Measuring Tourism Locally

Guidance Note Six: Event Analysis and Evaluation

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Office for National Statistics
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1. Introduction

The Tourism Intelligence Unit at ONS has produced this guidance note as part of a series with the aim of providing a consistent framework within which to measure and collect data on various facets of tourism activity. The guidance notes produced to date are:

- Guidance Note 1: Definitions of Tourism
- Guidance Note 2: Local Economic Impact Modelling Approaches
- Guidance Note 3: Undertaking Visitor Surveys
- Guidance Note 4: Tourism Benchmarking and Performance Indicators
- Guidance Note 5: Measuring the Supply Side of Tourism

This particular Guidance note concentrates on approaches to measuring the economic impact of events. It is intended for those interested in evaluating the economic impact of holding events of different scales. The note addresses a number of technical issues relating to the contribution of events to an economy. However, every effort is made to undertake this note in a clear and concise manner ensuring accessibility for all audiences. It will reference papers and studies throughout, so that the reader can investigate certain areas in more depth as they wish. This guidance sets out a number of principles relating to the measurement of the economic impacts of events. We are aware that other ‘softer’ impacts are generated by events, such as social impacts or environmental impacts. These have been covered in detail elsewhere, and particularly through the eventIMPACTS toolkit which has been developed by a consortium of partners and is covered in more detail in section 1.1. This guidance note should be seen as complimentary to the extensive guidance developed in eventIMPACTS (which is an essential resource for those faced with organising and evaluating events) and is aimed at tourism professionals and destination managers working in this area at the regional, local authority and destination level.

1.1 eventIMPACTS Toolkit (www.eventimpacts.com)

The eventIMPACTS Toolkit has been developed by UK Sport, Visit Britain, Event Scotland, the London Development Agency, the North West Development Agency, Yorkshire Forward and Glasgow City Marketing Bureau. It comprises some key guidance and good practice principles for evaluating the social, economic, environmental and media-related impacts associated with staging major sporting and cultural events.
The guidance within eventIMPACTS has been devised following independent evaluations of six events that took place across Great Britain in the summer of 2008. These evaluations were carried out by a research team headed by the Sport Industry Research Centre (Sheffield Hallam University) and involving researchers from the BRASS Centre (Cardiff University), the University of Stirling and the Substance social research company.

One of the central pillars of the eventIMPACTS guidance is to classify the level of investment needed to evaluate the impacts of events. The greater the investment in the evaluation then the more sophisticated the outputs from the evaluation and these are classified into basic impacts, intermediate impacts and advanced impacts. There is less focus on the scale of the event itself although it is implied that the larger scale events will call for a more advanced evaluation.

In this guidance note from the TIU, we focus on how events can be defined before we present approaches to analysing the direct spending relating to events and consequent indirect impacts that can be assessed through a variety of techniques. Finally we provide a summary of the economic impacts of events based on their scale.

2. How do we define events?
Put simply, an event is an organised gathering of people to take part in or observe a specific activity. They can occur on a wide range of scales. Small scale events could include a village hosting a summer fete with the aim of drawing people in from surrounding areas, and enhancing the community atmosphere. On a slightly larger scale, and perhaps to ensure a lasting legacy for the region, a local administrative unit or region might hold a regular music festival. At the top end of the scale, countries spend vast sums of money bidding and hosting ‘major’ or ‘mega’ sporting events such as the FIFA World Cup and the Olympics.

In defining the scale of an event from a tourism perspective, it could be helpful to determine the origin of visitors to the event. Therefore we could conceive of a classification of the size of the event in terms of whether it attracts international visitors, national or domestic visitors, or largely locally based visitors. Thinking of events in this way starts to differentiate between the impacts on tourism industries, such as accommodation providers, as the demands placed on those who provide services to visitors will differ across these categories. Major or mega events, such as Olympics, can be seen as a separate entity in such a classification which are worthy of further consideration. This is the approach that we have taken in section 5 of this guidance note.

In particular localities or situations a slightly different approach to defining the scale of the event may be pertinent. For example, in Wales the Welsh Assembly Government has developed a fivefold classification of events, which is shown in Appendix One. As with any classification of this nature, it unlikely that the different scales of event are going to be mutually exclusive. In, other words there might be some overlap, as local events progress towards becoming signature events, and so on.

