



Guidance on the Rationalisation of Museum Archaeology Collections

Prepared by Katherine Baxter, Gail Boyle, & Lucy Creighton for the
Society for Museum Archaeology on behalf of Historic England

Guidance on the Rationalisation of Museum Archaeology Collections

Prepared by Katherine Baxter, Gail Boyle, & Lucy Creighton for the Society for Museum Archaeology on behalf of Historic England¹

¹ Katherine Baxter, Honorary Secretary SMA; © Historic England 2018
Gail Boyle, Chair SMA;
Lucy Creighton, Honorary Treasurer SMA

Images reproduced on the front cover and pages 7, 14, 39 and 54 courtesy and © Leeds Museums and Galleries.

Image reproduced on page 34 courtesy and © Museum of London.

Design and layout by Maria Geals.

Contents

Introduction	4
Format	6
Guidance at a glance	7
SECTION 1: Practical delivery	14
Project Planning: what to consider before opening a box	15
Developing clear project aims	15
Establishing legal ownership	16
Identifying stakeholders	17
Identifying people who need to be involved	18
Thinking realistically about timescale and resources	18
Working within existing policies and procedures	20
Auditing collections	21
Preparing for audit	21
How much of the collection to audit?	21
What level of detail should be recorded?	22
Recording the collections audit	23
Limitations of existing data	23
Results of the audit	24
Assessing significance	25
Sampling strategies	25
Quality and completeness of documentary archives	26
Use of and engagement with archives	27
Condition of finds	28
Using criteria from other disciplines and policies	29
Using a ‘quality matrix’	30
Disposal	31
Methods of disposal	31

Contents

Creating a paper trail	32
Costs associated with disposal	32
Digitisation	33
SECTION 2: Space-saving solutions	34
Repacking and re-boxing	35
Investing in storage	36
Transfer to other institutions	36
Streamlining collecting for the future	37
Keeping up with changing standards.	38
SECTION 3: Case Study Summaries	39
Archaeology collections and staffing	40
Approaches to project delivery	41
The Scoping Exercise	43
Project results	45
Evaluation: benefit analysis	48
Project legacy.	49
Comparative table 1 – Collections and Scope	51
Comparative table 2 – The Scoping Exercise (stage 1).	52
Comparative table 3 – Rationalisation (stage 2) and Future Work	53
SECTION 4: Resources & templates	54
Selected Bibliography	55
Examples of significance methodologies	55
Templates	56
Acknowledgements	60

Introduction

Recent studies have clearly demonstrated the pressures that museums with archaeological collections are facing in terms of diminishing storage space, staff reductions and loss of expertise.² It is in this context that rationalisation is being increasingly suggested as one way forward to help alleviate the archaeological archive storage problem. Furthermore, the audits required by the rationalisation process are seen to be useful exercises in collections management since they increase knowledge of and access to collections. However, despite the potential value of rationalisation, little practical guidance exists for those wishing to carry it out and the overall efficacy of the process has never been fully assessed for archaeological material – until now.

Historic England's 'Scoping Studies and Guidance for the Rationalisation of Museum Archaeology Collections' project (2016-2017) responded directly to the need for practical information required by those considering reducing their current holdings as a means of creating room for new acquisitions.

For the purposes of this project the term rationalisation was defined as:

'...the application of agreed selection strategies to previously accessioned archaeological project archives, with the purpose of de-selecting parts of the collection and creating storage space.'

The Museums Association Disposal Toolkit (2014) articulates disposal as:

*'...the permanent removal of an item from a museum collection.'*³

It is important to note here that whilst one outcome of a rationalisation process may ultimately be the disposal of objects, rationalisation can also provide an opportunity to consider using material in new and different ways. Rationalisation should not therefore be considered synonymous with disposal.

The publication of the guidance provided here marks the final stage of this hugely informative and collaborative project. It was delivered in partnership with the Society for Museum Archaeology (SMA) and five institutions in England responsible for the collection and care of archaeological archives.

The organisations chosen to undertake scoping studies funded by Historic England were:

- Museum of London
- Museums Worcestershire & Worcestershire Archive and Archaeology Service
- Stroud District (Cowle) Museum Service/Museum in the Park (Gloucestershire)
- Suffolk County Council Archaeological Archives
- Tullie House Museum & Art Gallery Trust (Carlisle)*

These organisations were selected on the basis of project designs submitted in response to Historic England's call for interest: they provide a good geographical spread and a range of collections type and staffing levels, whilst the collection issues they faced were clearly representative of those across England.

2 <http://socmusarch.org.uk/socmusarch/gailmark/wordpress/wp-content/uploads/2016/07/Archaeological-archives-and-museums-2012.pdf>

3 <https://www.museumsassociation.org/collections/disposal-toolkit>

Participants were asked to audit their holdings, to establish selection criteria and to estimate the resources required to deliver rationalisation to its conclusion. They were also asked to calculate the amount of storage space that would be likely to be created and to reflect critically on the whole process.

The guidance that has been provided here has been directly informed by the detailed case study reports that resulted from these scoping studies, as well as a joint participant workshop hosted by SMA. It has been written so that it may be of use to everyone responsible for the care and management of museum archaeology collections irrespective of their area or level of expertise.

The case study reports that describe the specific preparatory procedures undertaken by each of the participating organisations, the methodologies they used, the resources they required and their likely outcomes are all available to download in full at www.socmusarch.org.uk.

*For ease of reference the names of the participating organisations have been abbreviated within this guidance as follows:

- Museum of London
- Museums Worcestershire
- Stroud Museum
- Suffolk County Council
- Tullie House

Format

The variation that exists across the museum sector in terms of, for example, scale, resource and governance means that the guidance provided here does not take the form of a prescriptive ‘how to’ document but rather more a series of practical considerations. The intention is to highlight what should be taken into account before, during and after undertaking a rationalisation project, and to help museums to plan a project that delivers outcomes suitable to their own circumstances. It is worth reiterating here, that all five case study participants reported that a scoping exercise is worth undertaking in its own right, even if the result was to reject the delivery of a full rationalisation exercise that led to the de-accessioning, dispersal or disposal of collections.

A tabulated form of the guidance has been provided for quick reference: although this summarises the detailed and contextual information found in the main body of the text, it is not intended as a substitute for the whole.

The information is split into four sections.

Section 1 considers the main stages that a collections rationalisation project might entail.

Section 2 discusses space saving methods outside the scope of disposal.

Section 3 provides summaries of each of the five case-study reports.

Section 4 provides examples of templates and other resources.



Guidance at a glance

Stage	Task	Guidance
PROJECT PLANNING	Define institutional need & scope of project	Consider: • The problem that needs to be addressed. • The evidence which already exists. • The positive impacts of resolution. • How it contributes to meeting the needs of the Collection Development Policy.
	Develop clear objectives	Be S.M.A.R.T. - set Specific, Measurable, Attainable, Relevant and Timely goals.
	Establish legal ownership	Research: • Organisational record-keeping. • Potential sources of information. • Legislative frameworks. Gather and assess: • Relevant documentation.
	Working with stakeholders	Draw up a communication plan that: • Identifies internal and external stakeholders. • Timetable and delivery. • Methods of consultation, evaluation and feedback.
	Identify assets and constraints	Take account of: • Competing institutional work programmes. • Staff & volunteer workforce. • Access to equipment & resources including IT provision. • Expertise (internal and external). • Available budget. • Physical accessibility. • Health & Safety.
	Set a realistic timescale & budget	Take account of: • Availability of assets and constraints (identified as above). Draw up a Risk Register to identify: • Risks to successful project delivery. • The probable impact of each risk. • Measures to mitigate the risks. Build in elements of contingency time and money for each activity.
	Assess current policies and procedures	Take account of: • UK collections management standards (SPECTRUM). • Museums Association Code of Ethics & Disposal Toolkit (as well as supplementary guidance). • Organisational Collections Development Policy (Acquisition & Disposals). • Archaeological archive standards (e.g. ARCHES, SMA, CIfA). • Pre-existing documentation processes.

Stage	Task	Guidance
AUDITING COLLECTIONS	Preparing for audit	Get collections in an order that makes the auditing process as efficient as possible by: • Re-ordering boxes in store • Gathering existing data and documentation. • Addressing potential limitations of pre-existing data Establish a recording method – spreadsheets should be designed to be: • Compatible with Collections Management Systems. • Easy to search.
	How much of the collection to audit	Choose between: • Auditing the entire collection. • Adopting a strategic, targeted approach. Targeted approaches might focus on parts of the collection that: • Are less well understood. • Are thought to be over-represented by a particular material type. • May/should/could be transferred to other institutions. • Contain large, understudied assemblages.
	What level of detail to record	As a minimum make a record of: • Museum accession number/site code. • Site name/geographical information. • Material type. • Object type e.g. bulk or registered. • Number of boxes. • Space occupied on shelves e.g. box sizes. • Location in store.
	Audit results	More in-depth analysis is usually needed before rationalisation can take place. However, immediate candidates for rationalisation may be revealed: • Unprocessed bulk environmental samples. • Stonework with no provenance. • Unstratified or unprovenanced material. • Material that sits outside collecting policies.

Stage	Task	Guidance
ASSESSING SIGNIFICANCE	Understanding significance	Rationalisation projects should recognise that: • The significance of archaeological archives can be defined in multiple ways. The measure of significance may vary, for example: • Archaeologically before, during and after excavation. • Post deposition, since it may be altered by the result of research programmes or as the result of other excavations. • Relative to the overall museum collection and the material present in other collection disciplines. • Relative to its potential for display, for handling, for community engagement, learning or as a focus for creativity. • Between stakeholders. N.B The rationalisation of an archive should not be taken to such an extreme that it would make future reinvestigation of the original research questions impossible.
	Making assessments	Establish a method to undertake a ‘quality assessment’ of all or part of the collection – this may involve: • Adoption of a sampling strategy to investigate some archives in more detail. • Researching pre-existing methodologies used by other organisations/disciplines. • Producing a list of criteria against which archives can be assessed. • Employing the expertise of museum staff, field archaeologists, researchers and specialists. • Taking account of varying stakeholder interests.
	Criteria	Consider using a ‘quality matrix’ to record information acquired during the assessment process. As a minimum, examine and then rate each archive against criteria within the following categories: • Site information and provenance. • Quality/completeness of the archaeological archive (finds and paperwork). • Selection strategies previously applied. • Level of analysis, reporting, publication. • Historical/archaeological significance (locally, nationally, internationally, including association with people/events/monuments). • Packaging and condition of finds (including whether safe to store/handle). • Quality/value of the finds assemblage (rare/unusual, intrinsically or for interpretation). • Ownership/administrative status. • Recorded/potential uses for display, engagement or research. • Relevance to Collections Development Policy and other collection disciplines. N.B. Care should also be taken when using any form of matrix to produce an overall ‘score’ since it is unlikely that all elements of ‘quality’ that form its basis will carry the same weighting in the decision-making process.

