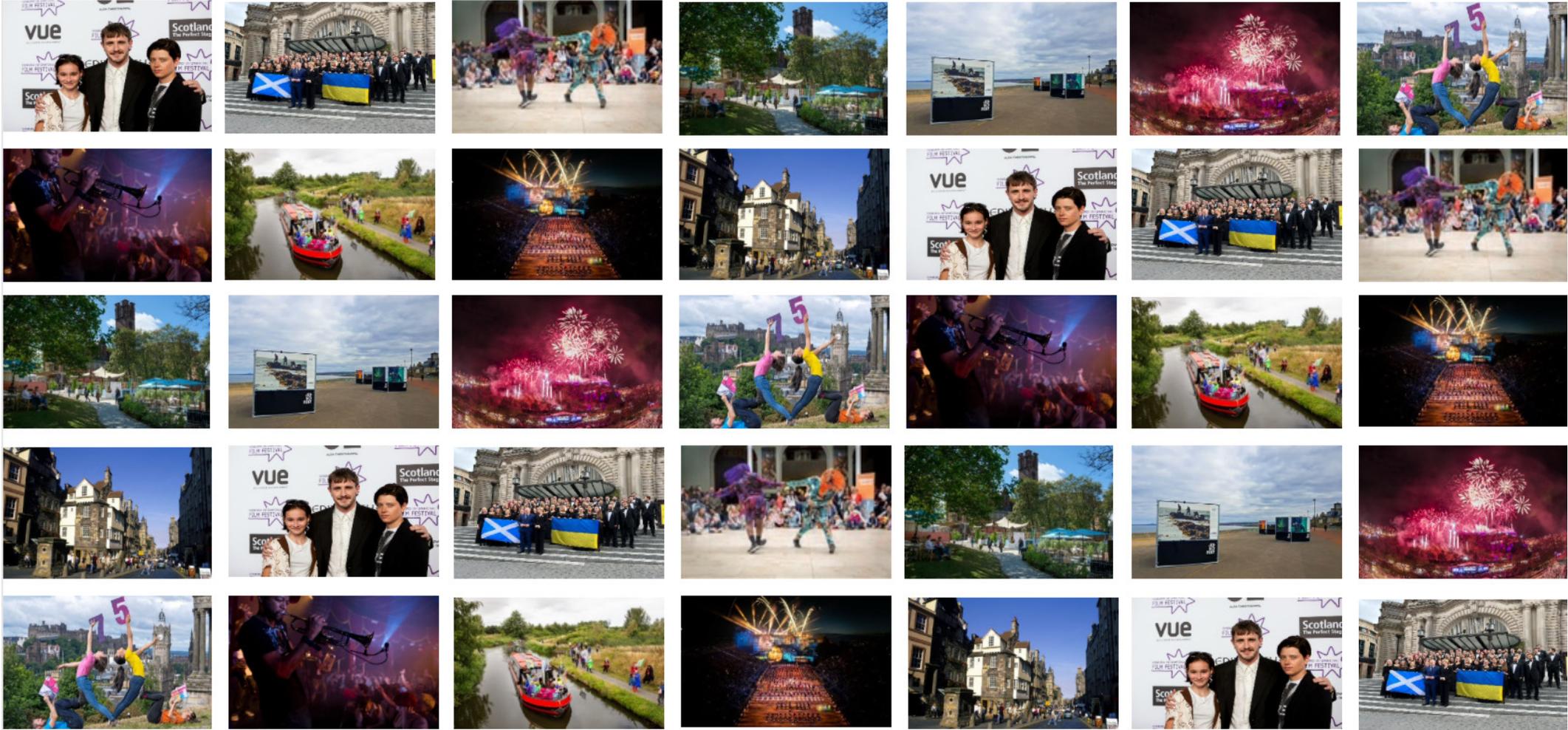


Economic Impact of the Edinburgh Festivals

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Credits

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Data credits: Edinburgh Science Festival, Edinburgh International Children's Festival, Edinburgh International Film Festival, Edinburgh Jazz and Blues Festival, Edinburgh Art Festival, The Royal Edinburgh Military Tattoo, Edinburgh Festival Fringe, Edinburgh International Festival, Edinburgh International Book Festival, Scottish International Storytelling Festival, Edinburgh's Hogmanay, Scottish Tourism Multiplier Study (STMS), Scottish Input Output Tables

Image credits: Edinburgh Festivals (2022)

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In 2022, BOP Consulting was commissioned by Festivals Edinburgh to undertake an economic Impact Study of the eleven Edinburgh Festivals it represents. This study repeats many elements of the Impact Studies carried out by BOP on two previous occasions and is based on best practice in economic impact assessment and appraisal, such as that specified by the Scottish Government and HM Treasury. The primary research involved gathering financial information from the Festivals and surveying audiences at the Festivals, which saw a statistically significant level of 22,000 + survey responses.

Strong recovery from the Covid-19 pandemic

- With a 2022 Festivals programme that ran at 75% of the events staged in the last year before the pandemic, the Festivals attracted over 3.2 million attendances generated by c.700,000 attendees, just over 70% of attendances reported in our last Impact Study in 2015.
- This robust rebound in attendances was impressive given that the peak Festivals season began around only three months after the Omicron wave of Covid-19 in the winter of 2021, and also at a time when international travel had not fully recovered to pre-pandemic levels.

Developing their role as an economic powerhouse

- Economic impact increased in Edinburgh from £280m in 2015 to £407m in 2022, and in Scotland from £313m to £367m.
- Impact holding up well despite the significantly smaller scale of the 2022 Festivals - when adjusted for inflation, these figures represent 119% of 2015 impact levels for Edinburgh and 97% of 2015 impact levels for Scotland.
- The increase in net aggregate economic impact for 2022 was greater for Edinburgh than for Scotland in part because of more spending from Scottish 'staycation' audiences, contributing to larger additionality of audience spending in Edinburgh (82%) than in Scotland (64%).
- More powerful driver for the Edinburgh economy, with a larger proportion of all audience spend attributable to the very existence of the Festivals (82% in 2022 compared to 62% in 2015).
- More powerful driver of additional spending across Scotland over the last

- 12 years (64% of audience spend in 2022, compared to 54% in 2015 and 48% in 2010).
- A larger proportion of all audience spend was directly attributable to the very existence of the festivals, being 82% in Edinburgh (64% in 2015) and 64% in Scotland (54% in 2015).
- The Festivals supported c.5,850 FTE (Full Time Equivalent) jobs in Edinburgh and c.5,000 in Scotland, compared to c.5,650 and c.6,000 respectively in 2015, with the decrease in Scottish employment reflecting both the slight reduction (3%) in additional output in Scotland and increases in the cost of labour.

Supporting the tourist and hospitality industries of Edinburgh and Scotland

- The average number of nights spent in Edinburgh and elsewhere in Scotland increased between 2015 and 2022. From 3.9 nights in Edinburgh in 2015 to 4.6 in 2022 and 5.2 in Scotland in 2015 to 5.7 in 2022.
- 51% of net audience expenditure in Edinburgh was spent on accommodation (c.£85m), 25% on food and drink (c.£42m) and a further 19% on shopping (£31m).
- The average proportion of staying visitors from outside Scotland has increased from 25% in 2015 to 31% in 2022, with a corresponding increase in net spend (from £95m to £137m between 2015 and 2022).