One final category of event that merits separate attention here, from a tourism perspective, is ‘Meetings Industry’ Events. These types of events are often given the acronym MICE, meaning Meetings, Incentives, Conferences, and Exhibitions. MICE is used to refer to a particular type of tourism in which large groups, usually planned well in advance, are brought together for some particular purpose. MICE tourism usually includes a well-planned agenda centred on a particular
theme, such as a hobby, a profession, or an educational topic. Such tourism is a specialized area with its own trade shows and practices. MICE tourism is known for its extensive planning and demanding clientele. Section 5.4 of this note discusses an approach to measuring the economic impact of this sector.

From an economic perspective, it is only worthwhile to take the decision to host an event, at any scale, if the benefits of doing so outweigh the costs involved, while recognising that less tangible social or community benefits may influence this decision. Many perceive it as a huge coup for a country to win the right to host an event such as the Olympics. This is because they assume that the influx of spectators and the lasting legacy effects will easily outweigh the costs. However this assumption is increasingly being questioned. The reasoning includes the argument that the reported impact of increased visitor spend are often vastly overstated, as effects such as displacement are often not considered. This has lead to an increasing amount of literature on measuring the net economic impact of events.

This note will now proceed to examine the main concepts that underpin event analysis and evaluation. It discusses how to measure the direct economic contribution of events. This will entail some explanation as to why the gross spending effects often exceed the overall net spending effects, including methods to calculate the latter. Section 4 will highlight some of the main methodologies for deriving the indirect and induced effects that occur from the net direct spending effects. The final section will discuss the potential for further studies based on the information obtained from the review of previous economic assessments of events. This further work could include the potential to examine the employment benefits, or environmental effects of events.

3. Measuring the direct spending associated with an event.

The key stages to measuring the direct increased spending associated with hosting an event are highlighted by eventIMPACTS in the following four steps;

- Defining the host economy
- Measuring the spending of spectators
- Measuring the spending of attendees
- Measuring the spending of the event organiser

3.1 Defining the host economy

The first stage clearly defines the host economy for measuring the economic impact. For instance, when assessing a mega event such as the London 2012 Olympics the host economy could exclusively be London, or South East England, or England, or the whole UK. This has to be decided in advance of estimating the direct spending associated with an event.

3.2 Measuring the spending of spectators, attendees and event organisers

The next stage is measuring the spending of spectators, followed by measuring the spending of attendees, the participants, and finally the spending of the event organiser. Taken together they represent the ‘gross direct impact’ of the event. However, as will shortly be explained, measurement of the net direct impact is required for event analysis. This requires careful consideration of the different types of expenditure undertaken, and whether they actually contribute
to the host economy. For instance, some spending at the event can actually reduce incomes within the host economy.

In the paper, ‘A framework for assessing the direct economic impacts of tourist events: Distinguishing origins, destinations and causes of expenditures’, Tyrell et al explore estimating the net - as opposed to gross - impacts of events. Figure 1, derived from key findings in the paper, indicates how to disentangle net from gross impacts. Gross spending consists of the total area of the two circles. Each circle represents the total spending of spectators who originate from either inside or outside the host economy. Each circle is split vertically into two halves. Each half represents the destination of income earned from visitor spend at the event. It either remains in the host economy or removed. Furthermore, each circle is split horizontally. Each of these halves represents whether the reason for spending at the event is dependant on the event itself, or on the region that it is hosted within. Therefore, each circle is split into four quadrants. As an example, the upper left quadrant in the top circle represents those visitors who reside in the host economy. Their spending is due to the event taking place, and the income earned through their spending remains inside the host economy.

Figure 2 replicates Figure 1. However, two light grey quadrants are now highlighted in dark grey. These two quadrants, for reasons explained shortly, represent the only two types of visitor expenditure which contributes to an increase in net direct spending. Furthermore, the black quadrant contributes negatively towards the net direct impact of an event. The remaining light grey quadrants are neutral in their effect on the net direct impact.

There are several reasons for the net impact being only a fraction of the gross impact. First, all purchases that occur out of the host economy are irrelevant from a net impact perspective. They have no economic impact on the defined host economy. These four quadrants are all neutral, with the exception of one. This black quadrant contributes negatively to the overall direct impact. This is because the expenditure is dependent on the host economy, but the income earned from it subsequently leaves the host economy. Take, for example, a local person who normally eats their lunch in local establishments. However, when an event takes place in the region, that person decides to buy lunch from the event vendors. The vendor, who is normally located outside the region, subsequently removes their earned income. The expenditure is site dependant as it would have occurred anyway in the absence of the event. However, the income is removed from the host economy as a result of the event. Hence, it has a negative impact on the region.

