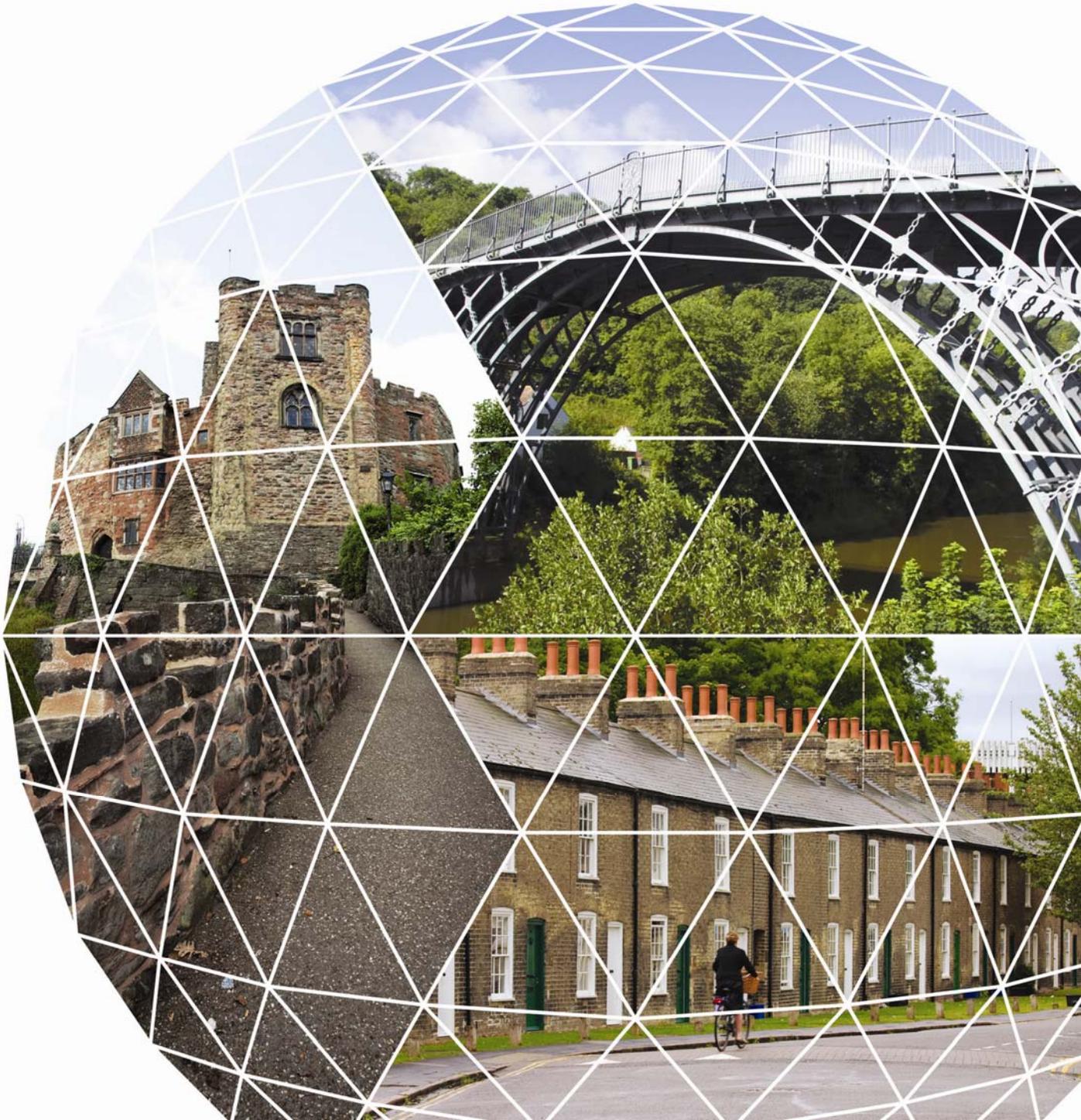


The Economic Impact of Maintaining and Repairing Historic Buildings in England

A Report to the Heritage Lottery Fund and English
Heritage - March 2012



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1.0 Introduction

This report presents the findings of research undertaken by Ecorys¹ on behalf of the Heritage Lottery Fund (HLF) and English Heritage (EH) to develop estimates of the *economic impacts of maintaining and repairing historic buildings in England*.

1.1 Scope of Study

A number of recent national-level studies, undertaken in Scotland, Wales and Northern Ireland (as well as the Republic of Ireland), have sought to develop estimates corresponding to the economic value of the heritage sector within different parts of the UK. In providing estimates these studies have typically adopted a three-fold distinction between impacts relating to the management of core sector organisations; those connected to heritage-based tourism; and impacts linked to repair and maintenance of the historic building fabric.

