

## ECONOMIC IMPACT

### Why Measure Economic Impacts?

Economic impact measurement has become a powerful and persuasive tool for those looking to capture and evidence the financial benefits that can result from the hosting of a major event. Measuring economic impact not only allows public sector bodies to evaluate their economic return on investment, but it also demonstrates how events drive economic benefits – allowing event organisers develop practices which maximise these benefits.

The ‘economic impact’ of a major event refers to the total amount of additional expenditure generated within a defined area, as a direct consequence of staging the event. For most events, spending by visitors in the local area (and in particular on accommodation) is the biggest factor in generating economic impact; however, spending by event organisers is another important consideration. Economic Impact studies typically seek to establish the net change in a host economy – in other words, cash inflows and outflows are measured to establish the net outcome.

### Choose a level of Impact

Attendance Impacts have been broken down into three categories based upon the ease with which they can be measured.

Basic Impacts	Intermediate Impacts	Advanced Impacts
Basic Economic Impacts capture headline spectator and attendee numbers, as these are a strong indicator of likely economic impact	Intermediate Economic Impacts usually involve survey work to calculate the ‘direct economic impact’ figure from the event	Advanced Economic Impacts consider adjustments to the ‘direct economic impact’ figure, usually to measure the subsequent effects of increased spending in the host economy
The number of spectators is the principal determinant of absolute economic impact. <a href="#">Learn More (link to Measuring Success 2)</a>	The direct economic impact of the World Rowing Championships 2006 was £3,268,703, of which 82% was visitor spend. <a href="#">(link to measuring success 3)</a>	

## **Economic – Basic Impacts**

### **What are the Basic Impacts?**

- Number of spectators
- Number of attendees (non-spectators)
- Percentage of spectators and attendees from outside the 'host economy'
- Duration of event

### **Overview & Considerations**

The basic economic impacts listed here are primarily measures which are both relatively simple to capture and give a broad indication of the potential scale of an event's economic impact. The actual process and key stages to be used in determining a robust economic impact figure is dealt with in the Intermediate Economic Impact section.

Whilst good economic impact measurement requires intermediate-level assessment (involving surveys of people's spending patterns), the basic measurements listed here have been shown to be relatively strong indicators of economic impact. For example, research conducted in the UK has consistently shown that the key determinant of total economic impact is the number of spectators attending an event. This is highlighted in the resource guidance below.

Therefore, on the condition that their limitations are acknowledged, looking at basic economic impacts can be useful for event organisers and funders to get a broad feel for the potential economic effect of an event. Scenarios where this may be particularly applicable include those where:

- Organisers/Funders may be involved with a large number of events and may not be able to afford to conduct attendee surveys at all of them.
- The organisers of an annual event may have conducted a full economic impact assessment involving spectator surveys for several years. The organisers may decide that they have enough historical data to make certain assumptions around the spending patterns associated with a typical event, and may choose to rely on basic impacts alone.

### **Routes to Measurement**

All of the basic economic impacts listed here relate to measuring attendance at the event. There is a separate section of eventIMPACTS dealing specifically with Attendance which can be found [here](#). Alternatively links to the specific guidance documents regarding measuring attendance can be found below.

## **Resources**

### **Introduction to Measuring Attendance**

This resource explains the importance of securing accurate attendance data, and outlines the consequences of getting this wrong.

### **Measuring Attendance at Ticketed Events**

This resource explains outlines the main routes to collecting attendance data at ticket events.

### **Basic Economic Impacts as an Indicator of Intermediate Economic Impacts**

This resource references why some basic information concerning the number of people attending the event can provide a good indication of economic impact

## Introduction to Measuring Attendance

Exaggerating crowd sizes can be common practice for the purposes of public relations, but it compromises the reliability of monitoring and evaluation that is based on estimates of attendance. This has implications for much of the research being undertaken at events, and we urge event organisers to recognise the implications of misrepresenting the popularity of an event in terms of spectator or audience numbers (or indeed competitor numbers at mass participation events). Exaggerating crowd sizes has the effect of overstating economic impact and at the same time overstating the carbon footprint attributable to an event. Other measures that are based on findings from a survey, such as the percentage of disadvantaged people attending the event, will be overstated if used subsequently to compute the absolute number of people from a particular group who attended an event. Thus regardless of the rigour with which monitoring and evaluation data is collected, its true value is unreliable if attendance levels are inaccurate.

Common forms of monitoring and evaluation involves conducting a survey of a sample of event participants and to aggregate the findings upwards to derive estimates for the population of participants. For example, it might be the case that 100,000 spectators attend a large scale equestrian event and event stakeholders wish to conduct an economic impact study. A research team would aim to interview around 1,000 spectators and then use the findings from this data to aggregate upwards on the basis that the 1,000 people interviewed are representative of all spectators. Assuming that the sampling has been conducted in a robust manner, the greatest source of error is likely to be the figure used to multiply the findings from the sample upwards to the population as a whole. For example the figure of 100,000 could have been used for the purpose of public relations, whereas in reality there were only 50,000 tickets sold. A practice such as this if left unadjusted would have the effect of doubling the economic impact attributable to the event.

At the majority of ticketed events there should not be a problem with spectator or audience levels as there are ticket sales databases which can provide accurate data with which to work. However, at free to view or open access events particularly along linear routes such as cycle races or cultural events that people can chance upon and drift in and out of such as Piping Live, there needs to be well reasoned estimates of the number of spectators for economic impact, environmental and social impacts. In particular, there should be a clear differentiation made between the number of attendances (throughput) and the number of different people (attendees) who generated the throughput figure.

For example there could be 90,000 admissions at a three day equestrian event which in turn could be made up of 90,000 different people attending once, 30,000 different people attending all three days, or numerous combinations of people and days in between these two extremes. Furthermore in the case of events that take place over an extended distance such as a cycle race or a carnival parade, there is the possibility that people can watch the event from more than one place on the same day. For example, in the case of the London Marathon, and similar events, it is possible (and common practice) for spectators to move around the course and see runners in whom they have an interest at numerous locations.

To illustrate the problems associated with overstating crowd sizes, consider the case of a cycling road race with an estimated attendance of 10,000. If the 10,000 crowd is all different people residing outside the host economy and their average spend is £10 per head at the event, the economic impact would be £100,000. However, this is a free to view event and primary research amongst a sample of 1,000 spectators indicates that they watch from an average of two different locations each, given that they are free to move around the route. Consequently, the 10,000 attendance becomes 5,000 different people

when the repeat viewing factor of two is applied (i.e.  $10,000/2$ ) and the economic impact will be £50,000 applying the same expenditure figure. Furthermore, as explained above, left unchecked the carbon footprint attributable to spectators would also be overstated. In short, event organisers need to be aware that should they exaggerate crowd sizes, the net effect is to undermine the reliability of monitoring and evaluation that is dependent upon accurate crowd size estimates.

Moreover, any over inflation of crowd sizes is also likely to have downstream effects in terms of social impacts. For example, if half of the 10,000 attendance are from the host economy and 50% of our sample report that they are more likely to cycle as a result of their attendance at the event; it would appear that there are 2,500 people at whom to direct any cycling interventions designed to increase participation. However, as suggested previously, if people watched from an average of two locations then this would halve the potential target group. This in turn might be the difference between implementing a cycling participation initiative, or shelving it due to an apparent lack of interest.

## Measuring Attendance at Ticketed Events

Attendance at ticketed events can be monitored by ticket sales, or tickets surrendered on entrance to gain admission. Where technology permits, other measures such as the total number of clicks on turnstiles can also be used as there can be no guarantee that all of those people who purchase a ticket for an event actually use them. The purpose of analysis is first to estimate the total number of attendances at an event, and then to down-weight it to the number of unique attendees by using a repeat viewing factor. We restate the requirement to differentiate between attendees and attendance, which applies not only to non-ticketed events but also ticketed events

For some types of monitoring and evaluation (such as economic impact assessment) it may be necessary to distinguish between those whose attendance at the event is their primary motivation for being in the local area and those who are 'casuals', that is, people who are in the locality for some other primary purpose and their attendance at the event is a secondary consideration. It is conventional practice to exclude casuals from calculations such as economic impact and carbon footprint estimates because the impacts made by such attendees cannot be attributed to the event.

