

Economic Value of the Screen Sector in Scotland in 2023

October 2025

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Executive Summary

This is the third biennial report on the economic value of Scotland's screen sector, following two previous studies of 2019 and 2021.

The headlines

- Scotland's screen sector remains on track to achieve Screen Scotland's strategic aim of £1billion GVA impact for the screen sector within the Scottish economy by end 2030/31.
- Scotland's overall screen sector generated **increases** in employment and gross value added (GVA):
- **Employment** in Scotland's screen sector **increased by 12.1%**, from 10,940 full-time equivalents (FTEs) in 2021 to 12,260 FTEs in 2023 (Figure E - 1b)
- **GVA** in Scotland's screen sector **increased by 15%¹**, from £627.1 million in 2021 to £718.0 million in 2023 (Figure E - 1c).
- 2023 was a challenging year for production globally, with industrial action from the US actors and writers' unions halting much film and high-end TV (HETV) drama production across the second half of the year.
- Though not covered in detail within this study of 2023, Scotland's inward film and HETV production **enjoyed a healthy recovery** in the first half of 2024.
- While some production originally scheduled for 2023 was displaced from 2023 to 2024 as a consequence of the strikes, production levels in 2023 remained above the 2019 baseline despite the displacement of some productions into 2024, while post-pandemic recoveries in screen tourism and cinema exhibition helped maintain economic momentum within Scotland's screen sector.

The overall picture

Inward investment

Having more than doubled between 2019 and 2021, inward investment film and HETV production in Scotland fell back to £173.5 million in 2023. This was due to the impact, felt globally, of the US writers and actors strikes, which delayed many projects of scale which were originally scheduled to start production in the second half of 2023. Nevertheless, despite the displacement of several projects into 2024 as a consequence of the US industrial action, inward investment production spend in Scotland of £173.5 million in 2023 represented an increase on the baseline 2019 figure of £165.3million.

Overall production spend

In total, an estimated £468.3 million was spent on the production of film, TV and other audiovisual content in Scotland in 2023. This was down 24% from £617.4 million in 2021 (Figure E - 1a) largely as a consequence of the US industrial action, but remained ahead of the 2019 baseline. This includes spend on content made by Scotland-based producers, producers based outside of Scotland filming in Scotland, and both by and for the UK's public service broadcasters (PSBs).

Employment

Between the 2019 baseline and 2023, the employment impact of Scotland's screen sector increased by 19.3% (Figure 2a) and its GVA impact grew by 26.5% (Figure 2b).

Screen tourism and VisitScotland's methodology update

Note that the VisitScotland survey methodology was updated in 2023, so any direct comparisons of screen tourism activity in 2023 to 2021 or 2019 should be viewed in this context. The observed increase

¹ GVA has been rounded up from 14.5%.

in screen tourism in 2023 was due to a combination of methodology changes and real underlying increases in Scotland's annual number of screen tourists and their spending.

Key insights

PSB spend remains stable (but worth less in real terms)

PSB spend on production in Scotland was static between 2021 and 2023 in current money terms (i.e. before accounting for price inflation). PSB production decreased by only 0.4% over the two-year period.

According to Ofcom's Media Nations, total PSB spending on first-run originated programming increased by 4.4% between 2021 and 2023.² Outside of London, the increase was 7.7%.

The impact of inflation on the value PSB spending in Scotland, combined with commissioning uncertainty across 2023 for the BBC and C4, reduced subsector growth, particularly within Scotland's long-established unscripted television production sector.

Non-PSB unscripted programming leaps in 2023

Other television production – specifically unscripted programming not commissioned by UK PSBs – increased nearly four-fold, from £6 million in 2021 to £23.2 million in 2023, in large part due to the filming of the US version of *Traitors* in Scotland alongside other unscripted programming made by US-based networks in Scotland.

Independent film production spend continues to increase

Meanwhile independent film production – which is supported by Screen Scotland funding, and a key pillar within Screen Scotland's strategic work to foster creative origination from within Scotland – increased by 10%, from £7.6 million to £8.4 million.³

Development of skills and infrastructure aids post strike and pandemic recovery

The sector development and strategic support work undertaken by Screen Scotland and the Scottish Government since 2018 either delivered or supported the delivery of much of the capacity necessary to meet the increase in demand between 2019 and 2021 and laid the groundwork for Scotland's immediate recovery from the US strikes of 2023.

The opening of new or expanded studio facilities, particularly FirstStage Studios in Edinburgh and The Pyramids in West Lothian, enabled projects such as Amazon's *The Rig 2* and the BBC's *Rebus* to film entire productions in Scotland, on-location and in studio. These studio facilities have made Scotland an attractive place to film complete productions, whereas prior to the opening of such facilities Scotland more often hosted shorter location shoots.

Growing confidence in Scotland's production sector

Screen Scotland's continued investment in skills development – in partnership with broadcasters, video-on-demand (VOD) platforms and production companies – has enabled higher investment in film and HETV crew training across 2021 and 2023, giving film and TV producers' increased confidence in Scotland's human production infrastructure. The *Outlander* Training Programme, Screen NETS and the *Good Omens Training Programme* (supported by Amazon Studios and BBC Studios) have been among the training initiatives co-funded by Screen Scotland in recent years that have significantly increased the capacity of Scotland's crew base.

The continued importance of UK PSB commissioning to Scotland's (and the UK's) screen sector

The PSBs – primarily the BBC and C4 – remain the core source of demand, financing and commissioning of TV programmes and documentary films made by Scotland-based producers. In 2023, as a consequence of the US writers and actors strikes impact on inward investment production, PSB content (£222.4

² Saffery-Nordicity calculations based on data in Ofcom (2024a) [Media Nations: UK 2024](#). Figure 26 and Ofcom (2024b) [Media Nations: Scotland 2024](#). Figure 22.

³ **Hollywood writers and actors strikes in 2023:** The US experienced two major multi-month strikes in 2023. The Writers Guild of America (WGA) was on strike between May 2 and September 27. The Screen Actors Guild - American Federation of Television and Radio Artists (SAG-AFTRA) was on strike between July 14 and November 8, 2023. Both strikes led to stoppages in film and television production in the US and in other countries that host US originated, inward investment film and television production.

million) was once again the largest type of film and TV production spend in Scotland, providing the overwhelming majority of commissioning opportunities for Scotland-based production companies.

While this study continues to report the economic impact of UK PSB's spending within Scotland's economy on a consistent basis with previous reports, we acknowledge the findings of the report commissioned by Screen Scotland entitled [20 years after the Communications Act 2003: the impact on production from and in Scotland](#) which highlights how the economic impact of certain 'Scottish qualifying' PSB commissioned programmes within Scotland's economy is unclear as a consequence of the latitude afforded in qualification as 'Scotland productions' by the current Ofcom Guidance on regional production. We note that Screen Scotland has recently called for current Ofcom quota regime for Nations & Regions production to be reviewed.

Cinema attendance recovers faster in Scotland in 2023 than across the rest of the UK

The post-pandemic recovery in cinema box office was slightly faster in Scotland compared to the overall UK in 2023. In 2023, Scotland's cinema box office (£79.9 million) had recovered to 80% of its 2019 level (£99.8 million), whereas across the entire UK, the cinema box office (£980 million) had recovered to 78% of its 2019 level (£1.254 million).⁴

Post-strike recovery in 2024

Though not covered in detail within this study of 2023, Scotland's inward film and HETV production showed signs of a swift recovery in the first half of 2024 following the resolution of the US writer and actor strikes in late 2023. Initial estimates of filming days in the first half of 2024 provided by Screen Scotland's Screen Commission indicate that 17 films and TV series (including Netflix's *Department Q*.) started principal photography in Scotland in the first six months of 2024, generating an estimated £194 million in total production expenditures and putting Scotland on course to realise up to £400 million in combined inward investment and independent film and TV production during the 2024 calendar year. This would be well above the combined £355 million record reached in 2021.

Progress towards £1 billion GVA impact for screen in Scotland's economy

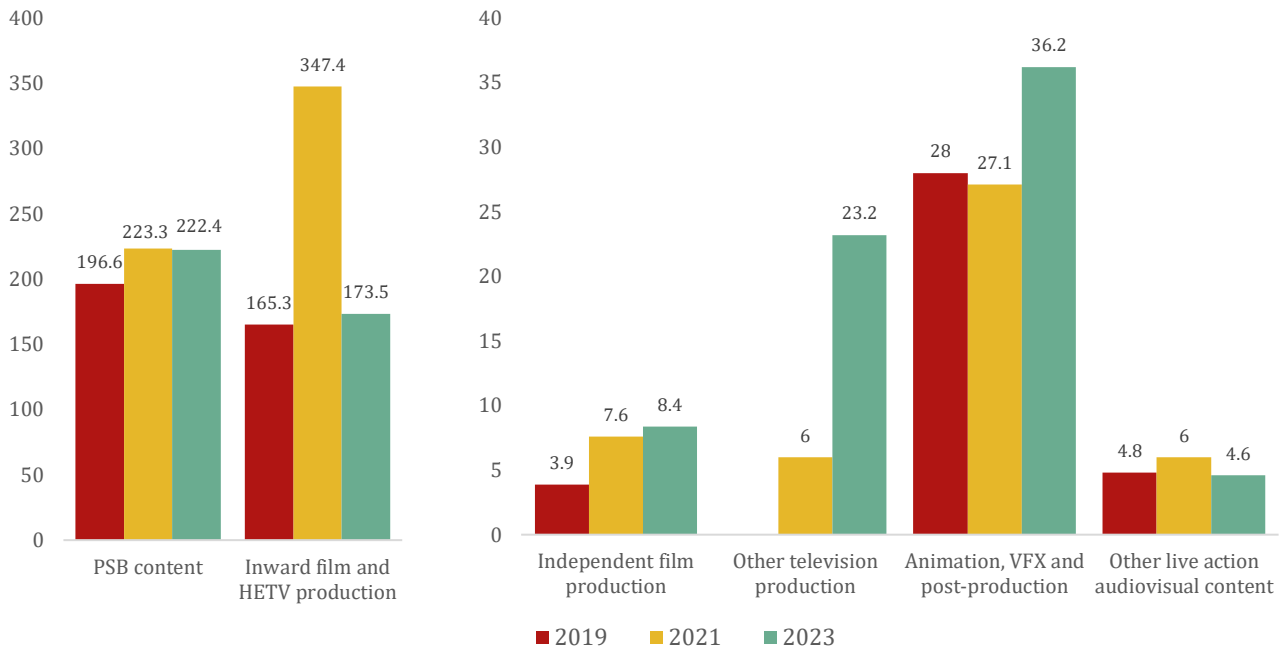
When this 2024 recovery in inward investment film and HETV production is combined with the recoveries in exhibition and screen tourism already observed in 2023, it is likely that the economic value of Scotland's screen sector remains on track to achieve Screen Scotland's strategic aim of £1 billion GVA impact for the screen sector within the Scottish economy by end 2030/31.

⁴ BFI (2024).

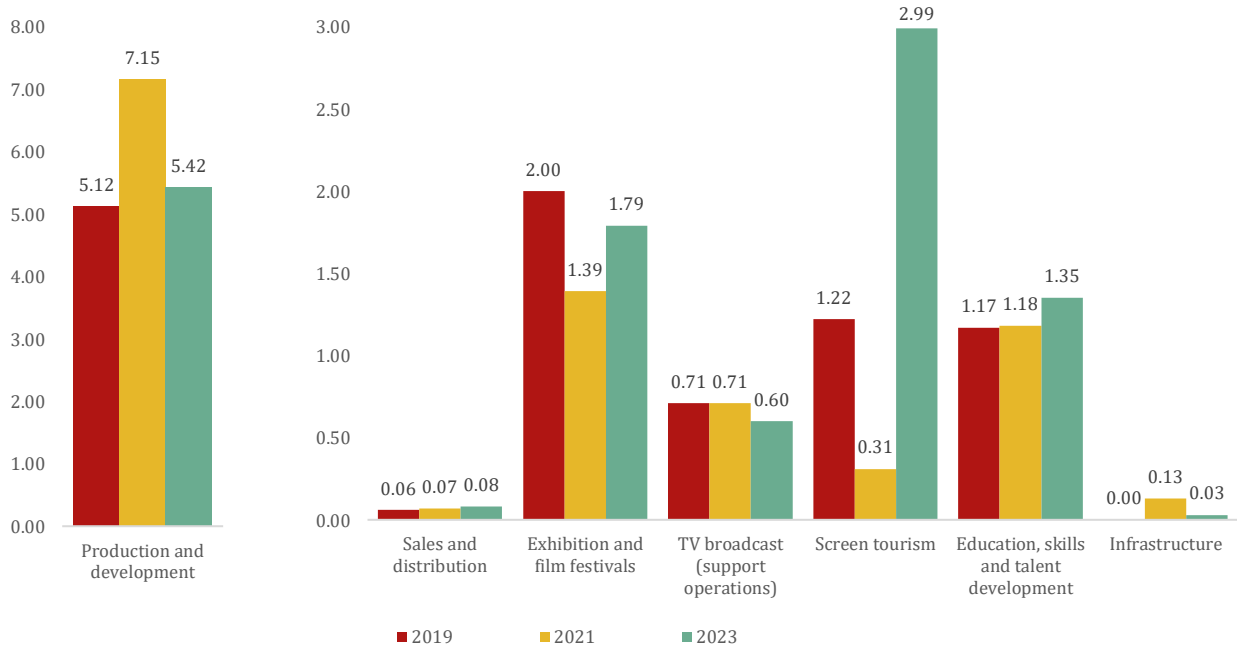
At a glance

Figure E - 1 Trends in Scotland's screen sector, 2019, 2021 and 2023

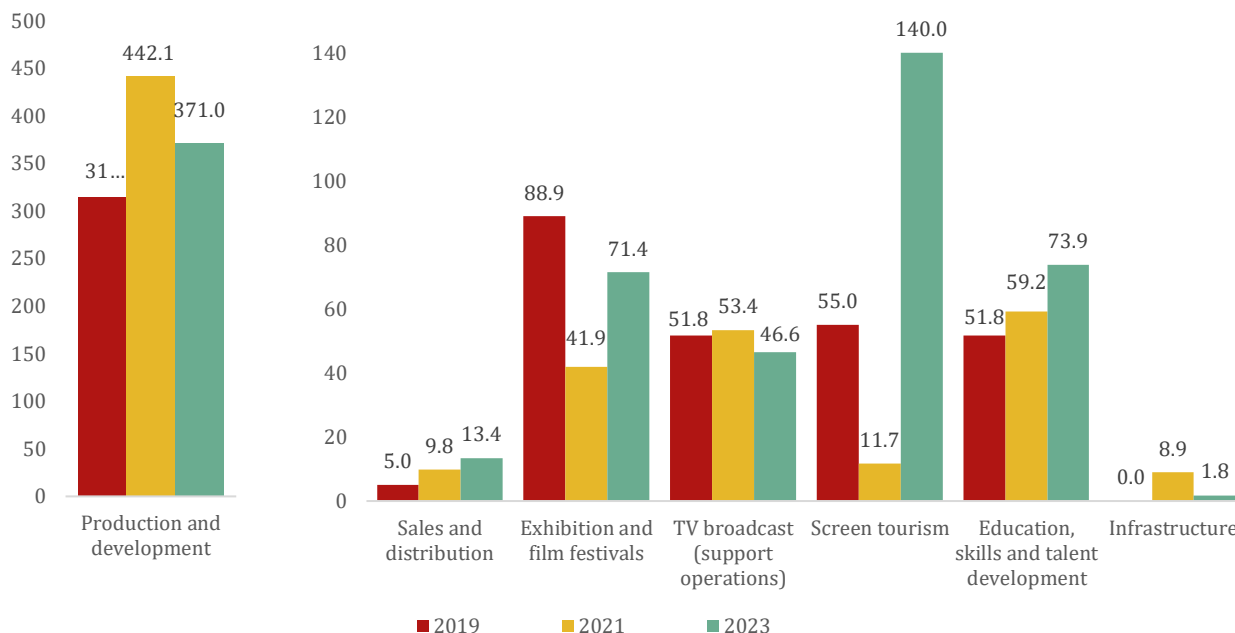
a. Estimated spending on film, TV and audiovisual production (£ millions)



b. Employment (FTEs, 000's)



c. GVA (£ millions)



Source: Saffery LLP / Nordicity estimates based on data from Screen Scotland, Screen Commission, BFI, public financial reports, Ofcom, producers/distributors survey (2021, 2022), Comscore, ONS, ABS, ASHE, IDBR, BRES, D&B, EIFF, Glasgow Film Festival, Tourism Resources Company, VisitScotland, VisitBritain, the Moffat Centre for Travel & Tourism Business Development, Jisc, HESA, ESFA, SQA and TRC Media

* Excludes employment, GVA and production spending generated in the 'Other TV production' segment, which was not included in the 2019 estimates

Scotland is home to a vibrant screen sector ecosystem benefitting from strong government commitment to its growth and success

Scotland remains home to a vibrant ecosystem of production companies, writers, independent film producers, broadcasters and facilities, creating a wide range of television programming and films for audiences within Scotland, across the UK and around the world.

It is a home to a diverse independent film exhibition sector that includes long-standing film festivals, and it hosts the annual Edinburgh TV Festival. Scotland also has post-production facilities and animation studios specialising in both production and visual effects (VFX) work for both television and games.

Thanks to its rich built and natural environments Scotland has long been a popular location for the filming of inward-investment films produced by the global studios, from *Harry Potter* to *Outlander*.

Much of the television production in Scotland is enabled by the fact that it has an ecosystem of public service broadcasters (PSBs) with Scottish bases – BBC Scotland, STV, BBC/MG Alba and C4. Network production obligations for both the BBC and C4 that require both to commission a certain proportion of their original UK network shows as “Scottish qualifying” also support the domestic sector’s sustainability – though there is evidence that the BBC places a greater emphasis than C4 on Ofcom qualification over economic impact or creative origination from within Scotland in the meeting of such [obligations](#).

The Scottish Government is committed to supporting the growth of Scotland’s film and TV production sector. Beginning in 2017, it increased the funding for film and TV production and development. This was followed by the formation of Screen Scotland in August 2018.

In 2024 Screen Scotland published its Strategy to end 2030/31. This strategy targets three interconnected strategic “north stars” for Screen Scotland: economic growth, creative origination from within Scotland, and development of the audience for films and TV programmes from Scotland.

As part of this commitment to grow the film and TV production sector as well as the wider screen sector in Scotland, Screen Scotland regularly monitors the contribution that the screen sector makes to

Scotland's economy – where the screen sector has been defined as inclusive of **film and TV production and development; animation, VFX and post-production; film and TV content sales and distribution; film exhibition and festivals; TV broadcast; screen tourism; film and TV education, skills and talent development; and film and TV production facilities**. The baseline for Screen Scotland's economic growth target – GVA impact for the screen sector in Scotland's economy of £1billion by end 2030/31 – was established by the 2019 edition of this report.

Scope of this report

This study follows two previous editions, the [Economic Value of the Screen Sector in Scotland in 2019](#) (published in June 2022) and the [Economic value of the Screen Sector in Scotland 2021](#) (published in August 2023). Like these two previous reports, this study covers film, TV and other audiovisual content, including television commercials. It does not cover the video games sector or online video production – though YouTube content creation is increasingly viewed as part of the professional audio/visual production sector, and a growing part of the “television content” viewers consume. As such it has started (in 2024/25) to become part of Screen Scotland's developmental work and may be incorporated into future editions of this report. For now though this report focuses on film and TV content that is intended for initial release in cinemas; on broadcast, multichannel or TV on-demand (TVOD) services; or subscription VOD (SVOD) services. Video content made primarily for video sharing platforms (e.g. YouTube or TikTok) is not captured.

This study focuses on quantifying the overall **economic footprint** of the professional screen sector in Scotland – that is, the total number of people employed on an FTE basis and the monetary value of all economic activity within the screen sector as measured by GVA – rather than assessing the additional or net economic impact of the screen sector in Scotland.

The impact in detail

Scotland's screen sector generated 12,260 FTEs of employment in 2023

In total, the screen sector in Scotland generated an estimated 12,260 FTEs of employment for Scotland's economy in 2023 (Table E - 1). Of this total employment impact, the direct employment impact was 8,660 FTEs (up from 7,440 FTEs in 2021). These **direct impact** FTEs included those employed on film and TV production projects and people employed at production companies, distributors, cinema exhibitors and film festivals, and at TV broadcasters in Scotland.

The direct impact also included people in those industries or sectors that benefit from screen sector spillovers, including screen tourism, and screen education and training. These are subsectors that lie outside the direct screen content value chain but still benefit from the creation of screen content, which ultimately generates demand for the products and services offered by these industries.

The infrastructure sub-sector, namely studio facilities, could also be considered a beneficiary of spillovers from the screen content value chain. In particular, rising levels of screen production in Scotland generate demand for the construction of new studio facilities – thereby creating a spillover for the construction and property development industries.

The sub-sectors that comprise both the screen sector value chain and the spillover industries all purchase supplies and services from other industries. Whilst some of these supply chain purchases are directed outside of Scotland, a very significant portion of these supply chains are located within Scotland. This type of economic impact is often referred to as the **indirect impact**. The impact of further re-spending of employment income by workers employed at both the direct and indirect phases of impact is often referred to as the **induced impact**. The screen sector generated an additional 3,600 FTEs of indirect and induced impact employment within Scotland in 2023. This excludes the indirect and induced impacts that would have been generated outside of Scotland.

