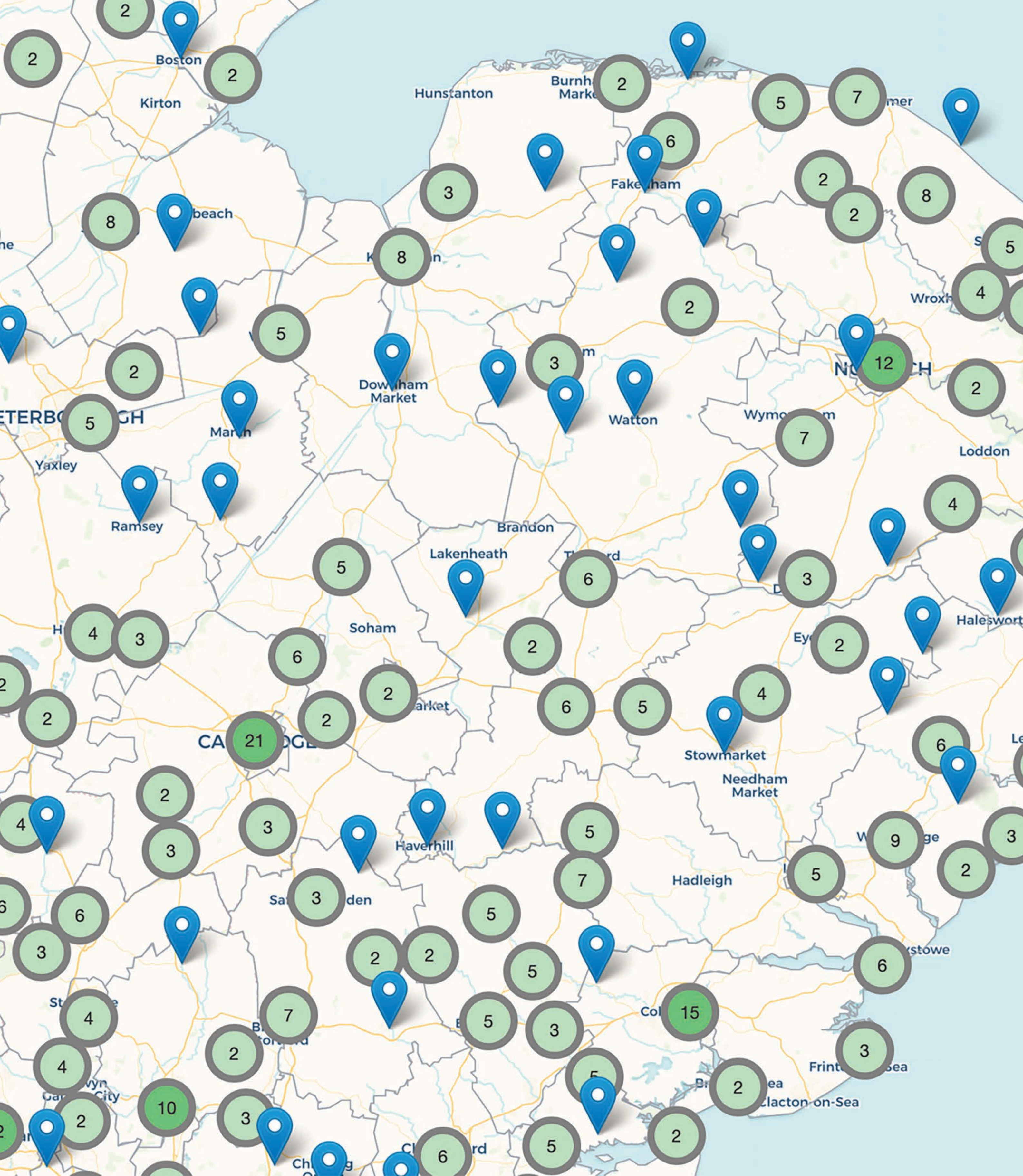

Mapping Museums 1960–2020: A report on the data

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ISBN: 978-1-5272-5464-0

Birkbeck, University of London 2020

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This document is also available from our website at: www.mappingmuseums.org

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Key Findings

Between 1960 and 2017

- There has been a massive boom in the number of museums in the UK. The sector has more than tripled, increasing from 1,043 to 3,289 museums.
- The total number of museums in the UK increased each year from 1960 until 2015. There were 55 years of growth in the museum sector.
- In 2016 the number of museums in the UK contracted for the first time since 1960.
- The most rapid period of museum growth was during the 1970s. The least growth has been seen during the 2010s.
- There is significant variation in growth and closure depending on location and on governance. The different nations and the English regions have different degrees and timescales of growth, as do independent versus local authority museums.

Growth

- There has been growth in all areas of the museum sector, but expansion was mainly driven by the foundation of independent museums. Independent museums now make up at least 71.5% of the total UK sector.
- Growth in the number of local authority museums slowed in the early 1990s and halted in 1997. Their numbers began to decline in 2001.
- The majority of the museums that opened since 1960 are small (defined as having fewer than 10,000 annual visits). Small museums make up 56% of the sector. Small, independent museums make up at least 47% of the sector.
- Since 1960, new subject matter has emerged, principally in the independent sector, and marginal subjects have become well established. There have been significant increases in the number of local history and transport museums.

Distribution

- England has the largest number of museums at 2,468, followed by Scotland with 495, Wales with 204, and Northern Ireland with 87.
- Scotland has the highest density of museums in relation to population at 9.1 per 100,000 residents, followed by Wales with 6.5 per 100,000 residents. Northern Ireland and England have a lower density of museums at 4.6 and 4.4 per 100,000 residents respectively.
- In England, Scotland, and Wales, the number of museums is declining. By contrast, the number of museums in Northern Ireland continues to grow.
- In England, the South East region had the most museums in 1960, and the North East had the least. That remains the case.
- In England, the South West has the highest density of museums at 7.5 museums per 100,000 residents, followed by the East of England with 5.3 and the South East, also with 5.3. London has the lowest density of museums per 100,000 residents at 2.5.

Closure

- 758 museums have closed, which is 18.7% of the total number of museums open since 1960. The assumption that museums survive and that they keep collections for posterity is misplaced.
- 21.7% of local authority museums that have been open since 1960 have closed, compared to 17.1% of independent museums. Within the category of independent museums, not for profit museums (i.e. those run on a charitable basis but excluding the large heritage organisations) have a percentage closure of 8.5%.
- Small museums are the most likely to close.
- There are substantial disparities in closure rates according to museum accreditation status. 2.0% of accredited museums that have been open since 1960 have closed as opposed to 25% of unaccredited museums.

Introduction

The Mapping Museums research project began in October 2016 and will conclude in September 2020. It is based at Birkbeck, University of London and is funded by the Arts and Humanities Research Council. The project focuses on growth and change in the UK museum sector from 1960 to 2020 and it has four main outputs:

- A database containing information on over 4,000 museums. This data can be browsed, searched, and visualised through a web application, and is free to use under the terms of the Creative Commons (BY) license.
- A website that houses the database and web application, and additional resources linked to the project. These include a glossary, detailed information on research methods, transcripts of interviews with museum founders, films and podcasts, and links to the project publications.
- A series of academic articles addressing research methods and findings.
- A monograph that draws on data, interviews with museum founders, and historical research, to analyse how and why so many new museums were established in the late twentieth century. Publication is planned for 2021.

The database and website can be found at: www.mappingmuseums.org

Mapping Museums was formulated and run as an academic research project. However, over the last three years, stakeholders within the museum sector and members of our Advisory Board have encouraged us to present our findings more widely. This report is an outcome of those discussions, and has been timed to coincide with the launch of the Mapping Museums database and website in March 2020. It provides a summary of the research and of our methods, and a guide to the findings from the data.

We are eager to know how our data and the database might impact on practices or policy within the museum sector. Please contact us to let us know if you use our database or draw on our findings, so that your responses can inform our subsequent research.

Context

Research Questions

It was well known that during the late twentieth century there was a massive increase in the number of museums in the UK. Commentators viewed the expansion as a cultural phenomenon and argued it constituted a revolution in museum practice. Various claims were made about the reasons underpinning the rising numbers of museums – that they were symptomatic of cultural malaise and an epidemic of nostalgia, that they were an entrepreneurial response to de-industrialisation, or that they were evidence of a growing historical consciousness among the populace at large – but very little quantitative data was available to support these assertions. Although it was generally accepted that the majority of the new museums were independent, it was often unclear exactly when the museums opened, where they were located, what subjects they covered, or whether or not they survived. Moreover, we did not know if or how the sector had changed.

The Mapping Museums project was conceived in response to the absence of coherent longitudinal data on the UK museum sector, particularly with respect to independent museums.

The project began with a series of over-arching research questions, including:

- How has the independent museum sector changed since 1960?
- What factors prompted and facilitated the increase in numbers of independent museums?
- Were the new independent museums symptomatic of wider cultural concerns and, if so, what?

In order to begin our investigation, we needed baseline information about the sector more generally, and so we worked to produce an authoritative database of UK museums. The database was designed to provide answers to the following questions:

- How many museums opened and closed in the UK between 1960–2020?
- Did the independent sector grow to a greater degree than the public sector?
- What were the most common topics of exhibition, and did they change?
- What size were the new museums?
- Where did the new museums open and was growth concentrated in particular nations or regions?
- Did the museums that closed share any commonalities of location, size, subject matter, or other factors such as accreditation status?

This report details our findings in relation to the second set of questions.

Data Collection and Management in the UK Museum Sector

There have been a number of surveys on museums in the UK. In 1987 the Office of Arts and Libraries funded the Museums Association to undertake a survey of all UK museums. It was the first time that this information had been gathered in digital form and the accompanying reports outlined an authoritative picture of the sector. However, none of the data was archived or carried through into subsequent surveys. We have been unable to trace any of the material gathered for the survey and it is our understanding that it has been lost.

In 1994, the Digest of Museum Statistics (DOMUS) was launched. From 1994 to 1999, Registered museums received a detailed annual survey and the information they submitted was logged in a central database. There were problems with these surveys, including a lack of data checking and a lack of consistency in that the surveys collected different information from year to year, but they did provide a large body of useful information on the UK sector. DOMUS was discontinued in 1999. DOMUS data was also housed at the National Archives, but without the software that drew together information from hundreds of coded spreadsheets, the material is not easily usable. Some DOMUS data was fed into the Cornucopia database, which was launched by the Museums, Libraries and Archives Council in 2001 and logged collections at Registered museums. Updates to this database ceased in 2004.

In recent years, various governmental and non-governmental bodies have collected data on UK museums, generally on an annual basis. These include Arts Council England (ACE), the Museum Development Network, the Department of Digital, Culture, Media and Sport (DCMS), the Northern Ireland Museums Council (NIMC), Museums Galleries Scotland (MGS), and Museums, Archives and Libraries Division (MALD) in Wales. The Museums Association and the Association of Independent Museums also collect data on their members. And yet, there are still concerns about the lack of comprehensive, comparative data on the sector. In 2015 ACE commissioned a report entitled 'The Economic Impact of Museums in England and the authors noted that their work had been seriously hampered by 'the lack of a single source of data on museums'.

In 2017 the Mendoza Review highlighted the shortcomings of data collection, with respect to visitor numbers, funding, collections, workforce, volunteering, and social impact. Mendoza recommended that ACE take a co-ordinating role in collecting and disseminating 'key data on the sector and its health' to provide benchmarks for good practice and inform strategy. ACE responded by commissioning a detailed report on current practices in data collection and management from DC Research. This report found that there was a lack of clarity about why museums were asked to fill in surveys and what that process achieved. They recommended a complete overhaul of how data was collected, managed, and shared. At the time of writing, ACE has convened a steering committee charged with formulating an appropriate strategy for collecting and managing data about museums.

Our research has identified numerous reasons why data about the museum sector is poor. These include:

- Data is not archived and is lost.
- Data is badly archived and unusable without extensive cleaning and checking.
- Data is collected by multiple organisations, is held in multiple locations, and there is no single platform where it is collected together.
- No standardised schema or taxonomy exists to organise and classify museum data.
- The organisations with national responsibilities for museums (ACE, MALD, MGS, NIMC); and heritage bodies (e.g. English Heritage) do not automatically publish their data.
- Surveys do not generally have a longitudinal focus; they tend to provide a snapshot of a particular moment.
- Organisations collect slightly different data on different groups of museums creating both duplications and gaps in coverage.
- Since the Accreditation scheme (initially known as the Registration scheme) was launched in 1988, almost no information has been gathered on unaccredited museums.
- Little information has been collected on museum opening and none on closure dates.
- Methodology for collecting data is inconsistent, particularly for visitor numbers.

As a result:

- Surveys provide partial accounts of the museum sector.
- It is difficult to analyse change in the museum sector over time.
- Information that is crucial for historical analysis, for understanding organizational resilience, and reasons for closure, has never been collected.
- It is difficult to access and thus to re-use historic data.
- Comparisons between statistics are often unreliable.

These limitations undermine any serious attempt at evidence-based policy and stymie any attempt at understanding the recent history of the UK museum sector. The Mapping Museums project has created a framework for collecting data on the UK museum sector with the aim of filling some of those historical and geographic gaps.

The Mapping Museums data

The Mapping Museums research team has compiled a dataset of museums that had been open to the public between 1960 and 2020, and a list of their main attributes. These attributes consist of:

- Accreditation status
- Governance status
- Location (both postal address and administrative location)
- Size
- Subject matter
- Year of opening
- Year of closing (if applicable)

We began by collating national surveys conducted by the government bodies responsible for museums. We then added information from museum membership associations (e.g. Association of Independent Museums), historic guidebooks and museum directories, subject specialist publications, and online websites. (See Appendix 2 for a full list of the sources we consulted).

The project team also made hundreds of telephone calls and sent hundreds of emails to museum staff, local history societies, tourist boards, and other relevant organisations in order to compile and verify information about museums that did not have a well-documented history. We continue to update the data with new information, as it becomes known.

As information was added the database was checked for errors and duplicate entries. We ensured that data was added consistently (e.g. some surveys log museum services rather than individual museums), and we cross checked the different sources of data. We also showed national and regional data to external experts who conducted a line-by-line scrutiny of the data and checked our classifications. They included members of the English Museum Development Network, and the national offices for museums in Northern Ireland, Scotland, and Wales (Appendix 3).

This report assesses change across the UK museum sector since 1960, concentrating on differences in the growth and closure rates of museums according to governance, subject matter, nation and region. It also considers some of the correlations between those attributes, for instance the differences in growth rates of independent museums in relation to location. Our focus is on independent museums, and to a lesser degree local authority and national museums. We have not commented on the data on university museums, although this is available in the database.

The report uses version 10 of the Mapping Museums database (finalised on 08/12/2018). The spreadsheets that relate to the period between 1960 and 2017 and that form the basis of this specific analysis are available on the Mapping Museums website. In order to ensure that we only analysed data for whole years (i.e. did not analyse years where data was still be collected), the report takes data for the period between 1960 and December 2017. More recent data is available from the online database accessible from the project website. We plan to publish a bulletin of statistics in 2021, encompassing the finalised data for the period 1960–2020.

Scope of the Report

What counts as a museum?

In order to establish a dataset of museums that existed in the UK between 1960 and 2020, we needed to decide what venues to include or exclude.

There have been substantial changes in how museums have been understood during the period under study. For instance, historic houses, historic windmills, and preserved pumping stations are now commonly understood as museums (so long as they retain their indigenous contents or have linked exhibitions), which was not the case in the 1960s.

There is also a difference between how museum professionals officially define museums and how they are more commonly understood. For instance, the International Council of Museums (ICOM) definition of 2007 stated that museums are institutions and that they hold artefacts 'in trust for society'. The term institution implies a degree of permanency, and that the organisation has established procedures and practices, which can exclude museums that have been established in more fragile premises or that do not have established practices. The phrase 'In trust for society' rules out museums that are privately owned.

We chose not to use either the ICOM or the UK Museums Association definitions as this would have limited our research to museums that complied with their terms. Our aim was to examine the expansion of the museum sector more broadly, and so we needed a more inclusive approach to compiling the dataset. However, we did generally expect museums to have a permanent collection, to have artefacts on display, to be regularly open to the public, and to occupy a defined space. This latter condition was intended to distinguish museums from displays in the corridors or reception rooms of public buildings or corporate headquarters.

We excluded zoos, aquaria, botanical gardens, libraries, archives, and monuments unless they contained a stand-alone museum; temporary museums; online museums; and mobile museums. Historic buildings such as lighthouses, windmills, watermills and archaeological sites were included if they contained interpretative exhibitions or had been fitted out with period décor.

A new subject classification system

The most recent taxonomy for classifying the overall subject of a museum (as opposed to the artefacts or collections within it) was devised for the DOMUS project. This taxonomy did not substantially encompass popular or non-academic subject areas, and it did not provide sufficient detail for research purposes. More recent taxonomies have been designed to categorise museum collections, but these have specific emphases that were not relevant to our needs. For instance, the Cornucopia database had subject headings and sub-categories. One such heading was 'Coins and Medals', which is a common type of collection in UK museums, but is not a common theme for a museum, so would be less useful for our purposes. Conversely, subject areas that we judged to be important for our research, such as transport, only appeared at the level of sub-categories.

