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Values and benefits of heritage
A research review

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Contents

Introduction

A research review of the values and benefits of heritage has been published by the HLF's Strategy and Business Development department annually since 2007. The review sets out the key information from a range of reports which are relevant to the heritage sector. Each year, the report is updated to include new research that has been published during the course of the year. This research review covers reports that were published before the end of 2015.

The topics covered are:

1. **Valuing heritage –** looks at people's perception of the value of heritage and ways of quantifying that value
2. **Visiting heritage –** includes numbers, motivations and barriers to visiting heritage sites
3. **Social benefits of heritage for individuals –** explores the relationship between visiting heritage sites and health and wellbeing
4. **Social benefits of heritage for communities –** examines the role heritage can play in creating a sense of place and fostering a sense of community cohesion
5. **Economic benefits of heritage.**

The areas of heritage covered are:

- **Museums and galleries** – including museums, art galleries, libraries and archives
- **Historic environment** – including the built environment, heritage sites, railways, visitor centres and places of worship
- **Natural environment** – including parks, gardens, wildlife attractions, coasts, canals and green space

As in previous years, we have only included research that features quantitative results, or larger-scale, in-depth qualitative studies. When reviewing evaluation studies that assess the impact of funded projects and programmes, we have only included studies that carried out primary research with final beneficiaries (i.e. visitors, participants, volunteers etc.), and have excluded research that only involves contact with project managers. We have only included evidence from the UK. We have excluded conceptual explorations of value and impact, discussions of impact methodologies or frameworks and research that is small-scale and/or anecdotal.

1. Valuing heritage

1.1 People's perception of heritage value

1.1.1 Museums and Galleries

- People value museums and galleries.

A MORI (2004) survey of 4,000 British adults for the Museums Libraries and Archives council (MLA) found that 82% of people think it is important for their local town or city to have its own museum or art gallery[1]. According to a Britain Thinks (2013) study into people's perceptions of and attitudes towards the roles and purposes of museums in society, both visitors and non-visitors have a strong, positive emotional attachment to museums and a sophisticated understanding of how museums shape our future as well as our past[2].

1.1.2 The Historic Environment

- Heritage sites and buildings are seen as important to local communities.

A Cebr (2013) survey of 2,001 UK adults found that 69%, equating to approximately 35 million people, felt that local heritage buildings and sites are important to their local community[3]. This is particularly felt amongst older people with almost three-quarters (73%) of over 55s agreeing with this sentiment in comparison to 64% of 18-34 year olds.

- Heritage sites and buildings play an important part in how people view the places they live, how they feel and their quality of life.

A report by IPSOS MORI (2010), into perceptions of beauty, shows the built environment plays an important role in how people view the places they live[4]. A striking area of consensus in the findings was the value people placed on old versus new buildings. Across all age groups, older buildings were favoured as being 'more beautiful' than newer ones. The most common reason people gave was that older buildings conveyed a sense of longevity and grandeur. This was also found in research conducted by IPSOS-RSL (2003) for the BBC's Restoration series in which 64% of respondents claimed they preferred old buildings over new ones[5].

- People are interested in how the built environment looks.

A MORI (2001) survey of 1,300 people in London for English Heritage found 81% of people said they are interested in how the built environment looks and feels, with about a third (34%) saying they are 'very interested'[6]. Only 2% were 'not at all interested'. Likewise, research conducted by IPSOS-RSL (2003), in preparation for the BBC's *Restoration* series, found that: 66% of respondents feel depressed by empty, derelict buildings; 63% said we do not do enough in the UK to look after historic buildings; and three quarters were concerned about the current loss of historic buildings[7].

1.1.3 The Natural Environment

- People want to live near green spaces, such as parks and commons.

A DEFRA-commissioned survey (Thornton, 2009) of English adults' attitudes towards the environment found that 74% of participants thought that having green spaces, such as parks, gardens and commons, nearby was 'very important' and 21% thought it was 'fairly important'[8]. Similarly, a Natural England (2015) survey found that 44% agreed and 49% strongly agreed with the statement 'having green spaces close to where I live is important'[9]. In addition, when asked what makes somewhere a good place to live, respondents to the Scottish Social Attitudes Survey, selected green amenities (e.g. open spaces, trees and greenery) ahead of transport, jobs, housing and local services[10].

1.2 Monetising the value of heritage

1.2.1 Willingness to Pay

Going beyond these basic kinds of survey results, environmental economists have attempted to monetise the extent to which people value heritage, by using 'willingness to pay' (WTP) or 'stated preference' studies, so that costs can be compared to benefits in the same unit of measurement. This is a survey-based technique that aims to understand the value people place on resources that are not directly sold in a market.

These studies show that:

- Non-users are willing to pay to maintain heritage facilities, even though they do not use them.

In 2014, English Heritage carried out a new stated preference study for two of its sites, Walmer Castle and Gardens in Kent, and Castle Acre Priory in Norfolk[11]. Both visitors and local people were asked what they would be willing to pay to maintain the site and keep it open. The study found that "people value the preservation of heritage buildings and places even when receiving no direct benefit (use value) from it" (Eftec, 2014, p56).

A willingness to pay study focused on the Surrey History Centre in Woking found that users were WTP £35 per year to prevent closure of the Centre, with even non-users prepared to pay an average of £13 per year[12].

- What people are willing to pay is often more than the cost of the service.

For example, a Spectrum Consulting (2004) survey of 2,000 people in the UK found an annual WTP for the British Library of £363m, against a public subsidy of £83m[13]. In addition, a similar but more localised study was undertaken by Jura Consultants for MLA North West and Bolton Metropolitan Borough Council (2005)[14]. This showed that users and non-users valued Bolton's museum, library and archive service at an annual £10.4m, against a cost of the service of £6.5m.

There has been much more extensive work of this kind in the area of nature conservation and landscape than either the built environment or museums. Useful meta-reviews include:

- The UK National Ecosystem Assessment (UK NEA) provides a comprehensive overview of valuation studies dealing with both natural and cultural heritage.[15]

- A research project between EH, HLF, DCMS and the Department of Transport by consultants eftec found 29 valuation studies that are directly applicable to historical sites, built heritage and archaeological sites, world-wide (eftec, 2005).[16]

- A comprehensive review carried out for the Department for Environment, Food and Rural Affairs (Defra) by eftec was published in 2006.[17] An earlier eftec / Entec report reviewed studies that have used environmental economics to value the external benefits of undeveloped land.[18]

1.2.2 Property Prices

Property prices are another way to gauge people's WTP for heritage – if we find that house prices are higher close to certain types of heritage (all other things being equal) then this represents a 'dividend' that people are willing to pay to live in the vicinity of that heritage. The UK's National Ecosystem Assessment (2011) analysed 1 million housing transactions in England between 1996 and 2008 to conclude that "there is substantial value attached to a number of natural habitats, designations, heritage sites, private gardens and local environmental amenities" (p1100)[19].