The production and development of screen content accounted for the largest share of the screen sector's total employment impact. In 2023, it accounted for 5,420 FTEs of employment, or 44% of the sector's overall employment impact.

Table E - 1 Employment impact generated by screen sector in Scotland, 2023 (FTEs)

		Direct	Indirect/ Induced	Total
Screen content value chain	Production and development	3,540	1,880	5,420
	Sales and distribution	30	50	80
	Exhibition and film festivals	1,320	470	1,790
	TV broadcast (support operations)	410	190	600
Spillovers	Screen tourism	2,260	730	2,990
	Education, skills and talent development	1,090	260	1,350
	Infrastructure	10	20	30
Total		8,660	3,620	12,260

Source: Saffery LLP / Nordicity estimates based on data from Screen Scotland, Screen Commission, BFI, public financial reports, Ofcom, producers/distributors survey (2022), Comscore, ONS, ABS, ASHE, BRES, D&B, EIFF, Glasgow Film Festival, Tourism Resources Company, VisitScotland, VisitBritain, the Moffat Centre for Travel & Tourism Business Development, Jisc, HESA, ESFA and SQA
 Note: Figures may not sum to totals due to rounding

The sector's GVA totalled £718 million in 2023

The monetary contribution that the screen sector makes to Scotland's economy can be measured through GVA. In 2023, the screen sector in Scotland generated a total GVA impact of £718.0 million (Table E - 2). Out of this total impact, £458.6 million was generated directly within the various sub-sectors of the screen sector value chain and the spillover industries.








As with employment, the production and development of screen content was the largest single source of GVA – contributing 52% of the sector's total and direct GVA. In 2023, production and development accounted for £371.0 million in total GVA, including £225.0 million in direct GVA.

Table E - 2 GVA impact generated by screen sector in Scotland, 2023 (£ millions)

		Direct	Indirect/ Induced	Total
Screen content value chain	Production and development	225.0	146.0	371.0
	Sales and distribution	10.0	3.3	13.4
	Exhibition and film festivals	45.1	26.3	71.4
	TV broadcast (support operations)	31.0	15.6	46.6
Spillovers	Screen tourism	89.4	50.6	140.0
	Education, skills and talent development	57.0	16.9	73.9
	Infrastructure	1.1	0.7	1.8
Total		458.6	259.4	718.0

Source: Saffery LLP / Nordicity estimates based on data from Screen Scotland, Screen Commission, BFI, public financial reports, Ofcom, producers/distributors survey (2022), Comscore, ONS, ABS, ASHE, BRES, D&B, EIFF, Glasgow Film Festival, Tourism Resources Company, VisitScotland, VisitBritain, the Moffat Centre for Travel & Tourism Business Development, Jisc, HESA, ESFA and SQA
 Note: Figures may not sum to totals due to rounding

Key Findings

Economic value* of the screen sector in Scotland				
	2019	2021	2023	
	10,280 FTEs £567.6m GVA	10,940 FTEs £627.1m GVA	12,260 FTEs £718.0m GVA	▲
 Production and development	5,120 FTEs £315.1m GVA	7,150 FTEs £442.1m GVA	5,420 FTEs £371.0m GVA	▼
 Sales and distribution	60 FTEs £5.0m GVA	70 FTEs £9.8m GVA	80 FTEs £13.4m GVA	▲
 Exhibition and film festivals	2,000 FTEs £88.9m GVA	1,390 FTEs £41.9m GVA	1,790 FTEs £71.4m GVA	▲
 TV broadcast	710 FTEs £51.8m GVA	710 FTEs £53.4m GVA	600 FTEs £46.6m GVA	▼
 Screen tourism	1,220 FTEs £55.0m GVA	310 FTEs £11.7m GVA	2,990 FTEs £140.0m GVA**	▲
 Education, skills and talent development	1,170 FTEs £51.8m GVA	1,180 FTEs £59.2m GVA	1,350 FTEs £73.9m GVA	▲
 Infrastructure	--	130 FTEs £8.9m GVA	30 FTEs £1.8m GVA	▼

Source: Saffery LLP / Nordicity estimates based on data from Screen Scotland, Screen Commission, BFI, public financial reports, Ofcom, producers/distributors survey (2022), Comscore, ONS, ABS, ASHE, BRES, D&B, EIFF, Glasgow Film Festival, Tourism Resources Company, VisitScotland, VisitBritain, the Moffat Centre for Travel & Tourism Business Development, Jisc, HESA, ESFA, SQA and TRC Media

Note: Figures may not sum to totals due to rounding

* Total economic contribution, including direct, indirect and induced impacts

** VisitScotland's research methodology has changed since 2021, as has real underlying increases in Scotland's annual number of screen tourists and their spending, see section 6 and appendix B for more information

1. Introduction

1.1 Sector trends 2019 to 2023

The [Economic Value of the Screen Sector in Scotland 2019](#), published by Screen Scotland in June 2022, found that audiovisual production spending in Scotland was an estimated £398.6 million by 2019. Like the rest of the UK – and most of the world for that matter – Scotland’s audiovisual production industry experienced a pause in 2020 due to the Covid-19 pandemic. However, the research and analysis in [Economic value of the Screen Sector in Scotland 2021](#), published by Screen Scotland in August 2023 showed that production spending in Scotland rebounded after the Covid-19 pandemic to a record £617.4 million (Figure 1). This paralleled the rebounds observed across the UK and globally.

This updated study, [Economic value of the Screen Sector in Scotland 2023](#), reports that as a direct consequence of the Hollywood writers and actors strikes in the second half of 2023 spending on audiovisual production in Scotland fell back from the 2021 high but remained ahead of the 2019 baseline in 2023 at £468.3 million. While there were small decreases in the production of public service broadcasting (PSB) content compared to 2021, virtually all of the overall drop in spending on production was due to lower levels inward film and HETV production, on account of the Hollywood writers and actors strikes in 2023 (See Box 1).

Box 1 Hollywood writers and actors strikes in 2023

Hollywood experienced two major multi-month strikes in 2023. The Writers Guild of America (WGA) was on strike between May 2 and September 27. The Screen Actors Guild - American Federation of Television and Radio Artists (SAG-AFTRA) was on strike between July 14 and November 8, 2023. Both strikes led to stoppages in film and television production in the US and in other countries that host US inward investment film and television production.

Inward film and HETV production in Scotland fell from £347.4 million in 2021 to £173.5 million in 2023.

Despite the temporary contraction in inward film and HETV inward production in 2023, it has been a major sources of sector growth in Scotland since 2019. PSB-commissioned content made without tax reliefs increased from £196.6 million in 2019 to £223.3 million in 2021, however, over 80% of the £218.8 million net increase in production spending between 2019 and 2021 was driven by inward film and HETV production supported by UK tax relief (Figure 1).

In large part, this growth in inward film and HETV production was due to the opening of new or expanded studio facilities, particularly FirstStage Studios in Edinburgh, where Amazon’s *The Rig* was filmed; and the expansion of the studio facilities at the Pyramids Business Park in West Lothian, home to another Amazon HETV series, *Good Omens 2*. These studio facilities have made Scotland an attractive place to film, opening just in time to catch the global post pandemic boom in production.

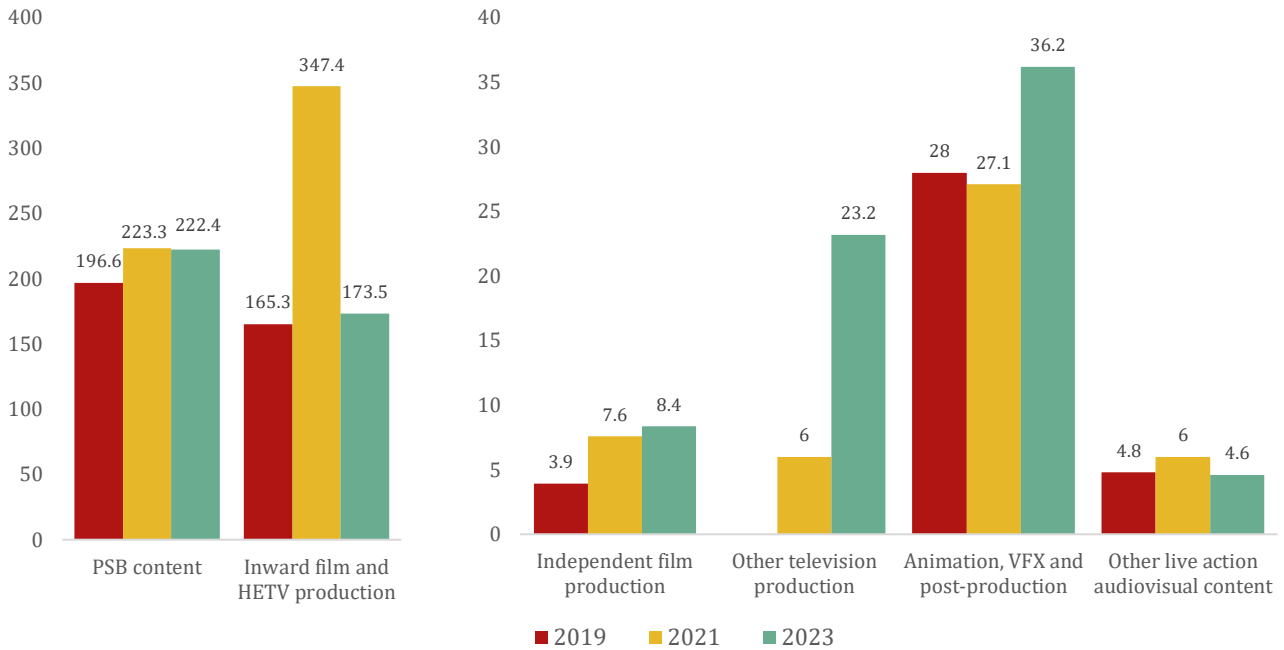
Even in the face of the Hollywood strikes and temporary contraction in film and HETV production in the second half of 2023, spending on audiovisual production in Scotland remained ahead of the 2019 baseline in 2023 at £468.3 million and Scotland’s overall screen sector experienced a healthy increase in employment and gross value added (GVA), in large part due to a higher economic contribution from screen tourism. Employment in Scotland’s screen sector increased by 13%, from 10,940 full-time equivalents (FTEs) in 2021 to 12,260 FTEs in 2023 (Figure 2a), while GVA in Scotland’s screen sector increased by 14% between 2021 and 2023, and by 26% since 2019 (Figure 2b).

With the resolution of Hollywood work stoppages in late 2023, Scotland’s inward film and HETV production showed signs of a healthy recovery in the first half of 2024. Filming data from Scotland’s Screen Commission indicates that 17 films and HETV series started principal photography in Scotland in the first six months of 2024.

These 17 projects brought over 800 filming days to Scotland in the first half of 2024 and generated an estimated £194 million in total production expenditures. This level of activity during the first six months put Scotland on pace to realise up to just under £400 million in film and HETV production during the 2024 calendar year. This would put Scotland’s 2024 level of film and HETV production ahead of the £347.4 million achieved in 2021.

Between 2019 and 2023, the employment impact of Scotland’s screen sector increased by 19% (Figure 2a) and its GVA impact grew by 27% (Figure 2b).

Figure 1 Estimated spending on film, TV and audiovisual production in Scotland (£ millions)

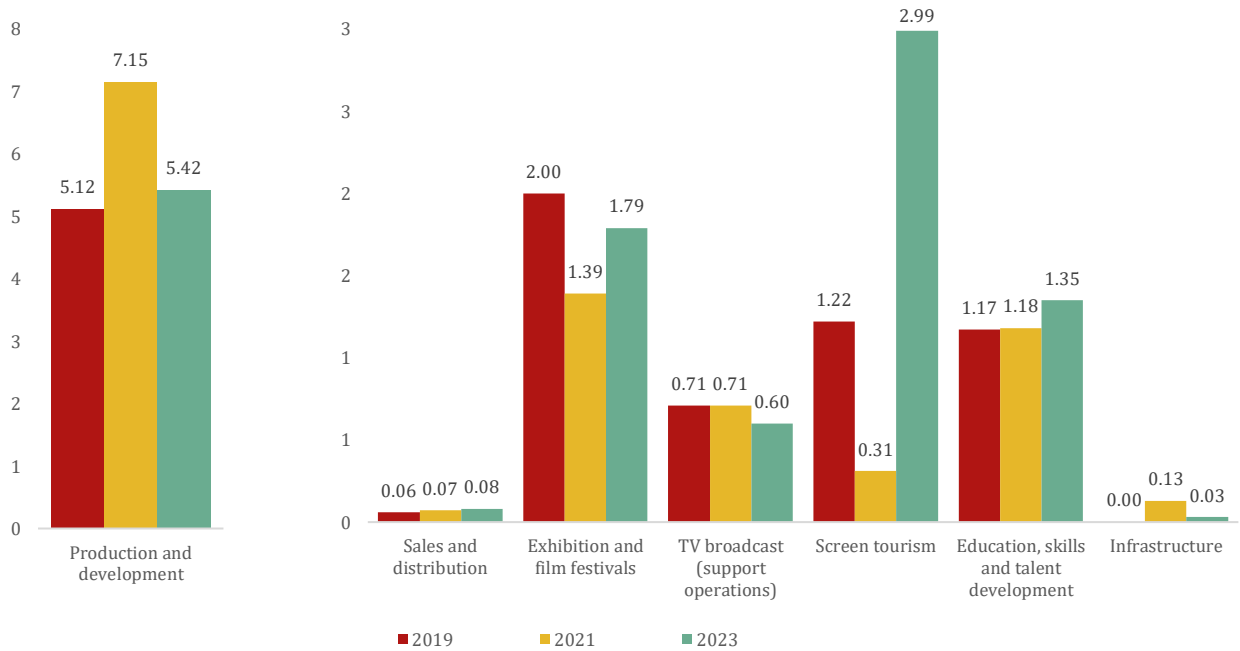


Source: Saffery LLP / Nordicity estimates based on data from Screen Scotland, Screen Commission, BFI, public financial reports, Ofcom, producers/distributors survey (2021, 2022, 2024), Comscore, ONS, ABS, ASHE, IDBR, BRES, D&B, EIFF, Glasgow Film Festival, Tourism Resources Company, VisitScotland, VisitBritain, the Moffat Centre for Travel & Tourism Business Development, Jisc, HESA, ESFA and SQA

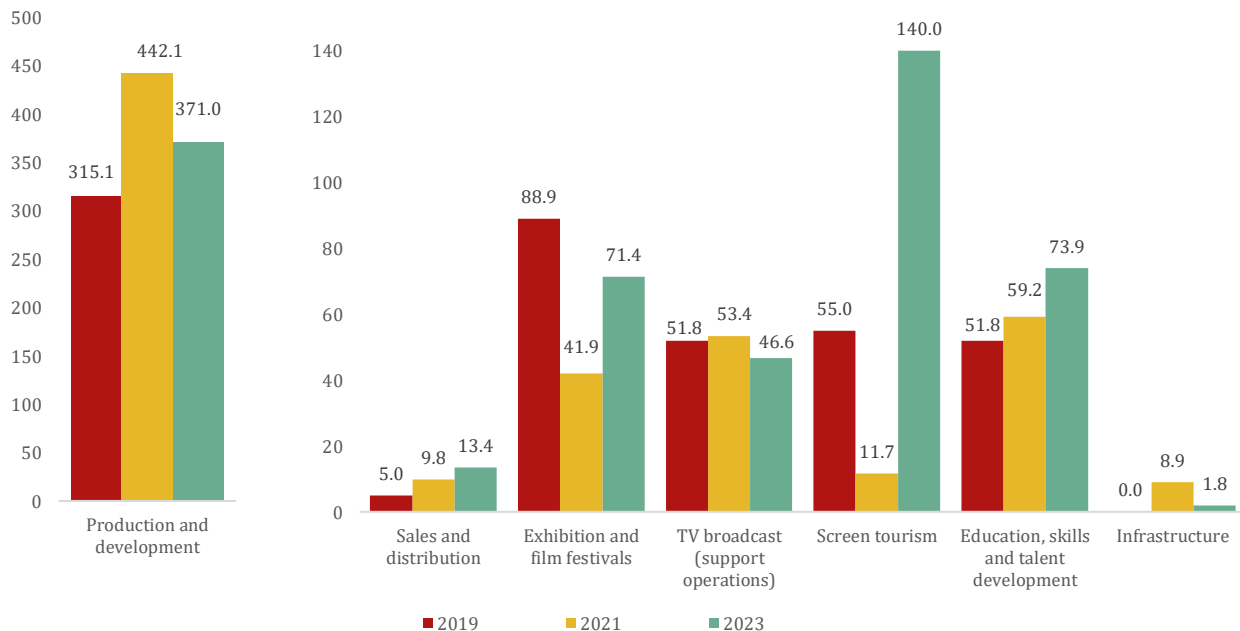
* Excludes employment, GVA and production spending generated in the ‘Other TV production’ segment, which was not included in the 2019 estimates

Figure 2 Trends in Scotland's screen sector

a. Employment (000s FTEs)



b. GVA (£ millions)



Source: Saffery LLP / Nordicity estimates based on data from Screen Scotland, Screen Commission, BFI, public financial reports, Ofcom, producers/distributors survey (2021, 2022), Comscore, ONS, ABS, ASHE, IDBR, BRES, D&B, EIFF, Glasgow Film Festival, Tourism Resources Company, VisitScotland, VisitBritain, the Moffat Centre for Travel & Tourism Business Development, Jisc, HESA, ESFA and SQA

* Excludes employment, GVA and production spending generated in the 'Other TV production' segment, which was not included in the 2019 estimates

1.2 Policy context

The creative industries have been one of the key engines of the UK economy over the past 10-15 years. According to statistics published by the Department for Culture, Media and Sport (DCMS) by 2023, the UK's creative industries were worth over £124 billion in GVA and employed over 2.4 million people.⁵ One of every 14 workers in the UK are employed in the creative industries.⁶

The latest published statistics indicate that there were just under 15,000 businesses operating in Scotland's creative industries in 2023,⁷ employing 161,000 people⁸ and just under £4.9 billion in GVA (2022).⁹

The UK and Scottish governments clearly recognise how the creative industries and the screen sector in particular are economic engines – driving exports and high-value job creation. For that reason, the creative industries are now one of the UK government's five priority sectors, along with digital technology, green industries, life sciences, and advanced manufacturing. Indeed, in May 2023, the UK government announced that it was significantly increasing its funding of the creative industries in an effort to help them expand by a further 50% by 2030.

The Scottish government views the creative industries as vital to Scotland's economy. Scotland's Economic Strategy published in March 2022 identifies the creative industries as one of the key industries of future growth for Scotland."¹⁰

Within Scotland and across the UK, the screen industries are one of the most important contributors to the creative industries' recent growth. According to the British Film Institute (BFI), the combined value of spending on the production of films and HETV programmes grew at an annual average rate of 18.1% between 2013 and 2022 and reached a record £7 billion in that year (Figure 3).

With the US strikes in 2023, production of films and HETV programmes in the UK dropped to £4.2 billion. However, the level of production recovered to £5.6 billion in 2024.

All indications are that film and TV production in the UK should continue to grow. The UK's fiscal incentive remains globally competitive and government is committed to maintaining that competitiveness, as is evident from its recent enhancements to the Audiovisual Expenditure Credit (AVEC) and introduction of Independent Film Tax Credit (IFTTC) and Additional tax relief for Visual Effects. This combined with the UK's talented filmmakers, crews and performers, and world-class infrastructure will underpin and sustain this continued growth.

⁵ DCMS (2024a) [Economic Estimates: Employment and APS earnings in DCMS sectors, January 2023 to December 2023](#). 20 December.

⁶ DCMS (2024a).

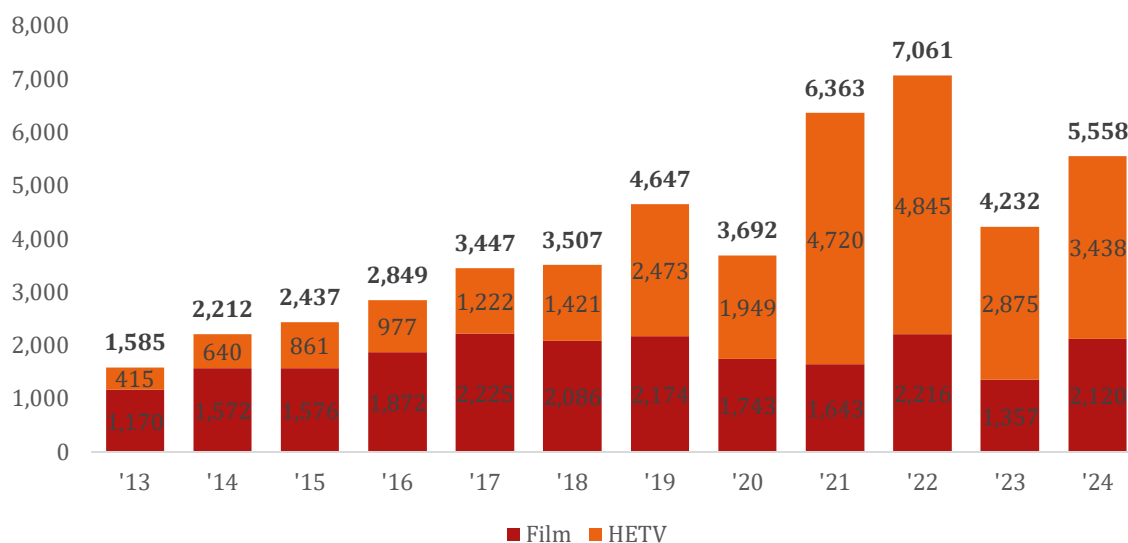
⁷ DCMS (2024b) [DCMS and Digital Economic Estimates: Business Demographics, 2023](#). 15 November.

