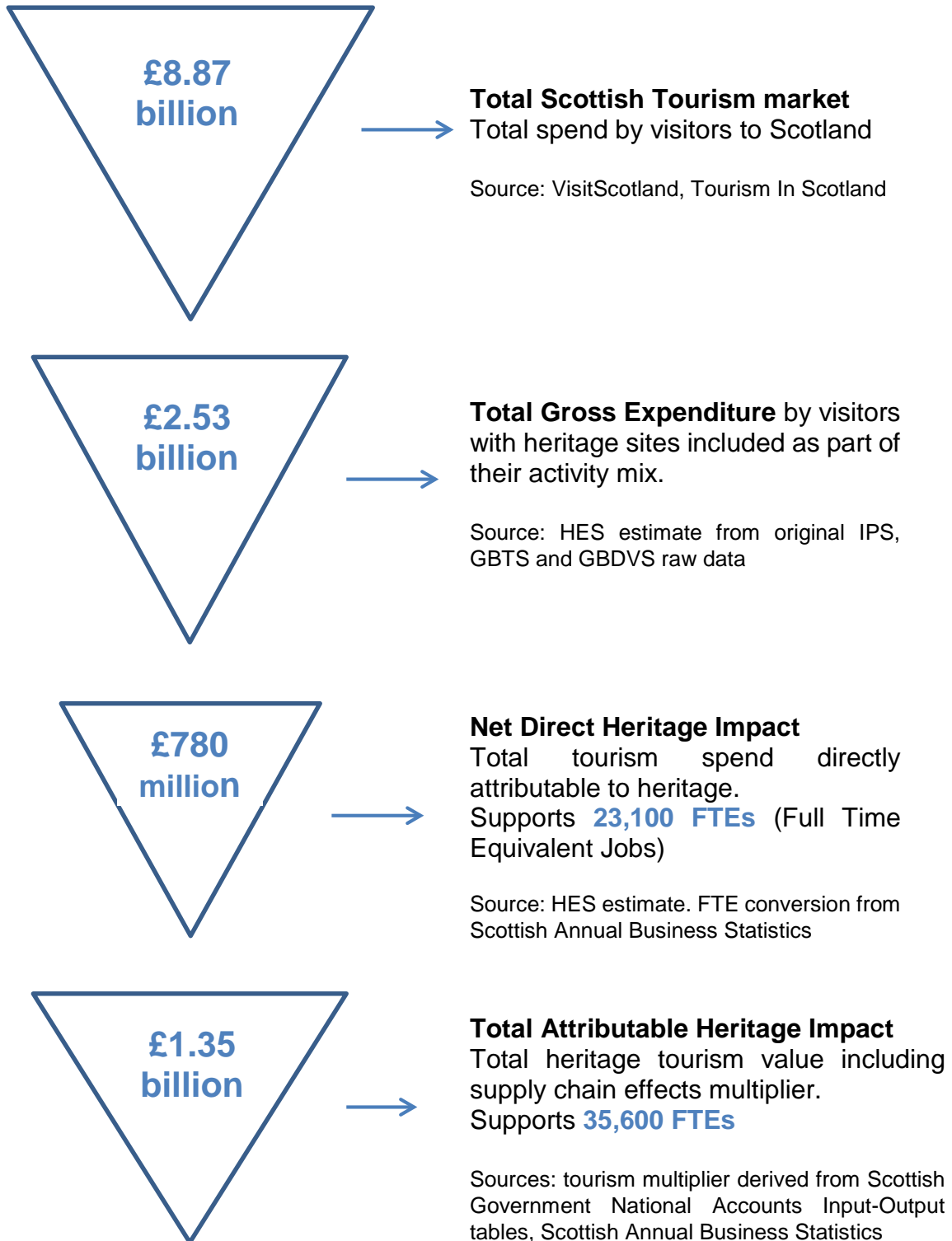
