

Finance and Public Administration Committee
2nd Meeting 2026 (Session 6)
Tuesday 13 January 2026

Scotland's national performing companies: economic impact

Purpose

1. The Committee is invited to take evidence in relation to the economic impact of Scotland's five National Performing Companies (NPCs) from the following witnesses in round-table format—
 - Alistair Mackie, Chief Executive, Royal Scottish National Orchestra (RSNO),
 - Alex Reedijk, General Director, Scottish Opera (SO),
 - Gavin Reid, Chief Executive, Scottish Chamber Orchestra (SCO),
 - Steven Roth, Executive Director, Scottish Ballet (SB), and
 - Liam Sinclair, Executive Director and Co-Chief Executive, National Theatre of Scotland (NToS).
2. This evidence session follows on from the [Committee's pre-budget 2026-27 scrutiny](#) which focused on fiscal sustainability, encouraging economic growth, improving productivity and supporting growth sectors. The session is intended to explore issues such as how NPCs assess and report on their impact on the economy, including Gross Value Added (GVA), employment and supply chains, and how they work together to maximise outcomes and share best practice in delivering economic, social and wellbeing impacts. The session is not intended to replicate the Constitution, Europe, External Affairs and Culture Committee's detailed pre-budget scrutiny on [funding for culture](#).
3. To inform this evidence session, witnesses from the five NPCs have provided the Committee with an Economic and Wellbeing Impact Assessment of Scotland's NPCs produced by BiGGAR Economics, as an overview of their work and impacts. This report is provided at Annex A.
4. This paper sets out the background to this session, along with key issues raised in the Impact Assessment and other relevant documents.

Economic and Wellbeing Impact Assessment (EaWIA) of Scotland's NPCs

Background

5. BiGGAR Economics were commissioned by the five NPCs “to provide a summary assessment of their combined economic and wellbeing impact across Scotland”, with the findings “intended to inform discussions around national investment in

arts and culture". The report is "intended to provide initial analysis on the scale of the economic activity generated by Scotland's NPCs", as phase one of a larger piece of work that is expected to be completed in mid-2026.

6. This study applied the same methodology used to estimate the [RSNO's economic and wellbeing impacts by BiGGAR Economics in October 2025](#) (further information on that report can be found later in this paper). The NPCs' report suggests that "by collecting data from each of the other four NPCs and using the model developed to assess the contribution made by the RSNO, an approximation of the overall economic and wellbeing impacts is obtained".
7. The report highlights that the five NPCs "promote Scottish culture while generating significant economic activity and enhancing population wellbeing". In 2024-25 they had a collective income of £50.4 million (m), 46% of which came from the Scottish Government, with other sources including public sector funding, charitable activity and other trading income, and donations, sponsorships and fundraising.
8. The report states that every £1 received from the Scottish Government generates £2.62 in GVA, along with £1.75 in wellbeing benefits.

Economic impacts

9. The report suggests that collectively Scotland's NPCs in 2024-25 are estimated to have generated an economic impact worth £60.6m GVA for the Scottish economy, supporting 1,280 jobs. Specific figures for direct and indirect economic impacts are provided below (the methodology behind these figures can be found in the report itself)—
 - Direct GVA¹ was £23.3m and NPCs directly employed 510 staff (440 FTEs²). Wages and salaries paid to staff totalled £20.2m, of which £13.3m was estimated to have been spent in the Scottish economy (after VAT).
 - Total supply chain spend was estimated at £29.2m, with 73% of this spend being retained in the Scottish economy. The supply chain generated £12.1m in GVA and 280 jobs.
 - The average value of capital investments by Scotland's NPCs was £3m. £1.9m in GVA was generated through this investment, as well as 50 jobs.
 - £5m in GVA and 70 jobs were generated through supporting freelancers. Over 2,300 freelancers were contracted by NPCs in 2024-25, with payments to them totalling £9.6m, of which £6.6m was estimated to have been spent in the Scottish economy (after VAT).
 - A total of 352,900 tickets sold in 2024-25, including around 300,000 to Scottish residents, approximately 28,000 from the rest of the UK, and over 25,000 international visitors. Scottish visitors were estimated to support economic activity worth £6.7m and 220 jobs and non-Scottish visitors £8m and 290 jobs.

¹ Direct GVA is estimated by subtracting the non-staff related expenditure from total income.

² Full-time equivalents.

