The Economic Value of the Independent Museum Sector

Association of Independent Museums

Final Report

June 2010

Supported with a valued contribution from:

www.dcresearch.co.uk

CONTENTS

AIM (the Association of Independent Museums) is the national UK body connecting, supporting and representing independent museums.

Founded in 1977 in response to the growing number of community-based projects seeking to preserve locally and nationally-important heritage, AIM has grown to become a respected sector group, consulted on national policy and providing a thriving network for members.

Independent museums range from small local organisations, mainly operated by volunteers, to large institutions, many operating as charitable trusts, and represent over half the museum provision in the UK.

For more information on AIM please go to www.aim-museums.co.uk.

1. INTRODUCTION

1.1 The Association of Independent Museums (AIM) commissioned DC Research to estimate the Economic Value of the Independent Museum Sector in January 2010. The purpose of the study was to carry out research into the economic value that can be attributed to the independent museums sector, with the research being used for advocacy work by AIM at a national level on behalf of the sector, and by individual and small groups of independent museums at the local and regional levels. The study was supported with a valued contribution from the Museums, Libraries and Archives Council.

1.2 The specific objectives, as set out in the invitation to tender, are to enable AIM and its individual museum members, to:

- Understand how and to what degree independent museums contribute value to local, regional and national economies.
- Produce benchmarks to gauge the economic value generated by different categories of independent museums and draw conclusions from them.
- Produce data that can provide the basis for further research work.

1.3 At the outset of the study, it was clear that there was a need for the evidence developed to be convincing both to museums within the sector and across a range of key external stakeholders. Furthermore, there was a need for the evidence developed to be used as advocacy material, and the research approach had to be suited to all the various sub groups of independent museums (i.e. different size of museums, different locations, different type(s) of visitor, different emphasis on tourism).

1.4 This **final report** is structured as follows:

- **Section 2** provides an overview of the approach and methodology used for the Study as well as some headline findings from the survey of independent museums.
- **Section 3** provides a summary of existing evidence about the economic impacts of museums and the wider cultural sector.
- **Section 4** sets out the key findings of the survey of AIM membership, and uses this data to estimate the economic impacts of responding museums, and aggregate estimates of the value of the independent museum sector as a whole.
- **Section 5** sets out perceptions and perspectives on the value of the sector from consultees and case study museums.
- Finally, **Section 6** provides a summary of the key findings. This section can also serve as a standalone summary of the findings of this report.

1.5 The study team would like to thank all those AIM members who participated in the research by responding to the survey, those who were consultees, and also the 11 museums who agreed to be case studies. A list of consultees is set out in Annex 1, and case study summaries are set out in Annex 2.

1.6 The study team would like to thank Roger Hornshaw, Diana Zeuner and Michael Cope for their support in terms of data provision and support for the membership survey.

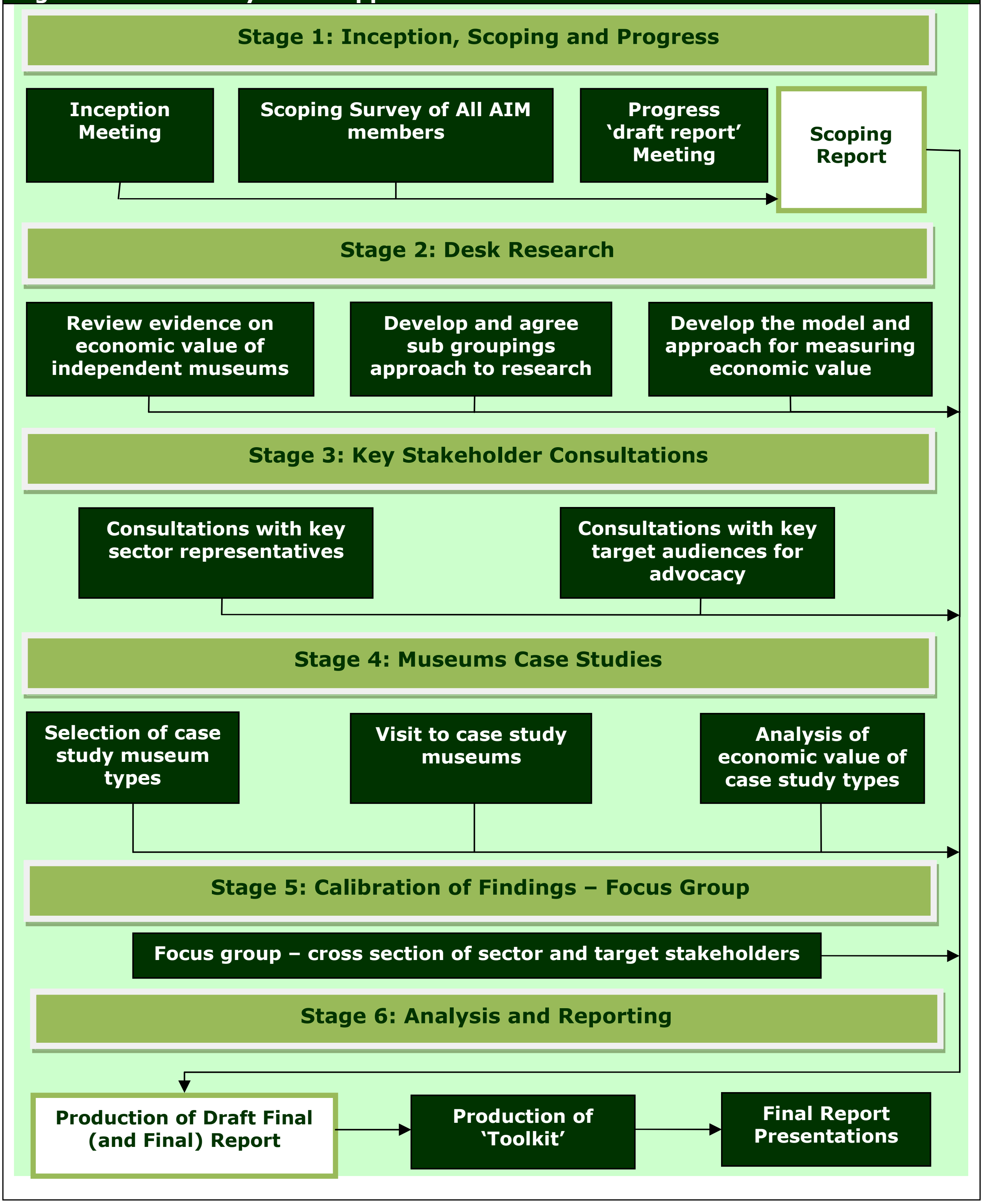
1.7 Finally, the study team would also like to thank the Steering Group for their guidance and support throughout:

- Sam Mullins, London Transport Museum.
- Tim Bryan, Heritage Motor Centre.
- Bill Ferris, Chatham Historic Dockyard Trust and AIM Chair.
- Keith Merrin, Woodhorn Museum, Archives and Country Park.
- Colin Sibun, Army Museums Ogilby Trust.

2. APPROACH AND METHODOLOGY

2.1 The approach and method adopted for this study is summarised in Figure 2.1 below. The approach comprises a six stage method, covering early inception and scoping work; a membership survey; desk based review; consultations with key audience partners; the creation of case studies; and reporting and presenting the findings at various stages of the study.

Figure 2.1: Summary of our approach



2.2 Key elements of the approach included:

- An **inception meeting** with the Steering Group in January 2010, and a consultation workshop with the AIM Council in February 2010.
- A **detailed survey sent out to the entire AIM membership** in February and April 2010.
- Selected **stakeholder consultations** with types of organisations that AIM and the independent museum sector might wish to target with sector based advocacy and arguments.
- **Case study consultations/visits** with museums drawn from the survey respondents and representing specific sub groups covering the AIM membership.

Survey of the AIM membership

2.3 The survey was distributed to AIM members by email. The survey aimed to collect key information held by individual museums to inform the economic impact research, and ensure that the toolkit was informed through understanding the range of places within which AIM members operate.

2.4 The survey included questions about the museum itself and its location, visitors and visitor type, employment at the museum (including paid employment where this was relevant, and also volunteering), information about the amount of spend on goods and services (and source location), and the range of facilities that the museum has available (such as meeting rooms, catering facilities and cafes, education and research facilities and retail etc).

2.5 Most of the information from the survey is used in Section 4 to estimate the economic value of responding museums, and to use this as a basis for estimating the value of the whole sector. However the tables below highlight the range of museums that responded to the survey, and present key data in terms of turnover, visitor numbers, facilities and volunteering.

2.6 In total there were 95 usable responses to the survey. Of this total, 81 responses were able to provide information that could be used in terms of the modelling of impacts of the sector (i.e. specific information on employment, spend on goods and services and/or visitor information).

2.7 It is worth noting that whilst this level of response is sufficient to underpin the analysis as set out in Section 4 of the report, it is likely that the detailed response required in order to estimate economic impact may have dissuaded some potential respondents from replying. However, on balance the study team and the Steering Group decided it was more important to ensure that the survey elicited a high quality of responses from those that participated, than dilute the information required to boost the response from members.

2.8 Table 2.1 shows the **turnover break down** of responding museums that disclosed turnover information.

Table 2.1: Turnover		
Estimate of total turnover for Museum/Attraction (for 2009 or most recent completed financial year)	Value	Average Percentage
Admission	£23,023,270	22%
Income from research inquiries	£362,652	<1%
Catering (i.e. cafe and restaurants)	£4,336,849	4%
Special events	£5,846,450	6%
Retail	£17,348,500	17%
Grant funding	£37,616,319	36%
Donations	£10,973,412	10%
Functions / Conferencing / Corporate Hospitality	£5,119,831	5%
Total	**£104,627,281**	**100%**
Source: DC Research/AIM Survey Analysis, 2010, n=73		

2.9 Table 2.1 shows that there are varying degrees of independence across responding museums, with a reliance on grant funding, which accounts for 36% of turnover for the responding museums.

2.10 Table 2.2 shows the **visitor breakdown** of responding museums that disclosed visitor information.

Table 2.2: Number of Visitors by Type (2009 or most recent completed year)		
	Number of Visitors	Percentage
Local	2,974,181	37%
Day tripper	2,500,705	31%
Overnight visitors from within the UK	1,630,712	20%
International visitors	955,069	12%
Total	**8,060,667**	**100%**
Source: DC Research/AIM Survey Analysis, 2010, n=78		

2.11 In terms of **employment**, 58 out of 95 respondents to the survey reported that they employed staff, with the total number of jobs being 2,164, and respondents estimating that this equates to 1,646 full time equivalent jobs.

2.12 The museums responding to the survey reported **volunteer numbers** totalling 4,724, with 15% of these volunteers volunteering for two or more days per week on average, and 3.5% volunteering for four days a week or more.

2.13 Just under half of responding museums (46%) reported that between 91% and 100% of these volunteers were local to the museum. Further to this, responding museums reported **'in kind' contributions of goods and services** of £621,000, and **'in kind' capital works** (such as building work, repairs, development, refurbishment) of £11.5m. It is clear that volunteering is hugely important to the independent museum sector.