Stage	Task	Guidance
DISPOSAL	Ethical disposal	Disposal should only be undertaken in accordance with all legal and ethical considerations as outlined in: • Museums Association Code of Ethics. • Museums Association Disposal Toolkit. • Museums Association supplementary guidance notes.
	Key considerations in the process	When disposing of material there should be: • A strong presumption for keeping items within the public domain. • A strong preference for free gift or transfer to other accredited museums and items should be offered to them in the first instance. Action should be taken to ensure continued public trust in museums by: • Being fully aware of actions that have the potential to result in legal, financial or reputational damage. • When in doubt seek expert legal advice and ensure reasonable due diligence can be demonstrated.
	Other limitations and restrictions	Anyone contemplating disposal should appraise themselves of restrictions placed upon this type of activity by: • Specific forms of organisational governance and associated legislation such as charity law. • Legal frameworks governing, for example, the recovery and ownership of archaeology, Treasure and Human Remains. • The Museums Association Disposal Toolkit and Code of Ethics which specifically identify the circumstances when disposal is considered to be unacceptable.
	Methods of disposal	Disposal of archaeological material should not be allowed to contribute to the future contamination of the archaeological record. Disposal may be achieved by: • Free gift or transfer to another Accredited museum. • Exchange of items between museums. • Free gift or transfer to another institution/organisation within the public domain (e.g. schools, colleges, community organisations). • Return to donor. • Sale of items to an Accredited museum. • Transfer outside the public domain. • Sale outside the public domain. • Recycling of items. • Destruction of items. Whilst controlled reburial may be an option permanent destruction (e.g. grinding to hardcore) may be the only solution.

continued overleaf

Stage	Task	Guidance
DISPOSAL <i>(continued)</i>	Documentation	All aspects of the disposal process must be documented to SPECTRUM standards. Create a paper trail that records: • Reasons for disposal. • Desired outcomes. • Opinions and advice considered. • Method of disposal. • Conclusion of process: retention, transfer, sale etc. • Any conditions attached. • Information and photographs relating to the item. • Documentation relating to transfer of title. • Note of any new location.
	Cost of disposal	Make allowances within the project budget for: • Staff time. • Administrative costs. • Equipment and materials. • Legal advice. • Disposal processes (e.g. destruction)
	Digitisation	The process of digitisation should be approached with caution: • It is time-consuming and requires specialist knowledge and equipment to produce high quality digital copies. • It should not be considered without provision being made for long-term curation of the digital assets produced. • All records produced this way should be deposited with an accredited Trusted Digital Repository such as the Archaeology Data Service. • Sufficient funds need to be allotted to production and deposition costs.

Stage	Task	Guidance
SPACE SAVING SOLUTIONS	Re-packing & re-boxing	Make the most use of space available on shelves: • By adopting modular box sizes. • Re-packing boxes to capacity and to current museum standards. • Storing multiple small site archives in single boxes.
	Storage systems	Investigate the provision of new storage systems: • Review and consider investing in roller-racking systems where these do not currently exist. Make the most use of pre-existing racking by: • Reviewing and adjusting shelf heights to accommodate the optimum number of boxes.
	Return or transfer	Consider returning the following categories of material (identified through audit) to their owners: • Material on loan (no longer required). • Material stored for 'safekeeping' on behalf of third-parties. • Un-accessioned material that does not come from the museum's collecting area and/or does not conform with the current Collections Development Policy. For accessioned material follow guidance provided in the Museums Association Disposal Toolkit.

Stage	Task	Guidance
FUTURE RESILIENCE	Streamline collecting & standards	Ensure staff: • Are conversant (and keep up to date) with standards for the creation, compilation, transfer and curation of archaeological archives. • Regularly review and revise institutional conditions of acceptance of archaeological archives. • Ensure appropriate selection strategies have been agreed with field units before archives are deposited. • Ensure archives are packed and documented to agreed modular standards. • Undertake training in the care and management of archaeological collections.



SECTION 1: Practical delivery

Section 1: Practical delivery

Project Planning: what to consider before opening a box

Collections scoping exercises and rationalisation projects are time, resource and cost heavy, whatever the size of collection and should not be entered into lightly. Careful thought and planning is needed from the outset to ensure the project meets its aims and is as efficient as possible.

Project plans will need to take account of the overall institutional work programme and the staff resource required, including time being set aside for the training and supervision of volunteers. Considerations relating to the impact of the time of year on working conditions, how resources or lack of access to them will affect progress and whether or not the projects will require phasing to be achievable, are all fundamental to the delivery of successful outcomes. Similarly, the way that archives are stored, their size and location, as well as the quality of documentation associated with them, will all impact on the time required to deliver the project and will also influence what can reasonably be achieved.

The five case study participants all produced plans that estimated the resource, time and therefore the cost of delivering a scoping study. Only one of the five (Stroud) sought to address the whole collection but the rest developed sampling strategies or other approaches to the scoping exercise, with the aim of delivering more cost-effective results.

This section outlines some of the practicalities to consider before a project begins.

Developing clear project aims

Scoping the collection is a valuable exercise in its own right. However, as has been demonstrated by all five projects, saving space may not be a realistic outcome. Communicating the likely outcomes and being realistic about what can be achieved is important. Positive outcomes outside the scope of reducing the size of collections may include:

- Increased knowledge of the collection.
- Improved documentation of the collection.
- Confidence to advocate the strengths of the collection.
- Better understanding of strategic collection needs and data to reflect this so as to enable forward planning and sustainability.

CASE STUDY COMMENT: AIMS

The overall aims of the project were as follows:

- *To create a methodology for assessing the collections and their potential for rationalisation based upon the quantity, quality, and significance of the material they contain.*
- *To identify areas of our collections that could be enhanced.*
- *To identify bulk finds that could potentially be de-accessioned and the resources required to follow this process through.*
- *To identify photographic material suitable for long-term curation and digitisation.*
- *To contribute to a review of our current collections policies.*

Suffolk County Council

- Increased ability to respond to enquiries/researchers
- Increased access to the collection

Establishing legal ownership

Establishing the legal ownership status of historically acquired archaeological material can be complex.⁴ It is important, both ethically and to avoid wasted time and effort, to ensure the institution holds legal title to material before considering it for discard.

Material that has been part of a collection for many decades cannot be assumed to be owned by an organisation and some investigation needs to be carried out to establish its legal ownership status. The practicalities of undertaking such an investigation, the amount of time it can take and the expertise of staff who might be called upon to assist should not be underestimated.

Standardised approaches to the transfer of archaeological archives were largely developed in response to managing the product of the developer-funded process after the publication of 'PPG 16' (Planning Policy Guidance Note 16, on 'Archaeology and Planning') in 1991.⁵ The transfer of archives before (and in many cases) after this date may have been documented in a variety of ways. Relevant information might be filed with correspondence in a paper archive, (for example, a letter from the landowner), or found buried within the museum's business archive.

Establishing an understanding of the history of record-keeping within the organisation and drawing upon the knowledge of long-standing members of staff may help locate relevant documents. Of the small sample of paper archives that the Museum of London assessed, most sites did not have a clear record of the transfer of legal ownership. However, if the time when deposited was taken into account, paperwork that inferred this transfer could be found. Depending upon the size and organisation of the paper archive, it took the Museum of London between 0.5–2 hours to assess the legal status of each site.

CASE STUDY COMMENT: LEGAL TITLE?

"Documentation of the legal and physical deposition of site archives has varied over the course of the organisation's history ... In addition, legal frameworks governing the recovery and ownership of archaeology, Treasure and Human Remains have also been subject to change over time. As a result, paperwork which reveals the legal ownership status of each site exists in a variety of places and formats ..."

"The absence of documents proving that the Museum has adequate title to an archive may mean that rationalisation is difficult, even if acceptable on archaeological grounds."

Museum of London

4 An updated note regarding Transfer of Title and Archaeological Archives is due to be published online by the Collections Trust mid 2018

5 <http://webarchive.nationalarchives.gov.uk/+http://www.communities.gov.uk/publications/planningandbuilding/ppg16>

Identifying stakeholders

Transparent and open communication is an important part of successful collections rationalisation. Deciding upon who should be informed and consulted at an early stage and developing a plan for how this can be achieved should help gain support for the project.

It is important to give consideration to organisations and different groups of people who might be affected by the rationalisation of the collections. It is useful to split stakeholders into two categories: those internal and those external to the museum. Communication with colleagues as well as appropriate management teams and governing bodies is key to seeing rationalisation through to conclusion. Consultation with the wider team may also highlight areas of expertise or experience that can be drawn upon. Stakeholders may include but are not limited to:

Internal

- Staff and volunteers within the organisation.
- Governors and trustees.
- Funders.
- Friends groups.

External

- The public (including community or special interest groups, communities living locally to the sites in question).
- Academics and specialists.
- Local or related museums and organisations.
- Commercial archaeological units.
- Development Control archaeologists.
- Advisory bodies e.g. Historic England, Museums Association.

Methods of engagement and the levels of communication required will differ between groups. All stakeholder engagement should be designed to be appropriate to particular audiences and realistic amounts of time and budget factored into the project delivery plan. Stakeholder consultation should be considered from the outset and not as an afterthought. It is important to be open and honest about the reasons for undertaking the project, what it is trying to achieve and to be prepared to make modifications as a result of comments or concerns that are received.

CASE STUDY COMMENT: STAKEHOLDERS

“As with all areas of museum practice it is important that museums ensure transparency and openness with the public, their colleagues and stakeholders.”

Museums Association, Disposals Toolkit

Tullie House planned for stakeholder consultation to form a major part of their project and identified a list of stakeholders from the outset including:

- *Carlisle County Council*
- *The Museum Trust*

And also consulted:

- *County Archaeologist*
- *English Heritage*
- *other local museums*
- *several commercial archaeological units*

Very few comments were received and only one concern was raised.

For the most part the case study participants did not consult with the wider archaeological community, or the public, since the purpose of their projects at this stage was not to undertake a rationalisation project to its conclusion.

Identifying people who need to be involved

Rationalisation projects may involve many people from both within and outside of the organisation: those who can or need to be involved will vary greatly depending on in-house staffing structures and areas of individual expertise. Breaking the project down into tasks during the planning stage will help to identify the number of people that are already available, how many people need to be recruited and also the level of expertise required for each stage.

It is vitally important to be honest about the level of specialist knowledge available in-house: some tasks will require more expertise than others. It is entirely possible some of this expert knowledge will have to be recruited externally and come with associated costs in terms of time and money. Consideration should be given to the:

- Recruitment/commissioning of external consultants and/or finds specialists.
- Recruitment and training of volunteers.
- Level of archaeological knowledge and assistance that may be available via local commercial units, from local societies and development control archaeologists.
- Possibility of pooling resources with other museums.

Museums Worcestershire acknowledged the benefits of having access to local specialist archaeological knowledge but noted this was a finite resource.

Thinking realistically about timescale and resources

It might seem obvious but it is important to think practically about the materials, facilities, location and timescale required to deliver the project well ahead of time. Practical considerations include:

- **setting a realistic timescale and identifying risks**

Most of the case study participant organisations did not have staff that could be dedicated to the delivery of one project to the exclusion of others: they had to balance the delivery of a rationalisation project whilst carrying out all other business as usual. Do not underestimate the time required to deliver a rationalisation project to its conclusion, which, in an ideal world, should be programmed to avoid competition with the

CASE STUDY COMMENT: EXPERTISE

Stroud Museum did not have the in-house archaeological expertise to carry out the required collection audit and assessment and so commissioned Cotswold Archaeology to do so:

“... the biggest expenditures would be in personnel – both in the experts needed to support us across the project and in back-filling curatorial time at the Museum so that other collections, enquiries and day-to-day tasks wouldn’t suffer as a result of this project being undertaken.”

Museums Worcestershire acknowledged:

“... the usefulness of knowledge available from local specialists and archaeologists who actually worked on the assemblages, as a rapid way to guide the assessment of some archives.”

delivery of other projects. The timescale of one case study project was affected when a project team member had to spend significantly more time than expected on a concurrent major exhibition. Several case study projects underestimated the scale of the work, which led to delays. In this respect, all rationalisation project plans should include a risk register that identifies risks to project delivery, the probability and impact of each risk and mitigation measures that will be required to reduce such risks. This will include building in contingency for additional time that may be required.

- **the realities of working in the store**

The delivery of a rationalisation project will inevitably involve prolonged working in storage areas and needs to be achieved as comfortably as possible: Museums Worcestershire identified that working in their main archive store over the winter was a specific risk to the project.

The store also needs to be equipped with all the facilities that are required to enable efficient recording of, and reference to, collections data. In such cases some modifications might be needed. Stroud identified that the lack of internet access in any of their storage areas would cause major problems for the audit. Lack of access to a sufficiently detailed and comprehensive database will necessarily impact on the time required to deliver the project: desk-based assessments can only be used to inform the project where archive records are detailed enough to enable this to happen.

- **physical accessibility as well as health and safety**

Tullie House encountered several unforeseen challenges related to their storage areas: material in their offsite store was moved to a new facility during their project lifetime meaning that the audit was interrupted and data could not be checked. Access to their main store was also curtailed when it was inspected and deemed a health and safety hazard. Both of these factors affected the quality and completeness of their collections audit. Risk assessments should be compiled for all tasks that the project will entail including for example:

- Working at height.
- Manual handling.
- VDU workstations.