- People are prepared to pay more to live in homes that are historic, have historic features or are situated in a conservation area.

The Nationwide Building Society 'Hometrack' survey (2003) compared the price of historic homes with modern counterparts[20]. For a pre-1919 property the uplift was 20% and was 34% in the case of a Jacobean property. Similarly, a study carried out by Arad Consulting and Cardiff Business School (2005) in South Wales found that property market professionals are likely to place a premium on heritage features within housing[21]. They expect properties with these features to fetch a higher price, all else being equal, than houses without historic features.

Research into the effects of conservation areas on property prices by English Heritage, working with the London School of Economics (2012), involved a statistical analysis of over 1 million property transactions between 1995 and 2010, alongside data on the characteristics of over 8,000 English conservation areas[22]. This was the first rigorous, large-scale, analysis of the effects of conservation areas on house prices in England. It found that houses in conservation areas sell for a premium of 23% on average. A premium of around 9% exists even after adjusting for other factors that affect house prices such as location and type of property. This adjusted premium was lower for conservation areas deemed to be 'at risk', at approximately 5%. Likewise, the Arad Consulting and Cardiff Business School (2005) report found that house prices in South Wales increased faster in areas where properties had been well conserved, when compared to general property price inflation in neighbouring areas[23].

- People are prepared to pay more to live in homes that are situated in or near a National or recreational park.

The Nationwide House Price index (2014) shows that properties situated within National Parks sell with a 21% premium, even homes within 5km (3 miles) of a national park can command premiums of 8%[24]. In addition, a report from CABE Space (2005) showed that higher property value was associated with the presence of a high quality park[25]. In some cases this uplift was as much as 34%, though a more typical figure is 5-7%.

- People are prepared to pay more to live in homes near a canal or waterway.

A number of studies of local property markets by British Waterways (now the Canal & River Trust) have shown that properties with a direct view of a well-kept waterway can command a premium of up to 20%[26]. Moreover, there is still a premium – albeit smaller – up to half a mile away from the canal. Using a conservative estimate of a 3-5% uplift, Ecotec's(2007) research for British Waterways has calculated that the canal network in Wales has a total impact of £44-£74m on canal-side (within 200m) property values[27].

1.3 Time and donations as proxy measures of value

The extent to which people ‘give’ to heritage – both financially and through giving time – can be seen as an indicator of how much they value heritage.

1.3.1 Monetary Donations

Research by Arts and Business indicates that the heritage sector received over £227m in privately generated income in 2011/12, down from £245m in 2010/11[28]. Heritage and museums together attracted £315m in private investment during 2011/12.

The DCMS Taking Part survey shows that, in 2014/15, 29.8% of the English public has donated money to the cultural sector – 13.7% of people donated to the heritage sector and 15.7% to museums and galleries[29]. Those aged 45-74 were the most likely to have donated to DCMS sectors (66.7%).

1.3.2 Volunteering

The 2014/15 Taking Part survey also states that 24% of respondents had volunteered their time within the last 12 months, with 7% volunteering in the heritage, museum or library sectors[30]. This equates to approximately 3.7 million people.

National Trust (2015) volunteer numbers in England, Wales and Northern Ireland have nearly doubled since 2002, increasing from 34,380 in 2002/03 to over 62,000 in 2014/15[31].

2. Visiting heritage

2.1 Visiting Patterns

- Visits to the UK and its attractions are increasing.

The International Passenger Survey[32] finds out the number and type of visits made by overseas visitors based on a random sample of adult passengers entering or leaving the UK through its major air, road or sea ports. In 2014[33], it found there were 34.4 million visits to the UK by people from overseas. This is a 5.2% increase from 2013 and marks the fourth consecutive year in which the number of overseas visitors has increased.

In terms of the domestic market, the Great Britain Day Visits survey[34] reports on the number and type of 'tourism day visits' undertaken within the UK by people living in England, Scotland and Wales. They define a 'tourism day visit' as a visit that lasts 3 hours or longer, takes place away from their local area and does not happen regularly. According to this survey, 1,585 million tourism day visits were made in Great Britain in 2014, with a spend of around £54 billion. Both of these figures are the same as those for 2013.

According to Visit England's (2014) survey[35] of 1,491 visitor attractions, there was a 4% annual increase in total visits by both UK and overseas residents to English attractions in 2014. This represents a strong recovery following the -1% decline reported in 2012 and has helped attractions to grow gross revenue by 5% overall.

The following sections break these visits down according to heritage sector.

2.1.1 Museums and Galleries

- Just over half of the UK's population have visited a museum or gallery in the last twelve months equating to 42 million tourism day visits.

According to the DCMS Taking Part survey (2015)[36], 52% of the UK's adults visited a museum or gallery over the past 12 months. Of these adults, 44.3% had a limiting disability, 42.9% were of black and minority ethnic origin and 38.9% were from lower socioeconomic backgrounds. This represents a 10% point increase across all those demographics since 2006/7. The same survey found that 62.2% of children (63.6% of children aged 5-10 years and 60.4% of children aged 11-15) have visited a museum, gallery or archive in the past year.

The Great Britain Day Visits Survey (2014) found there were 32 million visits made to museums and 10 million to art galleries in 2014 by residents of England, Scotland and Wales[37]. The table below shows the regional breakdown of these visits.

Figure 1: Table to show the number of visits to museums and galleries by nation

Location	No. of visits to museums (millions)	No. of visits to art galleries (millions)
UK	32	10
England	27	8
Scotland	3	1
Wales	1	Less than 0.5

However, these numbers rise considerably when visitors from overseas are included. According to the International Passenger Survey (2006), 40% of holidaymakers from overseas visited a museum in 2006[38]. Taking overseas visitors into account, there were 71 million visits to national and major regional museums (NMDC, 2015)[39] and 50.7 million visits to the 16 DCMS sponsored museums in 2014/15 (DCMS, 2015)[40].

2.1.2 The Historic Environment

- 72.6% of the UK's population have visited the historic environment in the last twelve months equating to 81 million tourism day visits.

The DCMS (2015) definition of the historic environment includes:

- A city or town with historic character
- A historic building open to the public
- A historic park, garden or landscape open to the public
- A place connected with industrial history or historic transport system
- A historic place of worship attended as a visitor
- A monument such as a castle, fort or ruin
- A site of archaeological interest
- A site connected with sports heritage[41].