Also, a host economy might attract a visitor during an event, but for reasons other than the event. In this case, any spending taking place in the host economy by that visitor should be ignored. This is because the expenditure is would have occurred anyway in the absence of the event. These expenditures, represented by the bottom-left quadrant of each circle are neutral.

Therefore net direct spending should only include spending in the host economy which only happens as a direct result of the existence of the event. Table 1 summarises this framework for evaluating tourism events.
### Table 1: A framework for evaluating tourism events.

<table>
<thead>
<tr>
<th>Origin of Expenditures</th>
<th>Location of Purchases</th>
<th>Expenditure Depends on</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Site</td>
<td>Activities</td>
</tr>
<tr>
<td>Out of region</td>
<td>In region</td>
<td>(1a)</td>
</tr>
<tr>
<td></td>
<td>Out of region</td>
<td>(2a)</td>
</tr>
<tr>
<td>In region</td>
<td>In region</td>
<td>(3a)</td>
</tr>
<tr>
<td></td>
<td>Out of region</td>
<td>(4a)</td>
</tr>
<tr>
<td>Total</td>
<td>In region</td>
<td>(1a) + (2a)</td>
</tr>
<tr>
<td></td>
<td>Out of region</td>
<td>(3a) + (4a)</td>
</tr>
</tbody>
</table>

**Gross Impact**

(1a)+(2a)+(3a)+(4a) \( (1b)+(2b)+(3b)+(4b) \) \( (1)+(2)+(3)+(4) \)

**Net Impact**

(1b)+(3b)-(4a)


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### A fictional case study

Newport County Council hosts an annual folk music festival. In order to estimate the economic impact of the festival on Newport, the organisers decide to survey the visitors on their expenditure at the festival. The survey is detailed enough to categorise each of the attendees in terms of the 8 quadrants of Figures 1 and 2. This fictional case study will provide an example of some of the various types of attendees. Mrs Patel and Mr Smith reside in Newport and Bristol respectively. Both, being fans of folk music, decide to attend the festival and purchase souvenirs and food. They both purchase a CD from a musician who resides in Newport. In terms of Figure 2, these individuals represent the upper left quadrants of both circles. This means that these two visitors, and the group of people they represent, are the only ones whose spending contributes a positive impact on the host economy. They attend, and spend in the host region as a direct result of the event taking place. Furthermore, the income earned by the musician from the goods they purchase is retained within the host economy.

The negative impacts come from event attendees such as Miss Thomas. Miss Thomas usually eats her Sunday lunch in a local Newport restaurant, with most of the income derived from it remaining within Newport itself. However, on the day of the folk festival, Miss Thomas decides to not have her usual lunch and instead attends the festival. In doing so, she purchases her lunch from a fast food vendor from Bristol, who subsequently takes the income earned back to Bristol.
This amounts to income from the host economy of Newport, which is usually retained in Newport, but is subsequently removed as a direct result of the event. Hence, this type of expenditure negatively contributes to the region. So, the sum of the expenditures of Mrs Patel's and Mr Smith's group of visitors, minus Miss Thomas' group amount to the overall net direct impact of the event. In terms of Figures 1 and 2, this only amounts to three of the possible eight quadrants. The spending from the remaining five groups of visitor has no overall impact on the host economy.

For instance, Mr Khan, who resides in Cardiff, visits Newport to see a film at the local independent cinema. However, upon arrival at Newport, he sees the festival and decides to attend that instead, purchasing the same CD that Mrs Patel and Mr Smith purchased. On the face of it, these purchases might be viewed as a direct benefit to the region as a consequence of the event. However, the income would have been still earned in the region by the cinema, so the overall effect is neutral.
Figure 1 – Graphical representation of the components of gross expenditure of visitors at an event

- Spending **inside** the host economy
- Spending **outside** the host economy

- Origin of expenditure **inside** the host economy
  - Expenditure depends on **event**
  - Expenditure depends on **location**

- Origin of expenditure **outside** the host economy
  - Expenditure depends on **event**
  - Expenditure depends on **location**
Figure 2 – Graphical representation of the net expenditure of visitors at an event
4. Calculating the indirect and induced effects

Once the estimation of the net direct spending effects of an event is complete, one can progress towards calculating the indirect and induced effects.