Suggested considerations when measuring attendance at ticketed events

- Primary data source will be box office data, ticket sales and ticket distribution
- The number of tickets distributed or sold does not always equal the attendance at the event
- Ticket buyers may not be the people who use them (i.e. group bookings and one person not always representative of the group)
- Some of the larger ticketed events may operate a reuse policy whereby people who leave an event early would relinquish their tickets, to be sold on to other spectators wanting to watch the action.
- Ticket sales and distribution may provide a broad indication of the nature of the audience attending, however, primary research is required to provide more detailed information on those attending (**see Standard Impacts**)

## **Basic Economic Impacts as an Indicator of Intermediate Economic Impacts**

### **Introduction**

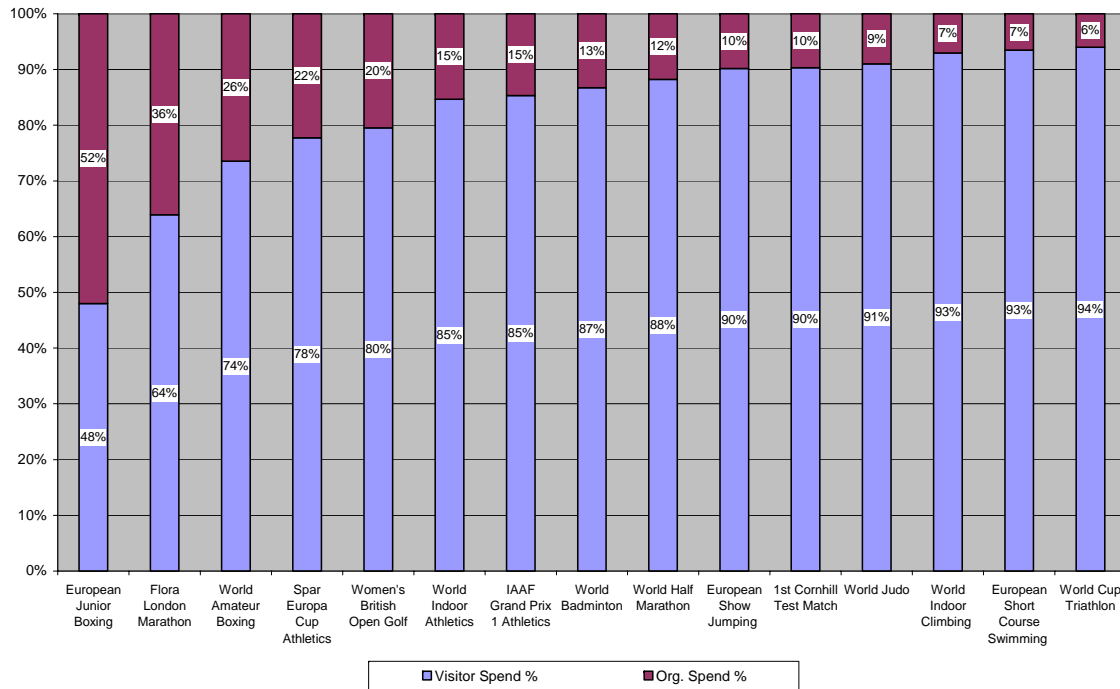
In 2004, UK Sport consolidated economic impact surveys that it had commissioned across 16 major sporting events to assess trends and commonalities. One of the key findings was that spectator spending (primarily driven by the number of spectators attending events) was the key determinant of economic impact.

The extract presented here (from Measuring Success 2) explains these conclusions, and supports the view that event organisers can get a good idea as to the potential scale of economic impact simply by considering basic impacts such as the number of spectators, the length of their stay, and where they originate from.

### **Abridged Extract from Measuring Success 2**

Using the events in the sample, the relative amounts of expenditure attributable to organisational and visitor expenditure can be seen in Graph 4.

Graph 4: The relative proportions of visitor and organisational spending



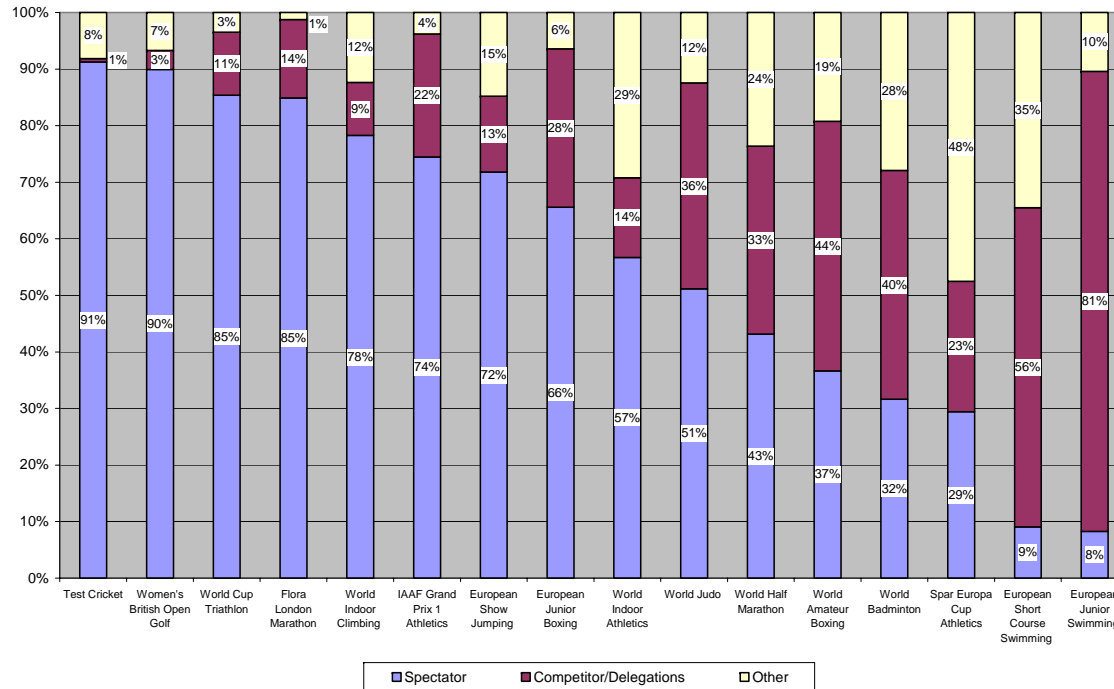
Graph 4 indicates that for all the events (apart from the European Junior Boxing), the economic impact attributable to organiser spend is a minority of the total economic impact. It should be noted that the graph excludes the European Junior Swimming Championships held in Glasgow in 1997, where none of the economic impact was attributable to organiser spend. The sheer scale of the Flora London Marathon (which achieved the second highest proportion of organiser spend) with 99,000 applicants, 42,000 accepted entries and more than 32,000 finishers necessitates a more significant organisational spend than the other events.

The median value is 13% for organiser spend, and 87% for visitor spend. **The significance of this finding is that, for the events included in this sample, the vast majority of the economic impact (80%+) is caused by visitors** and therefore it is logical to concentrate the subsequent secondary analyses on visitor expenditure. The reason why the majority of events in this report have relatively low levels of organiser spend is because they were all events that took place within existing facilities and existing infrastructure. There was no need to build or upgrade existing facilities, and therefore virtually all expenditure incurred by organisers was on revenue items necessary for the operational running of the event.



## Key Groups within Visitor Spend

Graph 5: The continuum between spectators' and other visitors' expenditure

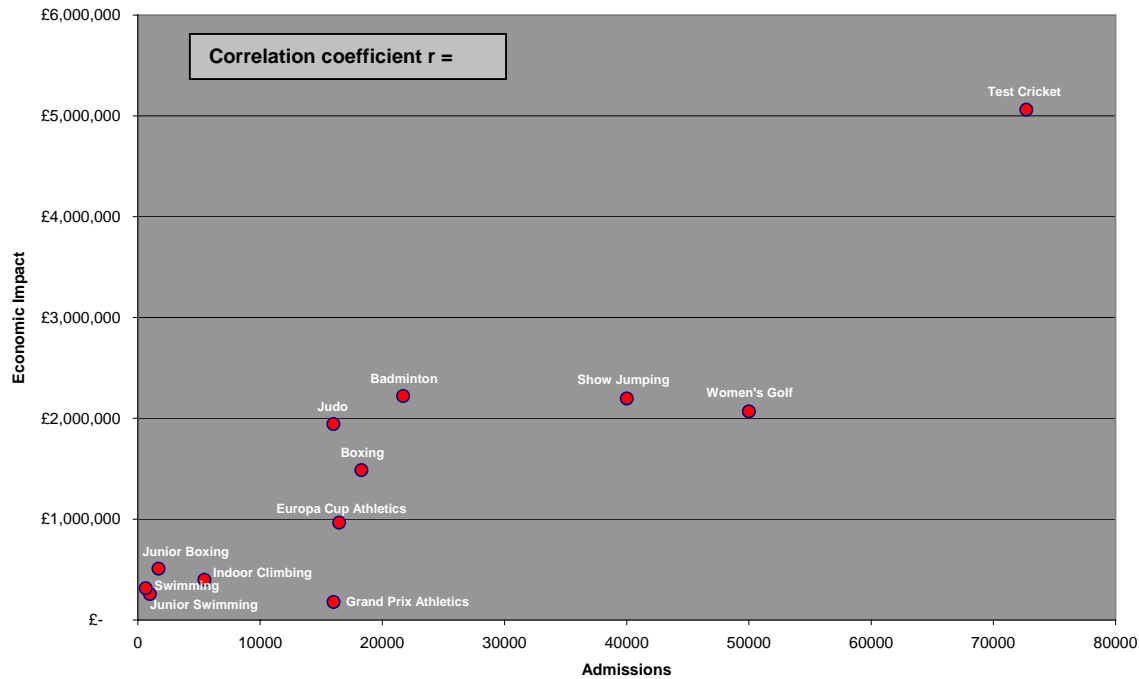


From Graph 5 it can be seen that at ten of the sixteen events featured, the majority (at least 51%) of the economic impact can be attributed to spectators and these would be categorised as 'spectator driven' events. The events at which the greatest percentage of economic impact was generated by spectators are the Test Match Cricket (91%), the Women's Golf (90%), the World Triathlon and London Marathon (both 85%). By contrast, at the remaining events, the economic impact was driven by other groups (principally competitors), in particular the two swimming events. The Short Course and Junior Swimming events are characterised by having large numbers of competitors staying in commercial accommodation and relatively small numbers of spectators (990 and 640 admissions respectively) most of whom are either the friends or families of the competitors; such events are categorised as 'competitor driven'.