⁸ DCMS (2024a).

⁹ DCMS (2025b) [DCMS Sectors Economic Estimates: Regional GVA 2022](#). 26 February.

¹⁰ Scottish Government (2022) [Scotland's National Strategy for Economic Transformation](#). March. pp. 23-24.

Figure 3 UK expenditures on production supported by Film Tax Relief and High-End TV Tax Relief (£ millions)



Source: BFI

The Scottish Government is committed to supporting the growth of Scotland’s film and TV production sector. Beginning in 2017, it significantly increased the funding for film and TV production and development. This was followed by the formation of Screen Scotland in August 2018.¹¹

The [Economic Value of the Screen Sector in Scotland 2019](#) found that film, TV and audiovisual production spending in Scotland was an estimated £398.6 million by 2019. [Economic value of the Screen Sector in Scotland 2021](#) found that production spending had not only rebounded from the economic effects of the Covid-19 pandemic in 2020 but grew to an estimated £617.6 million by 2021 (Figure 1). This study shows that production spending did drop to £468.3 million in 2023. However, this drop was almost entirely due to the Hollywood strikes, and despite the global impact of those strikes spending on audiovisual production in Scotland remained ahead of the 2019 baseline in 2023. Data for the first half of 2024 indicate that Scotland’s film and TV production sector was back on track to exceed £600 million in production spending. For the Scottish Government and Screen Scotland, the over-arching goal is to further increase not only the level of annual spending on audiovisual production, but also economic activity and employment across Scotland’s entire screen sector, so that by 2030 it can be a £1 billion industry.

Box 2 What is GVA?

GVA is the standard measure used by the Office for National Statistics (ONS) and other national statistical agencies for measuring the monetary value of economic activity and the economic performance of industries.

Unlike turnover, which measures the income collected by a firm or industry from the sale of its final product or service, GVA essentially measures the value ‘added’ by that firm or industry to the inputs purchased from other firms or industries in order to create its final products or services for sale.

GVA can be calculated by either summing the value of payments to workers and suppliers of capital or deducting the value of purchase of goods, materials and services from total turnover.

GVA provides a much more indicative measure of economic activity, particularly when summing activity across different industries. GVA removes the double counting inherent in other measures such as turnover. When a firm’s turnover is summed with the turnover of its upstream suppliers, the turnover of the latter is counted twice. However, because GVA measures the unduplicated value of economic activity, there is no such double counting.

¹¹ Screen Scotland (2019). *Business Plan 2019/20*. p. 5.

1.3 About this report

As part of its commitment to grow the film and TV production sector as well as the wider screen sector in Scotland, Screen Scotland commissioned Saffery LLP and Nordicity to prepare a study of the [Economic Value of the Screen Sector in Scotland 2019](#), which was published in June 2022. In August 2023, Screen Scotland published an updated version of this report, the research and analysis in [Economic value of the Screen Sector in Scotland 2021](#).

The objective of these two studies was to quantify the contribution that the screen sector made to Scotland's economy – where the screen sector has been defined as inclusive of film and TV production and development; animation, visual effects (VFX) and post-production; film and TV sales and distribution; TV broadcast; film exhibition, and film and TV festivals; screen tourism; film and TV education, skills and talent development; and film and TV production facilities. The studies only covered film, TV and other audiovisual content. They did not cover the video games sector. The 2019 study didn't include audiovisual production activity such as advertising commercials and corporate videos, but it was included in the 2021 study and in this 2023 study. In order to depict a more comprehensive picture of the wide range of audiovisual content that is produced in Scotland.

The following report, **Economic Value of the Screen Sector in Scotland 2023**, provides an update to the 2019 and 2021 reports. In general, this report follows the same sector definition and framework as was used for the 2019 and 2021 reports.

We note that the [Scottish Annual Business Statistics \(SABS\)](#) does provide annual industry-by-industry data on employment, turnover, GVA and compensation of employment (COE). According to the SABS, the film, video, and TV and radio broadcasting sector¹² in Scotland employed 7,300 people in 2022 (the most recent of available published SABS data at an industry level), earned £614.3 million in turnover and generated £268.5 million in direct GVA in that year. For several reasons, however, the SABS does not present a representative picture of the full economic activity generated by the screen sector.

- Because the SABS is only published for four-digit (or fewer) Standard Industrial Classification (SIC) codes, it is not possible to, for example, untangle TV broadcasting from radio broadcasting.
- Notably, the SIC-based SABS only captures the economic activity generated by businesses based in Scotland and fails to account for economic activity generated by the inward production of audiovisual content made by production companies based outside of Scotland.
- Data based strictly on SIC codes would not necessarily capture the whole range of economic activity in the screen sector in so far as that activity falls outside of the SICs specific to the audiovisual sector – for example, screen tourism.

In light of the above, the following study draws upon a variety of different sources – the Annual Business Survey (ABS), other data from the Office for National Statistics (ONS), the BFI, Ofcom, industry surveys and interviews – to provide a comprehensive estimate of the contribution that the entire screen sector value chain and its spillover impacts – particularly screen tourism and screen education and skills development – make to Scotland's economy.

¹² Includes Standard Industrial Classification (SIC) 59 and 60.

1.4 Summary of results

The screen sector in Scotland generated an estimated 12,260 FTEs of employment for Scotland’s economy in 2023 (Table 1).

Of this total employment impact, the direct employment impact was 8,660 FTEs. These direct impact FTEs included the production teams employed directly in film and TV production and people employed at production companies, distributors, cinema exhibitors and film festivals, and at TV broadcasters in Scotland. The Scottish screen sector also generated 3,600 FTEs of indirect and induced impact employment within Scotland in 2023.

The production and development of screen content accounted for the largest share of the screen sector’s total employment impact. In 2023, it accounted for 5,520 FTEs of employment, or 44% of the sector’s overall employment impact. This was down from 65% in 2021 and slightly lower than the 50% share in 2019.

With the rebound in post-pandemic tourism, screen tourism accounted for the second largest share of total employment – 2,990 FTEs or 24%. The cinema exhibition sub-sector (1,790 FTEs); as well as and the education, skills and talent development subsectors (1,350 FTEs) were also significant sources of employment impact.

Table 1 Employment impact generated by screen sector in Scotland, 2023 (FTEs)

		Direct	Indirect/ Induced	Total
Screen content value chain	Production and development	3,540	1,880	5,420
	Sales and distribution	30	50	80
	Exhibition and film festivals	1,320	470	1,790
	TV broadcast (support operations)	410	190	600
Spillovers	Screen tourism	2,260	730	2,990
	Education, skills and talent development	1,090	260	1,350
	Infrastructure	10	30	30
Total		8,660	3,600	12,260

Source: Saffery LLP / Nordicity estimates based on data from Screen Scotland, Screen Commission, BFI, public financial reports, Ofcom, producers/distributors survey (2024), Comscore, ONS, ABS, ASHE, BRES, D&B, EIFF, Glasgow Film Festival, Tourism Resources Company, VisitScotland, VisitBritain, the Moffat Centre for Travel & Tourism Business Development, Jisc, HESA, ESFA and SQA

Note: Figures may not sum to totals due to rounding

In 2023, the screen sector in Scotland generated a total GVA impact of £718.0 million for Scotland’s economy (Table 2). Out of this total impact, £458.6 million was generated directly within the various sub-sectors of the screen sector value chain and the spillover industries.

As with employment, the production and development of screen content was the largest single source of GVA – contributing just under 52% of the sector’s total and direct GVA, despite the effects of the Hollywood strikes. In 2023, production and development accounted for £371.0 million in total GVA and £225.0 million in direct GVA.

The post-pandemic rebound in global travel also helped lift economic activity in the screen tourism and exhibition sub-sectors in 2023 in relation to 2021, with the latter experiencing a recovery in physical attendance at film and TV festivals.

Table 2 GVA impact generated by screen sector in Scotland, 2023 (£ millions)

		Direct	Indirect/ Induced	Total
Screen content value chain	Production and development	225.0	146.0	371.0
	Sales and distribution	10.0	3.3	13.4
	Exhibition and film festivals	45.1	26.3	71.4
	TV broadcast (support operations)	31.0	15.6	46.6
Spillovers	Screen tourism	89.4	50.6	140.0
	Education, skills and talent development	57.0	16.9	73.9
	Infrastructure	1.1	0.7	1.8
Total		458.6	259.5	718.0

Source: Saffery LLP / Nordicity estimates based on data from Screen Scotland, Screen Commission, BFI, public financial reports, Ofcom, producers/distributors survey (2024), Comscore, ONS, ABS, ASHE, BRES, D&B, EIFF, Glasgow Film Festival, Tourism Resources Company, VisitScotland, VisitBritain, the Moffat Centre for Travel & Tourism Business Development, Jisc, HESA, ESFA and SQA

Note: Figures may not sum to totals due to rounding

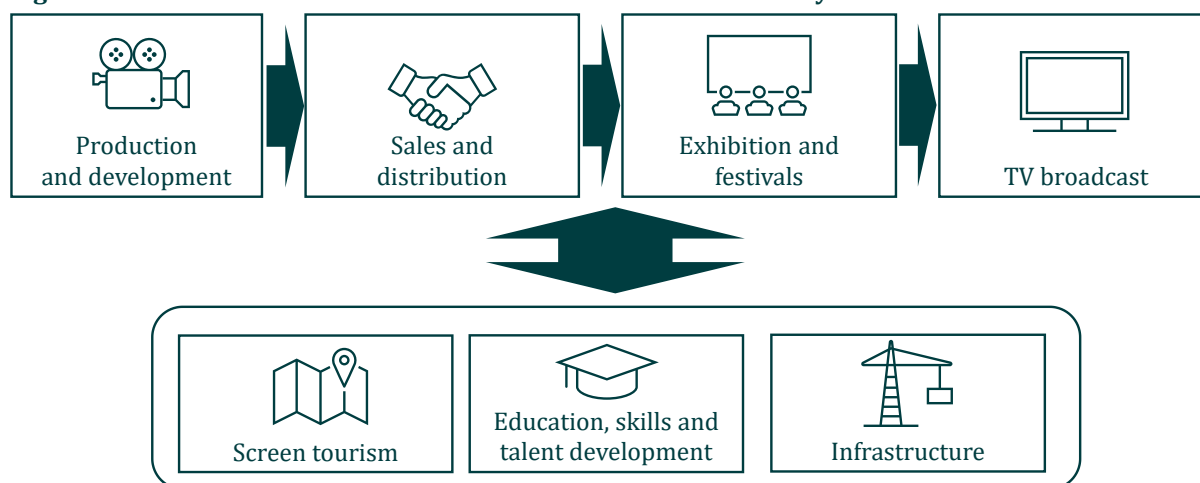
1.5 Approach and methodology

To prepare this study, originally for the 2019 report, we collaborated with Screen Scotland to develop an over-arching framework for the definition of the screen sector and the key sub-sectors for inclusion in the study. A combination of desk research and primary research was then used to gather the data to derive estimates of production spending, business activity, employment and GVA across the various sub-sectors of the screen sector.

1.5.1 Definition of screen sector

As noted above, this study analyses the economic contribution of both the screen sector value chain and the wider impacts that fall outside of that value chain – referred to as spillover impacts in this report. In that regard, the study follows the framework outlined in Figure 4.

Figure 4 Framework for screen sector economic contribution analysis



With respect to the screen sector value chain, the analysis covers: (i) the production and development of film and TV content; (ii) the sales and distribution of screen content, (iii) the exhibition sub-sector, including cinemas and film festivals, and (iv) the TV broadcast sub-sector within Scotland. This value chain and the various sub-sector components of it trace the path of screen content: from its formulation

as an idea or screen-based story to the points at which it is made available to audiences – either at festival screenings, in cinemas, on television or via online subscription video on demand (SVOD) platforms.

The screen content value chain's impact also extends into the supply chains that provide supplies and services to each stage of the value chain. For example, the production of film and TV content stimulates demand, income and employment within a variety of supplier industries such as timber and other building materials, transport, catering and accommodation.

Outside of this screen content value chain, the screen sector can also stimulate economic activity elsewhere in the Scottish economy. Firstly, Scotland's tourism industry benefits from screen tourism – as people from inside and particularly outside of Scotland visit locations featured in films and TV programmes made in Scotland or about places in Scotland.

The provision of education, skills-training and talent-development programmes related to the screen sector also generates additional income and employment for public and private education and training institutions and organisations within Scotland. Finally, the construction industry within Scotland benefits when screen sector production stimulates the development of studio facilities (i.e. infrastructure) within Scotland.

1.5.2 Desk research

The desk research consisted of the review and compilation of data and other information supplied by Screen Scotland and Screen Scotland's Screen Commission and sourced from the BFI, ONS, Ofcom, the annual reports of the public service broadcasters (PSBs), VisitScotland, Companies House filings and Dun & Bradstreet Hoovers (D&B).

Screen Scotland: Data from Screen Scotland's funding awards, as well as the cost reports Screen Scotland received from funded projects, were used to estimate the total value of production and development spending supported by Screen Scotland. The analysis focused on estimating the total production spending on projects that started principal photography in 2023, regardless of when they received funding from Screen Scotland.

Screen Commission: The Screen Commission (as part of Screen Scotland) provided data on the number of filming days for projects supported by Film Tax Relief (FTR) or High-End Tax Relief (HETR). These filming days data were combined with a new rate card originally developed for BFI's *Screen Business 2021* to estimate the total spending on production in Scotland (supported by FTR or HETR), where spending data was not otherwise available from Screen Scotland.

BFI: Certain data for cinema admissions was sourced from the BFI. The BFI's new production daily spending rate card was also used to estimate total spending on FTR and HETR production Scotland, where spending data was not available from Screen Scotland.

ONS: Data was sourced from various ONS surveys, including the ABS, Annual Survey of Hours and Earnings (ASHE) and Business Register and Employment Survey (BRES) to estimate the economic contribution of certain screen sub-sectors or develop other assumptions for estimating employment, COE or GVA within certain screen sub-sectors.

Ofcom: Data from the *Media Nations 2024 Scotland* report (which included data for 2023) and *Made-Outside-London Register* were used to estimate TV production in Scotland, identify TV projects made in Scotland and production companies operating in Scotland.

Annual reports of PSBs: Data from the annual reports published by BBC, STV, Channel 4, MG Alba and ITV¹³ was used to estimate the PSBs' spending on TV production and broadcasting operations in Scotland.

VisitScotland: Certain data on visitors to Scotland and admissions to castles and other monuments in Scotland was used to model the economic contribution from screen tourism.

¹³ Data for Channel 5 was sourced from Ofcom, *Media Nations 2020 Scotland* report.

Companies House and D&B: In some cases, turnover, employment and other financial data for specific companies operating in Scotland’s screen sector was sourced from public accounts available from Companies House or D&B Hoovers.

1.5.3 Primary research

The primary research consisted of a survey of production companies and consultation interviews with a wide range of stakeholders within the Scotland’s screen sector.

In collaboration with Screen Scotland, an online survey of production companies was conducted between September 2024 and March 2025. The main purpose of the survey was to collect data on production activity in 2023 that would not otherwise be captured by data available from Screen Scotland, BFI, Ofcom or the PSBs. The online survey was also used to gather data on development and distribution – two segments of the screen content value chain for which comprehensive data is not necessarily available from other sources. Screen Scotland invited over 200 production companies to participate in the online survey research. A total of 54 production companies submitted completed responses to the survey. Crucially, several of the largest production companies in Scotland submitted survey responses. This is the same sample size as in 2021.

1.5.4 Economic impact modelling

The data collected through the desk and primary research was used in combination with Nordicity’s MyEIA™ Model to generate estimates of economic impact in terms of full-time equivalent (FTE) employment, COE and GVA. The general MyEIA™ Model is based on the input-output tables and other economic statistics published by ONS. The MyEIA™ Model used for this study was based on the input-output tables published by the Scottish Government for Scotland’s economy.

The bespoke nature of the MyEIA Model™ means that it can provide reliable estimates for any industry, even if that industry is not among the 98 industries that comprise the Scottish Government’s 2019 supply and use tables.¹⁴ With detailed data on expenditures within an industry or any type of economic shock, the MyEIA Model™ can generate estimates of direct, indirect and induced economic impacts (see Box 3 for definitions). A more detailed description of the MyEIA™ Model can be found in Appendix C.

Box 3 Types of economic impact

Direct economic impact refers to the employment, COE and GVA generated directly within the screen sub-sectors in Scotland.

Indirect economic impact refers to the increased employment, COE and GVA experienced by the businesses located in Scotland that provide supplies and services to businesses and other organisations operating in the screen sub-sectors.

Induced economic impact refers to the increased employment, COE and GVA experienced across the wider Scotland economy, when workers employed on account of the direct and indirect impacts proceed to spend their earnings within Scotland on purchases of consumer goods and services.

Spillover impacts occur when industries outside of the screen sector value chain (e.g. the tourism sector) benefit from screen content. For example, screen tourism can generate additional spending on accommodation, meals, transport and shopping within Scotland’s economy, thereby raising employment, COE and GVA.

¹⁴ At the time of writing, the Scottish government’s 2019 supply and use tables (published in October 2022) were the latest years available.

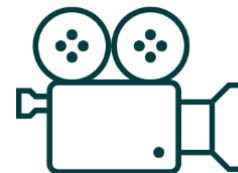
1.6 Report outline

The report has been organised to correspond with the screen sector framework found in Figure 4.

- **Section 2** summarises the research and analysis of the production and development sub-sector.
- **Section 3** examines the sales and distribution sub-sector.
- **Section 4** summarises the research and analysis of the exhibition sub-sector and film festivals.
- **Section 5** presents our analysis of the contribution of the TV broadcast sub-sector – beyond the portion of its contribution associated with TV production already counted in Section 2.
- **Section 6** examines the economic impact of screen tourism.
- **Section 7** assesses the contribution of education and skills development related to the screen sector.
- **Section 8** examines the impact of infrastructure investment.
- **Section 9** presents a regional analysis of the economic impact of the screen sector within Scotland.

2. Production and development

- £468.3 million in production expenditures
- 3,540 FTEs of direct employment in cast, crew and other creative roles within the production industry
- Including indirect and induced impacts, total employment impact of 5,420 FTEs
- £371.0 million in GVA for the Scotland economy



2.1 Overview

The following section analyses the economic contribution that film and TV production, and development make to Scotland. It includes estimates of spending on production and development, derived by collecting, compiling and reconciling data from Screen Scotland, the Screen Commission, PSBs, an online survey of production companies based in Scotland, and other sources.

This section concludes with an analysis of the economic contribution of production and development activity in Scotland in 2023, based on the estimates of production and development spending (Section 2.4).

2.2 Development

In the film and TV sector, development includes the research, writing and creative work that goes into creating ideas for new films and TV programmes and then writing the outlines, treatments and pitch decks, and screenplays for those productions as well as meetings with commissioners and potential production partners in the UK and at international markets and festivals. TV executive producers, film and television producers, development executives and screenwriters often lead the development process and once they have a programme proposal, deck, treatment or screenplay, they find a broadcaster, public funder, or distributor/sales agent (in the case of films) to financially support the production of the project. This process can take months or even years, with film projects often having a particularly long, uncertain and complex road to production.

In many cases, the development leads will fund or underwrite the development process from the income earned from other projects that have gone into production. In other cases, a broadcaster may help fund a producer or screenwriter's development in exchange for a 'first refusal' on the project or a certain period of exclusivity over the production of the screenplay. In television, distributors may also advance development support against future rights income.

In many jurisdictions – including Scotland – public funding is available to producers and screenwriters to undertake development, especially if they are unable to self-fund the development or obtain development funding from broadcasters or distributors. With PSB production and development budgets under ever-increasing pressure and production an increasingly marginal business for independent producers, this public funding is often essential in 'priming the pump', enabling producers to take forward new projects and sustain their growth.

In Scotland, Screen Scotland provides grants and equity investment to filmmakers resident in Scotland for the development of feature films or documentaries through the Film Development and Production Fund. Producers who would like to develop TV projects can access project or slate funding through the Broadcast Content Fund provided they are Scotland based.

During the 2023 calendar year, Screen Scotland disbursed just over £1,100,000 in development funding for feature films and documentaries through its Film Development and Production Fund, and almost £750,000 for the development of TV projects through its Broadcast Content Fund, memorandums of

understanding (MOUs) with BBC and Channel 4. In total, Screen Scotland provided just under £1.9 million in development funding in 2023 – up from £1.6 million in 2021.

Screen Scotland’s £1.9 million in development funding in 2023 attracted an additional £7.2 million in development funding from broadcasters, distributors, the BFI and production companies themselves (i.e. self-funding). In total, therefore, Screen Scotland supported £9.1 million development in 2023.