Table 2.3: Facilities that are available at your museum / attraction	
	Percentage
Retail	73%
Catering (i.e. on site restaurant / cafe facilities)	32%
Cafe (i.e. selling hot drinks and cold snacks)	38%
Meeting rooms (that can be hired for events and functions)	52%
Educational/ research facilities	74%
Source: DC Research/AIM Survey Analysis, 2010, multiple response, n=95	

2.14 Table 2.3 highlights the range of facilities that are provided by responding museums. Of those museums with meeting rooms that can be hired for events and functions, 17% do not use their venue for events that are not directly related to the core business of the museum. Of those that do, events include:

- Birthday parties
- Car boot sales
- Conferences
- Corporate hospitality
- Corporate meetings
- Goodwill events for local communities
- Outdoor theatre/cinema/music events
- Polling station
- Presentations to local residents
- Rallies and shows
- Weddings.

Development of sub groups and case studies to better understand the independent museum sector

2.15 As part of the research, the survey respondents were organised into a series of 'sub groups' based on visitor numbers, location and whether or not people are employed at the museum. The case studies were selected and used to refine the approach to estimating the economic value of the sector, inform the overall analysis of the study, inform the selection of assumptions made in Section 4, and providing perceptions and perspectives for Section 5.

2.16 From the survey, a series of sub groups were created to support the selection of the case study museums. These are based on classifying responding museums in terms of those variables that are most likely to influence levels of economic impact in localities, using the following three factors in order:

- The annual number of visitors to a museum (using AIM membership size bands).
- The significance of tourism to the museum's local visitor economy.
- Whether the museum has paid employees or not.

2.17 Each factor is then split into bands, with the overall approach to defining analytical sub groups being set out in Table 2.4 below (with the 'notes' column explaining the bands under each factor).

Table 2.4: Analytical Sub Groups			
Key factors	**Bands**	**Number of survey replies**	**Notes**
Number Of Visitors	Small	41 (51%)	*small = total visitor numbers of up to 10,000*
	Medium	24 (30%)	*medium = visitor numbers of 10,001 to 50,000*
	Large	15 (19%)	*large = visitor numbers of 50,001+*
Significance Of Visitor Economy	High	54 (67%)	*high = response to importance of visitor economy to area = 'key'; or 'moderate'*
	Low	27 (33%)	*low = response to importance of visitor economy to area = 'one of a number'; or 'minor'*
Paid Employees	Yes	57 (70%)	*yes = stated yes when asked if the museum had paid employees*
	No	24 (30%)	*no = stated no when asked if the museum had paid employees*
Source: DC Research Analysis and Survey 2010, Note: 81 museums provided usable impact data from a total response of 95 museums			

2.18 The selection of case studies provided coverage of these sub groups, striking a balance between being representative of AIM membership (with a strong bias towards smaller museums), and highlighting exemplars of impact. Given all this, the study team and the Steering Group agreed on the following case studies (Table 2.5) drawing from those responding museums that indicated that they were willing to participate as a case study.

Table 2.5: Final case study museums		
Visitor Numbers	**Museum**	**Location, Region**
Small	Eden Valley Museum	Edenbridge, South East
	Aston Manor Transport Museum	Birmingham, West Midlands
	Vintage Carriage Trust	Keighley, Yorkshire
	Browne's Hospital Gallery	Stamford, East Midlands
	Park Pharmacy Trust	Plymouth, South West
	University of Stirling Art Collection	Stirling, Scotland
Medium	The Ruskin Museum	Cumbria, North West
	Rachel Kay-Shuttleworth Collection	Burnley, North West
High	Woodhorn Museum, Archives and Country Park	Ashington, North East
	The Lightbox	Woking, South East
	London Transport Museum	London
Source: DC Research Analysis 2010		

2.19 In addition to the ten case studies agreed as part of this study, London Transport Museum agreed that the key findings of their recent impacts study, which was also produced by DC Research, could be used to support the analysis.

3. CONTEXT AND PREVIOUS RELEVENT RESEARCH

Overview

3.1 The independent museum sector can, and does, play a key role in the visitor economy in regions and localities. Museums can be key visitor attractions in themselves, and can also add to the attractiveness and appeal of a tourist destination through being part of the overall offer to visitors.

3.2 Tables 3.1 and 3.2 shows a breakdown of survey responses to questions regarding the nature of tourism in their area, and their significance as a visitor attraction in this context. Table 3.1 shows that most respondents recognise the significance of tourism as a sector in their local economy.

Table 3.1: How significant is the visitor economy to your local area?	
A key sector	30 (38%)
A moderately significant sector	18 (23%)
One of a number of significant sectors	22 (28%)
Of minor significance	9 (11%)
Total	79 (100%)
Source: DC Research/AIM Survey Analysis, 2010, n=78	

3.3 Table 3.2 shows that most responding museums feel their museum is at least moderately significant in terms of importance to their local area's visitor economy, with over half stating that their museum is either a key attraction, or one of a number of significant attractions.

Table 3.2: How important is your museum/attraction to the visitor economy of your local area?	
A Key attraction	28 (36%)
One of a number of significant attractions	17 (22%)
A moderately significant attraction	25 (32%)
An attraction of minor significance	8 (10%)
Total	78 (100%
Source: DC Research/AIM Survey Analysis, 2010, n=78	

3.4 The commissioning of this study highlights AIM's appreciation of the need to clearly articulate and demonstrate the contribution of independent museums, in a tourism/economic context. This need is well recognised across the sector and, particularly in the current economic climate, there are concerns that there will be ever increasing pressure on museums (and the rest of the cultural sectors) to provide clear evidence of their contribution to wider agendas – especially the contribution that they make to tourism and the visitor economy.

3.5 The museums sector needs to make its case, and provide clear, robust evidence of the economic value that the independent museum sector provides to tourism and the wider economy. Importantly, this needs to be articulated in such a way that key audiences outside the sector (including central government, national and regional tourism organisations, regional development agencies and other potential funders) appreciate and are convinced by the evidence and the related advocacy based upon the evidence.

3.6 This is an important message for museums at a time of **austerity and imminent public sector funding cuts**, elements of the sector are increasingly recognising the importance of tourism and the visitor economy in making the case to support their impact.

3.7 In addition to the commissioning of this study, and convening the 2010 AIM Conference around the theme of "**Tourism and the Visitor Economy**", a number of museums are looking to capture the economic impacts of particular events and exhibitions to support the articulation of their economic role. For example, Museums Sheffield commissioned an economic impact assessment of the Victoria and Albert Museum's Vivienne Westwood Exhibition, hosted at the Sheffield Millennium Galleries, and Bristol City Council commissioned an impact study of the Banksy exhibition in the city.

3.8 This study therefore comes at an important time, and there is a strong appetite and demand within the museum sector for such evidence to be established and communicated to key partners.

Existing evidence as to the contribution of the museums sector

3.9 In headline terms it is clear that museums make a highly significant contribution to UK tourism. At the national level, the national museums are well established as tourism attractions in their own right, with research showing that cultural activities, including museums and galleries, attract international visitors to the UK and are seen as some of Britain's core strengths, with **eight of the top 10 UK visitor attractions in 2008 being museums and galleries**[1].

3.10 **Museums and Galleries in Britain: Economic, Social and Creative Impacts**, by Tony Travers of the London School of Economics[2], argues that the UK's museums and galleries could, with greater capacity to expand and improve, allow this country to be a world leader in creativity and scholarship.

3.11 The Travers' report, which was jointly commissioned by the National Museum Directors' Conference and the Museums, Libraries and Archives Council, analyses a number of Britain's leading museums and galleries in terms of visitor numbers, economic impacts, civic functions, and contributions to the country's creativity and educational performance. It found that in 2006, overseas visitors to major UK museums and galleries spent £350 million as a result of their visit and UK visitors, who spend considerably less per visit, were estimated to have spent £245 million in 2004-5. The study also found that visitor surveys show that the vast majority of visitors have a positive experience in major museums.

3.12 **Popular, Prized and Full of Potential: Yorkshire Museums and the Tourist Offer** Briefing Paper for Renaissance Yorkshire on behalf of the Yorkshire Museum Directors' Conference sets out to explore what museums in Yorkshire contribute to tourism and how they can make the case for support and investment with the tourism sector. It argues that:

- Museums and galleries are more popular than any other type of attraction in Yorkshire.

[1] www.nationalmuseums.org.uk/.../museums_tourism_briefing_apr09.pdf

[2] Museums and Galleries in Britain: Economic, Social and Creative Impacts, T Travers (London School of Economics) for National Museum Directors' Conference and Museums, Libraries and Archives Council, 2006.

- Market growth for Yorkshire's museums is double the national average.
- Visitors rate museums, galleries and sculptures as the best of Yorkshire.
- Museums and galleries deliver the highest visitor satisfaction in the region.
- Visitors to museums and galleries are high spenders.

3.13 In autumn 2009, MLA Council published **Leading Museums, A Vision and Strategic Action Plan for English Museums**. Leading Museums envisages a future where excellent regional and national museums develop their collections in ways that reach beyond their walls and put people first. It outlines a future approach based on working together to pursue three objectives: Supporting Excellence; Promoting Partnerships; and Building Capacity. In terms of tourism, Leading Museums stresses that all museums, need encouragement and support to make stronger contributions to the creative and tourism economies, with greater freedom to develop learning and commercial partnerships.

3.14 Leading Museums was followed up by a study that scoped the tourism strategy role of MLA Council, which found that there is a clear consensus that museums need to be sharper, and engage better with tourism networks on a commercial basis. To succeed in this they have to push Destination Management Organisations/Partnerships, and local authorities, harder to get appropriate support. The **Tourism Strategy Scoping Report**[3], was completed in December 2009 and published in March 2010, and was designed to inform MLA Council's policy development and ensure that MLA programmes and strategies support the sector in achieving positive outcomes in terms of its contribution to tourism. It investigated the potential to support and deliver success under the tourism agenda, enabling the cultural and tourism sectors to work together more productively.

3.15 The research found that the MLA sector needs to focus on three outward facing factors in relation to engagement with tourism, supported by:

- Enhancing and **evidencing the economic benefit of its activities.**
- **Widening audience participation and engagement** from groups that typically do not access museums (a factor where significant progress has been made through programmes such as Renaissance).
- **Supporting the 'place' agenda** (as museums and archives are where the story of a place can be accessed and enjoyed).

3.16 The report argues that these factors are supported by a consensus that to achieve this, museums need to **be innovative and work in partnership to develop their offer as a 'product'** to visitors in order to compete effectively with a range of other cultural and leisure attractions.

3.17 In Wales, **'A Museums Strategy for Wales'** will be launched in June 2010 by the Minister for Heritage. It will include sections on 'Museums for Everyone' (access, inclusion, community involvement, Welsh Language and learning); 'A Collection for the Nation' (collections care, use, management etc) and 'Working Effectively' (Organisational development, governance, sustainability, staff and volunteer development etc).

[3] Tourism Strategy Scoping Project, DC Research for MLA Council 2010
http://www.mla.gov.uk/what/policy_development/tourism

Existing evidence as to the impact of the museums sector

3.18 There is a clear consensus that museums are beneficiaries of income from visitors, who contribute directly to the tourism economy. The **Economic impact of the UK heritage tourism economy**'[4], (Oxford Economics, commissioned by the Heritage Lottery Fund) represents both a recent and a significant step in quantifying the impact of the 'heritage' sector to the UK economy.