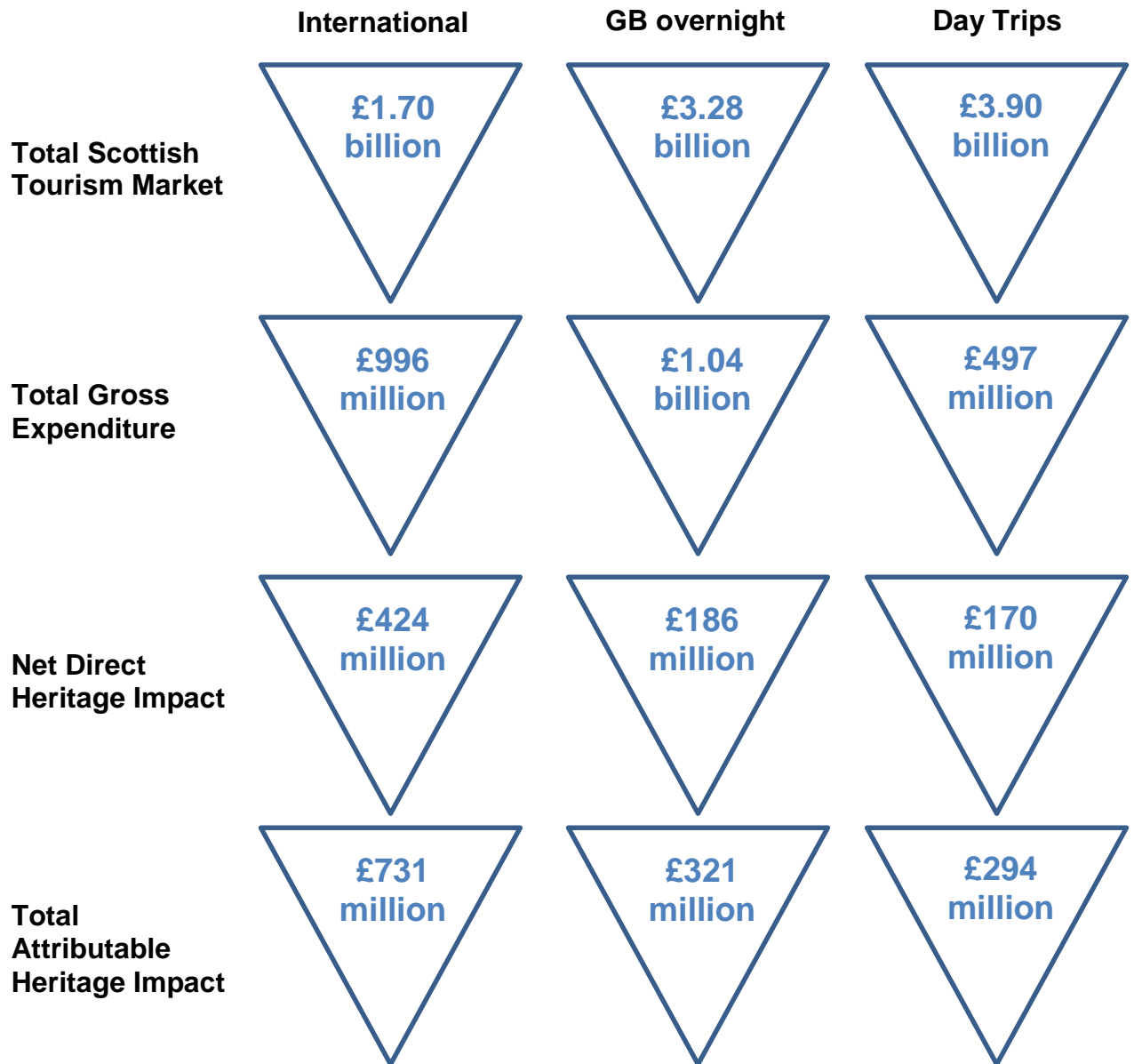


