ENGLAND'S CULTURAL INFRASTRUCTURE: REPAIR, MAINTENANCE AND RENEWAL

VOLUME ONE: MAIN REPORT

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PURCELL

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Cover images, clockwise from top left: Liverpool Metropolitan Cathedral; The Hexagon, Reading; Home, Manchester; God's House Tower, Southampton; Shugborough Hall, Staffordshire; Royal Shakespeare Theatre, Stratford-upon-Avon.'

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EXECUTIVE SUMMARY

0.1 Background

In late 2023 the Department for Culture, Media and Sport commissioned Purcell, with Harlow Consulting, to undertake research into the repair, maintenance and renewal (RMR) needs in key parts of the cultural sector in England. The research arose from an understanding that substantial backlogs of repair and maintenance work may have developed, especially since the COVID-19 pandemic.

0.2 SCOPE

The specific types of destination in scope were limited to venues in the following categories, where they are owned, managed or operated either by public bodies or third-sector organisations (thus excluding privately-owned venues):

- Theatres
- Other performing arts venues, (e.g. concert halls, performing arts centres)
- Cathedrals and churches in their role as visitor destinations
- Non-accredited museums and art galleries
- Historic houses, ruins and monuments where publicly accessible
- Visitor destinations with a strong heritage aspect.

0.3 METHODOLOGY

The main aim of the research was to provide a sound understanding of the size and nature of the repair, maintenance and renewal liability. In order to do this, the research has sought to:

- estimate the cost of the repair and maintenance backlog
- identify the specific types of repairs and renewals required
- understand why buildings have fallen into disrepair
- assess the impacts of repairing or not repairing the in-scope destinations.

The research used a variety of methods:

- detailed desk research
- stakeholder interviews with 20 sector organisations
- a detailed online questionnaire for in-scope organisations which received 324 valid responses
- specialist cost analysis
- the development of 14 case studies based on site visits by conservation-accredited architects and surveyors.

0.4 ESTIMATED COST OF REPAIRS, MAINTENANCE AND RENEWAL

Extrapolating from figures reported by survey respondents, the research has estimated that the total value of necessary works is c. £7 billion. Of these the estimated cost of urgent RMR (needing to be completed within the next five years) is c. £3 billion. Of the urgent RMR, there is a reported current funding deficit of c.£2 billion.

Because of the limitations of the available data sources on in-scope venues, the sampling frame is known to be incomplete. For this reason, the figures above should be viewed as a conservative estimate. Within the achieved sample, where it was possible to compare responses given with a costed condition survey, the figures given were reviewed by an experienced cost consultant and found to be credible.

0.5 OVERALL CONDITION

The survey asked respondents to rate their buildings using a five-step descriptive scale, where buildings with no active repair needs are rated 1 and those in state that puts their continued survival at immediate risk rated 5.

The condition of the in-scope buildings is very varied. Some venues are in very good or good condition (condition categories 1 or 2) but a substantial minority of more than 20% are in poor or very poor condition (condition categories 4 or 5). Overall, most buildings (nearly 70%) have needs beyond routine repair & maintenance (condition categories 3-5).

Churches reported the poorest overall condition. **Theatres and performance venues** reported relatively better condition for the basic building envelope, but many reported specific issues with the technical infrastructure – both backstage and front-of-house facilities and equipment – needed to operate to industry standards. **Heritage destinations** came between them. All reported a substantial minority of sites in poor or very poor condition.

Roofs were the most frequently reported element that needed repair or replacement for which funding was not available. This is especially the case for places of worship and heritage destinations.

Rainwater goods, such as gutters and downpipes, were generally regularly maintained and in adequate repair, but climate change means that some venues need to make changes to increase their drainage capacity.

Walls present special issues to places of worship, which have extensive masonry repair needs. Heritage destinations also reported a high value of works to walls.

Windows and doors were another area of significant need, particularly for places of worship, but also more generally across all venues.

Key structural components were generally said to be in good condition.

Many venues planned works to **external signage and lighting**, with theatres and performance venues planning the highest cost works.

Building services present particular challenges and are one of the highest areas of expenditure. They are also the most important category of unfunded, necessary works. Replacing older heating systems with new, more efficient low-carbon alternatives is a particular priority, but high upfront costs make it difficult to realise the resulting potential environmental and financial benefits.

Interiors were an area of high spend for heritage destinations. Some churches also reported expecting high spends for interior conservation work or reordering.

0.6 OBSTACLES TO REPAIR

Finance – all venue types overwhelmingly reported that lack of finance or funding was the biggest obstacle. Overall, nearly 40% of venues are operating in deficit and 70% reported drawing on cash reserves to pay for RMR costs. Most venues reported and anticipated declining income from most revenue streams. The partial exception was commercial revenue, where a substantial minority expected to increase their income.

Condition monitoring and management – the great majority (93%) of places of worship reporting having a current condition survey. In contrast, the figures for theatres and other heritage destinations were 32% and 42% respectively. Nonetheless, many venues reported good basic monitoring and maintenance processes.

Competing priorities and pressures – a majority of all destination types stated that attracting audiences, maintaining event programmes, and retaining staff took priority over building repairs. This was both to maximise income and meet funder requirements. Attempts to be 'entrepreneurial' to maximise income and minimise costs led to reduced repair, maintenance and renewal budgets whilst increasing need due to greater wear and tear on buildings. There was evidence that in some venues this situation had reached the point where repairs were now so urgent that they could no longer be deferred.

0.7 IMPACTS

When asked about impacts, respondents gave 'mirror image' responses for the risks and impacts of declining building condition compared to the benefits of addressing repair, maintenance and renewal (RMR) needs:

Impacts of RMR liabilities	Benefits of RMR investment
Risk to heritage	Preservation of heritage
Risks to health and safety of employees and audiences	Safety for employees and audiences
Increasing cost of RMR when backlogged repairs can no longer be deferred	Reduced ongoing RMR costs due to improved basic condition
Risk of disruption or closure	Assured future opening
Declining audiences, reduced activity, lower income	Growing audiences, increased activity, higher income
Less money to invest in RMR	More money to invest in RMR
Reduced social and economic benefits	Wider social and economic benefit

In both cases, the picture respondents gave was a self-sustaining cycle – either vicious or virtuous. Many venues anticipate that addressing RMR issues could lead to a virtuous cycle of increased audience engagement and associated enhanced revenue flows, that would increase long-term sustainability (notwithstanding that greater activity would increase wear and tear).

0.8 CONCLUSIONS

Taken as a whole, the built infrastructure of the in-scope cultural venues requires considerable investment. Whilst there is a minority of buildings in good to very good condition, most buildings have needs that go beyond routine repair, maintenance and renewal; a substantial number are in poor to very poor condition. There is a large RMR deficit, and at least £2 billion of unfunded, necessary works.

The research found that the primary factor underlying accumulated RMR liabilities is financial pressure on in-scope venues. There is a clear correlation between financial resources and basic building conditions across and within venue types. Churches, which often lack stable or adequate income streams, are most likely to be in deficit and most likely to be in poor condition; theatres and performance venues are most likely to be in surplus and in better relative condition. Heritage destinations lie in between in both respects. However, there are substantial issues across all three venue types, and specific issues in many theatres and performance venues with the technical infrastructure and facilities needed to ensure they are able to operate safely to industry standards.

The findings suggest that without additional funding to support organisations with vulnerable buildings, condition problems will grow worse, across all destination types. At the same time, long-term sustainability is likely to require changes to the broader ecosystem of skills, practices and funding.

SUMMARY OF REPORT FINDINGS

	THEATRES & PERFORMANCE SPACES	PLACES OF WORSHIP	HERITAGE DESTINATIONS
			
No. of venues in sample frame	681	383	517
No. of completed surveys received	143	82	99
Percentage of listed buildings[01]	43%	99%	67%
Percentage in good condition[02] (category 1 or 2)	39%	24%	28%
Percentage in poor condition[02] (category 4 or 5)	16%	36%	23%
Percentage having a current condition survey[02]	32%	93%	42%
Percentage on Historic England's 'At Risk' Register[02]	None	17%	7%
Total value of all necessary repair and maintenance[03]	£4,040 million	£1,738 million	£1,369 million
Cost of urgent repair works[03]	£1,799 million	£619 million	£671 million
Total value of unfunded urgent works[03]	£1,178 million	£481 million	£501 million

01 This is the percentage of venues that are either Listed Buildings or Scheduled Monuments

02 This is the percentage of the venues providing completed surveys

03 This is an extrapolated figure based on the received surveys and applied to all the venues in the sample frame

SECTION 1.0: INTRODUCTION

The Department for Culture, Media and Sport (DCMS) has commissioned this research to understand the scale and nature of the cultural infrastructure maintenance backlog in England. The research aims to:

- estimate the value and scale of the repair, maintenance and renewal (RMR) backlog,
- understand why this backlog exists and the drivers affecting the current state of cultural infrastructure, and
- develop a methodology for assessing the impact of investment into improving cultural infrastructure.

The robustness of cultural venues and heritage properties is key to ensuring a high-performing cultural ecosystem. However, stakeholders in the sector are indicating that they are finding it difficult to fund urgent short-term and longer-term repairs, owing to depletion of financial reserves during the COVID-19 pandemic. Although the worst effects of the pandemic have passed, the current pressures on local authority funding is now a major threat to those cultural organisations which depend on this type of support. The priority for much public funding is carbon reduction and nature recovery, with the consequence that the funding available for repairs to built fabric are likely to be correspondingly reduced. Current sources of funding for the repair of cultural assets are described in Appendix E.

The three principal categories of cultural asset considered by the research are:

- Theatres and performance venues
- Cathedrals, churches and other places of worship in their role as visitor attractions
- Publicly accessible heritage attractions and non-accredited museums.

Privately owned venues are not in scope. Accredited museums are outside the scope of the research, because they were the subject of a previous study in 2020 and are eligible for support from the Museum Estate and Development Fund (MEND).

The research has been conducted over a four-month period from December 2023 to March 2024, in close consultation with DCMS. The main report is presented in Volume 1. Fourteen full-length case studies are contained in Volume 2 and further detailed information, including the full results of the survey, are contained in the appendices in Volume 3.

The background to this research is summarised in Section 2 below and supported by more detailed information in relation to recent funding programmes which have supported repairs and maintenance (Appendix E) and previous research on related topics (Appendix F) .

The research methodology is summarised in Section 3 and explained in more detail in Appendix A. A detailed questionnaire was sent to around 1,800 cultural sites in England in January 2024; roughly half of these were theatre venues and the remainder were publicly accessible heritage-based attractions, including cathedrals and churches. An open link to the survey was also distributed widely within the cultural sector. 324 completed questionnaires were received in response and the data gathered from these provides the basis of the findings in this report. In addition, 14 detailed case studies of various building types from all parts of England have been prepared to illustrate the wide range of issues that affect the repair and maintenance of these assets.

The findings of the research are summarised in Section 4, with further analysis of these findings in relation to each of the three main categories of venue presented in Section 5. More detailed analysis of the questionnaire results is contained in Appendix 3. The report's findings have also been informed by interviews with around 20 national organisations that have a role in supporting arts and heritage, including Arts Council England and the National Lottery Heritage Fund. Appendix B of the report ('Stakeholder Engagement') summarises the information gathered through engagement with these organisations. A list of all the organisations and individuals which have been consulted is included in Section 7.

The anonymised financial information derived from the questionnaire has been reviewed by a cost consultant to test the accuracy and consistency of the information provided, and a sample of 18 of the submitted condition surveys has also been analysed. The results of this detailed cost analysis are included at Appendix D.

The report concludes (Section 6) with a summary of the most significant issues and drivers which affect the current and predicted condition of the built estate. Potential policy measures and initiatives are identified which could help to improve the condition of this estate and to ensure its sustainable management over the coming years. These have been developed in consultation with an investment analyst specialising in cultural heritage.

2.1 GENERAL ISSUES FACING THE ARTS AND HERITAGE SECTORS

The background to the current research is prior evidence that the state of the buildings and associated infrastructure that belong to arts and heritage organisations poses significant risks both to their continued functioning and to the nation's built heritage. These risks appear to have become particularly pressing due to a combination of reduced grant funding, the after-effects of the COVID-19 epidemic, climate change, and skills shortages. These sector-wide issues are summarised below (2.1.1 – 2.1.6). They are examined in more detail in the Heritage Sector Resilience Plan 2022-24, published by the Historic Environment Forum. Further contextual information is summarised in relation to theatres and performance venues (2.2), cathedrals and churches (2.3) and heritage attractions (2.3).

2.1.1 Funding

The principal sources of grant funding for the cultural sector in England are the Arts Council England (ACE) and the National Lottery Heritage Fund. The government allocated significant additional funding in response to the COVID-19 epidemic through the Culture Recovery Fund (CRF)[01], including the Heritage Stimulus Fund (HSF). Details of these funding sources are contained in Appendix E. The Covid Recovery Fund was vital in sustaining organisations across the cultural sector but was restricted to specific financial years (2020/21 and 2021/22). Sector-specific funding sources administered by DCMS include the Listed Places of Worship Grant Scheme and the Museum Estate and Development Fund ('MEND'). Funding sources from other government departments include the Levelling Up Fund; UK Shared Prosperity Fund; Museums and Galleries Tax Relief; Energy Bill Relief Scheme; and various other government programmes and initiatives.

2.1.2 Financial Issues

General funding challenges identified in discussion with sector stakeholders include:

- The availability of grant funding has diminished especially since the financial crash of 2008.
- Grant funding tends to be allocated to projects involving audience engagement rather than to the repair and renewal of existing cultural assets per se.
- Projects involving cultural assets face increased competition for funding from projects involving nature recovery and biodiversity.
- Since 2012, the imposition of VAT on alterations to listed buildings has tended to incentivise new buildings rather than adaptation of listed buildings.
- Inflation in the construction sector, which peaked at just over 10% in 2022, has had a significant impact on the spending power of cultural organisations.
- The running costs of cultural venues have been severely impacted by the high cost of gas, electricity, oil and other fuels which started to increase from summer 2021 and increased further in late 2021/early 2022. Energy prices remained very high for much of 2022.
- The cost-of-living crisis has had an adverse impact on visitor numbers and on visitors' spending capacity.
- Financial reserves have been significantly depleted as a result of the COVID-19 epidemic.
- There is a lack of core funding for heritage organisations and thus there is a consequent over-reliance for building repairs on project funding, which is short-term.

