

Commonwealth Games Value Framework

The Commonwealth Games Federation
FINAL REPORT
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Executive summary

*Hosting the Commonwealth Games
offers a unique opportunity to deliver a
positive return on public investment and
can reposition and transform a host city*

As part of Transformation 2022, the Commonwealth Games Federation recognises the importance of demonstrating the positive impact of sport on society

Context

The Commonwealth Games Federation (CGF) has recently republished 'Transformation 2022' which sets out its vision, mission, values and strategic priorities for the period 2019 to 2022.

The CGF believes that there has never been a more important time to galvanise and drive the positive impact of sport on society. It wants to be a progressive leader in sport and social change.

The CGF recognises that:

- the Games can be delivered more efficiently, at less cost and with less time, and with a greater focus on generating sustainable benefits for host cities
- prospective candidate cities to host the Commonwealth Games, under increasing scrutiny from taxpayers, need to be able to justify the commitment of scarce government resources as good value for money
- the costs of staging a global event such as the Commonwealth Games can deter those cities that have competing priorities for funding.

The CGF's **vision** is to use sport to create peaceful, sustainable and prosperous communities across the Commonwealth.

Its **mission** is to build an athlete-centred, sports-focused Commonwealth Sports movement across the six regions of the Commonwealth that transforms the destinies of future generations.



The CGF's **values** are:

- **Humanity:** the Commonwealth Sports Movement's purpose and potential is inspired by athletes and citizens
- **Equality:** the Commonwealth Sports Movement's sports and Games are a level-playing field, bringing people together as equals
- **Destiny:** together the Commonwealth Sports Movement can create a more peaceful, sustainable and prosperous future.

The CGF has established an impact structure (see left) aimed at defining, assessing, communicating and, ultimately, driving a positive impact on the diverse societies, economies and physical environments it aims to serve. Its approach is aligned to the three themes outlined in its vision (i.e. peace, sustainability and prosperity) working from the inside-out. Once a peaceful core is established, sustainability can best be delivered through an integrated approach to economic, social and environmental development, which supports and extends communal prosperity (i.e. wellbeing and progress).

The CGF is keen to develop and apply this framework as a guide to maximising and communicating short, medium and long-term returns on investment. It has already taken steps by:

- strengthening the commercial programme, cost management and operational delivery of the Birmingham 2022 Commonwealth Games to help maximise the economic, social and environmental benefits
- commissioning this work to assess and compare the costs and benefits of Games hosting, and the associated community legacies in a way that aligns with its impact framework
- supporting future host cities in the development of their proposals to underpin the delivery of Games which have long-term sustainable benefits as a key driver.

In an increasingly competitive environment, the CGF has identified the need to develop a more compelling benefits story around the Games

The challenge

The CGF has recognised the requirement to demonstrate the value of hosting a Commonwealth Games that is internationally recognised and quantifies the impact of a Games across a range of economic, social and environmental measures.

The CGF understands that it has been difficult to quantify the impact of a previous Games beyond GDP (e.g. wellbeing) for a number of reasons:

- analysis of the impacts of a previous Commonwealth Games has often only been measured in the immediate years after the Games, and legacy achievements or longer-term impacts have rarely been assessed
- the event often acts as a catalyst for bringing forward already planned investment by host cities. The total expenditure on such projects are often erroneously identified as Games-related expenditure and Games-related benefits, i.e. the value of accelerating the realisation of the expected benefits, are not captured appropriately
- some costs will vary from city to city because the Games-related capital expenditure required to host the Games is different and is determined by a host city's immediate context
- the legacy ambitions and objectives may also differ from city to city and this may be reflected in differences in both spend and the associated legacy outcomes. As noted above, the CGF recognises that the available evidence on legacy outcomes is often harder to compare and quantify.

With the demand from the public on governments to demonstrate greater transparency on how they spend public money, the need for a host city to develop a transparent and comprehensive view of costs, investments and associated benefits of short and long term value, has never been such a high priority.

The Games Value Framework meets these demands, by providing an informed structure and a consistent approach, built on a review of available evidence from across multiple Games' 'value stories'. This is then used to recognise and quantify associated costs relevant to hosting a Games, and well considered ambitions for legacy built on a host city's specific socio-economic plans.

Planning legacy from the start is vital to optimising value from all investment, and should underpin a host city plan from the outset.



The Games Value Framework has been developed to help the CGF, host cities and other stakeholders assess the costs and benefits of hosting the Games ...

Scope

The CGF has worked with PricewaterhouseCoopers LLP (PwC) to develop and apply a new Games Value Framework that:

- defines the potential costs and benefits of hosting the Commonwealth Games
- articulates how these costs and benefits should be assessed
- collates the existing evidence from recent Commonwealth Games and draws out lessons learned and critical success factors.

The intended audience is the CGF, host cities, Commonwealth Games Associations and other key stakeholders who are seeking to understand the costs and benefits of hosting the Commonwealth Games and how the Games can help cities to achieve their ambitions.

The work has involved:

- engaging with key stakeholders involved in past Games to understand the costs and benefits of hosting the Games
- developing a holistic Games Value Framework that is aligned with the CGF's impact themes of peace, sustainability and prosperity to guide prospective host cities (and other users) on how to assess the anticipated costs and benefits of hosting the Games
- reviewing previous editions of the Games to identify evidence to support the costs and benefits, drawing on appraisals and evaluations of the impact of past Games and case studies which have been undertaken to date.



... at each stage of the Commonwealth Games lifecycle

Potential host cities go through three stages in the Commonwealth Games lifecycle when they consider whether to host the Games. Once awarded the right to host the Games, a further three stages shape their approach to delivery.

The **Games Value Framework**, which comprises four elements, **supports decision making** at the different stages of the Games lifecycle by:

- enabling **dialogue** between the CGF and prospective host cities
- guiding **feasibility** analysis to support a decision as to whether a city should become a Candidate City
- helping cities appraise the potential value from hosting the Games and preparing formal Candidate City Files for submission to the CGF for evaluation and host city selection as part of the **Candidature** Process
- providing a framework to guide Organising Committees (OCs) and host cities in **planning** for benefit realisation as part of hosting the Games
- guiding host cities in **delivery** of the Games and implementing benefit strategies
- guiding the development of an evaluation framework for the Commonwealth Games and host cities to capture the **legacy** benefits from hosting the Games post-event.

By tracking developments during this lifecycle, the CGF will further improve its processes, so that it can optimise its support for host cities and prospective hosts.

Elements of the Games Value Framework

A	Costs and benefits statements
B	Core principles to assess potential costs and benefits
C	Evidence from past Commonwealth Games
D	Critical success factors



Evidence from the Games since 2002 highlights the key benefits and costs

"Manchester (2002 Commonwealth Games) and Barcelona (1992 Olympic and Paralympic Games) will go down as two of the most successful multisport events of their kind, because of that benefit to cost equation. If it was not for Manchester 2002, there would never have been an Olympic & Paralympic Games in London in 2012."

Sir Howard Bernstein, Chief Executive Manchester City Council (2000-2016)

GDP & employment	<ul style="list-style-type: none"> Spending to host the Commonwealth Games boosts the host city/country economy in the years before, during and after the Games. Hosting the Games has boosted GDP in the host city/region by £0.8 billion–£1.2 billion and generated between 13,600 and 23,000 full time equivalent (FTE) years of employment before, during and after the Games. 	<p>The Commonwealth Apprenticeship Initiative (CAI) is one of Glasgow City Council's leading 2014 Legacy projects and was introduced in 2009 following Glasgow's successful bid to host the 2014 Commonwealth Games. It sought to ensure that Glasgow school leavers would benefit from jobs and apprenticeships in construction associated with the 2014 Games.</p> <p><i>"The Apprenticeships programme in Glasgow 2014 was phenomenal"</i></p> <p>Chris Jenkins, CEO Commonwealth Games Wales (2006-present)</p>
Regeneration & transformation	<ul style="list-style-type: none"> Hosting the Games has catalysed regeneration and transformation of areas across the city and wider region – as seen in the reclamation of a former 146 hectare derelict site in East Manchester. It saw investment in sports, leisure and entertainment facilities, creating many thousands of jobs. House prices improved remarkably between pre and post Games position compared to Manchester and the wider region. £400 million was invested into new homes and communities. 	
Trade, investment & tourism	<ul style="list-style-type: none"> Hosting the Games has 'showcased' the host city's culture worldwide with a TV audience of 1-1.5 billion. Hosting the Games has led to increases in tourism of up to 25% in the three years after hosting, as well as trade deals agreements and investments of up to £400 million into the host city. 	<p>According to George Black, CEO of Glasgow City Council, one of the biggest legacies for Glasgow has been building its reputation on the world stage.</p> <p><i>"It puts you on a higher platform than the city was before and opens up opportunities which weren't necessarily there before"</i></p> <p>George Black, CEO Glasgow City Council (2003-2014)</p>
Sports participation	<ul style="list-style-type: none"> Hosting the Games has led to increased sports participation in the host city region from 10% of Victorians taking up sports as a result of Melbourne 2006, and a 5% increase in sports participation in Queensland following Gold Coast 2018. 	
Games spending	<ul style="list-style-type: none"> Total Games-related operating expenditure ranges from £221 million for Manchester 2002 to £749 million for Gold Coast 2018, whilst Games-related capital expenditure has varied between £75 million for Glasgow 2014 to £292 million for Gold Coast 2018. The public sector has historically contributed between 54% (Manchester 2002) and 83% (Gold Coast 2018) of the Games-related operating costs. 	<p><i>"The Commonwealth Games marked the beginning of a new chapter for the Gold Coast, as it evolves from a tourist town into a multi-dimensional city with a rapidly expanding economy."</i></p> <p>Property Council of Australia, June 2018</p>
Games funding	<ul style="list-style-type: none"> The Games have provided an effective fiscal dividend to host cities as they have attracted public funding which they would not otherwise have received. For example: <ul style="list-style-type: none"> for every £1 spent by local government on total Games-related expenditure (operating and capital), the national (and devolved) government contributed £2.7 in Manchester 2002 and £3.0 in Glasgow 2014 in Australia, the state government contributed 75% and 79% of total public-sector Games-related expenditure in Melbourne 2006 and Gold Coast 2018 respectively. 	<p><i>"The Commonwealth Games in 2002 was designed to be a driver and a catalyst for change in the host city. Part of our successful bid for the Games was our commitment to regeneration and improvement work pre and post Games, while creating a lasting legacy for communities, residents and volunteers."</i></p> <p>Sir Richard Leese, Leader of Manchester City Council (1996-present)</p>

Costs and benefits of hosting the Games

*Summary of evidence from past
Commonwealth Games*

There are two key categories of Games-related spending and two types of discretionary spending and investment

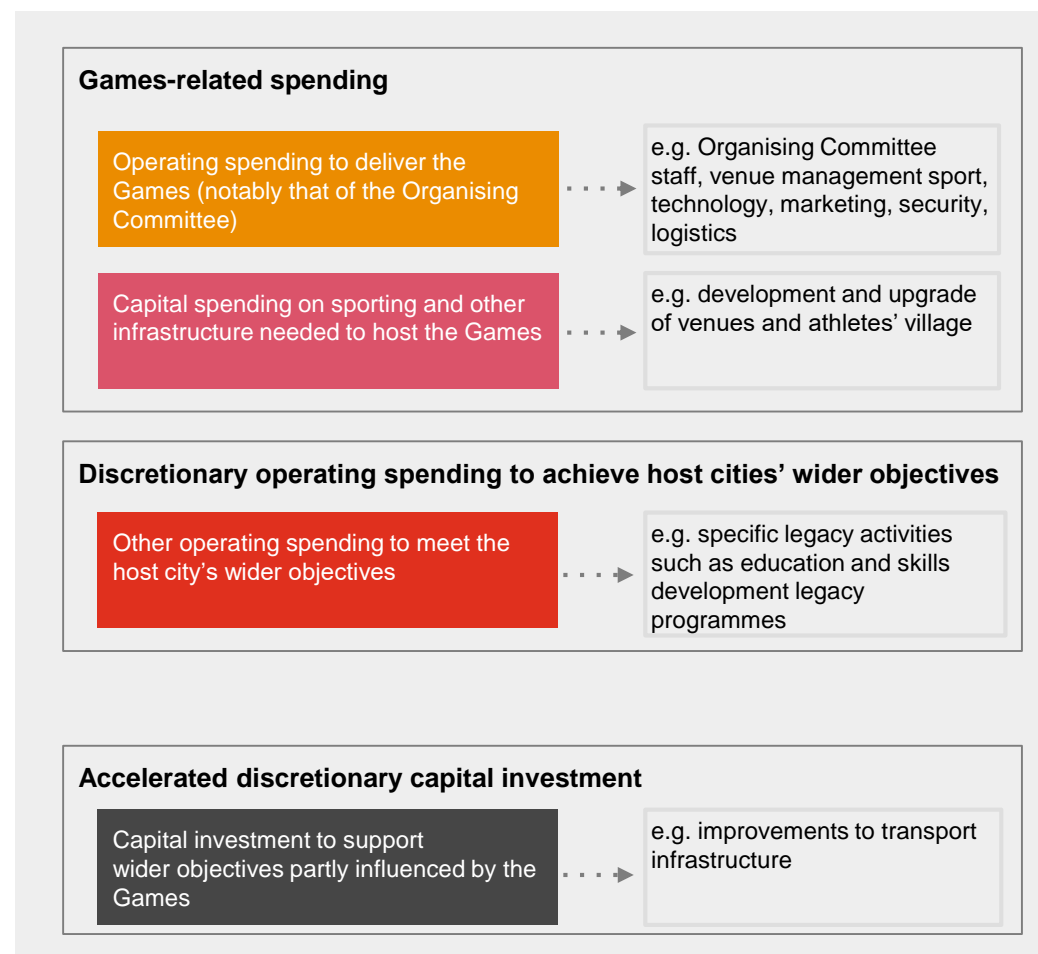
Expenditure linked to hosting the Games can be divided into **three main categories**:

- **Games-related operating expenditure**
- **Capital expenditure on Games-related venues and village**
- **Discretionary operating expenditure to achieve host cities' wider objectives** where the effect of hosting the Games is to accelerate or enhance the scale of expenditure, typically to meet legacy objectives

In addition, host cities often use the Games as a **catalyst** for **accelerating infrastructure investments (i.e. accelerated discretionary capital investment)**.

The distinction between Games-related expenditure and the other categories of spending is important because of what it implies about the choices made by the host city, what would have happened if the city had not been the host (i.e. the counterfactual) and how the benefits should be assessed. For example, where a host city invests to improve a venue to host the Games, and this spending was not envisaged prior to the award of the Games, all the (incremental) benefits associated with the spending can be attributed to hosting the Games. In contrast, where a host city invests to improve its transport infrastructure in part to improve visitors' experience at the Games knowing that the investment would otherwise have happened at a later date, the incremental (net) benefits attributable to hosting the Games is the value of accelerating realisation of the expected benefits.

The distinction between **capital** and **operating expenditure** is also important as the profile of the benefit streams from each category differs. Although capital expenditure boosts demand in the short term through the associated construction programme, it is the longer term benefits that arise from use of the assets which is most significant if it generates supply-side improvements which enhance the productivity of the local (and national) economy. In contrast, operating expenditure has a short term effect on demand, which may be bolstered in the longer term, for example if tourism is boosted (a demand side benefit) and/or if supply-side legacy benefits arise (e.g. through improvements in skills and productivity - such as through a volunteering programme). Any cost-benefit analysis needs to consider all these impacts.



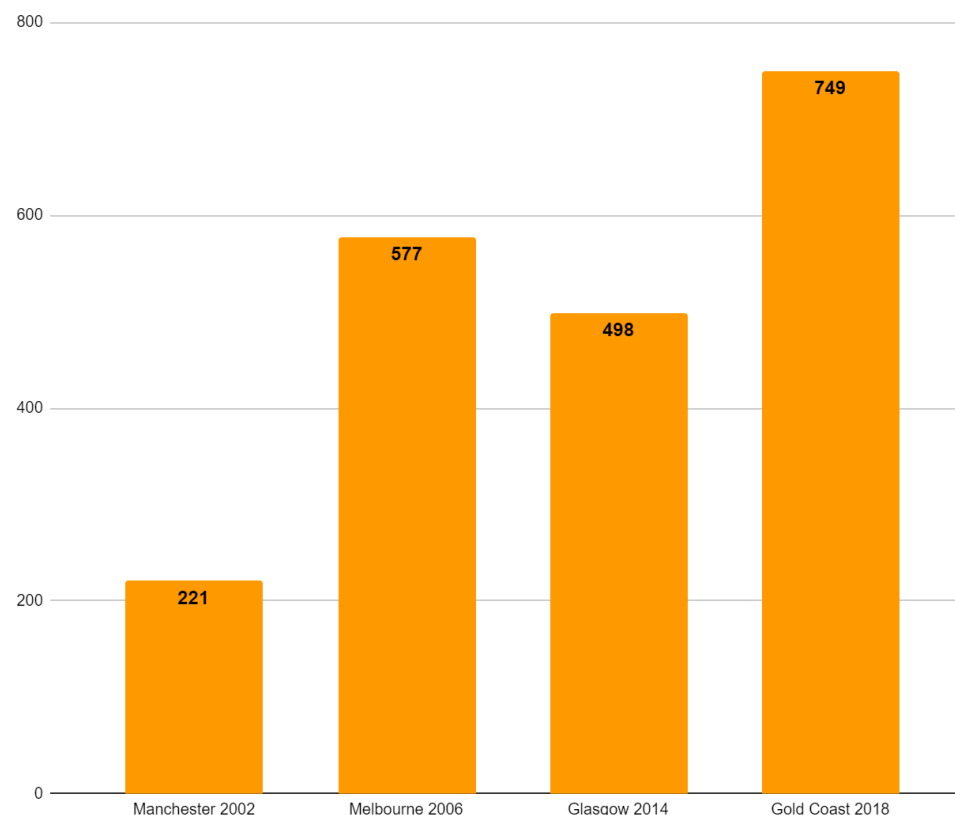
Games-related operating expenditure increased between Manchester 2002 and Gold Coast 2018

Games-related operating expenditure - increases

The operating expenditure for the Games has increased significantly since the 2002 Games in Manchester despite the number of sports being similar, with 17 sports in Manchester in 2002 and 18 sports in the Gold Coast in 2018. The increase in operating costs has been driven by a number of factors, including:

- the number of athletes increased by 30% between Manchester 2002 and Glasgow 2014, partly influenced by more generous host city flight subsidies, which had a significant impact on the size of the village and operating costs
- the security requirements changed significantly over the period, which had a direct impact on policing and security costs and an indirect impact on many operational areas, such as transport, venue management, catering and logistics
- service levels have increased over time as each successive Games has sought to become the best, raising expectations for athletes, media, the Games Family and other stakeholders across all areas of the Games, including not just sport and venues, but sport presentation, the Opening and Closing Ceremonies, the Queens Baton Relay and legacy programmes
- the approach to operational delivery has been unduly influenced in recent editions of the Games by other major events that have a less agile and flexible approach than the Commonwealth Games.

Games-related operating expenditure (£ million, 2018 prices)



See Appendix B of the main report for details of PwC approach and sources.

Games-related capital expenditure varies significantly from host city to host city

Games-related capital expenditure differs between cities

The scale of Games-related capital expenditure varies significantly depending on the extent and quality of host cities' existing infrastructure, their objectives and their appetite to invest. The table shows the Games-related capital expenditure on the athletes village and venues as well as the largest projects for each Games.

Capital expenditure has ranged from £75 million in Glasgow 2014 to £292 million in Gold Coast 2018. The differences in spend reflect the extent and quality of existing infrastructure, each city's objectives and their appetite to invest. For example:

- Glasgow 2014 decided to invest in several new venues before it was awarded the right to host the Games (so these costs are not classified as Games-related) but it did undertake minor redevelopment works, for example at the main stadium
- the Gold Coast's higher capital costs reflect the investment in the athletes' village and improvements to several venues.

All the Games (except Glasgow 2014) have invested more than £40 million in at least one venue.

Notes: 1. For Melbourne 2006, the total includes a deduction of £10 million to adjust for the cost of the Games village land. 2. In the case of Gold Coast 2018, the total includes in-kind contributions of £15 million towards infrastructure and facilities. This includes in-kind contributions from the City of Gold Coast for capital projects to improve venue infrastructure, roads, beaches and other public spaces.

Source: PwC analysis. All figures are presented in GBP millions at 2018 prices (PPP exchange rates from OECD, UK GDP Deflator from Office for National Statistics). See Appendix B of the main report for full list of capital investments in stadia for each Games, in addition to details of the approach and sources. The numbers may not add due to rounding.

Capital expenditure on Games-related venues and village (£ million, 2018 prices)¹

	Manchester 2002	Melbourne 2006	Glasgow 2014	Gold Coast 2018
Athletes village (Games contribution)	0	22 -10 (less land)¹	10	122
Venues	234	93	65	170
Stadium & athletics track	153	49.7	26	
Aquatics centre	44	41		20
English Institute of Sport	22			
Hockey centre	6		5	8
Shooting facilities / centre	8	0.1	*	9
Lawn bowls club / centre	1	1.5	1	2
State mountain bike facility		1.5	0.6	1
State netball hockey centre		0.4		
Velodrome			14	30
Tollcross international swimming centre			14	
Scotstoun sports campus			3	
Strathclyde Park			0.5	
Carrara sports & leisure centre				50
Carrara Indoor stadium				4
Carrara stadium				3
Coomera indoor sports centre				20
Oxenford studios				5
Runway Bay sports				1
Other venues				1
In-kind contributions ²				15
Total	234	105	75	292

* Approximately £11 million for the shooting facilities was captured in the Organising Committee Overlay budget (Source: David Leather (Glasgow 2014 COO, based on the Archived 2014 Organising Committee budget).

Commercial revenues have funded 17% (Gold Coast 2018) to 46% (Manchester 2002) of Games-related operating expenditure

Commonwealth Games host cities generate **commercial revenues from ticketing, broadcasting, sponsorship, licensing and merchandising**. However, the proportion of costs funded by commercial revenue has decreased over time. The CGF has, therefore, taken steps to reverse this trend through the introduction of a new delivery model to increase commercial revenues and drive down operating costs by delivering the Games more efficiently.

The financial contribution of each host city to the operating expenditure ranged from 8% (Gold Coast 2018) to 17% (Manchester 2002). This variation largely reflects differences in the political context in the host countries (i.e. the key public sector stakeholder in terms of budget/funding): for example, in Australia, the state government has led the bids whereas in the UK the host city works directly with the national government.

The **Games have also attracted private sector contributions to fund capital expenditure on Games-related venues and village**. For example, local universities in Manchester and the Lawn Tennis Association funded part of the venues for Manchester 2002.

The tables illustrate the sources of funding for Games-related operating and capital costs for each Commonwealth Games. They show how the **Games have provided an effective fiscal dividend to host cities** as they have attracted funding from state/devolved and national government (which they would not otherwise have received). For example, £728 million was invested by the Queensland (state) Government for Gold Coast 2018, of which £542 million relates to operating expenditure. A further £100 million was invested by the national government (of which £75 million went into capital expenditure).

The Games provide the city with a fiscal dividend from national, regional and other levels of government:

- in the UK, for every £1 of local government spending on total Games-related expenditure (operating and capital), the host cities attracted between £2.7 (in Manchester 2002) and £3.0 (in Glasgow 2014) from national and devolved government
- in Australia, the state government has been the key funder of the Games contributing 75% and 79% of total public-sector Games-related expenditure in Melbourne 2006 and Gold Coast 2018 respectively.

Sources of funding (£ million, 2018 prices)	Manchester 2002	Melbourne 2006	Glasgow 2014	Gold Coast 2018
Games-related operating and capital expenditure	455	682	573	1,041
Commercial revenues	101	161	126	124
National government	51	134		100
Other national institutions	201			
State/devolved government		437	337	728
Local government	93	12	111	89
Private sector	10			
<i>Less adjustments¹</i>		(-62)		
Games-related operating expenditure	221	577	498	749
Commercial revenues	101	161	126	124
National government	51	134		25
Other national institutions	31			
State/devolved government		300	298	542
Local government	38	12	75	58
<i>Less adjustments</i>		(-29)		
Capital expenditure on Games-related venues and village	234	105	75	292
Private sector	10			
National government				75
Other national institutions	169			
State/devolved government		138	39	186
Local government	55		36	31
<i>Less adjustments</i>		(-32)		

Notes: 1. To identify the sources of funding for Games-related expenditure in Melbourne 2006 PwC analysis makes a set of adjustments for items moved to discretionary operating expenditure, enhanced capital expenditure and the village land adjustment as per the previous slide. See Appendix 2 for more details.

Source: PwC analysis. All figures are presented in GBP millions at 2018 prices (PPP exchange rates from OECD, UK GDP Deflator from Office for National Statistics); Other national institution refers to non-government public sector bodies (e.g. Sport England). The numbers may not add due to rounding.

Hosting the Games accelerates and otherwise enhances other spending in the host city to support its wider objectives

Hosting the Games provides an opportunity for cities to achieve their wider, legacy objectives. Such discretionary expenditure has been identified from a review of publicly available information and interviews with key stakeholders.

All the host cities have made **discretionary operating expenditures** to meet their legacy objectives. The analysis shows that this expenditure has been between £28 million in Glasgow 2014 and £45 million in Gold Coast 2018 (see table). The resources have been committed to initiatives such as additional programmes and events to enhance the attractiveness of the city to visitors and sponsors and to boost the legacy benefits from volunteering and increased community sports participation. The Gold Coast 2018 also benefits from 'in-kind' contributions from various tiers of government. This expenditure has been funded mainly by local government and the state/regional government across the Games, often by re-directing or re-purposing of existing budgets.

In addition, the host cities have often been able to **accelerate or enhance capital investment** in infrastructure related projects to achieve wider objectives. Similar to discretionary operating expenditure, more often these are funded from re-directing/re-purposing existing city/regional/federal budgets and only rarely involve additional investment by governments. Examples of this are:

- Manchester City Council used the Games in 2002 to boost its work to regenerate East Manchester by spending £310 million
- Melbourne's discretionary investments focused on upgrading transport infrastructure with the largest project costing £20 million
- in Glasgow, the City Council used the Games in 2014 to accelerate investment in transport infrastructure (£474 million) and regeneration of the East End (£96 million). The majority of the funding for these investments was provided by the Scottish Government
- the Gold Coast used the Games in 2018 to catalyse economic development of the area and was able to invest in key transport projects. These projects included the investment of £205 million for the extension of the Gold Coast light rail by 7.3km to connect to the heavy rail at Helensvale Station, the investment of £80 million for the heavy rail duplication of 8.2km of single track, and the investment of £82 million towards the acceleration of major road upgrades across the Gold Coast.

Sources of funding (£ million, 2018 prices)	Manchester 2002	Melbourne 2006	Glasgow 2014	Gold Coast 2018
Discretionary operating expenditure	30	29	28	45
Look and feel of the city	6			
Legacy	24		14	4
Business, community and environment programmes		29	0.3	
Arts & culture			14	12
Public domain Improvements				3
Carrara Precinct				2
In-kind contributions ¹				24
Sources of funding				
Private sector	4			
National government	9	6		1
Other national institutions			11	
State/devolved government		22	3	17
Local government	17	1	14	27

Notes: 1. The Queensland Government and the City of Gold Coast contributed both cash and in-kind (i.e. non-monetary, e.g. staff, services) towards discretionary operating spending related to the Games. These in-kind contributions went towards a range of city services and legacy initiatives.

Source: PwC analysis. All figures are presented in GBP millions at 2018 prices (PPP exchange rates from OECD, UK GDP Deflator from Office for National Statistics). The numbers may not add due to rounding. Appendix B of the main report provides further details on the discretionary investments for each Games, the approach used and the sources. Other national institutions refers to non-government public sector bodies (e.g. National Lottery funding, Sport England, etc.).

Hosting the Games boosts local, regional and national GDP and employment before, during and after the Games

Existing appraisal evidence shows that hosting the Games was expected to boost local, regional and national GDP and employment. The table below shows that **the Games were expected to enhance GDP in the host city/region by between £0.8 billion and £1.2 billion and generate between 13,600 and 23,000 full time equivalent (FTE) years of employment** before, during and after the Games.

Care is, however, needed when comparing the impact of past Games on GDP and employment because the approaches adopted and the time periods included vary significantly.¹

	Manchester 2002	Melbourne 2006	Glasgow 2014	Gold Coast 2018
Employment impact (net FTE years of employment) ²	23,000 FTE years of employment	13,600 FTE years of employment	16,800 FTE years of employment	21,100 FTE years of employment
GVA impact (net)	£1.1 billion	£1.0 billion	£0.8 billion	£1.2 billion
Geography assessed	Manchester	Victoria	Scotland (city level results also available)	Queensland (national and city results also available)
Time period assessed	Pre-Games, Games and post-Games: 18 year period from 1995-2012, with Games development	Pre-Games, Games and post-Games: 20 year period from 2002–2022	Pre-Games and Games: 8 year period from 2007 to 2014	Pre-Games, Games and post-Games: 9 year period from 2013/14 to 2021/22
Modelling approach	Input-output modelling (Games-related and discretionary spending & attribution based on assumptions)	CGE modelling	Input-output modelling (Games-related spending and Games visitors estimates)	CGE modelling

Source: PwC analysis. All figures are presented in GBP millions at 2018 prices (PPP exchange rates from OECD, UK GDP Deflator from Office for National Statistics).

Notes:

1. Most recent Games' hosts have estimated this economic benefit by undertaking an ex ante (pre-event) appraisal of the expected impact of hosting the Games on GVA and employment. Two types of economic models are commonly used: Computable General Equilibrium (CGE) models and Input-Output (IO) models. Both types can estimate the national and sub-national (typically regional) impacts before, during and after the Games. The key differences are in how the models account for time reactions of the economy (dynamic vs. static), estimate the net (CGE) vs. the gross (IO) impacts, i.e. does or does not account for displacement effects, and can account for scenario-based analysis and sensitivities with CGE providing more robust (but data intensive) results. For example, two estimates are based on input-output models which do not take into account the knock-on displacement and substitution effects nor do they adjust for any changes in the structure of the economies over time. In contrast, others use a computable general equilibrium (CGE) model which does incorporate displacement and substitution effects. In addition, the Games-related spending that drives the economic modelling in the models is sometimes inconsistent in its scope: for example, the study for Glasgow 2014 includes the impact of volunteer and media staff spending, an element of spending that no other Games impact assessment considers.

2. The PwC analysis present figures in FTE years of employment, i.e. full-time-equivalent jobs created over the period assessed.

The return on public sector investment to host the Commonwealth Games has ranged from 1.3 (Gold Coast 2018) to 3.2 (Manchester 2002)

The **implied economic return on public sector investment** has been estimated by dividing the economic benefits (measured as the boost to GDP/GVA) by the total direct Games-related expenditure funded by the public sector (see table below). Even if only the demand-side benefits of the Games are considered, the implied return on public investment is between 1.3 (Gold Coast 2018) and 3.2 (Manchester 2002). The return for Manchester 2002 is larger than that of other Games as the value added estimates for Manchester 2002 are likely to include benefits from wider spend on regeneration and transport infrastructure, but the overall economic benefits are compared against the public sector spend towards only the Games-related operating expenditure and capital expenditure on venues and village. This is because the discretionary operating expenditure and capital investment to meet wider host city objectives (and thus the benefits originating from them) are “catalysed” by the Games-related costs.

Care is also needed when comparing the impact of past Games on GDP and employment between past Games because the approaches are not consistent.¹

Implied economic return on public-sector investment	Manchester 2002	Melbourne 2006	Glasgow 2014	Gold Coast 2018
Total estimated economic benefit	1,119	1,007	789	1,213
Total public sector spend on Games-related operating costs and capital expenditure on Games venues and village ³	344	583	447	917
Return on public sector spending on Games-related costs²	3.2	1.7	1.8	1.3

Source: PwC analysis. All figures are presented in GBP millions at 2018 prices (PPP exchange rates from OECD, UK GDP Deflator from Office for National Statistics).

Notes:

1. Care is needed when comparing the impact of past Games on GDP because the approaches adopted and the time periods included vary significantly. Nevertheless, a comparison of the estimated economic return from public investment in recent Commonwealth Games has been done. The results should be viewed only as indicative, as a more detailed analysis would be required to improve the consistency of the information used. All figures are reported in 2018 prices, and have been converted to GBP millions using purchasing power parity (PPP) exchange rates in order to aid comparability.
2. Return on investment has been calculated by dividing the total GVA impact as estimated in existing evidence by PwC’s assessment of the total public sector funding towards Games-related costs. These figures should be viewed with caution as the **denominator in the calculation is based on analysis in this report, and is not aligned with the areas of spend included in the underlying economic impact assessments used to generate the numerator of this calculation**. Moreover, the areas of spend included in the numerator vary across each Games, therefore comparisons cannot be made across Games.
3. The figures presented are based on PwC analysis to identify all Games-related costs that were funded by the public sector. The analysis is based on data from public sources and figures were converted in GBP 2018 for comparison purposes. The figures exclude discretionary operating expenditure and accelerated and otherwise enhanced capital investment to achieve host cities’ wider objectives (e.g. large infrastructure and transportation programmes).

Hosting the Games supports physical, economic and social regeneration and transformation of areas across host cities and their wider regions

Hosting the Games has been used by some host cities as a catalyst for regeneration and transformation of local areas.

Evidence from past hosts shows that the Games played a role in accelerating and otherwise enhancing capital investments towards regeneration. The primary role of the Games has been to accelerate and / or amplify the impact of existing strategies and plans to achieve the host city's wider ambitions for regeneration. This makes it difficult to isolate the benefits of regeneration that are attributable to the Games.

Manchester 2002: Regeneration of East Manchester

- A key priority for Manchester was to leave a lasting legacy of new sporting facilities and social, physical and economic regeneration around Sportcity in East Manchester.
- East Manchester was chosen as the location for the Commonwealth Games stadium to host the opening and closing ceremonies, athletics and rugby sevens.
- The strategy was that the new stadium would be a catalyst for sports-led regeneration in the local area.
- Several other prominent venues were built around the stadium used for the ceremonies and athletics at the Games, including the National Cycling Centre and a tennis academy.
- Between 1991 and 2002, East Manchester reduced its dependence on manufacturing, saw a decline in long-term unemployment from 43% to 19.5%, and an increase in households earning more than £200 per week from 17% to 34%.
- Employment opportunities increased; the Games created 2,000 jobs in the area and the UK's largest ASDA store and the Central Business Park were opened, providing further jobs.
- East Manchester has seen improvements in housing supply and transport links since the Abu Dhabi United Group (ADUG) bought Manchester City Football Club (MCFC) in 2008 and the metro-link extension (i.e. the second wave of regeneration).

Glasgow 2014: Transformation of East End

- A key ambition of the Glasgow 2014 Games was to regenerate the East End of the city.
- The athletes' village, Emirates Arena, Velodrome, Hockey Centre and Swimming Centre were developed in the heart of the wider Clyde Gateway redevelopment.
- From 2012 to 2017, more than 5,000 new jobs were brought into the area of which 1,100 were filled by locals.
- Since the Games, the village has been converted into 700 affordable houses, in addition to a 120 bed care home.
- The sports venues have provided facilities for local communities to enjoy.
- The Games accelerated investments in transport infrastructure into and within the area.
- From 2012 to 2016, neighbourhood satisfaction increased from 70% to 83% and the feeling of community cohesion increased from 37% to 45%.

'If we didn't have the Commonwealth Games in Manchester, the regeneration would be 20 years behind'

Sir Howard Bernstein
Chief Executive Manchester City Council
(2000-2016)

'The Commonwealth Games in 2002 was designed to be a driver and a catalyst for change in the host city. Part of our successful bid for the Games was our commitment to regeneration and improvement work pre and post-Games, while creating a lasting legacy for communities, residents and Games volunteers'

Sir Richard Leese, Manchester City Council

"Preparations for the Commonwealth Games brought much welcome investment in the City's public infrastructure and proved to be a springboard for further investment in subsequent years. However, the main legacy from the Games was the boost in confidence Glasgow received from delivering a successful Games. A confidence that continues today."

George Black, CEO Glasgow City Council

Hosting the Games strengthens trade, investment and tourism links with key markets of the Commonwealth and the rest of the world

Hosting the Games increases the global profile of the host city which provides a platform for hosting events and boosting trade and investment for local businesses. Consequently, trade, investment and tourism in the host city and wider country can be strengthened before, during and after the Games.

Evidence on the benefits from past Games across these dimensions varies in terms of the quantity and quality with a focus on the spending on activities and events before and during the Games rather than post-Games. Hosting the Games has increased tourism by up to 25% three years after the event and has led to trade agreements and investments of up to £400 million for the host city.

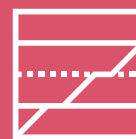
Trade

- **Manchester 2002:** Inward and outward trade missions with Australia, Canada, India, Malaysia, Singapore and South Africa.
- **Melbourne 2006:** 34% of impacted businesses had seen or expected export growth.
- **Glasgow 2014:** Trade and investment deal signed with Jamaica in build up to Games and discussions with Toronto and Queensland.
- **Gold Coast 2018:** Estimated annual A\$170 million boost to exports from Trade 2018 programme in the four years after the Games (2018 prices). Over 33% of Australian delegates reported it likely they will achieve export and/or investment deals as a result of their participation at Trade 2018.



Investment

- **Manchester 2002:** £400 million has been invested into new homes and communities as part of a joint venture between the Abu Dhabi United Group (ADUG) and Manchester City Council to regenerate East Manchester. ADUG brought Manchester City Football Club in 2008, who are housed in the stadium built for the Games in 2002 and have invested in the socio-economic and environmental improvement of the area.
- **Melbourne 2006:** 25% of foreign owned 'Business Club Australia – Melbourne 2006' survey respondents had identified a new potential investment opportunity, one third of which were above A\$1 million in value.
- **Gold Coast 2018:** Estimated annual A\$41 million boost to investment from Trade 2018 programme in the four years after the Games (2018 prices). 64% of international delegates likely to increase investments in Australia or buy Australian goods or services following Trade 2018.



Tourism

- **Manchester 2002:** 1.9% growth in annual tourism numbers in two years prior to Games compared to 7.3% growth in year of Games, and 65% growth in 5 years after Games.
- **Melbourne 2006:** 21% growth in annual tourism numbers in four years prior to Games, compared to 23% growth in four years after Games. Growth of 3.4% in Games year.
- **Glasgow 2014:** 22% rise in tourist numbers in the Games year, and a further 26% growth over the next 3 years, compared to 18% fall in annual tourism numbers in four years prior to Games.
- **Gold Coast 2018:** Hosting the Games in 2018 is projected to increase visitor nights in the Gold Coast by over 250,000 per annum for four years after the Games through additional sports events. The economic contribution is estimated at A\$45 million per year (2012/2013 prices).



Hosting the Games promotes community sport participation and elite sporting success

Much of the evidence from host cities of past Commonwealth Games on the positive sports impacts is limited to inputs/activities such as new or improved sporting facilities with some survey-based evidence on motivation and willingness to increase sports participation. PwC's review of this evidence shows that:

- 10% of Victorians took up sports as a result of Melbourne 2006 and adult sports participation increased by 5% in Queensland following Gold Coast 2018
- host countries have all enjoyed enhanced sporting success at the elite level.

No substantive research has been carried out on the well-being impacts for the Commonwealth Games; however evidence from the Olympic and Paralympic Games can be used to indicate the potential well-being impacts of enhanced sporting success. For example, a study estimated that Canadians would be willing to pay between 0.3 billion CAD to 0.7 billion CAD for 'sporting success' of Team Canada in the 2010 Vancouver Winter Olympic and Paralympic Games. This suggests that well-being impacts driven by community and elite sports benefits are significant although, given the scale of events, these are expected to be more modest for the Commonwealth Games compared to the Olympic Games.

Enhanced sporting success

- World-class sporting facilities developed and/or improved to deliver the Games from Manchester 2002 to Gold Coast 2018.

Examples of enhanced sporting success and legacy of the Games:

- **Manchester 2002:** Velodrome became the home of Team GB with track record of success being named the 'medal factory'.
- **Glasgow 2014:** Team Scotland broke their medal-target and made significant contribution to Team GB and Paralympics GB for Rio 2016 with 81 Scottish athletes selected and 27 winning 30 medals, finishing second in the medal tables.
- **Gold Coast 2018:** Australian athletes won the inaugural Australian Institute of Sport (AIS) Performance Awards recognising integrity, fair play and sportsmanship.



Community sports participation

- **Increased opportunities** through investments in venues (e.g. Sportcity in Manchester) and programmes/campaigns.

Limited survey-based evidence shows increased willingness to participate in community sports

- **Manchester 2002:** 50,000 new users registered at new facilities in the year after the Games.
- **Melbourne 2006:** 10% / 13% of Victorians have been encouraged to take up additional physical activity in 2005 / 2006.
- **Glasgow 2014:** Adult (and children) sports participation in Scotland and Glasgow has remained constant over time at around half of the population (51% and 48% respectively) in 2016. Moreover, 'Glasgow Club' (the city's extensive network of sport, leisure and gym facilities) usage increased by more than one million from 5.6 million 2014/2015 to 6.9 million in 2018/19.
- **Gold Coast 2018:** Rise in male (55% to 60%) and female (61% to 66%) sports participation in Queensland from 2016, before the Games, to 2018, after the Games.



Case study: Vancouver Winter Olympics 2010

- Evidence from the 2010 Vancouver Winter Olympic and Paralympic Games indicates that the wellbeing value associated with social and sporting benefits (beyond the economic impacts captured through GDP and employment) are significant. Although the evidence is specific to Canada and the Winter Olympics, it indicates that impacts for the Commonwealth Games, currently not captured in the available evidence, could be significant.
- A study estimated that Canadians would be willing to pay between 0.3 billion to 0.7 billion CAD for 'sporting success'.
- Several factors may have affected this besides watching Team Canada win medals, e.g. 'feel-good' effects of hosting the Games in Canada and the opportunity to see the Games.
- The estimated economic benefit is additional to the impact on GDP and productivity assessed in the previous pages.



Hosting the Games inspires community pride and confidence

Hosting the Games provides the opportunity to 'showcase' diverse aspects of the host city worldwide: the TV audience is 1-1.5 billion and the Games attract extensive media coverage which also boosts the city's profile. Social marketing campaigns add to these effects.

Evidence from past Games on the GDP and employment benefits captures the demand-side economic impacts resulting from increased city profile. Improved visibility of a host city can lead to increased tourism and business activities - captured in the economic impacts - but also improved well-being, confidence and national pride.

Below, examples from past Games illustrate the scale of visibility that hosting the Games can provide to a host city.

Increased 'showcase' of culture

- **Manchester 2002:** 1 billion people watched Opening/Closing Ceremonies. Manchester perceived as England's second city.
- **Melbourne 2006:** 1.5 billion TV audience, 2 million attended cultural Festival with more than 30% indicating increased willingness to attend future cultural events. 90% of overseas visitors would return or recommend Melbourne.
- **Glasgow 2014:** 1.5 billion TV audience; 700,000 visitors to Games and Festival. Increase in National Brand Index from 17th in 2014 to 15th in 2016.
- **Gold Coast 2018:** 1.5 billion TV audience; 1.1 million attendees to the Festival. 93% of visitors had a good or excellent experience and 75% of residents agree that Gold Coast is growing into a world class city.
- **Gold Coast 2018:** The Embracing 2018 Legacy Program engaged communities throughout Queensland in the celebration of Gold Coast 2018 including the Queen's Baton Relay celebrations with 83 communities across Queensland hosting community events as the Queen's Baton Relay travelled the state, carried by more than 1,800 baton bearers.



Impactful digital footprint

- **Glasgow 2014:** 1 million average daily visitors to Games Time website delivering 84 million page views from viewers in 228 different countries.
- **Glasgow 2014:** Social media channels attracted 503,000 followers, who created 3.4million Games Time mentions across the channels.
- **Gold Coast 2018:** As only the third Commonwealth Games to utilise social media, Gold Coast 2018 connected and engaged with a global audience to tell the stories of the Modern Commonwealth.
- **The Gold Coast 2018** website achieved a total 136 million page views and was accessed by people in 236 countries.
- The social media strategy employed by **Gold Coast 2018** proved highly engaging globally, and created a supportive community across over 800,000 total followers. From the 45,000 pieces of published content, this engaged audience delivered in excess of 428 million impressions globally. This took the Gold Coast 2018 Games into the lives of a new global audience.



Hosting the Games promotes social cohesion and engages whole communities through shared experiences

Hosting the Games can affect people's lives and the communities in which they live. These impacts include tangible elements related to improved access to culture and less tangible impacts such as the effect on community cohesion and enhanced pride. Impacts across these areas have the potential to contribute to improved wellbeing.

Evidence from past Games is largely limited to activities and outputs that potentially affect community pride and confidence, for example the cultural and volunteering programme: the Games have, however, been shown to improve community cohesion with up to 14,000 Games-volunteers involved in planning and hosting, increased willingness to participate in community events and increased pride in the local area.

Improved social cohesion and community inclusion

- **Manchester 2002:** 10,500 accredited volunteers; 2,000 from marginalised communities. 73% of Northwest residents believe the Games benefitted the region.
- **Melbourne 2006:** 14,000 volunteers; half of them wanted to keep volunteering. Over 40% of the public indicated a desire to participate in community events in the future.
- **Glasgow 2014:** During the Games there was an 18% reduction in crime in Greater Glasgow compared to 2013. In 2016, more than 40% of the local residents felt the Games had a positive impact on their families. Pride in the local area increased from 60% to 74% between 2012 and 2016.
- **Gold Coast 2018:** The Organising Committee participated in the inaugural Pride in Sport Index™ (PSI) in 2016 / 2017. This benchmarking instrument is designed to measure the inclusion of LGBTIQ+ people within Australian sport and sporting organisations. Year on year Gold Coast's Organising Committee performance improved by 20 per cent which resulted in the Pride in Sport Most Improved Achievement Award 2018.
- **Gold Coast 2018:** Of the 15,000 volunteers, 87% had a good or excellent experience. More than 100,000 Queensland students engaged in Games learning activities.



