who must balance these requirements against other financial pressures. As budgets become increasingly constrained, the condition of the research estate will depend on institutions' ability and willingness to prioritise capital investment.

While most providers report effective use of their estate, only **63%** say that 80–100% of their research estate is fully accessible, highlighting challenges in meeting regulatory and strategic expectations.

Interviews with universities reveal the practical consequences of ageing and deteriorating infrastructure with increasing safety risks, outdated facilities limiting research quality and talent attraction, rising energy and equipment costs, and additional pressures on institutions with listed buildings or specialist facilities. Providers consistently emphasise the essential role of RCIF in maintaining "core capabilities that underpin research delivery."

Overall, the findings point to a sector wide vulnerability, with uneven exposure to urgent remedial needs and a growing risk that some providers, including research intensive ones, may be forced to scale back research activity. The report highlights the need to integrate estates data into financial sustainability assessments, the cumulative effects of prolonged under-investment, and the continuing importance of Research England's Quality-related Research (QR) funding (the annual block grant provided to English universities) and RCIF in sustaining the research base.

Background

Research England initiated the Condition of the Estate (COTE) work in 2024 to build a clearer, evidence-based understanding of the state of research infrastructure across English Higher Education Providers.

Research infrastructure, encompassing both buildings and capital equipment, forms the physical underpinning of the national research ecosystem. Its condition directly influences the quality, safety, sustainability, and competitiveness of the research undertaken within universities. The programme was established to gather robust data from across the sector and to identify the scale of investment required to maintain and enhance this critical foundation.

This report summarises the findings of the condition of the estate survey in the context of other existing information.

The context

Across the sector, much of the existing building stock and equipment base is ageing. According to the Estates Management Record[1] (EMR) 28% of non-residential buildings were constructed between 1960 and 1979 and 13% between 1980 and 1999 periods encompassing common use of asbestos and RAAC in UK buildings.[2] At the same time, the cost of maintaining and renewing infrastructure has risen sharply. Material prices have increased, and construction costs have grown by an average of 4.6% per year over the past decade[3] and are expected to continue to increase with a predicted rise of 2.4% in 2026.[4] These pressures are compounded by more stringent expectations around Net Zero, environmental performance, and equality, diversity and inclusion (ED&I). Current estimates suggest that fully

[1] Estates Management Record is an optional annual data collection, managed by the Higher Education Statistics Agency (HESA) in conjunction with the Association of University Directors of Estates (AUDE), it standardizes and tracks detailed property and environmental data for UK Universities.

[2] Introduction to asbestos safety: Overview - HSE; Reinforced autoclaved aerated concrete (RAAC) - Manage risk

[3] UK construction costs set to rise by up to 3.8% in 2024 - UK Construction Online

[4] Modest rise in global construction costs expected for 2026 while uncertainty poses delivery risks | New Civil Engineer

decarbonising the UK higher education estate alone will require around £6.6 billion of investment[5].

At the same time, levels of capital expenditure and planned future expenditure have come under severe pressure.

In its 2025 report on the Financial Sustainability of Higher Education Providers in England, the Office for Students (which monitors planned future expenditure, including on capital) noted that

> "In the last few years, providers have told us that, when facing financial challenges, they have paused or halted capital expenditure and infrastructure improvements to protect operational expenditure.
>
> We remain concerned that underinvestment in facilities, infrastructure and equipment could lead to increased financial sustainability concerns in the future, especially where more urgent and significant maintenance investment is required, or where the quality or suitability of facilities, equipment and infrastructure restricts operations or necessary strategic developments."

One possible reason for the deprioritisation of capital budgets is that, in the early pandemic years, providers believed there might be huge savings from a less capital-intensive mode of operation[6] or at least that it might be worth pausing to see if the opportunity to make such savings materialised.

Whilst recognising the impact of remote working especially in administrative work, it is clear that there has been a reversal of the move away from face to face working in academic activities as the benefits of in person learning and working have been recognised.

Methodology and response rate

This report draws on data from both the survey and the HESA EMR for 2017/18 and 2022/23, aligning the EMR period with the survey data collection window to enable meaningful comparison. When the report refers to research income data, this will be presented as HESA data unless otherwise stated as COTE survey data.

