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# Estimating the Economic Benefits of Event Tourism:

a review of research methodologies

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## 1. Introduction

Serious research on the economic benefits of tourism has a long history. Studies dating back to 1933 can be identified in which the focus is on the economic benefits to destination areas. More recently, numerous books and academic journal articles have been published addressing the economic benefits of visitors to specific events at destinations. The work of Getz (1994), Tyrell and Johnston (2001), Crompton *et al* (2001) and Hodur and Leistritz (2006) is of particular note in this respect.

There is a general consensus that whilst measures related to economic impact assessment are conceptually simple, the actual collection of such information is extremely difficult and time consuming. Moreover, given the importance typically attached to the results by the sponsors of events, and the not infrequent criticism that the benefits to host communities are overstated, great care has to be taken in the choice of approach to the research and the subsequent communication of the findings.

This paper seeks to review the various methods and models currently in use in estimating the economic impact of event visitors.

## 2. Definitions

A number of authors have commented on the confusion that surrounds the use of particular terminology in the field of event tourism. Before collecting data about the impact of events on tourism it is essential, therefore, to be clear about how the basic terminology is understood.

### 2.1. Tourism

Whilst the term 'tourism' in everyday usage is generally understood to refer to holiday travel, formal definitions used in tourism literature are broader; significantly, they also include travel away from home for other purposes, notably business travel and visiting friends and relatives. Tourism has historically, therefore, proved difficult to define. The need for an agreed definition to enable consistent statistical measurement and international comparisons of activity was recognised by the industry. Indeed, under the auspices of the United Nations, the World Tourism Organisation (WTO) proposed the following definition which was accepted in 1991 at the WTO Ottawa Conference on Travel and Tourism Statistics.

*'The activities of persons travelling to and staying in places outside their usual environment for not more than one consecutive year for leisure, business and other purposes.'* (WTO, 1991)

As a consequence, when attempting to identify and define the sub sectors that combine to make up the tourism industry as a whole, the notions of 'travel' and 'stay' play key roles. For Cooper *et al* (2005), the main sub sectors of the tourism industry are:

- Transportation - including both the means to reach the destination and movement within the destination;
- Accommodation - the largest sub sector, covering both commercial entities (e.g., hotels, guesthouses, farmhouse accommodation) which may or may not provide food and beverages to guests and private accommodation provided by family or friends;
- Attractions - seen as the most important component of a holiday and including natural resources (e.g., mountains, forests and beaches), built attractions such as theme parks, fairgrounds and golf courses, and heritage sites, museums/art galleries and events;
- Intermediaries - comprising wholesale tour operators responsible for packaging the diverse components of the tourism product and retailers such as travel agents who sell the final product directly to the consumer.

## 2.2. Visitor

A review of event evaluation studies indicates that the term ‘visitor’ is often used to mean attendees at events, irrespective of their place of residence. Importantly, however, in the context of tourism, and in keeping with the above definition, visitors are people who have travelled away from home. They are, therefore, defined by WTO as:

*‘Any person travelling to a place other than that of his/her usual environment for less than 12 months and whose main purpose of visit is other than the exercise of an activity remunerated from within the place visited.’ (WTO, 2005)*

## 2.3. Tourist

Whilst the above conceptual definitions convey the essential nature of tourism - i.e., in particular a movement of people away from home and their stay in a destination - further technical refinement by WTO has led to a clear distinction being made between different types of visitor based on *length of stay* at the destination. Thus ‘tourists’ are defined as visitors staying at least 24 hours at their destination and whose stay includes a minimum of one night.

## 2.4. Same-day visitor (Excursionist)

Based on the above (see 2.3), visitors staying for less than 24 hours and who not stay overnight are termed ‘same-day visitors’ or ‘excursionists’.

The above definitions are used throughout this paper.

## 3. Research Methods and Models

Although organisations exist which are dedicated wholly to the tourism industry (e.g., travel agents), for the most part the supply of goods and services within the sector is provided by a wide range of businesses and organisations also involved in supplying local residents and other markets, e.g., restaurants. Unlike other sectors, therefore, where government agencies provide sectoral, financial and economic data for businesses with the same primary activity or product, tourism activity covers a spectrum of industries and can only be measured by reference to the purpose of the individual purchases. Thus, for Frechtling (1994a, p.360):

*‘(Tourism) economic impact studies are confronted by an unusual challenge at the outset: to determine the impact of an end-use activity in a world of product-type data.’*

Tourism activity is, therefore, generally measured in terms of *demand*. This is based, initially, on estimates of the volume of visitors and then of their value to the economy under study, either at an aggregate level or in terms of the effects on individual activities such as eating/drinking and shopping.