Case study: Glasgow 2014 'People Make Glasgow' campaign to bring communities together, instil civic pride and showcase what Glasgow has to offer

- In the lead up to 2014, Glasgow City Marketing Bureau was tasked with delivering the project to develop an overarching brand strategy that would position Glasgow across national and international markets as a world-class visitor destination and a dynamic business and investment location.
- It engaged the people of Glasgow in a month-long conversation which was built around the question: 'What makes Glasgow a great city?'
- 'People Make Glasgow' became the new destination brand for the city and provided a platform to show the world Glasgow's strengths during and after the Games, and aimed to attract investment, growth and opportunity to the city.

This campaign still lives on and in the main online site 'What's On' and tourist sites in Glasgow

'All services were trying to benefit from the Games and also contribute to them...waste, highway, children services...Manchester City Council advanced the provision of community services **creating a cohesive system of neighbourhood services rather than reverting back to compartmentalised services...The Games were a catalyst for this change**'

Sir Howard Bernstein Chief Executive Manchester City Council (2000-2016)

The Joint Emergency Services Coordination Centre in the Gold Coast 2018 will remain a permanent facility and, since the Games, has been used for other major events such as the Gold Coast supercars event.

Source: Gold Coast 2018 Post Games report (2019)

Hosting the Games encourages individuals to adopt positive behaviours to the benefit of their local communities

Hosting the Games can be used to influence the behaviours of local communities to achieve positive social and environmental impacts. In Gold Coast 2018 Kurt Fearnley, Australian Closing Ceremony flag bearer and wheelchair racer quoted 'through the medium of sport, this is what our movement represents, hope. Hope that if sport can adjust to include those with disabilities, maybe community can follow'.

Research from past Games is limited to specific programmes with few analyses of long-term legacy benefits having been carried out. The available evidence from post-Games surveys indicates increased future willingness to use public transport, benefit the environment and volunteer. The examples below illustrate the different mechanisms: for further examples please see Section 4 of the main report.

Hosting the Games can be used to promote use of public transport and improve accessibility during and after the Games

- **Melbourne 2006:** A post-Games survey shows that more than 50% of respondents reported increased willingness to use public transport after the Melbourne 2006 Games.
- **Gold Coast 2018:** Interviews with stakeholders indicated an increase in use of public transport from 3% in 2011 to 9% in 2019. This is partly attributed to improved connectivity arising from new transport links accelerated by the Games.
- **Gold Coast 2018** provided equitable access for people with disabilities, ensuring that all people, regardless of their ability, were able to attend and participate in Gold Coast 2018 and related activities. This delivered accessible service provisions for all participants to venues, Festival 2018 sites and transport hubs.

Hosting the Games can be used to increase willingness to volunteer

- **Melbourne 2006:** Positive attitude towards volunteering with 2,000 registered for future events and 90 events supported.
- **Glasgow 2014:** 83% of volunteers already volunteered regularly which means limited scope to increase their willingness to volunteer in the future.
- **Gold Coast 2018:** Games times volunteers helped Gold Coast Supercar 600 event organisers fill all 780 volunteer roles in record time. Moreover, volunteer roles for the Gold Coast Marathon (1,200 volunteers) and the Pan Pacific Masters (1,000) were also very popular.

Hosting the Games can be used as a platform for environmental and sustainability best practices

- **Melbourne 2006:** 60% of respondents to a post-Games survey indicated the Games increased their willingness to act to benefit the environment. 1 million trees were planted to offset Games greenhouse gas emissions by 2,000 volunteers.
- **Glasgow 2014:** Glasgow was awarded ISO 20121 status, the gold international standard in sustainable event management, and set a new benchmark for events held in Scotland.
- **Gold Coast 2018:** Offset 100% of the GHG emissions generated during the Games and was the first Games to measure carbon emissions impacts. Free water refill stations saved 1.7 million single-use plastic bottles.

Hosting the Games can provide a platform for bold discussions leading to social change

In a world first for a Commonwealth Games, and a nationwide first for major Australian events, a **Reconciliation Action Plan (RAP)** was developed for **Gold Coast 2018** with a commitment to deliver legacy outcomes for **Aboriginal and Torres Strait Islanders** people and communities. This includes: \$14 million worth of Games-related contracts and 800 jobs secured for the community and 48 schools receiving grants to promote reconciliation.

Hosting the Games can provide unique learning opportunities for school communities globally

Manchester 2002: A Commonwealth Games Curriculum Pack was developed and received by every school in the UK (33,000).

Engaging with schools was a key focus of the **Gold Coast 2018** Schools Connect, and the Embracing 2018 Legacy Programmes. They provided the opportunity to **connect** local **schools** with a **Commonwealth Games** Association and a school in a Commonwealth nation or territory, creating opportunities for the schools to participate in key **Gold Coast 2018** programmes and milestone celebrations. About 105 000 students from 466 schools were engaged in Commonwealth Games themed learning activities. 90,000 students were informed of the Gold Coast 2018 events and activities through the Schools Connect Programme.

The Games Value Framework provides a holistic basis for assessing the potential costs and benefits of hosting the Commonwealth Games

For cities considering hosting the Games and wishing to apply the Games Value Framework, the **first step** is to review their city context and ambitions.

Cities can then use the Framework to support their decision making by understanding the potential costs and benefits of hosting the Games and how the Games can support a city in achieving its wider aims.



Games Value Framework

A	Costs and benefits statements	Build on a set of eight key statements that describe the potential costs and benefits of hosting the Games in a holistic way to identify the aspects most relevant to their context and ambitions (e.g. economy, sport, social and environment)	
B	Core principles to assess potential costs and benefits	Adopt the core principles to undertake a robust assessment and interpretation of the potential costs and benefits of hosting the Games	
C	Evidence from past Commonwealth Games	Draw on a structured synthesis of the evidence of the cost and benefits of previous Games – including case study evidence – based on four of the last five editions of the Games which can be aligned to potential host cities' ambitions	
D	Critical success factors	Understand the critical success factors required to optimise the value from hosting the Games, based on the lessons learned from past host cities	

A

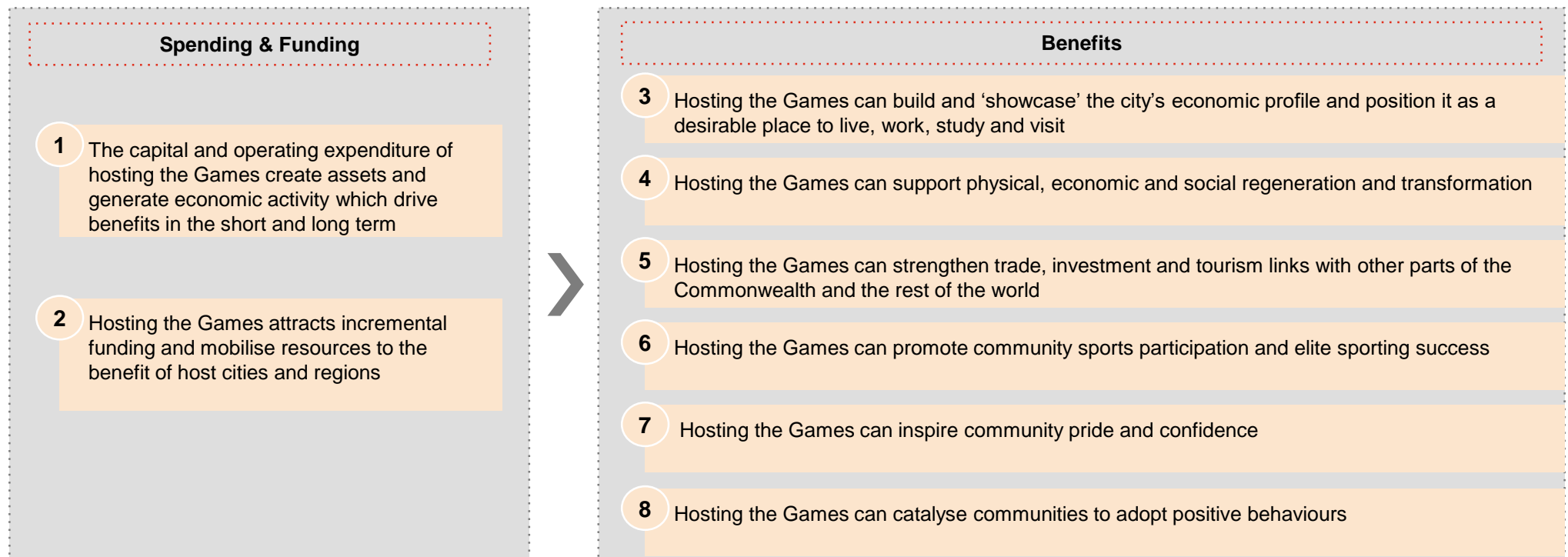
The Framework is based around eight key statements which identify the potential costs and benefits of hosting the Games

The overarching premise of the Games Value Framework is that hosting the Commonwealth Games can deliver a positive return on public investment and can reposition and transform a city. It is based on eight underlying statements which have been developed through engagement with key stakeholders from previous host cities. These define the structure and scale of:

- the financial costs of hosting the Games (e.g. Games-related operating expenditure and capital investments for Games venues and village) and funding
- the resultant benefits, including their type, timing and spatial distribution.

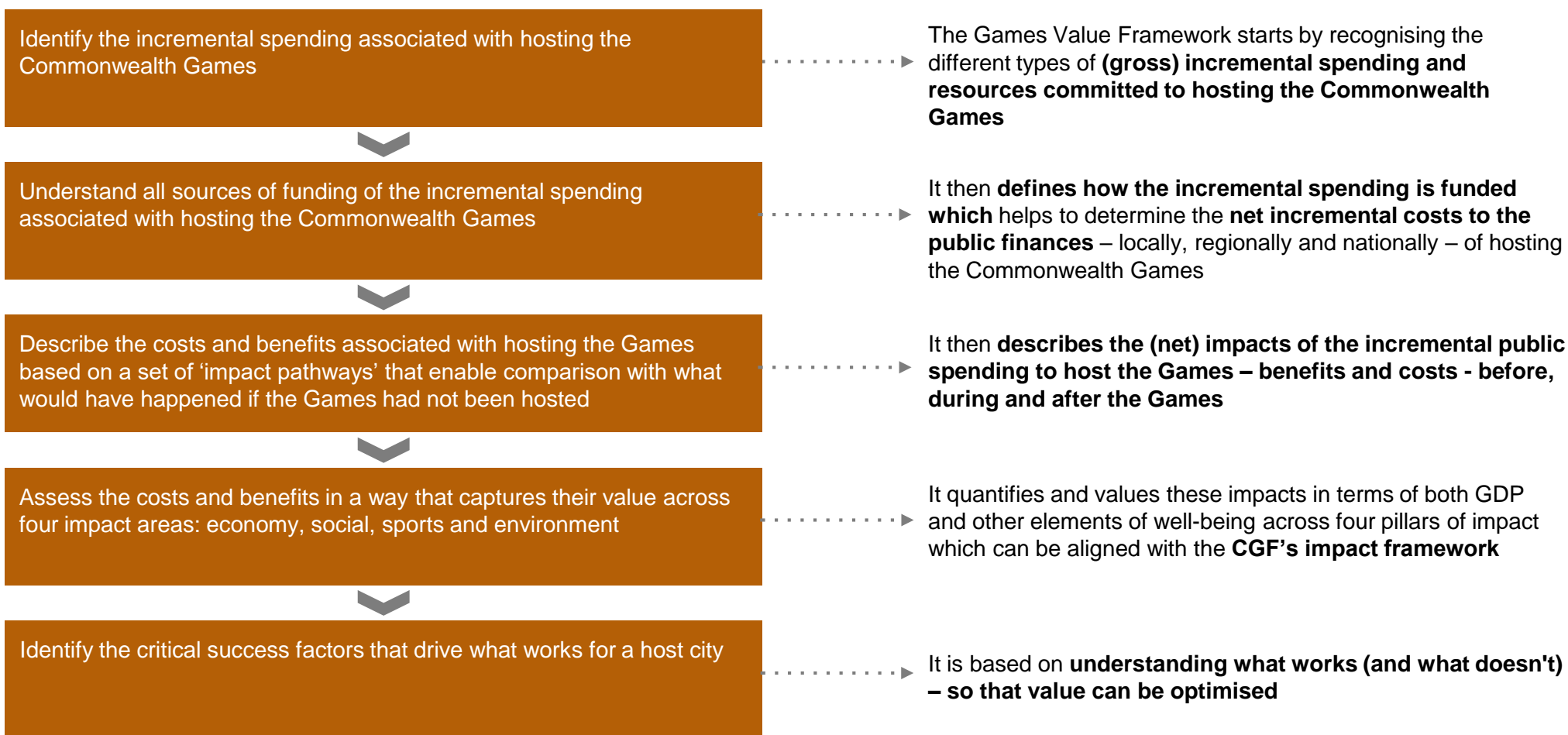
These eight statements enable a prospective host city to assess **the potential costs and benefits of hosting the Games**. They have been used to **structure, summarise and then interpret the available evidence of the costs and benefits of four of the last five editions of the Games from Manchester 2002 to Gold Coast 2018**. Delhi 2010 has been excluded from the analysis because the available evidence on costs and benefits is less complete.

Hosting the Commonwealth Games delivers a positive return on public investment and can reposition and transform a city



B The Framework is underpinned by five core principles

The Games Value Framework provides the basis for developing a holistic view of the returns to hosting the Games. It focuses on assessing the economic and other well-being benefits of (incremental) public spending on the Commonwealth Games and has five core principles.



C

The Framework supports interpretation of the evidence of the costs and benefits of the Games since 2002

1. Structure and scale of Games-related spending

- Total Games-related operating costs have ranged from £221 million for Manchester 2002 to £749 million for Gold Coast 2018, whilst capital costs have varied between £75 million for Glasgow 2014 to £292 million for Gold Coast 2018 respectively.
- The public sector has contributed between 54% (Manchester 2002) and 83% (Gold Coast 2018) of the Games operating costs.
- The Games have provided an effective fiscal dividend to host cities as they have attracted public funding which they would not otherwise have received. For every £1 spent by local government on total Games-related expenditure (operating and capital), the national (and devolved) government contributed £2.7 in Manchester 2002 and £3.0 in Glasgow 2014. In Australia, the state government contributed 75% and 79% of total public-sector Games-related expenditure in Melbourne 2006 and Gold Coast 2018 respectively.
- Many host cities have used the Games as a catalyst to accelerate or enhance the scale of discretionary operating expenditure and capital investments to achieve wider host cities' objectives.

2. Funding of Games-related spending

3. GDP and employment benefits

- Hosting the Games has boosted GDP in the host city/region by between £0.8 billion and £1.2 billion and generated between 13,600 and 23,000 FTE years of employment before, during and after the Games.

4. Regeneration and transformation benefits

- Hosting the Games has catalysed regeneration and transformation of areas across the city and wider region – as seen in the reclamation of a former 146 hectare derelict site in East Manchester. It saw investment in sports, leisure and entertainment facilities, creating many thousands of jobs. House prices improved remarkably between pre and post Games position compared to Manchester and the wider region. £400 million was invested into new homes and communities.

5. Tourism, trade and investment benefits

- Hosting the Games has 'showcased' the host city's culture worldwide with a TV audience of 1-1.5 billion.
- Hosting the Games has led to increases in tourism of up to 25% in the three years after hosting, as well as trade deals agreements and investments of up to £400 million into the host city.

6. Community and elite sports benefits

- Hosting the Games has led to increased sports participation in the host city region from 10% of Victorians taking up sports as a result of Melbourne 2006, and a 5% increase in sports participation in Queensland following Gold Coast 2018.

7. Community pride and confidence benefits

- Hosting the Games has improved community cohesion with up to 14,000 Games-volunteers involved in planning and hosting of Melbourne 2006, of whom 50% indicated they want to keep volunteering. Over 40% of the public indicated increased willingness to participate in community events.

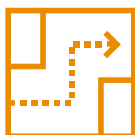
8. Community behaviours benefits

- Hosting the Games has encouraged individuals to adopt positive behaviours to the benefit of their local communities. For example, over 75% of all spectators used public transport during Manchester 2002 and Melbourne 2006.

D

Six critical success factors influence how a city can optimise the value from hosting the Games

A review of the evidence from past Games has highlighted six critical success factors (CSFs) that can support future host cities when planning for a successful Games. The CSFs help to minimise the net cost of hosting the Games and/or maximise the economic, social and environmental benefits. More specific CSFs for particular areas of benefit and cost are listed throughout Section 4 of the main report.



1. Integrate planning for and delivery of the Games into the wider city/region strategies – The Games should be seen as a driver with the potential to influence a city's wider long term strategy, not a stand-alone event. For example, Manchester used the Games as a catalyst for its wider regeneration of East Manchester and to drive transformation of how it delivered local public services.



2. Plan benefits and legacies from the outset – To maximise the long term benefits of hosting the Games, potential legacy outcomes should be planned from the outset (e.g. the post-Games use of new capital assets). There should also be clear legacy leadership, governance and accountability from the outset to ensure that legacy is at the heart of Games planning. For example, the Gold Coast athletes' village was well aligned with the wider Trade 2018 strategy and became an integral part of the wider Gold Coast Health and Knowledge Precinct development after the Games.



3. Put local communities at the heart of the Games – The feel-good factor in the build up to and during the Games is an important benefit which requires local communities to be engaged from the outset. Any antipathy towards the Games puts these benefits at risk and could detract from the positive image the city wishes to project internationally.

Plan the use and integration of Games assets' (volunteers, QBR, teams and athletes, festivals and ceremonies) across host city communities to drive social and community benefits, and shared experiences that enhance social cohesion.



4. Establish partnerships at all levels of government, the private sector and the third sector to combine and lever funds and human resources to achieve wider policy objectives – The Games helps to achieve a wide set of benefits which are key objectives for a range of organisations. As such, a number of different public, private and charity organisations may be willing to contribute to Games' funding. Moreover, existing budgets can be re-allocated to the costs of hosting the Games and existing investment plans can be accelerated.



5. Use the Games as a platform to boost other non-sports events – To help achieve the city's wider objectives, the Games provides a valuable platform for a range of non-sports events before, during and after the Games. For example:

- a year-long programme of cultural events was held in the run up to the Manchester and Glasgow Games in 2002 and 2014 respectively
- a programme of trade and business events has been held alongside each Games since 2002.



6. Build on the momentum generated by the Games – To sustain the benefits from the Games, it is important for the Games to continue to drive benefits in the years after the Games, by hosting follow-on events in Games venues. For example:

- Glasgow 2014 adopted this strategy successfully, securing the inaugural European Championships in 2018 and the Tissot UCI Track Cycling World Cup in 2019
- Gold Coast 2018 also secured a number of high profile events, including the 2019 UCI Track World Cup.

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Acknowledgments

PwC would like to acknowledge the valuable contributions of the Commonwealth Games Federation, CGF Partnerships and those closely involved in the delivery of previous editions of the Commonwealth Games.

Introduction

As part of Transformation 2022, the Commonwealth Games Federation recognises the importance of demonstrating the positive impact of sport on society

Context

The Commonwealth Games Federation (CGF) has recently republished 'Transformation 2022' which sets out its vision, mission, values and strategic priorities for the period 2019 to 2022.

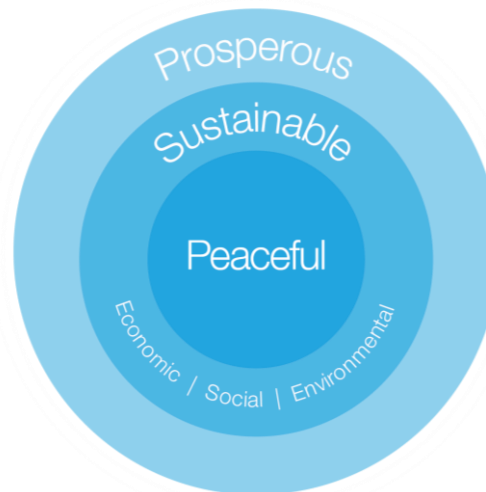
The CGF believes that there has never been a more important time to galvanise and drive the positive impact of sport on society. It wants to be a progressive leader in sport and social change.

The CGF recognises that:

- the Games can be delivered more efficiently, at less cost and with less time, and with a greater focus on generating sustainable benefits for host cities
- prospective candidate cities to host the Commonwealth Games, under increasing scrutiny from taxpayers, need to be able to justify the commitment of scarce government resources as good value for money
- the costs of staging a global event such as the Commonwealth Games can deter those cities that have competing priorities for funding.

The CGF's **vision** is to use sport to create peaceful, sustainable and prosperous communities across the Commonwealth.

Its **mission** is to build an athlete-centred, sports-focused Commonwealth Sports movement across the six regions of the Commonwealth that transforms the destinies of future generations.



The CGF's **values** are:

- **Humanity:** the Commonwealth Sports Movement's purpose and potential is inspired by athletes and citizens
- **Equality:** the Commonwealth Sports Movement's sports and Games are a level-playing field, bringing people together as equals
- **Destiny:** together the Commonwealth Sports Movement can create a more peaceful, sustainable and prosperous future.

The CGF has established an impact structure (see left) aimed at defining, assessing, communicating and, ultimately, driving a positive impact on the diverse societies, economies and physical environments it aims to serve. Its approach is aligned to the three themes outlined in its vision (i.e. peace, sustainability and prosperity) working from the inside-out. Once a peaceful core is established, sustainability can best be delivered through an integrated approach to economic, social and environmental development, which supports and extends communal prosperity (i.e. wellbeing and progress).

The CGF is keen to develop and apply this framework as a guide to maximising and communicating short, medium and long-term returns on investment. It has already taken steps by:

- strengthening the commercial programme, cost management and operational delivery of the Birmingham 2022 Commonwealth Games to help maximise the economic, social and environmental benefits
- commissioning this work to assess and compare the costs and benefits of Games hosting, and the associated community legacies in a way that aligns with its impact framework
- supporting future host cities in the development of their proposals to underpin the delivery of Games which have long-term sustainable benefits as a key driver.

In an increasingly competitive environment, the CGF has identified the need to develop a more compelling benefits story around the Games

The challenge

The CGF has recognised the requirement to demonstrate the value of hosting a Commonwealth Games that is internationally recognised and quantifies the impact of a Games across a range of economic, social and environmental measures.

The CGF understands that it has been difficult to quantify the impact of a previous Games beyond GDP (e.g. wellbeing) for a number of reasons:

- analysis of the impacts of a previous Commonwealth Games has often only been measured in the immediate years after the Games, and legacy achievements or longer-term impacts have rarely been assessed
- the event often acts as a catalyst for bringing forward already planned investment by host cities. The total expenditure on such projects are often erroneously identified as Games-related expenditure and Games-related benefits, i.e. the value of accelerating the realisation of the expected benefits, are not captured appropriately
- some costs will vary from city to city because the Games-related capital expenditure required to host the Games is different and is determined by a host city's immediate context
- the legacy ambitions and objectives may also differ from city to city and this may be reflected in differences in both spend and the associated legacy outcomes. As noted above, the CGF recognises that the evidence on legacy outcomes is often weaker.

With the demand from the public on governments to demonstrate greater transparency on how they spend public money, the need for a host city to develop a transparent and comprehensive view of costs, investments and associated benefits of short and long term value, has never been such a high priority.

The Games Value Framework meets these demands, by providing an informed structure and a consistent approach, built on a review of available evidence from across multiple Games' 'value stories'. This is then used to recognise and quantify associated costs relevant to hosting a Games, and well considered ambitions for legacy built on a host city's specific socio-economic plans.

Planning legacy from the start is vital to optimising value from all investment, and should underpin a host city plan from the outset.



The Games Value Framework has been developed to help the CGF, host cities and other stakeholders assess the costs and benefits of hosting the Games ...

Scope

The CGF has worked with PricewaterhouseCoopers LLP (PwC) to develop and apply a new Games Value Framework that:

- defines the potential costs and benefits of hosting the Commonwealth Games
- articulates how these costs and benefits should be assessed
- collates the existing evidence from recent Commonwealth Games and draws out lessons learned and critical success factors.

The intended audience is the CGF, host cities, Commonwealth Games Associations and other key stakeholders who are seeking to understand the costs and benefits of hosting the Commonwealth Games and how the Games can help cities to achieve their ambitions.

The work has involved:

- engaging with key stakeholders involved in past Games to understand the costs and benefits of hosting the Games
- developing a holistic Games Value Framework that is aligned with the CGF's impact themes of peace, prosperity and sustainability to guide prospective host cities (and other users) on how to assess the anticipated costs and benefits of hosting the Games
- reviewing previous editions of the Games to identify evidence to support each cost and benefit statement, drawing on appraisals and evaluations of the impact of past Games and case studies which have been undertaken to date. The work has reviewed the evidence of the four of the last five editions of the Games from Manchester 2002 to Gold Coast 2018. Delhi 2010 has been excluded from the analysis because the available evidence on costs and benefits is less complete.



... at each stage of the Commonwealth Games lifecycle

Potential host cities go through three stages in the Commonwealth Games lifecycle when they consider whether to host the Games. Once awarded the right to host the Games, a further three stages shape their approach to delivery.

The **Games Value Framework**, which comprises four elements, **supports decision making** at the different stages of the Games lifecycle by:

- enabling **dialogue** between the CGF and prospective host cities
- guiding **feasibility** analysis to support a decision as to whether a city should become a Candidate City
- helping cities appraise the potential value from hosting the Games and preparing formal Candidate City Files for submission to the CGF for evaluation and host city selection as part of the **Candidature** Process
- providing a framework to guide Organising Committees (OCs) and host cities in **planning** for benefit realisation as part of hosting the Games
- guiding host cities in **delivery** of the Games and implementing benefit strategies
- guiding the development of an evaluation framework for the Commonwealth Games and host cities to capture the **legacy** benefits from hosting the Games post-event.

By tracking developments during this lifecycle, the CGF will further improve its processes, so that it can optimise its support for host cities and prospective hosts.

Elements of the Games Value Framework

A	Costs and benefits statements
B	Core principles to assess potential costs and benefits
C	Evidence from past Commonwealth Games
D	Critical success factors



The Games Value Framework provides a holistic basis for assessing the potential costs and benefits of hosting the Commonwealth Games

For cities considering hosting the Games and wishing to apply the Games Value Framework, the **first step** is to review their city context and ambitions.

Cities can then use the Framework to support their decision making by understanding the potential costs and benefits of hosting the Games and how the Games can support a city in achieving its wider aims.

Understand **baseline social, economic and environmental conditions** in host city/region

Review **host city/region's ambitions** - short, medium- and longer-term

Assess **host city/region's existing strategies and plans** for achieving its ambitions

Games Value Framework

A	Costs and benefits statements	Defines a set of eight key statements that describe the potential costs and benefits of hosting the Games in a holistic way to identify the aspects most relevant to their context and ambitions (e.g. economy, sport, social and environment)	
B	Core principles to assess potential costs and benefits	Are the core principles to undertake a robust assessment and interpretation of the potential costs and benefits of hosting the Games	
C	Evidence from past Commonwealth Games	Provides a structured synthesis of the existing evidence of the costs and benefits of previous Games – including case study evidence: can be aligned to potential host cities' ambitions	
D	Critical success factors	Summarises the critical success factors required to optimise the value from hosting the Games based on the lessons learned	

The rest of this report is divided into five further sections

Report section	What questions does the section answer?	What stages in the Games lifecycle is the section relevant to?					
		1	2	3	4	5	6
Costs and benefits statements	<ul style="list-style-type: none"> What are the key costs and benefits which underpin the 'value story' of hosting the Games? 	*	*	*	*		
Core principles to assess potential costs and benefits	<ul style="list-style-type: none"> What key analytical principles should guide assessment of the costs and benefits of hosting the Games? 	*	*				
Evidence from past Commonwealth Games	<ul style="list-style-type: none"> What is the existing evidence from past Games for each of the costs and benefits? What case studies support understanding of the impacts of the Games? 	*	*	*	*	*	*
Critical success factors	<ul style="list-style-type: none"> What 'lessons learned' can be learned from past host cities about optimising the value from hosting the Games? 	*	*	*	*	*	*
How to apply the Games Value Framework	<ul style="list-style-type: none"> How should a potential host city decide whether to host the Commonwealth Games? What steps should prospective host cities take to apply the Games Value Framework? 	*	*	*	*	*	*
Appendices	<ul style="list-style-type: none"> What is the availability and quality of evidence? What were the costs and funding of past Games? Where can the existing evidence be found? 						

A

Costs and benefits statements

*Why cities host the Commonwealth
Games*

The Games Value Framework is based around eight key statements which identify the potential costs and benefits of hosting the Games

The overarching premise of the Games Value Framework is that hosting the Commonwealth Games can deliver a positive return on public investment and can reposition and transform a city. It is based on eight underlying statements which have been developed through engagement with key stakeholders from previous host cities. These define the structure and scale of:

- the financial costs of hosting the Games (e.g. Games-related operating expenditure and capital investments for Games venues and village) and funding
- the resultant benefits, including their type, timing and spatial distribution.

These eight statements enable a prospective host city to assess **the potential costs and benefits of hosting the Games**. They are used to **structure, summarise and then interpret the available evidence of the costs and benefits of four of the last five editions of the Games from Manchester 2002 to Gold Coast 2018**. Delhi 2010 has been excluded from the analysis because the available evidence on costs and benefits is less complete.

Hosting the Commonwealth Games delivers a positive return on public investment and can reposition and transform a city



Costs and benefits statement 1

1 The capital and operating costs of hosting the Games create assets and generate economic activity which drive benefits and legacies by:

1. Generating economic activity and tangible operating assets which drive benefits and legacies.
2. Driving new capital investments that build new and/or improved assets for legacy use.
3. Accelerating and/or enhancing the scale/quality of planned investments. This supports wider objectives such as investments in hard infrastructure (e.g. transport and public realm improvements).

Costs and benefits statement 2

2 Hosting the Games attracts incremental funding and mobilise resources to the benefit of host cities and regions by:

1. Generating revenues for public sector organisations responsible for delivery of the Games in the form of income from sponsorship, broadcast, ticketing, hospitality and merchandising: these revenues partly offset the gross costs of hosting the Games.
2. Attracting incremental national and/or regional funding to the host city. This contributes to spending that is required to host the Games and other spending that is influenced by the Games but not required.
3. Attracting incremental private sector investments to the host city to drive benefits and legacies.
4. Mobilising human and financial resources from local and regional third-sector partners to drive benefits and legacies.
5. Raising funds for local, national, and international charities.

Costs and benefits statement 3

3 Hosting the Games can build and 'showcase' the city's economic profile and position it as a desirable place to live, work, study and visit by:

1. Boosting local, regional and national GDP and employment before and during the Games: Games operating expenditures and capital investments have a positive economic multiplier effect locally, across the region and nationally.
2. Adding to local, regional and national GDP and employment after the Games by:
 - a. Enabling the city to attract sustained inbound tourism.
 - b. Enabling the city to attract more sporting and non-sporting events (e.g. cultural or business festivals and conferences).
 - c. Profiling the city nationally and internationally as an attractive place for students.
 - d. Profiling the city nationally and internationally as an attractive place for starting a career or retaining talent.
 - e. Enabling the city to diversify the local economy, e.g. build and profile the local arts and cultural industries.
3. Adding to local, regional and national GDP and employment after the Games by boosting productivity through:
 - a. Improving the skills of the workforce and those looking to access the workforce (e.g. senior school and university students).
 - b. Enhancing the capabilities and competitiveness of local businesses.

Costs and benefits statement 4

4 Hosting the Games can support physical, economic and social regeneration and transformation by:

1. Regenerating deprived areas within the host city boosting local economies, attracting investment and enhancing community cohesion.
2. Transforming areas within the host city boosting local economies, attracting investment and enhancing community cohesion.

Costs and benefits statement 5

5 Hosting the Games can strengthen trade, investment and tourism links with other parts of the Commonwealth and the rest of the world by:

1. Catalysing trade deals with other Commonwealth (and non-Commonwealth) countries.
2. Attracting inward investment from other Commonwealth (and non-Commonwealth) countries.
3. Attracting sustained tourism.

Costs and benefits statement 6

6 Hosting the Games can promote community sport participation and elite sporting success by:

1. Enhancing (elite) sporting success in the host country which boosts pride amongst citizens and produces positive role models for young people.
2. Driving healthier living by promoting community sport participation as:
 - a. Games-related capital investments provide new venues for increased sport participation after the Games.
 - b. Games-related complementary events and programmes (e.g. 'come and try' opportunities) promote sustained sport participation.

Costs and benefits statement 7

7 Hosting the Games can inspire community pride and confidence by:

1. Generating a 'feel-good' factor by boosting civic pride amongst citizens locally, regionally and nationally.
2. Promoting social cohesion and engage whole communities through shared experiences.
3. Building confidence in the capabilities of local, regional and national government institutions to enable efficient delivery of public services.
4. Creating positive partnerships between various levels of government and near-government organisations (e.g. emergency services building a joint command centre).

Costs and benefits statement 8

8 Hosting the Games can catalyse communities to adopt positive behaviours by:

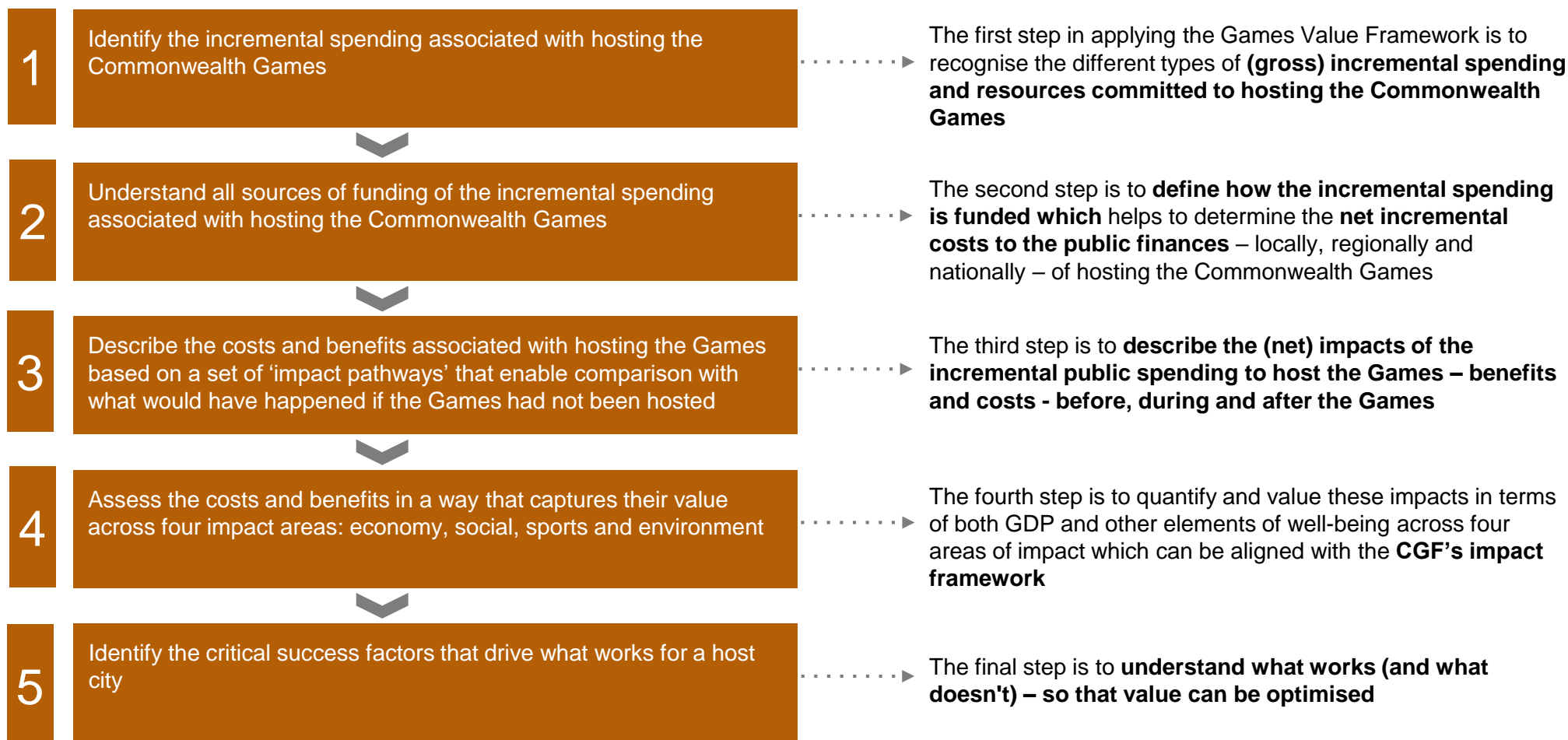
1. Promoting use of public transport among residents both during and after the Games.
2. Providing a platform for showcasing environmental and sustainability best practices.
3. Increasing willingness to volunteer.
4. Providing a platform for bold discussions leading to social change (e.g. on reconciliation, LGBTQ, gender equality, mental health, body image, disability / accessibility, human rights, etc.).
5. Providing educational opportunities for locals and visitors, expanding their world view through interactions with Commonwealth athletes, visitors, schools in other Commonwealth countries, and digitally through the Queen's Baton Relay.

B

Core principles to
assess potential costs
and benefits

The Games Value Framework is based on five core analytical principles

The Games Value Framework provides the basis for developing a rigorous view of the returns to public spending to host the Games. It focuses on assessing the economic and other well-being benefits of (incremental) public spending on the Commonwealth Games. This is based on five core principles.



There are two key categories of Games-related spending and two types of discretionary spending and investment

Expenditure linked to hosting the Games can be divided into **three main categories**:

- **Games-related operating expenditure**
- **Capital expenditure on Games-related venues and village**
- **Discretionary operating expenditure to achieve host cities' wider objectives** where the effect of hosting the Games is to accelerate or enhance the scale of expenditure, typically to meet legacy objectives.

In addition, host cities often use the Games as a **catalyst for accelerating infrastructure investments (i.e. accelerated discretionary capital investment)**.

The distinction between Games-related expenditure and the other categories of spending is important because of what it implies about the choices made by the host city, what would have happened if the city had not been the host (i.e. the counterfactual) and how the benefits should be assessed. For example, where a host city invests to improve a venue to host the Games, and this spending was not envisaged prior to the award of the Games, all the (incremental) benefits associated with the spending can be attributed to hosting the Games. In contrast, where a host city invests to improve its transport infrastructure in part to improve visitors' experience at the Games knowing that the investment would otherwise have happened at a later date, the incremental (net) benefits attributable to hosting the Games is the value of accelerating realisation of the expected benefits.

The distinction between **capital** and **operating expenditure** is also important as the profile of the benefit streams from each category differs. Although capital expenditure boosts demand in the short term through the associated construction programme, it is the longer term benefits that arise from use of the assets which are most significant especially if they generate supply-side improvements which enhance the productivity of the local (and national) economy. In contrast, operating expenditure has a short term effect on demand, which may be bolstered in the longer term, for example if tourism is boosted (a demand side benefit) and/or if supply-side legacy benefits arise (e.g. through improvements in skills and productivity - such as through a volunteering programme). Any cost-benefit analysis needs to consider all these impacts.

Games-related spending

Operating spending to deliver the Games (notably that of the Organising Committee)

e.g. Organising Committee staff, venue management sport, technology, marketing, security, logistics

Capital spending on sporting and other infrastructure needed to host the Games

e.g. development and upgrade of venues and athletes' village

Discretionary operating spending to achieve host cities' wider objectives

Other operating spending to meet the host city's wider objectives

e.g. specific legacy activities such as education and skills development legacy programmes

Accelerated discretionary capital investment

Capital investment to support wider objectives partly influenced by the Games

e.g. improvements to transport infrastructure

The focus of the Games Value Framework is on the spending that is incremental (i.e. it would not have happened had the Games not been hosted)

Host cities generate commercial revenues, attract private sector contributions and secure funding from regional and national governments

The Games Value Framework recognises that capital and operating spending by the public sector needed to host the Games can be an important catalyst for other private spending

- Local, state / devolved and national governments have historically funded some of the spending to prepare for and host the Commonwealth Games and realise its legacy potential; they have also underwritten other funding which comes from ticket sales, media rights, sponsorship and other third parties.
- This means that when assessing the value of hosting the Games the focus should be on the costs and benefits arising from all public spending (through local, state / devolved, or national governments) that is specifically needed to deliver the Commonwealth Games and realise host cities' wider objectives. Such spending may have taken place before the Games (from the date of the commitment to bid-or the bid being successful – to the start of the Games and in the years following the Games). This may cover operating and capital spending.

Host cities may also spend on projects intended to realise host cities' wider objectives, which may have been accelerated or increased as a result of the Games

- In addition, additional public (and private and third sector) spending can be accelerated by the Games – but not needed to enable the Games to be hosted. This spending (public and by other sectors in the economy such as charities and the wider third sector) may deliver enhanced benefits by bringing investment and other activities forward.

The Games Value Framework focuses on how the incremental spending is funded to determine the net costs to both local and wider government finances

The Games Value Framework relies on a set of impact pathways to identify and assess the net impacts of the incremental public spending to host the Games

Analysis of the impact of the (incremental) spending to host the Games needs to be conducted in a clear and consistent manner to show how it produces outputs, outcomes, and, in particular, impacts. The maps between public spending (inputs) and the resulting benefits (outcomes/impacts) are sometimes known as 'impact pathways'.

Each impact pathway needs to recognise the socio-economic context of the host city and relevant external factors which may affect the relationship between the inputs, outputs, outcomes and impacts. These impacts need to be considered before, during and after hosting the Games.

Assessing impacts systematically in this way helps to understand the causal linkages between (incremental) spending and the resultant impacts (benefits or costs). These may be both intended and unintended.

Theory of change	Definition	Example – Glasgow 2014, community sport
Context	The context and background to the spending linked to the Commonwealth Games	Aim to improve from existing level of community participation in sport
Activities	The material and human resources (inputs) used to undertake the tasks which underpin the project	Upgrading sporting facilities
Outputs	The deliverables that directly result from the inputs and activities	Short term: Commonwealth Games held in venue Long term: community sports centres available
Outcomes	The changes which result from the project outputs over the short, medium and long term	Increased participation in sport, increased community cohesion
Impacts	The economic, social, sporting and environmental impacts of the associated outcomes	Improved population health, increased economic activity, enhanced wellbeing

The Games Value Framework describes the (net) impacts of the incremental public spending to host the Games – benefits and costs - before, during and after the Games

The impact pathways that underpin the Games Value Framework explain how the incremental public spending drives impacts – benefits and, possibly, costs

It is important to understand the extent of 'additionality' of the identified benefits: specifically, consideration needs to be given to what would have happened if the Commonwealth Games had not been hosted by the city and the associated incremental public spending had not occurred. This means thinking about:

- what, if any, public spending would have occurred if the Commonwealth Games had not been hosted (and when it would have happened) - the appropriate counterfactual
- whether some outcomes might have been expected without the Commonwealth Games - the extent of 'deadweight'
- whether there is 'displacement' and 'substitution' in product, labour, and in some cases, capital markets
- when the actual (and expected) impacts will accrue
- where the benefits accrue – how far they are outside the host city.

Such an assessment provides the basis for understanding of **how the impacts of public spending on the Commonwealth Games compare to those that would have happened otherwise (i.e. the net impacts)**.

Methodological note

After developing the 'counterfactual' scenario the next step is to assess the net impact of hosting the Commonwealth Games. 'Additionality' should be calculated with consideration of 'leakage', 'deadweight', 'displacement' and 'substitution' effects.

- 'Leakage' effects benefit those outside of the geographical area or group which hosting the Games is intended to impact
- 'Deadweight' refers to outcomes which would have occurred in the absence of hosting the Games.
- 'Displacement' and 'substitution' impacts are closely related. They measure the extent to which the benefits of hosting the Games are offset by reductions of output or employment elsewhere.
- For example, a project may attract investment which would otherwise have gone to other parts of the country. The geographical focus of regeneration projects means that it is particularly important to assess displacement effects at both the local and national levels, especially if the investment is substantial.
- Similarly, substitution effects may arise in situations in which a firm substitutes one activity for a similar activity (e.g. recruiting a different job applicant) to take advantage of government assistance.

In summary, the net benefit of hosting the Games equals the gross benefits less the benefits that would have occurred in the absence of intervention (the 'deadweight') less the negative impacts elsewhere (including 'displacement' of activity), plus multiplier effects.