3.19 This study takes forward the macroeconomic understanding of the contribution of 'heritage' (including museums, libraries and archives) to the economy in an HM Treasury recognised gross direct impacts approach similar to that set out in Section 4 of this report. It builds on the model developed by Visit Britain's '**The Economic Case for the Visitor Economy'**[5] (Deloitte and Oxford Economics), which noted both the regeneration impacts of museums, and also the potential market distortions created by large free museums.

3.20 In terms of methodology, the analysis looked at the extent to which tourism visits and expenditure are motivated by heritage. From this analysis, the study was able to estimate the contribution that heritage tourism makes to the UK's economic output, and the employment impact of heritage tourism.

3.21 Key findings include the following highly relevant points:

- Heritage is a major motivation behind the tourism expenditure of both overseas and domestic visitors.
- The heritage tourism sector, including historic buildings, museums, parks and the countryside, directly supports an estimated 195,000 full-time equivalent (FTE) jobs. In general terms, heritage tourism is a £12.4billion a year industry. This is the annual amount spent not just at heritage attractions themselves (e.g. the cost of entrance to a historic site or in a museum shop) but also the broader amount of spending that can be reasonably said is 'motivated' by the desire to visit heritage attractions (e.g. visiting a restaurant or staying at accommodation).
- £7.3billion of heritage expenditure is based on visits to built heritage attractions and museums. Domestic tourism or the 'staycation' is the main component of this expenditure, with 60% being derived from UK residents on day trips and UK holidays.

3.22 Other useful studies that contribute to the evidence base on the economic impact of museums and the wider cultural sector in a tourism context include:

- **Appreciating Assets**, Glamorgan Business School for CADW (official guardian of the built heritage of Wales) in 2002 estimated that the historic environment in Wales, in its wider sense, had a total impact of £750m, supporting 22,500 jobs – and that 80% of most visited attractions in Wales were historic sites.

- **Assessment of the contribution of MLA to the visitor economy,** Roger Tym & Partners for MLA Council South East. This report sought to quantify the value the MLA sector adds to the tourism product, and its contribution through direct and indirect visitor expenditure, to the local and regional economy. It found that whilst libraries were focused towards resident and community use, archives attract a significant number of visits. However

[4] Economic Impact of the UK Heritage Tourism Economy, Oxford Economics for HLF (2009), http://www.hlf.org.uk/aboutus/howwework/Documents/HLF_Tourism_Impact_single.pdf
[5] The Economic Case for the Visitor Economy, Deloitte for VisitBritain, (2008).

museums are by far the most significant economic contributor. They are responsible for a total spend of around £224m, or 97 percent of total MLA related visitor spend in the South East region, and supporting over 3200 jobs as a direct result of visitor spend (compared to 60 for libraries and 23 for archives).

- **Maximising the Contribution of Heritage to the North East Regional Economic Strategy and North East Tourism Strategy**, Tribal for One NorthEast, 2008, conceptualised heritage in a regional tourism setting, and proposed a regional framework for heritage in a tourism marketing context.

4. MODELLING THE INDEPENDENT MUSEUMS SECTOR

4.1 This section sets out to estimate the value of the independent museum sector. It contains key data generated by the online survey of AIM members and develops bespoke assumptions based on available good practice. Firstly, it provides quantitative estimated impact analysis of employment, procurement and visitor numbers for those specific museums that responded to the survey. Secondly, it uses the survey data and analysis as a basis upon which estimates of the impact of the independent museum sector as a whole can be developed.

Overview of economic impacts approach and summary of key assumptions

4.2 The analysis presented in the remainder of this section is driven by two key sources – the AIM membership survey carried out for this study, and general information from the AIM membership database (on the profile of AIM's membership, broken down by visitor size band and by region). In addition to this, a range of assumptions have been made to firstly estimate the economic value of those museums that responded to the survey, and secondly to aggregate this data to reflect the possible value of the entire AIM membership that are museums.

4.3 In general, the approach taken to the assessment is adopted and adapted from the **HM Treasury's 'Green Book'** approach, using **English Partnership's Additionality Guidance** (3rd edition, 2008), and where relevant, **Scottish Enterprise's Additionality & Economic Impact Assessment Guidance Note** (2008).

4.4 This allows an estimation of deadweight, displacement, leakage and multiplier effects for museums, and overall additional economic impacts in terms of jobs and value created providing:

- Direct, indirect and induced employment effects.
- Supply chain linkages ("indirect") and income multiplier ("induced") effects on local incomes and employment.

4.5 This approach compares a baseline scenario (i.e. do nothing or reference case) and the proposed intervention scenario (or scenarios).

- The **base case/do nothing scenario** for this report assumes a hypothetical scenario where the museums that responded to the survey (and the entire membership of AIM when the analysis is aggregated up) do not exist.
- In comparison, the **development scenario** takes into account the full impact of all the responding museums for the 2008-09, or most recent, financial year.

4.6 Indirect and induced economic employment and spend impacts have been generated by adopting and adapting a mix of English Partnerships (and Scottish Enterprise) Additionality Guidance 2008 assumptions and ready reckoners, tailoring these to the specific elements of each responding museum thereby providing a bespoke impacts model that estimates impacts for each museum.

4.7 This approach (and its assumptions) is summarised in Table 4.1. This approach estimates the direct, indirect and induced employment and procurement spend impacts for each responding museum on a case by case basis. A glossary defining each of the key factors shown in Table 4.1 is contained in Annex 4 to this report:

Table 4.1: Employment and Spend Assumptions and Ready Reckoners			
Factor (employment / spend)	Standard EP / SE 2008 Assumption	Adjusted value	Rationale
Deadweight (both)	Low - 25%	No adjustment	Rationale based on established status of individual museums in their locations
Leakage (employment)	Medium – 25%	Case by case adjustment based on responses given to the survey	Of those respondents that employ staff, the split between local and non-local employee residence varies. Therefore the value is adjusted on a museum by museum basis
Leakage (spend)	High – 50%	Case by case adjustment based on responses given to the survey	The split between local and non-local location of spend varies. Therefore the value is adjusted on a museum by museum basis
Displacement (both)	Low – 25%	25% or 37.5%	▪ 25% for responding museums that classify themselves as being of 'low' or 'moderate' significance in their local visitor economy. ▪ 37.5% for responding museums that classify themselves as being of 'major' significance, or a 'key attraction' in their local visitor economy, or those that did not classify themselves.
Substitution (both)	0	No adjustment	No evidence of likely substitution effects
Multiplier (both)	1.07 (Type I – indirect only) 1.2 (Type II – indirect and induced)	No adjustment	A conservative sector specific multiplier. Assumes low indirect multiplier and higher induced multiplier – reflecting mainly national procurement patterns and local employee residential locations
Source: DC Research adapted from English Partnership Additionality Guidance (3rd Edition, October 2008) and Scottish Enterprise Guidance Note (November 2008).			

4.8 The multipliers used in the economic impact analysis presented later in this section are drawn from the Scottish Enterprise Guidance (November 2008) and from multiplier 'ready-reckoner' data drawn from Scottish Government Input-Output tables for 2004[6]). Scottish multipliers have been selected as they are based on sector specific input-output data, and are more bespoke than the composite multipliers as used by the 2008 English Partnerships Guidance). The specific multipliers selected are from the industry group 92 specified as 'hotels, catering and pubs etc.' – equivalent to SIC55.

4.9 Selecting an appropriate sector for independent museums as a sector is difficult given the range of activities that the sector encapsulates. In addition to SIC55, consideration was also given to industry group 121 (equivalent to SIC92) – recreational, cultural and sporting activities. The choice of SIC55 is a more conservative/cautious choice in terms of the scale of the multipliers, and as such allows the economic impact assessment results presented below to be summarised as the minimum impact that the independent museums sector has in terms of indirect and induced employment impacts.

[6] See www.scotland.gov.uk/Topics/Statistics/Browse/Economy/Input-Output/IOTIMults9804

4.10 Finally, in terms of impact areas, the analysis assumes that there are local and non local (i.e. regional and national) impacts for each museum, but taken together the analysis presents national (i.e. UK) impacts.

4.11 In addition, **gross** day and overnight visitor impacts are calculated using visitor numbers as provided by respondents to the survey, and average spend data calculated, where possible, on a region by region basis.

Estimating the Economic Value of Responding Museums

Direct, indirect and induced employment impacts

4.12 Of a total of 95 complete responses received, 57 museums reported that they employed staff. In total there were 1,646 full time equivalent staff employed by those responding museums that provided complete employment information, with responding museums reporting that most of these employees live near to their museum (three quarters reporting that at least 75% of employed staff lived locally). These jobs support further employment through indirect effects (i.e. supply chain effects) and induced effects (from the local spend of employment income of those employed by museums).

4.13 Table 4.2 sets out the estimated net indirect and induced employment created as a consequence of applying the assumptions set out in Table 4.1 to each of the responding museums, with Type I (indirect only) and Type II (indirect and induced) multipliers used to calculate indirect and induced employment.

Table 4.2: Direct, indirect and induced employment impacts of responding museums

	Direct Jobs	Indirect and Induced Jobs		Total direct, indirect and induced jobs	
		Indirect	Indirect and induced	Direct plus Indirect	Direct plus Indirect and Induced
Responding Museums	1,646	649	728	2,295	2,374

Source: DC Research calculations based on direct employment figures provided by responding museums, and adapted SE and EP Guidance, 2010. N=56.
Note: Totals have been subject to rounding

4.14 Table 4.2 shows that the 1,646 FTE jobs at responding museums create 649 indirect and 728 indirect and induced additional jobs in their localities. Alternatively, this can be expressed in financial terms, with an average salary for a job in the 'Libraries, Archives, Museums and other cultural activities' sector being £20,880[7]. If this is applied to the total direct, indirect and induced jobs in Table 4.2, the employment impact of responding museums for the most recent financial year is estimated as being the equivalent of between £13.55m and £15.2m.

Direct, indirect and induced procurement spend impacts

4.15 The direct, indirect, and induced impacts of procurement spend on goods and service by responding museums has also been assessed, with museums being asked to estimate spend in broad terms in goods and services for the last complete year. In total, responding museums spent £59.3 million on goods and

[7] Annual Survey of Hours and Earnings (ASHE) 2009, http://www.statistics.gov.uk/downloads/theme_labour/ASHE-2009/tab5_7a.xls, accessed 20th May 2010

services. Based on this data, the indirect and induced impacts of procurement spend is set out in Table 4.3 below:

Table 4.3: Direct, Indirect and Induced Procurement impacts of responding museums

	Direct Spend	Indirect and Induced Spend		Total direct, indirect and induced Spend	
		Indirect	Indirect and induced	Direct plus Indirect	Direct plus Indirect and Induced
Responding Museums	£59,273,586	£10,465,778	£11,737,321	£69,739,364	£71,010,907

Source: DC Research calculations based on direct procurement figures provided by responding museums, and adapted SE and EP Guidance, 2010. N=62.
Note: Totals have been subject to rounding.