### 3.1. Volume

The total number of tourism arrivals is a key measure of demand. Importantly, rather than just the number of individuals being counted, the number of *trips* is normally enumerated, with a distinction being made between international and domestic visitors.

#### 3.1.1. International tourism

International tourism by definition involves the crossing of a frontier and measurement is, therefore, theoretically amenable to the use of counting procedures at entry and exit points to a country. As such, this is the most common form of estimation, but it is often supplemented with data from international passenger carriers such as airlines or shipping companies.

### 3.1.2. Domestic tourism

Whilst the measurement of international tourism is normally given higher priority, due in part to the relatively high value of an individual trip, by far the most common form of travel is that by residents of a country within that country. It has been estimated that expenditure on domestic tourism worldwide 'may be worth up to ten times that on international tourism' (Cooper *et al*, 2005, p. 89).

At the same time the very nature of domestic tourism - that is, internal movement within national boundaries - makes measurement relatively difficult. In countries where the levels are thought not to be significant, internal tourism is often not measured at all, and indeed the benefits to be gained from the data collected have to be weighed against the cost and time of enumeration.

### 3.1.3. Methods of volume measurement

It is important to restate at this point that all measurement of tourism activity is based on *estimates*. In the view of a number of authors (Frechtling, 1994a; Getz, 1994; Cooper *et al*, 2005), results are subject to differing levels of error depending on the methodology used, a fact which should be borne in mind when statistical interpretation is undertaken. For Cooper *et al* (2005, p.95), however,

*'exact values are normally not what is important and, bearing in mind the shortcomings, we can see that tourism statistics often represent the best estimates available.'*

#### 3.1.3.1. Returns from accommodation establishments

Whilst this method does include visitors who stay in a destination for one night or more (i.e., tourists) *in recognised accommodation establishments*, it does not provide full coverage of tourism activity as same-day visitors are not included, nor are visitors staying with friends and relatives. Furthermore, ensuring regular, up-to-date returns from accommodation establishments can prove to be problematic when considered in the light of their other governmental data requirements.

#### 3.1.3.2. Household surveys

Household surveys are based on questionnaires administered to a sample of the population, with respondents normally asked about past behaviour. The U.K. Tourism Survey carries out surveys of domestic tourism behaviour, interviewing more than 100,000 households annually. The results are produced for each year and include data on trip frequency and value, together with a wide range of demographics. Results are disaggregated from the national level and extend to regional and county level statistics ([www.staruk.org.uk](http://www.staruk.org.uk)).

#### 3.1.3.3. Destination/visitor surveys

Surveys of visitors are often conducted at popular tourist destinations and typically take the form of personal interviews by teams of researchers. The information provided leads to estimates of the volume and value of tourism and visitor profiles. Although these surveys often involve high numbers, sampling is of particular concern and it is important that efforts are made to ensure an appropriate, varied selection of times and locations. Whilst, in spite of their shortcomings, accommodation surveys are often used, in tourism studies it is becoming 'increasingly common to collect information from the visitors themselves' (Cooper *et al*, 2005, p.91).

In the context of the evaluation of the impact of events on tourism, however, it can be argued that for an accurate estimation of tourism visitor numbers a basic data requirement concerns *attendance at the events themselves*. Whilst, for Getz (1994), gate counts or ticket sales are the preferred source of data in this respect, crowd estimates can be used where access is not controlled. Supplemented by information obtained from on-site surveys, an estimate of visitor numbers can then be made.

Whilst this approach is recommended by a number of researchers in the field of event tourism, some important issues have been raised. Firstly, in attempting to enumerate event attendance, Getz (1994) cautions against the use of estimates of mass crowds for free parades as he suggests that they tend to be dominated by *local*

*residents*. The inclusion of locals attending events in tourism impact assessments has some support in the literature and is based on the assumption that expenditure by the locals at the event acted to retain money in the local economy that would have been spent elsewhere. In a widely reported study of the 1990 Adelaide Festival, residents attending the festival were asked if they stayed at home because of the event rather than take a vacation out of the state. The researchers concluded that 20% of resident attendees at the event were 'holidaying at home' and would have otherwise travelled out of the state. Accordingly, a proportion of resident expenditure was counted as a benefit of the festival.