Sources: HM Treasury Green Book

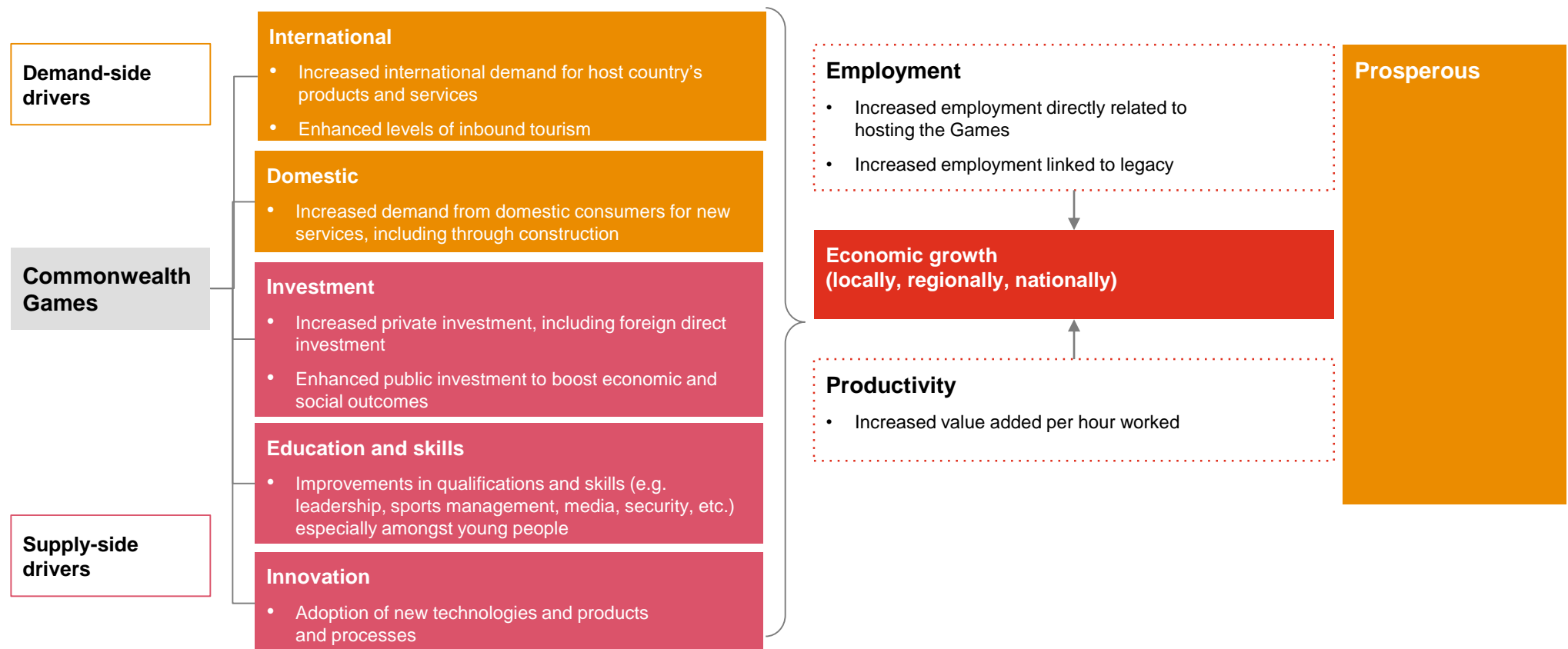
The Games Value Framework focuses on understanding what would have happened in the absence of hosting the Games (the 'counterfactual')

Economy: Hosting the Commonwealth Games can generate positive net economic impacts - locally, regionally and nationally - driven by increased demand and supply-side boosts

This area focuses on the direct impact on value added (or GDP), rather than the broader definition of economic welfare which is considered as part of other impact areas. A positive impact on GDP can be generated through two channels:

- Increased employment
- Increased productivity of existing workers.

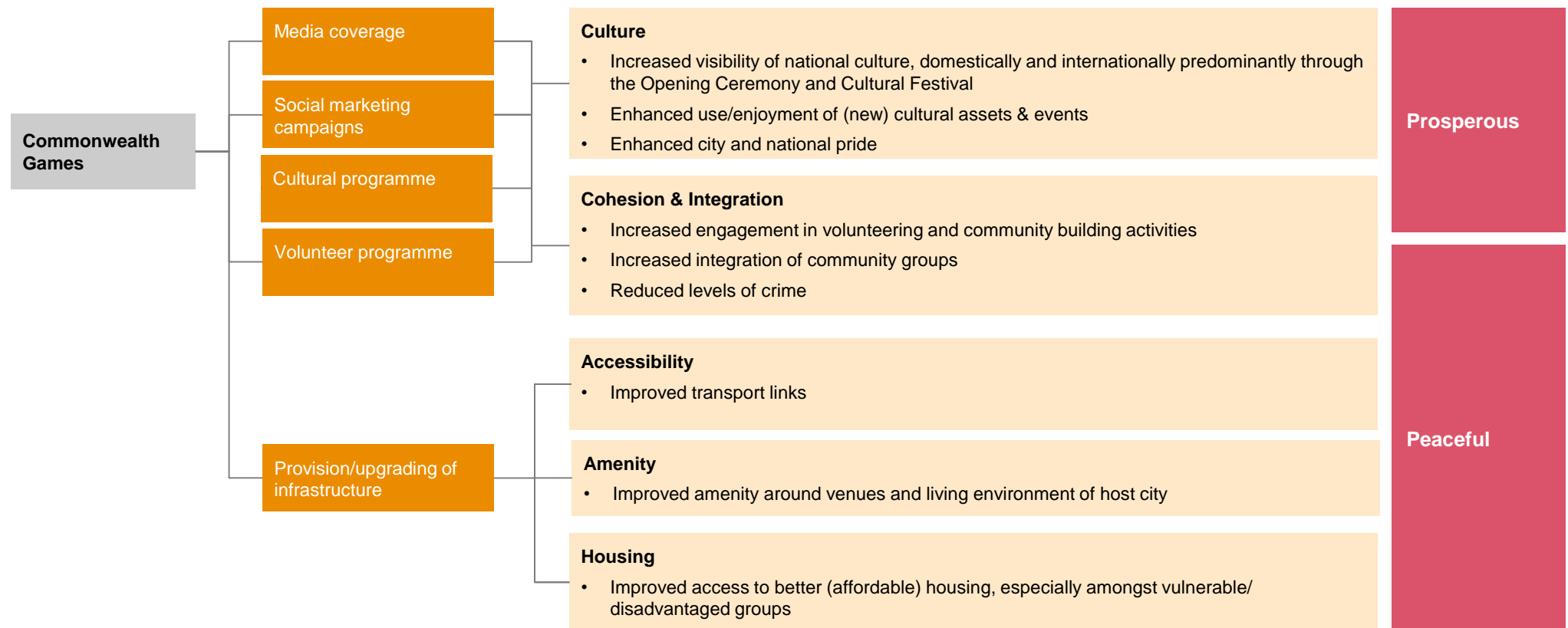
Hosting the Games can impact each channel directly and indirectly through demand and supply side drivers (e.g. investment, innovation and trade). Moreover, the increased GDP from hosting the Games can occur at the local, regional and /or national level.



Social: Hosting the Commonwealth Games can positively impact citizens and communities within the host city and nationally

Public spending (and catalysed private investment) on the Commonwealth Games can benefit people's lives and the communities in which they live.

These social impacts take many forms. These include **tangible** elements related to improved access to better (affordable) housing, transport and culture as well as less **tangible impacts** such as the effect on community cohesion including enhanced pride in national (and city) culture and the bringing together and inclusion of all groups of society.



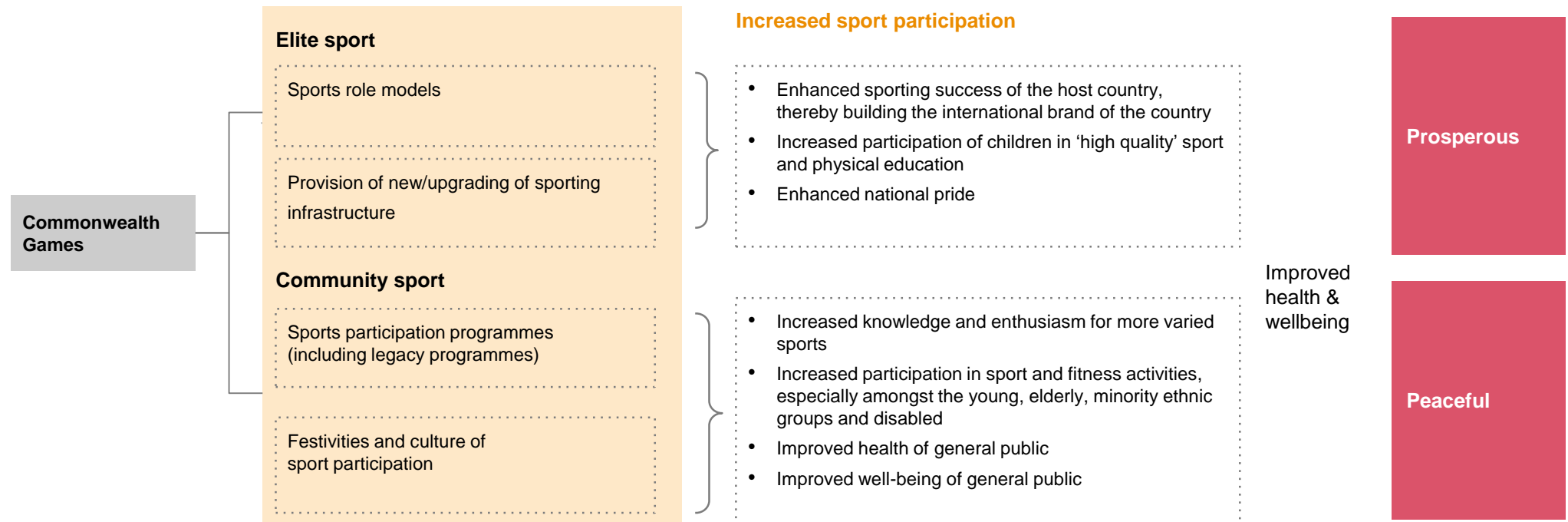
Sport: Hosting the Commonwealth Games can boost pride by enhancing sporting success at elite level and boosting participation at community level

The sporting impacts of the Commonwealth Games take two potential forms:

- the impact of elite sport is likely to be increased national pride associated with sporting success
- the impact of community sport is primarily related to the health and wellbeing impacts of increased participation in sport (better quality of life and reduced need for healthcare).

Spending to host the Commonwealth Games facilitates these impacts through:

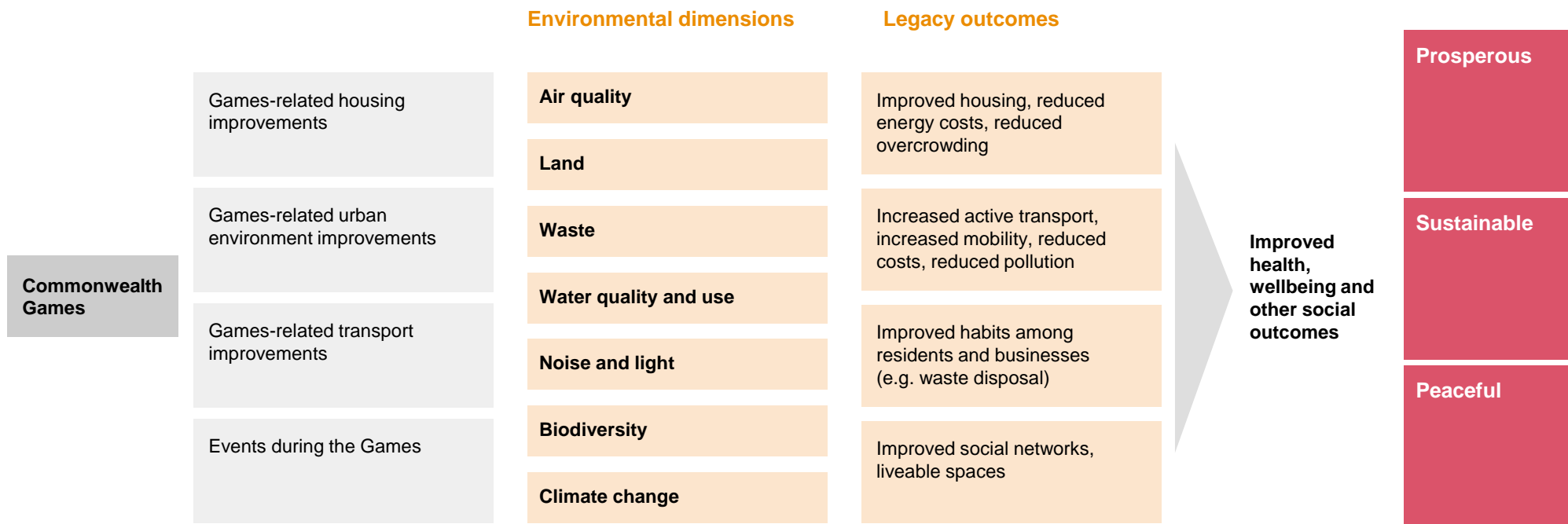
- improved training opportunities for elite athletes
- increased access to regular physical activity for all members of society (including the young, elderly and disabled)
- enhanced promotion of physical activity as a key element of improved health and wellbeing.



Environment: Hosting the Commonwealth Games can improve environmental conditions in the host city and beyond

Spending to host the Commonwealth Games can improve environmental conditions in the host city (and more widely) across multiple dimensions, notable air quality, land, waste, water quality and use, noise and light, biodiversity and climate change. Whilst the CGF promotes sustainability of the Games, the direction, timing and scale of the impacts depend on the activities linked to spending on the Games. In some cases, the short term impacts before or during the Games may be negative (e.g. as a result of construction), but offset by longer term improvements in the legacy period (e.g. as a result of green spaces developed, increased use of public transport, sustainability practices embedded in new venues).

The Games Value Framework focuses on measuring and valuing the non-market impacts on the environment.



The Games Value Framework captures impacts in four areas which align with CGF's impact structure of peace, prosperity and sustainability

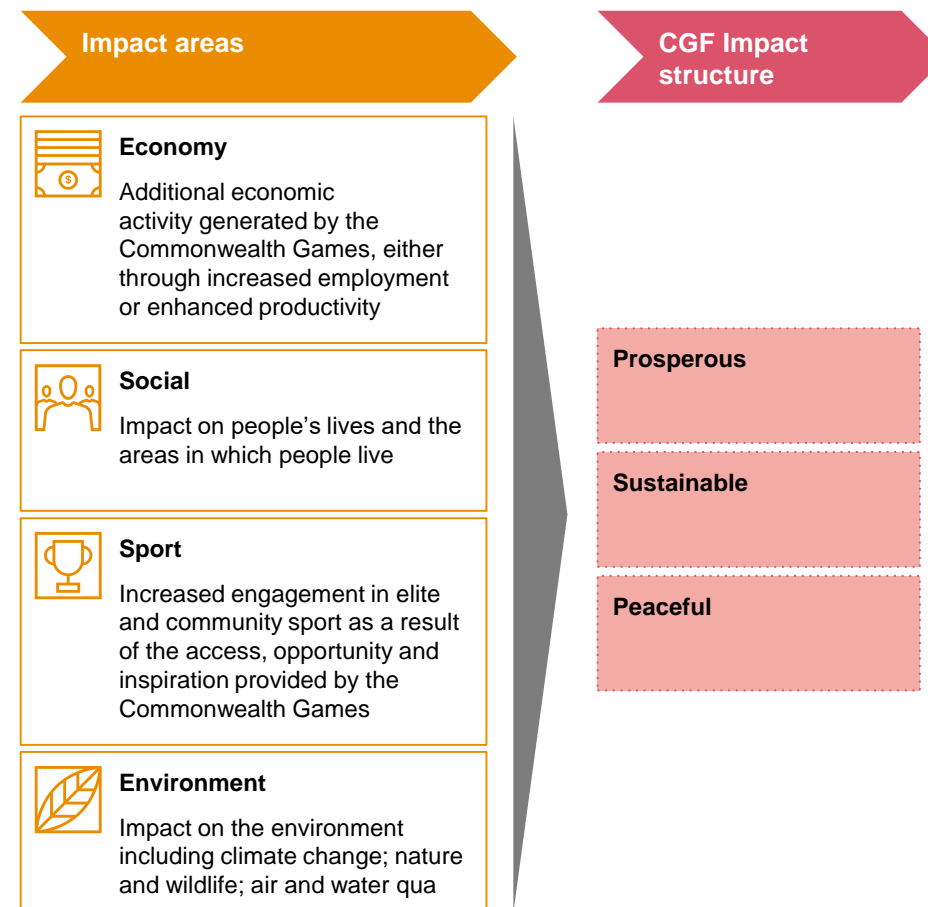
Capturing both GDP and other elements of wellbeing benefits in the Games Value Framework

The Games Value Framework provides a holistic structure for assessing all the impacts of spending to host the Commonwealth Games in a way that reflects their value to society as a whole. A key challenge in cost-benefit analysis is how to put a monetary value on the impacts.

The change in GDP is often used as a measure. It reflects the change in value of economic activity based mainly on the value of market transactions. Such a valuation does not fully capture the wider impact on society's wellbeing because it does not reflect, for example:

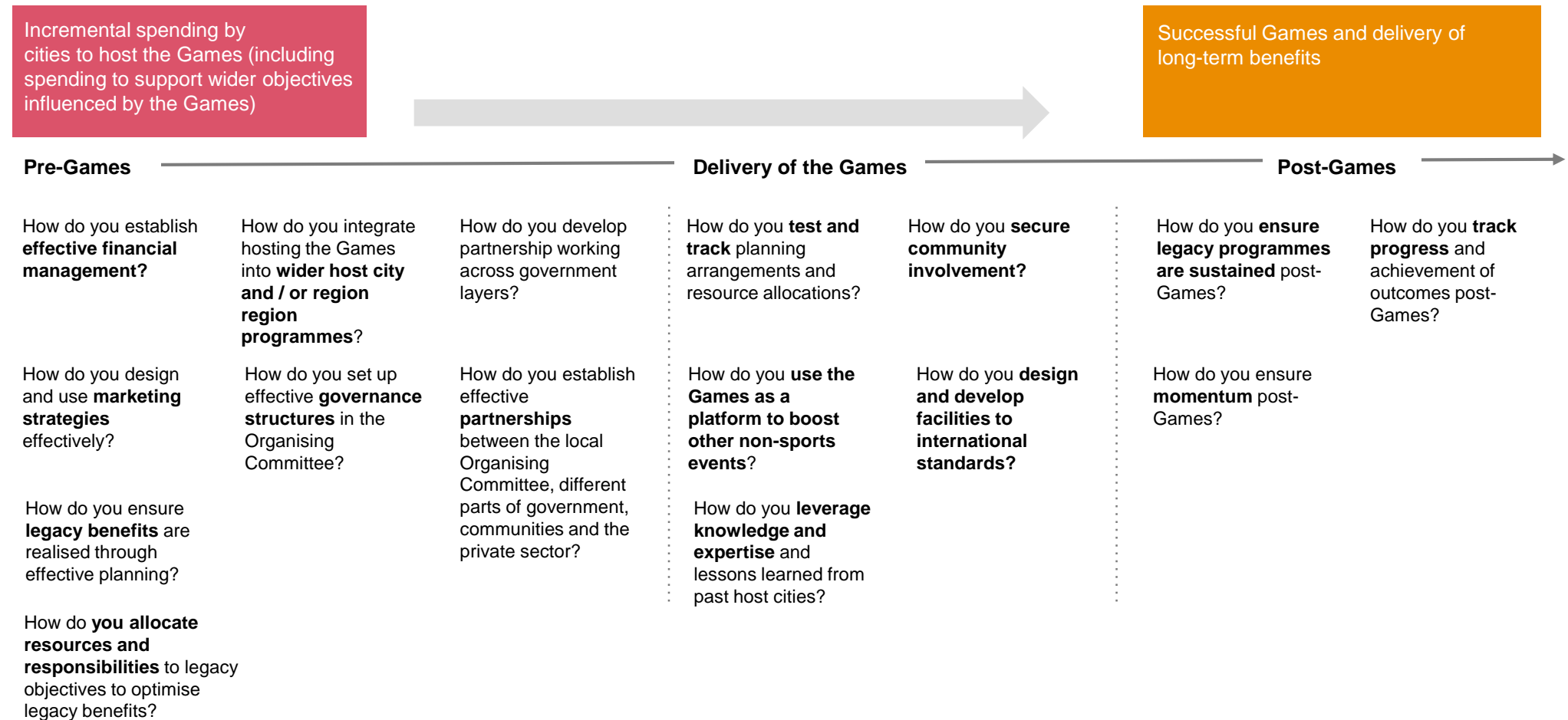
- changes in the value of **goods and services which are not traded in markets** (e.g. public services)
- changes in **externalities** such as environmental impacts which are not reflected in market prices
- changes in available **leisure time** (e.g. if road transport improvements reduce journey times)
- changes in people's quality of life as reflected in their subjective wellbeing
- how the impacts are **distributed across different groups in society** – evidence suggests that some groups (e.g. those with low incomes) attach more value to improvements to their incomes and wellbeing than other groups.

To understand the impacts of incremental public spending on the Commonwealth Games, the Games Value Framework captures the impact on both GDP and other elements of wellbeing across the four key impact areas. Each impact area spans the preparation, delivery and legacy of the Commonwealth Games.



The Games Value Framework assesses the costs and benefits of hosting the Commonwealth Games across four impact areas – economy, social, sport and environment

The Games Value Framework identifies those key factors that influence how far hosting the Games actually delivers value against its potential to do so



Note: This is an illustrative list to demonstrate how the Value Framework enables the identification of critical success factors.

Summary: The Games Value Framework provides a holistic basis for assessing the value of hosting the Commonwealth Games

Spending & Funding

Games-related spending

Operating spending to deliver the Games (notably that of the Organising Committee)

Capital spending on sporting and other infrastructure needed to host the Games

Discretionary operating spending to achieve host cities' wider objectives

Other operating spending to meet the host city's wider objectives

Accelerated discretionary capital investment

Capital investment to support wider objectives partly influenced by the Games

Benefits

The Games Value Framework impact areas



Economy
(enhanced GDP)

GDP (value added)



Social
(e.g. culture, community)



Sport
(e.g. community and elite sport)



Environment
(e.g. noise, air pollution)

Economic welfare (wellbeing)

The CGF impact structure

Prosperous

Sustainable

Peaceful

C

Evidence base
from past
Commonwealth Games

This section summarises the evidence base for each of the eight costs and benefits statements

This section is broken down into **eight sub-sections each covering one of the statements** which together provide a holistic basis for understanding the costs and benefits of hosting the Games. Each statement is made up of a set of subsidiary statements that support the overall statement. Moreover, each statement is part of the holistic Games Value Framework and is closely linked with the other statements. The analysis notes the key linkages throughout this section.

For each statement this section provides:

- A summary of the **impact pathway** - linking the activities associated with hosting the Games to the resulting outcomes and impacts
- a summary of the **existing evidence** for each of the past four Commonwealth Games (and, where relevant, other similar events)
- an assessment of the **critical success factors** identified in the existing evidence that is relevant to the specific statement.

The evidence presented covers the four editions of the Games considered in this report: Manchester 2002, Melbourne 2006, Glasgow 2014 and Gold Coast 2018. This is supplemented by additional evidence from other similar international events. Case studies from the past four Commonwealth Games are also presented to supplement the quantitative evidence.

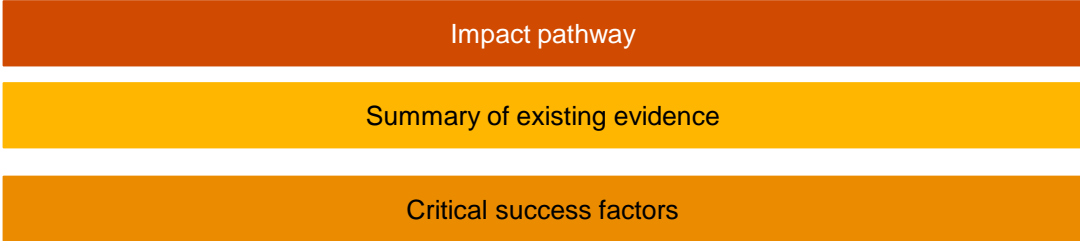
Appendix 1 provides a summary of the available evidence, its quality and **how to apply and interpret the evidence** presented, noting any **key limitations which readers of the report should consider..**

To aid comparison between different editions of the Games, all the costs are converted into British pound (£) at 2018 prices using purchasing power parity (PPP) exchange rates from the OECD. The UK GDP deflator from the Office of National Statistics is used to convert them to a consistent 2018 price basis. Appendix 2 provides more information on the methodology as well as the original costs in the currency of the host country and at the price level of the year of the Games.

Example structure for a cost & benefit statement

- 1
- The capital and operating costs of hosting the Games create assets and generate economic activity which drive benefits and legacies
- 1.1 Games operating expenditure can generate economic activity and tangible operating assets which drive benefits and legacies.
- 1.2 Hosting the Games can drive new capital investments that build new and/or improved assets for legacy use.
- 1.3 Hosting the Games can accelerate and/or enhance the scale/quality of planned investments which supports wider objectives such as investment in hard infrastructure (e.g. transport and public realm improvements).

For each statement (e.g. 1.1) the section covers three areas:



1

Structure and scale of
Games-related costs

Costs and benefits statement 1

1 The capital and operating costs of hosting the Games create assets and generate economic activity which drive benefits and legacies by:

1. Generating economic activity and tangible operating assets which drive benefits and legacies.
2. Driving new capital investments that build new and/or improved assets for legacy use.
3. Accelerating and/or enhancing the scale/quality of planned investments. This supports wider objectives such as investments in hard infrastructure (e.g. transport and public realm improvements).

Introduction

- The statement is structured to provide a breakdown of the total Games-related costs based on the evidence from past Commonwealth Games:
 - Games-related operating expenditure.
 - Games-related capital expenditure.
 - Discretionary operating expenditure and capital investments.
- It considers the various types of costs and discretionary investments associated with hosting the Games. When reviewing these costs, it is important to evaluate them in relation to the benefits generated from the Games and captured in Statement 3 onwards.
- Finally, this statement considers the scale and structure of the spending and investment related to hosting the Games. The next statement (1.2) explores how these costs were funded. A proportion of the costs are offset by revenues and private sector contributions. Moreover, the costs are funded by different tiers of government (e.g. city, regional/state, national).

Assessment of the evidence

- The operating expenditure of hosting the Games is generally well reported among past hosts. By contrast, the quantity and quality of evidence on accelerated capital investments is more varied.
- To support the comparability of costs across each of the past Games, figures have been converted into £, and are expressed in 2018 prices (see Appendix 2 for details of these conversions). Nevertheless, comparisons should be made with caution, given the variation in reporting approaches of past hosts.

1.1 Games-related operating expenditure generates economic activity and tangible operating assets which drive benefits and legacies

Impact pathway

This statement considers the operating expenditure associated with hosting the Games. By enabling the Games to take place, however, these costs drive the legacy benefits considered in other statements. In addition, they provide lasting value in themselves through a number of channels which are summarised in the impact pathway below.

Games-related operating expenditure:

Games-related operating expenditure, for example:

- Security
- Temporary venue fit out
- Volunteers
- Technology and broadcasting

Discretionary operating expenditure, for example:

- Cultural events
- Business and trade events
- Look and feel of city
- Sustainability programmes
- Community sport programmes.

Assessed in the sub-sections below

Benefits beyond the Games:

General legacy benefits of Games, for example:

- Tourism
- Social cohesion
- Change in habits towards environment, etc.

Specific operating assets linked to spend, for example:

- A set of trained volunteers with experience of working on complex multi-sport events
- Improved partnership working between layers of government, the private sector, and the third sector
- Experience as a city of hosting large international events
- Improved collaboration between public services.

Assessed in subsequent statements

Summary of evidence

Summarised below are the total Games-related and discretionary operating expenditure for each of the past Commonwealth Games considered in this report. All costs are presented in £ million at 2018 prices to aid comparability between Games. A detailed breakdown of the various categories of spend and the sources for the data are presented in Appendix 2. The benefits generated from this spend are outlined in subsequent Statements.

The costs outlined below are all expressed in gross terms. A portion of these costs is offset by Games generated revenues (see Statement 2.1). The differences in Games-related operating expenditure are in part driven by differences in the host city baselines and wider objectives. In particular, the Games-related operating costs for Manchester 2002 exclude security costs and the estimates for Gold Coast 2018 include in-kind contributions of over £120 million. All Games invested a similar amount in discretionary operating expenditure.

Manchester 2002:

Games-related operating
expenditure:

£221 million

Discretionary operating
expenditure:

£30 million

Melbourne 2006:

Games-related operating
expenditure:

£577 million

Discretionary operating
expenditure:

£29 million

Glasgow 2014:

Games-related operating
expenditure:

£498 million

Discretionary operating
expenditure:

£28 million

Gold Coast 2018:

Games-related operating
expenditure:

£749 million

Discretionary operating
expenditure:

£45 million

Sources: PwC analysis. All figures are presented in £ million at 2018 prices (PPP exchange rates from OECD, UK GDP Deflator from the Office for National Statistics). See Appendix 2 for further details on these conversions, including an example calculation.

**Critical
success
factors**

- **Minimising planning time to control operating expenditure:** There may be opportunities to reduce the planning time for the Commonwealth Games to minimise operating expenditure to the Organising Committee. The Birmingham 2022 Games will provide a useful case study for the feasibility and impact of a reduced planning timeline given the shorter timescale it is working to, following the change in host city from Durban in 2017.
- **Use the new Commonwealth Games Federation Partnerships (CGFP) delivery structure:** Future host cities can potentially leverage CGFP to help them manage their costs more effectively by drawing upon CGFP's new Games delivery model and long term commercial strategies.
- **Avoiding duplication through clear responsibilities:** To keep costs to a minimum, future hosts should apportion responsibility clearly among stakeholders. This will avoid duplication, whilst also ensuring accountability for outcomes.

1.2 Hosting the Games drives investments that build new and/or improved assets for legacy use

Impact pathway

This statement considers the expenditure on new or improved ‘hard’ infrastructure developed to host the Games (for example, stadia and the athletes village). New and improved “soft” infrastructure, and discretionary capital infrastructure are assessed in later Statements. These physical assets developed to host the Games deliver long-lasting economic and social benefits after the Games by enabling more sports events to be attracted and consequently attracting tourists to the region and by promoting greater sports activity among its residents.

Games-related capital investments:

Stadia

Athletes village

Uses after the Games

Future sporting and non-sporting events

Community sport

Housing for local communities

Examples of legacy benefits

- More visitors in years after Games
- Improved sporting profile of city/nation
- Healthier citizens
- Higher happiness/civic pride among citizens
- More housing availability for local residents
- More environmentally sustainable housing

Summary of evidence

Manchester 2002:



Use after Games

£234 million invested in sporting venues, including £153 million on the City of Manchester Stadium

- Athletics stadium leased to Manchester City FC; leading to further investment in the city from the UAE (e.g. Etihad Campus).
- Other venues available for follow-on events and community use (e.g. aquatics centre).

Sources: PwC analysis. All figures are presented in GBP millions at 2018 prices (PPP exchange rates from OECD, UK GDP Deflator from Office for National Statistics). See Appendix 2 of the main report for full list of capital investments in stadia for each Games, in addition to details of the approach and sources. The numbers may not add due to rounding.

Melbourne 2006:



£94 million invested in new and improved sporting facilities

- 30,000 additional seats at Melbourne Cricket Ground for a range of sports and non-sporting events.
- New community sporting facilities and venues for elite events (e.g. aquatics centre, athletics warm-up track).

Use after Games



£11 million invested in the athletes village for social housing (£22 million excluding £10.3 million for the treatment of land value)

- 200 new social housing dwellings, 1,000 new sustainable residences, and a new aged-care facility to help meet housing demands in city.
- 2.5 Ha open space.
- New community facilities (e.g. bike paths), helping to enhance citizen wellbeing.

Glasgow 2014:



£65 million invested in sporting venues

- Elite facilities available for community use (e.g. 5.4 million attendances at Emirates arena and cycling velodrome leisure facilities between October 2012 and March 2014 – Audit Scotland 2015).

Use after Games



£10 million investment in Athletes Village as part of the wider regeneration of the East End

- Athletes village converted into 700 affordable, sustainable homes and a 120-bed care home.
- Across the wider Clyde Gateway project, between 2012 and 2017, 239 Ha of derelict and contaminated land had been remediated, 63,664 square metres of Business Floor Space was completed and 2,456 residential units had been constructed (Final Legacy Report), the Games helping to drive this.

Gold Coast 2018:



£169.8 million invested in renovating/building new sporting venues

- Availability of stadia for elite events and public use; e.g. Olympic standard velodrome and aquatics centre open to the community for public use.

Use after Games



£122.1 million investment in athletes village has generated new assets for use among communities

- 1,251 apartments and townhouses offered for long term rent.
- Retail and dining hub created with Woolworths and BWS securing tenancies.

Sources: PwC analysis. All figures are presented in GBP millions at 2018 prices (PPP exchange rates from OECD, UK GDP Deflator from Office for National Statistics). See Appendix 2 of the main report for full list of capital investments in stadia for each Games, in addition to details of the approach and sources. The numbers may not add due to rounding.

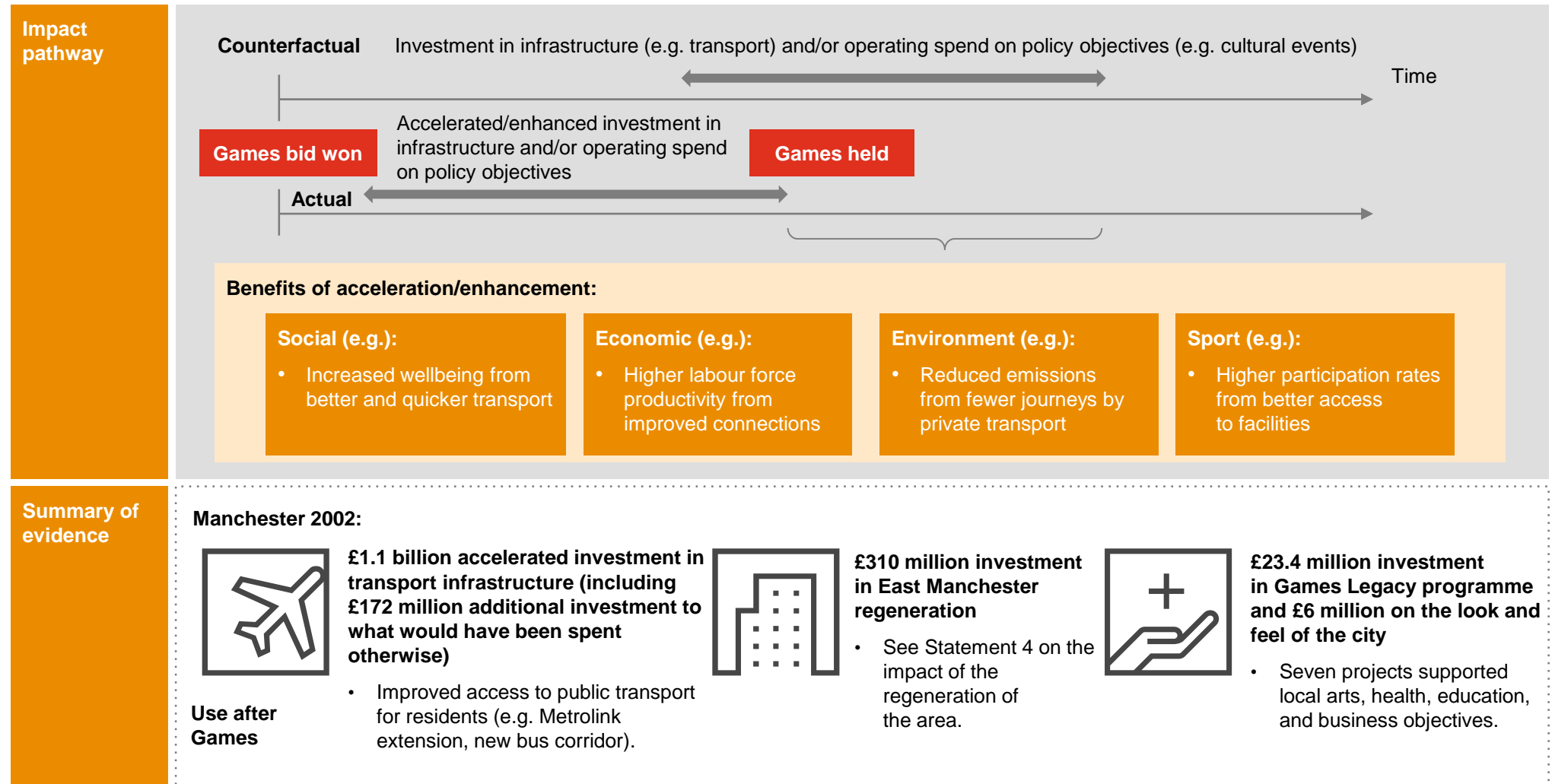
Critical
success
factors**Minimising cost in development of assets:**

- **Integrate planning for and delivery of the Games into the wider city/region strategy:** Prospective hosts should align the delivery of the Games with existing investments and initiatives in the host city. For example, the Games transport strategy should link with the existing city transport plan and opportunities to bring forward future investment should be sought. Similarly, any scheduled private investment in venues should be leveraged.

Maximising legacy benefits of assets:

- **Plan legacy from the outset:** To maximise the legacy benefits of capital investments after the Games and ensure that assets are appropriately used, it is important to plan the legacy use of assets at the earliest possible stage. For example, the Gold Coast athletes village was well aligned with the wider Trade 2018 strategy and became an integral part of the Gold Coast Health and Knowledge Precinct development after the Games. One advantage of hosting the Commonwealth Games, compared to single sport events for example, is that many venues can serve multiple sports during and after the Games as opposed to being suited only to a single sport - thus increasing the likelihood of a valuable legacy use.
- **Clear accountability for legacy – before, during and after the Games:** It is relatively easy for host cities to focus on delivering a successful 11 day programme at Games-time. If the long term benefits of the Games are maximised, host cities should clearly assign responsibility for the legacy of the Games from the outset of Games planning, and indeed beyond the period of hosting the Games. Clear governance, leadership and accountability for legacy outcomes should be put in place. For example, for each of the key legacy ambitions there should be a clearly defined set of outcomes that have measurable key performance indicators (KPIs) to track performance and hold leaders and organisations to account.

1.3 Hosting the Games accelerates and/or enhance the scale/quality of planned investments to support wider objectives



Sources: PwC analysis. All figures are presented in GBP millions at 2018 prices (PPP exchange rates from OECD, UK GDP Deflator from Office for National Statistics). See Appendix 2 of the main report for full list of capital investments in stadia for each Games, in addition to details of the approach and sources. The numbers may not add due to rounding.

Melbourne 2006:**£22 million invested in improved public transport and infrastructure around stadia**

- Improved pedestrian access to Melbourne Cricket Ground, thereby improving visitor experience.

Use after Games • Improved facilities at Jolimont Station.

**£29 million invested in business, community and environment programmes**

- See Statements 3, 4 and 5 for legacy benefits to businesses, communities, the environment and culture.

Glasgow 2014:**£579.8 million of accelerated investment to improve access across and into the city**

- 8km extension of the M74 providing access from the east of the city to Celtic Park and Sir Chris Hoy Velodrome.

Use after Games • Improved access to East End of city and improvement works at airport making international travel easier for residents and visitors.

**£14 million invested in community engagement and cultural events as part of the Culture 2014 programme and £14 million invested in ensuring Legacy outcomes in support of 202 programmes**

- See Statements 7 for the legacy benefits to community pride and confidence and Statement 8 for legacy volunteering benefits.

Gold Coast 2018:**£513 million invested in advancing transport infrastructure in the city**

- £146.5 million airport improvement works.
- £366 million invested in road and rail transport links, including a £205.2 million extension of the light rail network.

Use after Games

**£21 million invested in operating programmes towards wider policy objectives in addition to a £23.8 million value of in-kind contributions by the Queensland government**

- £12 million invested in arts and cultural events and £4 million invested in other Legacy events.
- £3 million and £2 million spent towards public domain improvements and the Gold Coast Carrara Precinct.

Sources: PwC analysis. All figures are presented in GBP millions at 2018 prices (PPP exchange rates from OECD, UK GDP Deflator from Office for National Statistics). See Appendix 2 of the main report for full list of capital investments in stadia for each Games, in addition to details of the approach and sources. The numbers may not add due to rounding.

**Critical
success
factors**

- **Establish partnerships at all levels of government, the private sector and the third sector:** To maximise the benefits from the Games, the Organising Committee should build strong relationships with national and local organisations. For example, local and national sports, arts and culture organisations can be involved in the funding and delivery of events.
- **Leverage funding opportunities to achieve wider (i.e. non-Games-related) objectives:** Similarly, the Organising Committee and key funders of the Games should leverage funding opportunities across all levels of government, the private sector and the third sector to achieve wider objectives. For example, in relation to funding of Games-related and discretionary capital costs and investments, local and national transport bodies should be involved throughout. These organisations may be able to bring forward their investment plans to support in the delivery of the Games but also achieve wider objectives such as improved infrastructure and transport for the city. Similarly, national sports and arts bodies may be willing to contribute to specific elements of the Games to help achieve their objectives.

2

Attracting incremental
funding and mobilising
resources to the benefit of
host cities

Costs and benefits statement 2

2 Hosting the Games can attract incremental funding and mobilise resources to the benefit of host cities and regions by:

1. Generating revenues for public sector organisations responsible for delivery of the Games in the form of income from sponsorship, broadcast, ticketing, hospitality and merchandising: these revenues partly offset the gross costs of hosting the Games.
2. Attracting incremental national and/or regional funding to the host city. This contributes to spending that is required to host the Games and other spending that is influenced by the Games but not required.
3. Attracting incremental private sector investments to the host city to drive benefits and legacies.
4. Mobilising human and financial resources from local and regional third-sector partners to drive benefits and legacies.
5. Raising funds for local, national, and international charities.

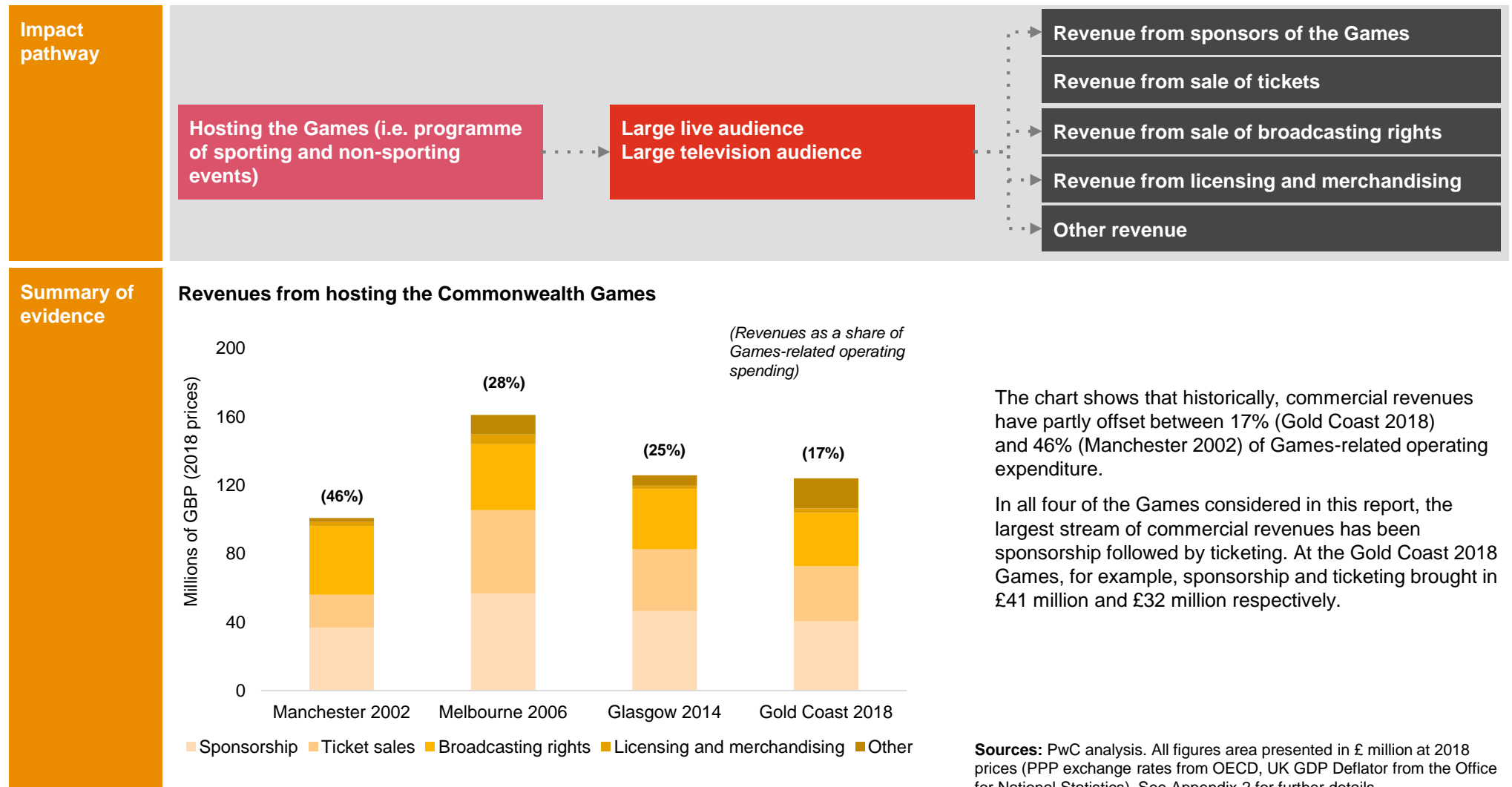
Introduction

- The previous Statement (1) considered the scale and structure of operating and capital expenditure related to hosting the Games. This statement identifies how these costs were funded.
 - Commonwealth Games host cities generate commercial revenues from ticketing, broadcasting, sponsorship, licensing and merchandising.
 - The Games also attract private sector contributions to fund capital expenditure on Games-related venues and village.
 - The Games also provide an effective fiscal dividend to host cities as they attract funding from state / devolved and national governments.

Assessment of the evidence

- Information on the contributions of each tier of government to Games funding is generally good across the four past host cities considered in this report.
- Less evidence is available on the links between the Games and charities, however Glasgow 2014 provides a valuable case study for this area of analysis, as it developed a strong partnership with UNICEF.

