

The heritage sector in England and its impact on the economy

An updated report for Historic England

August 2024

#### Disclaimer

Whilst every effort has been made to ensure the accuracy of the material in this document, neither Centre for Economics and Business Research Ltd nor the report's authors will be liable for any loss or damages incurred through the use of the report.

#### Authorship and acknowledgements

This report has been produced by Cebr, an independent economics and business research consultancy established in 1992. The views expressed herein are those of the authors only and are based upon independent research by them.

The report does not necessarily reflect the views of Historic England.

London, August 2024

# **Contents**

Execu	tive Sun	nmary	. 7
1.	Introdu	ıction	11
	1.1	Background and aims of the study	11
	1.2	Structure of the report	12
2.	Scope a	and methodology	13
	2.1	Background and scope of the study	13
	2.2	Overview of approach and methodology	14
3.	Direct (	economic contributions of England's heritage sector	18
	3.1	Direct national economic impact through Gross Value Added	18
	3.2	Regional direct economic impacts through Gross Value Added	22
	3.3	The direct national economic impact through employment	25
	3.4	Direct regional impact through employment	27
	3.5	The economic impact of the heritage sector in 2023	29
4.	Macro	economic impacts of England's heritage sector	33
	4.1	The supply chain of the heritage sector	33
	4.2	The heritage sector's contribution to GVA	34
	4.3	Contribution of England's heritage sector to employment	35
	4.4	Regional variation in our multiplier estimates	35
5.	Spillove	er impacts of heritage through tourism	37
	5.1	Domestic overnight tourism	38
	5.2	Domestic day visits	45
	5.3	International tourism	48
Appei	ndix I: D	irect economic impact of England's heritage sector in nominal terms	54
Appei	ndix II: B	reakdown of the workforce of England's heritage sector	63
Appei	ndix III: 1	Technical notes related to approach and methodology used in the study	65

Appendix IV: Technical notes related to calculating the economic multipliers used in this	
study72	L
Appendix V: Comparison of 2022 nowcasts to 2022 actuals75	5

# **Table of Figures and Tables**

Figure 1: Estimated GVA of the heritage sector, adjusting for inflation, 2011-2022, £ million, 2011-2022, £ mi	
Figure 0. Associational results rates and the constitution and the site of a section 2000.	20
Figure 2: Annual real growth rates on the construction and heritage sectors, 2012 - 2022	21
Figure 3: Estimated GVA of the heritage sector by industry, 2011-2022, £ million, 2022	
prices	21
Figure 4: Direct heritage sector GVA by region, 2022	22
Figure 5: Estimated GVA in the heritage sector by the regions in England, 2011-22, £ mill	lion,
2022 prices	23
Figure 6: Indexed GVA of the London's heritage sector compared to the rest of the Engla	nd.
2011=100, 2022 prices	
Figure 7: Estimated employment in the heritage sector, 2011-22	25
Figure 8: England employment and the heritage sector's share, 2011-22, millions	
Figure 9: Employment in the heritage sector by English regions, 2011-22, thousands	
Figure 10: Heritage sector GVA nowcasts, 2018 - 2023, £ million, 2022 prices	
Figure 11: Heritage sector employment nowcasts, 2018 – 2023, number of employees	
Figure 12: Total estimated domestic overnight heritage-related trips 2012-2019, millions .	
Figure 13: Total estimated domestic overnight heritage-related trips 2021-2023, millions .	
Figure 14: Estimated domestic heritage-related overnight trip spend 2013-2019, £m (202	
prices)	41
Figure 15: Estimated domestic heritage-related overnight trip spend 2021-2023, £m (202	3
prices)	41
Figure 16: Total estimated domestic overnight heritage-related holiday trips 2012-2019,	
millions	42
Figure 17: Total estimated domestic overnight heritage-related holiday trips 2021-2023,	
millions	43
Figure 18: Total estimated domestic overnight heritage-related holiday spend 2013-2019	, £m
(2023 prices)	44
Figure 19: Total estimated domestic overnight heritage-related holiday spend 2021-2023	. £m
(2023 prices)	44
Figure 20: Estimated volume of heritage-related day visits 2012-2019, millions	
Figure 21: Estimated volume of heritage-related day visits 2021-2023, millions	46
Figure 22: Estimated value of heritage-related day visits 2012-2019, £m (2023 prices)	
	41
Figure 23: Estimated value of heritage-related day visits 2021 Q2-Q4 - 2023, £m (2023 prices)	48
. ,	
Figure 24: Inbound tourist heritage-related visits 2012-2019, thousands	
Figure 25: Inbound tourist heritage-related visits 2021-2023, thousands	
Figure 26: Inbound heritage-related tourism spend 2012-2019, £m (2023 prices)	
Figure 27: Inbound heritage-related tourism spending 2021-2023, £m (2023 prices)	52
Figure 28: Total heritage-related regional tourism spending by type of tourism 2022, £m	
(2023 prices)	53
Figure 29: Total heritage-related regional tourism spending by type of tourism 2023, £m	
(2023 prices)	53
Figure 30: Estimated GVA of the heritage sector, 2011-2022, £ million	54
Figure 31: Annual nominal growth rates on the construction and heritage sectors, 2012 -	
2022	54
Figure 32: Estimated GVA of the heritage sector by industry, 2011-2022, £ million	
Figure 33: Estimated GVA in the heritage sector by the regions in England, 2011-22,	
£ million	55
Figure 34: Indexed GVA of the London's heritage sector compared to the rest of the Engl	
(2011-22), 2011=100	
Figure 35: Heritage sector GVA nowcasts, 2018 - 2023, £ million	
1 19010 00. F1011kago 000kot 0 v/k 110 voadko, 20 10 - 2020, 2 111111011	00

Figure 36: Estimated domestic heritage-related overnight trip spend 2013-2019, £ million	IS
(nominal)	57
Figure 37: Estimated heritage-related domestic overnight trip spend 2021 Q2-Q4 - 2023,	
£ millions (nominal)	58
Figure 38: Estimated domestic overnight heritage-related holiday spend 2013-2019,	
£ millions (nominal)	58
Figure 39: Estimated domestic overnight heritage-related holiday spend Q2-Q4 2021 - 20	023,
£ millions (nominal)	59
Figure 40: Estimated value of heritage-related day visits 2012-2019, £ millions (nominal)	59
Figure 41: Estimated value of heritage-related day visits 2021 Q2-Q4 - 2023, £ millions	
(nominal)	60
Figure 42: Inbound heritage-related tourism spend 2012-2023, £ millions (nominal)	60
Figure 43: Total heritage-related regional tourism spending by type of tourism 2022,	
£ millions (nominal)	61
Figure 44: Total heritage-related regional tourism spending by type of tourism 2023,	
£ millions (nominal)	62
Figure 45: Summary of economic impact layers	74
Figure 46: Comparison between the 2022 GVA central nowcast and the actual 2022 GVA	Д
result	75
Figure 47: Comparison between the 2022 central employment nowcast and the actual 20	)22
employment result	76
Table 1: GVA generated by constituent industries of the heritage sector, 2022	19
Table 2: Change in heritage-related employment for London and the rest of England	
between 2021 and 2022	28
Table 3: Structure of the heritage sector's domestic supply chain	34
Table 4: Type 2 multipliers and impacts in the English regions, 2022	35

# **Executive Summary**

This is a summary of the Centre for Economics and Business Research's study for Historic England, which seeks to assess the economic contributions and impacts of England's heritage sector in the UK. This study builds on the findings of an initial report commissioned by Historic England in 2018, with several subsequent updates since undertaken.

#### Scope and methodological overview

The research presented herein provides an examination of the role that England's heritage plays in the UK economy. A range of statistical data is generated to demonstrate different aspects of the value supported in the economy through heritage including:

- → **The direct contribution** made to Gross Domestic Product (GDP) and employment through all segments of the heritage sector in the UK.
- → The indirect multiplier impacts that arise through the activities stimulated in the supply chains of those engaged directly with the heritage sector.
- → The induced multiplier impacts that arise through the activities supported in the wider economy when the employees associated with the direct and indirect heritage activities spend their earnings on domestic goods and services.

While previous iterations have presented the above figures in nominal terms, this iteration presents the figures in real terms using 2022 prices as the base year. The nominal figures can be found in **Appendix I.** 

In addition, the study examines the ancillary contributions made by the heritage sector in the form of spillover impacts through tourism.

The study combines desk and primary research. The analysis of the direct contributions and macroeconomic impacts of the heritage sector draws upon official data provided by the Office for National Statistics (ONS). Economic indicators including revenues, costs of production and gross value-added are provided for hundreds of disaggregated industries. These are broken down according to the Standard Industrial Classification (SIC) framework which provides the underlying data collection framework for much of the economic data produced by the ONS.

However, a large share of the activities in the heritage sector either cross the boundaries of the SIC framework or are relatively niche and therefore buried within broader categories of economic activity. For this reason, we use the Standard Occupational Classification (SOC), a common classification of occupational information for the UK, to map occupations in the heritage sector to the corresponding SIC industries.

Through this SIC-SOC mapping, the economic characteristics of the heritage sector and its direct macroeconomic impacts upon the economy, at national and regional level, are estimated. The wider multiplier impacts of the heritage sector are quantified using our in-house UK and regional input-output models which trace the sector's economic footprint through its supply chain relationships.

#### Direct economic contributions of England's heritage sector

Aggregating all activities of England's heritage sector yields the following macroeconomic contributions:

- → A total estimated gross value added (GVA) contribution to the UK's GDP of £15.3 billion in 2022, equivalent to 0.80% of England's total GVA. In real terms, the heritage sector fell 5.3% in 2022 relative to 2021.
- → The construction industry remains the largest constituent heritage sector industry, generating 48.5% of total GVA, or £7.4 billion, lower than the £7.8 billion estimated (in real terms) in 2021. The three dominant industries of 1) construction; 2) libraries, archives, museums, and other cultural activities; and 3) architectural and engineering activities form over 80% of the total GVA of England's heritage sector.
- → London's heritage sector continues to generate the largest GVA contribution of £4.2 billion in 2022, accounting for 27.6% of the total heritage sector in England. As in 2021, the South East accounted for the second largest GVA contribution with £2.6 billion, while the North East's heritage sector again had the lowest GVA contribution in absolute terms, with £377 million in 2022.
- → The total estimated **employment of England's heritage sector in 2022 was 201,000** equivalent to 0.72% of the entire workforce in England. This is lower than the 207,000 workers employed in 2021 and is driven by a fall in employment in the construction sub-sector. Relative to 2021, London's contribution fell from 50,800 to 35,800 workers in 2022. The fall in employment in the construction sub-sectors drove this decline in London's heritage employment (3,400 fewer workers relative to 2021), followed by a fall in the number of archivists and curators (2,900) and conservation professionals (2,600).
- → Based on preliminary data, GVA growth in 2023 was estimated to be between 0% and a decline of 5%, leading to a direct GVA contribution to UK GDP of £14.5 £15.3 billion in real terms. This greater uncertainty is driven by less granular data availability in 2023, and the extrapolation of wider economic trends. Utilising a similar approach, employment was estimated to stand at between 195,000 and 206,000.

#### Macroeconomic impacts of England's heritage sector

In this iteration, we have not updated the multipliers calculated in the previous report. These multipliers were applied to the new 2022 direct impacts figures, which therefore result in updated estimates for the sector's aggregate impact. Based on our analysis of England's heritage sector within the ONS national accounting framework, specifically the supply-use tables and Cebr's input-output models, we conclude that:

- → For every £1 of GVA generated by the heritage sector in England, a total footprint of £2.93 is supported, within the UK economy. For every £1 of direct GVA generated, £0.97 is supported through wider spending effects (induced impact) and £0.96 is supported in the sector's supply chains (indirect impact).
- → Once these impacts are considered, England's heritage sector supported an estimated aggregate GVA impact of £44.9 billion in 2022, across the UK – £2.5 billion (real terms) less than in 2021.
- → For every worker directly employed in the heritage sector in 2022, a total footprint of 2.60 workers is supported in the wider UK economy.
- → Accounting for these wider multiplier impacts and adding them to the direct employment contribution, the 201,000 workers directly employed in England's heritage sector in 2022 supported an aggregate footprint of 523,000 jobs.
- → In terms of the regional breakdown, the heritage sector in London alone supported a total of £7.8 billion in GVA through direct, indirect and induced impacts. On the other hand, the North East again had the lowest 'in-region' multiplier impacts in England suggesting the region's economy is relatively less able to provide for the intermediate input needs of the heritage sector within the region. Just £928 million of GVA was supported in this region in 2022.
- → The picture is similar for employment. The heritage sector in London supported the largest number of workers, 61,000, through direct, indirect and induced impacts in 2022. Though this is 25,000 less than the aggregate employment supported in 2021. The North East with 14,000 workers again had the lowest aggregate impact in terms of total employment supported.

#### Spillover impacts of heritage though tourism

- → England's heritage sector creates additional spending through tourism in two ways. Some tourists visit the UK primarily to visit heritage attractions, while others take part in heritage activities during trips made for other purposes, potentially extending trips and generating additional spending.
- → Challenges with data collection as a result of the COVID-19 pandemic, led to significant disruption in the provision of underpinning tourism-related datasets. For this reason, domestic tourism figures for 2021 only represent quarters two to four of the year. International tourism figures represent the whole year.
- → In the case of overnight heritage-related trips in England, this report has found that:
  - The total number of trips was **16.0 million** in 2022 and **14.9 million** in 2023.
  - Across this period, the South West accounted for the highest number of trips
    (2.7 million and 2.4 million in 2022 and 2023), while the North East
    accounted for the fewest trips, with 0.6 million heritage-related domestic
    overnight trips in 2022 and 0.6 million in 2023
  - Tourists spent an estimated £5.1 billion in 2022 and £4.5 billion in 2023 on domestic overnight heritage-related trips.
  - London generated the highest spending from these trips (£960 million and £836 million in 2022 and 2023, respectively). This was followed by the South West (£941 million and £780 million).
  - While a large share of heritage-related activities and spending is generated domestically, England's heritage sector also draws visitors from much further afield.
  - The number of international trips increased significantly from 2.7 million to 14.6 million in 2022 and then increased again to 17.6 million in 2023, illustrating a strong rebound from the low levels seen during the Covid-19 pandemic.
  - International heritage-related tourism spend stood at £11.4 billion in 2022 and £12.5 billion in 2023, up significantly on the £2.7 billion throughout the whole of 2021. The majority of international heritage-related tourism is to London.

# 1. Introduction

This is a report by the Centre for Economics and Business Research (Cebr), on behalf of Historic England, detailing the economic contribution of the heritage sector to the UK economy.

## 1.1 Background and aims of the study

As part of the Heritage Counts publication, Historic England regularly publishes key socioeconomic indicators which demonstrate the scale, scope and value of heritage. The data are collected from numerous sources and presented on the <u>Heritage Counts website</u>.