Wellbeing impacts

10. The report further highlights three areas in which NPCs generate wellbeing benefits: performances, people, and community. The wellbeing impact of the NPCs has been measured using Wellbeing-Adjusted Life Years (WELLBYs), which the report states are recommended by HM Treasury and quantify wellbeing benefits in monetary terms. They “represent a one-point change in life satisfaction (on a 0-10 scale) per person, per year”. The NPCs are estimated to have a total wellbeing impact of 2,541 WELLBYs, worth £40.5m.
11. The report suggests that watching live and digital performances can bring a wellbeing effect of 1,301 WELLBYs, worth £20.8m. It notes that the WELLBY estimates draw on available literature rather than audience surveys and “are likely to be an underestimate; not fully accounting for the full diversity of the NPCs’ audiences”.
12. In terms of people, the report suggests that both permanent employment and regular volunteering enhance wellbeing and estimates a wellbeing effect of 263 WELLBYs, worth £4.2m (based on available literature).
13. It further highlights that “NPCs all have extensive community engagement programmes that bring arts and performance to diverse audiences”. This includes engaging with more than 100,000 people across communities in Scotland in 2024-25. The wellbeing effect is estimated at 977 WELLBYs, worth £15.6m, although this is expected to be “a substantial underestimate based on a set of simplifying assumptions from the RSNO study”.

Other relevant reports

Economic and Social Impact Assessment of the RSNO

14. As noted above, BiGGAR Economics published a [separate Economic and Social Impact Assessment of the RSNO in October 2025](#), using the same methodology and categories as its wider report on NPCs published in January 2026 (see above). The October 2025 report states that “the RSNO enhances cultural vitality across Scotland, is a driver for economic activity, and a force for community wellbeing”, and highlights—
 - in 2024-25 it generated £17.2m GVA for Scotland and supported more than 300 jobs (directly employing 130 staff), with wages and salaries totalling £5m,
 - an overall wellbeing contribution assessed at 729 WELLBYs, valued at £11.6m,
 - it spends on average £512,000 on capital investment each year,
 - each £1 RSNO receives from the Scottish Government leverages an additional £2 in income and generates £4.10 in GVA in addition to wellbeing benefits valued at £2.80, and

- the RSNO holds performances and events attracting visitors from across the world, supporting tourism activity of around £1.7m GVA.

15. The report also includes wider qualitative impacts under the headings of nurturing tomorrow's musicians, ensuring accessibility and future audiences, fuelling the film, TV, and games sector in Scotland, and international touring.

16. A funding scenario analysis is also included in the report (pages 32-38) "to illustrate the scale of the potential economic and wellbeing impact that could be generated if additional funding was received". A summary is provided in the table below replicated from page 38 of the report.

Funding Scenario	Additional Economic Impact (GVA)	Wellbeing Impact Change
No additional funding	(£1.1m)	(£2.2m)
Additional £1.5 million	£5.6m	£5.4m
Additional £3 million	£13.9m	£10.3m
Additional £5 million	£21.5m	£17.7m

17. The report concludes that "increasing the funding to the RSNO would enable an expansion of activities and result in substantial economic and wellbeing benefits across Scotland".

Measuring the social impact of Scotland's NPCs

18. Scotland's five NPCs have also provided the Committee with a [report on measuring the social impact of Scotland's NPCs published in March 2024](#). The NPCs commissioned Culture Commons and The Audience Agency to "support them in identifying the collective impact of their activities across a wide range of policy areas and advise on best practice to communicate these to key local and national decision makers". Their report draws on an audit of the current policy landscape and a snapshot of "the scale and breadth of impact in a single year" (April 2022 to March 2023).

19. The report highlights that over the last decade the NPCs' work has been seen live outside the UK by 628,264 people in 154 cities and 33 countries, and NPC digital content reached a global audience of over 1 million people in 2022-23, "with pioneering digital educational resources made available to every school in Scotland". The report also includes summaries of activities and case studies across five social impact areas (SIAs) formulated by Culture Commons "for the NPCs to share with local and national decision makers that each have a strong evidence base to support them". These SIAs are: (1) early years and primary school children, (2) young people aged 11-24, (3) communities and local government, (4) the creative and cultural sectors, and (5) international cultural relationships.

20. The report identifies next steps in developing the social impact of the NPCs' work under the five SIAs. These include partnering with the Scottish Government to deliver a national digital infrastructure to build cultural education resources (SIA

1), advocating for NPCs and the specialist skills they could provide in partnership to Scottish companies, e.g. theatrical manufacturing, (SIA 4), and earlier confirmation of International Touring Fund grants (SIA 5).

21. Further recommendations are included in relation to ongoing communications with policymakers, including the need for regular meetings with relevant Ministers and opportunities to make a collective approach to agencies “to demonstrate how NPC impacts can be employed across policy areas at local and national level”.

Next steps

22. The Committee will consider any next steps at a future meeting.

Committee Clerking Team
January 2026

Scotland's National Performing Companies

Economic & Wellbeing

Impact Assessment

January 2026





Executive Summary

Scotland's National Performing Companies are part of the cultural fabric of the country's economy, supporting a diverse range of economic and wellbeing outcomes.

