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The significance of festivals to regional economies: measuring the economic value of the Grahamstown National Arts Festival in South Africa

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This paper estimates the economic value of South Africa's longest running national arts festival, the Grahamstown National Arts Festival in the Eastern Cape Province. The Eastern Cape is a middle-income province (6.6% of national GDP), settles 9.6% of the South African population and has a high unemployment rate. A survey was conducted in July 2009, with 450 visitors completing a structured questionnaire at various sampling locations across the festival area. A social accounting matrix (SAM) for the province was used to estimate the economic value of the arts festival to the region's economy (adopting the classical SAMs multiplier approach) with visitor depending data. This research shows that the festival makes a significant contribution to revenue generation as well as to job creation, thereby confirming that investments made by government in arts and culture can address economic objectives.

Keywords: arts festivals; events; social accounting matrix; South Africa

JEL classifications: C6; D57; I32; O18; R15; Z11

In developing countries, aspects such as arts and culture are not regarded as main priorities as the governments in these countries are more concerned with health, education, housing and job creation issues. However, Bowitz and Ibenholt

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(2009) state that economists are asking the question: what is the positive effect for the local economy from investing in arts and cultural festivals? Although one might find that occasionally local or regional government agencies sponsor arts and cultural events, in the case of South Africa most of these events are privately managed, sponsored and promoted. Therefore, one could say that investment in the arts and culture sector is very dependent on private-sector involvement. This despite the fact that Long and Perdue (1990) have indicated that hosting of events such as arts festivals contributes to or benefits the local economy and its communities in various ways, since such festivals create jobs, generate income, attract investment, extend the tourist season, educate visitors, improve people's quality of life, serve as attractions, develop infrastructure, promote an area or destination, grow arts and culture, create tax revenues and boost citizen morale and pride. In support of the economic benefits from arts festivals, Slabbert *et al* (2009) revealed that South Africa's largest arts festival, the Klein Karoo National Arts Festival (KKNK), generated R91.3 million in visitor spending in 2009, so confirming the importance of festivals as generators of revenue.

Grahamstown National Arts Festival celebrated its 34th year of existence in 2008 and is South Africa's longest-running arts festival. The festival is hosted in the small town of Grahamstown in the Eastern Cape Province. The Eastern Cape is a middle-income province (6.6% of national GDP), settles 9.6% of the South African population and has a high unemployment rate. Events are seen as one of the methods to generate revenue and to combat poverty in the region. The festival began in 1974, with just over 60 items and exhibits. Currently, it offers over 500 productions that include dramas, stage shows, music, cabaret, jazz and rock. It is held annually over an 11-day period during the month of July, during which time the first few days form the fringe programme and the last eight days form the main programme. The purpose of the event is to provide a cultural experience for tourists and visitors (*festinos*), and to grow the local economy.

This paper determines the economic value of the oldest national arts festival in South Africa, the Grahamstown National Arts Festival. The paper will be structured as follows. The next section provides, as theoretical background, a brief survey of the relevant literature. This is followed in the subsequent two sections by, respectively, a brief overview of the festival and an account of the method of research. The penultimate section contains a profile of the visitors to the 2009 Grahamstown National Arts Festival, followed by a discussion of the results and findings of our analysis. The final section offers our conclusions.

Literature review

Hoyle (2002) indicated that the number, diversity and popularity of events have grown spectacularly over the past several decades. In support of this, South Africa offers approximately 300 festivals per year (Saayman and Saayman, 2008). These festivals include arts, music, agriculture, marine and food and wine. Currently, the country offers four national arts festivals. Jackson and O'Sullivan (2002) are also of the view that arts festivals are one of the fastest-growing

segments of the event sector. The focus of arts festivals is twofold: firstly, to preserve and to grow arts and culture; and secondly, to contribute to the economy of a region or destination. Therefore, it is not just about growing the arts but is also an attempt to benefit the community, in this case, that of Grahamstown.