Condition of the Estate design and methodology

The condition of the estate survey was issued to 127 universities, covering all providers eligible for QR funding, including those that do not receive RCIF, to ensure a broad and representative range of views. Participation was voluntary, but institutions were encouraged to respond to strengthen sector level insights. A total of

[5] Higher Education Financial Sustainability Report 2024
[6] The Impact of Covid-19 on University Finance

72 universities submitted responses, giving a response rate of 57%. The survey remained open for nine months, from March to November 2024, to maximise participation. For context, the Higher Education Statistics Agency (HESA) Estates Management Record (EMR) provides standardised and reliable property data to support performance monitoring and best-practice sharing across the sector.

The survey was designed to ensure the questions were clear, answerable, and aligned with existing data returns that universities already complete. As a result, the language and categories used mirror EMR definitions as closely as possible.

Following the survey, Research England conducted a programme of visits and interviews with a diverse range of institutions. Ten institutions were selected to ensure representation across the sector, including large research-intensive universities, small specialist providers, city based and campus-based institutions, older universities, and those where survey responses indicated particular areas of interest. We also visited some institutions who had not completed the survey to understand the challenges with the survey alongside understanding more about the research infrastructure. The insights gathered have directly informed the findings presented in this report.

Scaling from survey responses to sector estimates

To scale survey responses to sector wide estimates, we weighted results by respondents' share of sector income rather than by response count, to better reflect the substantial variation in provider size. For the condition of the estate survey, which focused on research estate (defined as estate with more than 25% research use), research income, as reported through HESA, is the most appropriate scaling measure; for EMR, which covered the total non-residential estate, total income is used. Based on these measures:

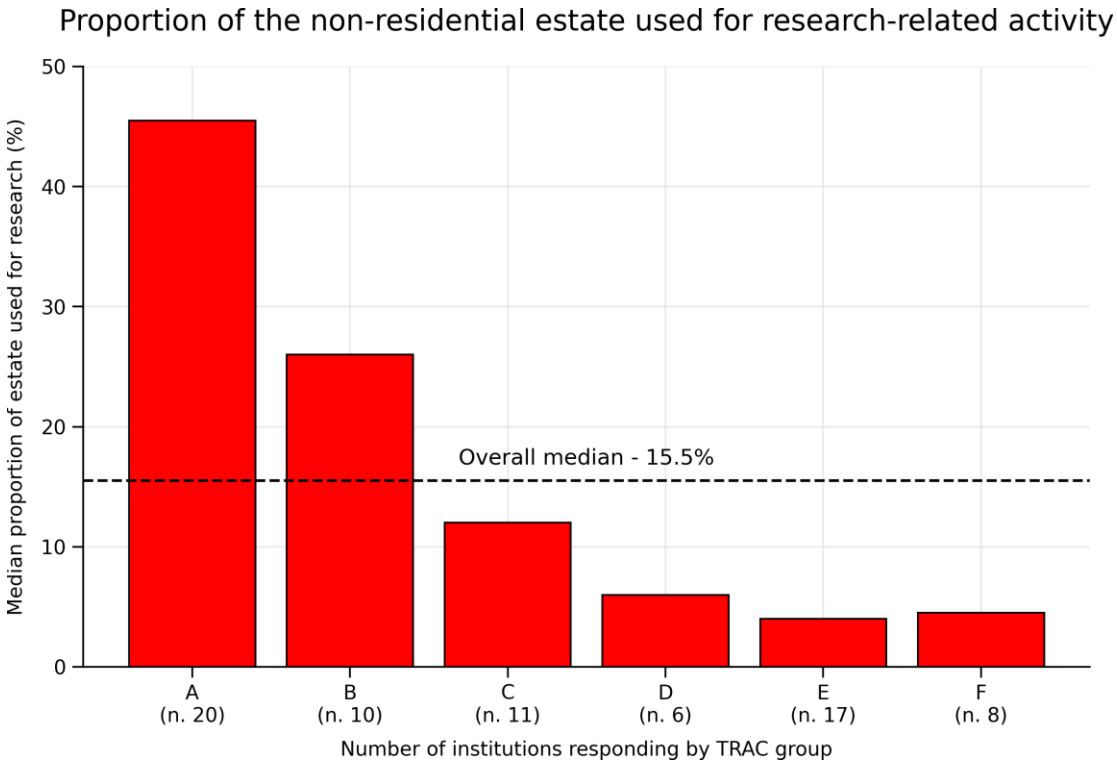
- The 72 survey respondents represented 72% of total sector research income in 2023–24.
- In 2017–18, EMR-returning universities accounted for 97% of total sector income.
- In 2022–23, EMR-returning universities accounted for 91% of total sector income.