In 2024/25, Scotland's National Performing Companies (NPCs) collectively generated:



£60.6 million

Gross Value Added (GVA)



1,280 Jobs



A wellbeing contribution of

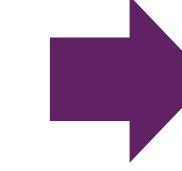
2,541 WELLBYs*

Valued at £40.5 million

Each £1 from
Scottish Government
Riaghaltas na h-Alba



**£2 in
income**



generates

£2.62 GVA



£1.75 wellbeing benefits



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Scotland's National Performing Companies

Scotland's five National Performing Companies promote Scottish culture while generating significant economic activity and enhancing population wellbeing.



Scotland's National Performing Companies

Scotland's National Performing Companies make a significant contribution to the economic and cultural life of Scotland.

Scotland's five National Performing Companies (NPCs) comprise of:

- **National Theatre of Scotland**
- **Royal Scottish National Orchestra**
- **Scottish Ballet**
- **Scottish Chamber Orchestra**
- **Scottish Opera.**

Collectively, the five companies are central to Scotland's cultural life, aiming to produce and present world-class work, tour nationally and internationally, and engage broadly with the public.

Their activities impact the local and national economy, as well as bring wider social benefits that enhance wellbeing.



Source: Scotland's NPCs – Social Impact of Scotland's NPCs



Key Activities

The five National Performing Companies have a significant presence throughout Scotland.

£50m
income

510
permanent staff
2,300+
freelancers

350,000+
people attending performances

20,000
hours of viewed digital content

100,000+
people engaged across communities in Scotland





Study Aims and Outputs

To provide a summary of the NPCs combined economic and wellbeing impacts.

BiGGAR Economics was commissioned by the five NPCs to provide a summary assessment of their combined economic and wellbeing impact across Scotland. This findings are intended to inform discussions around national investment in arts and culture.

All five organisations receive funding from the Scottish Government. This support enables them to generate a significant amount of additional income through ticket sales, performance and education fees, fundraising, and a variety of other sources. They work collaboratively to maximise their collective impact and effectiveness.

This report overviews the NPCs combined contributions, detailing **how they support the local economy through employment, tourism, and supply chain spending, while also generating significant wellbeing impacts across the nation.**

The study applies the methodology that was used to estimate the RSNO's economic and wellbeing impacts by BiGGAR Economics in 2025.

By collecting data from each of the other four NPCs and using the model developed to assess the contribution made by the RSNO, an approximation of the overall economic and wellbeing impacts is obtained.

This report is intended to provide initial analysis on the scale of economic activity generated by Scotland's NPCs, with further analysis completed in 2026.





Methodology

Approach to assessing the economic and social impact of the five NPCs.



The quantitative economic assessment covers:

- **Direct Impact:** including direct employment.
- **Supply Chain Spending:** goods and services.
- **Capital Expenditure Impact:** specialist equipment.
- **Staff Spending:** employees support the local economy through their expenditure (including freelance staff).
- **Visitor Impacts:** visitors contribute to the economy by spending money locally.

Economic impacts are presented in terms of:

- **Gross Value Added (GVA)**
- **Employment (Jobs)**

The impacts are presented at the level of the **Scottish Economy**.

Estimates are inclusive of the **indirect** (supply chain) and **induced** (spending of staff wages) impacts and are based on publicly available statistics, including the **Scottish Annual Business Statistics** and **Input-Output Tables**.

The **wellbeing impact** of the NPCs has been measured using Wellbeing-Adjusted Life Years (**WELLBYs**), which represent a one-point change in life satisfaction (on a 0–10 scale) per person, per year.

Recommended by HM Treasury, WELLBYs quantify wellbeing benefits in monetary terms, with **one WELLBY valued at £15,958**.

Further information on the key assumptions and sources used can be found in an appendix at the end of this report.