### Key determinants of economic impact

In order to investigate the relationship between the absolute scale of an economic impact and the number of people who generated it, the report now examines economic impact against the total number of spectator admissions as shown in Graph 6. This does not include events which were not staged in stadia and where the spectator admissions were approximations as there were no audience data available. This said, Graph 6 indicates that there is (in social science terms) a very high correlation ( $r = 0.90$ ) between the number of spectator admissions at an event and the economic impact attributable to that event. **Therefore it can be concluded that if economic impact is an important consideration in determining whether or not to support an event, then the number of spectators is the principal determinant of absolute economic impact.** As a consequence of this finding it can be concluded that in elite level sport (i.e. the type of event likely to be supported by UK Sport), 'competitor driven' events are unlikely to generate as much economic impact in absolute terms compared with 'spectator driven' events.

Graph 6: The relationship between spectator admissions and absolute economic impact



Notwithstanding the previous comments, it could be argued that if all or most of the spectators attending an event were local people, then the economic impact attributable to an event would be relatively small as there would be only a small net change in the economy i.e. most expenditure would be 'deadweight'. In order to investigate this possibility further, the report examines the relative proportions of local to non-local admissions as detailed in Table 3.

Table 3: The relative proportions of non-local and local spectators at events

EVENT	ADMISSIONS	NON-LOCAL	LOCAL
1997 World Badminton	21,702	62%	38%
1997 European Junior Boxing	1,690	73%	27%
1997 1st Cornhill Test Match	72,693	92%	8%
1997 IAAF Grand Prix 1	16,025	70%	30%

1997 European Junior Swimming	990	100%	0%
1997 Women's British Open Golf	50,000	99%	1%
1998 European Short Course Swimming	640	83%	17%
1999 European Show Jumping	40,000	55%	45%
1999 World Judo	16,000	87%	13%
1999 World Indoor Climbing	5,444	91%	9%
2000 Spar Europa Cup Athletics	16,478	20%	80%
2000 Flora London Marathon	300,000	57%	43%
2001 World Amateur Boxing	18,300	66%	34%
2001 World Half Marathon	15,000	45%	55%
2003 World Cup Triathlon	31,000	85%	15%
2003 World Indoor Athletics	15,000	81%	19%

## Economic – Intermediate Impacts

### What are the Intermediate Impacts?

- Direct Economic Impact of an Event

### Overview & Considerations

The **Direct Economic Impact** is a measure of the *total amount of additional expenditure within a defined geographical area, which can be directly attributed to staging an event*. Based on visitor and organiser spending, Direct Economic Impact is an assessment of the net increase in spending as a result of the event.

Importantly, Direct Economic Impact measures what is sometimes called the ‘first round’ of spending. In basic terms, this means direct transactions between those outside the host economy and those inside the host economy – for example between a visitor and the owner of a local restaurant.

Many event organisers and funders also wish to capture the Total Economic Impact. This step is designed to make adjustments to the Direct Economic Impact to capture the subsequent ‘secondary impacts’ of additional spending within the host economy. Effective calculation of the Total Economic Impact requires previous studies to have been carried out which analyse detailed interactions and interdependencies within the host economy itself. For this reason, the Total Economic Impact is dealt with in the Advanced Economic Impacts section.

This section also includes guidance on moving towards a more standardised reporting protocol for economic impact, both in terms of researchers’ reporting to clients around economic impact, and public sector bodies’ reporting of headline impact figures in public.

### Routes to Measurement

There is broad consensus on the standard approach to measuring the economic impact of an event. The spending patterns of event attendees are sampled, averaged and then upscaled to the overall ‘event population’. This is typically combined with an assessment of the net spending in the host economy by the event organiser to determine the Direct Economic Impact. This process typically requires some primary research in the form of surveying event attendees to evaluate peoples’ spending patterns at the event. Whilst not excessively complex or longitudinal in nature, this research is normally best carried out by a specialist contractor.

Within this basic approach however, there is the potential for diverging results based on different interpretations of the stages within the process. There can be varying approaches to: defining the host economy, surveying and sampling parameters, treatment of local residents, measuring economic flows in and out of the host economy, and the application of multipliers (which is covered in Advanced Economic Impacts). Arguably the biggest scope for error is in upscaling visitor spending patterns to an inaccurate event population – a factor which highlights the importance of securing accurate attendance data.

The resources in the section below explain each stage involved in calculating the Direct Economic Impact of an event. An online Calculator has been included so that organisers can forecast the approximate scale of economic impact of their event, based on achieving certain numbers.

## **Resources**

### **Overview of the Economic Impact Calculation**

Summarises the process and key steps by which economic impact figures are calculated.

### **Economic Impact Calculator**

This calculator provides a step-by-step tool whereby event organisers can enter either forecasted or actual numbers to calculate the approximate economic impact of an event.

### **Defining the Host Economy (Step 1)**

This resource explains the importance of an accurate assessment of the geographical area(s) within which you are measuring.

### **Measuring the Spending of Spectators (Steps 2.1 to 2.5)**

This resource explains how to calculate the total number of non-resident spectators whose spending is eligible for assessment.

### **Measuring the Spending of Spectators (Steps 2.6 to 2.8)**

This resource outlines the approach to measuring spectators' spending patterns on accommodation and in other areas. Consideration is also given to assessing direct 'leakage'.

### **Measuring the Spending of Attendees (Steps 3.1 to 3.2)**

Explains how the previous steps should be repeated for all non-spectator groups attending the event.

# Overview of the Economic Impact Calculation

## Introduction

Economic impact is an important consideration when bidding to secure major events, particularly in cases where organisations seek support from the public sector to help fund staging costs. Public sector bodies across the UK are increasingly investing in events with a view to stimulating regional GDP. However, the term 'economic impact' is often interpreted loosely. Approaches to the measurement and reporting of economic impact associated with events can be inconsistent. Due to the differences in methodologies employed it is often difficult to compare and contrast event-related impacts. This lack of comparability makes it difficult for the public sector to prioritise which events to support when it comes to allocating funds. eventIMFACTS seeks to establish some common ground amongst those undertaking such assessments for producing a transparent audit trail that is based on central principles and facilitates comparison across events.

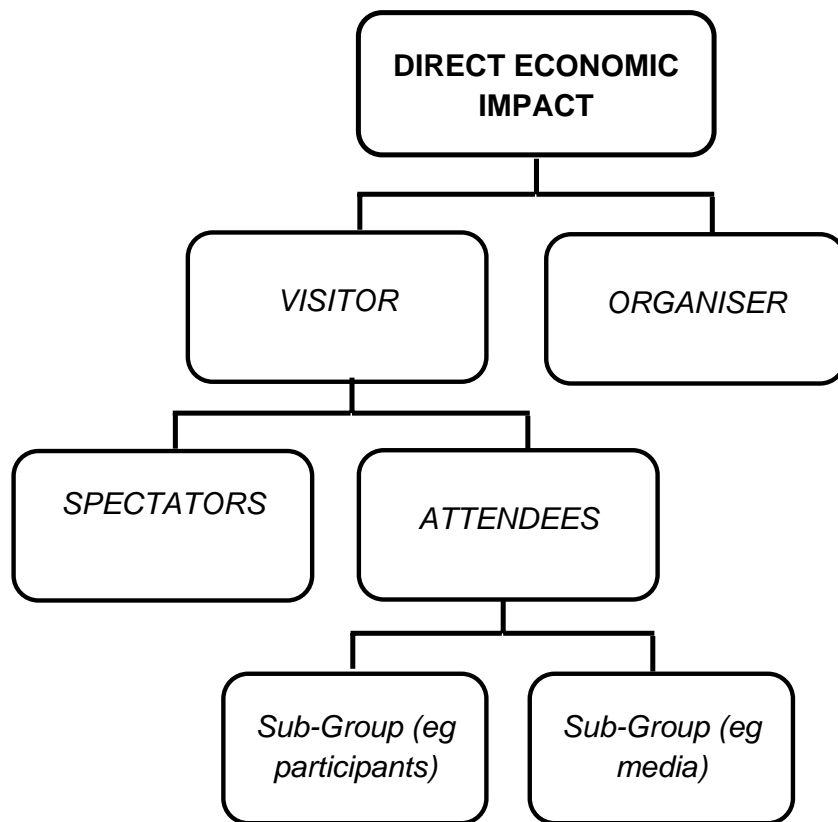
The approaches discussed in eventIMFACTS are generally usable for events of local, national or international significance. Nonetheless, for certain larger events (such as the Olympic Games or the FIFA World Cup) the economic consequences can be more far-reaching and stretch over a longer period of time. Whilst the principles of economic impact analyses still apply to larger events like the Olympics, more sophisticated approaches may be required to judge the full scale of the impact.