Supported by the people of Edinburgh and Scotland

For the first time this Impact Study also identifies what the figures look like when the economic actions of locals are fully retained within the calculations (i.e., by departing from HM Treasury guidance and not applying an additionality analysis to audience expenditure):

- While the additionality analysis removes a large amount of the spending by Edinburgh and Scotland audiences from the net figures, the actual spend of the 1.5m attendances associated with residents of Edinburgh and Scotland significantly contributed to the gross economic impact of the Festivals in 2022.
- On this basis, the Festivals contributed £492m to Edinburgh and £620m to Scotland, as compared with £407m and £367m respectively when resident spend is largely excluded by the additionality analysis.

- Relatedly, on this basis the Festivals also supported c.7,150 FTE jobs in Edinburgh and c.8,500 FTE jobs in Scotland.
- These gross figures show the importance of local and Scottish audience spending to the impact of the Festivals. The importance of this domestic audience expenditure is also shown in the net figures, with the net expenditure in Edinburgh of overnight audiences from across Scotland doubling from £11m in 2015 to £22m in 2022.

This support and contribution, together with the large attendance by residents, supports the results of the last Edinburgh People Survey, which found that 72% of residents believe the Festivals make Edinburgh a better place to live.¹

Value for Money

Given that public sector investment in the festivals stands at c£11m, it is possible to derive the net economic impact leveraged through this public sector investment. For every £1 invested by the public sector in the Edinburgh Festivals, there is a return of c£33 to Scotland.

Conclusion

This Study confirms and further strengthens the key message from the earlier Impact Studies that the Festivals are a major contributor to both the local Edinburgh economy and the national Scottish economy. This economic impact spreads far beyond the immediate cultural economy, with the biggest beneficiary businesses in Edinburgh and Scotland being those in the tourism and hospitality sectors. That the Festivals have bounced back so strongly shows the importance of communal events in our post-pandemic world with audiences and visitors increasingly seeking out unique cultural experiences – a role the Edinburgh Festivals are well suited to given previous research showing that 92% of audiences saw the Festivals as ‘must see’ events that gave them the chance to see things they would not otherwise see.²

¹ See page 228: <https://www.edinburgh.gov.uk/downloads/file/23814/edinburgh-people-survey-citywide>
² This statistic comes from BOP’s 2015 Impact Study when the cultural impact of the Festivals was assessed.

Our brief

In 2022, BOP Consulting was commissioned by Festivals Edinburgh to undertake an Impact Study of the eleven Edinburgh Festivals it represents. This study repeats many elements of the Impact Studies carried out by BOP on two previous occasions: 1) during the 2010 festival season and published in 2011, and 2) during the 2015 festival season and published in 2016. The first impact study developed a repeatable methodology for assessing the impact of the Festivals and this new study is the second update that has been guided by the 2010 study, which in turn expanded upon and refined an original economic impact study of the Festivals in 2004/5 conducted by SQW.

This study uses the same overall economic impact methodology as our two previous studies to assess the contribution that the Festivals make to the wider economy of Edinburgh and Scotland. The primary research started with the Edinburgh Science Festival in March 2022 and ran through until the end of February 2023 to capture Edinburgh's 2022 Hogmanay. This primary research involved surveying audiences at the Festivals and gathering financial information from the Festivals.

Background

Edinburgh is internationally renowned for the annual Festivals programme which it hosts. Starting with three festivals in 1947 – Edinburgh International Festival, Edinburgh Festival Fringe and Edinburgh International Film Festival, it has developed a year-round programme of Festivals which is crucial to the cultural, economic, and social life of Edinburgh, of the wider city-region, and of Scotland itself. The Edinburgh Festivals, for the purpose of this study, comprise the eleven Festivals represented by Festivals Edinburgh (see the Technical Report for a detailed description of each of the Festivals).

The Festivals are listed in date order below:

- Edinburgh Science Festival
- Edinburgh International Children's Festival
- Edinburgh International Film Festival
- Edinburgh Jazz and Blues Festival

- Edinburgh Art Festival
- Royal Edinburgh Military Tattoo
- Edinburgh Festival Fringe
- Edinburgh International Festival
- Edinburgh International Book Festival
- Scottish International Storytelling Festival
- Edinburgh’s Hogmanay

Context

After the publication of BOP’s 2015 Impact Study, the Thundering Hooves 2.0 report (2015) set out a Ten-Year Strategy and Action Plan to ensure that the leading status of Edinburgh’s Festivals is maintained. Implementation of this strategy assisted the growth and development of the Festivals in the period between 2015 and the beginning of the Covid-19 pandemic in 2020. Two years of very limited programmes at the Festivals followed in 2020 and 2021, given the combination of Covid lockdowns, social distancing measures and related illness affecting performers. These changed circumstances led to a period of internal research and external discussion, resulting in a new 2030 Vision, with six ambitions encompassing shared values of being globally minded, locally rooted, and creatively led.

The agility of the Festivals enabled them to successfully stage a 2022 peak Festival season with 75% of the events programmed pre-Covid-19 in 2019, beginning just three months after the Omicron wave of Covid-19 in the winter of 2021.³ Given development in the Festivals between 2015 and 2019 (the last full year of the Festivals before the pandemic), the Festivals were larger in programming terms in 2019 than 2015, the last year in which BOP undertook an Impact Study on the Festivals.

³ This 75% figure was reported in the Response to motion by Councillor Mowat – Festivals Review published by the Culture and Communities Committee of Edinburgh City Council on 7 March 2023.

Engagement and acknowledgements

This research benefits from a high-level of engagement by the Festivals and their audiences.

We are grateful to all eleven Festivals for their cooperation in undertaking the research – especially in relation to completing a financial template consistent with both the previous Impact Studies in 2010 and 2015. In addition, we are grateful to the Festivals and their research partners for facilitating a survey of their audiences.

We are grateful too to the 22,000+ audience members of the Festivals who took the time to complete surveys, without which this research would not have been possible. This survey repeated the same economic impact questions as 2010 and 2015.

Challenges

We faced two methodological challenges, which we adapted our research to:

- It was not possible for the Edinburgh International Film Festival to provide financial data, despite having been staged in 2022.⁴ We, therefore, assumed that their financial expenditure developed in line with inflation between 2015 and 2022.
- We ran a survey of delegates and performers at the Edinburgh Festival Fringe, as we did in 2010 and 2015. However, this survey received a very low number of responses and was not usable. Consequently, we assumed that spend by delegates and performers at the Fringe also grew in line with inflation between 2015 and 2022.

⁴ Unfortunately, this was due to the Festival going into administration.

A. OVERVIEW

The 2010 and 2015 Impact Studies demonstrated the large economic impact that the Festivals generate, not just at venues across Edinburgh, but across all sectors of the economy, and spreading out across the rest of the country.

As the Festivals have grown in size and stature, they have become a key contributor to the economy of both Edinburgh and Scotland. As will be seen below, the economic importance of the Festivals lies primarily in the expenditure made by audiences on trips to the Festivals. Most of this expenditure is generated outside of the cultural and events sector, and is made instead on items such as accommodation, food and drink, shopping and transport. In this way, the Festivals' economic impact is larger for the wider economy of Edinburgh and Scotland than it is for the cultural economy.