4.16 Table 4.3 shows that the £59.3 million of direct procurement spend spent by responding museums creates an estimated £10.5 million to £11.7 million of additional spending impacts. According to responding museums, most of this spend was either local to the museum, or spent nationally (with case study evidence suggesting that there are often only a few specialised suppliers to choose from for curatorial and/or collection specific items).

Gross impacts from visitor spending

4.17 Gross visitor impacts can be estimated by ascribing average spending from different types of visits to the development or venue being assessed (in this case independent museums). It should be noted that the calculation of impacts from visitor spending is separate to the calculation of to the employment and spending impacts estimated earlier.

4.18 Visitor spending assumptions are based on attributing either a day trip, or one day of an overnight trip, to the venue/attraction being assessed, and the resulting impacts are commonly presented as gross. In assessing the impact of visits to responding museums, it has been assumed that day trips were solely made to visit the museum in question, and that a single day of a longer (i.e. overnight) stay was solely a day to visit the museum (both cases therefore assuming that the museum was the main activity of the day). In the absence of detailed primary data (such as a visitor survey of a significant sample asking detailed and, in part, counterfactual questions), such assumptions have to be made[8].

4.19 This approach is underpinned where an entrance fee is charged by a museum, which allows analysis to assume that visits are a more likely to be a deliberate economic decision and less likely to be an arbitrary or unplanned decision. This makes an assumption about a visit to a museum being both planned, and constituting a significant proportion of a single visitor day, and is therefore reasonable in terms of assessing gross visitor impact.

4.20 In assessing visitor impacts it is important to make a distinction between day visitors and overnight visitors, with the latter typically spending more in the local economy per visit. Museums were asked to estimate the proportion of day and overnight visitors and also estimate the proportion of visits that were made by

[8] It is worth noting that the same assumptions have been used in The Economic Impact of the Heritage Tourism Economy, Oxford Economics for HLF, 2009, http://www.hlf.org.uk/news/Pages/InvestinginSuccess.aspx).

local residents, day trippers, overnight visitors from within the UK and international visitors.

4.21 Table 4.4 below sets out the values that can be attributed to visitors at responding museums by their regional location, based on regional and national tourism volume and value data. It should be noted that whilst full data is available for overnight visitors for each region, this is not the case for day visits, where such data is unavailable[9].

4.22 As an illustration, an example of this approach is set out below:

- Using Visit England/Britain[10] data, the average day visitor to England spends £42.53 per visit (based on 870 million trips and total day visitor spend of £37.1billion).
- Using Visit London data[11], a typical overnight visitor (overseas and domestic) to London spends £89 per day. Whilst this may seem low, it encompasses visitors that stay with friends and relatives as well as those who stay in hotels.

[9] This is currently the case in Scotland, Northern Ireland and Wales, and some English Regions, where Visit England/Visit Britain data has been used as a substitute. It is understood that Visit England/Visit Britain will be publishing updated data on tourism volume and value in 2011

[10] Visit England: England Fact Book Key Statistics about English Tourism (Updated May 2009). Note that day visit data in this report dates to 2005 (http://www.enjoyengland.com/Images/VisitBritain%20Summary_tcm21-170906.pdf).

[11] http://www.visitlondonmediacentre.com/images/uploads/London_-_Key_Visitor_Statistics_2008_-_Media_Factsheet.pdf.

Table 4.4: Calculation of regional spend assumptions

Region	Day trips (millions)	Day spend (£bn)	Spend per day	Nights (Millions)	Night spend(£bn)	spend per night	Source
England	870.00	37.40	**£42.99**	398.70	21.88	**£54.88**	Visit England
Northern Ireland	*Visit England data used in absence of regional data*		**£42.99**	12.85	0.51	**£39.69**	Visit England/NITB
Scotland	*Visit England data used in absence of regional data*		**£42.99**	63.53	4.05	**£63.70**	Visit England/Visit Scotland
Wales	*Visit England data used in absence of regional data*		**£42.99**	37.84	2.11	**£55.78**	Visit England/Visit Wales
Yorkshire	95.70	4.37	**£45.63**	40.00	1.93	**£48.33**	Welcome to Yorkshire 2008
South East	180.00	8.00	**£44.44**	52.84	2.60	**£49.11**	TSE 2008
East Midlands	125.49	3.62	**£28.84**	46.41	2.37	**£51.02**	Emda 2008
London	*Visit England data used in absence of regional data*		**£42.99**	118.30	10.50	**£88.76**	Visit England/Visit London
East of England	*Visit England data used in absence of regional data*		**£42.99**	29.10	1.36	**£46.80**	Visit England/UKTS 2008
West Midlands	*Visit England data used in absence of regional data*		**£42.99**	20.70	1.15	**£55.51**	Visit England/UKTS 2008
North East	*Visit England data used in absence of regional data*		**£42.99**	12.20	0.70	**£57.13**	Visit England/UKTS 2008
South West	96.80	4.42	**£45.64**	92.00	4.62	**£50.24**	South West Tourism, 2008
North West	237.00	9.04	**£38.14**	36.60	2.34	**£63.88**	NWRIU /UKTS 2008

Source: DC Research analysis of various regional/national tourism volume and value datasets, 2010.
Note: Individual references for data sourced in this Table are set out in the Annexes. Totals have been subject to rounding.

4.23 Table 4.4 sets out the day and overnight assumptions on a region by region basis. These spending assumptions (based on regional tourism volume and value data) treat local visitors as day trippers, and therefore it is necessary for the analysis needs to make an adjustment to these assumptions to account for local visitors from the immediate vicinity of a museum. Such an adjustment is not provided for in regional volume and value spending figures typically used in this type of analysis, so a judgement is necessary as to what a reasonable assumption for this might be.

4.24 Following discussion and workshop sessions with museums at the 2010 AIM Conference on 4th June 2010, there was a consensus that it would be reasonable to allocate half a day visit as a spend assumption to local visitors (e.g. a local visitor to an East Midlands museum spends £14.42).

4.25 In addition, adjustment is required to total visitor numbers to control for the proportion of visitors that are children (and therefore do not spend to the same extent as adults, if at all). To account for this, discussions at the AIM Conference reached a consensus on a two thirds/one third adult/child split, with the analysis discounting spend by child visitors.

4.26 Using these assumptions, Table 4.5 shows estimated gross annual visitor impacts for the responding museums of for the last complete year. It should be noted that if respondents did not specify a day/overnight split, then it was assumed that the visit was a day trip. In addition, museums not in the UK were excluded from the analysis.

Table 4.5: Visitor impacts of responding museums		
	Total Visitors	**Total Impacts**
Local visitors	1,110,245	£24,803,404
Day Trippers (UK)	2,554,083	£112,672,491
Overnight stays (UK and overseas)	1,701,908	£119,897,543
Total	5.366,191	£257,373,438
Source: DC Research calculation of visitor numbers provided by responding museums, and analysis of regional/national tourism volume and value datasets, 2010. N=76. **Note:** Totals have been subject to rounding		

Estimating the Value of the Independent Museum Sector

4.27 The analysis presented above sets out the impacts on local, regional and national economies generated by those museums from the AIM membership that responded to the survey. The remainder of this section extends the analysis (and the underpinning assumptions) to the whole of the AIM membership that are museums, thereby generating an estimation of the value of the wider independent museum sector as a whole.

4.28 A starting point for this analysis is set out in Table 4.6, highlighting a breakdown of museums that are AIM members by size band, and by location.

Table 4.6: AIM Membership by Size and Region				
	Small (0 to 9,999 visitors)	Medium (10,000 to 49,999 visitors	Large (more than 50,000 visitors)	**Total**
East Midlands	54	6	2	62
East of England	81	7	1	89
London	46	10	5	61
North East	8	0	7	15
North West	38	10	4	52
Northern Ireland	4	0	0	4
Overseas	2	0	0	2
Scotland	38	10	8	56
South East	98	15	13	126
South West	72	15	10	97
Wales	27	5	4	36
West Midlands	35	3	5	43
Yorkshire	29	7	7	43
Total (%)	**535 (77.6%)**	**88 (12.8%)**	**66 (9.6%)**	**686 (100%)**
Source: AIM, March 2010				

Table 4.7: Comparison of AIM Membership and Survey				
Size	Survey		Membership Data	
Small	41	51.3%	532	77.6%
Medium	24	30.0%	88	12.8%
Large	15	18.8%	66	9.6%
TOTAL	**81***	**100%**	**686**	**100.0%**

Source: AIM Membership Data and DC Research Survey, 2010
Note: *includes 1 museum who did not specify their visitor numbers. A further 14 museums completed the survey but did not provide data that could be used to calculate value

4.29 Table 4.6 shows that over three quarters of AIM member museums are categorised as 'small', and the remainder split between medium and larger museums. Table 4.7 highlights that the survey elicited a higher proportion of responses from the medium and large membership groups, and therefore is biased towards larger museums in comparison to the AIM membership data, a factor that needs to be taken into account when estimating the aggregate value of the sector as a whole.

4.30 This approach is underpinned by the analysis set out in Tables 4.8 and 4.9 below. Table 4.8 shows the mean and median averages, and the range, for museums who responded to the survey from each of the three AIM size bands in terms of direct employment, direct spend on goods and services, and in terms of visitor numbers.

Table 4.8: Range and Averages for Responding Museums					
Factor	Museum Size	Mean	Median	Range	
				Min	Max
Direct Jobs	Small	0.74	0.5	0	4
	Medium	7.44	4.25	0	30
	Large	95.67	50	4	493
Direct Spend	Small	£14,932	£10,000	£414	£54,000
	Medium	£114,669	£53,603	£150	£424,000
	Large	£4,054,397	£1,390,350	£83,000	£23,300,000
Visitor numbers	Small	4604	4647	320	10000
	Medium	22818	18511.5	11190	50000
	Large	488751	155921	56761	2667807
Source: AIM Membership Data and DC Research Survey, 2010					

4.31 In terms of the assumptions and ready reckoners set out above in Table 4.1, leakage was the only assumption driven by survey responses on a museum by museum basis, and as such will also need to be assessed in the same terms. Table 4.9 sets out the mean and median averages, and the range, for leakage in terms of both employment and spend on goods and services.

Table 4.9: Range and Averages for Responding Museums					
Factor	Museum Size	Mean	Median	Range	
				Min	Max
Employment Leakage	Small	0.21	0.05	0.05	0.95
	Medium	0.26	0.15	0.05	0.95
	Large	0.25	0.15	0.05	0.75
Spend leakage	Small	0.55	0.57	0	1
	Medium	0.5	0.35	0.1	1
	Large	0.61	0.63	0.06	1
Source: AIM Membership Data and DC Research Survey, 2010					

4.32 The remaining Tables show the potential economic value of the sector based on these assumptions. These tables highlight, in each case, a value for the sector based on applying a mean and a median aggregation of the survey data, and the assumptions used to underpin the analysis above, to the entire AIM membership.

4.33 The median analysis in effect sets out an estimation of the **likely minimum economic value** of the independent museums sector to the UK economy. Whilst on balance the impacts are more likely to be closer to the median than the mean aggregation, using the mean analysis highlights the potential range of impacts based on available evidence.