Indirect effects occur as the initial spending variation induces further rounds of purchases by industries in the supply chain of final products consumed by tourists. For example, if tourists demand extra hotel rooms, the hotel industry will purchase products which feature in the production of hotel room facilities. These purchases will include linen for bedding, food or toiletries. In turn, these purchases will induce further rounds of spending from each of the industries that produce these goods, and so on.

The induced effects are the changes in household income in the host economy due to changes in direct spending of people in the host economy. These occur through from changes in labour requirements resulting from demand shocks to industry outputs. The overall change in output, or total economic impact of an event, is the summation of the direct, indirect and induced effects.

4.1 Approaches to calculating indirect and induced effects

a) The application of multipliers

The International Recommendation for Tourism Statistics (IRTS)\(^1\) identifies three methods used to estimate the total economic impact of events. Input Output (IO) modelling and Computable General Equilibrium (CGE) models are two of these. The aim of both is to calculate multipliers. The value of the multiplier informs what the total economic impact (i.e. direct, indirect and induced effects) is given a £1 increase in visitor spend.

The final method stated in the IRTS involves using previously calculated multipliers from relevant studies. It has become regular practice for regions to use previously calculated multipliers to evaluate events in their economies. This is mainly due to the complexities and heavy data requirements of the both IO and CGE approaches. However, there are risks involved with this method which can seriously undermine the accuracy of the economic impacts calculated. For instance, there could be differences in the sizes of the regions in question. Applying a Scottish multiplier to an English county, such as Cornwall, is likely to produce erroneous results. The Cornish economy, being smaller, is more likely than Scotland is to import goods and services from other regions. Therefore, any expenditure by visitors in Cornwall is more likely to leak out of the economy, than would occur with spending in Scotland (assuming Scotland imports less as a proportion of its GDP). Hence the Cornish multiplier, if calculable, would be smaller than the Scottish one. If this is the case, then using a Scottish multiplier in the Cornish region will overestimate the economic impact of increased spending.

Similarly, even if the regions are similar in size, they are likely to be different in structure. One regional economy may produce tourism goods that tend to use domestically produced inputs in their production, while another might produce tourism goods that predominantly use imported goods in its production. The difference will lead to a multiplier for tourism goods which will be higher in the former. Therefore, proper examination of the structural composition of the economies in questions should be undertaken before performing this type of analysis.

Finally, the case can arise where a study makes use of a multiplier calculated many years before the current period. This can cause numerous issues, and will tend to reduce the accuracy of the estimates produced as the time period between the IO tables being produced and the analysis being conducted increases. The reason is that economies are constantly evolving over time. Technology improves, prices fluctuate and demands change. This means that the supply-side links that determine the indirect impact are likely to change from year-to-year.

b) Input Output Modelling Approaches

An alternative to using existing multipliers is IO modelling, which then lead to using CGE models. Rather than discuss the technicalities of these models, this note will concentrate more on the advantages and limitations of each approach.

There are many advantages of using IO models to estimate economic impacts. The first is that, given an adequate amount of data, it is possible to calculate multipliers specific to the region and time of the event under analysis.

Furthermore, IO models take account of all transactions between industries, allowing the complexities of regional and national economies to be replicated. Therefore, an IO model can estimate the economic impact on any sector, or all sectors, given a change in the final demand of products produced by any other sector of an economy.

However, limitations also exist with IO models. The 2004 paper, ‘Evaluating tourism’s economic effects: new and old approaches’ by Dwyer et al highlights some issues existing with IO models. One of these is that they only focus on the direct and indirect relationships of tourism within an economy. The main assumptions are that there are free and unrestricted flows of capital and labour, ignoring the resource limitations and the mechanics of related markets. More simply, an IO model will assume that an increase in tourism spending will lead to an increase in the tourism industries’ outputs, and hence an increase in their supplying industries’ outputs. However, it ignores the fact that there are likely to be negative effects of decreased output in other industries, due to the scarcity of resources inherent in an economy. An output increase in one industry invariably draws resources away from other sectors, reducing their output.

A further issue, on the demand side, is that increased consumption at events diverts consumption away from other goods and services. This could lead to decreased production in those industries, and increased prices in the industries which have a greater demand.