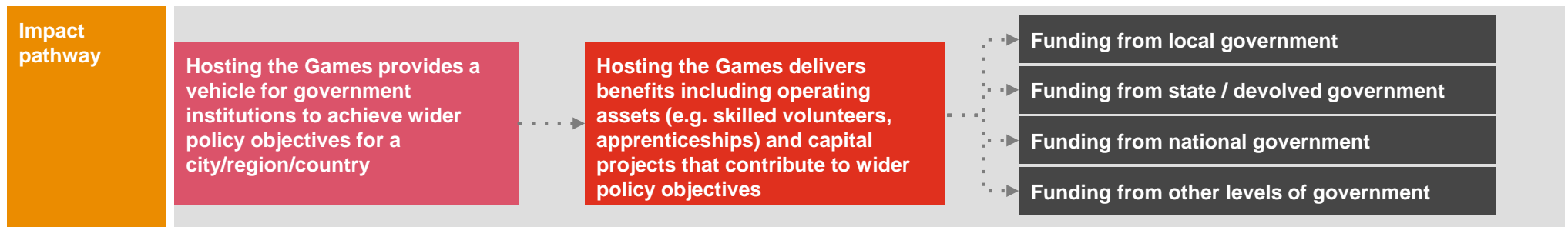
2.1 Hosting the Games generates revenues for public sector organisations responsible for delivery of the Games



**Critical
success
factors**

- **Form partnerships with all levels of government, the private sector and the third sector to maximise the value of in-kind contributions:** To minimise cost and increase sponsorship revenues, Games hosts can seek in-kind contributions. For example, partnerships can be sought with food, drink, and merchandise providers.
- **Investing in marketing campaigns to maximise benefits from hosting the Games:** There is a clear incentive for past hosts to minimise cost to maximise the return from hosting the Games. However, for some elements of cost it may be worthwhile spending more money to increase revenue streams. For example, pre-Games marketing is highly important in driving ticketing and merchandising revenues. The organisers of Glasgow 2014 were particularly effective in this regard. For example, local celebrities such as Sir Chris Hoy were involved as ambassadors throughout the build up to the Games, helping to capture the imagination of local citizens.
- **Use the new Commonwealth Games Federation Partnerships (CGFP) delivery structure:** Future host cities can potentially leverage CGFP to help them manage their costs more effectively by drawing upon CGFP's new Games delivery model and long term commercial strategies.

2.2 Hosting the Games attracts incremental national and/or regional funding to the host city



Sources of funding for Games-related expenditure

Summary of evidence

Commonwealth Games host cities generate **commercial revenues from ticketing, broadcasting, sponsorship, licensing and merchandising**. However, the proportion of costs funded by commercial revenue has decreased over time. The CGF has, therefore, taken steps to reverse this trend through the introduction of a new delivery model to increase commercial revenues and drive down operating costs by delivering the Games more efficiently.

The financial contribution of each host city to the operating expenditure ranged from 8% (Gold Coast 2018) to 17% (Manchester 2002). This variation largely reflects differences in the political context in the host countries (i.e. the key public sector stakeholder in terms of budget/funding): for example, in Australia, the state government has led the bids whereas in the UK the host city works directly with the national government.

The **Games have also attracted private sector contributions to fund capital expenditure on Games-related venues and village**. For example, local universities in Manchester and the Lawn Tennis Association funded part of the venues for Manchester 2002.

The table shows the sources of funding for Games-related operating and capital costs for each Commonwealth Games. They show how the **Games have provided an effective fiscal dividend to host cities** as they have attracted funding from state/devolved and national government (which they would not otherwise have received). For example, £728 million was invested by the Queensland (state) Government for Gold Coast 2018, of which £542 million relates to operating expenditure. A further £100 million was invested by the national government (of which £75 million went into capital expenditure).

The Games provide the city with a fiscal dividend from national, regional and other levels of government:

- in the UK, for every £1 of local government spending on total Games-related expenditure (operating and capital), the host cities attracted between £2.7 (in Manchester 2002) and £3.0 (in Glasgow 2014) from national and devolved government
- in Australia, the state government has been the key funder of the Games contributing 75% and 79% of total public-sector Games-related expenditure in Melbourne 2006 and Gold Coast 2018 respectively.

Sources of funding (£ million, 2018 prices)	Manchester 2002	Melbourne 2006	Glasgow 2014	Gold Coast 2018
Games-related operating and capital expenditure	455	682	573	1,041
Commercial revenues	101	161	126	124
National government	51	134		100
Other national institutions	201			
State/devolved government		437	337	728
Local government	93	12	111	89
Private sector	10			
<i>Less adjustments</i>		(-62)		
Games-related operating expenditure	221	577	498	749
Commercial revenues	101	161	126	124
National government	51	134		25
Other national institutions	31			
State/devolved government		300	298	542
Local government	38	12	75	58
<i>Less adjustments</i>		(-29)		
Capital expenditure on Games-related venues and village	234	105	75	292
Private sector	10		*	**
National government				75
Other national institutions	169			
State/devolved government		138	39	186
Local government	55		36	31
<i>Less adjustments</i>		(-32)		

Notes: *A consortium of private developers, City Legacy, signed a contract with Glasgow City Council to construct the Athletes' village. However, the specifics of the commercial agreement and financial contributions are not known (Audit Scotland, 2015). **The Gold Coast 2018 village was funded under a public / private partnership agreement. However, the exact private sector contribution is not known as that was part of a confidential development contract between the Queensland Government and the developers.

Sources: PwC analysis. All figures are presented in GBP millions at 2018 prices (PPP exchange rates from OECD, UK GDP Deflator from Office for National Statistics); Other national institution refers to non-government public sector bodies (e.g. Sport England). The numbers may not add due to rounding.

Sources of funding for discretionary operating spending and accelerated and otherwise enhanced capital spending

Summary of evidence

Hosting the Games provides an opportunity for cities to achieve their wider, legacy objectives. Such discretionary expenditure has been identified from a review of publicly available information and interviews with key stakeholders.

All the host cities have made **discretionary operating investments** to meet their legacy objectives. The analysis shows that this expenditure has been between £28 million in Glasgow 2014 and £45 million in Gold Coast 2018 (see table). The resources have been committed to initiatives such as additional programmes and events to enhance the attractiveness of the city to visitors and sponsors and to boost the legacy benefits from volunteering and increased community sports participation. This expenditure has been funded mainly by local government and the state/regional government across the Games.

In addition, the host cities have often been able to **accelerate or enhance capital investment** in infrastructure related projects to achieve wider objectives. More often these are funded from re-directing/re-purposing existing city/regional/federal budgets and only rarely involve additional investment by governments. Examples of this are:

- Manchester City Council used the Games in 2002 to boost its work to regenerate East Manchester by spending £310 million
- Melbourne's discretionary investments focused on upgrading transport infrastructure with the largest project costing £20 million
- in Glasgow, the City Council used the Games in 2014 to accelerate investment in transport infrastructure (£474 million) and regeneration of the East End (£96 million). The majority of the funding for these investments was provided by the Scottish Government
- the Gold Coast used the Games in 2018 to catalyse economic development of the area and was able to invest in key transport projects, including construction of the Gold Coast light rail extension to Brisbane at a cost of £205 million.

Sources of funding (£ million, Manchester 2002, Melbourne 2006, Glasgow 2014, Gold Coast 2018 prices)

Discretionary operating expenditure	30	29	28	45
Look and feel of the city	6			
Legacy	24		14	4
Business, community and environment programmes		29	0.3	
Arts & culture			14	12
Public domain Improvements				3
Carrara Precinct				2
In-kind contributions ¹				24
Sources of funding				
Private sector	4			
National government	9	6		1
Other national institutions			11	
State/devolved government		22	3	17
Local government	17	1	14	27

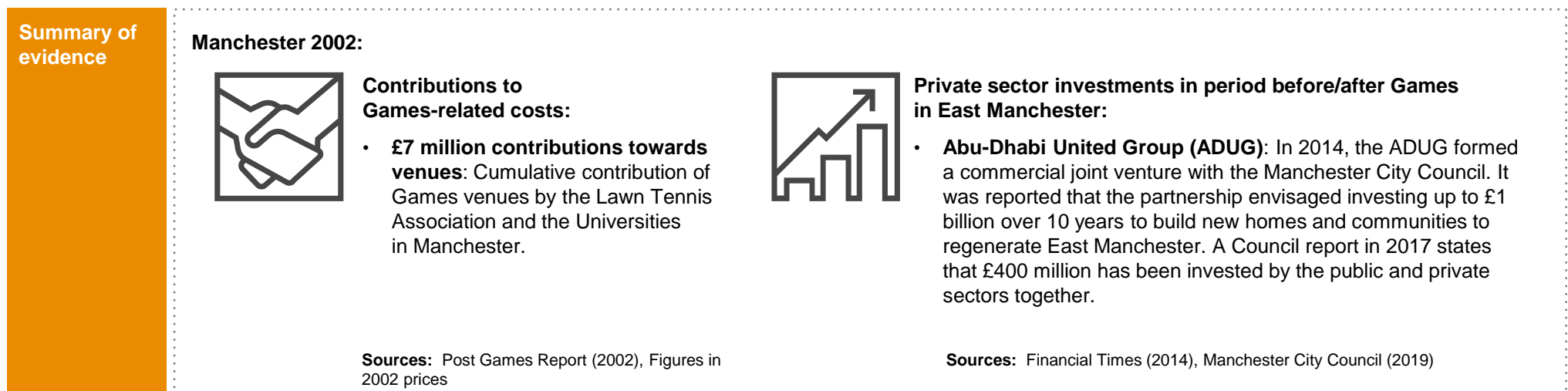
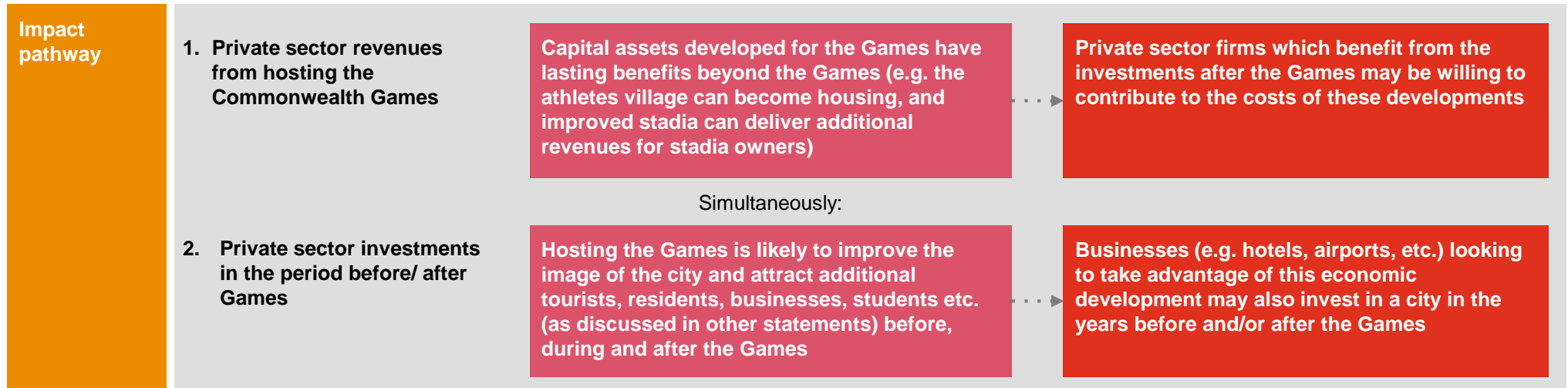
Notes: 1. The Queensland Government and the City of Gold Coast contributed both cash and in-kind (i.e. non-monetary, e.g. staff, services) towards discretionary operating spending related to the Games. These in-kind contributions went towards a range of city services and legacy initiatives.

Sources: PwC analysis. All figures are presented in GBP millions at 2018 prices (PPP exchange rates from OECD, UK GDP Deflator from Office for National Statistics). The numbers may not add due to rounding. Appendix 2 provides further details on the discretionary investments for each Games, the approach used and the sources. Other national institution refers to non-government public sector bodies (e.g. National Lottery funding, Sport England, etc.).

**Critical
success
factors**

- **Make sure all government / public sector funding delivers an appropriate return:** When seeking funding from higher or lower tiers of government, it is important for the stakeholder leading the bid/planning to articulate the benefits of the Games to all stakeholders. For example, in securing national funding, the benefits of the Games to the country as a whole should be presented. As such, the incentives of each potential public sector funding body can be aligned and public sector funding from a range of sources can be achieved.
- **Leverage relationships with non-governmental public sector bodies:** In addition to general governmental budgets, the budgets of other public sector organisations can be leveraged to fund the Games. For example, national sports or arts bodies may be willing to contribute to specific elements of the Games to help achieve their objectives. As above, in seeking funding from these bodies, the benefits to these stakeholders need to be clearly articulated.

2.3 Hosting the Games attracts incremental private sector investments to the host city to drive benefits and legacies



Melbourne 2006:



Contributions to Games-related costs:

- **Melbourne Cricket Ground:** A\$700 million invested in the redevelopment of the MCG.
- **Darebin International Sports Centre:** A\$17.5 million invested in new lawn bowls, cycling and soccer facilities to be used for the Games and available to the community at present.

Sources: KPMG (2006); Figures in 2006 prices

Glasgow 2014:



Private sector investments in period before/after Games:

- **Clyde Gateway regeneration:** £1.5 billion of private sector investment committed to the wider Clyde Gateway project.

Sources: Clyde Gateway Annual report (2009); Figures in 2014 prices

Gold Coast 2018:



Use after Games

Contributions to Games-related costs:

- **Gold Coast Airport:** A\$300 million initiative in project LIFT; expanding airport capacity and improving existing facilities.
- **Oxenford Studios:** A\$4.4 million private investment in new studio for film and television production (having been used to host boxing, squash and table tennis during the Games).



Private sector investments in period before/after Games:

- **Star Gold Coast Transformation:** A\$2.0 billion invested to build four towers and associated resorts aimed at boosting tourism.
- **Pacific Fair Redevelopment:** A\$670 million invested to expand the Pacific Fair Shopping Centre (making it the fourth largest in Australia).
- **Health and Knowledge Precinct (HKP):** A\$1 billion is expected to be invested in the future development of the HKP over the next 20 years (see case study in Statement 3).

Sources: Gold Coast 2018 Post Games Report (2019); figures in 2018 prices

**Critical
success
factors**

- **Plan legacy from the outset:** To secure private sector contributions to Games-related capital investments (e.g. stadia and the athletes village), it is important to identify how the venues will be used after the Games and who will benefit from the (improved or new) assets. By then presenting these benefits to the post-Games users, a contribution to the cost can be secured. For example, for the Melbourne 2006 Games, only A\$77 million of the A\$777 million investment in the Melbourne Cricket Ground came from the Organising Committee budget. The remainder was privately funded.
- **Use the Games as a platform to boost business events:** If securing additional private sector investment in a city is a key legacy ambition for a host city, initiatives can be put in place to maximise this benefit channel. For example, business support events and trade programmes can be scheduled in the years before and after the Games to attract additional domestic and foreign investment in the city. The Gold Coast's Trade 2018 programme, which was held alongside Gold Coast 2018) is a particularly good example.

2.4 Hosting the Games mobilises human and financial resources from local and regional third-sector partners to drive benefits and legacies

Impact pathway

Hosting the Games can help achieve legacy social benefits (e.g. skills, employment, social cohesion)

Third sector organisations (e.g. charities, universities) may be willing to provide human and financial resources towards the Games

The social benefits from hosting the Games align with wider objectives of local / regional / national / international third-sector objectives

Case study

Gold Coast 2018 “Host Broadcast training programme”

Griffith Film School, part of Griffith University, had more than 90 students and graduates working with the Gold Coast 2018 Commonwealth Games official broadcaster NEP.

The Host Broadcast Training Programme provided Griffith film students with hands-on experience in the lead-up to the Games, working on NEP live broadcasts for network television.

This was over and above the **Gold Coast 2019 Commonwealth Games Internship programme**. In partnership with the Gold Coast Organising Committee, Griffith University achieved:

- 239 internship placements for a 12 week full time period
- 278 further Games-related student opportunities with industry partners
- 154 Griffith students provided Games time support during the Games
- 181 Griffith graduates accepted paid employment (all staff of the OC were surveyed if they had studied at Griffith).

Sources: Griffith University



2.5 Hosting the Games raises funds for local, national, and international charities



3

Building and showcasing the
city's profile and position

Costs and benefits statement 3

3 Hosting the Games can build and 'showcase' the city's economic profile and position it as a desirable place to live, work, study and visit by:

1. Boosting local, regional and national GDP and employment before and during the Games: Games operating expenditures and capital investments have a positive economic multiplier effect locally, across the region and nationally.
2. Adding to local, regional and national GDP and employment after the Games by:
 - a. Enabling the city to attract sustained inbound tourism.
 - b. Enabling the city to attract more sporting and non-sporting events (e.g. cultural or business festivals and conferences).
 - c. Profiling the city nationally and internationally as an attractive place for students.
 - d. Profiling the city nationally and internationally as an attractive place for starting a career or retaining talent.
 - e. Enabling the city to diversify the local economy, e.g. build and profile the local arts and cultural industries.
3. Adding to local, regional and national GDP and employment after the Games by boosting productivity through:
 - a. Improving the skills of the workforce and those looking to access the workforce (e.g. senior school and university students).
 - b. Enhancing the capabilities and competitiveness of local businesses.

Introduction

- The Commonwealth Games provides host cities/regions/countries with a significant economic boost, both on the demand side and on the supply side in the years before, during and after the Games. This statement considers the total economic impact of hosting the Games.
- When reviewing these benefits associated with hosting the Games it is important to evaluate them in relation to the Games-related and discretionary spending and investment considered in Statements 1 and 2.
- This statement focuses narrowly on economic and employment benefits while the next set of statements focus on wellbeing impact areas including sports, social and environmental.

Assessment of the evidence

- The evidence base on the pre/during Games demand-side GDP boost is good, and there are some estimates of the long term demand side boost to GDP from hosting the Games.
- There are no estimates of the long term supply side impact, however activity based evidence on the drivers of this impact is available for most Games.
- Although similar measures are used in economic impact estimates of past Commonwealth Games, it is difficult to compare the results: in particular, the analyses use different methods to assess the economic impacts and key variables such as the time period for assessment and areas of spend included in the assessment are not always consistent.

Hosting the Games boosts local, regional and national GDP and employment before, during and after the Games

Existing appraisal evidence shows that hosting the Games was expected to boost local, regional and national GDP and employment. The table below shows that **the Games were expected to enhance GDP in the host city/region by between £0.8 billion and £1.2 billion and generate between 13,600 and 23,000 full time equivalent (FTE) years of employment** before, during and after the Games.

Care is, however, needed when comparing the impact of past Games on GDP and employment because the approaches adopted and the time periods included vary significantly.¹

	Manchester 2002	Melbourne 2006	Glasgow 2014	Gold Coast 2018
Employment impact (net FTE years of employment) ²	23,000 FTE years of employment	13,600 FTE years of employment	16,800 FTE years of employment	21,100 FTE years of employment
GVA impact (net)	£1.1 billion	£1.0 billion	£0.8 billion	£1.2 billion
Geography assessed	Manchester	Victoria	Scotland (city level results also available)	Queensland (national and city results also available)
Time period assessed	Pre-Games, Games and post-Games: 18 year period from 1995-2012, with Games development	Pre-Games, Games and post-Games: 20 year period from 2002–2022	Pre-Games and Games: 8 year period from 2007 to 2014	Pre-Games, Games and post-Games: 9 year period from 2013/14 to 2021/22
Modelling approach	Input-output modelling (Games-related and discretionary spending & attribution based on assumptions)	CGE modelling	Input-output modelling (Games-related spending and Games visitors estimates)	CGE modelling

Sources: PwC analysis. All figures are presented in GBP millions at 2018 prices (PPP exchange rates from OECD, UK GDP Deflator from Office for National Statistics).

Notes:

1. Most recent Games' hosts have estimated this economic benefit by undertaking an ex ante (pre-event) appraisal of the expected impact of hosting the Games on GVA and employment. Two types of economic models are commonly used: Computable General Equilibrium (CGE) models and Input-Output (IO) models. Both types can estimate the national and sub-national (typically regional) impacts before, during and after the Games. The key differences are in how the models account for time reactions of the economy (dynamic vs. static), estimate the net (CGE) vs. the gross (IO) impacts, i.e. does or does not account for displacement effects, and can account for scenario-based analysis and sensitivities with CGE providing more robust (but data intensive) results. For example, two estimates are based on input-output models which do not take into account the knock-on displacement and substitution effects nor do they adjust for any changes in the structure of the economies over time. In contrast, others use a computable general equilibrium (CGE) model which does incorporate displacement and substitution effects. In addition, the Games-related spending that drives the economic modelling in the models is sometimes inconsistent in its scope: for example, the study for Glasgow 2014 includes the impact of volunteer and media staff spending, an element of spending that no other Games impact assessment considers.

2. The PwC analysis present figures in FTE years of employment, i.e. full-time-equivalent jobs created over the period assessed.

3.1 Hosting the Games can boost local, regional and national GDP and employment before and during the Games

Impact pathway

Demand-side drivers

The impact of supply-side drivers on GDP after the Games is assessed in 3.3

International

- Rise in demand for host country's products and services through increased tourism following Games announcement and in year of Games

Domestic

- Increased demand for new goods and services, including through construction

Assessed in this statement

Economic growth

Employment

- Increased employment directly related to hosting the Games
- Increased employment linked to legacy

Productivity: increased value added per hour worked

Pre-Games

Games year

Post-Games

Games operating and capital expenditure have a positive economic multiplier effect locally, across the region and nationally

Where possible, in the summary of evidence below, the impact of the Games on GDP and employment before/during the Games has been separated from the impact to GDP and employment in the period after the Games. However, this breakdown is not always provided in the literature, therefore, in some instances the total GDP and employment impact is presented.

Summary of evidence

Manchester 2002:



9,400 net (direct, indirect and induced) FTE years of employment before and during the Games

9,190
pre- Games



225
during Games



£1.1 billion of estimated value added in Manchester over 1995-2012

The GVA impact estimated in the literature is driven by capital and operating spending directly related to hosting the Games and a portion of the discretionary spending accelerated by the Games. Comparing this estimate to the assessment of the public sector contribution to Games-related costs (£344 million in 2018 prices), it is estimated that the **implied economic return on public investment is 3.2.**

Sources: PwC analysis, Cambridge Policy Consultants (2002); All figures in 2018 prices

Melbourne 2006:



13,600 FTEs years of employment over a 20-year period (2002-2022)

(23 FTE years of employment per £1 million public investment in Game-related expenditure)



£1.0 billion estimated value added to the regional economy in NPV terms over a 20 year period (2002-2022)

- £1.1 billion boost to Gross State Product (GSP) in Victoria occurred in the three years before the Games, and £0.5 billion generated in the year of the Games, highlighting a small negative impact post-Games due to displacement between regions.
- The estimates consider the economic impact of £580 million of operating expenditure, £942 million of construction spending*, £156 million tourism spend and £122 million business expenditure.
- The estimated value added compared to public sector spending on Games-related spending as estimated by PwC (£583 million) in Statements 1 and 2 gives an **implied economic return on public investment of 1.7.**

Sources: KPMG (2006); Figures in 2018 prices; Approach: CGE modelling; *Construction spending includes public and private contribution in addition to non-Games-related spending (e.g. basketball)

Glasgow 2014:



16,800 FTE years of employment in Scotland over an 8-year period (2007-2014), of which **9,600 were in Glasgow**

This estimate is driven by Games-related spending as estimated in the Glasgow 2014 Legacy Technical Report which includes:

- **£565 million Games-related capital spending** (on venues and athletes village) over the 6 years from 2009 to 2014 added **6,408 FTE years of employment in Scotland**, of which 3,408 were in Glasgow.
- **£505 million Organising Committee spend** over the 8 year period (2007-2014) in the preparation and delivery of the Games added **7,000 FTE years of employment**, of which 3,664 were in Glasgow.
- **Visitor spending** in the year of the Games 2014 added **3,575 FTE years of employment in Scotland**, of which 2,075 were in Glasgow.



£0.8 billion estimated value added to Scotland's economy over the 8 years from 2007-2014, of which **£416 million GVA is added to Glasgow** over the same period.

- £565 million Games-related capital spending (on venues and athletes village) over the 6 years from 2009 to 2014 added **£320 million GVA in Scotland**, of which **£179 million is in Glasgow.**
- **£505 million Organising Committee spend** over the 8 year period (2007-2014) in the preparation and delivery of the Games added **£341 million GVA in Scotland**, of which **£166 million is value added to Glasgow.**
- Visitor spending in the year of the Games 2014 added **£132 million GVA in Scotland**, of which **£67 million was GVA created in Glasgow.**

The estimated value added compared to public sector spending on Games-related spending as estimated by PwC (£447 million) in Statements 1 and 2 gives an **implied economic return on public investment of 1.8.**

Sources: Glasgow 2014 Legacy Economic Technical Report (2015); All figures in 2018 prices. Approach: Input-Output model; Numbers might not add due to rounding

Gold Coast 2018:

21,100 FTEs years of employment over a 9-year period (2013/14-2021/22)

(23 FTE years of employment per £1 million public investment in Game-related expenditure)

3,550
pre-Games
(2013/14-2016/17)



12,298
during Games
(2017/18)



£1.2 billion estimated value added to the Queensland economy over a 9 year period (2013/14-2021/22)

- £241 million to Gross State Product (GSP) in Queensland occurred in the four years before the Games, and £273 million generated in the year of the Games, highlighting a small negative impact post-Games due to displacement.
- The estimated value add to the Queensland economy is driven by a net stimulus of £1.9 billion, of which the contribution of the government (primarily Queensland Government) amounted to £0.8 billion. The net stimulus includes construction spending, operating and miscellaneous spending and tourism spending.
- The estimated value added when compared with the public sector spending towards Games-related spending as estimated by PwC (£917 million) in Statement 1 and 2 give a **1.3 implied economic return on public investment.**

Sources: Griffith University (2018); Modelling approach: CGE modelling

Critical success factors

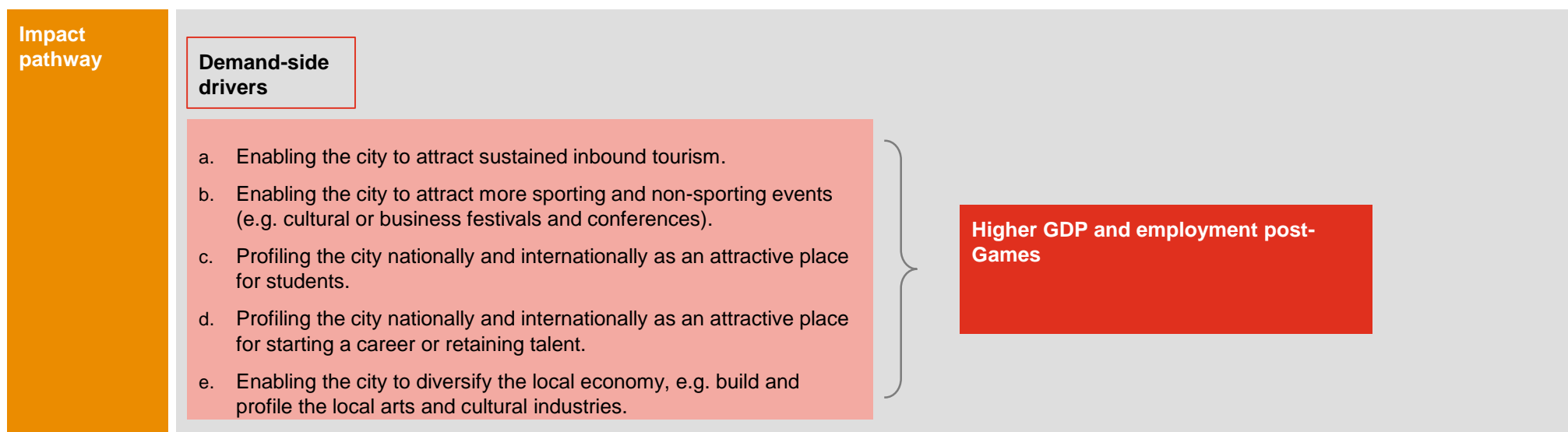
The key drivers of the economic impact in the period before and during the Commonwealth Games are largely consistent with the general drivers of a successful Commonwealth Games (see Section D). There are, however, critical success factors specifically with regards to this statement. In particular, it is important for host cities to **maximise the benefits from the Games' construction programmes and operating spend** for their local supply chains. For example, local suppliers should be prioritised in procurement activities, and business support programmes can be put in place to ensure local firms are able to leverage their experiences of providing services for the Games.

In addition, if **the Games are to be successful in attracting inbound tourists** in the year of the Games, there needs to be an effective international marketing campaign that captivates attention in the target markets.

Finally, hosting the Games can generate **additional tax revenues for the public sector**: for example, part of the economic impact on GDP will accrue as increased tax revenues. Host city governments should take into account this revenue to understand the net cost of hosting the Games to public finances.

3.2 Hosting the Games can add to local, regional and national GDP and employment after the Games

This statement considers the impact of spending to host the Games after the Games have taken place. In the sub-sections below, evidence from each of the past Games considered in this report is presented. Firstly, any pre-existing evidence on the post-Games impact to GDP and employment is presented (if available); then, existing evidence on each of the **five drivers of post-Games GDP impact** is presented (if available). In relation to demand driver “a” (tourism), in addition to the evidence presented in the sub-sections below, for Manchester 2002, Melbourne 2006, and Glasgow 2014 an analysis of actual post-Games tourist numbers has also been conducted. This is presented in Statement 5.3. The impact on supply-side drivers of GDP (e.g. productivity) after the Games is assessed in Statement 3.3.



Summary of evidence

Manchester 2002: Overall, combining both the demand and supply side boosts from the Games, the Manchester Games were projected to add 13,620 FTE years of employment in the ten years after the Games (Sources: Cambridge Policy Consultants (2002))

a. The Games were projected to attract 300,000 visitors per year in the years after the Games with total spending of £18 million per annum (2002 prices).

Sources: Cambridge Policy Consultants (2002);
Note: this spend estimate is tourist spend per year and not a GVA impact assessment

b. No analysis has been conducted to assess how many events were attracted to Manchester as a result of the Games. However, in total, in 2002 and 2013, 216 major sports events were held in Manchester which attracted 1.6 million visitors and had an estimated economic impact of £92 million on the Manchester economy. In addition, 56 events for businesses were held by the new Business Club (a forum for UK businesses to maximise opportunities from hosting the Games), including two major conferences which attracted 4,000 business representatives.

Sources: Post games report (Manchester 2002), Cambridge Policy Consultants (2002); Manchester Major Sports Events Strategy (2013)

c. Having supported the Games by providing accommodation for the athletes village, in 2003, the former Victoria University of Manchester (VUMC) and Manchester Institute of Science and Technology (UMIST) merged to form the combined University of Manchester (UOM) to help support the continued growth of the city.

Sources: Cordis Europa (2004)

d. 33% of business representatives in the region thought that the North West had improved as a place to do business following the Games. 24% of companies in the region thought that the Games had had a positive impact on their business. There was also a 54% increase in positive perceptions of the region from residents outside the region after the Games.

Sources: Faber Maunsell (2004)

e. The Commonwealth Games catalysed and accelerated development of Central Park in East Manchester. This comprise 200,000 square metres of new business floor space in addition to facilities for enterprise and learning. Manchester's position as a place to do business among cities in Europe improved from 19th in 2002 to 13th in 2003.

Sources: Faber Maunsell (2004)

Melbourne 2006: Overall, hosting the Games was estimated to add 13,600 FTE years of employment and £1.0 billion value added to the regional economy in NPV terms over a 20 year period (2002-2022). The estimated NPV in the period from 2008-2022 is expected to be slightly negative due to displacement between regions. (Sources: KPMG (2006))

- a. 71% of overseas visitors and 67% of interstate visitors said that attending the Games has made it more likely they will return to Victoria one day. Moreover, 85% of Melbournians felt that Melbourne's reputation as the events capital of Australia had been enhanced.

Sources: Insight Economics (2006)

- b. Prior to the Commonwealth Games, Melbourne was already a popular sporting venue and regularly hosted international sporting events. As a result, it is difficult to identify how far the Games attracted additional events in the years after the Games. However, the Commonwealth Games were found to be directly linked to the hosting of: the 13th Commonwealth International sports conference; the 2005 Pacific School Games; the 2004 Commonwealth Youth Games; the candidate cities seminar, and the National Conference on Volunteering and the Australian Conference of Science and Sport. Moreover, the increase in capacity of the Melbourne Cricket Ground from 70,000 to 100,000 increased the number of possible visitors at this venue in the years after the Games, though no impact assessment of this redevelopment has been found in the literature.

Sources: KPMG (2006)

- d. Australian respondents to a Business Club Australia survey responded that the most favourable impact of the business events held at the time of Melbourne 2006 was to increase inter-state and international awareness of the city, region and country as a place to do business.

80% of city residents thought that the Games improved the image of Melbourne.

Sources: KPMG (2006); Insight Economics (2006)

- e. The Commonwealth Games Business Benefits Programme helped to diversify and expand Victoria's Design and Technology industries. For example, a series of seminars were hosted with design companies across the region to help them begin or expand their exports. Similarly, an Australian Technology Showcase Exhibition was held in March 2006. approximately 1,500 people attended and 100 companies were showcased. The event helped to put Australia's Technology industry on the global map.

Sources: KPMG (2006)

Glasgow 2014: PwC's review of publicly available economic impact studies identified less evidence on the economic impact to Glasgow in the years after the Commonwealth Games. Below evidence is presented on some of the demand-side drivers of long-term economic growth:

- a. Glasgow 2014 provided the springboard for the Glasgow Tourism and Visitor Plan which was launched in 2017 with the aim of increasing overnight leisure tourism visits from 2 to 3 million by 2023. The key role that the Games played in boosting tourism was recognised by Scottish citizens in a survey of 1,000 residents in which the Commonwealth Games was cited as the greatest moment for Scottish tourism in the last half century.

- b. Between 2014 and 2017, 57 **international sporting events were held in Games venues, and eight more events were hosted in Commonwealth sports outside these venues**. In total these events were estimated to have had an economic impact of £27.5 million in the years up to 2019 (i.e. including legacy effects). This is reflected in Glasgow being ranked 5th in the world on the Ultimate Sport Cities Index in 2016 compared to 9th in 2012. Glasgow built on the 2014 Games by hosting the inaugural 2018 European Championships. Glasgow also attracted non-sporting events in the years after the Games, for example hosting the 2014 MTV Europe music awards, 2014 BBC Sports Personality and the 2015 Turner Prize. This success continued with Glasgow being awarded Europe's Leading Festival and Event Destination 2019 in the World Travel Awards and being selected as host city of the inaugural combined UCI World Cycling Championships in 2023 and UEFA Euro 2020.

Sources: Glasgow 2014 Legacy Final Evaluation Report (2018), Glasgow 2014 Post Games Report (2014), Event Scotland (2019), Glasgow Live (2019)

- d. Between 2014 and 2021 Glasgow attracted 31 business conferences to the city in the sport and sport science sectors. In total, these events were expected to attract 11,000 visiting delegates and generate an additional £14 million for the city's economy. Pride among existing residents also rose following the event. Considering those in the GoWell East study, pride in the city of Glasgow rose from 87% in 2012 to 91% in 2016.

- e. The Glasgow 2014 cultural programme helped to diversify Glasgow's economy by raising the profile of the arts and culture sector within and outside of Scotland. Approximately 500,000 attendances at the programme were from people from outside Scotland.

Sources: Glasgow 2014 Legacy Final Evaluation Report (2018)

Sources: Glasgow 2014 Cultural Programme Evaluation (2015), Glasgow 2014 Legacy Final Evaluation Report (2018)

Gold Coast 2018: Gold Coast 2018 was expected to add £699 million¹ to the Queensland economy in the post-Games years with key drivers being additional tourism expenditure and the Trade 2018 programme. Statement 3.1 considers the pre- and Games-year demand-side economic impact.

- a. Gold Coast 2018 was projected to increase visitor nights in the Gold Coast by over 250,000 per annum for four years after the Games purely through additional sports events. The economic contribution was estimated at A\$45 million per year in 2012/13 prices (or £22 million in 2018 prices). Survey evidence shows that 87% of Games attendees were likely or very likely to return to the Gold Coast.
- b. By mid-2019, 100 national and international events had been secured in Queensland following the hosting of the Games. It is not possible to establish the role that hosting the Commonwealth Games played in securing these events, however, it has helped to raise the global profile of the Gold Coast. For example, in 2018, the Gold Coast was ranked 15th globally in the 2018 SportBusiness Ultimate Sports City Awards. 83% of Festival 2018 artists and 85% of audiences agreed that Festival 2018 supported and strengthened the local creative sector. The Gold Coast has also attracted elite national sports bodies to the area following the Games – in particular squash, triathlon, mountain bike and basketball have all relocated to Gold Coast.
- c. See case study on next page for details of the relationship between Gold Coast 2018, Griffith University and the Gold Coast Health and Knowledge Precinct.
- d. Following the Games, a survey of residents found that 75% of people thought that the city was developing into a world class city. Moreover, 87% of visitors said that they were likely to return to the city and 85% would recommend the city to friends and family.
- e. Gold Coast 2018 played a major part in diversifying the Gold Coast's economy away from tourism by accelerating and catalysing the development of the Health and Knowledge Precinct, as outlined the case study below.

Sources: Griffith University (2018), Gold Coast 2018 Official post Games Report (2019)

Notes: 1. All figures are presented in £ million at 2018 prices (PPP exchange rates from OECD, UK GDP Deflator from the Office for National Statistics). See Appendix 2 for further details.

Case study

Gold Coast Health and Knowledge Precinct:

The Commonwealth Games played a key role in accelerating and increasing investment in and around the Gold Coast Health and Knowledge Precinct (GCHKP). The Precinct comprises a 200 hectare health, technology and innovation hub, residential complex in addition to a campus of Griffith University.

The athletes village was developed in the heart of the Precinct and was transformed into the central residential, retail and commercial hub of the development after the Games. In addition, the Games catalysed investment in the Gold Coast's light rail network, providing enhanced public transport access between the Precinct, the Gold Coast and Brisbane: Stage 1 saw A\$1.6 billion invested whilst Stage 2 saw further investment of \$500 million. Planning for Stage 3 is also well underway.

The Games also provided the opportunity to attract further private and foreign investment to the GCHKP as part of the Trade 2018 programme of events. For example, 24 members of China's High Technology Industry Development Center, Torch, toured the GCHKP as part of their visit to the Games. Following this, a Memorandum of Understanding was signed with the Queensland Government to establish the Queensland-Torch Health and Medical Precinct in the GCHKP – this was Torch's first overseas investment of this kind.

In addition to the A\$550 million investment in the Athletes village, it is estimated that there will be a further A\$1 billion investment in the Precinct over the next 20 years, above and beyond the A\$5 billion total investment in infrastructure to date.

Finally, the Post Games and Benefits realization reports estimate that, once the Precinct is fully developed and occupied, employment at the GCHKP is expected to grow from around 10,000 full time jobs in 2016 up to 26,000 in the next 10 to 15 years. Gold Coast 2018 played a major role in accelerating this.

Sources: Gold Coast Health and Knowledge Precinct (2017), Gold Coast 2018 Official Post Games Report (2019), Commonwealth Games Benefits Realisation (2018), Queensland Government media statement (2018)

'The Commonwealth Games marked the beginning of a new chapter for the Gold Coast, as it evolves from a tourist town into a multi-dimensional city with a rapidly expanding economy.'

Property Council of Australia, June 2018

Critical success factors

- **Secure follow-up events:** To maximise the demand side legacy of the Games, it is important to build on the successes of the Games by attracting follow-up sporting and non-sporting events that sustain momentum in the host city. For example, by securing the 2018 European Championships, Glasgow was able to use the venues developed for the Commonwealth Games and continue to position the city as a leading global sporting venue. Games hosts should have a long term strategy for attracting events to the city following the Games.
- **Working with the private sector to deliver legacy:** Organising Committees should form partnerships with the private sector to carry forward the legacy of the Games. For example, the Queensland Government partnered with Village Roadshow Studios to build a new sound stage to host Gold Coast 2018 squash and attract major international film makers to Queensland after the Games. Similarly, for Melbourne 2006, the majority of investment in Melbourne Cricket Ground was privately funded given the legacy benefits from the redevelopment; and, for Manchester 2002, the main Games stadium was converted into a football ground for future tenants – Manchester City Football Club.
- **Ensure strong media attention during and before the Games:** To maximise the legacy benefits from tourism, it is crucial to present a positive image of the city during the Games. Any negative media attention surrounding aspects such as public transport can damage the image of the city presented around the world, and therefore to the numbers of visitors to the city in the years after the Games. As a result, ensuring sufficient budget allocation has been made to these critical categories of operating expenditure is important. Gold Coast 2018 is a good example of a Games that invested to prevent harmful media attention. For example, in advance of the Games, works to protect the Gold Coast's famous beaches were accelerated to ensure these critical assets were protected from possible storm damage.

3.3 Hosting the Games can boost productivity through improving the skills of the workforce and business competitiveness

Impact pathway

Supply-side drivers

The impact of demand-side drivers on GDP before and after the Games is assessed in Statements 3.1 and 3.2, whilst the benefits to trade and inward investment are considered in Statements 5.1 and 5.2 respectively.

- a. Improvement to skills from experiences of supplying services and / or volunteering for the Games
- b. Improvement in the capabilities and competitiveness of businesses, e.g. innovation and potential adoption of new technologies, products and services

Increased productivity

Higher GDP and employment post-Games

Summary of evidence

Manchester 2002:



Business competitiveness:

- Commercial developments in East Manchester including a regional retail centre, a four star hotel, offices and new housing developments supporting up to 3,800 jobs.
- North Manchester Business Park was expected to add a further 6,000 or more jobs.
- 33% of North West business representatives believed that the region had improved as a place to do business as a result of the Games.
- Improvement in rank from 19th to 13th in European Cities Monitor as a business location.
- Estimated increased business turnover as a result of trade development and supply chain initiatives of £22 million.
- 24% of companies in the North West believed that the Games has benefited their business.



Skills:

- 47% of volunteering programme participants learned new skills and capabilities.
- 3,092 trained people obtained a recognised qualification.
- 10,500 gained experience from the Games.

Sources: Cambridge Policy Consultants (2002); Faber Maunsell (2004); Figures in 2002 prices

Melbourne 2006:



Business competitiveness:

- A\$4 million was invested by the Victorian Government in a business leveraging strategy.
- A\$778 million contracts awarded to local firms (87% of total Games-related contracts).
- 1,500 businesses attended business ready forums.
- 2,300 attendances at 25 international business events.
- 48 Business Leaders part of Industry Leaders programme.
- 1,500 attendances at Australian Technology Showcase Exhibition.
- 39% of Business Club Australia (BCA) survey respondents believed that BCA Melbourne 2006 had at least 'some impact' in improving their business networks.



Skills:

- 14,000 people developed skills as part of volunteer programme.
- 264 apprentices employed.

Sources: KPMG (2006), Victoria Government (2006); Figures in 2006 prices

Glasgow 2014



Business competitiveness:

- 76% of contracts awarded to Scottish businesses (£510 million).
- 320 CEOs attended the Commonwealth Games Business Conference.



Skills:

- 11,000 young people benefited from legacy employability initiatives including 3,600 school leavers as part of the Commonwealth Apprenticeship initiative.
- 600 students trained in production and technical skills.
- 77% of host city volunteers indicated their confidence had increased following the experience.
- 16,700 individuals developed (new) skills through volunteer programmes at the Games.

Sources: Glasgow 2014 Legacy Economic Technical Report (2015); Figures in 2014 prices

Gold Coast 2018**Business competitiveness:**

- 8,500 businesses participated in procurement information and development activities.
- 82% of the A\$1.7 billion total contract value awarded to Queensland businesses.
- 60,000 visits to Be Games Ready website.

**Skills:**

- Over 26,000 training opportunities provided to Gold Coast 2018 workforce.
- 360,000 training hours delivered to Gold Coast 2018 volunteers.
- 3,100 people trained as part of Be My Guest programme – aiming to drive service excellence in tourism and hospitality.
- 800 training opportunities for Aboriginal and Torres Strait Islander peoples.
- 200 intern and work experience opportunities provided by host broadcaster, NEP.
- 238 intern opportunities in partnership between Griffith University and the Organising Committee – 61 gained full time employment with Games organisers.
- New Women's Coaching Initiative Program (WCIP) set up to build women's coaching capabilities across the Commonwealth.
- 13 internship opportunities in tourism and hospitality at the 'Mossman Gorge Centre and Voyages' for Aboriginal and Torres Island Strait islander people.
- 15,000 volunteers gained experience and developed skills at the Games.

Sources: Gold Coast 2018 Official Post Games Report (2019); Figures in 2018 prices

**Critical
success
factors**

- **Select volunteers with the most to gain:** To maximise the legacy benefits of volunteering and employment programmes, volunteers should be selected on the basis of having the most to gain from the programme – for example, those not currently in employment, or those lacking experience and/or qualifications.
- **Train volunteers and support post-Games outcomes:** To help volunteers develop their skills over the course of the volunteering programme, individuals should be given specific training that has value beyond the Games. If this can be recognised as a formal qualification, individuals' post-Games prospects are even greater. Furthermore, both before and after the Games, attention should be given to providing volunteers with support in applying their skills after the Games.
- **Upskill local businesses:** To help ensure that local businesses involved in supplying goods or services for the Games derive significant legacy value from the Games, support networks and events can be put in place to assist local businesses in identifying follow-up work after the Games, and in applying the skills and experiences developed in supplying the Games. Moreover, to prevent leakage from the local economy, local suppliers should be prioritised in the tendering process.

4

Supporting physical, economic
and social regeneration and
transformation

Costs and benefits statement 4

4 Hosting the Games can support physical, economic and social regeneration and transformation by:

1. Regenerating deprived areas within the host city boosting local economies, attracting investment and enhancing community cohesion.
2. Transforming areas within the host city boosting local economies, attracting investment and enhancing community cohesion.

Introduction

- This statement is divided into two parts:
 - a summary of the evidence on the regeneration of East Manchester and the role of the 2002 Commonwealth Games
 - a case study on the transformation of East End in Glasgow and the role of the 2014 Commonwealth Games.
- The wider economic and social impacts associated with hosting the Games, including the impact of regeneration are also covered in Statements 3 and 7.

Assessment of the evidence

- For both case studies – East Manchester and the East End in Glasgow – plans for regeneration and transformation were already in place before the decision to host the Games. This makes it difficult to isolate the impacts of the Games themselves but evidence from the interviews conducted with stakeholders from past host cities suggests that the Games played a role in accelerating and amplifying these plans.
- There are limited long-term evaluations of regeneration initiatives which makes it difficult to track the impacts of specific spending elements or of hosting the Games in the long-term and separate out these effects from other things that may have influenced the development of these areas.