2.1.3 Local Authority Funding and Asset Transfer

Local authorities are facing significant funding pressures, with Section 114 notices already served on some and others have reported that they are likely to declare effective bankruptcy in the next five years.[02] Many are reportedly considering reducing service provision for parks and leisure, arts and culture and business support. Where heritage and arts buildings are owned by local authorities, there have been some reports of maintenance responsibilities being transferred to the leaseholder or ownership being transferred entirely. This issue was raised in discussion with some of the stakeholders, including the Heritage Trust network and Society of London Theatres, and was also a concern for one of the case studies (Headgate Theatre, Colchester). Where local authorities are seeking to divest their cultural assets, charitable trusts and not-for-profit organisations are an important and growing category of ownership in the arts and heritage sector.

01 The CRF provided £1.5 billion to 5,000 organisations, supporting 220,000 jobs.

02 https://www.local.gov.uk/about/news/section-114-fear-almost-1-5-council-leaders-and-chief-executives-after-cashless-autumn

2.1.4 Skills

General challenges around the availability of skills include:

- Many experienced staff working in the cultural sector with specialist skills, such as joiners and building maintenance engineers, decided to retire early during and after the COVID-19 epidemic.
- A large proportion of the current workforce in the heritage crafts industry are nearing retirement age, bringing the challenge of transferring that experience to the next generation.
- The retirement of older volunteers involved in building maintenance and the challenge of recruiting new ones is affecting many organisations across the cultural sector. It is a significant challenge for churches where there is a serious shortage of volunteer church wardens.
- Smaller organisations find the complexity of preparing funding applications off-putting.
- Local authorities have less capacity to provide ad hoc staff support (e.g. Conservation Officers, Building Surveyors, Project Managers or Development Officers) to advise on the repair and maintenance of buildings occupied by arts and heritage organisations.

2.1.5 Climate change

Damage caused by more frequent extreme weather events such as storms and flooding are already exposing the vulnerability of many sites including heritage railways, the waterways network and coastal sites. New guidance on climate change adaptation was issued for consultation in November 2023 by Historic England.[03]

2.1.6 Sustainability and zero carbon goals

Most of the larger organisations in the cultural sector have adopted carbon reduction strategies and targets to achieve net zero – for example the Church of England (by 2030), National Trust (by 2030) and English Heritage Trust (by 2040).

Theatre Green Book UK sets common standards for sustainable theatre across all areas of theatre practice and operation. It has already been widely adopted across the sector, being used by all the major UK subsidised theatres, the UK's three national theatres, and all UK opera houses. Volume Two of the Green Book is specifically about Sustainable Buildings.[04] Historic England has recently (July 2024) issued new guidance on adapting historic buildings for energy and carbon efficiency.[05]

2.1.7 Visitor trends

The Association of Leading Visitor Attractions (ALVA) publishes visitor figures for attractions in its membership.[06] The total number of visits in 2023 was 146.6 million, which was a 19% increase on the previous year but represented a decline of 11% on the 163.9 million visits made in 2019 (pre-COVID-19 pandemic) to the top 374 ALVA sites.

2.2 THEATRES AND PERFORMANCE VENUES

Contextual information regarding the issues currently facing theatres has been gathered from discussions in January 2024 with the Theatres Trust and with SOLT/UK Theatres. A summary of the issues mentioned in these discussions is contained in Appendix B1. Issues which are specific to theatre buildings include:

- Safety issues posed by fibrous plaster
- Retirement of skilled technical staff during the COVID-19 epidemic.
- Theatre Tax Relief (TTR)
- Health and safety issues in the back-of-house areas for technical crew.
- Technical upgrades of specialist theatre equipment and services.
- Increased day-time offer
- High potential for improving energy efficiency.

2.3 PLACES OF WORSHIP

The issues facing the repair and maintenance of churches are well-known, having have been examined in several research reports over the past decade:

- *Sustaining Major Parish Churches*, Purcell, 2016[07]
- *The Taylor Review: Sustainability of English Churches and Cathedrals*, 2017[08]
- *The Value of Maintenance*, Historic England, 2019[09]
- *The Future of the UK's Church Buildings*, National Churches Trust, 2021[10]

03 https://historicengland.org.uk/whats-new/news/climate-change-historic-building-adaptation-consultation/

04 https://theatregreenbook.com/book-two-sustainable-buildings/

05 https://historicengland.org.uk/images-books/publications/adapting-historic-buildings-energy-carbon-efficiency-advice-note-18/

06 https://www.alva.org.uk/index.cfm

07 https://historicengland.org.uk/content/docs/research/sustaining-major-parish-churches-research-summarypdf/

08 https://www.gov.uk/government/publications/the-taylor-review-sustainability-of-english-churches-and-cathedrals

09 https://historicengland.org.uk/images-books/publications/value-of-maintenance/

10 https://www.nationalchurchestrust.org/impact/our-campaigns/future-church-buildings

Detailed information regarding the condition of all English cathedrals is contained in Fabric Needs Surveys, undertaken in 2019/20.

Further contextual information regarding the issues currently facing cathedrals and churches has been gathered from discussions in January 2024 with the Church Commissioners, National Churches Trust and Churches Conservation Trust. A summary of the issues mentioned in these discussions is contained in Appendix B2. Grant sources specific to churches include:

- The Listed Places of Worship Grant Scheme, (funded by DCMS & HM Treasury)
- Funding for Church Buildings Support Officers (from the Church Commissioners)
- Repair grants for churches (from the Church Commissioners)

Contextual information regarding Roman Catholic cathedrals has been provided by the Catholic Bishops' Conference of England and Wales. In the time available for the research, consideration of places of worship belonging to other denominations has been limited.

2.4 HERITAGE DESTINATIONS

2.4.1 Heritage sites managed by third-sector bodies

Contextual information regarding the issues currently facing third-sector bodies has been gathered from discussions in the first quarter of 2024 with the National Trust, English Heritage Trust and Canal & River Trust A summary of the issues mentioned in these discussions is contained in Appendix B3. They include issues which are specific to heritage sites including:

- Phased withdrawal of funding from central government for the English Heritage Trust and Canal & River Trust
- Vulnerability of heritage infrastructure to climate change.

Further information about this sector has been gathered from discussions with the Architectural Heritage Fund and the Heritage Trust Network.

2.4.2 Museums Sector

Contextual information regarding the issues currently facing museums has been gathered from discussions in the first quarter of 2024 with the Museums Association and the Association of Independent Museums. A summary of the issues mentioned in these discussions is contained in Appendix B3.5. They include issues which are specific to museums including:

- Museums often occupy impressive buildings that are no longer wholly fit for purpose and are expensive to maintain and adapt.
- The Museum Estate and Development Fund (MEND) provides funding for repairs, but this fund is only available to accredited museums.[11]
- Cuts to local authority funding are leading to a risk of museum closures. This is supported by data on Local Authority revenue expenditure and financing published by the Department for Levelling Up, Housing and Communities (DLUHC).[12] For example, total expenditure on the Museum and Gallery sub-sector across all Local Authorities in England has reduced by 22% in the decade from 2012/13 to 2022/23. Similarly, total expenditure on theatres and the public entertainment sub-sector across all Local Authorities in England has reduced by 12% in the decade from 2012/13 to 2022/23.
- Funding is much more likely to be directed towards audience engagement and visitor services rather than routine maintenance

The issues facing the repair and maintenance of museums have been considered in the following reports:

- *The Future of Civic Museums*, English Civic Museums Network, 2018[13]
- *Understanding Museum Heritage Estate Management*, Historic England, 2020[14]
- *Research into the Level of Public Investment in Museums*, Arts Council, 2024[15]

11 This research received valid responses from 23 respondents classified as a 'non accredited museum or art gallery'

12 https://www.gov.uk/government/collections/local-authority-revenue-expenditure-and-financing

13 https://www.nationalmuseums.org.uk/media/documents/publications/civic_museums_think_piece.pdf

14 https://archaeologydataservice.ac.uk/archives/view/management_he_2020/

15 https://www.artscouncil.org.uk/research-and-data/research-understand-levels-public-investment-museums

SECTION 3.0: METHODOLOGY

3.1 AIMS AND OBJECTIVES

The overarching aim of the research is to understand the scale and nature of England's publicly and third-sector owned and operated cultural infrastructure, including theatres, concert halls, other performance spaces, cathedrals and major churches, and publicly accessible heritage-based attractions.

The specific objectives that support this aim are to:

- Assess the cost of the maintenance, repair, and replacement backlog of organisations.
- Understand the specific repairs and renewals required, by type of building fabric and how needs vary between different types of organisations and venues.
- Understand why the buildings have fallen into disrepair.
- Assess the impacts of both repairing and not repairing these sites.
- Assess the extent to which venues might be able to raise funds for addressing repair needs and identify barriers to securing funding independently.
- Assess the potential impact of government funding to address these needs.

3.2 RESEARCH METHODOLOGY

The project approach is based on a multi-method research approach combining desk research, stakeholder interviews, detailed case studies and an online survey targeting arts and heritage sector organisations:

- Desk Review - to understand the scope of existing research relevant to the research themes, and provide a systematic overview of the broader context for the repair and maintenance of cultural infrastructure in England.
- Stakeholder engagement - interviews with senior stakeholders at a wide range of sector organisations were undertaken to deepen the researchers' understanding of repair, maintenance and renewal needs, and spread awareness of the research.
- Sampling frame development - initial databases of potentially in-scope theatres and heritage destinations were provided by DCMS. Both were manually checked on the basis of desk research to remove venues with out-of-scope ownership or building types. The theatres list was further cross-checked and expanded with data generously provided by the Theatres Trust on active theatres in the UK. The heritage destinations list was expanded through desk research. The completed frames entries were then expanded to include contact details; whether they are listed buildings and/or on the Heritage at Risk Register (HARR); and estimated size.
- Survey - a detailed questionnaire was available to respondents via an online survey platform from Monday 15th January until 12th February 2024. The questions were grouped into sections on:
    - Respondent details
    - Overall and elemental building condition
    - Repair and maintenance approaches
    - Currently planned and funded works by building element
    - Estimated cost of repair, maintenance and renewal required
    - Impacts that would follow from the unfunded necessary works being or not being carried out
    - Past, current and expected future expenditure on repair, maintenance and renewal
    - Past, current and expected future financial status of the responding organisation
    - Barriers to effective repair, maintenance and renewal.
- Case studies – conservation-accredited architects and surveyors undertook detailed assessments of 14 geographically and typologically diverse sites to understand their repair, maintenance and renewal needs on the basis of site visits and direct dialogue. These are the basis for the case studies that are presented in Volume 2 of this report.

Data from the closed-out surveys was cleaned and reviewed by the project leadership team to remove out-of-scope submissions and to identify and resolve possible errors in quantitative responses.

The detailed analysis of the questionnaires has been undertaken by Harlow Consulting with the support of a cross-disciplinary team of Purcell's architectural and surveying team, cost consultants Synergy LLP and cultural sector business consultants, Barker Langham.

During the survey, respondents were invited to provide copies of their condition surveys. A total of 65 condition surveys were received and submitted to Synergy for a detailed quality and completeness review. Synergy has undertaken a detailed analysis of the cost data contained in these survey reports and compared this with the cost data presented in the questionnaire responses. Their analysis has informed the findings presented here.

The main findings from the research are presented in Section 4 and Section 5 below. Appendix A contains a full description of the methodology and Appendix C presents a full analysis of the questionnaire results.

4.1 SAMPLE FRAME

The scope for the sample was agreed in close conjunction with DCMS. Venues considered in scope are:

- Publicly and third-sector (charity and not-for-profit enterprise) owned structures and organisations that also have a role as visitor destinations, with the exclusion of central government buildings (notably the Palace of Westminster).

Within these ownership types the specific types of venue within scope are those which are publicly accessible, specifically:

- Active theatres.
- Other active performance venues, such as concert halls and multi-arts performing arts centres.
- Non-accredited museums and art galleries, but not accredited museums and art galleries, as the latter already benefit from a dedicated stream of funding to support repairs and maintenance.
- Places of worship that have a significant role as visitor destinations, notably cathedrals and major churches, focusing primarily on those formally defined as such by the Church of England, but also including other churches and places of worship of any denomination or faith with significant visitor numbers or events programmes (indicatively defined by visitors or audience numbers of 10,000 or more).
- Other arts and heritage-based visitor destinations, including: historic houses; historic monuments that operate as visitor attractions (such as ruins of castles, abbeys and historic industrial structures and notable memorials); historic cinemas; historic railways; and historic zoos. Parks and gardens and cemeteries were out of scope, unless acting formally as visitor destinations that are primarily of interest for their heritage value. Likewise, zoos, safari parks and wildlife sites have been excluded unless they contain significant heritage buildings which attract visitors.

Two lists of potentially in-scope sites and destinations were provided to the researchers by DCMS: 1) theatres and 2) other heritage destinations, based on VisitEngland databases of visitor attractions. Both lists were manually checked on the basis of desk research to remove venues with out-of-scope ownership or building types.

The theatres list was expanded with data generously provided by the Theatres Trust on active theatres in the UK. This was then filtered by ownership type. The provisional list of in-scope theatres was then manually checked on a case-by-case basis, followed by searches for contact details (in most cases generic venue email addresses were used or contact form URLs identified).

The researchers were not able to identify a similarly comprehensive database of heritage-based attractions that could be used to expand the frame. The researchers therefore undertook systematic regional searches for in-scope arts and heritage organisation and attractions. As with the theatres list, contact details were compiled and collated at this stage and, to accelerate this process, organisation and personal contact details in the arts and culture sectors were obtained from a commercial data provider and integrated into the frame.

The sample frame was classified into three broad categories for analysis and extrapolation, as follows:

Venue	Number of buildings (frame)
Theatres and performance venues	681
Places of worship	383
Heritage destinations	517
All	1,581

4.2 SAMPLE PROFILE

The survey gathered information on building condition, condition monitoring, maintenance regimes, budgets and finance. It was brought to the attention of potential participants either through a direct contact (by email, online contact forms, and telephone) or through an open link that was promoted through social media and by relevant organisations. After data cleaning and validation, there were 324 in-scope responses, representing a wide range of types of buildings owned and/or directly managed by public and third-sector organisations.

They included:

- 143 theatres and performance venues
- 82 places of worship
- 99 heritage destinations

Within the first category, the vast majority were theatres, but there were also 24 other performance venues. Most were either performing arts centres or concert halls. Among the places of worship, there were 14 cathedrals and 68 major churches. The vast majority were Anglican (Church of England) but also included a number of Roman Catholic cathedrals and Nonconformist churches and chapels. Among heritage destinations, the largest number of responses came from non-accredited museums and art galleries. It may be noted that a substantial number of otherwise valid responses were excluded from the sample because they came from accredited museums, which were out of scope. Other heritage destinations included multi-arts centres with a visual arts focus, historic houses and historic monuments, and small numbers of cinemas, historic railways as well as scattering of more unusual buildings such as windmills and canal structures.