The research presented herein seeks to produce new estimates using the latest statistical releases, primarily for the calendar year of 2022. Our analysis considers the direct contribution of the heritage sector, measured by macroeconomic indicators such as gross value added (GVA) - a measure of economic output - and employment.

This report again provides a 'nowcast' projection for the period of 2023, with the aim of reducing the lag time between when analysis was conducted (2024), and the year in which much of the report analysis focuses on (2022). Full analysis for the economic impact of the heritage sector (explained further in Section 2.2) is contingent on granular economic data at both national and regional level. However, data at this level of detail has a significant lag time associated with its production and publication by the relevant administrative bodies. For example, employment figures for constituent heritage industries are provided by Office for National Statistics (ONS) Business Register & Employment Survey (BRES). At the time of writing, the latest data available is for the calendar year 2022 which was provided in the latter part of 2023. This data is imperative in assembling our employment figures for the heritage sector which consequently are used to estimate the sector's direct impact. This means that historically, there has been a two-year lag between the year of analysis, and the year that this analysis focused on. The nowcast was, therefore, added with the aim of reducing this lag time from two years, to one year. Though, it is to be noted that the 2023 impacts are presented with a lower level of detail given that the data underpinning the nowcast is less granular. This is also discussed further in Section 2.2.

We also examine the indirect contributions made by the heritage sector to the wider economy through its supply chain relationships with other sectors and the additional economic activity supported through employee spending. We also consider the wider spillover impacts of heritage, through assessing its support of tourism.

The overall aim is to provide individuals and organisations involved in England's heritage sector with a clear, robust and evidence-based understanding of the ongoing economic contributions of the heritage sector to regional and national economies alongside gathering essential insights into the nature of these contributions helping to inform policy.

## 1.2 Structure of the report

The report is structured as follows:

- Section 2 explains how the heritage sector is defined and the scope of the study. It also
  gives an overview of our methodology.
- <u>Section 3</u> assesses the direct contribution of the heritage sector to the 'business economy'. We consider this in terms of value-added contributions and employment. This covers in full the period 2011-2022, with higher-level estimates provided for 2023.
- Section 4 sets out our findings on the macroeconomic impact of England's heritage sector.
  This includes indirect and induced multiplier impacts. This section first estimates the
  contributions to GVA, and employment in England, then the geographic distribution of
  these impacts across the constituent English regions.
- <u>Section 5</u> presents our analysis of the spillover impacts of the heritage sector through domestic and overseas tourism.
- Appendix I provides the direct contribution of the heritage sector to the 'business economy' in nominal terms for the full period of 2011-2022.
- Appendix II provides some context for the trend in employment by the constituent occupations of England's heritage sector.
- Appendix III provides further technical detail on the methodology used in the study.
- Appendix IV details our methodology on calculating the economic multipliers.
- Appendix V compares the 2022 central nowcasts from the previous report to the actual 2022 results for GVA and employment.

# 2. Scope and methodology

This study is the sixth iteration of an initial Cebr report for Historic England in 2018, calculating the impact on the economy of England's heritage sector <sup>1</sup>. The scope of the study is broadly consistent with the initial study and subsequent refreshes. The direct economic impact of the heritage sector was calculated, via a SIC-SOC mapping process in which occupations are mapped to specific industries. From this, we could observe which UK industries workers in the heritage sector are classified into.

Cebr's input-output models have then been used to calculate bespoke multiplier impacts for the heritage sector. During the previous refresh in Spring of 2023, we had calculated new multipliers and since these multipliers have been reasonably consistent over time, we have not updated the multipliers for this project. Multipliers would change over time if there were structural changes in either the heritage sector itself (for example the relative importance of different constituent heritage sub-sectors), or broader changes in the UK economy. The methodology used in calculating these multipliers is explained in detail in **Appendix IV**.

The spillover impacts of the heritage sector through tourism have also been updated.

Technical details related to the approach and methodology used in the study are discussed initially within this section of the report, then further within the technical notes of **Appendix III.** 

# 2.1 Background and scope of the study

Despite its importance, isolating the added value or net impact of heritage from the activities related to it or embedded within it presents many challenges. This is largely due to the fragmented market structure of the heritage sector and its economic value stemming from a variety of sectors and sub-sectors, ranging from conservation and preservation of historic buildings to activities in the natural environment.

This fragmentation means that it is difficult to identify a definition for heritage within the ONS Standard Industrial Classification (SIC) system. Although some SIC sectors clearly relate to heritage (for instance SIC 91.03 which refers to the operation of historical sites and buildings), just considering heritage related SIC sectors would underestimate the impact of the heritage sector. It would fail to acknowledge the contributions made to sectors that aren't solely heritage activities, but which do contain heritage activities (e.g. Construction). Given the highly fragmented nature of the heritage sector, this is a significant problem.

In recent years, progress has been made in applying innovative ways to explore and measure the value of the historic environment. Historic England has commissioned fact sheets and reports demonstrating the interdependencies between heritage and economic activity. Some of these studies apply models of economic impacts that make distinctions between the direct (output and employment); the indirect (impacts of the heritage supply chain); and the induced impacts (employment and expenditure due to consumer spending out of staff wages). In 2016 Historic England commissioned research to produce its first Heritage Economic Impact Indicators Workbook and this has been followed by several regular updates since then.

Although their definition of the heritage sector is constrained to a simple SIC based definition, the Department for Culture, Media and Sport (DCMS) has also attempted to address similar problems for creative industries by introducing the concept of creative intensities. These seek

<sup>1&#</sup>x27;The Heritage Sector in England and its Impact on the Economy'. Cebr, 2018.

to establish the proportion of a given SIC sector that involves creative occupations. If this proportion is above a given threshold, the sector is included within the definition of creative industries.

It would be possible to extend such a methodology to the Heritage sector. Doing so would involve identifying Heritage related occupations and mapping the intensities of these across the various SIC sectors in the economy. A threshold would then need to be identified, with any sectors that contain more than the threshold proportion of heritage occupations, being included in the definition of the Heritage sector.

However, such a methodology is problematic. This is highlighted well in a review conducted by the Statistical Authority on DCMS methodology for creative industries. It reasons that because the creative intensity approach considers industries above the threshold in their entirety. This means "for example, Creative Industries includes the total economic value of companies undertaking 'computer consultancy activities' (SIC 62.02) despite only around a third of those working in these companies having been identified as having creative occupations" <sup>2</sup>.

Therefore, directly applying the DCMS creative industry methodology to the Heritage sector would suffer from two problems. Firstly, the approach would include the 'non-Heritage' parts of sectors that meet the threshold requirement and secondly it will fail to consider the Heritage parts (however small) of sectors that don't meet the threshold requirement. Furthermore, as the first problem overestimates, and the second one underestimates the economic contribution of the heritage sector, it would not be possible to know whether the final results would be over, or underestimates.

In light of this, Historic England commissioned the Centre for Economics and Business Research (Cebr) to estimate the economic contribution of the heritage sector in England in 2018. Our approach substantially augments the DCMS intensity approach by applying the proportion of Heritage employment to the total economic contributions of each SIC sector. Doing so removes the need for a threshold and accounts for the two challenges discussed above.

This report is the sixth update to the original 2018 Cebr report. Our examination spans the period from 2011 to 2023 (inclusive), and endeavours to capture the full economic 'footprint' of the heritage sector. As such, the study is not confined to direct ongoing contributions to GDP and employment through the heritage sector's operations and activities in England, but also considers the additional economic activity that the heritage sector supports, via the associated indirect and induced multiplier impacts up to the period of 2022. The study also considers the spillover impacts of the heritage sector through tourism till the end of 2023.

# 2.2 Overview of approach and methodology

In line with the framework developed in the previous Heritage Counts and the DCMS Creative Industries Economic Estimates methodology, both embedded workers and organisational workers are considered. The economic contribution of the heritage sector is assessed through three tranches: the direct economic impact of the sector; the aggregate economic footprint and the spillover impacts of heritage.

#### **Direct economic impacts**

The overarching methodology used to estimate the economic contributions of the heritage sector in terms of employment and GVA can be summarised as follows:

- For constituent heritage industries fully captured by the relevant Standard Industrial Classification (SIC) codes, employment figures are obtained from the Office for National Statistics' (ONS) Business Register & Employment Survey (BRES).
- For some constituent industries, occupations rather than the industries are well defined, based on Standard Occupational Classification (SOC) codes. For these industries, employment estimates are derived by combining the Annual Population Survey (APS) with the BRES data. These official datasets are used to triangulate an estimate for heritage activities with no apparent industry SIC codes but with defined occupations, via the construction of bespoke SIC-SOC matrices.
- For heritage activities neither captured by the SIC nor the SOC codes, secondary data sources are used to establish estimated heritage employment figures or the employment share that could be applied to the relevant SIC or SOC codes.
- GVA figures are derived from the Regional GVA Estimates published by the ONS, by apportioning these regional estimates with employment estimates and earnings data from the Annual Survey of Hours & Earnings (ASHE).

Since standalone SIC and SOC codes are limited in their ability to define heritage, estimates of the activities of the heritage sector rely on cross extracting SIC codes through SOC codes, sometimes combined with secondary data sources or in some cases relying on secondary data sources alone. For example, since some heritage occupations in the APS or ASHE are buried within wider occupation categories, the use of secondary data sources is unavoidable.

To isolate specific activities in the heritage sector, coefficients are calculated from secondary data sources and applied to apportion the data. In cases where the data sources relate wholly to heritage, the data are not refined at all.

The methodology for estimating 2022 heritage impacts is the same as that implemented for 2021, with the exception that in this iteration we used the SOC20 classification system for occupations rather than the SOC10 classification system <sup>3</sup>. The SOC system is the classification system for occupations, which the ONS uses to categorise jobs in terms of the work performed by an individual in the economy. In our analysis, as discussed above we use a combination of SICs (industries) and SOCs (occupations) to define the heritage sector. Previous iterations of this report used the SOC10 classification system, however, in 2021, the ONS updated this classification system to form SOC20. While the two classification systems are broadly similar, there are slight classification changes which have therefore resulted in subsequent minor changes in certain heritage occupation definitions. Since this analysis is updated for the period of 2022, SOC20 is now the preferred classification system. The ONS published detailed reconciliation data, allowing us to map between SOC10 and SOC20 and therefore maintain definitional consistency with previous reports. **Appendix III** details how we addressed the change in classification definitions for each specific SOC code related to the heritage sector.

#### 2023 direct impact nowcasts

In this version of the report Cebr has also provided estimates for the direct impacts that the heritage sector had on the English economy in 2023, in terms of employment and GVA. For this a bespoke methodology is utilised, as data at the level of granularity required for methodological consistency with 2011-2022 figures is not yet available.

In the previous iteration, the nowcast methodology for 2022 was based on growth observed from 2021 to 2022 as well as growth observed from 2019 to 2022. This approach accounted for trends including and excluding the pandemic period, with uncertainty as the recovery path of the heritage sector relative to constituent SIC sections that the heritage sector fell into. In the current iteration, since the nowcast period is for 2023, the economy is more stable than it was in 2022, with the pandemic recovery playing a lesser role in determining GVA and employment figures. We, therefore, base our models solely on growth observed from 2022 to 2023, rather than growth observed from 2019-2023.

To calculate GVA, the distribution of heritage sector GVA by SIC defined industries for each region in England has been calculated using the aforementioned SIC-SOC matrix. After significant backtesting of various approach to assess historical accuracy, Cebr has used two measures to provide a range of GVA nowcasts in 2023, with an average of the two measures providing the final GVA nowcast for 2023. Using an average of two forecasts represents an attempt to increase the forecast accuracy of the key variables while reflecting the different trends implied by different data sources.

The first measure involved estimating year-on-year UK GVA growth by SIC for 2023 using an ONS produced GVA index, and applying this to the regional distribution of heritage GVA by SIC. The second involved calculating a measure of employee productivity by SIC, multiplying this by growth in the number of employees in each SIC, and applying this to the regional distribution of heritage GVA by SIC industry. The results are converted to real figures, using 2022 prices as the basis period. The nominal nowcasts can be observed in **Appendix I.** 

Employment nowcasts for 2023 initially required utilising the SIC-SOC matrix to calculate the regional distributions of employment solely by SIC. A combination of two measures were then used to estimate employment figures for 2023.

The first measure involved utilising PAYE RTI employment growth data and applying it to the distribution of heritage employment by SIC, while the second method calculated a proxy for employment by SIC, using ONS data to estimate productivity by SIC and stripping this out from ONS estimates of GVA by SIC, to estimate the implied number of employees required to produce the reported levels of output by SIC. These two measures again provide the range of employment nowcasts for 2023, with the final nowcast produced again using an average of these two measures.

#### Aggregate economic footprint

This report also estimates the aggregate economic footprint of the Heritage sector. These multiplier impacts are estimated using Cebr's input-output models, which draw on the ONS' national accounting framework. Per the scope of this refresh, these multipliers have not been updated since the previous report. Updated aggregate impacts are therefore calculated per updated estimates of the direct impacts of the heritage sector, to which the same multipliers are subsequently applied. **Appendix IV** provides a detailed explanation on how we calculated the multipliers.

To embed heritage activities within our macroeconomic impacts modelling framework, we adopt the framework provided by the ONS supply-use tables. Using this framework to analyse

the heritage sector is one of the best means of ensuring consistency with the national accounting framework.

The process of embedding a specific subset of productive activities within the framework involves assigning the heritage sector an explicit role within the supply-use tables and Cebr's input-output models. In so doing, we provide the foundation for establishing the economic size (direct impact) of heritage, and the wider economic footprint supported in the national and regional economies. We then use the multipliers along with the calculated direct impacts to produce estimates for the total footprint of the sector, inclusive of the supply chain response (indirect impacts) and the income from employment supported and spent in the wider economy (induced impacts).

As the ONS only produces supply-use tables for the UK as a whole, strictly these multipliers represent the contribution of England's heritage sector to the UK economy. However, as the direct impacts only consider England's heritage sector, we would expect the majority of the economic footprint to be experienced in England.

#### **Spillover impacts**

Section 5 considers the spillover impacts of the heritage sector through tourism and is largely driven by tourism data from VisitBritain's Great Britain Tourism Survey (GBTS), Great Britain Day Visits Survey (GBDVS), and the International Passenger Survey (IPS). For the GBTS and GBDVS, 2021 data covered only quarters two to four of the year. In 2022 and 2023, however, full-year results are presented. Consistent with recommendations from Visit Britain, and as presented in the previous version of this report, data from before Visit Britain's 2020 methodological review is not directly compared to data from 2021 onwards.

In addition, in this report, expenditure figures for 2022 and 2023 are stated in real terms, in 2023 price levels. As a result, Cebr have updated monetary figures for prior years to reflect 2023 price levels also. Thus, please note monetary data in the main body of this report will be different to the same datapoints in prior versions of this report. Nominal versions of all figures and tables are presented in **Appendix I**.