Notwithstanding a separate study into the value of the heritage-based tourism economy, it is notable that from an England perspective there remain significant gaps in respect of the economic impacts of the heritage sector: specifically, those components of impact associated with core heritage organisations and the repair/maintenance of the historic building stock.

Though significant, impacts relating directly to core sector organisations have been found to represent the smallest of the three principal impact categories adopted in the aforementioned national analyses. Recognising this position, the main objective of the current study is therefore directed at developing estimates for the most substantive missing component: the economic impact, in England, associated with the repair and maintenance of the historic building stock. Additionally, in reviewing existing estimates produced for Scotland, Wales and Northern Ireland, where practicable we seek to update these and combine with impact evidence for England for the purposes of compiling a UK-wide estimate.

1.2 Built Heritage Construction Impacts

A schematic representation of the economic impacts associated with the built heritage sector is presented in Figure 1.1 (below). In summary:

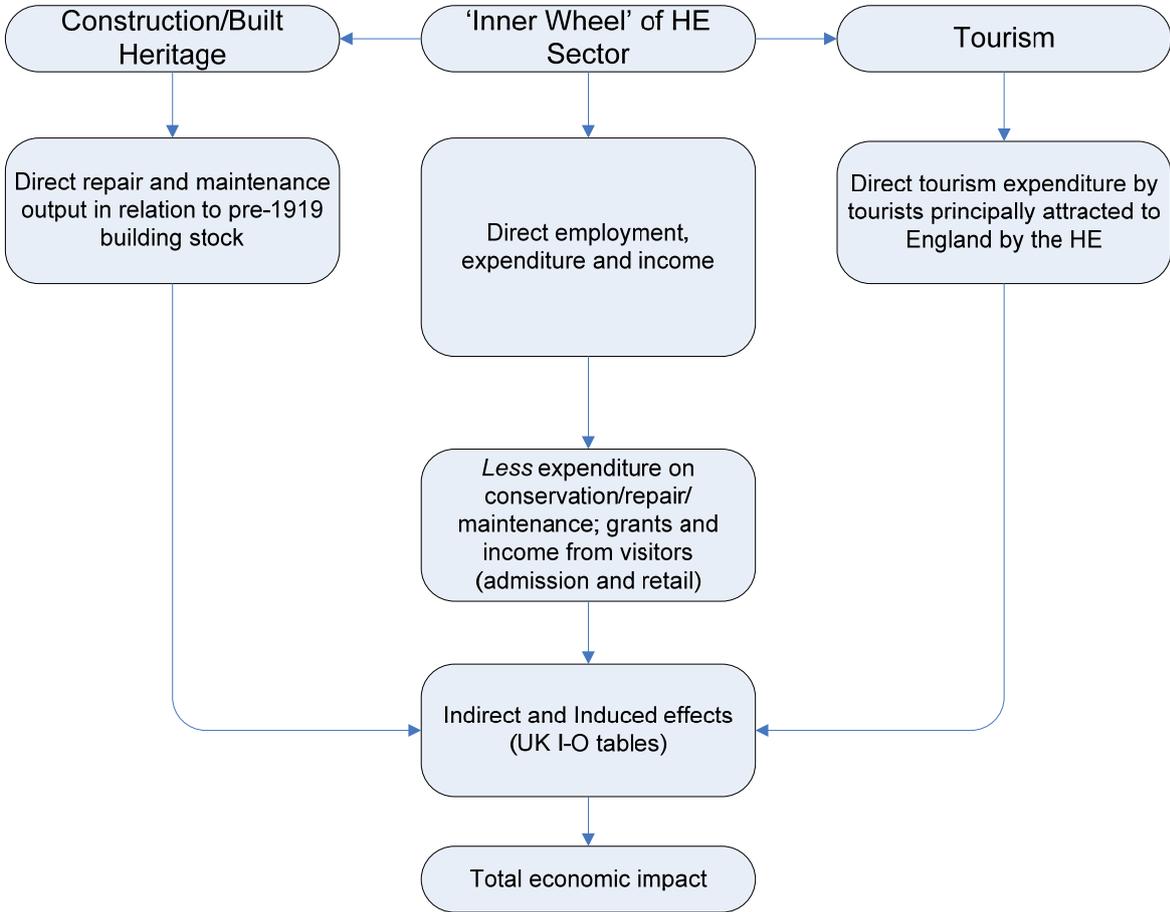
(1) The *'inner wheel'* of core heritage sector organisations comprises those bodies whose principal *raison d'être* is the conservation of the historic environment - including for example English Heritage, the Heritage Lottery Fund, the National Trust and relevant sections of local authorities. Expenditure by the sector's 'inner wheel' on conservation-related activities - either directly or in the form of grant awards - serves as an economic stimulus and, in turn, is translated into economic impacts within the wider economy.