The commonest types of ownership were charitable trusts (37%), the Church of England (22%), local authority (17%) and 'other third sector' (8%). English Heritage (EH) and the National Trust (NT) were not well represented. NT properties are usually accredited museums, and so in most cases out of scope of the research, but most EH properties were in-scope. To compensate for this, cumulative data on building condition was sought from EH; and an EH property (Whitby Abbey) was also used as a case study heritage destination.

Cross-comparison with the sampling frame and known data (for example, the proportion of cathedrals relative to major churches and theatres relative to other types of venue) suggests that the achieved sample provides a generally good, balanced representation of in-scope buildings. The South West produced more, and the North East fewer responses, but this is in line with the regional spread of heritage buildings (which are numerous in the South West but relatively few in the North East) and also (in the case of the North East) relative population.

4.3 OVERALL CONDITION OF ALL IN-SCOPE DESTINATIONS

The survey asked participants to provide information on the condition of their buildings both as a whole and in relation to its specific elements. Respondents were asked to use a five-point scale to report on the condition of their building.

1. Very good — Structurally sound, no repair needed
2. Good — Structurally sound, but with need for minor repair or general maintenance
3. Fair — Generally structurally sound, but in need of more extensive repair or maintenance to address substantive but localised/contained problems
4. Poor — Significantly compromised, with element(s) having problems that, if unaddressed, threaten the long-term stability or survival of the building
5. Very poor — Active failure of elements or clear signs of structural instability, posing an imminent threat to the survival of the building

Most buildings (nearly 70%) are reported to be in categories 3 to 5. This means that they have needs that go beyond routine repair & maintenance. The needs varied from isolated areas of disrepair to a small number with problems so extensive that they threaten the building's survival. Places of worship reported the worst overall condition and theatres and performance venues the best, with heritage destinations lying between the two.

While the majority of buildings were reported to be structurally sound, roofs, windows and doors were reported to have the most problems. There is also evidence in the qualitative responses that some sites have particular issues with building services. Amongst building services, space and water heating systems were a particular focus, with 12% of respondents specifically planning works to these systems, either because of failure or a desire to improve energy efficiency. There is also evidence of a issues with lifts and escalators in performance venues being in problematic condition. Of those who had them, 21% reported that their lifts or escalators were in poor or very poor condition. A further 22% that they were in 'fair' condition, defined as 'not functioning as consistently, safely or effectively as they should, and/or in need of cosmetic improvement'. Qualitative evidence suggested that lifts could present particular issues because of their high cost of repair and refurbishment. The elements most likely to be reported to be in good or better condition were interior decorative finishes and surfaces. This suggests that some destinations may be prioritising public-facing cosmetic appearance over keeping the building envelope in sound condition. The condition and repair needs of specific building elements are discussed in more detail in section 4.4.

Of the three categories of destination, places of worship had the most extensive issues. There were significantly more buildings in poor to very poor condition, and fewer in good to very good condition, than the two other destination types. Theatres and other performing arts venues were reported to be in the best overall condition but also had specific needs for complex technical infrastructure and visitor related building services. The condition of other building types lay almost exactly between the places of worship and theatres. The particular characteristics of the three destination types are discussed further in section 5.

4.4 THE COST OF THE MAINTENANCE, REPAIR AND RENEWAL BACKLOG

4.4.1 Cost estimates from the survey results

The survey asked respondents to estimate the total cost of works that needed to be carried out on their buildings, as well as the amount represented by urgent works that should be carried out within the next five years. They were further asked to specify the value of the works that were necessary but for which funding was not currently available.

Average repair costs were calculated by site type and the resulting figures used to calculate an estimated total repair need for all sites of that type. This figure is based on the average expected cost of repair for those venues reporting a repair need, multiplied by the proportion of that the type of venue reporting such a repair need, multiplied by the total number of that type of venue in the sample frame. This gives an estimate of **more than £7 billion** for the total amount of outstanding work needed. Of this, some **£3 billion is urgent and necessary** and **more than £2 billion is currently unfunded**.

Table 2: Total value of all repair and maintenance needed

Venue	Mean (£000s)	Proportion of Respondents (%)	Number of buildings (frame)	Total value (£000s)
Theatres and performance venues	6,148	97%	681	4,040,325
Places of worship	5,028	90%	383	1,737,728
Heritage destinations	2,946	90%	517	1,369,114
All	4,926	93%	1,581	7,147,166

Table 3: Total value of urgent works needed

Venue	Mean (£000s)	Proportion of Respondents (%)	Number of buildings (frame)	Total value (£000s)
Theatres and performance venues	2,758	96%	681	1,799,318
Places of worship	1,816	89%	383	619,241
Heritage destinations	1,493	87%	517	670,563
All	2,158	91%	1,581	3,089,122

Table 4: Total value of currently unfunded, but urgent, works

Venue	Mean (£000s)	Proportion of Respondents (%)	Number of buildings (frame)	Total value (£000s)
Theatres and performance venues	3,693	47%	681	1,178,349
Places of worship	2,101	60%	383	480,785
Heritage destinations	1,917	51%	517	500,583
All	2,688	51%	1,581	2,160,718

Respondents emphasised the risks of worsening issues and dilapidation that would ensue if urgent works are left unfunded.

> *"This is important and urgent work, but currently outside our budget. We need to seek funding for this work. This may* [take] *time some time to materialise, and in the interim, costs increase, and the problem worsens."*
>
> Heritage Destination, East Midlands

The accuracy of these figures is dependent on the accuracy of the reporting provided by respondents. However, a review of cost data undertaken as part of the research by cost consultants Synergy LLP found that where figures could be compared to a costed condition survey figures the given figures were distributed evenly around the costed amount, and that in general the figures for unfunded works 'can be treated with some confidence.

More generally, there is a possibility that these figures understate the actual situation. There are certain limitations in the data. The extrapolation used to give national figures is based on the number of destinations in the sample frame. There are reasons to think that this may understate the number of potentially in-scope buildings. The development of the frame made use of the best available information, but there are no fully comprehensive source datasets available that could be used to develop a complete frame. The open response survey received 56 responses from venues that were not included in the frame. Of these, seven were churches (including two non-conformist), 27 were heritage destinations, and 22 were theatres or performing arts venues. This tends to confirm that there is an unknown but potentially significant number of additional destinations that were not included in the source datasets or identified during desk research. This is especially the case given that the response rate is likely to be lower from organisations that were not directly invited to participate. This implies that the estimates given here are likely to understate the overall need across all in-scope venues. The extent of under-reporting is, nevertheless, likely to be limited by the greater likelihood of larger, more highly publicised destinations appearing in the frame and having more resources to respond to requests to participate in research such as this. These larger organisations will in most cases have greater repair and maintenance needs than the smaller venues that are less easy to identify.

It is also important to note that during the data-cleaning process, it was found that a number of venues had included the same works both among the planned works that they expected to be funded and also among the unfunded works. Where there were accompanying explanations given, it was often that the works would only be carried out if a current or future funding application were to be successful. Wherever possible, the works were reassigned to one category of the other, to avoid double-counting. Even so, the exact balance between the two is intrinsically uncertain, given the dependency of much planned work on external grants applications or fundraising campaigns that themselves have uncertain outcomes.

This is, in itself, indicative of some of the challenges faced by many arts and heritage organisations when trying to plan repair, maintenance and renewal. Uncertainty over the availability of funding is likely to make effective planning more difficult. A number of respondents described how uncertain or insufficient funding meant that they were frequently undertaking temporary patch repairs. This approach to repair and maintenance was acknowledged to be more expensive in the long run.

4.4.2 Reliability of cost estimates

The project team included a cost consultant (Duncan Ball of Synergy LLP) who has provided further commentary on the issue of cost estimates and their reliability. He has commented that he has no reason to doubt the costs that have been submitted in the survey responses, especially knowing from first-hand experience the level of repairs required on several properties within the accepted sample. If anything, he would suggest that the actual costs are likely to be a lot higher. This is because the associated costs beyond the cost of carrying out itemised work can be considerable. There is some uncertainty regarding whether all of these associated costs were included in the self-reported costs submitted as part of the survey. A professional Quantity Surveyor would make allowance for these associated costs, including:

- Contractor's preliminaries - typically 15% of the construction costs
- Main Contractor's overhead and profit – typically between 5% and 10%
- VAT – depending on the tax status of the project. Public bodies including local authorities can recover the VAT incurred on goods and services related to non-business activities i.e. public expenditure to do something for the public good.

- Access - this can account for more than half of the construction cost for certain types of work, for example roof repairs and high-level façade repairs, where scaffolding is a major expense.

A further factor affecting actual costs is how the works are procured. The owners and guardians of historic buildings do not, in general, have sufficient funds to allocate to the comprehensive repair of their buildings in a single phase. Work is often carried out piecemeal, meaning that scaffolding is not used efficiently and may have to be erected again to do the following phase of repairs. This tends to lead to a 'sticking plaster' approach in which repairs are often left too long or only partially completed. This results in fabric deteriorating and potentially adverse impacts on the functionality of the buildings. For example, water ingress can start impacting the interior if roof repairs are left too long.

Condition survey reports, including quinquennial reports, are extremely useful for planning ongoing maintenance and repairs but they tend to be extremely wide-reaching and do not scope all repairs in detail. Once funds have been secured and time is available to specify the repairs in detail, actual costs can start to exceed the original estimates by an unpredictable but often wide margin. This has also been confirmed by the Director of Estates at the English Heritage Trust.

4.5 THE NATURE AND COST OF SPECIFIC REPAIRS AND RENEWALS

4.5.1 Roofs

Of all the individual building elements, roof structures and coverings were most frequently reported to have problems. Roofs were least frequently reported to be in the two highest condition categories; most frequently reported in the two lowest condition categories; and by the far the most likely (at nearly 5% of responses or 1 in 20 buildings) to be in the worst condition category, indicating major failure.

This is in spite of the fact that around 40% of respondents reported relatively recent (within 20 years) comprehensive renovation or replacement of their venue's roof structures or coverings.

Condition issues in roofs pose risks to the broader condition of the buildings they protect. When rainwater penetrates roof coverings, it can lead to a wide range of both cosmetic and structural issues. Rainwater entering the building can lead to immediate superficial damage, such as staining and peeling of finishes, warps and splits in joinery, and disintegration of plasterwork. If exposure is prolonged, there is a high risk of wet or dry rot or colonisation of timber by wood-boring insects. The relatively poor condition of roofs is therefore a particular threat to the sustainability of the properties within the scope of the survey.

In this context, it would appear to be reassuring that around a third of respondents said that they would be undertaking planned and funded repairs to their roofs in the next five years. Nearly 15% of all responses reported that the works would include full renovation or replacement. The average cost of planned works is somewhat higher for theatres than places of worship, while heritage destinations planning roofworks report significantly lower projected spends. This is likely to directly reflect the relative size and complexity of the venues and the associated works required.

The average value of these planned works is over £400k. Extrapolated to a national level, the reported expenditure would equate to £135m of planned, funded works to roofs. Anticipated expenditure is broadly similar in both places of worship and theatres, but significantly lower amongst heritage destinations.

However, roofs are also by a considerable margin the building element most often requiring urgent repair but for which funds are not currently available. Of the 177 respondents who provided details of unfunded, necessary works, 22% (approximately 12% of the entire sample) specifically mentioned roof repair, restoration or replacement. This was ten percent higher than the next most frequently reported category of unfunded works, windows.

> *"Renewal of roof terraces currently in poor repair, likely to be unsafe in less than 5 years."*
>
> Theatre, London

> *"If we spend £20,000 on the new roof, it will deplete our funds completely."*
>
> Theatre, North-West

> *"Re-roofing the southern end of the house and addressing water egress issues exacerbated by climate change and sheer volume of rainwater."*
>
> Historic House, East of England

4.5.2 Rainwater goods

Rainwater goods (e.g. gutters and downpipes) were generally reported to be in somewhat better condition than the roofs that they serve. Relative to roofs, similar proportions were reported to have been fully renovated or replaced in the last 20 years (around 40%) and to be in perfect condition (a little over 15%). A greater proportion are in good or better condition, with over half of the survey respondents (56%) of rainwater goods being in need of no repair or only minor repair. They were also in slightly better condition than the average condition for all building elements. However, there remains a minority of 13% of venues reporting their rainwater goods were in the two worst condition categories.

The properties reported generally sound monitoring and maintenance practices, with very regular checks and routine cleaning of gutters and rodding or flushing of downpipes; this may account for their relatively good state of repair.

Overall, however, there were still around a third of venues proposing works to rainwater goods in the next five years. The average value of these works was £71k, with the largest spends being anticipated by theatres and performance venues and the lowest by heritage destinations. When extrapolated nationally, this suggests that the in-scope venues will undertake works to rainwater goods worth around £14.3 million.

There is also some evidence that climate change is creating a need for additional works and modifications to rainwater goods. A number of respondents noted this as a factor leading to greater need for works to roofs and rainwater drainage to adapt them to increasing quantities and extremes of rainfall. Qualitative research with major owners of heritage buildings confirmed this, with the English Heritage Trust noting that some of its largest forthcoming projects are required to deal with the additional stresses on buildings resulting from heavier rainfall.

> *"We have internal gutters which we have to inspect weekly. These are a severe risk to the integrity of the building and our collection. None of the gutters and down pipes are of the correct size taking account of increased rainfall due to climate breakdown. The down pipes are regularly blocked leading to damage to the brickwork."*
>
> Art gallery, East of England

4.5.3 Walls

Walls were, in general, reported to be in better condition than most of the other basic building envelope elements (roofs, rainwater goods, windows and doors), with nearly 60% of respondents stating that they are in good or very good condition, and 11% reporting that they were in poor or very poor condition. Even so, they lagged by some margin the best condition elements – structural components and internal decorative finishes.

In general, the responses reported appropriate inspection patterns for walls. Nearly nine out of ten (86%) of respondents state that walls are assessed for damage or failure every 4-6 years or more often and nearly 60% at least annually. Nearly a quarter of venues reported that they had comprehensively renovated their walls within the last ten years and 40% within the last twenty years. At the same time, more than a quarter had not done so for more than 30 years, and nearly 20% said they did not know. This generally suggests good maintenance of walls, given the infrequency with which significant works to walls tend to be required, but with a substantial minority of venues with poorer monitoring and less frequent major works.

Just over a quarter of properties plan to undertake works to their walls in the next five years, with an average expected cost of £550,000. As would be expected, the majority of repairs required are either repointing or replacement of stonework or other masonry elements.