Whilst it has been acknowledged as conceivable that the strength of cultural and arts events is such that residents do choose to spend locally rather than elsewhere, in general the inclusion of locals in impact assessments (in terms of their volume and their value) is seen to be, at best, 'misleading' (Hughes, 2000, p.173). For Getz (1994, p. 441), the practice is 'invalid'; he argues that the expenditure should be considered as an internal transfer only and not as an incremental benefit to the local economy.

Thus, as can be seen, the definition of 'resident' and 'non-resident' is critical in any analysis of the tourism impact on a local economy. Getz (1994) strongly recommends the clear definition of the area of study at the outset. Care should be taken to include the most important aspects of the impact and avoid too wide a focus which may risk masking the effects with 'extraneous' activity.

In addition, the inclusion or otherwise of two further categories of visitor are seen to be problematic by researchers. 'Casuals' are defined as visitors who are already in the area under study for other reasons and who attend the event 'incidentally'. 'Time switchers' are defined as visitors who had been planning to visit the study area but changed the timing of their visit specifically to attend the event (Frechtling, 2006).

Whilst identifying 'casuals' through survey questioning is relatively straightforward, and their exclusion is generally agreed upon, the issue of 'time switching' is more problematic and has not been treated consistently by researchers. In some cases when it has been established through survey questioning that the event attendee had intended to visit the area in the future, at a time outside of the event timescales, then their expenditure has been excluded from the benefits attributed to the event. For Frechtling (2006), however, these possible future benefits were not guaranteed, whereas the benefits accruing from actual attendees at the event are tangible and it is therefore legitimate to include them in estimates of the economic impact of the event. Thus, there is 'no principle served by trying to identify time switchers' (Frechtling, 2006, p.29).

### **3.2. Value**

Given the heterogeneous nature of tourism demand alluded to above (see 3.1), estimation of the value of visitors to the local area is again considered to be time consuming, methodologically complex and even – for Frechtling (1994a, p.360) – 'arcane'. A number of methods and models are widely used, as explored in the sub-sections below.

#### *3.2.1. Expenditure estimates*

The vast majority of studies start with an estimation of visitors' expenditure. In addition to expenditure on the entrance to events, visitors also make 'ancillary spending', for example, on hotels, restaurants and transport. Estimates of the amount of ancillary spend relative to ticket prices vary significantly across events and countries. For example, it was estimated that at the 1990 Adelaide Festival, for every A\$1 spent on tickets A\$5.60 was spent on accommodation, meals and transport. In a broader context, meanwhile, it was found that visitors to the West End in London spent £1.76 on ancillary items for every £1 of expenditure on tickets.

By far the most popular method for calculating estimates of visitor expenditure is by visitor survey. A sample of visitors are questioned on their expenditure and are typically asked to identify spend on admission, travel, accommodation, meals and other items (including souvenirs). For Getz (1994), the process continues with the

calculation of the average (mean) spend by category which is then, in turn, multiplied by the estimate of the number of visitors or trips as appropriate.

Whilst for Cooper *et al* (2005, p.152) 'tourist expenditure can only be estimated with some degree of accuracy by undertaking specific visitor expenditure surveys', important issues have been raised about the validity of surveys and, more generally, about the limitations of the use of expenditure as a measure of economic benefit. It is widely acknowledged that figures of expenditure based on visitor survey need to be treated with caution due to the possibility that respondents may not be able to accurately recall their expenditure, nor, if asked, would they be able to predict their spend with any certainty. Evidence suggests that the most accurate results are obtained if questions requiring recall solely relate to the previous 24 hours (Frechtling, 2006).

Work by WTO, in attempting to standardise terminology in the industry, extends the definition of visitor expenditure in terms of *consumption* rather than purchases. Thus,

*'Visitor consumption is the basic concept measuring tourism activity and refers to total consumption of, or on behalf of visitors and could, consequently, also be termed as "visitor demand"... Essentially all transactions where there is a direct link between the visitor and the producer/ provider of the good or service are within scope.'* (WTO, 2005)

Importantly, whilst accommodation for a business visitor may, in fact, be purchased by the employer rather than the individual themselves (in keeping with the above definition), the expenditure should be included in any estimates. Expenditure estimates based on consumption, therefore, exceed those based on purchase. This broader definition is now widely accepted and it is thus strongly recommended that survey questions are designed so that such relevant data is collected - especially where a sample of visitors includes business tourists.