The measurement of economic impact requires pragmatism, as there is an inherent trade off between what can be measured reliably and the resources available to conduct the research. Complex procedures have both time and cost implications. In reality, the normal portfolio of events that are held in the UK do not require the same degree of complexity for economic impact assessment as a one-off 'mega' event. With this in mind, the focus of eventIMFACTS around economic impact is to provide a generic template to aid organisers of major events to commission economic impact studies, and set the terms of reference for contractors undertaking such assessments.

## What is Economic Impact?

In the context of sport, Turco and Kelsey (1992) define economic impact as "*the net economic change in a host community that results from spending attributed to a sports event or facility*". Although this is set in the context of sport specifically, it is equally transferable to events in the arts and cultural sector, and can also be applied to business events and conferences. By measuring the net economic change, this considers cash inflows (positives) as well as outflows (negatives).

The key elements of economic impact are **Visitor Spend** and **Organiser Spend**. Visitor Spend refers to additional expenditure within a defined geographical area from event-related visitors such as spectators and attendees. For most events, Visitor Spend forms the major component of economic impact. However, the Organiser Spend in staging an event can also generate additional expenditure in the host economy. Collectively, visitor and organiser spending in the host economy that is directly attributable to the staging of an event can be termed **Direct Economic Impact**.





An estimate of the Direct Economic Impact provides an 'at least' position, which can be supported by a transparent audit trail of the assumptions used in the calculation process. Depending on the ultimate aspirations of the research and the availability of requisite evidence, adjustments can then be made to the Direct Economic Impact in order to calculate the **Total Economic Impact**.

### **Guidance in eventIMPACTS**

eventIMPACTS provides guidance on measuring both the Direct Economic Impact and the Total Economic Impact. The relevant issues within each stage, which are often overlooked or misunderstood, are discussed and illustrations are provided where appropriate. This can be used as a practical resource for any organisation wishing to carry out or commission an economic impact assessment of their event.

Also provided is guidance on research design, data collection and analysis, in addition to further guidance on the presentation of economic impact results and its reporting

### **Overview of Key Steps**

- STEP 1:**                    **DEFINING THE HOST ECONOMY**
  
- Step 2:**                    **MEASURING THE SPENDING OF SPECTATORS**

Establishing Eligible Spectator Numbers

Step 2.1 *Define Total Spectator Admissions*

Step 2.2 *Remove Repeat Spectators*

Step 2.3 *Discount Local Residents*

Step 2.4 *Discount Casual Spectators*

Step 2.5 *Consideration of Spectator Types*

Applying Spectator Spending Patterns

Step 2.6 *Calculate Spectator Spend on Accommodation*

Step 2.7 *Calculate Other Spectator Spend*

Step 2.8 *Deduct Direct Leakages*

**STEP 3: MEASURING THE SPENDING OF ATTENDEES**

Step 3.1 *Establish Attendee Sub-Groups*

Step 3.2 *Repetition of Spectator Process (noting differences)*

**STEP 4: MEASURING THE SPENDING OF THE EVENT ORGANISER**

Step 4.1 *Subtract local income from local expenditure*

Step 4.2 *Considerations for commercial promoter-driven events*

**STEP 5: DIRECT ECONOMIC IMPACT**

**STEP 6:                   ADJUSTMENTS FOR TOTAL ECONOMIC IMPACT**

*Step 6.1                   Application of multipliers*

*Step 6.2                   Additional considerations for larger events*

## Defining the Host Economy (Step 1)

The starting point for calculating the Direct Economic Impact attributable to an event is to formally establish the geographical area under consideration ie the **Host Economy**. The Host Economy is usually defined as a city, county, region or country. The choice of the host economy may be influenced by the remit of the agency providing financial support to the event. For example, if the event is being funded primarily by the Regional Development Agency then it would be reasonable for them to want to measure the impact at regional level. It is possible to define different host economies within the same study. For example if an economic impact assessment were to take place on an event at the Millennium Stadium in Cardiff, it would be possible to assess the economic impact of that event on Cardiff, Wales, and the UK.

Defining the Host Economy is a critical stage because the spatial boundary selected will determine what to include in, and what to exclude from, any potential impact assessment. As a general rule of thumb, events are more likely to deliver a greater Direct Economic Impact on a host city or county rather than on a region or nation. However, if the immediate locale does not have the requisite service sector infrastructure (eg accommodation stock) to manage the increased level of demand for the event, then the impact will tend to be spread over a wider geographical area.

### **PRACTICAL EXAMPLE: WORLD SOMERSAULT CHAMPIONSHIPS**

For the purpose of the World Somersault Championships, we assume that the economic impact will be measured on the London region comprising the 32 London boroughs.

## Measuring the Spending of Spectators (Steps 2.1 to 2.5)

Once the host economy has been defined, the next stage involves establishing the visitor spend from spectators. There are two basic parts to this work:

- Steps 2.1 to 2.5 detailed below address how to **calculate eligible spectator numbers**. This process takes the total number of spectators present at the event and down-weights this in order to account for residents and casual visitors.
- Steps 2.6 to 2.8 address how to **apply spectator spending patterns**. This involves taking survey data regarding spectators' spending patterns and applying them to the eligible spectator numbers (as defined through Steps 2.1 to 2.5).

The key steps to calculate the eligible spectator numbers are outlined below.

<i>Step 2.1</i>	<i>Define Total Event Admissions</i>
<i>Step 2.2</i>	<i>Remove Repeat Spectators</i>
<i>Step 2.3</i>	<i>Discount Local Residents</i>
<i>Step 2.4</i>	<i>Discount Casual Visitors</i>
<i>Step 2.5</i>	<i>Consideration of Spectator Types</i>

### Step 2.1 - Define Total Event Admissions

The accuracy of Visitor Spend estimates is dependent on gaining access to good quality attendance data. Accurate records are usually available from the organisers relating to accredited groups such as participants, officials and media personnel. The key group for whom attendance data tends to be variable is spectators. Research conducted at major events in the UK has consistently shown that the key determinant of economic impact is the number of spectators attending an event.

Estimating spectator numbers is less problematic at ticketed events and / or events that occur within the confines of a stadium or arena. A more scientific approach should be employed at open access and free-to-view events, especially where large distances are involved (e.g. marathons).

#### PRACTICAL EXAMPLE: WORLD SOMERSAULT CHAMPIONSHIPS

The numbers of accredited personnel at the World Somersault Championships is assumed as follows: 250 participants, 100 officials and 50 media representatives. In addition, we assume that the event had 25,000 spectator admissions over the four days.

### Step 2.2 - Remove Repeat Spectators

When dealing with spectators, the approach to attendance measurement should allow differentiation between visits (total admissions) and visitors (individuals). This may include, for example, a consideration of how many days of an event people attend. If an event is held at more than one location (e.g. along a linear route at free to view events), then it would be appropriate to down-weight total admissions to account for possible repeat viewing at multiple locations. A survey of people may be required for this purpose, particularly in the case of non-ticketed events. Even at ticketed events, there may be a difference between the number of tickets sold and the actual number of people who attend. However, should the requisite data be available from box office records or a ticket sales database, then this would provide a reasonable indication of the number of different people attending an event, which can be used as a proxy for survey work.

**PRACTICAL EXAMPLE: WORLD SOMERSAULT CHAMPIONSHIPS**

It is estimated that spectators at the World Somersault Championships attended the event for an average of two days. Therefore, the 25,000 spectator admissions were actually made by 12,500 different people.

**Step 2.3 - Discount Local Residents**

Attendance at sporting events is but one leisure pursuit. Essentially, events are in competition amongst themselves, and with other sectors of the leisure industry, for the custom of people with limited resources (income and time) at their disposal. In other words, every £1 spent on one form of leisure activity in the UK is potentially £1 less spent on another activity. Spending by local people in the host economy is merely a recirculation of money that already existed there. When evaluating investment decisions in the public sector, the consideration of 'additionality' is regarded as best practice as per the HM Treasury Green Book and is also consistent with the national RDA Impact Evaluation Framework. The Green Book defines additionality as follows: "An impact arising from an intervention is additional if it would not have occurred in the absence of the intervention." Essentially we are concerned with what happened over and above what would have happened anyway.