(2) *Tourism* expenditure attributable to the historic environment represents an important category of overall economic impact, with the range and quality of England's built heritage for example representing a powerful motivating factor for people's decisions to visit, to wider tourism and related visitor expenditure.

¹ Formerly ECOTEC Research and Consulting

(3) *Construction*-related impacts, a third category of impact and the specific focus for this assignment, can be expected to comprise a major share of total economic impacts associated with built heritage, with substantial amounts of money - private and public - spent each year on maintaining and conserving England's endowment of historic buildings and structures.

Figure 1.1 Economic Impact Components: England's Built Heritage



Source: Ecorys (2012)

1.3 Methodology

This is a desk-based study which has involved review and analysis of relevant data, documentary sources, and commissioned research in other UK nations, supplemented as applicable by a number of sector consultations.

The approach to estimating economic impact is rooted in analysis of available construction industry data to develop estimates of the expenditure directed at the repair and maintenance (R&M) of the building stock. The share of the building stock attributable to the historic environment defined on the basis of those structures which date from the pre-1919 period. Multipliers (indirect and induced effects) are estimated using the input-output tables produced by the Office for National Statistics (ONS).

However, reflecting the fact that construction work specifically related to the built heritage does not fit neatly into traditional industry classifications, there are few directly observable values concerning the size and importance of the sector in terms of output and associated employment. For these reasons it is necessary in making reference to available data on total construction output to combine this with informed assumptions in respect of the share of overall output that may be attributed to the built heritage sector.

1.4 Structure of Report

The remainder of this report is structured as follows:

- *Section 2: Economic Impact of the Built Heritage Construction Sector: England* - extends methodological procedures utilised in existing analyses of the heritage sector to develop a set of estimates for that component of economic impact associated specifically with the repair and maintenance of historic buildings in England.
- *Section 3: Economic Impact of the Built Heritage Construction Sector: UK* – reviews and updates the results of previous national level studies conducted in Scotland, Wales and Northern Ireland, and combines this data with the England level analysis developed for this project as the basis for a UK wide assessment of the economic impact of the built heritage construction sector.
- *Section 4: Summary Conclusions:* brings together the results of our analysis and presents a set of summary findings and key conclusions.

2.0 Economic Impact of the Built Heritage Construction Sector: England

In this section we develop estimates for the value of the built heritage construction sector in England. In undertaking this analysis we consider, in turn, definition and coverage of built heritage assets at the national level, the scale and composition of the construction industry, and that proportion of aggregate repair and maintenance expenditure which can be attributed to the built heritage construction sector. Having derived estimates of the value of the sector at the national level, we also go on to develop a set of related estimates for the English regions.

2.1 Defining the Built Heritage Sector

Heritage is a diverse and complex sector with a plethora of specialist interests reflecting the richness and diversity of the assets which it comprises. More specifically, heritage can usefully be seen as comprising of sets of 'assets', which may be further grouped into a number of inter-related categories, but especially: (1) built environment (including historic buildings, monuments and townscapes); (2) archaeological (sites and landscapes); (3) cultural (museums, archives and libraries); and (4) natural (heritage landscapes, scenic and coastal areas).

For the purposes of this assessment, and reflecting as far as practicable definitions used in existing studies, our analysis is focused specifically on the *built heritage* components of a wider definition of the heritage or historic environment sector.

England's built heritage is comprised of sets of built heritage 'assets' – those which are statutorily protected, together with components of the broader built heritage. While designation (including the listing of buildings and scheduled monuments) seeks to identify the most notable built heritage elements so that their significance is recognised, it is important to recognise that there is a considerable stock of buildings and structures in England which have not been formally designated but which nonetheless make a valuable contribution to the local historic environment and typically face similar conservation and maintenance issues to 'protected/ scheduled structures'. For example, the repair and maintenance of these buildings often requires the use of traditional building materials, and labour possessing traditional craft skills (such as stonemasons etc.). It has been estimated that there are around 5 million surviving buildings in England that were constructed prior to 1919².

The use of 1919 as a widely accepted definitional component for the broader built heritage is rooted in the assertion that up to 1919 most houses in the UK were built by skilled craftsmen using traditional indigenous building materials. Although the majority of older buildings are not listed/ statutorily protected, many provide flexible domestic and office accommodation, and major investment in money, energy and materials is embodied in these structures. Reflecting these criteria, England's built heritage is defined for the purposes of this study as comprising the stock of built heritage assets which is statutorily protected, together with components of the broader (pre-1919) built heritage.

² Traditional Building Craft Skills (England report), 2008, National Heritage Training Group (NHTG) – alongside many studies focusing on Great Britain, this report uses 1919 as a milestone date for historic buildings.

2.2 Scale and Composition of England's Built Heritage

In order to better understand the nature of construction-related impacts attributable with England's built heritage it is necessary to obtain an appreciation of the source of potential demand, namely, the scale and composition of historic buildings and structures.