The Economic Impact of Heritage Tourism

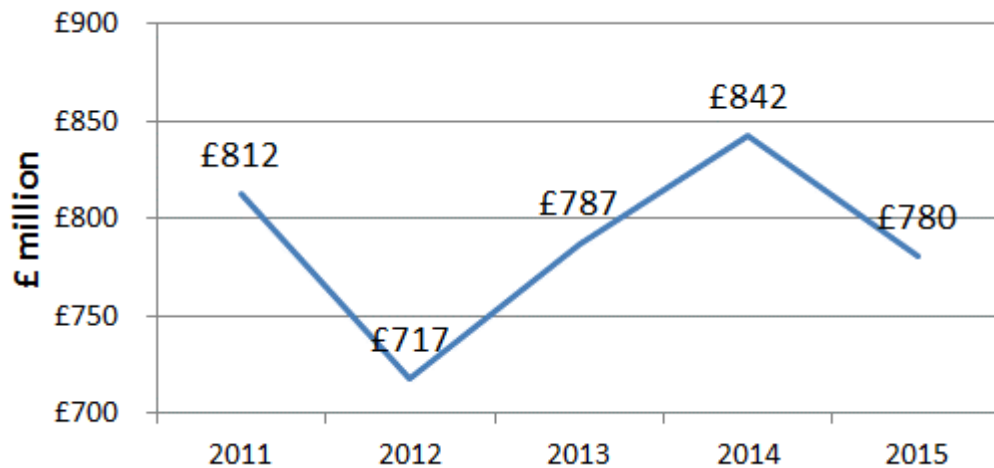
2015 Estimate - Summary



2015 Estimate – Breakdown by Visitor Type



Heritage Impact Trend, 2011 – 2015 (net direct impact)



Method and Detailed Results

When setting aims for, and measuring performance of, the Heritage Tourism sector it is important to identify the drivers of impact growth, not just the headline figure, so that the contribution (or success) of individual activities can be traced through to the total.

This paper should be considered a baseline in which each area and market segment has been treated on an equal basis, following the same method and adopting the same source data. However, estimates can always be refined if more specific site data is available from bespoke surveys or background research. In this respect, the report should therefore be considered a starting point which can be supplemented by additional bespoke research.

This method for estimating heritage tourism impact was developed in 2014, using the latest available data at the time: 2013 data.

Main sources

The overall tourism market comprises international passengers, domestic overnight trips and day visitors. The most comprehensive publicly available sources used to determine the scale of the market are (2013 figs.):

- The International Passenger Survey (IPS) – international market: £1.68bn
- The GB Tourism Survey (GBTS) - domestic overnight market: £2.89bn
- The GB Day Visitor survey (GBDVS) – day trips market: £4.6bn

These surveys ask respondents about their expenditure, the activities they undertake during their visit and their main motivation for visiting the country. These questions can be used to allocate a share of the overall tourism market to the heritage sector. There is no single, agreed method for doing this and previous studies have used these same questions in different ways to determine:

- Attribution: which refers to the share of total visitor spend which relates to the historic environment, or would otherwise be lost to Scotland if the historic environment did not exist; and
- Deadweight: which is defined as the share of a visitor's expenditure which would still have accrued to Scotland even in the absence of the historic environment.

Notes on previous approaches

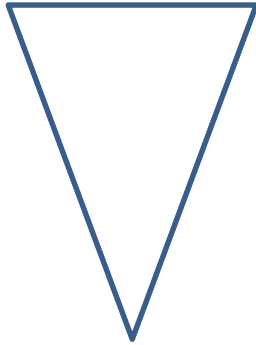
Economic Impact of the UK Heritage Tourism Economy, Oxford 2013

www.hlf.org.uk/economic-impact-uk-heritage-tourism-economy

- Method: a top-down approach, allocating a share of total UK tourism expenditure to the heritage environment. The UK tourism market is taken as the sum of the IPS, GBTS and GBDVS expenditure totals.
- Heritage share is based on visitors' activities only: Respondents in the 3 source surveys are asked what activities they are undertaking during their trip (from a

fixed list). Oxford's "heritage allocator" calculates attribution based on the number of heritage activities a visitor undertakes as a share of their total activity profile.