# 3. Direct economic contributions of England's heritage sector

This section assesses the importance of heritage to the economy in terms of GVA and employment, over the period 2011–22.

We first outline the estimated contributions made by the heritage sector to GVA using national accounting data. Our results for GVA are adjusted using a GDP deflator provided by the ONS, using 2022 prices as the base year, with the nominal results presented in **Appendix I**. We then consider the contributions made to employment using the Business Register and Employment Survey (BRES) and other data sources, examining the impacts first for England and then across the English regions.

# 3.1 Direct national economic impact through Gross Value Added



It is estimated that in 2022, England's heritage sector directly generated a GVA contribution of £15.3 billion to UK GDP.

This GVA contribution can also be broken down by the constituent industries of the heritage sector. The results of this are shown in Table 1.

Table 1: GVA generated by constituent industries of the heritage sector, 2022

Constituent industries of the heritage sector	GVA (£m)	% of total heritage GVA
Construction	7,423	48.5%
Libraries, archives, museums and other cultural services	3,337	21.8%
Architectural and engineering services; technical testing and analysis services	1,859	12.1%
Public administration and defence services; compulsory social security services	749	4.9%
Services furnished by membership organisations	292	1.9%
Education services	203	1.3%
Real estate services on a fee or contract basis	244	1.6%
Other professional, scientific and technical services	230	1.5%
Services to buildings and landscape	87	0.6%
Scientific research and development services	133	0.9%
Owner-Occupiers' Housing Services	59	0.4%
Services of head offices; management consulting services	12	0.1%
Total	15,319	100%

Source: ONS Annual Business Survey, Cebr analysis

The construction industry remains the largest constituent heritage sector industry in 2022, generating 48.5% of total GVA, or £7.42 billion. This is slightly lower than the £7.84 billion estimated (in real terms) in 2021. The next largest industry - Libraries, archives, museums and other cultural activities continues to contribute less than half the GVA of the construction industry at almost £3.34 billion (21.8% of the total) which is close to the 2021 real value of £3.36 billion. The third dominant industry within the heritage sector is architectural and engineering activities, which contributes 12.1% of total heritage GVA (£1.86 billion), lower than the £2.07 billion (in real terms) estimated in 2021. These three sectors combined form over 80% of the total GVA of England's heritage sector.

Since 2011, while there have been certain periods of downturn such as during the 2020 Covid-19 pandemic, the heritage sector has overall experienced significant growth. Using 2022 prices as a base year, in real terms, the £15.3 billion estimated in 2022 is almost 27% larger than the £12 billion contribution in 2011, although this does mask some year-on-year variation. Figure 1 shows the direct GVA contributed by the heritage sector over this time period, and the sector's year-on-year growth rate.<sup>4</sup>

<sup>4</sup> The values in Figure 1 are different to the values in the previous iteration as in this report we adjusted for inflation using a GDP deflator while the previous iteration adjusted for inflation using the CPI.

18,000 25% 16,579 16,157 16,181 15,175 15,338 15,319 20% 15,123 16,000 15% 13,186 12,782 12,893 13.234 14,000 12,076 10% 12,000 5% 10,000 0% 8,000 -5% 6,000 -10% 4,000 -15% 2,000 -20% 0 -25% 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 Heritage GVA Annual % Growth

Figure 1: Estimated GVA of the heritage sector, adjusting for inflation, 2011-2022, £ million

Source: ONS Annual Business Survey, 2011-22, Cebr analysis

In real terms, the £16.6 billion directly generated in 2017 was the highest of any year estimated, followed by 2021 at £16.2 billion. In 2021, the heritage sector grew 22.3% year-on-year which represented a strong recovery from the Covid-19 pandemic in 2020. However, Figure 1 shows that relative to 2021, estimated GVA of the heritage sector in 2022 was down by 5.3%. With the GVA of England's heritage sector growing most years, 2022 joins 2013 (-3.1%), 2018 (-8.8%) and 2020 (-18.1%) as the list of years when the heritage sector's GVA did not grow. The full results in nominal terms, can be seen in **Appendix I.** 

As seen in Table 1, measured by GVA, the largest constituent industry of the heritage sector is construction activities. The construction industry is inherently volatile and is responsive to fluctuation in both confidence and key economic variables. The construction-related constituent heritage industries contracted by 5.3% <sup>5</sup> in real terms between 2021 to 2022, which can partially explain the drop in GVA contribution in 2022. This is likely due to the closure of the Culture Recovery Fund in early 2022, which, during the Covid-19 pandemic, had provided a £1.57 billion financial package to sectors in the culture and heritage industry in order to prevent insolvency. The volatility in the construction industry can also partially explain the volatility in year-on-year heritage sector GVA growth, seen in Figure 1. The large spike of 17.7 percent in GVA between 2014 and 2015 was largely due to significant growth in heritage-related construction, which accounts for almost half of the GVA of the heritage sector.

Figure 2 below maps the year-on-year growth rates of both the construction industry overall and heritage sectors from 2012 to 2022. As seen from the chart below, there exists a reasonable degree of synergy between the two sectors, with growth rates diverging in only

<sup>5</sup> This figure is calculated by taking the weighted growth rates of the constituent construction SIC codes, which for the purposes of this report are defined as being part of the heritage sector.

<sup>6</sup> Evaluation of the Cultural Recovery Fund (publishing.service.gov.uk), 2022, DCMS

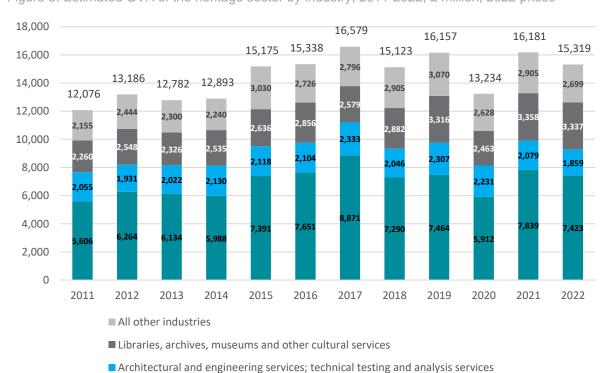
three of the ten years measured and large impacts of a similar magnitude observed for both in 2020 and 2021.



Figure 2: Annual real growth rates on the construction and heritage sectors, 2012 - 2022

Source: ONS Annual Business Survey, ONS Annual Population Survey, Cebr analysis

To further emphasise how impactful the construction industry is, we present the yearly heritage GVA figures broken down by the three biggest sectors and the others combined in Figure 3. The three largest ones are: construction (SIC 41-43); libraries, archives, museums and other cultural activities (SIC 91); and architectural and engineering services (SIC 71). Combined, these three sectors make up around 80% of the total heritage sector.



■ Construction

Figure 3: Estimated GVA of the heritage sector by industry, 2011-2022, £ million, 2022 prices

Source: ONS Annual Business Survey, ONS Annual Population Survey, Cebr analysis

## 3.2 Regional direct economic impacts through Gross Value Added

In 2022, England's heritage sector directly contributed an estimated 0.79% of England's GVA. There is regional variation on the exact percentage contributed, from the 0.90% in the East Midlands to 0.49% in the West Midlands. These percentages and the associated monetary contributions from which they are derived can be seen in Figure 4.

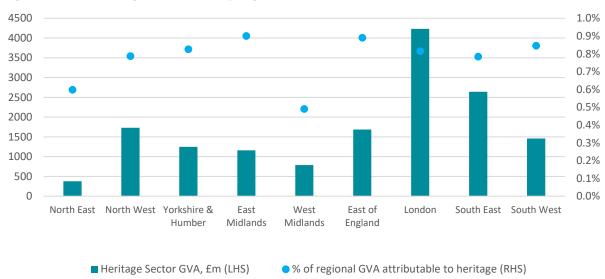


Figure 4: Direct heritage sector GVA by region, 2022

Source: ONS' Annual Business Survey, Cebr analysis

In monetary terms, London's heritage sector continues to contribute the most in England at £4.2 billion<sup>7</sup>, which constitutes 0.81% of total London GVA. As a percentage of the total contribution of the heritage sector to the English economy, London is still the most significant contributor at 27.6%. Given this fact, however, and that London's contribution to the heritage sector fell from £6.2 billion (in real terms) in 2021, it is evident that this decline in 2022 is driving the overall fall in the heritage sector's GVA.

The fall in London's GVA contribution in 2022 is driven by broadly consistently declining employment in the constituent heritage subsectors in the capital. This includes the heritage-related construction sub-sectors; the number of chartered surveyors; conservation professionals; and archivists and curators. This is discussed further in Section 3.4.

The region that contributes the second highest amount of heritage GVA in 2022 was the South East, at an estimated £2.6 billion. Cebr estimates that the heritage sector in the South East contributed almost 0.80% of the region's total GVA in 2022. In monetary terms, the heritage sector in the North East again contributes the least to the UK economy, at £377 million, with the lowest percentage contribution in 2022 coming from the West Midlands' heritage sector at just below 0.5%.

<sup>7</sup> The actual figure is £4,231 million. The 2021 actual figure is £6,153 million.

<sup>8</sup> The actual figure for the South East is £2,639 million.

Figure 5 shows the direct impact of heritage through GVA, disaggregated by the regions in England in the years 2011 to 2022.

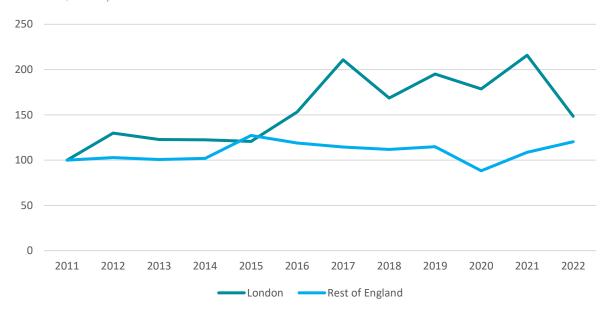
813 723 911 850 1160 448 843 9 London South East ■ South West ■ East of England ■ Yorkshire and the Humber ■ North West ■ West Midlands ■ East Midlands ■ North East

Figure 5: Estimated GVA in the heritage sector by the regions in England, 2011-22, £ million, 2022 prices

Source: ONS' Annual Business Survey, Cebr analysis

The declining relative importance of London in 2022 can be further seen in Figure 6, which shows the GVA of London's heritage sector from 2011-22, compared to the combined GVA of the heritage sector in the rest of England's regions. Data has been indexed such that the 2011 level of heritage sector GVA for London and the rest of England has been set to 100, with subsequent values measured as the growth relative to 2011 levels.

Figure 6: Indexed GVA of the London's heritage sector compared to the rest of the England, 2011=100, 2022 prices



Source: ONS' Annual Business Survey, Cebr analysis

This graph shows how the growth in the GVA of London's heritage sector outstripped that of the rest of the UK from 2011 to 2017, with the majority of this increase occurring from 2015 to 2017. From this point the two broadly moved in parallel, until the discussed partial convergence in overall trend in 2022. Over the entire period, in real terms, GVA growth in London stood at 48%, compared to 20% for the rest of England. It is worth clarifying that this graph presents growth rates and does not imply that London's GVA exceeds that of all non-London regions.

## 3.3 The direct national economic impact through employment

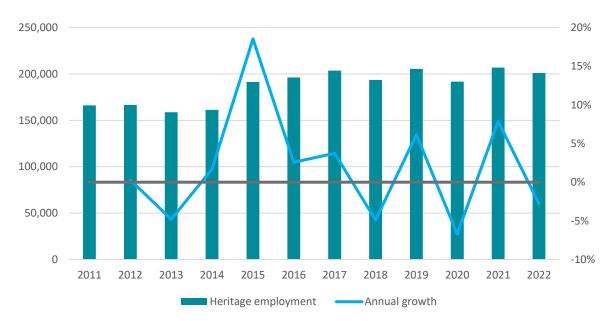


It is estimated that in 2022, England's heritage sector employed 201,000 workers<sup>9</sup> This represents 0.72% of total employment in England.

Employment estimates are collated from a number of different sources. They are based on a definition that uses SIC and SOC codes, combined with data from other sources on specific areas of heritage. Since the SIC and SOC codes are limited in their ability to sufficiently isolate heritage employment, coefficients derived from a number of different data sources are used to proportionally allocate employment estimates. Technical details related to how this has been done can be found in the technical notes of **Appendix III.** 

Figure 7 shows the direct impact through employment in the years 2011 through 2022, along with the year-on-year percentage change in heritage employment.

Figure 7: Estimated employment in the heritage sector, 2011-22



Source: ONS' Business Register and Employment Survey, Annual Population Survey, Cebr analysis

Given the nature of the activities embedded in the heritage sector, the sector's employment contribution has followed a somewhat volatile trend. It is estimated that the heritage sector in England directly employed around 201,000 workers in 2022, down from the 207,000 workers

directly employed in 2021. Over the entire period, heritage sector employment has increased by 35,000, or almost 21%. The greatest driver of this was significant increases in heritage workers in the construction sub-sectors, and the number of conservation professionals in all industries <sup>10</sup>. The drop in total heritage sector employment from 2021 to 2022 of 5,800 was driven mainly by a fall in the number of heritage workers in the construction sub-sectors from 102,000 to 94,000.

The average yearly growth rate in employment in the heritage sector from 2011-22 was 2.0%. This compares favourably to an average overall increase in employment in England of 1.2% over the same period. A further comparison of total employment in England, and the heritage sector's share can be seen in Figure 8.

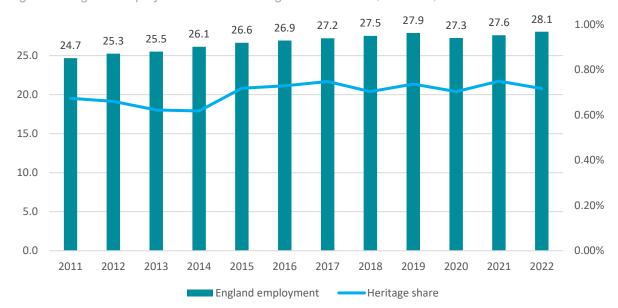


Figure 8: England employment and the heritage sector's share, 2011-22, millions

Source: Labour Force Survey, Business Register and Employment Survey, Annual Population Survey, Cebr analysis

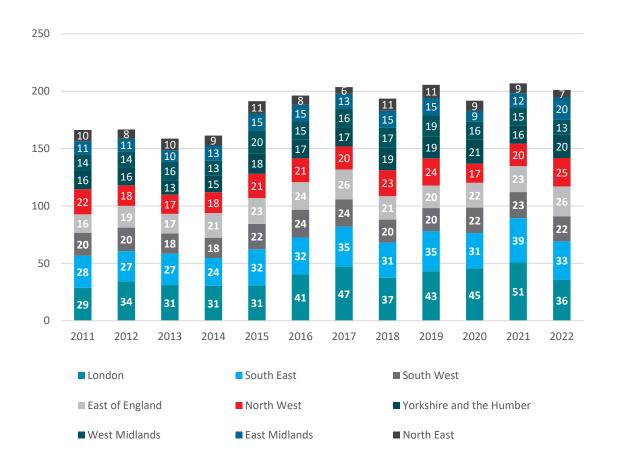
Over the entire period, total employment in England has increased by 13.7%, from 24.7 million in 2011 to 28.1 million in 2022. The heritage sector's share of total English employment fell from 0.67% of total employment in 2011, to 0.62% in 2014. Since, it has increased significantly, and in 2021 it peaked at 0.75%. In 2022, the share fell slightly to 0.72% which is close to the 2015 levels. This share indicates that one in every 139 jobs in England is directly provided by the heritage sector.