Direct, indirect and induced employment impacts

Table 4.10: Aggregate estimate of direct, indirect and induced employment impacts of the independent museum sector

	Museum Size	Direct Jobs	Indirect and Induced Jobs		Total direct, indirect and induced jobs	
			Indirect	Indirect and induced	Direct plus Indirect	Direct plus Indirect and Induced
Median estimate of AIM membership	Small	266	127	142	393	408
	Med	374	159	179	533	553
	Large	3300	1407	1578	4707	4878
Total Median estimate		**3940**	**1693**	**1899**	**5633**	**5839**
Mean estimate of AIM membership	Small	394	156	175	550	569
	Med	655	243	273	898	927
	Large	6314	2375	2664	8689	8978
Total Mean estimate		**7363**	**2774**	**3111**	**10137**	**10474**

Source: DC Research calculations based on direct employment figures provided by responding museums, analysis of AIM membership, and adapted SE and EP Guidance, 2010.
Note: Totals have been subject to rounding

4.34 Based on these assumptions, Table 4.10 estimates that the independent museums sector (as characterised by all museums that are AIM members) is likely to **account for at least 5,600 direct and indirect, and 5,800 direct, indirect and induced jobs in the UK economy**.

4.35 However, the number of direct, indirect and induced jobs that the independent sector, based on a mean aggregation, might account for could be in the order of 10,000 direct and indirect, and 10,500 direct indirect and induced jobs. Whilst on balance the impacts are more likely to be closer to the median than the mean aggregation, this highlights the potential range of impacts based on available evidence.

Direct, indirect and induced procurement spend impacts

Table 4.11: Aggregate estimate of direct, indirect and induced procurement impacts of the independent museum sector

	Museum Size	Direct Spend	Indirect and Induced Spend		Total direct, indirect and induced Spend	
			Indirect	Indirect and induced	Indirect	Indirect and induced
Median estimate of AIM membership	Small	£5,320,000	£1,147,374	£1,286,775	£6,467,374	£6,606,775
	Med	£4,717,064	£1,537,837	£1,724,677	£6,254,901	£6,441,741
	Large	£91,763,100	£17,029,224	£19,098,195	£108,792,324	£110,861,295
Total Median estimate		**£101,800,164**	**£19,714,435**	**£22,109,647**	**£121,514,599**	**£123,909,811**
Mean estimate of AIM membership	Small	£7,943,824	£1,792,946	£2,010,780	£9,736,770	£9,954,604
	Med	£10,090,872	£2,530,601	£2,838,058	£12,621,473	£12,928,930
	Large	£267,590,202	£52,343,152	£58,702,601	£319,933,354	£326,292,803
Total Mean estimate		**£285,624,898**	**£56,666,700**	**£63,551,439**	**£342,291,598**	**£349,176,337**

Source: DC Research calculations based on direct procurement figures provided by responding museums, , analysis of AIM membership, and adapted SE and EP Guidance, 2010.
Note: Totals have been subject to rounding

4.36 Again, based on the assumptions set out above, Table 4.11 estimates that the independent museums sector (as characterised by all museums that are AIM members) is likely to **account for at least £122m of direct and indirect and £124m of direct, indirect and induced spending on goods and services in the UK economy**.

4.37 However, the amount of spending on goods and services that the independent sector, based on a mean aggregation, might account for could be in the order of £343 million to £349 million. Whilst on balance the impacts are more likely to be closer to the median than the mean aggregation, this highlights the potential range of impacts based on available evidence.

Gross impacts from visitor spending

4.38 As highlighted elsewhere in the report, the AIM membership data specifies the regional location of each member museum. This allows the regional spend assumptions as set out in Table 4.4 above to be applied to the findings of the survey to create a median and mean average analysis of total AIM membership. This means that the data in Table 4.12 below captures this regional variation, as much as possible, in terms of tourism volume and value.

Table 4.12: Aggregate estimate of visitor impacts of the independent museum sector

		Total number of local visitors	Total number of day visitors	Total number of staying visitors	Total local visitor spend	Total day visitor spend	Total staying visitor spend	Total visitor spend (local+ day+ overnight)
Median estimate of AIM membership	Small	741,661	362,590	329,627	£15,506,407	£15,161,820	£18,199,647	£48,867,874
	Med	488,704	271,502	244,352	£10,356,351	£11,507,057	£14,081,078	£35,944,486
	Large	1,372,105	3,430,262	1,783,736	£29,661,060	£148,305,299	£101,010,281	£278,976,639
Total Median estimate		2,602,470	4,064,354	2,357,715	£55,523,818	£174,974,176	£133,291,006	£363,788,999
Mean estimate of AIM membership	Small	771,328	443,349	428,515	£16,126,663	£18,538,771	£23,659,541	£58,324,976
	Med	480,016	306,254	299,738	£10,172,238	£12,979,960	£17,272,789	£40,424,987
	Large	2,113,041	2,888,281	1,852,341	£45,678,032	£124,873,061	£104,895,291	£275,446,385
Total Mean estimate		3,364,385	3,637,883	2,580,595	£71,976,934	£156,391,793	£145,827,622	£374,196,348

Source: DC Research calculation of visitor numbers provided by responding museums, and analysis of regional/national tourism volume and value datasets, 2010.
Note: Totals have been subject to rounding

4.39 Again, based on the assumptions set out above, Table 4.12 estimates that the independent museums sector (as characterised by all museums that are AIM members) is likely to **account for gross visitor impacts of at least £364 million in the UK economy**.

4.40 It is interesting to note that compared to employment and spend as set out above, there is relatively little difference between the median and mean estimate of the value of visitor impacts, with the mean (i.e. maximum) likely level of visitor spend being in the order of £374 million.

4.41 In parallel to the data presented in Table 4.5, this analysis has controlled for 'local' visits, assuming that such visits are worth 50% of a full day visit, and also a two thirds/one third adult/child split. It is again important to note that the analysis in this data assumes that visits were solely made to visit the museum in question for that particular day, with other activities (such as leisure, retail and restaurants/cafes etc being secondary factors). Whilst this will be the case for many museums (and was used in the HLF/Oxford Economics Heritage Impacts study), this assumption may not be true for all museums in all places.

5. PERCEPTIONS AND PERSPECTIVES ON THE VALUE OF THE SECTOR

5.1 This section provides a summary of perceptions and perspectives from both the strategic consultations and the case study visits undertaken as part of this study, and provides an insight into the wider strategic and catalytic impacts of the independent museum sector.

The views and expectations of key advocacy audiences

5.2 In general terms, the diversity of museums contained in the independent sector is well understood, and the sector is recognised as being entrepreneurial, and perhaps being able to understand more about its visitors than public sector run museums. Larger independent museums (such as SS Great Britain, London Transport Museum, Chatham Historic Dockyard and Ironbridge Gorge etc.) are very well networked with local and regional tourism agendas. However, this level of engagement becomes much more varied in terms of small and medium sized museums, who can often feel isolated (although it was notable that a number of the case study museums that were much smaller concerns were similarly well networked either locally or thematically).

5.3 The museums sector as a whole has a good track record of making the case for its contribution towards a range of sector specific and community focussed outcomes, and there has been significant progress in this regard over the past decade. However, to make the case to tourism and economic development decision makers it is important to provide robust economic arguments about impact with respect to visitors, and the potential impacts of museum investments and products.

5.4 Consultees from economic development and tourism backgrounds tend not to feel they understood the economic scale of museums in their areas. This can lead to museums in general, and independent museums in particular, not having the tourism profile with key decision makers that they might be entitled to in comparison to other attractions and accommodation providers. As a result museums in general, and the independent sector in particular, can often struggle to convince key audiences as to the economic importance of the sector as a whole.

5.5 The issue of charging emerged in a number of discussions. In general terms, it is the independent museums sector that tends to charge an admission (compared to national and local authority museums who largely operate a free admission policy). However a number of the museums who responded to the survey, and those who were case studies operate a free admissions policy. Reasons for this range from a continuing degree of public sector governance, subsidy / funding agreements with local authorities (where free entry is a specified condition), to one example where an independent trust took the view that free entry would increase visitor numbers and turnover.

5.6 Nevertheless, there are a number of prominent examples where independent museums have made a strong case for investment based on economic arguments. Ironbridge Gorge Museums Trust and Advantage West Midlands was mentioned as a strong example by some consultees, as is highlighted in a recent MLA Council report on tourism strategy[12]:

[12] DC Research for MLA Council, 2010.

"A number of RDA and regional tourism consultees highlighted that engagement with the sector tended to be linked to funding, with museums often approaching RDAs for funds. Whilst there are good examples of RDA funded investment into museums, the case is typically best made on a strong economic rationale.

This can be illustrated by the example of Advantage West Midland's investment in a number of museums-related developments in the region. A notable example is with the Ironbridge Gorge Museum Trust in a project which demonstrated a clear economic rationale, made on the basis of delivering clear returns on investment in terms of jobs created and sustained, along with the projected economic benefits to Shropshire and the West Midlands of increased visitor numbers.

The investment into Blists Hill Victorian Town, combined with the stay at home effects of the recession and Ironbridge's 300th anniversary celebrations generated over 530,000 visits for the 10 months up to the end of October 2009, representing a 23% increase in paying visitors on the previous year".

http://www.mla.gov.uk/what/policy_development/tourism

5.7 However, a number of consultees recognised that smaller independent museums often struggle to make a strategic economic case for support in isolation, which suggests that forms of collaboration between museums, or with museums and other visitor economy attractions and businesses might be necessary. Smaller museums are recognised as suffering from a range of disadvantages in this regard. Firstly, on their own they can struggle to be recognised by destination marketing organisations and partnerships, and secondly often lack the capacity and/or the expertise to advocate effectively, and lever support from strategically focussed regional and national organisations.

5.8 A number of consultees highlighted the need for advocacy arguments to focus on how the independent sector (or individual museums) can help to deliver the key priorities of audience organisations. These priorities might involve education, increasing participation of particular groups and communities, and economic and visitor impacts, and could extend to museums providing services where appropriate to local government through the commissioning process.

5.9 Tourism consultees noted and celebrated the huge diversity of museums that exist across the UK, and reaffirmed the understanding (as quantified in the HLF report) that heritage based tourism is a major element of the UK economy. However a number did highlight that it does not necessarily follow that every museum (independent or otherwise) is by default a tourism attraction. Put simply, there is an expectation from tourism practitioners that museums need to understand the importance of the offer to tourists that museums can provide to attract or entice the visitor to visit.

5.10 In this context it is clear that museums will need to engage and collaborate, either at a thematic or locality level, in a 'joined up' offer that tourism organisations can effectively market. There are a number of case study examples where this joined up approach is already in place, with museums benefitting from strong and mutually beneficial relationships with neighbouring attractions (for example the Vintage Carriage Trust at Ingrow benefitting from visitors to the Keighley and Worth Valley Railway, The Rachael Kay Shuttleworth Collection being hosted at Gawthorpe Hall near Burnley, and the Park Pharmacy Trust being hosted in the Merchant's House Museum in Plymouth).

5.11 Whilst museums might be the sole or primary reason for a visit, many will not have enough to offer a full day of activity for the visitor, and tourism consultees are keen to see museums collaborate (as appropriate) more to resolve this (e.g. either with other museums, or with leisure or retail attractions). In essence, to better access tourism markets and marketing expertise and support, willing museums will need to have wider horizons.