More generally, whilst the use of expenditure is 'by far, the most popular method' of estimation (Frechtling, 1994a, p.361), for Cooper *et al* (2005, p.162) the approach is seen to be 'misleading'. They argue it is not correct to assume that the figures reflect the economic benefit of tourist expenditure. Rather the measurement of economic benefit is best understood in terms of *the gross increase in wealth or income* of the people located in the area under study, and not in terms of increases in gross expenditure.

### 3.2.2. Multiplier models

Attempts to estimate the deeper effects of increases in tourism expenditure upon an economy are usually made by use of multiplier models. The multiplier concept is based on the premise that initial expenditure by visitors permeates through the rest of the economy. During this process, however, a proportion of the original spend is not retained within the local economy. Such leakages can be due to the external sourcing of supplies, wages being paid outside the area, or profits and taxes being remitted elsewhere. The multiplier is, therefore, the ratio of change between the *original change* in economic activity (in this case, tourism expenditure) and the *ultimate change* in activity that results as the money is spent and re-spent through various sectors of the economy. The value of the multiplier depends on the amount of leakage between each stage of the process.

The effects on the economy can be estimated at three levels: that of direct effects, indirect effects and induced effects.

- *Direct effects:* The direct level of impact recognises that the initial change in expenditure will create some income both for the firms that receive the expenditure and for the employees of those firms.
- *Indirect effects:* The indirect level of impact recognises the need of the initial recipient of the expenditure to make purchases of goods and services from other sectors of the economy. Thus, for example, an increase in the demand for hotel accommodation may cause hotels to increase their demand for food and

beverages, laundry services, electricity and water. Furthermore these suppliers will, in turn, need to purchase goods and services from other establishments within the local economy. This process continues until the amount of money being re-spent during each round of activity becomes negligible.

- *Induced effects*: The existence of induced effects is based on the assumption that, as income levels rise throughout the economy due to the indirect effects of the original increase in expenditure, a proportion of the increased income will be re-spent on goods and services within the local economy.

### 3.2.2. Types of multiplier

A common approach in tourism studies relating to the impact of arts or culture is the use of the sales (or transactions) multipliers where the original, direct tourist expenditure is linked to the final total business revenue in the economy. This approach was followed by Myerscough in his 1991 study of Glasgow 1990, when he estimated that the multiplier value between original expenditure and final expenditure was 1.2. Other studies of this kind have estimated that the multiplier falls within the range of 1.0 to 1.5 and importantly, therefore, it should be noted that the value of a *sales* multiplier is more than one.

While in its simplest form, therefore, the multiplier links original tourism expenditure to final sales, for a majority of authors the most important indicator of the economic impact is the income multiplier which relates original expenditure to changes in wages, salaries and profits. For Hughes (2000, p.175) this represents the 'normal multiplier', a view supported by, amongst others, Cooper *et al* (2005), Frechtling (1994b) and Getz (1994).

The size of the multiplier value varies according to circumstance because it depends on the pattern of tourist expenditure, the nature of an area's economy and, crucially, the linkages between sectors within the economy. Getz (1994) cites studies of UK tourism impacts which estimate income multipliers in the range of 0.18 and 0.47; a 1996 study of the Edinburgh Festival quotes a multiplier of 0.2, while research into the impact of the Adelaide Festival found that the ratio between expenditure and income was 0.6. It should be noted, therefore, that due to leakages from the local economy the value of an *income* multiplier is less than one.

Notwithstanding the choice of multiplier, the calculation of the value of the multiplier to be used at each stage is obviously critical. Whilst some studies have attempted to use multipliers developed by other researchers in different circumstances, it is, as Frechtling (1994b, p.383) states 'a mistake to think of the tourist or tourism industry as monolithic'; different types of tourist have different impacts on an area's economy. The approach is, therefore, not recommended, although the calculation of the multiplier value requires considerable time and resources.

Criticisms of the broad, aggregate approach of multipliers have led to the development of increasingly sophisticated models. **Input-output** (I-O) models are based on dividing the economy of the area under study into sectors and the construction of a matrix. Each sector of the economy is shown in each *column* as a purchaser of goods and services from other sectors in the economy and in each *row* as a seller of output to each of the other sectors. Whilst I-O models provide a means of estimating the effect of additional exogenous expenditure on every sector of the economy (even down to the level of individual establishments), the initial extensive, additional data requirements are seen as prohibitive by some commentators, including Vaughan *et al* (2000) and Hodur and Leistriz (2006).