Economic Impacts

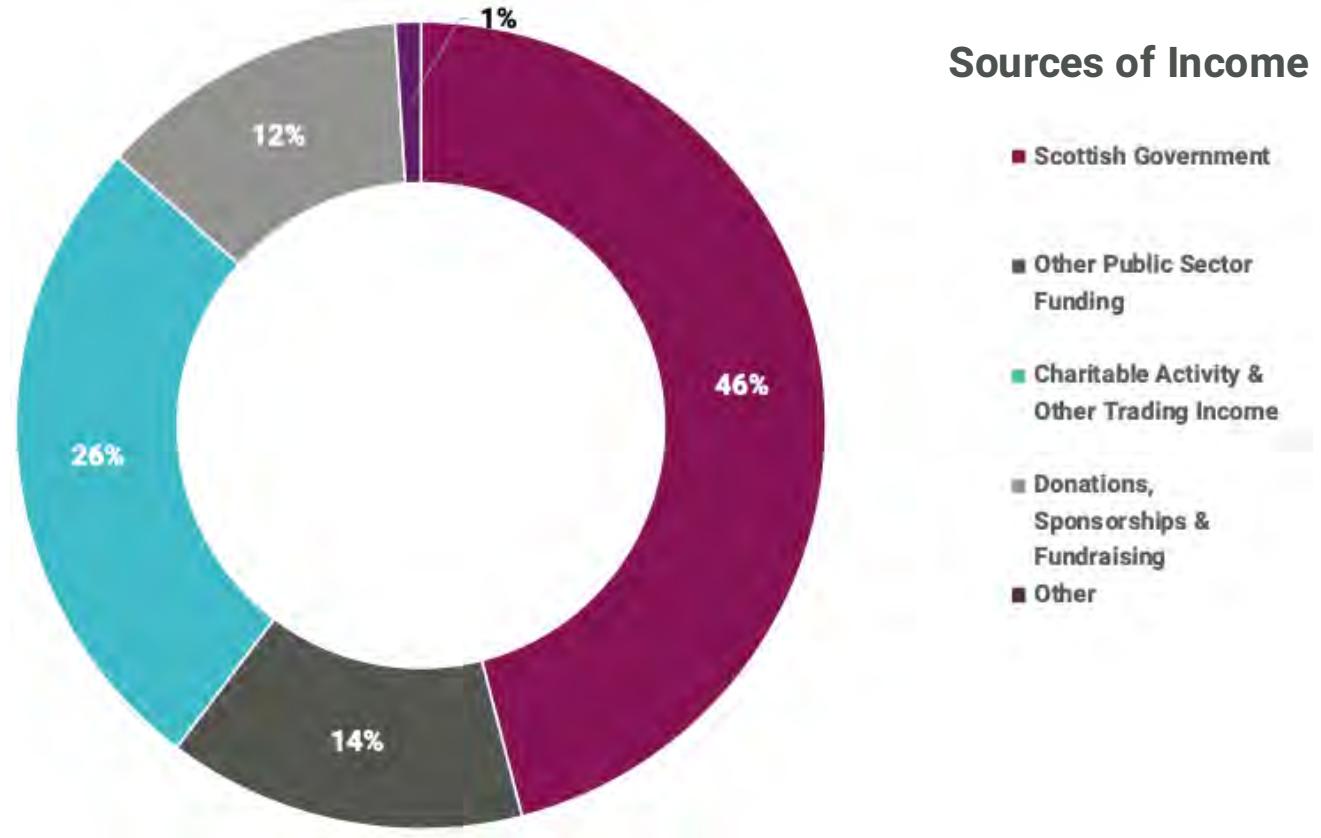
This section sets out the economic impacts arising from Scotland's NPCs activities.





Leveraging Income

- In 2024/25, Scotland's NPCs generated a collective income of £50.4 million
- Of total income received, less than half (46%) came from the Scottish Government (£23.2 million)
- £7.2 million was received in other public sector funding (inclusive of tax relief)
- A further £13.2 million was generated from charitable activity and other trading income
- Around £6.3 million was received from donations, sponsorships, and fundraising.





Economic Impact: Direct



£23.3m GVA



510 Jobs

What is this Benefit?

The direct impact Scotland's NPCs generate for the economy is based on their core operations, including as direct employers.

It accounts for all the activity undertaken by Scotland's NPCs, including performances and events, engagement activities, fundraising, and buying goods and services.



How is it Estimated?

The direct GVA is estimated by subtracting the non-staff related expenditure from total income.

Direct employment is based on the total number of headcount staff employed.

In 2024/25, Scotland's NPCs directly employed 510 staff

Key Findings

- The total income of Scotland's NPCs in 2024/25 was £50.4 million**
- Based on information provided by NPCs, it was estimated that total supply chain expenditure for the same year was £29.2 million



Economic Impact: Supply Chain



£12.1m GVA



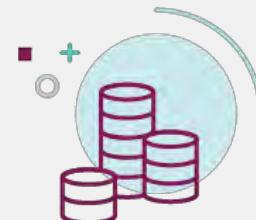
280 Jobs

What is this Benefit?

To support daily activities, Scotland's NPCs purchase goods and services.

This includes things such as general property costs and support services, and costs incurred as part of concert activity.

Spend on these goods and services supports the businesses they are purchased from, supporting turnover and employment.



How is it Estimated?

The supply chain impact is determined by the total spend, and the location of that spend, i.e. how much of the spend goes to Scottish-based businesses.