Appropriate Personal Protective Equipment will also need to be supplied and should be accounted for within the project budget.

CASE STUDY COMMENT: PRACTICALITIES & RISK

“Parts of the main archive store are known to be uncomfortable for working in winter, so the countermeasure was to arrange audit at time of year when ambient conditions are suitable or to ensure appropriate PPE is worn and working conditions ameliorated as far as possible.”

Museums Worcestershire

“The provision of ICT access into the stores as part of this project was what made this viable, and an important legacy from the project is that this type of information will now be able to be recorded directly to the database at the time that archaeological archives are accepted in the future rather than allowing this sort of documentation backlog to build up again.”

Stroud Museum

- **the cost of additional materials and activities**

Costs other than those for staff time, recruitment and commissioning of specialists and the provision new IT equipment are very likely to be incurred. These may relate to providing new or replacement packaging materials (boxes, bags, labels, plastazote, acid free tissue etc.) as well as engagement activities that arise from the project itself. Hidden costs will also include general overheads.

Working within existing policies and procedures

Deaccessioning and disposal of museum collections is a SPECTRUM procedure and responsible informed disposal is recognised across the sector as an important part of active collections management.⁶ Museums should have a policy which covers disposal; this is often included in a Collections Development Policy. Such a policy may cover the principles of disposal (i.e. the reasons it should be carried out), the criteria against which collections should be assessed, priorities for disposal and references to professional standards and procedures that should be followed. As well as a policy, a museum may also have an established procedure against which disposal should be managed. (More detail on this can be found in the section on [Disposal](#) below).

Establishing familiarity with policies and procedures enables rationalisation projects to be framed by them from the outset. Demonstrating that a project will contribute towards meeting organisational strategic aims may help to foster support from management and governing bodies and result in more support and resources being made available. The timing of the scoping study worked well for Tullie House for instance, as drawing up a cross-collections rationalisation plan was a main strand of the strategic work that was required ahead of a store move.

CASE STUDY COMMENT: POLICES & PROCEDURES

Museums Worcestershire adopted a method of rationalisation that was closely in line with their established acquisition and disposals procedure. This procedure had already been approved by the Museums Association and had museum management buy-in.

“This approach ensured that the rationalisation process was based on existing procedures, and so could be most easily integrated into current museum practice.”

“A key aim within the Tullie House Museum 20:20 Development Plan is to draw up a collections rationalisation plan during the period of this Collections Development Policy. This will be particularly important in relation to transferring collections material from the external store at Shaddon Mill, the lease of which is due to expire in October 2016.”

Tullie House Museum

⁶ Spectrum is the UK collection management standard that is also used around the world: <https://collectionstrust.org.uk/spectrum>

Auditing collections

The starting point for any rationalisation project should be an audit of the collection and its associated documentation, to understand both what it consists of and its significance. All five case studies demonstrated the value of this and for the most part the scoping process itself enabled them to gain full listings of their holdings for the first time.

The time and resources required to undertake a collection audit can be onerous. It took Tullie House 117 working days to undertake the audit of their off-site store.

Preparing for audit

Some preparatory work may be necessary to make the auditing process as efficient as possible. This may entail, for example, the reordering of boxes so that complete site archives are stored together or boxes of material types being grouped together. Other key questions to consider in the planning stages are:

- How much of the collection can be audited?
- What level of detail should be recorded?
- What information already exists?
- How will the audit itself be recorded?

How much of the collection to audit?

Since collections audits are time and staff intensive an audit of an entire collection may not be feasible. The size of the collections being assessed by the five participant organisations, as well as the time allowed for the study, precluded all but one from assessing their whole collection. The four remaining case study participants targeted their collections strategically, meaning that each of the audits had a slightly different focus. Summaries of the approaches that were taken can be found in [Section 3](#) and the full detail published online at www.socmusarch.org.uk.

Stroud's scoping study tackled their entire collection. Being the smallest collection in the study this was more manageable, but they also felt the need to include antiquarian and chance finds as these took up more space in store than archives from developer-funded work.

CASE STUDY COMMENT: AUDIT

"It was understood that an assessment for rationalisation would necessarily begin with a simple audit of the collection and associated documentation, establishing what is actually in the boxes and assessing the scale of any problems alongside the scope for improvement and future usage."

Stroud Museum

"Given the vast nature of our archives and other pressures on staff time and the need to keep the archive accessible, compromises had to be made. The photographic archive was too large to be completely audited within the given six-month period, as a result of this we audited a sample of the slides in order to test our methodology."

Suffolk County Council

The Museum of London targeted material it identified as having the most potential for rationalisation, with a focus on bulk assemblages rather than registered finds or human remains. Large stonework and wooden objects were specifically excluded because these were less accessible.

The most effective parts of a collection to focus on will depend upon specific project aims but they may include:

- Parts of the collection that are less well understood.
- Parts of the collection that are thought to be over-represented by a particular material type.
- Parts of the collection that may/should/could be transferred to other institutions.
- Parts of the collection with large, understudied assemblages.

Documentary archives are unlikely to occupy large amounts of storage space: of the case-study participants only Suffolk County Council (see below) scoped these for rationalisation. Audits undertaken by case study participants were, therefore, focussed on the material aspects of archives with their documentary counterparts only being assessed to inform significance.

What level of detail should be recorded?

Collections audits are a process separate to museum cataloguing, which is carried out to fulfil different objectives. Attempting to record too much detail about individual objects at the audit stage may hinder the progress of a scoping exercise. However, it is important to capture enough information in order to facilitate assessments of significance. A high-level audit of archaeological material should capture the following information:

- Museum accession number/site code.
- Site name/geographical information.
- Material type.
- Object type e.g. bulk or registered.
- Number of boxes.
- Amount of space on shelves e.g. box sizes.
- Location in store.

CASE STUDY COMMENT: AUDIT DETAIL

“Carefully think through what data you wish to record before proceeding with an audit. The data you collect should relate to the aims, research questions and objectives of the project.”

Suffolk County Council

“Whereas the vision for the rationalisation audit and assessment was set in a museological framework from the start, it also became evident during the project that this needed to be expanded to incorporate archaeological criteria at a basic level, especially in terms of how much analysis/reporting had taken place for any archive, or parts thereof.”

Worcestershire Museums

The Museum of London aimed find out:

“... which categories of finds occupy the most space in the store ...” to “... reveal anomalous or exceptionally large groups within individual sites.”

Recording the collections audit

Once the level and categories of information to be recorded have been decided, consideration must be made as to the best method of recording the audit. All the case study participants used Microsoft® Excel spreadsheets to record data. Suggested spreadsheet headings and example templates can be found in [Section 4](#).

To make the most use of the data collected, it is recommended that spreadsheets are designed to be compatible for import into Collections Management Systems, or that they record information in such a way it can be searched easily to answer collections enquiries.

An assessment of lists, databases and templates that are already being used and which could be repurposed will save time. The Museum of London used their pre-existing spreadsheets as a starting point for their audit. These listed each site archive in the collection, the number of boxes per site and the classes of material present. As well as saving time, using these spreadsheets to quantify the collection and record additional detail also enabled staff to notice discrepancies between the two.

It is important to spend some time evaluating the preferred audit methodology at an early stage within the process to see whether or not it is achieving its aims. The Museum of London soon realised there was a need to undertake more than a simple box count, since the huge variety in box sizes meant it was impossible to get an accurate picture of which categories of material took up the most shelf space. Staff developed a numbered typology of the main box sizes used in the store so as to be able to collect more useful information without the need to record the measurements of each box.

Limitations of existing data

Despite the potential merits of using existing collections information as a basis for an audit, the limitations of the data must, however, be recognised and the accuracy and completeness of pre-existing records should not be assumed.

Museums Worcestershire planned to use their accessions catalogue and recent box inventory as the starting point of assessing significance. This data was subsequently found not fit for this purpose. This meant staff spent a significant amount of unforeseen time compiling a new more detailed inventory so as to be compatible with the project aims.

CASE STUDY COMMENT: RECORD & RE-USE

“The starting point was the inventory, held on four Excel spreadsheets that had been maintained by the Archive’s Curator until he retired from the Museum of London in October 2015. Each of these spreadsheets represented a different phase in the history of archive acquisition at the Museum of London and at its predecessor museums.”

Museum of London

“Excel spreadsheets were used for data collection in store. A STEP 1 spreadsheet was constructed to capture information relating to the archive or site, the number of boxes by material and finally to assess those archives and boxes against the Museums Worcestershire STEP 1 disposal criteria.”

Museums Worcestershire

Suffolk County Council based their collections audit on pre-existing data held within their Collections Management System. It was soon identified, however, that the use of vague cataloguing terms, a lack of information and inconsistencies in the recording of box numbers and their sizes all caused issues.

Results of the audit

The data collected during an audit provides an overview of the contents of the collection and it may be possible to identify trends within it that will help to structure the focus for rationalisation.

Some immediate candidates for rationalisation may be revealed through the audit including:

- Unprocessed bulk environmental samples.
- Stonework with no provenance.
- Unstratified or unprovenanced material.
- Material that sits outside collecting policies.

On the whole however, all materials will need much more in-depth scrutiny before they can be considered for rationalisation. The overall process will necessarily include an assessment of significance.

CASE STUDY COMMENT: AUDIT ANALYSIS

The **Museum of London** identified several trends in their audit data and used them to inform the next stage of the project. The data analysis revealed:

Size: 38% of sites consisted of just one box or less and 31 very large sites (less than 1% of the total) occupied more than one third of the total space.

Material: boxes containing pottery occupied the largest amount of space by volume (43%) followed by animal bone (23%) and then Ceramic Building Material (CBM).

Trends in collecting: animal bone and environmental remains were represented in increasing amounts within more recent archives and archives with high proportions of CBM may not have been subject to a proper on-site recording and discard process.

Assessing significance

This may be one of the most problematical issues to resolve since the process of rationalisation for many will be largely centred on assessing the significance of collections and the identification of materials for de-accessioning, dispersal or disposal.

It is important to recognise, however, that whilst the significance of archaeological archives and their components may be defined in a variety of ways, fundamentally they represent a body of evidence gathered as the result of a destructive process. **The rationalisation of an archive should not be taken to such an extreme that it would make future reinvestigation of the original research questions impossible.**

The measure of significance may vary for example:

- Archaeologically before, during and after excavation.
- Post deposition, since it may be altered by the result of research programmes or as the result of other excavations.
- Relative to the overall museum collection and the material present in other collection disciplines.
- Relative to its potential for display, for handling, for community engagement, learning or as a focus for creativity.
- Between stakeholders.

Sampling strategies

The project participants explored a variety of methods that might be applied to their collections in order to assess significance.

Stroud was able to undertake a 'quality assessment' of all of its archaeological material since it held the smallest of the project participant collections.

The approach that Stroud took was as follows:

- Creation of a complete list of all archaeological holdings as recorded on the Collections Management System and as found in the stores.
- Calculation of an accurate total number of boxes of archaeological material – including those where entire site archives have been catalogued as one item.
- Categorisation of the collection by the main types of archaeologically derived material (developer, university, historic collection, historic excavation, surface find etc.)
- Evaluation of the existing records to try and ascertain the potential significance, quality and scope of the archaeology.

CASE STUDY COMMENT: SIGNIFICANCE

Stroud Museum tested a strategy for dealing with individual finds:

"... the format has been adapted to take seven major areas of significance in to account, assigning a numeric score to each individual object against those categories.

The categories are:

- *locality provenance*
- *locality significance*
- *collector provenance*
- *condition*
- *completeness*
- *display potential or other intrinsic interest*
- *research potential ..."*

Suffolk County Council's assessment of site significance locally, regionally and nationally involved looking at 'SHINE' (a single, nationally consistent dataset of undesignated historic environment features from across England) as well as significance ratings recorded by the local Historic Environment Record. (See <https://www.myshinedata.org.uk/>)

It was necessary, however, for most participants to sample their collection, assessing the significance of only certain aspects of it rather than of the whole.