In addition, any increase in inbound visitors for an event, holding other factors which affect the exchange rate constant, will lead to an appreciation of the domestic currency. This will harm export and import-competing industries. As IO models don’t factor in these negative effects, the estimated economic impact they derive are likely to be overestimated.
Another weakness of the IO methodology is the vast amount of data required to construct an input-output table. It requires the value of transactions between all industries, households and the government of the region under analysis. Furthermore, it needs to measure the amount of goods and services imported and exported, in order to gauge the extent of the leakages from the region. This is perhaps the main reason why there is a distinct shortage of IO tables in the UK. The last one produced at a national level by the Office for National Statistics was in 1990, although one constructed by the Stockholm Environment Institute (SEI) was based on 2004 data. At the regional level, Wales, Scotland and Northern Ireland have created input-output tables in recent years.

c) Computable General Equilibrium models

The last alternative for estimating economic impacts to be considered here are Computable General Equilibrium (CGE) models. CGE models rely on IO models, meaning that they both share a common weakness; they are extremely data-hungry. However, there are plenty of considerable strengths to this estimation procedure. CGE models contain functions which simulate other mechanisms of the economy enabling it to recognise several important considerations that IO models fail to make. For instance, the fact that consumers must choose how to spend their budget, and that increased consumption of one good will generally lead to a fall in demand for other goods. In addition, resources are in fact limited, and that an increase in production for one good can cause a fall in production of others. Market imperfections may exist that will lead to unemployment and it recognises that governments must spend, and can raise taxes reducing the spending power of consumers. Finally, the technique links the domestic economy to international markets via the exchange rate, affecting the performance of its exporters and import competing industries.

If the purpose of any analysis is to consider the impact of an event on a regional basis only, then a CGE model would be unnecessary. IO modelling in this case would be sufficient. This is because its assumptions of free and unrestricted commodity and capital flows are more reasonable at a regional level as they can be imported from other regions. Assuming the regions share the same currency, then the exchange rate issue is not valid.

However, CGE would be more appropriate if the analysis concerned the effect on a state after a tourism shock to a region. Any such study should indicate that the impact, whether positive or negative, will be greater in the region than in the state.

IO modelling then is more useful to a regional policymaker, to assess the impact of an event in a region. The state policymaker would be better served with a CGE model as it would provide a broader picture of the net impact across all of the regions.

One of the final problems of the CGE model is that the results do not often correspond with what the user expects, and can therefore be difficult to interpret. As previously mentioned, CGE models can even sometimes imply counterintuitive results, such as a negative net impact arising from an increase in tourism demand. Of course, this is in fact the strength of CGE modelling, as it highlights and quantifies all the intricate dynamisms within an economy.

5. Summary of Economic Impacts

This section of the guidance note will attempt to bring together concisely the information conveyed in the previous sections. It will discuss each type of event as laid out in Section 2. First it will deal
with Mega and Major events, followed by National/Large regional events, before finally discussing local events. Figure 3 will bring together all the findings of the paper in a simple diagram. However, it excludes measurement of the meetings industry, as this deserves its own separate treatment.

5.1 Mega and Major Events
At the top end of scale are mega events and major events. These are considered together because they both are likely to be characterised by international attendees and coverage. Here, two methods for measuring the net direct impact are discussed.

One analysis of large scale events could involve using information from existing data sources. For instance, the UK has two surveys which measure the expenditure of two significant components of visitors in the UK. The International Passenger Survey (IPS) measures inbound visitors from abroad and the United Kingdom Tourism Survey (UKTS) measures the expenditure of overnight domestic visitors. These provide robust expenditure figures by quarter with reasonable timeliness.

With this data it is possible to construct a time series for the expenditure of visitors to the UK, and then extrapolate it forward to provide forecasts of tourism expenditures. So, an analyst could use a time series of expenditure from 1995-2011, for example, and estimate the expenditure of tourists in 2012. This would be an estimate of the expenditure of tourists in 2012, without taking the London 2012 Olympic Games into account. In other words, it is an estimate of the amount of visitor spending that would occur if the Olympics were not to take place. Then, after the event, an analyst could look at actual spend data for 2012.

The difference between the actual spend and the projected spend gives an approximation of the spending that is occurring purely as a result of the Olympics. This method will take into account the people who would normally visit the UK, but are put off by the Olympics; the so-called displacement effect. One of the main drawbacks with this method though is that it would not give much further information on the spending of the visitors. For instance, it is important for IO and CGE analysis to know the types of products and services they are purchasing.