From 2011-22, the heritage sector's share of total employment in England increased by 0.04 percentage points. It is to be noted, however, that in contrast to 2021, the 2022 heritage sector employment fell below 2019 levels while total employment across England in 2022 exceeded 2019 levels.

# 3.4 Direct regional impact through employment

Figure 9 illustrates employment in the heritage sector by English regions over the period 2011-22.

Figure 9: Employment in the heritage sector by English regions, 2011-22, thousands



Source: ONS Annual Population Survey, Cebr analysis

London contributed the most in every year bar 2015 <sup>11</sup>, peaking at 50,800 in 2021, although in 2022, London's contribution fell substantially to 35,800 workers <sup>12</sup>. In contrast, certain regions improved relative to 2021 including the East of England, East Midlands, Yorkshire and Humber and the North West.

Over the entire period, the East Midlands grew the fastest relative to the 11,200<sup>13</sup> workers in 2011, at 74% followed by the East of England at 61%. In absolute terms, the highest growth

<sup>11</sup> In 2015, an estimated 31,600 employees worked in the heritage sector in the South East, compared to 30,800 in London.

<sup>12</sup> The actual figures for 2021 is 50,758, for 2022 is 35,824.

<sup>13</sup> The actual figure is 11,238.

was from the East of England which accounted for 28% of the total increase in heritage employment since 2011.

The South East continues to be the second largest heritage employer, with 33,400 employees in 2022 (albeit this is 5,300 fewer workers than in 2021). The East of England (25,900) and the North West (24,900) are third and fourth, with the South West (21,900), previously third place in 2021, dropping to fifth place. Over the entire assessed period, two regions have seen a decrease in employment in the heritage sector: the North East (9%) and the West Midlands (4%). In 2021, the North West and Yorkshire and the Humber experienced a decrease in heritage employment but in 2022, these two regions have respectively grown by 9% and 11%.

The discussed reduction in London's heritage sector employment is illustrated in Table 2 below, which shows employment figures for heritage-related SICs and SOCs in 2021 and 2022 for London and the rest of England.

Table 2: Change in heritage-related employment for London and the rest of England between 2021 and 2022

SIC/SOC	Heritage related SIC SOC	London		Rest of England		and	
		2021	2022	Change	2021	2022	Change
SOC	Conservation professionals in all industries	3,447	804	-2,643	9,937	18,396	8,459
SOC	Architects in the heritage sector	4,984	3,549	-1,435	3,493	5,653	2,160
SOC	Town planning officers in the heritage sector	2,288	1,811	-477	5,334	6,317	983
SOC	Chartered surveyors in the heritage sector	4,660	2,621	-2,038	8,993	9,516	523
SOC	Building and civil engineering technicians in the heritage sector	121	447	326	831	1,600	768
SOC	Archaeologists in all industries	867	877	10	5,063	5,123	60
SOC	Archivists and curators in all industries	7,507	4,656	-2,851	6,302	8,985	2,683
SOC	Conservation and environmental associates in all industries	2,039	811	-1,228	8,277	6,214	-2,063
SOC	Gardeners & nature reserve workers in the heritage sector	229	241	12	2,581	2,776	195
SIC	Workers in the museum sub sector	6,587	6,009	-578	8,234	10,249	2,015
SIC	Workers in the historical sites & buildings sub sector	2,000	1,008	-992	10,000	6,988	-3,012

SIC	Workers in the archives sub sector	529	900	371	846	1,580	734
SIC	Heritage workers in the building completion and finishing sub sector	9,920	8,680	-1,240	53,630	52,080	-1,550
SIC	Heritage workers in the other specialised construction activities subsector	5,580	3,410	-2,170	32,550	29,760	-2,790
	Total	50,758	35,824	-14,934	156,072	165,237	9,165

Source: ONS' Business Register and Employment Survey, Annual Population Survey, Cebr analysis

Table 2 illustrates that across the SIC and SOC categories, London experienced a fall in heritage sector employment by almost 15,000, while the rest of England experienced growth of 9,200. There is a broadly consistent decline in employment across the different heritage SICs and SOCs in London, headlined by falls in employment in the construction subsectors (3,400), in conservation professionals (2,600 workers) and in archivists and curators (2,900 workers). Overall, nine of the fourteen SICs and SOCs experienced a decline in employment in 2022. On the other hand, we observe a much stronger employment growth in most (ten out of fourteen) of the heritage-related industries and occupations for the rest of England. This includes a rise of 8,500 conservation professionals as well as 2,700 more archivists and curators.

## 3.5 The economic impact of the heritage sector in 2023

At the time of writing, there exists very little complete statistical datasets for 2023, with the majority of analysis completed for this report being conducted in May and June 2024. This has presented a challenge in terms of calculating the direct impacts of the heritage sector in a way which is methodologically consistent with prior years. As a result, Cebr has instead produced 'nowcasts' of both GVA generated by, and employment in England's heritage sector solely utilising less disaggregated data <sup>15</sup>. As this approach inherently comes with more uncertainty, we present ranges within these nowcasts, utilising differing assumptions (discussed in Section 2.2). In addition, data is only presented at the national level, and is not disaggregated by heritage subindustry. It is important to note that while these projections are termed 'nowcasts' they provide estimations for a very recent, but historical time period (2023). A comparison of the 2022 central nowcasts from the previous report to the actual 2022 results for GVA and employment are presented in **Appendix V**.

Figure 10 below displays the three nowcasts Cebr has produced for 2023 along with the direct GVA contributions from England's heritage sector in 2018 through 2022 for comparative purposes. The figures are in real terms using 2022 prices, with the nominal figures provided in **Appendix I.** 

<sup>15</sup> As an example, while data is available for the economic impact of the construction sector as a whole in 2023, data disaggregated to allow estimation of solely the heritage-related component of this is not.

17,000 16.157 16,181 16,000 15.320 15,123 15.000 14,925 14,529 14,000 13,234 13,000 12,000 11,000 2023 2018 2019 2020 2021 2022 Conservative Central —

Figure 10: Heritage sector GVA nowcasts, 2018 - 2023, £ million, 2022 prices

Source: ONS Annual Business Survey, ONS GDP Tables, ONS Labour Productivity Tables, Cebr analysis

Both optimistic and conservative nowcasts have been calculated using trends for the wider SICs that the heritage sector falls into. The optimistic nowcast projects that the heritage sector GVA in 2023 will be at a similar level to 2022 at £15.3 billion in real terms, while the conservative forecast projects that heritage sector GVA will fall to £14.5 billion in 2023.

The conservative nowcast's measure involved estimating year-on-year UK GVA growth by SIC for 2023 using an ONS-produced GVA index, and applying this to the regional distribution of heritage GVA by SIC. The optimistic nowcast's measure involved calculating a measure of employee productivity growth by SIC in 2023, combining this with growth rates for the number of employees in each SIC <sup>16</sup>. This generates a proxy for year-on-year UK GVA growth by SIC for 2023 but driven by employment data, which is then applied to the regional distribution of heritage GVA by SIC industry. Both measures are based on growth observed from 2022 to 2023 at a SIC section level, with the assumption that heritage sector in 2023 grew in line with the wider SIC growth observed between 2022-2023.

The divergence between the two measures comes about through the differences in underlying source data on economic activity within the SIC sections that the heritage sector falls into. Specifically, the conservative nowcast's data for wider SIC GVA growth implies a stronger fall in real GVA growth rate relative to the optimistic nowcast's data.

The inconsistency between the datasets can be seen from the following example when comparing implied and actual GVA growth figures. In the arts, entertainment and recreation sector, PAYE RTI employment data indicate that between 2022 and 2023, employment growth

<sup>16</sup> In other words, estimating the growth in the number of workers, multiplied by the growth in the expected level of per person production.

was roughly 5% and with productivity growth around 4%, implied GVA growth is approximately 9% <sup>17</sup>. However, ONS data suggests that GVA hardly grew in real terms in this sector. This inconsistency between the datasets causes this divergence between the two nowcasts.

Without more granular data for 2023, it is difficult to ascertain which of these nowcasts is more accurate, however our estimates show that the heritage sector GVA in 2023 is likely to only grow marginally or decline, which is in line with the stagnant real GVA growth observed across the wider SIC codes that the heritage sector falls within.

Figure 11 below displays optimistic, central, and conservative nowcasts for employment in the heritage sector in 2023, alongside heritage sector employment in 2018 through 2022 for comparative purposes.

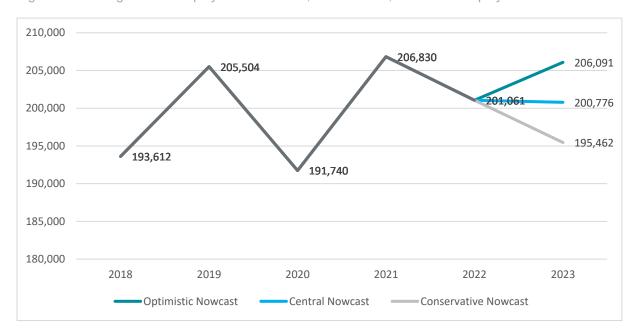


Figure 11: Heritage sector employment nowcasts, 2018 – 2023, number of employees

Source: ONS Annual Business Survey, ONS GDP Tables, ONS Labour Productivity Tables, Cebr analysis

The optimistic nowcast suggests 2023 heritage sector employment of 206,091, which represents a growth from the 2022 figure of 201,061, though it falls slightly short of the 2021 peak of 206,830. The conservative employment nowcast projects 195,462 workers in the heritage sector in 2023, which represents a fall of over 5,000 workers relative to the 2022 figure. Our central nowcast again represents a midpoint between these two approaches, at 200,776.

Both estimates are driven by data from the ONS, but from different datasets. The optimistic nowcast's measure involved utilising PAYE RTI employment growth rate figures and applying it to the distribution of heritage employment by SIC. The conservative nowcast's measure involved calculating a proxy for employment growth by SIC, using ONS data to estimate productivity growth by SIC and stripping this from 2023 GVA growth by SIC. The conservative nowcast's data indicates a fall in employment growth across the wider SIC sections that the heritage section falls in, while the optimistic nowcast's measure which uses the PAYE RTI

Assuming approximately 5% more employees produce 4% more per person each, we would estimate that total output would grow by approximately 1.05\*1.04, which is just over 9%.

data indicates positive employment growth across most SIC sections. This is for similar reasons as explained for the GVA nowcasts.

# 4. Macroeconomic impacts of England's heritage sector

The wider economic footprint of the heritage sector goes beyond the direct impacts discussed in the previous section. Specifically, our analysis considers two further impact layers:

#### The indirect impact

To conduct its operations, the heritage sector purchases goods and services from suppliers. This helps to support output and jobs amongst these firms. In turn, these suppliers place demands on their suppliers which supports further output and jobs. The indirect impact captures the GVA and employment supported along the supply-chains as a result of the sector's operations.

#### The induced impact

The workers who receive income and employment benefits through the direct (heritage sector operations) and indirect (the suppliers of the sector and in turn their suppliers) channels spend their earnings on goods and services in the wider economy. This helps to further stimulate demand and as such supports further GVA and employment. The induced impact captures these wider-spending effects.

We define the aggregate economic footprint supported by the heritage sector to be the sum of the direct, indirect and induced impact layers.

# 4.1 The supply chain of the heritage sector

The most apparent way in which industries interact with the wider economy is through the purchases they make from businesses in the same and other industries through their supply chain. The supply chain, therefore, provides the logical starting point for an analysis of the multiplier impacts and the economic footprint of the heritage sector. The structure of the heritage sector's supply chain is presented in Table 3: Structure of the heritage sector's domestic supply chain

below. The figures below and multipliers (discussed later) are unchanged from the previous report given that we have not updated the supply-use tables for this iteration.

Table 3: Structure of the heritage sector's domestic supply chain

Sector	% of Domestic Supply Chain Expenditure
Construction	38.5%
Manufacturing	16.6%
Professional, scientific and technical activities	11.5%
Wholesale and retail trade; repair of motor vehicles	6.9%
Administrative and support service activities	6.5%
Heritage sector	4.0%
Financial and insurance activities	3.2%
Information and communication	3.2%
Public administration and defence; compulsory social security	1.5%
Other service activities	0.5%
Other Sic Sectors	7.5%

Source: ONS, Cebr analysis

We estimate that the heritage sector's supply chain is dominated by the construction industry and the manufacturing industry, accounting for 38.5% and 16.6% of the domestic supply chain respectively. The heritage sector's purchases from its own constituent industries are estimated to account for approximately 4.0% of domestic procurement.

# 4.2 The heritage sector's contribution to GVA

For every £1 of GVA directly generated by England's heritage sector in 2022, a further £0.96 of GVA is supported in the sector's supply chains (the indirect impact). This £0.96 represents the GVA of the industries from which the heritage sector purchases goods and services as inputs to its own production processes, and of the industries that in turn provide inputs to these suppliers, and so on.

In addition, for every £1 of direct GVA generated, £0.97 is supported through wider spending effects (the induced impact). This represents the GVA of the industries that supply goods and services to households when the direct and indirect employees of the heritage sector spend their earnings in the wider economy.

Together, these findings imply that for every £1 in GVA directly generated in 2022, a total footprint of £2.93 is supported, within the UK economy. By combining these multipliers with our direct impacts, we estimate that the heritage sector supported an aggregate GVA contribution of £44.9 bn<sup>18</sup> to the UK economy in 2022; £2.5 billion (real terms) less than in 2021.

## 4.3 Contribution of England's heritage sector to employment

In Section 3, we estimated that the heritage sector employed 201,000 workers in 2022. However, as with GVA, the impact of the heritage sector on labour markets is not confined to this direct contribution.

For every worker directly employed by heritage sector, a further 0.84 jobs are supported through indirect effects. Furthermore, 0.76 jobs are supported through induced impacts. This implies that for every worker directly employed in the heritage sector in 2022, a total footprint of 2.60 workers is supported in the wider UK economy. This is marginally lower than the 2.74 estimated in 2019, primarily due to a slight decrease in the induced multiplier.

In all, the 201,000 workers directly employed in England's heritage sector in 2022 supported an aggregate footprint of 523,000 jobs<sup>19</sup>; 15,000 less workers than in 2021.