It is also dependent on the type of goods and services purchased.

Each category of expense was assigned to a relevant economic sector, to which GVA and employment ratios and multipliers were applied.

Key Findings

- Total supply chain spend in 2024/25 was estimated at £29.2 million
- **73% of total supply chain spend was retained in the Scottish economy**
- This impact excludes the impact generated from services associated with freelancers, which has been estimated separately
- This impact supports the NPCs' interactions and partnerships with venues across Scotland



Economic Impact: Capital Expenditure



£1.9m GVA

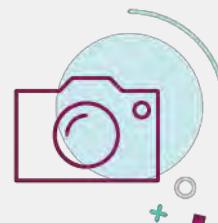


50 Jobs

What is this Benefit?

Large capital investments, such as purchasing new equipment or buildings, generates economic impact.

In the case of Scotland's NPCs, this includes spend on items such as recording, audio, or visual equipment.



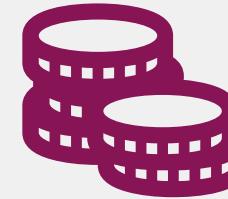
How is it Estimated?

The value of capital spending tends to vary from year to year and, as such, a 10-year average is used to estimate an annual value.

Based on the nature of the capital expenditure at Scotland's NPCs, the annual spend is applied to sectoral ratios and multipliers associated with 'Motion picture, video and television programme production, sound recording and music publishing activities.'

Key Findings

The average value of capital investments by Scotland's NPCs is £3.0 million.





Economic Impact: Staff Spending



£10.4m GVA



80 Jobs

What is this Benefit?

The staff employed by Scotland's NPCs are paid wages and salaries. These wages and salaries are then spent in the local, and national, economy.

This spending supports turnover and employment in the places they are spent, enabling local businesses to sustain operations and continue employing their own staff.



How is it Estimated?

The level of spend in the economy is determined both by the value of wages and salaries paid, and by the location of this spend.

The latter is largely dependent on where staff live.

Through an examination of household expenditure habits, it was possible to project the geographic distribution of staff expenditure.

Economic ratios and multipliers for the household spending sector were then applied to these expenditure figures.

Key Findings

- Scotland's NPCs employed 510 staff in 2024/25 (440 FTEs) in Scotland
- **Wages and salaries paid to staff totalled £20.2 million**, of which £13.9 million was estimated to have been spent in the Scottish economy (after VAT)



Economic Impact: Supporting Freelancers



£5.0m GVA



70 Jobs (FTE)

What is this Benefit?

In addition to providing permanent employment for 510 staff, Scotland's NPCs support freelancers, contracted for performances, events, or specialist activities.

This supports additional income for performers who are often self-employed.



How is it Estimated?

Payments to freelancers stimulate economic activity in the same way as that of the spending of permanent staff's wages and salaries.

The level of spend by freelancers in the economy is determined by the number of freelancers contracted and the monetary value of the payments made to them.

Economic ratios and multipliers for the household spending sector were then applied to the value of total payments made.

Key Findings

- Over 2,300 freelancers contracted by Scotland's NPCs in 2024/25**
- Payments made to freelancers totalled £9.6 million – of which £6.6 million was estimated to have been spent in the Scottish economy (after VAT)



Economic Impact: Tourism & Hospitality



£14.7m GVA



510 Jobs

What is this Benefit?

Performances and events hosted by Scotland's NPCs attract visitors to performances based across the country, including in the largest cities, Glasgow and Edinburgh.

As part of their visit, visitors are likely to also spend in the local economy, such as in local hospitality and accommodation.

This supports the local tourism industry and is spend by visitors that may not otherwise have gone to the area if it were not for the Scotland's NPCs event.

How is it Estimated?

The level of additional spend that can be attributed to this type of impact is determined by where visitors to Scotland's NPCs events travel from, and their associated spend in the local economy.

Visitors travelling to events from outwith Scotland will have a larger daily spend, as they will likely require accommodation as part of their trip, whereas Scottish visitors may have some additional day spend in the local hospitality sector as part of their visit to the event, such as dining out before or afterwards.

The impact of this spend was determined by applying the spend to sectors associated with tourism and hospitality, such as accommodation and food and beverage services.

Key Findings

- A total of 352,900 tickets sold in 2024/25**
 - Almost 300,000 tickets sold to Scottish residents
 - Around 28,000 from the rest of the UK
 - Over 25,000 international visitors
- The average ticket price per customer was £25
- Scottish visitors supported an estimated economic activity worth £6.7 million GVA and 220 jobs for the local economies where performances were held
- Non-Scottish visitors supported an estimated £8.0 million GVA and 290 jobs.