This study provides an *ex post* analysis of the 1994 Football World Cup staged in the USA. It estimates projected levels of economic activity without the event to actual levels of economic activity, in the cities that hosted the matches.

Running a regression on variables such as income, wages, and taxes enables a forecast of economic activity in the cities. Comparing the difference between projected and actual levels of income, compared to the size of the host economy, they extract the actual benefit of the World Cup to each host city. It assumes that any difference between actual and projected income is explained purely by the World Cup.

This model estimates that the average host city suffered a reduction in income of $712 million. To test the significance of these results, they find that the probability of achieving any negative economic impact was 93.67%.

Alternatively, one could conduct a questionnaire at the event in order to establish the spending patterns of visitors. This questionnaire would need to identify the origins and motivations of the respondent with respect to Figures 1 and 2. Furthermore, detailed expenditure breakdown is required, corresponding with the detail of the IO table. For example, some IO tables represent the economy in a simple fashion; splitting it up into approximate sectors, e.g. agriculture, manufacturing, etc. Others are in far more detail. For example, the SEI's IO table represents the economy in terms of 123 industries.

If the IO table does represent the economy simply, it maybe redundant, from the point of view of performing IO or CGE analysis, and expensive to question people on expenditure in great detail. On the other hand, if a detailed IO table is available, then a corresponding detailed expenditure survey would provide a richer level of analysis. For further guidance on carrying out visitor questionnaires interested parties can consult TIU’s Guidance Note Three, ‘Undertaking Visitor Surveys’.

The previous section also suggested that if analysis is to go beyond a regional level, to a multi-regional or multi-national level, then CGE is a more appropriate methodology to use to assess the overall economic impact. This would most probably be applicable to the mega or major event. A CGE model will take into account the resource constraints that a multi-region or nation faces, and also the effects on the exchange rate that could potentially result. This will ensure a more accurate estimation of the multipliers calculated.
Guidance Note 6: Event Analysis and Evaluation

1.0


This paper provides an estimate of the effects of the Foot and Mouth Disease (FMD) outbreak on the UK Economy in 2001. It pays particular attention to the tourism sector, linking a Computable General Equilibrium (CGE) Model, to the Micro-Regional Tourism Simulation (MRTS) model. The MRTS uses the International Passenger Survey (IPS) and the UK Tourism Survey (UKTS) to model tourism demand in 2001 in the absence of the FMD outbreak. Then, using a survey of nationwide tourism firms, they measure the reduction of tourists’ expenditure during the FMD outbreak. The difference between the two measures is used to estimate the change in tourism expenditure due to the FMD outbreak. Therefore, it is the net direct impact of the FMD outbreak on tourism expenditure.

The model estimated that total tourism revenue fell by almost £7.5bn in 2001. The region which suffered the most was Cumbria. Tourism expenditure fell by £198m in 2001, equivalent to 31% of Cumbria’s usual tourism receipts.

Using the CGE model, the paper also estimates the economy wide implications. While the fall in tourism receipts is £7.5bn, the total fall in GDP due to the FMD crisis was only £2.5bn. This is explained by the redeployment of factors of production which were previously used in the tourism industries. Therefore, reductions in the output of some tourism industries are met by increases in the output of other industries.

Finally, the paper highlights the sectors which suffered the most in terms of the percentage decline in real value added. The three worst affected sectors were; Hotels, catering and pubs; railway transport; and road transport. As a conclusion, the authors suggest that policy makers should consider the wider implications to other sectors, including the tourism sector, of their policy reaction to FMD outbreaks.

5.2 National or Large Regional Events

Next on the scale are national or large regional events. These are events which are characterised by attracting visitors from across the national economy. These would include such events such as Glastonbury. In order to measure the net spending associated with these types of events, one could adopt a similar method to the one previously explained; using existing data sources.

This method, however, might encounter problems for two reasons. The first is that the data sources – and this is certainly relevant for the UKTS and IPS – become less reliable when used at a regional level than national level. Furthermore, these types of events are more likely to repeated on an annual basis. Therefore it is difficult, if not impossible, to establish from past trends what would have happened in terms of visitor spending if the event had not occurred, as they generally have always occurred.