Using this definition, their Taking Part survey (2015) found that 72.6% of adults in the UK had visited the historic environment over the last 12 months. Of those adults, 63.4% were from lower socio-economic backgrounds, 67.7% had a limiting disability and 56.3% were of black and minority ethnic descent. They also found that 68.9% of children (68.7% of children aged 5-10 and 69.2% of children aged 11-15) had visited the historic environment.

According to the Great Britain Day Visits Survey[42], there were 81 million tourism day visits to the historic environment (including visits to castles, stately homes, ancient religious buildings and other buildings with historic architecture) by UK adults in 2014. The table below shows the breakdown of these visits by type of historic environment and by nation.

Figure 2: Table to show the number of visits to aspects of the historic environment by nation

Type of Historic Environment	Total (millions)	England (millions)	Scotland (millions)	Wales (millions)
Viewed Victorian or pre-Victorian architecture	17	15	1	1
Visited a historic house, stately home or palace	25	20	3	1
Visited a castle or other historic site	25	20	3	2
Visited a cathedral, church, abbey or other religious building	14	12	1	Less than 0.1
Total	81	67	8	4-4.5

BDRC (2010) has mapped trends in visits to attractions in England since 2009/10[43]. In 2013/14, visits to all historic sites saw an increase in visitor numbers in comparison to the previous year, apart from places of worship which saw a 5% decrease. Visitor/heritage centres saw the greatest change with a 10% increase in visits; historic houses / castles saw a +5% change; steam railways a +4% change and other historic properties a +3% change.

The historic environment also appeals to overseas visitors. In 2006, 50% of international visitors visited an aspect of the UK's built heritage and 30% visited a castle, church, monument or historic house[44]. A Harris Interactive telephone survey of 650 holiday makers in Scotland in 2007 found that 90% of international visitors and 61% of UK visitors had visited castles, historic houses and palaces during their stay[45].

The Scottish visitor attractions survey from 2009 provides a more fine-grained breakdown of the 45 million visits to the historic environment made by both UK and overseas residents in that year[46].

Figure 3: Table to show the number of visits to the historic environment in Scotland by UK and overseas residents

Visitor Attraction Category	Attractions Sample	Number of visits to responding Scottish Attractions
Heritage/Visitor Centre	100	6.7m
Castle/Fort	58	3.5m
Historic House/Palace	49	1.5m
Place of Worship	22	1.5m
Historic Monument/Archaeological Site	30	0.6m
Other Historic Property	15	0.4m
Steam/Heritage Railway	4	0.1m
Industrial/Craft Workplace	11	0.08m
Scotland total	682	44.7m

2.1.3 The Natural Environment

- As well as attracting 161 million tourism day visits, most of the UK population makes regular day-to-day visits to the natural environment.

According to the Great Britain Day Visits Survey, there were 161 million tourism day visits to the natural environment (including visits to the beach, country parks, gardens and nature reserves) by UK adults in 2014[47]. The table below shows the breakdown of these visits by type of natural environment and by nation.

Figure 4: Table to show the number of visits to different aspects of the natural environment by nation

Type of Natural Environment	Total (millions)	England (millions)	Scotland (millions)	Wales (millions)
Beach	50	39	5	5
Country Park	32	26	3	2
Garden	41	35	4	2
Wildlife attraction / nature reserve	22	18	2	1
Zoo or safari park	16	14	2	1
Total	161	132	16	11

In addition, studies have been carried out by organisations into specific aspects of the natural environment not covered by the Great Britain Day Visits Survey. For example:

- the Public Opinion of Forestry (2015) survey found that 56% of UK respondents have visited forests or woodlands in the last few year[48]s. This is down from the 66% of respondents who said they had in the 2013 survey.

- the Canal & River Trust estimates that 402 million visits were made to the canal network in Britain in 2014/15, up from 350 million in 2013/14[49].

Besides the data about tourism day visits, there is data about the day-to-day use of the natural environment. The Urban Green Nation research, published by The Commission for Architecture and the Built Environment (CABE) in 2010, found that nearly nine out of 10 people use parks and green spaces regularly and that over half the UK population – some 33 million people – make more than 2.5 billion visits to urban green spaces each year[50].

In England, the Monitor of Engagement with the Natural Environment (MENE) survey, commissioned by Natural England, Defra and the Forestry Commission, has captured six full years of data (2009 to 2015) about public engagement with the natural environment, particularly at the level of day-to-day use[51]. The findings for the sixth year of research showed that an estimated 3.12 billion visits were made to the natural environment by adults (aged over 16) in England during 2014/15, the highest number for six years and that most English adults visit the natural environment frequently. 59% of respondents to MEME stated they had visited it weekly in the last 12 months. Their main reasons for visiting are for health and exercise (45%) or to walk a dog (47%). The most commonly cited reason for 8% of the population not visiting the natural environment is not having enough time as a result of their work.

2.2 Motivation for visits

Britain is ranked 4th out of 50 nations in terms of its tourism offer with its museums, galleries and historic environment major contributors to that ranking[52].

2.2.1 Museums and Galleries

- Visiting museums and galleries is strongly associated with a visit to the UK and rank highly on potential visitors' to do lists.

The Nation Brands Index (2009) asked respondents from 20 countries around the world to select cultural products they would associate with the UK from a list provided[53]. Judging by their selections, it seems that 50% of respondents associated the UK with museums. Visiting museums is regarded as the 4th best activity in Britain (out of 32) and ranks 3rd on potential visitors' to-do-lists. Museums are slightly more appealing for older visitors than younger ones, but younger visitors still see themselves as very likely to visit museums if they were to visit Britain. Galleries are less popular than museums. Visiting galleries was listed as the 8th best activity Britain has to offer (out of 32) and ranked 17th on potential visitors' to-do lists.

2.2.2 The Historic Environment

- The UK's historic environment is iconic and a major driver for visits.

According to the Nations Brands Index, the UK is seen as a "world class destination for culture and heritage" (p7) [54]. The country ranks 4th out of 50 in terms of its build heritage. Analysis of the heritage tourism economy carried out in 2010 by Oxford Economics for HLF showed that 30% of overseas visitors cite heritage as the biggest single motivation for their visit to the UK – the largest single factor for non-business visitors[55]. An earlier survey of 300 passengers on the Superfast Ferry service between Rosyth and Zeebrugge found that almost 50% mentioned visits to castles/ historic sites and Scotland's history and heritage as reasons for visiting Scotland[56].