While taking careful note of historic and existing taxonomies, the Mapping Museums team developed a new classification system. We grouped the museums in our database into recognisable categories such as 'arts' and 'transport'. If a number of similar museums did not easily fit into the existing classes we devised new classes, and we introduced sub-categories when a single group was large and unwieldy (the exception was local history, where it was difficult to see what the sub-categories might be). The number of sub-categories varies by subject type. Large categories such as 'transport' have several sub-categories, while the relatively small category 'food and drink' has none. We used more inclusive terminology than was previously the case and renamed categories that privileged particular groups or approaches (e.g. we replaced 'military' with 'war and conflict'). (See Appendix 4 for the Mapping Museums subject matter classification schema).

Museum governance

We divided museums into four categories of governance, two of which have sub-categories.

- Government museums
  - o Cadw (Historic environment service for the Welsh government)
  - o Local authority
  - o National
  - o Other
- Independent museums
  - o English Heritage
  - o Historic Environment Scotland
  - o National Trust
  - o National Trust for Scotland
  - o Not-for-profit (charities, community interest companies, unincorporated associations)
  - o Private (owned by individuals or non-charitable organisations)
  - o Unknown
- University museums
- Unknown

Local authority museums where responsibility has been delegated to a charity (often termed ‘devolved’ status), have been logged as local authority. They can be identified in the database by using the keyword ‘hybrid’ in a search of the ‘notes’ attribute.

We have not modelled temporal change in governance. As a result, the most recent governance status of a museum is taken to be the status of the museum throughout the period under study. Readers should note that English Heritage and Historic Environment Scotland both appear in the category of independent museums in the figures, although prior to 2015 they operated under government auspices. The numbers concerned are relatively small. English Heritage (and its predecessor bodies) operated 27 museums in 1960 and 46 in 2014, while Historic Environment Scotland operated 8 museums in 1960 and 18 in 2014.

Museum size

Museum size is calculated on the basis of annual visitor numbers. When we plotted the data on visitor numbers, there were no obvious points where the distribution of museums divided into bands. Thus, we decided to use size categories that are common within the sector. The range below is the same as that used by the Association of Independent Museums except we have added an additional category of ‘huge’.

- Huge (1 million+)
- Large (50,001–1 million)
- Medium (10,001–50,000)
- Small (0–10,000)

Visitor numbers were not available for 45% of the museums in the database and to manage these missing values we used a machine learning classification to estimate visitor numbers based on other attributes. In some marginal cases it was impossible to confidently establish size through this method and so these museums were categorised as being of unknown size.

Modelling change to museum size over time was outside the scope of our project. Instead, the database takes the most recent visitor numbers as an indicator of museum size. The change in the number of visitors of individual museums and thus their change in size can be checked manually in the database for those museums for which historical figures were available.

Opening and closing dates

In some instances, it has been impossible to establish exact opening or closure dates for a museum. However, we often had anecdotal information that enabled us to narrow down this information to a range of dates: for instance, we may know that a museum was opened in 'the late 1980s'. In this instance we logged the museum as having opened in or between 1985 and 1989. We established a precise opening date for 85% of the museums in the database with the remainder having date ranges of variable sizes. Of the 4047 museums open in the UK between 1960 and 2017, we have precise closure dates for 13% and closure date ranges for 6%, while the rest are understood to remain open.

For the purposes of this report, we adopt a probabilistic approach to managing date ranges. We estimate the probability of a museum opening (or closing) in a given year as 1 divided by the length of the range. By contrast, we estimate the likelihood of a museum 'being open' at a given date as between 0 and 1, incrementing the probability over time. For example, if a museum is known to have opened between 1991 and 2000 (an interval of 10 years), then its probability of its opening having happened in any of the 10 years is 0.1 (1/10). By contrast, the probability of this museum being open increases over time. It starts at 0 in 1990 (certainly not open yet), and then 0.1 in 1991, 0.2 in 1992, 0.5 in 1995, and 0.9 in 1999. In 2000, the museum is definitely open therefore the value is 1.

Accreditation data

The Museums and Galleries Commission formally launched the Museums Registration scheme in 1988, with its successor, the Accreditation scheme, beginning in 2004. Responsibility for the Accreditation scheme passed to ACE in 2011. In order to achieve accreditation, museums must reach nationally recognised standards of collections care, management, visitor services, and information delivery.

Museums may join the Accreditation scheme and subsequently leave. We have only logged museums' current accreditation status, not the year in which a museum gained accredited status, if it was removed from the scheme, or if it ceased to participate in the scheme. Thus, we cannot establish how many museums were accredited at a given time or how that number has changed over time.

Geo-demographic data

The Mapping Museums database makes it possible to examine the distribution of museums across the UK at the level of local authority units, but such an analysis is too fine-grained for a single report. Instead, we have focused here on UK trends, the differences between the four constituent nations and between the nine English regions.

The Mapping Museums database incorporates the indices of deprivation and the geo-demographic profiles from the Output Area Classification based on the 2011 census, provided by the Office for National Statistics (ONS). The Deprivation Index and the data on geo-demographic sub-groups were developed by the ONS between 2011 and 2017 and are thus not applicable to the whole period under consideration. Consequently, we have decided not to incorporate that data within this report.

Confidence in the data

We are confident that we have established a rigorous, coherent database of UK museums. However, it is likely that some museums, particularly from the earlier period within the study, have disappeared without a trace and are missing from the data. It is also likely that there are more small museums in operation than we have identified.

Our database is the most accurate to date, but some uncertainty must be allowed for. Very small changes in museum counts and percentages should therefore be interpreted with caution. To account for this limitation, we have focussed our analyses here on clear, significant trends that are not affected by small variations in the data.

A note on numbers

The use of date ranges means that the data sometimes shows fractional numbers of museums. For example if we want to calculate the number of museums open in 1990, we sum all the probabilities of museums being open that year, from 0 (certainly closed) to 1 (certainly open). For this reason, the numbers of museums may have a decimal point, being summed probabilities. Numbers calculated with date ranges are called ‘weighted’ (i.e. probabilistic counts). When we have not factored in date ranges the numbers are ‘unweighted’ (i.e. simple counts).

In the accompanying figures and tables we show decimals to one point. In the text we round numbers of museums up or down. Cumulative growth within a given category has only been calculated if there was one museum or more within that category open in 1960.

Snapshot data on 2017 does not use weighted numbers – because we have assumed a high degree of certainty for that year – and thus there are small discrepancies between figures that only cover data for 2017 and the weighted figures used elsewhere in the text.

We have not generally discussed the categories of ‘unknown’. However, they are factored into the analyses and thus figures relating to museums do not always add up to 100%. Likewise, we have not discussed museums located in the crown dependencies, but they are factored into the analysis and so the total number of museums for England, Northern Ireland, Scotland and Wales is not equivalent to that of the UK.

A brief overview of the UK museum sector

In 1960 there were 1,043 museums open to the public in the UK. By 1980, this figure had increased to 2,042, and by the millennium there were 3,091 museums. The total number of museums peaked in 2015 when 3,314 museums were open to the public. In 2017 there were 3,289 museums in the UK (see Figure 1). The sector has more than tripled in size since 1960.

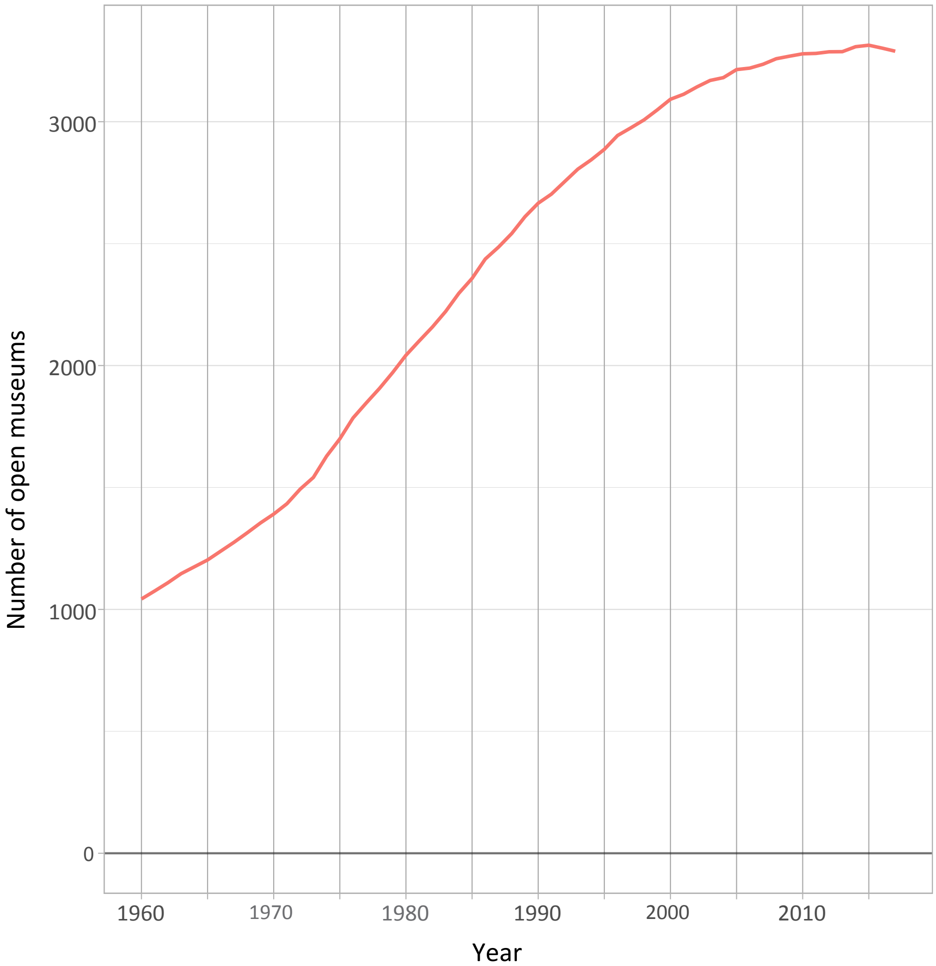


Figure 1: Graph showing number of museums open to the public between 1960 and 2017.

Until 2015, the number of UK museums increased year on year, a period of 45 years of continuous growth. However, the degree of growth varies substantially over time. The number of museums in the UK grew steadily at an average of 2.9% per annum throughout the 1960s, rising to an average of 3.3% per annum during the 1970s. This decade saw the fastest rate of museum expansion in this period, with the most rapid expansion being in 1974 (5.7%) and 1975 (4.4%). During the 1980s growth slowed to 2.8% before falling to an average of 1.6% through the 1990s, and 0.7% per year in the 2000s. There was no growth for the first time in 2011 and between 2010 and 2015, growth was effectively static at 0.1% per year. In 2016, the sector contracted for the first time, with a 0.4% decrease in the number of museums. Across the period 1960 to 2017, the average annualised growth of the UK museum sector stood at 2%.

While new museums continued to open after 2000, growth in the sector has been offset by the accelerating rate of museum closures (see Figure 2). Whereas there were comparatively few closures during the 1960s and 1970s, the rate of closure increased during the 1980s and 1990s and rose more sharply after 2000. The number of closures outpaced the number of openings for the first time in 2016; since then the sector has contracted. In total, 758 museums closed between 1960 and 2017, which is 18.7% of the museums open during this period.

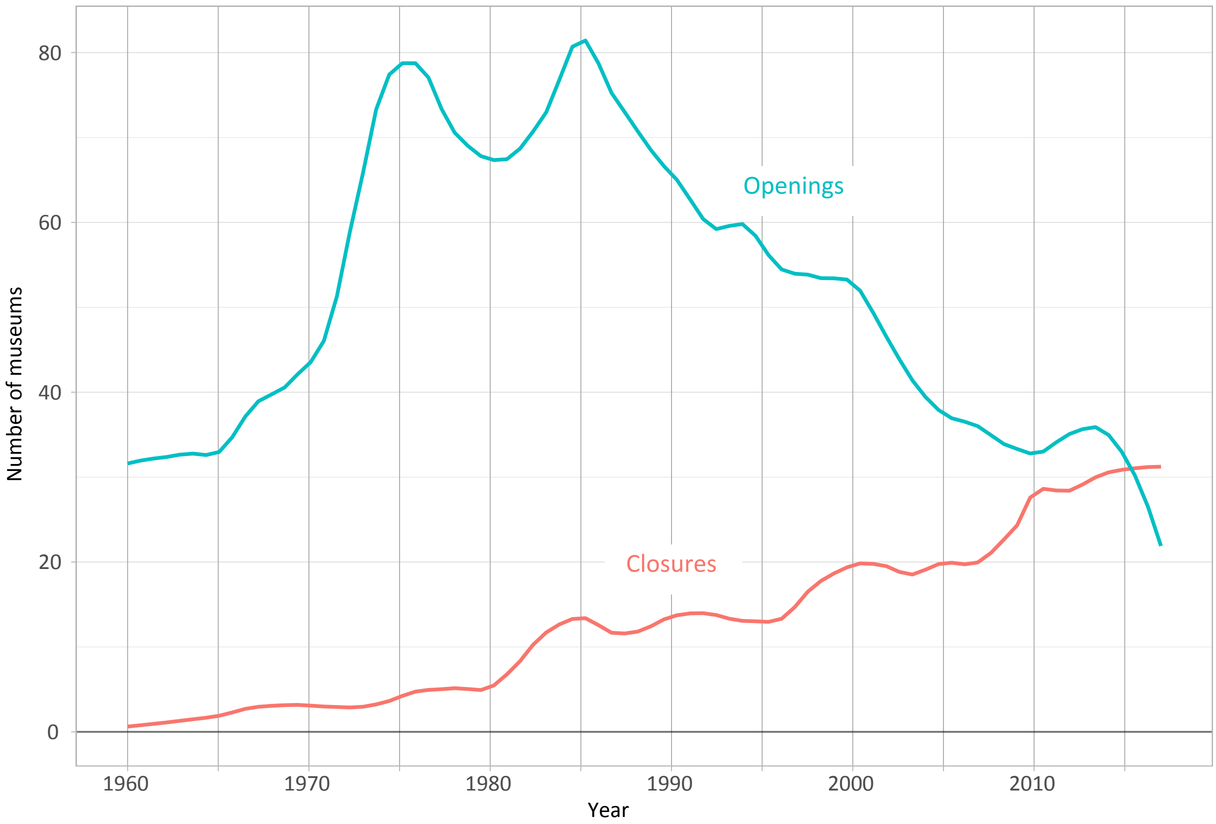


Figure 2: Graph showing numbers of museum openings and closures between 1960 and 2017.

There has been enormous growth in the UK museum sector since 1960. However, this growth varied depending on a range of factors, including governance type, subject matter, size, and location. The following sections address those variations.

Variation according to governance type

In 1960, the sector was divided between 560 independent museums (53.7%) and 419 government museums (40.1%). The numbers of both types of museum increased in the subsequent period, but the growth of independent museums has far outpaced government museums (see Figure 3). Since 1960, the number of government museums has nearly doubled, from 419 to 786. By comparison, independent museums have more than quadrupled, increasing from 560 to 2,352.

In 2017, the sector consisted of 2,352 independent museums (71.5%) and 786 government museums (23.9%). The numbers of both Independent and government museums increased annually until the late 1990s. Since 2000, the number of government museums began to contract and growth in the sector has been driven entirely by independent museums.

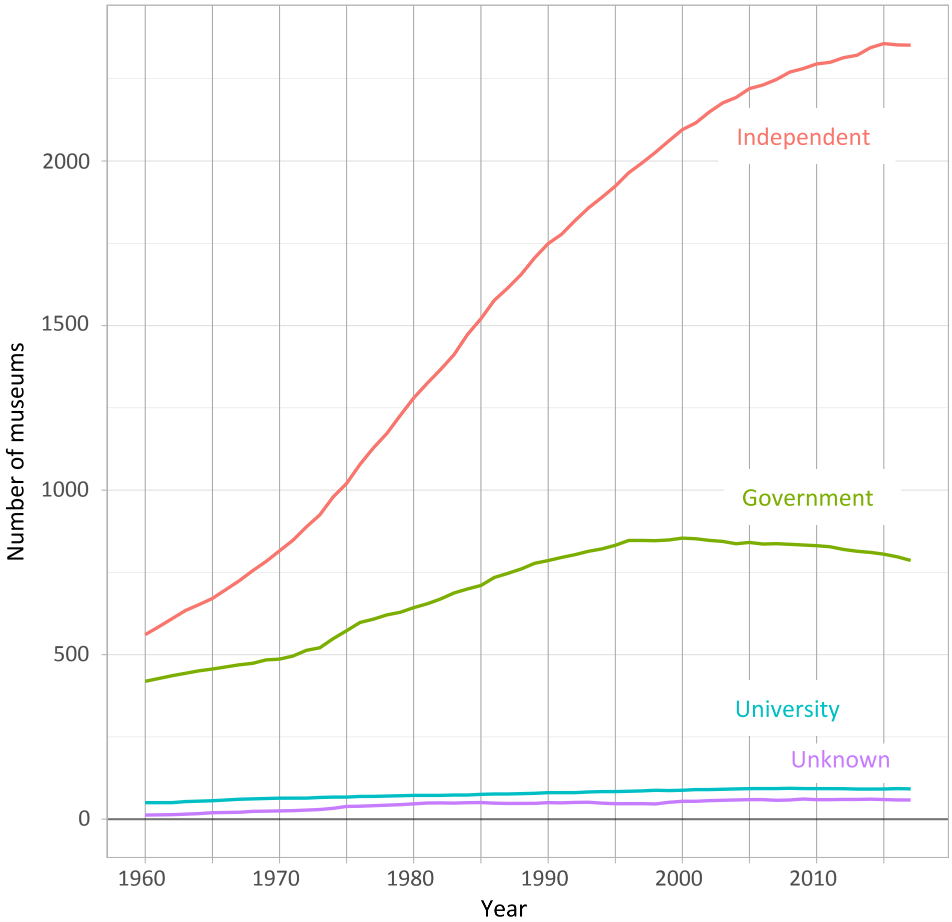


Figure 3: Graph showing number of museums open between 1960 and 2017 according to governance.