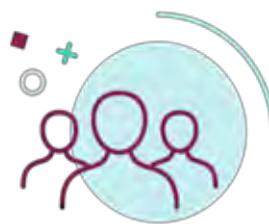


Total Economic Impact



£60.6m GVA*

&



1,280 jobs

Across the Scottish Economy

Scotland's NPCs:

- directly employ **510 staff** (440 FTEs)
- generate an **income of £50.4 million**
- spend around **£29.2 million on goods and services** to support operational activity
- spend an **average of £3.0 million on capital investments each year**
- pay **wages and salaries totalling £20.2 million**
- contract **over 2,300 freelancers** to support performance activities
- hold performances and events that **attract visitors from across the world**, supporting tourism activity of around £8.0 million GVA.

Collectively, these sources of impact indicate that Scotland's NPCs generate an economic impact worth **£60.6 million GVA** for the Scottish economy, supporting **1,280 jobs**.

**Excluding tourism and hospitality impacts from those living in Scotland*



Wellbeing Impacts

This section sets out the wellbeing impacts arising from Scotland's NPCs' activities.





Wellbeing Impacts

Engaging with the arts is a powerful source of wellbeing.

Engaging with the arts, whether it be dance, opera, theatre, or music, can be a powerful source of wellbeing. There is substantial evidence showing that engaging with the arts whether it be through direct participation (playing an instrument, taking classes, singing) or being a member of the audience is associated with higher life satisfaction.

Arts engagement also benefits other wellbeing variables including experienced happiness, a sense of meaning and purpose, and both physical and mental health.

There are three key areas in which the NPCs generate wellbeing benefits:

- **Performances:** the wellbeing benefit of the NPC's live and digital events to its audiences
- **People:** the wellbeing benefit to those who work for or volunteer for the NPCs
- **Community:** the benefit from the NPC's wider community engagement which aims to bring arts to diverse communities and support performers.



Source: Scotland's NPCs – Social Impact of Scotland's NPCs



Wellbeing Impacts: Performances

Watching live and digital performances can bring significant wellbeing benefits.

Engaging with the arts is an enjoyable and satisfying activity that can **reduce stress, help relaxation, and enhance social relationships**.

Performances, whether live or recorded, therefore have important wellbeing benefits.

This impact is driven by the number of live and digital performances across the NPCs, as well as the extent to which the wellbeing benefit would have otherwise occurred (i.e., additionality).

In 2024/25, there were

299,458

attendances at NPC performances from people in Scotland

The WELLBY estimates draw on available literature rather than surveys from actual audiences and are likely to be an underestimate; not fully accounting for the full diversity of the NPCs audiences.



Wellbeing Effect:
1,301
WELLBYs
£20.8 million



Wellbeing Impacts: People

Both permanent employment and regular volunteering enhance wellbeing.

Investing in people through providing **secure work and development opportunities** significantly boosts their wellbeing.

Regularly volunteering also boosts wellbeing due to opportunities for **social connection, learning new skills and offering a sense of purpose**.

510 people were directly employed by the NPCs in 2024/25.

There were also **more than 2,300 freelancers**, equivalent to 140 FTEs.

Although freelancer employment is beneficial for the economy, the lack of security means that it doesn't bring the same wellbeing benefits as permanent employment.

The WELLBY estimates draw on available literature rather than surveys from actual audiences.



**Wellbeing Effect:
263 WELLBYs
£4.2 million**



Wellbeing Impacts: Community

The NPCs all have extensive community engagement programmes that bring arts and performance to diverse audiences.

Working with communities can help give people **new skills** to help them develop. Engagement helps to **bring communities together**, which can help to create a **sense of belonging**.

For example, a **performance** in community and health care settings can help people engage in arts who otherwise might not be able to. Or a person attending a **training event** can boost wellbeing by improving their opportunities, developing skills, and fostering a sense of fulfilment.

In 2024/25, the NPCs **engaged more than 100,000 people across communities in Scotland**.

This included:

- More than 80,000 attendances at performances in community or school settings.
- Over 6,000 people attending events that helped them develop their skills in arts and performance.
- Wide engagement across health care.

The WELLBY estimates draw on available literature rather than surveys from actual audiences and people are likely to be a substantial underestimate; being based on a set of simplifying assumptions from the RSNO study.



Wellbeing Effect:
977 WELLBYs
£15.6 million



Summary

This section presents the summary of impacts.





Summary

Scotland's NPCs generate annual economic benefits for the Scottish economy and enhance community wellbeing.