Table 3 Estimated spending on film and TV programme development in Scotland (£ millions)

	2019	2021	2023
Production companies (self-funding)	6.8	8.9	4.7
Screen Scotland funding	2.4	1.6	1.9
Broadcasters	1.3	2.1	1.1
Distributors	0.3	0.5	0.8
BFI	0.1	0.1	0.3
Other	0.3	0.3	0.3
Total	11.2	13.5	9.1

Source: Saffery LLP / Nordicity estimates based on data from Screen Scotland and producer survey (2021, 2022, 2024)

Note: Figures may not sum to totals due to rounding

2.3 Production

Scotland has a vibrant independent production ecosystem. Raise the Roof Productions, Tern Television, Synchronicity, Finestripe Productions, Firecrest Films, Friel Kean Films, Hello Halo, Wild Child Animation, Young Films, Hopscotch, Bandicoot, Black Camel, Two Rivers Media and IWC Media represent just some of the leading independent film and television production companies based in Scotland.

Alongside these Scotland-based independent companies, several leading UK production companies based outside Scotland, such as World Productions and Objective Media Group, maintain a business base in Scotland. Scotland also hosts production units for a number of broadcaster-owned production companies, including BBC Studios and STV Studios.

In recent years, these production companies have been responsible for making a variety of scripted and unscripted content in Scotland, including *Shetland*, *Vigil*, *Tornado*, *Aftersun*, *Harvest*, *The Agency: Unfiltered*, *Dinosaur*, *On Falling*, *The Outrun*, *Annika*, *An t-Eilean* and *Highland Cops*.

2.3.1 PSB content

The PSBs represent one of the core sources of demand, financing and commissioning of TV programmes and documentary films made by Scotland-based producers. By and large, this consists of TV programmes and films commissioned by PSBs from external, independent and so-called ‘non-qualifying independent’ producers (e.g. drama, documentary, specialist factual, factual entertainment and entertainment programmes) or made in-house by the PSBs (e.g. news and current affairs programmes).

To estimate the total value of spending on PSB content, we reviewed the PSBs’ public financial reports and Ofcom data on TV production in the nations. We also conducted research interviews with the PSBs.

The data gathered through this desk research and research interviews indicates that PSBs’ operating expenditures in Scotland totalled an estimated £268.5 million in 2023 (Table 4). This included not only the PSBs’ spending on content production, but also other aspects of their broadcasting support operations in Scotland, such as transmission, sales and marketing, administration and other overhead.

After making adjustments to remove expenditures on broadcasting support operations (e.g. operation of transmission infrastructure), payments made between PSBs (e.g. BBC Scotland contributions to MG Alba/BBC Alba) and content already supported by tax relief (see Section 2.3.2), we conclude that the PSBs spent an estimated £222.4 million on content production in Scotland in 2023. This included PSBs’

spending on news, current affairs, sports, children's, arts, entertainment and factual entertainment programming.

As noted in Section 2.3.7, in 2019, PSB content was the single largest type of film and TV production in Scotland (£196.6 million), followed closely by inward film and HETV production. However, the tremendous growth in the latter in 2021 meant that the total value of PSB content that year (£223.3 million) trailed inward film and HETV production (£347.4 million) for the first time. In 2023 however, PSB content (£222.4 million) was once again the largest type of film and TV production spend in Scotland, a consequence of the US strikes more than an indication of growth in UK PSB spend.

Table 4 PSB's estimated spending on TV production in Scotland, 2023 (£ millions)

	Gross operating expenditures in Scotland	Content spending in Scotland ¹
BBC Scotland ²	76.1	66.2
BBC Network ³	88.8	88.8
MG Alba / BBC Alba ⁴	23.4	18.8
STV ⁵	32.2	9.6
ITV	7.1	7.1
Channel 4 ³	36.2	27.3
Channel 5	4.7	4.7
Total	268.5	222.4

Source: Saffery LLP /Nordicity estimates based on data from public financial reports, Ofcom and interviews with broadcasters
 Note: Figures may not sum to totals due to rounding

1 Excludes estimated spending on broadcasting support operations

2. Gross operating expenditures and content spending amounts adjusted to remove BBC Scotland's contributions to BBC Alba; figures exclude operating expenditures for BBC Scotland's radio operations and the Scottish Symphony Orchestra.

3 Gross operating expenditures and content spending for BBC Network and Channel 4 have been adjusted to remove value of spending on content supported by tax relief.

4. Includes contributions to gross operating expenditures and content spending from MG Alba and BBC Scotland.

5. Gross operating expenditures (broadcast and digital) and content spending have been adjusted to remove programming payments made to ITV (2023: est. £48.4m); figures exclude STV Productions.

The total value of PSB's estimated content spending in Scotland increased by £26.7 million or 14% between 2019 and 2021, before slightly decreasing by just over 1% in 2023 (Table 5).

Table 5 PSB's estimated TV content spending in Scotland (£ millions)

	2019	2021	2023
BBC Scotland	60.1	67.1	66.2
BBC Network	84.8	92.8	88.8
BBC Alba	16.9	16.9	18.8
STV	9.2	9.4	9.6
ITV	2.7	8.1	7.1
Channel 4	20.7	23.5	27.3
Channel 5	2.2	5.5	4.7
Total	196.6	223.3	222.4

Source: Saffery/Nordicity estimates based on data from public financial reports, Ofcom and interviews with broadcasters
 Note: Figures may not sum to totals due to rounding

2.3.2 Inward film and HETV production¹⁵

Producers based outside of Scotland – particularly those based outside the UK – also made significant contributions to production activity within Scotland. In most cases, this inward production was supported by the Film Tax Relief (FTR) or High-end Tax Relief (HETR). In some cases, projects also received funding from Screen Scotland’s Production Growth Fund (PGF).

In 2023, films such as *Damaged*, *The Gorge*, and *Last Breath* filmed in Scotland, along with TV series such as the long-running *Outlander* (season 7), *The Rig* (season 2), and *The Crown* (season 6).

To estimate the total spending generated by inward film and HETV production in Scotland, data on the number of filming days was sourced from Scotland’s Screen Commission. These filming days were multiplied by a rate card developed for the BFI for average daily production spending for different types of film and HETV projects. These rate-card rates included estimates of spending on Scotland-based elements used on inward production, as well as elements based outside of Scotland.

Producers based outside of Scotland spent an estimated £173.5 million on the inward production of films and HETV programmes filmed on location or in studio facilities in Scotland in 2023 (Table 6). This included £56.4 million in spending on FTR-supported films and £117.1 million on HETR-supported TV programmes.

The total value of film and HETV production activity in Scotland more than doubled between 2019 and 2021. In large part, this was due to the opening of new or expanded studio facilities, particularly FirstStage Studios in Edinburgh, where *The Rig* and *Anansi Boys* were filmed. These new studio facilities have made Scotland and even more attractive place to film.

Table 6 Estimated spending in Scotland on inward film and HETV production (£ millions)

	2019	2021	2023
Film Tax Relief projects	60.4	117.7	58.1
HETV Tax Relief projects	104.9	229.7	117.1
Total	165.3	347.4	175.2

Source: Saffery LLP / Nordicity estimates based on data from Screen Scotland, Screen Commission and BFI

2.3.3 Independent film production

In addition to the TV programmes and films commissioned by PSBs and inward film and HETV production supported by tax relief, data from Screen Scotland indicates that there were 13 independently produced fiction and documentary films made by Scotland-based producers in 2023 (i.e. films that started principal photography in 2023) with support from Screen Scotland’s Film Development and Production Fund. These films, including *The Fall of Sir Douglas Weatherford*, *SEBASTIAN* and *Harvest* (which counts for 45% of total production spend alone), generated an estimated **£8.4 million in production spending** in Scotland. Spending in Scotland on Independent film production increased from £7.6 million in 2021.

2.3.4 Other television production

The vast majority of television programs made in Scotland are either commissioned by the PSBs (see Section 2.3.1) or are made by inward producers receiving tax relief (see Section 2.3.2). However, a small number of television programs made in Scotland in 2023 were commissioned by one of the SVODs or commercial multichannel services (e.g. Sky, NBC, Discovery Channel) rather than the PSBs and were also in genres not eligible for tax relief (e.g. entertainment or reality programming). For example, the US edition of *Traitors*, airing on NBC, filmed at Ardross Castle in the Highlands in 2023.

¹⁵ In this report, the term ‘inward production’ refers to films and TV programmes made by producers based outside of Scotland, including other parts of the UK and outside the UK.

Based on the total number of location filming-days tracked by the Screen Commission, an estimated **£23.2 million** was spent on this type of television production in Scotland in 2023.

2.3.5 Animation, VFX and post-production

Scotland is also home to several production companies that focus on the creation of animation content as well as studios engaged in VFX and post-production work. Wild Child, Revenant and TG Entertainment are among Scotland’s leading animation companies.¹⁶ Notable post-production companies include Serious FX, Blazing Griffin, Edit 123 and Freakworks, as well as the BBC’s facility within its Glasgow base.

According to the survey research, the total value of animation, VFX and post-production work in Scotland was an estimated £36.2 million in 2023 – most of which (£28.6 million) was earned on a service basis for projects ultimately created by producers based outside of Scotland (Table 7).

The overall level of animation, VFX and post-production activity in Scotland increased by 33.6% between 2021 and 2023, with the vast majority of the increase due to higher service production and animation service production in particular. Animation service production more than doubled from £11.7 million in 2021 to £24.1 million in 2023. **Animation, VFX and post-production work for Scotland-based producers declined by 32.7% to £7.6 million in 2023, but was still more than double the £3.1 million recorded in 2019.**

Table 7 Estimated value of animation production, VFX and post-production in Scotland (£ millions)

	2019	2021	2023
For Scotland-based producers			
Animation	0.5	7.1	2.2
VFX	0.3	0.2	0.3
Post-production	2.3	3.9	5.1
Subtotal	3.1	11.3	7.6
Service work			
Animation	19.8	11.7	24.1
VFX	5.0	3.4	3.1
Post-production	0.1	0.8	1.4
Subtotal	24.9	15.9	28.6
Total			
Animation	20.3	18.8	26.3
VFX	5.3	3.6	3.4
Post-production	2.4	4.7	6.5
Subtotal	28.0	27.1	36.2

Source: Saffery LLP / Nordicity estimates based on data from producers survey (2021, 2022, 2024)

Note: Figures may not sum to totals due to rounding

¹⁶ Axis Studios operated as animation studio in 2023. However, it went into administration in July 2024.

2.3.6 Other audiovisual production

Survey data and filming-days data supplied by Scotland's Screen Commission were used to estimate the spending on the production of advertising and other live action screen content (e.g. corporate or educational content) in Scotland in 2023. As Screen Scotland's relationship with the purely corporate sector is limited, this figure is likely an underestimate. Producers spent an estimated £4.6 million on these other forms of live action audiovisual production in 2023, down from £6.0 million in 2021 (Table 8).

Table 8 Estimated spending in Scotland on other live action audiovisual production (£ millions)

	2019	2021	2023
Advertising (e.g. television and web commercials)	4.7	4.5	4.5
Other live action screen content (e.g. corporate videos, music videos)	0.1	1.5	0.1
Total	4.8	6.0	4.6

Source: Saffery LLP / Nordicity estimates based on data from Screen Commission and producers survey (2021, 2022, 2024)

2.3.7 Summary

In total, an estimated £468.3 million was spent on the production of film, TV and other audiovisual content in Scotland in 2023 (Table 9). This included content made by Scotland-based producers, producers based outside of Scotland filming in Scotland and PSBs, and was down 24% compared to 2021, but up on pre-pandemic levels reported in the 2019 report (£398.6 million).

While there were small decreases in the production of PSB content and other live action audiovisual production in 2023 compared to 2021, virtually all of the overall drop in spending on production was due to the drop in inward film and HETV production. The US writers and actors strikes in 2023 led to a 50% drop in inward film and HETV production (a decrease of £173.9 million).

Table 9 Estimated spending in Scotland on film, TV and other audiovisual production (£ millions)

	2019	2021	2023
PSB content	196.6	223.3	222.4
Inward film and HETV production ¹	165.3	347.4	173.5
Independent film production ²	3.9	7.6	8.4
Other television production ³	--	6.0	23.2
Animation, VFX and post-production	28.0	27.1	36.2
Other live action audiovisual content	4.8	6.0	4.6
Total	398.6	617.4	468.3

Source: Saffery LLP / Nordicity estimates based on data from Screen Scotland, Screen Commission, BFI, producers survey (2021, 2022, 2024)

1. All of the inward production projects were supported by tax relief. A subset of inward production projects received funding from Screen Scotland's Production Growth Fund

2. These films projects received production funding from Screen Scotland's Film Development and Production Fund but have not been counted under the other categories of film, TV and other audiovisual production.

3. Includes television programs made without tax relief, and by or for SVODs or commercial multichannel broadcasters (i.e. not the PSBs). The value of this type of production was not counted in 2019.

2.4 Economic impact

The total expenditures on production and development in Scotland in 2023 generated a total of 5,420 FTEs of employment, £267.5 million in Cost Of Employment (COE) and £371.0 million in GVA for Scotland's economy in 2021 (Table 10). This total impact included 3,540 FTEs of employment in the film and TV production sub-sector (i.e. cast, crew and other creative roles in development) along with £189.9 million in direct COE and £225.0 million in direct GVA.

Table 10 Economic impact of production and development in Scotland, 2023

	Direct	Indirect	Induced	Total
Employment (FTEs)				
Development	140	10	20	170
PSB content	1,880	540	470	2,890
Inward location production ¹	970	270	240	1,480
Independent film production	50	40	20	110
Other TV production	130	40	30	200
Animation, VFX and post-production	360	100	80	540
Other audiovisual content (live action)	10	10	10	30
Total	3,540	1,010	870	5,420
COE (£m)				
Development	7.3	0.5	0.6	8.4
PSB content	106.9	26.6	17.6	151.1
Inward location production ¹	45.8	12.0	7.8	65.6
Independent film production	2.2	1.6	0.8	4.6
Other TV production	6.2	1.5	1.0	8.7
Animation, VFX and post-production	20.8	4.1	2.8	27.7
Other audiovisual content (live action)	0.7	0.5	0.2	1.4
Total	189.9	46.8	30.8	267.5
GVA (£m)				
Development	7.3	0.7	1.1	9.0
PSB content	127.2	51.1	32.2	210.5
Inward location production ¹	55.0	23.0	14.3	92.3
Independent film production	2.6	3.1	1.4	7.2
Other TV production	7.4	3.0	1.9	12.3
Animation, VFX and post-production	24.7	7.9	5.0	37.6
Other audiovisual content (live action)	0.8	0.9	0.4	2.1
Total	225.0	89.7	56.3	371.0

Source: Saffery LLP / Nordicity estimates based on data from Screen Scotland, Screen Commission, BFI, public financial reports, Ofcom, producers survey (2024) and interviews with broadcasters

1. The economic impact of inward location production assumes that 55% of total spending in Scotland is paid to Scotland-based personnel and suppliers. This local-spend share of 55% was derived from research of actual and illustrative production budgets.

3. Sales and distribution

- £22.3 million in turnover
- 30 FTEs of direct employment and a total employment impact of 80 FTEs
- £10 million in direct GVA and a total GVA impact of £13.4 million



3.1 Turnover and direct employment

The sales and distribution segment of the screen sector value chain encompasses the business activities associated with the acquisition, licensing and sale of audiovisual content. Film and TV distribution companies will often advance financing to film or TV projects in exchange for rights to license that content to cinema exhibitors, TV broadcasters in the UK or overseas, or home video platforms. Distributors do not always provide upfront financing for production. They may also acquire exhibition or broadcast rights in already completed – and even released – films and TV programmes, with a view to re-selling those rights.

Distribution companies are often distinct from production companies. In Scotland, Park Circus, Conic, Cosmic Cat and Anime Limited are examples of distribution companies. In some cases, production companies will operate distribution themselves to oversee the monetisation of the exhibition and broadcast rights they hold in their produced content or to reach audiences when the market interest dictates, they handle distribution directly. In Scotland, production companies such as STV Studios, Raise the Roof Productions, Firecrest Films, Synchronicity Films, Hopscotch Films, Two Rivers Media and Friel Kean Films maintained significant distribution activity in 2023, according to the industry survey.

Data collected from D&B and Companies House for Park Circus and Anime Limited, combined with sales and distribution revenue data collected through the survey from Cosmic Cat and other production companies with distribution arms indicate that companies based in Scotland earned an estimated £22.3 million in sales and distribution revenue in 2023, up from £16.3 million in 2021 and £8 million in 2019.

Whilst comprehensive sales and distribution-operations employment data was not available for all these companies, the employment data available for the largest sales and distribution companies in Scotland indicates that they employ approximately 1.44 persons for every £1 million in turnover. That employee-turnover ratio implies that the distribution sub-sector in Scotland generated an estimated 30 FTEs of direct employment in 2023 (Table 11).

According to the Annual Survey of Hours and Earnings (ASHE), full-time workers employed in SIC 5913 (Motion picture, video and television programme distribution activities) in the UK earned a mean weekly salary (excluding overtime) of £837 in 2022. This implies a mean annual salary of £43,500 and mean employment cost of approximately £50,000. With average wage inflation within the Scotland economy of 13.7% between 2021 and 2023, the mean employment cost likely rose to £57,000 in 2023. This mean employment cost implies that the sales and distribution sub-sector generated direct COE of £1.7 million in 2023.

According to the ONS's Annual Business Survey (ABS), the GVA-to-turnover ratio in SIC 5913 was equal to 0.45 in 2021. Applying this ratio to total estimated turnover of £22.3 million in 2023 implies that the sales and distribution sub-sector generated an estimated £10 million in direct GVA for Scotland's economy in 2023.

Table 11 Direct economic impact of the film and TV sales and distribution sub-sector in Scotland¹, 2019, 2021 and 2023

	2019	2021	2023
Turnover (£m)	8.0	16.3	22.3
Direct GVA (£m) ²	3.0	7.3	10.0
Direct COE (£m) ³	1.7	1.5	1.7
Total employment (FTEs)	30	30	30

Source: Saffery LLP / Nordicity estimates based on data from producers/distributors survey (2020, 2022, 2024), D&B, ASHE and ABS

1. SIC 5913 Motion picture, video and television programme distribution activities

2. Scotland GVA in 2023 estimated by applying GB-wide GVA-to-turnover ratio (0.45) to Scotland turnover (£22.3 million)

3. Scotland COE in 2023 estimated by multiplying 30 FTEs by average full-time employment cost of £57,000

3.2 Economic impact

Through the purchase of advertising and marketing services as well as other business services, the film and TV sales and distribution sub-sector also generates significant indirect and induced impacts across the economy. In total, Scotland's film and TV sales and distribution sub-sector generated 80 FTEs of employment, £3.5 million in COE and £13.4 million in GVA for Scotland's economy in 2023 (Table 12). This included 30 FTEs, £1.7 million in COE and £10 million in GVA directly within the sales distribution sub-sector.

Table 12 Economic impact of film and TV sales and distribution sub-sector in Scotland, 2021

	Direct	Indirect	Induced	Total
Employment (FTEs)	30	20	30	80
COE (£m)	1.7	0.9	0.9	3.5
GVA (£m)	10.0	1.7	1.6	13.4

Source: Saffery LLP / Nordicity estimates based on data from producers/distributors survey (2024), D&B, ASHE and ABS

4. Exhibition

- 9.0 million admissions and £79.9 million in box office revenue
- 30,000+ in-person and online audience across 18 film festivals based on Scotland
- 1,750 persons employed in exhibition sector, representing 1,250 FTEs
- Direct employment impact of 1,320 FTEs and total impact of 1,790 FTEs across cinemas and film festivals
- £71.4 million in GVA for Scotland's economy, including £45.1 million in GVA generated directly within the exhibition sub-sector



4.1 Overview

The UK's cinema market is dominated by the major multiplex chains – Cineworld, Odeon and Vue – which collectively hold 70% of the market.¹⁷ While these cinema chains are domiciled outside of Scotland, they still have a significant economic impact within Scotland. Cinema chains maintain large workforces and it is largely through this employment and employment income that these cinema chains contribute to the Scotland's economy. Scotland also has a significant independent cinema sector operating as small and medium-sized enterprises. Together, they are a significant employer in the sector and driver of economic activity in the communities – often small towns – in which they are based.

During the late 2010s, the UK cinema sector consistently earned over £1.2 billion in annual box office receipts.¹⁸ The Covid-19 pandemic led, however, to the temporary closure of cinemas in the UK and many other countries in March 2020.

While cinemas in the UK did reopen to the public in August 2020, subsequent lockdowns, social distancing restrictions on audience capacity, the general public's avoidance of indoor public spaces, and audiences' changing media preferences has meant that the box office remained lower than historical levels. In 2021, the UK cinema box office was only £557 million, or 56% below the 2019 box office of £1,254 million.

The UK box office totalled £908 million in 2023, which was 63% higher than 2021, but still 28% below the 2019 box office, before accounting for consumer price inflation.¹⁹ After accounting for consumer price inflation, the real value of the UK box office has dropped by 40% between 2019 and 2023.

In this section, we estimate the economic contribution of the cinema chains and independent cinemas located in Scotland. As part of the exhibition sub-sector, we also examine the economic contribution associated with alternative cinema and screen festivals.

¹⁷ UK Cinema Association (undated) [About the UK cinema sector: Circuits, multiplexes and smaller sites.](#)

¹⁸ UK Cinema Association (undated) [Facts and figures: UK cinema admissions and box office](#)

¹⁹ BFI (2024) [The UK Box Office: Full Year 2023.](#) 1 February.