This seems to be because many of its landmarks are world famous and visitors want to see what they have read about, heard about or seen on TV. Castles and stately homes are regarded as having a magical charm, mystery and links to medieval history. However, this built heritage can give the impression that the country as a whole is "like a museum" with the experience of visiting being more educational than emotional (George Street Research, 2003 p18).

2.2.3 The Natural Environment

- The natural environment seems to be a motivator for visits to Scotland but not to the UK as a whole.

The natural environment of a country seems to be the main consideration for people when choosing a holiday destination. 70% of participants in the Nation Brands Index (2009) survey agreed with the statement 'I choose holiday destinations based on their natural scenic beauty" [57]. According to that survey, exploring the UK's natural environment is less appealing to overseas visitors than exploring its historic environment and museums and galleries because the UK is not seen as a world leader in terms of its natural environment. However, this does not seem to be the case for Scotland. 55% of overnight visitors (from Scotland, the UK and overseas) surveyed in 2011-12 say they were motivated to visit by its scenery and landscape[58]. The nation's natural environment is an even greater motivator for first time visitors as 65% of them claim they were motivated to visit by Scotland's landscape.

2.3 Barriers to Visiting

Despite the attendance figures and motivators discussed above, there are many barriers to participation in museums and heritage. The DCMS Taking Part survey (2010) includes questions about possible barriers to engagement but data from these questions is reported infrequently[59]. The reasons shown below were those most cited for non-participation in the heritage sectors in 2007-2008, by people who had not attended in the previous 12 months.

Figure 5: Table to show reasons cited for not visiting the historic environment, museums and galleries by participants in the DCMS Taking Part Survey (2007/08)

Type of Heritage	Not really interested	Not enough time	Health not good enough
Historic environment	32%	34%	14%
Museums	34%	31%	9%

Various studies have analysed the DCMS Taking Part data to identify factors affecting participation in museums, the arts and the historic environment. The factors they found include:

- **Gender** – with females more likely to attend a museum than males[60]
- **Educational attainment** – people with higher levels of educational attainment are more likely to visit museums and heritage than those with lower levels.[61] [62]
- **Socio-economic group** – those with higher socio-economic status are more likely to participate than those with lower.[63] [64]

- **Childhood visits** – a person who visited a heritage site or museum as a child is more likely to visit throughout adulthood.[65 66 67]

- **Age** – older people are more likely to attend museums and heritage sites than their younger counterparts.[68]

- **Ethnicity** – young people of black or minority ethnic origin (BAME) are as likely to visit museums and heritage as non-BAME people but this changes as they get older. Older people of black or minority ethnic origin are less likely that non-BAME people of the same age to visit museums and heritage. They are also less likely to visit than younger people of black or minority ethnic origin.[69]

- **Access to a vehicle**[70]

- **Health**[71]

- **Time**[72]

- **Interest**[73]

3. Social benefits of heritage for individuals

3.1 Museums and Galleries

- There is evidence to suggest that engagement with museum and gallery collections can enhance people's wellbeing and even improve their life expectancy.

The role of museums in promoting health and wellbeing is becoming increasingly important. At a time when health is being viewed as a societal issue (RCMG, 2014)[74] and museums are under pressure to demonstrate their value to society in light of governmental funding cuts, the Museums Association has issued a vision to increase the social impact of museums called 'Museums Change Lives'[75]. In Autumn 2015, the National Alliance for Museums, Health and Wellbeing – a consortium led by UCL Public and Cultural Engagement – was launched[76]. Its first national conference sold out suggesting it is a topic of major interest for the sector.

Indeed, there is a growing body of evidence to suggest that museums and galleries have a positive effect on health and wellbeing. The NEF's definition of wellbeing consists of two components:

1) feeling good i.e. experiencing positive emotions, such as enjoyment
2) functioning well i.e. having positive relationships with others, a sense of purpose and a sense of being in control[77].

From reviewing a number of research and practice reports, Wood (2007) found evidence that museums provide:

- Sense of connection and belonging
- Human capital, including skills
- Optimism and hope
- Moral values, beliefs
- Identity capital and self-esteem

- Emotional capital, resilience
- Opportunity for success
- Recognition of achievement
- Support
- Quiet, rest and sanctuary
- Social capital, relationships
- Meaningful pursuits
- Safe, rich environment
- Access to arts and culture[78].

Currently, the best evidence for how museums and galleries promote health and wellbeing is through object handling and viewing artworks[79]. It seems that object handling encourages personal meaning making which is beneficial in:

- sparking memories and reminiscence[80]
- allowing people to make connections between their personal meanings and the cultural significance of the object and the people around them[81] [82]
- creating a sense of privilege through being able to handle something of value
- can help distract hospital patients from their surroundings, help them deal with issues relating to illness, death and grief and improve their relationships with healthcare professionals[83]
- helping patients express difficult emotions[84]

This can result in feelings of social inclusion, better mood, increased self-worth and a general sense of wellbeing[85]. The fact that object handling requires the participant to use three senses (touch, hearing, seeing) has been used as one reason why the activity results in enhancing wellbeing[86].

There are claims that this results in longer lifespans. After analysing a number of epidemiological studies, O'Neill (2010) claims that "there is a growing body of research by university and state epidemiologists that cultural attendance of this kind does make a difference to people's mental and physical well-being, such a difference in fact that people live longer" (p23) [87].

3.2 The Historic Environment

- Similar links have been made between wellbeing and the historic environment.

CABE (2004) found that 85% of English adults surveyed agreed that 'the quality of the built environment makes a difference to the way they feel' and that 'better quality buildings and public spaces improve people's quality of life'[88]. Similarly, the Scottish Executive Architecture Policy Unit undertook research in 2004 that found 64% of Scots said the built environment impacted on how they felt and on their quality of life.[89]

In 2014, English Heritage published results of joint research with DCMS examining the impact of visiting heritage on wellbeing using the Understanding Society survey[90]. The study, undertaken by Fujiwara, showed that visiting heritage sites has a significant positive effect on life satisfaction. The impact of eight different heritage sites was assessed through regression analysis after controlling for the main determinants of individual wellbeing. All eight types of site had a positive effect on life satisfaction with historic towns and historic buildings having the biggest impact.

Fujiwara's analysis also explores the indicative financial values associated with identified social impacts of engagement in culture and sport. The approach employs a statistical method, in which the correlation between income and wellbeing is used to convert the well-being gain from visiting heritage into a monetary equivalent. In the case of heritage this income equivalence was calculated at £1,646 per person per year.

3.3 The Natural Environment

- Studies suggest that access to green space can improve both mental and physical health.