Economic impact is interpreted within this report as the contribution made by the Festivals to the economy's output, Gross Value Added (GVA) and Full Time Equivalent (FTE) employment, for both Edinburgh and Scotland.

The calculations for this are based on the analysis of the following strands of expenditure:

- Audience expenditure, as well as expenditures by performers and delegates
- Festival organisers' expenditure.

The figures for each type of expenditure can be presented as a gross figure. However, a key part of the economic modelling process, as recommended by HM Treasury and the Scottish Government, is to establish what proportion of expenditure is genuinely 'additional' for each strand, to arrive at the net value. This process means subtracting the expenditure that would have occurred anyway (the 'deadweight'), as well as that which is simply displacing or substituting other expenditure, and expenditure which is made outside of the target geographies of Edinburgh and Scotland ('leakage').

Once the net expenditure has been calculated, the final stage is to estimate how this flows through the economy to generate additional output, GVA and employment. This is calculated by applying multipliers to the direct expenditure.

A more detailed account of how the economic impact has been calculated is contained within a separate Technical Report. The sections in this report, therefore, summarise the economic impact analysis, highlighting the key contributory factors.

B. AUDIENCE NUMBERS

The foundation for the economic impact of the Festivals is the sheer number of audiences that they attract. In 2022, over 3.2m attendances were made across the eleven Festivals. This includes both paid events and free events.

In establishing the economic impact of these attendances, it is first important to know how many attendees generated the total number of attendances. Audiences can (and do) attend more than one event per Festival. Once this smaller pool of attendees is known, one can then begin to estimate the other factors that generate economic impact: what they are spending money on per day and how many days and nights their trips to the Festivals encompass.

Figure 1 shows the total attendances and the number of unique attendees for the 2010, 2015 and 2022 studies. The data for attendances has been provided by the individual Festivals. The number of attendees is derived from the survey data on the number of events attended – per visitor type. That is, the audience is composed of different types of audiences, some on overnight trips, many more that live locally in Edinburgh, and it is important to capture this information. Different audience types have different attending and spending patterns, and the degree to which their spending is genuinely ‘additional’ to the economy also varies significantly.

In 2022, 3.2 million attendances at Edinburgh Festivals’ events were generated by just over 700,000 attendees. The ratio of attendees to attendances was similar in 2022 to 2015 and 2010.

Covid-19 dramatically curtailed the Edinburgh Festivals in 2020 and 2021. When the Festivals resumed to something like normality in 2022, some important events that took place before the pandemic were no longer programmed (e.g., the major fireworks event as part of the Edinburgh International Festival). Therefore, while 2022 saw a strong recovery of events compared to the Covid-hit years of 2020 and 2021, there were still fewer events than in 2015. This led to a corresponding reduction in both attendances (reduced by 29% between 2015 and 2022) and unique attendees (reduced by 35% between 2015 and 2022). This reduction in

attendees broadly aligns with the reduction in events at the Festivals before and after the pandemic – as noted above, events in 2022 were around 75% of the volume pre-Covid.

Figure 1: Number of attendances and attendees at the Edinburgh Festivals (2010, 2015, 2022)

Year	Attendances	Attendees	Attendances per Attendee
2010	4,272,000	1,008,000	4.2
2015	4,538,000	1,071,000	4.2
2022	3,237,000	701,000	4.6

Source: BOP Consulting (2023)

The following five audience categories have been used within all the economic impact calculations:

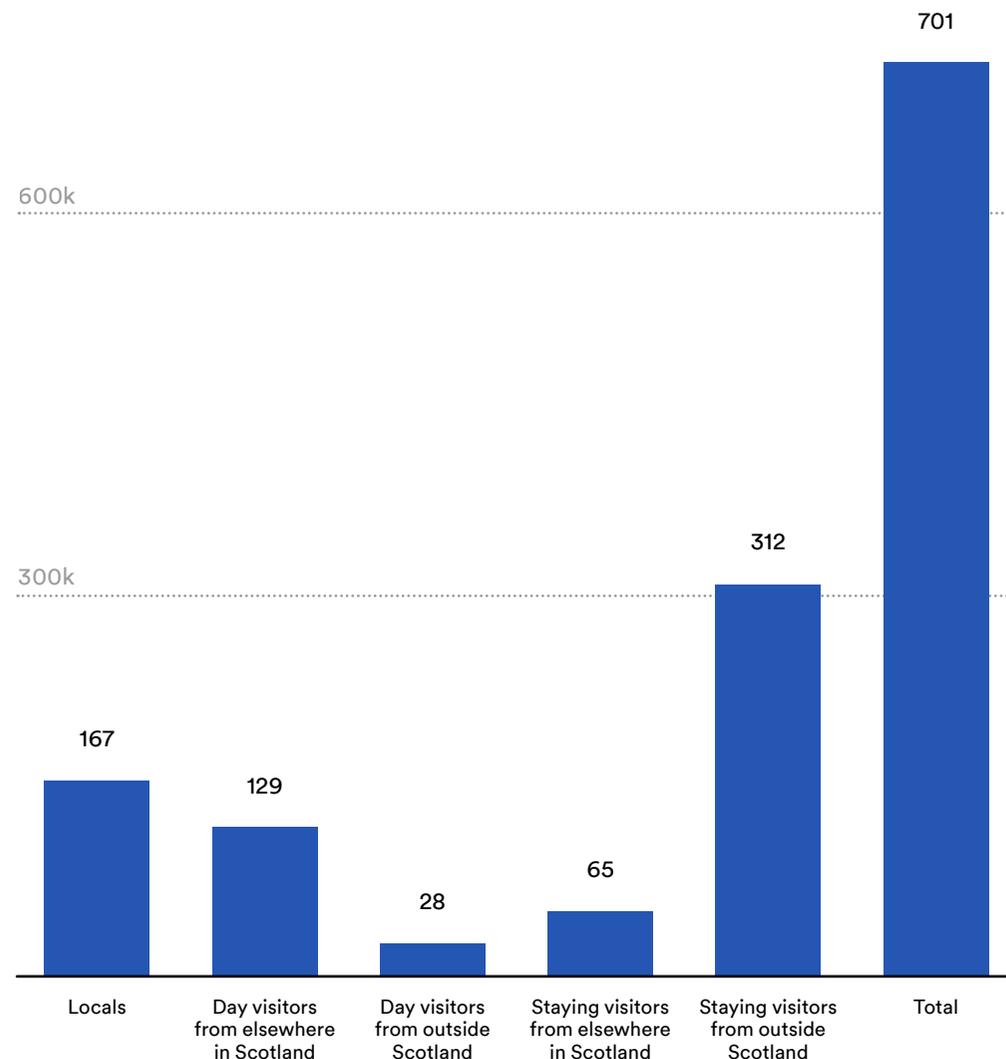
- locals: Edinburgh residents⁵
- day visitors: from elsewhere within Scotland
- day visitor: from outside Scotland
- staying visitors: from elsewhere in Scotland
- staying visitors: from outside Scotland

The first step is, therefore, to allocate the overall attendances according to the composition of the five visitor types – for instance, if the proportion of locals attending a Festival was 40% and the total number of attendances to the Festival was 100,000, then 40,000 are estimated to be accounted for by locals. If locals attend, on average, four events at the Festival, this means that the number of local attendees at the Festival is $40,000 / 4 = 10,000$. This process is then repeated for the four remaining visitor types. These are then summed to produce the total number of attendees. For the 2022 Edinburgh Festivals, this produces an estimate of the number of unique attendees at a little over 700,000. The breakdown of attendee types for 2022 is shown below in **Figure 2**.

