9

APPENDIX AND TECHNICAL NOTES



APPENDIX

ECONOMIC IMPACT METHODOLOGY

This appendix sets out how the economic impact reported in the chapter was estimated: the scope of the assessment, the data used, the input-output model, how Games delivery and visitor expenditure were established, the additionality adjustments applied, the basis of the comparison with prior Games and the sources utilised.

Scope

Geographies. Results are reported for the Glasgow City Region and for Scotland, each assessed against its own boundary. The Glasgow City Region comprises eight local authorities: East Dunbartonshire, East Renfrewshire, Glasgow City, Inverclyde, North Lanarkshire, Renfrewshire, South Lanarkshire and West Dunbartonshire. Spending that is additional to the city region, such as that of a visitor from Edinburgh, is not treated as additional to Scotland.

Period and prices. The assessment covers expenditure by the Organising Company (OC) from its establishment through to Games close-down, and spending by visitors and participants during the Games period (23 July to 2 August 2026). All figures are in 2026 prices. The costs of earlier Games are restated to 2026 prices using the HM Treasury GDP deflator.

Expenditure assessed. Games delivery expenditure is the OC's operating and capital expenditure on staging the Games, including discretionary programme spend on the Glasgow 2026 Festival, live sites and spectator experience. Expenditure has been allocated to geographies based on management information.

Visitor and attendee expenditure is spending in Scotland by spectators, the Games Family (athletes and team officials, technical officials, media and broadcast personnel, delegates, VIPs and sponsors) and volunteers travelling from outside the Glasgow City Region. Activity funded by partner bodies outside the OC's accounts, benefits in kind that did not replace budgeted expenditure, the value of volunteer time and longer-term effects are outside the scope of the assessment.

Measures. Impact is reported as gross output, gross value added and employment. Employment is expressed in full-time equivalent (FTE) years: one FTE year is one person employed full time for one year, with part-time and part-year roles scaled accordingly. The figure is derived from expenditure and sector productivity rather than observed employment, so it indicates the labour demand supported rather than a count of individuals.

ECONOMIC MODEL METHODOLOGY

Scotland model

The premise of the economic model is that direct impacts from event spending, as outlined in the report and detailed later in this appendix, are fed in and adjusted for additionality, before the model estimates how these impacts permeate the economy through the supply chain and subsequent consumer spending patterns.

Additionality adjustments factor out any spending that would have taken place anyway in Scotland by people who would have been in Scotland without the Commonwealth Games, and any spending that is prevented by the event, for example by people who would otherwise have visited Scotland but elect not to visit, rather than bring forward or delay a trip. Net spend also excludes any spend by Scottish or UK Government entities from benefit estimation. Such spend is non-additional and is considered in the cost line.

The model triangulates levels of expenditure (also known as gross output), gross value added (GVA, analogous to local level GDP) and full-time equivalent employment. The model includes 104 sectors and households in keeping with ONS input-output analyses, and is consistent with the latest published Scotland Domestic Use Matrix, which is extrapolated using ONS Business Register and Employment Survey data to extend to the 104 plus one sectors in keeping with the UK standard.

These variables are related to each other using extrapolated Scotland statistics at sectoral level for GVA, the latest Business Register and Employment Survey for employment, and the latest input-output analyses for the relationship between gross output and GVA within sectors. Productivity per worker links GVA and full-time equivalents, and GVA and gross expenditure are linked by the GVA ratio (GVA divided by gross output)

The model uses matrix multiplication to estimate both Type I and Type II multipliers from the Scotland Domestic Use Matrix, which removes imports to give domestic consumption of goods and services. These multipliers estimate, respectively, the knock-on impacts of the additional spend in the supply chain through business to business purchases, and the effects of increased consumer spending arising from the initial increase in spending.

Employment in the model, measured in full-time equivalent terms, should be used as an indication of the level of labour demand required to meet the additional demand for goods and services. It does not indicate a number of net new jobs created.

Glasgow City Region model

A localised model for the Glasgow City Region is tailored to national and local information from ONS Business Register and Employment Survey data on economic size, to ensure Scotland multipliers are not overstated. All else equal, a larger local area is more likely to be able to supply more inputs locally and retain more spending locally without leakage, and as such larger areas will have larger multipliers.

This method is based on an academic paper by Flegg and Webber that provides a method for scaling, or dampening, local multipliers from national input-output tables. The specific formulae used to determine the changes from national level multipliers come from a three-step process.

- Estimating a fixed dampening factor for the nation or city based on the area's share of UK economic activity. This is given by: DF = Log2(1 + percentage share of national economy) to the power 0.3.
- The matrix of cross location quotients estimates the proportion of the supplying and demanding sectors in a given location for each of the 10,816 industry combinations (104 by 104). This determines the extent to which local firms can create supply to meet demand in the short term. With a low or zero cross location quotient, demand will leak outside the nation or city in question.
- Adjusting the Scotland matrix of coefficients with the dampening factor and cross location quotients to estimate a local specific matrix of coefficients by sector. This final adjustment, denoted as the FLQ by Flegg and Webber, is given by: MoC(ij)A = DF x MoC(ij)UK x CLQ(ij), where i is industry i, j is industry j, and A is area A.

The same matrix transformation used at Scotland level is then used to estimate Type I and Type II multipliers for the Glasgow City Region based on this adjusted matrix of coefficients.

Games delivery expenditure

Expenditure base. Delivery expenditure is the OC's outturn expenditure of £159.6 million as reported at 12 October 2026, ahead of the OC's final close. It excludes £2.6 million of central contingency that was not required. Value in kind that replaced budgeted expenditure is included at the value recorded by the OC, within both sponsorship income and expenditure.