5.12 Moving forwards, it is clear that new relationships and collaboration will be increasingly important to museums in a tourism and economic development context as public subsidy becomes increasingly difficult to come by. The success and profile of a number of websites (such as www.culture24.org.uk in particular) suggest that the museums and the wider cultural sector can play a meaningful role in the provision of cultural tourism information through a range of mediums and outlets.

Key issues highlighted by the case study museums

5.13 In addition to providing insights that supported the development of assumptions for the estimation of economic impacts in Section 4, a number of common issues were highlighted by the case study museums.

5.14 A number of the museums had **ongoing relationships with local authorities and other public bodies** that impacted on their ongoing operations. Examples ranged from agreements about grant funding, service provision (including discussions around moving from grant based approaches to commissioning of specific activities and outcomes through a social enterprise model).

5.15 This highlights the findings from Section 2 that there are varying degrees of 'independence' in the independent museums sector, although it should be noted that one case study museum was entirely self sufficient, surviving on income from admission and from rental income from property owned in trust. Nevertheless, it is clear that **all cases recognise the need to diversify income streams away from grant income and admissions**, with none of the case study museums being dependent upon income derived from visitors. Examples of diversification include catering, workshops and showing normally 'unseen' aspects of a collection, events, taking on specialist contract work for other museums, retail diversification (including online), as well as aforementioned commissioning based and social enterprise activity.

5.16 Across the case studies, there are **a range of different types of tenure** in terms of museum accommodation. Tenure is especially important for independent museums, as their ability to secure grant funding, and to have their collections formally accredited by organisations such as MLA Council is, in part contingent on evidencing tenure security. Whilst some case museums are in a secure position in this regard, others are not, with issues ranging from uncertainty that might prevent a collection receiving MLA accreditation, to the ultimate viability of a museum being potential consequences.

5.17 Case study museums reported a range of experiences in terms of their **ability to engage with destination marketing and promotion organisations**. Some museums, of different sizes, were well networked in their locality, across attractions in the vicinity and thematically (especially where their collections are of a specialist nature) and with destination marketing organisations, whilst others felt more isolated.

5.18 Whilst a number of the case study museums employed staff, those smaller to medium sized museums that did so typically paid either an honorarium or paid a salary at the level of the minimum wage. It is clear that there is a **high level of dedication** with such staff, which may well make up for the relatively low wage, and levels of unpaid overtime, which 'goes with the territory'.

6. SUMMARY

6.1 The Association of Independent Museums (AIM) commissioned DC Research to estimate the Economic Value of the Independent Museum Sector in January 2010. The purpose of the study was to **carry out research into the economic value that can be attributed to the independent museum sector**, with the research being used for advocacy work by AIM at a national level on behalf of the sector, and by individual and small groups of independent museums at the local and regional levels.

6.2 The research was commissioned to **demonstrate to national, regional and local partners how important independent museums are to a thriving economy**. It comprised a survey of 100 AIM members, a number of follow up case studies used to refine the approach, and the construction of an analytical model to estimate the impact of the entire sector. Based on visitor numbers and type, employment and purchasing patterns, facilities, and information on the locality in which museums were situated, the model was applied to the AIM member museums (of which there are nearly 700).

6.3 The findings were first presented to the AIM Annual Conference at the Heritage Motor Museum in June 2010, where the model was further refined following workshop feedback from a range of AIM members.

Key findings from the research:

- Across the independent museum section, visitors (estimated to be over 9 million) represented around £364 million of gross visitor impacts.
- At least £124 million of direct, indirect and induced impacts as a result of spending on goods and services by independent museums (although impact might be as high as £349 million).
- At least 5,800 full time equivalent direct, indirect and induced jobs supported by the sector, equivalent to a further £122 million (although impact might be as high as 10,500 jobs, equivalent to £219 million).

Taken together, the **total impact of the independent museum sector is estimated to be at least in the order of £610 million** (although this could be as high as £930 million).

6.4 In addition to providing data to underpin the sector wide economic value analysis, the survey highlighted the **importance of the volunteer workforce to independent museums**. The museums responding to the survey reported volunteer numbers totalling 4,724, with 15% of these volunteers volunteering for two or more days per week on average, and 3.5% volunteering for four days a week or more. Just under half of responding museums reported that between 91% and 100% of these volunteers were local to the museum.

6.5 Further to this, responding museums reported 'in kind' contributions of goods and services of £621,000, and 'in kind' capital works (such as building work, repairs, development, refurbishment) of £11.5m.

The importance of economic value

6.6 The commissioning of this study highlights AIM's appreciation of the **need to clearly articulate and demonstrate the contribution of independent museums** in a tourism/economic context. This need is well recognised across the sector, and particularly in the current economic climate, there are concerns that there will be ever increasing pressure on museums to provide clear evidence of their contribution.

6.7 In headline terms it is clear that museums make a highly significant contribution to UK tourism, with **eight of the top 10 UK visitor attractions in 2008 being museums and galleries**. 'The Economic impact of the UK heritage tourism economy', (Oxford Economics, commissioned by the Heritage Lottery Fund) represents both a recent and a significant step in quantifying the impact of the 'heritage' sector to the UK economy. It found that **heritage tourism is a £12.4 billion per annum industry**, and that heritage is a major motivation behind the tourism expenditure of both overseas and domestic visitors.

6.8 At a time of austerity and a culture of funding cuts, the independent museum sector needs to make its case, and provide clear, robust evidence of the economic value that independent museums provide to tourism and the wider economy. Importantly, this needs to be articulated in such a way that key audiences outside the sector (including central government, national and regional tourism organisations, regional development agencies and other potential funders) appreciate and are convinced by the evidence and the related advocacy based upon the evidence.

6.9 The **diversity of museums contained in the independent sector is well understood by stakeholders** in economic development and tourism, and the sector is recognised as being entrepreneurial, and perhaps being able to understand more about its visitors than public sector run museums. Larger independent museums are very well networked with local and regional tourism agendas, although engagement becomes much more varied in terms of small and medium sized museums.

6.10 There are a number of case study examples where this joined up approach is already in place, with **museums benefitting from strong and mutually beneficial relationships with neighbouring attractions**. It is clear that museums could benefit from **further engagement and collaboration**, either at a thematic or locality level, **to provide a 'joined up' offer that tourism organisations can effectively market**.

6.11 A number of the case study museums had **ongoing relationships with local authorities and other public bodies that affect their ongoing operations**. Examples ranged from agreements about grant funding, service provision (including discussions around moving from grant based approaches to commissioning of specific activities and outcomes through a social enterprise model), to issues around security of tenure.

6.12 All the case study museums recognise the **need to diversify income streams away from grant income and admissions**, with none being solely dependent upon income derived from visitors. Examples of diversification include catering, workshops and showing normally 'unseen' aspects of a collection, events, taking on specialist contract work for other museums, retail diversification (including online), as well as aforementioned commissioning based and social enterprise activity.

The Economic Value Toolkit

6.13 Finally, it is clear from the research that many **independent museums are able to accurately and quickly generate the data** that is needed to estimate economic impacts. This information can be used by **AIM member museums to estimate their own impacts by using the toolkit** that has been developed to accompany this research, with the toolkit having different levels to cater for all museum types and sizes. The toolkit is included as an Annex to the full report.

ANNEX 1: CONSULTEES AND CASE STUDY MUSEUMS

NAME	ORGANISATION/MUSEUM
Bill Ferris	Chatham Historic Dockyard Trust, AIM
Michael Bedingfield	Tourism South East
James Berresford	Visit England
Jon Finch	MLA
Nigel Russell	Advantage West Midlands
Carol Whittaker	CyMAL
Alison Turnbull and Heather Doherty	Museums Galleries Scotland
David Friesner	Leicestershire Promotions (Leicester & Leicestershire DMO)
Richard Gray and Alan Bishop	Aston Manor Transport Museum, Birmingham
Pam Sharp	Browne's Hospital Museum, Stamford
Jane Higgs	Eden Valley Museum, Edenbridge
Carol Manktelow	Park Pharmacy Trust, Plymouth
Mike Millward	Rachel Kay-Shuttleworth Collection, Gawthorpe
Victoria Slowe	The Ruskin Museum, Coniston
Marilyn Scott	The Lightbox, Woking
Jane Cameron	University of Stirling Art Collection, Stirling
Michael and Jackie Cope	Vintage Carriages Trust, Keighley
Keith Merrin	Woodhorn Northumberland Museum and Archives
Sam Mullins	London Transport Museum

ANNEX 2: THE CASE STUDY MUSEUMS

Input from the case study museums has informed Sections 4 and 5 of this report, both in terms of supporting the development of the model used to estimate the value of the different museum types, developing bespoke assumptions for the sector, and providing detail on the economic issues faced by independent museums. The study team is most grateful for the time and valuable views and insights provided by each of these museums.

Aston Manor Transport Museum

Aston Manor Road Transport Museum is based in Witton, very close to Birmingham City Centre and Villa Park. The Museum houses a collection of historic and classic vehicles and related exhibits, all in the original setting of Witton Tram Depot. It was built in 1882 and still bears the name of Borough of Aston Manor Tramways Depot on a large stone sign above the front entrance.

The museum faces ongoing challenges around its tenancy status at the Witton Depot, and also its locality, which faces significant socio-economic and regeneration challenges.

Aston Manor Transport Museum is a Registered Charity. For more information please see http://www.amrtm.org/index.html

Browne's Hospital

The Hospital was founded by William Browne, a rich wool merchant of Stamford, and built in 1475. The Hospital or Bedehouse — a name by which it was also known — was established as a home and a house of prayer for 10 poor men and 2 poor women, with a Warden and a Confrater, both of whom were to be secular, i.e. non-monastic, priests.

Browne's Hospital featured as "Middlemarch Hospital" in the film adaptation of George Eliot's novel, "Middlemarch", much of which was shot in Stamford.

The Hospital is a Registered Charity, and is managed by a Board of Governors and Trustees, any profit from opening to the public going towards maintaining this Foundation. As such it is entirely self sufficient, with income from visitors supplementing rent from residents and the conversion of part of an adjoining building into office space.

For more information please see

http://www.stamfordcivicsociety.org.uk/html/browne_s_hospital.html

Eden Valley Museum

Six galleries tell the story of a house of medieval origin and the story of Edenbridge and the Eden Valley. Edenbridge Town Council leased Church House (a building of medieval origin) to the trust, and the Museum opened in 2000. The museum includes static displays and exhibitions, outreach work, and courses and events also being provided, as well as an archive for researchers. Current displays include a blacksmiths shop, tanning, farming, local stately homes, Doggetts Farm (alias Church House) and cricket ball making.

The museum is run by Eden Valley Museum Trust, and facilitates include a meeting room that is hired out for meetings and events. The museum currently does not charge an entry fee, although this policy is under review.

Eden Valley Museum Trust is a Registered Charity. For more information please see http://www.evmt.org.uk/index.htm.

London Transport Museum

London Transport Museum is a registered charity, whose objective is to *advance the heritage of transport in London and to educate the public about the history of transport in London through the provision, operation and maintenance of a transport museum for the public benefit, and to educate the public about the role of transport in the life and work of London, past, present and future*. As such, it is a charitable business that seeks to maximise its income from admissions, grants, trading, events and corporate hire to fund and extend the reach of its heritage and community work.