Consequently the spending of people normally resident within the defined impact area should be considered 'deadweight' and not included in calculations of direct economic impact. The Green Book refers to deadweight as "outcomes which would have occurred without intervention". Anticipating what local residents might have done had they not attended an event is a complex process. It could be argued that events generate increased spending by local residents in the host economy; however this is difficult to prove, and does not represent new money to the host economy. With the exception of mega events, it would be unusual to find many instances where local resident income is retained (and not spent outside the region) simply because an event is being staged. For events that are held routinely in the UK, this is another reason for adopting the deadweight argument cited above.

**PRACTICAL EXAMPLE: WORLD SOMERSAULT CHAMPIONSHIPS**

For the World Somersault Championships, the assumption is that 50% of spectators were normally resident in London. Therefore, 6,250 people were exempt from economic impact calculation.

#### Step 2.4 - Discount Casual Visitors

Not all non-local spectators visiting the host economy will be eligible for inclusion in the calculation of the Direct Economic Impact of an event. This will happen in cases where:

- The event was not their main reason for being in the defined impact area. For example, someone from Scotland might be visiting friends or relatives in London and during this trip elected to attend the World Somersault Championships; however the event was incidental to the visit and therefore any related expenditure may have occurred regardless, albeit on something else.
- Visitors changed the timing of their visit to coincide with the event. For example, an overseas visitor might be planning a visit to London but decided to plan the trip around the World Somersault Championships; however, the trip and related expenditure would have occurred regardless, albeit at a different point in time.

As with local residents, expenditure by casual visitors should be considered deadweight for economic impact purposes.

#### PRACTICAL EXAMPLE: WORLD SOMERSAULT CHAMPIONSHIPS

We assume that 20% of non-local spectators attending the World Somersault Championships were casual visitors. Therefore, the number of event specific visitors to London was 5,000.

#### Step 2.5 - Consideration of Spectator Types

Events involve different types of spectators who can be grouped by the nature of their economic involvement:

- **Commercial Stayers** - Visitors making use of hotels, guest houses or other commercial accommodation in the Host Economy.
- **Non-Commercial Stayers** - Visitors staying overnight in the Host Economy but in unpaid accommodation, for example with friends or relatives.
- **Day Visitors** - Visitors not staying overnight in the Host Economy. This sub-group may include someone staying either commercially or non-commercially outside the Host Economy.

The rationale for this classification is that the spending patterns of these sub-groups are not the same. In short, Commercial Stayers are likely to spend more than Non-Commercial Stayers or Day Visitors. Similarly those staying non-commercially have a greater opportunity to interact with the Host Economy than Day Visitors because their dwell time is longer. Therefore, it is good practice to treat these sub-groups separately.

#### PRACTICAL EXAMPLE: WORLD SOMERSAULT CHAMPIONSHIPS

At the World Somersault Championships, we estimate that 15% of event-specific spectators from outside London were commercial stayers, 10% stayed non-commercially and the rest (75%) were day visitors.

Should organisers or event funders also wish to assess the expenditure of local residents, then the process outlined here can be modified to exclude visitors from outside the Host Economy. It is important to note that this will necessitate collecting full expenditure information from local residents (in addition to visitors) and replicating the calculation process. Thus, there will be an increase in the time taken to administer the survey for local residents which may reduce the sample size obtained. Moreover, the extra analysis will increase the cost of conducting the research. If the objective is to measure Visitor Spend then the focus should be on maximising response rates in order to make reliable inferences about the non-local people.

### Worked Examples for Steps 2.1 to 2.5 – World Somersault Championships

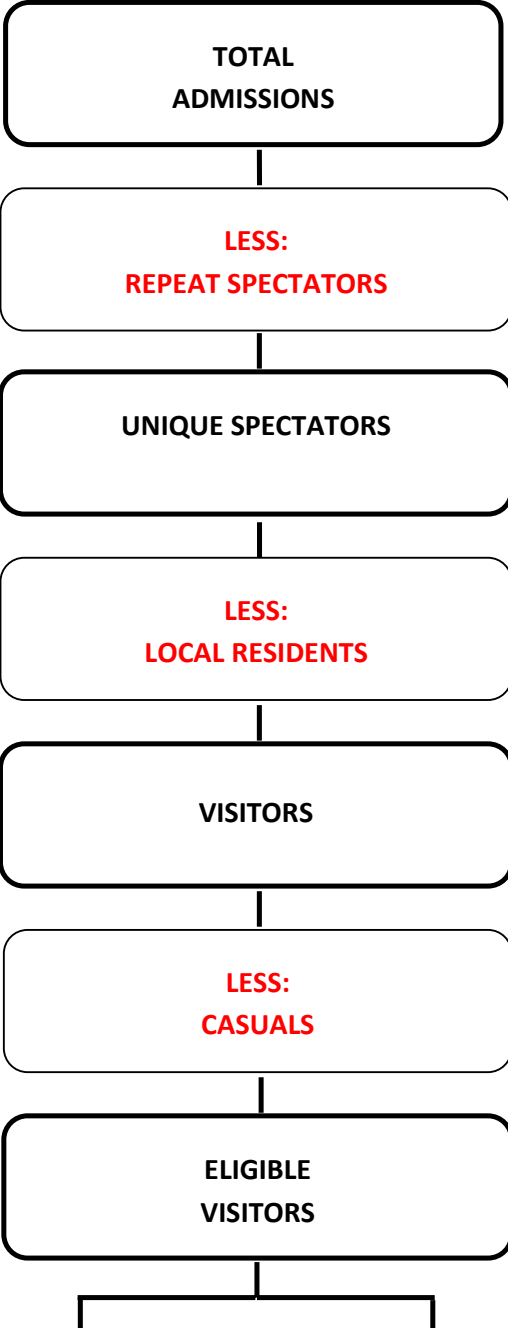
The following example relates to spectators only. The same process can be repeated for other visitor groups (e.g. participants) in order to establish the total number of eligible visitors. Steps 2 and 4 will not apply to accredited event personnel.

	Example	Calculation
<b>Step 2.1 - Define Total Event Admissions</b>		
Total spectator admissions	25,000	A
<b>Step 2.2 - Remove Repeat Spectators</b>		
E.g. Average number of event days attended	2	B
Number of different spectators	12,500	$C = A / B$
<b>Step 2.3 - Discount Local Residents</b>		
% of spectators resident in the host economy	50%	D
Number of non-local spectators	6,250	$E = (1 - D) / C$
<b>Step 2.4 - Discount Casual Visitors</b>		
% of non-local spectators who are casual visitors	20%	F
Number of event specific visitors	5,000	$G = (1 - F) / E$
<b>Step 2.5 - Consideration of Spectator Types</b>		
Commercial Stayers	750 (15%)	H
Non Commercial Stayers	500 (10%)	I
Day Visitors	3,750 (75%)	J

NB: For illustrative purposes, it is assumed that members of all other groups represented at the World Somersault Championships were from outside London and were exclusively Commercial Stayers.



FIGURE 2: SUMMARY OF CALCULATING ELIGIBLE SPECTATOR NUMBERS



## Measuring the Spending of Spectators (Steps 2.6 to 2.8)

### Introduction

Once the eligible spectator numbers have been calculated as per the previous resource (Steps 2.1 to 2.5), the spending patterns of those spectators need to be determined and upscaled to output the overall estimated spend associated with spectators (Steps 2.6 to 2.8).

The methodology used to assess Direct Economic Impact usually involves some survey work. A standard economic impact questionnaire tries to ascertain the spending of visitors on accommodation and other event-related areas.

With this in mind, it is important to recognise that an individual might undertake expenditure on behalf of other people. For example, a couple sharing a hotel room might be spending £100 per night on their accommodation, but this equates to £50 per person. Similarly, a parent or guardian attending with children is more likely to cover the expenses of their dependents. If left unadjusted, a practice such as this might artificially inflate the spending patterns of visitors. Any error in the calculation of the spending patterns of those surveyed will be compounded when these are extrapolated across all eligible visitors. Whilst it is inevitable that people might spend on behalf of others in their group, sensible design of the survey can help to resolve this issue by simply asking a respondent how many people his or her expenditure relates to.

*Step 2.6 Calculate Spectator Spend on Accommodation*

*Step 2.7 Calculate Other Spectator Spend*

*Step 2.8 Deduct Direct Leakages*

### Step 2.6 - Calculate Spectator Spend on Accommodation

Accommodation tends to be the most significant item of expenditure in economic impact studies. In this regard, estimates of visitor spend on accommodation must be reliable. The impact on the accommodation sector is relatively simple to calculate, as shown below.

$$\begin{aligned} & \text{Number of Commercial Stayers} \\ \times & \text{Average number of nights spent in the Host Economy} \\ = & \text{Number of commercial bed-nights} \\ \times & \text{Average cost per bed-night} \\ = & \text{Spectator Spend on Accommodation} \end{aligned}$$

The number of Commercial Stayers will have been determined from the previous section (Steps 2.1 to 2.5). The rest of the information required can be gathered using a relatively simple survey of event visitors, such as those used in the development of eventIMPACTS.