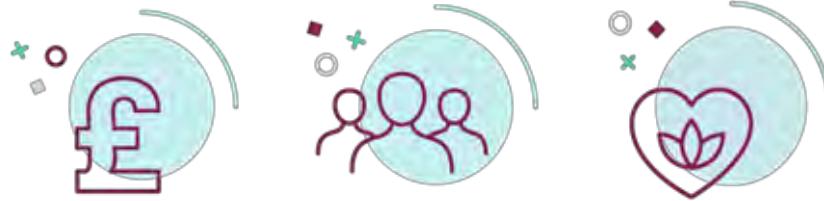
The total quantifiable impacts include:

- **£60.6 million GVA**
- **1,280 Jobs (plus supporting over 2,300 freelancers)**
- **2,541 WELLBYs, worth £40.5 million**
- **Additional/potential £6.7 million GVA and 220 jobs supported in local tourism & hospitality economies where Scotland's NPCs events and performances are held.**





Costs and Benefits

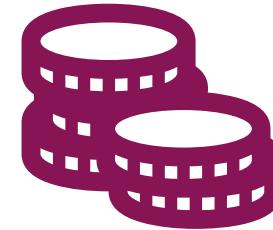


Total Costs

- Total Income = £50.4m
- Scottish Government = £23.2m
- Other Public = £7.2m

Total Benefits

- Economic Impact (Jobs) = 1,280
- Economic Impact (GVA) = £60.6m
- WELLBYs = 2,541
- Value of WELLBYs = £40.5m



Every £1 received from the Scottish Government generates £2.62 in GVA, plus £1.75 in wellbeing benefits.



Appendix

This section presents the key assumptions and sources used in the assessment.





Key Assumptions and Sources: Economic Impact

Source of Impact	Key Assumptions & Sources
Direct	<ul style="list-style-type: none"> Total income: £50.4 million Total non-staff expenditure: £29.2 million Total number of staff (headcount): 510 (440 FTEs) <i>Source: Data provided by Scotland's NPCs</i>
Supply Chain	<ul style="list-style-type: none"> Total supply chain spend: £29.2 million Share of supply chain spend going to Scottish companies: 73% <i>(Based on information provided by each NPC on total spend and share going to Scottish companies)</i> Turnover to GVA and Turnover to Employment ratios and multipliers for sectors of spend <i>Sources: Scottish Annual Business Statistics & Scottish Government Input-Output Tables</i>
Staff Spending/Freelancers	<ul style="list-style-type: none"> Total wages and salaries paid: £20.2 million - additional £9.6 million spent on freelancers Share of salaries spent in the Scottish economy: 75% Spending on VAT: 8% Turnover to GVA and Turnover to Employment ratios and multipliers for Household Spending sector <i>Sources: Data provided by Scotland's NPCs, BiGGAR Economics Analysis of Household Expenditure, Scottish Annual Business Statistics & Scottish Government Input-Output Tables</i>
Capital Investment	<ul style="list-style-type: none"> Average annual value of capital investments - based on past five, and projected next five, years: £3.0 million Turnover to GVA and Turnover to Employment ratios and multipliers for relevant sectors <i>Sources: Information provided by Scotland's NPCs, Scottish Annual Business Statistics & Scottish Government Input-Output Tables</i>
Tourism	<ul style="list-style-type: none"> Total number of visitors to performances and events: 352,901 (299,458 based in Scotland) Average ticket price to Scotland's NPCs event per visitor: £25 Average additional spend in local hospitality sector by local visitor: £31 Average additional spend in local tourism economy by overnight visitors: £196 Turnover to GVA and Turnover to Employment ratios and multipliers for hospitality sectors <i>Sources: Information provided by Scotland's NPCs, Visit Scotland, Scottish Annual Business Statistics & Scottish Government Input-Output Tables</i>