> *"Repointing and masonry replacement in various places as identified by our architect. These will be patching repairs to the worst areas only, due to cost. The cost of a full wall repair for a building of this size would be several hundred thousand pounds."*
>
> Major church, Yorkshire & the Humber

> *"The Georgian window lintels are all cracked and falling and need to be rebuilt. There is significant mortar loss at the parapet and at ground level. We have a rendered wall that is ballooning and blistering. Our Georgian portico has significant damage."*
>
> Art gallery, East of England

> *"The walls and masonry need rendering and repointing due to damage and corrosion … The stone finials need to be assessed to ensure stability and will be uncovered as at present they are netted. Once the walls are rendered and repointed the exterior in its entirety will need to be repainted…This work is essential for the building integrity as well as maintaining the heritage status to the standard of its grading."*
>
> Theatre, London

4.5.4 Windows and Doors

After roofs, windows and doors were the building elements where there were the most reported problems. There were the second highest number of reports of these elements being in the two worst condition categories at 17%, and the third lowest in good or very good condition (out of the nine different elements asked about).

Traditional timber windows and doors also have very long potential lifespans if properly maintained – sometimes lasting for centuries – but can rot rapidly if they are not painted or varnished regularly. Timber windows and doors are a particularly clear example of routine repair and maintenance works that, if deferred too long, can lead to higher long-term costs, as extensive repair or even complete replacement become necessary.

Moreover, windows and doors in poor condition generally have low thermal efficiency, increasing both energy costs and carbon emissions. Poorly maintained windows and doors are also likely to be less effective at keeping wind and water out while also increasing security risks.

Most sites still have single glazed windows. Only among theatres do a high proportion of venues have double-glazing. Secondary glazing is also uncommon, despite being the most economical and often the least aesthetically detrimental way of upgrading the thermal and acoustic performance of windows, especially in heritage settings.

As with works to roof coverings and rainwater goods, theatres and performance venues reported the highest expected costs for their planned works, at more than £350,000 over the next five years. This is likely to reflect the large size and complexity of these venues, and the fact that, unlike places of worship, most windows in older venues are likely to be of timber construction and so in need of more regular repair and maintenance.

Overall, when extrapolated nationally, the survey data suggest that around £85 million of planned works will be carried out over the next five years.

Work on windows – including re-leading, comprehensive cleaning and repair – was the second most frequently cited category of works that respondents stated were necessary but unfunded. Of the 177 respondents who provided specific detail on unfunded works, 12% mentioned windows.

Doors received relatively infrequent specific mention, by only 24 respondents. The majority of these reported a need for replacement, or repair of, doors, most usually the main front door (including painting). Replacement of fire doors was also cited.

> *"Replacement of windows as an on-going programme. Grade II listed buildings must be made like-for like which is prohibitively expensive... to make double glazed rather than single with minor modifications. Four done so far, another 28 to do."*
>
> Theatre, North-West

> *"Repair and upgrade of failed internal doors that are required to improve fire safety."*
>
> Cathedral, London

4.5.5 Structural Components

Structural components were generally reported to be in good condition. More than 70% of venues reported that they were in good or very good condition and only 6% reported that they were in poor or very poor condition. These are highest and lowest frequencies respectively for any of the nine individual elements asked about.

Past structural works were reported by just under 30% of venues and were most commonly reported in places of worship. Given the age and structural complexity of many places of worship, this is not unexpected.

Only a minority of venues (less than 15%) reported planned structural works for which funding is expected to be available in the next five years. Amongst these, theatres and performance venues were the most common. They also reported the highest expected expenditures at an average of £1.7 million. The main driver for this is proposed large-scale redevelopment or refurbishment works, which relate to a small number of venues but typically involve high expenditures on structural improvements or changes.

Places of worship were almost as likely to say that they expected to carry out planned and funded structural works. They also reported high expected expenditures at an average of £1.3 million. Explanations given by some respondents suggest that the need for structural work is often associated with towers. These are both more common in cathedrals and churches and more liable to more extreme and potentially dangerous forms of structural failure than most other built forms. Heritage destinations reported far smaller expected expenditures.

The total expenditure over the next five years, when extrapolated nationally, amounts to nearly £150 million.

> *"Coping stones have failed, causing water ingress that has corroded the steel structure. Steel treatment and rebricking is required. Scaffolding is a significant cost."*
>
> Theatre, South-West

4.5.6 Other External Components

Venues were asked about external components of their property that were not included in any other building element category. These include signage, lighting, and non-structural decorative elements, such as sculpture. Signage and lighting were the commonest types of external components.

The elements were reported to be in generally good condition, with 66% of respondents saying they were in good or very good condition.

Just over a quarter of venues planned external works. Signage and interpretation boards were the commonest category of planned expenditure, with lighting a close second. The lighting category included a diverse array of works, ranging from security lights, through waylighting, to floodlighting schemes.

Places of worship are by far the most likely to report such works. The highest cost works were, however, reported by theatres and performance venues, with an average spend of around £600k, far higher than the £226k reported by places of worship. This probably reflects use of complex, illuminated display signage, which is found in nearly half of theatres and performance venues but only 18% of heritage destinations and 9% of places of worship. The figure for places of worship is also high, but is almost certainly a reflection of the more extensive use of signage and floodlighting in cathedrals and the largest of the major churches than in other smaller places of worship or heritage destinations.

Extrapolated to a national level, the planned expenditure across all cultural heritage venues would equate to £112m of planned, funded works to external components.

> *"There is a need to improve safety and security lighting to the rear of the Cathedral as we are open late for the community to help those without permanent residence and also for the song room exits / entrance for the community choir."*
>
> Cathedral, London

4.5.7 Building Services

The condition of building services was reported to be worse than many of the other building elements that respondents were asked to describe. In spite of higher-than-average numbers of 'don't know' and 'not applicable' responses, a smaller proportion of respondents reported that their building services were in good or very good condition than any other building element except roofs. In addition, only roofs and windows were more likely to be reported to be in poor or very poor condition (13% of respondents versus 22% and 17% respectively).

Water, drainage and plumbing and gas supply were generally the oldest building services systems. The most recently installed systems were generally ICT and CCTV systems but they are also the least likely to be in adequate functional condition; this can only reflect the rapid obsolescence of these kinds of technical systems.

As would be expected given the strong compliance requirements to maintain them in good condition, fire detection and alarm systems were reported to be in the best condition.

The average anticipated spend across venue types is approximately £660k over the next five years. When extrapolated, this equates to a national expenditure of around £270 million.

The most frequently reported specific types of planned work related to heating, ventilation and/or air conditioning systems. HVAC systems are also cited frequently and present significant challenges. Like lifts they have long operational life spans but require periodic comprehensive replacement. Many of these systems were installed some years ago – one respondent stated their system was over 40 years old and had not been upgraded since the 1980s. There are also trade-offs between up-front and long-term costs, with more efficient systems tending to be more costly. As a result, where finances are challenging it can be difficult to secure the long-term savings that come from a high upfront investment. Responses to open questions suggest that this conflict is being felt particularly acutely now, as a result of energy price inflation and the zero-carbon ambition.

Works on heating and cooling systems – upgrading, repair, and boiler replacement – were also the third most frequently cited form of necessary but unfunded works. They were specifically mentioned by 11% of the 177 respondents who described their unfunded works.

> *"We intend to replace/upgrade the heating and cooling system looking at insulation and ventilation. We have had some quotes concerning this work and are applying for grant funding. We have been working with a RIBA Climate Net Zero consultant who believes that our spaces are ideal for installing green energy sources including insulation. We are keen to combine this with our re-roofing plans to ensure a coordinated building management scheme and good value for money."*
>
> Heritage destination, East of England

> *"Replace the heating system in the library… [we are] working towards a new heating system throughout [we need to] replace the boilers that are nearing the end of life …remove the wet heating systems at high-level and replace with new effective heating systems."*
>
> Cathedral, West Midlands

Although only installed in a minority of venues, lifts and escalators had a high proportion of old (more than 20-year-old) installations. In addition, while most are in acceptable functional condition, a significant proportion of around 20% of those who reporting having such installations reported they were in poor or very poor (categories 4 or 5) condition, implying urgent repair or replacement needs. Because of their high intrinsic cost, the critical safety issues they present, and their long but limited operational lifespan before replacement or extensive refurbishment is required, lifts can become a major challenge within otherwise manageable repair and maintenance liabilities.

In addition, amongst necessary but unfunded works, lifts were the second most frequently reported after works to heating and cooling systems.

4.5.8 Interiors

Interior finishes and surfaces were generally reported to be in good condition relative to other building elements, with nearly 70% of respondents placing them in the good or very good categories. Only fundamental structural components received more favourable assessments from survey respondents and only external components (such as lighting, signage and non-structural decorative elements) were reported to be in comparable condition.

A majority of venues, with the exception of places of worship, reported relatively frequent, regular redecoration, with works taking place every five years or less. Very high proportions of all venue types also reported recent substantial interior refurbishment, redecoration or restoration works, or planned works.

The average value of this planned work is around £650k. Extrapolated to a national level, this would equate to £293 million of planned, funded works to interior decoration across all cultural heritage venues over the next five years. By far the highest projected spend on interior works was reported by heritage destinations. Even so, interior works are an important category of expenditure across all destination types.

Given the high reported figures, the responses were cross-checked to ensure that they appeared realistic. A review of individual figures given by respondents suggests that there is a high degree of polarisation between relatively small expenditures and very large expenditures. In most cases the very large expenditures appeared to be realistic and to relate to complete internal refurbishments of major performing arts venues or heritage sites; major restorations and re-orderings of the interiors of major churches or continuing interior restoration projects at cathedrals; and very large restoration projects by organisations with extensive and complex historic built estates of outstanding heritage significance. These are likely to entail very high costs, due to the extensive nature of the works proposed and the need for very high standards of specialist design, materials and execution in unusually architecturally and historically sensitive contexts.

> *"We are planning to refurbish and remodel our theatre / cinema space to increase access, sustainability and commercial viability."*
>
> Theatre, Yorkshire & the Humber

4.5.9 Summary overview of elemental condition

By comparing the average condition of the various elements that the research asked about across all buildings, it is possible to gain a sense of which building elements are most or least likely to have problems. It should then be possible to assess whether resources are being appropriately allocated, as expenditure should prioritise ensuring that the building elements which are most crucial for the building's long-term preservation are kept in good condition. The summary table lists the buildings elements in order of their reported condition relative to each other and then details the extrapolated planned expenditures on those building elements.

The building elements reported to be in best relative condition were structural elements and interior finishes. The condition of basic structural elements must reflect the fact that most buildings are designed to withstand structural failure for as long as possible, and that, in general, serious structural problems tend to develop only after prolonged neglect or as a result of comparatively rare extrinsic factors (e.g. subsidence, serious flood damage, fire and so on). The condition of the interior finishes, by contrast, appears to reflect the high frequency with which interior refurbishment takes place and the relatively generous expenditures on these kinds of works relative to others. Indeed, works of interior conservation, restoration and refurbishment emerged as the single largest area of future expenditure, at nearly £300 million, when reported planned and funded expenditures are extrapolated nationally.

Building services were reported to be the second highest overall category of planned expenditure at nearly £270 million. Expenditures on building services are also expected to be high and appear to be appropriate given their fundamental importance to the operational effectiveness and efficiency of many destinations. By contrast, the extrapolated total expenditures on roofs and windows and doors are relatively low, at £135 million and £85 million respectively. This is in spite of their being crucial building envelope components that are reported to be in poor condition.

The initial appearance is therefore of misallocation of resources between interior refurbishment and maintaining the fundamental building envelope in good repair; but this almost certainly somewhat deceptive. As discussed above, the high reported planned expenditures on interior works are mostly associated with large-scale, comprehensive schemes of restoration, repair and refurbishment or are taking

place in buildings that are likely to be in relatively good condition. There is therefore little clear evidence of misallocation at the level of individual buildings. Instead, the broad picture again appears to be one of polarisation, where there is a minority of venues able to raise and spend the sums needed to engage in major internal restoration or refurbishment, and a majority for whom relative lack of resources means that the primary challenge is maintaining the building envelope.

TYPE OF WORKS BY ELEMENT	RELATIVE CONDITION	MEAN EXPENDITURE (£ 000)	TOTAL VALUE - NATIONAL
Roofs	Worst	402.00	£135 million
Windows and doors	Worse	255.5	£85 million
Building services	Worse	661.637	£269 million
Rainwater goods	Average	71.4	£14.3 million
Walls	Average	552.8	£172 million
Other external components	Better	322.6	£112 million
Interior surfaces and finishes	Better	651.0	£293 million
Structural components	Best	1,191	£147 million

Note: mean reported expenditure is the average for those destinations specifically reporting works of the relevant kind, not for all destinations.

This overall pattern, however, does not apply to places of worship (as discussed in more detail below).

4.6 THE REASONS FOR BUILDINGS FALLING INTO DISREPAIR

4.6.1 Finance, Funding and Revenue

Survey participants were asked to identify the main obstacles to carrying out repair and maintenance. The most significant immediate obstacle was reported to be lack of finance (87% of respondents) or difficulty accessing grant funding (76%). Closely related financial obstacles were loss of revenue associated with the disruption caused by undertaking repairs, cited by nearly half of respondents, and the lack of a ring-fenced maintenance budget, cited by more than a quarter. Venues also overwhelmingly reported that it was challenging to secure funding for works over and above routine repair and maintenance, with 56% stating that it was 'very difficult' and a further 34% reporting it was 'quite difficult'.

These figures are consistent with clear evidence that many respondent organisations are in a precarious financial state. Overall, nearly 40% of respondent venues are operating at a deficit. By contrast, only around 20% are generating a surplus, with theatres and performance venues being most likely (33%) and places of worship (16%) least likely to do so.

> *"Falling attendances and increased costs as a result of pandemic and cost of living are depleting reserves and resulting in hand to mouth existence just to keep functioning."*
>
> Heritage destination, East of England

> *"Lack of budget has meant that some day to day and annual repairs and maintenance has not taken place."*
>
> Theatre, London

Venues were asked whether their various income streams were declining, stable, or increasing. All main sources of income streams were far more frequently reported to have declined or stayed the same than increased relative to the pre-Covid situation. Public funding was the most likely to be reported as stable, but fewer venues reported an increase (20%) than a decrease (31%). This suggests there has been a real-terms cut in most forms of income for most respondent organisations, regardless of their specific type.

This is likely to account at least in part why nearly 70% of respondent venues are funding repair and maintenance expenditure from cash reserves, by far the most frequently cited source of funds.

A few fortunate organisations, usually but not exclusively places of worship, do have endowments. In a few cases endowment income is able to cover all or most repair and maintenance costs. Although benefiting less frequently from endowment income than churches, both theatres and performance venues and heritage destinations were able to draw, as would be expected, on ticket sales to help finance their R&M spend. This may help account for their overall better condition than churches and cathedrals.