The share of the estate used for research

Unlike EMR data, the survey data used in this report focused on the portion of the estate used for research (defined as 25% research usage or greater). In considering the survey figures it is important to understand that the research estate represents a much higher proportion of the total estate in some providers than it does in others.

Unsurprisingly, the most research-intensive providers (TRAC[7] groups A and B) have the highest proportion of research estate.

Figure 1: Research estate as a proportion of total estate by TRAC group



Scale of the non-residential and research estate

We do not have a direct measure of the scale of the research estate *as a proportion of the overall estate,* but we can approximate it by comparing data from the condition of the estate survey with the EMR dataset.

The 2022-23 EMR figure for the insurance replacement value of non-residential buildings was £90.95bn. Providers returning data to EMR in that year accounted for 91% of HE sector income. This yields an estimate for the entire sector on £90.95bn / 91% = £99.95bn.

The total research estate value reported by the survey respondents in 2024 was £22 billion. As these respondents represented 72% of total sector research income,

[7] Transparent Approach to Costing (TRAC) peer groups categorize universities based on their size, medical school presence and proportion of research income (measured by HESA).
Group A: Institutions with a medical school and >20% of total income from research
Group B: Institutions with > 15 of total income from research (excluding those in Group A)
Group C: Institutions with between 5% and 15% of total income from research
Group D: Institutions with < 5% of total income from research, where total income exceeds £150M
Group E: Institutions with < 5% of total income from research, and total income is less than £150M
Group F: Institutions dedicated to the creative arts, music and design

this implies an estimated whole sector research estate value of around £30.56 billion, noting that this includes mixed use facilities. When compared with EMR data on the overall estate, this suggests that the research estate accounts for roughly 30% of total estate value. These figures are drawn from different datasets, collected in different years and using different methods, and the extrapolation from a sample is necessarily crude, so direct comparison should be treated with caution. Nonetheless, together they provide a useful indication of the scale of both the research estate and the wider estate relative to providers' incomes: according to TRAC, total income for English and Northern Irish HE providers in 2023/24 was £44.5 billion, of which £10.4 billion, around 25%, was research income.

Estate spend relative to estate size

Combining EMR figures for capital expenditure and maintenance and applying the same technique for estimating whole sector expenditure, we estimate a spend on the total non-residential estate of around £3.067bn in 2022-23 suggesting that providers are spending roughly 3% of the total estimated non-residential insurance replacement value of £99.95bn. This figure has declined over recent years and is discussed later in this report.

Condition of the estate

In assessing the condition of buildings, this report uses the following definitions for non-residential estate at English universities. These definitions are used in the EMR and by the condition of the estate survey:

- **Condition A** – As new condition
- **Condition B** – Sound, operationally safe, and exhibiting only minor deterioration
- **Condition C** – Operational, but major repair or replacement needed in the short to medium term (generally three years)
- **Condition D** – Inoperable or presenting a serious risk of major failure or breakdown

In the survey providers were asked, for the first time, to assess the condition of their research estate (defined as being used at least 25% for research purposes). Some institutions found this challenging for several reasons: research space is not always distinguished from the wider estate, or is only divided into residential and non-residential categories that group together offices, teaching facilities, sports spaces, retail areas and libraries. In other cases, buildings and equipment are managed at departmental level, meaning there is no central record of estate condition.

Some providers also reported difficulty allocating space accurately across condition categories, particularly where buildings did not fit neatly into a single classification, for example, a building with an asbestos ceiling may be fully usable day to day, but any remedial work would require complete closure, blurring the line between categories. Universities do not typically monitor the proportion of space used for research versus teaching, meaning many did not have precise information on which areas met the threshold of at least 25% research use particularly those that are predominantly not research.

Overall results

Of the 72 providers responding to the survey, 69 responded to the question on condition[8].

Estate in condition C or D requires action in the short-term (in the case of C) or is currently inoperable and/or risky (in the case of D). The share of a provider's estate in these categories is an indicator of whether it faces a need for near-term remedial investment which is substantially different from sector norms.

The median proportion of estate in categories C and D was 25%. However, just under a quarter (17 of 69) providers reported that 50% or more of their research estate was in these categories.