Therefore, it is more appropriate for national events than for major and mega events to conduct questionnaires. It is quite likely that there will be a fairly balanced mix of residents and non-residents. Identifying the type of visitor, with respect to Figure 1 is extremely important. The
discussion that entailed the detail of expenditure surveying identified with larger events is also applicable to these types of events.

To calculate the overall economic impact of national and large regional events, IO modelling is probably more appropriate. The reasons for preferring CGE analysis aren’t nearly so prevalent at this scale. Goods and services are relatively easy to import from other regions. Therefore, there should be no concerns about resource drains on other industries inside the host economy. Furthermore, one could not rationally expect a small regional event to have any significant impact on the exchange rate. The benefit of an IO analysis over a CGE analysis is that it is much cheaper to carry out. This will enable the diversion of funds towards more detailed questionnaires or IO tables, further enriching the analysis.

**Box 3 Case Study: ‘The Business of Jazz: The Economic Impact of Brecon Jazz 2000’ – Welsh Economy Research Unit (2001)**

This paper uses a regional input output table to explore the economic impact of the Brecon Jazz Festival. It involved a visitor expenditure of just under 500 visitors, in which half were from outside of Wales. Expenditure on event tickets was discounted to avoid double counting of the expenditure of the organisers themselves.

By using the adjusted Wales Input Output table, the paper reported some interesting results. For instance, the expenditure survey identified that gross expenditure in Wales from people visiting the event was £0.9m. However, £0.3m leaked out of the economy, so there was a direct impact to the economy of £0.6m. However, the Input Output model estimated the indirect effects at just over £0.31m. Therefore, the overall impact of the Brecon Jazz Festival 2000 was just over £0.9m. Furthermore, this generated 23 person-years of employment for the festival.

**5.3 Local Events**

Finally, events on the smallest scale: local events. These events are normally only relevant at the local authority level, and the majority of attendees would be local residents. This means that the economic impact of this event could be minimal. Most probably, only one type of visitor will generate any substantial net impact – residents who spend in the region because of the event. Furthermore, the impact will be reduced by anybody who spends on goods and services at the event from a vendor who resides out of the region, and subsequently removes the income.

Additionally, any net impact generated will likely to have minimal indirect and induced economic impacts. This is due to most, if not all, inputs for any goods and services purchased by visitors being imported from surrounding regions. Therefore, the impact through the supply-side inside the host economy will be virtually non-existent.
This does not mean to say that the existence of a considerable economic benefit is the only reason for hosting an event at this scale. Events will produce certain benefits that are not always measurable in monetary terms. For example, increased community cohesion, or the potential for it to develop into a growth event, and build a lasting legacy in the region.

5.4 ‘Meetings Industry’ Events

Accurate measurement of the economic importance of the Meetings Industry is the subject of a project carried out by the UN World Tourism Organisation (UNWTO). It follows the same framework as that adopted in a TSA – that is, to measure the demand and supply separately before reconciling them. A purely demand side approach does not actually provide the contribution of the industry to the economy. Furthermore, purely measuring the supply side won’t identify the expenditures of delegates purchasing goods from other industries, such as accommodation and food.

In order to do this, clear definitions of the both the demand and supply of the meetings industry had to be established. This goes some way to alleviating the definitional issues which were apparent in existing attempts to measure the industry. Therefore, the definitions are:

- Nomenclature for the industry: Meetings Industry.
- Meeting aims: To motivate participants, to conduct business, share ideas, to learn, to socialise and hold discussions.
- Meeting size: Minimum number of ten (10) participants
- Meeting venue: Venues where there is a payment for the use of the venue for meetings
- Meeting duration: A half-day (four hours) or more

There is further guidance on the variables which should be collected when surveying the meetings industry. On the demand side, it should measure the total number of participants, broken down by whether they are local (non-visitors), domestic, or international visitors. Furthermore, expenditure information of the participants should include fees, total expenditure, average daily expenditure, and a break down by product. Additional information on the characteristics of the participants and of it the trip itself is advised.