The Museum of London took a two-stage approach to assessing significance. The first stage saw a 10% sample of the collection undergo a 'quality assessment' measured against three criteria:

- Site documentation.
- The condition and packaging of the finds.
- The use of the archives.

A smaller sample of sites was then interrogated in more detail with specialists brought in to assess them.

A selection of the criteria and methods that case study participants employed in an effort to assess significance are described below.

Quality and completeness of documentary archives

The Museum of London assessed the documentary archives of their 10% sample to determine how well they could be used to reconstruct and interrogate the site. Three questions were asked of each archive and a simple scoring system used to record the results. The first two questions were seen as more important, and given more weighting:

- How accurately can the site be located?
- How well are the features recorded, and can a stratigraphic sequence be reconstructed?
- Is there a post-excavation report, and has specialist analysis been carried out?

The assumption that some documentary archives would be of such poor quality that the associated finds could be considered for rationalisation on the basis of limited contextual information was deemed largely false and this mode of assessing significance provided little way forward in terms of rationalisation. Furthermore, a certain level of archaeological knowledge and familiarity with archaeological recording systems and paperwork is necessary for this task.

Many sites lacked post-excavation analysis but this should not be used as the sole justification for disposal as, given good primary site records and adequate resources, this could be retrospectively carried out by the necessary specialists.

CASE STUDY COMMENT: SAMPLING

"In order to devise a rationalisation strategy, it was decided to select a 10% sample of the entire Archive – some 300 individual site archives – and to investigate these in much greater detail."

Museum of London

Tullie House focussed on sites that had been published. For these they felt that:

"... the selection of the items that are essential for telling the story of the site has already been done by the excavators and so the assessment can more safely be undertaken by non-archaeological people."

"The scale of the Worcester City part of the Museums Worcestershire collection meant that, whereas all the larger site archives could be included...at both STEPs 1–2, the high volume of smaller sites (comprising less than 5 boxes) led to the random selection of a 10% sample."

Museums Worcestershire

An absence of post-excavation analysis poses major problems for assessment purposes as the resources and expertise needed to carry this out retrospectively are significant. Museum curators, even those with archaeological expertise, have rarely had the opportunity to develop the level of specialist knowledge to undertake such analysis: this means that outside assistance should be sought from, for example, commercial archaeological units or independent specialists. Since limited funding is available for 'backlog projects' it may prove difficult to gain support for a project which essentially involves allocating resources for the study of material that may eventually be disposed of. However, without such specialist recommendations it can be difficult, or even impossible, to assess the significance of finds. This was a recurring frustration experienced by many project participants.

Use of and engagement with archives

One measure of significance relates to the extent to which archive material has been 'used'. The Museum of London's definition of use was wide-ranging and included instances where:

- Objects were displayed in permanent galleries.
- Objects were loaned out for exhibitions.
- Objects were loaned out for other purposes e.g. research, public events.
- Enquiries had been received for site records and finds for example by email or by visit.
- Website searches made via the online catalogue.
- Material had been published in monographs, journals, catalogues, student dissertations but NOT as 'grey literature' (i.e. not in the public domain).

Analysis of the data collected by the Museum of London showed that there are a small number of very 'iconic' London sites that are heavily 'used' and a very large number of smaller sites which are not. This experience is one likely to be replicated across many museums.

Care should, therefore, be taken when using this particular criterion for assessment purposes, since the level of 'use' of archival material may, for example, be biased toward:

- Sites that are fully published or 'famous' locally or historically.
- Sites for which information is available via online catalogues.

CASE STUDY COMMENT: INCOMPLETE RECORD

Missing or incomplete documentary archives were a recurring problem that some case study participants encountered. **Stroud Museum** discovered that the lack of complete documentary archives for some sites:

"... presents serious issues when rationalisation is considered, as it is not possible to make truly 'informed' decisions."

And

"Finding additional information to help with the assessment of the significance of some historic sites has proven very difficult ... Woodchester 1973 excavation finds are all clearly bagged with trench numbers and context information on labels placed inside each bag, but despite several letters, phone-calls and other enquiries it has not been possible to trace the existence of any original site documentation which would allow us to establish the significance of that information."

- Sites containing materials that particularly lend themselves to scientific research and especially those for which new techniques have been developed.
- Sites that have produced finds that are of interest to those who are not archaeologists, e.g. decorative arts/applied arts specialists.

Condition of finds

The condition and completeness of objects, along with their potential for display, are often specified as considerations relevant to the decision-making process for the rationalisation and subsequent disposal of objects represented in non-archaeological collections: these considerations may come to the fore where there is the possibility of duplication and the aim is therefore to retain the ‘best’ or at least reduce the number of examples.

This approach when taken in isolation is not deemed to be appropriate for archaeological archive material since its significance is bound inextricably to provenance and context, as well as to the particular associations of artefacts found together with each other.

It is important that condition checking is undertaken by those qualified to do so and where necessary bought in. The Museum of London assessed the condition of two types of material (leather and ironwork) that would potentially be so degraded they would be of little use for future research. Staff queried whether ‘preservation by record’ might be a more sustainable approach rather than attempting to preserve objects in poor condition in perpetuity. Conservators surveyed the ironwork using an established conservation system and showed this approach was labour intensive (which would also make it costlier).⁷ Questions were also raised about the validity of using this method to support decision making relative to rationalisation when x-raying may be a more appropriate method to employ.

CASE STUDY COMMENT: CONDITION OF FINDS

“A visual survey of over 1,000 iron objects suggested that it will be necessary to devise a new strategy for the archiving of this material – regardless of whether the need to save storage space is a motive. Since 25% of the sample could not be identified by visual means, routine x-raying may be a more effective guide to what might be rationalised; and, at the same time, the x-ray will serve as a mechanism for preserving basic information that may ultimately be more useful and cost-effective than attempting to maintain an object that was already in bad condition when it came out of the ground.”

Museum of London

⁷ The methodology and results are published in full at www.socmusarch.org.uk

Using criteria from other disciplines and policies

In recent years there have been several rationalisation projects focussed on other types of collections. Some case study participants attempted to transfer the criteria used for assessing significance of, for example, social history collections to archaeological material, or by working within existing agreed collections procedures.

Museums Worcestershire tested the suitability of the significance criteria identified in its accepted disposals procedure. Material to be considered for disposal as the result of rationalisation was tested against the following criteria:

- Originates from outside the agreed geographic collection area.
- Has no known research potential.
- Has no association with people or events.
- It is not suitable for display.
- A better example or sample can be retained.
- It is a replica project collected in error.
- It cannot be made safe to store or handle.

In actuality, it also proved necessary to consider archaeological criteria for the purpose of the rationalisation assessment, and so the following criteria were added to the Museums Worcestershire assessment process with respect to whether:

- An appropriate level of analysis/reporting had been carried out.
- A rationalisation exercise had already been carried out sufficiently.

Care should be taken, therefore, when attempting to transpose criteria that have worked successfully for other disciplines without also taking additional archaeological criteria into account.

CASE STUDY COMMENT: CRITERIA

“... museological criteria on their own were not sufficient to fully assess the archives for the purpose of their rationalisation, and so these were supplemented by archaeological assessment criteria.”

Museums Worcestershire

“Following some testing it became obvious that it would be possible to apply the policy for selection from Gloucestershire’s Project Archive Acceptance Guidelines ... Comments from Cotswold Archaeology on the policy indicate that they believe that it would benefit from some simplification if it were to be used in its entirety ...”

Stroud Museum

“Rationalisation of storage space shouldn’t be the prime motivator for disposal of collections. Selection criteria must be based on the potential for future research, use in further analysis potential and for use in museum activities.”

Tullie House

Using a ‘quality matrix’

The Museum of London used information collected during the audit process as a guide to choosing which sites might be representative of the whole collection. The information was compiled in the form of a ‘quality matrix’.

Subsequent analysis took the form of three interconnected sub-projects that looked at:

1. Site acquisition records to assess issues relating to having sufficient authority for disposal.
2. Archives from the curatorial perspective, where provisional conclusions relative to their suitability for rationalisation were recorded.
3. Archives from the perspective of subject experts, archaeological and museum professionals to try to establish general principles for the selection of sites for possible rationalisation and to consider the practical steps that would need to be taken for rationalisation in individual cases.

This is a process that is not to be undertaken lightly as it is both time and resource heavy. As with other methods of assessment described above, problems are likely to arise where collections haven’t been reported to a sufficient level of detail to make well-informed decisions and where the collections are being managed by museum staff that lack enough archaeological knowledge to make the necessary assessment. Care should also be taken when using any form of matrix to produce an overall ‘score’ since it is unlikely that all elements of ‘quality’ that form its basis will carry the same weighting in the decision-making process: it is possible, for example, that an archive that is poorly documented may be highly significant with reference to research potential.

CASE STUDY COMMENT: QUALITY MATRIX

“... the Quality Matrix was used in conjunction with the Stage 1 Inventory to identify a very small number of sites that could serve as the basis for studies of the detailed practical steps that would have to be taken in order to assess, record and, potentially, discard material.”

“The survey of 312 documentary archives revealed a wide range of ‘quality’ but no easy routes to identifying groups of archives – or, even, individual archives – that are strong immediate candidates for ‘rationalisation’.”

Museum of London

“... it would be premature to be thinking about selection criteria as the material is not listed in enough detail to allow this to happen.”

Tullie House

Disposal

Case study participants identified very few categories of material that could be easily selected for the rationalisation process and then disposal. For the purposes of this project and the guidance provided here, it is nevertheless necessary to consider how archaeological material might be practically removed from the collection and the ethical procedures that should be followed. Unsurprisingly the process can be fraught with difficulties. The main sector guidance document for this process is the Museums Association's Disposal Toolkit.

Methods of disposal

The Museums Association Disposal Toolkit outlines three key considerations relevant to the disposal process itself:

- There is a strong presumption for keeping items within the public domain.
- There is a strong preference for free gift or transfer to other accredited museums and items should be offered to them in the first instance.
- Action should be taken that ensure continued public trust in museums.

The power to dispose may be restricted by many factors, not least of which are the specific forms of organisational governance and associated legislation such as charity law. Since every museum is different, anyone contemplating disposal (whether through dispersal or destruction) as the end result of a rationalisation process should appraise themselves fully of the legal and ethical considerations outlined within the:

- Museums Association Code of Ethics.⁸
- Museums Association Disposal Toolkit.
- Museums Association supplementary guidance.^{9 10}

Given that many collecting policies will specify geographically defined collecting areas for archaeological archives, the options for transfer to other accredited museums may be severely limited. Furthermore, other public organisations where uses might be found, for example, within schools or higher education settings, may become saturated over time. Reburial under controlled circumstances may be an option but a major consideration unique to archaeological material is how to do any of this without contaminating the

CASE STUDY COMMENT: DISPOSAL

1. *Offer to another museum.*
2. *Offer to education staff for handling.*
3. *Offer to another educational, charitable or community organisation.*
4. *Return to donor.*
5. *Donate to charity shop.*
6. *Special hazardous material disposal.*
7. *Other professional waste disposal.*
8. *Burial.*

Extracted from Museums Worcestershire disposals procedure – NB not all of these are applicable to material of an archaeological nature.

8 <https://www.museumsassociation.org/download?id=1155827>

9 <https://www.museumsassociation.org/download?id=1151041>

10 <https://www.museumsassociation.org/download?id=1075417>

archaeological record. Simply sending material to landfill is problematic so permanent destruction (e.g. grinding to hard-core) may be the only solution.

Creating a paper trail

All aspects of the disposal process should be documented to SPECTRUM standards.¹¹ SPECTRUM is the UK collection management standard which is also used around the world. The Museums Association's Disposal Toolkit also specifies what types information should be recorded including:

- Reasons for disposal.
- Desired outcome.
- Opinions and advice considered.
- Method of disposal.
- Conclusion of process: retention, transfer, sale etc.
- Any conditions attached.
- Information and photographs relating to the item.
- Documentation relating to transfer of title.
- Note of any new location.