A study using the European Quality of Life Survey involved researchers charting mental well-being and economic status[91]. Analysing responses from 21,294 urban residents in 34 European nations, academics at the Centre for Research on Environment, Society and Health found compelling evidence that open spaces helped to level health inequality. Indeed, a 2011 literature review of how the landscape is a health resource that promotes physical, mental and social well-being identified over 120 studies showing meaningful pathways that link landscape and health[92].

Research for the Forestry Commission suggests the health benefits of green spaces are strongest with regards to mental health rather than physical health indicators having reviewed the literature on the relationship been the natural environment (trees, woods, forests) on health in urban populations[93].

A 2014 study examining how moving to greener or less green areas may affect mental health over time provides evidence that moving to greener urban areas is associated with having a long-lasting positive impact on people's mental well-being[94]. Using data from the British Household Panel Survey with mental health data (General Health Questionnaire scores) the study showed that individuals who moved to greener areas had significantly better mental health in all three post-move years.

In 2009, Natural England looked at the way people value landscape, through a literature review, 16 focus groups and 16 in-depth interviews[95]. Phase two of this research looked at six National Character Areas (NCAs) that differed to those used in the previous research[96]. Both studies showed that people are reliant upon the natural landscape to help them put balance into their lives. Many benefits they described related to their health – and to the freedom they feel when out in the open, away from modern-day life. Similarly, CABE (2004) quotes studies demonstrating, variously how natural views lower blood pressure and stress[97].

The 2009 Scottish Social Attitudes Survey found a link between the quality of green space and quality of life[98]. Where participants perceived their local green space to be high quality, they reported better self-assessed health, higher life satisfaction, greater social trust and a higher sense of community cohesion.

- There appears to be a link between greenspace and physical activity.

A 2011 review of evidence relating to green space use and its impact on health and physical activity by HM Partnerships found that where people have good (perceived and/or actual) access to green space they are 24% more likely to be physically active[99]. If this effect was universal and the population of England had equitable good access to green space, it is estimated that the life-cost averted saving to the health service would be around £2.1billion per annum.

A detailed review of the literature exploring links between biodiversity and increased levels of physical activity is contained in 'Natural Fit' – a report published in 2004 by the RSPB and endorsed by the Faculty of Public Health[100]. This includes references to medical research and case studies looking at whether the natural environment can increase levels of physical activity, and the links between wildlife and well-being.

- Green exercise, in particular, seems effective at benefiting participants' mental health.

The University of Essex conducted a study which aimed to 'explore the synergy in adopting physical activities whilst being directly exposed to nature'[101]. The researchers termed this 'Green Exercise'. Quantitative analysis of ten countryside case studies looked at the impacts on the health of 263 participants[102]. The findings demonstrated improvements in mental health measured through self-esteem and mood profiles such as depression, dejection, tension and anxiety. One of the activities, canal boating in Scotland, had a clear heritage connection though the others were more typical countryside activities such as walking, mountain-biking, fishing, horse-riding and conservation work.

The charity Mind commissioned the University of Essex to undertake two further, smaller scale studies[103]. Of a survey of 108 people involved in Mind green exercise group activities, 94% said taking part had benefitted their mental health. In the second study, twenty members were taken on two different walks – one in the countryside where 90% reported an increase in self-esteem; the second through a shopping centre, which 44% said reduced their self-esteem.

Further research into the effect of 'green exercise' on the state of anxiety has been looked in to in the Journal of Psychology of Sport and Exercise[104]. The findings support the claims for mental health benefits through 'green exercise'.

CABE (2004) has used evidence about the benefits of green exercise for public health and reducing healthcare costs to bolster the case for urban public parks[105]. They cited evidence about rising obesity, young people's health, the establishment of adult patterns of exercise in early life and the health benefits of walking.

Several other meta-reviews, bringing together evidence for the benefits of green space, have been produced over the last few years, which include sections on health impacts. These include:

- Microeconomic Evidence for the Benefits of Investment in the Environment (2012, Natural England);[106]
- Green spaces: the benefits for London (2013, BOP for the City of London Corporation);[107]
- Green infrastructure's contribution to economic growth: a review (2013, eftec and Sheffield Hallam University, for Defra and Natural England).[108]

4. Social benefits of heritage for communities

In contrast to a general consensus on how museums, heritage and the natural environment can make a difference to individuals, there is less agreement and understanding of how they can contribute to benefits at a community scale. According to one review, there is neither an agreed understanding of how these community impacts arise, nor is there any strong empirical evidence to demonstrate these impacts – 'most reviewers conclude that the evidence for group-level impacts is less compelling than that for individual impacts' (Demos, 2006, p8) [109].

Where research does exist, it has concentrated on the following, social mechanisms through which community benefits may arise from engagement with heritage:

- greater interaction between people, hence the strengthening of social capital
- a deeper sense of collective identity, linked to sense of place
- enhanced levels of awareness and understanding between particular groups, with a positive effect on community cohesion.

4.1 Museums and Galleries

- There is some evidence to suggest that visiting museums and participating in community-based heritage projects enhances social cohesion.

Demos for MLA (2006) quote the Renaissance in the Regions visitor survey result that indicated 45% of people felt more tolerant towards other people and their cultures and ideas as a result of their visit[110]. The same research points out the social function of museums and galleries, with two-thirds seeing them as appealing places to meet.

Work by the MLA sought to capture outcomes from the Regional Museums Hubs' community engagement activities[111]. This research looked at 17 Renaissance-funded projects and shows that museums are delivering real value to communities in relation to: stronger and safer communities, strengthening public life, health and well-being as well as in the Generic Learning Outcome categories (knowledge and understanding; attitudes and values; skills; enjoyment, inspiration and creativity; and activity, behaviour and progression).

HLF research into the impact of volunteering shows that the majority (92%) of HLF volunteers meet new people through their involvement with HLF projects and 35% of volunteers sustain these relationships[112]. The research showed that heritage projects can increase community cohesion and boost instances of 'co-presence' among distantly connected people.

- Projects involving specific community groups can help change people's perceptions of that community.

Two examples include:

The Refugee Communities History Project ran between 2004 and 2007, drawing on £740,000 of HLF and Trust for London funding. Refugee community organisations were involved in recording oral history interviews and staging local exhibitions. 85% who visited the local exhibitions said the experience had given them a greater understanding of refugee communities and 85% said it helped them to see the positive contributions made by refugees[113]. These results, however, are based on a relatively low sample of 73 respondents.