Moreover, a minority of destinations did report increases in at least some funding streams. The form of funding that was most likely to be reported as having increased was commercial income: 35% of respondents stated that commercial income had increased since before the COVID-19 pandemic. In addition, the largest proportion (25%; 20/81) of respondents who provided explanations for their belief that their venues have potential to increase self-generated funding for repairs and maintenance think that this additional income will come through increasing or diversifying their commercial activities. Even churches viewed commercial income as the area that they most expected to grow. This gives substance to anecdotal reports that many venues have become more entrepreneurial in an attempt to fill the 'funding gap'.

It is also important to note, however, that this situation was polarised: whilst 35% of venues stated that commercial income had increased (the source of income with the highest increase), a similar number of venues (36%) stated that commercial income had declined. Similarly, the most common reason given by organisations for not being able to increase self-generated funding for R&M is that there are limited opportunities to increase commercial activities at their venues.

Some venues, it therefore seems, are adapting more successfully to a changed funding environment while others are struggling. Even among those who have managed to increase commercial revenue, however, the story is not entirely positive. An increased focus on minimising costs and maximising income is reported to have led to diversion of funding away from buildings at the same time as having increased intensity of building use. A quarter of venues who provided details about their expectation of increasing commercial income (32/124) say that increases in operational and running costs limit how much of the resulting additional revenue can be dedicated to R&M costs. At the same time, there was anecdotal evidence that increase used for commercial purposes leads to greater wear and tear to buildings and other infrastructure, with correspondingly increased repair and maintenance needs.

4.6.2 Approaches to Repair and Maintenance

The survey questionnaire asked respondents to provide information about how they go about understanding the condition of their properties and what approaches they take to repair and maintenance.

Overall, half of respondents reported having a current condition survey in place, in most cases undertaken by an external consultant and almost always within the last five years. However, there is a high level of disparity between places of worship and other venue types. Places of worship almost all have condition surveys (quinquennial inspection or similar) in place.

Of the three types of venue considered, almost all places of worship stated that they have a current condition surveys. These are usually carried out by an architect. Around two fifths of heritage venues and around a third of theatres also have current condition surveys, the former often, and the latter usually, carried out by a chartered building surveyor, with the balance undertaken by architects. Nearly 60% of these types of venues had a schedule of repairs with costs. This compares to only around 40% of places of worship.

Those without condition surveys overwhelmingly reported their cost as the primary limiting factor. Among the remainder, some reported having sufficient in-house expertise or comprehensive enough repair and maintenance processes and/or personnel to not require formal condition surveys.

Just under a third of respondents described prioritising repairs in a systematic way, with expert professional input. Just over specifically 10% reported using a condition survey or quinquennial inspection as a means of prioritisation. However, nearly half of respondents who gave specific information about how they prioritise (144 respondents of 308) seemed to be making use of an essentially reactive approach. This is in some cases informed by systematic surveys but more usually by immediate urgency. Very few respondents made reference to planned preventative maintenance (PPM), except where health and safety, regulatory, legal or insurance compliance requires it. As one theatre in London stated "Urgency, compliance, funds available", are the key factors, with another commenting that repairs were assessed "On a case-by-case basis, as and when needed. Priority would always be dependent on financial cost and immediate safety."

> *"Emergency repairs; anything putting visitors or staff at risk. All other repairs are considered but typically pushed back as cannot be afforded."*
>
> Museum, London

Maintenance is typically undertaken by subcontracted maintenance teams, with only a minority using directly employed staff. However, the data from the survey suggests that venues with directly employed maintenance teams tend to be in better condition than those without (though this may also reflect other differences, as larger venues with larger funding flows are more likely to have directly employed maintenance teams). There was also evidence of widespread use of volunteers or members for prioritising and undertaking repairs and maintenance, especially in churches.

> *"Everything is done in-house with volunteers unless professional work is required."*
>
> Theatre, North-West

> *"Combination of theatre technicians and external tradesmen, overseen by the council's property team."*
>
> Theatre, South-East

> *"Volunteers who have relevant skills e.g. retired electricians. Volunteer gardeners, general [help] e.g. help with cleaning."*
>
> Major Church, North-West

Around two-thirds of respondents reported having a maintenance plan. A similar proportion reported having a maintenance budget. Average maintenance budgets reported by places of worship are around £145k, smaller than the around £170k reported by theatres and heritage destinations. All venue types reported spending more than the allocated budget, with an average spend across building types of around £190k. These findings suggest that there is a limited direct link between effective maintenance planning and good building condition, if sufficient resources to carry out work are not available.

More than a third of venues reported substantial increases in repair and maintenance expenditure, but in most cases said that this was still not enough to meet repair needs.

> *"We've actually increased our spend on building maintenance, but it's not enough."*
>
> Heritage destination, Yorkshire & the Humber

A number of venues explained that the increased intensity of and expenditure on repairs and maintenance resulted from past underinvestment. This had led to a situation where repairs could no longer be deferred. This was the single most frequently given reason for a 'substantial' increase in repair intensity.

> *"Sustained underinvestment has caused many issues which are now coming to a head, compounded by loss of income during covid, meaning that reserves were eroded and donations towards building costs disappeared."*
>
> Theatre, Yorkshire & the Humber

> *"Previous underinvestment in repair and maintenance has led to increased intensiveness required now."*
>
> Theatre, London

4.6.3 Other Pressures and Priorities

Survey participants were asked to rate the importance of repair and maintenance and to consider whether competing pressures and priorities make it more difficult to finance and organise required works. In response, they almost without exception reported that repair and maintenance is a high priority. Nevertheless, many organisations seem to find it difficult to translate this priority in principle into the reality of keeping their buildings in good condition. Most respondents felt that there were significant competing priorities, some internal but many often imposed by external funders.

> *"Due to the scale of the organisation there is always a need to balance spend on maintenance and conservation against wider organisation priorities."*
>
> Historic monument, Yorkshire & the Humber

The most significant competing priorities were reported to be increasing visitor and audience numbers, maintaining or increasing events programmes and maintaining or increasing staffing levels. These pressures were, however, less applicable to places of worship, which tended to see increasing community outreach as a higher priority. All these findings correlate well with anecdotal evidence that there has been an increased focus among funders on public engagement and diversification.

As noted previously, there was also evidence that the growing pressure to be 'entrepreneurial' has impacted on the organisations' focus and use of resources. This was reported to have led to building repair and maintenance being deprioritised, while increasing the underlying need for repair, maintenance and renewal as a result of more intensive use of buildings and their services.

> *"Many systems have reached the end of life... More pressure to raise income from building - more use and demand on building."*
>
> Non-accredited museum, North East

Other important barriers included disruptions to visitor access or audience attendance and skills shortages (both to commission and manage and to undertake the work). These were both reported by more than 25% of respondents. One theatre reported that a planned closure would result in nearly £750k of lost revenue over a three-month period.

Energy efficiency was also regarded as an important factor that had to be taken into account when planning maintenance.

Finally, the need for planning permissions or consents was also cited by more than 20% of respondents as a barrier. This included the additional constraints affecting listed buildings. For Anglican churches there is the parallel process to obtain 'faculty' for repairs, alterations and additions to the fabric of these buildings.

4.7 IMPACTS AND RISKS OF NOT CARRYING OUT REPAIRS

Respondents were asked to estimate the future condition of their venue if repair and maintenance expenditures remain stable over the next five years.

The proportion of buildings in good to very good condition (categories 1 and 2) is expected to stay broadly the same. Within this, there is expected to be an increase in buildings in very good condition (category 1). This may reflect recent increases in repair and maintenance budgets (which were reported to have increased substantially over the last five years by more than a third of venues). It may also reflect the expected impact of the large amount of planned works, especially within the minority of venues that are undertaking comprehensive refurbishment. However, the increase is from a very low base of around 2% of all buildings.

However, the proportion of buildings in the worst state of repair (categories 4 and 5) is expected to increase from 23% to 35%.[01] Given the stable numbers in relatively good condition, this seems to reflect the buildings in borderline condition (category 3) seeing their substantive but currently contained problems spreading and leading to accelerating deterioration.

Once again, then, there is evidence of a polarised situation. In most cases it would appear likely that it is buildings already in basically good condition that are expected to be stable or improve further, and the buildings in moderate to poor condition that are expected to decline further.

Although this overall picture was consistent across venue types, it was striking that theatres and performance venues envisaged a greater proportion of buildings falling into the lowest condition category than any other type of building, with more than twice the proportional increase (at nearly 90%) than the next largest, heritage destinations (at just less than 40%).

If the expected changes in condition were to take place, 30% of theatres and performance venues, 32% of heritage destinations and 45% of places of worship that took part in the research would be in poor or very poor condition.

> *"If we are not able to raise and spend the approx. £4 million needed over the next five years we will not be able to function effectively as an arts centre. Without this investment our long-term viability as a community asset would be severely impacted, with a potential failure of the business model and a loss of this vital cultural home for the community."*
>
> Arts venue, London

> *"With limited resources… [the Trust has] undertaken some of the extremely urgent dilapidations… At the time of writing very little funding has been made available… with such a list of extensive inherited dilapidations no commercial theatre company will be prepared to take the building on – this vicious circle needs to be broken sooner rather than later, as we know that we are sitting on a ticking time-bomb."*
>
> Theatre, North-East

> *"If we are unable to complete the most urgent of these works, the building would soon become unsafe, and might have to be partially or completely closed. Serious deterioration from weather and water damage, etc. would also ensue. Our income would be diminished as worshippers would be forced to go elsewhere, and many would cease to make regular contributions… leading to a vicious circle of reducing income and ever poorer maintenance. Without adequate funds for maintenance, this church would have to close."*
>
> Major church, Yorkshire & the Humber

The adverse impacts and risks of not carrying out these works are examined in Appendix C14.

01 As well as being asked to rate the current condition of their building/s, venues were also asked to predict the condition of their buildings in 5 years, should maintenance expenditure remain the same.

4.8 THE BENEFITS OF REPAIR

The survey included an open question that allowed respondents to outline the benefits that would follow from being able to tackle necessary (but currently unfunded) works.

The underlying able to use the building for its intended purpose, resulting in:

- Preservation of the country's heritage buildings for future generations, enhancing community health & wellbeing through access to such venues and building civic pride.
- Unlocking opportunities to increase existing income streams and develop new ones, through the ability to use the building for multiple purposes.
- Improved accessibility leading to higher visitor numbers and greater inclusivity
- Energy savings resulting in reduced operating costs and lower carbon emissions.
- Better visitor experiences, leading to repeat visits and reputational benefits – attracting more visitors locally, nationally and internationally - in turn boosting revenue with a positive knock-on impact for the local and national economy
- Maintenance and increase of community outreach (e.g. as warm spaces, for nurseries, early years, students, community choirs, parish clinics, baby/ toddler groups, learning cafes etc.).
- Reduced pressure on staff and volunteers and opportunity to strengthen financial resilience and build up reserves and ability to safeguard jobs in consequence
- Reduction of insurance costs if essential works undertaken, reducing risks to building stability and safety
- Stimulation of demand for specialist heritage conservation skills to undertake necessary repair and maintenance works

> *"Securing the future of this unique [building]… secure employment for 14 people, continue with school visits and volunteering, ecological benefits, community hub to continue. Increased visitor numbers to help to make the location more financially sustainable."*
>
> Heritage destination, North-West

> *"A capital investment to bring [the building] up to a modern standard would unlock opportunities to earn additional income from audiences through increased ticket sales and ancillary income and to attract private hirers. Facilities for disabled people would be improved, as would working conditions and staff and public safety levels. Investment would allow us to get closer to decarbonising the venue and reaching net zero within the operation. Costs in maintaining aged elements of the building would reduce for a considerable period as well as costs for energy to run the venue. The building would be safely preserved as the cultural resource and unique heritage asset it is."*
>
> Performance venue, South-East

> *"The theatre and organisation would be future-proofed for the 21st century, ensuring the continuation of the only professional theatre [in the district]. … All of these positive benefits and impacts would secure employment for 23 staff, work for over 80 freelancers and volunteering opportunities and the benefits this brings for 84 local people."*
>
> Theatre, Yorkshire & the Humber

The benefits of carrying out necessary repairs are examined in greater detail in Appendix C13.

5.1 THEATRES AND PERFORMANCE VENUES

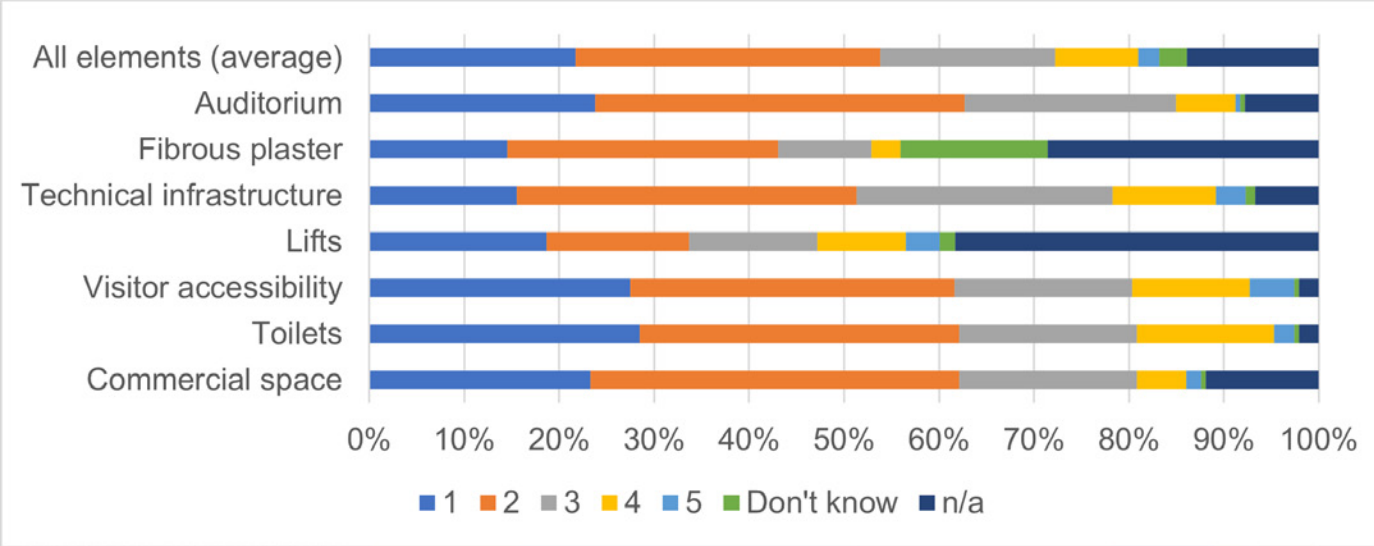
5.1.1 Condition and Repair Needs

Of the three destination types within scope of this project, theatres and performance venues were in the best relative condition. Nearly 40% were in good or very good condition (categories 1 or 2), compared to fewer than 30% of heritage destinations and a quarter of places of worship. Only 16% were in poor or very poor condition (categories 4 or 5), compared to 36% of places of worship and 23% of heritage destinations. No respondents reported buildings with failures that pose immediate threats to their survival.

