BRAID/NATIONAL LOTTERY HERITAGE FUND RESPONSIBLE AI RESEARCH CHALLENGE
Funded by the Arts and Humanities Research Council

ADDITIONAL GUIDANCE FOR CHALLENGE-LED APPLICANTS

KEY INFORMATION

BUDGET	up to £120,000
CALL OPENS	3 September 2026
PROJECT START	by 1 April 2027
PROJECT DURATION	up to 12 months core activity plus up to 3 months for impact and engagement
PROJECT END	by 30 June 2028

1. About the call

Bridging Responsible AI Divides (**BRAID**) in collaboration with **The National Lottery Heritage Fund** invite proposals to address how Responsible AI can enhance the embedding of environmental considerations into heritage project design, maintenance planning and long-term sustainability.

Up to £120,000 is available for a research fellow to bring their unique disciplinary expertise to bear on the development of a prototype Environmental Impact Mitigation Tool for the heritage sector. This challenge is made possible through match-funding from the AHRC and The National Lottery Heritage Fund.

2. About BRAID and the National Lottery Heritage Fund

Bridging Responsible AI Divides

BRAID is a six-year programme funded by UKRI's Arts and Humanities Research Council and delivered in partnership with the Ada Lovelace Institute and the BBC. The programme is dedicated to bringing arts and humanities knowledge more fully into the Responsible AI ecosystem, supporting research and innovation fellowships, scoping projects, demonstrators, and translational research. We work to widen access to Responsible AI knowledge and practice in the UK and to demonstrate its value in concrete, real-world contexts.

The National Lottery Heritage Fund

The National Lottery Heritage Fund is the largest dedicated funder of heritage in the UK. Established in 1994, and using money raised by National Lottery players, the Heritage Fund has awarded over £9.9 billion to more than 54,000 projects to date, all working to connect people and communities to their heritage. The fund is a key advocate for the UK's heritage and provides

leadership and support for the heritage sector. It is a non-departmental public body accountable to DCMS and has offices across England, Scotland, Wales and Northern Ireland.

The Heritage Fund's Heritage 2033 strategy commits to protecting the environment and supporting nature recovery and environmental sustainability as one of its four core investment principles.

3. The Challenge

Heritage assets across the UK are increasingly affected by climate pressures, including flooding, extreme weather events, temperature change, and long-term environmental degradation. These pressures pose significant risks to historic buildings, landscapes, archaeological sites, and cultural collections. At the same time, heritage organisations are increasingly reliant on digital infrastructure such as digitisation workflows, digital archives, and cloud storage. While these tools enable preservation and access, they also introduce environmental costs through energy consumption, data storage, and digital infrastructure.

The Heritage Fund's Heritage 2033 strategy identifies environmental responsibility and climate resilience as central priorities for the future of the heritage sector. However, a practical challenge remains: translating environmental and climate information into meaningful guidance for heritage projects at the point where funding decisions and project planning occur. This BRAID fellowship invites researchers to help address that gap.

The challenge provides an opportunity to explore how environmental intelligence can be embedded into heritage funding processes in ways that are transparent, accessible, and responsible.

We are seeking proposals which explore how responsible AI, data-driven analysis, or other computational approaches could support applicants and assessors in incorporating environmental considerations into heritage project design, maintenance planning, and long-term sustainability.

The intended direction for this fellowship is the development of a prototype Environmental Impact Mitigation Tool, acting as an information support system to help applicants and assessors interpret environmental information and consider mitigation strategies relevant to their project.

For the Heritage Fund, the work will help build organisational capability in responsible digital innovation while strengthening environmental planning across funded projects. For the wider heritage sector, the outputs should help make environmental information more accessible and usable for organisations of all sizes, supporting a more climate-aware approach to heritage practice.

The fellowship should centre contemporary heritage interpretation and practice in prototype development, and might include the following types of research questions:

1. How can environmental and climate datasets be translated into forms which are meaningful for heritage project planning?
2. How can computational tools support heritage professionals to identify, interpret and respond to environmental pressures affecting heritage assets?

3. How can existing frameworks (e.g. Historic England, National Trust) be operationalised to help applicants plan their projects better?
4. Additionally, How can heritage organisations better understand the environmental footprint of digital preservation practices?

This fellowship also offers an opportunity to explore broader questions around responsible digital innovation in public-sector contexts, including:

- transparency and governance of algorithmic systems
- the role of responsible AI in public funding processes
- usability and accessibility for organisations with varying levels of technical capacity
- questions of place, regional equity, and organisational access to environmental information

4. What We Are Looking For

Working in collaboration with staff at The National Lottery Heritage Fund, the fellow will translate environmental datasets, heritage guidance and funding criteria into a structured decision-support tool capable of identifying climate risks within heritage project applications and proposing mitigation strategies.

The fellowship will combine technical development, environmental analysis, and responsible AI governance, ensuring that the resulting prototype aligns with public-sector standards for transparency and accountability, including the UK government's Algorithmic Transparency Recording Standard (**ATRS**).