An evaluation of the WWII commemoration programme, Veterans Reunited, reported that 46% felt differently about other people and their community after participating in the programme and 14% were said to have a more positive appreciation of diversity[114]. A specific evaluation of the 'Their Past your Future Strand' of the programme found that 95% of students who took part had gained a deeper understanding of the contribution of veterans and people who lived through the war and – as a consequence – had come to think differently about them.

4.2 The Historic Environment

- The historic environment seems to create a positive sense of place amongst its inhabitants.

English Heritage research found evidence that the historic built environment contributes positively to sense of place, particularly in reinforcing local identity and higher levels of social capital[115]. Similarly, an on-street survey of residents and visitors in areas which have seen significant historic environment led regeneration found that 93% of respondents felt that the project has improved their perceptions of the local area and 91% that it had improved the image of the wider town[116]. 92% of respondents felt that the project had raised pride in the local area and 93% that it had increased their sense of place. The research evidenced that the historic environment has a positive and significant relationship to the sense of place among the adults living there.

4.3 The Natural Environment

- Evidence suggests that having a shared green space can have a positive impact on the lives of communities.

83% of the almost 20,000 respondents to a national survey run by Greenstat said that parks and open spaces are focal points for communities[117]. Research carried out by SQW for the BTCV People's Places Award Scheme looked at impacts on local environments, communities and individuals[118]. Most projects funded by the scheme were concerned with creating, improving or better utilising local green areas and public open space. The evaluation showed that these types of projects have positive impacts on life in communities by increasing a sense of ownership and pride of place, creating a space that the community can use and fostering a sense of belonging as well as successfully raising environmental awareness.

5. Economic benefits of heritage

Work on the way that heritage contributes to economic / business activity in local areas can be divided into five:

1. The impact associated with the day-to-day operations of a heritage attraction / facility;
2. The economic benefits associated with heritage-based recreation and tourism;
3. The impact associated with capital works, including restoration and repair / maintenance;
4. How heritage and cultural institutions make a place more attractive for non-tourism businesses and workers to locate; and
5. Economic security.

In the case of research that looks at operational, tourism and restoration/repair, a further variable across reports is their geographic scale of analysis – ranging from impacts at a national scale to the localised impact of single heritage sites and attractions. The sections below review provide separate reviews that have taken place at the national/regional scale, and then those based on single attractions.

5.1 National / regional studies

A great deal of work to quantify the economic impact of heritage has been done over the last decade. Though the results of these studies are usually presented in very similar ways – jobs created and (sometimes) GVA (Gross Value Added = wages and profits) generated – the scope is different across them.

We have compiled a comparative summary of work carried out at either a UK or a regional scale that we know about. As well as differing in the geographic scale they cover, these reports vary in terms of the heritage they cover and the types of impact they review.

- In 2010 two pieces of work – by Oxford Economics for HLF[119] and by VisitBritain[120] – looked at the importance of *all parts* of the heritage sector – built, natural and museums / galleries – across *the whole of the UK / Britain* for the visitor economy. The HLF work looks at the impact of both overseas and domestic tourists: the VisitBritain work only deals with inbound tourists. The HLF work was updated by Oxford Economics in 2013[121]**.**

- Seven reports have reviewed impacts on a regional or country scale: Ecorys (formerly Ecotec) carried our separate reports on Wales[122], Scotland[123] and the East Midlands[124]; eftec produced a study for Northern Ireland[125] and there were reports by Amion / Locum for the North-West[126]; and Arup for the North-East[127]. However, in each of these cases, bar one, the focus was on *built heritage*. Only one – the Arup report for the North East – went beyond tis to include museums / galleries.

- The Amion / Locum work for the North-West used a wider definition of built heritage than the other reports, to encompass *townscapes* as a motivation behind leisure and even shopping trips (i.e. it assumed that the extent to which people prefer to socialise in historic towns should be factored into the assessment of the impact of heritage)[128].

- The reports by Ecorys, Amion and Arup also provide figures for the number of people directly employed in organisations managing heritage, along with the employment impact of their procurement (see Table 6 below).

- This focus on *direct employment impacts* was the main focus of the LSE report for MLA / NMDC[129], which reviewed impacts within museums and galleries across the whole of Britain. This report, though, did not look at wider tourism impacts.

- The Ecorys reports in Scotland[130] and Wales[131], and the Amion / Locum[132] report in the North-West extended the analysis beyond tourism, to review the economic impacts associated with conservation maintenance and repair – not something that has featured in any of the other pieces of work.

- Research on the full UK wide impact of historic building maintenance was completed in 2012 through work undertaken by Ecorys for the Heritage Lottery Fund.[133]

With a high degree of consensus on how to undertake economic impact work, the findings from these reports are broadly consistent with each other. The results for Scotland, for example, are higher than those for Wales, which – in turn – are higher than the East Midlands. The results for the North-West are higher than for Wales, but this can be explained by the wider definition of heritage to include townscape-related impacts.

The regional / country studies also appear consistent with the bigger Oxford Economics / HLF study[134]. The Oxford Economics estimate of 466,000 tourism jobs would imply around 38,000 in each region / country if spread evenly. This is bigger than the estimates in all the individual regional / nation studies, with the exception of the Ecorys figure for Scotland[135]. But this is as we would expect, since the Oxford Economics / HLF work includes natural heritage, which is excluded from the other studies.

It is possible to use all of these results to come up with an overall economic impact figure for a broad definition of heritage and heritage-based activity, across the whole of the UK. This is the 742,000 jobs estimated by Oxford Economics / HLF for heritage based tourism[136] + the figures from the various studies by Ecorys on the management and maintenance of historic buildings[137] + the LSE figure for direct employment in the operation of museums[138] = 1,280,000 jobs.

In GVA terms, and on the same basis, the total contribution of heritage to the UK economy can be estimated at just under £50bn per year.