# 4.4 Regional variation in our multiplier estimates

Using our multiplier modelling we have also estimated the contribution made by the heritage sector in 2021 to the regional economies in England. Table 4 gives the results of our input-output modelling at the level of the English regions. Separate Type 2 multipliers<sup>20</sup> that capture direct, indirect and induced impacts are shown for GVA and employment.<sup>21</sup>

Table 4: Type 2 multipliers and impacts in the English regions, 2022

Region	Type 2 GVA multiplier	Aggregate GVA supported (£m)	Type 2 employment multiplier	Aggregate employment supported (000s)
North East	2.46	928	2.17	14
North West	2.60	4,504	2.31	57
Yorkshire & The Humber	2.58	3,226	2.28	46
East Midlands	2.64	3,066	2.34	46
West Midlands	2.60	2,042	2.29	30
East of England	2.75	4,641	2.42	63
London	1.84	7,767	1.69	61
South East	2.67	7,039	2.34	78
South West	2.45	3,564	2.16	47

Source: Cebr analysis

<sup>19</sup> The actual figure is 522,600.

In economic impact assessments, type 2 multipliers are used to estimate the total aggregate economic impact of a sector, including the direct, indirect and induced effects. The type 1 multiplier, on the other hand, solely considers the direct and indirect effects. Further details on how we calculate the multipliers can be found in **Appendix IV**.

<sup>21</sup> Note that these estimates capture the impacts of the heritage sector of a region on that region itself. They do not take account of the potential impacts on the heritage sector of other regions when other regions need to draw on suppliers in that region for which the multiplier estimate is being produced.

With our regional multipliers unchanged from the previous report, the heritage sector in the East of England continues to have the largest Type 2 multipliers for both GVA and employment, at 2.75 and 2.42 respectively.

The impacts observed for London are interesting to touch upon. The multipliers themselves are low, however the total aggregate GVA supported is extremely high. The interpretation of this, is that due to the high concentration of direct activity within the heritage sector in London, even with relatively low further levels of activity supported through indirect and induced layers (relative to the direct level of economic activity), in absolute terms the indirect, induced and ultimately aggregate impacts are very high.

The heritage sector in the South East had the highest number of aggregate employment supported at 78,000, followed by the East of England at 63,000. Despite, the South East and the East of England having lower employment figures in terms of direct impacts relative to London, on aggregate terms, these two regions exceed that of London. This is driven by the higher in-region multipliers for these regions.

### 5. Spillover impacts of heritage through tourism

The dynamics of the UK's tourism industry depend on a range of factors. Economic and political trends may drive long-term changes in patterns of tourism, while one-off events can cause demand to rise or fall suddenly. For example, declining Sterling exchange rates post-Brexit may have contributed to international tourism growth generally outpacing domestic tourism growth between 2016 and 2019, as the UK became a relatively cheaper tourist destination. Throughout the Covid-19 pandemic and related travel restrictions, the UK saw a large decline in international tourism, a relatively smaller decline in domestic trips, and an increase in domestic day trips. In 2022, domestic tourism in the UK showed some signs of recovery. In 2023, however, it was international tourism which saw a stronger rebound. This stronger recovery in international tourism relative to domestic tourism may be attributed to the cost-of-living crisis in the UK, which hindered the growth of domestic trips.

Besides directly generating employment and GVA, England's heritage sector also supports additional economic activity in two other ways. Firstly, many tourists visit the UK with the primary intention of visiting heritage sites. Secondly, many others take part in heritage-related activities during trips that are made with another primary purpose. The cumulative spending on the heritage components of such trips contributes substantial amounts to national and local economic output, supporting thousands of additional jobs.

In this section, we present a series of descriptive statistics on domestic heritage-related overnight trips and day visits, as well as international heritage-related trips, and the corresponding spending generated by these trips.

Due to the Covid-19 pandemic, the collection of tourism data through extensive fieldwork was suspended for most of 2020, with the collection of tourism data continuing from April 2021. As the first quarter of the year was heavily influenced by restrictions due to the pandemic, which made analysis of this period difficult, we present only Q2-Q4 results for 2021. Without corroborating data, we do not attempt to extrapolate full year estimates. For 2022 and 2023 we are able to present full-year results.

In addition, Visit Wales, Visit Scotland and Visit England undertook a review in 2021 of the requirements and methods for producing the official GB domestic tourist statistics, to future-proof their data collection methods whilst maintaining the reliability and robustness of the information reported. As a result, substantial changes were introduced as part of a new combined online survey collecting data on both domestic overnight trips as well as domestic day trips. Therefore, while we continue to present figures from previous years, consistent with recommendations from Visit Britain, these are not directly comparable with figures from 2021 onwards.<sup>22</sup> We include previous estimates for completeness, but we would advise readers not to draw direct conclusions from trends between 2021-2023 and previous years. To this end, we present separately 2012-2019 and 2021-2023 figures, and any comparisons between these periods are indicative only.

The methodology applied to determine heritage-specific tourism utilises an activities-based categorisation of tourist trips to estimate the appropriate portion of total expenditure and visits

due to the heritage sector.<sup>23</sup> Official data sources, such as GB Tourism Survey, that provide a national breakdown of activities undertaken by tourists enabled us to derive estimates for the direct impact of tourism attributed to the heritage sector.

### 5.1 Domestic overnight tourism

The GB Tourism Survey (GBTS) is used to estimate the volume and spend of UK domestic overnight tourism. This survey covers overnight trips taken for any purpose, such as holidays, business or visiting friends and family.<sup>24</sup>

Figure 12 and Figure 13 below illustrate the volume of heritage-related trips taken by UK citizens between 2012 and 2019, and between 2021 and 2023. The number of trips remained relatively constant between 2012 and 2019, fluctuating around 15 million annually.

It is important to note that the methodological change between 2019 and 2021 makes it difficult to draw strong conclusions about the change in trip numbers pre- and post-2020. That said, 2022 tentatively saw a ten-year high of 16.0 million trips; an increase of 1.0 million on Q2-Q4 2021. It should again be highlighted that the 2021 data represents only three quarters of the year due to continued travel restrictions in Q1, however, even when comparing Q2-Q4 2021 with Q2-Q4 2022, we see an increase in 2022 in the number of overnight heritage-related trips.

Throughout this section, trip purpose is only available up until 2015. To form our estimates past this date, the proportion of heritage related trips in 2015 is applied to total domestic trips.

<sup>24</sup> GBTS measures the volume and value of domestic overnight tourism and provides detailed information about trip and visitor characteristics. "Trips" are classified as trips or journeys away from home involving an overnight stay, taken by adults aged 16 and over and accompanying children. It includes costs paid in advance of the trip, costs paid during the trip and any other expenses incurred as part of the trip.

18.0 18.0 16.5 15.7 15.3 15.2 16.0 0.7 15.1 16.0 14.9 0.6 1.3 0.5 0.5 0.6 0.6 1.2 1.1 1.1 14.0 14.0 1.3 1.1 1.2 1.3 1.2 1.3 11.9 1.3 11.7 1.2 1.5 12.0 12.0 1.5 0.5 0.9 1.5 0.4 0.9 1.4 1.3 1.5 1.7 1.7 1.6 0.9 1.4 10.0 10.0 1.0 1.6 1.4 1.1 1.0 8.0 8.0 1.1 1.2 1.9 1.8 1.9 1.8 1.8 1.8 6.0 6.0 1.4 1.4 2.8 2.8 2.4 2.5 2.4 4.0 2.4 4.0 2.0 2.0 2.0 2.0 3.1 3.1 3.1 3.0 2.9 2.8 2.2 2.2 0.0 0.0 2012 2013 2014 2015 2016 2017 2018 2019 ■ South West ■ South East ■ London ■ North West ■ Yorkshire and the Humber ■ East of England ■ West Midlands ■ East Midlands ■ North East

Figure 12: Total estimated domestic overnight heritage-related trips 2012-2019, millions

In 2023, 1.1 million fewer overnight trips were taken than in 2022. This decline could reflect that the increase in 2022 was short-lived as travellers made up for trips they had not been able to take during the pandemic.

18.0 16.2 16.0 16.0 0.6 15.0 16.0 14.9 0.4 1.3 0.6 14.0 1.2 1.2 1.3 15.8 1.3 1.2 12.0 1.6 1.5 15.6 10.0 1.5 1.3 8.0 15.4 2.4 6.0 2.3 2.3 15.2 4.0 2.4 2.4 2.4 15.0 2.0 2.7 2.5 2.4 0.0 14.8 2021 Q2-Q4 2022 2023 ■ South West ■ South East ■ London ■ North West ■ Yorkshire and the Humber ■ East of England ■ West Midlands ■ East Midlands ■ North East

Figure 13: Total estimated domestic overnight heritage-related trips 2021-2023, millions

The South West accounts for the highest or joint-highest share of overnight trips taken across all years; 16.8% of total trips in 2022 and 16.3% in 2023. This is closely followed by the South East with 15.1% and 15.8% of overnight trips in 2022 and 2023, respectively. The North East, in contrast, continues to account for the smallest share – only 3.6% in 2022 and 3.9% in 2023.

The spending tourists make on such trips supports the recipient local economies. Figure 14 and Figure 15 below, illustrate the estimated spend per region associated with domestic heritage trips. All values are expressed in real terms in 2023 price levels to remove the effect of inflation. Since 2016, annual spending on domestic heritage-related trips has been consistently around £4 billion annually. Between 2021 and 2023 total real spend saw no significant increase (0.4%). However, 2022 saw a considerable temporary spike in spending to £5.1 billion, an increase of 14.9% on 2021, greatly outpacing the associated 6.6% growth in the number of trips over the same period. This lends favour to the idea that individuals were potentially willing to spend more on trips in 2022 after the pandemic.

Figure 14: Estimated domestic heritage-related overnight trip spend 2013-2019, £m (2023 prices)

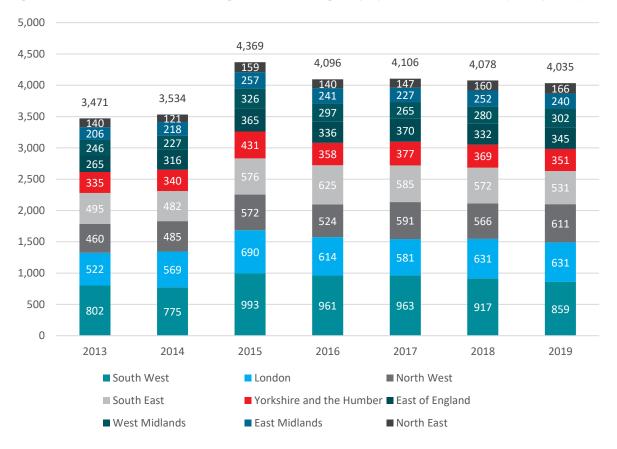
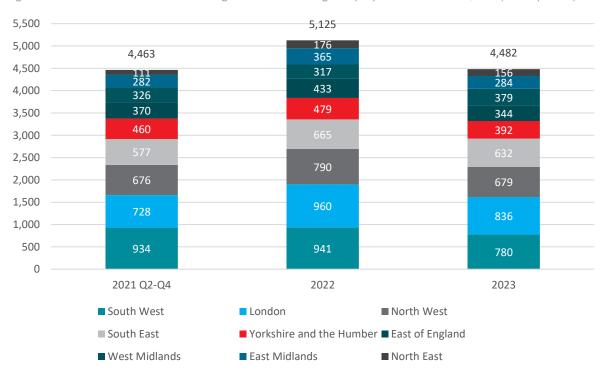


Figure 15: Estimated domestic heritage-related overnight trip spend 2021-2023, £m (2023 prices)



Source: GB Tourism Survey and Cebr analysis

Until 2022 the South West dominated in terms of proportion of spend, as it did in number of trips. However, in 2022 and 2023, it was London which received the greatest share of expenditure on overnight tourism; 18.7% in both years. Also, whilst the North East again received the smallest share of spending, accounting for only 3.5% of total, it increased its share from 2.5% in Q2-Q4 2021.

To gain a more disaggregated view of overnight trips, Figure 16 and Figure 17 below illustrate domestic heritage-related holiday trips. Holidays in this context exclude visits to friends and family for leisure purposes. Consistent with total trip numbers, the South West accounts for the greatest number of heritage-related holiday trips, and the North East the lowest.



Figure 16: Total estimated domestic overnight heritage-related holiday trips 2012-2019, millions

Source: GB Tourism Survey and Cebr analysis

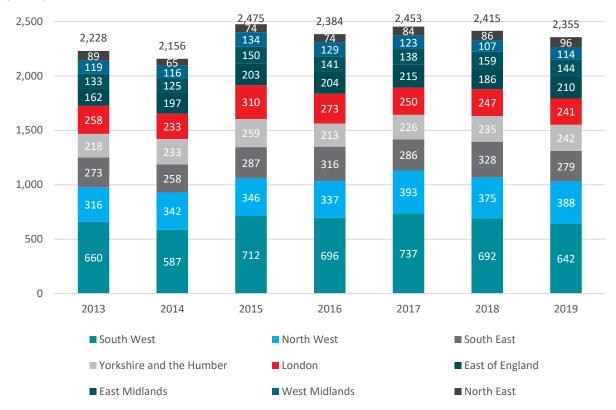
7.0 5.8 5.7 5.7 6.0 5.6 0.3 0.3 0.4 0.4 4.9 5.0 5.4 0.4 0.4 0.2 0.5 0.5 0.4 4.0 0.5 5.2 0.5 0.4 0.4 3.0 5.0 8.0 8.0 0.7 4.8 2.0 0.9 0.9 0.8 1.0 4.6 1.4 1.4 1.2 0.0 4.4 2021 Q2-Q4 2022 2023 ■ South West North West ■ South East ■ Yorkshire and the Humber ■ East of England ■ London ■ East Midlands ■ West Midlands ■ North Fast

Figure 17: Total estimated domestic overnight heritage-related holiday trips 2021-2023, millions

Despite representing only nine months of activity, Q2-Q4 2021 saw approximately the same number of overnight holiday trips as the whole of 2022, whereas the number of heritage-related domestic holidays fell by 14.6% between 2022 and 2023. On full-year-equivalent terms, therefore, the data indicates the possibility that holiday trips are declining. Again, this could reflect the reversion of a temporary increase above pre-pandemic trend levels in 2021 and 2022 if, as restrictions were lifted, people took more holidays because they had not been able to take any during the pandemic. In addition, international travel restrictions constrained international trips, potentially leading UK residents who may otherwise have gone abroad to substitute domestic holidays for international holidays. However, it could also reflect the higher cost of living in 2022 and 2023; as household budgets were stretched, holidayers may have substituted longer overnight stays with day trips to keep costs down, as supported by the concurrent rise in domestic day trips over the same period, which will be discussed in the next section. The lack of comparability between pre- and post-2019 data makes this dynamic difficult to determine precisely.