The challenge would best fit fellows who enjoy translating technical and policy issues into practical tools and frameworks. We welcome proposals from researchers working across disciplines that include:

- Heritage Studies
- Environmental Humanities
- Digital Humanities
- Human-Computer Interaction (HCI)
- Science and Technology Studies
- Responsible AI and Algorithmic Governance
- Geography
- Environmental Science
- Information Science
- Design Research

Given the combination of technical, analytical and sectoral expertise required to address the challenge, the ideal fellow would have experience of interdisciplinary research projects including:

- experience working with structured or unstructured data, including text-based datasets and an ability to translate complex datasets or technical concepts into clear, accessible insights for non-specialist audiences
- familiarity with computational tools used in data analysis, understanding of natural language processing (NLP) or text analysis approaches (including applying such techniques to reports, applications or archival materials), experience developing or prototyping digital

tools or systems including browser-based tools, APIs or lightweight web applications, and experience designing digital tools that are accessible to diverse users, including non-technical audiences
- awareness of responsible AI principles within public sector contexts and an understanding of ethical considerations in data-driven systems, including transparency, accountability and bias mitigation
- an ability to work collaboratively with multidisciplinary teams including policy staff, funding assessors and digital specialists and engage constructively with organisational stakeholders

In terms of sectoral expertise, the following kinds of expertise would be beneficial:

- understanding of environmental and climate risks relevant to built heritage and cultural assets, including environmental datasets, climate projections, or sustainability frameworks
- familiarity with heritage management, conservation practice, or heritage funding programmes
- experience working with climate adaptation strategies, environmental impact assessments, or sustainability planning
- knowledge of governance frameworks relevant to digital systems in public services, such as the ATRS, data protection and privacy considerations and responsible AI frameworks

Proposals should:

- address a real organisational challenge around environmental intelligence in heritage funding
- outline to the development of a prototype tool or equivalent practical framework
- engage with Heritage Fund staff and stakeholders
- produce outputs which are useful both within the organisation and across the heritage sector.

See UKRI Guidance on Co-production in Research for more information.

Glossary

Responsible AI in the context of this challenge and in addition to the working definition contained in our main guidance note, Responsible AI is about the intentional and deliberate development, deployment and use of AI as a tool that supports environmental sustainability by working to reduce the negative environmental impact of heritage funded projects.

Algorithmic Transparency Recording Standard (ATRS) is a UK government framework, administered by the Government Digital Service, that provides a standardised way for public sector organisations to publish information about the algorithmic tools they use in decisions affecting the public.

5. Working with the Heritage Fund

The fellow will work closely with the Heritage Fund, working with colleagues across the organisation's three directorates.

The Heritage Fund will onboard the fellow, work to finalise the project plan, and provide access to resources and staff. The Heritage Fund will help shape and deliver the project by assigning the

Head of Digital Policy as key point-of-contact to work on the project at a minimum of 10% time commitment (which can be shared across the organisation from time to time according to project need).

The Heritage Fund have offices across the UK and hybrid working arrangements are available. Working arrangements will be agreed with the successful fellow but will include regular engagement with the organisation either in-person or online to ensure the tool is accessible to non-specialists and suitable for potential integration into heritage funding workflows.

6. Outputs, Intellectual Property and Further Development

Expected outputs

The expected output of this fellowship is a functional, evaluated prototype rather than a production-ready system for immediate deployment. Given the scale of the award and the interdisciplinary nature of the fellowship, proposals should aim to demonstrate the approach against real heritage project data and deliver a working proof of concept that the Heritage Fund can pilot, evaluate and build upon. Bringing the tool to full production readiness, including hardened security, accessibility testing at scale, and integration into live funding systems, would be expected to require further investment beyond this fellowship.

Intellectual property and licensing

Software developed through this fellowship is expected to be released as open source, under a permissive licence such as the MIT License or Apache License 2.0. This is a condition of Heritage Fund's match funding contribution to this challenge, and will give the Heritage Fund, and any other organisation, a free, perpetual right to use, adapt and further develop the code, without restriction or cost.

Accompanying documentation, reports and guidance materials will be published under an open licence appropriate to authorship (e.g. the Open Government Licence (OGL) v3.0 for material contributed by or co-authored with the Heritage Fund, and the Creative Commons Attribution licence (CC-BY 4.0) for material primarily authored by the fellow or host institution), consistent with standard UKRI open access requirements.

In line with standard AHRC/UKRI practice, intellectual property arising from the research will vest in the host research organisation. The research organisation and fellow retain the right to further develop, extend or commercialise the work (e.g. through additional features, hosted services, or consultancy), provided this does not withdraw or restrict the rights already granted to the public under the open source licence. Applicants should confirm their institution's position on intellectual property and open source licensing as part of their proposal.

Further development beyond the fellowship

Should the prototype demonstrate value, the Heritage Fund and fellow may wish to pursue further development through a subsequent funding or procurement route. Potential options include UKRI Translation: AHRC Proof of Concept and Innovate UK Contracts for Innovation. These routes are not guaranteed and would require separate application, assessment or procurement; they are noted here to clarify the intended pathway from research prototype to further-developed solution.

7. Eligibility

The research fellow must be employed by a UK university or research institution eligible to receive AHRC funding, which will hold the grant. We welcome postdoctoral and early career researchers. At least 51% of the underlying research should come from the Arts & Humanities. For this challenge, underlying research is allowed to draw on complementary methods (e.g. environmental or data science) provided the research questions and primary academic contribution remain grounded in heritage and Arts & Humanities scholarship.

This challenge sits within AHRC's well-established tradition of cross-disciplinary heritage research, which has long connected arts and humanities scholarship with scientific and technical methods.

Applicants are encouraged to frame their research questions around heritage interpretation, values and practice, using computational or environmental methods as a means to that end rather than as the primary focus of the research. Applicants who are unsure whether their proposal falls within AHRC's remit are encouraged to see AHRC Remit, programmes and priorities for more information.