Nevertheless, a number of venues, including some very prominent national and regional theatres, reported very high backlogs. Overall, theatres and performance venues represent well over half of all the unfunded, necessary works reported by all destination types. This appears to reflect the high number of theatres in the sample frame, their physical size and complexity, and their need for complex technical and operational systems.

The survey sought information from theatres and other performance venues on the condition of various discrete elements of their venues. Front-of-house elements appear to be in the best condition, potentially masking more serious problems in the back of house.

Condition of specific elements of performance venues



Base: 193

Technical infrastructure appears to be a particular concern. Of all the different elements, it was amongst the least frequently reported as being in good or very good condition. In addition, 14% reported that it is in poor or very poor condition. Open responses explained that it was essential to have theatrical equipment that met international norms. In a setting of financial stringency, a conscious need to 'run to fail' was mentioned by multiple respondents.

Although only 60% of venues reported having lifts, more than a fifth of these said that they were in poor or very poor condition. There was evidence that the need to replace obsolete lifts was affecting many theatres and performance venues, including some of England's largest and most prominent arts institutions. Given their cost, the critical safety issues they involve, and their importance for equitable visitor access, these kinds of condition issues are likely to have significant impacts, including on operational effectiveness and income.

In addition, 17% of respondents reported serious problems with visitor accessibility and with toilets. The open responses suggested that these two problems can intersect, with many venues needing more or better accessible toilets to ensure equitable treatment of all their potential audiences.

Respondents were also asked about the condition of any fibrous plaster elements in their venues. While 29% stated that the question was not applicable to them, of the remaining 71%, more than fifth said that they did not know. This finding presents a possible health and safety concern: ageing fibrous plaster is a known potential safety hazard. Many Victorian and Edwardian theatres have elaborate and heavy fibrous plaster suspended ceilings, in most cases directly below roof spaces and over audience seating in the auditorium. These depend on the integrity of natural fibre (usually hessian) supports that are highly vulnerable to decay from insect activity or mould growth. Weakened supports can lead to total failure of the ceiling, without visible warning signs.

Since the partial collapse of a fibrous plaster ceiling at the Apollo Theatre in London in 2013, there has been a requirement for regular fibrous plaster inspections to ensure potential issues are identified and remedied early. Those involved in the management of historic theatrical buildings should therefore be confident whether or not they have fibrous plaster in their venue; and if so, should have a good understanding of its condition. The finding that this may not be the case was paralleled by stakeholder interviews suggesting that monitoring may have become less thorough in recent years as the Apollo incident grows more distant in time.

Respondents reported planned works by type of building element. The resulting figures, when extrapolated nationally, suggest that interior refurbishment, building services and structural work are the largest areas of planned and funded expenditure.

Type of works by element	Mean expenditure (£)	Total value - national (£)
Interior works	631,160	141 million
Structural components	1,789,545	94 million
Building services	517,987	94 million
Roofs	532,500	81 million
Other external components	603,511	78 million
Windows and doors	354,303	56 million
Walls	324,167	28 million
Rainwater goods	71,444	9.7 million

5.1.2 Reasons for Disrepair

As with other destination types, the most significant barriers to maintenance appear to be financial. Insufficient financial resources and difficulty accessing grant funding were reported by the vast majority of theatres and performance venues to be barriers to adequate repair and maintenance.

Around a third of both theatres and performance reported being in deficit, a similar proportion to heritage destinations. Of the three destination types, theatres are least likely to draw on fundraising or income from endowments to help cover core repair and maintenance costs. They are also the most likely to draw on income from ticket sales.

The vast majority of theatres and performance venues reported stable, or more usually declining, income of almost all types in recent years. In each of five different revenue categories (public funding, charitable and grant funding, fundraising and philanthropy, and other) fewer than 20% of venues had stated that they had increased income since before the COVID-19 pandemic. The only revenue source where a substantial minority of venues (38%) reported increases was commercial income. Even here, a higher proportion (42%) reported declining income – implying a higher degree of polarisation than other venue types. In spite of this, 58% reported that they expected to increase commercial income at least somewhat over the next five years. Around a quarter also hoped to generate increased income from fundraising and charitable bodies. It does not, however, seem likely that future income will depart far from the established trend, given the impacts of inflation.

The importance of income from ticket sales and shows means that the pressure to remain operational is particularly high among theatres. This has direct implications for the ability to undertake work.

> *"This is a chicken and egg situation, as in order to undertake major work we would need to close, which then loses our major income stream. This year we are closing for 13 weeks for critical work at an income cost of c£750k … Our forecasting shows we will need at least 3 full years to recover from this."*
>
> Theatre, Yorkshire and the Humber

However, the regular income from ticket sales does make it easier to implement regular repair and maintenance, even if it is not always possible to address backlogged issues. Theatres and performance venues reported generally good routine repair and maintenance practices. Most venues monitored almost all key building elements regularly, often once a year or more. Theatres had the most consistent distribution of times since last replacement or refurbishment of roof coverings, suggesting that they have the most systematic approach to roof replacement and refurbishment. They also reported very regular maintenance of gutters and downpipes, and the highest planned spend on replacement or refurbishment of rainwater goods. Theatres report frequent internal redecoration, with 50% or more undertaking works every 5 years or more often and very few redecorating less often than every 20 years. A majority (nearly 60%) reported having a schedule of repairs with costs, also implying a systematic approach to building repair and maintenance.

Nevertheless, theatres and performance venues were also the least likely of the three destination types to report having a formal condition assessment. Just under a third (32%) had one, in comparison to 42% of heritage destinations and more than 93% of places of worship. The choice of professionals to undertake these surveys contrasted with the other destination types, where an architect was the most frequent choice. The surveys were most frequently conducted by a chartered building surveyor (more than 40%), followed by 'other chartered or certified building professional' (20%) and then architect (16%). Perhaps unexpectedly, given the scale and structural complexity of many theatres and performance venues, no surveys were reported to have been commissioned from structural engineers.

Stakeholder interviews also raised concerns about loss of building management and practical skills during the Covid pandemic. One interviewee suggested that the collective loss of knowledge and understanding would be liable to have serious long-term consequences. Mistakes being made now would cause problems that would only become apparent many years down the line.

> *"Generally the workforce don't understand the urgent need for this work until something breaks or doesn't work for them. The shows are wonderful but they need a building to support them."*
>
> Theatre, Yorkshire and the South-West

5.1.3 Impacts and Benefits

Respondents were asked what they would expect the condition of their venue to be in five years' time, if repair and maintenance expenditure remained stable. The expectation for theatres and performance venues was the proportion of buildings in poor or very poor condition (categories 4 and 5) will increase by nearly 88%. This is much the highest proportion of any of the three destination types considered in this research. Repair and maintenance backlogs affect all types, scales and locations of venues, and some venues are clearly worried about the scale of these backlogs.

> *"Running to fail on both the stage infrastructure and the planned maintenance will lead to potential catastrophic failure of key systems which then will cause show and/or venue closure."*
>
> Theatre, South West

> *"The organisation is directing available maintenance funds to safety critical items and those necessary to keeping the venue open to the public for performance. Levels of complaints are rising about the facilities available for the public and threaten to reduce audience numbers. … Failure to maintain the exterior means that the building fabric is at risk which as a Grade 1 listed building is something that we as the building owners are striving to avoid."*
>
> Performance venue, South East

> *"Business continuity [is] at risk if technical systems are not urgently replaced due to failure of equipment leading to loss of performances and related sales (retail and catering)."*
>
> Theatre, West Midlands

In addition, there were concerns by stakeholders that potential closure of venues would not only have direct impacts on performers and audiences, but also compromise the 'talent pipeline' that underpins the UK's important creative arts industries.

Conversely, implementation of needed works was anticipated to lead to numerous benefits, both direct and indirect. Frequently cited benefits of implementing works were increased environmental and financial sustainability; the ability to maintain or enhance performance programmes by attracting leading artists; and greater accessibility to diverse audiences.

> *"A capital investment to bring [the building] up to a modern standard would unlock opportunities to earn additional income from audiences through increased ticket sales and ancillary income and to attract private hirers. Facilities for disabled people would be improved, as would working conditions and staff and public safety levels. Investment would allow us to get closer to decarbonising the venue and reaching net zero within the operation. Costs in maintaining aged elements of the building would reduce for a considerable period as well as costs for energy to run the venue. The building would be safely preserved as the cultural resource and unique heritage asset it is."*
>
> Performance venue, South-East

> *"Life safety systems would be robust and meet current guidance, protecting the safety of our staff and visitors. Upgrades to show infrastructure would enable us to have more flexibility to put on shows which meet modern standards and expectations. … Upgrades to building infrastructure would enable us to be more proactive rather than reactive, there would be a direct financial benefit as this would reduce running costs (both operational & energy)."*
>
> Theatre, Greater London

> *"[We would] retain our position as a leading arts centre in Europe continuing to underpin the wider UK cultural ecosystem (circa 100,000 creatives per annum)."*
>
> Performance venue, Greater London

5.2 PLACES OF WORSHIP

5.2.1 Condition and Repair Needs

Places of worship had the most extensive condition problems, with significantly more buildings reported to be in poor or very poor condition (46% relative to an average for all venues of 23%), and fewer in good to very good condition (36% relative to an average of 23%).

Masonry repairs, external and internal, represent the single highest category of expenditure for places of worship as a whole. Nearly half of respondents reported planned works to walls and also reported high projected average five-year spends on these works, at nearly £1 million. This is more than three times as much as theatres and nearly nine times as much as heritage destinations. They had the longest periods between major renovations, with 40% reporting that there have been no significant works for more than 30 years and a further very large proportion of respondents uncertain as to when this last happened.

The long periods between, and high costs of, works to walls almost certainly reflect the prevalence of highly durable but often heavily decorated and in many cases ancient, masonry elements, that need infrequent but very extensive and expert repair to very high standards. This is particularly the case with cathedrals, which reported exceptionally high planned expenditures. Presumably at least in part because of the high costs involved in masonry repairs, some respondents reported that they were only in a position to carry out patch repairs.

Places of worship were almost as likely as theatres to say that they expected to carry out planned and funded structural works. They also reported high expected expenditures, at an average of £1.3 million. Explanations given by some respondents suggest that the need for substantial structural work is particularly associated with repairing towers. These are both common features of cathedrals and churches and liable to more extreme and potentially dangerous forms of structural failure than most other built forms. The need for extensive work at height, with associated need for particularly complex scaffolded access, greatly increases the cost of preliminaries for tower works.

Places of worship were also the most likely destination type to be planning works to building services (more than 40% of respondents). They also reported by far the highest anticipated average spend, of nearly £1 million over the next five years. In combination, these findings are likely to reflect the Church of England's ambition to reach net zero carbon by 2030, as well as broader imperatives to reduce energy costs at a time of significant energy price inflation.

This ambition is particularly challenging for traditional places of worship. Their size, materials, large window areas and high heritage significance make them particularly difficult to modify to improve thermal performance. Unlike other venue types, in traditionally constructed places of worship there are relatively few opportunities to improve thermal performance through window works. Most expenditures are likely to be limited to 'as existing' repair, maintenance and conservation, rather than upgrading.

This is especially the case as places of worship were by far the most likely to report long periods, and least likely to report short periods, since the last major replacement or refurbishment works to windows were carried out. In this case, well over 50% of respondents reported that it was more than 30 years since substantial works took place. In part this must reflect the highly durable materials that cathedral and church windows tend to be made of. Stone tracery and leaded windows in most cases need only very infrequent repair. Nevertheless, places of worship were also the most likely of all venue types to report planned works. Though the disparity with other types of destination was less marked than with planned works to walls, it still suggests that condition issues are more extensive in places of worship.

> *"[The west window has recently been repaired at a cost of £125,000 and the east window is in a similar condition as are all the clerestory stained glass windows. Failure of these windows may result in the church being unsafe for public access. Grant monies will be needed to help finance the cost."*
>
> Performance venue, Greater London

A great deal of time and highly specialised expertise is required for stained-glass window repair, which can result in very high costs; one respondent anticipates costs of £2m for repair of two stained glass windows. Where upgrading does take place, this is likely to be secondary glazing to protect artistically important stained-glass windows from weather damage. Where this is the case, the glazing cavity is generally fully ventilated to the exterior, meaning that it has few thermal or acoustic benefits.

The main focus therefore has to be on introducing more efficient heating systems, such as ground or air source heat pumps. These may be installed in conjunction with underfloor heating pipes, to maximise radiated heat, and photovoltaic panels, to reduce mains electricity consumption. These are costly to install but cheaper to run. Many responses from places of worship to open questions on heating systems showed that there was a basic tension between improving environmental performance and the high installation cost of sustainable heating systems. Where funding is short, it can be difficult to realise the long-term benefits of low running costs that entail higher up-front investment.

Other significant areas of expenditure included roofs. The oldest roofs are found on places of worship, with nearly half reporting that it was more than 30 years since their last major works of refurbishment or replacement. Places of worship reported the greatest inconsistency in intervals since the last major intervention, potentially implying a more reactive approach to repair and maintenance. As with other aspects of church architecture, the materials used for roofs – notably lead sheet – tend to be highly durable but also to need comprehensive renewal when they do begin to fail.

> *"We have already restored 3 of the 11 roof slopes and have fully developed plans to restore another six slopes in a seriously bad condition … if the National Lottery will give us a grant. We have already been turned down three times so are not hopeful."*
>
> Major church, South West

> *"Total replacement of the leaded roof, plus roof timbers if damaged by the ingress of water. Not yet costed but will be a substantial expense."*
>
> Major church, East of England

Places of worship also report having by far the oldest rainwater goods, with nearly 40% saying that they have not been replaced in the last thirty years or more. Issues with roofs and rainwater goods were frequently referred to in open response questions. Climate change was noted by some respondents as a significant factor in plans to change rainwater goods and exterior drainage.