For events that tend to attract a large number of visitors, it is recommended that the findings from the survey are supplemented by consultations with hotels and other providers of commercial accommodation in the Host Economy. Given the relative importance of accommodation to the overall economic impact, it is crucial that the findings from any visitor survey match the experiences of accommodation providers. Questions to be explored from such consultations include:

- What was the average occupancy level and room rate achieved by hotel operators during the time of the event?
- How does this compare with normal occupancy levels and room rates in the host economy at a similar time of year?

- Were any event specific bookings or enquires made with hotels or special offers taken up for the event?
- Did the operators turn away any event visitors?

Responses to such questions help to verify the findings from the survey, and provide a more rounded view and 'narrative' of the impact on the accommodation sector.

**PRACTICAL EXAMPLE: WORLD SOMERSAULT CHAMPIONSHIPS**

The number of Commercial Stayers is known to be 750 from Step 2.5. A survey showed that spectators staying commercially spent on average two nights in London, and that the average cost per bed night was £50. The spectator spend on accommodation was therefore £75,000.

**Step 2.7 - Calculate Other Spectator Spend**

Whilst accommodation is a major item of Visitor Spend, it is not the only one. With a view to promoting a common template for recording and reporting Visitor Spend, six other standard categories of expenditure are proposed. These are:

- Food and Drink
- Entertainment
- Local Travel (eg Bus, Taxi)
- Merchandise
- Shopping/Souvenirs
- Other (eg Petrol, Parking)

As with accommodation, spectator expenditure on the above items can be captured through a survey and recorded on a per-day basis, which can then be extrapolated based on eligible spectator numbers.

Note that the expenditure on tickets is not listed here, nor are other items such as programme sales. Tickets and programmes tend to be an item of revenue for the event organiser, whereas the items listed above are usually items of revenue for local traders. The revenue that event organisers take from tickets and programmes often goes directly towards the staging costs of the event itself. Consequently tickets and programmes are best dealt with in a subsequent section (Organiser Spend) where the income and expenditure of the organiser can be properly evaluated. There may well be other items that partly feed through to event organisers (for example, commissions received from on-site concession stands or from the sale of merchandise). Any such items should therefore be discounted from estimates of Visitor Spend.

In addition to individual categories of expenditure, it is good practice to find out how much visitors are planning to spend on their entire trip to the Host Economy. This will serve to indicate their typical behaviour, and there may be arguments to inflate or deflate their daily spend figures accordingly. For example, if someone attending all four days of an event spent £40 on the day of interview, but budgeted to spend £120 over the four days of the event then his / her average expenditure per day would be £30 and not £40. In this way it becomes possible to subject the expenditure patterns reported on the day of interview to a 'test of reasonableness'.

**PRACTICAL EXAMPLE: WORLD SOMERSAULT CHAMPIONSHIPS**

Steps 2.5 and 2.5 respectively have already shown that there were 5,000 event-specific visitors and that spectators attended an average of two days. This equates to 10,000 visitor days. A survey

showed that the average spectator spend per-day on items other than accommodation was £30. The spectator spend on other event-related activity was therefore £300,000.

NB: In the interest of simplicity, the £30 figure has been taken as an average across commercial stayers, non commercial stayers and day visitors. In reality, the calculation process should consider the expenditure patterns of these groups separately.

### Step 2.8 - Deduct Direct leakages

When visitors spend money at (or around) an event, some of this could immediately leave the Host Economy. This is 'direct leakage'. An example of where this might happen is around on-site concessions or trade-stands which are not resident in the Host Economy. Any expenditure incurred with such non-local traders, although technically changing hands locally, does not directly impact on the Host Economy. Non-local traders tend to have minimal interaction with the Host Economy outside the event. Whilst traders would be expected to pay the event organiser for their stands at an event, such expenditure would need to be considered under Organiser Spend for the reasons outlined above.

To try and account for leakage, visitor expenditure at the event site should be discounted to reflect the proportion of concession or trade-stands from outside the Host Economy. At events where retail villages feature prominently (eg equestrian events), surveys can be designed to differentiate between on-site and off-site expenditure. Furthermore, primary research may be required with traders working at the event to get a feel for the income that they generate and their expenditure levels in the Host Economy. The following table illustrates the effect of different transactions involving concession or trade stands.

	Impact on Host Economy		
	<i>Positive</i>	<i>Neutral</i>	<i>Negative</i>
Visitor spending with local vendors			
Non-local vendors' spend in the host economy			
Local residents' spend with local vendors			
Visitor spending with non-local vendors			
Spending by local vendors in the host economy			
Vendors' spend with organisers			
Local residents' spend with non-local vendors			

A strategic approach to maximising the economic impact of an event would be to encourage on-site concessions and trade stands from within the Host Economy.

#### PRACTICAL EXAMPLE: WORLD SOMERSAULT CHAMPIONSHIPS

Following an analysis of both spectator spending and the residency of the concession stand owners, it has been assumed that £75,000 of spectator expenditure associated with the World Somersault Championships was made with traders not normally resident in London.

### Worked Example for Steps 2.6 to 2.8 – World Somersault Championships

The following example relates to spectators only. The same process can be repeated for other visitor groups (e.g. participants) in order to establish total eligible visitor spend. With respect to

non-accommodation items, visitor spend can be further broken down by the six standard categories of expenditure proposed in Step 2 above.

	Example	Calculation
<b>Step 2.6 - Calculate Spectator Spend on Accommodation</b>		
Number of commercial Stayers (from 2.5 example)	750	H
Average number of nights spent in the host economy	2	K
Number of commercial bed-nights	1,500	$L = H \times K$
Average cost per bed-night (per person)	£ 50	M
Revenue for accommodation sector	£ 75,000	$N = L \times M$
<b>Step 2.7 - Calculate other event-related visitor spend</b>		
Total number of event specific visitors (from 2.5 example)	5,000	G
Average number of days attended (from 2.2 example)	2	B
Day visits generated	10,000	$O = G \times B$
Avg. daily spend on non-accommodation items	£ 30	P
Non-accommodation visitor spend	£ 300,000	$Q = O \times P$
<b>Step 2.8 - Deduct direct leakages</b>		
Visitor spend with non local traders	£ 75,000	R
<b>SPECTATOR SPEND</b>	<b>£ 300,000</b>	<b><math>S = N + Q - R</math></b>

## Measuring the Spending of Attendees (Steps 3.1 to 3.2)

Whilst spectators have been shown to be the main driver of economic impact, other attendees can also make a significant contribution to the economic impact of an event. This is especially important for events which might have a high number of participants. Whilst some attendee groups such as officials may be relatively small in comparison to spectator numbers, they often stay for the full duration of the event. Similarly athletes may arrive several days in advance of a sporting event for acclimatisation and training.

The main attendee groups at an event should therefore be detailed and a similar process be applied to these groups as has been detailed for spectators (Steps 2.1 to 2.8). The guidance here explains the relatively minor differences between the spectator and attendees processes.

*Step 3.1 Establish Attendee Sub-Groups*

*Step 3.2 Repetition of Spectator Process (noting differences)*

### Step 3.1 – Establish Attendee Sub-Groups

For major events, a number of people outside of spectators are required to attend. These are principally people participating in or running the event. It is important to categorise the sub-groups of Attendees so that their economic impact can be measured in a similar way to spectators. Some typical sub-groups include:

- Athletes/Teams/Participants
- Media
- Officials
- Delegates
- Volunteers

For major events, these groups may often be shaped by accreditation categories which can assist in capturing robust numbers of attendees. Event organisers will tend to have access to good quality data regarding many of the attendees in terms of their numbers and their duration of stay.

### Step 3.2 – Application of Spectator Spend Process

For attendee groups, the basic process detailed in Steps 2.1 to 2.8 can be applied to assess both eligible numbers and spending patterns. There are however a couple of important exclusions which apply to spectators only, and should not normally be applied to attendees:

- Step 2.2 down-weights the total number of admissions to allow for repeat spectators. This will typically not be required for attendees as their numbers can usually be counted fairly robustly from organiser data such as accreditations. It can still be useful however to apply Step 2.3 which will determine whether the attendee is a local resident.
- Step 2.4 down-weights the spectator numbers based on casual visitors whose main reason for visiting the area was not attending the event. Typically a reasonable assumption can be made that most non-resident attendees (for example a volunteer or official) have visited the locality with the primary reason of attending the event.

For simplicity, the calculator used in eventIMPACTS groups all attendees together for the purposes of assessing their numbers and spending patterns. However a more robust assessment of economic impact can be achieved through consideration of each sub-group, as groups such as the media may well have different spending patterns to athletes.

PRACTICAL EXAMPLE: WORLD SOMERSAULT CHAMPIONSHIPS

Whilst there were significantly more spectators than attendees at the World Somersault Championships, there were a large number of athletes competing at the event, most of whom had arrived several days earlier. A survey across the attendees established that an additional £200,000 was generated in London as a result of the event being staged.