Considering the categories in more detail: between 1960 and 2017 the number of national museums rose from 34 to 67, a percentage increase of 97.1% (see Table 1). Only 9.5% of the national museums open in the period between 1960 and 2017 have closed. They are directly supported by central government, so have more secure funding, and closure almost always relates to that of a branch museum (e.g. the British Theatre Museum, a branch of the Victoria and Albert Museum, closed in 2007).

In the same years the number of local authority museums rose from 383 to 714, a percentage increase of 86.5%, which is slightly lower than that of national museums. Numbers of local authority museums grew at a rate of 1.5% per year during the 1960s, increasing to 2.8% during the 1970s, which was the decade that contained the highest single years of growth for these museums: 1974 (5.3%), 1975 (4.4%), and 1976 (4.4%). In the 1980s growth was 2%, and it began to slow in the early 1990s, halting abruptly in 1997. In 2001 the number of local authority museums began to contract, with the largest decline being -1% and -1.4% in 2016 and 2017 respectively. The long period of low growth and eventual contraction suggests that investment in local authority museum provision began to slow before austerity measures were introduced in the UK in 2008, but it also shows that the largest decline in the size of the local authority museum sector has happened after austerity measures were introduced.

Local authority museums have a higher likelihood of closing than national museums, and 21.7% of the local authority museums that were open in the years between 1960 and 2020 have closed (see Table 1). Our data shows that 51 local authority museums closed between 2008 and 2017, although these figures need to be treated with caution because closures are sometimes the result of strategic consolidation wherein one museum is amalgamated with another, or when a single institution replaces several museums.

Governance	Open as of 1960	Open as of 2017	Closed as of 2017	Closed (%)	Cumulative Growth (%)
Government					
Cadw	1	3	0	0	195
Local Authority	383	714.3	198	21.7	86.5
National	34	67	7	9.5	97.1
Other	1	2	4	66.7	96.7
Independent					
English Heritage	27.1	50	2	3.8	84.3
Historic Environment Scotland	8.1	18	0	0	122.2
National Trust	104.4	183	2	1.1	75.3
National Trust for Scotland	11.7	25	2	7.4	113.2
Not for Profit	269.8	1,497	139.5	8.5	454.9
Private	114.6	449.6	232.7	34.1	292.4
Unknown	25.1	129.5	106	45	416
University	50.2	92.2	15	14	83.7
Unknown	12.5	58.4	50	46.1	365.7

Table 1: Numbers of museums open in UK in 1960 and 2017; numbers of museum closures between 1960 and 2017; percentage closure and percentage growth in numbers of museums, according to sub-categories of governance.

The growth rate for independent museums was higher than that of government museums (see Figure 4). However, there are considerable differences in growth and closure within the category of independent museums. The numbers of museums operated by the national heritage organisations (English Heritage, National Trust, National Trust for Scotland, Historic Environment Scotland) increased from 151 to 276 during the period between 1960 and 2017, an increase of 98%, which is almost identical to that of national museums. Taken as a group, the national heritage organisations have a percentage closure of 3.1%, the lowest of any museum type.

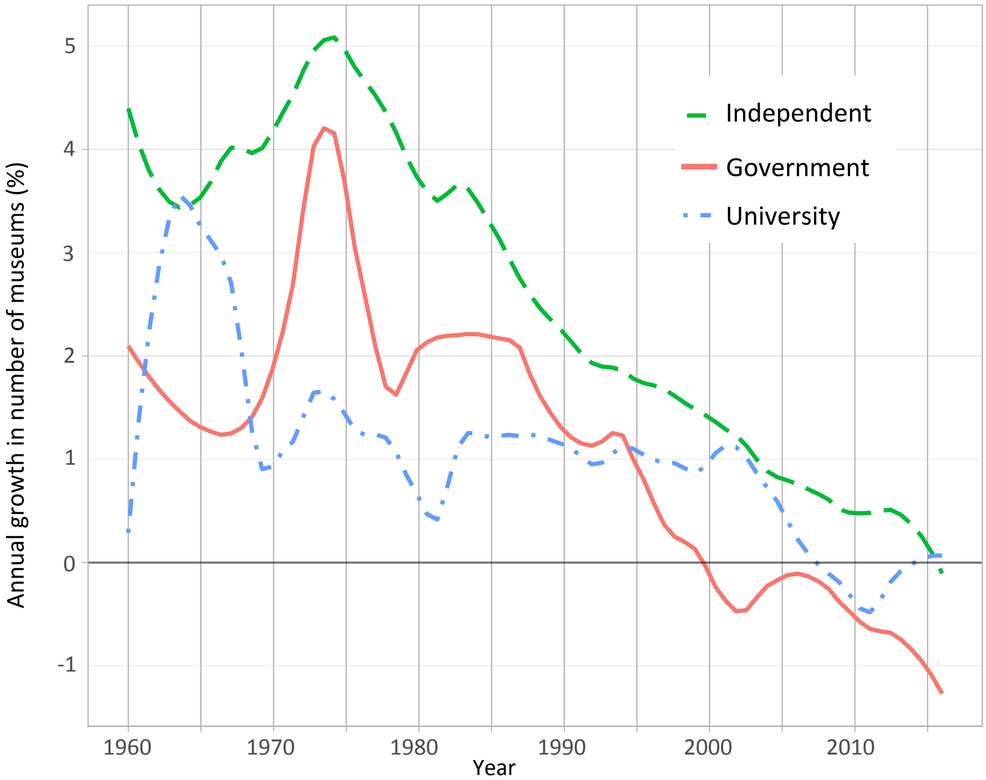


Figure 4: Percentage growth rate of UK museums from 1960 until 2017 according to governance.

The growth in numbers of not for profit museums is considerably more striking. The number of not for profit museums grew from 269 in 1960 to 1,497 in 2017, an increase of 454.9%. During the 1960s, the annualised percentage growth of not for profit museums was 4.4%. Growth increased to 5.2% during the 1970s, with the years of the highest growth being 1974 (5.9%), 1976 (6.9%) and 1977 (5.8%). In the 1980s the rate slowed to 4%, although this was clearly still a significant pace of development. Growth began to slow in the 1990s to 2.3%, in the early 2000s to 1.2%, then gradually slowed to the point of stasis in the 2010s – with growth of 0.1% in 2017.

Not for profit museums also have a low proportion of closure at 8.5% during the period under study. These museums are subject to a blend of legal regulation and collective responsibility, which creates restrictions and provides greater networks of support than is the case with private museums. ‘Our data suggests that since 1960 the overall number of not for profit museums has increased year by year.

The number of private museums increased from 114 in 1960 to 449 in 2017, an increase of 292.4%, which although not as high as that of not for profit museums is still a remarkable level of growth. During the 1960s, the annualised percentage growth of private museums was 4.6%. Growth increased to 5.2% during the 1970s. The real expansion in numbers of private museums seems to have occurred slightly earlier than the wider sector as the biggest increase was a massive 8.9% in 1970; this was also the largest increase in any single year for any category of museum. This strong growth continued in the early part of that decade, with growth of 5.6% in 1972, 8.3% in 1974 and 6.3% in 1975. This rate was not sustained and decreased to 2.5% in the 1980s, and further to 1.3% in the 1990s. The private museum sector grew at an annual rate of 0.7% throughout the 2000s. Since 2010 the sector has contracted in 5 of the 7 years, and has declined on average -0.2% per year.

Private museums have the highest proportion of closures of any museum governance type at 34.1% over this period. They are founded for a variety of reasons, which include providing an income for their owners; documenting a business; showcasing a collection; or providing a focus for collectors. Their closure is often motivated by changes in the structure or priorities of a business, or by the death or retirement of the owner. Closure is less likely to be the result of a merger or opening of a replacement museum.

There is often an assumption that the museums boom of the late twentieth century primarily occurred during the 1970s and 1980s. Our data shows that growth continued through the 1990s, albeit at a slower rate. It also indicates that the period of growth began earlier for some kinds of museums and was longer for some types than others. While numbers of local authority museums started to decline after 2000, the number of independent museums continued to rise well into the twenty-first century.

Our findings also indicate that the museums boom was primarily generated within the independent sector rather than by museums under the responsibility of the state. In 2017, independent museums accounted for 71.5% of the UK sector. If we include local authority museums that have devolved their management to a business or charity, and thus are counted as independent, then that figure rises to 75.6% (we have identified 135 museums owned by local authorities but operated on their behalf by charities or private contractors).

Moreover, our findings indicate that the predominant driver of growth was the foundation of not for profit museums. Not for profit museums had the most significant growth rate of museums categorised according to governance and comprise the biggest single museum category. In 2017, not for profit museums constitute the single biggest governance sub-category, making up 45.5% of the total UK sector.

Overall growth is not just linked to the numbers of new museums that open but to their sustainability, and thus the success of not for profit museums is related both to the sheer numbers that opened but also, crucially, to their greater degree of resilience.

Variation according to subject matter

There has been some continuity and some change in museums’ subject matter. The three subjects most common in 1960 remain the same, but new subjects have emerged leading to greater heterogeneity within the sector.

In 1960, the most common museum subject matter was buildings, which accounted for 24.2% of the sector (a category comprised primarily of historic houses), followed by local history, which accounted for 17.4% of the sector, and arts, which accounted for 10.5%.

In 2017, the most common museum subject matter was local history, which accounted for 22.8% of the sector, followed by buildings with 17% and arts with 7.2%.

The same three subject areas remain the most common, although museums devoted to buildings and those to arts now make up a lower overall proportion of the sector, and local history makes up a larger proportion. Indeed, the surge of local history museums is notable. In the period between 1960 and 2017 the number of local history museums rose from 181 to 751 (an increase of 313%) (see Figure 5).

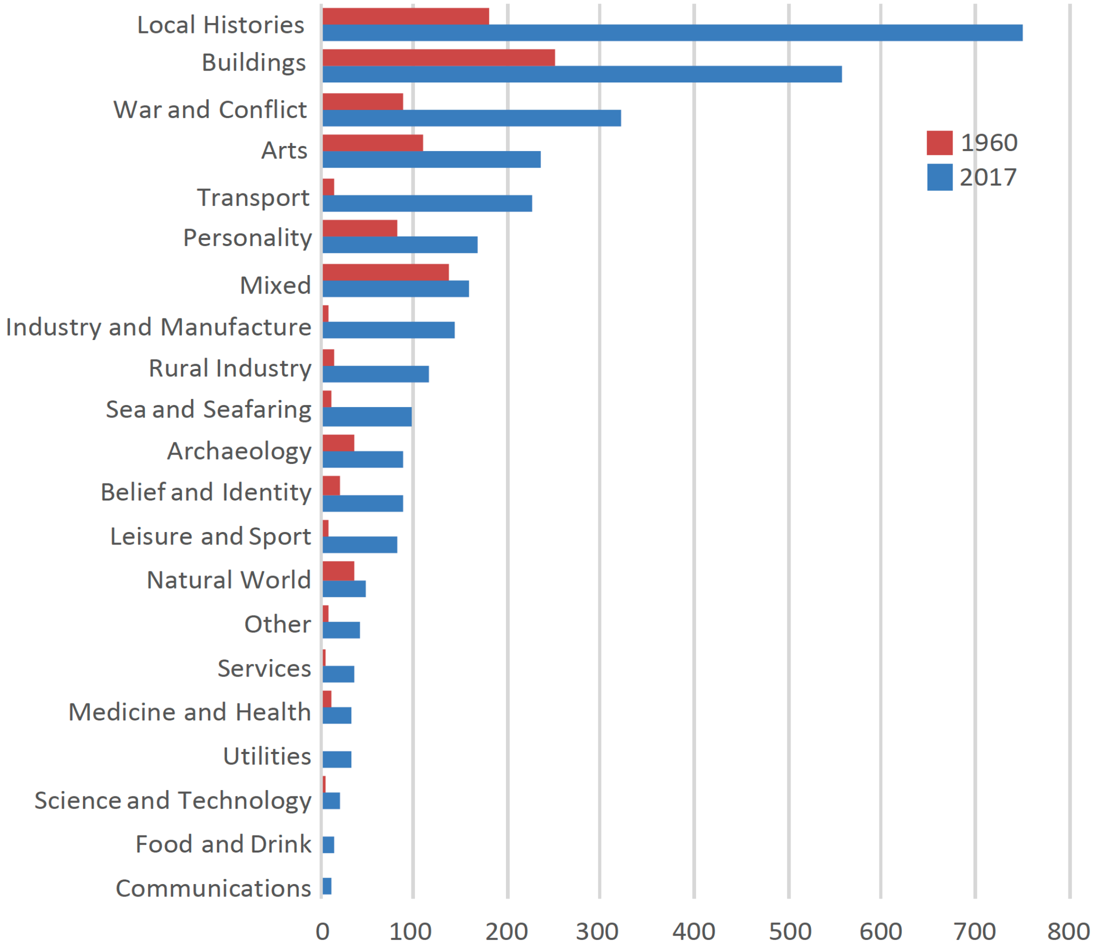


Figure 5: Bar chart showing numbers of museums in UK by subject matter in 1960 and 2017.

During the same period, previously marginal subjects have become well established (see Table 2). For example, the category of transport increased from 14 museums to 228, and is now the fourth most common subject for UK museums. The number of museums of industry and manufacture also increased from 9 to 145. These categories display a similar cumulative growth of around 1,500%. Other subjects did not grow to the same degree but have become commonplace: categories of sea and seafaring, belief and identity, and leisure and sport acquired between 80 and 100 new museums apiece. Significantly, museums focussing on new subjects emerged within the sector, including communications, food and drink, and utilities.

Subject Matter	Open as of 1960	Open as of 2017	Closed as of 2017	Closed (%)	Cumulative Growth (%)
Archaeology	37.6	90.3	16	15.1	140
Arts	109.7	236.4	71	23.1	115.5
Belief and Identity	21.9	88.2	14.5	14.1	303.3
Buildings	252	558.5	56	9.1	121.6
Communications	1	13	5	27.8	1,203.3
Food and Drink	0.7	15.5	9	36.7	–
Industry and Manufacture	8.8	145.2	38	20.7	1,541.4
Leisure and Sport	9.7	82.3	53	39.2	748.8
Local Histories	181.5	751	109	12.7	313.7
Medicine and Health	12.6	34.2	8	19	170.3
Mixed	136.6	160.3	42	20.8	17.4
Natural World	37.3	48.3	24	33.2	29.7
Other	9.3	44	28	38.9	373
Personality	81.9	168.2	28	14.3	105.4
Rural Industry	15	115.5	73.7	39	671.5
Science and Technology	5	21	2	8.7	318.6
Sea and Seafaring	11.1	98.1	23	19	782.3
Services	5.4	37.2	13	25.9	585.8
Transport	14	228.3	87	27.6	1,533.7
Utilities	1.1	33	5	13.2	3,001.5
War and Conflict	90.5	320.6	53	14.2	254.3

Table 2: Numbers of museums open in UK in 1960 and 2017; numbers of museum closures between 1960 and 2017; percentage closure and percentage growth in numbers of museums, according to subject matter.

There was also considerable change at the level of sub-categories. For instance, in 1960 the category of war and conflict was dominated by regimental and corps museums. It is now far more varied and includes numerous air force museums, civil defence structures, naval museums, museums devoted to wartime events, and non-regimental military museums. To a lesser degree, the category of arts also changed. In 1960, this category primarily consisted of fine and decorative art museums. While that group is still the largest, it now encompasses museums of the crafts, textiles, applied arts, and music.

All subject areas have increased during this period but some did so to a lesser extent. The category with the lowest percentage growth in this period is that of 'mixed', which consists of encyclopaedic museums (sometimes referred to as universal museums), collections of bygones, and museums that combine two or more distinct subjects. Mixed only grew by 17.4%. Its sub-category of encyclopaedic museums grew by 7%, with seven new museums. The low growth in this area may be a product of our classification in that it can be difficult to distinguish between local history and small encyclopaedic museums. Alternatively, the figures could indicate changing priorities, as the sector began to move away from the generalised and universal to the specific. Or, the low number of encyclopaedic museums could be due to the difficulty and expense of establishing such collections. The category of natural world also displays a low degree of cumulative growth: 29% between 1960 and 2017.