Cost categories and sectors. Each of the OC's 85 expenditure lines is assigned to one of 23 cost categories, such as venue hire and operations, technology and systems, temporary overlay, ceremonies and sport presentation, and accommodation and team services. Each category is mapped to the sector of the input-output framework that best describes what was purchased, and classified as Games-related operating, capital or discretionary expenditure as shown in Table 6.2.

Geography of spend. Each line is split between the Glasgow City Region, the rest of Scotland and outside Scotland.

- Procured goods and services take the split of their functional area in the OC's procurement extract, which records the registered location of each supplier and covers £88.4 million of the £159.6 million. Where a line is only partly covered, the same split is applied to the whole line.
- Suppliers that based themselves in Glasgow for the Games but are registered elsewhere brought staff, subcontractors and equipment into the city. 37% of their contract value is treated as retained in the Glasgow City Region, the spend-weighted local share found in look-through returns from three event delivery partners.

- OC payroll is allocated by staff home postcode: 56% to the Glasgow City Region and 19% to the rest of Scotland.

The OC's finance and procurement teams reviewed the allocation line by line in October 2026 and adjusted it where the procurement data did not reflect the geography of a line's full spend. On this basis 59.6% of delivery expenditure is placed in the Glasgow City Region, 3.7% in the rest of Scotland and 36.7% outside Scotland. Spend placed outside a geography is treated as leakage and excluded from that geography's results.

Spectators. 448,473 tickets were issued across 138 sessions. Scan records were unreliable, so attendance is set at 85% of tickets issued, in line with non-attendance at comparable events. Tickets held by accredited groups, who are counted from accreditation records, and held, killed or returned inventory are removed. Admissions are converted into people through the purchaser account: for each origin group, tickets held divided by sessions attended gives the average party size, multiplied by the number of accounts. Origin is the purchaser postcode classified with the ONS Postcode Directory, or country of residence where no UK postcode is held, and admissions of unknown origin are allocated in proportion to the known split. The ticketholder survey gives the share staying overnight (26% of visitors from the rest of Scotland and 94% from the rest of the UK, with all international visitors treated as overnight). Glasgow City Region residents are identified and excluded.

Spend per person per night in Scotland, excluding tickets, comes from the ticketholder survey for each origin group across accommodation, food and drink, transport, retail, leisure and other. Accommodation for visitors in paid accommodation is instead based on VisitScotland's 2026 average daily rates, adjusted for guests per room, with nothing for those staying with friends and family. The survey also gives the share of spending in the Glasgow City Region rather than elsewhere in Scotland, and spend is pro-rated to nights in Scotland.

Spending outside Scotland is excluded as leakage, as is spending elsewhere in Scotland for the GCR results.

Games Family. Athletes, team officials, technical officials and delegates are counted from arrivals and departures records, which also give length of stay. Media and broadcast personnel are counted from accreditation passes, split by nationality, with a 14-night stay assumed. Only personal spending is counted, because accommodation, catering and transport provided by the OC sit within delivery expenditure: retail only for athletes and team officials, no accommodation or food for delegates, and spectator rates for technical officials and media.

Volunteers. 1,769 non-local volunteers, with length of stay and spending from the volunteer survey. Local volunteers are excluded on origin.

Additionality rates applied

Gross expenditure is adjusted in three steps before it enters the model. Leakage removes delivery and visitor spending that falls outside the geography being assessed, whether the Glasgow City Region or Scotland. Gross expenditure is also adjusted for deadweight (spending that would have occurred without the Games) and displacement (spending that would otherwise have taken place elsewhere in the same economy) before it enters the model, at the rates in the table below.

Games delivery expenditure. Funding from outside Scotland, principally Commonwealth Sport, Commonwealth Games Australia, broadcast rights and international sponsorship, is treated as additional. Funding from sportscotland and the FCDO (£1.7 million) is treated as a cost of delivering the Games rather than a benefit and is excluded from net additional expenditure. A displacement rate of 5% is assumed to reflect suppliers diverting capacity from other work.

Spectators. Rates come from the ticketholder survey, weighted by reported spending. Deadweight is scored from the trip-purpose question covering the reason for the trip. Displacement is taken from what additional visitors would otherwise have spent in the area.

At Scotland level, visitors resident in Scotland are excluded in full. Glasgow City Region residents are excluded from both geographies.

Games Family and volunteers. No deadweight or displacement is applied, as these groups were present only because of the Games.

Source information used

- Glasgow 2026 Organising Company records
- Glasgow 2026 evaluation primary research: Event delivery partner look-through returns.
- Scottish Government, Supply and Use Tables 2022, and Office for National Statistics, Business Register and Employment Survey (input-output model).
- Office for National Statistics, ONS Postcode Directory, May 2026.
- VisitScotland Accommodation Reporting from Key Data 2026
- HM Treasury, GDP deflators at market prices and money GDP (restatement to 2026 prices).
- Audit Scotland (2015), Commonwealth Games 2014: Third Report, and Scottish Government (2018), Glasgow 2014 Commonwealth Games Legacy: Final Evaluation Report.
- Department for Culture, Media and Sport (2023 and 2024), Interim Evaluation and One Year Post-Games Evaluation of the Birmingham 2022 Commonwealth Games.
- PwC for the Commonwealth Games Federation (2019, published 2021), Commonwealth Games Value Framework.
- Commonwealth Sport, official Games Records

COMPARISON WITH PRIOR GAMES:

Comparison with previous Games

Table 6.9 compares Glasgow 2026 with the three previous Commonwealth Games for which published cost data is available. Costs are Games-related operating and capital expenditure, restated to 2026 prices using the HM Treasury GDP deflator, with each Games' costs treated as being in the prices of the year it was held. Public funding share is public funding as a share of that cost.