According to the latest figures publicly available from English Heritage (2011³), there are in excess of some 375,000 listed building entries alone in England. This is itself likely to be an underestimate of the actual number of listed buildings as one entry can contain more than one building (such as an entire terrace of houses), with perhaps something in the region of 500,000 individual buildings being covered in total. Official figures also indicated some 9,800 conservation areas⁴, though they are unable to provide meaningful estimates of the numbers of individual buildings included within these conservation areas (as is the case with certain other categories of historic buildings – such as within national parks and vernacular buildings). Consequently, it is better to consider them within the context of England's wider heritage of traditional buildings, a broader group which comprises the vast majority of historic buildings.

The basic data source covering domestic buildings is the English Housing Survey (EHS⁵). Latest available figures, for 2010, indicate that there are some 4,865,000 pre-1919 dwellings in England, or approximately 22% of the total housing stock⁶. This figure represents an increase on estimates reported for earlier years, and may well reflect continuing sub-division of existing pre-1919 houses into flats/ apartments as well as conversions of pre-1919 industrial/ commercial buildings into dwellings.

In addition to domestic buildings, the number of historic (pre-1919) commercial and industrial buildings must also be taken into account in considering England's built heritage stock. However, given that official surveys undertaken since 2000 have ceased to note the age of non-domestic properties, available statistical estimates are now somewhat dated. These suggest approximately 552,000 individually rated commercial properties (or 'hereditaments' in technical parlance) dating from before 1919⁷.

In total therefore, it can be estimated that there are a little over 5.4 million traditional buildings in England⁸, all of which require specialist knowledge and skills if they are to be maintained and repaired in good order. Plainly, this constitutes a very substantial volume of potential demand for traditional building craft skills and material inputs (Table 2.1).

³ Heritage Counts 2011, English Heritage

⁴ *ibid*

⁵ Previously covered by English House Condition Survey (EHCS)

⁶ English Housing Survey: Headline Report 2010-11

⁷ Traditional Building Craft Skills in England, 2005, NHTG

⁸ This estimate covers the stock of buildings dating from the pre-1919 period but does not include the relatively small number of listed buildings which date from the post 1919 period (which only account for between 1-2% of all listed buildings according to English Heritage). This is because it would be problematic to accurately attribute any additional R&M construction output to this small number of additional structures. This approach is also consistent with that used in similar studies of Wales and Scotland.

Table 2.1 Built Heritage: Domestic and Non Domestic Structures (England)

Structures	
Domestic (dwellings)	4,865,000
Non-domestic (hereditaments)	552,000
Total	5,417,000

Source: Ecorys analysis; based on EHS, Valuation Office data

2.3 Built Heritage-Related Construction: England

Reflecting the scale and composition of England's endowment of historic buildings and structures highlighted above, substantial amounts of private and public expenditure are directed every year at maintaining and conserving the nation's built heritage. However, reflecting the fact that construction work specifically related to the built heritage does not fit neatly into traditional industry classifications, information concerning the size and importance of the sector is limited. For these reasons it is necessary to make reference to available data on total construction output in combination with informed assumptions in respect of the share of overall output that may be attributed to the built heritage sector.

Based on publically verified data the total value of the construction industry in England as of 2010 was £99.5 billion. Of this total output it is estimated that some £36.6 billion (equivalent to 37%) corresponds to elements associated with repair and maintenance (R&M) (2010 figures)⁹. Industry figures further indicate that construction output associated with repair and maintenance of residential properties accounted for more than one-half of total R&M construction output in England, £19.3 billion (53%).

As noted above, based on EHS data it is estimated that in the order of 22% of the total housing stock in England dates from the pre-1919 period. Under a situation whereby the share of residential construction R&M was entirely proportionate to the age of the building stock, the pre-1919 residential building stock would theoretically account for 22% of this total. However, in reality, it is highly likely that historic pre-1919 structures will account for a disproportionate share of overall R&M expenditure, with this reflecting their comparative age and anticipated upkeep requirements. Indeed, empirical evidence from Scotland would tend to support this assertion¹⁰.

Given this standpoint, and reflecting the empirical evidence noted above, we have used a 1.5 weighting factor (i.e. 22% of the residential building stock accounts for approximately 33% of overall residential R&M expenditure) as a reasonable, if conservative, estimate of the relative share of overall residential R&M that may be attributed to the pre-1919 building stock. Under this calculation England's stock of historic residential buildings accounts for approximately £6.3bn of residential R&M output.