While the sector has become far more diverse with respect to subject matter, the infrequency or absence of some topics is noticeable. For example, of the 87 museums categorised as belief and identity, 55 are devoted to various aspects of Christian culture. There are 8 freemasonry museums and 6 clan museums with relatively few museums being devoted to other faiths, ethnicities or identities: there are two Jewish Museums, two museums of Polish history, the National Sikh Heritage Centre and Holocaust Museum, the Ron Hubbard Museum, a Romany museum, the Huguenot Museum, the Museum of Witchcraft, and St Mungo's Museum of Religious Life and Art (which is multi-faith).

Only one museum specifically relates to women's history – the Glasgow Women's Library – and women are also less well represented than men in the category of personality museums. 10.7% of the 168 personality museums are focused on women's lives. There is also very little attention paid to disability or deafness. Bethlem: Museum of the Mind is an exception in this respect, as are the Landon Down Museum of Learning Disabilities, and the Deaf Museum and Archive.

Growth rate according to subject matter reflects broader patterns of museum growth, in that the fastest rates of growth across most categories occurred in the 1960s and 1970s before slowing down in the 1980s and showing signs of stasis or contraction in the late 1990s or early 2000s. However, there are exceptions. For example, the categories of rural industry and transport increased most rapidly during the 1960s and 1970s. In both cases, the rising numbers of these museums can be linked to changes in the related technologies and the availability of both artefacts and accommodation. Conversely, numbers of rural industry museums began to fall in the late 1980s, much sooner than those in other subject areas. With the slowing of growth in recent years, most museums across the subject index are in stasis or decline. The museum subjects that have shown growth over the past five years (expressed as average percentage growth) includes belief and identity (1.7%), medicine and health (1.9%), food and drink (2.3%), and science and technology (3.4%).

Subject matter and governance

There are noticeable differences in the subject matter of museums depending upon their governance.

The most common subject among national museums in 1960 was arts. In 2017 the most common subject is war and conflict. There are now 19 national war and conflict museums, with the growth in numbers coming from the foundation of new branch museums (see Table 3).

Subject Matter	Open as of 1960	Open as of 2017	Closed as of 2017	Closed (%)	Cumulative Growth (%)
Archaeology	1	1	0	0	0
Arts	10	14	2	12.5	40
Buildings	4	6	0	0	50
Communications	0	1	0	0	–
Industry and Manufacture	0	3	0	0	–
Leisure and Sport	1	1	0	0	0
Local Histories	0	1	2	66.7	–
Mixed	6	6	2	25	0
Natural world	3	2	1	33.3	-33.3
Personality	0	1	0	0	–
Rural Industry	0	2	0	0	–
Science and Technology	1	2	0	0	100
Sea and Seafaring	2	3	0	0	50
Transport	0	3	0	0	–
War and Conflict	6	19	0	0	216.7

Table 3: Numbers of national museums open in UK in 1960 and 2017; numbers of museum closures between 1960 and 2017; percentage closure and percentage growth in numbers of museums, according to subject matter.

The most common subject matter for local authority museums in both 1960 and 2017 is local history (see Table 4). The second most common category is mixed museums, most of which are encyclopaedic. Indeed, local authorities run the majority of encyclopaedic museums.

Subject Matter	Open as of 1960	Open as of 2017	Closed as of 2017	Closed (%)	Cumulative Growth (%)
Archaeology	7	24	4	14.3	242.7
Arts	56	67.2	27	28.7	19.8
Belief and Identity	2	4	0	0	100
Buildings	46.1	82.1	14	14.6	78.2
Communications	0	0	2	–	–
Food and Drink	0	1	0	0	–
Industry and Manufacture	1	33	10	23.3	3,200
Leisure and Sport	3	2	3	60	-33.3
Local Histories	115.2	254.5	61	19.3	120.9
Medicine and Health	0	1	0	0	–
Mixed	100.1	108.1	19	14.9	8
Natural World	14	10.1	9	47.1	-28.2
Personality	22.6	38.1	11	22.4	68.6
Rural Industry	0	24.2	7	22.4	–
Science and Technology	2	4	2	33.3	98.3
Sea and Seafaring	2	13	8	38.1	551.5
Services	2	4.1	4	49.4	104.7
Transport	2	12	11	47.8	501.3
Utilities	1	4	2	33.3	292.2
War and Conflict	7	25	3	10.7	257.1
Other	0	3	1	25	–

Table 4: Numbers of local authority museums open in UK in 1960 and 2017; numbers of museum closures between 1960 and 2017; percentage closure and percentage growth in numbers of museums according to subject matter.

The most common subjects among independent museums are local history and buildings (see Table 5). However, instead of war and conflict occupying third place as it does when museums of all governance types are considered, that position goes to transport museums. Significantly, the new museum subjects that have emerged since 1960 are generally located within the independent sector. 98.6% of the museums that opened in the category of leisure and sport were independent, 94% of those in belief and identity, 93.2% of those in food and drink, 92% in transport, and 84% of utilities.

The same pattern is observed when the data is analysed according to subject matter sub-categories. For instance, eight of the nine museums that are categorised as film, cinema and TV that opened after 1960 are independent. Some sub-categories are entirely comprised of independent museums including: computing, cricket, ethnic identity, fairgrounds, football, freemasonry, gas or electricity, medical associations, photography, and rugby and football.

Subject Matter	Open as of 1960	Open as of 2017	Closed as of 2017	Closed (%)	Cumulative Growth (%)
Archaeology	20.1	55.1	8	12.7	173.8
Arts	30.6	109.2	37	25.3	257
Belief and Identity	19.8	82.2	13.5	14.1	314.3
Buildings	200.4	462.4	37	7.4	130.7
Communications	1	12	2	14.3	1,100
Food and Drink	0.7	14.5	9	38.3	–
Industry and Manufacture	7.6	106.2	26	19.7	1,295.7
Leisure and Sport	5.7	77.3	47	37.8	1,256.3
Local Histories	64.8	479.4	40	7.7	640.1
Medicine and Health	8.6	28.1	7	19.9	224.7
Mixed	24.3	37.2	15	28.7	53.2
Natural World	5	21.2	10	32.1	323.3
Personality	58.1	122.1	14	10.3	110.2
Rural Industry	10.9	84.3	55.7	39.8	676.2
Science and Technology	0	13	0	0	–
Sea and Seafaring	5.1	79	13	14.1	1,439.7
Services	3.4	31	5	13.9	817.7
Transport	12	209.3	76	26.6	1,650.1
Utilities	0	27	1	3.6	–
War and Conflict	76.4	266.6	48	15.3	248.7
Other	6.3	35	20	36.4	459.3

Table 5: Numbers of independent museums open in UK in 1960 and 2017; numbers of museum closures between 1960 and 2017; percentage closure and percentage growth in numbers of museums, according to subject matter.

Independent museums focus on a more heterogeneous range of subjects than government museums. They are also more likely to cover subjects that are connected to belief and identity, and that address aspects of ordinary life or popular culture.

There are also differences between the types of independent museums and their subject matter. For example, the majority of National Trust museums are of buildings, although they also own some museums categorised under personality and war and conflict. Private museums cover most subject areas but their numbers are notably higher in a few subject categories. For example, around half of the category buildings that are under independent governance are in private hands. Most of these are large houses that are owned by a family and opened as museums to help cover costs and retain ownership. A disproportionately high number of car museums are private, as are museums of toys and models, museums of cricket, and museums of football and rugby, often reflecting their beginnings as individual collections of a single individual or their operation as a commercial enterprise. Local history museums and museums of belief and identity are almost all not for profit because they tend to be connected to a community or a special interest group.

Subject matter and closure

Our findings demonstrate that there are differences in how many museums closed between 1960 and 2017, according to subject matter (see Table 2).

In this period, the highest proportion of closure is among museum categories of rural industry (39%), leisure and sport (39%), food and drink (39%), natural world (33%) and transport (28%). It is unclear why museums of rural industry have such high rates of closure. For the remaining categories, all have high levels of private ownership and, as noted above, they are more likely to have a limited life. The high proportion of transport museum closures is mainly due to closure of privately-owned car museums, often high value collections, which the owner sells to liquidate assets.

The category of buildings has a low closure rate at around 9%. This resilience is partly because a large number of buildings museums are owned by the National Trust, the National Trust for Scotland, and English Heritage, which are well established organisations and unlikely (or legally unable) to dispose of assets. It is also because a large number of buildings museums are large historic houses in private ownership. Of all the science and technology museums open between 1960 and 2017, only 8.7% closed, the smallest percentage of any subject (although this relates to far fewer museums than the category of buildings).

The numbers of museum closures vary significantly between sub-categories. In some there have been no museum closures in this time period. These include: computing and gaming, church treasuries, design, dinosaurs, Freemasons, literature, manufacturing/metals, the Navy, palaces, personality/music, the RNLI, windmills, and zoology. There are low numbers in each of these groups (between 5 and 19) but there are other sub-categories with similarly low numbers where the proportion of museums that close is very high, such as that of bicycles, 84.5% of which have closed. Several possible factors underpin this variance. For example, the Navy, RNLI, Freemasons, and church treasuries are all connected to established institutions with associated infrastructure and governance mechanisms. The Anglican Church also has strict rules governing the disposal of church fittings, fixtures, and chattels. Palaces, church treasuries, and windmills are often listed buildings, a designation that encompasses the equipment and machinery and prevents the collections from being dispersed.

The other areas of subject matter with low numbers of closures have different characteristics. Museums of computing and gaming have all opened within the past fifteen years (at the time of writing), so may still have a degree of momentum, while dinosaurs have great popular appeal. It is less clear why the small number of museums of design and of literature should have been more than usually resilient.

In addition, almost all the museums in these resilient sub-categories are constituted as not for profits or are owned by the local authority. This gives them a degree of stability, because while it is possible for a local authority or not for profit museum to dispose of its collection, that process involves considerable legal proceedings and often a high degree of public disapprobation. There are no such restrictions when a museum is privately owned.

Variation according to museum size

Our findings show that in 2017, the breakdown of the UK museum sector was as follows:

- Small (56%)
- Medium (27%)
- Large (15%)
- Huge (0.36%)

Small museums make up the majority of the UK museum sector. The number of small museums has increased more rapidly than that of museums of other sizes in this period.

In terms of closure, we can identify a trend of decreased risk of closure with increased museum size. Small museums are much more likely to close than medium or large museums. No museum categorized as huge has ever closed (see Table 6).

Size	Open as of 1960	Open as of 2017	Closed as of 2017	Closed (%)	Cumulative Growth (%)
Huge (1 million +)	12	12	0	0	0
Large (50,001–100,000)	244.2	497.1	31	5.9	103.1
Medium (10,000–50,000)	376.4	867.8	140	13.9	130.6
Small (0–10,000)	374.1	1,855.7	545.2	22.7	374.1

Table 6: Numbers of museums open in UK in 1960 and 2017; numbers of museum closures between 1960 and 2017; percentage closure and percentage growth in numbers of museums, according to size (calculated according to visitor numbers). Note: As explained in 'Scope of the report' size categories are retrospectively applied. Thus, the differences in numbers between 1960 and 2017 relates to new museums rather than to changes in size of the existing museums).

Our findings show correlations between governance and size. The majority of huge museums are nationals, the exceptions being the Tower of London (run by Historic Royal Palaces), Edinburgh Castle (run by Historic Environment Scotland) and Kelvingrove in Glasgow (owned by the local authority and managed by the charitable company Glasgow Life). By contrast, 48.8% of local authority museums are medium sized and 27.5% are small. The vast majority of private (82.3%) and not-for profit (68.9%) museums are small.

When size and governance are cross referenced, small independent museums make up the largest proportion of museums, comprising at least 47% of the museum sector. If museums where size is unknown (these are likely to be small) and governance is unknown (these are likely to be independent) are included, this figure rises to 50.6%. However, the 12 huge museums record more annual visits than all of the small museums put together.

Accredited and unaccredited museums

According to our findings, the UK museum sector has almost exactly even numbers of accredited and unaccredited museums.

In terms of governance type, government museums are much more likely than independent museums to be accredited (see Table 7). 89.5% of national museums are accredited while 78.2% of local authority museums are accredited. By contrast, slightly over half (51.6% of not for profit museums are accredited. Private museums cannot be accredited because they do not meet the accreditation scheme's requirement that museums be held in public trust. Some museums that are eligible for accreditation may not have the capacity to reach the standards set by the scheme. Others may not have the capacity to apply, or have decided that it is not a priority for their organisation.

Governance	Accredited	Unaccredited	% Accredited
Government			
Cadw	0	3	0
Local Authority	557	155	78.2
National	60	7	89.5
Other	0	2	0
Total Government	617	167	78.7
Independent			
English Heritage	33	17	66
Historic Environment Scotland	8	10	44.4
National Trust	145	38	79.2
National Trust for Scotland	8	17	32
Not for Profit	769	722	51.6
Private	0	445	0
Unknown	1	120	0.8
Total Independent	964	1369	41.3
University	69	22	75.8
Unknown	0	54	0
Total	1,650	1,612	50.6

Table 7: Numbers of UK museums in 2017 according to governance and accreditation (unweighted numbers).

Our findings demonstrate that accreditation positively correlates with size; the larger a museum is, the more likely it is to be accredited. Of museums categorised as huge, 92.3% are accredited, among large museums it is 78.4%, for medium it is 71.5% and for small museums it is 33.8% (see Table 8).

Size	Accredited	Unaccredited	% Accredited
Small	620	1,211	33.8
Medium	620	247	71.5
Large	391	107	78.4
Huge	11	1	92.3

Table 8: Numbers of UK museums in 2017 according to size and accreditation (unweighted numbers)

Subject Matter	Accredited	Unaccredited	% Accredited
Archaeology	54	36	60
Arts	152	83	64.7
Belief and Identity	33	55	37.5
Buildings	247	306	44.7
Communications	7	6	53.8
Food and Drink	1	14	6.7
Industry and Manufacture	66	78	45.8
Leisure and Sport	17	63	21.3
Local Histories	471	275	63.1
Medicine and Health	18	16	52.9
Mixed	129	29	81.6
Natural World	22	25	46.8
Other	9	35	20.5
Personality	93	75	55.3
Rural Industry	36	77	31.8
Science and Technology	10	11	47.6
Sea and Seafaring	42	56	42.9
Services	7	28	20
Transport	78	149	34.3
Utilities	11	22	33.3
War and Conflict	147	173	45.9

Table 9: Numbers of UK museums in 2017 according to subject matter and accreditation (unweighted numbers).

Our findings indicate significant variation in accreditation status across subject matter (see Table 9). Museums of a more traditional subject matter (namely subjects common in 1960) are more likely to be accredited than those of a non-traditional subject matter (subjects that have largely emerged since 1960). For instance, 81.6% of museums with mixed subject matter, a category that includes major encyclopaedic museums, are accredited, as are 64.7% of arts museums. These figures are unsurprising given that local authorities have historically founded both types of museum and it is more common for local authority museums to be accredited.

By contrast, subjects that fall outside the traditional canon, such as transport, belief and identity, and rural industry, have much lower rates of accreditation. Similarly, museums in the categories of food and drink, services, and leisure and sport are almost always unaccredited. The classification 'other' contains museums that do not comfortably fit into any of the twenty subject categories we devised, and these too are predominantly unaccredited.

The same trend in relation to traditional/non-traditional subject matter is discernible at the level of sub-categories. For instance, 64.3% of museums in the sub-category religion are accredited in comparison to 22.2% in the sub-category ethnic group. 76% of museums in the sub-category regimental and corps museums are accredited, whereas museums in the sub-category of wartime bunkers are entirely unaccredited. On similar lines, unaccredited museums are much more likely to belong to categories that relate to specialised or niche topics. The category natural world is comprised of sub-categories including mixed (traditional natural history museums with a wide scope), dinosaurs, and fossils. The first sub-category is almost entirely comprised of accredited museums, whereas the latter two sub-categories largely comprise of unaccredited museums.

Examining figures since the formal launch of the accreditation scheme, it is clear that closures among unaccredited museums vastly outpaced closures of accredited museums (see Table 10). In this period, 25.5% of unaccredited museums have closed in contrast to only 2.0% of accredited museums.

Status	Open Between 1990–2017	Closed 1990–2017	Closure (%)
Accredited	1,684	34	2.0
Unaccredited	2,164	552	25.5

Table 10: Closures of museums in 1990–2017 according to accreditation status (unweighted numbers).

It is likely that working towards and achieving the benchmarks set by the Museums Association definition and by accreditation helps museums to attract and retain audiences and thus to survive. It is also notable that around 25% of unaccredited museums are private, and private museums are more likely to close, partly because collections are sometimes sold for profit, or upon the retirement or death of the owner. However, the largest group of unaccredited museums are not for profits, which otherwise are the least likely to close of any group of museums by governance. In this instance, it may be that the decision not to apply for accreditation indicates a lack of long term buy-in from the founders or original volunteers, or a lack of capacity, which in turn has an impact on the longevity of the venue.