Key Assumptions and Sources: Wellbeing Impact

Source of Impact	Key Assumptions & Sources
Performances	<ul style="list-style-type: none"> 299,458 tickets for live performances were sold to people in Scotland WELLBY impact of viewing a live performance – 0.0056 WELLBYs – based on Wheatley & Bickerton (2019), who find, after controlling for various confounding factors, that those who attend arts events at least once a year are 0.043 higher on a 1 to 7 life satisfaction scale. 0.043 converts to 0.068 on a 0 to 10 scale. According to their data, 12.8% of people go to an arts event one a year, 19.0% twice a year, 43.7% 3 to 4 times a year, 21.4% between once a month and once a week, and 3.1% once a week. This suggest an average attendance of approximately 6 times a year to a general arts event. When divided by 6 this gives a per attendance value of 0.011, but to be conservative it was instead divided by 12. Other evidence is consistent with this wellbeing value see e.g., Fujiwara, Kudrna, & Dolan (2014) who estimate a wellbeing value of between £47 and £62 in 2013 prices. See also Dolan & Testoni (2016), Wang et al. (2020). 75% additionality for live performances – NPC events are a significant cultural attraction, encouraging some people (assumed 50%) to engage proactively in something that raises their wellbeing when they might ordinarily be passive (e.g., watching TV or shopping), and for those who do readily engage with these types of activities (the remaining 50%), the NPCs deliver a wellbeing benefit that is over and above what they otherwise might have done (assumed 50%). Therefore, 50% of listeners will experience the full impact and of the other 50%, only 50% experience the full impact - 50% + 25% = 75%. 20,470 hours of viewing digital performances WELLBY impact of viewing one hour of a digital recording – 0.0014 WELLBYs – based on Dolan & Testoni (2016), who show that listening to recorded music has about half the life satisfaction relationship of listening to a live classical performance. Assuming a live performance is 2 hours, an hour of listening to a digital recording gives an overall WELLBY estimate per hour that is 4 times smaller than the live effect. 25% additionality for digital recordings – there are many alternatives a person could otherwise engage with, including comparable orchestras or other music. Nevertheless, NPC performances are assumed distinct enough to bring wellbeing rises to some that they might not otherwise have experienced. <i>Sources: Information provided by NPCs</i> <i>Key References:</i> Wheatley, D., & Bickerton, C. (2019). Measuring changes in subjective well-being from engagement in the arts, culture and sport. <i>Journal of Cultural Economics</i>, 43, 421-442. Dolan, P., & Testoni, S. Assessing the relationships between engagement in music and subjective wellbeing. <i>Supporting analysis. What Works Wellbeing, Culture, Sport and Wellbeing Evidence Review Programme</i>.



Key Assumptions and Sources: Wellbeing Impact

Source of Impact	Key Assumptions & Sources
People	<ul style="list-style-type: none"> 510 jobs supported. WELLBY value of one job – 0.46 WELLBYs – based on the difference between being employed and unemployed. This reflects the NPC's role in job creation, whereby without these jobs someone in the economy, though not necessarily NPC employees, will be unemployed. WELLBY value of one regular volunteer – 0.1 WELLBYs – based on several studies (e.g., Fujiwara et al., 2013; Binder and Freytag, 2013; Lawton et al., 2021) showing that regular volunteering is associated with enhanced life satisfaction of approximately 0.1 on a 0 to 10 life satisfaction scale. <i>Sources: Information provided by NPCs.</i> Treasury, H. M. S. (2021). Wellbeing guidance for appraisal: supplementary green book guidance. HM Treasury, London. Lawton, R. N., Gramatki, I., Watt, W., & Fujiwara, D. (2021). Does volunteering make us happier, or are happier people more likely to volunteer? Addressing the problem of reverse causality when estimating the wellbeing impacts of volunteering. Journal of happiness studies, 22, 599-624.
Community	<ul style="list-style-type: none"> The NPCs deliver a wide range of community engagement activities including live performances in schools and public places, offering digital recordings, various education offerings and mentorships, supporting community choirs and orchestras, and health care interventions. These were assessed from a wellbeing perspective using simplifying assumptions from the RSNO study. Community performances – 83,888 people engaged through live or digital community performances (schools, public places, digital recordings) – 0.0056 WELLBYs per live performance, 0.0014 WELLBYs per hour viewed of digital content (see section in appendix on performances for justification). Community Training – 6,052 people engaged in some sort of arts and performances training (e.g., side-by-sides, mentoring, skills development) – based on an assessment of whether the training was like a work experience placement or a training event (0.035 WELLBYs – based on Dolan & Fujiwara (2012), who show that adult learning has a 0.045 effect on a 1 to 7 life satisfaction scale. 0.045 equates to 0.071 on a 0 to 10 scale and is assumed to last 6 months), or an internship (0.11 WELLBYs, based on a 3-month internship having a quarter of the 0.046 WELLBYs of having a job, and accounting for engagement with a disadvantaged community). Health Care Interventions – 2,240 people were engaged with in various health care settings based on simplifying assumptions around impacts of the interventions and various adjustments – WELLBY values ranging from 0.002 to 0.2 per participant. Misc Community Engagement – there were a wide range of additional community engagement activities, such as community choirs and performances, as well as exhibitions, that were assessed from a wellbeing perspective using simplifying assumptions from the RSNO study. <i>Sources: Information provided by NPCs. Key References:</i> Dolan, P., & Fujiwara, D. (2012). Valuing adult learning: comparing wellbeing valuation to contingent valuation. Department for Business Innovation & Skills. Castillejos, C., & Godoy-Izquierdo, D. (2021). "Music makes my old heart beat": A randomised controlled study on the benefits of the use of music in comprehensive care for institutionalised older adults. <i>Applied Psychology: Health and Well-Being</i>, 13, 84-108.



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