Moreover, I-O models are criticised for the assumptions that underpin their utilisation (Hodur and Leistriz, 2006). In particular, the models are based on a perfectly elastic supply of inputs and constant prices. In response, **Computable General Equilibrium** (CGE) models have been developed where production functions and prices are allowed to vary. Furthermore, whilst I-O analysis only provides an aggregated estimate of the additional income accruing to study area households (with no indication of the distribution of income benefits between lower and higher income households), **Social Accounting Matrices** (SAM) have been developed. Both CGE and SAM models are, however, more complex and require more extensive data requirements than

I-O models. Traditionally, they have been seen as more appropriate for the study of national economies or larger regions, rather than estimating the local effects of events.

In summary, methodological approaches to the estimation of the value of visitors to events vary. For some, the analytical advantages of I-O models are seen to be 'overwhelming.... and appear to be the most appropriate for most analyses of the economic impact of events' (Hodur and Leistriz, 2006, p.75). Furthermore, they appear to be the most widely used techniques reported in recent literature.

Where full I-O modelling is seen to be impractical or too expensive, multiplier analysis is seen to be 'cost-effective and particularly well suited to regional analysis' (Vaughan *et al*, 2000, p.112). Getz (1994, p.443), however, claims that, as there are few backward linkages into the local economy from events tourism, 'reliable studies have demonstrated that the economic benefits of events are predominantly the direct result of incremental tourist expenditure, not secondary effects stemming from the respending of this money and resultant creation of new income and jobs'.

Factors affecting the choice of approach include the size of the event being assessed, the scope of the analysis, and the specific concerns of relevant decision makers. Ultimately, however, it is argued that 'accuracy and information are related to the budget available for the study, which is true of almost any study' (Vaughan *et al*, 2000, p.112) – that is, such research involves a *trade-off between accuracy and cost*.

### 3.2.3. Supply-side model (STEAM)

Whilst the above approaches are based on changes to the value of exogenous demand, and, in the first instance, are based on visitor surveys, models using supply-side data have been developed. Of these, STEAM is the most widely used and has gained popularity with local authority organisations.

Inputs to the model include not only basic data on visitor numbers and attendance at attractions but also bed-stock in the area and occupancy levels by type of accommodation. The model does not claim to be a full input-output analysis model; rather, it is a spreadsheet model where outputs include estimates of visitor expenditure and employment supported by tourism. The model quantifies the local impact of tourism for both overnight and same-day day visitors.

The confidence level of the model is claimed to be plus or minus 10% in respect of the yearly outputs, and plus or minus 5% in respect of trend data. The logic of the model is constant across all studies but the values of the relationships between variables are specified at each stage by the user depending on the structure of the local tourism sector, survey material and expert opinion. The model is used by a number of local authorities in the UK and is currently being used by The Mersey Partnership (TMP), who are working in conjunction with Global Tourism Solutions (UK) Ltd. (the owners of the commercial rights to the model) to constantly refine the model.

As mentioned above, STEAM is dependent on data on bed-stock and occupancy rates and the lack of availability of regular, up-to-date, accurate data from the accommodation providers in the area was highlighted as an issue by TMP's research manager at a recent meeting with the author. Approximately 15 out of a total population of 50 establishments were supplying occupancy data to TMP on a regular basis, although the picture was expected to improve.

## 4. Recent Practical Applications

### 4.1. European Capitals of Culture

In their 2004 study of European Capitals of Culture from 1995 to 2004, Palmer/Rae Associates base their analysis on reports produced by host cities and note that, overall, the provision of data is 'patchy' (p.108). It is important to note at the outset that, for the purposes of their report, the term 'visitor' includes not only same-day visitors and those visitors staying at least one night in the area, but also, all those attending events.

Definitional issues, therefore, make estimations of visitor numbers ‘at best a very inexact science’ (*ibid.* p.110); as a consequence, the report focuses on the number of people staying in commercial accommodation in the city during the year, an approach which excludes the effect of same-day visitors.

Similarly, comparisons of visitor expenditure between the capitals prove to be difficult due to the different assumptions made in each city. Accommodation, food and drink, cultural expenditure and travel were the most frequently counted elements, although in some cases only travel to the city was included. In the 2007 study undertaken by Palmer/Rae Associates focussing on the Lille 2004 event, tourism impact was measured in terms of the number of enquiries to the Lille tourist office, rail and air traffic to the city, and hotel overnight stays. Whilst a small survey was carried out, questions focussed on visitor profiles and activities, and no data on expenditure was captured.

There is some evidence of the use of multipliers in ECoC evaluations. In particular, Myerscough (in his 1991 study of Glasgow 1990), and more recently Herrero *et al* (in their 2007 review of Salamanca 2002) both estimate economic impact using sales multipliers. Again, it is important to note that, in the latter study, the authors do not differentiate between visitors to the area and local residents, and spend by both is included in their estimates of total expenditure.