The figures below are rounded.

- **Glasgow 2014:** £543 million Games budget outturn reported by Audit Scotland, equivalent to £768 million in 2026 prices. This includes £70 million of permanent venue development, including the Athletes' Village. It excludes venue capital funded separately, such as the Emirates Arena and Sir Chris Hoy Velodrome. Public funding of £425 million from the Scottish Government and Glasgow City Council accounted for 78% of the cost.
- **Gold Coast 2018:** £1,041 million reported by PwC in 2018 prices, made up of £749 million operating and £292 million capital expenditure and converted to sterling at purchasing power parity. This is equivalent to £1,392 million in 2026 prices. Public funding of £917 million from national, state and local government accounted for 88% of the cost.
- **Birmingham 2022:** £811 million of Games-related spending reported by DCMS, made up of £638 million operating and £173 million capital costs, equivalent to £944 million in 2026 prices. This excludes £69 million of discretionary legacy spending and £50 million of accelerated capital spending. Public funding of £691 million (the cost less £121 million of commercial income) accounted for 85% of the cost.
- **Glasgow 2026:** £160 million of delivery expenditure from the OC outturn at 12 October 2026. This includes £5.4 million of discretionary spending on the festival, live sites and spectator experience, which is excluded for Birmingham 2022, so the comparison is conservative. Public funding of £1.7 million accounted for 1% of the cost.
- **Programme data:** taken from Commonwealth Sport official Games records. The Glasgow 2026 count of athletes and team officials comes from OC arrivals and departures data. Figures for previous Games are approximate.

DEADWEIGHT AND DISPLACEMENT RATES APPLIED

Expenditure group	Deadweight - GCR	Deadweight - Scotland	Displacement - GCR	Displacement - Scotland
Games delivery expenditure	5.5%	8.5%	5.0%	5.0%
Overnight - rest of Scotland	16.6%	100%	0.9%	0.9%
Overnight - rest of UK	10.8%	10.8%	2.9%	2.9%
International spectators	12.0%	12.0%	6.2%	6.2%
Day-trip spectators (non-GCR)	26.6%	92.6%	2.4%	2.4%
Glasgow City Region residents	100%	100%	-	-
Games Family and non-local volunteers	-	-	-	-

Source: Glasgow 2026 economic impact model and post-event ticketholder survey.

TECHNICAL NOTES

ABOUT THESE NOTES

These notes accompany the Glasgow 2026 Impact Evaluation and its 26 case studies. They set out the data sources, sample sizes, definitions and caveats behind the figures. Notes are numbered by report chapter, in the order the figures appear in the report. The full economic impact methodology is in the prior Appendix: Economic Impact Methodology.

Conventions used throughout

- Rounding. Some figures in tables, including percentages, are rounded for presentation purposes. As a result, totals may not sum exactly. Survey scores out of 10 are given to one decimal place.
- Prices. Unless otherwise stated, figures are in 2026 prices. Glasgow 2026 figures are in cash terms and are treated as 2026 prices without adjustment. Figures for previous Games are restated to 2026 prices using the HM Treasury GDP deflator (September 2026 edition)
- Survey bases. Percentages use everyone who answered the question, not all respondents to the survey, unless stated. “Don’t know” and “prefer not to say” are included in the base unless stated.
- Sources. Unless stated, figures come from Glasgow 2026 Organising Company (OC) records and were supplied to the evaluation team.

DEFINITIONS

Term	Definition used in this report
Organising Company (OC)	Glasgow 2026 Organising Company, the company set up to plan and deliver the Games.
Games Family	People accredited to take part in or support the Games, not including the paid workforce and volunteers: athletes, team officials, technical officials, media and broadcasters, Commonwealth Sport and Commonwealth Games Association delegates, sponsors and invited guests.
Glasgow City Region	The eight local authorities of the Glasgow City Region City Deal: East Dunbartonshire, East Renfrewshire, Glasgow City, Inverclyde, North Lanarkshire, Renfrewshire, South Lanarkshire and West Dunbartonshire.
Nations and territories	The 74 Commonwealth Games Associations that took part.
Para sport	Sport for athletes with an eligible impairment, under each sport's classification system. "Para athletes" and "Para sport" are capitalised throughout.
Embedded Delivery Suppliers	Specialist organisations integrated into the planning and operational delivery of Glasgow 2026, taking responsibility for key functions that would traditionally have been managed by a larger Organising Company. They were represented on the Games Delivery Assurance Group: Trivandi (Event Delivery and Venue Management); Progress Productions (Sport Presentation and Medal Ceremonies); People & Co. (Ceremonies Production); Actua (Host Broadcast); CSE (Accommodation, Arrival and Departures); Riedel Communications (Venue Connectivity); Wiz-Team (Games Management Systems); The Team (Look, Wayfinding and Signage); First Travel Solutions (Bus Systems and Transport Planning).
Workforce (OC)	The Organising Company's total team of 562 people, including employees, secondees and freelance or SME contractors working as part of the OC. This comprised a core planning and delivery team of 298 and 264 people in Games-time-only roles. It excludes staff of Embedded Delivery Suppliers, venue partners and other suppliers, and volunteers.
FTE years	Full-time equivalent years of employment: one FTE year is one person employed full time for one year. Used for the economic impact estimates (Chapter 5).
Gross value added (GVA)	The value of goods and services produced, minus the cost of the inputs used to make them. The main measure of economic contribution in Chapter 5.
tCO_2e	Tonnes of carbon dioxide equivalent, which expresses all greenhouse gases as the CO_2 that would have the same warming effect.

NOTES TO CHAPTER 1: INTRODUCTION

Evaluation design

1.1 Evaluation framework. The evaluation used an Integrated Evaluation Framework. It links each research question to indicators and data sources and maps these to the Glasgow 2026 Story of Change and the Commonwealth Sport Common Wealth model.