Case study

The Legacy of the 2002 Commonwealth Games in East Manchester

The legacy of the 2002 Commonwealth Games in relation to the regeneration in East Manchester is summarised below in four parts:

- an analysis of the context of sports-led regeneration as a result of the 2002 Commonwealth Games
- a summary of the quantitative evidence on the economic and social improvements in East Manchester based on existing Sources: note that the evidence usually does not assess legacy
- an analysis of the long-term changes in socio-economic indicators in East Manchester
- a summary of the legacy successes and failures of the 2002 Commonwealth Games on regeneration in East Manchester.

Context

- A key priority for Manchester 2002 was to leave a lasting legacy of new sporting facilities and social, physical and economic regeneration around Sportcity in East Manchester.
- East Manchester was chosen as the location for the Commonwealth Games stadium to host the opening and closing ceremonies, athletics and rugby sevens.
- The strategy was that the new stadium, which was occupied by Manchester City Football Club after the Games, would be a catalyst for sports-led regeneration in the local area.
- Several other prominent venues were built around the stadium used for the ceremonies and athletics at the Games, including the National Cycling Centre and a tennis academy.
- Some road links were improved and widened to improve access and reduce congestion.
- The area immediately around the stadium was given an aesthetic makeover – creating railing and planting vegetation to disguise areas of poorly maintained and dilapidated housing opposite the stadium.
- East Manchester has seen improvements in housing supply and transport links since the Abu Dhabi United Group (ADUG) bought Manchester City in 2008 and the metro-link extension (i.e. the second wave of regeneration).

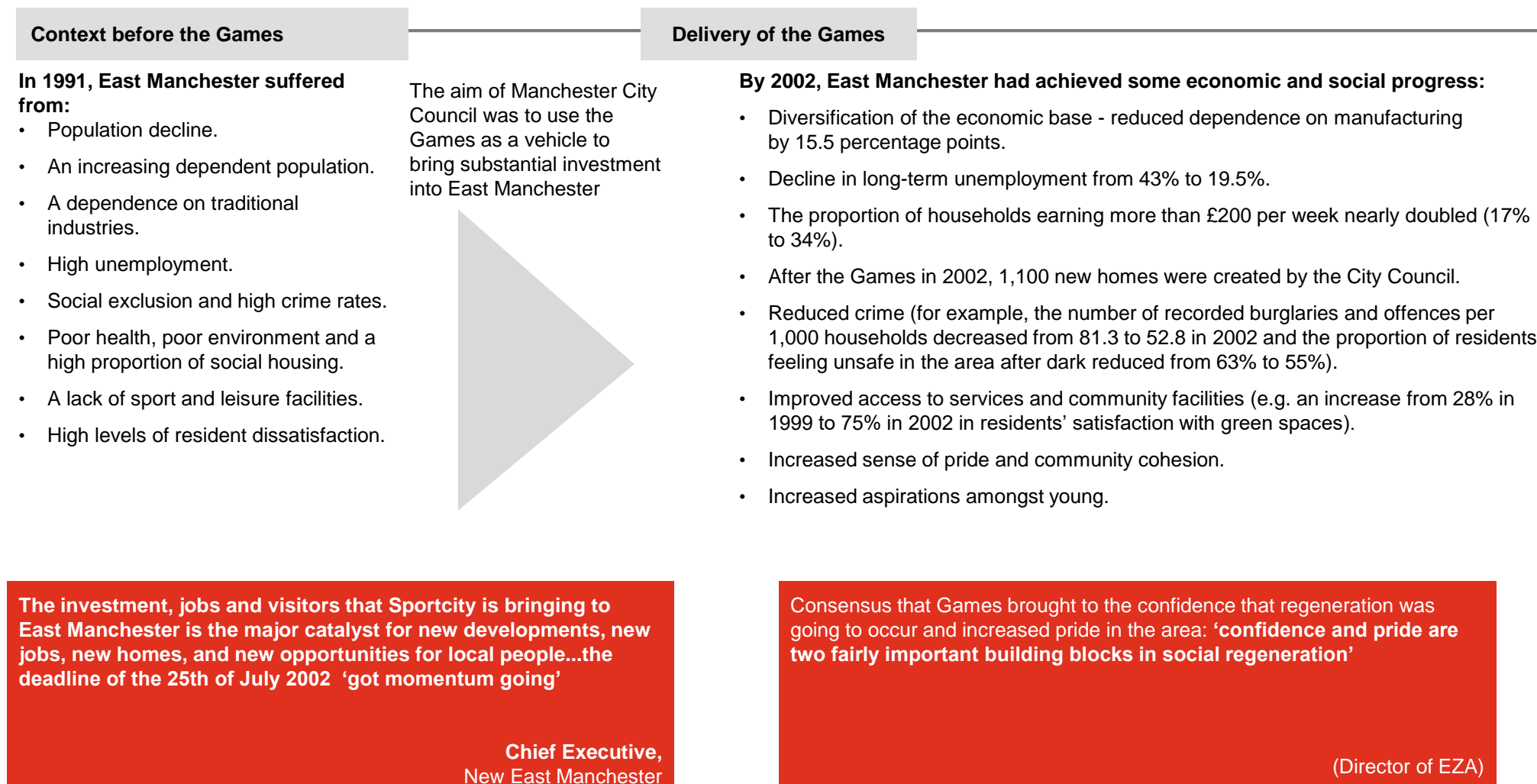
Sources: Curriculum Press (2017), Manchester Evening News (2003)

Case study: Sports-led regeneration in East Manchester

‘The Commonwealth Games in 2002 was designed to be a driver and a catalyst for change in the host city. Part of our successful bid for the Games was our commitment to regeneration and improvement work pre and post-Games, while creating a lasting legacy for communities, residents and Games volunteers’

Sir Richard Leese,
Leader of Manchester City Council (1996-present)

Case study: The Games acted as a catalyst for social regeneration in East Manchester



Sources: Newby (2003), Cambridge Policy Consultants (2002)

Case study: The Games acted as a catalyst for social regeneration in East Manchester

The direct impact of the Games was felt in terms of employment creation and investment



Of the 2,900 additional jobs in Manchester linked to hosting the Games, 2,000 were expected to occur in East Manchester.



Public investment in the Games and the regeneration infrastructure was £670 million (at 2002 prices); £570 million was in East Manchester.

In 2014, the ADUG formed a commercial joint venture with Manchester City Council. It was reported that the partnership envisaged investing up to £1 billion over 10 years to build new homes and communities to regenerate East Manchester. A council report in 2017 states that £400 million has been invested by the public and private sectors together.

The direct impact of the Games is the development of Sportcity and access to services and facilities



Improved **confidence** that regeneration was going to occur
Increased the sense of **community pride**: 59% of residents surveyed in 2002 indicated their sense of community pride



Improved **access to services and facilities** (leisure, sports, supermarkets) in the area around Eastlands

The Games accelerated economic regeneration by pulling in private investment and providing 'clarity of vision' for regeneration

Sportcity

- Resulted in higher employment, for example, during construction.
- Commercial developments around Sportcity, which included a regional retail centre, a four star hotel and offices, were expected to create 3,800 jobs.

Central Business Park

- Fujitsu Services invested in 150,000 square feet of space having been convinced by the positive signs of progress shown by the Games.
- Phase 1 of the development of 30 hectares of land for industrial and commercial uses was expected to create or safeguard 2,000 new jobs, with a further 10,000 new jobs expected once all phases are completed.

ASDA Walmart Store

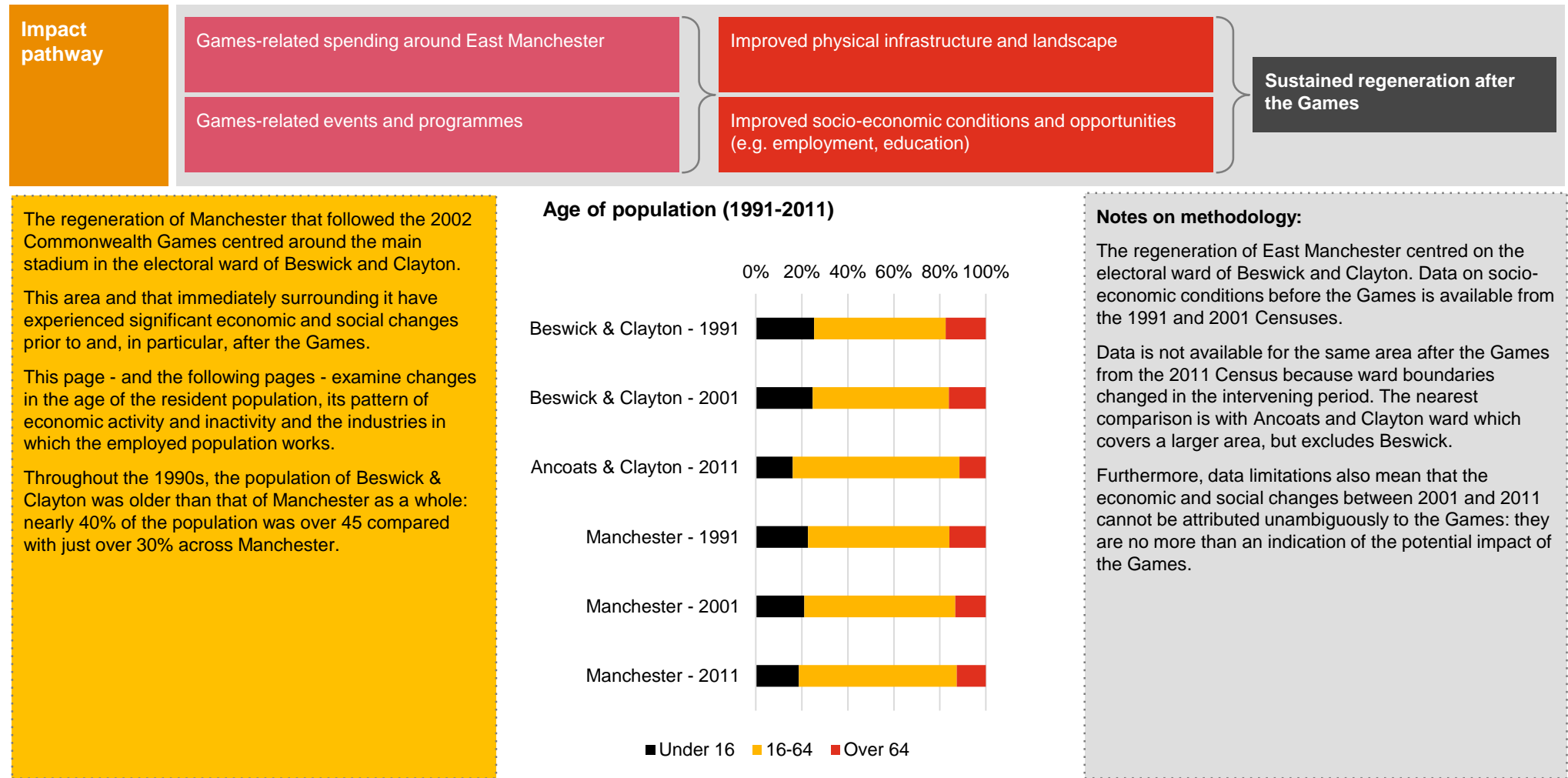
- One of the UK's largest ASDA stores (16,722 square metres retail superstore) was situated next to Sportcity; the investment was prompted by the regeneration.
- ASDA created 588 permanent jobs and 250 temporary jobs, with local people making up 95% of the employees.

'If we didn't have the Commonwealth Games in Manchester, the regeneration would be 20 years behind'

Sir Howard Bernstein
Chief Executive, Manchester City Council (2000-2016)

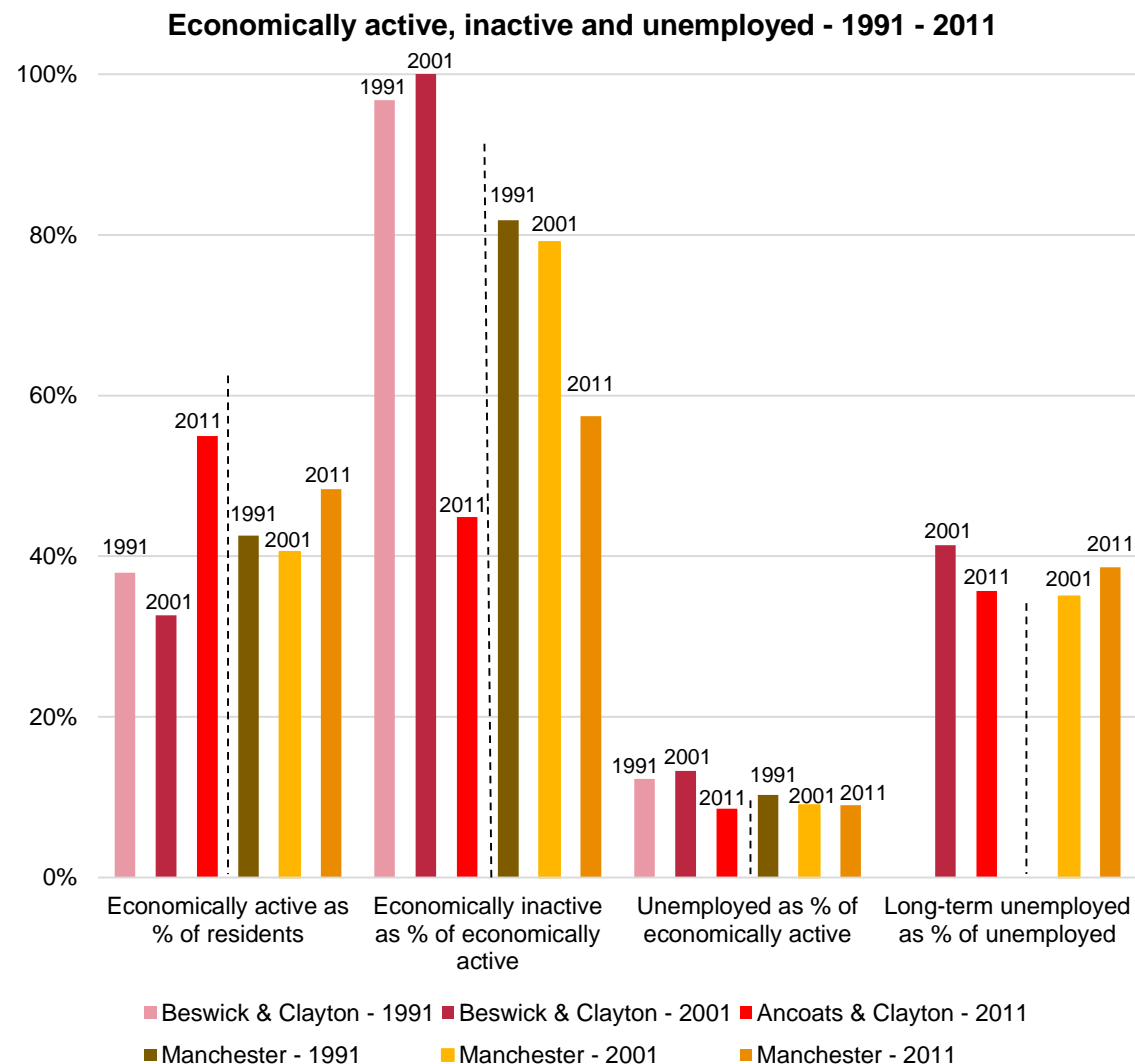
Sources: Newby (2003), Cambridge Policy Consultants (2002), Financial Times (2014), Manchester Council (2019)

Case study: The Games acted as a catalyst for social regeneration in East Manchester



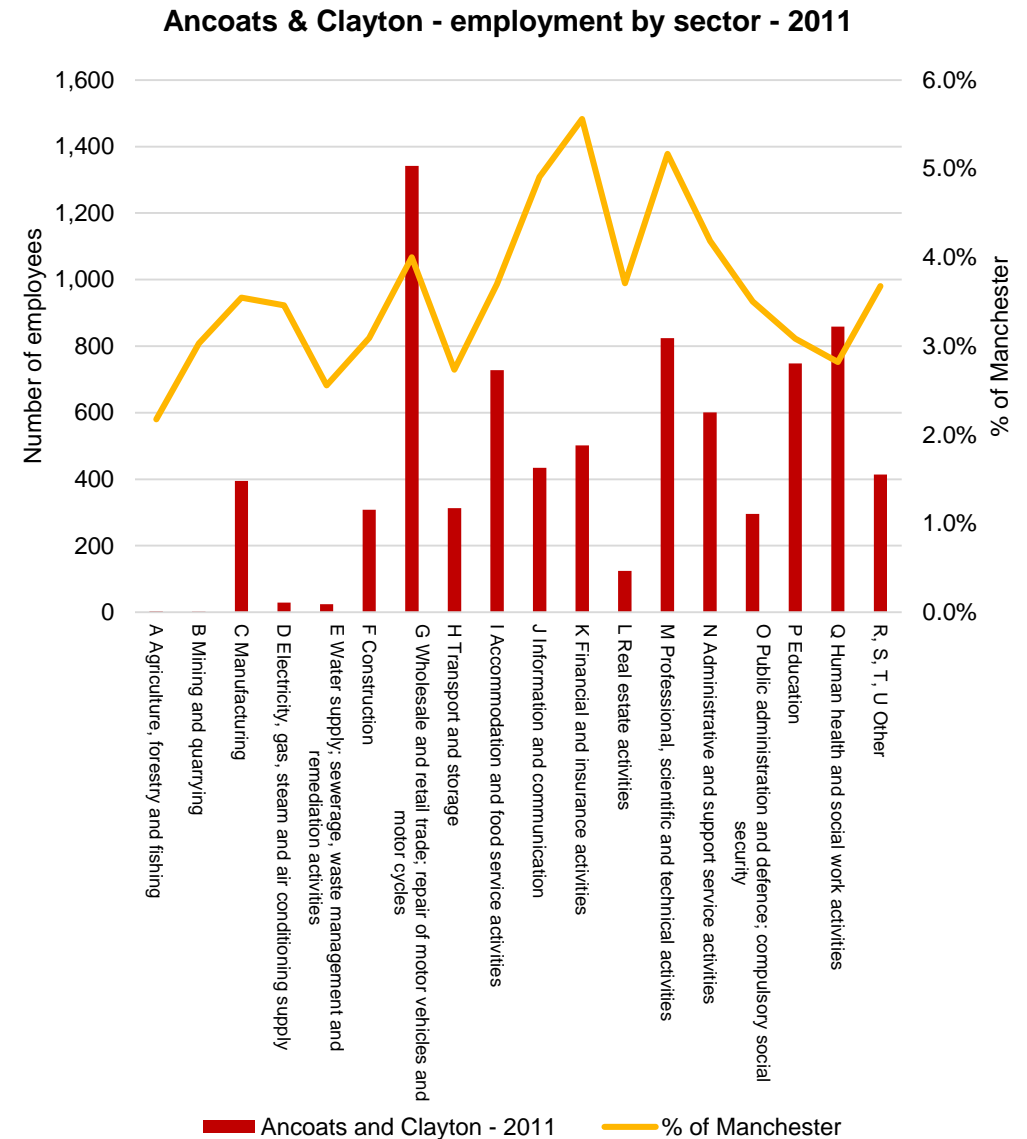
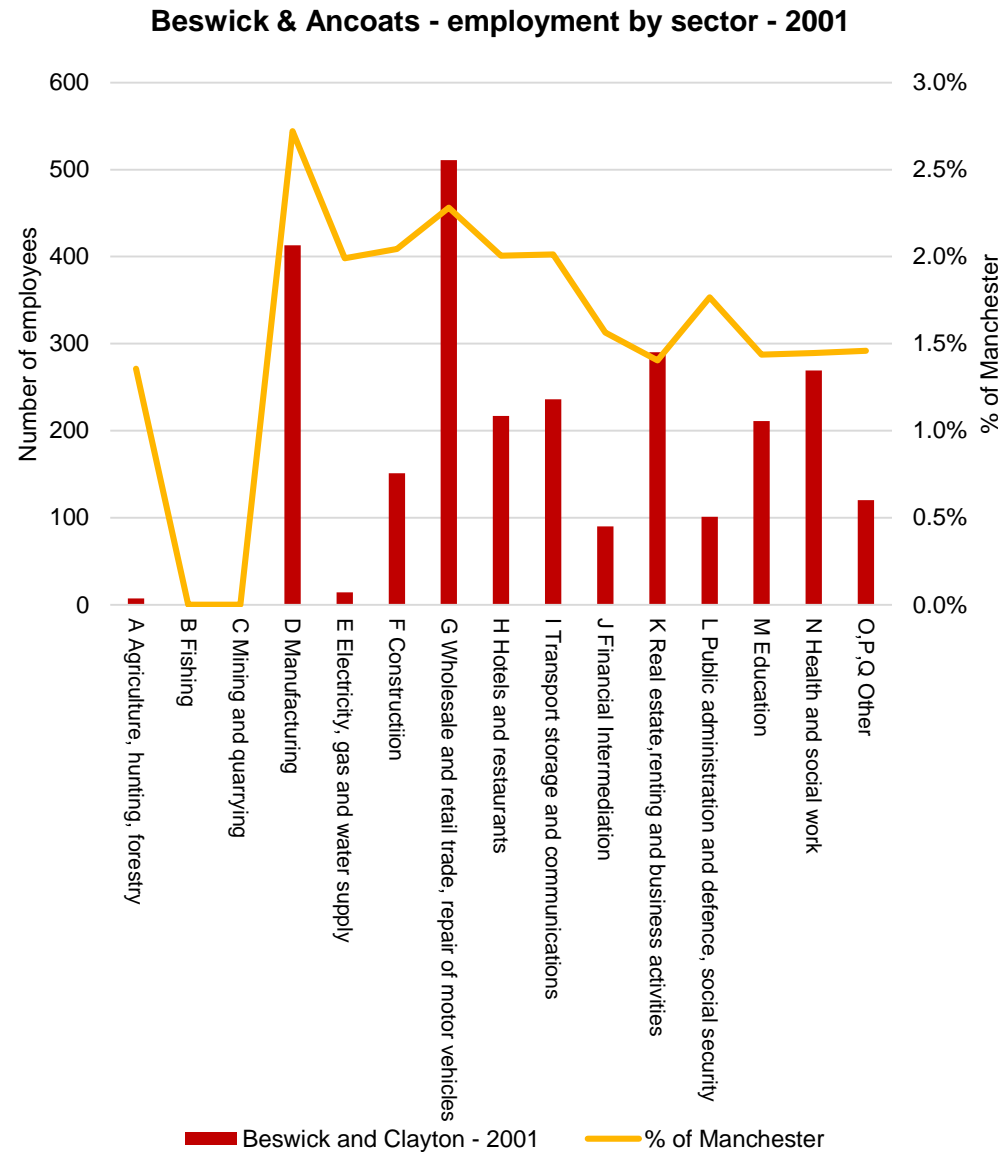
Case study: The Games acted as a catalyst for social regeneration in East Manchester

- Since 2001, reflecting the changing demographics, **the proportion of residents who are economically active has increased from below the average for Manchester, to a level significantly above it.**
- Furthermore, in the period up to the Commonwealth Games (2001), the ratio of economically inactive to economically active in Beswick & Clayton was over 10 percentage points higher than across Manchester as a whole. After the Games, this ratio fell sharply, taking it to more than 10 percentage points below that of Manchester.
- The pattern of unemployment has followed this trend with the area around the main stadium experiencing a faster fall in the rate of unemployment – and the importance of long term unemployed – than Manchester as a whole.
- As the following page illustrates, regeneration of the area has seen the structure of employment change: employment in manufacturing has declined to be replaced by service sector employment.
- Please refer to the previous page for a note on the methodology (e.g. geographical boundaries and wards).



Sources: NOMIS, Census 2001 and 2011

Case study: The Games acted as a catalyst for social regeneration in East Manchester



Sources: NOMIS, Census 2001 and 2011

Case study

Glasgow East End transformation

A key objective of the Glasgow 2014 Games was to regenerate the East End of the city. By developing the athletes village, Emirates Arena, Sir Chris Hoy Velodrome, Hockey Centre and Tollcross International Swimming Centre in the heart of the wider Clyde Gateway redevelopment, the Games played a major role in catalysing investment in the area. Following the Games, the athletes village was converted into 700 affordable, sustainably built houses and flats and a 120-bed care home and the sporting venues provide facilities for local communities to enjoy. The Games have also accelerated investments in the area's transport infrastructure, in particular the extension to the M74 motorway and a refurbishment of Dalmarock Railway station.

As the Games were part of a wider regeneration project, it is challenging to identify the incremental benefits brought about by the Games. Either side of the Games (from 2012 until 2017), 239 hectares of derelict and contaminated land were remediated, 63,664 square metres of business floorspace were completed and 2,456 residential units were constructed. In addition, 5,106 new jobs were attracted to the area, of which 1,103 (22%) were filled by local people. Over the same period 1,940 people participated in employability programmes, 980 businesses were supported, 4,665 people participated in Clyde Gateway community engagement events, and 136,990 had participated in additional learning/health/sport capacity building. As a result, from 2012 to 2016, neighbourhood satisfaction rose from 70% to 83% and community involvement (defined as the share of survey participants who felt they could influence local decisions) rose from 37% to 45%. Those feeling safe walking in the area after dark rose from 52% in 2012 to 72% in 2016, taking it above the Glasgow average of 67%. The number of people rating the environment as good also rose over the period from 75% to 80%.

A survey of those living in the former athletes village found that 58% of social renters in the development originally came from the East End of Glasgow; the equivalent figure among owners was only 24%. Dwelling satisfaction was high across the board at 97% for social renters and 98% for owners, whilst the equivalent figures for neighbourhood satisfaction were 90% and 96% respectively. Social renters were concerned about anti-social behaviour in the area and owners feared that investment in the area would stall. In addition, across the regeneration area, health outcomes have failed to improve over the course of the project.

The GoWell East and wider Clyde Gateway projects have had variable positive impacts on key socio-economic variables. Although it is difficult to attribute all the impact to the Games, the Games are widely considered to have been a positive force which has contributed to transformation of the city.

Sources: GoWell in the East End, Clyde Gateway, Glasgow 2014 Commonwealth Games legacy final evaluation report (2018)

Critical success factors

Apart from the factors that drove the successful delivery of the Manchester and Glasgow Games, other specific factors were critical to successful acceleration of the regeneration of East Manchester and transformation of the East End in Glasgow. Notable amongst these was **the commitment of the host city to integrate the Games within wider regeneration strategies** at city and regional levels.

For example, for Manchester 2002:

- There was an existing legacy plan already in place at Games time to help achieve 'buy-in' from **local residents who began to see the Games as part of a wider regeneration strategy**.
- The City Council ensured that the **Games were relevant and central to the long term development of the city and East Manchester**.
- The legacy programme linked to the wider regeneration strategies and schemes: for example, the Healthier Communities project linked with Health and Sport Action Zones where possible.

Although there were programmes outside the Main Legacy Programme that ensured that 30% of construction jobs went to residents of East Manchester, some people felt that an opportunity was lost in terms of linking specific legacy projects to the large scale construction activities that occurred pre-Games. This would have ensured that tangible legacies associated to construction projects feed into less tangible projects.

Subsequently, further regeneration was driven by investment by ADUG following its purchase of Manchester City, leveraged on wider regeneration plans and strategies influenced by the Commonwealth Games such as the Metro-Link extension.

5

Strengthening trade, investment
and tourism

Costs and benefits statement 5

5 Hosting the Games can strengthen trade, investment and tourism links with other parts of the Commonwealth and the rest of the world by:

1. Catalysing trade deals with other Commonwealth (and non-Commonwealth) countries.
2. Attracting inward investment from other Commonwealth (and non-Commonwealth) countries.
3. Attracting sustained tourism.

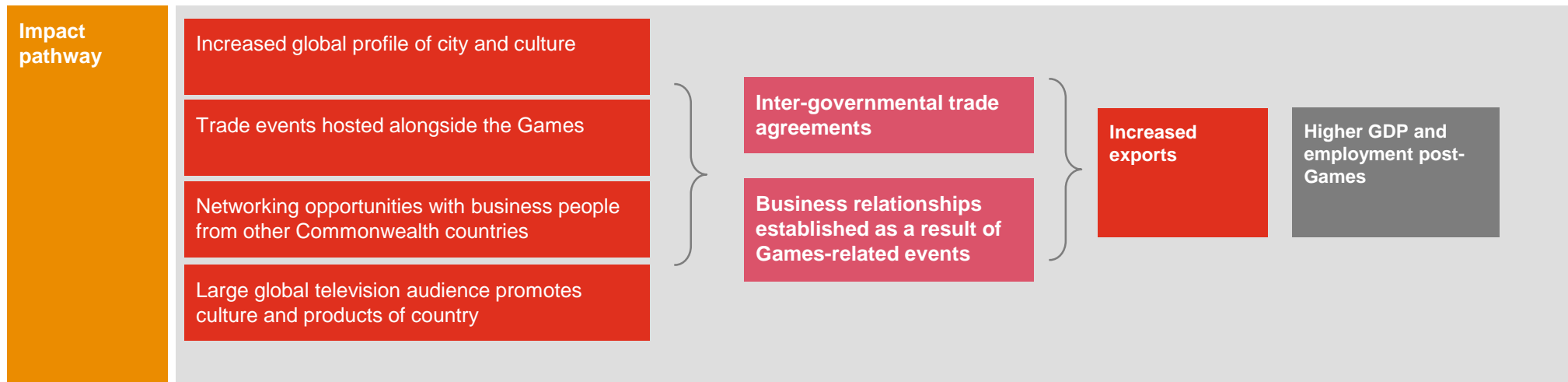
Introduction

- Hosting the Commonwealth Games enhances the global profile of the host city and provides a platform to promote trade and investment links across the Commonwealth and beyond - this can enhance the long term return to the economy on the investment of hosting the Games.
- Information on Games-related business-promotion activities and initiatives are presented and, where available, evidence on the outcomes and impacts of these initiatives on trade and inbound investment are provided.
- Evidence on the estimated long term boost to tourist numbers from raising the global profile of the host city is also presented. Evidence on the impact on tourism before and during the Games was presented in the previous statement.
- These benefits are additional to the economic benefits considered in the previous statements. The Games-related and discretionary spending and investment considered in statements 1 and 2 are key drivers for these benefits.

Assessment of the evidence

- Evidence on Games-related business-promotion activities and initiatives is captured for most past host cities. However, there is limited to no evidence on the impact of these initiatives on trade or investment.
- Few existing analyses have reviewed the post-Games change in tourist numbers for host cities/regions. As a result, the evidence has been supplemented based on reviewing pre/post Games tourism data for past host cities where reliable data are available.

5.1 Hosting the Games can catalyse trade deals with other Commonwealth (and non-Commonwealth) countries



Summary of evidence

Manchester 2002:

Activities:

- The Commonwealth Economic Benefits initiative was set up to promote trade in key sectors of the North West of England economy.
- Inward and outward trade missions were organised with Australia, Canada, India, Malaysia, Singapore and South Africa.
- Specific events/missions were set up for each country. For example: 87 North West business people participated in five trade missions to Australia and seven specific Australian events at the Business Club in July 2002 attracted 102 participants; six specific Malaysian attracted 138 participants.

Sources: Prosperity North West (2003)

Melbourne 2006 :**Activities:**

- The Commonwealth Games Business Benefits Programme was set up to leverage the hosting of the Games to benefit businesses. It was led by the Department of Innovation, Industry and Regional Development.
- 25 international business events were held in 2005 and 2006 and attracted 2,300 attendees.
- There were 2,901 international members of the Business Club Australia.
- The key markets were India, Pakistan, Malaysia, Singapore, South Africa, China and the United Kingdom.
- Export seminars and conferences were held for the design and technology industries to showcase Victoria's innovation capabilities. Similar events were held in the food and wine sector.

Outcomes:

- 103 business deals worth A\$236.5 million for Australian companies were linked to the programme.
- 34% of business involved in the Business Club programme said that they had either achieved export sales due to the programme or that they expected to do so in the future.

Sources: KPMG (2006); Figures in 2006 prices

Glasgow 2014:**Activities:**

- 9,800 delegates were attracted to more than 70 events set up by Scotland's enterprise and tourism agencies. These events ranged from Geared for Gold roadshows to the Scotland Welcomes the World conference to offer opportunities by the Commonwealth Games and Ryder Cup.
- Welcoming representatives of the Commonwealth's 71 nations and territories to Glasgow provided an opportunity to encourage stronger trade links and relationships by showcasing the city to business leaders and politicians.
- Glasgow's Chamber of Commerce used the opportunity to host a series of business breakfasts during the Games.
- The Commonwealth Games Business Conference held at Glasgow University – in collaboration with the Scottish Government, UK Trade & Investment and Scottish Enterprise - attracted 320 CEOs and was live streamed in 80 countries.

Outcomes:

- A Trade and Investment Memorandum of Understanding was signed with Jamaica in 2013.
- In addition, trade and investment discussions took place with Queensland and Toronto.

Sources: Glasgow 2014 Post Games Report (2014)

Gold Coast 2018:**Activities:**

- 3,200 businesses were involved in 120 engagements as part of the Trade 2018 programme in 2017.
- A further 2,500 attended 32 Games-time events.
- Seven priority markets were targeted: Canada, UK, India, Malaysia, Singapore, New Zealand and Papua New Guinea.

Outcomes:

- The estimated annual boost to exports from the Trade 2018 programme in the four years after the Games was A\$170 million (2018 prices).
- 89% of Trade 2018 survey respondents said that the programme raised awareness and consideration of collaboration opportunities on the Gold Coast.
- 90% of respondents from overseas either agreed or strongly agreed that Trade 2018 had improved their perception of the Gold Coast, Queensland and Australia as places to do business.
- More than one third of Australian delegates reported that it was either likely or extremely likely they'll achieve export and/or investment deals as a result of their participation in Trade 2018.
- Following a food buyers showcase, two Queensland businesses secured their first export deals.

Sources: Griffith University (2018), Gold Coast 2018 Official Post Games Report (2019); Figures in 2018 prices

Evidence from other events:

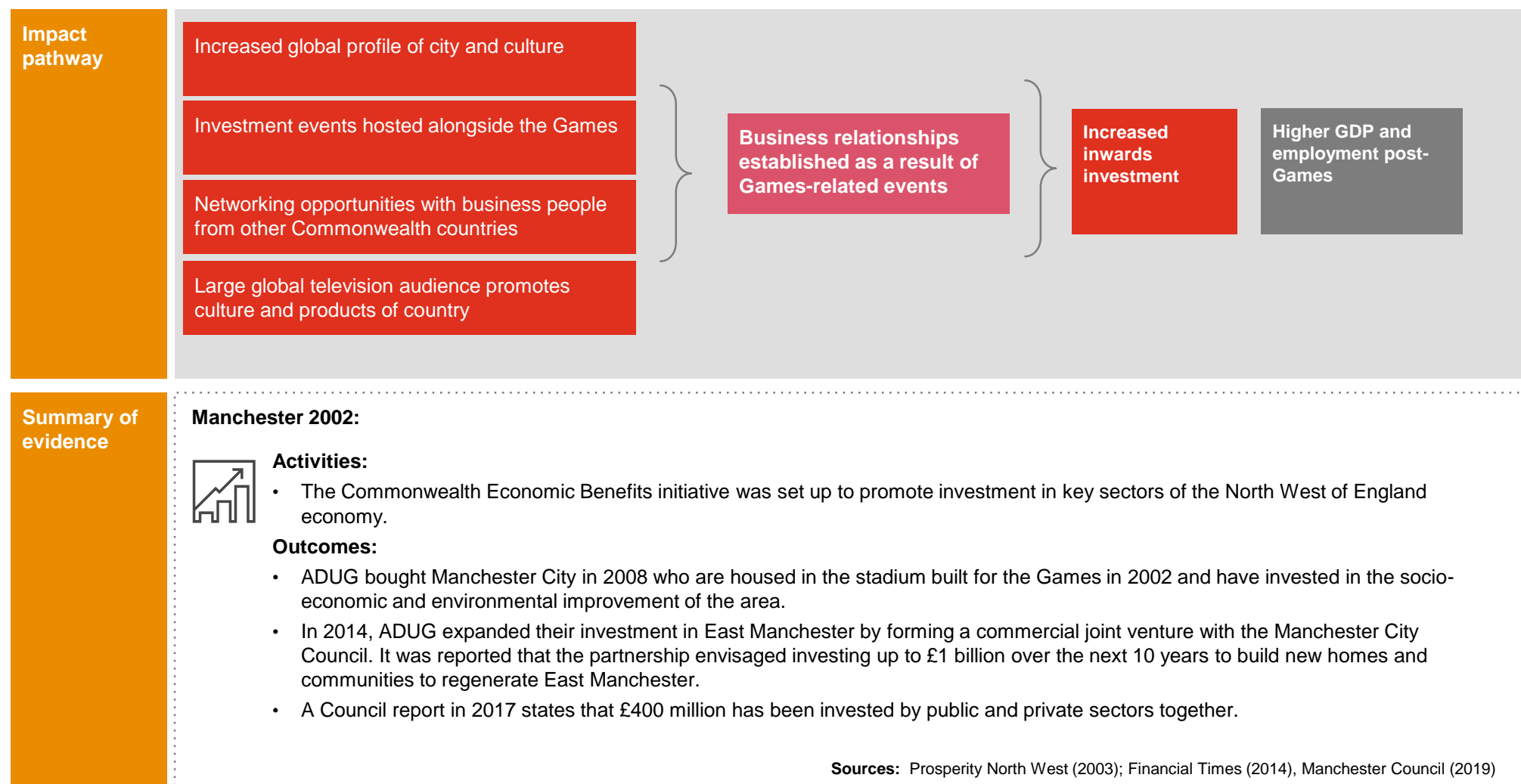
- UK Trade and Investment estimated that the London 2012 Olympics helped to attract inward investment of £2.5 billion and supported UK firms in winning £1.5 billion of contracts and making sales of £5.9 billion.

Sources: PwC analysis

**Critical
success
factors**

- **Hosting simultaneous business events to maximise export growth:** If increasing exports is a key objective for the host city/region, a parallel programme of business events can be organised during the build up to and during the Commonwealth Games. Gold Coast 2018 is a good example of a Games investing heavily to promote export capabilities as part of the Games. Although it is too early to establish what has been the lasting effect on exports; early survey evidence indicates that businesses in the region benefited from the programme's events and wider support.
- **Leveraging the city's key strengths and growth priorities:** Host cities have multiple options in terms of how to structure their trade programmes. However, one way that proved effective in Melbourne 2006 was to host specific events that targeted priority industries and strong sectors of the Victoria economy. For example, Melbourne 2006 showcased its design, technology and food and wine sectors.

5.2 Hosting the Games can attract inward investment from other Commonwealth (and non-Commonwealth) countries



Melbourne 2006 :**Activities:**

- The Commonwealth Games Business Benefits Programme was set up to leverage the hosting of the Games to benefit businesses. Led by the Department of Innovation, Industry and Regional Development.
- 25 international business events held in 2005 and 2006 attracted 2,300 attendees.
- 2,901 international members of the Business Club Australia – with the key markets being India, Pakistan, Malaysia, Singapore, South Africa, China and the United Kingdom.

Outcomes:

- 25% of 'Business Club Australia - Melbourne 2006' survey respondents who indicated that their company was foreign owned identified a new potential investment opportunity. In one third of cases the value was above A\$1 million.
- More than 90 per cent of respondents from foreign owned companies who identified an opportunity expected a decision on that investment within two years of the Games. Around one third indicated either a 'high' or 'very high' likelihood of that investment eventuating.

Sources: KPMG (2006); Figures in 2006 prices

Glasgow 2014:**Activities:**

- Glasgow's Chamber of Commerce used this opportunity by hosting a series of business breakfasts during the Games.
- The Commonwealth Games Business Conference held at Glasgow University – in collaboration with the Scottish Government, UK Trade & Investment and Scottish Enterprise - attracted 320 CEOs and the event was live streamed in 80 countries.

Outcomes:

- A Trade and Investment Memorandum of Understanding was signed with Jamaica in 2013; in addition, trade and investment discussions were held with Queensland and Toronto.

Sources: Prosperity North West (2003)

Gold Coast 2018:**Activities:**

- 3,200 businesses were involved in 120 engagements as part of the Trade 2018 programme in 2017; a further 2,500 attended 32 Games time events.

Outcomes:

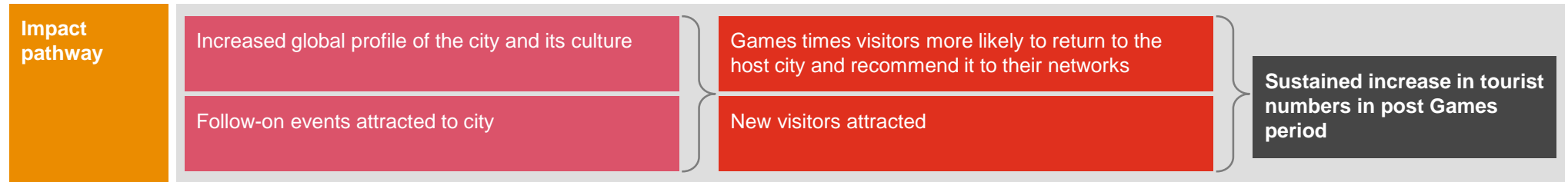
- The projected annual boost to inward investment from the Trade 2018 programme in the four years after the Games was A\$41 million.
- 64% of international delegates said that they were either 'extremely likely' or 'likely' to increase their investment in Australia or buy Australian goods or services following Trade 2018.
- A Memorandum of Understanding was signed in April 2018 between the Chinese backed Queensland-Torch Health and Medical Precinct and the Queensland Government to develop jointly a Medical Precinct in Gold Coast.

Sources: Griffith University (2017), Gold Coast 2018 Official Post Games Report (2019);
Figures in 2018 prices

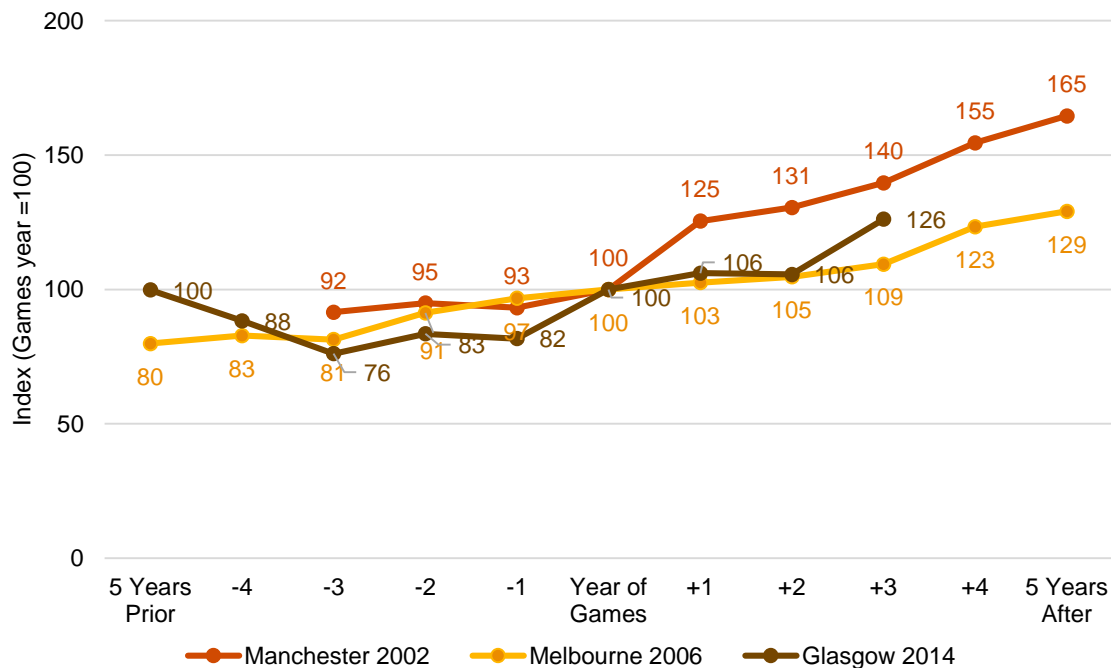
**Critical
success
factors**

- **Hosting simultaneous business events to maximise inward investment:** If increasing inward investment is a key objective for the host city/region, a simultaneous programme of business events can be organised during the build up to and during the Commonwealth Games.
- **Leveraging Games-related assets:** Games organisers can trigger a multiplier of inward investment into a particular area of a city through kickstarting regeneration by investing in Games-related assets. For example, significant investment has been attracted to East Manchester following the Commonwealth Games, not least from Abu Dhabi. Similarly, investment in the athletes village in the Gold Coast accelerated investment in the Health and Knowledge Precinct - for example, contributing to the inward investment from the Chinese backed Torch body. Games organisers may also be able to secure inward investment to help fund Games-related capital investments. By planning the legacy use of assets well in advance of the Games, the eventual benefactor may be willing to contribute to the upfront development costs.

5.3 Hosting the Games can attract sustained tourism



Tourist numbers in host cities before and after the Games



The chart shows the number in overseas tourist arrivals in the host cities (the host state in the case of Melbourne 2006), for past host cities where reliable data are available in the years before and after the Games.

- In Manchester, from three years prior to the Games to one year prior to the Games, tourist numbers only increased from 540,000 to 550,000. Then, in the Games year, the number of overnight visitors increased significantly to 590,000 and this growth continued in the years after the Games, rising consistently to 971,000 five years after the Games.
- Similarly, in Melbourne, the Games fell within a period of sustained tourism growth with tourist numbers rising from 787,500 to 955,800 from five years before the Games to one year before the Games, before jumping to 988,500 in the year of the Games, and then continuing to increase consistently to 1,275,700 five years after the Games.
- Finally, for Glasgow, tourist numbers were falling prior to the Games (623,000 per year five years before the Games, but only 510,000 one year before the Games). However, growth was restored in the year of the Games, with numbers rising to 624,000 in the year of the Games, and then continuing to grow in the period after the Games to 787,000 when the dataset ends, three years after the Games.

These changes need to be assessed against a global rate of growth in tourist arrivals of 4.4% per annum between 2012 and 2018 (OECD (2018)).