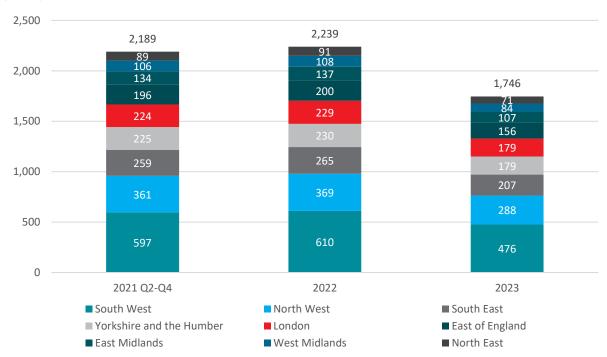
The amount spent on domestic holidays in the regions is displayed below in Figure 18 and Figure 19. There was a general upward trend in holiday spending from 2013 to 2017, after which there was a slight decline to 2019. Despite the pandemic, expenditure in 2021 was resilient at £2.2 billion, rising only £50 million in 2022. As with holiday trip numbers, though, spend fell dramatically (22.0% decline) from 2022 to 2023. The relatively greater decline in spending than trip numbers means that average spend per domestic holiday fell.

Figure 18: Total estimated domestic overnight heritage-related holiday spend 2013-2019, £m (2023 prices)



Source: GB Tourism Survey and Cebr analysis

Figure 19: Total estimated domestic overnight heritage-related holiday spend 2021-2023, £m (2023 prices)



### 5.2 Domestic day visits

The UK is home to 27 cultural and 4 natural UNESCO World Heritage sites, including such iconic destinations as Stonehenge, the Tower of London, the City of Bath and the Giant's Causeway. In addition, English Heritage maintains over 400 historic monuments, buildings and places ranging from Cold War bunkers to Roman forts. These are spread throughout the country and are major attractions for both citizens of the UK and international visitors. Thus, heritage sites are the motivation for a significant amount of expenditure within the UK's regional economies, expenditure which goes on to support additional economic activity and jobs.

This section's analysis draws on Visit England's Great Britain Day Visit Survey (GBDVS) and defines a 'visit' as one that involves one of 15 defined leisure activities, lasts at least three hours, was not a regular activity and one that is in a destination outside the respondent's place of residence. This excludes sporting events and some other visitor attractions.<sup>27</sup>

Total day visits in 2022 and 2023 improved markedly as travel restrictions eased, after a low of 119 million visits in Q2-Q4 2021. Visits totalled 195 million in 2022 and rose 7.8% to 211 million in 2023. Recovery in 2022 was thus relatively much greater than that of overnight trips in 2022. Additionally, the further increase in day trips in 2023 contrasts with a decline in holiday overnight trips in the same year.

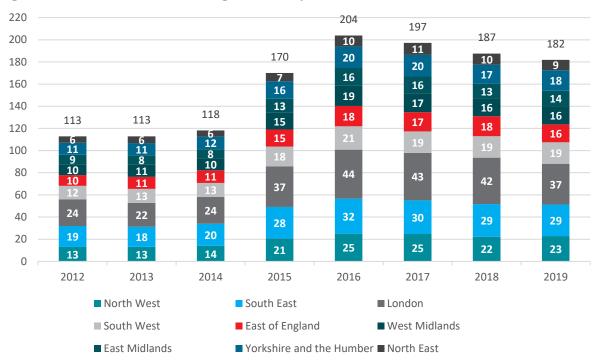


Figure 20: Estimated volume of heritage-related day visits 2012-2019, millions

Source: Visit England's Day Visit Survey and Cebr analysis

<sup>25</sup> UNESCO. (2020). 'United Kingdom of Great Britain and Northern Ireland'.

<sup>26</sup> English Heritage. (2020). 'Stand where history happened'.

<sup>27</sup> For a complete definition and more information please see Visit Britain's GB Day visits Survey

Figure 21: Estimated volume of heritage-related day visits 2021-2023, millions



Source: Visit England's Day Visit Survey and Cebr analysis

Figure 22 and Figure 23 below present the expenditure on heritage-related day visits throughout the English regions. Total heritage-related visits generated a value of £10.7 billion in 2022 and £11.4 billion in 2023, both in terms of 2023 prices. This spending is not homogenous across the regions. London accounted for the largest share, at 25.9% of the total, equivalent to £3.0 billion. This is despite receiving 20.8% of the footfall, illustrating that average spend in London was relatively high. The North East again accounted for the smallest share at 3.3% of the value, equating to £380 million, broadly in line with its 3.4% share of day visits.

6,000 5,800 5,588 5,525 5,275 5,274 247 5,178 325 4,934 4,932 253 4,894 5,600 324 468 249 348 5,000 285 252 249 334 216 369 387 459 339 347 501 473 392 5,400 456 389 372 629 4,000 504 484 511 439 387 453 390 361 381 438 5,200 398 3,000 5,000 549 776 647 609 2,000 898 747 780 4,800 768 1,000 4,600 1,501 1,389 1,414 1,309 1,285 1,172 1,220 1,057 0 4,400 2014 2012 2013 2015 2016 2017 2018 2019 London ■ South East ■ North West ■ South West ■ West Midlands ■ Yorkshire and the Humber ■ East Midlands ■ East of England ■ North East

Figure 22: Estimated value of heritage-related day visits 2012-2019, £m (2023 prices)

Source: Visit England's Day Visit Survey and Cebr analysis

14,000 14,000 11,447 12,000 12,000 10,659 380 780 377 10,000 10,000 915 813 947 1,053 884 8,000 8,000 1,053 6,291 1,078 166 6,000 6,000 388 528 1,364 637 1,672 682 4,000 4,000 1,781 1,626 2,000 2,000 2,968 2,222 1,223 0 0 2021 Q2-Q4 2022 2023 London South East ■ North West ■ West Midlands ■ Yorkshire and the Humber ■ South West ■ East of England ■ East Midlands ■ North East

Figure 23: Estimated value of heritage-related day visits 2021 Q2-Q4 - 2023, £m (2023 prices)

Source: Visit England's Day Visit Survey and Cebr analysis

The 82% increase in real expenditure on day visits between Q2-Q4 2021 and 2023 is broadly in line with the 78% increase in number of day visits over the same period, but does indicate that, in contrast to holiday trips, average real spend per trip rose. This again likely reflects households taking more day trips in place of longer domestic trips or holidays involving overnight stays, and potentially being willing to spend slightly more per trip in such circumstances.

### 5.3 International tourism

This section of the analysis draws upon the International Passenger Survey (IPS) which collects information about individuals entering and leaving the UK and is used to produce estimates of overseas travel and tourism <sup>28</sup>. Figure 24 and Figure 25 illustrate the volume of inbound heritage-related visits to the UK over the period 2012 to 2019. There was a slow upward trend in the volume entering the UK from 2012, peaking in 2017. Overall, the period experienced a growth in volume of 26%, equivalent to 3.7 million additional international visits per year.

<sup>28</sup> The IPS conducts between 700,000 and 800,000 interviews a year. Interviews are carried out at all major airports and sea routes, at Eurostar terminals and on Eurotunnel shuttle trains.

20,000 18,380 17,965 17,755 17,497 17,099 18,000 15,961 15,403 16,000 14,242 14,000 12,000 10,000 8,000 6,000 4,000 2,000 0 2015 2016 2018 2019 2012 2013 2014 2017 ■ North East 273 202 203 224 265 264 221 227 ■ Yorkshire and the Humber 518 575 648 612 664 636 660 677 ■ East Midlands 437 505 483 533 616 607 595 611 1,168 ■ South West 956 1,042 1,040 1,127 1,185 1,225 1,138 ■ West Midlands 741 873 925 1,004 1,043 1,101 1,011 1,039 ■ East of England 922 946 998 1,039 1,141 1,042 1,070 1,138 ■ North West 1,267 1,446 1,485 1,095 1,141 1,191 1,327 1,487 South East 2,042 2,149 2,203 2,437 2,465 2,522 2,335 2,398 London 7,328 7,968 8,249 8,807 9,053 9,398 9,048 9,290

15,961

17,099

17,755

18,380

Figure 24: Inbound tourist heritage-related visits 2012-2019, thousands

14,242

15,403

Total

17,497 Source: IPS and Cebr analysis

17,965

18,000 16,000 14,000 12,000 10,000 8,000 6,000 4,000 2,000 2021 2022 2023 ■ North East 50 226 218 ■ Yorkshire and the Humber 108 501 544 ■ East Midlands 118 456 513 ■ South West 997 186 1,152 ■ West Midlands 198 778 895 ■ East of England 260 965 1,047 ■ North West 336 1,258 1,620 ■ South East 401 1,726 2,044 London 1,291 7,643 9,611 England 2.740 14,551 17.643

Figure 25: Inbound tourist heritage-related visits 2021-2023, thousands<sup>29</sup>

Source: IPS<sup>30</sup> and Cebr analysis

In 2021, the number of international trips fell to 2.7 million; an 84.7% drop compared to 2019. This demonstrates the disproportionate impact of Covid-related restrictions on international tourism, relative to domestic tourism, due to constraints on international travel. By 2022, international visits had recovered to 81.0% of their 2019 total, at 14.5 million visits. By 2023, this figure had risen to 98.2%, equivalent to 17.6 million visits.

London consistently accounts for over half of international visits to the UK; between 2012 and 2023, it accounted for at least 50% of visits in every year but 2021, when it received 47.1%. 2022 and 2023 data show that total international visit numbers have recovered, but that the regions have not benefited equally from this recovery. In 2023, London accounted for 54.5% of international heritage visits; its highest share over the eleven years concerned, and an increase on its 51.7% share in 2019. However, the South East did not enjoy as strong a

<sup>29</sup> The overall estimate does not equal the sum of the regional visits as it is possible that one international traveller visited multiple regions.

<sup>30</sup> Unlike the GBTS and GBDVS, the ONS are able to publish IPS results for the whole of 2021, due to differences in methodology and additional estimates they are able to make. See 'About The International Passenger Survey | VisitBritain.org'

recovery, accounting for 11.6% of international visits in 2023, a decline on its 13.3% share in 2019.

Heritage-related tourism spend increased by £2.3 billion in real terms between 2012 and 2023; an increase of 21.9%. This is despite a decline in 2021 to just £2.7 billion, a 78.0% fall from 2019. As expected, given the visitor numbers, London dominates regional spending also: 62.8% of all international heritage-related tourism spend occurs here. Likewise, the North East receives only 1.4% of all international heritage-related tourism expenditure, and all other regions individually receive less than 10%.

12,000 10,000 8,000 6,000 4,000 2,000 2012 2013 2014 2015 2016 2017 2018 2019 ■ North East 181 129 131 165 248 141 168 183 ■ East Midlands 228 282 261 263 289 260 301 330 ■ Yorkshire and the Humber 274 359 347 313 310 332 345 378 ■ South West 613 672 632 640 780 705 646 707 ■ West Midlands 365 521 464 495 513 472 478 523 ■ East of England 489 548 589 582 513 477 403 441 ■ North West 560 674 679 734 720 932 773 846 South East 1,237 1,199 1,315 1,359 1,320 1,251 1,148 1,257 London 7,102 7,195 7,226 7,143 7,925 7,050 7,719 6,367 England 10,277 11,524 11,613 11,776 11,836 12,494 11,311 12,384

Figure 26: Inbound heritage-related tourism spend 2012-2019, £m (2023 prices)

Source: IPS and Cebr analysis

14,000 12,000 10,000 8,000 6,000 4,000 2,000 2021 2022 2023 ■ North East 46 157 170 ■ East Midlands 259 81 283 ■ Yorkshire and the Humber 97 268 304 ■ South West 650 690 133 ■ West Midlands 151 435 499 ■ East of England 174 505 526 ■ North West 822 267 1,016 ■ South East 1,167 316 1,151 London 7,122 1,462 7,870 England 2,727 11,368 12,524

Figure 27: Inbound heritage-related tourism spending 2021-2023, £m (2023 prices)

Source: IPS and Cebr analysis

Lastly, we present the overall heritage-related regional tourism spending by type of tourism in 2022 and 2023 in Figure 28 and Figure 29. As indicated, international tourism is consistently heavily concentrated in London; it continues to be the most visited region and international tourist expenditure in the region is over six times that of the South East, the region with the next highest expenditure. International tourism to London is so strong that international trip spending across England constituted 42.1% of total England tourism spend in 2022, rising to 44.0% in 2023, despite the fact that, in all other regions, domestic day visits contribute the largest share of total regional spend in both years. Indeed, London received 38.1% of total England tourism spending in 2022 and 41.0% in 2023, when comparing in terms of 2023 price levels.

Figure 28: Total heritage-related regional tourism spending by type of tourism 2022, £m (2023 prices)



Source: GBDVS, GBTS, IPS and Cebr analysis

Figure 29: Total heritage-related regional tourism spending by type of tourism 2023, £m (2023 prices)



Source: GBDVS, GBTS, IPS and Cebr analysis

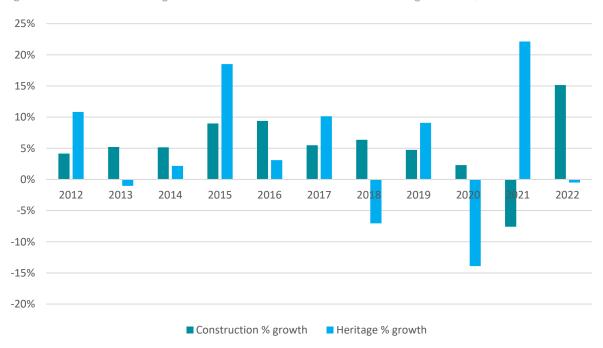
## Appendix I: Direct economic impact of England's heritage sector in nominal terms

Figure 30: Estimated GVA of the heritage sector, 2011-2022, £ million



Source: ONS Annual Business Survey, 2011-22, Cebr analysis

Figure 31: Annual nominal growth rates on the construction and heritage sectors, 2012 - 2022



Source: ONS Annual Business Survey, ONS Annual Population Survey, Cebr analysis

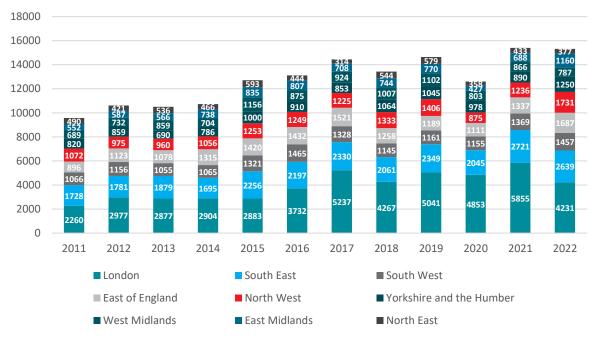
18,000 15,395 15,319 16,000 14,642 14,441 13,423 12,717 13,110 14,000 12,604 2,764 2,699 2,782 2,436 10,610 10,501 10,729 12,000 2,579 2,330 2,539 2,503 9,573 3,195 3,337 10,000 1,864 1,966 1,890 2,558 2,346 1,708 2,032 1,97 1,859 8,000 2,110 1,911 **2,09**: 1,79 1,816 1,791 1,779 2,125 6,000 1,772 1,554 1,661 1,629 4,000 ,47 5,193 ,040 ,039 2,000 0 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 ■ All other industries ■ Libraries, archives, museums and other cultural services ■ Architectural and engineering services; technical testing and analysis services