It is also important to point out that the Accreditation scheme requires museums to be established on a reasonable footing. Arts Council England, the Museum Development Network, Museums, Archives, Libraries Division (Wales), Museums Galleries Scotland, and the Northern Ireland Museums Council all specify that museums gain accreditation in order to qualify for financial support. Museums have to be working towards accreditation in order to qualify for support from the Museum Development Network. If unaccredited museums do not have the means to achieve minimum standards, then they may find it hard to leverage the funding or to get the advice that may help them to become resilient in the longer term.

National differences

Our findings demonstrate that the geographical distribution of museums across the UK has been relatively consistent between 1960 and 2017.

In 1960, the proportion of museums by nation was as follows:

- England 81.4%
- Scotland 13.3%
- Wales 3.8%
- Northern Ireland 1.2%

This general pattern holds in 2017, although growth has been more pronounced in some nations than others.

In 2017, the proportion of museums by nation was as follows:

- England 75.8%
- Scotland 15.2%
- Wales 6.2%
- Northern Ireland 8.4%

In numerical terms, England powered the growth of the sector and the museum boom of the late twentieth century (see Table 11). However, the distribution of museums has become slightly more equitable in geographical terms. England's proportion of the UK sector has fallen to 75.8%. Scotland's proportion has increased marginally to 15.2%. By contrast, both Wales and Northern Ireland saw the most dramatic expansion in growth and have seen significant proportionate growth. Based on current rates of growth/decline, it is likely that England and Scotland's proportion of UK museums will continue to marginally decrease while Wales and Northern Ireland's proportion will continue to marginally increase (see Figure 6).

The proportion of museums that have closed during the period between 1960 and 2017 is relatively consistent across England, Scotland, and Wales at between 17% and 19%. By contrast Northern Ireland has a smaller proportion of closures at 12.1%. This discrepancy may be explained by the fact that the Northern Ireland museum sector is characterised by lower proportion of private museums, which tend to have a high incidence of closure, and also by the relatively recent development of the sector (see Table 11).

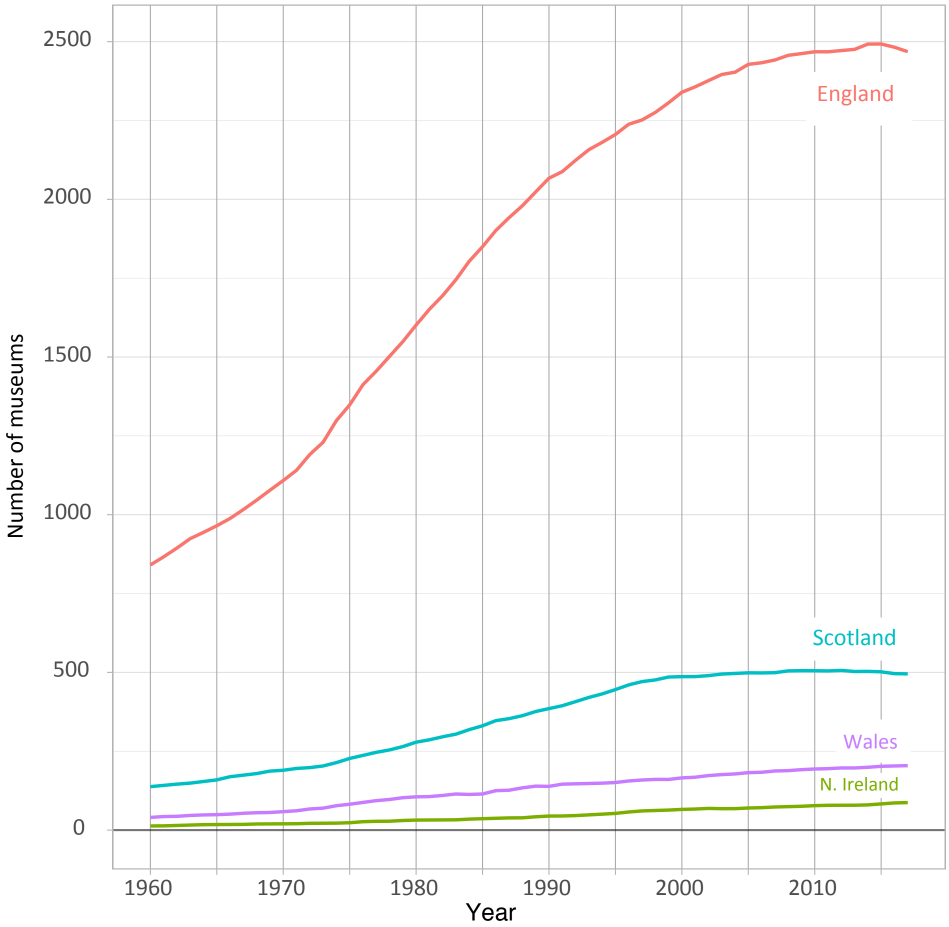


Figure 6: Graph showing numbers of museums open over time according to nation.

Nation	Open as of 1960	Open as of 2017	Closed as of 2017	Closed (%)	Cumulative Growth (%)
England	840.7	2,468.2	585.7	19.2	193.6
N. Ireland	13.1	87.2	12	12.1	565.5
Scotland	137.7	495.3	110.5	18.2	259.7
Wales	40.2	204.4	42	17	408.8

Table 11: Numbers of museums open in UK in 1960 and 2017; percentage closure and percentage growth in numbers of museums, according to nation (excluding crown dependencies).

Our findings also show that UK museum distribution can be understood quite differently when considering museum density. Our analysis shows that Scotland has the highest number of museums per resident, at 9.1 per 100,000 people. This is double the density of museums in England and thus provides the greatest provision of museums for its residents (see Table 12). However, our analysis does not measure the relative distances that residents have to travel to reach a museum.

Nation	Number of Museums 2017	% of UK Museums	Population as of 2017	Museums per 100,000 People
England	2,468.2	75.8	55,619,430	4.4
N. Ireland	87.2	2.7	1,870,834	4.6
Scotland	495.3	15.3	5,424,800	9.1
Wales	204.4	6.3	3,125,165	6.5

Table 12: Number of museums; percentage share of UK museums, population as of 2017; museums per 100,000 of population, according to nation (excluding the crown dependencies).

There are differences in the rate of museum growth in this period across the four nations. Generally, the number of museums in all nations grows rapidly in the mid-1970s, before maintaining a lower, yet significant rate of museum growth in the 1980s. Growth slows in the 1990s (see Figure 7).

England, because of its significant proportion of museums, broadly traces the general trajectory of museum development in the UK, with the highest growth in the early to mid-1970s. Since the peak in 1974, growth has continued although its rate has consistently declined, with the sector beginning to contract in 2016.

Scotland shows a similar pattern to England, with a marked increase in growth in the early 1970s, peaking in 1975. In the 1980s growth was maintained between 2% and 3% before falling sharply during the late 1990s. The Scottish museum sector first contracted in 2006, grew slightly, and then contracted again from 2010 onwards (The smoothed graph in Figure 7 does not show the 2006 contraction).

Wales saw its fastest rate of growth in the 1970s, when it was also the nation with the fastest growing sector, surpassing 7.5% growth during the middle of the decade. The sector peaked again at 4% annual growth in the late 1980s. During this period, the Welsh museum sector has not contracted; its growth stood at 0.5% in 2017, although its overall trend is towards stasis.

Northern Ireland shows the most pronounced differences from the overall trend, displaying sporadic peaks of growth, particularly in the mid-1970s and the mid-1990s. It is also unusual in that following a sharp fall in growth in the late 1990s and early 2000s, it is now on an upward trajectory. Northern Ireland is the only UK nation to currently have an expanding museum sector, with its sector growing by 2.8% in 2017.

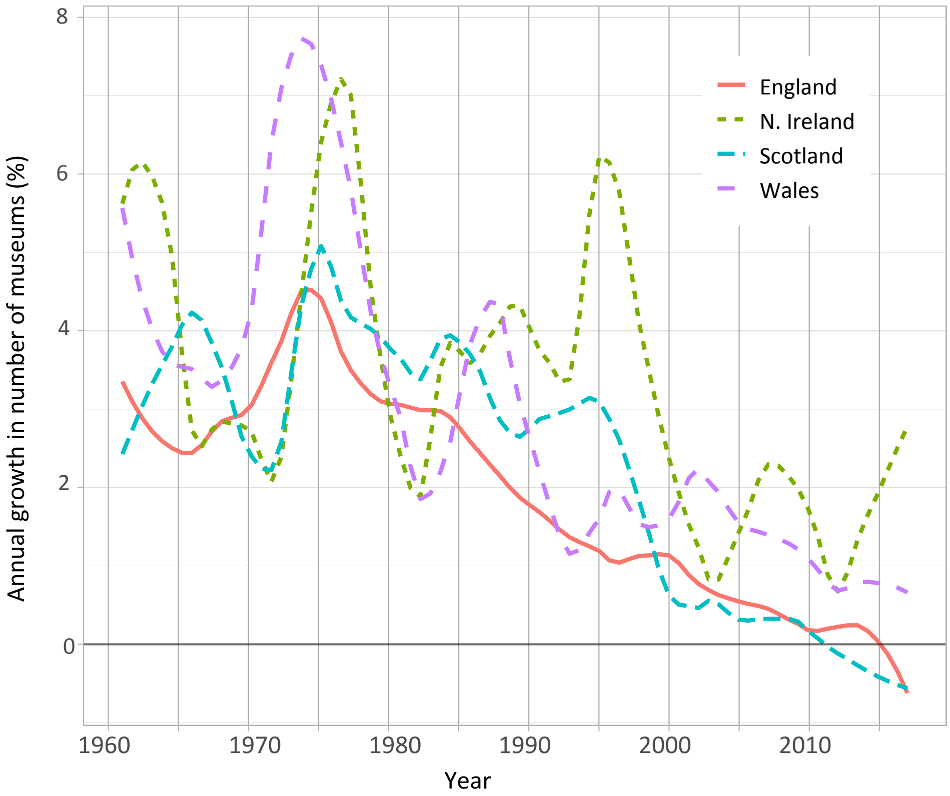


Figure 7: Percentage growth rate of UK museums from 1960 until 2017 according to nation.

National differences and governance

Our findings demonstrate geographical variation between the nations with respect to the governance status of museums that have opened and closed in this period.

Since 1960, the number of national museums in the UK has doubled from 34 to 67. England has gained 23 new national museums indicating a nearly 100% increase. Broadly comparable growth figures are reported for Scotland, Wales, and Northern Ireland (see Table 13). This means that the proportion of national museums remains the same in 2017 as it did in 1960, with England accounting for 70% of the total.

Nation	Open as of 1960	Open as of 2017	Closed as of 2017	Closed (%)	Cumulative Growth (%)
England	24	47	5	9.6	95.8
N. Ireland	2	4	0	0	100
Scotland	5	9	1	10	80
Wales	3	7	1	12.5	133.3

Table 13: Numbers of national museums open in UK in 1960 and 2017; numbers closed between 1960 and 2017; percentage closure and percentage growth in numbers of museums, according to nation.

Since 1960, the number of local authority museums has increased from 380 to 709. At the outset of this period England had 304 of the UK's local authority museums (80%), but it has grown at a comparatively slow rate, with just under 200 new local authority museums (see Table 14). England also has a comparatively high closure rate for its local authority museums of 23.5%. This has led to an overall expansion of local authority museums by 65% between 1960 and 2017. In the context of the wider sector, England now accounts for 70% of the UK's local authority museums.

Each of the other three nations demonstrated a three-digit rate of growth. In Northern Ireland the local authority museum sector grew eightfold, expanding from 3 museums to 29 museums (851%). This growth is buoyed by Northern Ireland's low closure rate (12.1%) for local authority museums.

Nation	Open as of 1960	Open as of 2017	Closed as of 2017	Closed (%)	Cumulative Growth (%)
England	303.9	501.8	154	23.5	65.1
N. Ireland	3.1	29	4	12.1	851.4
Scotland	55	125.4	34	21.3	127.9
Wales	18.1	53.1	5	8.6	194

Table 14: Numbers of local authority museums open in UK in 1960 and 2017; numbers closed between 1960 and 2017; percentage closure and percentage growth in numbers of museums, according to nation.

Since 1960, the number of independent museums in the UK has increased from 561 to 2,352. Among not for profit museums the rate of growth by nation broadly mirrors that of local authority museums in that the highest rate of growth has been in Northern Ireland and the lowest in England (see Table 15). This has meant that the proportion of independent museums by nation has remained broadly the same during this period, with England accounting for 82.9% of not for profit museums in 1960, and 80.3% in 2017.

Closure rates for not for profit museums are relatively consistent across the nations.

Nation	Open as of 1960	Open as of 2017	Closed as of 2017	Closed (%)	Cumulative Growth (%)
England	219.7	1,162.8	106	8.4	429.3
N. Ireland	3.1	25	3	10.7	716.1
Scotland	31	211.1	23.5	10	581.9
Wales	11	79	7	8.1	615.5

Table 15: Numbers of not for profit museums open in UK in 1960 and 2017; numbers closed between 1960 and 2017; percentage closure and percentage growth in numbers of museums, according to nation.

Our findings show that in 1960 the private museum sector was predominantly concentrated in England, where 90% of such museums were located. Private museums were virtually non-existent in Wales and Northern Ireland and have emerged as a new type of museum practice within these nations (see Table 16).

Wales saw a high degree of churn in the private museum sector. There was only one private museum in Wales in 1960 whereas in 2017 there were 27. However, a further 23 private museums closed, 44.1% of the total.

By 2017, England's proportion of the UK's private museums had fallen to 77.9%.

Nation	Open as of 1960	Open as of 2017	Closed as of 2017	Closed (%)	Cumulative Growth (%)
England	102.6	346.2	185.7	34.9	237.6
N. Ireland	0.3	11.1	2	15.3	–
Scotland	8.8	57.1	18	24	549.8
Wales	1.9	29.1	23	44.1	1,435.3

Table 16: Numbers of private museums open in UK in 1960 and 2017; numbers closed between 1960 and 2017; percentage closure and percentage growth in numbers of museums, according to nation.

Between 1960 and 2017, the composition of the national sectors by governance has seen significant change. In 1960:

- In England, 464 museums (55.2%) were independent and 329 museums (39.1%) were government museums.
- In Scotland, 65 museums (47.3%) were independent and 60 museums (43.5%) were government museums.
- In Wales, 16 museums (40%) were independent and 22 museums (55.1%) were government museums.
- In Northern Ireland 8 museums (57.5%) were independent and 3 museums (25%) were government museums.

By 2017, the composition of the sector has become much more heavily weighted towards independent museums (see Figure 8):

- In England, 1,809 museums (73.2%) are independent and 549 (22.2%) are government museums.
- In Scotland, 326 museums (65.8%) are independent and 133 (27.1%) are government museums.
- In Wales, 125 museums (61.2%) museums are independent and 64 (31.3%) are government museums.
- In Northern Ireland, 45 museums (51.7%) are independent and 33 (37.9%) are government museums.

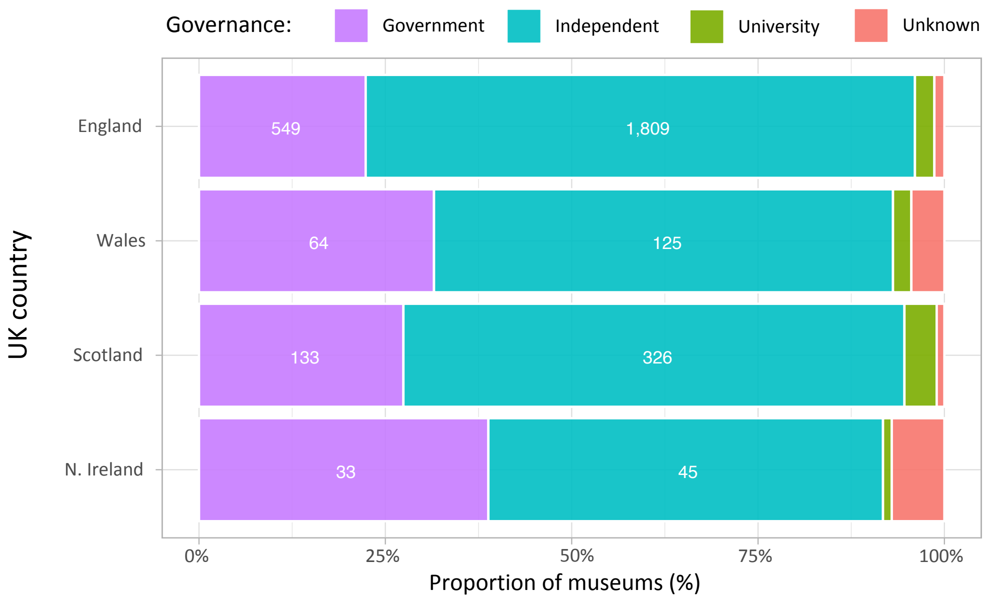


Figure 8: Numbers of UK museums in 2017 according to governance, by nation. The numbers in the bars indicate the number of museums in each category.