## Measuring the Spending of the Event Organiser (Steps 4.1 to 4.2)

The final stage required in assessing Direct Economic Impact is the event organisers' net spend within the Host Economy. The organisation of major events can be an expensive and complex business involving income streams from inside and outside the host economy, and spending on contracts with suppliers inside and outside the host economy. A calculation is therefore required to assess the organisers net spend in the Host Economy.

Economic impact estimates of major events sometimes include visitor spending on tickets; however, it should not be assumed that such expenditure will entirely benefit the Host Economy as this is normally used immediately by the organiser to offset the staging costs of the event.

It is imperative that event organisers engage with the evaluation process by providing access to relevant financial documentation and they should be made fully aware of their responsibilities prior to the commencement of the research.

*Step 4.1 Subtract local income from local expenditure*

*Step 4.2 Considerations for commercial promoter-driven events*

### Step 4.1 - Subtract Local Income from Local Expenditure

The following table illustrates a hypothetical break-even budget for the World Somersault Championships in London. It can be seen that the total revenue generated by the event is £1m, of which £650,000 originates from within London and the remainder from elsewhere. However, the expenditure made by organisers in London amounts to £750,000, which indicates a net Organiser Spend of £100,000 in London.

In practice, it is possible that the transactions of event organisers could have a negative impact on the Host Economy, particularly where support services and expertise are outsourced. Therefore, there is an obvious rationale for developing a network of local suppliers and expertise which will assist public bodies to maximise the economic impact of their events.

	London	Elsewhere	Overall
<b>INCOME</b>			
Ticket sales	£ 250,000	£ 250,000	£ 500,000
Merchandise	£ 100,000	£ 50,000	£ 150,000
Sponsorship	£ 200,000	£ -	£ 200,000
Other	£ 100,000	£ 50,000	£ 150,000
<b>Total</b>	<b>£ 650,000</b>	<b>£ 350,000</b>	<b>£ 1,000,000</b>
<b>EXPENDITURE</b>			
Rights fees	£ -	£ 150,000	£ 150,000
Suppliers & Staff	£ 500,000	£ -	£ 500,000
Prize Money	£ -	£ 100,000	£ 100,000
Other	£ 250,000	£ -	£ 250,000
<b>Total</b>	<b>£ 750,000</b>	<b>£ 250,000</b>	<b>£ 1,000,000</b>
<b>SURPLUS / DEFICIT</b>	<b>£ 100,000</b>	<b>£ (100,000)</b>	<b>£ -</b>

*Hypothetical Event Budget – World Somersault Championships*

### Step 4.2 - Considerations for commercial promoter-driven events

Most publicly funded events are likely to break-even in financial terms (ie income = cost). On the other hand, most commercial promoter-driven events are designed to achieve a profit. The



inclusion or exclusion of profit as economic impact will depend on a number of factors that include the promoter's place of business; how much of the profit is then spent; and where it is spent.

For example, Wimbledon generates an annual surplus (in the region of £25m) for the All England Lawn Tennis Club, which is then handed to the Lawn Tennis Association (LTA) to be reinvested in British tennis. It is impractical to assume that the LTA will spend all of this money in the Greater London area; rather the money will most likely be distributed across the UK regions to fund tennis initiatives. In contrast to Wimbledon, the surplus from the London Marathon is used by the London Marathon Charitable Trust to support recreational projects in London.

It is apparent from the two examples cited above that the treatment of profit will vary by event and therefore it is difficult to be prescriptive about whether to consider profits generated by events as economic impact on the Host Economy. In order to facilitate cross-event comparison, and in line with producing an 'at-least' estimate of economic impact, the recommendation is to exclude profits from the calculation of Direct Economic Impact.

**PRACTICAL EXAMPLE: WORLD SOMERSAULT CHAMPIONSHIPS**

Following a review of the British Somersault Federation's accounts in staging the event, it was seen (above) that an additional £100,000 was spent by the organiser in London as a result of staging the event.

## Calculating Direct Economic Impact (Step 5)

The various calculations from Steps 1 to 4 can now be brought together to determine the Direct Economic Impact:

	Example	Calculation
Spectator Spend (Step 2)	£ 300,000	S
Attendee Spend (Step 3)	£ 200,000	T
<b>ELIGIBLE VISITOR SPEND</b>	<b>£ 500,000</b>	<b>U = S + T</b>
Organiser Spend (Step 4)	£ 100,000	V
<b>DIRECT ECONOMIC IMPACT</b>	<b>£ 600,000</b>	<b>W = U + V</b>

In the event that organiser's spending in the Host Economy is a negative figure, then this should be deducted from visitor spend in order to arrive at the Direct Economic Impact.

## Reporting on Economic Impact

It is important that any economic impact findings are presented in a transparent manner that allows the reader to trace how the results have been derived. The rationale for this is to ensure comparability when trying to reconcile economic impact estimates for two or more events, or for the same event over time.

### Standardised Reporting of Methodology

It is recommended that those commissioning event impact studies request the following ten pieces of information to be clearly set out on a summary top-sheet which should accompany any report.

1	A statement explaining whether the research was conducted in-house or by an independent external contractor.
2	Definition of the host economy - whether this is a city, county, region or nation.
3	The total number of people attending the event, broken down by their role in the event (eg spectators, athletes, participants, media, officials, etc). If the event was not ticketed, an explanation should be provided as to the approach used to gauge spectator numbers.
4	The method used to estimate visitor spending patterns. If a survey has been used, what was the approach to data collection, the size of the sample and the associated sampling error? What was done to ensure that the sample obtained is representative?
5	The number of people eligible for inclusion in the economic impact calculation by group (eg participants, spectators, etc) on account of being resident outside the host economy but visiting the host economy specifically for the event.
6	The number of commercial bed-nights generated by the different groups in the Host Economy and the associated impact in expenditure terms on the local accommodation sector.
7	The impact of visitor spending on other sectors of the host economy (ie not accommodation) broken down by group (eg food & drink, entertainment, etc).
8	The method used to estimate organiser spend. Was the event budget scrutinised?
9	The Direct Economic Impact - to include eligible visitor and organiser Net Spend in the host economy. This should be reported net of any direct leakages from the Host Economy.
10	The Total Economic Impact if considered feasible, and therefore any adjustments made to the Direct Economic Impact. What type of multiplier has been applied? What evidence is there to support the use of these adjustments?

### Sample top summary sheet for the World Somersault Championships

<b>Event Title</b>	World Summersault Championships				
<b>Venue and Date</b>	London, 1st - 4th January 2010				
<b>Host Economy</b>	London Region				
<b>Economic Impact Summary</b>					
	Participants	Officials	Media	Spectators	Totals
Total Number	250	100	50	12,500	12,900
Eligible Number	250	100	50	5,000	5,400
Commercial Bed-Nights	1,250	500	150	1,500	3,400
Accommodation	£ 75,000	£ 30,000	£ 11,250	£ 75,000	£ 191,250
Food & Drink	£ 31,250	£ 14,000	£ 5,250	£ 150,000	£ 200,500
Entertainment	£ -	£ 2,500	£ 750	£ 3,000	£ 6,250
Merchandise	£ -	£ -	£ -	£ 47,000	£ 47,000
Shopping/Souvenirs	£ 12,500	£ 5,000	£ 1,500	£ 50,000	£ 69,000
Local Travel	£ -	£ -	£ 1,500	£ 30,000	£ 31,500
Other	£ 6,250	£ 2,500	£ 750	£ 20,000	£ 29,500
<b>Total Visitor Spend</b>	<b>£ 125,000</b>	<b>£ 54,000</b>	<b>£ 21,000</b>	<b>£ 375,000</b>	<b>£ 575,000</b>
Direct Leakage					-£ 75,000
<b>Eligible Visitor Spend</b>					<b>£ 500,000</b>
Organiser Net Spend					£ 100,000
<b>DIRECT ECONOMIC IMPACT</b>					<b>£ 600,000</b>

### Standardised Public Reporting

It is recommended that public reporting of economic impact figures, or reporting in the press, uses the two standardised terms as defined in this framework:

- Direct Economic Impact
- Total Economic Impact

It is also recommended that press releases confirming economic impact contain notes which clarify the sample size and sampling error of visitor surveys (as is seen more commonly in polling).

## Economic – Advanced Impacts

### What are the Advanced Impacts?

- Total Economic Impact of an Event

### Overview & Considerations

Advanced Economic Impacts primarily involve making judgements about longer-term economic activity, or economic decisions that people may or may not have made were it not for the event taking place. In other words, there is an increasingly high level of complexity involved in making a robust link between the event and the stated impact.

The **Total Economic Impact** builds on the calculation made in the Intermediate Impacts section which determined the Direct Economic Impact. Whereas the Direct Economic Impact assesses additional 'first-round' spending resulting from an event (eg a direct transaction between say a visitor and a local restaurant), the Direct Economic Impact seeks to capture the knock-on benefits to the host economy (eg the additional money spent in the local area by that restaurant as a result of the increased business).