In exchange for TfL's annual grant £6m, the Museum generates a further £5m income, and delivers a range of services and public benefits to London at large and, specifically, for its parent company TfL. In the context of the TfL investment that supports the Museum, a recent independent study (also by DC Research) found that for each £1 invested by TfL, London Transport Museum broadly generates just over £4 of gross impact for London and its neighbouring regional economies.

London Transport Museum's collection originated in the 1920s, when the London General Omnibus Company decided to preserve two Victorian horse buses and an early motorbus for future generations. The Museum of British Transport opened in an former bus garage in Clapham, south London, during the 1960s, before moving to Syon Park in west London in 1973 as the London Transport Collection. In 1980, the public displays moved again, this time to occupy the Flower Market building in Covent Garden as the London Transport Museum. In 2000, London Transport became Transport for London, and to reflect this, the Museum changed its name to London's Transport Museum. The Museum has attracted over 5m visitors since 1980, has achieved accredited and designated status and has won many awards for since reopening in November 2007 after a £22m refurbishment.

London Transport Museum is a subsidiary company of Transport for London, and a Registered Charity. For more information please see http://www.ltmuseum.co.uk.

Park Pharmacy Trust

Park Pharmacy Trust is a registered Educational Charity. Since its inception in 1984 it has worked closely with Plymouth City Council for the wider benefits of the local community. The Trust has received national recognition for its innovative approach to life-long learning. It has pioneered recall reminiscence sessions with Age Concern Devon and Plymouth Age Concern and also runs hands-on practical workshops for primary school children.

The C J Park Pharmacy is hosted on the third floor of the Merchant's House Museum in Plymouth. It is the last remaining Victorian chemist's shop in Plymouth, and was established 1864. Visitors can wander round an authentic Victorian pharmacy, try their hand at old-fashioned pill-rolling and find out more from the volunteer stewards on duty.

For more information please see:

http://www.plymouth.gov.uk/homepage/creativityandculture/museums/museummerchantshouse/museumsparkpharmacy.htm

Rachel Kay-Shuttleworth Collection

The Hon. Rachel Kay-Shuttleworth (1886-1967) was the last member of the Shuttleworth family to live at Gawthorpe Hall and it was here that she formed the nationally important textile collection. The Hon.Rachel was particularly skilled in the art of embroidery and lacemaking, and was eager to impart her immense knowledge to others through the medium of examples collected in her lifetime.

The Rachel Kay-Shuttleworth collection is one of the largest collections of textiles and needlework in the UK outside the Victoria and Albert Museum, London. The collections contain historical and contemporary textiles and needlework from a variety of global cultures.

For more information please contact the Collection on 01282 773963 e-mail: rbskcollection@tiscali.co.uk. More information on Gawthorpe Hall can be found at http://www.nationaltrust.org.uk/main/w-gawthorpehall

The Lightbox

The Lightbox is Woking's new gallery and museum. Designed by Marks Barfield Architects and opened to the public on September 15, 2007, The Lightbox has some of the most exciting gallery spaces in the South East. An independent museum government by a Trust, and a Registered Charity, The Lightbox benefits from a long term relationship with Woking Borough Council.

Two spacious galleries host a huge range of exhibitions, changing regularly. These include contemporary art from local and nationally famous artists, and loans from major museums and galleries in the UK and overseas. The building is also home to Woking's Story, an interactive museum of the town's history from the 19th Century to the present day. As well as art and history, there is often the chance to explore science and the natural world.

For more information please see: http://www.thelightbox.org.uk/

The Ruskin Museum

There has been a Ruskin Museum in Coniston since 1901, when W.G. Collingwood, a local artist and antiquarian who had been Ruskin's secretary, set it up both as a memorial to Ruskin and a celebration of the area's heritage. The Museum (as The Coniston Institute and Ruskin Museum) is a Registered Charity. The Ruskin Museum is fully Accredited.

A £950,000 development scheme (funded by the Heritage Lottery Fund, European Regional Development Fund, Foundation for Sport and the Arts, the Rural Development Commission and others) was completed early in 1999. The Ruskin Museum re-opened on 1st May 1999, and went on to win an Interpret Britain Award. The new displays cover Coniston's history from the stone age (Langdale axes and other implements) and the Bronze age (weapons and other artefacts) to the jet era (Donald Campbell and Bluebird) via the copper mines and slate quarries which riddle the surrounding fells, charr fishing, and Herdwick sheep husbandry.

The successful recovery of Donald Campbell's iconic hydroplane Bluebird K7 in 2001 catalysed a further extension scheme. A new extension, The Bluebird Wing, was constructed in 2008 to house the boat once her conservation rebuild, by volunteers, has been completed; the contract included the extension of the Reception/Shop and toilet facilities, as well as external landscaping and a boundary wall. The major funders were Cumbria Vision, The Garfield Weston Foundation, South Lakeland District Council, other charitable trusts, individual donors and local businesses & residents. To date, £ 580,000 has been raised towards a target of £680,000 which will enable the full delivery of the museum's display & interpretation aspirations.

The Ruskin Museum endeavours to recycle capital monies as locally as possible in support of the local economy.

For more information please see: http://www.ruskinmuseum.com/

University of Stirling Art Collection

The Art Collection on public display at the University of Stirling houses the single most important collection of Contemporary Art in Central Scotland. With a catalogue of over 450 works, the collection includes paintings, prints, sculpture, film and photography. It boasts paintings by such major figures as JD Fergusson, Alberto Morrocco, Joan Eardley, Elizabeth Blackadder and sculpture by Eduardo Paolozzi, Barbara Hepworth and George Wylie. The gallery continues to identify and acquire work from major artists for the Collection supported by grants from NFA, MGS and trusts and foundations.

The Collection was created in 1967 by the first Principal Tom Cottrell who believed that art should be on display across the campus as part of the everyday life of students and staff. The Pathfoot Building, which houses the collection is permanently open to the public. It is an elegant 1960's building which has recently been 'listed'. Sculpture and is on display in its various courtyards as well as on the campus around the loch.

For more information please see: http://www.artcol.stir.ac.uk/

Vintage Carriage Trust

The Vintage Carriage Trust is a Registered Charity, and owns and operates the Museum of Rail Travel at Ingrow, near Keighley, West Yorkshire. Ingrow is the first station from Keighley on the Worth Valley Line, and the museum (which has gained accreditation) benefits from many of its visitors combining a visit to the Museum with a ride on the Keighley and Worth Valley Railway.

The Collection held by the Trust presently consists of nine historic railway carriages, three small industrial steam locomotives, and a collection of railway posters and other miscellaneous railway items. As well as admissions, the Trust's income comes from filming and other locomotive and carriage hire, also from the Museum's Shop. This is well-stocked with railway relics, a wide selection of second-hand railway books and (in a separate room) a comprehensive and clearly laid out stock of back-number railway magazines.

For more information please see: http://www.vintagecarriagestrust.org/index.htm

Woodhorn Museum, Archives and Country Park

Woodhorn, near Ashington, is Northumberland's largest museum and a major visitor attraction with around 100,000 visitors each year. It is home to the Northumberland archives covering all aspects from over 800 years of the county's history. Woodhorn is also home to the Ashington Group Collection, the main collection of paintings by the famous Pitmen Painters.

Woodhorn is at the site of a former colliery complete with historic pit head buildings and displays on the coal mining and social history of the area.. It includes a new building inspired by the large coal cutting machines that once worked underground, and houses an emotive display about life in the local mining community, the Northumberland archive, and three galleries for touring exhibitions, as well as listed colliery buildings.

Woodhorn is a registered charity and receives funding from Northumberland County Council as well as a variety of grants. Income is also generated from admission, and from the café, shop and function rooms.

For more information please see: http://www.experiencewoodhorn.com/

ANNEX 3: TOOL KIT

Introduction

This toolkit provides AIM members with a straightforward approach to help museums in estimating the impact they might have on their local economy.

Estimating economic impacts is a specialised and technical task, which can often involve a range of complex assumptions. Whilst it does not represent a full independent economic impact assessment, this toolkit does present an approach that can be used by museums to estimate their economic value for the purposes of advocacy and making a case to economic and tourism stakeholders. It is important that for each stage, the most accurate available information and data is used, which in an ideal situation would include the collection of museum specific information (e.g. visitor surveys).

The Toolkit is structured into three levels as follows:

- **Level 1 - Tourism Impacts:** This stage is for those museums who want to express the impact of visits to their museum in terms of the economic value to their local and regional economies.
- **Level 2 - Employment Impacts:** This stage is for those museums who want to express the impact of their employees (if they have them) in terms of the economic value to their local and regional economies.
- **Level 3 - Impacts of Spend on Goods and Services:** This stage is for those museums who want to express the impact of their spending on goods and services in terms of the economic value to their local and regional economies.

The DC Research team are happy to discuss the toolkit with AIM member museums, and provide summary help and guidance as appropriate. However DC Research Ltd accepts neither liability nor responsibility for its use, or the implications of its use, by AIM member (or any other) museums. It should also be noted that the data and assumptions in Tables 1 and 2 will change over time as new data and impact methodologies become available, and as such, data and assumptions included within this toolkit will need to be refreshed on a regular basis to ensure it is up to date.

Collecting data

The robustness of the toolkit, and of its use, depends on the museum specific information and data that is used. In all instances, information and data that is accurate and relates specifically to the individual museum using the toolkit is the best approach to adopt. In instances where museum specific data is not readily available, an alternative approach is for museums to make judgements based on their experience. However it should be borne in mind that such estimates are secondary to museum specific data, and the generation of specific information and data should always be considered as the preferred approach (particularly in regard to the number and composition of visitors).

For each level of the toolkit, it is important that museums set out where information and data has come from and, where judgement has been used in the absence of such information and data, a brief explanation of the supporting rationale. Where reference is made to museum size, AIM's standard approach has been used:

- Small 0 to 9,999 visitors per annum).
- Medium (10,000 to 49,000 visitors per annum).
- Large (more than 50,000 visitors per annum).

Level 1: Tourism Impacts

This stage is for those museums who want to express the gross impact of visits to their museum in terms of economic value. The calculation of economic value of visitors to a museum is relatively straightforward, through following the steps below:

1. Establish the total number of visitors to the museum for the last complete year and, importantly in terms of impact, separate out the number of adult and number of child visitors.

2. Establish the proportion (and subsequently the number) of adult visitors that are 'local' (i.e. from the local community of the museum), 'day visitors', and 'overnight visitors' (i.e. those who have stayed in the area overnight). In doing this, the following might be helpful:

    a. A split between day and overnight visitor can be estimated based on analysis of postcodes from museum specific Gift Aid data (where travel time to the museum of more than three hours can be assumed to equate to an overnight stay, calculated by analysing a sample of post code data). Alternatively, estimates of the proportion of day, overnight and local visitors can be derived from museum specific visitor surveys.

    b. Where specific visitor information (e.g. through surveys) is not available, the proportion of visitors that are 'local' is a matter for the judgement of the museum. As a guide, survey evidence suggested that the mean average proportion of local visitors for a small museum is 47%, for a medium museum 44% and for a large museum in 31%.