Providers with the greatest share of estate in categories C and D included some of the most research intensive. It is therefore not the case that these issues in the research estate are limited to providers with limited exposure to research, or to providers receiving relatively small amounts of funding from UKRI and other public funders.

Table 1: Providers reporting at least 50% of their estate in Categories C and D by TRAC Group[9]

TRAC Group	Number of providers responding	Number of providers with 50% or more of research estate in categories C & D
A	20	6
B	10	3
C	11	4
D	6	0
E	13	2

[8] The three non-respondents were all in TRAC Group E.
[9] TRAC peer groups or TRAC Groups are subdivisions of the populations of HE providers based on a historic measure of research intensity. A list of their members and the basis for the designation is provided here

F; and No TRAC Group	9	2
Total	69	17

There were examples of providers in TRAC groups A and B (those most exposed to research) which in addition to having over half of their research estate in category C and D had at least a quarter in category D.

These figures do not provide a measure of the overall cost of remedial spending on the estate, but they do demonstrate a significant vulnerability in the system. The requirement on providers for near-term remedial investment is highly variable; and within the sector, there are providers, including research intensive providers, which have, on the face of it, a need to invest urgently at levels much greater than their peers.

The survey data is not an audit of the research estate; it is a confidential survey dependent on respondents' self-reporting. But the following conclusions might reasonably be drawn.

- There is uneven exposure across higher education providers to the need for urgent remedial investment in their estates. This may have implications for providers' ability to sustain critical capabilities, which is likely to depend not only on their overall financial position and strategic alignment, but also on the condition of their estates, and in some cases the specific parts of the estate that support those capabilities. Providers with the greatest estate-related pressures may therefore face considerably stronger incentives to scale back research activity than other providers.
- Estates data is an important factor in understanding the financial sustainability of the sector and can be usefully considered alongside financial data in sector level assessments.
- A prolonged period of under-investment is likely to lead to a continued deterioration in the condition of the research estate, with impacts expected across all TRAC groups. However, the scale and nature of those impacts are likely to vary both between and within each group.

Investment required for a fully functional research estate

The condition of the estate survey asked respondents to estimate the cost of bringing their entire research estate to a fully operational and workable condition. Estimates were provided by 64[10] HE providers, who estimated a combined

[10] One of the respondents could not be included in this estimate because of incomplete data available from the survey.

requirement of £3.610bn. If these providers devoted their entire QR allocation to meeting this cost, it would take them 2.9 years to clear the backlog.

The 64 providers responding accounting for 64% of Research England's recurrent QR funding and 68% of total research income as measured by HESA.

We have used the higher of these figures (68%) to estimate the whole sector requirement for remedial investment as this provides a slightly more conservative estimate of the total need. If we assume that the respondents account for 68% of the total sector need, that total need can be estimated at £5.286bn.

An alternative methodology, applying the mean value for respondents in each TRAC group to those mainstream QR recipients in each TRAC group who did not respond, produces a similar figure: £5.221bn. This analysis affords a view of the distribution of the need across TRAC groups.

Table 2: Estimated funding required for a fully operational estate applying TRAC group mean to non-respondents

TRAC	Submitting to 2024 COTE survey in each TRAC	Universities in receipt of mainstream QR in 2023/24	COTE survey mean funding required to get to fully operational research estate	Estimated whole sector funding needed to get to fully operational research estate
A	19	25	£151m	£3768m
B	9	16	£50m	£801m
C	9	18	£22m	£399m
D	5	14	£6m	£87m
E	14	37	£4m	£139m
F	8	16	£2m	£26m
Total	64	126	£56m	£5221m

Unsurprisingly, the majority of the requirement relates to the research estates of the most research-intensive providers – those in TRAC Group A. As with the data on the condition of the research estate, there are outliers whose need for remedial investment is reported to be far greater, relative to their research income, than most of their peers.

To offer some insight into the potential for more efficient use of the estate, respondents were also asked about the extent to which they considered the research estate to be effectively used.

- 43 universities (86%) reported that the majority of their estate is used for its intended purpose, the median proportion of estate used for its intended purpose is 97.5%.
- 5 universities reported a portion of their estate as not used and unusable (approx. 10-30% range). This is consistent with the prevalence of estate in condition category D.
- 43 universities (88%) reported that the majority of their estate is being used to an excellent or above average effectiveness.
- 29 universities (60%) reported some below average or extremely poor effective use, of which 11 universities (22%) reported over a third of their estate use as below average or extremely poor.