> *"They [existing rainwater goods] are not coping with the amount of water and so we will be making changes."*
>
> Major church, North West

Places of worship are redecorated least frequently of all the venue types, but the open responses suggest that when redecoration is needed it often requires complex work and specialist skills, with correspondingly high costs. There were, however, several churches and cathedrals that planned very costly interior works. These generally fell into two categories: large-scale, long-term interior restoration by cathedrals and very large major churches; and comprehensive internal reordering schemes to adapt traditional church interiors to make them more flexible and welcoming.

Type of works by element	Mean expenditure (£)	Total value - national (£)
Walls	983,362	133 million
Building services	956,583	107 million
Interior works	444,250	50 million
Structural components	1,340,750	50 million
Roofs	411,472	35 million
Other external components	225,748	28 million
Windows and doors	210,439	23 million
Rainwater goods	56,216	3.7 million

In spite of the high planned expenditures on multiple categories of works, places of worship also report the highest value of necessary but unfunded fabric repairs. This is consistent with the generally poorer reported condition of cathedrals and churches. It also further substantiates a pattern of polarised experiences, with some venues clearly doing well and feeling confident to undertake ambitious and costly interior schemes, and others struggling to maintain the basic building envelope in sound condition.

5.2.2 Reasons for Disrepair

Places of worship were the most likely of the three destination types to report that repair and maintenance of their building was a high priority. However, it also appears to be even more challenging for them to translate this priority into the reality of comprehensive, proactive repair and maintenance.

This primarily reflects financial issues. Places of worship were most likely to report operating in deficit, with 56% in the red. They are also the most reliant on reserves to meet building needs, with 80% of respondents drawing on them to finance repair, maintenance and renewal. The capacity to generate alternative income is often more limited than in other destination types, with commercial income being less frequently reported. Places of worship also have limited capacity to charge for entry, which is largely restricted to a small minority of high-profile places of worship, mostly cathedrals. More commercial types of operation are often possible, but unless there is funding available to develop high-quality hire spaces, the income that can be generated is liable to be limited. Even more than with other destination types, building works tend to be dependent on successful fund-raising or grant applications or attracting philanthropic support.

However, places of worship also reported the highest levels of confidence that they would be able to generate additional future funding for repairs and maintenance. This may reflect the establishment of more formalised, coordinated repair and maintenance approaches due to the implementation of the recommendations of the Taylor Review. This includes allocated funding from the Church Commissioners for minor and major repairs, which are currently being allocated to the Church of England's dioceses.

There were also a group of churches that did not seem to have particular issues with conditions. In some cases this was because endowments or special charities provided income specifically for fabric repair and maintenance. At times, these were on their own sufficient to cover all reasonable fabric needs. Other places of worship clearly had active and generous congregations or wealthy individual donors. It seems to be in these contexts that major interior works are most frequently planned and funded.

While financial challenges were widely reported, respondents do appear to have a good understanding of their building's condition. More than 90% of places of worship had a recent condition assessment undertaken, in almost all cases, by an architect. This directly reflects the statutory requirement for inspection introduced by the Inspection of Churches Measure 1955 and its revised successor, the Care of Churches and Ecclesiastical Jurisdiction Measure 1991. These introduced a legislative requirement for quinquennial inspections (five-yearly condition assessments) by an architect with relevant expertise. In the case of those few churches without a recent quinquennial inspection inaccessibility of expertise was mentioned, in addition to cost, as a barrier.

Although most places have a condition survey, relatively few included a costed repairs schedule. Without at least an indicative estimate of costs of repairs it can be difficult to plan their implementation effectively. Many places of worship did report having a maintenance plan. Nevertheless, the open responses to questions about how repairs and maintenance are prioritised suggested that in many cases condition surveys did not, in themselves, lead to systematic prioritisation. Lack of funds to implement structured repair programmes meant that a reactive approach continues to predominate in many places.

Churches, like other destination types, also stated that there were competing priorities that could become barriers to effective repair and maintenance. Outreach is a major priority, cited by 58% of churches compared to 36% of theatres and 27% of heritage destinations. Maintaining or enhancing event programmes is a less frequent priority (47% of places of worship compared with more than 70% of both theatres and heritage destinations) but remains important. Many churches act as cultural centres and host concerts, art exhibitions and other events.

Finally, some Anglican churches reported external barriers to implementing planned works. The most significant is the need to obtain a faculty for any changes and, in particular, the right of multiple interest groups to object to changes. It should nevertheless be borne in mind that such consents often form an important part of the national framework for protecting heritage assets.

5.2.3 Impacts and Benefits

When asked what the condition of the building would be in five years if current repair and maintenance budgets remain stable, the proportion in poor or very poor condition was expected to increase by about a quarter. This is a smaller proportional increase than the other destination types anticipated. However, the relatively high baseline proportion of buildings in poor or very poor condition (at around 35%) means that the absolute proportion of places of worship in the lowest condition categories would still be higher, at 45%, than with theatres and performance venues at 30% and heritage destinations at 32%.

> *"The church might be described as shabby at present, and without non-urgent but necessary works it will deteriorate further and appear neglected and in decline. It is more difficult to attract and retain members of the congregation in these circumstances and we would expect numbers to reduce, leading to a vicious circle of reducing income and ever poorer maintenance. Without adequate funds for maintenance, this church would have to close."*
>
> Major church, Yorkshire & the Humber

> *"Inability to generate sufficient funds to maintain the church is causing on-going deterioration. Income £140000 pa Running expenditure £170000 depleted reserves to £50000 currently (lifespan 2 years currently so no latitude for other than emergency repairs). … If the roof deteriorates further, the building would become unusable suddenly and deteriorate to an extent where no refurbishment options would be viable."*
>
> Major church, South West

> *"Further deterioration of structure, further loss of amenity for visitors (being dripped on), further loss of attractiveness as a viable venue."*
>
> Major church, North West

Respondents were also asked about the benefits of being able to carry out necessary repairs. The answers were diverse, but focused on the intrinsic value of preserving the architectural and historical significance of important heritage buildings; on enhanced ability to reach and serve the surrounding community; and the ability for more use of the building, for worship, for income generation, and for cultural activities.

> *"Maintain availability to a large cross section of the community for a variety of needs and purposes relating to tourism, heritage, charity, arts and culture. Ability to continue to generate income from lettings."*
>
> Major church, East Midlands

> *"The church acoustic has been commented on by professional opera singers recently as ideal as a concert space. Safeguarding this heritage building could invigorate the … area as a centre of the arts (reference] churches as classical/folk music centres). The five-aisled church can include art gallery/historic archive displays suitable as a tourist venue."*
>
> Major church, South West

> *"The ability to provide greater community outreach and attendance at the Cathedral. … Financially we would be able to put more resources into addressing long term maintenance deficits and begin to get to a more manageable maintain-and-care rather than emergency repair scenario."*
>
> Cathedral, Greater London

5.3 OTHER HERITAGE DESTINATIONS

5.3.1 Condition and Repair Needs

The heritage destinations that participated in the research were an extremely diverse group. The largest single group of responses from a single destination type came from non-accredited museums and art galleries, but the remaining responses included historic houses, historic railways, historic zoos, vintage cinemas, ancient monuments, multi-arts centres, libraries, textile mills, historic windmills, and heritage centres.

Like theatres, these varied destinations are mostly income-generating sites, with ticket sales providing a steady revenue stream that can help provide a budget for repair and maintenance works. With this, though, comes a strong concern to maintain uninterrupted operations both to ensure both visitor access and experience and continuity of revenue flows Like places of worship, they often rely heavily on local volunteer labour, in some cases have endowments to help with funding core operational costs.

Overall, the condition of buildings in this category lay between that of the two other destination types considered in the research: better than places of worship, but not as good as theatres and performance venues.

However, some venues were clearly in a difficult situation. This especially appeared to be the case with non-accredited museums in the sample.

> *"We are between a rock and hard place. We are fulfilling the social functions that the state has abandoned but remain vital. Spending a few hundred thousand pounds with us at the frontline has a massive impact not only in enriching people's lives but in the basic services people need to feel part of society … we make a real difference to people's lives. And yet we are crumbling."*
>
> Non-accredited museum, East of England

Specific areas of future planned and funded expenditure were asked about in the questionnaire. Taken at face value, the survey data suggested a much higher projected spend on interior works among heritage destinations than other venue types, with an average spend by organisation planning such works of nearly £1m, giving an extrapolated national value of more than £100m.

This figure may be overstated, however. Even though the base of respondents was reasonably high, it may not be fully representative due to the very high projected spend of more than £15 million at one, very large and complex heritage destination with planned expenditure.

Treating this as an outlier and excluding it completely would reduce the mean average spend to £172,071 per destination and would reduce the extrapolated national expenditure over the next five years to just under £19 million. As cross-checking of recent expenditure at the outlier destination suggested that its figure was realistic, it would then need to be reincluded within the national total, raising it to around £35 million. This would still likely be a substantial underestimate, as there would still be expected to be large-scale works at other large destinations that this estimate would not account for. It nevertheless offers a useful lower bound.

Even at this level, interior works would remain the highest category of average spend for individual venues and also still be the second highest when extrapolated nationally. This accords with heritage destinations' need to focus on attractive internal presentation and high-quality visitor facilities, as visitor experience at these kinds of assets is more likely to be influenced by the physical environment itself or the collections it houses rather than by events held within it.

Building services also emerge as an area of particularly high planned expenditure. This is not unexpected given the current financial and environmental imperatives to increase energy efficiency, as well as the need to ensure that public-facing organisations have appropriate health and safety, security and fire systems in place.

Type of works by element	Mean expenditure (£)	Total value - national (£)
Roofs	184,500	19 million
Windows and doors	96,857	7 million
Building services	588,000	68 million
Rainwater goods	14,500	0.9 million
Walls	112,289	11 million
Other external components	61,000	6 million
Interior works	933,976*	102 million*
Structural components	79,571	2.9 million

* Please see the main text for discussion of this figure.

5.3.2 Reasons for Disrepair

As with other destination types, finances were reported to be challenging for many heritage destinations. The main barriers to effective repair and maintenance were said to be insufficient financial resources and difficulty accessing grant funding. The proportions giving these explanations were, however, lower than for the two other destination types.

At 34%, approximately the same number of heritage destinations reported being in deficit as theatres and performance venues. However, there was a relatively large number of 'Don't Know' and 'Prefer not to say' responses from heritage destinations, amounting to 17% of responses, compared to 7% from both other destination types. If the proportions are rebased to remove these, then the proportion in deficit becomes 56%, nearly as many as places of worship, which when similarly rebased becomes 60%, while the figure for theatres and performance venues becomes 36%.

The proportion of heritage destinations in surplus was 19%, closer to the 16% reported by places of worship than the 27% of theatres and performance venues. When rebased to exclude 'Don't Know' and 'Prefer not to say' responses, however, the proportion becomes 23%, a proportion that lies exactly between the correspondingly rebased figures for the two other destination types.

As with other destination types, heritage destinations reported downward pressures on almost all income streams over the last five years. The only revenue stream reported by a substantial proportion (37%) of venues to have increased was commercial income. Interestingly, this was similar to the proportion of theatres and performance venues. However, the proportion that had seen commercial income decrease was very close to that seen in places of worship, in both cases around a third of respondents, compared to more than 40% of theatres and performance venues.

A greater proportion of heritage destinations anticipated decreases than were anticipating increases in future public and charitable funding. The situation was the opposite with commercial and fundraising income. Nearly 60% of heritage destinations expected commercial income to increase somewhat or substantially, the only category where more respondents from this type of site expected future increases than decreases. Nearly 42% expected income from fundraising and philanthropy to increase, but this is approximately the same proportion of respondents who expect it to decline. Given the preponderance of decline over increase in recent years, and the expected continuation of the current challenging economic situation at least in the short to medium term, these expectations may be optimistic.

As with theatres and performance venues, around 75% of heritage destinations had seen the cost of repair and maintenance increase in recent years.

> *"Falling attendances and increased costs as a result of pandemic and cost of living are depleting reserves and resulting in hand to mouth existence just to keep functioning."*
>
> Heritage destination, East of England

There appears to be a fairly even split between those heritage destinations that do and do not have a condition survey. Those heritage destinations that reported not having a condition survey were most likely to cite cost as the reason. Of the remainder, some claimed that a survey was not needed, for example because they felt that they had sufficient in-house repair and maintenance expertise to identify and manage issues. Even so, this suggests that there is a large group of heritage destinations that lack a detailed understanding of the condition of their buildings.

Where a condition survey is in place, it is most likely to be undertaken by an architect or building surveyor. The majority of these destinations' condition surveys include a costed repair schedule. As with other destination types, around 40% of heritage destinations have an asset management plan or estates strategy in place. As with other venues, the impression is of an approach to repair and maintenance that is driven primarily by compliance (especially health and safety) and addressing urgent needs.

Like theatres and performance venues, a majority of heritage destinations reported competing priorities as a barrier to effective repair and maintenance. More than 60% said that they need to prioritise other areas of expenditure. As with theatres and performance venues, the top competing pressures were the need to maintain and enhance the destination's events programme, expand visitor numbers, and retain or grow staff numbers.

> *"Due to the scale of the organisation there is always a need to balance spend on maintenance and conservation against wider organisation priorities."*
>
> Historic monument, Yorkshire & the Humber

Heritage destinations were also more likely than theatres and performance venues, and much more likely than places of worship, to say that the lack of a ring-fenced repair and maintenance budget was an issue, with a third mentioning this.

In addition, more than 60% of heritage destinations had seen the intensiveness of repair increase. In many cases this was accounted for as a result of past underinvestment leading to growing problems that were now serious, so that addressing them could not be deferred any longer.

> *"The building has only had superficial maintenance over the last twenty years. And eventually ad hoc patching doesn't cut it."*
>
> Non-accredited museum, East of England

A combination of restricted funding, diversion of resources to competing priorities, and the resulting tendency to underinvest in repair and maintenance has left a substantial minority of heritage destinations with serious backlogs of repair. In some cases addressing these can no longer be deferred, leaving organisations with a combination of increased repair, maintenance and renewal loads at a time of declining incomes and rising costs.

5.3.3 Impacts and Benefits

Respondents were asked what they would expect the condition of their venue to be in five years' time, if repair and maintenance expenditure remains stable. While there was expected to be only a small decline in the number of properties in good or very good condition, respondents suggested that there would be a 39% increase in the number in poor to very poor condition. This represents less than half the proportional increase in theatres and performance venues but considerably larger than the 25% expected for places of worship. If this were to happen, nearly a third of heritage destinations would be in the two worst condition categories.

When asked to explain what would happen if needed works could not be carried out, respondents cited a wide range of impacts on operational effectiveness, building fabric, collections and revenue generation.