⁹ Construction Statistics Branch, ONS

¹⁰ Research on Scotland's built heritage has suggested that some 40% of the total patch repair bill is related to pre-1919 buildings, with these structures accounting for 20% of the residential building stock (source: Scottish House Condition Survey)



Turning to non-residential structures (commercial/ industrial/ public) the total value of R&M connected to non-residential structures is estimated at some £11.5 billion (excluding infrastructure works)¹¹. As with residential stock, it can be expected that a significant proportion of this non-residential R&M output relates to historic buildings. Available Valuation Office Agency (VOA)/ Department for Communities and Local Government (DCLG) data would tend to confirm this view, suggesting that in the order of one-half (51%) of the commercial and industrial stock in England is comprised of pre-1940 buildings (the proportion that relates to pre-1919 buildings is not known).

Making appropriate allowance for those additions to stock which resulted from the inter-war period building boom, but recognising that the above stock estimate does not include public buildings, for analysis purposes we have assumed that in the order of two-fifths (38%) of overall non-residential R&M expenditure (excluding infrastructure works) represents a reasonable working assumption as to the relative share of non-residential R&M expenditure that may be attributed to the historic environment. This is predicated on evidence that pre-1919 buildings account for one-half of the pre-1940 non-residential building stock (as above), with a similar 1.5 weighting factor as for residential building stock applied to account for the disproportionate share of overall R&M expenditure likely to be attributable to pre-1919 buildings. Consequently, it can be estimated that England's built heritage sector accounts for approximately £10.6bn of total national construction output (Table 2.2).

Table 2.2 Built Heritage Construction Sector Output (2010), £m

Sector	£m
Residential	£6,271
Non-residential	£4,354
Total	£10,625

Source: Ecorys analysis; based on EHS, VOA/ DCLG and ONS data

The direct GVA effect associated with this level of output (expenditure) can be calculated on the basis that GVA accounts for some 38.8% of total output in the construction sector (UK input-output tables, 2005). Similarly, the direct employment effect may be derived on the basis of applying sector specific employment coefficients (18 construction jobs are generated for every £1m of output (2010 prices))¹². By way of further refinement construction 'jobs' can be converted into full-time equivalent (FTE) positions using available evidence on the composition of the workforce in the construction sector¹³ - full-time (1 FTE) and part-time employees (0.5 FTE).

Multiplier effects arising as a result of this output associated with built heritage construction can be calculated by reference to the UK input-output tables (2005)¹⁴. The output multiplier for the Construction sector, as presented in the input-output tables, is estimated at 2.41 (adjusted to reflect both indirect and induced effects¹⁵). While a

¹¹ Non-residential structures include factories, warehouses, schools and colleges, universities, hospitals, offices, entertainment establishments, shops, etc. 'Infrastructure' in this case relates to utility and transport structures.
¹² National Heritage Training Group (2008) Traditional Building Craft Skills: Reassessing the Need, Addressing the Issues. The original estimate, namely 23 workers per £1m output (2000 prices), has been suitably adjusted for inflation.
¹³ Business Register and Employment Survey, 2010 (England)
¹⁴ The UK input-output tables are used here as a representative proxy for England; an overwhelming share of economic output/ GDP in the UK is accounted for by England.
¹⁵ The output multipliers provided by ONS cover direct and indirect effects only (Type I), and therefore serve to underestimate the fuller effect on the wider economy. For the purposes of this report, and referencing multipliers

similar estimate is not available for the desired employment and GVA multipliers, we have used an approximation based on the multipliers developed for the Construction sector in Scotland. In summary:

$$\text{(Output multiplier in the UK / Output multiplier in Scotland) * GVA multiplier in Scotland}$$

$$\text{(Output multiplier in the UK / Output multiplier in Scotland) * employment multiplier in Scotland}$$

Such multipliers may then be applied to the values corresponding to direct effects to produce estimates of total economic impact for the built heritage construction sector in England.

Table 2.3 Built Heritage Construction Sector: Economic Impacts

	Direct	Indirect/ induced	Multiplier	Total
Output (£m)	10,625	14,978	2.41	25,603
Employment (FTE)	181,146	311,611	2.72	492,757
GDP (£m)	4,125	6,840	2.66	10,965

Source: Ecorys analysis, incorporating UK Input-Output tables

In summary:

- Including indirect and induced effects, it is estimated that the built heritage construction sector in England supports approaching 500,000 FTE jobs.
- In terms of contribution to national income, England's built heritage construction sector is estimated to account for some £10 billion in GDP.

2.4 Built Heritage-Related Construction: Regions

By employing a similar methodology as that established above, it is also possible to derive indicative estimates for the value of the built heritage construction sector for each of the nine regions in England.

Based on the total R&M expenditure in each of the regions, and applying similar methodological assumptions as for the national-level analysis, estimates for R&M expenditure associated with the built heritage can be calculated as follows (Table 2.4):

developed for the Construction sector in Scotland, we have derived the Type II multiplier as follows: ONS Type I multiplier (2.11)*the ratio between the Type II Construction sector multiplier(1.94) and the Type I Construction sector multiplier in Scotland (1.70) = 2.41.