The results indicate scope for steady, incremental improvement rather than dramatic change. Most savings from increased remote working are likely to have already been realised, and experience since the pandemic shows that further reductions are constrained by expectations from students, politicians and the regulator for sustained in-person engagement. However, remote working is only one route to greater efficiency. There has been relatively little consolidation of research facilities, either within institutions or across the sector, and increased consolidation therefore remains a potential future option to help address the challenges identified.

Financing the estate

The evidence shows a clear and widening gap between the level of investment required to maintain and improve the research estate and the proportion of income that universities are able to commit. In real terms, sector wide investment has fallen sharply, from an estimated £4.3 billion in 2017/18 to £2.3 billion in 2022/23, despite increasing pressures on the estate.

Research England provides support through the Research Capital Investment Fund (RCIF), but this represents only a small contribution relative to total need, and providers may use RCIF for a range of capital purposes.

The primary responsibility for maintaining and developing the research estate therefore rests with providers, who must balance this against competing financial demands. RCIF offers targeted support and signals the importance of long-term capital investment, but it cannot ensure adequate levels of spending across the

sector. Ultimately, the condition of the research estate depends on the ability and willingness of institutions to prioritise it within increasingly constrained budgets.

Table 3: Decline in capital expenditure and maintenance spend (all figures for 2017-18 adjusted for inflation)

	EMR respondents' share of research income	Capital spend	Total for EMR respondents (£m)	Estimated whole sector spend (£m)	Change (%)
2017-18	97%	Non-residential capital expenditure (buildings)	3442	3548	
		Non-residential repairs and maintenance costs	698	720	
		Total	4140	4268	
2022-23	91%	Non-residential capital expenditure (buildings)	2125	2335	-34%
		Non-residential repairs and maintenance costs	666	732	2%
		Total	2791	3067	-28%

Accessibility, environmental sustainability and other challenges

Accessibility

Research estate accessibility is an ongoing challenge, with only 63% of responding universities reporting that 80-100% of their research-related infrastructure is fully accessible.

32 universities (63% of those responding) reported that 80–100% of their research related non-residential infrastructure is fully accessible for wheelchair users or those with access needs. A further 12 universities (24%) reported that 60–80% of their estate is accessible. 7 universities (14%) reported that less than 60% of their estate is accessible.

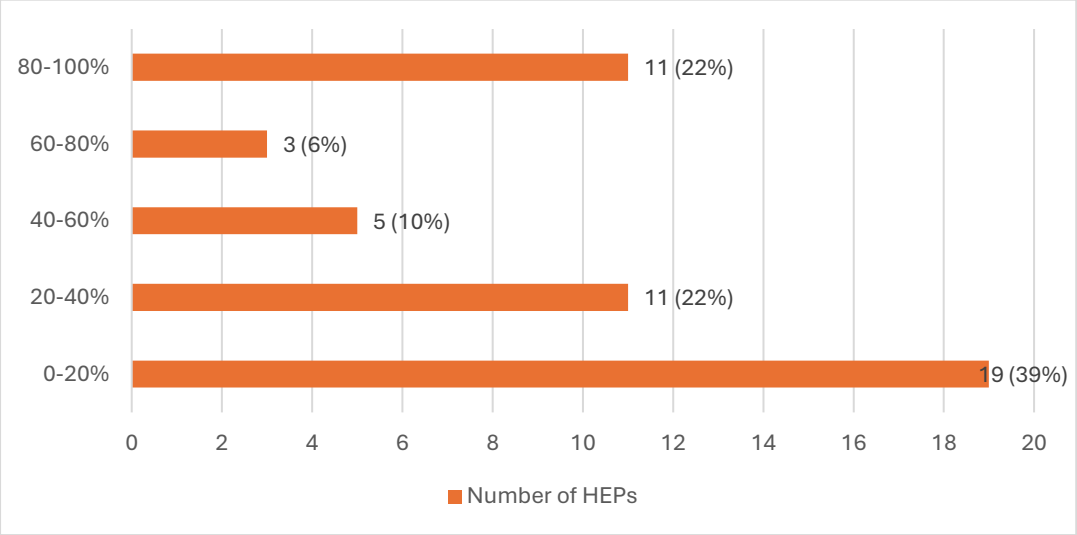
Environmental sustainability

Progress on the environmental sustainability of the research estate is falling behind sector ambitions. Sixty-one per cent of universities reported that less than 40% of their research-related infrastructure meets their environmental sustainability and net-zero goals. This is behind wider national progress: while the UK as a whole is not yet on track to meet its 2050 net-zero target, it is estimated to be roughly halfway there[11]. Only 11 universities (22%) reported that 80–100% of their estate aligns with their sustainability and net-zero ambitions, with a further 3 universities (6%) reporting