In this period, England, Scotland and Wales saw an average 19.7% increase in the proportion of independent museums and a corresponding 19% decrease in government museums. The outlier is Northern Ireland. While independent museums continue to constitute the majority of its museum sector, this category actually saw a 5% decrease in its sector share and a 13% increase in its proportion of government museums.

Interpreting these differences is not straightforward. It is possible that the large proportion of independent museums in England is evidence of individual or community enthusiasm for establishing museums, or it may be related to differing levels of affluence and the related capacity to open museums. It could also be interpreted as under-investment by government. England has fewer local authority museums per 100,000 residents than the other three nations and higher rates of closure, which may indicate less investment in local authority museums in England.

Conversely, in Northern Ireland there are higher numbers of local authority museums per 100,000 residents, and lower rates of closure, which suggests both investment in and a commitment to maintaining local authority museums. Various factors underpin the relatively low proportion of independent museums. The data shows that Northern Ireland had no private museums in 1960 and only three not for profit museums. (It is possible that there were independent museums open at this time in Northern Ireland but that they were not documented and therefore not captured in this research). Thus, it is only since 1960 that the independent museum sector has become established in Northern Ireland. While the growth rate of independent museums has been extremely high, this part of the sector has effectively started from scratch.

Like Northern Ireland, Wales also had a very small independent sector in 1960 and it too has started from a small baseline. Like Northern Ireland, it also shows higher levels of local authority provision per 100,000 residents than England. By contrast, Scotland shows high rates of local authority and independent museums per head suggesting that local enthusiasm and state investment are not mutually exclusive.

National differences and museum size

Our findings show that the majority of museums in each nation are categorised as small (see Figure 9).

England has the biggest number of small museums at 1,327, but this equates to the smallest proportion of the UK nations at 54%. England has proportionately more medium (27.9%) and large (16.7%) museums than the other nations. The Scottish museum sector has the second highest proportion of small museums (65.7%) but also the highest proportion of huge museums per sector size, which likely reflects the predominance of Edinburgh and Glasgow as cultural capitals. Conversely, Northern Ireland can be characterized as a sector dominated by small museums, with the highest proportion across the nations (68.2%) (see Figure 9)

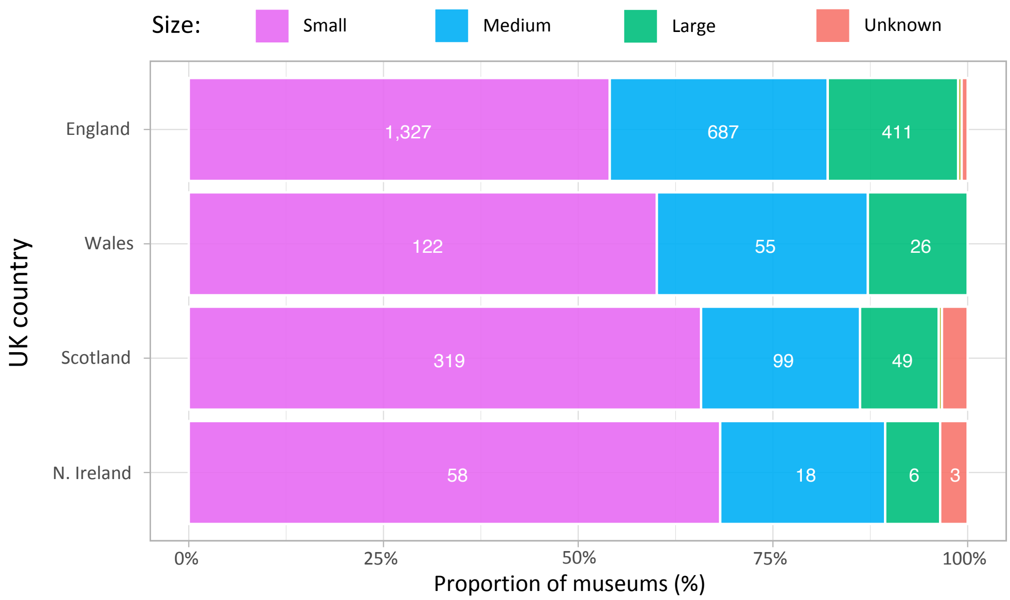


Figure 9: Numbers of UK museums in 2017 according to size, by nation. The category of huge museums is too small to appear in the figure. The numbers in the bars indicate the number of museums in each category.

Regional differences in England

We have divided England into nine regions as per the standard ONS classification. Our findings demonstrate that while there has been a degree of regional variation in terms of museum development, the sector retains the same basic geographical distribution in 2017 as it did in 1960: pre-existing inequities in museum provision have not changed.

In 1960, the South East had the highest proportion of museums of the English regions at 19.4%, while the North East had the lowest proportion at 4.4%. Museums were weighted in the South: collectively, the South East and South West accounted for 36.2% of museums in contrast to the North East and North West, which accounted for 15.6% (see Table 17).

In 2017, the South East still has the highest proportion of museums in English regions, which has remained the same at 19.4%, while the North East still has the lowest proportion, which has declined to 3.7%. Moreover, the gap between the two regions has grown. In 1960 the South East had over four times as many museums as the North East. In 2017, it had over five times as many museums.

Museums continue to be concentrated more heavily in the South: collectively, the South East and South West now account for 36.3% of museums in contrast to the North East and North West, which account for 13.5%.

Region	Open as of 1960	% of English museums	Region	Open as of 2017	% of English museums	% +/-
East Midlands	51.7	6.2	East Midlands	224.4	9.1	2.9
East of England	91	10.8	East of England	330.4	13.4	2.6
London	98.9	11.8	London	225.8	9.2	-2.6
North East	37.3	4.4	North East	92.1	3.7	-0.7
North West	94.3	11.2	North West	241.5	9.8	-1.4
South East	163.1	19.4	South East	479.1	19.4	0.0
South West	140.9	16.8	South West	416.8	16.9	0.1
West Midlands	85	10.1	West Midlands	232.2	9.4	-0.7
Yorkshire and the Humber	78.4	9.3	Yorkshire and the Humber	224.9	9.1	-0.2
	840.6			2,467.2		

Table 17: Numbers of museums open in England in 1960 and 2017 according to region; their percentage of English museums; and change in the percentage share of the sector.

The region with the highest rate of growth in this period is the East Midlands, with an increase from 52 to 224 museums (a 333.8% increase). The region with the lowest rate of growth was London, with an increase from 99 to 226 (a 128.3% increase). The rate of growth in this period has influenced the proportionate representation of the sector. The East Midlands (+2.9%) and the East of England (+2.6%), have seen the most significant proportionate increases, while Yorkshire (+0.7%) shows a marginal increase. By contrast, growth in London (-2.6%), the North West (-1.4%), West Midlands (+0.7%) and the North East (-0.7%) has not been as rapid and thus shows a relative proportionate decline.

Our findings on the unequal distribution of museums in the UK are not significantly changed if we correlate numbers of museums to the data on population density. The South West has by far the highest density of museums at 7.5 museums per 100,000 residents, followed by the South East and the East of England, both with 5.3 museums per 100,000 residents. This mirrors the three regions with the highest number of museums. By contrast, the North East has 3.5 and the North West has 3.3 museums per 100,000 residents. London has the lowest density of museums at 2.5 per 100,000 (see Figure 10).

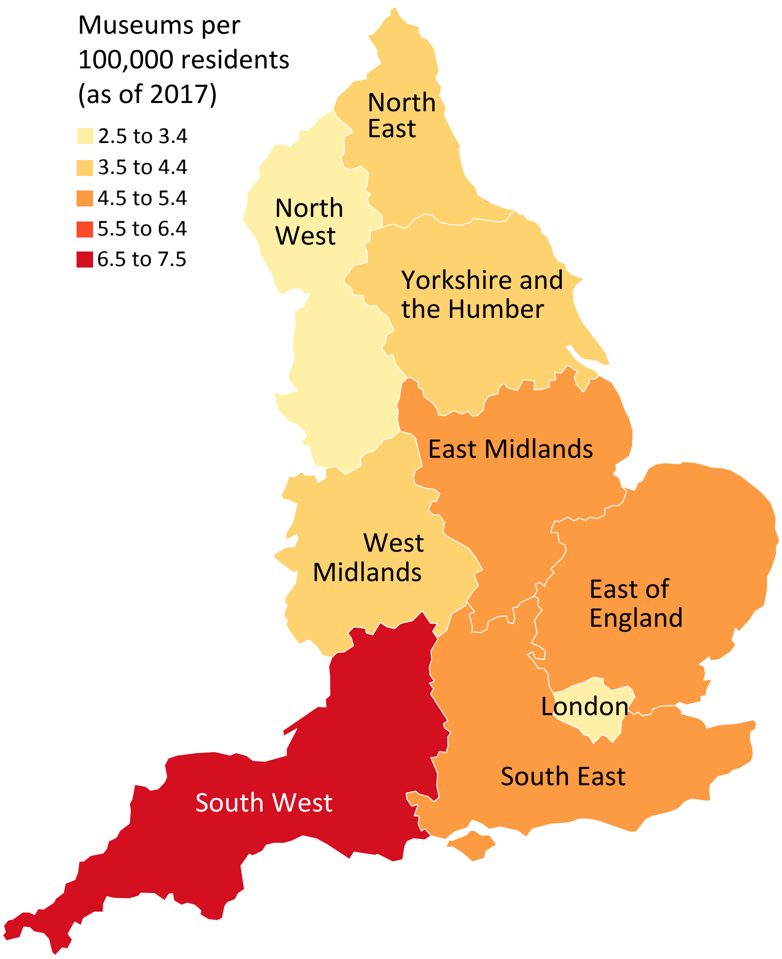


Figure 10: Museums per 100,000 residents by English statistical region.

As previously noted, growth of museums is not just tied to numbers of new museums but also to the proportion of museums that close. Of all the museums that were open between 1960 and 2017, 18.7% closed. The regions with the highest incidence of closure are the North West, where 23% of the museums closed during this period, the North East where 22.7% closed, and the South West where 22.6% closed. Significantly, the East Midlands and the East of England, which have the highest percentage growth also have below average levels of closure. Between 1960 and 2017, 15.8% of the museums in the East Midlands and 16.9% of those in the East of England closed. Likewise, the South East, which has the highest number of museums, also has low levels of closure: between 1960 and 2017, 17% of the museums that were open in this region closed (see Table 18).

Region	Open as of 1960	Open as of 2017	Closed as of 2017	Closed (%)	Cumulative Growth (%)
East Midlands	51.7	224.4	42	15.8	333.8
East of England	91	330.4	67	16.9	263
London	98.9	225.8	59	20.7	128.3
North East	37.3	92.1	27	22.7	146.8
North West	94.3	241.5	75	23.7	156.2
South East	163.1	479.1	98	17	193.7
South West	140.9	416.8	122	22.6	195.8
West Midlands	85	232.2	50	17.7	173.1
Yorkshire and the Humber	78.4	224.9	45.7	16.9	186.8

Table 18: Numbers of museums open in England in 1960 and 2017; numbers closed between 1960 and 2017; percentage closure and percentage growth in numbers of museums, according to region.

Regional differences in museum governance (England)

Our findings indicate that in this period the provision of local authority museums has been relatively consistent throughout England. The real difference has come with the growth of independent museums. Within this category, there are substantive differences in terms of the geographical distribution of growth.

National museums skew heavily towards London, although the capital has seen a proportionate drop from 70.8% to 42.5%. While still heavily concentrated in London, there is now a more equitable regional distribution of national museums, with all regions except the East Midlands gaining one or more since 1960. The North West has seen the most significant growth in this area, which is largely due to the creation of National Museums Liverpool in 1986 and new national museums in Manchester (see Table 19).

Region	Open as of 1960	Open as of 2017	Closed as of 2017	Closed (%)	Cumulative Growth (%)
East Midlands	0	0	0	0	0
East of England	1	2	0	0	100
London	17	20	4	16.7	17.6
North East	0	2	0	0	–
North West	3	10	1	9.1	233.3
South East	2	5	0	0	150
South West	0	3	0	0	–
West Midlands	1	2	0	0	100
Yorkshire and the Humber	0	3	0	0	–

Table 19: Numbers of national museums open in England in 1960 and 2017; numbers closed between 1960 and 2017; percentage closure and percentage growth in numbers of museums, according to region.

Local authority museums are present in the highest numbers in the South East (87), followed by Yorkshire and the Humber (75). The North East has the lowest number of local authority museums (27) (see Table 20). The proportion of local authority museums by region has generally remained stable since 1960, with six of the nine regions showing a change of +/- 0.5%. The regions exhibiting most significant change were the East Midlands (+2%), which has seen significant growth, and the North West (-2%), which has seen the lowest growth in local authority museums of any region.

Region	Open as of 1960	Open as of 2017	Closed as of 2017	Closed (%)	Cumulative Growth (%)
East Midlands	23	49	11	18.3	112.9
East of England	31.1	52	14	21.2	67.4
London	19	34	12	26.1	78.9
North East	16	27.1	16	37.1	68.6
North West	44	61.3	30	32.9	39.2
South East	52.3	87.1	17	16.3	66.4
South West	34.5	56.2	21	27.2	62.8
West Midlands	38.9	60.1	18	23	54.6
Yorkshire and the Humber	45	75.1	15	16.6	66.7

Table 20: Numbers of local authority museums open in England in 1960 and 2017; numbers closed between 1960 and 2017; percentage closure and percentage growth in numbers of museums, according to region.

The North East (37.1%) and North West (32.9%) have the highest degree of closure among local authority museums in this period (see Table 20). The North West has the lowest percentage growth of local authority museums over this period and the local authorities have also struggled to maintain provision. However, the situation is less clear in the North East where some local authority museums were closed and later replaced by new institutions or were amalgamated to form a new museum service. For example, the Middlesbrough Art Gallery (2003), Cleveland Gallery (1999) and Cleveland Crafts Centre (2003) were closed, and their collections used to form the Middlesbrough Institute of Modern Art (2007). Thus, in this instance high closure figures should be treated with caution since they can be interpreted as a diminution of local authority museum provision or a means of consolidating and potentially improving provision.

Independent museums are present in the highest numbers in the South East at 365, closely followed by the South West with 350. The North East has the lowest number of independent museums at 57 (see Table 21).

The distribution of independent museums by region has changed since 1960. The regions exhibiting the most significant proportionate growth over this period were the East Midlands and the East of England. In 1960, 6.1% of England's independent museums were located in the East Midlands, whereas in 2017 the independent museums in that region account for 9.7% of the nation's total. Independent museums in the East of England accounted for 10.7% of the English total in 1960 and 13.8% in 2017. By contrast, the regions with the lowest growth rate were London, where the proportion of independent museums declined from 11.9% to 8.7%, and the South West, where the proportion declined from 22.1% to 19.2%.

Region	Open as of 1960	Open as of 2017	Closed as of 2017	Closed (%)	Cumulative Growth (%)
East Midlands	28.6	170.4	26	13.2	495.7
East of England	49.7	252.3	48	16	407.6
London	55.6	159.7	32	16.7	187.3
North East	16.1	57	9	13.6	255.3
North West	43.2	158.2	39	19.8	265.8
South East	97.5	364.7	71	16.3	274.2
South West	102.9	349.6	95	21.4	239.8
West Midlands	40.1	164.1	28	14.6	309.2
Yorks. & the Humber	30.4	140.8	22.7	13.9	363.4

Table 21: Numbers of independent museums open in England in 1960 and 2017; numbers closed between 1960 and 2017; percentage closure and percentage growth in numbers of museums, according to region.

Among independent museums, the highest proportions of closure are in the South West where 21.4% of all the museums open between 1960 and 2017 closed and the North West where 19.8% closed. These figures are comparable to local authority museum closures in the same regions, with the North West displaying the second highest figure for this category and the South West in third place. The significant closure figures for these respective regions could point to broader systemic difficulties with sustaining museum provision in these areas (particularly in light of the analysis by independent museum type below).

Examining independent museums in greater detail, we can see differences in the regional growth of both not for profit and private museums.

Not for profit museums are present in the highest numbers in the South East at 244, followed by the South West at 198. Conversely, the South West has the highest number of private museums at 84, followed by the South East at 58. The North East has both the fewest not for profits with 33 and private museums with 9 (see Table 22).

Region	Governance	Open as of 1960	Open as of 2017	Closed as of 2017	Closed (%)	Cumulative Growth (%)
East Midlands	Not for profit	12.1	101	6	5.6	738.4
	Private	11.3	34.3	14	29	203.7
East of England	Not for profit	19.3	174.1	8	4.4	800
	Private	17.2	51.1	27	34.6	197.8
London	Not for profit	40	120.1	13	9.8	200.2
	Private	5.3	21.6	13	37.6	310.9
North East	Not for profit	6	33	1	2.9	448.4
	Private	3	9	4	30.8	198.3
North West	Not for profit	16.8	91.1	16	14.9	443.1
	Private	12.2	41	18	30.5	235.7
South East	Not for profit	50	244.3	24	8.9	388.7
	Private	17	58.1	37	38.9	242
South West	Not for profit	44.4	198.1	20	9.2	346.6
	Private	21.5	84.2	51	37.7	292.5
West Midlands	Not for profit	17.1	104	9	8	509.9
	Private	6.1	23.1	13	36	276.2
Yorks. & the Humber	Not for profit	14.1	96.1	9	8.6	581.1
	Private	9	23.7	8.7	26.9	163.3

Table 22: Numbers of not for profit and private museums open in England in 1960 and 2017; numbers closed between 1960 and 2017; percentage closure and percentage growth in numbers of museums, according to region.