Sources: UK: Number of overnight visitors, International Passenger Survey, Office for National Statistics; Australia: Australian Bureau of Statistics: Table 11: Short-term Movement, Visitors Arriving - Intended State Of Stay. Gold Coast is excluded as there is no data yet for the period after the Games.

Commonwealth Games Value Framework

**Critical
success
factors**

- **Securing follow-on events:** To sustain the boost to tourism after the Games, host cities need to attract follow-on events. Glasgow adopted this strategy particularly well, for example securing the inaugural European Championships in 2018.
- **Ensuring that the event runs smoothly:** Portraying a positive image of the city around the world is important. Bad news stories in the media at the time of the Games, for example regarding public transport and the availability of accommodation can deter future visitors. Any logistical disruption could create a negative impression, not only among Games visitors but also those watching and reading about the Games. This will reduce the likelihood of the city securing follow on events in the years after the Games.
- **Effective marketing:** To sustain the tourism benefits of the Games, it is important that host cities continue to market the city globally, even after the Games.

6

Promoting community sport participation and elite sporting success

Costs and benefits statement 6

6 Hosting the Games can promote community sport participation and elite sporting success by:

1. Enhancing (elite) sporting success in the host country which boosts pride amongst citizens and produces positive role models for young people.
2. Driving healthier living by promoting community sport participation as:
 - a. Games-related capital investments provide new venues for increased sport participation after the Games.
 - b. Games-related complementary events and programmes (e.g. 'come and try' opportunities) promote sustained sport participation.

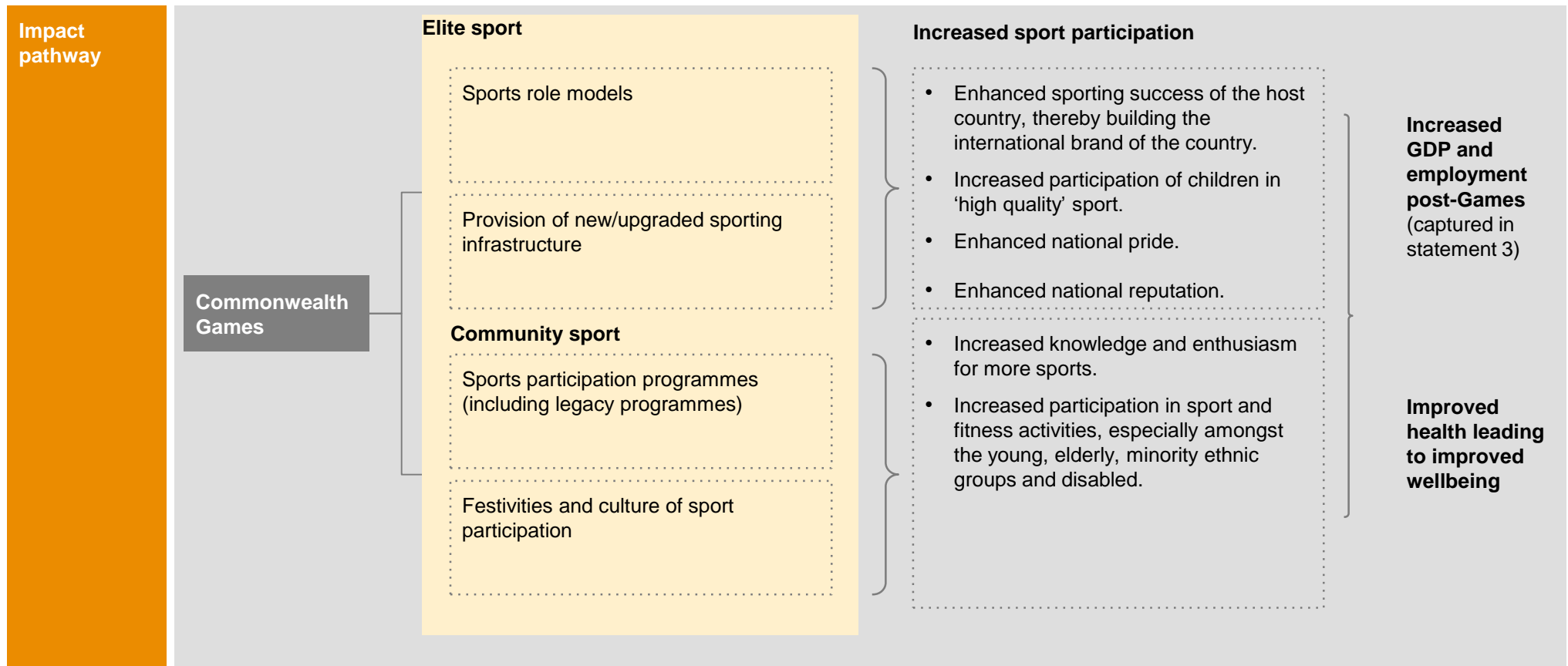
Introduction

- Hosting the Commonwealth Games generates positive impacts by boosting pride through enhanced sporting success at the elite level and boosting enhanced sports participation at the community level.
- Spending on the Games facilitates these impacts by:
 - Improved training opportunities for elite athletes.
 - Increased access to regular physical activity for all members of society (including the young, elderly and disabled).
 - Enhanced promotion of physical activity as a key element of improved health and wellbeing.

Assessment of the evidence

- The available evidence on the impact of hosting the Games on elite sporting success focuses on activities and outputs, i.e. public spending related to elite sporting and number of medals won. Any trends in sporting success cannot be wholly attributed to Games-related spending or other Games-related activities.
- The estimated economic benefit is additional to the impact on GDP of additional public spending related to the Games.

6. Hosting the Games can promote community sport participation and elite sporting success



6.1 Hosting the Games can lead to enhanced (elite) sporting success in the host country

Summary of evidence

Manchester 2002:



Hosting the 2002 Commonwealth Games

- World-class sporting facilities including main stadium, regional athletics arena, aquatics centre, national squash and table tennis centre, hockey centre and velodrome.
- Velodrome became the home of Team GB.



Sporting (elite) success

- British Cycling based at Manchester velodrome; track record of success being nicknamed the 'medal factory'.

Sources: Post Games Report (Manchester 2002)

Melbourne 2006:



Hosting the 2006 Commonwealth Games

- Has left a legacy to future residents of upgraded sporting facilities.
- The Melbourne Sport and Aquatic Centre and facilities such as the new mountain bike course at Lysterfield Park have provided a legacy for elite and community sport.



Sporting (elite) success

- Six world records were set at Melbourne 2006 and 74 Games records were broken.
- Team Australia ended up top of the medals table with 84 golds and a total haul of 221.

Sources: Victoria Government (2006)

Glasgow 2014:**Hosting the 2014 Commonwealth Games**

- Enhanced sporting infrastructure.
- A record number of Scottish athletes met the minimum selection criteria for the Games with Team Scotland fielding its largest ever team of 310 athletes (compared to 202 in Manchester 2002). This represents an increase of just over 50% from the 2002 Games.

**Sporting (elite) success**

- Team Scotland secured 53 medals (19 gold, 15 silver and 19 bronze) and finished **4th in the overall medal table**.
- This surpassed its Commonwealth Games target of breaking their previous record 33-medal haul of Edinburgh 1986 and previous gold medal haul of 11 in Melbourne 2006.
- Scotland made a significant contribution to Team GB and Paralympics GB at the Rio 2016 Olympics and Paralympics with 81 Scottish athletes selected and 27 winning 30 medals; the GB teams finished second in both medal tables.

Sources: Glasgow 2014 Legacy Final Evaluation Report (2018)

Gold Coast 2018:**Hosting the 2018 Commonwealth Games**

- Attracted 19 high performing training camps in 2016/17.
- Sport venues were made available for test events before the Games.

**Sporting (elite) success**

- Nine new world records were set at Gold Coast 2018 and 91 new Commonwealth Games records.
- Australian athletes won the inaugural Australian Institute of Sport (AIS) Performance Awards recognising integrity, fair play and sportsmanship.

Sources: Gold Coast 2018 Official Post Games report (2019)

Case study

Estimated value of Team Canada's sporting success at the Vancouver Winter Olympic Games in 2010

Canadians enjoyed watching Team Canada win medals and would have been willing to pay for this success



0.3 billion to 0.7 billion CAD¹

1. Canadian dollars in constant prices, discounted using a factor of 5%

- Canadian athletes won a record number of medals at the Vancouver Winter Olympic Games in 2010.
- A study in 2011 by Humphreys et al. estimated that **Canadians would be willing to pay between 0.3 billion to 0.7 billion CAD¹ for 'sporting success'**.
- The research asked Canadian households how much they would be willing to pay to fund elite sport following the Vancouver Olympic Winter Games in 2010 (in the expectation that this would sustain the success).
- Several other factors may have affected this value besides the sporting success including 'feel-good' effects of hosting the Olympic Games in Canada and the opportunity to see the Games.

6.2 Hosting the Games can drive healthier living by promoting community sport participation

Manchester 2002:

Increased opportunities

Venues

- The **Sportcity** complex offers world class facilities to top athletes and the community.

Programmes and events

- **75,000** primary age pupils participated in over 750 events organised by **Youth Sports Trust**.
- **4,500** young people took part in 2002 school holiday programmes at new facilities.

Increased motivation

- **50,000 new users** registered at new facilities between January and May 2003.
- The new facilities expected to provide over **31,500 places on sports development courses** per year.

Increased sport participation

- Faber Maunsell (2004) showed **increased participation of 7% in adults in the UK and 19% among 6–15 year olds in the North West**.
- EdComs (2007) found an **increase in participation frequency** ('do you play more sport?') among **school children and young people in Manchester** following Manchester 2002.

Sources: Cambridge Policy Consultants (2002), Post-Games report (Manchester 2002), Faber Maunsell (2004)

Melbourne 2006:

Increased opportunities

Venues

- Investments in sporting infrastructure for elite athletes and community use: Melbourne Cricket Ground, Olympic Park athletics track, Melbourne sports and aquatic centre, Victoria netball & hockey centre.

Programmes and events

- The **Future Athletes** programme ran 60 sport performance sessions with 1,700 secondary school students across Victoria in 15 Games sports.
- Victoria sporting associations delivered over 800 events involving more than 44,000 individuals.

Increased motivation

- A survey showed that Games-time programmes resulted in **modest increases** within the community in **willingness to increase their sport participation (c. 80% of respondents)**.

Increased sport participation

- **10% of Victorian** respondents in a 2005 survey were **encouraged to take up additional physical activity** as a result of the Games; this increased to **13% in 2006** (the year of the Games).

Sources: Insight Economics (2006), Victoria Government (2006)

Glasgow 2014:**Increased opportunities****Venues**

- Glasgow invested in several new venues before it won the right to host the Games
- It also upgraded sporting facilities for community use

Programmes and events

- Since 2012, over 80,000 members of the public have taken part in Glasgow's accreditation sessions at the velodrome.
- Since 2010–11, Sport Scotland has invested up to £12 million in the development of community sport hubs across Scotland and over £9.4 million in projects through the Legacy 2014 Active Places Fund which aims to support local communities improve sporting infrastructure and encourage participation.
- Since 2014, Glasgow Life has supported 18 Community Sports Hubs across the city.

Increased motivation

- **98% increase** in health and fitness adult **memberships** of the Glasgow Club Health **from 2009 to 2016.**
- **10% increase** in Commonwealth sports **memberships with associations in Scotland** (especially netball, hockey, squash, gymnastics).
- **110% increase in sports club volunteers** since 2009.
- In 2015, there were more than **6.4 million annual attendances at sporting facilities across Glasgow**, a **18.2%** increase since 2009.
- Participation in sports programmes (e.g. attendances at Glasgow Life's gymnastics pathways programmes) increased **32%** from 2015/15 to 2016/17.
- Community Sports Hubs have seen an increase in membership from 1,360 in 2013/14 to 10,361 in 2018/19 (nearly 8x increase in five years).

Increased sport participation

- Data show that in 2007 (July), 68.2% people living in Glasgow took part in sporting activities whereas in 2019 it had increased to 78.2%.
- Glasgow club usage increased by more than one million, from 5.6 million in 2014/15 to 6.9 million in 2018/19.

Sources: Glasgow 2014 Legacy Final Evaluation Report (2018), Evening Standard (2019)

Gold Coast 2018:**Increased opportunities****Venues**

- The availability of stadia for elite events and public use was enhanced; (e.g. Olympic standard velodrome and aquatics centre were opened to the community for public use).
- Sports assets were gifted to sporting organisations and communities across Queensland.

Programmes and events

- Over 200,000 participants took part in over 100 healthy and active projects.
- More than \$2.3 million was invested in sport and lifestyle programmes across the country.

Increased motivation

- The 2018 marathon was sold out for the first time.
- The park run set up in 2018 attracted 15,000 runners.

Increased sport participation

- Male and female sports participation in Queensland rose from 55% to 60% and 61% to 66% respectively between 2016 and 2018.

Sources: Gold Coast 2018 Official Post Games Report (2019)

Critical success factors

- **Complementary events during the Games:** Organising complementary events during the Games to encourage people to participate in physical activity can enhance the impact of hosting the Games on locals' motivation to increase their physical activity; this can range from school activities to community activities using the theme of the Games and new / upgraded sporting facilities available for use by the local community.
- **Legacy programmes:** To sustain short-term increases in sports participation or motivation to participate during the Games, host cities and regional and national governments have to find proactive methods to encourage participation. For example, following Glasgow 2014, as part of Sport Scotland's national legacy, community sport hubs (CSHs) continued to bring together sports clubs and local partners complementing increased investment from Sports Scotland.
- **National sport policy:** Integrating the hosting of the Games to the national sport policy (e.g. Manchester 2002 was keen to attract national sports bodies in the city) is crucial to sustain the Games' effect on both community sport and elite sporting success
- **Sporting venues available before the Games for test events:** To enable athletes and associates to try out the venues before the Games. For example, the venues were made available for test events in Gold Coast 2018 which improved athletes perception of the Games as a success and attracted national bodies to test the sites as future potential headquarters for training national teams.

7

Inspiring community pride and
confidence

Costs and benefits statement 7

7 Hosting the Games can inspire community pride and confidence by:

1. Generating a 'feel-good' factor by boosting civic pride amongst citizens locally, regionally and nationally.
2. Promoting social cohesion and engage whole communities through shared experiences.
3. Building confidence in the capabilities of local, regional and national government institutions to enable efficient delivery of public services.
4. Creating positive partnerships between various levels of government and near-government organisations (e.g. emergency services building a joint command centre).

Introduction

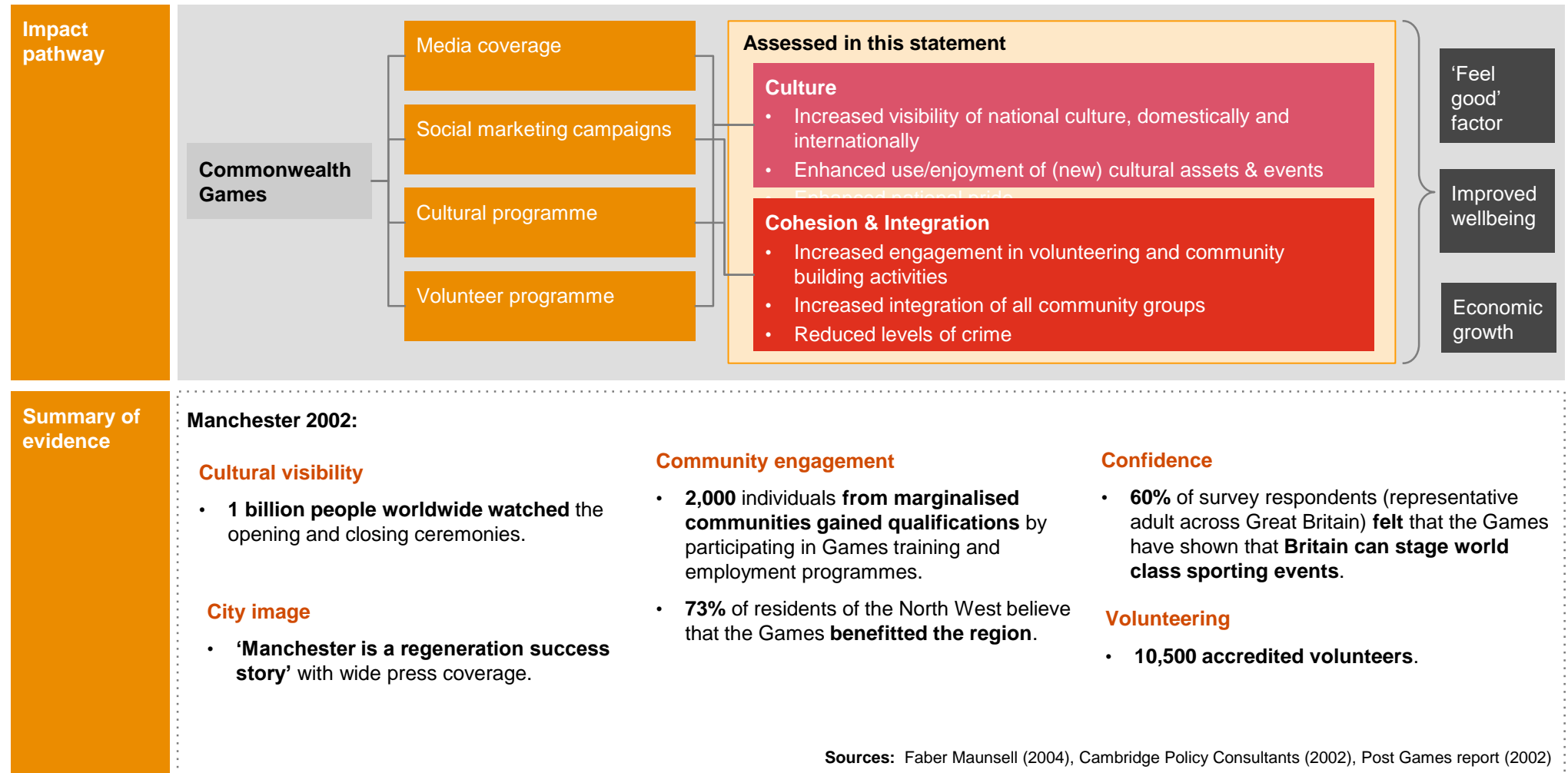
This section starts by considering how hosting the Games can impact on 'feel-good' and national pride through two key mechanisms; increased visibility of the host city and its culture and improved cohesion and integration. The benefits from these mechanisms are closely links to the benefits considered in Statement 8 (e.g. the impact of volunteering on community engagement).

It then provides case studies from previous host cities to show how hosting the Games can enable efficient delivery of public services by building confidence in the ability of different tiers of government, and create strong partnerships across organisations.

Assessment of the evidence

- For each of the past Commonwealth Games there is evidence of the activities and outputs associated with hosting the Games that potentially impact social aspects of the host city, for example the cultural and volunteering programme. There is, however, limited evidence on whether the programmes would have run in the absence of the Games and/or the impacts of the programmes.
- There is some evidence on the tangible outcomes related to improved access to culture but limited evidence on less tangible outcomes such as the effect on community cohesion and bringing together and inclusion of all groups of society.

7. Hosting the Games can inspire community pride and confidence



Melbourne 2006:

Cultural visibility

- **1.5 billion** TV audience. **2 million** attended the **cultural festival** and 81,000 attended regional festivals.
- **38%/32% of stakeholders** engaged in a market research study/**public** responding to an attitudinal survey reported an **increase in their willingness to attend future cultural and arts events**.
- **Indigenous welcome ceremony** and **3,400 people a day** attended the tribal expressions event.

Community engagement

- **80%** felt that the Games had been **successful in encouraging school involvement**.
- **41%** of general public and **44%** of stakeholders indicated **desire to participate in community event in the future**.

City image

- **90% of overseas visitors** stated they would return to Melbourne or recommend it as a place to visit.

Volunteering

- **14,000 volunteers** of whom **50%** indicated that they wanted to keep volunteering.
- **31%** of volunteers were from **culturally and linguistically diverse backgrounds**.

Sources: KPMG (2006)

Glasgow 2014:

Cultural visibility

- **1.5 billion global TV audience**.
- **700,000 unique visitors** to the Games and related festivals.
- Majority of projects in the Cultural Programme reported that participation resulted in **new opportunities and increased their profile**.

City image

- Increase from **17th in 2014 to 15th in 2016 in National Brand Index** and from **19th to 16th in Cultural Brand Index**.

Community engagement

- By 2016, **41% felt the Games had a positive impact on their families**; this is lower than the 56% who said they expected a positive impact in 2012 but indicates that the Games may have played a role in **boosting the attractiveness of the area**.
- **18% reduction in crime in Greater Glasgow** during the Games compared to the average.

Volunteering

- **12,000 volunteers** chosen out of 50,000 applications.
- **1,200 Host City volunteers** with efforts made to recruit from hard-to-reach groups

Civic pride

- A survey carried out with residents of Glasgow's east end found that **pride in the local area** increased from **60% to 74%** between **2012 and 2016**.
- **Pride in the city of Glasgow** increased from **87% in 2012 to 91% in 2016**.

Digital footprint

- **1 million average daily visitors** to Games Time website delivering **84 million page views** from viewers in **228 different countries**.
- Social media channels attracted **503,000 followers**, who created **3.4 million Games Time mentions** across the channels.

Sources: Audit Scotland – Third Report (2015), Glasgow 2014 Legacy Final Evaluation Report (2018), Glasgow 2014 Digital Media statistics archive

Gold Coast 2018:**Cultural visibility**

- **1.5 billion global TV audience.**
- **1.1 million** attendees to the Festival.
- **83%** of Festival artists thought it **improved the local creative sector.**

City image

- **93%** of visitors had **good or excellent experience.**
- **75%** of residents agreed that **Gold Coast is growing into a world class city.**

Community engagement

- **Embracing 2018 Legacy Program** engaged communities throughout Queensland.
- **Free and affordable tickets** invited local communities and visitors to get involved.
- More than **105,000 Queensland students** and 466 schools engaged in Games learning activities.

Volunteering

- **15,000 volunteers**
- **87%** had a **good or excellent experience.**

Digital footprint

- As only the third Commonwealth Games to utilise social media, Gold Coast 2018 connected and engaged with a global audience to tell the stories of the Modern Commonwealth.
- The Gold Coast 2018 website achieved a total 136 million page views and was accessed by people in 236 countries
- The social media strategy employed by Gold Coast 2018 proved highly engaging globally, and created a supportive community across over 800,000 total followers. From the 45,000 pieces of published content, this engaged audience delivered in excess of 428 million impressions globally. This took the Gold Coast 2018 Games into the lives of a new global audiences.

Sources: Gold Coast 2018 Post Games report (2019), Gold Coast Digital Media report (2018)

Case study

Glasgow 2014 Cultural Programme

Context: the Cultural Programmes, spending and funding

- The Cultural Programmes was composed of Culture 2014, a nationwide cultural programme, and Festival 2014, a citywide Games-time celebration which focused on maximising the Games experience. The National Lottery contributed £9.7 million to the delivery of the Programme through Creative Scotland and the Organising Committee contributed £3.5 million with funding from the Scottish Government and Glasgow City Council. Beyond this core Programme funding, projects themselves accessed considerable further funds from other parts of the public sector, partners and earned income.

The impacts of the Glasgow 2014 Cultural Programme

- Improved capacity, skills and new collaborations in the arts and culture sector:** over 10,000 arts and culture professionals and 4,000 volunteers with more than two fifths of the projects benefiting from training and skills development; 16,000 new partnerships, including with organisations outside the sector; financial benefits with a minimum of £5.2 million levered in match funding from initial Programme investment.
- Enhanced profile and reputation of the city and country outside Scotland:** around 500,000 visits to the Cultural Programme by people from outside Scotland with those attending the cultural events more likely to want to return to visit the city than those who had only attended the sport.
- Showcasing Scotland's capability and capacity to deliver major events.**

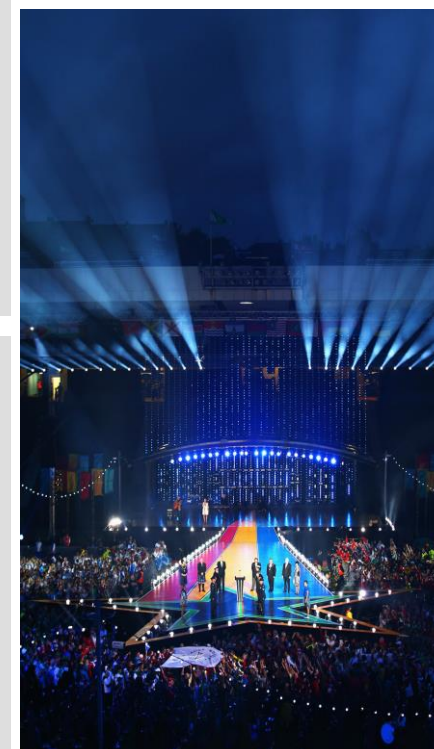
Sources: Glasgow 2014 Cultural Program Evaluation (2015)

'People Make Glasgow' campaign to bring communities together, instill civic pride and showcase what Glasgow has to offer

- In the lead up to 2014, Glasgow City Marketing Bureau was tasked with delivering the project to develop an overarching brand strategy to position Glasgow across national and international markets as a world-class visitor destination and a dynamic business and investment location.
- Engaged the people of Glasgow in a month-long conversation which was built around the question: 'What makes Glasgow a great city?'
- 'People Make Glasgow' provided a platform to show the world Glasgow's strengths during and after the Games and aimed to attract investment, growth and opportunity to the city. This campaign still lives on and is the main online site for 'what's on' and tourist sites in Glasgow (<https://peoplemakeglasgow.com/>).

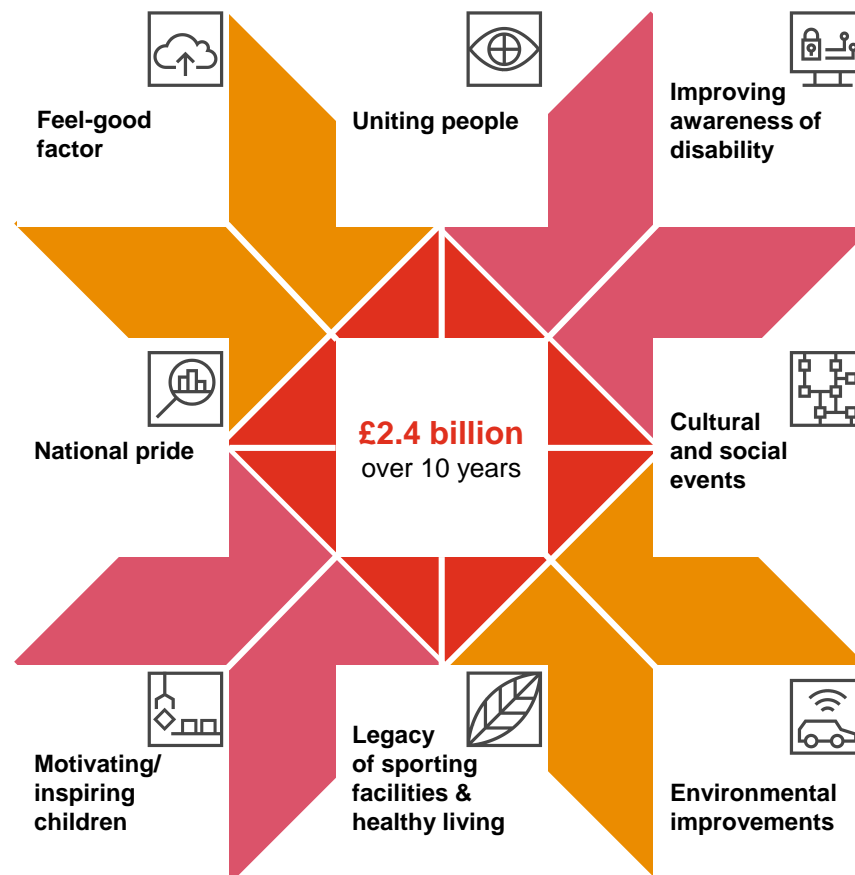
"People Make Glasgow" campaign was extremely effective...this strapline branding helped increase city participation'

Carole Forrest,
Glasgow City Council



Case study

Intangible benefits from hosting the London Olympic Games in 2012.



- A study in 2004 found that **UK citizens' willingness to pay to host the London Olympic Games in 2012 over 10 years was £2.4 billion¹**.
- This estimate indicates the wellbeing benefits of hosting the Games, specifically the value of the 'feel-good' and other intangible factors.
- These benefits are additional to the economic benefits captured in GDP.

Implications for the value of hosting the Commonwealth Games

- The available evidence on the social benefits of hosting the Commonwealth Games is limited to activities, outputs and outcomes rather than impacts on wellbeing.
- **This means that many of the social benefits assessed in the previous pages are likely to have a value over and above the estimated GDP impact of hosting the Commonwealth Games (assessed in Statement 3).**

1. Constant 2004 prices, discounted

7.3 Hosting the Games can build confidence in the capabilities of local, regional and national businesses and government institutions

Case study

Manchester 2002: Innovation in public service delivery

Hosting the Manchester 2002 Games improved working relationships across local government and formed effective partnerships that were sustained after the Games.

Evidence shows that strong leadership and effective partnerships were key success drivers for the Manchester 2002 Games:

- The plan for beyond 2002, which was already in place at Games time, helped to achieve 'buy-in' from local residents who began to see the Games as part of a wider regeneration plan.
- The leadership of MCC and effective partnerships with operating partners, critically between MCC, Sport England and other national government organisations, were built over time through workshops, operating reviews and the formation of task groups.
- Strong and effective financial management were undertaken and strong cost controls were exercised.
- A small group of key decision makers was given the authority to commit resources to resolve issues quickly in the period leading up to and during the Games.

Sources: Lessons learned from Manchester 2002 (2002)



'All services were trying to both benefit from the Games and also contribute to them....Waste, highway, children services all got involved and have remained involved...Manchester City Council advanced the provision of services to community services creating a cohesive system of neighborhood services rather than reverting back to compartmentalised services....The Games was a catalyst for this change...'

Sir Howard Bernstein
Former CEO Manchester City Council (2000-2016)

7.4 Hosting the Games can create positive partnerships between various levels of government and near-government organisations

Case study

Glasgow 2014 Cultural Programme enhanced partnership and collaboration in the arts and culture sector

The Cultural Programme was designed with partnership and collaboration at its heart. The model of governance and management of the Glasgow 2014 Cultural Programme delivered a programme with high quality and diverse activity and also ensured that the learning from delivering the Programme remained within partner organisations and that relationships that were developed and deepened through pulling off such a complex and risky undertaking support greater multi-agency working going forward.

For example:

- Two of the Strategic Commissions within the Programme – Big Sing and GENERATION – explicitly aimed to build capacity and trial new models of professional collaboration across their respective sub-sectors. Both commissions can point to some early successes but ultimately they are systemic interventions whose effects are likely to be experienced in the longer term.
- Building on new models of creative practice, collaboration and areas of work – projects expressed a growing confidence in their capabilities and an intention to build on the new collaborations and models that they had trialed through the Cultural Programme.
- Better partnership and multi-agency working - the national and city-level partnership has been unique; both partners are committed to working together in the future and building on the relationships and trust that have been established through the Programme. Strategic partnerships have been developed right across the Cultural Programme and even where this has been challenging, partners learned lessons that will be taken forward.

The Creative Scotland – Glasgow Life partnership was viewed by partners and stakeholders as overwhelmingly positive. It resulted in upskilling, closer partnership working and ongoing relationships. These outcomes would not otherwise have been as far-reaching had the Cultural Programme been outsourced to an external curator or producer.

Sources: Glasgow 2014 Cultural Programme Evaluation (2015)



7.4 Hosting the Games can create positive partnerships between various levels of government and near-government organisations

Case study

Case study: Gold Coast 2018 Joint Emergency Services Coordination Centre - a legacy story

Context: a Joint Emergency Service to deliver safe and secure Games

- Gold Coast 2018 was the largest event and security operation hosted in Australia in the past decade.
- The Joint Emergency Services Coordination Centre in the Gold Coast was activated from 5 March to 18 April 2018 in support of the Games.

Legacy benefits: a permanent facility to coordinate safety and security for future major events

- It will remain a **permanent facility** and be the central coordination point for the emergency services' response to major events and incidents on the Gold Coast.
- Since the Games, **it has already been used** for the annual Gold Coast Supercars 600 event held in October 2018.

Sources: Gold Coast 2018 Post Games report (2019)



Critical success factors

- **Legacy programmes to ensure sustained social benefits:** To ensure lasting benefits it is important that communities in the host city and region are engaged throughout the process, from thinking about bidding, to hosting, to legacy with clear assigned responsibilities. For example, community engagement for Gold Coast 2018 and the Embracing 2018 Legacy Programme was facilitated through working groups across Queensland schools and multicultural programmes and events.
- **Good institutional organisation to achieve partnership legacy:** Evidence from past events highlights the need for clear roles and responsibilities across different organisations and agencies. Clear strategies and objectives are needed to keep legacy plans focused and efficient as well as clear and reliable communication channels between different stakeholders. Moreover, to maximise partnership benefits, the aim should be joint-decision making rather than using a top-down approach.
- **Longer duration of the cultural programme and events:** By taking place over a longer timespan, the Cultural Programme for Glasgow 2014 enabled expectations and excitement to be built before the Games started. The Cultural Programme broadened the appeal of the Games beyond ticket holders and sports fans, providing opportunities for everybody to take part in Glasgow and Scotland's 'special moment'.

8

Positive communities to adopt
positive behaviours

Costs and benefits statement 8

8 Hosting the Games can catalyse communities to adopt positive behaviours by:

1. Promoting use of public transport among residents both during and after the Games.
2. Providing a platform for showcasing environmental and sustainability best practices.
3. Increasing willingness to volunteer.
4. Providing a platform for bold discussions leading to social change (e.g. on reconciliation, LGBTQ, gender equality, mental health, body image, disability / accessibility, human rights, etc.).
5. Providing educational opportunities for locals and visitors, expanding their world view through interactions with Commonwealth athletes, visitors, schools in other Commonwealth countries, and digitally through the Queen's Baton Relay.

Introduction

This statement provides case studies from previous host cities to illustrate how hosting the Games catalyses communities to adopt positive behaviours across key areas such as:

- use of public transport
- adopt of environmental and sustainable practices
- involvement in volunteering activities
- provision of a platform for bold discussions on social change and driver of educational opportunities.

Public spending associated with the Games (e.g. improvements in public transport) and events, programmes and campaigns in the run-up, during and after the Games can be used to promote positive behaviours such as increased use of public transport, adoption of sustainable practices, improved willingness to volunteer and as a platform for bold discussions.

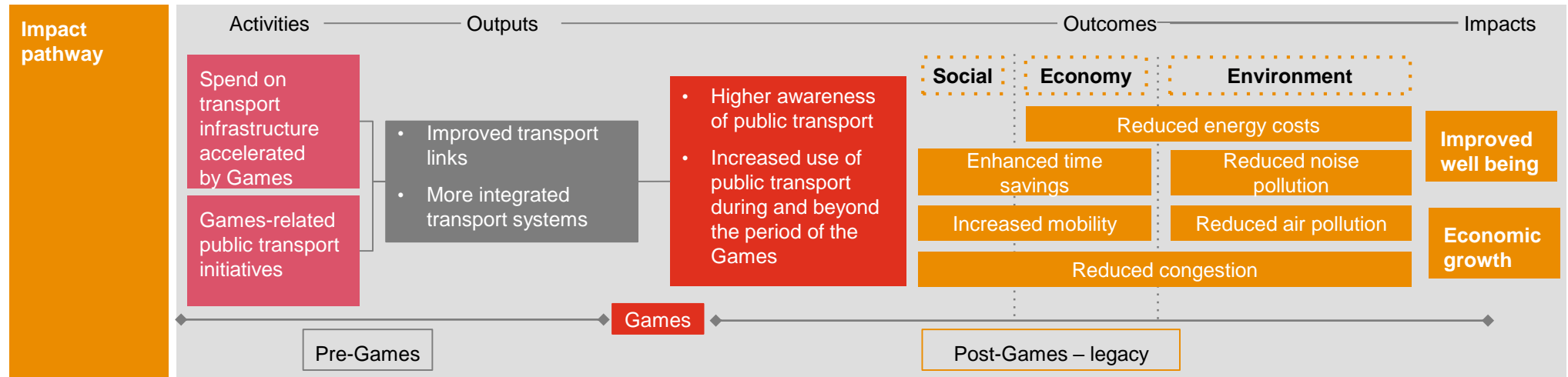
All these behavioural changes have the potential to deliver valuable impacts; where evidence is available, these impacts are covered in Statements 3-7. This means there is a risk that the benefits have already been captured in the previous statements: it is noted where a specific link to another statement is relevant.

Assessment of the evidence

- There is evidence on the impact of hosting the Games on community behaviours is limited to case studies and evidence on key activities and outputs (rather than outcomes and impacts).
- The focus of these case studies is on changes in behaviour rather than the impact that these changes can deliver. These behavioural changes contribute to the economic, social and sport impacts considered in the above statements and isolating their effect from other factors is not possible.

8.1 Hosting the Games can be used to promote use of public transport among residents and visitors both during and after the Games

See Statement 2.3 for investments in advancing public transport systems and associated legacy programmes



Summary of evidence

Manchester 2002:



- **Over 75% of spectators at Sportcity used public transport during the Manchester 2002 Games.**
- General awareness of the potential of public transport in and around Manchester increased substantially.
- People who had never tried public transport or had not used it for many years became converts.

Sources: Cambridge Policy Consultants (2002)

Melbourne 2006:



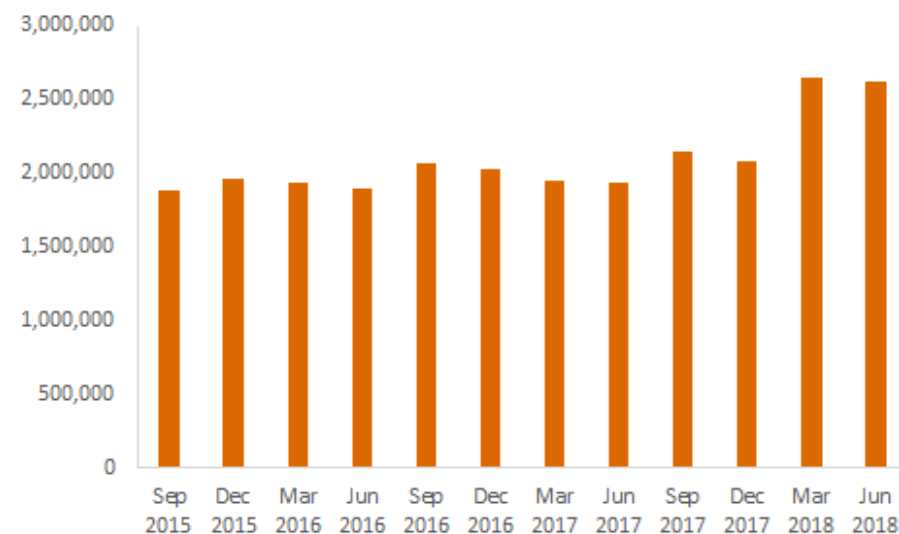
- **75% of people travelled to the Games by public transport.**
- **53% of the general public reported increased willingness to use public transport after Melbourne 2006 Games.**
- **58% of stakeholders reported increased willingness to use public transport after Melbourne 2006 Games.**

Sources: Insight Economics (2006)

Gold Coast 2018:

- **More than 5.3 million** trips were taken **on public transport** during the course of the event with all transport modes posting record numbers.
- More than **730,000 journeys** were planned on the Gold Coast 2018 **Games Journey Planner** and 93% of users rated it as easy to use.

Interviews with stakeholders indicate an increase in the proportion of trips which rely on public transport in the Gold Coast; from 3% in 2011 to 9% in 2019. This is partly attributed to improved connectivity accelerated by the Games

Public use of public and active transport options

Sources: Gold Coast 2018 Post Games Report (2019)

**Critical
success
factors**

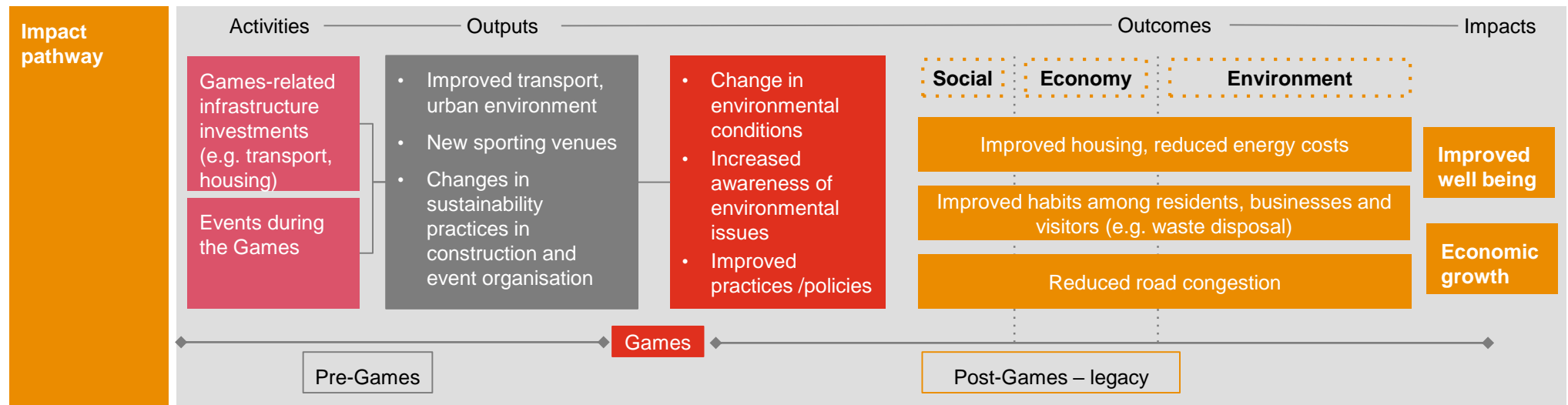
Several critical success factors enable hosting the Games to deliver social and environmental benefits during and after the Games and increase the wellbeing of residents. Specific actions can be undertaken by host cities to achieve a positive shift in behaviours, and more specifically, increase use of public transport by city residents. These include:

- Free use of public transport for ticket holders.
- Strong and effective campaigns to build awareness of, and encourage residents to use the improved transport system, e.g. launch of Games Journey Planner.
- Ensure smooth and reliable running of public transport system during the Games, e.g. in Gold Coast 2018, four temporary Games lanes were introduced along the M1 and activated at different times to minimise traffic disruption for road users - these were used by police and emergency vehicles, spectator shuttle buses and accredited Games family and athletes.
- Maintain quality of infrastructure post Games to sustain usage, e.g. clear plan and responsibilities.

8.2 Hosting the Games can be used as a platform for showcasing environmental and sustainability best practices

Spending on the Commonwealth Games and associated events has the potential to impact environmental conditions and indicators in the host city (and more widely). Some of the relevant dimensions are air quality, land, waste, water quality and use, biodiversity and climate change. Whilst the CGF promotes sustainability in all aspects of the Commonwealth Games, the direction, timing and scale of the impacts depend on the activities linked to spending on the Commonwealth Games. In some cases, the short term impacts before or during the Games may be negative, but offset by long term improvements in the legacy period.

As with the social and sporting impact areas, the majority of the evidence from past Commonwealth Games-related to activities and outcomes rather than outcomes and impacts. The key environmental metrics from past Games are summarised below across four key areas: air quality, land and water use, waste and climate change.



Summary of evidence

Manchester 2002:**Land, water and air quality**

'Look of the City' initiative: physical improvements to major routes into and around Manchester, infrastructure improvements, banners, flags and horticultural displays

- £24 million in Ashton Canal Corridor Improvement.
- More than 85 hectares of derelict land reclaimed.

Waste and sustainability management

- 1,000 tonnes of waste were collected, of which 16.5% was recycled.
- The waste management success was enhanced through the link to city / national recycling / waste management programme and cooperation of Greater Manchester Waste.

Sources: Faber Maunsell (2004), Post Games report (Manchester 2002)

Melbourne 2006:**Land, water and air quality**

- WaterWise initiatives resulted in **18,000 trees** planted, **four hectares of wetland constructed in Royal Parks** adjacent to the Games.
- Rainwater collection systems and other conservation infrastructure constructed at venues.
- More than \$55,000 raised for a clear water project in East Timor.

Waste and sustainability management

- 40% less waste was produced at venues than was projected to occur; of this waste c. 57% was recycled.
- Increased willingness to act to benefit the environment; **60%** of public responding to a Post-Games attitudinal market research survey.

Climate change

- Under the Carbon Neutral programme, c. **1 million trees were planted to offset** the impact of the Games on GHG emissions (c. 2,000 volunteers).

Sources: Insight Economics (2006)

Glasgow 2014:**Land, water and air quality**

- Clyde Gateway: between 2012 and 2017, 239 hectares of derelict and contaminated land remediated.
- Neighbourhood environmental quality is seen by residents to have improved over time; the number of people rating local parks and green spaces as good increased from 75% to 80% from 2012 to 2016.

Waste and sustainability management

- Diverted **86% of waste from landfill** during Games time (against an 80% target).
- Recycled **49% of all waste** during Games time.
- Awarded the ISO 20121 – the gold international standard in sustainable event management and set new benchmark for events in Scotland.

‘Sustainability was at the core of all our decisions and was not an added extra or bolted on strategy and it was our aim to contribute to making a positive...in the way we use natural and human resources....now and in the future’

David Grevenberg
Glasgow 2014 CEO

Sources: Glasgow 2014 Legacy Final Evaluation Report (2018), Glasgow 2014 Post Games Report (2014)

Gold Coast 2018:**Land, water and air quality**

- Seven hectares of public parkland at athletes village and 100,000 trees planted.

Waste and sustainability management

- Games-village six-star rated representing world leadership in sustainable construction.
- Waste/recycling activities during the Games.
- Est that 600m litres of water saved from single use plastic bottle plan.

Climate change

- First Games to measure Games operations carbon emissions impacts.
- The Organising Committee offset 100% of the carbon emissions generated during the Games; 1,164 tonnes of CO₂e.