Table 2.4 Built Heritage Sector: Construction Output (English Regions)

	Residential R&M Construction Output (£m)	Non-Residential R&M Construction Output (£m)	Total R&M Construction Output (£m)
South West	687.4	265.5	952.9
South East	1,283.2	811.5	2,094.8
London	984.2	889.5	1,873.8
East of England	946.8	415.1	1,362.0
East Midlands	447.4	321.1	768.5
West Midlands	508.2	465.0	973.1
Yorkshire & Humber	573.1	468.3	1,041.4
North West	622.4	580.7	1,203.2
North East	218.7	136.9	355.6
<i>England</i>	<i>6,271</i>	<i>4,354</i>	<i>10,625</i>

Source: Ecorys analysis; based on EHS, VOA/ DCLG and ONS data

N.B. sum may not add up to the total due to rounding.

The direct employment and GVA effects associated with these levels of construction output in the regions can be similarly derived using the same assumptions as applied to the national-level analysis (Table 2.5):

Table 2.5 Built Heritage Construction Sector: Direct Effects (English Regions)

	Direct Output (£m)	Direct Employment (FTE)	Direct GDP (£m)
South West	953	16,245	370
South East	2,095	35,713	813
London	1,874	31,945	727
East	1,362	23,220	529
East Midlands	769	13,102	298
West Midlands	973	16,590	378
Yorkshire & Humber	1,041	17,754	404
North West	1,203	20,513	467
North East	356	6,063	138
<i>England</i>	<i>10,625</i>	<i>181,146</i>	<i>4,125</i>

Source: Ecorys analysis

N.B. sum may not add up to the total due to rounding.

In the absence of specific multiplier information at the regional level, the total value of the built heritage construction sector to each of the English regions may be calculated on the basis of relative share of direct impacts (Table 2.6):

Table 2.6 Built Heritage Construction Sector: Total Economic Impacts (English Regions)

	Total Output (£m)	Total Employment (FTE)	Total GDP (£m)
South West	2,296	44,191	983
South East	5,048	97,148	2,162
London	4,515	86,898	1,934
East	3,282	63,163	1,406
East Midlands	1,852	35,640	793
West Midlands	2,345	45,129	1,004
Yorkshire & Humber	2,509	48,296	1,075
North West	2,899	55,799	1,242
North East	857	16,492	367
<i>England</i>	<i>25,603</i>	<i>492,757</i>	<i>10,965</i>

Source: Ecorys analysis. N.B. sum may not add up to the total due to rounding.

Perhaps unsurprisingly, and measured both in absolute and relative terms, the scale of the built heritage construction sector would appear most pronounced in the three regions comprising the Greater South East – namely, the South East, London and the East of England.

3.0 Economic Impacts of the Built Heritage Construction Sector: UK

In this section we look to review and update the results of previous national level studies - conducted in Scotland, Wales and Northern Ireland¹⁶ - and apply this data to the England level analysis developed for this project as the basis for a UK wide assessment of the economic impact of the built heritage construction sector.

3.1 Built Heritage Construction Sector: Scotland

In 2008, Ecorys (then ECOTEC Research and Consulting) undertook research directed at establishing the economic impact of the historic environment in Scotland on behalf of the Historic Environment Advisory Council for Scotland (HEACS)¹⁷. An important component of the analysis related to the built heritage construction sector. Specific findings in respect of the built heritage construction sector included:

- Approximately £3.6 billion of total Scottish construction industry output was spent on R&M of housing and other infrastructure (as of 2006).
- An estimated 40% of R&M expenditure on housing was attributable to pre-1919 buildings, with some 20% of R&M expenditure on other infrastructure also attributable to the historic environment.
- Scotland's built heritage construction sector was estimated to account for approximately £1.1 billion (2007 prices) of R&M output, representing some 10,500 FTE employees and some £500 million in respect of GVA.
- Including indirect and induced effects, it was estimated that the built heritage construction sector supported some 20,000 FTE employees in Scotland, with this representing some £1 billion to Scotland's national GVA.

3.2 Built Heritage Construction Sector: Wales

A similar study was conducted by Ecorys with respect to the heritage sector in Wales¹⁸. Specific findings in respect of the built heritage construction sector advanced in this work included:

- Approximately £1.4 billion of total Welsh construction industry output related to R&M of buildings (as of 2008).
- Some 43% of R&M expenditure was estimated to relate to pre-1919 buildings, valuing the Welsh built heritage construction sector at approximately £620 million (2009 prices); with this representing some 7,500 FTE jobs and approaching £240 million in terms of GVA.
- Including indirect and induced effects, the built heritage construction sector supported approaching 13,400 FTE jobs in Wales, with this contributing some £450 million to Wales' national GVA.