Across the nine regions, greater numbers of not for profit museums were established in this period than private museums. On average, per region, the not for profit sector added 104 museums (495% increase) as compared with the private sector, which added 27 museums (235% increase). In all regions the rate of proportionate growth of not for profits was faster than private museums. In some contexts, this has led to wide disparities between these types of museums. For example, in 1960, Yorkshire and the Humber had 14 not for profit museums and 9 private museums. By 2017, this had become 96 not for profit museums and 23 private museums.

The sole exception to this trend was London, where not for profits increased from 40 to 120 (+200%) while private museums increased from 5 to 22 (+300%).

Our data demonstrates that the rapid expansion of the independent sector was principally powered by the growth of not for profit museums. This is particularly evident in the East Midlands and the East of England; in both regions not for profit museums increased between three and four times faster than private museums. Significant growth is also demonstrable in Yorkshire and the Humber. As discussed above, this is not necessarily due to significantly more not for profit museums being established, but the difficulty in keeping private museums open. Table 22 starkly demonstrates the clear distinctions between private and not for profit museums, with the former having four times the number of closures as the latter. The South East (38.9%), South West (37.7%) and London (37.6%) demonstrate the greatest percentage of private sector closures.

As a result of the differences in opening and closure across governance, the regions have significant differences in terms of their proportions of government and independent museums (see Figure 11). To reiterate, across England the museum sector consists of 73.7% independent museums and 22.2% government museums.

The region that has a significantly higher proportion of independent museums to government museums than the national England average is the South West (83.9%/14.2%). The regions that have a significantly higher proportion of government museums than the average are Yorkshire and Humber (34.7%/62.6%), and the North East (31.6%/61.8%).

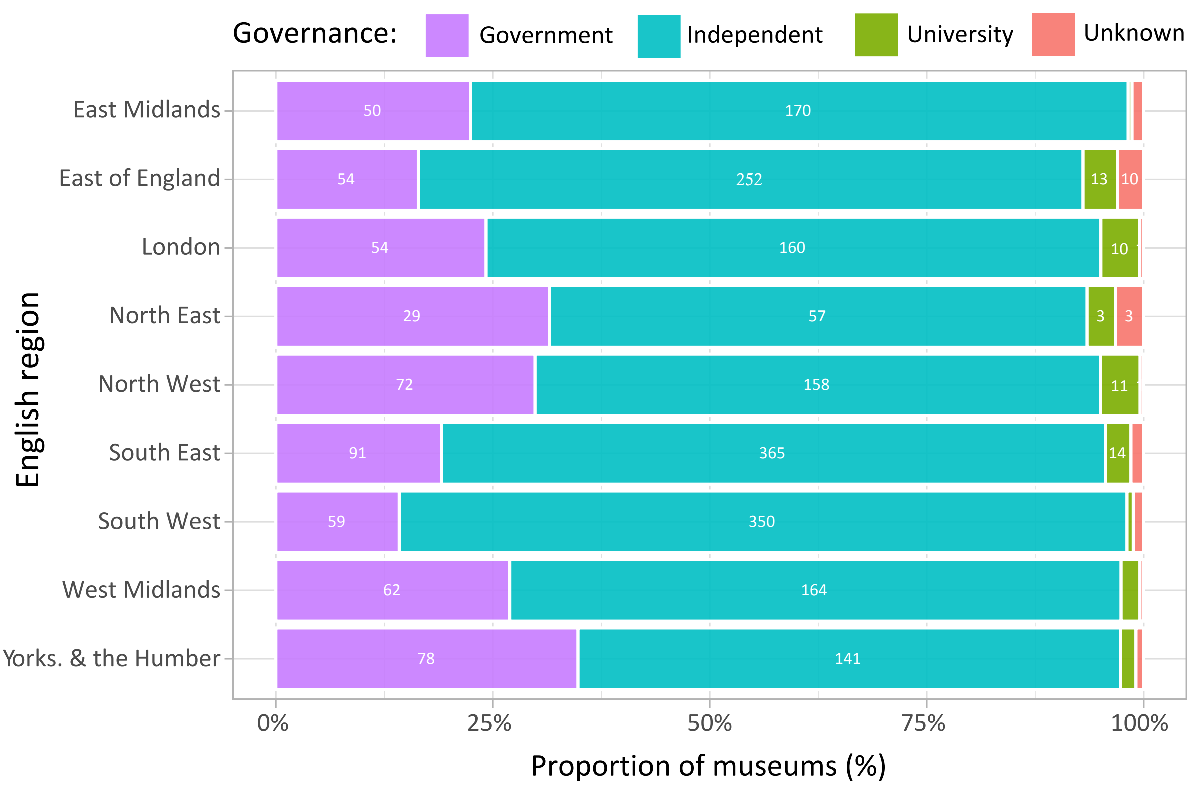


Figure 11: Numbers of English museums in 2017 according to governance, by region. The numbers in the bars indicate the number of museums in each category.

When the number of museums is considered in relation to population, the distribution of local authority museums is fairly uniform throughout English regions, with Yorkshire and the Humber having a higher number of government museums per 100,000 residents than other regions (see Figure 12).

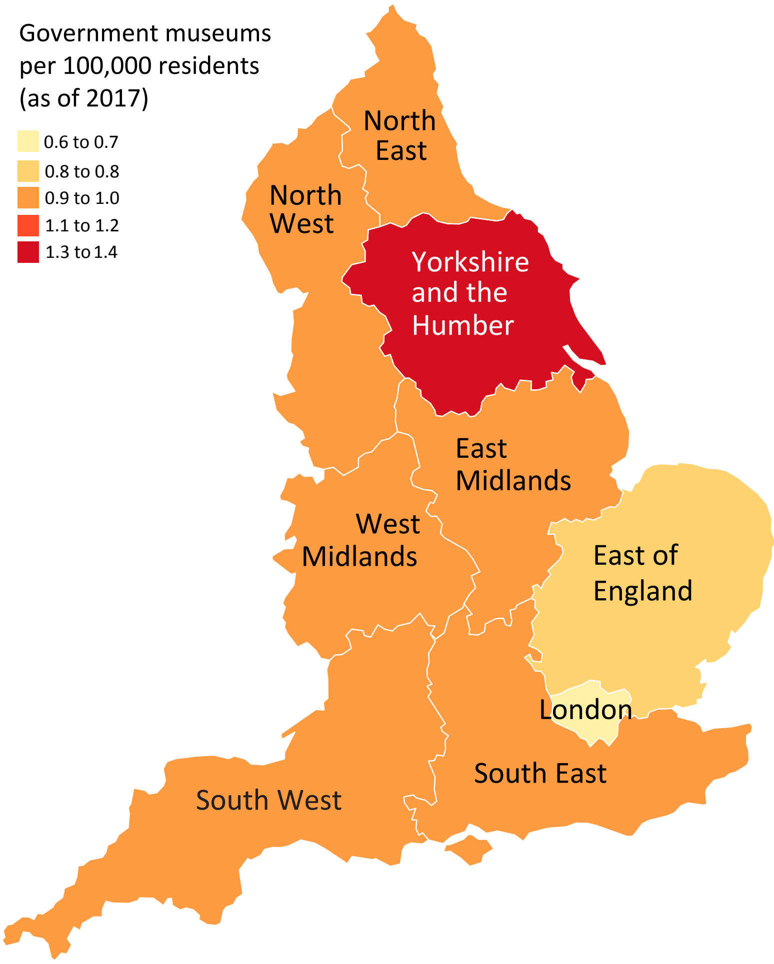


Figure 12: Government museums per 100,000 residents, according to English statistical region.

However, Figure 13 clearly shows that the development of independent museums is firmly concentrated in the South, with the gradual sweep from yellow to red indicating increasing density of independent museums per 100,000 residents concentrated primarily in the South West, the South East, and the East of England.

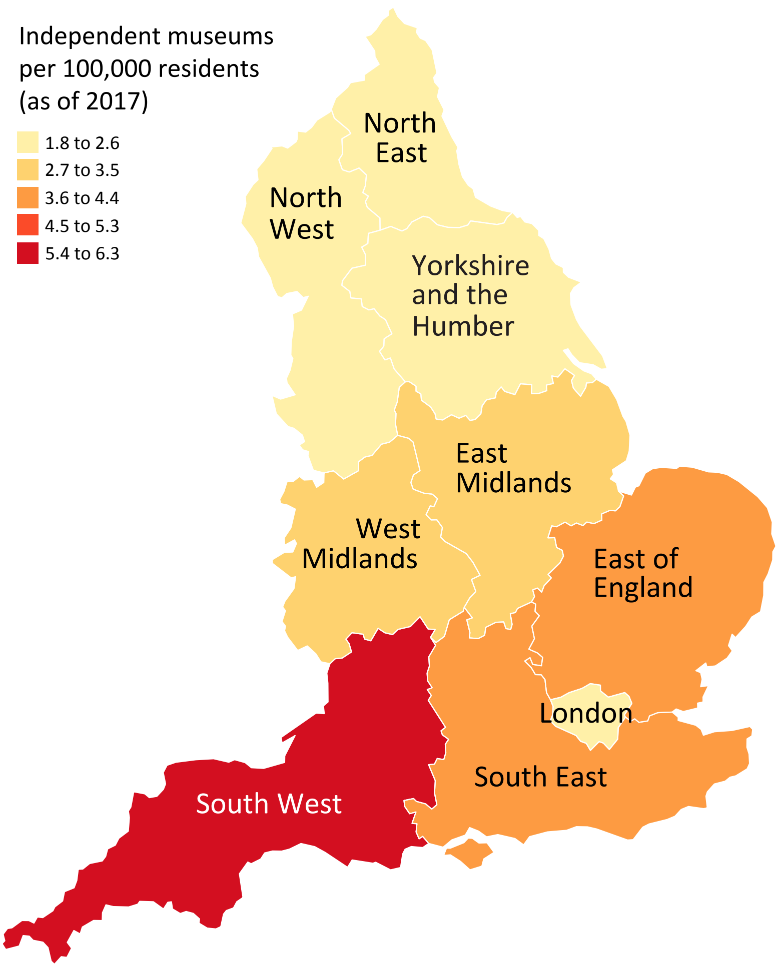


Figure 13: Independent museums per 100,000 residents, according to English statistical region.

Regional differences and museum size (England)

Our findings indicate that there are significant differences throughout the English regions relating to museum size. In England, the breakdown of the sector by size is as follows: small (54.0%), medium (28.0%), large (16.8%) and huge (0.5%).

In terms of general regional distribution, small museums tend to be congregated in the South East (with 262), the South West (236) and the East of England (225). However, the region with the most pronounced proportion of small museums is in the East of England, at 68%, significantly surpassing the national average and also the second highest region (East Midlands: 59%). The East of England also has the lowest number of large museums at 8%, which is half the national average.

In terms of large museums, the region with the highest number is again the South East with 82, followed by the South West with 58 and North West with 50. However, the region with the most pronounced proportion of large museums is the North East at 32.6%, nearly double the national average. The region also has the smallest variation between each of its categories (small: 36.9%; medium: 29.3%; large: 32.6%). Unsurprisingly, London contains all of England's 12 huge museums.

Profiles of the regional museum sectors (England)

In order to provide a benchmark against which the regional museum sectors can be compared, it is useful to recap on the figures relating to England as a whole.

England has a total of 2,468 museums. Of its museums, 51% are accredited, while 49% are unaccredited.

England's museum sector broken down by governance is as follows: Government (22.2%); Independent (73.7%); University (2.6%); Unknown (1.5%).

England's museum sector broken down by size is as follows: small (56.5%); medium (26.5%); large (14.4%); huge (0.5%).

19.2% museums closed in England between 1960 and 2017.

East Midlands

The East Midlands has 224 museums. This accounts for 9.1% of all museums in England. Of its museums, 46.2% are accredited and 53.8% are unaccredited. Of all the museums open in the region between 1960 and 2017 15.8% closed.

The East Midlands museum sector broken down by governance is as follows: Government (22.3%); Independent (75.9%); University (0.4%); Unknown (1.3%).

The East Midlands museum sector broken down by size is as follows: small (59.6%); medium (26.5%); large (13%); unknown (0.9%).

The East Midlands shows the most rapid growth of any English region in the period of 1960–2020, with its museum sector increasing by 333%. The region demonstrates the fastest rate of growth of both local authority museums and independent museums in this period. This growth has meant that the region has moved to a position of relative parity with other regions in terms of museum numbers.

East of England

The East of England has 330 museums. This accounts for 13.4% of all museums in England. Of its museums, 46.2% are accredited and 53.8% are unaccredited. Of all the museums open in the region between 1960 and 2017 16.9% closed.

The East of England museum sector broken down by size is as follows: small (68.4%), medium (22.5%), large (8.8%) and unknown (0.3%).

The East of England museum sector broken down by governance is as follows: Government (16.3%); Independent (76.4%); University (3.9%); Unknown (3.3%).

The East of England has the third largest number of museums by region. The sector has shown significant growth since 1960, expanding by 263%. The East of England consists of the largest percentage of small museums in England, making up 68% of its museum sector. It is also the region with the lowest percentage of large museums.

London

London has 226 museums. This accounts for 9.2% of all museums in England. Of its museums, 52.5% are accredited and 47.5% are unaccredited. The region's rate of museum closure over this period is 20.7%

The London museum sector broken down by size is: small (51.1%); medium (23.3%); large (18.4%); huge (4.9%); unknown (2.2%).

The London museum sector broken down by governance is: Government (23.9%); Independent (70.8%); University (4.4%); Unknown (0.9%).

The museum sector in London has grown but not as rapidly as the rest of the English regions. London has the highest proportion of large museums in England and is the only region to contain huge museums. London has the lowest museum provision per 100,000 residents in England.

North East

The North East has 92 museums. This accounts for 3.7% of all museums in England. Of its museums, 67.4% are accredited and 32.6% are unaccredited. The region's rate of museum closure over this period is 22.7%.

The North East museum sector broken down by governance is as follows: small (37%); medium (29.3%); large (32.6%); and unknown (1.1%).

The North East museum sector broken down by governance is as follows: Government (31.6%); Independent (61.9%); University (3.3%); Unknown (3.3%).

The North East region has the fewest museums in England. Its museum sector is characterised by significantly higher numbers of government museums and significantly fewer independents than the England average. The region also has a much more equal distribution of museum size than the England average. The region displays a degree of volatility in terms of museum longevity with a higher than average degree of closure.

North West

The North West has 242 museums. This accounts for 9.8% of all museums in England. Of its museums, 55.2% are accredited and 44.8% are unaccredited. The region's rate of museum closure over this period is 23.7%.

The North West sector broken down by size is as follows: small (44.4%); medium (34.4%); large (20.7%); unknown (0.4%).

The North West museum sector broken down by governance is as follows: Government (29.5%); Independent (65.5%); University (4.6%); Unknown (0.4%).

The North West museum sector is characterised by higher numbers of government museums and significantly fewer independents than the England average. Similarly, the sector is comprised of significantly fewer small museums than the England average. The region displays a degree of volatility in terms of museum longevity with a higher than average degree of closure.

South East

The South East has 479 museums. This accounts for 19.4% of all museums in England. Of its museums, 48.4% are accredited and 51.6% are unaccredited. The region's rate of museum closure over this period is 17%.

The South East museum sector broken down by size is as follows: small (54.9%); medium (27.5%); large (17.2%); unknown (0.4%).

The South East museum sector broken down by governance is as follows: Government (19.2%); Independent (76.1%); University (2.9%); Unknown (1.7%).

The South East has the highest number of museums of any English region. It has both the highest number of local authority and independent museums. The sector demonstrates a degree of stability as it has the lowest museum closure rate of any region. The South East has the second greatest number of museums per 100,000 residents.

South West

The South West has 417 museums. This accounts for 16.9% of all museums in England. Of its museums, 48.4% are accredited and 51.6% are unaccredited. The region's rate of museum closure over this period is 22.6%.

The South West museum sector is broken down as follows: small (56.9%); medium (27.7%); large (14%); unknown (1.4%).

The South West museum sector broken down by governance is as follows: Government (14.2%); Independent (83.9%); University (0.7%); Unknown (1.2%).

The South West has the second highest number of museums in England. The South West has the greatest number of museums per 100,000 residents. The South West museum sector is characterised by significantly higher numbers of independent museums and significantly fewer local authority museums than the national average for England. The region displays a degree of volatility in terms of museum longevity. The South West had highest percentage of independent museum closure and the third highest percentage of local authority museum closure.

West Midlands

The West Midlands has 232 museums. This accounts for 9.4% of all museums in England. Of its museums, 54.8% are accredited and 45.2% are unaccredited. The region's rate of museum closure over this period is 17.7%.