#### 4.2. Other events

A review of arts and cultural events - other than those produced under the auspices of ECoC - provides some evidence for the use of multipliers. In particular, the multiplier concept was used to estimate income in independent, 1996 studies of both the Adelaide and Edinburgh festivals (cited in Hughes, 2000).

#### 4.3. Non event-based arts and cultural tourism

In his seminal work, Hughes (2000) cites three uses of sales multipliers within the broader context of studies into the continuing economic impact of the arts on tourism. Firstly, in a 1993 study, The Port Authority of New York and New Jersey estimated that original expenditure of \$1,300 million increased by a multiplier of 1.76 resulting in an overall impact of \$2,300 million. Similarly, in a 1998 study of Broadway a sales multiplier of 1.77 was used, whilst in the UK, research into the effect of the West End on tourism utilised a multiplier of 1.5 to estimate total expenditure by visitors.

### 5. Data Availability

As mentioned above (see 3.1.3.2), statistics on tourism by residents of the UK are published annually by the United Kingdom Tourism Survey (UKTS). The figures include both the volume and value of tourism at the national, regional and county level. Estimates of domestic tourism on Merseyside are, therefore, available year by year ([www.staruk.org.uk](http://www.staruk.org.uk)).

The Mersey Partnership (TMP) conducts a number of surveys in the region. Visitor surveys are carried out every five years, the most recent being in 2005. Destination benchmarking surveys are undertaken every two years, and it is intended that the survey planned for 2008 will include some specific questions relating to Liverpool 08. Both surveys estimate visitor numbers and expenditure. Gateway surveys, at both the airport and the ferry port, are carried out. Only non-UK residents are interviewed and the results are used to estimate expenditure by overseas residents.

Whilst TMP publish regular statistics on visitor numbers and their expenditure, only occasional use of multipliers has been noted. For a more in-depth analysis of the economic impact of tourism, TMP utilise the STEAM model. Inputs include Tourist Information Centre visitor numbers, bed-stock, accommodation occupancy rates, and expenditure (as derived from visitor surveys). Main outputs are total expenditure and an analysis of visitor origins.

In a broader context, ATLAS and Interarts collaborated in 2004 on a global study of cultural tourism. The methodology is based on extensive visitor surveys at cultural attractions and events around the world. Results include estimates of visitor expenditure and, whilst only preliminary findings are currently available, it is interesting to note that the average total spending in a destination for cultural tourists groups was higher than for visitors on rural, beach or city trips ([www.tram-research.com/atlas](http://www.tram-research.com/atlas)).

## 6. Conclusion and Recommendations

As can be seen throughout this paper, definitional issues significantly restrict the utility of a number of the studies on the economic benefits of events in the context of tourism. This is especially true when attempting comparisons of the various ECOC events. From a review of the literature, however, it is apparent that the principal measure of the effect of the events is the number of bed-nights in the area, and it is recommended, therefore, that if comparisons are to be made with previous ECOC events then the same method be adopted.

In addition, a wider range of indicators can be used to compare with other ECoCs and other major events. A summary of the indicators used in the main reports consulted as part of this research is shown below in matrix form. It is recommended that a number of these continue to be used.