⁵ Edinburgh residents are self-defined. In the audience surveys, respondents are asked whether they live in Edinburgh or not.

The level of attendances and attendees alone suggests that some of the Festivals will have a much larger economic impact than others, as Festivals such as the Fringe simply have much larger audiences than others, but this is, of course, not the only determinant of visitor expenditure.

Figure 2: Composition of attendees (000s), by type (2022)



Source: BOP Consulting (2023)

C. VISITOR EXPENDITURE

For each Festival, average daily expenditure for each visitor type is calculated. This includes:

- expenditure made at the Festival venues (e.g. at the bar/café)
- expenditure outside the venues (e.g. shopping, food and drink, entertainment)
- transport expenditure
- accommodation.

As in both previous BOP Impact Studies, ticket expenditure was not assessed through the visitor survey and was instead provided by the Festivals themselves from their actual box office data.

Whole trip expenditure

A factor that has to be defined in the expenditure calculations is how much of the expenditure made during a trip to the Festivals is allocated to the Festivals? In this study (as in 2010 and 2015), the calculation is based on a ‘whole trip’ expenditure model. That is, if someone from outside Scotland spends a ten-day holiday in Scotland, but spends only six of these days attending the Festival, all of the expenditure is attributed to the Festivals if (and only if) the visitor indicates that their expenditure is additional. The visitor indicates that the visit is additional by stating in their survey response that they would not have otherwise come to Edinburgh/Scotland were it not for the Festivals. As demonstrated in this study and previous iterations (2010 and 2015), the Festivals are a huge draw for people to visit the City and Scotland more widely.

Audience expenditure and length of stay

Two of the key components driving the economic impact of the Festivals are the average expenditure made per day by visitors to the Festivals and the length of stay (of staying visitors).

Figure 3 shows the average values for these across the Festivals, as well as comparing these to 2015 and 2010. They are weighted averages in that they

reflect the composition of the audience. Thus, Festivals that attract a lot of locals, will have low per person average day expenditures. Locals do not spend on accommodation, may not have to spend on transport, and may also spend a lot less on food and drink (a major item of expenditure for Festival visitors). Conversely, staying visitors from outside Scotland have higher day expenditures (which includes accommodation costs), and longer trips.

For the summer Festivals, we have had to avoid double-counting by only including the expenditure that relates to the specific Festival in question. Audience research shows that festival visitors during the peak August period are attracted by the total experience available in Edinburgh, meaning that any methodology for attributing visitor expenditure to different festivals can only be approximate. The accompanying Technical Report provides the detail on how this is done.

Average daily expenditure per attendee at the Edinburgh Festivals was higher in 2022 than in 2010 or 2015 – increasing from £50.10 in 2015 to £86.80 in 2022. When adjusted for inflation, the 2015 figure of £50.10 equates to £60.97 in 2022 prices, which represents a real increase in average daily expenditure of 42%.

The average number of nights spent in Edinburgh and elsewhere in Scotland increased slightly between 2015 and 2022. From 3.9 nights in Edinburgh in 2015 to 4.5 in 2022 and 5.2 in Scotland in 2015 to 5.7 in 2022. These increases in 2022 brought the averages back to roughly where they were in 2010.

Figure 3: Average daily audience expenditure at the Edinburgh Festivals and average length of stay in Edinburgh and Scotland, per person (2010, 2015, 2022)

Year	Daily expenditure (£)	Nights spent in Edinburgh	Nights spent elsewhere in Scotland	Total nights in Scotland
2010	45.4	4.6	0.9	5.5
2015	50.1	3.9	1.3	5.2
2022	86.8	4.5	1.2	5.7

Source: BOP Consulting (2023)

Additionality

Following all best practice in economic impact assessment and appraisal, such as that specified by the Scottish Government and HM Treasury, a key stage of the economic impact calculations is to assess the proportion of expenditures made by all visitor types that would have been made in the city in any case. This entails converting the gross economic impact into the net economic impact.

For example, many residents who attend the Festivals might have visited the city and spent money on their trip even if the Festivals had not taken place. Therefore, the expenditure incurred on the trip to the Festivals is simply deadweight (i.e., would have occurred anyway) and cannot be considered to be additional (i.e., only occurred as a result of the Festivals).

What is important to note is that additionality varies by the place of origin of the audience, in connection with the geography of the economy that is being assessed. Thus, a day visitor to the Festivals from the rest of Scotland, who would have gone on a trip elsewhere in Scotland if the Festivals had not taken place, would have made expenditure that was not additional to the Scottish economy (as it simply displaced expenditure from elsewhere in Scotland to Edinburgh), but it would be additional to Edinburgh's economy (as it was being made there rather than elsewhere). Similarly, for a Scottish day visitor who would have gone to work or stayed at home, the expenditure made at the Festivals would not be additional to Scotland (as it is assumed that this expenditure is deadweight, as it would have been made in the local economy at a later date), but it would again be additional to Edinburgh as it was spent in the city rather than in the day tripper's home town.

In order to quantify these effects, all visitors were asked what they would have done if the Festivals had not taken place. They were given four options:

1. *'I would have stayed at home or gone to work'*
2. *'I would have done something else in Edinburgh/visited the city anyway'*
3. *'I would have visited another part of Scotland'*
4. *'I would have visited an area outside Scotland'*

These responses have been analysed for each of the Festivals, and crucially, for the different visitor types. This is exactly the same question used in the 2010 and 2015 studies. The effect of applying these additionality criteria is very significant. Almost all local visitors answer either option 1 or 2 (stayed home /gone to work, or done something elsewhere in Edinburgh). The vast majority of local visitors, therefore, get excluded at this stage from the subsequent calculations of net economic value.

Additionality was also applied to the ticket expenditure. As the data on ticket expenditure was not collected through the surveys, and captured instead from the Festivals' actual box office data, this was achieved through a slightly different method. As in 2010 and 2015, the average additionality generated through the surveys per visitor type (locals, staying visitors etc.) was applied to the ticket expenditure, according to the composition of the Festivals' audiences (see the Technical Report for more detail).

Gross expenditure to net expenditure

Gross expenditure by audiences, performers, and delegates in Edinburgh was c.£246m in 2022, as **Figure 4** below shows. This figure is only the direct expenditure made by audiences, performers, and delegates, i.e., before the application of multipliers to capture the impact of indirect expenditure. This increase in gross expenditure is driven by the real term increase in average daily expenditure per attendee between 2015 and 2022 of 42%, which we report above.

Once the additionality for the Festivals has been established, it is possible to convert the gross visitor expenditures made at the Festival into net expenditure – i.e. the proportion of expenditures that is genuinely additional. As **Figure 4** below shows, the difference that the gross to net conversion makes when looking at visitor expenditure is dramatic. For instance, the net expenditure for Edinburgh in 2022 is approximately £203m from a gross figure of £246m.