1.2 Scope and timing. The report covers outputs and early outcomes before, during and immediately after the Games. It builds on "The Story So Far", the interim evaluation published on the final day of the Games (2 August 2026). Most data collection finished on 4 September 2026; the evaluation team received later updates to administrative datasets as these were finalised by the OC.

1.3 Data collection phases. Pre-Games: administrative and early output data, surveys, stakeholder interviews and early case studies. Games-time: operational and monitoring data, observational site visits and vox pop interviews. Post-Games: completed administrative datasets, surveys, and reflective interviews and focus groups with volunteers, athletes, ticketholders, Live Site attendees, case study participants and community stakeholders.

1.4 Interviews and focus groups. Stakeholder interviews and focus groups were held before and after the Games, between July and September 2026. Interviewees came from organisations across the delivery model, including the Organising Company, Commonwealth Sport, Commonwealth Games Scotland, Glasgow City Council, Glasgow Life, the Scottish Event Campus, sportscotland, delivery partners, community organisations and programme participants.

Surveys

1.5 Survey summary. The table below lists the main surveys used. All were self-selecting: respondents chose whether to take part. People with stronger views, positive or negative, may be over-represented

Survey	Population	Responses	Response rate	Margin of error (95%)
Athlete survey	2,749 athletes	200 (193 rated overall experience)	7%	±6.7 pts
Volunteer onboarding (pre-Games) survey	4,065 volunteers	c.1,154	28%	±2.4 pts
Volunteer post-Games survey	3,962 volunteers	1,097	28%	±2.5 pts
Post-event spectator (ticketholder) survey	c.380,000	3,785; 1,027 from Glasgow City Region; 335 with accessibility needs	1%	±3.1 pts (region); ±5.4 pts (accessibility)
Game On Live Site survey	Live Site visitors (c.131,000)	402	n/a	±4.9 pts
All In participant survey	755 registered organisations	60	8%	±12 pts

1.6 Pre- and post-Games comparisons. Where the same group was surveyed before and after the Games (for example volunteers), the samples were not matched. Differences between the two waves may reflect who responded as much as any change in views.

Data quality, ethics and comparisons

1.7 Data validation. Where possible, operational data was analysed from underlying datasets rather than summary dashboards, checked for internal consistency, and cross-referenced between sources. Where data supplied by the Organising Company or its partners could not be verified independently, this is stated in the relevant note.

1.8 Ethics and data protection. All data was handled under UK GDPR, using data minimisation. Ethical approval came from the University of the West of Scotland. Demographic results are not reported for groups small enough that individuals could be identified.

1.9 Case study selection. The 26 case studies were chosen deliberately, with the Organising Company and Commonwealth Sport, to explore selected programmes and activities in depth across the four impact drivers. They are not a representative sample of all Games activity. Notes for each case study follow the chapter notes.

1.10 Comparisons with previous Games. Comparisons with Glasgow 2014, Gold Coast 2018 and Birmingham 2022 use published evaluations and audit reports (sources in Note 5.2). Differences in scale, scope and indicator definitions mean these comparisons are best read as context, not like-for-like benchmarks.

Glasgow 2026 at a Glance

1.11 Sport programme (10 sports, 2,749 athletes, 74 nations and territories, 1,168 medals across 215 medal events, 152 Games Records, 8 World Records). Source: Sport Entries database; Commonwealth Sport and OC results data.

1.12 Workforce (562 Organising Company team members; 2,387 Embedded Delivery Supplier and venue partner staff). The Organising Company team of 562 included employees, secondees and freelance or SME contractors working as part of the OC: a core planning and delivery team of 298 and 264 people in Games-time-only roles. 2,387 is the combined team of the nine Embedded Delivery Suppliers and the two venue partners, Glasgow Life and the Scottish Event Campus, including 2,172 in Games-time roles. It does not include 6,616 contractors employed by other suppliers to work at the Games, or volunteers (see Note 1.14). Source: OC workforce composition data.

1.13 Employment supported (around 2400 FTE years, of which 2100 in Glasgow City Region). These are modelled estimates from the Glasgow 2026 economic impact model. See Note 5.1 and the Appendix.

1.14 Volunteers (4,000+; 156,110 hours). Source: OC volunteer database. Hours calculated by the OC based on the number of scheduled shifts, revised to factor in average attendance.

1.15 Schools and students (2,536 downloads; 126 athlete visits across 29 local authorities reaching 27,827 pupils; 82 students in Games-time roles through Campus to Commonwealth). See Notes 4.6 to 4.8.

NOTES TO CHAPTER 2: THE INCLUSIVE GAMES WHERE EVERYONE BELONGS

Athletes and sport

2.1 GAPS (Gather, Adjust, Prepare and Sustain). Source: Commonwealth Sport GAPS programme data. 38 Para athletes from nations with fewer sporting resources attended the pre-Games camp at Ayr, hosted with the University of the West of Scotland. Medal and performance figures (nine medallists, seven personal bests, 22 season's bests) cover GAPS athletes who attended a camp in the six months before the Games.

2.2 Athlete survey. 200 respondents out of 2,749 athletes (7%). 193 rated their overall experience; seven gave no sport and are excluded from the Para/non-Para comparison (Para n=29, non-Para n=164). The accommodation question had 180 responses. This survey was designed and distributed by Commonwealth Sport using the Athlete App. With 29 Para respondents, Para results are indicative only (margin of error about ±18 points).