- Results:



Total UK tourism expenditure (2011 data) - **£92.9 Bn**



Allocated share for UK heritage – **9.1%**
(based on weighted shares for international, domestic overnight and day visitors)



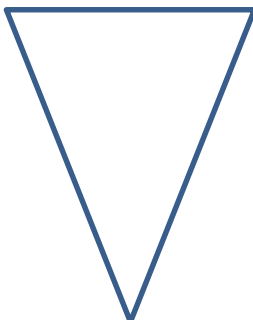
Direct UK heritage tourism expenditure - **£8.49bn** (= £5 Bn GDP)
(GDP multiplier 2.75 then applied to give £13.9 Bn total impact)
NB: There is no Scotland figure presented in the report.

- Possible constraints: visitors' motivations are not taken into account e.g. a person who plays golf and visits a castle will have half of their expenditure included in the heritage impact total (deadweight 50%), regardless of whether their motivation to come to Scotland was to play golf, or to visit the castle. If this visitor's motivation for coming to Scotland was solely to play golf, then made the decision to visit the castle after they arrived, intuitively it is likely that they would still have incurred a high share of their expenditure (hotel, food & drink etc) even if the castle were not available. In this case, the visitors' impact might be over-estimated within the heritage total. The reverse is also true.

[Download the Ecorys 2013 report, Economic Impact of the Historic Environment in Scotland](#)

- Method: this study also uses a top-down approach, taking total tourism expenditure in the economy, then allocating a share of it to the heritage sector.
- Heritage share is based on visitors' motivations only: if respondents stated "the historic environment" as their main motivation from a fixed list of options, their entire trip expenditure is assumed to be attributable to the historic environment. All other visitor expenditure is assumed to be non-attributable (either displaced or deadweight).

- Results:



Total Scottish visitor expenditure (2011/12 data) - **£3.9 Bn**



Allocated share for historic environment – **33%**
(based on visitor response for main motivation for Scotland visit)



Historic environment visitor expenditure - **£1.3 Bn**

Possible constraints:

- The total market figure does not include day visitors, only international and domestic overnight visitors. Day visitors are assumed to be 100% displaced i.e. they would have spent the same amount on other goods and services in Scotland if they had not visited the heritage attraction.
- The market size and attribution figures are not taken from the same source surveys, so may not be consistent. The market share is based on a review of small independent surveys, predominantly of international passengers. Equal attribution is assumed for each visitor market. The single overall attribution figure makes it difficult to identify the relative contribution of each component market. There is also scope for some bias if a fixed rate of 33% attribution is applied to the tourism expenditure total: in practice, the 33% motivated by heritage might be concentrated amongst the lowest overall spenders, and as such the method would over-estimate their heritage impact (and vice versa).
- In this model, a visitor who says their motivation to come to Scotland was the historic environment will have their entire trip expenditure allocated to the heritage impact total (they would otherwise not be in Scotland, so deadweight is 0%). Conversely, this means that visitors who have been to historic sites, but were in the area for other reasons (e.g. to play golf) contribute nothing to the heritage impact total (deadweight is 100%). Intuitively, this may also not be the case, as some visitors may extend their stay or increase their planned spend due to the availability of other attractions once they arrive in the area.

Although they are based on the same source data (the IPS, GBDVS and GBTS), the composition of visitors contributing to the overall heritage impact total is significantly different between the 2 studies due to the differing methods of attribution adopted. This could give rise to different policy messages about which key groups to target to increase the overall total.

New method

The results presented in this paper use a hybrid of the 2 previous studies, accounting for both visitors' activity and motivation to determine attribution. Three distinct visitor types have been identified, each with a different rate of attribution:

- Heritage motivated visitors (**HE visitors**): those who were motivated to come to Scotland by the historic environment. Attribution for these individuals is based on their activity share (as per the Oxford study), plus 50% of their non-heritage activity spend is assumed to be leveraged by their heritage motivated visit. By reducing this from the 100% leverage figure used in the Ecorys report, it allows non-heritage motivated visitors to heritage sites to be included in the overall impact total without double counting the impact of other sectors. Deadweight will vary between individuals depending on the total number of activities they undertook during their trip. The 50% leverage figure can also be varied in sensitivity analysis (or to reflect new data sources);
- **Incidental visitors**: those who have been to an HE site, but were in the area for another reason (non-HE motivation). In order to be consistent with the approach for HE visitors, incidental visitors' attribution is taken as their activity share (as per Oxford) with 50% deadweight applied i.e. half of their HE-related

spend is assumed to have been attributable to whichever market sector was their main motivation for visiting Scotland; and

- **Non-HE visitors** – those who have not visited a HE attraction, and were not motivated to visit Scotland by the HE.