This reduction is less dramatic, however, than in 2015 and 2010. This can be seen by looking at the overall additionality column in **Figure 4** – which equates to net expenditure divided by gross expenditure, indicating the

proportion of gross expenditure that is additional. At 82%, this proportion is higher in 2022 than in 2015 and 2010 – indicating that the Festivals were a more important driver of visitor expenditure in Edinburgh in 2022 than in 2015 and 2010.

This means that 82% of the audience expenditure in Edinburgh would not have been made, had the Festivals not existed.

Figure 4: Gross expenditure (audience, performers and delegates) at the Edinburgh Festivals, for Edinburgh (2010, 2015, 2022)

Year	Gross expenditure (£m)	Overall additionality (%)	Net expenditure (£)
2010	249.1	60	150.2
2015	230.5	62	143.0
2022	246.3	82	202.7

Source: BOP Consulting (2023)

This expenditure is more concentrated on Edinburgh, rather than elsewhere in Scotland, in 2022. **Figure 5** shows gross expenditure in Scotland of circa £267m in 2022 – with gross expenditure in Edinburgh (£246m in **Figure 4**). In 2022, much of the world was still in a process of recovering travelling activity after the Covid-19 pandemic. This may have reduced long-haul travellers to the Festivals, who may be more likely than other visitors to incorporate the Festivals into a longer holiday involving other parts of Scotland.

In 2022, gross expenditure was higher in Scotland than in Edinburgh – c. £267m (**Figure 5**) versus £246m (**Figure 4**). However, the combination of the scale of gross expenditures, the geographic focus of these expenditures (in Edinburgh or elsewhere in Scotland), and the extent of additionality determines how gross expenditure translates into net spending in Edinburgh and Scotland. The result of these factors is that the pattern is reversed: net expenditure is higher in Edinburgh (c. £203m in **Figure 4**) than in Scotland (c. £169m). A key factor in this reversal is significant differences in how additional visitor expenditure is at the two different geographic levels.

As **Figure 5** below shows, overall additionality in Scotland in 2022 was 64%. This means that 64% of the visitor expenditure in Scotland would not have been generated, were it not for the existence of the Festivals. The comparison with the data in **Figure 4** shows that this was lower than in Edinburgh, where 82% of all visitor expenditure was additional. But importantly, the additionality ratio for Scotland in 2022 (64%) was still higher than in both 2015 and 2010 (54% and 48% respectively). Having the benefit of three data points in a time series suggests that the Festivals have become a more powerful driver of additional audience spending across Scotland over the last 12 years.

Figure 5: Gross expenditure (audience, performers and delegates) at the Edinburgh Festivals, for Scotland (2010, 2015, 2022)

Year	Gross expenditure (£)	Overall additionality (%)	Net expenditure (£)
2010	307.8	48	146.8
2015	270.8	54	147.4
2022	266.5	64	169.3

Source: BOP Consulting (2023)

Components of audience expenditure

Given that audience expenditure is what drives the bulk of the economic impact of the Festivals, it is important to understand what audiences are spending their money on.

As **Figure 6** below shows, in 2022 two of the five categories accounted for 76% of all non-ticket, net audience expenditure in Edinburgh: food and drink and accommodation.

Figure 6: Breakdown of non-ticket net expenditure for Edinburgh, from audiences to the Edinburgh Festivals (2010, 2015, 2022)

Spend category	2010 (£m)	2015 (£m)	2022 (£m)	2022 (%)
Transport	11.4	7.6	4.1	2
Entertainment	19.0	13.7	4.5	3
Shopping	7.6	20.2	31.0	19
Accommodation	46.8	29.5	85.3	51
Food and drink	43.0	30.1	41.7	25

Source: BOP Consulting (2023)

This strongly demonstrates the contribution that the Festivals make to the tourist economy, with audiences spending an estimated £42m in the city's cafes, bars, pubs and restaurants (food and drink), and a further £85m on hotels, B&Bs, guest houses etc (accommodation). What should be remembered is that these figures only take into account the net additional expenditure that can be attributed to the Festivals' audiences – i.e., gross expenditure by these audiences is larger.

Visitor types

The amount spent on accommodation already suggests that one of the major factors that generates the large economic returns from the Festivals is the number of staying, paying visitors that they attract. Consequently, **Figure 7** below presents the net audience expenditure for Edinburgh, according to the differing visitor types that generate this sum.

As described above, the logic of the additionality assessment has the effect of almost removing the spending of the large contingent of local Edinburgh audiences that the Festivals attract. Instead, staying visitors are the biggest contributors to net audience expenditure in Edinburgh.

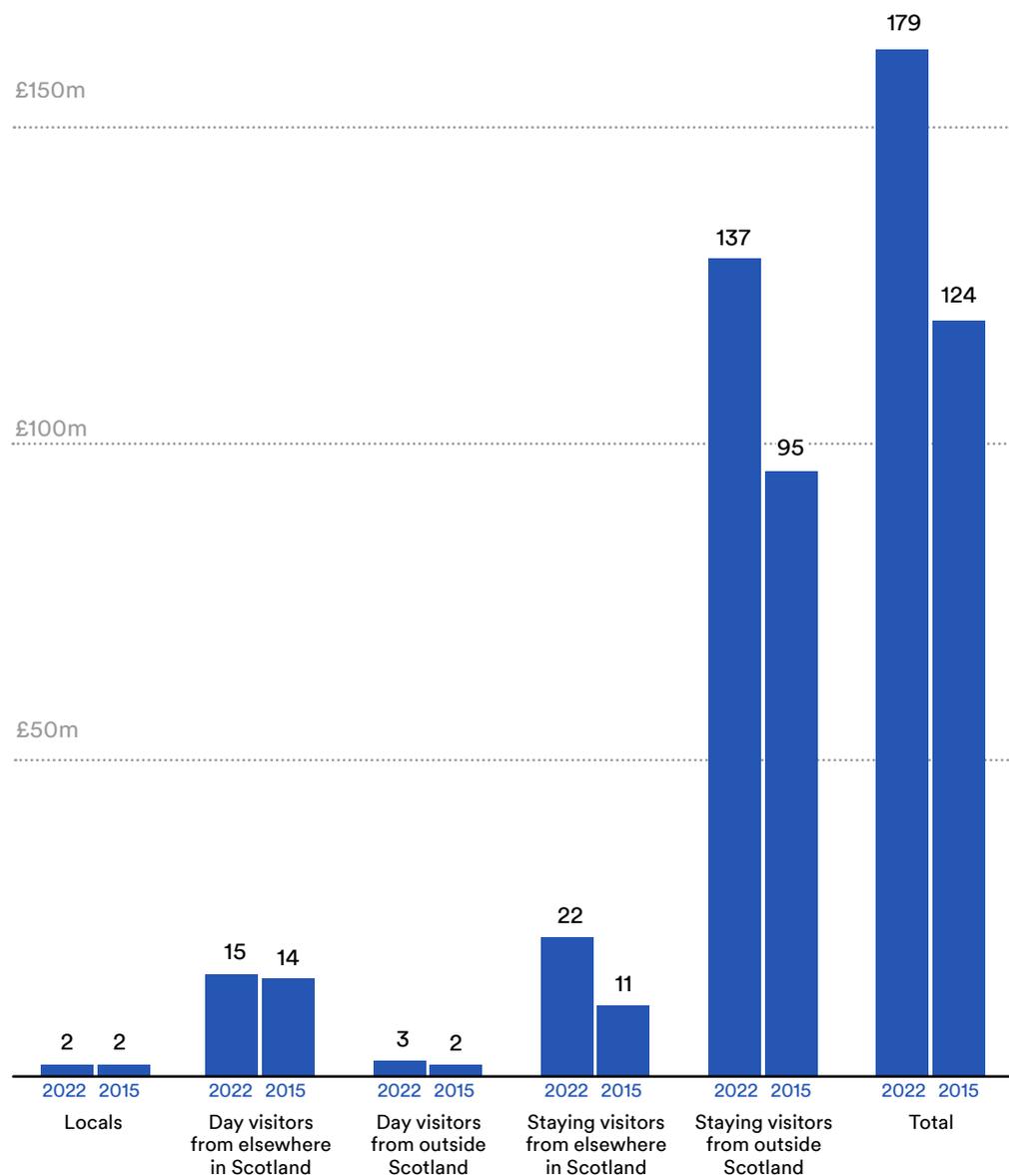
Staying visitors is also the category of visitor whose contribution has increased most significantly between 2015 and 2022: growing from £95m in 2015 to £137m in 2022 in the case of staying visitors from outside Scotland and from £11m in 2015 to £22m for staying visitors from elsewhere in Scotland. In part, this is driven by a rise in the average number of nights stayed in Edinburgh by visitors to the Festivals, which rose from 3.9 to 4.5 (see **Figure 3** above).