Figure 6: Economic impact of heritage – summary of results from various studies

Consultant	Date	Geographic focus	Heritage sector focus	Direct operations jobs	Renovation / maintenance jobs	Tourism direct jobs	Tourism + multipliers jobs	Study total jobs	GVA p.a study total
DCMS Creative Industries Economic Estimates study[139]	2015	England	Museums, galleries and libraries.	110,000	n/a	n/a	n/a	n/a	n/a
Arts Council England[140].	2015	England	Museums	n/a	n/a	n/a	n/a	n/a	£1.45 bn
Natural Parks England[141].	2015	England	Area of Outstanding Natural Beauty and National Parks	n/a	n/a	120,000	n/a	n/a	£20bn
Oxford Economics for HLF[142]	2013	UK	Built heritage, Museums & Galleries + Natural Heritage	n/a	n/a	505,000	742,000	742,000	£26.4bn
VisitBritain[143]	2010	UK	Built heritage, Museums & Galleries + Natural Heritage	n/a	n/a	n/a	100,000	100,000*	n/a
Ecorys for HLF[144]	2012	England	Built heritage	181,146	311,611	n/a	n/a	492,757	£11bn
		UK	Built heritage	n/a	n/a	n/a	n/a	530,000	£12.4bn
Ecorys (formerly Ecotec) for HEACS[145]	2008	Scotland	Built heritage	5,800	20,400	28,200	37,200	60,400	£2.4bn
Ecorys (formerly Ecotec) for the 'Valuing Our Environment' Partnership'[146]	2010	Wales	Built heritage	2,100	13,400	n/a	14,900	30,400	£0.84bn
eftec[147]	2012	Northern Ireland	Built heritage, Museums & Galleries + Natural Heritage	n/a	n/a	n/a	n/a	5,383	£0.13bn
Ecorys (formerly Ecotec) for East Midlands Heritage Forum[148]	2007	East Midlands	Built heritage	6,200	n/a	3,500	4,500	10,700	n/a

Consultant	Date	Geographic focus	Heritage sector focus	Direct operations jobs	Renovation / maintenance jobs	Tourism direct jobs	Tourism + multipliers jobs	Study total jobs	GVA p.a study total
Amion / Locum for NWDA[149]	2009	North West	Built heritage incl. townscape	8,500	10,772	n/a	20,400	39,680	£1.6bn
Arup for One North East[150]	2005	North East	Built heritage + Museums & Galleries	1,900	n/a	n/a	5,500	7,400	n/a
London School of Economics for MLA / NMDC[151]	2006	UK	Museums	9,000	n/a	n/a	n/a	9,000	n/a

* impacts associated with overseas tourists only.
** industries and businesses that depend on the natural environment e.g. farming, forestry, fishing, renewables, tourism, food & drink, water supply, environmental management and (in the case of SEEDA) environmental technologies.

5.2 Single attraction studies

Tourism impact studies of single attractions have been researched in a large number of studies by various organisations.

5.2.1 Museums and Galleries

- The British Library undertook an evaluation of its services to determine how it generates economic value for its users and the wider public. Findings showed the economic value delivered by the British Library for society is £5 for every £1 invested and the Library generates a net economic value of £419m[152].

- A report by LSE on the impact of the first five years of Tate Modern found it had contributed between £75m and £140m to the local economy creating up to 4,000 new jobs about half of which are focused in Southwark.[153]

- A further LSE study on National Museums Liverpool (NML) – a consortium of 8 city museums. NML was calculated to have an impact of between £65.9m and £74.6m per year on the north west economy, with at least 1,600 Merseyside jobs dependant on the museums. The cultural role of the museums in developing local pride in the city and its history were also found to be important to longer term regeneration.[154]

5.2.2 The Historic Environment

- A UNESCO report into the wider value of World Heritage Sites in the UK estimates that UNESCO membership for the country's 180 affiliated organisations is worth £90million per year to the UK economy.[155]

- A report by GHK published as part of *Heritage Counts 2010* presents an assessment of the impacts of investments in five historic sites operated by English Heritage and the National Trust. The five sites are Anglesey Abbey (NT), the Great Tower at Dover Castle (EH), Down House (EH), Kenilworth Castle and Elizabethan Gardens (EH) and Tyntesfield (NT). The five case studies examine expenditures involved in each investment, and the effects of the investments on ongoing staffing, site expenditures, visitor numbers and expenditures, and the local business environment.[156]

- The refurbishment of the De La Warr Pavilion, Bexhill has been found to have a total economic impact of £16m p.a. in the town.[157]

- A study of the Eden Project in 2002 revealed that the new attraction had received just under 2 million visitors in 2001/2, with an estimated direct economic impact of £155m.[158]

- A study undertaken by Ecotec has found that, on average, cathedrals such as Chester and Carlisle, employed some 45 people and supported some 55 other gross additional jobs as a result of visitor spend.[159]

5.2.3 The Natural Environment

- RSPB research conducted in 2011 into the direct impact conservation activities have on local employment and economic activity indicates that RSPB reserves across the UK support 1,872 FTE jobs (an 85% increase from 2002) and attract £66m in local expenditure (a 235% increase from 2002).[160]

- Work by the National Trust in the South West, North East, Cumbria and Wales which showed that 40% of employment in tourism 'depended on' a high quality environment, rising to 60%-70% in some rural areas.[161] Studies in Wales have focused on the impact of the Coastal and Marine Environment and of National Parks.[162]

- British Waterways studies of the Kennet & Avon, Forth & Clyde/Union Canal in Scotland, the Huddersfield Narrow Canal and the Rochdale Canal. The BW study of the Kennet & Avon Canal was updated in 2006 with the number of jobs dependent on the canal estimated at nearly 1,000.[163]

- Research has found that visitors to the canals in Wales give rise to some £34m expenditure per year along the canal corridors, supporting over 800 full-time equivalent jobs.[164]

- In 2010 the Countryside and Community Research Institute assessed the incidental socio-economic benefits of Environmental Stewardship (ES) schemes in England in order to identify their socio-economic impact on the wider local economy. In particular, the extent of local multiplier effects and employment creation as an indirect result of agri-environment expenditure.[165]

- Work by English Heritage and Defra that assessed the economic benefits to local businesses of farm building repairs funded through the Environmentally Sensitive Area scheme (ESA) in the Lake District.[166]

- A study for English Heritage and Defra on the public benefits of grant funded historic farm building and dry stone wall repairs in the Yorkshire Dales National Park has reported that funded work between 1998 and 2004 has injected between £7.08m and £9.12m into the local economy, with every £1 expenditure on repair work on buildings resulting in a total output within the wider local area of £2.48 (£1.92 for walling).[167]

5.2.4 Cross Sector

- HLF has undertaken detailed local economic impact study of 90 projects completed between 2003 and 2008 – ranging from Chatham Historic Dockyard to The Sunderland Museum and Winter Gardens, the new Time & Tide Museum in Great Yarmouth to the Playfair project at the National Galleries of Scotland, the Lowry in Manchester to ss Great Britain in Bristol – shows that, across all projects, HLF funding has led to a 96% increase in visit related spend in local economies and created 3,401 new local jobs. Together, these 90 places generate nearly £130m of spending for local businesses each year, and support over 4,800 local jobs.[168]