Accessibility

2.3 Venue audits. Accessible seating, step-free access and accessible toilets were audited at all competition venues.

2.4 Spectator accessibility. From the post-event spectator survey: respondents with accessibility requirements in their travel party who rated accessibility (n=335). Average score 7.4 out of 10; 64% rated 8 or above; 18% rated it 4 or below. Among respondents without accessibility requirements in their travel party who provided an accessibility rating (n=1,708), the average was 8.0.

2.5 Para athlete accommodation. 65 hotel rooms adapted. Para athlete support ratings are from the 29 Para athlete survey respondents.

2.6 Safeguarding. Training figures (300 workforce members trained in-house, 10 with accredited training) and case-management data come from the OC Safeguarding System and Dashboard. Individual concerns are not broken down, to protect confidentiality.

Workforce, volunteers and governance

2.7 OC workforce demographics. Source: OC EDI dashboard, drawn from a voluntary EDI questionnaire issued to the OC's direct employees and secondees as part of HR onboarding. Freelancers, outsourced teams and partner staff were not included. Some staff answered only some questions, so each percentage uses those who answered that question; non-responses are excluded. KPI baseline and stretch targets were set by the OC. Location is based on home address at recruitment. Leadership gender: Executive Leadership Team 77% female (10 of 13); Senior Management Team 59% female.

2.8 Embedded Delivery Supplier workforce. Source: Trivandi data only covering 130 of 248 staff. Embedded Delivery Suppliers collected demographic data in different ways, so a single profile across all suppliers cannot be produced.

2.9 Volunteer profile and KPIs. Source: OC volunteer database, extract of 8 July 2026, covering 4,090 volunteers offered a role (not all applicants). Bases vary by question: location 4,086; ethnicity 4,006; Location was coded by the evaluation team from free-text town or city: Glasgow City Region about 55%, rest of Scotland 27%, rest of UK 18%. A figure for Glasgow City alone (about 40%) is approximate, because some postal towns cross council boundaries. Age: 711 volunteers (17%) were 16–24, including 251 aged 16–17. 176 volunteers (4%) asked for reasonable adjustments at application. Chart categories follow the OC volunteer database.

2.10 New and returning volunteers. 36% of volunteers said they had not volunteered in the two years before applying (OC volunteer database). For context: in the Glasgow Centre for Population Health baseline survey of Glasgow 2014 Clyde-siders (n=7,722), 83% had volunteered formally in the previous 12 months. The questions and time periods differ, so this is context, not a direct comparison.

2.11 Board and committees. Source: OC governance data and Committees dashboard.

NOTES TO CHAPTER 3: DELIVERING A GREENER GAMES, TREADING LIGHTER ON THE PLANET

3.1 ISO 20121. Certified by ERMCVS on 26 August 2026.

Carbon measurement

3.2 Methodology. The assessment was prepared in line with the IOC Carbon Footprint Methodology and the GHG Protocol, the same standards used for Birmingham 2022 and for the pre-Games forecast model. Actual data was used wherever possible, sourced from functional areas (FAs), delivery partners and suppliers. Published emission factors were then applied, principally the UK DEFRA 2026 emissions factors for activity data and the UK Government EEIO factors for spend data.

3.3 Boundary. The carbon assessment covers 19 May 2025 to 31 December 2026. The period starts when the Bothwell Street office opened and ends when the office closed at the end of December 2026, to include bump-out and dissolution activities. Activities are classified by the OC's level of control.

3.4 Calculation method. The footprint was calculated in an Excel workbook. Ideagen's ICA carbon accounting tool was also used to collect and calculate some datasets, mainly Games Family travel, contractor and FA business travel, contractor freight, the leased Games fleet and competition venue waste. These were then imported to the Excel workbook.

Responsibility	OC influence	Description	Examples
Owned	High	Funded by the OC	Overlay, office energy and waste, workforce catering, uniforms, Ceremonies
Shared	Medium	Not funded by the OC, but the OC has control or influence over it	Venue readiness works, security, broadcast, transport services
Associated	Low	Neither funded nor controlled by the OC, but closely linked to the Games	Spectator and media travel, spectator and media accommodation
Out of scope	None	Not funded, controlled or influenced by the OC	Activity that would have happened without the Games

3.5 Data quality. Each line of data in the calculation workbook carries one of three ratings, using the same definitions as Birmingham 2022:

- High: all activity data, based on confident actual data such as meter readings, fuel volumes, weighed materials or recorded distances.
- Medium: over 50% activity data, where the activity data is based on actual data or reasonable assumptions and estimates.
- Low: 100% financial data, or a mix of activity and financial data with high uncertainty.

By emissions, 11% of the footprint is rated High quality, 81% Medium and 7% Low.

3.6 Carbon baseline. A carbon forecast model was completed in March 2026 based largely on budget-based estimates. The total baseline footprint was 58,270 tCO_2e.

3.7 Carbon footprint comparisons. The Birmingham 2022 total footprint was 201,821 tCO_2e. The Glasgow 2026 carbon footprint is 40,907 tCO_2e.

- Carbon intensity per ticket based on 1,581,500 tickets for Birmingham 2022 and 448,473 tickets for Glasgow 2026.
- Carbon intensity per athlete: based on 4,822 athletes for Birmingham 2022 and 2,749 athletes for Glasgow 2026.
- Carbon intensity per medal event: based on 283 for Birmingham 2022 and 215 for Glasgow 2026.

3.8 Avoided emissions. Avoided emissions were measured against specified alternatives for pre-Games expectations from concept to procurement and delivery. Rather than comparing to the forecast model, which used spend data that is generally over-estimated, this approach uses more accurate activity data combined with pre-Games expectations. The total estimated avoided emissions were 19,021 tCO_2e, divided as follows:

- Use of existing venues: 15,142 tCO_2e. The emissions of the three venue upgrades for

Glasgow 2026 were compared with the emissions of building three new venues for Birmingham 2022.