The proportion of staying visitors from outside Scotland is obviously not equally distributed across the Festivals. Some of the Festivals have a much stronger local pull and orientation in comparison to others, and it is this variety that is at the heart of the overall appeal of the Festivals. As **Figure 8** below shows, the average proportion of staying visitors from outside Scotland attracted by the 11 Festivals was 31% in 2022, as opposed to 25% in 2015 and 28% in 2010.⁶

The spending behaviour of these visitors in 2022 was also different from earlier years, with relatively more expenditure concentrated on Edinburgh, rather than elsewhere in Scotland.

⁶ This Figure presents the average number of visitors from outside Scotland across each of the Festivals. This percentage does not reconcile with **Figure 2**, which presents audience numbers across the Festivals as a whole.

Figure 7: Breakdown of net audience expenditure for Edinburgh (£m) by visitor type, at the Edinburgh Festivals (2015, 2022)



Source: BOP Consulting (2023)

In terms of why this might be, in 2022 international travel had not fully recovered to pre-pandemic levels (e.g., UK air travel in 2022 was 75% of pre-pandemic levels)⁷ and some countries continued to place Covid-19 related restrictions on the international travel of citizens (e.g., China). These restrictions may have contributed towards the Festivals attracting fewer long-haul travellers that incorporated a trip to the Festivals into a longer holiday taking in various Scottish destinations. This scenario is consistent with airport passengers at Edinburgh airport in August 2022 being 76% of the volume as measured in the same month in 2019. At the same time, city hotel occupancy during August 2022 was 86.5% – a slight reduction of 3.7% on August 2019.⁸ Moreover, hotel prices in Edinburgh have risen more quickly than the UK average since our last Impact Study in 2015.⁹

While **Figure 8** shows an increase between 2015 and 2022 in the proportion of staying visitors coming from outside Scotland, it may be that fewer of these visitors in 2022 were long-haul travellers (given the reduction in passengers at Edinburgh airport between 2019 and 2022), with enough drawn from closer to Edinburgh (e.g., parts of the UK outside Scotland) to sustain city hotel occupancy rates in August 2022 at nearly August 2019 levels.

City break travellers from other parts of the UK coming to Edinburgh, for example, are more likely to concentrate expenditure on the city itself, rather than elsewhere in Scotland. For long-haul travellers, it is likely to be the reverse: with the incorporation of a visit to Edinburgh’s Festivals into a longer trip to various Scottish destinations. The possibility that visitors to the Festivals in 2022 contained relatively more city break visitors from elsewhere in the UK and fewer long-haul travellers is also consistent with the discussion above on Figures 4 and 5 that highlighted a higher proportion of net expenditure concentrating on Edinburgh in 2022 than in 2015 or 2010.

⁷ <https://www.caa.co.uk/news/2022-in-review-uk-air-travel-reaches-75-of-pre-pandemic-levels-as-spain-tops-most-popular-destination-list/>
⁸ These figures from the Edinburgh Tourism Action Group were reported in the Response to motion by Councillor Mowat – Festivals Review published by the Culture and Communities Committee of Edinburgh City Council on 7 March 2023.
⁹ In May 2018, PWC published research that found that hotel prices in Edinburgh were growing three times quicker than the UK average. This research found a 12.4% increase in hotel prices in Edinburgh between 2017 and 2018, as compared with a UK-wide increase of 3.6% over the same period. This confirmed Edinburgh’s place as the second most expensive UK city to stay in a hotel after London.

Figure 8: Average proportion of staying visitors (audience members) from outside Scotland to the Edinburgh Festivals, by all Festivals (2010, 2015, 2022)

Year	Staying visitors (%)
2010	28
2015	25
2022	31

Source: BOP Consulting (2023)

D. FESTIVAL ORGANISERS' EXPENDITURE

In addition to the expenditures made by the audience, the expenditures made by the Festivals themselves have an economic impact. Calculating this impact is, however, not straightforward. The calculations are based on detailed information supplied to us by the Festivals, each of which is different.

There are several stages in this calculation, the first of which is to exclude ticket revenues from the organisers as this has been factored into the audience calculations.

As with the visitor expenditure, we also have to assess the degree to which Festivals expenditure is genuinely additional to Edinburgh and Scotland. In order to do this, we have had to firstly account for 'leakage'. That is, for Edinburgh, to exclude the expenditures made outside Edinburgh, and for calculating the net expenditure to Scotland, to exclude any expenditure made outside Scotland.

Finally, further additionality analysis is applied to the grants provided by both public and private sector organisations to the Festivals. For the public funding received by the Festivals, we have followed the additionality criteria first outlined in 2004 by SQW and repeated in 2010 and 2015 by BOP, in assuming that, *'grants provided by public bodies both locally and nationally should be discounted from the net expenditures at these geographies. It is assumed that if the Festivals had not taken place these revenues would have been used to support other projects within the area.'*

This means, for instance, that Edinburgh City Council grants are deemed not additional at either Edinburgh or Scotland level, as they would have been made anyway (deadweight). Creative Scotland grants are not additional at the Scottish level – as investment in the Festivals would have been spent elsewhere in Scotland. Public funds from outside Scotland, such as DCMS funding, are additional to both Edinburgh and Scotland. In terms of sponsorship from commercial sources, we again followed the additionality criteria used in all the previous studies, which are based on similar assumptions to the public funding (these are outlined in full in the

Technical Report). Lastly, only cash sponsorship has been included within the calculations, even though some of the Festivals receive significant in-kind contributions and these are acknowledged by Festivals and stakeholders to be of critical importance. This again follows how in-kind contributions were treated in previous studies.