## 7. Bibliography

- BDRC (2008), *Liverpool Capital of Culture Events (2008), Opening Event: St. George's Plateau Economic Impact Assessment*, Liverpool City Council. (Unpublished Draft Report)
- Brown, M.D., Var, T. and Lee, S. (2002), Messina Hof Wine and Jazz Festival: An Economic Impact Analysis, *Tourism Economics*, Vol. 8, No. 3, pp. 273-279.
- Cooper, C., Fletcher, J., Fyall, A., Gilbert, D. and Wanhill, S. (2005), *Tourism: Principles and Practice*, 3<sup>rd</sup> edition, Pearson.
- Crompton, J.L., Lee, S. and Shuster, T.J. (2001), A Guide for Undertaking Economic Impact Studies: The Springfest Example, *Journal of Travel Research*, Vol. 40, August, pp. 79-87.
- Daniels, M.J., Norman, W.C. and Henry, M.S. (2004), Estimating Income Effects of a Sport Tourism Event, *Annals of Tourism Research*, Vol. 31, No. 1, pp. 180-199.
- Dwyer, L., Forsyth, P and Spurr, R. (2004), Evaluating Tourism's Economic Effects: New and Old Approaches, *Tourism Management*, Vol. 25, pp. 307-317.
- ERM Economics (2003), *European Capital of Culture 2008: Socio-Economic Impact Assessment of Liverpool's Bid*, Liverpool City Council.
- Evans, G. and Shaw, P. (2004), *The Contribution of Culture to Regeneration in the UK: A Report to the DCMS*, DCMS.
- Evans, G. (2005), Measure for Measure: Evaluating the Evidence of Culture's Contribution to Regeneration, *Urban Studies*, Vol. 42, Nos 5/6, pp. 959-983.
- Frechtling, D.C. (1994a), Assessing the Economic Impacts of Travel and Tourism: Introduction to Travel Economic Impact Estimation, in *Travel, Tourism and Hospitality Research: A Handbook for Managers and Researchers*, 2<sup>nd</sup> edition, edited by J.R. Brent Ritchie and Charles R. Goeldner, John Wiley & Sons.
- Frechtling, D.C. (1994b), Assessing the Impacts of Travel and Tourism: Measuring Economic Benefits, in *Travel, Tourism and Hospitality Research: A Handbook for Managers and Researchers*, 2<sup>nd</sup> edition, edited by J.R. Brent Ritchie and Charles R. Goeldner, John Wiley & Sons.
- Frechtling, D.C. (2006), An Assessment of Visitor Expenditure Methods and Models, *Journal of Travel Research*, Vol. 45, August 2006, pp. 26-35.
- Getz, D. (1994), Event Tourism: Evaluating the Impacts, in *Travel, Tourism and Hospitality Research: A Handbook for Managers and Researchers*, 2<sup>nd</sup> edition, edited by J.R. Brent Ritchie and Charles R. Goeldner, John Wiley & Sons.
- Global Tourism Solutions (UK) Ltd. (2006), *Overview of STEAM*, GTS.
- Herrero, L.C., Sanz, J.A., Devesa, M., Bedate, A. and del Barrio, M.J. (2007), Economic Impact and Social Performance of Cultural Macroofestivals, in *Cultural Tourism: Global and Local Perspectives*, edited by Greg Richards, The Haworth Press.
- Hodur, N.M. and Leistriz, F.L. (2006), Estimating the Economic Impact of Event Tourism: A Review of Issues and Methods, *Journal of Convention and Event Tourism*, Vol. 8, No. 4, pp. 63-79.
- Hughes, H. (2000), *Arts, Entertainment and Tourism*, Butterworth-Heinemann.
- Impacts 08 (2007), *Baseline Report 2006/7*.
- Impacts 08 (2007), *Benchmark Indicators Report, 2000-2006*.
- Lee, M.J. (2006), Analytical Reflections on the Economic Impact Assessment of Conventions and Special Events, *Journal of Convention and Event Tourism*, Vol. 8, No. 3, pp. 71-85.
- McKercher, B. (2002), Towards a Classification of Cultural Tourists, *International Journal of Tourism Research*, Vol. 4, pp. 29-38.
- Maitland, R. (2007), Cultural Tourism and the Development of New Tourism Areas in London, in *Cultural Tourism: Global and Local Perspectives*, edited by Greg Richards, The Haworth Press.