4.2 Cinemas

4.2.1 Admissions and revenue

According to data from Comscore and certain cinemas and arts venues that do not report to Comscore²⁰, cinemas in Scotland earned total box office revenue of £79.9 million (including VAT) in 2023 (Table 13). Box office and admissions data for the entire UK published by the BFI indicate that this box office revenue was earned from an estimated 9.0 million admissions in Scotland.²¹

Table 13 Estimation of cinema box office and admissions in Scotland (m)

	2019	2021	2023
Box office (incl. VAT) (£m)	99.8	45.7	79.9
Cinema admissions (est.) (millions)	14.0	6.2	9.0

Source: Saffery LLP / Nordicity estimates based on data from BFI, Comscore and ONS

Notably, the recovery in cinema box office has been slightly faster in Scotland compared to the overall UK. In 2023, Scotland's cinema box office (£79.9 million) had recovered to 80% of its 2019 level (£99.8 million), whereas across the entire UK, the cinema box office (£980 million) had recovered to 78% of its 2019 level (£1.254 billion).²²

Statistics for the UK-wide cinema sub-sector published by the BFI and ONS's ABS for SIC 5914 *Motion picture projection activities* suggest that the cinema sub-sector in the UK earns £0.64 in revenue from other sources such as food and beverage sales and advertising for every £1.00 of box office revenue. Based on that ratio, cinemas in Scotland earned an estimated £109.1 million in total revenue (excluding VAT) in 2023 (Table 14).

Table 14 Estimated cinema revenue in Scotland (£m)

	2019	2021	2023
Gross box office (excl. VAT) ¹	83.2	38.1	66.6
Other revenue ²	53.2	24.4	42.6
Total revenue	136.4	62.5	109.1

Source: Saffery LLP / Nordicity estimates based on data from BFI, Comscore and ABS

1. 2019: £99.8m ÷ 1.20 = £83.2m; 2021: £45.7m ÷ 1.20 = £38.1m ; 2023: 79.9m ÷ 1.20 = £66.6m

2. 2019: £83.2m x 0.64 = £53.2m; 2021: £38.1m x 0.64 = £24.4m; 2023: £66.6m x 0.64 = £42.6m

²⁰ Two cinemas were identified that did not report to Comscore. The total admissions and estimated box office for these two cinemas were added to the data provided by Comscore.

²¹ Box office data published by BFI for the entire UK indicates that the average ticket price (i.e. average box office per admission) was £7.12 in 2019, £7.32 in 2021 and £7.97 in 2023.

²² BFI (2024).

4.2.2 Economic impact

A similar approach was used to estimate the direct employment, COE and GVA contribution of the cinema sub-sector in Scotland. Data sourced from the Business Register and Employment Survey (BRES) indicated that 1,750 people, or 1,250 FTEs, were employed in the cinema sub-sector in Scotland in 2023. This workforce earned an estimated £28.5 million in COE in 2023 and generated £42.6 million²³ in direct GVA (Table 15).

Table 15 Direct economic impact of cinema sub-sector in Scotland

	2019	2021	2023
Total employment ¹	2,040	2,000	1,750
FTE employment ²	1,290	1,120	1,250
COE ³	27.7	28.3	28.5
GVA ⁴	55.7	28.3	42.6

Source: Saffery LLP / Nordicity estimates based on data from BFI, Comscore, Screen Scotland, ABS and BRES

1. Total employment counts for Scotland sourced directly from BRES.

2. Total employment multiplied by an FTE conversion factor of 0.72 to account for part-time employment in the cinema exhibition industry.

3. UK-wide average annual wage cost in SIC 5914 (2023: £16,256) multiplied by the total number employment in Scotland.

4. UK-wide 10-year average GVA-to-turnover ratio (2010-2019: 0.39) multiplied by total cinema revenue in Scotland in 2023.

Including indirect and induced impacts, the cinema sub-sector generated an estimated 1,670 FTEs of employment, £43.0 million in COE and £66.4 million in GVA for Scotland's economy in 2023 (Table 16).

Table 16 Total economic impact of cinema sub-sector in Scotland, 2023

	Direct	Indirect	Induced	Total
Employment (FTEs)	1,250	250	170	1,670
COE (£m)	28.5	8.9	5.6	43.0
GVA (£m)	42.6	13.7	10.2	66.4

Source: Saffery LLP / Nordicity estimates based on data from BFI, Comscore, Screen Scotland, ABS and BRES

Note: Figures may not sum to totals due to rounding

4.3 Film and TV festivals

4.3.1 Audience, visitors and expenditures

Film and TV festivals contribute to economic activity in several different respects. The operation of the festival itself generates income and employment as the festivals hire screens, produce festival events and deliver industry-development programmes, as well as employ people to run the screenings and events. Many festivals attract attendees and delegates from outside Scotland and thereby stimulate tourism spending on accommodation, meals and other retail outside of festival venues. Finally, some festivals that also operate as markets can help local producers increase the sales of their content or secure financing for future projects.

Prior to the Covid-19 pandemic, Scotland hosted approximately 30 film festivals on an annual basis. During the Covid-19 pandemic, many of these film festivals switched to online-only or hybrid models, which allowed audiences to enjoy screenings in person or online. Some these festivals, however, did cease to operate during the pandemic. Even after social distancing regulations ceased many festivals continued to operate hybrid models as a means for engaging with a wider audience unable to attend physical screenings.

²³ Due the challenging market conditions facing the UK cinema sub-sector in 2021, cinemas were assumed to earn no operating profits in Scotland in 2021. As a result, sub-sector GVA was equivalent to the value of COE in the sub-sector.

In 2023, Scotland hosted three major international festivals: the Edinburgh International Film Festival (EIFF), the Glasgow Film Festival (GFF) and the Edinburgh Television Festival. Information from Screen Scotland indicates that Scotland hosted a total of 36 film and TV festivals in 2023, including 21 that were funded by Screen Scotland or Creative Scotland (see Box 4).²⁴

Box 4 Film and TV festivals in Scotland, 2023

Adventure Cinema	Glasgow Film Festival*
Alchemy Film and Moving Image Festival*	Glasgow Short Film Festival*
Celtic Media Festival**	Govanhill International Festival and Carnival
Central Scotland Documentary Festival*	Havana Glasgow Film Festival*
CinemaAttic*	Hebrides International Film Festival*
Discovery Film Festival*	Hippodrome Silent Film Festival*
Dundead*	Into Film Festival
Dundee Mountain Film Festival	Inverness Film Festival*
Dunoon Film Festival	MINT Chinese Film Festival
Edinburgh International Film Festival*	Montrose LandXSea*
Edinburgh Short Film Festival	Samzidat Film Festival*
Edinburgh Spanish Film Festival	Sands International Film Festival of St Andrews*
Edinburgh Television Festival*	Scotland Loves Anime
Focus Hong Kong	Scottish Queer International Film Festival*
Folk Film Gathering*	Sea Change*
Fort William Mountain Film Festival	Short Com Festival
French Film Festival*	Take One Action Film Festivals*
Fringe of Colour Films*	Weekend of Polish Cinema

Source: Screen Scotland

* Funded by Screen Scotland or Creative Scotland

** 2023 festival hosted in Dungloe, Ireland, but permanent festival headquarters located in Glasgow, Scotland

According to data from Screen Scotland and independent research of festivals' public accounts, Scotland's film and TV festivals combined for total physical audiences of 93,551 in 2023, up from 31,500 in 2021, but still lower than the 177,000-plus physical attendance recorded in 2019 (Table 17). The number of unique visitors was an estimated 11,913 in 2023, up from 6,300 in 2021, but down from 40,244 in 2019.

In 2023, Scotland's film and TV festivals made operating expenditures of £3.4 million to produce the festivals, up from £2.1 million in 2021, but still lower than the £4.3 million recorded in 2019. In-person audiences and media delegates spent an estimated £2.6 million outside of festival venues in 2023.

Table 17 Summary of key performance indicators for film festivals in Scotland

	2019	2021	2023
Core attendance	177,624	31,500	93,551
Number of unique visitors	40,244	6,300	11,913
Festival operating expenditures (£)	4,286,105	2,120,610	3,382,320
Gross visitor and media delegate spending (£)	4,657,559	575,000	2,580,037

Source: Saffery LLP / Nordicity estimates based on data from EIFF, Glasgow Film Festival, Tourism Resources Company and Screen Scotland

²⁴ The 2023 edition of the Celtic Media Festival was hosted in Dungloe, Ireland, however, the festival headquarters is located in Glasgow, Scotland and generates an economic impact through its planning and organisation of the festival.

4.3.2 Economic impact

With nearly £3.4 million in operations expenditures in 2023, up from £2.1 million in 2021, Scotland's film festivals generated 70 direct FTEs of employment, £2.1 million in COE and £2.8 million in GVA (Table 18). This included 40 FTEs employed in festival operations – both on a temporary basis during the festival and on a permanent basis throughout the year.

The spending by visitors and media delegates outside of festival venues (£2.6 million, up from £575,000 in 2021) generated a further 50 FTEs, £1.2 million in COE and £2.2 million in GVA for Scotland's economy in 2023. This included employment in the accommodation, food and beverage, transport, and other tourist-facing industries benefitting from festival-visitor spending.

Combining the impacts of festival operations and visitor spending indicates that Scotland's film festivals generated a total of 120 FTEs of employment, £3.4 million in COE, and £5 million in GVA for Scotland's economy in 2023. The economic impact of film festivals has more than doubled in terms of COE and GVA since 2021.

Table 18 Total economic impact of film festivals in Scotland, 2023

	Direct	Indirect	Induced	Total
Festival operations				
Employment (FTEs)	40	20	10	70
COE (£m)	1.1	0.7	0.3	2.1
GVA (£m)	1.1	1.1	0.6	2.8
Visitor and media delegate spending				
Employment (FTEs)	30	10	10	50
COE (£m)	0.8	0.3	0.2	1.2
GVA (£m)	1.4	0.5	0.3	2.2
Total				
Employment (FTEs)	70	30	20	120
COE (£m)	1.9	1.0	0.5	3.4
GVA (£m)	2.5	1.6	0.9	5.0

Source: Saffery LLP / Nordicity estimates based on data from EIFF, Glasgow Film Festival, Tourism Resources Company and Screen Scotland

Note: Figures may not sum to totals due to rounding

4.4 Summary

Summing the impact of the cinema exhibition industry in Scotland with the impact of film and TV festivals indicates that Scotland's exhibition sub-sector generated 1,790 FTEs of employment, £46.3 million in COE and £71.4 million in GVA for Scotland's economy in 2023 (Table 19).

Table 19 Total economic impact of exhibition sub-sector in Scotland, 2023

	Direct	Indirect	Induced	Total
Cinemas				
Employment (FTEs)	1,250	250	170	1,670
COE (£m)	28.5	8.9	5.6	43.0
GVA (£m)	42.6	13.7	10.2	66.4
Film and TV festivals				
Employment (FTEs)	70	30	20	120
COE (£m)	1.9	1.0	0.5	3.4
GVA (£m)	2.5	1.6	0.9	5.0
Total				
Employment (FTEs)	1,320	280	190	1,790
COE (£m)	30.3	9.9	6.1	46.3
GVA (£m)	45.1	15.2	11.1	71.4

Source: Saffery LLP / Nordicity estimates based on data from BFI, Comscore, Screen Scotland, ABS, EIFF, Glasgow Film Festival, Tourism Resources Company and Screen Scotland

Note: Figures may not sum to totals due to rounding

5. TV broadcast

- £46.1 million spent on broadcasting support operations
- 410 FTEs of direct employment and 600 FTEs of total employment
- £31 million in direct GVA and £46.6 million in total GVA



5.1 Broadcasting support operations

In Section 2, we estimated the portion of PSBs’ gross operating expenditures in Scotland that were devoted to the creation of TV content – both in-house and through external commissioning – and the economic impact of that content production. In this section, we consider the economic impact generated by the balance of PSBs’ operating expenditures: that is, their spending on broadcasting support operations such as transmission infrastructure, sales and marketing, administration, and other overhead expenses.

As with the rest of the UK, households in Scotland can access PSB TV content broadcast by the BBC (network), ITV, Channel 4, Channel 5 and S4C; however, ITV programming is rebroadcast by STV within Scotland. Scotland is also home to BBC Scotland and BBC Alba, as well as opt-outs on the Channel 3 service operated by ITV for STV programming. BBC Scotland and STV have the largest operations in Scotland, and along with BBC Alba account for the broadcasting support operations in Scotland, including terrestrial and digital operations.

After removing content spending, the PSBs spent an estimated £46.1 million on broadcasting support operations in Scotland in 2023, or 17% of their total estimated gross operating expenditures in Scotland in 2021 (£268.5 million) (Table 20).

Table 20 PSB’s estimated spending on broadcasting support operations in Scotland, 2023 (£ millions)

	Gross operating expenditures in Scotland	Content spending in Scotland	Expenditures on broadcasting support operations ¹
BBC Scotland	76.1	66.2	9.9
BBC Network	88.8 ²	88.8	0.0 ³
BBC Alba/MG Alba	23.4	18.8	4.6
STV ⁴	32.2	9.6	22.6
ITV	7.1	7.1	0.0
Channel 4	36.2	27.3	8.9
Channel 5	4.7	4.7	0.0
Total	268.5	222.4	46.1

Source: Saffery LLP / Nordicity estimates based on data from public financial reports, Ofcom and broadcaster interviews

1. Includes spending on transmission infrastructure, sales and marketing, administration and other overhead

2. Gross operating expenditures have been adjusted to remove value of spending on content supported by tax relief

3. BBC Network only has content production and commissioning operations in Scotland; it has no broadcasting support operations in Scotland

4. Gross operating expenditures and content spending have been adjusted to remove programming payments made to ITV (est. £48.4m); figures exclude STV Productions

The estimated level of spending on TV broadcast operations in Scotland in 2023 (£46.1 million) was 15% lower than 2021 (£54.3 million) and 25% lower than the estimated level in 2019 (£61.1 million) (Table 21).

Table 21 PSB’s estimated spending on broadcasting support operations in Scotland (£ millions)

	2019	2021	2023
BBC Scotland	27.6	17.8	9.9
BBC Network	0.0 ³	0.0 ³	0.0 ³
BBC Alba/MG Alba	3.4	3.4	4.6
STV ⁴	19.8	25.4	22.6
ITV	0.0	0.0	0.0
Channel 4	10.3	7.7	8.9
Channel 5	0.0	0.0	0.0
Total	61.1	54.3	46.1

Source: Saffery LLP / Nordicity estimates based on data from public financial reports, Ofcom and broadcaster interviews

1. Includes spending on transmission infrastructure, sales and marketing, administration and other overhead
2. Gross operating expenditures have been adjusted to remove value of spending on content supported by tax relief
3. BBC Network only has content production and commissioning operations in Scotland; it has no broadcasting support operations in Scotland
4. Gross operating expenditures and content spending have been adjusted to remove programming payments made to ITV; figures exclude STV Productions

5.2 Economic impact

These expenditures on broadcasting support operations generated an estimated 600 FTEs of employment, £33.7 million in COE and £46.6 million in GVA in Scotland in 2023 (Table 22). This included 410 FTEs of employment, £25.3 million in COE and £31.0 million in GVA generated directly within the TV broadcasting sub-sector – namely at the broadcasters themselves.

Table 22 Economic impact of broadcasting support operations in Scotland, 2023

	Direct	Indirect	Induced	Total
Employment (FTEs)	410	100	90	600
COE (£m)	25.3	5.1	3.4	33.7
GVA (£m)	31.0	9.3	6.3	46.6

Source: Saffery LLP / Nordicity estimates based on data from public financial reports, PSBs, Ofcom, broadcaster interviews and ASHE

Box 5 Public reporting of PSBs' employment in Scotland

Our estimates of the direct employment impact of the TV broadcast sub-sector are based on a compilation and analysis of employment data gathered from public financial reports and interviews with PSBs. In particular, we note that the PSBs have publicly reported the following staff levels within Scotland:

- The BBC employed 1,276 people in Scotland in 2023/24 across all its services including support functions. This includes persons employed in TV and radio operations.²⁵
- STV employed 598 people in 2023.²⁶
- MG Alba employed 58 people in 2023.²⁷
- Channel 4 employed approximately 25 people at its Glasgow Creative Hub office.²⁸
- ITV employed under 50 people in Scotland in 2019 (the most recent year of available data), largely in news gathering functions.²⁹

Together, these reported employment statistics point to as many as 2,000 people directly employed in TV (and BBC radio) broadcasting in Scotland. Through the research conducted for this study, we removed employment in BBC radio operations. We also removed employment in TV content production (already estimated in Section 2.3.3) and converted the headcount statistics to FTEs. After making these adjustments, we concluded that an estimated 380 FTEs were employed in TV broadcasting support operations in Scotland in 2023.

²⁵ BBC (2024). *BBC Group Annual Report and Accounts 2023/24*. P. 161. Available at: <https://www.bbc.co.uk/aboutthebbc/documents/ara-2023-24.pdf>

²⁶ STV (2024). *Annual Report and Accounts 2023*. P. 128. Available at: https://www.stvplc.tv/media/43khzilg/stv-group-plc-annual-report-and-accounts-2023_.pdf

²⁷ MG Alba (2022). *Annual report & statement of accounts 2023/2024*. P. 106. Available at: https://mgalba.com/wp-content/uploads/2024/06/13386_MG_ALBA_Annual_Report_2023_ARTWORK.pdf

²⁸ Interview with Channel 4.

²⁹ Mediatique (2021). *ITV in the Nations and Regions: Storied past, dynamic present, challenges ahead*. May 2021. P. 36. Available at: https://www.itv.com/presscentre/sites/default/files/210510_mediatique_report_itv_nations_and_regions.pdf

6. Screen tourism

- 1.14 million overnight screen tourists³⁰ in 2023
- £787.0 million total spending by screen tourists of which £161.4 million was attributable to screen tourism activities and spent within Scotland
- 2,260 FTEs of direct employment and 2,990 FTEs of total employment impact
- 89.4 million in direct GVA and £140 million in total GVA impact



The economic contribution of the screen sector is not confined to the content value chain. Once films and TV programmes are released, they can continue to generate economic benefits for the countries and regions that hosted production or were the settings for the stories depicted in the films or TV programmes.

Scotland has, over the years, been a beneficiary of screen tourism. *Braveheart*, released in 1995, was set in Scotland and generated significant interest for tourists visiting Scotland. In recent years, the television series *Outlander* has garnered a strong global audience, and significant interest among tourists visiting Scotland.

In addition to *Outlander*, several other popular films and TV series, including the *Harry Potter* films, *Skyfall*, *Mary Queen of Scots* and *Outlaw King* have been partially filmed in Scotland and subsequently generated significant tourist interest.

Of course, the pandemic and associated lockdowns and travel restrictions led to a sharp drop in travel and tourism, particularly inbound and international tourism across 2020/21. While tourism did recover in 2021, inbound tourism – historically an important source of screen tourists – remained weak in 2021 as some travel restrictions remained. However, the ongoing bounceback in global travel and tourism helped to significantly lift Scotland's screen tourism in 2023.

In this section, we analyse the tourism spending and economic impact of *Outlander* prior to the pandemic – which is, by far, the most notable screen tourism asset for Scotland. We then use data from VisitScotland, which has been updated since the 2021 report, to extrapolate the impact of *Outlander* to the wider screen tourism sector for Scotland in 2023.

6.1 *Outlander* effect

According to a survey conducted by VisitScotland in 2016, 6% of overnight leisure tourists in Scotland, including domestic and overseas overnight tourists, visited a film or TV location in Scotland during their trip. This was equivalent to a total of 525,000 overnight screen tourists in 2016.

However, between 2016 and 2019 screen tourism in Scotland likely grew significantly, mainly due to the popularity of *Outlander* – the first season of which began airing in 2014 in 87 territories.³¹ In fact, an updated version of the difference-in-difference analysis of visits of historic sites featured in *Outlander* and first set out by VisitScotland indicates that *Outlander* probably led to an additional one million visits to 23 *Outlander* sites since 2013 (Figure 5).

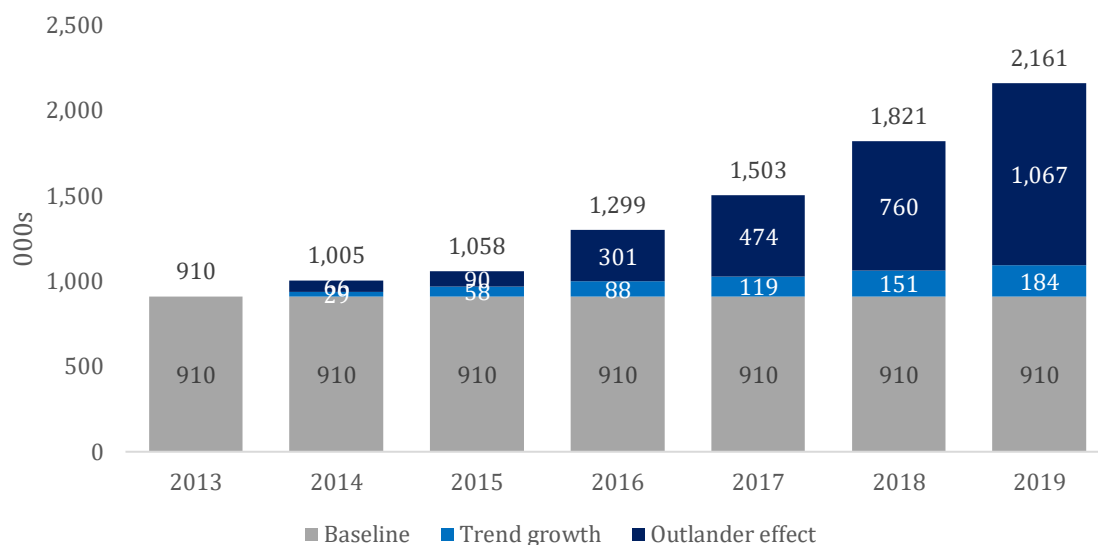
³⁰ In this study, 'screen tourist' refer to tourists who, as part of their visit to Scotland, visited a site in Scotland that was either a filming location or a setting for a film or TV programme. These site visits may not have been the prime motivation for that person's visit to Scotland.