This means that it is vital to document the decision-making process throughout the rationalisation and disposal project. The mechanism chosen to do this does not have to be complicated but the information must be recorded in such a way as to make it understandable and retrievable. The record also needs to contain enough detail to satisfy the museum's governing body that the case made for disposal is sound: the information which supports it must also demonstrate comprehensive consideration of all the relevant factors.

Costs associated with disposal

There are several overt as well as hidden financial costs associated with disposal including:

- Staff time.
- Equipment and materials.
- Legal advice.

Suffolk County Council calculated the costs of hiring skips for the material it had identified as suitable for disposal (having considered all other options): at the time of writing their report this was around £2,820, based on the cost of a skip with the capacity to hold 290 boxes (£235+ VAT per skip).

CASE STUDY COMMENT: COST OF DISPOSAL

"... the breakdown of the cost per box for archives recommended for immediate disposal ... has been calculated based on analogous work on the social history collection."

"... the cost of dealing with the rationalisation of 568 boxes ... would be £259,008 (at £456 per box)."

Museums Worcestershire

¹¹ <https://collectiontrust.org.uk/spectrum/procedures/>

High administrative costs also exist for the process from assessment through to recommendation for disposal especially since this requires meticulous record keeping as well as board meetings.

Digitisation

Digitising pre-existing documentary archives (paperwork, photographs, drawings etc.) is potentially one way of ‘disposing’ of some archival material without the loss of information. Digitisation can increase the accessibility of archive material and allow for wider dissemination but may not release a huge amount of physical space. The process of digitisation can also be time-consuming and requires specialist knowledge and equipment. It should not be considered unless provision can be made for the ongoing long-term curation of the digital assets that are produced as a result. Few museums have the facilities, resources or expertise to curate digital data adequately. This means a strategy for the preservation of digital material that requires its deposition with an accredited Trusted Digital Repository such as the Archaeology Data Service (ADS) should be drawn up. Since the latter is a process to which there are costs attached, funding and specialist advice will also need to be secured to do so.

Stroud identified its paper-only archives as the most under-utilised aspect of their collection, with no enquires or research requests for this material being received in the last 10 years. It was thought that little to no impact would be made to the accessibility of the collection if all paper-only archives were digitised, deposited with ADS and physically disposed of. At the time of writing their report, the costs of scanning documents and slides for around 180 archives and depositing this data with the ADS were estimated at £16,370.

Suffolk County Council scoped the digitisation of its entire photographic collection consisting of c. 99,621 individual monochrome and colour film photographs. It was estimated that this would be an expensive process, costing up to 37p per photograph not including the costs of digital archiving.

CASE STUDY COMMENT: DIGITISATION

“Whilst the volume of space created through a disposal of this sort is negligible when considered against the cost of digitising and uploading these archives, in terms of the pressures museums are facing with space, limited resources etc. it may make sense to look for grant funding to deal with this issue.”

Stroud Museum

“The audit identified 85% of the slides suitable for digitisation. When applying this to the complete collection of 99,621 photographic negatives and slides that means 84,678 of them could be eligible for digitisation.”

“Due to the large number of resources required to digitise the identified slides it was decided it would be better to digitise all of the slides and rationalise the collection afterwards.”

Suffolk County Council



SECTION 2: Space-saving solutions

Section 2: Space-saving solutions

The creation of space that results from a rationalisation and disposal project should be seen as a by-product of the process of good collections management. However, the results of the case study projects showed that there were several ways that space taken up by archaeological archives could be reduced without undertaking a potentially costly, labour and resource intensive rationalisation process.

Repacking and re-boxing

All the projects identified archives that were stored poorly and inefficiently, with shelf space being wasted through the use of irregular sized boxes and space within boxes being under-utilised through poor packing.

Storing collections in boxes that fit most efficiently on shelves can make a big difference. Whilst it is acknowledged that many museums may already do this, it is possible that this has not always been applied historically and consistently. The Museum of London's survey work showed much variance across its older archives with more than eight different sizes and shapes of boxes in use that drastically affected shelf capacity.

Space can also be released through the repacking of finds. The Museum of London assessed the state of finds packaging for 10% of its archives and found that almost 25% of these boxes were not filled to capacity, with 11% being 'nearly empty'. If the sample is representative of the entire archive this could mean that 20,000 boxes contain wasted space. One major contributory factor is that the museum does not store finds from multiple sites in the same box. Museums that are willing to combine multiple small site archives into single boxes could release significant space within stores: object location records held in a comprehensive collections management system should relieve some of the perceived barriers to the re-ordering or relocation of material within a store that would result from this process.

Space can also be realised within large archives by repacking to meet current museum standards and this work can also vastly improve the accessibility of archives. It is worth noting here, that the costs of archival standard packaging (e.g. boxes, bags and labels) and staff time are not insignificant and whilst volunteer help may reduce staff costs, their training and management also has a resource implication. Nevertheless, it should be appreciated that such projects provide excellent opportunities to engage volunteers directly with collections and can provide valuable learning and skills-building experiences.

CASE STUDY COMMENT: SAVING SPACE

"Simply re-boxing material that is currently in out-sized containers could, in certain circumstances, be a cheaper (and less contentious) alternative to disposal."

"... approaching a quarter of the boxes sampled were not filled to capacity ..."

"Since the sample represents around 1% of all the boxes in the Archive, this could imply that around 10,000 boxes in the General Store are half-full, and that a similar number are near-empty."

Museum of London

"If early indications prove correct, it seems likely that these huge material archives could also be fairly dramatically reduced in their current volume just through sorting and repackaging without any actual disposal or rationalisation taking place."

Stroud Museum

Investing in storage

Case study participants identified improvements to the physical storage environment that would increase storage capacity significantly, be cheaper to implement and more effective than large scale rationalisation. Suffolk County Council calculated that installation of a roller racking system would increase their capacity by around 2.5 times. Even more radically, purchasing a new storage facility would increase capacity by a similar amount, whilst also improving the environmental conditions and accessibility of the building. Both options were highly preferable and if funding was available a more cost-effective solution than undertaking large scale rationalisation.

Even where a roller racking system exists, improvements can be made to increase storage capacity. The Museum of London stressed the importance of their modular shelving system, however, in several areas of the store it was noticed that shelves were not positioned optimally, meaning that fewer than the ideal 20 boxes per shelf could fit. Extra space was created by simply adjusting the height of shelves on just one row of racking, a process that took two members of staff less than one day. Significant space could be released if the positioning of all shelves was assessed and adjusted.

Transfer to other institutions

Undertaking a collections audit may highlight material that could be transferred to more suitable institutions. Candidates for this may include material on loan, or material which lies outside of the institution's current geographical collecting area, having been collected before formal collecting boundaries were drawn up. Returning material to lenders may be relatively straightforward, providing contact details remain up to date, however transferring accessioned material to other institutions will require museum curatorial consideration. The Museums Association Code of Ethics, as well its Disposal Toolkit, provides guidance on the considerations that should be made and advice on the process of transfer.

Tullie House undertook a review of its holdings as part of a collections audit and returned material to Carlisle Cathedral that was being held in store for that institution.

CASE STUDY COMMENT: STORAGE SYSTEMS

“Installing roller racking (up to a height of 3.6m high) could increase our shelf capacity to 409 cubic metres. This is assuming we could roller rack the entire width and length of the building leaving enough space for access. This increases our capacity up to seven times more than rationalising would for a cost approximately £81,600. [In contrast to the cost of disposal] There is a price difference of between £240,638.64 and £547,233.44. The roller racking would increase our entire capacity by approximately two and a half times (160%).”

Suffolk County Council

Streamlining collecting for the future

Several case study participants realised the need to update their deposition guidelines for archaeological material in light of issues identified with historically received archives. Although this will not immediately alleviate current storage problems it will:

- Streamline the deposition process.
- Ensure appropriate selection strategies have been agreed with field units before archives are deposited.
- Ensure archives are packed and documented to agreed standards.

Staff that are responsible for the care and management of archaeological archives should as a minimum:

- Undertake regular reviews of their institution's deposition guidelines and conditions of acceptance of archaeological archives.
- Ensure that units are consistently complying with deposition guidelines.
- Be conversant with archiving standards including Archaeological Resources in Cultural Heritage a European Standard (ARCHES) which is the agreed standard for the creation, compilation, transfer and curation of the products of European archaeology supported by a best practice manual for archaeological archiving.¹²
- Be fully aware of the institution's expertise (or lack of it) and seek advice from bodies such as the Museums Association, the Chartered Institute for Archaeologists and the Society for Museum Archaeology where necessary.

Selection strategies should always be discussed with the field unit and be in-line with the receiving museum's collecting policy: space-saving should not be the primary motivation. Such streamlined archives may not necessarily be smaller in volume but, most importantly, should have received the appropriate level of specialist study to justify the retention of all classes of material presented for deposition.

CASE STUDY COMMENT: DEPOSITION GUIDELINES

"... it should be noted that for sites deposited pre-1971 ... Seldom have the items been sorted and packed to current standards, and the selection embodies the on-site collection policy of the time. Moreover, since the containers are generally much larger than the current standard box, these miscellaneous finds occupy much more space in the store ..."

"A surprising number of the sub-standard archives relate to sites from the 1990s and 2000s; in some instances, this is because the material has not yet been fully deposited, but more often it appears that the Museum of London Standards are not being completely fulfilled by contractors."

Museum of London

¹² <http://archaeologydataservice.ac.uk/arches/Wiki.jsp?page=Main>

Keeping up with changing standards

In response to the Mendoza Review of museums in England (2017), Historic England and Arts Council England, along with a range of archaeology and museum organisations (including SMA), developed an action plan to address the challenge of sustainable management of archaeological archives.^{13 14}

The recommendations that Historic England made to DCMS were wide-ranging and accepted in full. It is likely that new standards and guidance relative to archaeological archives will be forthcoming as a result of the ongoing delivery of a 12-point action plan. Those organisations that are considering undertaking a rationalisation project should endeavour to continue to research and make themselves aware of the most up to date standards before attempting to undertake such a project.

The plan includes for example:

- Updates to professional standards and guidance that will provide up-to-date best practice advice on the sustainable creation, management, compilation and transfer of archaeological archives.
- A practicable ‘digital first’ approach to the documentary elements of archaeological archives and better integration of museum records with Historic Environment Records.
- A recommendation that local museums are relieved of the expectation that they will maintain the digital documentary archive for future archaeological interventions, in favour of deposition a Trusted Digital Repository.
- The inclusion of archaeological archive retention reviews within overall museum collections review and rationalisation strategies.

RESPONDING TO NEW INITIATIVES

“In order to embrace the efficiencies now presented by digital technologies and a ‘digital first’ approach and in order to reduce the challenges for museums, we recommend that:

6. DCMS should welcome and endorse guidance from key archaeological organisations that, as soon as practicable, relieves museums of the expectation that they should attempt to curate digital archive material from archaeological projects, in favour of their deposition in a Trusted Digital Repository that will guarantee the preservation and accessibility of digital material, such as the Archaeological Data Service.”

Mendoza Review:

Historic England’s recommendations to DCMS on the future of archaeological archives, March 2018.

¹³ <https://www.gov.uk/government/publications/the-mendoza-review-an-independent-review-of-museums-in-england>

¹⁴ <https://content.historicengland.org.uk/content/docs/consultations/he-response-to-dcms-mendoza-review-mar18.pdf>



SECTION 3: Case Study Summaries

Section 3: Case Study Summaries

Each case study participant planned its own approach and reported results against a template provided by SMA. Although each institution's project was unique, reflecting their differing collections and priorities, the use of the same reporting structure allowed comparisons to be made more easily.

Each case study has been summarised below and three reference tables produced to enable quick comparison between the different institutions, approaches to the project and the conclusions drawn. Institutions considering a scoping project for rationalisation will find this a useful tool in make comparisons between themselves and the case study participants.