¹⁶ At the time of writing the results of a national level impact analysis of the heritage sector in Northern Ireland had not been finalised.

¹⁷ Economic Impact of the Historic Environment In Scotland, 2008, ECOTEC

¹⁸ Valuing the Welsh Historic Environment, 2010, ECOTEC

3.3 Built Heritage Construction Sector: Northern Ireland

While an impact study on the historic environment in Northern Ireland is currently in the process of being undertaken on behalf of the Department of the Environment, we understand that results are still being finalised and consequently these have not been made available for the purposes of this research. Given this position, we have sought to develop our own indicative analysis of the impact of the built heritage construction sector in Northern Ireland.

Based on data contained in the Northern Ireland Construction Bulletin (2012)¹⁹, it is estimated that approximately £630 million of total Northern Irish construction industry output (£2.6 billion) was attributable to repair and maintenance (R&M) as of 2010.

By making reference to figures corresponding to the structure of the Northern Irish building stock – specifically, the residential building stock – provided under the most recent (2009) Northern Ireland House Condition Survey²⁰, it is possible to further estimate that component of R&M construction output that is accounted for by historic buildings. According to the 2009 House Condition Survey just over 14% of Northern Ireland's stock of residential dwellings comprises structures built pre-1919.

With construction output (2010) associated with residential R&M estimated at roughly £257 million, and on the assumption that the share of residential construction R&M were entirely proportionate to the age of the building stock, the pre-1919 residential building stock would theoretically account for 14% of this total. However, as we have argued elsewhere in this report the likely reality is that that historic (pre-1919) structures will account for a disproportionate share of overall R&M expenditure, with this reflecting their comparative age and associated upkeep requirements. Again, we would point to empirical evidence from Scotland which tends to support this assertion²¹.

Given this standpoint, we would suggest that a 1.5 weighting factor (i.e. 14% of the residential building stock accounts for approximately 22% of overall residential R&M expenditure) represents a reasonable, if conservative, estimate of the relative share of overall residential R&M that may be attributed to the pre-1919 building stock²². Under this calculation Northern Ireland's stock of historic residential buildings account for approximately £56 million of total residential R&M output.

Whilst a similar estimate is not readily available for non-residential R&M, it can be expected that this will be appreciably lower, particularly on account that major infrastructure such as roads and bridges are included in this category. For analysis purpose therefore, we have assumed that in the order of 11% of non-residential R&M expenditure – or one-half that proportion assigned to residential R&M – may be reasonably attributed to the historic environment. Consequently, it can be estimated that Northern Ireland's built heritage construction sector accounts for approximately £96 million or some 3.7% of total national construction output.

¹⁹ Northern Ireland Construction Bulletin: Output in the Construction Industry – Q3 2011 (January 2012)
<http://www.csu.nisra.gov.uk/niconsq32011.pdf>

²⁰ http://www.nihe.gov.uk/northern_ireland_house_conditions_survey_2009_-_main_report.pdf

²¹ Scottish House Condition Survey 2002 – National Report, Communities Scotland and the Scottish Executive)

²² Research on Scotland's built heritage has shown that 40% of the patch repair bill is related to pre-1919 buildings, whilst accounting for 20% of the residential building stock (source: Scottish House Condition Survey 2002 – National Report, Communities Scotland and the Scottish Executive)

Multiplier effects arising as a result of this construction sector output may be calculated on the basis of the UK input-output tables²³, together with supporting research on sector specific employment coefficients²⁴. Composite impacts accruing from the construction-related expenditure of Northern Ireland's historic environment are presented in the table below:

Table 3.1 Built Heritage Construction Sector: Economic Impacts

	Direct	Indirect/ induced	Multiplier	Total
Output (£m)	95.8	108.3	2.13	204.1
Employment (FTE)	1,633	2,294	2.40	3,928
GDP (£m)	37.2	50.2	2.35	87.4

Source: Ecorys analysis, incorporating UK Input-Output tables

In summary:

- Including indirect and induced effects, it is estimated that the built heritage construction sector supports approaching 4,000 FTE jobs in Northern Ireland.
- In terms of national income, construction output attributable to built heritage is estimated to contribute in the order of £87 million to Northern Ireland's GDP.

3.4 Composite Assessment: UK

By bringing together the results of these national studies with the impact analysis developed for England (see chapter 2) it is possible to present a composite assessment for the built heritage construction sector in the UK. While we have sought to update and standardise the results presented in Table 3.2 as far as reasonably practicable, it should of course be recognised that each of the national studies effectively comprised 'stand-alone' assessments and some caution should therefore be exercised in comparing and interpreting summary results.