Case study: Gold Coast 2018 were ISO 20121 Event Sustainability Management Systems accredited and adhered to these guidelines

- First Games to measure carbon emissions impacts.
- Free water refill stations saving 1.7 million single-use plastic water bottles.
- All Gold Coast 2018 Official Merchandise stores only had reusable bags.
- No straws, plastic bags, cigarette butts or balloons found in venue waste audits.
- Achieved Level four and 5 competency in ISO 204000 Sustainable Procurement.
- Green Star Office rating for Games HQ.
- 30% reduction in waste.
- 52% recycling rate.
- Athletes village towel saving initiative achieved 61% reduction against expected levels of cleaning.

Sources: Gold Coast 2018 Official Post Games Report (2019), Sustainability Report (2018)

**Critical
success
factors**

- **Embedding the local sustainability agenda into all Games-related projects** (including sustainable procurement). The Games should be used to showcase environmentally-friendly practice through all of its developments such as working towards a low carbon community within the athletes village by improving recycling facilities (amongst others).
- **Ensure sustainability legacy plans:** Host cities need to build venues to the highest environmental standards. Host cities should plan early on with developers of the venues in the legacy period to adopt sustainable practices such as design standards compatible with low carbon development, providing a high proportion of well-planned green space, amenity land and water features within the site, among others.
- **Campaigns and events to instill behavioural changes:** Programmes and sustainable practices for Games-related venues should be complemented with campaigns to influence behaviours such as plastic free Games, encouraging use of public transport by providing free access for ticket holders, among others.

8.3 Hosting the Games can be used to increase willingness to volunteer

Impact pathway

Hosting the Games

- Volunteers recruited to support during the Games
- Pre-Games volunteering programmes and events

- **Improved skills** for volunteers (see Statement 3.3)
- Enhanced **community cohesion** (see Statement 6)
- Increased **willingness to volunteer in the future** (this statement)

Summary of evidence

Manchester 2002:



The legacy of the volunteer programmes was the creation of:

- A **positive attitude** towards volunteering (e.g. 2,000 have registered for future events)
- A **pool of volunteers** who could be utilised for other events and activities (e.g. 90 events have been supported).

Sources: Faber Maunsell (2004)

Gold Coast 2018:



The positive experience of volunteering for Gold Coast 2018 delivered record volunteering results for major events on the Gold Coast:

- Game Shapers, Games times volunteers, helped Gold Coast Supercar 600 event organisers set a record, filling all 780 volunteer roles six weeks out from the event held in October 2018.
- Volunteer roles were also popular for the Gold Coast Marathon (1,200 volunteers) and the Pan Pacific Master (1,000 volunteers).

Sources: Gold Coast 2018 Official Post Games Report (2019)

Glasgow 2014:



There were more than 12,000 Games times volunteers known as Clyde-siders (out of 50,000 people who applied). A review of the evidence on Clyde-siders showed that:

- Clyde-siders believe that volunteering has increased their confidence, knowledge and skills in addition to playing a role in showcasing Glasgow and enhancing the city's reputation.
- Clyde-sider applicants were not representative of the general population; they had higher average levels of qualifications and volunteering experience with 83% already volunteering which means limited scope to increase their willingness to volunteer in future.

A study of 1,100 Host City Volunteers, one of few studies exploring the longer-term impacts of event-based volunteers, found that, three years on from the Games, those who were already involved in volunteering before the Games continued to do so.

Sources: Glasgow 2014 Legacy Final Evaluation Report (2018)

Case study

Manchester 2002: The Pre-Games Volunteer Programme (PVP)

The nationally funded North West Single Regeneration Budget programme carried out a region-wider PVP from 1999 to 2003 aimed at ensuring that volunteers were drawn from groups who would not normally participate in such activities with a view to improving their skills and confidence and encouraging them to volunteer in the future. This enabled residents living in disadvantaged areas of the region to have the opportunity to volunteer for the Games by equipping them with the required skills. The **experience** and **skills** gained enabled individuals to boost their CV and improve their employability. It also initiated **significant interest in volunteering**, providing a mechanism for engaging individuals in the regeneration of their area.

The PVP had an impact on individual volunteers and wider society:

- more than 2,000 individuals gained qualifications (out of a total of 6,250 people engaged across the region): by December 2002, 160 of the PVP graduates had progressed into employment
- it provided volunteers with opportunities for the future, either further volunteering, contributing to their communities in other ways, entering further education or training or enhancing their employment prospects
- it created a **database of potential volunteers**, establishing a pool of individuals that can be drawn on for other events: 2,000 volunteers registered for future events and 90 events have been supported
- the PVP project team reported that it had been an **inspiring experience** that had given them a sense of pride that they were making a difference
- the PVP led to the development of an **accredited course in event volunteering** and provided an example for future events.

Sources: UK Sport (2003), Faber Maunsell (2004)

All stakeholders agreed that the **volunteer programme was a major 'public relations' success**, in that it helped promote a positive atmosphere, generated more public interest in attending the Games and/or visiting the city, and contributed to the inclusive approach of the event.

Faber Maunsell (2004)

Case study

London 2012: The impact of volunteering

Few long term volunteering legacy studies have been conducted for the Commonwealth Games. However, such information is available for the London 2012 Olympics. Although there are important differences between the Olympic and Commonwealth Games, the volunteering programmes set up by the respective organising committees share similarities. Although different in terms of the number of volunteers (70,000 volunteers at London 2012 compared to 16,700 at Glasgow 2014, for example), the benefits to individuals from becoming a volunteer at either event are potentially comparable. This is because the events are of similar nature (i.e. they involve sports events with athletes coming from across the world to compete and people visiting the city to be part of the Games). The activities of volunteers in the Commonwealth Games and the Olympic Games are similar.

A study of 77 ex-London volunteers found that the London 2012 Olympic Games had been the first volunteer experience for 57% of the cohort surveyed. In addition, 56% were currently involved in volunteering activities four years after the Games, and 42% had volunteered one day a week in the year up to the survey conducted in 2016. 66% of respondents said that the Games had influenced them to consider future volunteering. This suggests that hosting the Olympic Games and opening up volunteer roles have two effects: it can help sustain volunteering interest but can also attract new volunteers.

Research in 2013 found that since the 2012 Olympics, over half of Londoners were more aware of volunteering opportunities and 42% of people were encouraged to volunteer for the first time or more often. Of those surveyed, 68% had been involved in volunteering in the year since the Games.

Finally, another survey of nearly 11,500 London 2012 volunteers in 2013 found that:

- 82% thought they could apply their enhanced skills to another volunteering situation
- 57% thought they could apply their improved skills to paid employment
- 92% were satisfied or very satisfied with their London 2012 volunteering experience
- 45% indicated that they expected to increase their volunteering levels.

After the Games. 45% of those surveyed indicated that they would consider volunteering at the Glasgow 2014 Games.

Sources: Koutrou et al (2016), Mayor of London (2013), Dickson and Benson (2013)

'Since London 2012. I volunteered at the Commonwealth Games in Glasgow 2014, I also volunteered at the Rugby World Cup in 2015. In between these events I have also been able to have some casual employment'

'I re-joined girl guiding and am now a Brownie Leader of a unit in East London. I am also chair of governors at a school in north London'

Survey respondents
(Koutrou et al, 2016)

**Critical
success
factors**

- **Early engagement and community building activities:** Interviews with key stakeholders from past host cities highlighted the importance of creating a resident engagement plan to build a strong network of volunteers and communicating with the community on how to get involved and offer relevant training to maximise the benefits of volunteering and enhance civic pride. For example, event organisers for Manchester 2002 used this rationale to request further public sector funding for community building activities.
- **Target individuals with the most to gain (as individuals and for society):** Lessons from Glasgow Clyde-sider volunteering show that event organisers need to take clear steps to target those with the most to gain from volunteer experience and tailor the approach to these demographic groups. For example, the Glasgow Clyde-sider applicants had higher average levels of qualifications and volunteering experience compared to the general population and, therefore, the scope for an increase in volunteering uptake was very limited.
- **Good communication between organisers and volunteers:** Feedback from volunteer programmes (e.g. recruitment, training, motivations) highlighted the importance of good communication between organisers and volunteers throughout the experience.

8.4 Hosting the Games can provide a platform for bold discussions leading to social change

Case study

Gold Coast 2018 Reconciliation Action Plan (RAP): Aboriginal and Torres Strait Islander engagement

Gold Coast 2018 set out to deliver an event that engaged and inspired communities across the Commonwealth, Queensland and the Gold Coast to be involved and unite on peace, prosperity and sustainability related issues of critical importance’.

In a nationwide first for Australian events, a RAP was developed with three priority areas:

1. Relationships: building strong relationships with Aboriginal and Torres Strait Islander people.
2. Respect: increasing cultural capabilities and understanding of Aboriginal and Torres Strait Islander people, culture, language, lands, histories and rights.
3. Opportunities: providing tangible outcomes in the areas of training, employment and business development.

Examples of projects, developed through extensive consultation with communities, included:

- Reconciliation in Queensland Schools.
- Aboriginal and Torres Strait Islander Stories of Queensland to showcase relevant culture along with historical and cultural sites of significance.
- Business Development Workshop to assist Aboriginal and Torres Strait Islander businesses to benefit from the opportunities presented by Gold Coast 2018.

The Gold Coast 2018 RAP was a world first for the Commonwealth Games in providing significant commitment to deliver legacy outcomes for Aboriginal and Torres Strait Islander people and communities. Some early impacts include:

- More than A\$14 million worth of contracts and other revenue were secured by businesses as a result of Gold Coast 2018.
- More than 800 employment opportunities through Gold Coast 2018 business development activities and Parklands redevelopment.
- Respect, recognition and celebration of people, histories and cultures through involvement and cultural capability training for staff.
- 48 schools received Reconciliation in Queensland Schools grants to promote reconciliation.



Sources: Gold Coast 2018 Official Post Games Report (2019)

8.5 Hosting the Games can provide educational opportunities for locals and visitors

Impact pathway

Hosting the Games can provide an opportunity for school children (and their teachers) across the region to study a major sporting event at first hand, and benefit from that experience (e.g. using distance/miles for numeracy, architectural/building/arts skills using Games venues) associated with hosting the Games. The sport and cultural events can also provide opportunities for locals and visitors to expand their world views by interacting with athletes and visitors, engaging in educational activities, among others.

Hosting the Games

- Educational events within the host city, region, country
- Cultural festival and associated campaigns
- The Games sports events and their broadcast

- **Improved educational opportunities** to study a major sports events and benefit from that experience
- **Improved awareness of** Commonwealth countries and their diversity

Summary of evidence



Manchester 2002:

North West 2002 developed a Commonwealth Games Curriculum Pack:

- Every school in the UK (33,000) received a copy.
- 75,000 children from 3,000 schools participated in their own mini Commonwealth Games.

Sources: Post Games Report (Manchester 2002)



Gold Coast 2018:

Schools across the Gold Coast, Queensland and the Commonwealth were engaged in Gold Coast 2018:

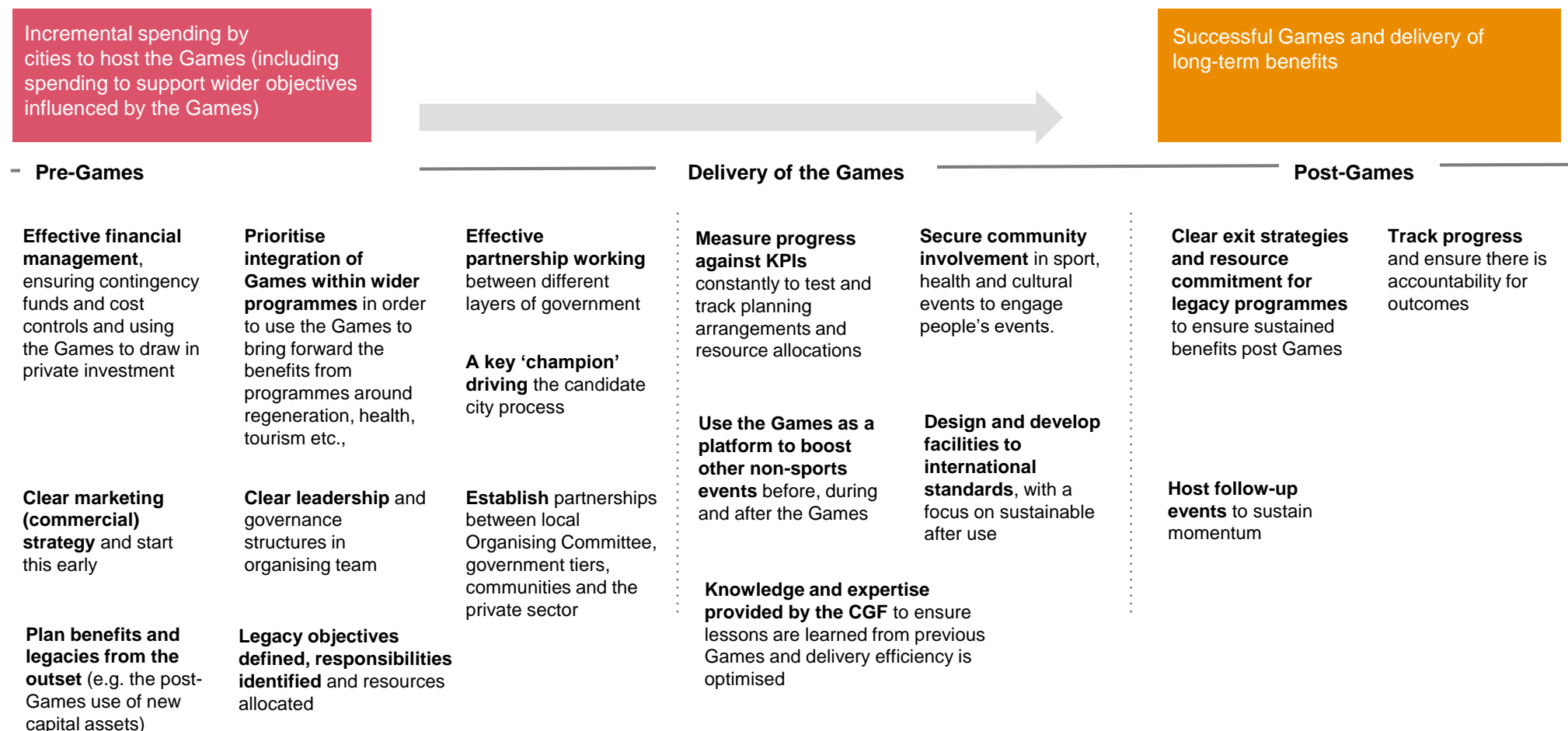
- the Schools Connect Programme kept more than 90,000 students enrolled in participating schools informed of Gold Coast 2018 events and activities
- the Global Education Programme delivered teaching and learning resources and online, interactive curriculum activities.

Sources: <https://embracing2018.com/>

D

Critical success factors

The critical success factors underpin the successful delivery of the Games and enable a host city to sustain lasting impacts are diverse ...



Notes: This is an illustrative list to demonstrate how the Value Framework enables the identification of critical success factors.

... but six critical success factors influence how a city can optimise the value from hosting the Games

A review of the evidence from past Games in the previous section has highlighted six critical success factors (CSFs) that can support future host cities when planning for a successful Games. The CSFs help to minimise the net cost of hosting the Games and/or maximise the economic, social and environmental benefits. More specific CSFs for particular areas of benefit and cost are listed throughout Section 4 of this report.



1. Integrate planning for and delivery of the Games into the wider city/region strategies – The Games should be seen as a driver with the potential to influence a city's wider long term strategy, not a stand-alone event. For example, Manchester used the Games as a catalyst for its wider regeneration of East Manchester and to drive transformation of how it delivered local public services.

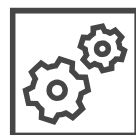


2. Plan benefits and legacies from the outset – To maximise the long term benefits of hosting the Games, potential legacy outcomes should be planned from the outset (e.g. the post-Games use of new capital assets). There should also be clear legacy leadership, governance and accountability from the outset to ensure that legacy is at the heart of Games planning. For example, the Gold Coast athletes' village was well aligned with the wider Trade 2018 strategy and became an integral part of the wider Gold Coast Health and Knowledge Precinct development after the Games.



3. Put local communities at the heart of the Games – The feel-good factor in the build up to and during the Games is an important benefit which requires local communities to be engaged from the outset. Any antipathy towards the Games puts these benefits at risk and could detract from the positive image the city wishes to project internationally.

Plan the use and integration of Games assets' (volunteers, QBR, teams and athletes, festivals and ceremonies) across host city communities to drive social and community benefits, and shared experiences that enhance social cohesion.



4. Establish partnerships at all levels of government, the private sector and the third sector to combine and lever funds and human resources to achieve wider policy objectives – The Games helps to achieve a wide set of benefits which are key objectives for a range of organisations. As such, a number of different public, private and charity organisations may be willing to contribute to Games' funding. Moreover, existing budgets can be re-allocated to the costs of hosting the Games and existing investment plans can be accelerated.



5. Use the Games as a platform to boost other non-sports events – To help achieve the city's wider objectives, the Games provides a valuable platform for a range of non-sports events before, during and after the Games. For example:

- a year-long programme of cultural events was held in the run up to the Manchester and Glasgow Games in 2002 and 2014 respectively
- a programme of trade and business events has been held alongside each Games since 2002.



6. Build on the momentum generated by the Games – To sustain the benefits from the Games, it is important for the Games to continue to drive benefits in the years after the Games, by hosting follow-on events in Games venues. For example:

- Glasgow 2014 adopted this strategy successfully, securing the inaugural European Championships in 2018 and the Tissot UCI Track Cycling World Cup in 2019
- Gold Coast 2018 also secured a number of high profile events, including the 2019 UCI Track World Cup.

How to apply the Games Value Framework

A prospective host city needs to follow five steps to apply the Games Value Framework to support its decision making

For cities considering hosting the Games and wishing to apply the Games Value Framework, the first step is to review their city context and ambitions. Cities can then use the Framework to support their decision making by understanding the potential costs and benefits of hosting the Games and how the Games can support a city in achieving its wider aims.

This section explains the process that prospective host cities can follow to apply the Games Value Framework and an indication of the output / outcome of the process.

1 Understand the baseline social, economic and environmental conditions of the host city and region.



2 Review the host city / region's ambitions – short-, medium- and longer-term.



3 Assess the host city / region's existing strategies and plans for achieving its ambitions.



4 Use the costs and benefits statements to identify how hosting the Games can help a city achieve its ambitions, strategies and plans.



5 Use evidence from the past Commonwealth Games to assess the value from hosting the Games.



The first step is to understand the key characteristics of the host city which affect the costs and benefits of hosting the Games

What key characteristics of a host city affect the costs and benefits of hosting the Games?



Economy

- Level of economic development (e.g. GDP per capita)
- Economic structure/diversity
- Availability of/access to labour force
- Unemployment/economic inactivity



Social

- Crime, youth at risk, homelessness



Sport

- Sports participation
- Elite sporting success



Environment

- Pollution, sustainability practices

Demographics

- Size of city (population)
- Demographic diversity (e.g. age, social, cultural)

Geography

- Proximity to other population centres (within and between countries)

Existing infrastructure

- Existing sporting infrastructure – availability and location
- Existing non-sporting hard infrastructure (e.g. transport)
- Digital connectivity of city

Stakeholders / governance





- Existing 'soft' infrastructure (i.e. institutional structure and governance)

The second step is to review the host city's ambitions

Cities have ambitions to grow their economy and improve the quality of life of citizens and visitors. Past host cities have used the Commonwealth Games to achieve some of their ambitions.

Illustrative

Host city ambitions may cover¹

Economy 	<ul style="list-style-type: none"> Grow the economy and support jobs through tourism Grow the economy and support jobs through investment and trade Grow the economy and support jobs by hosting major events Diversify the economy, e.g. by promoting new sectors and skills 	Sport 	<ul style="list-style-type: none"> Sports-led regeneration Become a hub for international multi- or single-sports events Increase sports participation Promote elite sporting
Social 	<ul style="list-style-type: none"> Improve health and wellbeing of residents Reduce social disparities by regenerating deprived areas Improve accessibility, e.g. invest in new / upgrading transport Improve liveability, e.g. invest in new housing 	Environment 	<ul style="list-style-type: none"> Conserve the environment Reduce waste Improve access to green space Reduce carbon emissions

1. List intended to be illustrative of host city ambitions

The third step is to evaluate the prospective host city's existing strategies and plans to achieve their ambitions

Step 3 requires a **holistic assessment of existing strategies and plans**. This should cover a wide spectrum, from economy to social, environmental and other plans that a host city has in place to achieve its ambitions.

An assessment of existing strategies and plans and their underlying targets in the short-, medium-, and long-term would enable a city to assess:

- The 'gap' between their current baseline conditions and their ambitions
- The role of existing strategies and plans in closing this gap in the short-, medium-, and longer-term
- The potential role that hosting the Commonwealth Games can play in supporting the alignment of strategies, policies, activities, project timings and budgetary commitments across the different tiers of government
- The potential value of hosting the Commonwealth Games to support these wider strategies, i.e. in terms of helping a city achieve, accelerate or amplify its ambitions (see Step 4).

Illustrative

Strategies and Plans

Short term

For example:

- the national, regional or local Government's short-term strategic plans
- Projects and investments to improve transportation (e.g. bike lanes)
- Projects and investments to improve sustainability (e.g. plan to make government building sustainable)

Medium term

For example:

- the national, regional or local Government's medium-term strategic plans
- Projects and investments to improve transportation (e.g. bike lanes)
- Projects and investments to improve sustainability (e.g. plan to make government building sustainable)
- Plans to host international events
- Tourism marketing campaigns

Long term

For example, the national, regional or local Government's:

- long term economic strategy
- long term transportation strategy
- long term arts and culture strategy
- long term social strategy

The fourth step is to use the Games Value Framework to understand how hosting the Games could help them achieve their ambitions

Hosting the Commonwealth Games delivers a positive return on public investment and can reposition and transform a city

- 1 The capital and operating costs of hosting the Games create assets and generate economic activity which drive benefits and legacies.
- 2 Hosting the Games attracts incremental funding and mobilise resources to the benefit of host cities and regions.
- 3 Hosting the Games can build and 'showcase' the city's economic profile and position it as a desirable place to live, work, study and visit.
- 4 Hosting the Games can support physical, economic and social regeneration and transformation.
- 5 Hosting the Games can strengthen trade, investment and tourism links with other parts of the Commonwealth and the rest of the world.
- 6 Hosting the Games can promote community sport participation and elite sporting success.
- 7 Hosting the Games can inspire community pride and confidence.
- 8 Hosting the Games can catalyse communities to adopt positive behaviours.

Illustrative

Economy	Social	Sport	Environment
Grow the economy and support jobs through tourism	Improve health and wellbeing of residents	Become a hub for international events	Conserve the environment
Grow the economy and support jobs through investment and trade	Reduce social disparities	Increase sports participation	Reduce waste
✓	✓	✓	✓
✓	✓		✓
✓		✓	
✓		✓	
	✓		
✓	✓		✓
✓	✓	✓	✓

The most useful evidence is likely to be from past hosts with similar characteristics and/or common ambitions

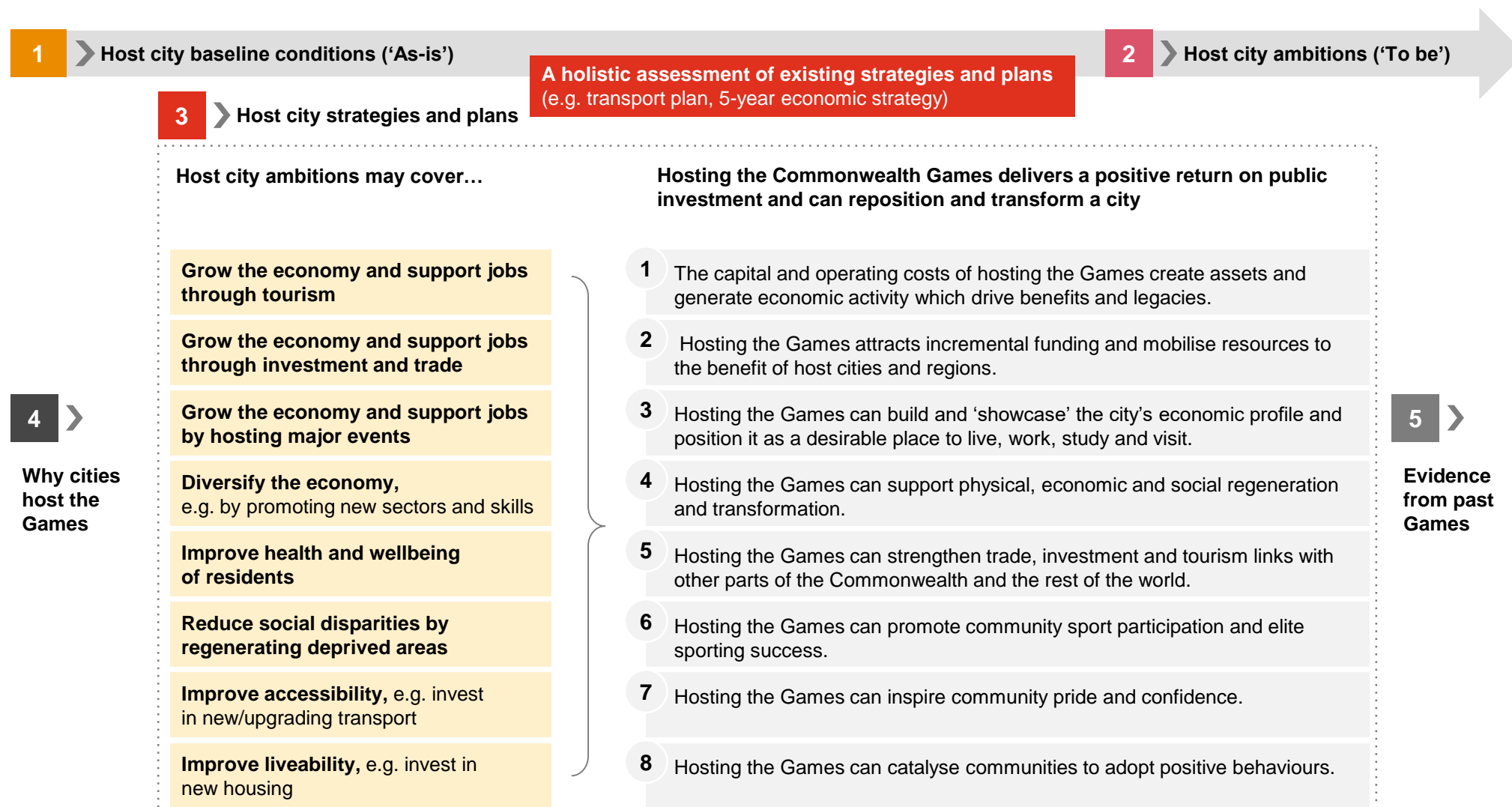
A prospective host city can look at the evidence from past host cities to identify lessons learned and ways to optimise the value of hosting by:

- Assessing the level of similarities in their characteristics, e.g. the level of socio-economic development at the time of hosting the Games.
- Reviewing the key ambitions of past host cities to assess how they match with their own ambitions and how they align with the Games Value Framework statements.
- Using the evidence from past Games, where available, to demonstrate potential value and optimise the value from hosting.

The table below provides a high level summary of the baseline socio-economic conditions of past host cities and their stated objectives for hosting the Games. A more detailed 'city profile' page for each of the past hosts, from Manchester 2002 to Gold Coast 2018, can be found in Appendix 3.

	Manchester 2002	Melbourne 2006	Glasgow 2014	<i>Illustrative</i> Gold Coast 2018
Baseline conditions				
Economic (e.g. GDP)	High	High	High	High
Social (e.g. minority communities share of population)	Low	Low	Low	Low
Sport (e.g. sports participation)	Medium	High	Medium	High
Environment (e.g. sustainability practices)	Medium	Medium	Medium	Medium
Demographics (e.g. population)	Medium	Medium	Small	Small
Existing infrastructure	Low	High	Medium	Medium
Hosting experience	Medium	High	Low	Low
Why cities host the Games (costs and benefits statements)				
1. The capital and operating costs of hosting create assets and drive benefits	✓	✓	✓	✓
2. Attract incremental funding to the benefit of the city/region	✓	✓	✓	✓
3. Build and 'showcase' the city' economic profile and position it as a desirable place to live, work, study, and visit	✓	✓	✓	✓
4. Support regeneration	✓		✓	
5. Attract investment, trade and tourism			✓	✓
6. Promote community sport participation and elite sporting success			✓	✓
7. Inspire community pride and confidence	✓		✓	
8. Catalyse communities to adopt positive behaviours			✓	✓

By following the five steps, a prospective host city can assess how hosting the Games could help to achieve its ambitions alongside its wider strategies



Appendices

1

Evidence review:
Availability and quality

The availability and quality of existing evidence to support each costs and benefits statement have been assessed




This appendix presents the results of a high level assessment of the existing evidence

The work has involved reviewing previous editions of the Games to identify publicly available evidence on the costs and benefits of hosting the Games. It draws on appraisals and evaluations of the impact of past Games and case studies which have been undertaken to date. No primary quantitative research has been undertaken to support this study.




For each costs and benefits statement the available evidence has been reviewed to assess its quality. The results of this assessment are summarised in the following pages.

The evidence available for each statement has been awarded a red, amber or green rating based on its availability and quality (see table).

Finally, this appendix provides a summary on how to apply and interpret the evidence presented in Section C. For each costs and benefits statements, any key limitations which readers of the report should consider are noted.

	Strong evidence	<ul style="list-style-type: none">Impacts considered rather than ‘activities’, ‘outputs’, ‘outcomes’ (e.g. impact on GDP compared rather than number of tourists).Sufficient evidence to support the statement (e.g. time/geographic breakdown).Additionality/distributional effects sometimes considered.
	Medium quantity and / or quality of evidence	<ul style="list-style-type: none">Quantitative or qualitative evidence on outputs (e.g. no. of business events hosted, no. of volunteers) and outcomes (e.g. % of residents feeling happier) but typically no evidence on impacts of these outputs/ outcomes.Information may be further supported by anecdotal qualitative evidence.Evidence may support only some components of the statement.
	Very weak evidence / no evidence	<ul style="list-style-type: none">Very little or no evidence to support the statement.Activity based information without any quantitative information.

Statement 1. Structure and scale of Games-related costs (1/2)

	Manchester 2002	Melbourne 2006	Glasgow 2014	Gold Coast 2018
1.1 Games operating expenditure generates economic activity and tangible operating assets which drive benefits and legacies.	✓	✓	✓	✓
1.2 Hosting the Games drives new capital investments that build new and/or improved assets for legacy use.	✓	✓	✓	✓
1.3 Hosting the Games accelerates and/or enhances the scale/quality of planned investments	✓	✓	✓	✓
<div>  Strong evidence  Medium quantity / quality of evidence  No evidence/weak evidence </div>				

Statement 1. Structure and scale of Games-related costs (2/2)

Applying and interpreting the evidence

1.1 & 1.2

- **Differences in host city conditions and objectives:** The Games-related operating expenditure is partly determined by the Organising Committee (which means that some elements are largely unavoidable) but others are influenced by the level of ambition of the host city and its objectives. For example, host cities have opening and closing ceremonies (including festivals and other cultural activities) that vary in scale and cost depending on the importance attached by the city to cultural objectives. The scale of Games-related capital expenditure also varies significantly depending on the extent and quality of host cities' existing infrastructure, their objectives and their appetite to invest. As a result, any assessment of the relative costs of different Games needs to consider the context of the existing infrastructure and the benefits that were sought/achieved.

1.2

- **Difficulty in determining additionality:** For a number of cost categories it is difficult to identify the additional cost that was incurred as a result of the Games. For example, it is not possible to know what investment in transport would have happened if the Games had not taken place, in addition to when this investment would have occurred. Similarly, for improvements to stadia – separating the investment due to the Games from investment that would have occurred anyway is a difficult task. This is important information as the benefits derived from investments will be considerably greater for additional investment as opposed to accelerated investment. For additional investments, all benefits can be attributed to the Games. However, for accelerated investments, the benefits that can be attributed to the Games are the 'additional' benefits as a result of the investment being brought forward.
- **Reviewing costs in isolation of the benefits:** This statement focuses on the costs of hosting the Commonwealth Games. To assess value for money, these costs need to be compared to their resulting benefits in the context of the objectives of host cities. For example, the costs in one category may be higher for a particular host than another because this investment was deemed worthwhile to achieve wider policy objectives. As a result, it is important to match costs to the specific associated benefits of these costs.

1.3

- **Challenge in identifying degree of acceleration:** As discussed earlier in Section C, this report aims to separate categories of capital costs and investments between those that are Games-related (see Statement 1.2 in Section C) and those that are discretionary and were accelerated and / or enhanced as a result of hosting the Games (this Statement). The nature and scale of acceleration and / or enhancement is difficult to identify and rarely reported in the literature. To evaluate the benefits (and costs) derived from investments that were brought forward as a result of hosting the Games, further evidence and analysis is required to assess the number of years that these investments were accelerated by. This information would then allow estimation of the change in the net present value of the benefits from the investments.

Statement 2. Funding structure of Games-related costs (1/2)

	Manchester 2002	Melbourne 2006	Glasgow 2014	Gold Coast 2018
2.1 Hosting the Games generates revenues for public sector organisations responsible for delivery of the Games in the form of income from sponsorship, broadcast, ticketing, hospitality and merchandising.	✓	✓	✓	✓
2.2 Hosting the Games attracts incremental national and/or regional funding to the host city.	✓	✓	✓	✓
2.3 Hosting the Games attracts incremental private sector investments to the host city to drive benefits and legacies.	✓	✓	✓	✓
2.4 Hosting the Games mobilises human and financial resources from local and regional third-sector partners to drive benefits and legacies.	✓	✓	✓	✓
2.5 Hosting the Games raises funds for local, national, and international charities.			✓	

 Strong evidence
  Medium quantity / quality of evidence
  No evidence/weak evidence

Statement 2. Funding structure of Games-related costs (2/2)

Applying and interpreting the evidence

2.1

- **Differences in methods for calculating value of in-kind contributions:** In-kind contributions have been included as part of sponsorship revenue. They are inherently challenging to value. The value reported by each past host have been used, however the underlying methodologies for calculating these in-kind contributions may vary across hosts. For example, where in-kind contributions relate to time spent by public sector employees (e.g. for security), different approaches may have been used to value these time costs.

2.2

- **Differences in political context in each country:** When comparing the share of funding from different levels of government for each past host, it is important to consider the political context of the host country (i.e. the key public sector stakeholder in terms of budget / funding). For example, in Australia, the state government has led the bids whereas in the UK the host city works directly with the national government.
- **Need to consider in the context of total costs:** The relationship between the funding of each government body and the costs of hosting the Games is complex in that causation flows both ways. If the total cost of delivering the Games in a particular city is higher, then the funding needed is higher. However, the reverse is also true. If the Games budget is higher (i.e. as public sector bodies are willing to invest more in the Games to meet wider policy objectives), then the costs of hosting the Games are likely to also be higher. Furthermore, it is often challenging to establish which opposing mechanism is the driving force. This means that it is important to review the funding contributions of public sector bodies in this context, keeping in mind these two opposing forces.




2.3

- **Uncertain share (public/private) of capital projects:** A few of the projects which begin as a result of a successful bid are completed in partnership between the local, regional or national government and a private firm. Existing evidence that allows identification of the share of investment made by the public and private sector is limited. Where information is available for specific projects, the analysis identifies the share of investment across different funders.
- **Difficulty establishing how far the Games accelerated or enhanced private sector investments:** For discretionary private sector investments that occur in a city in the years before and after the Games, it is often hard to establish the extent to which hosting the Games contributed to the decision to make each investment; i.e. would the investment still have been made had the Games not taken place.

2.4 & 2.5

- **Limited evidence available:** Little systematic evidence is available from past host cities on how hosting the Games has mobilised resources from third-sector organisations or supported fund raising for local, national and international charities. Gold Coast 2018, however, provides a valuable case study which shows how Griffith University (a not-for-profit organisation) leveraged the Games to achieve their objectives and Glasgow 2014 offers a good case study on the partnership with UNICEF.

Statement 3. GDP and employment benefits (1/2)

	Manchester 2002	Melbourne 2006	Glasgow 2014	Gold Coast 2018
3.1 Hosting the Games can boost local, regional and national GDP and employment before and during the Games.	✓	✓	✓	✓
<div>  Strong evidence  Medium quantity / quality of evidence  No evidence/weak evidence </div>				

Applying and interpreting the evidence

3.1

- **Differences in spending included in the impact estimates (which do not always match the costs):** The economic impact studies for Manchester 2002, Melbourne 2006, Glasgow 2014 and Gold Coast 2018 all include different elements of expenditure to underpin their analysis. There are two specific differences - how the Games-related spending is identified and how net spending is identified (i.e. to what extent the spending would have happened in the absence of the Games). Furthermore, some studies, such as for Glasgow 2014, use estimated spend figures, whereas others (e.g. Gold Coast 2018) are based on data from surveys.
- **Comparability between Games:** The GDP and employment impacts of past Commonwealth Games as different methods have been used in the underlying economic impact assessments. For example, the estimates for Glasgow and Manchester are based on input-output modelling whereas CGE modelling is used for Melbourne and Gold Coast. For more detailed analysis of these results, the direct sources should be reviewed.
- **Estimated vs actual economic impact estimates:** The employment and GDP estimates are all based on economic models rather than analysis based on observational data completed after the Games. These approaches use analytical tools to isolate the likely change in GDP caused by the Games. Analysing post-Games actual GDP and other variables to identify the impact of hosting the Games is challenging: it is difficult to isolate the change to GDP and employment caused by the Games rather than other factors by analysing changes in actual GDP and employment data.
- **Differences in measures of employment impact:** When comparing the impact on employment across past editions of the Games, it is important to consider the impact measure being used. Some studies estimate the impact on jobs (which do not have a set time period). Other studies estimate the number of full time equivalent years (i.e. the number of jobs multiplied by the length of time in employment). The two are not directly comparable.

Statement 3. GDP and employment benefits (2/2)

	Manchester 2002	Melbourne 2006	Glasgow 2014	Gold Coast 2018
3.2 Hosting the Games can add to local, regional and national GDP and employment after the Games by boosting demand.	✓	✓	✓	✓
3.3 Hosting the Games can add to local, regional and national GDP and employment after the Games by boosting productivity through improving the skills of the workforce and business competitiveness.	✓	✓	✓	✓



Strong evidence



Medium quantity / quality of evidence



No evidence/weak evidence

Applying and interpreting the evidence

3.2

- **Limited evidence available of legacy:** Few existing impact assessments consider the period beyond the Games. Those that do are based on ex ante analysis (i.e. forecasts and assumptions before the Games were hosted) as opposed to realised ex post data (i.e. actual data post-Games). For example, assumptions regarding the post-Games boost to tourist numbers are used rather than actual post-Games outcomes. Even where an ex post economic impact assessment was conducted for a host city, it is challenging to define and identify the counterfactual (i.e. what would have happened in the absence of the Games).
- **Evidence on GDP drivers but not economic impact:** Many post-Games reports and legacy studies consider the key drivers of post-Games economic impact (e.g. increased visitor numbers, number of follow-on events), however, few estimate the economic impact of these outcomes.
- **Unclear geographic level of data:** When outcome and impact data are reported in post-Games studies, it is often unclear whether reported figures relate to the city, regional or national level. In particular, where data is presented at the city level, it is often unclear whether displacement from other areas in the country has been examined (i.e. whether or not tourists/events would have been attracted to the city if the Games had not been hosted).
- **Comparability between Games:** Care should be taken when comparing the GDP and employment impacts of past Commonwealth Games as different methods have been used in the underlying economic impact assessments. For example, the estimates for Glasgow and Manchester are based on input-output modelling whereas CGE modelling is used for Melbourne and Gold Coast. For more detailed analysis of these results, the direct sources should be reviewed.

3.3

- **Activity and output based evidence rather than impact based evidence:** There is a wide range of evidence available on the business and skills based initiatives that have been undertaken at past Commonwealth Games but there is very little information available on the impact of these programmes.

Statement 4. Regeneration and transformation benefits




	Manchester 2002	Melbourne 2006	Glasgow 2014	Gold Coast 2018
4.1 Hosting the Games can regenerate deprived areas within the host city boosting local economies, attracting investment and enhancing community cohesion.	✓		✓	
4.2 Hosting the Games can transform an area within the host city boosting local economies, attracting investment and enhancing community cohesion.	✓		✓	

✓ Strong evidence ✓ Medium quantity / quality of evidence ✓ No evidence/weak evidence

Applying and interpreting the evidence

- **Attribution is difficult:** There is no robust long-term evaluation of the impact of the Games on regeneration and transformation of local areas which means that it is difficult to identify the impact of the Games on local communities (rather than other factors occurring).
- **Displacement / substitution not captured:** The displacement and substitution effects of the Games are not assessed. This includes benefits that would otherwise flow to other localities that are now flowing into East Manchester or benefits that would have gone to different groups of citizens.
- **Distributional impacts not captured:** The distributional effects of regeneration and transformation of local are not assessed. This includes consideration that the people benefitting are more disadvantaged relative to the average population.
- **Difficult to measure social progress:** Evidence on social regeneration is largely based on anecdotes from consultations with key stakeholders.

Statement 5. Trade, investment, and tourism benefits (1/2)

	Manchester 2002	Melbourne 2006	Glasgow 2014	Gold Coast 2018
5.1 Hosting the Games can catalyse trade deals with other Commonwealth (and non-Commonwealth) countries.	✓	✓	✓	✓
5.2 Hosting the Games can attract inward investment from other Commonwealth (and non-Commonwealth) countries.	✓	✓	✓	✓
5.3 Hosting the Games can attract sustained tourism.	✓	✓	✓	✗
<div>  Strong evidence  Medium quantity / quality of evidence  No evidence/weak evidence </div>				

Statement 5. Trade, investment, and tourism benefits (2/2)

Applying and interpreting the evidence

5.1

- **Activity and output based evidence rather than impact based evidence:** Most of the existing evidence is activity and output based data (e.g. trade programmes, number of businesses attending events): few Games have evaluated the economic impact of their trade programmes with the notable exception of the Gold Coast 2018 which has estimated the boost to export sales from the Trade 2018 programme.
- **Challenge of monitoring exports:** It is difficult to isolate the impact of the Games on trade not least because data on exports are rarely available at the local/regional level.

5.2




- **Limited evidence on investment-specific activities and outcomes:** Most of the evidence presented is investment-related activities and programmes hosted on the back of the Commonwealth Games. For example, business events have the objective to increase inward investment through forming business to business / business to consumer agreements and relationships. While these activities have the potential to increase inward investment there is limited evidence on investment-specific events.
- **Challenge monitoring investment:** It is difficult to isolate the impact of the Games inward foreign direct investment (e.g. FDI) in part because data on inward investments are rarely available at the local/regional level.

5.3

- **Attribution to the Games:** Although the number of tourists increased in the period after the Games in each of the three cities presented on the previous page, it is hard to determine how far this can be attributed to the Games. Other factors may have contributed to the observed change. These changes need to be assessed against a global rate of growth in tourist arrivals of 4.4% per annum between 2012 and 2018 (OECD (2018)).
- **Possible displacement and substitution effects:** Analysis of changes in the number of tourist arrivals does not take account of how tourists would have behaved if they had not gone to the host city. For example, tourists may choose to go to the host city rather than a different city in the same country. Whilst this is a good news story for the host city, from a national perspective there is no net change in the number of tourists in the country. In contrast, if tourists instead choose to make an additional trip to the host country, or visit the host country instead of a different country, there is a net gain in tourist arrivals to the country. For example, the economic impact study for Glasgow 2014 estimated the economic impact of visitors accounting for displacement and deadweight, i.e. the analysis considered the impact at three geographical levels: Scotland, Glasgow and Glasgow and Clyde Valley. The analysis adjusted for displacement by assuming that money spent by Scotland / Glasgow residents on Games-related activity is money that those people would have spent in Scotland / Glasgow in any case (i.e. displaced spending).

Statement 6. Community and elite sports benefits

	Manchester 2002	Melbourne 2006	Glasgow 2014	Gold Coast 2018
6.1 Hosting the Games can lead to enhanced (elite) sporting success in the host country.	✓	✓	✓	✓
6.2 Hosting the Games can drive healthier living by promoting community sport participation.	✓	✓	✓	✓




 Strong evidence
  Medium quantity / quality of evidence
  No evidence/weak evidence

Applying and interpreting the evidence

- **Counterfactuals are weak:** Some analysis of the sport benefits of the Games seeks to identify the impact by comparing outcomes with either other areas of the host country or a baseline. Neither is ideal since they may not isolate the impact of the Games from other contributing factors but the former is better because it seeks to adjust for the effect of the other contributory changes.
- **Elite sport benefits cannot be attributed to funding the Commonwealth Games:** Public spending to enable athletes to prepare for the Games is often not directly associated with a single edition of the Commonwealth Games and is not typically included in Games-related spending. This means that the performance of the team, and the impact on national pride cannot be attributed to the Games as there may have been an improved performance even if the Games were not hosted.
- **Outcomes are not valued:** The evidence does not value the impact of the Commonwealth Games on sport. Rather than impacts, the evidence presents the outcomes (sometimes only outputs) associated with the activities. These outcomes, such as increased sport participation which could impact on population health, are not valued. This means that the wellbeing impacts of the Games are not captured robustly. Work to estimate the value of sporting success beyond any impact on GDP and employment has been carried out for similar events such as the Vancouver 2010 Winter Olympics (see case study in Statement 6.1).