Archaeology collections and staffing

Museum of London

- Holds a large collection of archaeological archives from London and issues site codes for about 400 fieldwork projects per year. The main archaeological store is filled to 91% of its potential capacity. The main store has the potential capacity for 140,000 boxes, the metal store for 21,000 boxes, and the bulk finds area for 124,000 standard boxes.
- Has a range of archaeological specialists including curators, an archaeological collections manager, archaeological conservators, and a number of other experts on staff.

Museums Worcestershire

- Holds collections of both Worcestershire County Council and Worcester County Council. There are approximately 700 accessioned archaeological archives.
- Has one archaeology/natural history curator within the museum, plus seven archaeology specialists in Worcestershire Archives & Archaeology Service and access to more (HER Officer, Worcester City Archaeologist).

Stroud Museum

- Has 6,500 object records on its database, 350 of which are archaeological archives. Collecting archaeological archives was stopped in 2013 due to lack of space.
- Has never had a specialist archaeologist or curator of archaeology on staff.

Suffolk County Council

- Holds 7,592 individual site archives which include approximately 8,290 boxes of bulk finds and approximately 99,621 individual slides and negatives.
- Has specialist staff working for Suffolk County Council Archaeological Archives.

Tullie House

- Has 20,000 objects in the collection made up of both the historical collection and archaeological archives. The archive is comprises 425 separate 'events' (an 'event' may include watching briefs, desk-based assessments as well as excavations).
- Has two curators and an assistant curator but none have a background in archaeology. There is now no specialist archaeology curator although one is employed on a temporary freelance basis.

Approaches to project delivery

Background and Rationale

Museum of London

- The main archaeological store is filled to 91% of its potential capacity.
- Archaeological contractors have deposited archives from scarcely more than 25% of the total sites excavated since the London Archaeological Archive opened in 2002.
- A three-year project that resulted in the dispersal of some 4,000 items from their vast Social and Working History collections came to an end, and many other collections were being reassessed as they prepare for closure of their galleries at London Wall and the creation of an entirely new museum for London, which will open at West Smithfield in 2022.

Museums Worcestershire

- Has diminishing space and shrinking resources.
- The project builds on the work already done at Worcester.
- The project aimed to develop methodological guidance for targeting and estimating resources and executing archive rationalisation without compromising the research value of the remaining archive (and will actually enhance research potential).
- It needed to follow the acquisition and disposal procedures of Museums Worcestershire.

Stroud Museum

- The service represents a significant part of the museums sector in terms of the size of the collection, the sorts of material collected and the types of archive held. It also, like many others, has historic backlogs and poor documentation. A framework developed to rationalise this Museum's collections would be widely applicable to other museums.
- A lack of truly specialist staff was felt to be a strength of the project, as any framework or strategy developed which worked for Stroud could be successfully adopted by other non-expert museum staff.

Suffolk County Council

- SCCAS has a need to prove that it is managing its collections and future accessions in as cost-effective a way as possible and to retain an accessible collection for benefit to the people of Suffolk.
- The results will provide a basis of a collection policy review to ensure that good quality archives are being collected and curated in a sustainable manner.
- The project will provide evidence in support of new collecting and the continued curation of current archaeological material and will inform Senior SCC management and elected members in their decisions regarding the future management of the archive.
- Keen to explore retrospective rationalisation before an anticipated move of the bulk finds archive store within the next five years.

Tullie House

- Wanted to produce a collections rationalisation plan as part of the Tullie House Museum 2020 Development Plan.
- Only the basic outline of the archaeological collection was known so more detailed information was required for staff to be able to plan for its long-term future once a lease an external store at Shaddon Mill had expired. The scoping exercise would provide an accurate statement of the material that the museum should retain, as well as the storage needed to house it.
- The results would show Carlisle City Council (the owners) that Tullie House Trust had assessed their collections and provide a justification for the money required to care for them.

Aims and objectives

Museum of London

To produce:

- An inventory of the General Store and the Metal Store.
- A quality assessment of a 10% sample of site archives (300 archives): documentation, ironwork condition, research and public usage, and ratings expressed on a quality matrix.
- A detailed assessment of a small number of selected sites, involving Museum of London curators and external experts, to look at how rationalisation might work.
- Estimates of the space saved and resources used.

Museums Worcestershire

To:

- Undertake store inventory.
- Assess inventories against disposals procedure.
- Produce new inventories.
- Apply significance criteria.
- Work out space saved and resources used.

Stroud Museum

To:

- Audit the quality and quantity of the archaeological archives in the Museum's stores.
- Establish criteria by which selection could be carried out.
- Calculate the resource needed to carry out a rationalisation exercise.
- Calculate the amount of storage space that could be created by such a project.

Suffolk County Council

To:

- Assess quantity, quality, and significance of the material contained in the collection.
- Identify areas of our collections that could be enhanced.
- Identify bulk finds that could potentially be de-accessioned and the resources required to follow this process through.
- Identify photographic material suitable for long-term curation and digitisation.
- Contribute to a review of the current collections policies.

Tullie House

To:

- Quantify the complete archaeological collection, both in Tullie House and the off-site store, and work on documenting the collection.
- Work out the amount of space required to house the collection.
- Look at the type of storage needed to house the collection.
- Assess quality of the material.
- Consider the site information available.

Project Management & Delivery

Museum of London

Was undertaken by the Senior Curator for Archaeology, supported by a Project Board comprising of the Documentation Manager, Conservation Manager, and Registrar. The team also included a project assistant (dedicated exclusively to this project), a Curatorial Assistant, the Archaeological Collections Manager and a Conservator (Archaeology).

Museums Worcestershire

Was undertaken by the Curator of Archaeology/Natural history (Museums Worcestershire), the post-excavation manager and finds archaeologist (Worcestershire Archive & Archaeology Service). The team included a number of archaeology specialists and volunteers.

Stroud Museum

Was undertaken by the Documentation and Collections Officer and three volunteers. Cotswold Archaeology and two academic researchers were brought in on a freelance basis.

Suffolk County Council

Was undertaken by the Archaeological Officer (Archives) and Senior Archaeologist from Suffolk County Council Archaeological Service.

Tullie House

Was undertaken by a Curatorial Consultant and the Assistant Curator.

The Scoping Exercise*Collections involved in scoping exercise***Museum of London**

Undertook an inventory of the General Store and the Metal Store, but excluded human remains, sculpted and architectural stonework and large structural timbers. This was followed by a quality assessment of a 10% sample of sites that included documentation, ironwork condition, research and public usage and then a detailed assessment of selected sites.

Museums Worcestershire

Restricted the exercise to Worcester City archives only and examined a 10% sample of all archives under 5 boxes in size.

Stroud

The entire archaeological collection was assessed. This included project archives, individual surface finds, the historic collections, the collections of private individuals and disparate material from investigations conducted in antiquity. Sampled 10% of the individual surface finds – a total of some 450 individual objects. Also assessed the entire flint collection (excepting material found within archives) of approximately 2000 individual objects, comprising almost half of the individual surface finds collection, as well as the Vernon Parry Kitchen Collection of some 760 objects.

Suffolk

Restricted to an assessment of bulk finds and photographic material and a sample of the slides were audited in order to test the proposed methodology.

Tullie House

The whole collection was assessed, including bulk finds and individually recorded finds, large items and paper archives. Although the assessment was not completed, the process highlighted issues such as lack of digitisation and the use of obsolete storage media (e.g. floppy discs).

Methodology/criteria for assessing significance

Museum of London

A 10% sample of all archives was examined and rated using a range of significance criteria, and these were expressed in terms of a quality matrix. Ratings were given against the quality of acquisition records, site documentation, location of site and periods represented, condition and packing of finds, and the use made of site archives (including exhibitions, research and remote access).

Museums Worcestershire

To be considered for rationalisation, the material had to be tested against and meet 2 of the following criteria:

- Originates from outside the geographic collection area.
- Has no known research potential.
- Has no association with people or events.
- Is not displayable.
- A better example or sample is retained.
- It is a replica project collected in error.
- It cannot be made safe to store or handle.
- Whether an appropriate level of analysis/reporting had been carried out.
- Whether a rationalisation exercise had already been carried out sufficiently.

Stroud Museum

The collection was assessed by looking at:

- Pre-existing literature.
- Archives relating to sites that had produced no finds or archaeological information.
- Archaeology Data Service listings.
- Documentation quality.
- A bespoke framework for assessing material on a grading system looking at provenance, research and display potential, etc.
- Conservation needs.
- Options for re-packaging to save space.

Suffolk County Council

Assessment criteria included:

- Site publication status.
- Site significance and the quality of its associated contextual information in the form of the paper archive.

Bulk finds – their importance was assessed locally, regionally, or nationally.

Photographic material – quality of the photograph was assessed as well its subject and condition.

Tullie House

It was felt that not enough work had been done on the material to allow detailed retention and dispersal criteria to be worked out.

Scoping exercise: time, budget & stakeholders

Museum of London

Just over 6 months.

£12,000 project funding plus match funding and volunteer/professional contributions estimated at £28,911 making a total of £40,911.

No stakeholders identified.

Museums Worcestershire

Just over 8 months.

£11,938.66 project budget plus matched funding and volunteer/professional contributions estimated at £18,220. Stakeholders included Museums Worcestershire joint museums committee, Worcester and Worcestershire local authorities, including planning archaeologists, SMA, West Midlands Archaeological Curators Research Unit (WEMACRU), Historic Environment Records, Worcester City and Worcestershire County Councils, local groups looking for local research projects, universities, professional researchers, museum visitors including 'visitors' via social media.

Stroud Museum

5 months.

£10,950 project funding – the budget was mainly required for ICT (to provide access to Collections Management System and ICT in stores) and experts/back-filling curatorial time. No stakeholders specified.

Suffolk County Council

7 months.

Estimated cost of £22,712.50. Stakeholders include Suffolk County Council Archaeological Service, Historic England, and SMA.

Tullie House

Just under 4 months (117 working days) to create inventory.

Consultation with the wider local archaeological community, including archaeological contracting units, the Cumberland and Westmorland Antiquarian and Archaeological Society, the Historic England Scientific Advisors and the County Archaeologist. Consultation had very little response.

Stakeholders included Carlisle City Council, the Trustees of Tullie House, and the Tullie House Museum and Art Gallery Trust.

Project results

Data

Museum of London

- The inventory identified 85,376 boxes of general bulk finds from 2,868 sites. This equates to almost exactly 30 boxes per site. However, analysis reveals a far more complex pattern, with a high proportion of those boxes coming from a small number of large or very large sites.
- The Stage 2 assessment revealed that of the 1,000 boxes sampled, over 10% were nearly empty. Repacking and re-boxing could save between 5% and 10% space in the stores.
- Categories of finds identified which do not meet selection/retention criteria (ceramic building-material, marine shell and unprocessed soil samples) are obvious first candidates for rationalisation but would only make a space saving of under 5% of general finds.
- To process the material would likely involve at least 1 person-day work per site by collections staff and registrars, and the ceramic building-material (which is almost entirely from well stratified contexts) should be recorded by an expert to the current standard. This could involve processing over 3,000 boxes (which might be reduced by over a third) – perhaps 200 days' work.

Museums Worcestershire

- The high volume of smaller sites (comprising less than 5 boxes) led to the random selection of a 10% sample.
- The total m³ volume of the Worcester City collection can be estimated at 96.552m³.
- Pottery and animal bone were the most represented materials, with ceramic building materials and slag next in terms of their bulk occupation of space in the collection.

- The completed second stage record (involving the application of significance criteria) consisted of 16,310 records relating to 3,220 boxes, as compiled for the purpose of this project. Overall the total number of stage 2 sites assessed in detail was 34 (comprising the 3,220 boxes), giving an average per archive of 95 boxes.
- Estimated that about 500 boxes would be available for disposal without further recording or analysis – representing a space saving of around $0.02025\text{m}^3 \times 500 = 10.125\text{m}^3$.
- The cost of dealing with the rationalisation of 568 boxes (total number of boxes now identified for rationalisation as described above; Section 5.2.3) would be £259,008 (at £456 per box).