Other economic impact considerations for larger events have been referenced. These introduce concepts such as displacement and import substitution which are generally felt to be more applicable to the very largest scale international events.

### Routes to Measurement

The most common way in which the calculation of Total Economic Impact is made is to take the Direct Economic Impact and apply a 'multiplier'. The application of the multiplier, once determined, is a straightforward process, but the data and analysis required to calculate an accurate multiplier can be extremely difficult and require the study of complex economic interrelations within a defined geographical area. This is the reason why Total Economic Impact has been listed as an Advanced Impact.

In practice, these Advanced Measurements will need to be handled by professional companies or research bodies that are skilled in working with complex economic data.

### Resources

#### Measuring the Total Economic Impact

Summary of the application of multipliers to calculate Total Economic Impact, and other considerations which may be applicable for economic research into extremely large scale events.

#### Reporting on Economic Impact

Guidance on a standardised way for researchers to report back methodological summary to clients, and around a standardised approach to public reporting of economic impact figures.

#### Economic Impact Calculator

This calculator provides a step-by-step tool whereby event organisers can enter either forecasted or actual numbers to calculate the approximate economic impact of an event.

## Measuring the Total Economic Impact (Step 6)

Step 6 deals with adjustments that can be made to the Direct Economic Impact figure to capture secondary impacts on the Host Economy. In most cases, the information required to undertake these adjustments is not readily available, can be speculative, and has additional resource implications. However, should such information be available and reliable then it is possible to assess the Total Economic Impact. As a matter of practice, any adjustments should only be undertaken following the calculation of the Direct Economic Impact (Steps 1 to 5).

*Step 6.1 Application of multipliers*

*Step 6.2 Additional considerations for larger events*

### **Step 6.1 - Application of multipliers**

Multipliers are used to assess the extent to which increased spending in the host economy produces subsequent benefits for that economy. For example, the local businesses benefitting from increased visitor and organiser spend will use some of this money to pay their suppliers. Assuming that these suppliers are also locally based, a 'multiplier effect' is created.

Two types of multipliers are commonly applied in the context of events - output multiplier and income multiplier. Both these multipliers are measured in monetary terms but have very different uses. The output multiplier measures the impact on the total business turnover in the host economy. By contrast, the income multiplier measures the overall increase in household income of local residents. The value of output multipliers will tend to be much higher than those of income multipliers, although the latter are considered to be more 'fit for purpose' in academia.

Regardless of its type, the value of any multiplier is dependent on the size of the economy being considered. In simple terms, the smaller the host economy, the higher the chance of leakage and the lower the value of the multiplier. In many cases, multiplier values are borrowed from other studies, which are far less valid than multipliers that are empirically derived based on the inter-industry relationships in a given host economy. However, empirically derived multipliers are not readily available for every level of geography.

Both the data and analyses required to accurately calculate a multiplier tend to be fairly complex and are beyond the scope of the guidance in eventIMPACTS. A failure to understand how multipliers are derived (or use of incorrect multipliers) will only serve to mislead event funders about the value of their investment. Therefore where multipliers are not readily available, and/or it is considered too costly to derive these empirically, it is recommended that only the Direct Economic Impact is reported. It worth noting however that the development/application of multipliers may be of particular benefit in calculating the additionality of the very largest scale events.

As a final point of note, an event has no bearing on the value of the multiplier. Therefore when comparing the economic impact of events that take place in different cities or regions, it is not appropriate to consider multiplier effects and the Direct Economic Impact should be used.

### **Step 6.2 - Additional Considerations for Larger Events**

For the very largest events, there may be a case that the event exerts an impact on residents' normal economic behaviour which should also be measured.

In some instances there could be legitimate grounds to claim that a large-scale event has prevented local residents from temporarily leaving the Host Economy, which in effect represents income retained in the Host Economy. For example, had Paris won the right to host the Summer Olympic Games in 2012, then it could have been reasonable to argue that some Londoners (and indeed other UK residents) may have travelled to France to attend the event. With the Games being awarded to London, the UK population will now have the opportunity to witness the event without having to travel abroad. However, quantifying the value of local resident income retained in London is at best tenuous. As a counter scenario, some residents may temporarily leave the UK because of the event, which would result in a negative economic impact on the UK. For example, some London residents might decide to take a holiday abroad to avoid the large influx of people expected during the 2012 Olympics.

Yet another consideration (primarily though not exclusively) for larger events is **displacement**. This is caused when normal tourists planning a trip to the Host Economy are crowded out by event-related visitors. For example, London is a popular tourist destination regardless of staging a major event like the Olympics in 2012; the expected influx of Olympic visitors will place additional demands on the London economy. An increase in demand is in turn likely to trigger an increase in price levels for certain sectors of the economy e.g. accommodation (although a Fair Pricing and Practice Charter has been introduced for 2012). Congestion coupled with inflated prices could have a detrimental effect on the behaviour of normal tourists planning to visit London during that period. The challenge then in economic impact terms is to quantify the monetary value associated with the volume of displacement.

Not only are these advanced economic impacts only likely to occur with significance around large-scale events, but also it is likely to be only those events that can afford to undertake the research required to assess them. As has been noted elsewhere in eventIMPACTS, the cost benefit of impact assessment needs to be carefully considered.



## Reporting on Economic Impact

It is important that any economic impact findings are presented in a transparent manner that allows the reader to trace how the results have been derived. The rationale for this is to ensure comparability when trying to reconcile economic impact estimates for two or more events, or for the same event over time.

### Standardised Reporting of Methodology

It is recommended that those commissioning event impact studies request the following ten pieces of information to be clearly set out on a summary top-sheet which should accompany any report.

1	A statement explaining whether the research was conducted in-house or by an independent external contractor.
2	Definition of the host economy - whether this is a city, county, region or nation.
3	The total number of people attending the event, broken down by their role in the event (eg spectators, athletes, participants, media, officials, etc). If the event was not ticketed, an explanation should be provided as to the approach used to gauge spectator numbers.
4	The method used to estimate visitor spending patterns. If a survey has been used, what was the approach to data collection, the size of the sample and the associated sampling error? What was done to ensure that the sample obtained is representative?
5	The number of people eligible for inclusion in the economic impact calculation by group (eg participants, spectators, etc) on account of being resident outside the host economy but visiting the host economy specifically for the event.
6	The number of commercial bed-nights generated by the different groups in the Host Economy and the associated impact in expenditure terms on the local accommodation sector.
7	The impact of visitor spending on other sectors of the host economy (ie not accommodation) broken down by group (eg food & drink, entertainment, etc).
8	The method used to estimate organiser spend. Was the event budget scrutinised?
9	The Direct Economic Impact - to include eligible visitor and organiser Net Spend in the host economy. This should be reported net of any direct leakages from the Host Economy.
10	The Total Economic Impact if considered feasible, and therefore any adjustments made to the Direct Economic Impact. What type of multiplier has been applied? What evidence is there to support the use of these adjustments?

### Sample top summary sheet for the World Somersault Championships

<b>Event Title</b>	World Summersault Championships				
<b>Venue and Date</b>	London, 1st - 4th January 2010				
<b>Host Economy</b>	London Region				
<b>Economic Impact Summary</b>					
	Participants	Officials	Media	Spectators	Totals
Total Number	250	100	50	12,500	12,900
Eligible Number	250	100	50	5,000	5,400
Commercial Bed-Nights	1,250	500	150	1,500	3,400
Accommodation	£ 75,000	£ 30,000	£ 11,250	£ 75,000	£ 191,250
Food & Drink	£ 31,250	£ 14,000	£ 5,250	£ 150,000	£ 200,500
Entertainment	£ -	£ 2,500	£ 750	£ 3,000	£ 6,250
Merchandise	£ -	£ -	£ -	£ 47,000	£ 47,000
Shopping/Souvenirs	£ 12,500	£ 5,000	£ 1,500	£ 50,000	£ 69,000
Local Travel	£ -	£ -	£ 1,500	£ 30,000	£ 31,500
Other	£ 6,250	£ 2,500	£ 750	£ 20,000	£ 29,500
<b>Total Visitor Spend</b>	<b>£ 125,000</b>	<b>£ 54,000</b>	<b>£ 21,000</b>	<b>£ 375,000</b>	<b>£ 575,000</b>
Direct Leakage					-£ 75,000
<b>Eligible Visitor Spend</b>					<b>£ 500,000</b>
Organiser Net Spend					£ 100,000
<b>DIRECT ECONOMIC IMPACT</b>					<b>£ 600,000</b>

### Standardised Public Reporting

It is recommended that public reporting of economic impact figures, or reporting in the press, uses the two standardised terms as defined in this framework:

- Direct Economic Impact
- Total Economic Impact

It is also recommended that press releases confirming economic impact contain notes which clarify the sample size and sampling error of visitor surveys (as is seen more commonly in polling).