Ritchie and Goeldner (1994) define economic impact as the net economic change in a host community that results from the spending of tourists or visitors in a given area. Therefore, one can say that the purpose of an economic impact analysis is to measure the economic benefits that a community receives (Fayos-Sola, 1997; Van Heerden, 2003). This knowledge will help to enhance the way of life, the economy and the environment of the host population. The magnitude of the economic impact of tourism, however, depends on the following (Saayman, 2007):

- the total number of tourists who visit an area/country
- the duration of the stay
- the average spending of the tourists in that area/country
- the circulation of tourism expenditure through the country.

The last item implies the multiplier effect, which is normally explained in terms of the direct, indirect and induced effect that expenditure has on the regional economy. Since economic impacts do not end with the initial tourist expenditures, multiplier effects should also be considered as an argument for community and public support of festivals (Kim *et al*, 1998). However, it should be kept in mind that not all expenditures accrue locally, particularly in the more rural regions (Long and Perdue, 1990). The importance of this is that it shows the leakages from the local economy – and the smaller the leakages, the greater the economic impact of the initial spending. To estimate economic impacts, the additional 'new money' generated for the local economy due to tourism is normally considered (Gelan, 2003). Within tourism, tourists (not locals) visiting a province or region usually create this 'new money'. From a regional perspective, both foreign (tourists from outside South Africa's borders) and domestic (tourists from provinces other than the Eastern Cape) tourists visiting the region represent 'new money', while day excursions (by *festinos* from the Eastern Cape) to the region are excluded, but rather captured in the form of 'retained locals'.[1]

Economic impact analyses have been implemented in various fields of study, including areas as diverse as sport tourism (for example, Kang and Perdue, 1994; Gelan, 2003; Diakomihalis and Lagos, 2008; Saayman and Rossouw, 2008), regional and country economic impacts (for example, Kottke, 1988; Randall and Warf, 1996; Saayman and Saayman, 1997; Wagner, 1997; Zhou *et al*, 1997; Fretchling and Horvath, 1999; Stynes, 1999; Rhodes, 2000; Walpole and Goodwin, 2000; Oh, 2005; Ahlert, 2009). Analyses have been undertaken on the economic impact of events (for example, Fayos-Sola, 1997; Gelan, 2003; Van Heerden, 2003; Saayman and Saayman, 2004; Van der Merwe and Saayman, 2008) and into wildlife and culture tourism (for example, Nijkamp, 2004; Getzner *et al*, 2005; Bowitz and Ibenholt, 2009).

It seems from the review of available literature that although economic impact analyses have been conducted at arts festivals, not much has been done using a social accounting matrix (SAM). This study provides estimates of the

total economic impact of a single short-term event in South Africa's Eastern Cape Province, using multipliers calculated from a SAM model. SAMs quantify, at a point in time, the economic interdependencies in an economy, such as a province/region or country, and contain more social detail. Tourism studies that have used SAM multipliers include Aruna *et al* (1998), Grado and Lord (1998), Kim *et al* (1998), Crompton (1999) and Frechtling and Horvath (1999). The classical SAMs multiplier approach is used in this study to determine how much output, income and value added are generated by tourist expenditures at the festival.

In recent years there has been a move to standardize the evaluation of festivals and events through the adoption of applied general equilibrium (AGE) modelling for determining economic impact (Brown and Trimboli, 2007). Where input–output (I–O) models, which had provided results that often overstated the financial outcomes and economic impacts of the events or festivals under investigation, were previously employed, AGE models accounted for quantitative adjustments in demand leading to rising prices and so curtailed the fixed price adjustment that occurred under linear-type models (Jago and Dwyer, 2006).

Jago and Dwyer (2006) also contend that the social impact of festivals and events, rather than the economic impact, may provide a more compelling argument for the continued existence, financial support and sponsorship of such festivals or events. It is therefore crucial for societies to look 'economy-wide' in their development philosophies and policies. For this reason, AGE models also seem to be a more suitable measurement tool.