Statement 7. Community pride and confidence benefits

	Manchester 2002	Melbourne 2006	Glasgow 2014	Gold Coast 2018
7.1 Hosting the Games can generate a “feel-good” factor by boosting civic pride amongst citizens locally, regionally and nationally.	✓	✓	✓	✓
7.2 Hosting the Games can promote social cohesion and engage whole communities through shared experiences.	✓	✓	✓	✓
7.3 Hosting the Games can build confidence in the capabilities of local, regional and national government institutions to enable efficient delivery of public services.	✓	✗	✗	✗
7.4 Hosting the Games can create positive partnerships between various levels of government and near-government organisations.	✗	✗	✓	✓




 Strong evidence
  Medium quantity / quality of evidence
  No evidence/weak evidence

Applying and interpreting the evidence

- **Counterfactuals are weak:** Some of the evidence on community benefits identifies the impacts by comparing outcomes with either other areas of the host country or a baseline. Neither is ideal since they may not isolate the impact of the Commonwealth Games from other contributing factors.
- **Legacy is not assessed:** Little existing evidence covers the outcomes and impacts generated after the Games have been held although the nature of the investments in social legacy programmes means that benefits might be anticipated, especially social ones.
- **Outcomes are not valued:** The evidence does not value the impact of the Games on pride and confidence. Rather than impacts, the evidence presents the outcomes (sometimes only outputs) associated with the activities which form part of this impact area. These outcomes, such as increased community engagement or enhance civic pride could impact wellbeing but are not valued. There is some evidence of the wellbeing benefits of being the host city for the Olympic Games. Although this evidence is not directly applicable to hosting a Commonwealth Games, it indicates the potential significance of the social value.

Statement 8. Community behaviours benefits (1/2)

	Manchester 2002	Melbourne 2006	Glasgow 2014	Gold Coast 2018
8.1 Hosting the Games can be used to promote use of public transport among residents both during and after the Games.	✓	✓	✓	✓
8.2 Hosting the Games provides a platform for showcasing environmental and sustainability best practices.	✓	✓	✓	✓
8.3 Hosting the Games can be used to increase willingness to volunteer.	✓	✓	✓	✓
8.4 Hosting the Games can provide a platform for bold discussions leading to social change.	✓	✓	✓	✓
8.5 Hosting the Games provides educational opportunities for locals and visitors.	✓	✓	✓	✓

 Strong evidence
  Medium quantity / quality of evidence
  No evidence/weak evidence

Statement 8. Community behaviours benefits (2/2)

Applying and interpreting the evidence

8.1

- **Limited evidence from past Commonwealth Games:** The existing evidence reviewed by PwC (publicly available economic impact and evaluation reports) for Manchester 2002, Melbourne 2006 and Gold Coast 2018 is limited to the use of public transport during the Games and, in some cases, an indication of willingness to increase use post-Games. It does not provide the basis for assessing whether the Games have contributed to a sustained increase in the use of public transport in the host city, and further to improved well-being:
 - It **does not quantify the change in actual use** of public transport after the Games.
 - **There is no assessment of the social, economic and environmental benefits and associated welfare impacts** as a result of higher use of public transport in host cities.

8.2

- **Weak or no counterfactuals:** The available evidence suggests that organising committees and host city governments can prevent and/or mitigate the adverse environmental impacts arising from venue construction, transport and other Games activities. Typically, however, this performance is assessed against their plans which are based on previous editions of the Games or conditions before the Games, rather than what would have happened if the city had not hosted the Games at the time.
- **Focus on short term impacts:** The available evidence is largely limited to short term environmental impacts related to the construction of Games-related infrastructure. The medium term (Games-time) and longer term environmental effects are rarely assessed even though they may bring significant benefits if improved practices/policies are maintained.

8.3

- **Weak counterfactual:** There is available evidence of the activities associated with volunteering and some evidence on volunteers' experience during the Games. There is, however, less evidence on whether intentions to volunteer in the future would have been different in the absence of the Games. For example, would there have been a sustained interest in volunteering or attraction of new volunteers even in the absence of hosting the Games? Typically, the survey results are not assessed against a baseline or the general population.
- **Focus on short term impacts:** The available evidence is largely limited to Games-times and immediate post-Games survey responses from volunteers. Long term effects are rarely captured even though they may bring significant benefits through increased skills, improved motivation and sustained participation in volunteering activities.

2

Analysis of host city
costs and funding

This Appendix explains how the costs and funding of previous Commonwealth Games have been analysed

This appendix explains:

- the sources of data that underpin the cost analysis presented in Statement 1
- the basis for the analysis of funding (which is part of Statement 2)
- how the cost and funding data have been converted to a common currency and price basis (£ at 2018 prices).

Costs

For each of the four Games, the first step is to break down the expenditure associated with hosting the Games into four categories:

1. Games-related operating expenditure: this is largely the costs incurred by the relevant Organising Committees.
2. Capital expenditure on Games-related venues and village.
3. Discretionary operating expenditure to achieve host cities' wider objectives
4. Accelerated and otherwise enhanced discretionary capital investments.

This means separating out the expenditure directly related to hosting the Games (categories 1 & 2) from the expenditure that the Games influenced in host cities (categories 3 & 4). The latter two categories include spending which is part of initiatives to maximise the Games' contribution to the city's wider policy objectives (e.g. legacy programmes).

The only expenditure included in the analysis is that where the Games influenced the timing and/or the scale.

In some cases, it is difficult to separate the expenditure in category 1 from that in category 3: for example, the security costs reported may need to be split between security for the Games events and other events not directly linked to the Games. In the absence of information on the appropriate split, no attempt has been made to separate the spending. Instead, it is noted that some part may relate to discretionary expenditure.

In other cases, notably the capital expenditure on Games-related venues and village, the expenditure captured in the sources used relates only to the contribution of the organisations responsible for delivery of the Commonwealth Games (rather than the full cost of the investments). Where possible this missing expenditure is noted.

Operating and capital expenditure are distinguished.

Two other principles have been applied as part of the analysis:

- in-kind contributions are included where these are known to arrive at the total cost
- where elements of expenditure were partially privately funded, the total expenditure (including private contributions) has been reported where available.

The components of costs are presented in detail in the tables on the following pages.

All the cost information has been collated from published sources.

Funding

The appendix also presents analysis of how each category of cost has been funded in each of the four Games considered. This informs Statement 2. The underlying data and approach are explained below.

Where possible, the funds provided by a particular organisation (in either the public or private sectors) are attributed to a specific cost item (e.g. funder X contributed £Y million towards the cost of Z). Often, however, it is not possible to attribute the funds received from a particular organisation to a specific cost item or, indeed, category. Where this is the case, the overall pattern of funding is noted.

Throughout the analysis in-kind contributions, where available, have been included.

Conversion to common currency and price basis

All the values presented in this Appendix use the currency of the host country at the price level of the year of the Games. In the main body of this report, to aid comparison between Games, they are converted into £ at 2018 prices using a PPP exchange rates from the OECD. The UK GDP deflator from the Office for National Statistics is used to convert them to a consistent 2018 price basis.

Manchester 2002 - Games-related operating expenditure

Cost item	Amount (£ million)	Source	Notes
Finance and corporate services	12.4	Post Games Report – Volume 1	
Venue fit out	15.8		
Workforce division	25.6		
Sport	5.5		
Operations	21.6		
Technology (including Broadcast)	36.1		*£17 million included into the value for Technology to cover the cost of broadcasting (Sources: David Leather, Deputy Chief Executive and Finance Director Manchester 2002 Limited)
Marketing	5.0		
Commercial	5.6		
Ceremonies	12.4		
Work packages	7.1		
Core Games operating costs	147.1		
Additional operating expenditure by Manchester City Council	13.0		Manchester City Council incurred additional operating costs of £13 million related to human resources, stadium licensing and preparing the city for the Games.
Total Games-related operating expenditure	160.1		
Source of funding			
National government	36.9	Post Games Report - Volume 1	
Manchester City Council (local government)	27.3		
Sport England	22.7		
Revenues	73.2		This covers broadcasting rights, sponsorship, ticketing, licensing and merchandise and other revenue
Total Games-related operating expenditure	160.1		

Sources: Post Games Report (Manchester 2002)

Manchester 2002 - Capital expenditure on Games-related venues and village

	Amount (£ million)	Source	Notes
Cost item			
City of Manchester Stadium	111.0	Post Games Report - Volume 1	
English Institute of Sport	16.0		
Aquatics centre	32.0		
Belle Vue hockey centre	4.0		
Shooting facilities	6.0		
Heaton Park lawn bowls	1.0		
Total capital expenditure on Games-related village and venues	170.0		
Source of funding			
Manchester City Council (local government)	40.0	Post Games Report - Volume 1	
Sport England	123.0		
Other	7.0		Other sources of funding for Games-related venues and the athletes' village were local universities and the Lawn Tennis Association.
Total capital expenditure on Games-related village and venues	170.0		

Sources: Post Games Report (Manchester 2002)

Manchester 2002 - Discretionary operating expenditure to achieve host cities' wider objectives linked to hosting the Games

	Amount (£ million)	Source	Notes
Cost item			
Look and feel of the city	4.5	Cambridge Policy Consultants	This spending on the look and feel of the city may be included in Manchester City Council's operating expenditure
Legacy programme	17.0	Ecotec	The budget for the legacy programme was £17.7 million but the actual amount spent was £17.0 million. The legacy programme included seven different projects: Pre-volunteer (£3 million), Curriculum package (£0.36 million), Passport 2K (£3.0 million), Healthier communities (£0.8 million), Let's celebrate (£1.3 million), Prosperity (£7.1 million), Games xchange (£1.1 million) and management and admin costs (£0.31 million)
Total discretionary operating expenditure	21.5		
Source of funding			
National government (through the North West Development Agency)	6.2	Ecotec	Legacy programme
Manchester City Council (local government)	12.2	Cambridge Policy Consultants & Ecotec	This consists of £4.5 million towards the Look and feel of the city and £7.7 million for the Legacy programme
Private sector	3.1	Ecotec	Legacy programme
Total discretionary operating expenditure	21.5		

Sources: Cambridge Policy Consultants (2002); Ecotec (2016)

Manchester 2002 - Accelerated and otherwise enhanced discretionary capital investment to achieve host cities' wider objectives

Manchester City Council used its right to host the Manchester 2002 Games as an opportunity to accelerate the regeneration of East Manchester. As such, its spending to host the Games was linked to a wider programme of investment in regeneration and transport infrastructure.

A report by Cambridge Policy Consultants in 2002 suggests that:

- total public investment in the Games and the associated regeneration infrastructure was £670 million at 2002 prices, of which some £570 million was expected to be East Manchester
- £225 million of this spend was on regeneration and associated with the pre-Games and parallel activities
- the Games also brought forward several major transport schemes (with a total cost of nearly £800 million) of which the estimated additional public investment was £125 million.

Details of the funding of these investments are not published, it is understood that the majority was provided through national government programmes and agencies.

The benefits of these investments are considered elsewhere within the Games Value Framework (see Statements 3 and 7).

Sources: Cambridge Policy Consultants (2002)

Melbourne 2006 - Games-related operating expenditure

Cost item	Amount (A\$ million)	Source	Notes
Sales, Commercial & Corporate Services	103.6	Report on the financial contribution by the Victorian Government to the Melbourne 2006 Commonwealth Games	
Marketing & Communications	35.1		
Technology & Broadcast	95.6		
Sports & Venues	45.9		
Ceremonies & events	78.1		
Games Time Operations	77.1		
Traffic & Transport	44.6		
Infrastructure & Overlay	132.8		
Villages	97.3		
Support services	15.9		
Licence Fees	50.6		
<i>Sub-total</i>	<i>776.5</i>		
Security and emergency services	194.8		This includes A\$79.1 million in-kind security and emergency services provided by the Australian Government. Some part of this expenditure is believed to have been on Festival 2006 but the amount is unknown.
Total Games-related operating expenditure	971.3		The Government of Victoria report identifies A\$47.7 million spend on Business, Community and Environment Programs which falls into the discretionary category and is, therefore, excluded here.
<i>Adjustments</i>			These adjustments were made to reconcile the statement of net outlays to the statement of net operating resources (use for Games-related operating and capital expenditure). These adjustments are used to reconcile with the funding information in the same report.
Resources included in normal operating budgets of Government Departments but not in the Statement of Net Outlays	(41.3)		
Intra-government outlays	7.1		
Intra-government revenues	(3.3)		
Total Games-related operating expenditure (after adjustment)	933.8		

Sources: Victoria Government (2006)

Melbourne 2006 - Funding of Games-related operational expenditure

Total Games-related operating expenditure was A\$933.8 million and this was funded as follows:

- the Victoria Government earned A\$485.2 million in operating revenue from broadcasting rights (A\$62.4 million), sponsorship (A\$91.8 million), ticketing (A\$78.8 million), merchandising and donations (A\$9.3 million) and interest received (A\$10.2 million) and in-kind contributions (A\$8.2 million) where venues were provided at no cost.
- the cost of security and emergency services was partly funded through an in-kind contribution from the Australian Government (A\$79.1 million) which made a further cash contribution of A\$112.9 million and an in-kind contribution of A\$24.2 million towards non-security services such as sales, commercial and corporate services.
- local government's contribution totaled A\$19.4 million made up of A\$16.4 million received in the form of in-kind contributions for support services and the rest A\$3.0 million in cash contributions.
- the contribution of the Victorian Government was A\$485.2 million which includes A\$115.7 million for security funding.

The A\$47.7 million for Business, Community and Environment programmes is allocated to discretionary spend.

Source of funding	Amount (AUS\$)	Notes
<i>Commonwealth Government</i>	216.2	
Cash contribution	112.9	
In-kind contribution	103.3	Includes \$79.1 million in-kind contributions for security
<i>Victoria Government (Regional)</i>	485.2	
<i>Local government</i>		
Cash contribution	3.0	
In-kind contribution	16.4	
Revenues	260.7	
<i>less items moved to enhanced capital expenditure</i>	(47.7)	Excluding \$47.7 million contribution to Business, community and environment programmes that is allocated to discretionary spend
Total Games-related operating expenditure	933.8	

Sources: Victoria Government (2006)

Melbourne 2006 - Capital expenditure on Games-related venues and village

Cost item	Amount (A\$ million)	Source	Notes
Melbourne Cricket Ground redevelopment	77.0	Report on the financial contribution by the Victorian Government to the Melbourne 2006 Commonwealth Games	There are several potential estimates of the cost of the athletes' village: for example, the KPMG economic impact study states that its total cost was A\$496.4 million whilst the Government of Victoria report quotes different estimates of the cost of the athletes' village based on different methodologies. A\$35.1 million represents the cost of the Victoria Government's commitment to provide 200 social housing dwellings as part of the athletes' village. The Government of Victoria report also notes that the cost of construction of the athletes' village and "satellite villages" was A\$157.8 million.
Melbourne sports and aquatics centre	66.6		
Village social housing	35.1		
Olympic Park athletics track	2.7		
Darebin lawn bowls centre	2.5		
State mountain bike facility	2.4		
State netball hockey centre	0.7		
Melbourne gun club	0.1		
Total capital expenditure on Games-related venues and village	187.1		This capital expenditure, which is part of the total expenditure on 'infrastructure and facilities' only reflects the part of the cost which the Victoria Government needed to fund, rather than the total cost of developing and upgrading venues and the athletes' village. For instance, the KPMG economic impact study suggests that the total cost of redeveloping the Melbourne Cricket Ground was A\$777 million. The costs of the Yarra Precinct pedestrian link, the Yarra Precinct lighting upgrade and the works at Jolimont Station are excluded here and treated as part of enhanced discretionary capital investment.
<i>Adjustments</i>			These adjustments were made to reconcile the statement of net outlays to the statement of net operating resources (use for Games-related operating and capital expenditure). These adjustments are used to reconcile with the funding information in the same report
<i>Village land adjustment</i>	(16.6)		The adjustment relates to the different treatment of the value of the land contributed to the Athletes Village project between the Statement of Net Outlays and the Statement of Net Operating resources.
Total capital expenditure on Games-related venues and village (adjusted)	170.5		
<i>Victoria Government (Regional)</i>	222.6		
<i>Village land adjustment</i>	(16.6)		As above
<i>less items moved to enhanced capital expenditure</i>	(35.5)		Items moved to discretionary capital include: Yarra Precinct pedestrian link (A\$32.7 million), Yarra Precinct lighting upgrade (A\$1.5 million), minor works at Jolimont Station (A\$1.3 million)
Total capital expenditure on Games-related venues and village (adjusted)	170.5		

Sources: Victoria Government (2006)

Melbourne 2006 - Discretionary operating expenditure to achieve host cities' wider objectives linked to hosting the Games

	Amount (A\$ million)	Source	Notes
Cost item			
Business, community and environment programmes	47.7	Report on the financial contribution by the Victorian Government to the Melbourne 2006 Commonwealth Games	
Total discretionary operating expenditure*	47.7		
Source of funding			
National government	9.5	Report on the financial contribution by the Victorian Government to the Melbourne 2006 Commonwealth Games	This includes an in-kind contribution for the Business, Community and Environment Programmes made to the Victoria Government
Victoria Government (Regional)	35.7		Business, Community, Environment Programmes
Local government	2.5		This includes an in-kind contribution for the Business, Community made to the Victoria Government
Total discretionary operating expenditure	47.7		

Melbourne 2006 - Accelerated and otherwise enhanced discretionary capital investment to achieve host cities' wider objectives

Several capital investments were associated with the Melbourne 2006 Games.

Three transport investments were accelerated:

- A\$32.7 million was spent on the Yarra Precinct pedestrian link
- A\$1.5 million was spent on the Yarra Precinct lighting upgrade
- A\$1.3 million was spent on minor works at Jolimont Station.

All these investments were funded by the Government of Victoria.

Glasgow 2014 - Games-related operating expenditure

Cost item	Amount (£ million)	Source	Notes
Security	88.0	Audit Scotland Report	This includes £0.8 million of Security costs towards Festival 2014
Games service & transport	72.5		
Technology & broadcasting	70.0		
HR & Games workforce	70.0		
Venue costs (temporary changes)	55.0		This includes energy and water solutions and additional toilet facilities
Marketing, communications, ceremonies & QBR	54.0		The Cultural Programme Evaluation report notes that the Organising Committee spent £3.5 million on cultural programmes but it is unclear whether or not this amount is included in the cost for Ceremonies.
Corporate services & finance	35.0		
Venue use agreements & other venue development costs	23.0		This consists of £18 million on venue use agreements to cover leasing arrangements for existing venues such as the SECC and Hampden Park and £5 million of other costs on developing venues.
Total Games-related operating expenditure	467.5		
Source of funding			
Scottish Government	279.6	Audit Scotland Report	The contribution of the Scottish Government and local government is split 80:20 as detailed in the Post Games Report.
Local government	69.9		
Revenues	118.0		This covers broadcasting rights, sponsorship, ticketing, licensing and merchandise and other revenue
Total Games-related operating expenditure	467.5		

Sources: Audit Scotland (2015)

Glasgow 2014 - Capital expenditure on Games-related venues and village

	Amount (£ million)	Source	Notes
Cost item			
Hampden Park	24.2	Audit Scotland	All costs related to temporary features of the stadia are captured in the temporary venues costs included as part of the operating expenditure. The figures here represent only the contribution from the Organisation Committee budget to the cost of the athletes' village and venue development (i.e. they do not represent the total capital costs of the venues).
Tollcross	13.6		
Velodrome	13.2		
Athletes' village	9.1		
Glasgow Green hockey	5.1		
Scotstoun	2.5		
Kelvingrove	1.2		
Cathkin Braes	0.6		
Strathclyde Park	0.5		
Total capital expenditure on Games-related venues and village	70.0		
Source of funding			
Scottish Government	36.2	Audit Scotland	The remaining funding for venues and the athletes' village is assumed to come from the Scottish Government
Local government	33.8		This covers the funding for Hampden Park, Strathclyde Park and the athletes' village
Total capital expenditure on Games-related venues and village	70.0		

Sources: Audit Scotland (2015)

Glasgow 2014 - Discretionary operating expenditure to achieve host cities' wider objectives linked to hosting the Games

Cost item	Amount (£ million)	Source	Notes
Festival 2014	13.2	Cultural Programme Evaluation Report	The Cultural Programme budget was £13.2 million. This includes a contribution of £3.5 million from the Organising Committee with other funding coming from the Scottish Government and Glasgow City Council. £9.7 million came from the National Lottery and was distributed through Creative Scotland. The Audit Scotland report notes that security costs for the Festival 2014 were £0.8 million. It is unclear whether or not the Cultural Programme budget includes these costs. It is possible that the Organising Committee's contribution to the cost of the cultural programmes is included in the cost for ceremonies noted previously as part Games-related operating expenditure. In the absence of this information, no adjustment is made for these costs.
Legacy volunteering	12.7	Audit Scotland	Glasgow City Council allocated £12.7 million from its Integrated Grants Fund to support 202 projects that contributed towards legacy outcomes.
Community engagement	0.3	Audit Scotland	Provided by EventScotland as part of the Games for Scotland 2014 Programme
Total discretionary operating expenditure	26.2		
Source of funding			
Scottish Government	2.8	Cultural Programme Evaluation Report	The Organising Committee's contribution of £3.5 million to the cost of the Cultural Programme is split 80:20 between the Scottish Government and Glasgow City Council (in line with their contribution to the overall Games budget).
Local government	13.4	Audit Scotland & Cultural Programme Report.	This includes £12.7 million for Legacy volunteering and £0.7 million for the Cultural Programme. based on 20% of the £3.5 million referenced above.
Event Scotland	0.3	Audit Scotland	This covers community engagement.
National Lottery	9.7	Cultural Programme Report.	Cultural Programme Budget
Total discretionary operating expenditure	26.2		

Sources: Audit Scotland (2015)

Glasgow 2014 - Accelerated and otherwise enhanced discretionary capital investment to achieve host cities' wider objectives

In parallel with preparing to host the Glasgow 2014 Games, Glasgow City Council and other stakeholders led a programme of major capital investments designed to accelerate development of the transport infrastructure and to promote regeneration, especially in the area around the main venues for the Games.

Different estimates exist for the total investment in transport infrastructure. They range between £700 million (quoted in Glasgow City Council's 'Beyond 2014') and 'around £1 billion' which is cited by the Scottish Government in its Final Evaluation Report for the Games.

Key transport projects included:

- completion of the M74 extension to the M8 at a cost of £445 million as a partnership project between Transport Scotland, the principal funder, Glasgow City Council, South Lanarkshire Council and Renfrewshire Council
- construction of the East End Regeneration Route at a cost of £90 million to improve access to the east end of Glasgow and facilitate regeneration: this was funded by the Glasgow City Council
- the refurbishment of Dalmarnock station (at a cost of £9 million): this was funded by the Scottish Government, including a grant from the European Regional Development Fund.

Other transport projects undertaken before the Glasgow 2014 Games are excluded. These include the M80 Stepps to Haggs completion, the Airdrie to Bathgate rail link and the M8 Baillieston to Newhouse extension. Although these are all cited in the Transport Strategic Plan, there is no suggestion that they were affected by the Games.

The regeneration programme has been delivered through Clyde Gateway URC and is expected to continue through to 2027. As of April 2018, the level of public and private investment is approaching £1 billion although it is unclear how much is attributable to Glasgow 2014.

Sources: Audit Scotland (2015); G2014 Post Games Report (2014); G2014 Transport Strategic Plan (2010); G2014 Cultural Programme Evaluation (2015)

Gold Coast 2018 - Games-related operating expenditure

Cost item	Amount (A\$ million)	Source	Notes
HR and Games workforce	252.0	Post Games Report	
Games operations & transport	231.0		
Overlay	211.0		
Security	174.0		
Technology and broadcasting	145.0		
Corporate & administration	68.0		
City operations	14.0		
Marketing, communications & ceremonies	90.0		
Games fees	68.0		
Sub-total	1,253.0		This is the total net operating cost after moving spend on Arts and culture (A\$24 million) and Games legacy benefits (A\$8 million) to discretionary operating expenditure
Value of in-kind contributions	280.6		The purpose of the in-kind contributions is set out below
Total Games-related operating expenditure	1,533.6		
Source of funding			
<i>National government</i>	51.0	Post Games Report	
Cash contribution	-		The cash contribution of A\$2 million by the Australian Government was towards funding Legacy programmes that are included in discretionary operating expenditure
In-kind contribution	51.0		This includes A\$3 million for the Australian Government's coordination planning, A\$34 million for the Australian Defence Force for security support, A\$2 million for anti-doping services and an additional A\$12 million for a range of services from other Commonwealth agencies
<i>Queensland Government (Regional)</i>	1,111.0		
Cash contribution	920.0		The Post Games Report identifies A\$950 million (after adjusting for rounding). Spending that is moved to discretionary expenditure is deducted: A\$24 million for Arts and Culture and A\$6 million for the total A\$8 million of Games Legacy Benefits (where A\$2 million comes from the National government as noted above)
In-kind contribution	190.0		This includes A\$133 million from the Department of Transport and Main Roads (for planning, coordination and branch expenditure), A\$56 million from the Queensland Police Service and A\$1 million from the Department of Education for Commonwealth Games planning unit.
<i>Local government</i>	118.6		
Cash contribution	79.0		
In-kind contribution	39.6		
Revenues	254.0		This covers broadcasting rights, sponsorship, ticketing, licensing and merchandise and other revenue
Total Games-related operating expenditure	1,533.6		

Sources: Gold Coast 2018 Official Post Games Report (2019)

Gold Coast 2018 - Capital expenditure on Games-related venues and village

	Amount (A\$ million)	Source	Notes
Cost item			
Village	250.0	Post Games Report	The athletes' village was part of the Parklands redevelopment, one of the most significant legacy projects of the Games which also included the surrounding precinct. The redevelopment was the responsibility of a private developer managed by the Queensland Government. The Government's approved funding for the Parklands redevelopment was A\$265 million.
Carrara Gold Coast Sports and Leisure Centre	103.0		
Velodrome	61.0		
Gold Coast Aquatics Centre	41.0		
Coomera Indoor Sports Centre	40.0		
Belmont Shooting Centre	19.0		
Gold Coast Hockey Centre	16.0		
Oxenford Studios	11.1		Total investment was A\$15.5 million with A\$4.4 million funded privately
Carrara Indoor Stadium	8.0		
Carrara Stadium	6.0		
Broadbeach Bowls Club	4.0		
Neran Mountain Bike Trails	3.0		
Runaway Bay Sports	2.0		
Other	2.0		This includes programme wide management and communication expenses associated with the Commonwealth Games infrastructure programme. Costs were not attributable to individual infrastructure projects
Sub-total	566.1		
Value of in-kind contributions	31.5		See below for components of in-kind contributions
Total capital expenditure on venues and village	597.6		
Source of funding			
National government	154.0	Post Games Report	
Queensland Government (Regional)	380.1		Of the total contribution, A\$7 million for public domain improvements and A\$5 million for Carrara Precinct are deducted as these spend items and allocate them to discretionary operating expenditure
Local government	63.5		
Cash contribution	32.0		
In-kind contribution	31.5		This includes an A\$39 million in-kind contribution by City of Gold Coast towards capital projects to improve venue infrastructure, roads, beaches and other public places. Some of it can possibly be for discretionary expenditure but the exact amount is unknown. An adjustment of approximately A\$7 million is made as some of the in-kind costs were partially offset by the Queensland Government contributions.
Total capital expenditure on venues and village	597.6		

Gold Coast 2018 - Discretionary operating expenditure to achieve host cities' wider objectives linked to hosting the Games

	Amount (A\$ million)	Source	Notes
Cost item			
Public domain improvements	7.0	Post Games Report	This was deducted from the expenditure on infrastructure and facilities
Gold Coast Carrara Precinct	5.0		This was deducted from the expenditure on infrastructure and facilities
Arts and culture	24.0		This was deducted from Games-related operating expenditure
Legacy benefits	8.0		This was deducted from Games-related operating expenditure
Sub-total	44.0		
Value of additional in-kind contributions	48.8		See below for components of in-kind contributions
Total discretionary operating expenditure	92.8		
Source of funding			
National government	2.0	Post Games Report	Cash contribution towards the Games Legacy benefits worth A\$8 million
Queensland Government (Regional)	35.0		
Cash contribution	31.0		This includes A\$6 million towards the Games Legacy benefits programme, A\$13 million towards Arts and culture, A\$7 million for Public domain improvements and A\$5 million for Gold Coast Carrara Precinct
In-kind contribution	4.0		This covers an in-kind contribution by the Department of Education for the Long Jump Project and Embracing 2018
Local government	55.8		A\$36m for a range of city services to dress the city for Gold Coast 2018, A\$22 million for economic development and projects to enhance legacy outcomes,, A\$11 million for A\$24 million Arts and Culture. Adjustment of approximately A\$13 million is made as part of the in-kind costs were offset by the state government contributions.
Total discretionary operating expenditure	92.8		

Gold Coast 2018 - Accelerated and otherwise enhanced discretionary capital investment to achieve host cities' wider objectives

Part of the rationale for bringing the Games to the Gold Coast in 2018 was to support economic development of the city by diversifying its economy and enhancing its underlying infrastructure. Reflecting this ambition, the Gold Coast benefitted from several investments in the period before the Games including four key projects:

- construction of Stage 2 of the Gold Coast rail providing new services to the community including a network connection to the heavy rail service to Brisbane at a cost of A\$420 million
- redevelopment of the Gold Coast airport at a cost of A\$300 million
- duplication of the Gold Coast (heavy) rail line at a cost of A\$163 million
- improvements to the road network at a cost of A\$167 million.

These investments, which were accelerated by the Games, were largely funded by the Queensland Government with smaller contributions from the City of Gold Coast and various departments of the Australian government. The airport development was funded by the private sector.

Other private sector led developments occurred during the period, notably the Pacific Fair redevelopment (at a cost of A\$670 million) and the Star Gold Coast Transformation (at a cost of A\$2,000 million).

All data on costs and funding have been converted to a consistent currency and price basis using the exchange rates and price indices below

To facilitate comparison of the costs and funding across the four editions of the Games, all the figures have been converted to a common currency (£) on a constant price basis (2018 prices). This has been using purchasing power parity (PPP) exchange rates from the OECD and the UK GDP deflator which is a measure of the change in price levels over time. The table below shows the data used and the panel illustrates the calculation performed.

Games	Exchange rate (Local currency to US\$)		Exchange rate (US\$ to £)		UK GDP deflator (Indexed to 2018)
Commonwealth Games					
Manchester 2002	£:US\$ (2002)	1.45	US\$:£ (2002)	0.69	1.38
Melbourne 2006	A\$:US\$ (2006)	0.71	US\$:£ (2006)	0.70	1.24
Glasgow 2014	£:US\$ (2014)	1.43	US\$:£ (2014)	0.70	1.07
Gold Coast 2018	A\$:US\$ (2018)	0.70	US\$:£ (2018)	0.70	1.00

Illustrative calculation

Games-related operating expenditure (A\$, 2006 prices):

840.1 million

Step 1: Convert to US\$ at 2006 prices using PPP exchange rates:

$840.1 * 0.71 = 596.45$

Step 2: Convert to £ at 2006 prices using PPP exchange rates:

$596.45 * 0.70 = 417.51$

Step 3: Convert to £ at 2018 prices using UK GDP deflator:

$417.51 * 1.24 = 517.71$

Games-related operating expenditure (£, 2018 prices):

517.71 million

Sources: PPP exchange rates (OECD); UK GDP deflator (Office for National Statistics (ONS))

3

Profiles of previous
host cities

City profile – Manchester 2002

Economy

- GDP of Greater Manchester (GM) in 2002: **£37.4 billion**
- GDP per capita of Greater Manchester in 2002: **£14,839**
- GDP growth in GM 2000–2001: **6.59%**
- GDP growth in GM 2001–2002: **5.12%**
- **Key employment industries** 2002: Wholesale and retail trade, real estate, health and social work.

Demographics

- **Population** of Greater Manchester in 2002: 2,523,200
- **Population** of Greater Manchester in 2017: 2,799,000
- **Population growth** in GM 2001–2002: 0.28%
- **Population growth** in GM 2002–2003: 0.55%

Objectives of key funders (MCC, DCMS and Sport England) in partnership with Manchester 2002 OC

- Deliver an outstanding sporting spectacle of world significance, celebrating athletic excellence, cultural diversity and the unique atmosphere of 'The Friendly Games'.
- Leave a lasting legacy of new sporting facilities and social, physical and economic regeneration (particularly around Sportcity in East Manchester).
- Show the long term benefits that hosting international events can bring to the city and its inhabitants.
- Focus on redeveloping and bringing large investment into East Manchester.

City profile

- Major concerts held in Manchester Arena with a capacity of 21,000.
- Manchester United FC had a strong presence pre-2002.
- Venue for four Cricket World Cups in 1975, 1979, 1983 and 1999.
- Boxing Fights – International, large scale fights.
- Manchester was the fourth most visited city in the UK by overseas visitors in 2002.
- In 2002, the main universities in Manchester were UMIST, Victoria University of Manchester (VUM) and Manchester Metropolitan University. The former two universities merged in 2004 to form the University of Manchester (UoM).
- Student population of VUM in 2002: **26,470**.
- Student population of UoM in 2018: **40,140**.
- Victoria University of Manchester ranked 89th in the world in the Shanghai world academic rankings of 2003.

Stakeholders/governance

- Manchester City Council (MCC) was responsible for producing and delivering the venues, and the means of delivering legacy to the region.
- The Department of Culture, Media and Sports (DCMS) was responsible for providing legacy for the venues, ensuring sporting facilities were world class and providing a legacy for Elite athletes.

- Sports England was responsible for promoting for promoting UK's ability to put on major events and build world class venues.
- Other operating and regional stakeholders.

Infrastructure

Existing infrastructure

- Public transport structure in place. However, frequency and reliability was forced to improve to encourage use.
- Manchester Velodrome for cycling.
- Manchester Arena for boxing and netball.
- Buses and shuttles used for athletes.
- Student accommodation (Owens Park) used for the athletes village – 15 minute drive from the Sportcity.

New infrastructure:

- City of Manchester Stadium for the opening and closing ceremonies, rugby and athletics – currently the Manchester City FC football stadium. Cost of construction: £110 million.
- National Squash Centre – now used for annual squash competitions and international squash competitions.
- Manchester Aquatics Centre – now used for national training and international swimming events.
- Park and ride sites created.

Sources: ONS (2001), BBC news (2002), HESA (2002), Manchester 2002 Games Legacy, MCC (2002), Shanghai Research (2002), Visit Britain (2003)

City profile – Melbourne 2006

Economy

- GDP of the City of Melbourne in 2006: **\$6.51 billion**
- GDP per capita of the City of Melbourne in 2006: **\$85,492**
- **GDP growth 2004–2005: 5.17%**
- **GDP growth 2005–2006: 3.33%**
- **Key employment industries:** Professional, scientific and technical services and financial and insurance services.

Demographic

- Population of the City of Melbourne in 2006: **76,147**
- **Population growth** five years prior to the Games: **25%**
- **Population growth** 5 years post Games: **23%**

Objectives of the Victorian Government for Melbourne 2006

- Host a great event and consequently increase participation in sports.
- Deliver lasting infrastructure (upgrades and replacements).
- Deliver lasting social, environmental and economic benefits to Victorian communities.
- Address social policy objectives.
- Respect the rights of indigenous populations whilst engaging communities and bringing benefits to all.
- Develop a sustainable environmental framework for the Games.
- Maximise the education benefits.

City profile

- Summer Olympics in 1956 (67 countries, 3342 athletes).
- Australia Games in 1985 (1848 athletes, 93,000 attendees).
- World Police and Fire Games in 1995.
- World Masters Games in 2002 (98 countries, 24,886 competitors).
- Summer Deaflympics in 2005 (2,038 competitors).
- UCI Track Cycling World Championships in 2004.
- 7 Universities in Melbourne including Monash University, University of Melbourne and RMIT University.
- University of Melbourne was ranked 22nd in the QS World University Rankings in 2006.
- 52.5% of surveyed consumers rated Melbourne the best Australian city for shopping in 2006. The same survey also suggested it was the leading city associated with theatre, quality food experiences and world class restaurants, cafes, bars and nightlife as well as international sporting and cultural events.

Stakeholders/governance

- The Victorian State Government led the bid and had oversight of planning.
- The Organising Committee within the Department of Victorian Communities managed the Government's interest and was responsible for budget, Government coordination with security, sporting and urban infrastructure, culture, transport and achieving benefits.
- Melbourne 2006 CGA managed provision of the Games (sports programme, tickets and boardcasting, etc.).

Infrastructure

Existing infrastructure

- Melbourne Cricket Ground (redeveloped for the Games) for the opening and closing ceremonies and athletics.
- Exhibition Centre for boxing and weightlifting.
- Melbourne Arena for basketball and track cycling.
- Aquatics Centre for swimming and table tennis.
- Rod Laver Arena for gymnastics.

New infrastructure

- Athletes Village called Parkville was created for athletes and staff.
- Netball and hockey centre project accelerated due to the Games.
- Alternate transport routes put into place to support travel across the city for the games.

Sources: City of Melbourne (2007), Australian Bureau of Statistics (2007), Tourism Victoria (2007), QS World University Rankings (2007)

City profile – Glasgow 2014

Economy

- **GDP** of Glasgow city in 2013: **£19.3 billion**
- **GDP per capita** of Glasgow city in 2014: **£32,279**
- **GDP growth** 2012–2013: 2.50%
- **Key employment industries:** Services – public admin, education and health, distribution, hotels and restaurants.

Demographics

- **Population** of Glasgow City in 2014: **599,640**
- **Population growth** 2013–2014: **0.52%**
- **Population growth** 2014–2015: **1.12%**

Objectives of Glasgow 2014 Ltd

- Generate pride in Glasgow and Scotland and promote their global image.
- Leave a lasting legacy of a connected, active and sustainable city.
- Deliver accessible, family-friendly, inclusive Games.
- Boost sport participation and increase physical activity.
- Maximise economic benefits.
- Promote business growth and employability and skills.
- Bring urban regeneration to and sustainable development especially the east end.

City profile

- 2003 World Bowl XI Final (European American Football – 28,000 attendees).
- Speedway Racing.
- International Convention on Science, Education and Medicine in Sport in 2012, 3000 delegates.
- World Badminton Championships in 1997.
- European Capital of Sport in 2003 by ACES Europe.
- Glasgow was the fifth most visited city in the UK by overseas visitors in 2014.
- In 2013, 606,640 people visited Greater Glasgow and Clyde Valley. This increased by 14.95% in 2014.
- The main universities in Glasgow are: The University of Glasgow, University of Strathclyde and Glasgow Caledonian University. The combined student population of the three universities in 2014 was 54,315. In 2017, this increased to 59,055.

Stakeholders/governance

- The Scottish Government was responsible for most of the policies necessary for hosting the Games in Scotland.
- Glasgow City Council (GCC) was responsible for delivering a legacy for the city of Glasgow to ensure benefits for residents. It managed the construction of the Athlete's village and delivery of the Festival.
- Commonwealth Games Scotland (CGS) partnered with Glasgow 2014 to contribute to planning.

Infrastructure

Existing infrastructure

- Celtic Park used for the opening ceremony.
- Ibrox Stadium for Rugby Sevens.
- Hampden Park used for track and field events and the closing ceremony.
- Scottish Exhibition and Conference Centre for wrestling, judo and boxing.

New infrastructure:

- Commonwealth Sports Arena & Sir Chris Hoy Velodrome for track cycling and badminton. Cost of construction: £113 million. Currently used for sporting events and as a training venue for Glasgow's athletes.
- Glasgow National Hockey Centre.
- Large scale refurbishment and upgrade to Kelvingrove park used for Bowls.
- Tollcross International Swimming Centre was upgraded. Cost of refurbishment: £14 million.
- New athlete's village in Dalmarnock created for athletes and staff.
- Bus Travel was encouraged - new bus shelters were built with more signage and information across the route from the village to the venues.
- Traffic light phasing was updated for the Games.

Sources: ONS (2015), NOMIS (2014), BBC news, HESA (2014), Glasgow 2014, World Population Review (2015), QS World University Rankings (2015), Visit Britain (2015), Premier Construction news (2012), Understanding Glasgow (2017)

City profile – Gold Coast 2018 (1 / 2)

Economy

- **Gross Regional Product (GRP)** of Gold Coast City in 2018: **\$36.3 billion**
- **GRP per capita** of Gold Coast in 2018: **\$59,800**
- **GRP growth** in Gold Coast 2016–2017: **3.42%**
- **GRP growth** in Gold Coast 2017–2018: **4.55%**
- **Key employment industries** 2016: Healthcare and social assistance, retail trade and construction.

Demographics

- **Population** of Gold Coast in 2018: **606,774**
- **Population growth** in Gold Coast 2016–2017: **2.75%**
- **Population growth** in Gold Coast 2017–2018: **2.64%**

Queensland Government's objectives for Gold Coast 2018

- Demonstrate Queensland's ability to stage a successful, inspiring and memorable international event.
- Leverage the Commonwealth Games to derive economic benefits and develop local business and workforce capability.
- Maximise long term community, sport and health benefits.
- Strengthen Queensland as Australia's premier tourism destination.

City profile

Selection of major events hosted / to be hosted by the City

- 2017 Sudirman Cup – World Mixed Team Badminton Championship.
- 2018 and 2009 ITU World Championships Grand Final.
- 2018 World Parachute Championships.
- 2019 World Squash Doubles Championships.
- 2020 World Surf League Championship Tour – 1st leg of tour.
- 2020 World Junior Squash Championships.
- 2020 World Bowls Championships.
- 2024 World Life Saving Championships.

Visitors

- 1,050,000 international visitors in year ending June 2019 up over 3.5% since 2016.
- 4,172,000 domestic visitors in year ending 2019 up over 18.5% over previous year.

Culture, nature and education

- Gold Coast is Australia's most diverse city, home to 1,300 animal and 1,700 plant species and includes world heritage listed Gondwana Rainforests, the most extensive subtropical rainforest in the world.
- Gold Coast has 3 universities, Griffith, Bond and Southern Cross representing a combined student population of approximately 31,000 students.
- Griffith University is 320th in the QS 2020 World University rankings.

Stakeholders/governance

- Queensland Government – Delivered the capital programme for the development and construction of Gold Coast 2018 venues; the Reconciliation Action Plan; the Embracing 2018 Legacy program; Trade 2018, the trade and investment program; Festival 2018, the arts and culture program; a portfolio assurance and reporting framework; and integration and oversight of Gold Coast 2018 activities including implementation of the State Protocol Plan.
- Other stakeholders include the City of Gold Coast, the Australian Government and Aboriginal and Torres Strait Islander groups.

Sources: Gold Coast City Economic Profile (2019), Gold Coast Regional Snapshot (June 2019), Queensland Government Statistician's Office (2018), Griffith University (2019), QS World University Rankings (2019), Southern Cross University (2019), Bond University (2019).

City profile – Gold Coast 2018 (2 / 2)

Infrastructure

Existing infrastructure

- Gold Coast Convention and Exhibition Centre – netball and basketball, the Main Press Centre and the International Broadcast Centre
- Village Roadshow Film Studios– boxing and table tennis
- Gold Coast Hockey Centre (redeveloped) – hockey
- Gold Coast Aquatic Centre (redeveloped) - diving and swimming
- Carrara Stadium (upgrades + temporary stand) – athletics, opening and closing ceremonies
- Robina Stadium – rugby

New infrastructure

- Studio 9 Village Roadshow – squash
- Gold Coast Sports and Leisure Centre – badminton, para powerlifting, weightlifting and wrestling
- Coomera Indoor Sports Centre – rhythmic gymnastics, artistic gymnastics and netball
- Anna Meares Velodrome – track cycling
- Nerang Mountain Biking Track – mountain biking
- Athletes Village – 1,282 apartments for athletes accommodation, legacy use - new rental apartments, retail outlets and land development to support Gold Coast Health and Knowledge Precinct growth.

Sources: Gold Coast Convention and Exhibition Centre (2018), Information provided by CGF (2020)

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Glossary

Glossary of terms (1/2)

Term	Definition
Activities (or inputs)	The material and human resources (inputs) used to undertake the tasks which underpin a project (see impact pathway)
Benefits (or impacts)	The economic, social, sporting and environmental impacts of the associated outcomes related to a project
CGF	Commonwealth Games Federation
CGFP	CGF Partnerships
CGE	Computable general equilibrium modelling
CSF	Critical success factor
Games-related costs / expenditure / spending	Spending that is needed in order to host the Commonwealth Games (e.g. stadia and village on capital side of costs, and security and staffing on operating side)
FTE	Full time equivalent jobs

Term	Definition
Games Value Framework	A framework that provides a structured approach for a holistic assessment of the net benefits (impacts) of hosting the Commonwealth Games
GDP	Gross domestic product
GRP	Gross regional product
GSP	Gross state product
GVA	Gross value added
Glasgow 2014	Glasgow 2014 Commonwealth Games
Gold Coast 2018	Gold Coast 2018 Commonwealth Games
Impact	The changes which result from the project outcomes over the short, medium and long term that wouldn't have happened otherwise (see impact pathway)
Impact pathway	A pathway that identifies the activities enabled by spending and describes how each element creates outputs, outcomes and impacts
I-O	Input-output modelling

Glossary of terms (2/2)

Term	Definition
Legacy	The period after hosting a Games
London 2012	London 2012 Summer Olympics
Manchester 2002	Manchester 2002 Commonwealth Games
Melbourne 2006	Melbourne 2006 Commonwealth Games
Costs and benefits statement	A specific statement which provide more specific arguments on the potential scale and type of costs and benefits
Discretionary Games-related costs	Costs that were above and beyond what was needed to host the Games, but were incurred in support of wider policy objectives (e.g. accelerated transport infrastructure projects on capital side of costs or cultural events on operating side)
NPV	Net present value
Outcomes	The changes which result from the project outputs over the short, medium and long term (see impact pathway)
Outputs	The deliverables that directly result from the inputs and activities related to a project (see impact pathway)

Term	Definition
OC	Organising Committee
PPP	Purchasing power parity
Value principles	A set of analytical principles that underpin the Games Value Framework
Vancouver 2010	Vancouver 2010 Winter Olympics

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Policy Action Team Legacy Report	Lauren Newby	April 2003	Newby (2003)
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* Soft copy provided by CGF

Manchester 2002: Key sources (2/3)

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Glasgow 2014 Digital Media statistics archive	The Commonwealth Games Federation	2014	Glasgow 2014 Digital Media statistics archive

* Soft copy provided

Glasgow 2014: Key sources (2/2)

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