[11] Climate change committee

60–80% and 5 universities (10%) reporting 40–60%[12]. By contrast, more than half of providers indicated that less than 40% of their estate meets these goals, including 19 universities (39%) at 0–20% and 11 universities (22%) at 20–40%.

Figure 2: The proportion of universities research-related infrastructure that is meeting the universities organisational sustainability and Net Zero ambitions. (Condition of the estate survey)



Further insight – interviews and comments

In addition to the comments left within the survey, Research England visited 10 universities to have focused discussions to understand their aims, ambitions and needs for their research infrastructure, and identify specific challenges that relate to their research estate, both now and in the future. Across the visits, we engaged with a diverse cross-section of higher education providers, spanning large research-intensive universities, medium sized research active institutions, small specialist providers, and arts focused conservatoires. We also visited a mix of universities who had completed the condition of the estate survey and those that had not, increasing the engagement numbers. This provided a broad view of how different parts of the sector manage estates, capital pressures, and long-term infrastructure planning.

In the condition of the estate interviews and comments provided with the survey, universities explained and provided examples of the some of the physical design and location constraints that add to the challenge of maintaining and developing their estate.

Ageing estate was a recurring concern across the visits. Buildings constructed between the 1950s and 1970s were frequently described as the most problematic

[12] Respondents were asked to use these ranges when responding

and are now reaching end of life. While much older buildings from the 1800s tend to have fewer issues with asbestos or RAAC and were often built more sustainably, they present different challenges, including limited power capacity, poor digital connectivity, and the restrictions associated with listed-building status. In some cases, RAAC had rendered sizeable parts of an estate unusable, while asbestos continues to add significant cost and complexity to refurbishment. Several universities reported that large proportions of their estate are approaching end-of-life, yet investment momentum has tended to favour new developments over upgrading older spaces. Many acknowledged that previous periods of substantial investment in new buildings have left insufficient funding to address the growing problems in the ageing parts of their estate.

Several universities own and operate out of **historic and prestigious buildings** that are old and listed and therefore carry additional operating and maintenance costs. These buildings are also more difficult to adapt.

Listed buildings create significant operational and financial challenges because restrictions apply not only to the buildings themselves but also to their surrounding settings. A substantial portion of the organisation's budget is spent maintaining departments housed in listed buildings, many of which have outdated or impractical features such as flat roofs, poor drainage, and accessibility barriers. The estate may also face costly remediation work related to RAAC, which is complicated by heritage preservation requirements.

Other common issues that were raised include:

- challenges arising from buildings shared with other users or located across shared sites, noting that this can make responsibility for maintenance difficult to disentangle.
- Particularly high energy costs due to the nature of the research they conduct and the fact that most of their buildings need to operate constantly, at all hours of the day and night.
- Several universities in London highlighted additional pressures:
    - linked to planning processes, space constraints, and the cost and complexity of developing their estate.
    - of occupying large proportions of leased land and buildings and their desire, where possible, to move to long leases or ownership.
    - of operating across a city-centre estate made up of disparate buildings, which are hard to centralise.
    - vibrations from the underground tube network, which affects where certain research can be located and how buildings must be designed.

In the condition of the estate interviews, many universities emphasised the critical role and uniqueness of RCIF in sustaining core capability. Several universities highlighted the importance of stability and predictability in RCIF allocations, noting that long-term planning for infrastructure development requires dependable funding. Universities reported that RCIF supports essential “workhorse” equipment that is not eligible for major capital bids, provides a route for emergency maintenance and compliance- driven upgrades, and offers the flexibility needed to leverage philanthropic or research council funding. Many universities emphasised that, without RCIF, they would lose core capabilities that underpin research delivery.

1**Financial sustainability** challenges were repeatedly linked to the deteriorating estate. Universities reported drawing on reserves to support new projects and income no longer covering routine maintenance, forcing safety driven prioritisation. Many emphasised **limited alternative funding routes**, particularly for equipment, naming schemes no longer available, funders removing eligibility for routine laboratory items, or barriers to applying for funding because they lacked equipment specified by funders.