However, despite these fundamental insights, this study makes use of multipliers calculated from a linear (I–O or SAM) model to evaluate the impact of spending at the Grahamstown National Arts Festival, for numerous reasons. Some of these reasons are that, to date, methods or tools to assess the subnational impacts of events or festivals have been lacking. One reason is that economic data, which allow quantitative simulation of policy impacts, are much richer at the national level. As a result, top-down approaches are often used to estimate the impact of events on South Africa's provinces. This, however, ignores many regional-level factors such as the effect of the local environment on economic activity, the proximity of firms from distinctive resources (clusters) and the quality of the regional labour market (Wing and Anderson, 2004). Moreover, the existing AGE models for South Africa are by now dated and would provide unreliable results. For future studies of this sort, it would, however, be more suitable to use a current AGE model to conduct the analysis.

Bowitz and Ibenholt (2009) believe that studies such as this are important because policy makers and sponsors increasingly seem to demand estimates of the effects on the local or regional economy of investing or sponsoring arts and cultural events. Saayman and Rossouw (2008) indicate that consultants seem to exaggerate the potential of economic spin-offs from hosting events, while another school of thought is of the view that true impact cannot be determined in the short run and it may take years before one can see the financial impact of these events. Despite these diverse schools of thought, it nevertheless remains important to conduct research regularly in order to enable informed decisions. These include policy, marketing, strategic management and investment decisions.

Method of research

The method used in the research will be discussed in the following sections, including the sampling method, questionnaire used, data collection and data analysis. Since the research required the collection of primary data, a visitor survey was conducted over a period of six days at the Grahamstown National Arts Festival during June/July 2009.

Sampling

Sampling was based on the availability and willingness of visitors to complete the questionnaire. Cooper and Emory (1995) show that for a population of 100,000 (*N*), the recommended sample size is 384. Since this festival attracted approximately 33,000 visitors (Slabbert *et al*, 2009), it was decided to distribute 450 questionnaires to ensure a sufficient number of completed questionnaires.

Questionnaire

The questionnaire used was similar to previous questionnaires used by Saayman and Saayman (2006) at the Klein Karoo National Arts Festival (KKNK) and at the Aardklop National Arts Festival in South Africa. The questionnaire included questions of a demographic nature (age, gender, language, occupation, province of origin), as well as travel and participation behaviour (number of people in the group, days spent at the festival, spending at the festival and genres of productions attended).

Data collection

As mentioned earlier, this festival consists of two parts, a fringe programme and the main programme. The fringe programme is hosted first and, thereafter, the main programme. The focus of the survey was on the main programme, as the fringe programme was aimed specifically at the community of Grahamstown. All questionnaires were completed at the main festival grounds, where fieldworkers circulated to minimize bias. Questionnaires were distributed progressively during the last six days of the festival. Therefore, fieldworkers distributed 50 questionnaires on day one and increased the number by 10 per day for six days. Of the 450 questionnaires distributed, 435 questionnaires were collected for data capture during the festival.

Data analysis

Data were coded in Microsoft Excel and processed using SPSS (Statistical Package for the Social Sciences). The method used to estimate the direct, indirect and induced effects of the festival was a SAM multiplier analysis. The main application of this form of analysis is to examine the effects on the economy of a change in final consumption expenditure by *festinos*.

Multipliers derived from a SAM for the Eastern Cape Province have been employed as summary measures that quantify direct, indirect and induced effects on all industries of changes in demand for the output of any one industry. In this way, SAM multipliers allow the quantification of the increased activity

Table 1. Total *festino* spending at the 2009 Grahamstown National Arts Festival (in ZAR).