Stroud Museum

- Archives: Of 436 boxes of material archive, only 80 were deemed to be compliant with standards. 270 boxes required some work in terms of repackaging. Of 178 documentary boxes, only 12 deemed compliant. Volunteers sorted 16 boxes of material and managed to reduce it to 12 just by repacking.
- Individual finds: Used grading strategy on 10% – about 7% could be considered for disposal. It will take a further 300 hours to work through the rest.

Suffolk County Council

- The audit provided a good overview of the collections.
- The number of sites/boxes with material considered for rationalisation (burnt flint/stone, shell and clay-pipe) was calculated.
- A total of 1,350 slides were analysed instead of the original 1,000 sample size. The only tasks that took longer than anticipated were the recording of the sites publication status and the assessment of the quality of the project archives.
- The publication status of 6,450/7,471 sites were entered into the database and 3,973/7,471 sites were assessed for archive quality.

Tullie House

- The material in Tullie House has largely been put onto the MODES Complete museum documentation system. These figures were combined into a single set of figures for the whole collection (both in Tullie House and off-site).
- This combined archaeological collection consists of 16,793 individually accessioned objects, 367 standard boxes of small finds and 8,509 boxes of bulk material. This material occupies an estimated combined volume of 191.5m^3 .

Performance and issues

Museum of London

- Tests showed that a simple box count could be misleading as boxes are different sizes.
- Variations from the standard box size has a major impact on storage capacity.
- Because of the scale of the project, the content of boxes in the stage 1 inventory were taken from the labels. Where there was more than one type of material, they were split evenly in the records. Boxes were only opened if the label information seemed implausible.
- An entirely new inventory had to be started for metalwork.

Museums Worcestershire

- Discovered the existing museum accession catalogue, together with a more recent archaeological box inventory, were not adequate so a fresh detailed box inventory down to context level of box contents had to be undertaken for the whole collection.
- Variation and quality of box labelling.
- Broadly the project plan remained intact but adjustments had to be made to enable delivery.

- More time was spent getting the project under way than was expected largely because of the quality of the accession/archive records available to the project.
- The starting point for the project fell at the busiest time of the year (i.e. the end of the financial year), and so this also contributed to a slower start.
- Enabled an in-depth understanding of the contents of a large part of the collection to be realised for the first time through systematic survey. This has now revealed some major possibilities for disposals, should resources be forthcoming.
- Has provided a collection-wide framework for rationalisation and stimulated the active management of the collection and planning for its future.

Stroud

- One of the biggest issues in considering this project was that there was no access to the Collections Management System, the council ICT network or the internet from any of the Museum's stores.
- The single biggest cost in facilitating this project would be ICT infrastructure and equipment.

Suffolk

- The vast nature of the archives and other pressures on staff time as well as the need to keep the archive accessible meant compromises had to be made.
- The photographic archive was too large to be completely audited within the given six-month period, as a result of this a sample of the slides was audited in order to test the methodology.
- There were two tasks that were not fully completed within this project; the assessment of the paper archives and the publication status for each individual site.
- A successful methodology was designed to identify material suitable for rationalisation.
- An estimate of the resources needed to carry out rationalisation was arrived at.
- The information gathered showed where the collection could be improved.

Tullie House

The project was beset by problems:

- The Curatorial Manager left post.
- Material was moved to a new store.
- A health and safety report on the main store ruled it inadmissible until further notice.
- The original timescale could not be met due to work on a major exhibition.
- Not able to achieve aims and objectives of the project but were able to quantify all of the archaeological collection, apart from the paper archive.

Insights

Museum of London

- The review demonstrated the importance of assessing archives and providing information about their contents.
- Saving space by re-boxing is an option to pursue and promotes 'good housekeeping'.
- Many opportunities for working with volunteers.

Museums Worcestershire

- Highlighted the importance of volunteers.
- Rationalising at point of entry.
- The process is severely hampered without archaeological expertise and access to grey literature.
- The poor quality of reporting is a hindrance to investigation and effectively means that groups of finds have to be assessed afresh and at the museum's cost.

Stroud Museum

- It is not possible to make enough space through the rationalisation of the collections to be able to start collecting sustainably again in the future.
- The project has enabled the museum service to improve collections records and to increase understanding of their holdings.

Suffolk County Council

- The process highlighted several database issues.
- A list of recommendations for rationalisation based on their experience was produced.¹⁵

Tullie House

- It would be premature to be thinking about selection criteria as the material is not assessed/listed in enough detail to allow this to happen. A lot of work needs to be done across the collection first.

Evaluation: benefit analysis

The cost of rationalisation and overall conclusions

Museum of London

The cost of carrying out the assessment of an archive is unlikely to be less than 1 staff member for 1 day, and for larger sites (30-50 boxes) 2-3 days. Estimating resources for tackling the largest sites is beyond the scope of the present study. Few site records are recorded to modern standards – the need to improve these records renders any rationalisation of large archives cost-ineffective. Looking at 200 boxes could take around 50 person-days by specialists, including some time for assessing the results in conjunction with the stratigraphic records.

“The review has demonstrated conclusively that discarding large quantities of archival material is not the best way to resolve our storage problems. The costs – both by way of internal administrative overheads and in terms of procuring experts to assess and record items before disposal – would be prohibitively high.”

Museums Worcestershire

The cost of dealing with the rationalisation of 568 boxes (total number of boxes now identified for rationalisation) would be £259,008 (at £456 per box).

“Given the scale of costs now envisaged for rationalisation of the existing collection it would be unlikely to be justifiable given the nature of the saving achieved ... and the sheer scale of the identified cost suggests it is unsustainable even if it was to be tackled over a span of many years.”

¹⁵ The list of recommendations can be found in Suffolk County Council's report at www.socmusarch.org.uk

Stroud Museum

Cotswold Archaeology estimated that it could work through all the archaeological archives with rationalisation in mind over a 60-day period using a supervisor and 3 volunteers at a cost of £13,680. The digitisation of ‘negative archives’ would cost in the region of £16,370 (180 sites).

“It is not possible to make enough space through rationalising the collections to be able to collect sustainably in the future. It is hoped that there is enough space reserved in store for the 30 projects currently awaiting deposition, but in the years since this museum stopped accepting notifications of archaeological archives there has still be archaeological work carried out, and that there are perhaps as many projects again held in archaeological contractors stores which would immediately fill up any space generated by carrying out a full-scale rationalisation of the collection. This unfortunately makes a poor case for justifying the expenditure and hours needed in order to complete such a project.”

Suffolk County Council

Rationalisations could release up to 57.84 m³ of shelf space but in reality, this number is likely to be greatly reduced as some of the material identified during the audit may be deemed unsuitable during the assessment phase. The cost of rationalisation is very high. Scenario 1 was costed at £628,833.44 and scenario 2 was costed at £332,238.64.

“In the event that the financial resources were made available to continue with retrospective rationalisation in order to release space in the archives, it is clear that other options of equivalent cost would increase our capacity by a far greater amount. As it stands retrospective rationalisation of our collections is not a cost-effective method of creating capacity and is a poor justification of the financial resources.”

Tullie House

The assessment and development of criteria for potential rationalisation was not achieved, so no costs or potential saved space was calculated. However, a methodology for a potential future study has been designed. On the back of this study, a wider plan to look at collections care, including rationalisation, was produced in March 2018 called ‘Tullie House Museum and Art Gallery Archaeological Archives Assessment’. It considers as priorities documentation, collection stabilisation and dissemination of information.

“...at present it has not been able to provide any information about saving space. However, rationalisation is not just about saving space, but also about making things more accessible and using them better.”

Project legacy

Future plan / delivery

Museum of London

- There is potential to save space by re-boxing and removing unstratified material that doesn't meet retention criteria.
- They are likely to consider a policy of prioritising a certain number of archives to be held in store locally and then to send the remainder into remote low-cost storage.
- A detailed review of the archives that remain un-deposited will be undertaken in conjunction with the Greater London Archaeology Advisory Service, City of London Planning Office, Southwark Planning Office, and all leading contractors.

Museums Worcestershire

- Would like to carry out inventory recording for the remainder of the collection, though staff resources would still need to be found for this.
- Will formally institute the STEP 2 rationalisation assessment at the point of transfer to the museum. However, for this to be fully effective there is a need to also now address the museum collection policy.

Stroud Museum

- ICT equipment is available in store to prevent a backlog happening again in the future.
- The collection can be used more easily since the museum is more equipped to answer research enquiries and better able to target its limited resources more effectively.
- It's possible that all negative/no finds archives will be digitised and uploaded to ADS and hard-copies disposed of by destruction.
- Approval will be sought from Museum Trustees for the disposal of individual surface finds.

Suffolk County Council

- The audit results will contribute to a review of current collecting policies since the process has identified areas where future incoming archives could be rationalised before deposition as well as the minimum requirements needed for new paper archives.
- What has been learned is already being applied by SCCAS to all new depositions.

Tullie House

- A methodology has been designed to assess the collections in the future, but its implementation would depend on resources and funding.
- The museum is planning to draw up a rationalisation plan during the period of the current Collections Development Policy (expires 2020).
- The material quantified as 'raw data' needs to be converted into useful information. This would begin with the 8 sites that make up 66% of the archive as this is where the largest potential saving in space can be made. The details can be found in the full report.
- The museum would like to carry out prioritised tasks (as set out in the 2018 'Archaeological Archives Assessment') as a starting point for future planning to manage the archaeological archives currently stores at the Longtown Store.
- The museum will look to produce clear guidelines for accepting archaeological archives in future, both in terms of which geographical areas are to be collected from, but also the standards of archiving.

Comparative table 1 – Collections and Scope

	Type of Service	Size and type of archaeology collection	Archaeological Expertise	Part of the collection included in scoping study	Not included in scoping study
Museum of London	Museum service, part of City of London Corporation and the Greater London Authority.	Archaeological archives. Room for: Main store – 140,000 boxes. Metal store – 21,000 boxes. Bulk finds – 124,000 boxes. Already at 91% capacity.	A range of archaeological specialists including curators, an archaeological collections manager, an archaeological conservator, and other experts on staff.	Inventory of the General Store and the Metal Store. 10% sample of site archives for quality assessment (300 site archives). All metallic ‘registered finds’ included.	Human remains. Sculpted and architectural stonework. Large structural timbers. Non-metallic ‘registered finds’.
Museums Worcestershire & Worcestershire Archive and Archaeology Service	Shared local authority museum service of Worcester City Council and Worcestershire County Council.	About 700 accessioned archives across the collection, plus historical collections.	One archaeology/ natural history curator in the museum, plus seven archaeology specialists in Worcestershire Archives & Archaeology Service and access to more (HER Officer, Worcester City Archaeologist).	Worcester City archaeological archives.	Worcestershire County Council archaeological archives.
Stroud District (Cowle) Museum Service / Museum in the Park	Partnership between Stroud District Council and the Stroud District (Cowle) Museum Trust (a registered charity).	6,500 archaeological object records on database. 350 records are archaeological archives. They stopped collecting archives in 2013.	None. Brought in Cotswold Archaeology for project.	The entire archaeology collection.	N/A
Suffolk County Council Archaeological Archives	County Council archaeological archive repository.	7,597 individual site archives.	Specialist archaeologists working for SCCAA.	Bulk finds (about 8290 boxes) and photographic material (about 99,621 photographs).	Paper archives, digital archives and small finds.
Tullie House Museum & Art Gallery Trust	Museum Trust.	20,000 artefacts. The collection is made up of both historical collections and archaeological archives.	None. Used freelance archaeology consultant (ex-curator).	The whole collection, comprising bulk finds and individually recorded finds, large items and paper archives.	Some items already marked for rationalisation, including some bulk environmental samples, unprovenanced stonework and objects to return to Carlisle Cathedral.