This can be expressed as a formula: **tourism impact = $\sum X(C+Z(A-C)) + Y(C-ZC)$** where X = HE visitors, Y = Incidental visitors, A = the individuals total spend, C = the individuals spend / number of activities undertaken, and Z = deadweight. As such, each individual respondent in the 3 source surveys (the IPS, GBTS and GBDVS) will have their own unique level of attribution.

The following example illustrates that the total heritage impact does not necessarily vary between the 3 methods (Oxford, Ecorys and the new model), but there is a significant difference in which visitors are contributing to it. The total impact would vary depending on the relative expenditure of each visitor type.

Visitor	Spend	Activities undertaken		Motivation for visit		Heritage Impact			
		Castle visit	Golf	Heritage	Golf	Oxford method	Ecorys method	This study	Type
A	£100	✓	✓	✓		£50	£100	£75	HE motivated
B	£100	✓	✓		✓	£50	£0	£25	Incidental
C	£50	✓	✓	✓		£25	£50	£37.5	HE motivated
D	£50	✓	✓		✓	£25	£0	£12.5	Incidental
Total heritage impact						£150	£150	£150	

Provisional results

Motivation and activity varies significantly between international, domestic overnight and day visitor types. A third (34%) of international visitors are HE-motivated compared to only 3% of day visitors. Domestic overnight visitors are more likely to be incidental visitors to HE sites than international or day visitors. 90% of day visitors do not take part in a HE activity.

Table 1: visitor profile	HE visitors	Incidental visitors	Non HE visitors	Total
International visitors	34%	16%	50%	100%
Domestic overnight visitors	5%	27%	68%	100%
Day visitors	3.1%	6.3%	90%	100%

Applying this visitor profile to the total tourism market gives the following impacts:

Table 2: HE impact estimate 2013	Internat. visitors	Domestic overnight visitors	Day visitors	Total
Total visitor spend	£1,68m	£2,89m	£4,60m	£9,17m
Activity share for HE	11%	5.3%	5.1%	£6.2%
Activity based HE impact	£185m	£154m	£234m	£573m
Net leverage based on visitor type (motivation)	+£235m	+£10m	-£32m	£213m
Final weighted HE impact (net direct impact)	£420m	£164m	£201m	£785m
HE as share of total visitor market	25%	5.7%	4.4%	8.6%

- Net direct heritage sector impact is estimated at £785 million in 2013. This includes expenditure directly on HE activities (£573m), plus tourism spend on other non-HE activities which has been levered in by HE-motivated tourists (£213m).
- This equates to 8.6% of the total tourism market. However, the HE sector is assumed to account for as much as 25% of the total international passenger market.
- The £573m HE activity share is assumed to be consistent with the Oxford method applied for the UK-wide results.

Sensitivity testing

Sensitivity analysis shows the variance in the overall impact depending on whether the Oxford model or an Ecorys-consistent approach (though different dataset) are adopted. See table 3:

Table 3: sensitivity	Internat. visitors	Domestic overnight visitors	Day visitors	Total
Baseline – market share	25%	5.7%	4.4%	8.6%
Baseline – total impact	£420m	£164m	£201m	£785m
High scenario (Ecorys model) - market share	40%	6%	3.6%	11%
High scenario (Ecorys model) – total impact	£672m	£174m	£166m	£1,102m
Low scenario (Oxford model) – market share	11%	5.3%	5.1%	6.3%
Low scenario (Oxford model) – total impact	£185m	£154m	£235m	£574m

- Adopting the Ecorys approach, but using the IPS, GBTS and GBDVS as sources rather than other motivation surveys, increases the overall impact estimate from £785m to over £1.1bn. NB: this is consistent with Ecorys's 2012 update in terms of order of magnitude, but the composition of the figure is significantly different.
- Following the Oxford approach reduces the overall impact to £574m. However, it should be noted that the UK figure produced by Oxford includes the natural environment as well as historic/heritage so will naturally account for a higher share of total visitor spend.