Spending item	Foreign	Eastern Cape	Rest of SA	Total
Shows	568,004.60	1,928,853.98	2,533,834.91	5,030,693.48
Accommodation	1,198,620.69	2,981,898.81	4,841,691.49	9,022,210.98
Food	820,574.71	2,519,600.61	3,744,339.32	7,084,514.64
Alcoholic beverages	381,333.33	927,948.75	1,420,665.74	2,729,947.83
Non-alcoholic beverages	161,333.33	737,258.19	596,081.32	1,494,672.84
Retail	152,988.51	1,715,409.33	1,176,815.16	3,045,212.99
Stalls	701,724.14	3,008,270.72	2,367,067.49	6,077,062.35
Transport	393,218.39	959,652.37	3,179,158.84	4,532,029.60
Parking	32,241.38	125,120.77	162,440.18	319,802.33
Other	0.00	0.00	0.00	0.00
Total (ZAR)	*4,410,039.08*	*14,904,013.53*	*20,022,094.44*	*39,336,147.05*

Source: Visitor surveys.

in other sectors of the economy which results indirectly from the expenditure by *festinos*. It is also possible to examine the income and employment effects of the festival.

Spending data. The economic impact of the Grahamstown National Arts Festival begins with an accounting of the direct expenditure by *festinos* in the various expenditure-related sectors. *Festino* expenditure at the festival encompasses spending on shows, accommodation, food and beverages, retail shopping, festival vendors and related transport and parking services (refer to Table 1). Retailing includes locations where products are consumed 'on-premise', such as stalls or vendors. 'Off-premise' retail outlets are supermarkets, curios, restaurants and similar locations.

Festinos spent an estimated R82.3 million in the local area in 2009 (Table 1). About a third of this spending was for accommodation, 17.5% for food and 14.3% for shows attended at the festival. *Festinos* staying overnight in hotels accounted for 24.3% of the total spending.

It is sometimes mistakenly thought that initial spending accounts for a totality of the impact of the festival. For example, at first glance, it may appear that *festino* expenditures are the sum total of the impact on the provincial or local economy (Dunham *et al*, 2009). However, one economic activity always leads to a ripple effect whereby other sectors and industries benefit from this initial spending. This inter-industry effect of *festino* spending can be assessed using multipliers derived from the provincial SAM (PROVIDE, 2006).

The economic activities of the festival are linked to other industries in the local and provincial economies. The activities required, for example, to produce a product sold at the festival (including packaging, shipping, etc) generate direct effects on the economy. Regional (or indirect) impacts occur when these activities require purchases of goods and services from local or regional suppliers. Additional, induced impacts occur when workers involved in direct and indirect activities spend their wages in the region. The ratio between total economic and direct impact is termed the multiplier (Dunham *et al*, 2009).

This method of analysis allows the impact of *festino* spending at the festival to be quantified in terms of final demand, earnings (income) and employment in the province. Once the direct impact of *festino* spending has been calculated, the multiplier methodology discussed below is used to calculate the contribution of the festival and of the re-spending in the economy.

Multipliers and secondary effects. Various techniques can be employed to estimate the economic impact of a festival. After estimating the initial additional demand that is created due to the festival, which in this case includes spending by *festinos*, the direct, indirect and induced impacts should be derived (Smeral, 2003). The multiplier concept is termed as the nature and extent of the impact of an autonomous change in a specific economic quantity (that is, expenditure) on other economic quantities, such as production or employment (Conningarth Consultants, 2006b). More specifically, Samuelson (1970, p 226) defines the multiplier concept as 'the number of times the change in investment must be multiplied in order to present us with the resulting change in income'.

Multipliers can be used to estimate the total economic impact of *festino* spending in the region and the associated economic effects (indirect and induced) in terms of production, income and jobs. The basic equation for estimating the economic impacts of the festival is:

Economic impact = average spending per category × multiplier

The model is, of course, more detailed and complex than this simple equation may indicate. The analysis is based on the consistent and comprehensive data set concerning all mutual transactions among productive and institutional sectors of the economy, which is represented by the SAM for the Eastern Cape Province for 2000. SAMs extend the basic I–O concept from production to income distribution and include both social and economic data for an economy (Raa and Sahoo, 2005). A SAM consists of data from I–O tables, national income statistics and household income and expenditure statistics. Contrary to national accounts, '. . . a SAM attempts to classify various institutions to their socio-economic backgrounds instead of their economic or functional activities' (Chowdhury and Kirkpatrick, 1994). In the present case, the authors used a SAM for the Eastern Cape Province, which was developed by the PROVIDE project (2006). The SAM (based on 2000 prices) used in these analyses distinguished 34 sectors, 10 household types and 4 ethnic groups.