Comparative table 2 – The Scoping Exercise (stage 1)

	Main problems	Cost/resources required	Aims achieved	Aims not achieved	Outcomes of scoping exercise
Museum of London	Archives from 1992-2005 not officially deposited yet. Variation in box sizes.	Just over 6 months to assess.	Successfully quantified material broadly by type and carried out quality assessment on a 10% sample of the entire archive (300 site archives).	All main aims were achieved.	Quantified amount of material in archive broadly by type.
Museums Worcestershire & Worcestershire Archive and Archaeology Service	New box inventory down to context level had to be undertaken for the whole collection. Variation and quality of box labelling. Working conditions in stores. High volume of smaller sites (comprising less than 5 boxes).	Just over 8 months to assess. £11,938.66 project budget plus matched funding and volunteer/professional contributions estimated at £18,220.	Audited quality and quantity of archives. Assessed for potential rationalisation.	Could not assess every archive. High volume of smaller projects led to 10% sample of archives under 5 boxes.	In-depth understanding of the contents of a large part of the collection. Revealed some major possibilities for disposal. Collection-wide framework for rationalisation.
Stroud District (Cowle) Museum Service / Museum in the Park	No access to ICT or Collections Management System from stores. Wide variation in standards of archaeological archives.	5 months to assess.	Improved documentary archive files on database.	Sampled 10% of surface finds as part of the scoping exercise.	Improved collections records. Better understanding of the nature and scope of collection. Collection more accessible. Museum more equipped to answer research enquiries and target resources.
Suffolk County Council Archaeological Archives	Delayed start. Photographic archive was too large to be completely audited within the given six-month period, so audited a sample of the slides in order to test methodology.	6 months to assess, with a further month for report writing and preparation. Estimated cost of £22,712.50.	Created successful methodology to identify material suitable for rationalisation. Now able to estimate the resources needed to carry out rationalisation.	Photographic collection too big so had to audit a sample. Assessment of paper archives and the publication status for each individual site were not completed.	Improved overall view of the collections. Identifying areas where future incoming archives could be rationalised before deposition. Identified the minimum requirements needed for new paper archives.
Tullie House Museum & Art Gallery Trust	Lack of staff. Store move. Inconsistent documentary archive. Assessment not completed because of store conditions. More to do than envisaged so the original timescale could not be met.	117 days (just under 4 months) to create inventory.	Quantified archaeology collection (apart from paper archive). Preliminary assessment of the state of material.	Assessment not completed. Premature to be thinking about selection criteria.	Greater understanding of size and nature of archaeology collections. Better physical access through re-boxing. Increased volunteer engagement. Potential methodology for future study.

Comparative table 3 – Rationalisation (stage 2) and Future Work

	Estimated time full rationalisation	Estimated cost full rationalisation	Estimated space saved full rationalisation	Conclusions	Legacy
Museum of London	1 staff member for 1 day for small archives. 1 staff member for 2-3 days for archives of 30-50 boxes. Cannot presently estimate time needed to tackle larger archives. Plus time for specialists to go through boxes (estimated 50 person-days per 200 boxes).	Not specified.	5-10% of total space in store by simply re-packing rather than by rationalisation (6,000-10,000 boxes).	Discarding large quantities of archival material is not the best way to resolve our storage problems.	Potentially save space by re-boxing, removing certain materials and sending some archives into remote low-cost storage. Will be carrying out a detailed review of undeposited archives.
Museums Worcestershire & Worcestershire Archive and Archaeology Service	About 1.5 days per box, if ready for immediate disposal.	Worst case scenario would be about £250,000 (i.e. £456 per box, or more where archaeological assessment still required).	Floor space of only 8 cubic metres is liable to be liberated if the process was to be completed fully.	Even if carried through to completion, rationalisation does not deliver an easy answer to pressure on space.	Potential rationalisation of certain categories of finds. Inventory for rest of collections. Address museum collecting policy – rationalisation at point of entry.
Stroud District (Cowle) Museum Service / Museum in the Park	Cotswold Archaeology estimated it will take 60 days to go through the archaeological archive collection with rationalisation in mind. Estimated it will take 300 hours to work through the rest of individual finds by museum staff.	Cotswold Archaeology estimated £13,680 to assess archives for rationalisation and £16,370 to digitise 'negative archives'.	About 7% of space could be considered for rationalisation.	Not possible to make enough space through rationalising the collections to be able to collect sustainably in the future.	Better ICT access for future. Potential digitisation of 'negative archives'. Potential disposal of individual finds after grading. Collection can be used more easily in the future. Museum is more equipped to answer research enquiries and better able to target resources.
Suffolk County Council Archaeological Archives	1186 days to rationalise all material.	Scenario 1 was costed at £628,833.44 and scenario 2 was costed at £332,238.64.	Could release up to 57.84 cubic meters of shelf space (23%) but in reality, this number probably greatly reduced.	Not a cost-effective method of creating more space in the bulk finds archive in comparison to other less costly options.	Study will be used to inform collections policy and ensure that new accessions are accepted in a sustainable manner. Already being applied by SCCAS to all new depositions.
Tullie House Museum & Art Gallery Trust	Unknown – not achieved.	Unknown – not achieved.	Unknown – not achieved.	Rationalisation is not just about saving space, but also about making things more accessible and using them better.	Aim to document collection (non-specialists). Will develop rationalisation plan and make collections useful and accessible.



SECTION 4: Resources & templates

Section 4: Resources & templates

Selected Bibliography

Brown, D, 2007 (as updated) *Archaeological archives: a guide to best practice in creation, compilation, transfer and curation*, Archaeological Archives Forum

Collections Trust, 2017, *Spectrum 5.0*

Historic England, 2016, *Historic England Action Plan: Call for Proposals relating to Project No: 7359 – Scoping Studies and Guidance for the Rationalisation of Museum Archaeology Collections*

Museums Association, 2015, *Code of Ethics for Museums* (plus supplementary guidance notes)

Museums Association, 2015 *Guidelines for museums: Disposal toolkit*

Society of Museum Archaeologists, 1993, *Selection, retention and dispersal of archaeological collections*

Examples of significance methodologies

- UCL Collections Review Toolkit
<https://www.ucl.ac.uk/culture/projects/collections-review>
- Collections Trust – Reviewing Significance 3.0
<https://collectionstrust.org.uk/resource/reviewing-significance-3-0/>
- Welsh Government. Why do we have it? A significance process and template.
<http://gov.wales/docs/drah/publications/130327significanceen.pdf>
- Renaissance North West “What’s in Store?”
<https://museumdevelopmentnorthwest.files.wordpress.com/2012/06/collections-review-in-the-north-west.pdf>

Templates

The case study participants used a wide variety of templates and recording sheets created in house and examples of these can be found described or provided in their reports which may be downloaded from the Society for Museum Archaeology website: www.socmusarch.org.uk. A selection of approaches used by some of the participants is shown below.

Spreadsheet headings: case study example

Museums Worcestershire used a two-step process: a STEP 1 spreadsheet was constructed to capture information relating to the archive or site, the number of boxes by material and finally to assess those archives and boxes against the Museums Worcestershire STEP 1 disposal criteria.

A STEP 2 spreadsheet was constructed to collect information relating to the archive or site, information that could be researched within documentation, paper archives and site reports and information on box types that could be used to estimate the amount of space occupied by boxes and archives that could potentially be rationalised. The STEP 2 disposal criteria were also applied.

The spreadsheet headings used were as follows:

STEP 1 Spreadsheet

To capture archive and site information:

Accession Number
Site Name
Unit
Site Code (HER number if known)

To inventory boxes by material:

Pottery	Clay Pipe	Quern
Animal Bone	Coins	Land Drain
CBM	Mortar	Leather
Slag	Ceramic Mould	Stone
Brick	Porcelain	Shell
Tile	Environmental	Water Bottles
Human Remains	All/Misc./Various	Other
Metal Glass	Bottles	Hazardous

To assess archives/boxes against Museums Worcestershire STEP 1 rationalisation criteria:

Badly Damaged
Over Collected
Abandoned
Retain

STEP 2 Spreadsheet

- Box Number

To capture archive and site information:

Accession Number
Site Name
Site Code
Unit (HER number)
Location

To capture information that can be researched in documentation, paper archive and site reports:

Material
Context Number
Additional Information
Notes

To capture enough information to estimate volume of space occupied by boxes and archives that could potentially be rationalised:

- Box Type

For the purposes of the STEP 2 assessment the following table of criteria was applied to each site archive:

1	It comes from outside geographic collection area
2	It has been assessed as having no known research potential
3	It has no association with people or events
4	It is not displayable
5	A better example or sample is retained
6	It is a replica project collected in error
7	It cannot be made safe to store or handle
8	Regarding an appropriate level of analysis/reporting:
	• None was needed
	• Full analysis/specialist report has been done
	• Publication has been completed
9	Rationalisation exercise already carried out sufficiently

Re. criteria 1–7 a minimum of x2 'true' = to be considered for Step 2 discard

Capturing information about finds: case study example

Stroud Museum used a spreadsheet based on the following headings to record information about finds.

Project name	Item	Archive requirements?	Comments & summary
Accession No.	Contents	Silica gel required?	
Project Type	Quantity	Suitable for display?	
Year of Field Work	Photo No.	Quantity for disposal?	
Item No.	Stable & Secure?	Report/Publication?	
Location	Missing elements?	Outreach potential?	

Assessment of archives: case study example

The Museum of London drafted an archaeological archive assessment form that broadly followed the structure of a Significance Table that was devised for the museum's Social and Working History Rationalisation project. The form is produced in full below.

ARCHAEOLOGICAL ARCHIVE ASSESSMENT

SITE CODE		TOTAL BOXES		CURRENT STATUS
ORGANISATION				GREEN

Site information and state of the archaeological records

What is the state of the site documentation? (Score 0/1/2/3)	
How accurately can the site be located?	
Is there a good stratigraphic sequence with little contamination and/or residuality?	
What digital finds inventories exist for this site?	

General historical/archaeological significance

What periods are represented?	
Is the site associated with any important monument/area/event? Is it a production site?	
If yes, does it tell us anything about that monument/area/event that wasn't known before?	
Is the site particularly important for general interpretation of the area/borough?	
Is the site in a Greater London Archaeological Priority Area or particularly relevant to a Research Framework priority?	

Condition						
Are the finds preserved particularly well or particularly badly?						
Are there conservation issues? [Note especially metalwork, outsize objects and organics.]						
What is the state of the packaging?						
Are there any hazardous materials?						
Quality/value of the finds assemblage						
Are there rare/unusual individual objects?						
Are there any groups of finds that are intrinsically important?						
Are there any finds/groups of finds that are particularly relevant for the interpretation of the site or area?						
Exploitability						
Are any finds displayable?						
Is the archive particularly suitable for learning or public engagement?						
Is the archive likely to be particularly useful for academic research?						
Provisional recommendation (tick one)						
The archive should be preserved in its entirety						
The archive can be discarded in its entirety after suitable recording						
Certain items or groups of items can be discarded						
If certain items or groups of items are to be discarded list here or on a separate sheet						
Ownership and administrative status (to be completed by a Registrar)						
How does the Museum hold the finds? (Tick one only)		Deed of transfer		Deposit agreement		Other or none
If 'other or none' add further comments here						
Further actions						
List tasks to be completed before a final recommendation can be made (e.g. consulting with experts, searching for missing information, recording objects for discard)						
Current status						
		Green = No action required Amber = Items can probably be discarded after further checks and recording Red = Ready for immediate disposal or rationalisation (as detailed above)				

Acknowledgements

Delivery of the case studies and the guidance which has resulted from these would not have been possible without the financial support of Historic England, for which all those involved are extremely grateful. We are particularly indebted to Duncan H. Brown, Head of Archaeological Archives (Historic England) for the foresight, patience and expertise that he generously supplied to both the authors of this document and to each of the institutions that participated. Projects like this require the dedicated skills, knowledge, time and resources of a wide-range of individuals, from those that devised the original project designs, through to the staff and volunteers that put them in to practice, and for this we would like to record our sincere thanks to them all. We would also like to salute the staff of each of the case study participant organisations that presented the results in such a detailed and honest way so that others might benefit from their experience. Finally the authors would not have been able to compile this guidance without time and support being made available for them to do so by their employing organisations, which at the time of writing were:

- Leeds Museums and Galleries (Katherine Baxter)
- Bristol Culture (Gail Boyle)
- Museum of London (Lucy Creighton)