- Morgan, A. and Condliffe, S. (2006), Measuring the Economic Impacts of Convention Centers and Event Tourism: A Discussion of the Key Issues, *Journal of Convention and Event Tourism*, Vol. 8, No. 4, pp. 81-100.
- Myerscough, J. (1988), *The Economic Importance of the Arts in Britain*, Policy Studies Institute.
- Myerscough, J. (1991), *Monitoring Glasgow 1990*, Glasgow City Council.
- Palmer/Rae Associates (2004), *European Cities and Capitals of Culture*, EC, Brussels.
- Palmer/Rae Associates (2007), *European Cultural Capital Report No. 1*, ATLAS.
- Phythian-Adams, S.L., Sapsford, D. and Southern, A. (2008), *Considering the Economic Impacts of the 2008 ECoC: A Review of the Literature Concerning Economic Multiplier Effects*. (Unpublished Draft Report)
- Plaza, B. (2000), Evaluating the Influence of a Large Cultural Artifact in The Attraction of Tourism, *Urban Affairs Review*, Vol. 36, No. 2, pp. 264-274.
- Prentice, R. and Anderson, V. (2003), Festival as Creative Destination, *Annals of Tourism Research*, Vol. 30, Issue 1, pp. 7-30.
- Richards, G. (2007), Introduction: Global Trends in Cultural Tourism, in *Cultural Tourism: Global and Local Perspectives*, edited by Greg Richards, The Haworth Press. [If including, have the source below first, so in alphabetical order.]
- Richards, G. (2007), Conclusion: The Future of Cultural Tourism-Grounds for Pessimism or Optimism? in *Cultural Tourism: Global and Local Perspectives*, edited by Greg Richards, The Haworth Press.
- The Mersey Partnership (2008), *Turner Prize Ceremony at Tate Liverpool: Economic Impact Assessment*, England's Northwest Research Service for Economic Development and Tourism.
- Tyrell, T.J. and Johnston, R.J. (2001), A Framework for Assessing Direct Economic Impacts of Tourist Events: Distinguishing Origins, Destinations and Causes of Expenditure, *Journal of Travel Research*, Vol. 40, August 2001, pp. 94-100.
- Vaughan, D.R., Farr, H. and Slee, R.W. (2000), Estimating and Interpreting the Local Economic Benefits of Visitor Spending: An Explanation, *Leisure Studies*, Vol. 19, pp. 95-118.
- WTO (1995), *Collection of Tourism Expenditure Statistics*, WTO, Madrid.
- WTO (1995), *Collection of Domestic Tourism Statistics*, WTO, Madrid.
- WTO (2000), *Data Collection and Analysis for Tourism Management, Marketing and Planning*, WTO, Madrid.
- WTO (2005), *City Tourism and Culture: The European Experience*, WTO, Madrid.

## 8. Appendix: Indicators used in Major ECoC Impact Reports

Report \ Indicator	ERM Economics (2003) – <i>Impact Assessment of Liverpool's Bid</i>	Impacts 08 (2007) – <i>Baseline Report 2006/7</i>	Myerscough (1991) – <i>Monitoring Glasgow 1990</i>	Palmer/Rae Associates (2004) – <i>Report on ECOCs 1995-2004</i>	WTO (2005) – <i>City Tourism and Culture</i>	Palmer/Rae Associates (2007) – <i>Report on Lille 2004</i>
Bed-nights		✓	✓	✓	✓	✓
Number of hotel rooms		✓				
Hotel occupancy		✓	✓			✓
Number of hotel rooms built/ refurbished		✓				
Hotel average room rate		✓				
Visitor numbers	✓	✓	✓		✓	
Tourist trips involving attendance at event			✓			
Attendance at events		✓	✓			✓
Visits to museums, galleries, etc.			✓			✓
Tourist Office Enquiries			✓			✓
Rail Passengers						✓
Air Passengers						✓
Number of conferences & delegates		✓	✓			
Visitor expenditure	✓	✓	✓	✓		
Income effect	✓		✓			
Employment effect	✓	✓	✓			

Measure of bed-nights (or any other individual indicator) does not, however, cover full potential value of visitor impact; for example, bed-night calculations do not include recognition of same-day visitors and, given their significance in published Liverpool 08 documents, it is important that steps are taken for their identification and enumeration. As shown above, several comparative reports use visitor expenditure and, as a minimum, visitor expenditure should be estimated.

For Getz, in his authoritative 1994 paper, the recommended impact evaluation process should include the following steps:

1. Formulate precise research goals identifying principal research interest and addressing definitional issues;
2. Determine data needs and appropriate methods;
3. Determine attendance at the events, and calculate number of visitors and visits;
4. Conduct visitor surveys;
5. Estimate total expenditure by visitors;
6. Estimate total visitor expenditure attributable to the event.

As can be seen, the process is dependent on surveys of visitors to enable estimates of expenditure to be made, and it is recommended, therefore, that specific surveys be carried out at Liverpool 08 events. It should be noted, moreover, that the above process provides a framework within which the major issues identified in this paper can be addressed, and it is thus also recommended that issues of definition and enumeration are resolved, bearing in mind standard event tourism definitions and practices.

Whilst Getz (1994, p.443) stresses his view that 'total incremental expenditure is not all economic benefit to the area', he appears to be ambivalent about the adoption of multiplier models. For Frechtling (2006, p.27), however, the use of multipliers is 'essential... to successfully measuring the full range of visitor benefits' – a view supported by Phythian-Adams *et al* (2008).

Although income multipliers are acknowledged as the best approach for estimating the impact on the host community's standard of living, the use of sales multipliers is widespread. For Brown *et al* (2002), this is, in part, due to the fact that the latter tend to produce higher figures than do the former and so help in avoiding perceptions of a relatively insignificant economic impact.