What this means is that once the expenditures that would have been double counted if they were not stripped out (i.e., the ticket revenues), once leakage has been accounted for, and once an additionality assessment has been applied to the sources of funding, net organisational expenditure is significantly reduced on gross organisational expenditure (see Technical Appendix for more details).

E. MULTIPLIER EFFECTS

The last stage in calculating the net economic impact of the Festivals is to account for the secondary effects that the Festivals have on the economies of Edinburgh and Scotland. The increase in economic activity as a result of the Festivals will have two types of wider “multiplier” effects:

- supplier effect: suppliers to the Festivals will have to make expenditures in order to meet the Festivals’ demand
- income effect: wage expenditures of Festival staff and a proportion of the wages of Festival contractors and suppliers will be re-spent in the local economy.

The multipliers used here, as in previous iterations of this impact study, are based on the Scottish Tourism Multipliers, which is currently a standard methodology, that enables comparability with other major cultural and national events and initiatives that have been evaluated using these same multipliers. The Scottish Tourism Multiplier Study (STMS) provides supplier and income multipliers for the tourism sector for Edinburgh and Scotland. The multipliers we have used here are the specific sectoral output multipliers for Edinburgh and Scotland. The employment multipliers come from two different sources. STMS provides information at Edinburgh level while the Scottish Input Output Tables provide information at the Scottish level.

The Festival organisers’ expenditure is, as in the two previous studies, treated differently from visitor expenditure as it is not likely to go to tourism related businesses, but instead to suppliers involved in the production of the events. This means that the non-tourism multiplier has been used for the Festival organisers’ expenditure.

Once the multipliers have been applied, the final overall economic impact of the Edinburgh Festivals in 2022 is established.

F. OVERALL NET ECONOMIC IMPACT OF THE EDINBURGH FESTIVALS

The data presented below in **Figure 9** combines all of the expenditure data from audiences, performers and delegates, as well as Festival organisers.

Figure 9 reports at two geographies (Edinburgh and Scotland) in terms of two metrics:

- Output: the value of net new sales produced by all sectors of the economy as a result of the various new streams of expenditure
- Employment: measured in terms of Full Time Equivalent (FTE) jobs, which are defined as employment year-round for more than 30 hours a week.

Over 2022, the Festivals are estimated to have generated:

- new output of £407m in Edinburgh and £367m in Scotland; and
- supported 5,850 new FTE jobs in Edinburgh and 5,000 in Scotland.

These net output contributions correspond to additional GVA in Edinburgh in 2022 of £236m and £217m in Scotland.

The net economic impact of the Edinburgh Festivals in 2022 was an increase on 2015, both in Edinburgh and across Scotland. As **Figure 9** below shows, the increase in net economic impact was most rapid within Edinburgh – increasing from £280m in 2015 to £407m in 2022 (a 46% increase), compared with an increase from £313m in 2015 to £367m in 2022 across Scotland (a 17% increase).

The more rapid growth in net economic impact in Edinburgh is caused by both the audience and the organisation sides of the economic model. First, audience expenditure in Edinburgh is more likely to be additional than across Scotland: 82% compared with 64% in the Scotland model (see Figures 4 and 5). Second, in 2022 the organisation side of the model adds over £24m more to the Edinburgh model than to the Scotland model. This is largely because funding from governmental sources is treated as additional to Edinburgh but not to Scotland.

Figure 9: Comparison of overall net economic impact of the Edinburgh Festivals in Edinburgh and Scotland (2010, 2015, 2022) - nominal¹⁰

Impact	2010	2015	2022
Edinburgh (£m, Output)	236	280	407
Edinburgh (FTE)	5,050	5,650	5,850
Scotland (£m, Output)	253	313	367
Scotland (FTE)	4,750	6,000	5,000

Source: BOP Consulting (2023)

To some extent, the growth in net economic impact between 2015 and 2022 is caused by inflation – change in the price of goods and services over time. To assess the degree to which this explains our results, we have adjusted our 2010 and 2015 turnover results for inflation and put them into 2022 prices.

Figure 10: Comparison of overall net economic impact of Edinburgh Festivals in Edinburgh and Scotland – inflation-adjusted, in 2022 prices

Impact	2010	2015	2022
Edinburgh (£m, Output)	321	341	407
Edinburgh (FTE)	5,050	5,650	5,850
Scotland (£m, Output)	344	380	367
Scotland (FTE)	4,750	6,000	5,000

Source: BOP Consulting (2023)

The net economic impact of the Festivals across Scotland in 2022 was marginally reduced in real terms compared with 2015 – from £380m in 2015 to £367m in 2022, a fall of 3%. This may have been caused by fewer long-haul travellers attending the Festivals in 2022, as long-haul travel was recovered from the impacts of Covid-19 lockdowns during the 2022 Festivals season.

¹⁰ Employment figures rounded to nearest 50 in this figure and others included in this report.

Equally, the impact of the Festivals on Edinburgh increased in real terms between 2015 and 2022 – from £341m in 2015 to £407m in 2022, a real-terms increase in the net economic impact of Festivals of £66m (or 19%).

Finally, given that public sector investment in the festivals stands at c£11m,¹¹ it is possible to derive the net economic impact leveraged through this public sector investment. For every £1 invested by the public sector in the Edinburgh Festivals, there is a return of c£33 to the Scottish economy.

Summary and conclusions to net economic impact analysis

The study confirms and further strengthens the key message from the earlier Edinburgh Festivals Economic Impact Studies: the Festivals are a major contributor to both the local Edinburgh economy and the national Scottish economy. This economic impact spreads far beyond the immediate cultural economy. In fact, the biggest beneficiary businesses in Edinburgh and Scotland are those in the tourism and hospitality sectors. The economic impact was assessed according to the principles of the Scottish Government and HM Treasury's Green Book, which means that only the economic contribution which is genuinely additional has been considered.

The overall factors that generate the economic impact of the Festivals are not markedly different from the previous studies:

- The economic impact is driven by visitor expenditure. In 2022, inflation-adjusted gross average daily expenditure per attendee at the Festivals increased very significantly, by 42% compared to 2015.
- This visitor expenditure is dominated by staying visitors, as they spend more, stay for longer, and their expenditure is more likely to be genuinely additional.
- The weight of the overall economic impact is generated by the small number of Festivals that attract large audiences, with significant numbers of visitors from outside Scotland.
- The net economic impact of the Festivals on Scotland in 2022 was 97% of that achieved in 2015, while more rapid growth in Edinburgh means that the net impact on Edinburgh in 2022 was 119% of that secured in Edinburgh in 2015.

¹¹ See Question 10: https://www.edinburghfestivalcity.com/assets/000/005/513/International_Culture_Strategy_-_Scottish_Government__May_2023__original.pdf?1684933152

G. GROSS EXPENDITURE ANALYSIS

As stated earlier, applying additionality rules to visitor expenditure within the economic model developed for the Festivals, following Treasury Green Book rules, results in the large majority of expenditures made by locals being discounted from the calculation.¹² Unintentionally, the model de facto privileges the economic value brought by staying visitors, i.e. tourists, and particularly those from outside Scotland and the UK.