Multiplier effects

The £785m total impact figure is a “direct” figure. It includes only visitor expenditure. However, a tourism multiplier can be applied to demonstrate the supply chain effects resulting in Scotland from this visitor expenditure e.g. as tourism services have to increase their expenditure with their suppliers in order to meet visitor demand.

The Scottish Government publish industry multipliers as part of the annual accounts, but there is not an official multiplier for the tourism industry, given that it is a composite of other sectors e.g. hotels, catering, travel. Historic Environment Scotland has worked with the Scottish Government to derive a specific tourism expenditure multiplier of 1.7 – for every £1 spent by visitors, a further 70p is generated along the Scottish supply chain. Applying this figure gives a **revised total heritage impact of £1.34bn** in 2013.

Attributable visitor spend coefficients

A visitors' average attributable spend will vary depending on their origin and their motivation for visiting. The impact of individual sites could therefore be determined by the relative proportion of each visitor type within the total footfall estimate. For example, having a heritage motivated international visitor in the site footfall is worth £231 towards total impact, while a Scottish incidental visitor only contributes £5.80 to the total.

Table 5: visitor expenditure coefficients (attribution per footfall for heritage sites)	Internat. visitors	Domestic overnight visitors	Day visitors	All visitor average (weighted)
HE motivated visitors	£230.89	£180.90	£29.57	£79.05
Incidental visitors	£34.79	£18.34	£5.80	£10.80
Scotland average	£166.75	£42.66	£17.20	£33.98

The source data also shows a distinct Edinburgh effect, whereby visitors to attractions in the capital have a higher attributable rate of spend compared to other non-Edinburgh attractions i.e. the attractions have a higher proportion of international visitors, or a higher proportion of HE motivated visitors than the national average.

Table 6: visitor expenditure coefficients (attribution per footfall for heritage sites)	Internat. visitors	Domestic overnight visitors	Day visitors	All visitor average (weighted)
Scotland average	£166.75	£42.66	£17.20	£33.98
Edinburgh site average	£181	£59	£17.20	£38.84
Non-Edinburgh average	£161	£38	£17.20	£32.57

The sector could use these coefficients to evaluate the potential value-for-money of initiatives targeting different visitor groups. Increasing footfall in one group will not generate the same impact as an equivalent footfall increase from another group.

Conversion factors

All figures presented to date are in terms of expenditure. These can also be converted to Gross Value Added or Full Time Equivalent jobs supported through this expenditure.

Scottish Annual Business Statistics (SABS)¹ includes data for output, GVA and employment in each industry sector. The heritage sector is not explicitly included in SABS, but we know visitors' expenditure split from the visitor surveys e.g. retail, accommodation, restaurants, leisure attractions. We can use this split to derive weighted estimates for the heritage sector as follows:

- Level of net direct visitor spend required to support an FTE: **£33,710**
- GVA as a share of heritage expenditure (or providers' turnover): **52%**

As already noted, HES worked with the Scottish Government to derive weighted multipliers for the heritage tourism sector based on the National Accounts Input Output tables² as follows:

- Type 2 heritage expenditure multiplier: **1.72**
 - For every £1 of net direct heritage tourism spend, a further 72p is spent in the supply chain. This includes indirect effects (as people providing goods and services directly to visitors have to increase purchases from their own suppliers in order to meet demand) and induced effects (as people in jobs supported by the sector spend their income).
- Type 2 heritage GVA multiplier: **1.39**
 - For every £1 of net direct GVA heritage creates, a further 39p GVA is created in the supply chain.
- Type 2 heritage employment multiplier: **1.54**
 - For every 100 FTEs supported directly in the heritage tourism sector, a further 54 are sustained along the supply chain and through induced wage expenditure.