³¹ VisitScotland (2020), Insight Department: The *Outlander* Effect & Tourism. February 2020. p. 3.

With that in mind, visitor data for *Outlander* sites in Scotland along with additional tourism data from VisitScotland, VisitBritain and VisitEngland were used to estimate the total number of screen tourists visiting Scotland in 2019, their gross tourism spending and the portion of that gross spending that can be attributed to screen tourism.

The methodology and calculations used to derive these estimates are summarised in this sub-section and detailed in Appendix B.

Figure 5 Annual visits to historic sites featured in *Outlander*

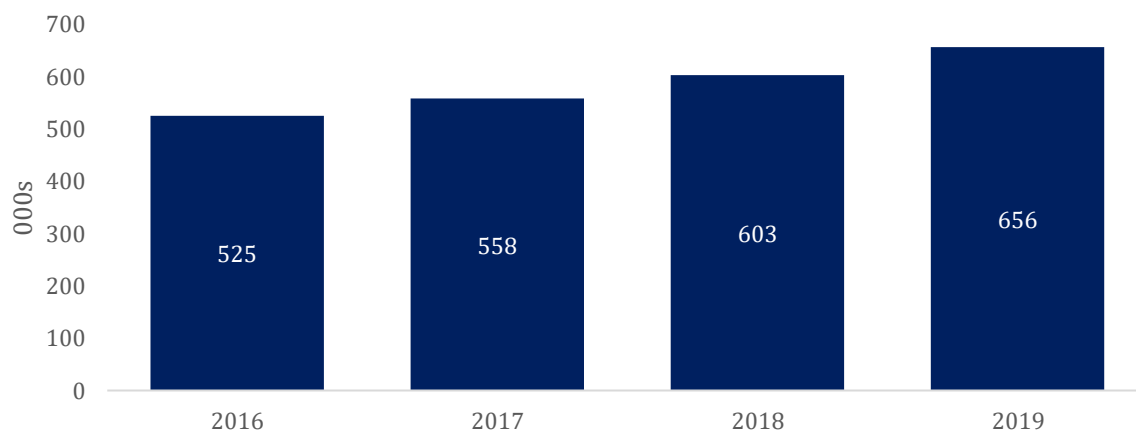


Source: Saffery LLP / Nordicity analysis based on data from the Moffat Centre for Travel & Tourism Business Development (2021)

An analysis of the annual increases in visits to *Outlander* sites indicates that the total number of unique overnight visitors to those sites was 71,000 higher in 2019 compared to 2016. Metrics from VisitScotland’s website – particularly the web pages it maintains for *Outlander* and other TV programmes and films – suggest that *Outlander* likely accounted for 54% of interest in screen tourism in Scotland in 2019, when compared alongside other content such as *Harry Potter*, *Skyfall* and *Mary Queen of Scots*.

Outlander’s share of screen tourism interest further suggests the total number of screen tourists in Scotland was 131,000 higher in 2019 than in 2016. In other words, the number of overnight screen tourists in Scotland increased from 525,000 in 2016 to 656,000 in 2019 (Figure 6).

Figure 6 Estimated annual number of screen tourists in Scotland (domestic overnight and overseas visitors), 2016 - 2019



Source: Saffery LLP / Nordicity analysis based on data from VisitScotland, Historic Houses, the Moffat Centre for Travel & Tourism Business Development, Glasgow Caledonian University (2021)

VisitScotland statistics for 2016 suggest that approximately half of Scotland’s overnight screen tourists in 2019 were domestic tourists (328,000) – i.e. residing in Scotland or elsewhere in the UK – and half were from overseas (328,000).

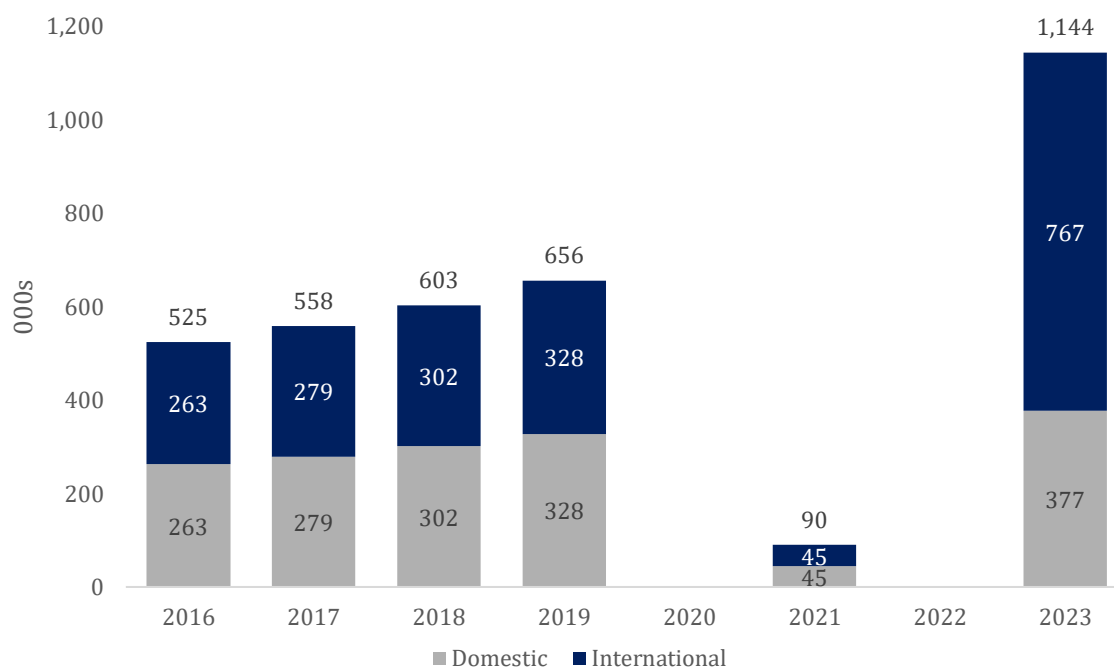
6.2 Annual visitors and spending in 2023

Screen tourism, and tourism in general, recovered significantly in 2023 from the levels seen in 2021. Statistics published by VisitScotland point towards a strong rebound in inbound overnight visitors to Scotland in 2023. Although it should be noted that VisitScotland’s survey methodology has changed since 2021 resulting in a larger incidence of screen tourism, so direct comparisons between 2023 and previous years should be viewed in this context. The observed increase in screen tourism in 2023 was due to a combination of methodology changes and real underlying increases in Scotland’s annual number of screen tourists and their spending.

According to VisitScotland’s visitor-survey research, 16% of visitors to Scotland in 2023 were motivated to travel because of films or TV programmes shot in Scotland or about Scotland.

Based on calculations from VisitBritain data, Scotland’s screen tourists totalled 1.14 million in 2023. The split between domestic and international tourists was 32-68, a divergence from the 50-50 split observed in previous years.

Figure 7: Estimated annual number of domestic overnight and international screen tourists in Scotland, 2016 to 2023



Source: Saffery LLP / Nordicity analysis based on data from VisitScotland, Historic Houses, the Moffat Centre for Travel & Tourism Business Development, Glasgow Caledonian University (2021)

VisitScotland statistics also indicate that total spending by international visitors to Scotland was £95.7 million in 2023.³² That is, average spending per international visitor increased from £733 in 2019 to £901 in 2023. Domestic overnight tourist spending increased from £232 in 2019 to £254 in 2023. In total, therefore, screen tourists spent an estimated £787 million in 2023. This is more than double the figure of £316.5 million estimated for 2019; although this is not directly comparable due to changes in VisitScotland’s research methodology and real underlying increases in Scotland’s annual number of screen tourists and their spending.

³² VisitScotland (2023a).

Applying VisitBritain’s tourism spending attribution model indicates that out of these gross expenditures of £787 million in 2023, £176.4 million can be attributed to the influence of visiting film and TV locations as opposed to other attractions or activities that draw people to Scotland (see Appendix B, Table A - 10). Out of this £176.4 million, **we estimate that £161.4 million can be attributed to businesses located in Scotland** (see Appendix B, Table A - 11).

6.3 Economic impact

These attributable Scottish tourism expenditures (£161.4 million) generated an estimated 2,990 FTEs of employment and 140 million in GVA. Out of this total impact, screen tourism generated 2,260 FTEs of direct employment and £89.4 million in direct GVA in Scotland in 2023. This included employment and economic activity in the accommodation, food and beverage, transport, tour operators, retail, and culture and entertainment industries, which directly benefit from tourist spending.

Table 23 Economic impact of screen tourism in Scotland, 2023

	Direct	Indirect	Induced	Total
Employment (FTEs)	2,260	370	360	2,990
COE (£m)	50.0	16.3	11.9	78.1
GVA (£m)	89.4	28.9	21.7	140.0

Source: Saffery LLP / Nordicity estimates based on data from VisitScotland, VisitBritain, Historic Houses, the Moffat Centre for Travel & Tourism Business Development, Glasgow Caledonian University (2021)

7. Education, skills and talent development

- £73.5 million in annual spending on the provision of film, TV and broadcast education and training
- 1,090 FTEs of direct employment and total employment impact of 1,350 FTEs
- £57.0 million in direct GVA and £73.9 million in total GVA impact



In Scotland there is an evolving education, skills and talent development ecosystem in place that operates at three main junctures along the talent pipeline for film and TV:

- **Exposure:** introduces film and TV to young people as a potential career (pre-career);
- **Entry:** further education (FE), higher education (HE) and independent organisations provide academic or vocational courses, or experience to educate and prepare individuals for entry into the screen sector; and
- **Evolution:** a network of additional training services that support the continued development of screen sector workers, as they grow and advance their careers within their profession, as well as talent development opportunities for creatives to develop, especially early in their careers.

The support ecosystem is made up of public, private and not-for-profit organisations that largely operate in a complementary way endeavouring to ensure services are available to support the breadth of screen sector occupations as well as the geography of Scotland. Most of this provision originates from within Scotland but some of this is provided by UK-wide organisations and other provision is exported from Scotland to the rest of the UK.

Screen Scotland is part of Creative Scotland and is charged with growing the screen sector in Scotland. Within this role, Screen Scotland has a number of objectives that relate to education and skills development:

- Improving and expanding the provision of moving-image education in every context, increasing its reach, depth and inclusivity.
- Developing Scotland's screen talent and promoting that talent in domestic and international markets.
- Improving employment opportunities in the screen sector through increased and coordinated opportunities for work-based learning, training, and development.

This is funded by the Scottish Government through grant-in-aid and the National Lottery. Furthermore, BFI and ScreenSkills – each of which has a UK-wide remit – also operate within Scotland as part of the education and skills development ecosystem for the screen sector, with the BFI Skills Cluster in Scotland delivered by Screen Scotland. Lastly, there is the education sub-sector which provides FE and HE qualifications for entry into the screen sector.

In the rest of this section, we estimate the total level of expenditures associated with the delivery of FE and HE courses in Scotland for the screen sector. We also estimate the annual expenditures on non-tertiary level exposure and training – either pre-career or in-career – and continuing professional development (CPD). These various estimates of expenditures on education and skills within the screen sector on Scotland provide the basis for our estimates of the contribution that this sub-sector made to Scotland's economy in 2023.

7.1 Higher education

Screen Scotland identified a small number of key HE institutions (HEIs) that provide courses for film, television and broadcast. In order to estimate the economic impact of the screen industries within HE, we took the approach of estimating the number of students studying courses for film, TV and broadcast in a single academic year at the identified HEIs and then applying an average cost incurred to educate a single HE student. For 2023, enrolment statistics were sourced from [Jisc](#) and the Higher Education Statistics Agency (HESA). In total, there were an estimated 2,154 students enrolled in film, TV and broadcast courses at HEIs in Scotland in 2023 (Table 24). In estimating the total number of HE students we have included both undergraduates and postgraduates who were enrolled in courses in film, TV or broadcast in 2023.

Separate research indicates that across 18 HEIs in the UK that were notable for providing screen sector courses alongside a general portfolio of courses, the average cost per student was an estimated £12,400 in 2019. Education cost inflation implies that this likely rose to £12,484 in 2021 and £13,633 in 2023.

Based on this average annual expenditure per learner, we estimate that £29.4 million were spent in 2023 to deliver film, TV and broadcast courses at HEIs in Scotland.

Table 24 Estimated expenditures on screen sector HE courses in Scotland

	2019	2021	2023
Number HE students enrolled in film, TV or broadcast courses	1,898	2,195	2,154
Average expenditure per learner (£)*	12,400	12,484	13,633
Total HE expenditures (£m)	23.5	27.4	29.4

Source: Saffery LLP / Nordicity estimates based on data from Jisc, HESA and consultations with the HEIs identified by Screen Scotland

Notes:

* Based upon the data from the following HEIs: Abertay University Dundee, Arts University Bournemouth, Glasgow Caledonian University, Goldsmiths College, Leeds Beckett University, Ravensbourne University London, Solent University, Staffordshire University, Teesside University, University of Bolton, University of Edinburgh, University of Greenwich, University of Hertfordshire, University of Salford, University of Stirling, University of the Arts London, University of the Creative Arts and University of Westminster

7.2 Further education

In FE, there is a large number of colleges that provide courses that prepare students for careers in film, TV and broadcast that were identified for the study team by the Screen Scotland. These courses were at SCQF Levels 5-8 and were classified as either generalist or vocational. According to the data supplied by SQA and collected from FEIs, 3,809 students were enrolled in film, TV or broadcast courses at FE colleges in Scotland in 2019. General trends in FE enrolment suggest that the number of students rose to 3,854 in 2021.

According to updated data from SQA, the number of students enrolled in film, TV or broadcast courses at FE colleges in Scotland rose to 4,597 in 2023.

Using a large sample of 236 FE colleges reporting their financial data to the Education and Skills Funding Agency (ESFA), the average cost per learner was calculated to be approximately £6,500 in 2019. Education cost inflation implies that this average learner cost rose to £6,544 in 2021 and £7,146 in 2023.

Based on this average annual expenditure per learner, we estimate that total expenditures of £32.9 million were spent in 2023 to deliver film, TV and broadcast courses at FE colleges in Scotland (Table 25).

Table 25 Estimated expenditures on screen sector FE courses in Scotland

	2019	2021	2023
Number FE students enrolled in film, TV or broadcast courses	3,809	3,854	4,597
Expenditure per learner (£)	6,500	6,544	7,146
Total FE expenditures (£m)	24.8	25.2	32.9

Source: Saffery LLP / Nordicity calculations based on data from FEIs, ESFA and SQA

7.3 Pre-career and in-career skills development

Prior to entering the screen sector, the aspirations of young people are exposed to the opportunities of a career in film, TV and broadcast by Screen Scotland and the BFI, through their Film Education and BFI Academy programmes, respectively.

In terms of developing creative talent and skills there are, in addition to schemes run by Screen Scotland and the BFI, a number of not-for profit or private organisations that deliver pre-career skills development or in-career CPD.

Through National Lottery and grant-in-aid funding from the Scottish Government, Screen Scotland funds three strands of pre-career and in-career skills development.

- **Film education** for improving and expanding the provision of film and moving-image education in every context, increasing its reach, depth and inclusivity.
- **Skills development** for improving employment opportunities in the sector through increased and coordinated training.
- **Talent development** for developing Scotland’s screen talent (as well as promoting Scotland’s talent in domestic and international markets).

To estimate the annual level of expenditures devoted to skills development within the screen sector in Scotland, Screen Scotland compiled data on its own levels of funding and that received from other sources³³. This approach provides an estimate of the combined overall investment in screen sector skills and training in Scotland, where Screen Scotland is involved.

In total, an estimated £11.1 million was invested in the delivery of screen sector education, skills and talent development programmes in Scotland in 2023. This included £5.6 million in funding from Screen Scotland and £5.5 million in match funding (Table 26).

Table 26 Investment in screen sector education, talent or skills development programmes in Scotland, 2023 (£)

	Screen Scotland funding	Other funding	Total budget
Screen education	1,096,641	1,280,181	2,377,413
Skills development	2,931,909	3,588,875	6,552,679
Talent development	1,592,122	622,412	2,214,534
Total	5,620,672	5,491,468	11,144,626

Source: Screen Scotland. ‘Total budget’ is indicated by applicant at the application stage and may vary from the final amount. ‘Other funding’ has been estimated by subtracting the level of investment required from Screen Scotland, from the indicated ‘Total budget’.

In addition to the specific funding of screen education, skills development programmes, Screen Scotland funds and promotes on the job training, upskilling and trainees through its Production Growth Fund (PGF). As part of the PGF, producers typically have to employ trainees. According to Screen Scotland, 36 production trainee roles were supported through the PGF on projects that started filming 2023. A further 700+ trainee roles were supported by Screen Scotland’s general skills and talent development programmes.

³³ This includes in-kind contribution.

7.4 Economic impact

The research summarised in Sections 7.1 to 7.3 indicates that an estimated total of £73.5 million was spent to deliver screen sector education, skills and talent development in Scotland in 2023 (Table 27).

Table 27 Estimated expenditures on screen education, skills and talent development in Scotland (£m)

	2019	2021	2023
Higher education	23.5	27.4	29.4
Further education	24.8	25.2	32.9
Screen education and pre-career and in-career skills and talent development ¹	5.9	6.3	11.1
Total	54.2	58.9	73.5

Source: Saffery LLP / Nordicity estimates based on data from Screen Scotland, Creative Scotland, Jisc, HESA, HEIs, ESFA, SQA, BFI and TRC Media

Notes: Figures may not sum to totals due to rounding

1. Estimate for 2023 not directly comparable to 2019 and 2021 due to change in methodology.

Scotland's supply and use tables and Nordicity's MyEIA Model were used to convert these estimated total expenditures into estimates of employment, COE and GVA. In total, screen sector education, talent and skills development in Scotland generated 1,350 FTEs of employment, £53.4 million in COE and £73.9 million in GVA for Scotland's economy in 2023 (Table 28). This included 1,090 FTEs of employment, £43.7 million in COE and £7 million in GVA directly within Scotland's education and training sub-sector.

Table 28 Total economic impact of screen sector education, skills and talent development in Scotland, 2023

	Direct	Indirect	Induced	Total
Employment (FTEs)	1,090	70	190	1,350
COE (£m)	43.7	3.3	6.4	53.4
GVA (£m)	57.0	5.2	11.7	73.9

Source: Saffery LLP / Nordicity estimates based on data from Screen Scotland, Creative Scotland, Jisc, HESA, HEIs, ESFA and SQA

Note: Figures may not sum to totals due to rounding

8. Infrastructure

- As of April 2025, Scotland had 24 studio and build space facilities totalling 779,000 sq. ft.
- Of this total figure, there were 10 facilities totalling 370,082 sq. ft. of stage space available with the height generally required for film and TV production
- Potential to attract £5 million to £10 million in annual film and TV production spending for every 10,000 sq. ft. of new state of the art stage space

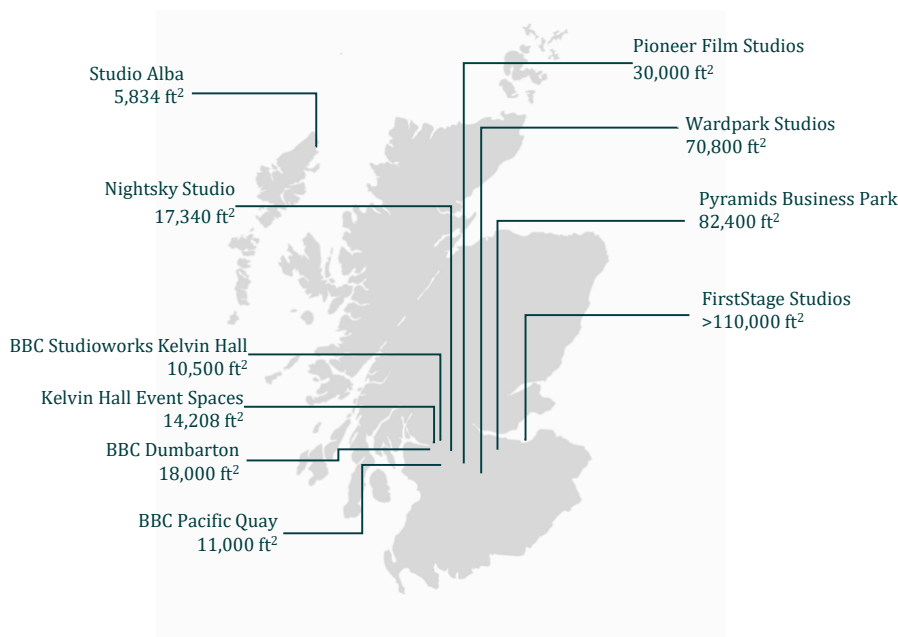


8.1 Studio facilities

Within the screen sector, infrastructure is largely comprised of the studio facilities that are used by producers of films, TV programmes, TV commercials and other audiovisual content. According to Scotland’s Screen Commission, as of July 2023 Scotland had:

- 13 studio facilities or build spaces of **under 10,000 sq. ft.** offering a combined 72,988 sq. ft. of stage space, and
- 11 studio facilities or build spaces of **over 10,000 sq. ft** offering a combined 706,276 sq. ft. of stage space.