The West Midlands museum sector broken down by size is as follows: small (48.3%); medium (32.2%); large (19.1%); unknown (0.4%).

The West Midlands museum sector broken down by governance is as follows: Government (26.7%); Independent (70.7%); University (2.2%); Unknown (0.4%).

The West Midlands has fewer smaller museums than the England average. Beyond this, the West Midlands is the region that most closely conforms to the sector average for most of the metrics under consideration.

Yorkshire and the Humber

Yorkshire and the Humber has 225 museums. This accounts for 9.1% of all museums in England. Of its museums, 59.4% are accredited and 40.6% are unaccredited. The region's rate of museum closure over this period is 16.9%.

The Yorkshire and the Humber museum sector broken down by size is: small (46.4%); medium (32.1%); large (21.4%); unknown (0.1%).

The Yorkshire and the Humber museum sector broken down by governance is as follows: Government (34.7%); Independent (62.6%); University (1.8%); Unknown (0.9%).

Its museum sector is characterised by significantly higher numbers of government museums and significantly fewer independents than the England average. Similarly, the sector has considerably fewer small museums than the England average.

Conclusion

During the later decades of the twentieth century the UK museum sector boomed. However, it did not boom equally or for everyone. In the main, the growth was propelled by the foundation of independent museums, which did not receive core funding from the state. The majority of these museums were not for profit, and to a lesser degree private, and they were predominantly small. To a large degree, the rising number of museums was due to the endeavours of community and special interest groups. These groups established their own museums.

It is important to remember that the new museums of local history, industry and manufacture, transport, and rural industry that opened during the 1960s and 1970s were radical. Their founders used museums to articulate the experience, skills, and histories of working class communities that had largely been omitted from previous museum exhibitions. They took ownership and control of their own narratives. At the same time, our findings show that there was a relative lack of museums devoted to other identity groups: that women's, black and ethnic minority, disabled and LGBTQ histories did not form the subject of stand-alone museums. This lack is partly due to the more recent forms taken by museums and to our definitions of what counts as a museum. Museums that have a critical or radical intent are still being established, but in many cases they hold pop-up exhibitions or exist online and thus have not been included within our database. Examples of such museums are the Museum of British Colonialism, East End Women's Museum, Museum of Homelessness, Museum of Migration, Museum of Neoliberalism, Museum of Ordinary People, and Museum of Transology.

The Vagina Museum, which is listed in the database, also began by staging pop-up exhibitions. At the time of writing its founder, Florence Schechter, had just found a permanent space for the museum and within three months of opening had welcomed over 50,000 visitors. Thus, a question for the museum sector is how they might strategically support a more diverse and innovative range of museums. How can they help secure permanent spaces for new, critically oriented museums? To what degree are permanent premises or even a physical space necessary? How might museums be re-defined in all kinds of productive ways?

This report also makes clear that museums are not evenly distributed across the UK. They predominantly opened in England, but per head there are far more museums in Scotland. Equally, there are differences in the numbers of museums across the English regions. The South East and South West have the most, whether that is measured in relation to actual numbers or per head of population, and the North East has the least, both in terms of actual numbers and in relation to the population.

This uneven geography of museums has a bearing on who founds museums, and thus has the opportunity to articulate, preserve, or promote their culture. It is notable that independent museums proliferate in the South East where levels of wealth are far higher than in the North East and North West, where there are fewer independent museums. These issues require further research. If the museums boom is the work of a thousand different hands, as the historian Raphael Samuel observed in 1994, then it is important to ask: whose hands, exactly?

Conversely, we have found that local authority museums are more likely to close than most other types of museum and that the incidence of closure has been higher in the less affluent regions. While visitors to museums do not necessarily come from the immediate area, these findings indicate that museum provision is often hardest hit in the places where the residents experience higher rates of deprivation. We plan on further investigating these questions of equity in future research. It is important to better understand who exactly visits which types of museums, and to what extent lower numbers of museums equate to diminished access.

The more recent story is that in England and Scotland the museums boom is over, and in Wales growth is very slow. It is possible that the numbers of museums will remain relatively static or that they will decline further. Given the current economic and political situation in the UK, it seems unlikely that the museum sector will expand, although there may be some grounds for optimism in that the largest increase in the number of museums was in the mid-1970s, which was also a period of economic austerity. Nonetheless, we expect that the museum sector's emphasis on resilience will continue to be important.

The museums boom should be celebrated. The diversity and extent of museums expanded dramatically, and in all kinds of interesting ways. At the same time it is important to remember that the boom did not occur equally across all subject matters, or in all geographic areas. This has important implications for our understanding of current provision, the design of policy, and how we set about further research on the sector.

Moving forward

The Mapping Museum Data provides an overview of the UK museum sector between 1960 and 2017 and of the disparities within it. It shows where the sector has grown and where it has contracted over time. The research team is currently working on a monograph that will further examine the massive growth in the numbers of local history, transport, and war and conflict museums in the UK. We are exploring how and why ordinary people established these museums and kept them open. We are planning to apply for funding that will allow us to perform detailed analyses of the data with respect to the geo-demographic profiles and deprivation of geographic areas in which museums are located. The research team also hopes that the data will provide other scholars with a starting point for new research.

The Mapping Museums project was intended to provide a time capsule of 60 years of data and will close in 2020. We have designed the database so that we can continue to add and edit data, although that process will be reliant on the museum services keeping us updated on the museums that come under their remits, and on the project lead having the time to research unaccredited museums and to input new information as it becomes available. This is clearly not sustainable in the long term. Moreover, it would be useful to add to and develop the information held in the database: for instance to be able to cross-reference regional disparities with funding, or to track visitors, workforce, or numbers of volunteers over time.

Thus, the question remains of how the museum sector's problem with data collection can be remedied in the long-term. In their report, 'Mapping Museums Data' DC Research strongly recommended that Arts Council England should find a way to work with the information that they have already collected, or develop a new process that would enable a more consistent approach to data collection. In either case, they stressed the importance of creating 'a process by which current, consistent, reliable, and ideally longitudinal data is collected on a comprehensive basis for all museums in England'. We wholeheartedly endorse that conclusion, and would like to add to their recommendations.

Firstly, it is vitally important that all the museum services properly archive their own data. It is clear that members of staff have often viewed data from previous years or decades as useless and have made no efforts to keep it. Yet without it, we cannot document or understand change.

Secondly, we would be delighted to see the museum services make their raw data publicly available. In our experience, the various organisations have shared their data upon request but that clearly relies on researchers knowing it exists and who to ask, and on the organisations having the capacity to assist. Automatically making data available online would be more transparent and would facilitate research, which would in turn be useful to the museum sector.

Thirdly, it would be sensible for the museum services to work together on data management systems. Deciding on a common strategy for data collection and management, and pooling information, would result in better data for everyone.

Lastly, we strongly advocate the inclusion of unaccredited museums within any data management system, as Museums Galleries Scotland did in their National Audit and continue to do in their annual Visitor Monitor Reports. Including unaccredited museums in a national database provides a more fully rounded account of museum practice across the UK, in all its capacities and forms. Some 21% of local authority museums have not been accredited. Given their relatively high closure rates, particularly in recent years, recording their existence and whereabouts is key to keeping track of the impact of austerity on this part of the sector. At a minimum it would be useful to keep track of museums that are eligible for accreditation.

Appendices

Appendix 1

Mapping Museums research team

Fiona Candlin is Professor of Museology in the History of Art department at Birkbeck and Principal Investigator on the Mapping Museums project. She had overall responsibility for co-ordinating and delivering the Mapping Museums project. She also led on developing new approaches to defining museums and a new subject classification system, and worked closely with other team members on database and website development.

Alexandra Poulovassilis is Professor of Computer Science in the School of Business, Economics & Informatics at Birkbeck and Director of the Birkbeck Knowledge Lab. She is Co-Investigator on the Mapping Museums project and had overall responsibility for designing and developing the database, web application, and website. She also worked closely with Candlin on managing other aspects of the project.

Dr Andrea Ballatore is a Lecturer in GIS and Big Data Analytics in the Department of Geography at Birkbeck. He advised on the development of the Mapping Museums database, web application, and website, particularly in relation to Geographic Information Systems. He conducted the spatial analysis of the museum locations and the predictive modelling on visitor numbers.

Dr Toby Butler is an oral historian and post-doctoral researcher on the Mapping Museums project. He organised and conducted the interview-based research with founders, staff, and volunteers from over forty museums.

Dr Val Katerinchuk is a Computer Science post-doctoral researcher on the Mapping Museums project. He designed additional functionality for the database and web application, and developed the project website.

Dr Jamie Larkin was a post-doctoral researcher on the Mapping Museums project. He led on data collection, data cleaning, and data validation, and contributed to the development of new museum definitions and the subject classification system. Larkin is now Assistant Professor of Creative and Cultural Industries at Chapman University, California.

Nick Larson was a Computer Science researcher on the Mapping Museums project. He developed the first version of the database and web application.

Mark Liebenrood is a PhD student in the department of History of Art at Birkbeck and research assistant on the Mapping Museums project. He contributed to data validation, updating the dataset, and website development.

Dr Jake Watts is a political scientist and a post-doctoral researcher on the Mapping Museums project. He conducted a wide range of historical, social, cultural, and economic research that informed the overall research analysis.

Appendix 2

Primary sources of data

- Arts Council England list of accredited museums
- Association of Independent Museums members list, 2016
- Association of Independent Museums members list, 1982
- Association of Independent Museums non-members list, 1982
- AMOT Guide to Military Museums in the UK, 2010/2011
- Digest of Museum Statistics, 1998
- Historic Houses Association 2016 Friends Pocket Guide

- *Historic Houses & Castles in Great Britain and Northern Ireland, London:* Index Publishers 1959
- Kenneth Hudson and Ann Nicholls, *The Directory of Museums and Living Displays, London:* Macmillan 1985
- Micromuseums Archive, Bishopsgate Institute, London
- Museums, Archives, Libraries Division, Wales. Raw data from *Spotlight* reports, 2002, and published data 2007, 2013, 2015
- Museums and Galleries Scotland museums list, 2017
- Northern Ireland Museums Council, museum list, 2012, 2016
- Museums Association 'Find a Museum' website
- Museums Association's *Museums Calendar*, 1970
- Wikipedia lists of museum by country/county

Appendix 3

Subject classification

Archaeology
Greek and Egyptian
Medieval
Mixed
Prehistory
Roman
Other

Arts
Ceramics
Costume and textiles
Crafts
Design
Fine and decorative arts
Glass
Literature
Music
Photography
Other

Belief and Identity
Church treasuries
Ethnic group
Freemasons
Religion
Religious buildings
Other

Buildings
Civic
House: Large
House: Medium
House: Small
Palace
Penal
School
Shops
Other

Communications
Post
Radio
Other

Food and drink

Industry and manufacture
Clocks and watches
Industrial life
Metals
Mining and quarrying
Mixed
Potteries
Print
Steam and engines
Textiles
Other

Leisure & Sport
Cricket
Fairgrounds and amusements
Film cinema and TV
Rugby and football
Toys and models
Other

Local Histories

Medicine and health
Hospital
Professional association
Other

Mixed

Natural world
Dinosaurs
Fossils
Geology
Herbaria and gardening
Mixed
Zoology
Other

Other

Personality
Art
Explorer
Literary
Music
Political
Religious
Scientific
Other

Rural industry
Farming
Forges
Rural Life
Textiles
Watermills
Windmills
Other

Science and Technology
Computing and gaming
Other

Sea and seafaring
Boats and ships
Fishing
Lighthouses
Mixed
Other

Services
Fire
Police
RNLI
Other

Transport
Aviation
Bicycles
Buses and trams
Canals
Cars and motorbikes
Mixed
Trains and railways
Other

Utilities
Gas and Electricity
Water and waste

War and conflict
Air Force
Bunkers
Castle and forts
Event or site
Military
Navy
Regiment
Other

Appendix 4

External experts consulted

Having compiled data on over 4000 museums, the Mapping Museums team presented the relevant sections to external experts who conducted a line-by-line scrutiny of the data and who checked our classifications. Others advised also on our classification system and our research on museum definitions. With apologies for any omissions, we would like to thank the following people:

Bishopsgate Institute Library and Archives: Stef Dickers

Museums, Archives, Libraries Division, Wales: Ann Mansell, Carol Whittaker

Museum Development East Midlands: Clare Browne, Angie Minton

Museum Development London: Rachael Crofts, Ben Travers, Yvette Shepherd

Museum Development North East: Sarah Carr, Bill Griffiths

Museum Development North West: Kaye Hardman, Lynsey Jones

Museum Development South East: Helen Derbyshire, Sarah Menary, Elaine Sansom, Stephen Lowy

Museum Development South West: Ros Bonnet, Victoria Harding

Museum Development West Midlands: Dawn Allman, Helen Johnson, Karen Davies, Charlotte Edwards, Rachel Lambert-Jones

Museum Development, Yorkshire: Michael Turnpenny, Lily Wilks

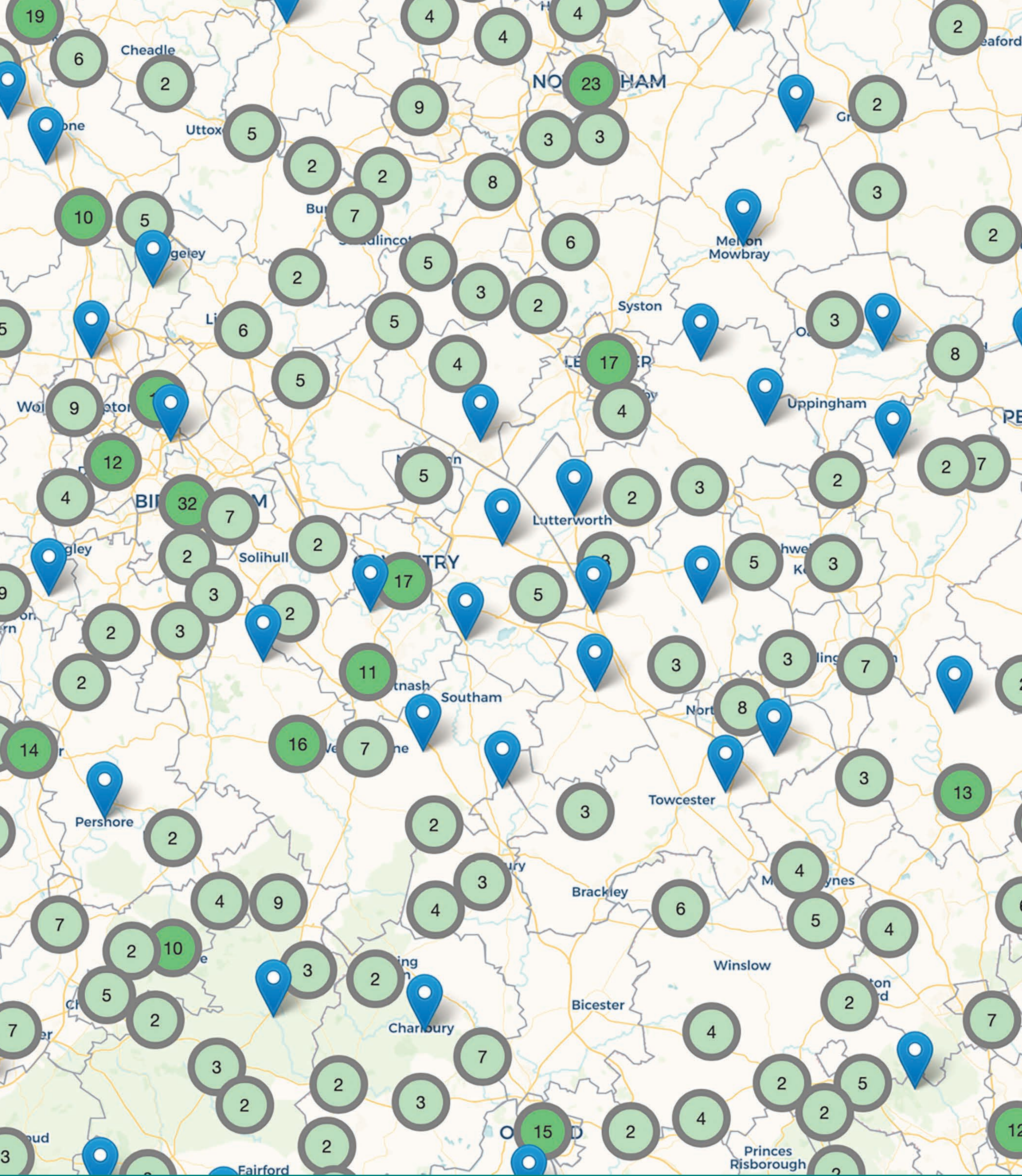
Museums Galleries Scotland: Heather Doherty, Devon McHugh, Loretta Mordi, Jenny Youngson

SHARE: Jamie Everitt

Northern Ireland Museums Council: Triona White Hamilton

Acknowledgements

The authors would like to thank Adrian Babbidge, Mark Liebenrood and Jake Watts for their critical and constructive comments on drafts of the report.



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