¹ <http://www.gov.scot/Topics/Statistics/Browse/Business/SABS/ScotSection>

² <http://www.gov.scot/Topics/Statistics/Browse/Economy/Input-Output/Downloads>

2008 to 2015 Trend Estimates

There are 2 components of change over time:

- Expansionary: this is when the total tourism market grows and heritage retains a fixed share of the market. However, heritage growth does not necessarily display the same % growth as the total tourism market, because it has a different share in each sub market (international, overnight and day visits); and
- Structural: when heritage increases its share of the total tourism market via:
 - An increasing share of visitors including heritage sites and activities as part of their trip;
 - A higher proportion of visitors naming heritage as their key motivation for visiting Scotland; or
 - Heritage visitors increasing their expenditure at a faster rate than non-heritage visitors.

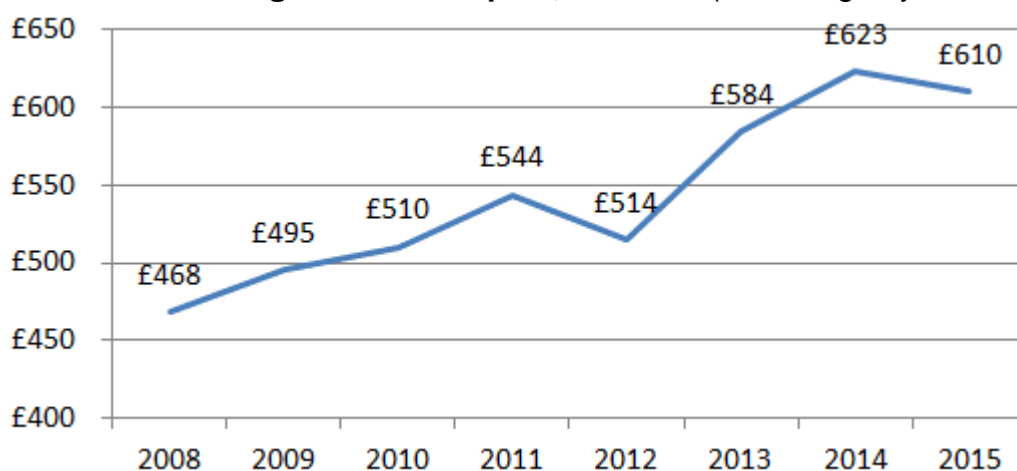
At this stage we can only estimate expansionary growth over the period 2008 to 2015 (the latest available data) using published statistics. A fixed market share has been assumed for heritage in each of the 3 core visitor markets based on the 2013 baseline:

- International passengers – 25%
- UK overnight passengers – 5.7%
- Day visitors – 4.4%. (NB the Day Visitor Survey is only available from 2011 onwards)

Structural change can also be estimated over this period, but requires further data to be made available from existing surveys. To date, we have little evidence to suggest heritage's market share has changed significantly over this period.

With this caveat in mind, heritage tourism impact (excluding day visitors) is estimated to have grown by a third (30%) between 2008 and 2015, growing year-on-year albeit experiencing slight drops in 2012 (attributed to the London Olympics) and in 2015.

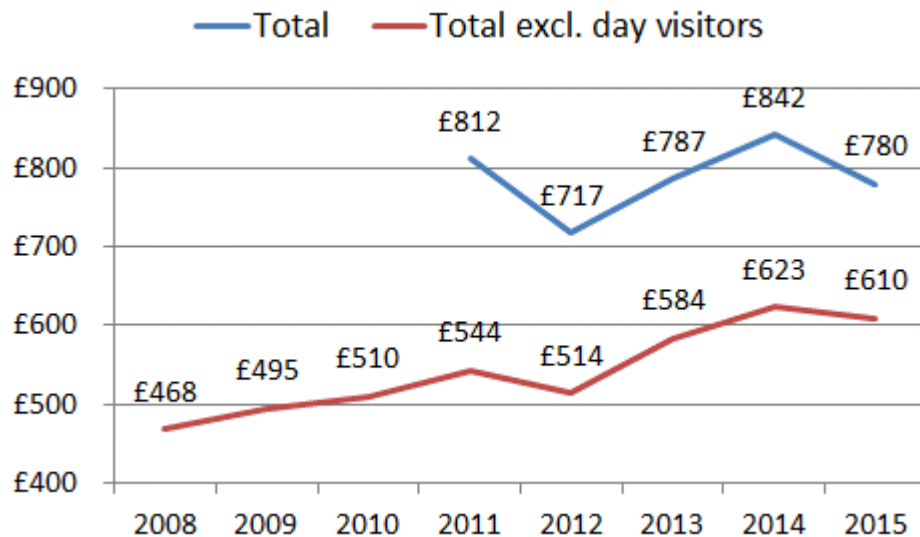
Estimated Heritage Tourism Impact, £ million (excluding day visitors)