In essence, the analysis is based on two model approaches. The first approach is presented by a standard I–O Leontief model for which input coefficients and Leontief multipliers (M^L) have been calculated:

$$M^L = (E - A)^{-1},$$

where A is the matrix of input (technical) coefficients.

The second model approach is based on extending a linear Leontief model to a SAM framework, which is performed by partitioning the accounts into endogenous and exogenous accounts and assuming that the column coefficients of the endogenous accounts are all constant. For determining the set of endogenous accounts, it is important to know whether changes in the level of expenditures directly follow any change in incomes (Pyatt and Round, 1985). Exogenous accounts are those for which one assumes that the expenditures are

set independently on incomes. Standard practice is to pick up for the exogenous accounts, one or more accounts among the government, capital and the rest of the world accounts, justifying the choice on the basis of the objectives of the study (Hajnovicova and Lapisakova, 2002).

Multipliers calculated from the SAM are the simple indicators comprising the important information about the structure of the Eastern Cape economy. They are calculated from the matrix of expenditure shares (general technical coefficients) after excluding the exogenous accounts. The computed multipliers will be sensitive to the choice of exogenous accounts and express the sensitivity of the endogenous accounts on changes in demand for exogenous accounts (Hajnovicova and Lapisakova, 2002). SAM multipliers (M^S) are calculated as:

$$M^S = (E - A)^{-1},$$

where M is the matrix of expenditure shares of endogenous accounts.

Comparing the multipliers calculated from the I–O and SAM models carries new aspects in the economic analysis. The SAM multipliers are much larger than the corresponding I–O multipliers. Because value added is a leakage, only intermediate demand serves as a multiplier in the I–O analysis. In contrast, value added and incomes generate demand linkages in the SAM approach. SAM multipliers capture the different multiplier effects of exogenous accounts on productive activities, factors and institutions. Based on the partition of the endogenous section of the SAM into three categories of accounts (activities/commodities, factors and institutions), a matrix of multipliers can be decomposed into four components, that is, initial injection, transfer effects, open-loop effects and closed-loop effects. Many versions of this decomposition have been used (Hajnovicova and Lapisakova, 2002).

In analysing the productive sphere of economy, a decomposition of multipliers by Pyatt and Round (1985) and Cardenete and Sancho (2004) was used. The matrix M^S which is reduced to the Leontief multiplier matrix M^L corresponds only to the production accounts. To perform the impact analysis, the M^S matrix is truncated to conform to the dimension of the matrix M^L.

The differences between both multiplier matrices, M^S and M^L, measure the induced effects due to the added endogeneity, while the direct and indirect effects are measured by M^L. Matrix M^S can be decomposed into three components:

$(M^S - M^L)$, which measures induced effects,

$(E + A)$, which measures direct effects,

$(M^L - E - A)$, which measures indirect effects,

where

$$M^S = (M^S - M^L) + (E + A) + (M^L - E - A).$$

A vast array of inputs was required for the analysis. These were obtained from surveys conducted by Statistics South Africa and published in their Supply and Use Tables. Detailed information on the economic composition of each sector in the economy was obtained from these tables and formed part of the basic exogenous inputs needed for the calculation of the various multipliers.

Table 2. Profile of *festinos*.