Figure 32: Estimated GVA of the heritage sector by industry, 2011-2022, £ million

Source: ONS Annual Business Survey, ONS Annual Population Survey, Cebr analysis

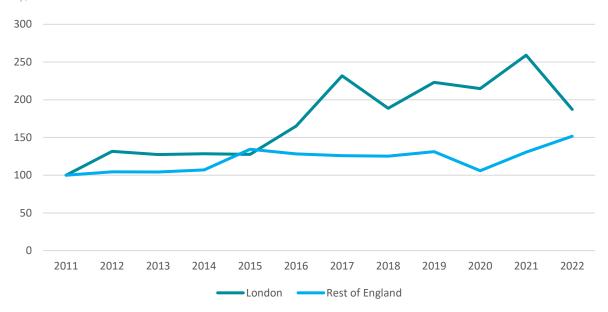


■ Construction



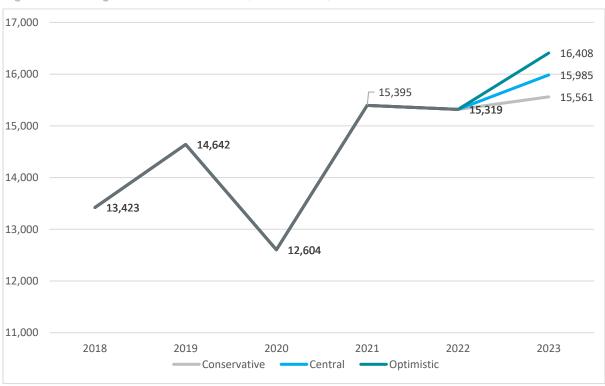
Source: ONS' Annual Business Survey, Cebr analysis

Figure 34: Indexed GVA of the London's heritage sector compared to the rest of the England (2011-22), 2011=100



Source: ONS' Annual Business Survey, Cebr analysis

Figure 35: Heritage sector GVA nowcasts, 2018 - 2023, £ million



Source: ONS Annual Business Survey, ONS GDP Tables, ONS Labour Productivity Tables, Cebr analysis

4,000 4,000 3,397 3,361 3,382 3,308 3,500 3,500 3,216 200 208 183 189 3,000 3,000 2,737 2,649 169 2,500 2,500 2,000 2,000 1,500 1,500 1,000 1,000 ■ South West London ■ North West ■ South East ■ Yorkshire and the Humber ■ East of England ■ West Midlands ■ East Midlands ■ North East

Figure 36: Estimated domestic heritage-related overnight trip spend 2013-2019, £ millions (nominal)

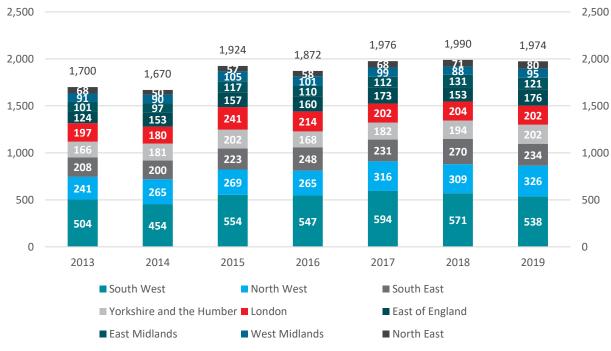
Source: GBTS, Cebr Analysis

Figure 37: Estimated heritage-related domestic overnight trip spend 2021 Q2-Q4 - 2023, £ millions (nominal)



Source: GBTS, Cebr Analysis

Figure 38: Estimated domestic overnight heritage-related holiday spend 2013-2019, £ millions (nominal)



Source: GBTS, Cebr Analysis

Figure 39: Estimated domestic overnight heritage-related holiday spend Q2-Q4 2021 - 2023, £ millions (nominal)



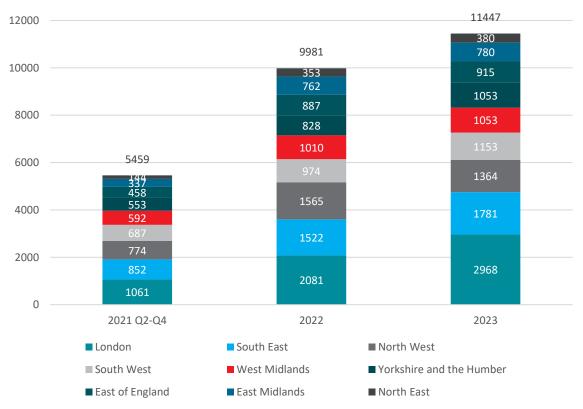
Source: GBTS, Cebr Analysis

Figure 40: Estimated value of heritage-related day visits 2012-2019, £ millions (nominal)



Source: GBDVS, Cebr Analysis

Figure 41: Estimated value of heritage-related day visits 2021 Q2-Q4 - 2023, £ millions (nominal)



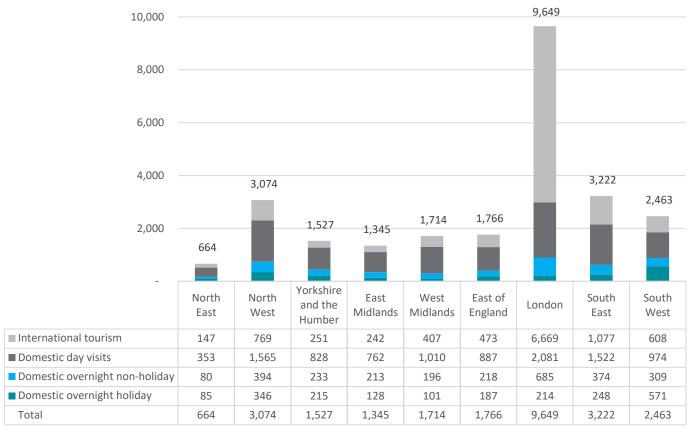
Source: GBDVS, Cebr Analysis

Figure 42: Inbound heritage-related tourism spend 2012-2023, £ millions (nominal)



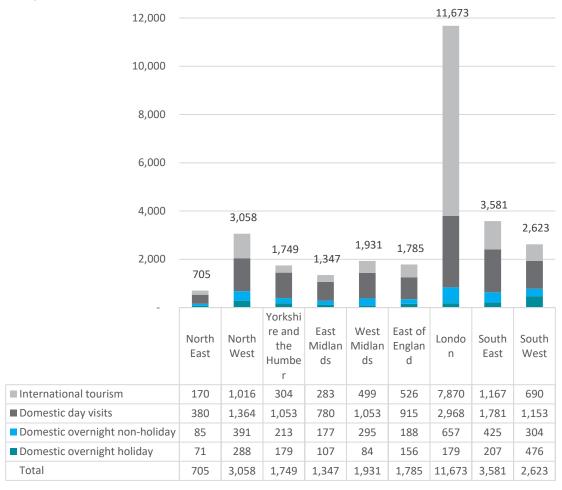
Source: IPS, Cebr Analysis

Figure 43: Total heritage-related regional tourism spending by type of tourism 2022, £ millions (nominal)



Source: GBDVS, GBTS, IPS, Cebr Analysis

Figure 44: Total heritage-related regional tourism spending by type of tourism 2023, £ millions (nominal)



Source: GBDVS, GBTS, IPS, Cebr Analysis

## Appendix II: Breakdown of the workforce of England's heritage sector

Appendix II.: Workforce of England's heritage sector, 2011-2022. Thousands

Constituent industries of the heritage sector England	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Workers in the museum subsector	15	16	12	16	16	19	13	14	14	9	15	16
Workers in the historical sites & buildings subsector	10	10	8	10	11	13	12	13	13	10	12	8
Workers in the archives subsector	3	3	2	2	2	2	2	2	2	2	1	2
Heritage workers in the building completion and finishing sub- sector	45	44	42	46	53	58	62	57	57	60	64	61
Heritage workers in the other specialised construction activities subsector	33	34	32	27	39	37	40	38	38	33	38	33
Archivists and curators in all industries	9	8	10	10	10	11	15	10	16	15	14	14
Archaeologists in all industries	5	5	4	4	4	5	5	6	6	6	6	6
Conservation professionals in all industries	9	11	9	9	14	11	9	17	14	13	13	19
Conservation and environmental associates in all industries	7	8	7	7	10	7	8	7	12	9	10	7
Gardeners & nature reserve heritage workers	3	2	3	2	3	2	3	3	3	2	3	3
Architects working with heritage	10	8	11	11	10	11	12	11	12	13	8	9

Town planning officers working with heritage	3	3	3	4	3	3	6	4	4	4	8	8
Chartered surveyors working with heritage	12	12	12	11	11	14	12	10	10	12	14	12
Building and civil engineering technicians working with heritage	3	3	3	3	4	5	5	3	4	4	1	2

Source: ONS' Business Register and Employment Survey, Annual Population Survey, Cebr analysis

# Appendix III: Technical notes related to approach and methodology used in the study

Appendix IIIA: Technical note GVA

Type of indicator : GVA	Data source	Estimation method and assumptions
Regional GVA estimates	Regional GVA Estimates (income approach) and Annual Survey of Hours & Earnings, both ONS	Economic output from heritage was estimated using a method adapted from that used in the DCMS Creative Industries Economic Estimates, and requires heritage employment estimates to have been calculated.
		The Annual Survey of Hours & Earnings was used to calculate median earnings for relevant heritage sectors and occupations. Given the insufficient sample sizes at regional level, estimates for the UK as a whole were used; these were weighted by region according to the ratio of total median earnings per region and the overall national average.
		Median earnings for relevant heritage sector and occupations were then multiplied by employment numbers to derive weighted total earnings for the heritage sector of each region. This was then divided by total weighted earnings of all industries of the respective region to arrive at the share of total earnings which heritage accounts for. Lastly, this share was applied to the ONS regional GVA estimate to estimate total heritage GVA for each region.

Source: Cebr analysis

Appendix IIIB. Technical note workforce

Type of	Data source	Estimation method and assumptions
indicator : Workforce		
Workers in the museum subsector	Business Register & Employment Survey (BRES). SIC code: 91020 Annual Population Survey (APS) Business Register &	To avoid double-counting between APS and BRES, defined heritage professions in the museum subsector such as Archaeologists, Conservation professionals etc. were stripped out using a SIC-SOC mapping process.  To avoid double-counting between APS and
historical sites & buildings subsector	Employment Survey (BRES). SIC code: 91030 Annual Population Survey (APS)	BRES, defined heritage professions in the museum subsector such as Archaeologists, Conservation professionals etc. were stripped out using a SIC-SOC mapping process.
Workers in the archives subsector	Business Register & Employment Survey (BRES). 91012 Annual Population Survey (APS)	To avoid double-counting between APS and BRES, defined heritage professions in the museum subsector such as Archaeologists, Conservation professionals etc. were stripped out using a SIC-SOC mapping process.
Heritage workers in the building completion and finishing subsector  Heritage workers in the other specialised construction activities subsector	Business Register & Employment Survey (BRES). SIC code: 433 & 439 Annual Population Survey (APS) The English Heritage report Skills Needs Analysis 2013 Repair, Maintenance and Energy Efficiency Retrofit of Traditional (pre1919) Buildings in England and Scotland.	The number of people involved in heritage building craft skills in England was divided by total employment in built environment sectors, to arrive at a coefficient. This was then applied to the relevant BRES data. In addition, SIC-SOC matrices were used to avoid double-counting between APS and BRES.
Archivists and curators in all industries	Annual Population Survey (APS). SOC(10) code: 2452 SOC(20) code: 2472 Business Register & Employment Survey (BRES)	Using APS data at regional level, SIC-SOC matrices were constructed to examine the distribution of employment by SIC and SOC, and to identify the intersection. This was done to avoid double-counting between APS and BRES. From SOC10 to SOC20, solely the numerical code changed from (SOC 10) 2452 to (SOC 20) 2472, with no significant conceptual changes. We simply take the data under the new code.
Archaeologists in all industries	Landward Research report Archaeology Labour Market Intelligence. Business Register & Employment Survey (BRES)	Using APS data at regional level, SIC-SOC matrices were constructed to examine the distribution of employment by SIC and SOC, and to identify the intersection. This was done to avoid double-counting between APS and BRES.

Conservation professionals in all industries	Annual Population Survey (APS). SOC(10) code: 2141 SOC(20) code: 2151 Business Register & Employment Survey (BRES)	Using APS data at regional level, SIC-SOC matrices were constructed to examine the distribution of employment by SIC and SOC, and to identify the intersection. This was done to avoid double-counting between APS and BRES. From SOC10 to SOC20, solely the numerical code changed from (SOC 10) 2141 to (SOC 20) 2151, with no significant conceptual changes. We simply take the data under the new code.
Conservation and environmental associates in all industries	Annual Population Survey (APS). SOC(10) code: 3550 Business Register & Employment Survey (BRES)	Using APS data at regional level, SIC-SOC matrices were constructed to examine the distribution of employment by SIC and SOC, and to identify the intersection. This was done to avoid double-counting between APS and BRES. From SOC(10) to SOC(20), SOC(10), 3550 was split into two different SOC codes – 5119 Agricultural and fishing trades n.e.c. group & 2152 Environmental professionals. 25.26% of SOC(20) 5119 and 1.72% of SOC(20) 2152 is represented by the old SOC(10) 3550, which we use to apportion the APS data.
Gardeners & nature reserve heritage workers	Annual Population Survey (APS). SOC code(20): 5113. Business Register & Employment Survey (BRES)	Gardeners & nature reserve workers involved in holiday centres and villages and general public admin activities were isolated using a SIC-SOC mapping process. This was done to avoid double-counting between APS and BRES. From SOC(10) to SOC(20), there was no change to this occupation's SOC code.
Architects working with heritage	Annual Population Survey (APS). SOC(10) code: 2431 Business Register & Employment Survey (BRES)	Using APS data at regional level, SIC-SOC matrices were constructed to examine the distribution of employment by SIC and SOC, and to identify the intersection. From SOC(10) to SOC(20), SOC(10) 2431 was split into two different SOC(20) codes – 2451 Architects and 2452 Chartered architectural technologists, planning officers and consultants. 100% of SOC(20) 2451 and 2.67% of SOC(20) 2452 is represented by SOC(10) 2431 which we use to apportion the APS data. To isolate heritage employment, coefficients were calculated based on the proportion of pre-1919 building stock in each region. These were derived from Council Tax: Stock of properties data from the VOA.
Town planning officers working with heritage	Annual Population Survey (APS). SOC code: 2432 Business Register & Employment Survey (BRES)	Using APS data at regional level, SIC-SOC matrices were constructed to examine the distribution of employment by SIC and SOC, and to identify the intersection. From SOC(10) to SOC(20), SOC(10) 2432 was merged with the SOC(20) code 2452 Chartered architectural technologists, planning officers and consultants

technologists, planning officers and consultants. 75% of SOC(20) 2452 is represented by SOC(10) Chartered surveyors working with heritage

Annual Population Survey (APS). SOC(10) code: 2434 SOC(20) code: 2454 Business Register & **Employment Survey** (BRES)

Annual Population Survey (APS). SOC(20) code: 3114 Business Register & **Employment Survey** (BRES)

2432 which we use to apportion the APS data. To isolate heritage employment, coefficients were calculated based on the proportion of pre-1919 building stock in each region. These were derived from Council Tax: Stock of properties data from the VOA.