- Spectator travel: 1,348 tCO_2e. The final spectator travel emissions were compared with the forecast model, which was based on ticketing survey responses.
- Hiring of assets (excluding overlay): 1,293 tCO_2e. Emissions were compared with the equivalent assets had they all been purchased, which would account for their full embodied carbon.
- Hiring of overlay: 449 tCO_2e. Emissions were compared for 96% of overlay hired instead of the original target of 90%.
- Switching Glasgow Life venues to renewable energy and using only HVO fuel for temporary power: 438 tCO_2e. Compared with the Glasgow Life venues on a standard non-renewable tariff and temporary power on diesel.
- Hotels on renewable energy: 248 tCO_2e. Emissions were compared for the 41% of hotel nights on renewable tariffs being on standard tariffs instead.
- Lower meat and fish consumption: 45 tCO_2e. Emissions were compared for the expected share of meat and fish meals pre-Games (80%) against actual meals purchased or consumed (54%).
- Electric fleet: 38 tCO_2e. Emissions were compared with all the electric vehicles running on diesel.
- One-third of branding made from 50% recycled plastic: 10 tCO_2e. Compared with the same amount of material from virgin, non-recycled branding polyester.
- Use of water refill stations: 10 tCO_2e. The estimated number of plastic bottles avoided was 156,700. Emissions were calculated from the equivalent plastic bottles, assumed to contain 30% recycled plastic (the UK plastic packaging minimum).

3.9 Energy.

- 5.38 GWh of renewable energy supplied by EDF, equivalent to the annual electricity use of 2,000 average UK homes, using Ofgem's Typical Domestic Consumption Values (TDCV) for a "medium" household electricity profile (about 2,700 kWh a year).
- 117 tCO_2e avoided during the Games, based on actual consumption recorded, equivalent to 631 return flights between London and Glasgow. UK Department for Transport domestic flight emissions factor: 92.71 $kgCO_2e$ per passenger, one way, for the London–Glasgow route (DfT Transport and Environment Statistics).
- Continued supply beyond the event avoided 705 tCO_2e (compared with the remainder of the 5.38 GWh not used during the event being supplied on a standard tariff), equivalent to 4.3 million km in an average petrol car (UK Government 2026 factor, 0.16152 $kgCO_2e$ per km), or 109 journeys around the globe (based on the Earth's circumference of 40,075 km).

Transport and travel

3.10 Transport.

- 69% of emissions are associated with transport, including spectator travel (45%), Games transport (22%) and media transport (2%), compared with 64% for Birmingham 2022 (spectator travel and transport of people).
- 90% of Games transport emissions were from flights by athletes, technical officials and the Games Family; the rest was from land transport.
- Electric vehicles represented 66% of the operational fleet, based on number of vehicles.
- 66% of athlete bus mileage was in electric vehicles, based on daily data provided by First Bus.

3.11 Spectator travel.

- Travel mode and distance come from the post-event spectator survey. Of respondents, 51% used public transport and 16% used active travel. 31% considered sustainability when planning their journey. More than 60% travelled from within 100 km.
- Compared with the other venues, travel to Tollcross International Swimming Centre showed 9% higher car and taxi use and 10% lower train use.
- Spectator travel intensity per ticket was calculated by dividing the associated emissions by the number of tickets: 18,365 tCO_2e and 448,473 tickets for Glasgow 2026; 100,331 tCO_2e and 1,581,500 tickets for Birmingham 2022.

Food

3.12 Menus.

- "Locally sourced" means produced in Scotland, judged by each dish's main ingredient. This excludes packaged foods, drinks, sauces and dressings.
- Meat-free dish percentages exclude drinks, snacks, standalone fruit, desserts, sauces and dips, and toppings or flavour add-ons (for example pizza toppings), which are modifiers rather than standalone meals. 57% of menus across all four competition venues for obligatory clients and spectators were meat-free. For obligatory clients alone it was 59% of menus, compared with 40% for Birmingham 2022.

3.13 Food served.

- 46% of food served was meat-free, based on the number of meals purchased or served as provided by the catering suppliers. Where data was not provided, for example spectator meals at the Scottish Event Campus, it was estimated from the share of ticket holders buying food at the other venues and their servings per spectator.
- The average footprint per meal was calculated by dividing emissions from food by the total number of servings: 1.3 $kgCO_2e$ per meal. Paris 2024 reported 1 $kgCO_2e$ per meal in its sustainability report.

Circularity

3.14 Supplier Code of Practice. 73% uptake based on supplier numbers. This excludes suppliers engaged only through purchase orders below a financial threshold.

3.15 Eleiko equipment. Recycled content in barbells and platforms (97%) and the reduction in carbon footprint compared with the global average (80%) were provided by Eleiko.

3.16 Branding assets. 36% of total branding assets were made from recycled plastic (rPET). The recycled plastic content of those assets was 50%. This is equivalent to 301,675 plastic bottles by weight, based on an average of 20g of plastic per bottle.

3.17 Overlay. 96% of temporary overlay was hired, calculated on spend. This included water, waste, temporary power, rigging and lighting.

3.18 Assets. 61% of assets were hired, excluding consumables and temporary overlay. 54% of purchased assets were donated or resold, calculated by weight of total

purchased assets, excluding consumables. Of the remainder, 20% were recycled and 26% sent to waste-to-energy. In total, 74% of purchased assets were donated, resold or recycled.

Waste and water

3.19 Waste. Generated waste was 146 tonnes in total, or 0.33 kg per ticket (448,473 tickets). In comparison:

- Paris 2024: 0.3 kg per ticket (3,750 tonnes, 12.1 million tickets), from its sustainability report.
- Birmingham 2022: 1.1 kg per ticket (1,670 tonnes and 1,581,400 tickets), from its sustainability report.