Cross subsidy from international fee income was frequently referenced with universities acknowledging both the dependence and the risk. Falling student numbers were linked to reduced infrastructure investment and growing backlogs, with knock on effects for research talent recruitment. **Charity** partnerships were described as constrained, and charities are often not forthcoming with equipment funding.

Inflation was another common theme, several universities cited rapidly increasing construction and materials costs (with one reporting procurement increases of 60–80%), rising equipment replacement costs, and there are challenges keeping tendered contractors within agreed budgets. In one example, a university that received a grant to refit 1930s laboratories before COVID-19 and the Russian invasion of Ukraine said subsequent inflation left them uncertain they could afford the equipment for the refurbished spaces. Energy costs, too, were mentioned as an ongoing financial strain.

Alongside the data findings, the following are some of the implications and impacts of the deteriorating estates that were highlighted by universities.

- **Safety risks** were a key area of concern. Universities described live safety risks such as ceilings collapsing, electrical routing issues and fire-safety problems that they do not have the capacity to address immediately. One university said they are increasingly forced into reactive, emergency maintenance, which can pause or relocate research activity at additional cost.

In some places necessary long-term remediation works were visibly disruptive to staff and students.

- Universities made it clear that infrastructure condition directly affects **talent** and therefore **research quality**. Several universities emphasised the strong link between high-quality infrastructure and talent recruitment. Feedback included that infrastructure mattered more than salaries in remaining competitive and highlighted the role of infrastructure in attracting partnerships and further funding.
- **Research ambitions** are also being constrained by estate limitations. Estate challenges are a significant barrier to meeting ambitions with some research spaces being so outdated that they cannot accommodate modern equipment. In many Universities there are facilities that are visibly dated, restricted and uncomfortable with some that are no longer fit for purpose or serve obsolete functions. In multiple institutions there are already closed or empty buildings. One university said they are having to make difficult decisions about whether certain facilities can continue and have begun outsourcing services abroad. Several mentioned selling land and assets to manage financial pressures. One university said that estate limitations were hindering interdisciplinary working.

Conclusion

The Condition of the Estate programme provides clear evidence that research infrastructure across English Higher Education Providers is ageing, deteriorating, and subject to increasing levels of underinvestment. Responsibility for maintaining and developing higher education estates primarily rests with individual institutions, supported by investment from a range of sources, including UKRI. Nevertheless, the findings demonstrate a significant sector-wide challenge.

Responses from 72 universities, representing 72% of sector research income, together with EMR data, show a sector under mounting pressure from rising costs, declining capital investment, and growing maintenance backlogs. A substantial proportion of the research estate is now in poor condition: the median provider reports that 25% of its research estate is in Condition C or D. Universities estimate that £3.6 billion is required to bring their research estates to a fully operational standard; scaled to the whole sector, this equates to £5.2–£5.3 billion. Whilst UKRI funding supports the system, it is not sufficient on its own to address the scale of underlying need.

Despite these pressures, capital investment has fallen sharply. Between 2017/18 and 2022/23, total non-residential capital and maintenance spending declined by 28% in real terms, with capital expenditure alone falling by 34%.

Reforms RCIF allocations and wider UKRI infrastructure funding aim to improve targeting, coordination, and support for sustaining existing assets. While RCIF itself has fallen in real terms, this has been partly offset by growth in other UKRI capital investments, including competitive funding and targeted infrastructure programmes. However, the overall model continues to rely on institutional investment decisions made within increasingly constrained financial circumstances. This reflects wider financial strain, reduced cross-subsidy, and paused or cancelled capital programmes.

Interviews with universities highlight the practical consequences: safety risks, outdated facilities that limit research quality and talent attraction, rising energy and equipment costs, and additional pressures for institutions with listed buildings, specialist facilities, or London based estates.

The research estate is also increasingly exposed to systemic financial risks. Heavy reliance on international student income, inflationary pressures, and limited access to alternative capital funding routes are directly undermining providers' ability to maintain essential infrastructure. Many universities emphasised the critical role of the RCIF in sustaining core capability, supporting essential equipment, emergency maintenance, and compliance driven upgrades, but RCIF represents only a small fraction of total need and cannot compensate for prolonged under investment. This points to a structural challenge rather than a marginal funding gap. Without changes to how the system supports and incentivises capital investment, current arrangements are unlikely to sustain the long-term condition and capability of the research estate.