Using APS data at regional level, SIC-SOC matrices were constructed to examine the distribution of employment by SIC and SOC, and to identify the intersection. From SOC10 to SOC20, solely the numerical code changed from (SOC 10) 2434 to (SOC 20) 2454, with no significant conceptual changes. We simply take the data under the new code. To isolate heritage employment, coefficients were calculated based on the proportion of pre-1919 building stock in each region. These were derived from Council Tax: Stock of properties data from the Valuation Office Agency (VOA).

Using APS data at regional level, SIC-SOC matrices were constructed to examine the distribution of employment by SIC and SOC, and to identify the intersection. To isolate heritage employment, coefficients were calculated based on the proportion of pre-1919 building stock in each region. These were derived from Council Tax: Stock of properties data from the VOA. From SOC(10) to SOC(20), there was no change to this occupation's SOC code.

Building and civil engineering technicians working with heritage

Appendix IIIC. Technical note multiplier impacts

Multiplier impacts (	ONS supply-use tables	
of GVA and	and Cebr input-output models.	The national accounting data in the supply-use tables provide detailed information for a given year on production activities, the supply and demand for goods and services, intermediate consumption, Primary inputs (factors of production) and foreign trade.
		The multiplier impacts are estimated using Cebr's in-house input-output models, which draw on the ONS' national accounting framework. The input-output models identify the industries from which the heritage sector purchases its inputs and trace the sector's economic footprint.
		In so doing, it provides the foundation for establishing the economic size (direct impact) of heritage, and the wider economic impact on the national and regional economies. We use the multipliers along with the direct impacts data to produce estimates of the total impact of the sector through the supply chain response (indirect impacts) and through the income from employment generated and spent in the wider economy (induced impacts). We produce these impacts for England as a whole before analysing regional differences.

Source: Cebr analysis

Appendix IIID. Technical note heritage tourism

Type of	Data source	Estimation method and assumptions
indicator:		
heritage tourism  Domestic trips and spending related to heritage	GB Tourism Survey (GBTS), Visit Britain	The approach taken to apportion the figures for heritage-related tourism uses an activities-based definition.  GBTS provides a national breakdown of the data by activities undertaken, which enabled us to derive a proportion for heritage activities undertaken as a share of all activities undertaken by visitors. The following categories were classed as 'heritage' to create this coefficient:  • Visiting a historic house, stately home, palace  • Visiting a cathedral, church, abbey or other religious building  • Visiting a country park  • Visiting a garden  • Visiting a castle/other historic site  • Visiting an art gallery  • Viewing architecture and buildings  • Visiting a museum
Domestic day visits and spending related to heritage	Great Britain Day Visits Survey (GBDVS), Visit Britain	The approach taken to apportion the figures for heritage-related tourism uses an activities-based definition. GBDVS provides a national breakdown of the data by activities undertaken, which enabled us to derive a proportion for heritage activities undertaken as a share of all activities undertaken by visitors. The following categories were classed as 'heritage' to estimate the heritage-related share of trips and spend:  • Visited a country park  • Visited a garden  • Visited an art gallery  • Visited a cathedral, church, abbey or other religious building  • Visited a historic house, stately home, palace  • Visited a castle/other historic site  • Viewed architecture
International tourism related to heritage	International Passenger Survey, ONS	The approach taken to apportion the figures for heritage-related tourism uses an activities-based definition. IPS provides a national breakdown of the data by activities undertaken, which enabled us to derive a portion for heritage activities undertaken as a share of all activities undertaken by visitors. The following categories were classed as 'heritage':  • Went to countryside or villages  • Visited religious buildings  • Visited museums or art galleries  • Visited castles or historic houses  • Visited parks or gardens  Source: Cebr analysis

# Appendix IV: Technical notes related to calculating the economic multipliers used in this study

This report estimated the aggregate economic footprint of the Heritage sector using multipliers calculated using Cebr's input-output models, which draw on the ONS' national accounting framework. The multipliers are applied to the direct impacts to produce estimates for the total footprint of the sector, inclusive of the supply chain response (indirect impacts) and the income from employment supported and spent in the wider economy (induced impacts).

### Theoretical background

The Leontief input-output model is a model for the entire economy of a country or region, and it is a process of mapping and computing the interdependencies between sectors of the economy. It allows us to compute the wider impacts associated with a firm, industry or sector and hence is often used for economic footprint analysis.

Input-output models have their foundations in the national accounting framework, which contain a series of categories that detail the workings of the economy. They are disaggregated by industry classification codes – for the UK these would be the Standard Industrial Classification (SIC) codes.

A key component of the national accounting framework are supply-use tables. They are a detailed official record of how the various parts of an economy interact with each other: industries, households, governments, etc. The result allows us to track the 'supply' and 'use' of products within the economy. This allows us to understand the inter-relationships that exist between consumers through supply-chains.

There are three principal tables contained within the supply-use tables:

- **The Supply Table** Details what proportion of each product is produced domestically.
- The Intermediate Demand Table Details typical supply-chains by industries; i.e. it considers what proportion of each industries' output is spent on intermediate consumption and which products are purchased.
- **The Final Demand Table** Sometimes called the 'use' table, this considers who purchases the final products produced.

Technically, supply-use tables bring the three estimates of GDP (production, income and expenditure) into balance with each other. Essentially it gets rid of the statistical discrepancy. We use a slightly modified version of the intermediate demand table, known as the 'Domestic Use' (or input-output analytical tables). This strips out any intermediate consumption that is purchased from abroad and hence allows us to analyse domestic supply-chains. Given the difficulties in putting these together the dataset lags by a few years.

The underlying data used for input-output models can be thought of as economy-wide matrices of data presenting the interlinkages between different industries of the economy; how much each industry purchases goods and services from other areas of the domestic economy, how much they depend on imports, etc. Therefore, they allow us to map out the supply chain

linkages of each industry to assess how much they depend on the rest of the economy to produce one unit of output.

### The stages of modelling

#### **Indirect Impacts**

The model works on various stages. It starts with the Domestic Use tables as described above, with a symmetrical product by industry or industry by industry matrix of the whole economy, where the industry we are interested in is a distinct column and row.

The model then moves on to the analysis stages, where this matrix is used to compute our multipliers. The first stage is to establish an 'A' matrix. This details the proportion of each industry's output that is spent on intermediate consumption. From here, we produce the identity matrix, the difference between the identity matrix and the A matrix, and finally Leontief Multipliers.<sup>31</sup>

The workings of this can be summarised for a single industry below, where q = total output, i = intermediate consumption, f = total consumption and A = total output that is expended on intermediate consumption. The matrix allows us to compute this for multiple sectors simultaneously, reflecting the suppliers of suppliers and so on.

$$q = i + f$$

$$q = Aq + f$$

$$q - Aq = f$$

$$(I - A)q = f$$

$$q = ((I - A)^{-1}) * f$$

As such, the Leontief T1 stage (the first of the multiplier results stages) is simply the  $(I - A)^{-1}$  computation. Summing the column gives us the total output supported for every \$1 of output directly generated.

From here, the GVA T1, Employment T1 and Compensation T1 stages use ratios to compute the relevant impacts. The ratios used would be each of the metrics of interest – GVA, Employment, and Compensation – as a share of Output (or business turnover), respectively. For example, the ratios used to compute the GVA T1 multipliers would be the GVA-Output ratios for each of the component industries of the economy in the matrix.

#### **Induced Impacts**

To calculate induced impacts, we extend the input-output model by adding a new row and column that detail household spending and income. This results in an augmented A matrix, often referred to as the B matrix when including induced effects. The B matrix incorporates both the direct and indirect effects (captured by the original A matrix) and the induced effects due to changes in household income and consumption.

The additional row in the B matrix represents the proportion of total industry output that goes to employee compensation. It shows how much income is paid to households by each sector. Meanwhile, the additional column represents the distribution of household spending across different sectors. It indicates how households spend their income on the outputs of various sectors. By including these components, we effectively treat employee compensation as an industry. This approach allows us to track how income from employee compensation flows to households and how households, in turn, spend this income on goods and services produced by different sectors.

Higher-order effects refer to the repeated cycles of spending and income generation. For example, the first-order effect is the direct income to households from a sector. The second-order effect occurs when households spend this income, generating further demand for goods and services. The third-order effect involves the increased demand requiring additional production, leading to more income for households, and so on. When we invert the extended matrix, we capture these cascading effects, hence the term higher-order effects.

Once the new row and column are embedded within the B matrix, we follow the same analytical approach as with Type I multipliers.

The important thing to note is that the employee compensation row itself is not summed in our multiplier calculations. It would be wrong to suggest that the entirety of this employee compensation would be spent domestically. Some may be spent on imports for instance.

Another way to think about this is to once again think of the compensation of employees as an intermediate consumption purchase. We are not interested in the amount spent on compensation on a first order basis (as discussed above), but we are interested in where households go on to spend this money, i.e. the intermediate consumption of the employee compensation industry.

Once this new column and row are imbedded within the B matrix, the approach to the analysis is the same as the Type 1 multiplier case.

### Application of input-output modelling

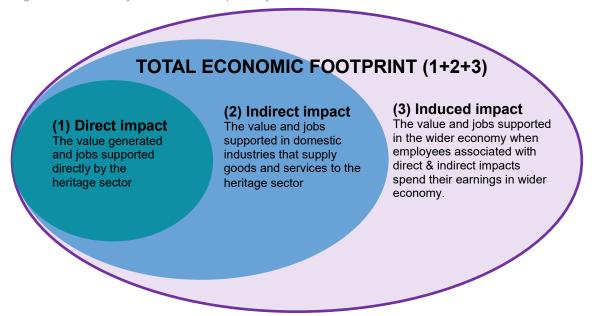
Input-output models facilitate the estimation of indirect (or supply chain) and induced (employee spending) multiplier impacts. The four macroeconomic indicators for which the aggregate economic impact have been calculated are as follows: business turnover; GVA; employment; and the compensation of employees. Typically, Cebr have a series of in-house ready-to-use input-output models for the UK economy and the ITL 1 regions within the UK from which multipliers are then estimated.

The models produce three types of impact for four indicators – turnover, GVA, employment and the compensation of employees. The three types of impact are:

- **Direct impact:** this is the value generated and jobs supported directly by the economic activities within the heritage sector in the UK.
- **Indirect impact:** this is the value and jobs supported in industries that supply inputs to the heritage sector in the UK.
- **Induced impact**: this is the value and jobs supported in the wider economy when the direct and indirect employees of the heritage sector in the UK spend their wages and salaries on final goods and services.

These three impact layers are illustrated in the Figure 45 below.

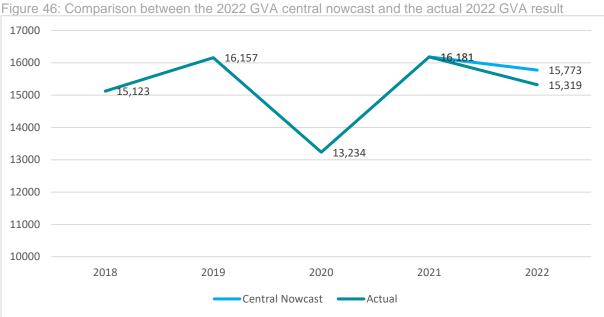
Figure 45: Summary of economic impact layers



At its core, a multiplier is a measure of how a particular industry (or company, if we are looking at it at a micro-level) leads to further economic activity in the wider economy through the output of its supply chain, as well as the wider spending by workers directly employed by the industry and its supply chain.

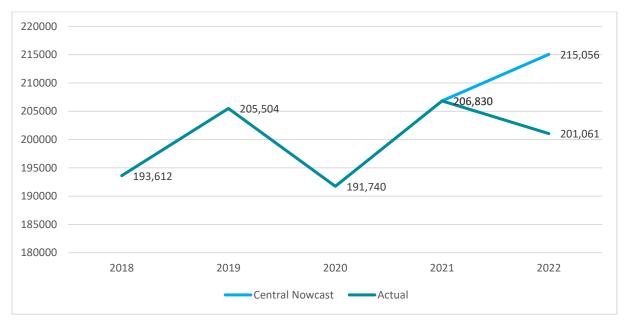
However, a multiplier is not a metric for economic performance. It only measures to what extent an industry needs goods and services from other parts of the economy to operate; i.e. it is related to the operational structure of an industry. A higher multiplier means that an industry needs to purchase more goods and services from other industries within the economy to produce one unit of output. A low multiplier means it needs less, i.e. it has a smaller supply chain/it is more vertically integrated.

### **Appendix V: Comparison of 2022 nowcasts to 2022 actuals**



Firstly, comparing our 2022 GVA central nowcast from the previous iteration of this report to the 2022 actual GVA figure, the GVA nowcast fell short by 2.9%. The previous report's central nowcast was calculated using approaches that accounted for trends in the wider SICs that the heritage sector falls in, based on growth between 2019-2022. This assumed that the heritage sector's GVA for 2022 would grow in line with wider SIC growth from 2019 to 2022. The data for wider GVA SIC growth for 2019-2022 used by the two measures showed strong growth for sectors that pertain to the heritage sector, especially construction and arts, entertainment and recreation. However, as observed previously, we noticed a slowdown in specifically heritage-related construction activities, relative to the overall construction sector (a level of granularity at which data was not available at the time of analysis). This dragged down 2022 GVA growth, relative to the levels estimated in our central nowcast, which was not underpinned by data at this level of granularity.

Figure 47: Comparison between the 2022 central employment nowcast and the actual 2022 employment result



Regarding employment, the actual employment figures fell short by 6.5% relative to the central nowcasts. In the previous iteration, we provided a range of nowcasts to account in particular for uncertainty in the productivity trends observed in the data at the time of analysis. As comparison of relative trends earlier in this section demonstrate, the heritage sector actually experienced declining productivity (as measured by GVA/worker in real terms) in 2022. However, GVA estimates for the heritage sector in 2022 as calculated in this report were below the level 'nowcasted' in the 2023 iteration of this report, leading in turn to a lower than 'nowcasted' figure for heritage sector employment in 2023, even withstanding the trend of declining productivity. These dynamics were established with greater confidence, similarly, following the release of more granular employment data for constituent heritage SICs and SOCs.