3.20 Water. 156,700 single-use bottles avoided, calculated as the total volume of drinking water used at the refill stations divided by 500ml, assumed to be the average plastic bottle volume. Use of water stations (60%) and the free-water rating (7.7 out of 10) are from the spectator survey.

3.21 Serveware and drinkware. The breakdown is based on numbers collected from the catering suppliers and excludes pre-packaged drinks. Compostable serveware was 99% and compostable drinkware 81%. Combined, compostables and reusables were 94% of drinkware and serveware. Reusable cups were 12% of drinkware.

3.22 Commonwealth Clean Oceans Plastic Campaign. All data on the campaign was supplied by the Royal Commonwealth Society.

Behaviour change

3.23 Sustainability training. 49% of the OC, Commonwealth Sport and Trivandi workforce who were offered the training completed it, based on online records.

3.24 Volunteer sustainability actions. From the post-Games volunteer survey: 68% said they better understood sustainability in event delivery, 66% were likely to apply what they had learned in future, and 57% reported at least one sustainability action.

3.25 Spectator sustainability awareness. From the spectator survey: 72% of respondents reported good awareness, defined as a score above 6, with an average rating of 7.3 out of 10.

3.26 Zero Waste Scotland campaign. All engagement and reach data on the awareness campaign was supplied by Zero Waste Scotland: 1.1 million potential opportunities for people to encounter the campaign; owned social content reached 146,000 people and generated 11,300 engagements.

3.27 Scottish Water. The stand figures (30,000 conversations averaging four minutes; 2,500 pledges) were supplied by Scottish Water.

NOTES TO CHAPTER 4: CREATING A WELCOMING GAMES, IN A WELCOMING CITY

4.1 Festival Fund. Source: Glasgow Life programme data. £1,186,190 was distributed to 161 projects across all 23 Glasgow council wards. sportscotland, Glasgow City Council and the Scottish Government each contributed £250,000.

4.2 Connect, Develop, Champion. Led by Scottish ClubSport. Source: Scottish ClubSport Glasgow 2026 Festival Final Report; Glasgow 2026 Festival programme information.

4.3 All In. 755 registered organisations, including 255 businesses, across every Glasgow ward and all 32 Scottish local authorities (OC registration data). The survey had 60 responses (8%); individual questions had 58 or 59. Results come from a small, self-selecting group and are indicative. Some respondents also received Awards for All or Festival Fund support, so results cannot be credited to All In alone.

4.4 Community clubs. The figures for interest registered with the Gladiators (about 190 people, 20 of them interested in volunteering) were supplied by the club.

4.5 Trivandi Academy. 523 enrolled. Accredited by Highfield. Results of 96% and 89% are from the course feedback survey (respondent number not provided). The Experiential Learning Programme had 22 participants and 10 survey respondents; results are shown as counts. Longer-term employment outcomes were not yet available.

4.6 Campus to Commonwealth (C2C). 82 students secured paid Games-time roles.

4.7 Schools programme. Resources were downloaded 2,536 times. The reach of 16,381 classes is an estimate based on the number of classes registrants expected to reach. There were 129 athlete visits to 129 schools: 126 through the Great Athletes initiative and 3 additional visits organised directly by the OC.

4.8 Deprivation reach. Participating schools were matched to the Scottish school census (854 schools) to estimate the share of pupils living in the 20% most deprived data zones (SIMD 2020). Result: 27.6% of pupils in participating schools lived in SIMD deciles 1 to 2, against 22.2% nationally; schools where at least half of pupils lived in these areas made up 22.5% of participants, against **16.5% nationally.**

4.9 Mascot consultation. Primary pupil consultation began in spring 2025. Finnie was co-created with 76 young people from 24 schools across Glasgow. Headline data provided by the Organising Company.

4.10 Pride and wellbeing. Pride results come from Glasgow City Region respondents to the corresponding post-event spectator survey question (n=994), giving an average score of 8.8 out of 10. Results reflect people who took part in the Games and are not representative of all residents. Across the 16 further and higher education institutions participated, with 300,000+ students reached, based on the overall student population of the institutions engaged, rather than direct participation.

full spectator survey sample answering the related questions (n=3,468), the Games' role in bringing people and communities together received an average score of 8.3 out of 10, and Glasgow's welcome an average of 9.0.

4.11 Volunteer outcomes. From the post-Games volunteer survey (n=1,097): 87% intended (59%) or would consider (28%) new volunteering opportunities, against 75% in the onboarding survey; 22% had engaged with the OC's signposting offer. These are intentions, not confirmed participation.

4.12 Volunteer quotes. Quotes are from the free-text option to add a "volunteer story" in the onboarding survey.

NOTES TO CHAPTER 5: A PLACE-BASED EVENT, DELIVERED IN A FINANCIALLY RESPONSIBLE FORMAT

5.1 Economic impact methodology. Technical notes for this chapter are mainly covered in the full economic impact methodology, as set out in the appendix.

5.2 Media monitoring. 90,868 media items between 22 October 2024 and 31 August 2026, of which 95% were classed as positive or trending positive. Information was provided as headlines by the OC and the evaluation team did not conduct additional sentiment analysis.

NOTES TO CHAPTER 6: IMPACT SUMMARY

6.1 Organising Company workforce. The OC team of 562 is defined under Definitions (Workforce (OC)). the Birmingham 2022 comparison (a workforce of more than 2,000 and a multi-year planning cycle) is from the Interim Evaluation of Birmingham 2022: The Birmingham 2022 Commonwealth Games Commonwealth Games (Jan 2023).