Universities report that their estates are becoming increasingly fragile. Many buildings from the 1950s–1970s are now reaching end of life and are costly to maintain due to issues such as asbestos and RAAC. Older historic and listed buildings, while structurally robust, present different challenges, including limited power capacity, poor digital connectivity, and strict restrictions on adaptation. These pressures are compounded by high energy demands, shared site complexities, and location specific constraints, particularly in London.

Financial pressures continue to intensify. Universities describe drawing on reserves, reduced ability to fund routine maintenance, limited access to equipment funding, and growing dependence on international student income. Inflation has sharply increased construction, materials, and equipment costs, making capital projects harder to deliver within budget. As a result, the consequences of deteriorating estates are becoming more visible: live safety risks, disruption from emergency works, outdated facilities that constrain research ambitions, and growing impacts on talent recruitment, partnerships, and interdisciplinary working. Some institutions are

already closing buildings, outsourcing services, or selling assets to manage pressures.

The condition of the estate programme is subject to several limitations. This was the first time providers had been asked to assess the condition of their research estate, and many found the task challenging because research space is not routinely distinguished from teaching or other uses. Universities often do not monitor the proportion of space used for research, meaning they lacked precise information on which areas met the 25% research use threshold. Estate information is frequently fragmented, with buildings and equipment managed at departmental level and no central record of condition. Approaches to categorising estate condition varied between institutions, and some buildings did not fit neatly into a single category, introducing subjectivity. Not all universities submitted data, leaving an incomplete dataset, and comparisons with EMR are also limited because EMR is an optional and similarly incomplete return. Together, these factors mean the findings provide a useful but imperfect picture of the condition of the research estate.

Overall, the evidence points to a sector facing growing estate related risks that directly affect research quality, competitiveness, and long-term sustainability. The findings highlight the need to integrate estates considerations into assessments of financial resilience and underline the continuing strategic importance of RCIF in sustaining the national research base.

Next Steps

While RCIF and other institutionally allocated funding remain a vital component of the research capital funding landscape, it will not by itself be sufficient to address the long-term sustainability challenges. Looking ahead, a more strategic, system-level approach will be needed alongside institutional investment, enabling collective prioritisation and optimising investment across institutional boundaries. This could include greater sharing of facilities and equipment, more deliberate collaboration between institutions, and, where appropriate, consolidation of elements of the research estate to maintain capability while reducing duplication and cost.

Drawing on the insights from the condition of estate survey, EMR data, and institutional visits, Research England will take forward the following actions:

Inform future funding policy and RCIF reform

The findings will directly inform the planned reform of the Research Capital Investment Fund (RCIF). Evidence from universities highlights the fund's critical role in maintaining research capability, the importance of funding predictability, and the scale of unmet capital need. This evidence will help shape future decisions on how RCIF can most effectively support the long-term sustainability of the research estate.

As set out in the circular letter, RCIF is intended to focus on the maintenance and upkeep of existing research infrastructure, and Research England is exploring how future allocations could more explicitly prioritise the sustainability and resilience of the research estate.

Develop improved benchmarking and sector insight

Research England will explore opportunities to develop more robust benchmarking data as part of its wider programme of sector insight and financial resilience. This work aims to build a more comprehensive and comparable picture of the sector's financial health, including long-term capital pressures and estate condition.

Share findings with the Office for Students

High-level findings will be shared with the Office for Students to support their broader understanding of the condition of the higher education estate, and the infrastructure needs of the system. This will help ensure alignment across regulatory and funding bodies in assessing sector sustainability.

Ongoing policy development

At this stage, Research England does not intend to undertake further condition of the estate analysis. Future work will instead focus on integrating estate-related insights into ongoing policy development and sector wide monitoring.

Annex A: Glossary of acronyms

EMR	Estates Management Record
HEP	Higher Education Provider
HESA	Higher Education Statistics Authority
KE	Knowledge Exchange
KEF	Knowledge Exchange Framework
QR	Quality Related research funding
RAAC	Reinforced Autoclaved Aerated Concrete
RCIF	Research Capital Investment Fund
RE	Research England
TRAC	Transparent Approach to Costing
UKRI	UK Research and Innovation