Among these 24 facilities, 10 provide stages with suitable height available to film and TV producers: (i) BBC Dumbarton, (ii) Wardpark Studios, (iii) Pyramids Business Park, (iv) FirstStage Studios, (v) BBC Pacific Quay, (vi) Studio Alba, (vii) Kelvin Hall, (viii) Kelvin Hall (BBC), (ix) Pioneer Film Studios and (x) Nightsky Studios.



From an economic impact perspective, the ongoing use of studio facilities is captured as an indirect impact of production. The revenue earned by studio facilities and used to cover their own operating expenditures and employment costs is already counted as stage-hire fees in production budgets. Over the long-term, the capital investments made to build new studio facilities or convert existing buildings to suitable stage spaces would also be indirectly recovered as part of these stage-hire fees.

8.2 Economic impact

To provide a contemporaneous accounting of the economic contribution of the screen sector in Scotland, we have, however, estimated the capital construction costs associated with studio building in Scotland in 2023.

A review of the Scotland Screen Commission’s year-to-year information on studio floorspace indicates that approximately 58,000 sq. ft. of new stage space was opened in Scotland in 2023. Average stage construction costs and other public financial data for studio facilities points to an estimated £2.5 million invested in studio capital investments in 2023, including builds, expansions and refurbishments.

These capital investments generated an estimated 30 FTEs of employment, £1 million in COE and £1.8 million in GVA in Scotland in 2023 (Table 29). This included 10 FTEs of employment, £0.6 million in COE and £1.1 million in GVA generated within Scotland’s construction industry.

Table 29 Economic impact of studio capital investments, 2023

	Direct	Indirect	Induced	Total
Employment (FTEs)	10	10	10	30
COE (£m)	0.6	0.3	0.1	1.0
GVA (£m)	1.1	0.5	0.2	1.8

Source: Saffery LLP / Nordicity estimates based on data from Screen Commission and interviews with studio operators

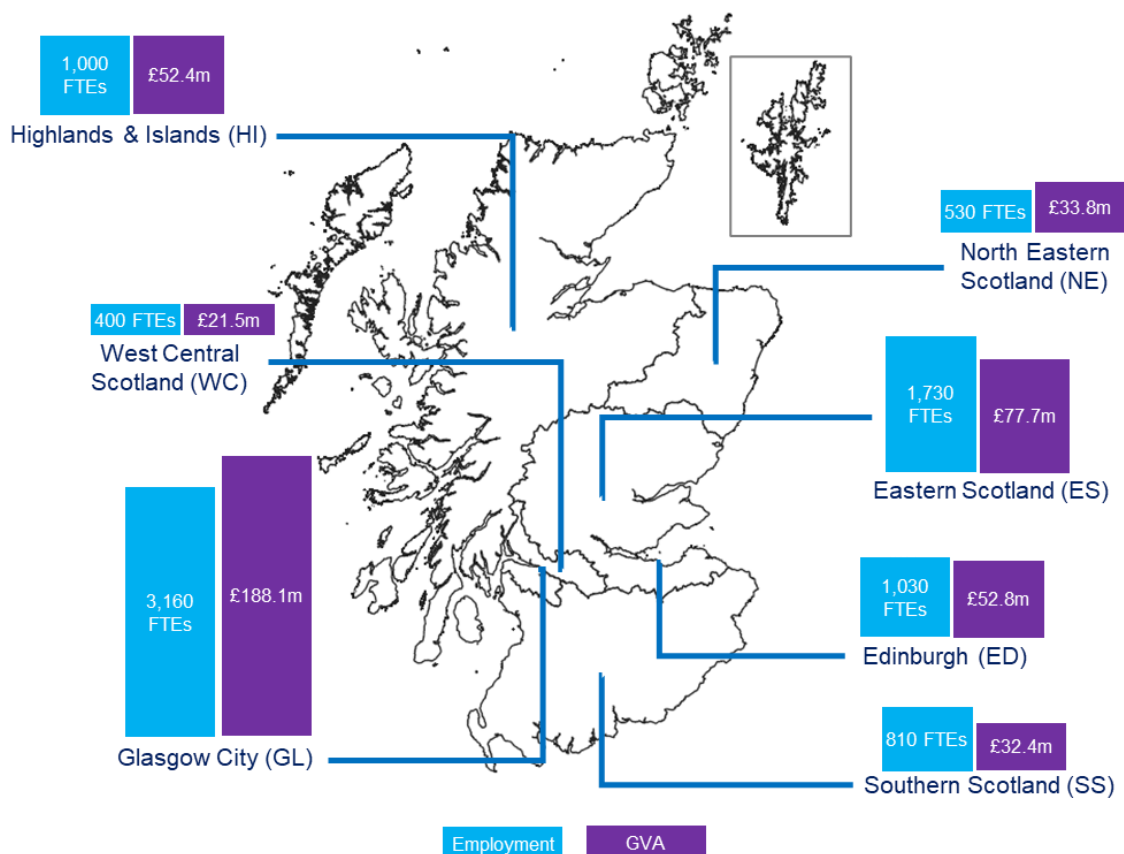
9. Regional analysis

In the following section we provide a regional breakdown of the economic impact of the screen sector in Scotland. This regional breakdown is based on a modified version of the International Territorial Levels Level 2 (ITL-2) regions of Scotland. We have estimated the economic impacts for each of Scotland’s five ITL-2 regions; however, we have also estimated the impacts for Glasgow City and Edinburgh and removed those impacts from the ITL-2 regions that those two urban centres are located within (see Box 6).

Our regional analysis indicates that Glasgow accounted for the largest shares of direct employment and GVA in the screen sector in 2023 (Figure 8). In that year, Glasgow accounted for 36.5% of direct employment and 41.0% of direct GVA (Table 30). Glasgow’s screen cluster generated 3,160 FTEs of direct employment and £188.1 million in direct GVA in 2023.

Most of the employment generated within the Glasgow cluster is due to production and development; however, Glasgow also accounts for significant shares of employment in GVA in other sub-sectors, particularly TV broadcast, distribution, exhibition and festivals. In fact, with the exception of screen tourism, and education and skills development, Glasgow was Scotland’s leading centre of economic activity within the screen sector.

Figure 8 Direct economic impact of screen sector in Scotland, by region, 2023



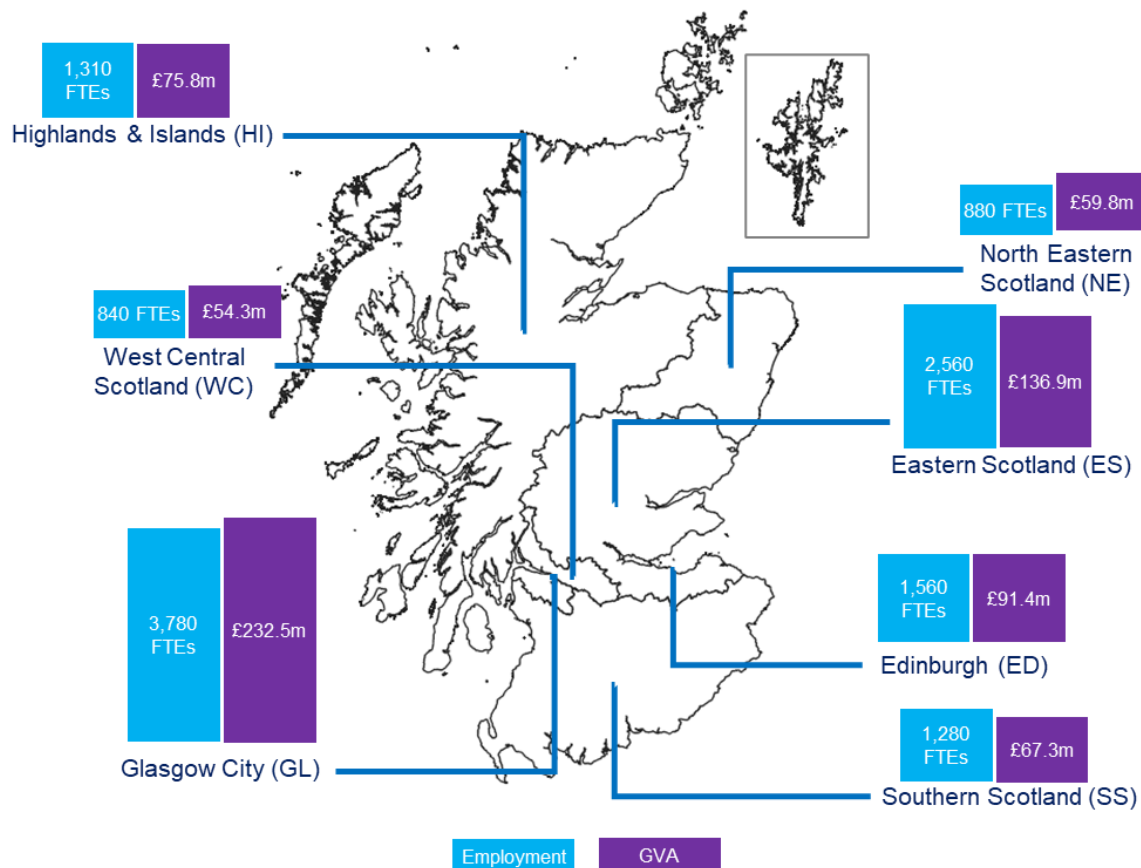
Source: Saffery LLP / Nordicity estimates based on data from Screen Scotland, Screen Commission, BFI, public financial reports, Ofcom, broadcaster interviews, producers/distributors survey (2024), Comscore, ONS, ABS, ASHE, BRES, D&B, EIFF, Glasgow Film Festival, Tourism Resources Company, VisitScotland, VisitBritain, the Moffat Centre for Travel & Tourism Business Development, Jisc, HESA, ESFA and SQA

Glasgow was followed by Eastern Scotland (excluding Edinburgh), which accounted for 1,730 FTEs of employment and £77.7 million in GVA; Edinburgh with 1,030 FTEs of employment and £52.8 million in GVA; and then Highlands and Islands, which accounted for 1,000 FTEs of employment and £52.4 million in GVA.

West Central Scotland (excluding Glasgow City), North Eastern Scotland and Southern Scotland each accounted for under 10% of direct employment and GVA in 2023.

Glasgow also accounted for the largest share of the total economic impact of the screen sector in 2023 (Figure 9), with a 31.0% share of the total employment impact and a 32.4% share of total GVA impact (Table 31). Glasgow’s slightly lower share in relation to its share of direct impacts was due to the fact that many indirect and induced impacts are spread across a wider range of industries that are less concentrated in Glasgow and more evenly distributed (in terms of business and economic activity) across Scotland.

Figure 9 Total economic impact of screen sector in Scotland, by region, 2023



Source: Saffery LLP / Nordicity estimates based on data from Screen Scotland, Screen Commission, BFI, public financial reports, Ofcom, broadcaster interviews, producers/distributors survey (2024), Comscore, ONS, ABS, ASHE, BRES, D&B, EIFF, Glasgow Film Festival, Tourism Resources Company, VisitScotland, VisitBritain, the Moffat Centre for Travel & Tourism Business Development, Jisc, HESA, ESFA and SQA

Table 30 Direct economic impact of screen sector in Scotland, by region and sub-sector, 2023

	GL	ES	ED	HI	WC	NE	SS	Total
Employment (FTEs)								
Production and development	2,030	210	300	440	200	310	40	3,540
Distribution	20	<0	0	0	0	<0	0	30
Exhibition and film festivals	300	200	290	200	130	70	130	1,320
TV broadcast	190	40	40	40	40	70	0	410
Screen tourism	290	1,060	20	290	0	0	590	2,260
Education, skills and talent development	330	220	380	30	30	80	40	1,090
Infrastructure	0	0	0	0	0	0	0	10
Total	3,160	1,730	1,030	1,000	400	530	800	8,660
Share	36.5%	20.0%	11.9%	11.6%	4.6%	6.1%	9.2%	100.0%
GVA (£m)								
Production and development	129.3	13.7	18.6	28.2	12.4	20.3	2.7	225.0
Distribution	5.2	0.6	0.6	1.7	0.4	1.4	0.1	10.0
Exhibition and film festivals	10.3	7.0	9.9	6.7	4.5	2.2	4.5	45.1
TV broadcast	14.1	2.8	2.8	2.8	2.8	5.6	0.0	31.0
Screen tourism	11.6	42.0	0.9	11.6	0.0	0.0	23.2	89.4
Education, skills and talent development	17.1	11.3	19.7	1.4	1.3	4.1	1.9	57.0
Infrastructure	0.3	0.2	0.4	0.0	0.0	0.1	0.0	1.1
Total	188.1	77.7	52.8	52.4	21.5	33.8	32.4	458.6
Share	41.0%	16.9%	11.5%	11.4%	4.7%	7.4%	7.1%	100.0%

Source: Saffery LLP / Nordicity estimates based on data from Screen Scotland, Screen Commission, BFI, public financial reports, Ofcom, broadcaster interviews, producers/distributors survey (2024), Comscore, ONS, ABS, ASHE, BRES, D&B, EIFF, Glasgow Film Festival, Tourism Resources Company, VisitScotland, VisitBritain, the Moffat Centre for Travel & Tourism Business Development, Jisc, HESA, ESFA and SQA

GL – Glasgow City, ES - Eastern Scotland (excluding Edinburgh), ED - Edinburgh, HI - Highlands & Islands, WC – West Central Scotland (excluding Glasgow City), NE – North Eastern Scotland, SS – Southern Scotland

Note: Figures may not sum to totals due to rounding

Table 31 Total¹ economic impact of screen sector in Scotland, by region and sub-sector, 2023

	GL	ES	ED	HI	WC	NE	SS	Total
Employment (FTEs)								
Production and development	2,360	640	590	610	440	490	290	5,420
Distribution	20	10	<10	<10	<10	<10	<10	80
Exhibition and film festivals	380	310	360	240	190	110	200	1,790
TV broadcast	220	80	60	50	60	90	30	600
Screen tourism	420	1,230	130	360	90	80	690	2,990
Education, skills and talent development	370	280	410	50	60	110	70	1,350
Infrastructure	10	10	10	0	0	0	0	30
Total	3,780	2,560	1,560	1,310	840	880	1,280	12,260
Share	31.0%	21.0%	12.8%	10.7%	6.9%	7.2%	10.5%	100.0%
GVA (£m)								
Production and development	154.7	46.8	41.2	41.2	30.9	34.6	21.8	371.0
Distribution	5.8	1.4	1.1	2.0	0.9	1.8	0.5	13.4
Exhibition and film festivals	14.7	13.0	13.6	9.1	7.8	5.0	8.1	71.4
TV broadcast	16.7	6.4	5.0	4.2	4.8	7.2	2.2	46.6
Screen tourism	20.2	53.7	8.0	16.3	6.4	5.2	30.3	140.0
Education, skills and talent development	20.0	15.2	22.1	3.0	3.5	5.9	4.3	73.9
Infrastructure	0.5	0.4	0.5	0.1	0.1	0.2	0.1	1.8
Total	232.5	136.9	91.4	75.8	54.3	59.8	67.3	718.0
Share	32.4%	19.1%	12.7%	10.6%	7.6%	8.3%	9.4%	100.0%

Source: Saffery LLP / Nordicity estimates based on data from Screen Scotland, Screen Commission, BFI, public financial reports, Ofcom, broadcaster interviews, producers/distributors survey (2024), Comscore, ONS, ABS, ASHE, BRES, D&B, EIFF, Glasgow Film Festival, Tourism Resources Company, VisitScotland, VisitBritain, the Moffat Centre for Travel & Tourism Business Development, Jisc, HESA, ESFA, SQA and TRC Media

GL - Glasgow City, ES - Eastern Scotland (excluding Edinburgh), ED - Edinburgh, HI - Highlands & Islands, WC - West Central Scotland (excluding Glasgow City), NE - North Eastern Scotland, SS - Southern Scotland

Note: Figures may not sum to totals due to rounding

1. Includes direct, indirect and induced impacts

Box 6 Modified ITL-2 regions

For this study, Scotland's five ITL-2 regions have been modified to create a total of seven regions. Since Glasgow and Edinburgh account for significant amounts of production activity, business activity and employment within Scotland's screen sector, Glasgow City and Edinburgh were removed from their respective ITL-2 regions - West Central Scotland and Eastern Scotland - to create two new regions.

ITL-2 regions

Eastern Scotland
Highlands and Islands
North Eastern Scotland
Southern Scotland
West Central Scotland

Modified ITL-2 regions

Eastern Scotland (excluding Edinburgh)
Highlands and Islands
North Eastern Scotland
Southern Scotland
West Central Scotland (excluding Glasgow City)
Edinburgh
Glasgow City

List of abbreviations

ABS	Annual Business Survey
ASHE	Annual Survey of Hours and Earnings
BFI	British Film Institute
BRES	Business Register and Employment Survey
COE	Compensation of employment
D&B	Dun & Bradstreet Hoovers
EIFF	Edinburgh International Film Festival
ESFA	Education & Skills Funding Agency
FE	Further education
FEI	Further education institutions
FTE	Full-time equivalent
GBTS	Great Britain Tourism Survey
GVA	Gross value added
HE	Higher education
HEI	Higher education institution
HESA	Higher Education Statistics Agency
IDBR	Inter-Departmental Business Register
IPS	International Passenger Survey
ONS	Office for National Statistics
PSB	Public Service Broadcaster
SABS	Scottish Annual Business Statistics
SQA	Scottish Qualifications Authority
SVOD	Subscription Video on Demand
VOD	Video on Demand

Appendix A: Data tables

Table A - 1 Key performance indicators for film and TV festivals in Scotland, 2023

	Edinburgh International Film Festival	Edinburgh TV Festival	Glasgow Film Festival	Other film festivals in Scotland	Total
Core attendance ¹	10,435	2,003	31,984	49,129	93,551
Screenings per visitor	5.0	-- ²	5.0	5.0	--
Number of unique visitors	2,087	2,003	6,397	9,826	11,913
Scotland residents	1,440	1,382	5,546	6,780	8,220
Other UK residents	459	441	601	2,162	2,621
Overseas residents	188	180	249	884	1,072
Festival operating expenditures (£)	757,939	445,000	782,939	1,396,442	3,382,320
Gross visitor spending (£)	231,000	221,000	708,000	1,087,000	2,247,000
Scotland residents	58,000	56,000	179,000	275,000	568,000
Other UK residents	90,000	86,000	275,000	422,000	873,000
Overseas residents	83,000	79,000	254,000	390,000	806,000

Source: Saffery LLP / Nordicity estimates based on data from Screen Scotland, Creative Scotland, Edinburgh International Film Festival, Edinburgh TV Festival, Glasgow Film Festival, Tourism Resources Company, and Screen Scotland

1. Includes festival audiences and delegates

2. No audiences screenings

Appendix B: Screen tourism methodology

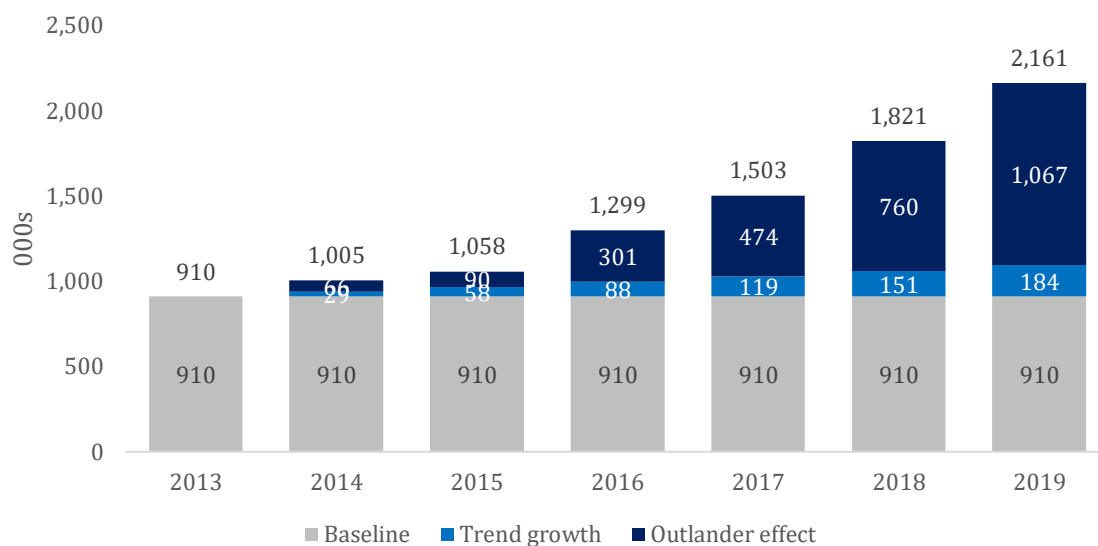
The following Appendix provides a detailed description of the data sources, assumptions and calculations used to derive the estimate of attributable screen tourism spending.