> *"Loss of tenants due to the building being too cold to work in (approximately £30,000 per annum lost income). Car parks are too dangerous to use. Visitors put off visiting as the building was too cold and damp (approximately £50,000 per annum lost income). Loss of income resulting in staff redundancies and less employment for our local area. No lift - not accessible to all. Leaking from roof and windows causing damage to artists' work, loss of commission from sales or inability to book in exhibitions resulting in decrease in visitor numbers and income as nothing to see (approximately £10,000 in donations a year)."*
>
> Heritage destination, North West

> *"Eventually the building would have to be put out of use if the leaks continue to worsen. The building is used as our Visitor Centre, cafe, meeting and events building and would therefore result in a reduction in income. The fabric of the roof structure (although not the main beams) will be adversely affected."*
>
> Heritage railway, South West

> *"Continued water ingress affecting and damaging the interior structure, decorations, chattels, art and visitor route. The longer it takes to address the problems the greater the costs."*
>
> Historic house, East of England

When conversely asked to consider the benefits of being able to undertake needed works, a similarly broad range of benefits was described. These included sustaining cherished heritage assets, operating more effectively and sustainably, both financially and environmentally, and generating wider social and economic benefits.

> *"We are a building-based organisation and being able to fund the necessary repairs will give us financial sustainability and resilience, as our business model can be improved with a few tweaks to our building. Non-financially, we give over 100,000 children and families a year experiences that build their creativity, confidence and connection and make a significant contribution to the economy [in the area] through employment, services and visitor spending elsewhere."*
>
> Non-accredited museum, Greater London

> *"This work would remove the risk of venue closure, risk to buildings and collections, and long-term damage from water ingress. It would offer a more long-term solution to ongoing issues throughout the building caused by water ingress."*
>
> Non-accredited museum, East of England

> *"We would be able to increase accessibility to our building. We would be able to increase the auditorium size enabling us to programme a wider range of more financially attractive acts. We would be able to safeguard one of the oldest cinemas in the country for generations to come."*
>
> Historic cinema, South West

SECTION 6.0: CONCLUSIONS

6.1 SCALE OF THE REPAIR AND MAINTENANCE BACKLOG

- The analysis has identified a total sector repair, maintenance and renewal backlog conservatively estimated at more than £7 billion, with at least £3 billion in outstanding urgent works, of which some £2 billion is currently unfunded.
- These figures are based on the completed questionnaires received for 324 venues and extrapolated to the whole sample frame of around 1,580 venues.

6.2 LIMITATIONS OF THE RESEARCH

- It is inevitable that some in-scope venues have not been included in the sample frame due to the relatively short period available for preparing the dataset and the absence of reliable datasets to work from.
- However, precisely because the sample frame is not a comprehensive dataset of all in-scope venues, the repair need estimates should be understood as a conservative estimate.
- There were also found to be some inconsistencies in the self-reporting of costs in the survey responses. While these were addressed as far as possible during data-cleaning, these cannot realistically be completely eliminated.
- The exclusion of privately-owned venues means that a very significant proportion of the nation's cultural offer has not been considered by this research.
- As a 'point in time' assessment of the repair and maintenance backlog, it has not been possible to objectively measure trends. It would be desirable to refine and repeat the survey periodically so that the current data can be built into an evolving assessment of trends, issues and needs across the whole of the cultural sector.

6.3 CONDITION OF ASSETS ACROSS THE IN-SCOPE DESTINATIONS

- Across all destination types, only a minority of buildings are in good condition, and most either have significant condition problems or are at potential risk of developing them.
- There are high levels of disparity in the condition of structures and infrastructure between the three destination types, including a marked contrast between the condition of theatres (39% in good condition) and places of worship (24% in good condition).
- The proportion of listed places of worship in poor or very poor condition is higher than other destination types. There is also a much higher proportion on the Heritage at Risk Register than for other types of heritage destinations. In contrast, very few of the theatres in the sample frame are included in the Register.
- The age of the building is not a reliable indicator of its repair liabilities; in fact some of the most acute problems concern the buildings constructed in the post-Second World War period, especially those built with untried techniques and materials. The cohort of lottery-funded buildings which date from around the millennium are also beginning to reveal their defects and to require renewal of their building services.
- There are real risks of closure or restricted access due to disrepair and health and safety concerns. The resulting pressures on operations and associated high levels of stress on staff were a palpable concern from respondents. There is a consistent sense that building issues are now becoming a significant distraction from the core mission of many respondent organisations.

6.4 FINANCIAL PRESSURES

- The survey responses provided direct evidence of the importance of financial state as a major factor influencing repair and maintenance. There is broad correlation between the proportion of organisations reporting a financial surplus and the proportions reporting buildings in good repair, and broad correlations between the condition of basic building types and the financial state of the relevant sub-sector organisations.
- There is clear evidence of precarious finances in many respondent organisations, with evidence of significant and continuing efforts to maximise alternative sources of revenue.
- In particular, the stakeholder interviews and a number of open responses from the survey testified to a strong pressure to operate in a more commercial way as a way of compensating for declining public and charitable funding. In line with this, commercial income was the only form of income that a substantial minority of respondents expected to increase. However, there is anecdotal evidence that a focus on income generation can distract attention from building maintenance whilst increasing wear and tear.
- In addition, it is not clear that respondents' hopes of increased commercial income are realistic given that the anticipated increase in commercial income is taking place against a backdrop of increased pressure in both public and private finances due to inflation. It is consequently not clear whether this will be sufficient to compensate for frozen or declining other sources of income. It is also important to note that a substantial group of venues expect stable or declining commercial income.
- It therefore seems that a substantial number of in-scope organisations will experience significant challenges meeting essential repair and maintenance needs, with potentially serious implications for building condition.

6.5 FUTURE FUNDING AND FINANCIAL VIABILITY

- Lack of funding has been identified as the most significant obstacle to keeping cultural assets in good repair. There is great uncertainty about how future repairs can be funded. The expectation from venues responding to the survey was that current levels of repair and maintenance are insufficient to prevent significant deterioration. This applies to all venue types, but especially to theatres.
- Responses show that it is consequently hard to access and raise funds for the venue's core needs, as one-off funding is often prioritised for a particular project or focused on making an impact, rather than for operational costs, or to carry out repairs and maintenance of existing infrastructure.
- The MEND fund for accredited museums has demonstrated how government funding can be targeted at the repair of building fabric. A comparable scheme aimed at other types of cultural asset would be highly effective – indeed essential - in tackling the immense scale of backlog repairs identified in this research. In developing such a scheme, it would be necessary to consider what types of work and what types of cultural assets would be eligible. For example, whether it would be restricted to listed buildings and/or to registered charities and social enterprises.
- Addressing the repair and maintenance backlog effectively on a sector-wide basis is likely to be challenging while grant funding remains limited and is usually tied to non-fabric related audience development and the creation of new facilities. In overall terms, the survey points to a need for a re-appraisal of the funding systems and support networks for cultural organisations.

6.6 PREDICTED COSTS

- Forecast costs in condition surveys have a tendency to underestimate actual costs. Once funds have been secured and time is available to specify the repairs in detail, actual costs can start to exceed the original estimates by a wide margin.
- The actual costs of repair projects are often increased by associated costs such as scaffolding, contractors' overheads, inflation, VAT and unforeseen defects revealed once a project has started.
- In addition, actual repair costs are likely to exceed forecast repair deficit due to the need for emergency repairs following extreme weather events.

6.7 DIFFERENCES BETWEEN BUILDING ELEMENTS

- Roofs, windows and doors are the basic 'building envelope' elements of a building. If they are not in good condition, they can lead to progressively worsening deterioration.
- Particular problems were reported in the survey responses with building services and technical systems, notably plumbing and drainage, lifts and ICT (Information & Communication Technology) systems.
- Heating systems, though often functionally adequate, were reported to be a source of particular concern. Their renewal is often a priority in order to meet carbon reduction targets.

6.8 DIFFERENCES BETWEEN VENUE TYPE

- There are clear differences between the three main categories of venue (theatres & performance venues, places of worship and other heritage destinations). The overall picture appears to be polarised, with some venues maintaining their buildings on a 'plateau' of good repair whilst others are only just managing to do this or see their buildings in declining condition. This situation is likely to become more serious without intervention.
- Churches and cathedrals have a stronger foundation of understanding for defining and addressing building condition, but report being in significantly worse average condition and having fewer resources than other venue types.
- Theatres and performance venues report being in better overall condition, and are subject to more day-to-day monitoring and routine repair and maintenance practices. However, theatres reported acute challenges with technical infrastructure, with 'run to fail' being a frequent default approach.
- Destinations that are seeking to draw more visitors will want to ensure that their venue has a good internal appearance to ensure that they remain attractive in a competitive marketplace. There is, however, a risk that this may lead to a misallocation of scarce resources away from repairs, maintenance and renewal.

6.9 PROCUREMENT

- Unsurprisingly, larger organisations are more likely to have in-house capability or resources for effective management of their buildings. The challenge of procurement is most acute for small organisations such as churches and non-accredited museums which are least likely to have the capacity to procure works.
- Anecdotal evidence from local authorities suggests that they are not always able to procure appropriate specialist conservation skills for repair and maintenance of their cultural assets. This can be for various reasons including the lack of necessary skills in the marketplace, inflexible procurement rules and a lack of in-house expertise to define what is required.
- One potential solution would be to establish regional frameworks for the procurement of specialist professional services and specialist repair skills. This could allow local authorities and third-sector organisations to obtain these services without having to embark on a complex procurement process.

6.10 VALUE ADDED TAX (VAT)

- Currently there is no VAT relief for repairing, renovating and retrofitting existing buildings, or indeed repurposing them. Historic England is looking at whether it may be realistic to develop a case to government (DCMS and HM Treasury) to reduce the VAT costs associated with such works and thus to reduce the incentive to demolish and rebuild.
- Although zero-rating works to cultural and heritage assets may not be practicable, a more targeted approach such as a reduced rate of VAT for repairs to historic or listed buildings owned by charities could be a significant fiscal incentive for this type of work. The Listed Places of Worship Grant Scheme, administered by DCMS, already provides grants covering the cost of VAT on repairs for eligible listed places of worship. . The scheme could be extended to include a wider range of heritage assets and cultural venues.
- This type of relief could also be applied to energy improvements to eligible categories of building. A zero rate already applies to the installation of certain specified energy-saving materials in charitable and residential buildings.[01]

01 Note: This applies from 1 May 2023 to 31 March 2027 and thereafter a reduced rate of 5% VAT will apply

6.11 SKILLS & CAPACITY BUILDING

- The shortage of building management and conservation skills is a fundamental issue which has come up in all our discussions with sector organisations.
- The upfront costs and challenges of securing the expertise for diagnosing repair, maintenance and renewal needs are a significant barrier. In general, whilst organisations work hard to deliver their day-to-day value proposition on a limited budget by engaging volunteer labour and the community at large, most cultural operations do not possess in-house the required skill sets to define, plan, project manage and deliver repair projects. Even the larger organisations in this sector must turn to professional service companies to address this skills shortfall.
- Sector interview research suggested that there have been particularly significant problems in theatres with the loss of experienced buildings management and maintenance staff during the Covid closures.
- The skills needed are wide-ranging – they include surveying of historic buildings, energy assessments, maintenance of building services and specialised equipment, and practical conservation skills. There is a need for support to develop and maintain these skills across the whole of the cultural sector.

6.12 CONDITION SURVEYS AND BUILDING MANAGEMENT

- The great majority (93%) of places of worship reported having a current condition survey, whereas only 32% of theatres and 42% of heritage destinations reported having one. Condition surveys are a prerequisite of funding applications as well as for more general effective identification and prioritisation of works.
- The research has exposed the contrast between places of worship in the Church of England which have a long-established regime of periodic (quinquennial) condition surveys and other types of cultural venues, theatres especially, which are much less likely to have a recent condition survey. Major estate owners – notably National Trust, English Heritage Trust and Churches Conservation Trust - have each developed their own systems for periodic inspections.
- One of the lessons learnt is the need to ensure that the methodology is appropriate to what is needed – overly-detailed surveys can be expensive to procure and may result in excessively 'dense' information. It is important that surveys are carried out by suitably experienced professionals e.g. accredited conservation architects/surveyors for surveys of historic and listed buildings.
- There is potential for new guidance to help building managers and surveyors in producing effective and consistent types of survey for particular types of building, such as historic theatres.
- There was clear evidence, across venue and organisation types, that the primary approach to building maintenance is reactive rather than proactive. Very few respondents made reference to planned preventative maintenance (PPM), except where health and safety, regulatory, legal or insurance compliance requires it.

6.13 SUSTAINABILITY

- The surveyed destinations, especially places of worship, showed high awareness of the need to improve their environmental sustainability. However, this requires investment to decarbonise buildings, including the high initial cost of more sustainable heating systems such as air-source or ground-source heat pumps.
- Maintaining built assets in good repair is a prerequisite for effective and sustainable management i.e. an approach of early intervention to remedy minor defects will help to avoid the need for more costly interventions at a later date, and to mitigate the risk of buildings becoming unsafe or unusable.
- Reducing energy use can be considered in tandem with repairs to building fabric repairs, and a more integrated approach would help to ensure that interventions are effective and appropriate. There is potential for more guidance on how these twin objectives (i.e. good repair and reduced energy use) can be delivered. Enhancing professional skills could help foster closer integration between building fabric surveys and energy audits.
- Pilot projects that demonstrate good practice in surveying buildings and upgrading their fabric have the potential for beneficial impacts, and could be particularly useful for buildings which are energy-intensive, such as theatres.

6.14 CLIMATE CHANGE

- Changes to weather patterns are having an impact on repair and renewal liabilities, both through the need to plan for increases in rainfall and the cost of repair following exceptional weather events.
- The existing drainage systems on many buildings are inadequate to cope with increased and intense rainfall, and the capacity of these systems needs to be increased, both above ground and below ground.
- Therefore additional investment is needed over and above like-for-like repair to upgrade these systems.

SECTION 7.0: REFERENCES, SOURCES AND ACKNOWLEDGEMENTS

7.1 ANNUAL REPORTS

Canal & River Trust Annual Report 2022-23[01]

English Heritage Annual Report 2023-24[02]

National Trust Annual Report 2023-24[03]

7.2 STRATEGIES AND PLANS

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- Churches Conservation Trust – Sarah Robinson
- English Heritage Trust – Rob Woodside
- Heritage Alliance – Lizzie Glithero-West
- Heritage Trusts Network - David Tittle
- Historic Houses - Ben Cowell
- Historic England – Dr Andy Brown
- Historic Environment Forum - Mike Heyworth

01 https://canalrivertrust.org.uk/about-us/annual-report-and-accounts
02 https://www.english-heritage.org.uk/about-us/annual-reports/
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