Supply side data should include the number of meetings, investment in facilities, Gross Value Added, employment, number of businesses involved in the meetings industry. The supply and demand side data would then fit into the existing TSA, potentially as a tourism product and industry. The results would ideally show the demand side value of consumption resulting from the activity of meetings. Furthermore, how much of the meetings' activity contributes to a country’s GVA.
References


Blake A et al. (2001), The Economy-Wide Effects of Foot and Mouth Disease in the UK Economy. Christel Dehaan Travel and Research Centre, Nottingham University


**Figure 3: Summary of Event Evaluation**

<table>
<thead>
<tr>
<th>2. Measure net direct impact.</th>
<th>1. Define the host economy.</th>
<th>3. Estimate total economic impact.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Existing data sources</strong> – Using IPS and UKTS to project spending in region during event. The difference between projected and actual spending is the net direct spending. Only relevant for events taking place at national and international level, e.g. <strong>Mega</strong>, and to a lesser extent, <strong>Major</strong> events.</td>
<td><strong>Mega event e.g.</strong> Olympics</td>
<td><strong>CGE models</strong> – An extension to IO modelling, CGE models are most appropriate for measuring the economic impact at a multiregional or multinational level. This is probably most applicable to <strong>Mega</strong> and <strong>Major</strong> events.</td>
</tr>
<tr>
<td><strong>Conduct visitor questionnaire</strong> – If the use of existing data sources is not feasible, a visitor questionnaire should be conducted. This should cover all parties: spectators, attendees, event organiser, and participants. It should also identify each respondent in terms of Table 1 in order to derive net as opposed to gross increased spending, as illustrated by Figures 1 and 2. Applicable to <strong>Mega</strong> and <strong>Major</strong>, but more suitable for regional or low scale events such as <strong>national, large regional and local events</strong>.</td>
<td><strong>National Event e.g. Glastonbury</strong></td>
<td><strong>IO models</strong> – If a complex CGE model isn’t necessary, an IO model is the next best alternative. They are most suitable for assessing the economic impact of <strong>national</strong> or <strong>large regional</strong> events. However, the benefit of using them on very small, <strong>local</strong> events is questionable. Requires the construction of an IO table, which is a very data-hungry process.</td>
</tr>
<tr>
<td><strong>Major event e.g. FA Cup Final</strong></td>
<td><strong>Large regional Event e.g. Bristol half-marathon.</strong></td>
<td><strong>Existing multipliers</strong> – Theoretically, existing multipliers can be used on any scale of event. However, they must be relevant to the host economy. The existing multiplier should be for the same region, and calculated around the same time as the current event is taking place.</td>
</tr>
<tr>
<td><strong>Local Event e.g. Big Lunch events</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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Appendix One: Adapted from Welsh Assembly Government Classification of Events\(^2\)

**Mega Events** – like major events, these are peripatetic events with a global reach. They are distinguished by the fact that they are normally preceded by large scale capital projects, often involving building new venues and supporting infrastructure. They involve a major bidding effort and demand a high level of government resource and support at all stages from bidding to delivery. Typically, this means the creation of a stand-alone organisation with a dedicated budget to manage the entire process from start to finish. Examples include the Commonwealth Games, the Ryder Cup and the Olympics.

**Major Events** – these are peripatetic events defined by their scale and appeal to attract and influence large scale international audiences and extensive media coverage, and to deliver economic impact and significant visitor numbers for the host destination. Examples include an Ashes Test Match, an FA Cup Final and a major awards ceremony (e.g. the BRITs).

**Signature Events** – these are typically recurring events which enhance the image and cultural identity of a region, improve the wellbeing of people living in the region and provide a high quality experience for visitors. They are usually unique to a region or distinctive in flavour, and reflect culture, traditions and values. Successful Signature Events continuously re-invigorate and replenish their audiences. Examples include the Hay Festival, the Royal Welsh Show, or the Glastonbury Festival.

**Growth Events** – these are smaller events with a footprint and focus that is regional, local or sector led or ambitious new events, both of which demonstrate the potential to evolve and grow to become Major or Signature Events. These events can also act as milestones in growing the capacity, experience and credibility of destinations, acting as a necessary precursor to the hosting of targeted major events. There are many examples that could be cited but things like half marathons, small cultural events such as food festivals could come under this category.

**Local Events** – the smallest scale of event. These events may be classed as an event with relevance at the local area or destination and attract visitors from the surrounding area, or neighbouring authorities, but may not have a wider appeal. These types of events would normally cater for visitors already within the area, excursionists, or local residents. Examples might include family fun days, or events taking place in existing visitor attractions, e.g. an historic monument might organise a themed day. Local fetes and fairs might fall under this category. These are perhaps the most difficult events to measure in terms of the impacts, as there will be a large proportion of local resident participation.

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