- VivaCity!, a study undertaken by Oxford Economic Forecasting for the City of London, looked at the economic impacts associated with the operation of 28 festivals and institutions that form the 'City Arts Cluster'. These include the Barbican, Tate Modern, St. Paul's, Tower of London, Museum of London, Guildhall Art Gallery and London Symphony Orchestra. It found that, in *gross* terms, the City Arts Cluster contributes £325m to UK GDP each year.[169]

- Research in 2010 investigating the social and economic impacts of Liverpool's experience as European Capital of Culture has found the city attracted 9.7 million additional visits, constituting 35% of all visits to the city in 2008. These visits generated an economic impact of £754m (additional direct visitor spend) across Liverpool, Merseyside and the wider North West region.[170]

- A less positive conclusion was reached by the What Works Centre for Economic Growth. It reported that findings from a systematic review of evaluations into the economic impact of major sporting and cultural events and facilities demonstrate that the overall measurable effects of projects on a local economy tend not to be large and are more often zero. Any wage and income effects are usually small and limited to the immediate locality or particular types of workers. Projects may have been associated with increased trade imports and exports, including tourism, although these effects may be short lived. However, facilities are likely to have a positive impact on local property prices. [171]

5.3 Places for business

Three studies since 2010 have looked at the overall role heritage plays within regeneration and economic development within modern town and city economies.

- A report by researchers at LSE tells the story of US and European cities that were once industrial giants but went into steep decline. It looks at how these cities recovered and explores their different approaches including: new-style city leadership and special neighbourhood programmes. The use of heritage and the maintenance of a distinctive local environment and economy are strongly highlighted in the report.[172]

- A report for *Heritage Counts 2010*, combines economic analysis with case study, survey and mapping work to help understand the specific role of the historic environment on economic activity, job creation and perceptions of local urban areas. Case studies are Regent Quarter Kings Cross; Newburgh Street, Westminster; New Road Brighton; the Barbican in Plymouth; the Market and Underbanks area of Stockport; and Stourport Canal Basins. Areas with strong historic character in these places were found to be the places where independent business, especially in leisure, retail and cultural industries preferred to locate.[173]

- This work was extended in a 2013 publication by the Heritage Lottery Fund and English Heritage: *New Ideas Need Old Buildings*. The study looked at the business occupation of historic buildings in the UK, and was produced in collaboration with Oxford Economics and Colliers International. The research matched existing figures for listed buildings with detailed economic datasets on business occupation. Extrapolating from the sample, the study found an estimated 130,000 businesses operating in listed premises, contributing £47bn to UK GDP and employing 1.4m people. Moreover, those businesses benefitted from a 'heritage premium' – an additional GVA of £13k (4.4%) above average per business based in an historic building.[174]

- Research by Colliers international showed that businesses located in a historic building have higher relative returns to investing compared to commercial buildings. A leading property company indicated that over 5, 10 and 30 years the annualised total return on listed offices has been higher than for offices overall[175].

Other research in this area can be divided into three:

1) The impact of regeneration projects in bringing buildings back into economic use.

- Examples of good evaluations here include HLF Townscape Heritage Initiative schemes in Glasgow[176] and Penryn[177] as well as HLF's evaluation of the Townscape Heritage Initiative.[178]

2) Improvements to public space making places more attractive for business.

- 'The Pedestrian Pound', a 2012 report commissioned by Living Streets, brings together evidence for the commercial and consumer benefits of good walking environments. The report argues that well-planned improvements to public spaces can have a significant impact on existing business performance (footfall and retail); urban regeneration (new business, rental income, employment, social exclusion etc.); and on improved consumer and business perceptions.[179]

- A 2007 CABE report, 'Paved with Gold', tested a method for calculating the extra financial value of good street design on 10 case study London high streets, using a design quality scoring system. Controlling for other variables, the research found direct links between street quality and both retail and residential prices.[180]

- CABE has also previously used research to show that:
    - Well-planned improvements to public spaces within town centres can boost commercial trading by up to 40% and generate significant private sector investment.[181]
    - Small businesses choosing a new business location rank open space, parks and recreation as a number one priority.[182]

- An impact study for the Norwich HEART Development plan – a scheme which plans to advance heritage redevelopment in the city – has predicted that one project that plans to invest £11m in developing St Andrews Hall as a regional hub would yield a return of £166m after ten years, Another project to invest £495,000 in public realm and retail space improvements in the 'Lanes' area of Norwich was calculated to have an anticipated return of £16.68m over the same period.[183]

- Similarly, British Waterways has undertaken work which attempts to assess the impact of waterway environmental improvements on commercial property markets. Though no link can be made with commercial rents, waterside locations – particularly in city centres such as Birmingham, Leeds, Manchester and London – have been found to provide a 'unique selling point' for new development which unifies separate components can bring development to market more quickly.[184] British Waterway's report on the economic impact of water development schemes was completed May 2007.[185]

3) How heritage and other cultural facilities can make places appealing for businesses to be based.

- Some studies have attempted to show how heritage / culture can contribute to civic pride / cultural draw and creative workers. This has often been wrapped up with the impact of iconic buildings such as Tate Modern, Peckham Library, the Sage Centre in Gateshead.[186] However, there is no substantive UK evidence in this field to date.

- A potentially interesting area of new research is to look at how the activities of cultural institutions in support of local business can contribute to networks of public / private interaction leading to enhanced productivity. An indication of the scale of impact here is suggested by a University of Northumbria study cited by Demos which found 62% of neighbourhood renewal and social inclusion projects surveyed had a museum involved in their delivery; 41% a library and 21% an archive.[187]

5.4 Economic security

Research in this area focuses on the hypothesis that investment in heritage has an economic benefit by reducing costs to society. Much of this work uses an ‘Ecosystem services’ approach that considers the benefits to people and society that are provided by the natural world – habitats and species – and by natural processes of the atmosphere and water cycle.

A review by Natural England[188] noted that, “Economic security is not as widely discussed as economic growth, but is at least as important. Economic security is about planning to ensure that the economy is resilient in the face of potential shocks which could significantly undermine it” (p7).

Three pieces of work that review research in this area are:

- The ‘Microeconomic Evidence for the Benefits of Investment in the Environment’ review, produced by Natural England. This includes sections on water, food and resources; flooding; heat and air pollution as well as health.[189]

- Defra and Natural England commissioned a 2013 report to assess how investment in green infrastructure links to economic activity, based on the available evidence. The review is structured around six logic chains, one of which relates to environmental cost saving.[190]

- A review by BOP Consulting for the City of London Corporation draws together evidence for the economic value of green spaces. The four categories used by BOP include cost savings for government related to environment expenditures as well as health expenditures.[191]

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