Table 3.2 Built Heritage Construction Sector: Total Economic Impacts

	England	Wales	Scotland	N Ireland	UK
Output (£m)	25,603.4	1,081.0	1,937.3	204.1	28,825.8
Employment (FTE)	492,757	13,433*	20,350*	3,928	530,468
GDP (£m)	10,965.0	433.1	928.9	87.4	12,414.4

Source: Ecorys analysis, expressed in 2010 prices

*a broader estimate of employment effects was used in these studies (i.e. for construction sector as a whole); estimates in England and Northern Ireland provide a more accurate employment coefficient that directly relates to the trades relevant for historic buildings, with such trades tending to be more labour intensive when compared to the construction sector as a whole.

²³ Making the Economic Case for Construction (2011) Centre for Economic and Business Research Ltd for UK Contractors Group

²⁴ Traditional Building Craft Skills: Ireland 2009, National Heritage Training Group

In summary:

- Including indirect and induced effects, it is estimated that the built heritage construction sector supports more than 530,000 FTE jobs in the UK overall.
- In terms of national income, construction output attributable to built heritage is estimated to contribute in the order of £12 billion to UK GDP.

4.0 Summary Conclusions

In this concluding section we bring together the results of our analysis and present a set of summary findings and key conclusions.

4.1 Built Heritage Construction Impacts

Construction-related impacts, the specific focus for the analysis underpinning this report, comprise a major share of overall economic impacts associated with built heritage, with substantial amounts of money - private and public - spent each year on maintaining and conserving England's endowment of historic buildings and structures.

Our key findings may be summarised as follows:

- The built heritage construction sector is a highly significant contributor within the context of the wider national economy, directly supporting in the order of 180,000 FTE jobs. Including indirect and induced effects, it is estimated that the scale of economic impact attributable to the built heritage construction sector in England supports approaching 500,000 FTE jobs.
- In terms of contribution to national income, England's built heritage construction sector is estimated to account for some £11 billion in GDP.
- Broken down by region, our analysis suggests that the scale of the built heritage construction is most marked in the three regions that make up the Greater South East – namely, the South East, London and the East of England.
- Combining the results of our impact analysis for England with revised figures developed under separate analyses for Scotland, Wales and Northern Ireland, indicates a composite value for the UK's built heritage construction sector equivalent to almost £12.5 billion in respect of GDP.

4.2 Some Implications

In presenting the results of this analysis it is to be hoped that these findings will afford policy makers and practitioners with a stronger appreciation of the scale of economic impacts that may be rightly attributed to the built heritage construction sector in England and the UK. The value of the nation's built heritage as an economic resource has often been misunderstood and frequently underplayed - in part a factor of acknowledged difficulties of valuing activities that do not fit neatly into traditional sector classifications or for which there are few directly observable values.

Within a context of scarce resources and enhanced scrutiny of public expenditure stronger evidence is desirable in order to better demonstrate the specific nature and scale of economic impacts attributable to heritage. It follows that establishing economic impacts should be seen as a critical step towards greater acceptance and understanding of the need for regular investment and maintenance, and in order to more fully realise the potential value of the nation's heritage assets. While the greater part of investment in the historic environment

comes from private sector businesses and individuals, it should be recognised that public funding – whether directly or in the form of grants - often serves as a critical enabler or catalyst to wider investment in the historic environment, and as a mechanism for inducing private sector resources and further unlocking the scale of economic benefits embodied in built heritage assets.

The built heritage construction sector accounts for a major share of the total economic impact associated with heritage buildings and structures, with expenditure directed at the repair and maintenance of this fabric in turn making a very significant contribution to sustaining major elements of England's construction sector – a wider industry which continues to face notably challenging conditions. Moreover, and as the National Heritage Training Group and others have persuasively argued, if this investment were to decrease, then there is a real possibility that a component share of these higher value-added construction jobs, and associated traditional building craft skills, could be at risk.

Annex One: Glossary of Technical Terms

Direct impact – refers to expenditure and associated employment within the construction sector arising as a consequence of built heritage repair and maintenance expenditure relating to historic assets.

GDP (Gross Domestic Product) - represents a measure of the total economic activity in a nation/ region. It is equal to output excluding the intermediate inputs, and represents national income (wages and profits).

Indirect impact – refers to purchases of inputs made by firms that are supplying goods and services to the built heritage construction sector.

Induced impact – refers to those impacts which accrue in the economy as a result of increased income and spending by people who work in the built heritage construction sector, together with those businesses that supply goods and services to these sectors.

Input – Output - The UK Input-Output (I-O) framework breaks the economy down to display transactions of all goods and services between industries and final consumers for a single year. I-O tables are used by economists for modelling and analytical purposes.

Multipliers - A multiplier measures the further downstream economic activity, (whether output or jobs), resulting from the creation of additional national/ regional economic activity.

Output - the amount of production, including all intermediate goods purchased as well as value added. Output can also be thought of as turnover or supply.