6.2 Broadcast and digital reach. The global linear TV audience (510 million), hours of coverage, audience gender split (52% women, 48% men) and share of audience by sport (Netball 25%, Athletics 19%, Swimming 18%) are from Commonwealth Sport data provided as headlines to the evaluation team.

6.3 Programmes and networks continuing after the Games. Statements that Youth Coaching Pathways, Together We Move and Together We're All In were designed to continue, that the Glasgow 2026 Legacy Network was expected to convene until December 2026, and that the National EDI Forum for Scottish Sport has become a standing group, reflect plans reported by the lead organisations over summer and early autumn 2026. They are not confirmed long-term outcomes.

NOTES TO CHAPTER 7: LESSONS FOR THE FUTURE

No additional technical notes. Lessons draw on the evidence and notes for Chapters 2 to 6

Notes to the Case Studies

These notes describe the main data and evidence sources for each of the 26 case studies. They cover only information specific to each case study. Data, definitions and caveats already set out in the chapter notes are not repeated.

Case Study 1: All In Glasgow 2026
Data sources: OC registration data (755 organisations); participant survey (n=60). Small, self-selecting sample: results are indicative. See Note 4.3.

Case Study 2: The Athlete Journey at Glasgow 2026
Data sources: athlete survey (n=200; Para n=29), see Note 2.2.

Case Study 3: Circularity at Glasgow 2026
See Notes to Chapter 3.

Case Study 4: Commonwealth Clean Oceans Plastic Campaign
See Notes to Chapter 3 (Note 3.22).

Case Study 5: Commonwealth Sport GAPS Programme
Data sources: Commonwealth Sport GAPS programme data; see Note 2.1.

Case Study 6: EQUIP Skills Academy
Data sources: eqUIP Officer – Asia & Oceania, on behalf of Commonwealth Sport; group interview with eqUIP participants held at Games time.

Case Study 7: Game On Live Site, Kelvingrove Park
Data sources: Glasgow 2026 programme monitoring data and activity provider feedback; visitor survey (n=402).

Case Study 8: Glasgow 2026 Festival Fund
Data sources: Glasgow Life programme data.

Case Study 9: Glasgow 2026 Legacy Network
Data sources: UWS lead's membership figures as at 31 August 2026. 10 co-creation workshops (which developed the Story of Change with partners and stakeholders); 6 learning events.

Case Study 10: Glasgow 2026 Legends Volunteer Programme
See Notes to Chapter 2 and Chapter 4.

Case Study 11: Glasgow 2026 Schools Programme
Data sources: download and athlete visit data; school census match (854 schools). See Notes 4.7 and 4.8.

Case Study 12: Glasgow 2026 Workforce Legacy
Data sources: two focus groups with OC staff (August 2026) and stakeholder interviews on talent recruitment and development with the OC, Trivandi, Commonwealth Games Scotland and city partners Glasgow Life and the SEC; demographic data from the OC's EDI dashboards, drawn from employee onboarding surveys; a data table supplied by the OC showing the size of the workforce across the OC, Embedded Delivery Suppliers and venue partners; and local recruitment data supplied by Trivandi.

Case Study 13: Host Broadcaster Training Initiative
Data sources: QTV representative in charge of the Host Broadcaster Training Initiative; interviews with UWS students involved in the initiative, facilitated by a colleague seconded to the project.

Case Study 14: Influencing International Sport Relations
Data sources: Scottish Government data, Scottish Council for Global Affairs, TeamScotland date including 115 events, 20,000+ people through the door, 32 Scottish Government events 1000+ delegates attending the government programme, 34 international partners at FM event, 32 governments represented.

Case Study 15: Leading Women
Data sources: the Hosted Events Programme's event and ticketing log, covering all sessions held between 25 July and 2 August 2026, and the programme's planning documentation; participant feedback compiled for the evaluation team from LinkedIn and email. The feedback is self-selected and is used to illustrate attendees' experiences rather than as a representative account.

Case Study 16: National EDI Forum for Scottish Sport
Data sources: National EDI Forum for Scottish Sport case study consultation; Forum planning and project documentation.

Case Study 17: National Lottery Awards for All Scotland
Data sources: Awards for All programme and funding data; funder monitoring data; All In survey responses from funded projects; partner consultation.

Case Study 18: The Partner Family
Data sources: UWS Centre for Culture, Sport and Events report commissioned by the OC on

its partnership programme (Glasgow 2026: From Rights to Results, 2026). The diagram in this case study is reproduced from that report with the authors' permission. Review of internal OC project documentation on partners' plans and objectives, and partners' public announcements and websites.

Case Study 19: Powered by Partnership
See Notes to Chapter 3.
Case Study 20: Preparing World-Class Venues
Data sources: venue investment upgrade information provided by Organising Committee Finance team. Upgrades discussed in stakeholder interviews.

Case Study 21: The Scotland Route of the King's Baton Relay
Data sources: Purple Moon Events and MIH events

Case Study 22: Serving Scotland
See Notes to Chapter 3.

Case Study 23: Team Scotland Achieve Programme 2026
Data sources: Team Scotland Youth Trust data. 37 people took part. 87% rated their experience 9 or 10 out of 10 (n=15).

Case Study 24: Together We Move
Data sources: campaign monitoring and reach data; partner consultation; Together We Move Celebration Toolkit.

Case Study 25: Together We're All In
Data sources: Partnership of Scottish Athletics, Scottish Disability Sport, Scottish Action for Mental Health (SAMH), the Daily Mile Foundation and junior parkrun.

Case Study 26: Youth Coaching Pathways
Data sources: Commonwealth Sport Foundation programme monitoring and evaluation data, including the Youth Coaching Pathways interim report and Beyond the Games conference attendee evaluation (n=15).



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