This is significantly higher than the rate of growth of the tourism sector as a whole (23%) over the same period. This growth has been largely generated via the year-on-year increase in expenditure by international passengers to Scotland – a market where heritage is a significant component – while spend by overnight visitors has remained comparatively static. Spend by international passengers dropped slightly (8%) between 2014 and 2015, leading to the overall drop in 2015, though it was somewhat offset by marginal growth in domestic overnight tourism.

Including day visitors (for whom data is only available after 2011), net direct heritage impact is estimated to be £780 million in 2015. This represents a 7% drop on the previous year, though is broadly in line with 5-year average. The total Scottish day visitor market fell from annually £6.2 billion in 2011 to £5 billion in 2014 and £3.9 billion in 2015. Although it is a comparatively small market (in impact terms) for heritage tourism, it is still assumed to have led to a reduction in impact for the sector.

Estimated Heritage Tourism Impact, £ million (net direct)



Scotland's Heritage Tourism Strategy (Tourism 2020) has set a target of £1.2 billion for heritage tourism impact by 2020. Growth has been broadly on trend to meet this target since 2012, though has dipped below in 2015.

Trend to Heritage Tourism 2020 Target

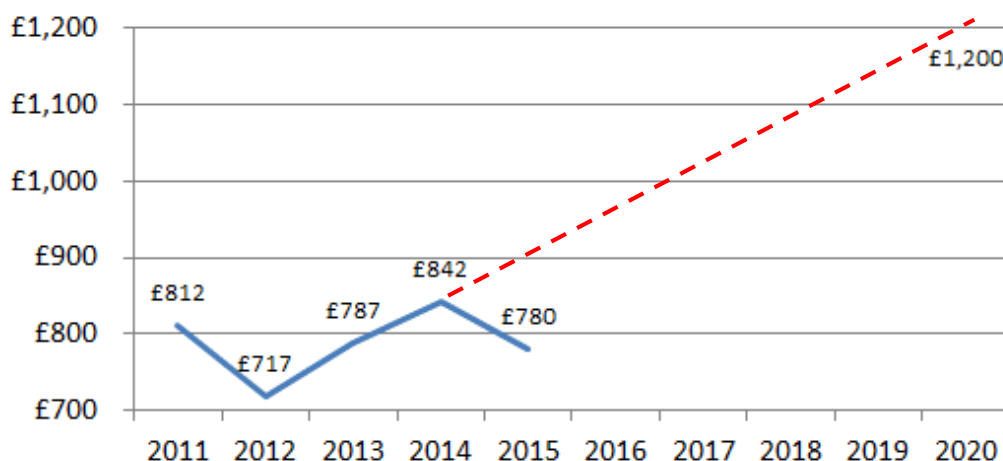


Table 7 presents net direct heritage impact estimates by visitor type from 2008 and 2015:

Table 7 Heritage Tourism Impact	International Passengers	UK Overnight visitors	Day Visitors	Total (inc. day visits)	Total (excl. day visitors)
2008	£309	£160	n/a	n/a	£468
2009	£340	£155	n/a	n/a	£495
2010	£361	£149	n/a	n/a	£510
2011	£373	£171	£268	£812	£544
2012	£350	£164	£203	£717	£514
2013	£420	£164	£203	£787	£584
2014	£460	£163	£219	£842	£623
2105	£424	£186	£170	£780	£610

Results from the International Passenger Survey, GB Tourism Survey and GB Day Visitor Survey are typically published in July each year in VisitScotland's: Tourism In Scotland with a 1-year lag. 2016 data are expected to be published in July 2017.