3. Select the region that the museum is located in from Table 1.

4. To calculate the gross impacts of visitors to the museum: multiply the number of local visitors by the relevant information in Table 1 ('spend by local visitor column'), the number of day visitors by 'spend per day visit', and the number of overnight visitors by 'spend per night'. Summing these three values up will provide the total gross economic impact of visitors to the museum.

Level 1 – Tourism Impacts Example:

A museum in the East Midlands had 13,500 visitors in the last financial year (2009/10), of which 10,000 were adults. The museum estimates that 40% are local visitors, 40% day trippers and 20% overnight visitors.

- Local visitors: 4,000 X £14.42 = £57,680
- Day trippers: 4,000 X £28.84 = £115,360
- Overnight visitors: 2,000 X £51.02 = £102,040

Total gross visitor impacts of £275,080 in the local economy in 2009/10.

Level 2: Employment Impacts

This stage is for those museums that employ paid staff and want to express the wider economic impacts (referred to as the indirect and induced impacts) of their employees on local and regional economies. The estimation of the economic value of museum employees is driven by a number of assumptions and is set out through following the steps below:

1. Establish the number of full time equivalent (FTE) employees for the last complete year.

2. Determine the proportion of FTE employees that **do not** live locally (say in the local authority area where the museum is located).

    a. If for example this proportion is 25%, this gives the museum an employment 'leakage' ratio of 0.25.

    b. It is preferable that leakage is calculated from museum specific information. However if this is not possible, then museums can use the relevant employment leakage ratio from Table 2.

3. Using Table 2, decide on the most appropriate 'displacement ratio' assumption relevant to the museum:

    a. Displacement for a museum that is of moderate or low significance to their local visitor economy should be 25% (i.e. a ratio of 0.25).

    b. Displacement for a museum that is a key attraction, or is of major significance to their local visitor economy should be 37.5% (i.e. a ratio of 0.375).

4. In order to calculate the wider impacts of employment at the museum, the total number of FTE staff needs to be applied to a formula that takes account of deadweight, leakage, displacement and multiplier factors.

5. This can be expressed as follows: Net wider economic impacts of employment (i.e. Indirect and Induced Employment) = number of FTE staff x (1-deadweight) x (1-leakage) x (1-displacement) x Multiplier). For each ratio this needs to be expressed in the calculation as a number (e.g. 25% as 0.25).

Level 2 Employment Impacts Examples:

A medium sized museum that is of major significance to its local visitor economy employs a total of 15 full time equivalent staff (10 full time and 15 part time).

Indirect and induced jobs = 15 x (1-0.25) x (1-0.26) x (1-0.375) x 1.2 = 6.2

Total direct, indirect and induced employment value of 21.2 jobs.

A small museum of moderate significance to its local visitor economy employs a total of 5 full time equivalent staff (3 full time and 6 part time).

Indirect and induced jobs = 5 x (1-0.25) x (1-0.21) x (1-0.25) x 1.2 = 2.7

Total direct, indirect and induced employment value of 7.7 jobs.

Level 3: Impacts of Spend on Goods and Services:

This stage is for museums who want to express the impact of their spending on goods and services in terms of economic value to their local and regional economies. The estimation of economic value of museum spend on goods and services is driven by a number of assumptions and is set out through following the steps below:

1. Establish the total amount spent on goods and services (excluding spend on employment) for the last complete year.

2. Determine the proportion of spend on goods and service with suppliers that **are not** based locally (say in the local authority area where the museum is located).

    a. If for example this proportion is 50%, this gives the museum a spend 'leakage' ratio of 0.5.

    b. It is preferable that leakage is calculated from museum specific information on supplier location. However if this is not possible, then museums can use the relevant spend leakage ratio from Table 2.

3. Using Table 2, decide on the most appropriate 'displacement ratio' assumption relevant to the museum:

    a. Displacement for a museum that is of moderate or low significance to their local visitor economy should be 25% (i.e. a ratio of 0.25).

    b. Displacement for a museum that is a key attraction, or is of major significance to their local visitor economy should be 37.5% (i.e. a ratio of 0.25).

4. In order to calculate the wider economic impacts of the museums spend on goods and services, the total value of spend on goods and services needs to be applied to a formula that takes account of deadweight, leakage, displacement and multiplier factors.

5. This can be expressed as follows: Net wider economic impact of spend on goods and services (i.e. Indirect and Induced Spend) = spend on goods and services x (1-deadweight) x (1-leakage) x (1-displacement) x Multiplier). For each ratio this needs to be expressed in the calculation as a number (e.g. 25% as 0.25).

Level 3 Goods and Services Examples:

A medium sized museum that is of major significance to its local visitor economy spent a total of £200,000 in the last financial year.

Indirect & induced spend = £200,000 x (1-0.25) x (1-0.5) x (1-0.375) x 1.2 = £56,250

Total direct, indirect and induced spend of £256,250.

A small museum of moderate significance to its local visitor economy spent a total of £50,000 in the last financial year.

Indirect & induced spend = £50,000 x (1-0.25) x (1-0.55) x (1-0.25) x 1.2 = £15,188

Total direct, indirect and induced spend of £65,188.

Assumptions

Table A3.1: Regional Visitor Spend assumptions

Region	Spend per 'local visitor' (50% of day visit)	Spend per day visit	Spend per night
Northern Ireland	**£21.50**	**£42.99**	**£39.69**
Scotland	**£21.50**	**£42.99**	**£63.70**
Wales	**£21.50**	**£42.99**	**£55.78**
Yorkshire	**£22.82**	**£45.63**	**£48.33**
East Midlands	**£14.42**	**£28.84**	**£51.02**
East of England	**£21.50**	**£42.99**	**£46.80**
London	**£21.50**	**£42.99**	**£88.76**
North East	**£21.50**	**£42.99**	**£57.13**
North West	**£19.07**	**£38.14**	**£63.88**
South East	**£22.22**	**£44.44**	**£49.11**
South West	**£22.82**	**£45.64**	**£50.24**
West Midlands	**£21.50**	**£42.99**	**£55.51**

Source: DC Research analysis of various regional/national tourism volume and value datasets, 2010.
Notes:
1. Full detail set out in 'Economic Value of Independent Museum Sector' DC Research for AIM, 2010.
2. Spend assumptions will need to be updated as data is released.
3. Value for a 'local' visitor has been assumed to be 50% of a full day trip following workshop discussion at the 2010 AIM Conference. Museums can adjust this to reflect bespoke circumstances based on scale and average visitor duration.

Table A3.2: Employment and Spend Assumptions and Ready Reckoners

Factor	Value	Rationale
Deadweight (employment and spend)	25%	Rationale based on established status of individual museums in their locations
Employment leakage (use only if information on home location of employees is not available)	Small museum = 21% Medium = 26% Large museums 25%	Based on survey evidence split by size of museum
Spend leakage (use only if information on home location of employees is not available)	Small museum = 55% Medium = 50% Large museums 61%	Based on survey evidence split by size of museum
Displacement (employment and spend)	25% or 37.5%	▪ 25% for museums that classify themselves as being of '**low**' or '**moderate**' significance in their local visitor economy. ▪ 37.5% for museums that classify themselves as being of '**major**' significance, or a '**key attraction**' in their local visitor economy, or those that did not classify themselves.
Multiplier (employment and spend)	1.2 (Type II indirect and induced)	A conservative sector specific multiplier. Assumes low indirect multiplier and higher induced multiplier – reflecting mainly national procurement patterns and local employee residential locations

Source: DC Research adapted from English Partnership Additionality Guidance (3rd Edition, October 2008) and Scottish Enterprise Guidance Note (November 2008).
Note: Full detail set out in 'Economic Value of Independent Museum Sector' DC Research for AIM, 2010.

Key terms and definitions

Deadweight	Value or impact that would have occurred without the museum.
Direct effects	Actual jobs and spending created by a museum.
Displacement	The proportion of museum value or impact accounted for by reduced value or impact elsewhere in the local area.
Indirect and induced effects	Supply chain linkages, and income multiplier effects on local employment and incomes created in local areas as a result of the activities of a museum.
Leakage	The proportion of value or impact that benefit those outside of the museum's local area.
Multiplier effects	Further economic activity (jobs, expenditure or income) associated with additional local income, local supplier purchases and longer term effects.
Ready reckoner /ratio	An economic assumption used in the absence of museum specific data.

Source: DC Research adopted from English Partnership Additionality Guidance (3rd Edition, October 2008) and Scottish Enterprise Guidance Note (November 2008).

ANNEX 4: REGIONAL DATA SOURCES AND GLOSSARY

Regional tourism volume and value data sources

Area	Web link
North West	http://www.nwriu.co.uk/documents/Tourism_Facts_2008.pdf
South West	http://www.swtourism.org.uk/finance-facts-figures/quick-regional-facts/
South East	http://www.industry.visitsoutheastengland.com/site/market-intelligence/tourism-volume-and-value
Yorkshire	http://www.welcometoyorkshire.net/getdoc/91dc2ebc-986d-4cb2-aac1-16e761ae923d/Facts-of-Tourism-(2007-Update)-New-Logo-and-Addres.aspx
East Midlands	http://www.eastmidlandstourism.co.uk/text.asp?PageId=123
England day trips	http://www.enjoyengland.com/Images/VisitBritain%20Summary_tcm21-170906.pdf
London overnights	http://www.visitlondonmediacentre.com/images/uploads/London_-_Key_Visitor_Statistics_2008_-_Media_Factsheet.pdf
Scotland nights http	http://www.visitscotland.org/PDF/tourism_in_scotland_2008_provisional.pdf
Wales http	http://wales.gov.uk/docs/drah/publications/Tourism/091120walesukfs0608eng.pdf
Deliotte report	http://www.visitbritain.org/Images/EconomicCaseforTourism_tcm139-168288.pdf
England / Britain day visits http	http://www.enjoyengland.com/Images/VisitBritain%20Summary_tcm21-170906.pdf
East of England (includes UKTS 2008 summary for all regions) http	http://www.eet.org.uk/doclib/East_of_England_Compendium_of_Tourism_Statistics_2008.pdf
UKTS 2008 (page 33) http	http://www.enjoyengland.com/Images/The%20UK%20Tourist%202008_tcm21-170509.pdf

Glossary

Additionality	The extent to which an activity is undertaken on a larger scale, takes place at all, or earlier, or within a given geographical area as a result of the intervention. Thus, an impact arising from an intervention is additional if it would not have occurred in the absence of the intervention.
Deadweight	Output that would have occurred without the intervention.
Direct effects	Actual jobs and spending created by a development
Displacement	The proportion of intervention outputs accounted for by reduced outputs elsewhere in the target area.
Indirect effects	Supply chain linkages created in economies as a result of the activities of an intervention.
Induced effects	Income multiplier effects on local incomes and employment as a result of an intervention.
Leakage	The proportion of outputs that benefit those outside of the intervention's target area or group.
Multiplier effects	Further economic activity (jobs, expenditure or income) associated with additional local income, local supplier purchases and longer term effects.
Ready reckoner	An economic assumption used in the absence of activity specific data.
Reference case	The position in terms of target outputs over a set period of time if the intervention did not take place.
Substitution	Where a firm substitutes one activity for a similar activity (such as recruiting a different job applicant) to take advantage of public sector assistance.