1. Growth in visits to Outlander sites

To assess the annual number of screen tourists³⁴ influenced by *Outlander*, we updated a simple difference-in-difference analysis first set out by VisitScotland. Many of Scotland’s castles and historic monuments feature as locations in *Outlander* episodes. These 23 *Outlander* sites accounted for just under 2.2 million visits in 2019, or 3.9% of the over 55 million visits to 597 historic sites across Scotland.³⁵

The first season of *Outlander* aired in 2014 and 2015; so, 2013 provides a baseline measurement of pre-*Outlander* visits. By 2019, total visits to all 23 sites reached just under 2.2 million. After removing the trend rate of growth in annual visits to historic sites – as indicated by the overall number of visits to non-*Outlander* historic sites between 2014 and 2019 – we conclude that *Outlander* led to 1,067,000 additional visits to these historic sites in 2019 in relation to 2013 – i.e. before the first airing of *Outlander* (Figure A - 1).

Figure A - 1 Annual visits to historic sites featured in *Outlander*



Source: Saffery LLP / Nordicity analysis based on data from the Moffat Centre for Travel & Tourism Business Development (2021)

Since VisitScotland’s Scotland Visitor Survey provided an estimate of screen tourists in 2016 (525,000), we used this analysis of visits to *Outlander* sites to derive estimates of the increase in visits to *Outlander* sites since 2016. So, while there were an estimated 1,067,000 additional visits to *Outlander* sites in 2019, once one removes the additional visits already achieved by 2016 (301,000), the net increase in visits to *Outlander* sites vs. 2016 was 766,000 (Table A - 2).

³⁴ In this study, ‘screen tourist’ refer to tourists who, as part of their visit to Scotland, visited a site in Scotland that was either a filming location or a setting for a film or TV programme. These site visits may not have been the prime motivation for that person’s visit to Scotland.

³⁵ Moffat Centre for Travel & Tourism Business Development (2021).

Table A - 2 Calculation of additional visits to *Outlander* sites, 2016 - 2019

	2016	2017	2018	2019
Total additional visits to <i>Outlander</i> sites (vs. 2013)	301,000	474,000	760,000	1,067,000
Additional visits to <i>Outlander</i> sites in 2016 (baseline year)	301,000	301,000	301,000	301,000
Additional visits to <i>Outlander</i> sites (vs. 2016)	0	173,000	459,000	766,000

Source: Saffery LLP / Nordicity estimates based on data from the Moffat Centre for Travel & Tourism Business Development (2021)

2. Conversion of visits to estimates of unique individuals

A review of web sites for *Outlander* tour operators indicated that most single-day multi-site location tours took in three castles. Based on this, we assumed that each visitor visited an average of three sites and used this average to convert the estimates of additional 'visitors' to *Outlander* sites to estimates of unique individuals visiting *Outlander* sites (Table A - 3).

Table A - 3 Calculation of additional number of unique visitors to *Outlander* sites, 2016 - 2019

	2016	2017	2018	2019
Additional visits to <i>Outlander</i> sites (vs. 2016)	0	173,000	459,000	766,000
Average number of sites visited per visitor	3.0	3.0	3.0	3.0
Estimated number of additional <i>Outlander</i> visitors (vs. 2016)	0	58,000	153,000	255,000

Source: Saffery LLP / Nordicity estimates based on data from the Moffat Centre for Travel & Tourism Business Development (2021)

3. Origin breakdown of unique overnight visitors

Given the similarity of *Outlander* castle sites to historic attractions, data from DC Research³⁶ and research conducted by Saffery and Nordicity³⁷ for Historic Houses for the origin of visitors to historic houses and gardens in the UK was used to prepare a breakdown of unique visitors by geographic origin (Table A - 4).

³⁶ DC Research (2015). The Economic and Social Contribution of Independently Owned Historic Houses and Gardens. Prepared for Historic Houses. P. 35.

³⁷ Saffery and Nordicity (2018). Changes to the tax treatment of heritage maintenance funds: a cost benefit analysis. Prepared for Historic Houses. P. 18.

Table A - 4 Geographic origin of number of unique visitors to Outlander sites, 2016 - 2019

	2016	2017	2018	2019
Estimated number of additional Outlander visitors (vs. 2016)	0	58,000	153,000	255,000
International (13%)	0	8,000	20,000	33,000
Domestic overnight (15%)	0	9,000	23,000	38,000
Domestic daytrip (72%)	0	41,000	110,000	184,000

Source: Saffery LLP / Nordicity estimates based on data from Saffery LLP / Nordicity (2018), DC Research (2015) and the Moffat Centre for Travel & Tourism Business Development (2021)

4. Estimate of additional overnight Outlander visitors

The estimated number of international and domestic overnight visitors was summed to arrive at estimates of the additional overnight visitors to *Outlander* sites.

Table A - 5 Calculation of additional number of unique overnight visitors to Outlander sites, 2016 - 2019

	2016	2017	2018	2019
International visitors	0	8,000	20,000	33,000
Domestic overnight visitors	0	9,000	23,000	38,000
Additional overnight visitors to Outlander sites (vs. 2016)	0	17,000	43,000	71,000

Source: Saffery LLP / Nordicity estimates based on data from Saffery LLP / Nordicity (2018), DC Research (2015) and the Moffat Centre for Travel & Tourism Business Development (2021)

5. Total additional overnight screen tourists

The VisitScotland website contains a variety of individual pages promoting tourism related to different TV programmes and films, including *Outlander*. Website metrics provided by VisitScotland indicated that web site visits or sessions to the *Outlander* pages accounted for 54% of all sessions in 2019. The share of website sessions was used as a proxy for *Outlander's* ultimate share of screen tourists in Scotland. So, for example, in 2019, our estimate of 71,000 additional (vs. 2016) overnight tourists visiting *Outlander* locations would imply that all film and TV locations in Scotland likely attracted 131,000 overnight tourists ($71,000 \div 54\% = 131,000$) (Table A - 6).

Table A - 6 Estimate of total screen tourists in Scotland (domestic overnight and overseas visitors), 2016 - 2019

	2016	2017	2018	2019
Additional overnight visitors to <i>Outlander</i> sites (vs. 2016)	0	17,000	43,000	71,000
<i>Outlander</i> share of web site traffic to VisitScotland screen tourism pages	--	51%	55%	54%
Estimated total number of additional overnight screen tourists in Scotland (vs. 2016)	0	33,000	78,000	131,000

Source: Saffery LLP / Nordicity estimates based on data from VisitScotland, Saffery LLP / Nordicity (2018), DC Research (2015) and the Moffat Centre for Travel & Tourism Business Development (2021)

6. Estimated number of overnight screen tourists in 2019

The estimates of the total annual number of additional screen tourists were added to the baseline figures of 525,000 overnight screen tourists in 2016, as per VisitScotland's Visitor Survey to arrive at an estimate of the overall number of overnight screen tourists (656,000) in Scotland in 2019 (Table A - 7).

Table A - 7 Estimate of total screen tourists in Scotland (domestic overnight and overseas visitors), 2016 - 2019

	2016	2017	2018	2019
Baseline number of screen tourists (2016)	525,000	525,000	525,000	525,000
Estimated total number of additional overnight screen tourists in Scotland (vs. 2016)	0	33,000	78,000	131,000
Estimated total number of overnight screen tourists in Scotland	0	558,000	603,000	656,000

Source: Saffery LLP / Nordicity estimates based on data from VisitScotland, Saffery LLP / Nordicity (2018), DC Research (2015) and the Moffat Centre for Travel & Tourism Business Development (2021)

7. Domestic-international split in screen tourists

An analysis of data contained in VisitScotland's Scotland Visitor Survey 2015 & 2016: TV and Film Extract indicated that overnight screen tourists in Scotland were split approximately 50-50 in terms of domestic vs. international visitors, however, data from VisitBritain now indicates that the split is now more heavily weighted towards international visitors, 68-32. (Table A - 8).

According to VisitScotland, international visits to Scotland fell from 3,460,100 in 2019 to 479,000 in 2021, 2021 included sustain periods of travel restriction within and between nations as a consequence of the COVID pandemic.³⁸ In other words, international tourism was 86% lower in 2021 compared to 2019. Although it should be noted that the VisitScotland survey methodology has been updated since 2021, so any direct comparison should be viewed in this context. Due to these changes to the survey methodology, international visitor numbers in 2023 have been calculated from VisitBritain data, resulting in over 9 million total overnight visits.

The updated survey methodology also points towards an increase in the incidence of screen tourism, rising from 8% in 2016 to 16% in 2023. The total share of overnight tourists who visited a film or TV location in Scotland in 2023 was 12%. Applying these trends to the total visitor numbers results in an estimated 1.14 million screen tourists in Scotland in 2023.

Table A - 8 Estimate of total screen tourists in Scotland (domestic overnight and overseas visitors)

	2016	2017	2018	2019	2020	2021	2022	2023
Estimated total number of overnight screen tourists in Scotland	0	558,000	603,000	656,000	-- ¹	90,000	-- ²	1,143,720
Domestic (50%)	0	279,000	301,500	328,000	-- ¹	45,000	-- ²	377,000
International (50%)	0	279,000	301,500	328,000	-- ¹	45,000	-- ²	767,000

Source: Saffery LLP / Nordicity estimates based on data from VisitScotland, Saffery LLP / Nordicity (2018), DC Research (2015) and the Moffat Centre for Travel & Tourism Business Development (2021)

1. No estimates due to pandemic

2. Biennial estimates only for 2019, 2021 and 2023

³⁸ <https://www.visitscotland.org/research-insights/about-our-visitors/international/annual-performance-report>

8. Estimation of total spending by screen tourists in 2019, 2021 and 2023

Data published by VisitScotland indicates that domestic overnight visitors in Scotland spent an average of £232 per trip in 2019, whilst international overnight visitors spent an average of £733.³⁹ These amounts were multiplied by the visitor estimates for 2019 to arrive at an overall estimate of tourism spending (Table A - 9).

For 2021, VisitScotland statistics indicate that total spending by international visitors to Scotland was £459 million in 2021, or 82% lower than in 2019.⁴⁰ That is, average spending per international visitor increased from £734 in 2019 to £958 in 2021. If domestic overnight tourists' average spending increased at the same rate, then it would have rose from £232 in 2019 to £303 in 2021 (Table A - 9).

For 2023, VisitScotland statistics indicate that domestic overnight visitors in Scotland spent an average of £254 per trip in 2023, whilst international overnight visitors spent an average of £901. These amounts were multiplied by the visitor estimates for 2023 to arrive at an overall estimate of tourism spending of £787 million (Table A - 9).

Table A - 9 Estimate of total screen tourists in Scotland (domestic overnight and overseas visitors), 2019, 2021 and 2023

	Number of screen tourists	Average spend per trip (£)	Total spend (£m)
2019			
Domestic overnight	328,000	232	76.1
International	328,000	733	240.4
Total	656,000	--	316.5
2021			
Domestic overnight	45,000	330	13.6
International	45,000	958	43.1
Total	90,000	--	56.8
2023			
Domestic overnight	377,000	254	95.7
International	767,000	901	691.2
Total	1,144,000	--	787.0

Source: Saffery LLP / Nordicity estimates based on data from VisitBritain, VisitScotland, GBTS/NISRA/IPS, Saffery LLP / Nordicity (2018), DC Research (2015) and the Moffat Centre for Travel & Tourism Business Development (2021)

³⁹ VisitScotland (2020). [Key Facts on Tourism in Scotland 2019](#). p. 5.

⁴⁰ VisitScotland (undated) [International tourism performance](#).

9. Attributable spending

VisitBritain’s model for estimating the portion of total tourist spending attributable to individual activities was used to attribute spending to screen tourism, i.e. visiting film and TV locations. Under VisitBritain’s attribution model, tourists are asked to rate the importance of different activities as motivators for their decision to take a short break or holiday in the UK. These ratings are then used in the following manner to apportion total trip spending.⁴¹

- **Sole reason:** Percentage response is multiplied by total spending. For example, if 20% of respondents selected this rating for a particular activity, then total trip spending, say £1,000, is multiplied by 20% and £200 is attributed to the particular activity.
- **Very important reason:** Percentage response is multiplied by total spending and then divided by the average number of total activities undertaken on a trip. For example, if 30% of respondents selected this rating for a particular activity and then also undertook an average of 10 different activities, then total trip spending, say £1,000, is multiplied by 30% and £300 and divided by 10 so that £30 is attributed to the particular activity.
- **Fairly important reason:** Treated in the same manner as ‘Very important reason’.
- **Only a small reason:** 0% attribution.
- **Of no importance at all:** 0% attribution.

With regards to the activity of visiting film and TV locations, this type of ratings data was only available for research commissioned by VisitBritain for the UK in 2015.⁴² The results of that research (summarised in Table A - 10) was applied to Scotland for 2021.

The results indicated that a spending attribution rate of 22.4% could be applied to screen tourism. In other words, out of the estimated total trip spending of £56.8 million made by screen tourists, £12.7 million (i.e. 22.4%) could be attributed to screen tourism as a motivator in relation to other trip motivators (Table A - 10).

Table A - 10 Derivation of trip spend attribution rate for visiting film or TV locations in the UK

	Share of responses (UK, 2015) ¹	Average number of activities undertaken during trip ²	Attribution rate
Sole reason	16%	7.8	16.0%
Very important reason	23%	7.8	2.9% ³
Fairly important reason	27%	7.8	3.5% ³
Only a small reason	23%	7.8	0.0%
Of no importance at all	12%	7.8	0.0%
Total	100%	7.8	22.4%

Source: Saffery LLP / Nordicity calculations based on data from TNS (2015)

1. Response to the following question: ‘Thinking about the most recent UK holidays or short breaks when you took part in these activities, how important was being able to undertake ‘Visiting location of TV series, etc.’ in your decision to take the holiday or short break?’

2. Average number of activities for domestic holidays and short breaks by British residents in 2015

3. Share of responses divided by average number of activities undertaken during trip.

⁴¹ TNS (2015). Valuing Activities: Final Report. Prepared for VisitScotland, VisitEngland and Visit Wales. 7 October 2015.

⁴² TNS (2015). Valuing Activities: Final Report. Prepared for VisitScotland, VisitEngland and Visit Wales. 7 October 2015.

10. Allocation of attributable spending

Before analysing the economic impact generated by attributable screen tourism spending, the spending estimate was allocated across tourism-spending categories. This allocation was done in accordance with observed spending patterns published by VisitBritain for domestic tourists in Scotland (Table A - 11).⁴³

Table A - 11 Allocation of attributable screen tourism spending, 2023

	Share of total spending	Allocation (£m)
Accommodation	39.0%	68.8
Food and beverage	20.0%	35.3
Culture	6.0%	10.6
Retail and other	18.0%	31.7
Transport (earned in Scotland) ¹	8.5%	15.0
Scotland total	91.5%	161.4
Transport (earned outside Scotland) ¹	8.5%	15.0
Global total	100.0%	176.4

Source: Saffery LLP / Nordicity calculations based on data from TNS (2015) and Kantar (2020)

1. 50% of the total allocated transport spending has been allocated to businesses in Scotland (eg. car hire, public transport), with the other 50% allocated to businesses (eg. airlines) located outside Scotland.

⁴³ Kantar (2020). The GB Tourist: 2019 Annual Report. Prepared for VisitScotland, VisitEngland, Cymru Wales. P. 93.

Appendix C: MyEIA™ Model

Indirect impact

Indirect impacts were estimated using Nordicity's MyEIA™ Model. This model utilises the 2019 input-output tables published by the Scottish Government, along with other economic data (e.g. median wages) to estimate how increased purchases of goods and services translate into incremental employment, COE and GVA.

Construction of input-purchases vector

Data collected through primary and secondary research was used to prepare a profile of input purchases. After removing expenditures on sources of value added (i.e. COE, mixed income), the remaining expenditures were mapped to a 98 x 1 vector (x) of industries (corresponding with the industries listed in the 2019 input-output tables published by the Scottish Government).

Estimation of indirect output

The 2019 Leontief inverse matrix (L) for the UK economy was derived from the 2019 input-output tables published by the Scottish Government. The following formula was then used to estimate a 1 x 98 vector (y) containing the changes in output, y_i , in each industry as a result of the input purchases arising from each sector.

$$y = x'L$$

Where:

y is a 1 x 98 vector of changes in output (y_i)

x is 98 x 1 vector of input-purchase expenditures (by receiving industry)

L is the 98 x 98 Leontief inverse matrix

Calculation of indirect GVA

The GVA ratio (a_i) was calculated for each of the 98 industries listed in the ONS input-output tables and L . These ratios were calculated as:

$$a_i = \text{GVA}_i / z_i$$

Where:

GVA_i is the value of GVA generated in industry i as per the 2019 input-output tables

z_i is the total value of output in industry i as per the 2019 input-output tables

The total indirect GVA impact across all industries (g^*) was calculated in the following manner:

$$g^* = a'y$$

Where:

a is a 98 x 1 vector of a_i

y is a 98 x 1 vector of y_i

Calculation of indirect COE

The COE ratio (b_i) was calculated for each of the 98 industries listed in the ONS input-output tables. These ratios were calculated as:

$$b_i = \text{COE}_i / z_i$$

Where:

COE_i is the value of COE generated in industry i as per the 2019 input-output tables

z_i is the total value of output in industry i as per the 2019 input-output tables

The total indirect COE impact across all industries (w^*) was calculated in the following manner:

$$w^* = b'y$$

Where:

b is a 98×1 vector of b_i

y is a 98×1 vector of y_i

Estimation of indirect employment

The number of indirect jobs (measured in FTEs) was estimated by dividing the COE impact in each industry (w_i) by the average FTE cost in each industry (m_i).

$$q_i = w_i / m_i$$

Where:

w_i is the total wage impact in industry i

m_i is the average FTE cost in industry i

Total indirect employment (q^*) was arrived at by summing the employment impacts (q_i) across the 64 industries.

$$q^* = \sum_i q_i$$

Induced impact

Nordicity's MyEIA™ Model also provides estimates of induced impacts. These estimates are based on the Leontief Type II tables published by the Scottish Government for 2019.

Estimation of induced output

The values of direct and indirect output were summed to arrive at an estimate of Type I output.

$$Y_{\text{TYPE I}} = Y_{\text{DIRECT}} + Y_{\text{INDIRECT}}$$

The Type I output was then multiplied by the Type II ratios implied by the Scottish Government Leontief Type II tables.

$$y_{\text{TYPE II}} = \text{Type II multiplier} \cdot (y_{\text{TYPE I}})$$

For impacts at the regional level, lower multipliers were used.

Estimation of induced GVA

The total value of induced impact GVA was estimated by multiplying the economy-wide GVA-to-output ratio (as per the 2019 input-output tables) by the estimate of Type II output.

$$g_{\text{INDUCED}} = (a^*) \cdot (y_{\text{TYPE II}})$$

Where:

a^* is the GVA-to-output ratio across all industries (0.53)

Estimation of induced COE

The total value of induced impact COE was estimated by multiplying the economy-wide COE-to-output ratio (as per the 2019 input-output tables) by the estimate of Type II output.

$$w_{\text{INDUCED}} = (b^*) \cdot (y_{\text{TYPE II}})$$

Where:

b^* is the COE-to-output ratio across all industries.

Estimation of induced employment

The number of induced impact FTEs (q_{INDUCED}) was estimated by dividing the estimate of induced COE (w_{INDUCED}) by the average FTE cost across the UK economy (m^*).

$$q_{\text{INDUCED}} = w_{\text{INDUCED}} / m^*$$

Where:

m^* is the average FTE cost in the UK economy in 2019.

Total economic impact

The total economic impact in terms of GVA, COE and employment was arrived at by summing the estimates of the direct, indirect and induced impacts.

Regional and local economic impacts

The MyEIA™ Model can also be used to generate estimates of direct, indirect and induced impacts in terms of employment, COE and GVA for NUTS1, NUTS2 and local authorities within England, Scotland and Wales. This regionalisation of the model is based on location quotients (LQs) published by ONS.

The LQs are used to derive regional-supply ratios (λ) for a given geographic jurisdiction. Where $\lambda > 1$, it is set equal to 1.

These regional-supply ratios are used to adjust the input purchase expenditures vector (x) to approximate the portion of input purchases met by suppliers located within a given geographic jurisdiction.

$$X_{\text{REGIONAL}} = x_i \cdot \lambda_i$$

Where:

x_i input-purchase expenditures (by receiving industry i)

λ_i is the supply ratio for industry i .

The regional-supply ratios are also used to create a regionalised Leontief inverse matrix (L_{REGIONAL}) in the following manner:

$$L_{\text{REGIONAL}} = (\lambda'A)^{-1}$$

Where:

λ is a 98 x 98 diagonal matrix of regional-supply ratios

A is a 98 x 98 matrix of input-output coefficients

The regionalised Leontief inverse matrix is then used to calculate the indirect output vector.

$$y_{\text{REGIONAL}} = x'L_{\text{REGIONAL}}$$

Where:

y_{REGIONAL} is a 1 x 98 vector of changes in output (y_i) in a given geographic jurisdiction

x is 98 x 1 vector of input-purchase expenditures (by receiving industry)

L_{REGIONAL} is the 98 x 98 regionalised Leontief inverse matrix