However, boosting tourism is certainly not the only (or even main) reason that, for instance, Edinburgh City Council has supported the Festivals over the years. Providing a cultural offer exclusively for tourists is not a strategic aim of the Festivals. Instead, engaging visitors is a happy by-product of the organisations' commitments to producing world class, enriching cultural experiences. Relatedly, most programming decisions reflect the fact that the Festivals are strongly rooted in their local and national, Scottish contexts – and most public funders such as Edinburgh City Council and Creative Scotland fund them for these reasons.

Thus, the strategic objectives of the Festivals themselves and many of their key stakeholders, do not dovetail neatly with the Green Book appraisal process. In this edition of the Impact Study, we are, therefore, choosing to report more detail on what the Gross figures look like, i.e., when the economic actions of locals are fully retained within the calculations, so that stakeholders can understand more fully the difference that the Green Book additionality process makes.

¹² Within our 2022 model at the geographic level of Edinburgh, 90% of expenditure by locals is eliminated by the additionality analysis.

Environmental impact

As noted above, following Green Book principles within the net economic impact modelling has the unintentional impact of privileging the economic value brought by staying visitors, particularly those from outside Scotland and the UK. Another downside to this appraisal process is that it does not take into account the environmental impacts of visits to the Festivals. From this perspective, local audiences are more environmentally sustainable than those from outside Scotland in terms of their carbon footprint. Staying visitors, who travel long distances to attend the Festivals, generate the largest carbon emissions and visitor travel to events is the largest single component of carbon emissions associated with the Festivals.¹³ Therefore, if we were also to factor in the negative environmental externalities of tourists' journeys to the Festivals, the calculation of net benefits across the different visitor groups would look quite different.

Indeed, the Treasury's own review of the Green Book in 2020 reported that the focus on the technicalities of benefit-cost analysis could sometimes be to the detriment of achieving Government's strategic objectives, including Net Zero.¹⁴ While the Green Book was subsequently revised, and some improvements have been made with respect to environmental concerns, the key principles remain essentially unchanged.¹⁵

What the Government review and wider critiques illustrate is that when using Green Book principles in economic appraisal, some things are gained but some things are lost; it remains the best approach to adopt but it is not perfect. We need to acknowledge that conducting an economic impact of the Edinburgh Festivals according to Green Book principles means that it continues to be an account principally of the economic actions of tourists.

¹³ In our 2010 Impact Study, we reported that 95% of carbon emissions generated by the Festivals derived from audience travel.

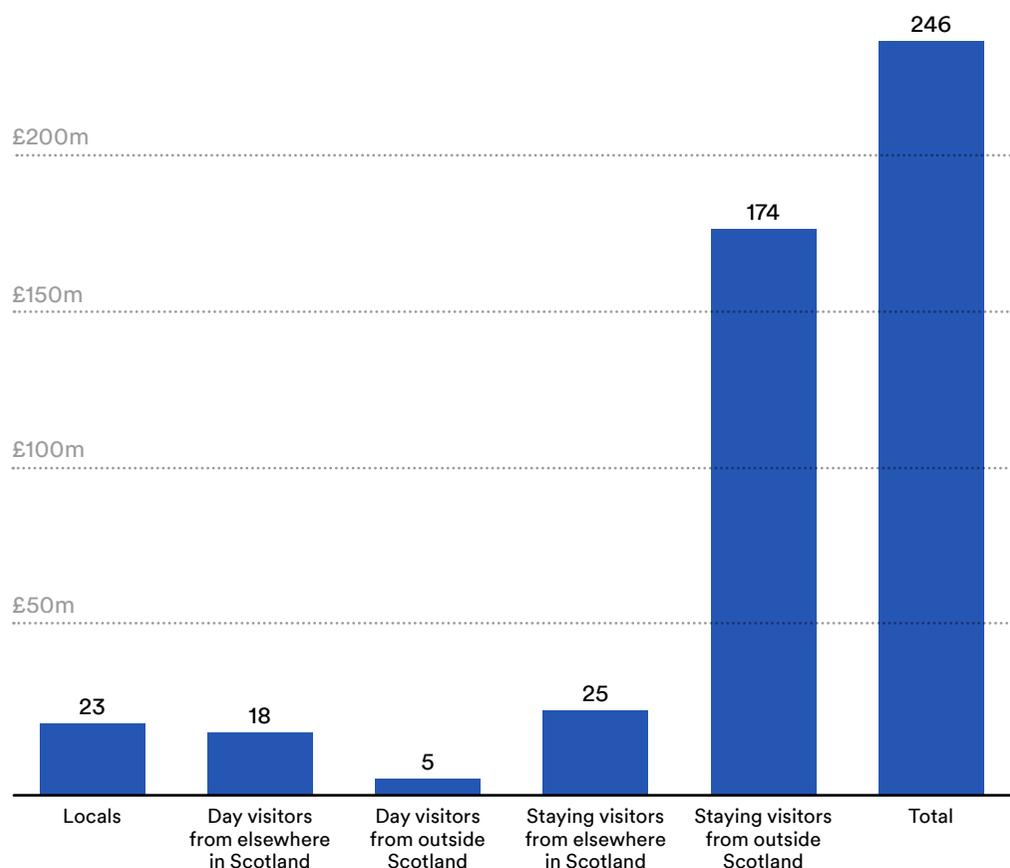
¹⁴ HM Treasury, Green Book Review 2020: Findings and response

¹⁵ HM Treasury, Green Book (2022)

Gross expenditure results

Figure 4 shows that gross expenditure by visitors in Edinburgh was c.£246m in 2022 and **Figure 5** shows that such expenditures were c.£267m in Scotland over the same period. In **Figure 11** below, we breakdown this c.£246m of gross expenditure in Edinburgh by visitor type. Here expenditures by locals (£23m) equate to the combined total of both types of day visitors, albeit still far behind expenditures made by visitors from outside Scotland.

Figure 11: Breakdown of gross audience expenditure for Edinburgh (£m) by visitor type, at the Edinburgh Festivals (2022)



Source: BOP Consulting (2023)

In **Figure 12** below, we do not apply the additionality analysis to these gross expenditures and instead apply the multipliers in Edinburgh and Scotland to these gross expenditures. The non-application of the additionality analysis means that expenditures by locals contribute to this economic model to a much greater extent than in the version presented above (see Figures 9 and 10).

On this basis, the Festivals contributed £492m in gross economic impact to Edinburgh and £620m to Scotland – which contrasts with £407m to Edinburgh and £367m to Scotland in terms of net economic impact (see Figures 9 and 10). These net figures are reduced by the application of our additionality analysis to audience expenditure. The £620m gross figure for Scotland reflects larger amounts of audience expenditure across Scotland as a whole, rather than just within Edinburgh – as captured by the £492m figure. As these figures show, the additionality assessment does more to reduce expenditure in Scotland than in Edinburgh – meaning that the net economic impact is larger in Edinburgh than in Scotland (£407m versus £367m).

Figure 12: Overall gross economic impact of the Edinburgh Festivals in Edinburgh and Scotland (2022)

Impact	2022
Edinburgh (£m, Output)	492
Edinburgh (FTE)	7,150
Scotland (£m, Output)	620
Scotland (FTE)	8,500

Source: BOP Consulting (2023)

BOP Consulting is an international consultancy specialising in culture and the creative economy.

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