Gender	Male, 44%; female, 56%
Age	37 years
Language	English, 75%; Afrikaans, 18%
Province of origin	Eastern Cape, 45%; Gauteng, 21%; Western Cape, 17%
Type of show	Comedy, 60%; drama, 48%; dance, 38%; music, 31%
Country of residence	Foreign, 4%; SA, 96%

Moreover, additional information pertaining to labour numbers and capital used was obtained from Census 2001 and the South African Reserve Bank Quarterly Bulletin, respectively (Conningarth Consultants, 2006a). The exogenous input data (shocks) were calculated and drawn from independent surveys conducted during 2009 by the Institute for Tourism and Leisure Studies at the arts festival. The SAM multipliers convert the exogenous input data (shocks) to the income generated and the number of jobs supported by using sets of economic ratios and multipliers for the province. Total effects are presented in aggregate form and include both indirect and induced effects (see the section below).

Assessing the economic impact of the festival

The results are discussed in two sections. In the first section, a brief overview is given of the descriptive results of the surveys. The second section contains the results of the economic impact study.

Profile of festinos

From Table 2 it is clear that the profile of *festinos* is that of predominantly English-speaking females, primarily falling in the 35–49 year age group, living in the Eastern Cape Province and spending approximately R4,700 at the festival. Approximately 4% of *festinos* are foreigners. It is interesting to note that the festival attracts 21% of *festinos* from the Gauteng Province and that they enjoy comedies and drama.

Economic impact

Festino spending is converted to the associated increase in production, income and jobs in the region using economic multipliers from a SAM for the Eastern Cape Province. The classical SAMs multiplier approach employs distinct multipliers for each expenditure-related sector. The multipliers convert expenditure into the associated increase in production, jobs and income and estimate secondary effects as the *festino* spending circulates through the regional economy. To do this, it is necessary to 'correct' the direct impact (that is, expenditure figures in Table 1) by the multiplier effect. These results, based on the 'corrected' spending by visitors (refer to Column 2 in Tables 3–5), are contained in the following subsections.

Table 3. Impact through production multipliers (ZAR, 2000 prices) – foreign visitors.

Sector	Direct impact[a]	Indirect impact[b]	Induced impact[c]	Total impact[d]	Percentage (total)
Agriculture	3,519.70	1,903.20	4,514.60	9,937.50	0.10
Mining	9,551.60	6,213.00	10,379.50	26,144.10	0.30
Manufacturing	889,352.80	839,836.30	779,899.40	2,509,088.60	27.40
Electricity and water	174.30	106.50	165.40	446.30	0.00
Construction	3,472.60	3,319.70	3,635.70	10,428.00	0.10
Trade and accommodation	1,042,974.60	765,305.90	1,153,428.50	2,961,709.00	32.30
Transport and communication	345,736.90	290,566.20	315,936.70	952,239.80	10.40
Financial and business services	988,052.20	647,223.30	1,016,941.30	2,652,216.90	28.90
Community services	16,078.50	14,741.50	19,956.90	50,776.90	0.60
Total (ZAR)	*3,298,913.30*	*2,569,215.70*	*3,304,857.90*	*9,172,986.90*	*100.00*

Notes: [a]Initial expenditures (for example, by *festinos*) are generally called the direct costs of an activity and their effects on the economy are direct effects. [b]Purchases by suppliers (for example, vendors, hotel and restaurant owners, charter operators, etc) of the final goods and services of materials and supplies to sustain the original purchases are called indirect effects. [c]Induced effects occur when workers in the sectors stimulated by direct and indirect expenditures spend their additional income on consumer goods and services. [d]The direct plus indirect plus induced effects equal the total effect.

New money impact

This section represents only the impact of the money spent by *festinos* on the regional economy of the festival. The usefulness of this section is that it provides a model of economic impact that calculates how much money has been brought into the area from *festinos* specifically because of the festival and allows one to focus on the money that has been spent in the area specifically by *festinos*.

Foreign expenditure. The quantification of the direct, indirect and induced impact of foreign expenditure at the Grahamstown National Arts Festival in the region is summarized in Table 3. As this expenditure is applied partially by the foreign *festinos* of the festival in the purchase of goods and services in the region, this represents an inflow of money in the region, mobilizing economic activity, generating employment and generating additional revenues for the province. 'Production' is an indication of the total turnover generated by each sector in the regional economy. As such, production comprises two components: demand for intermediate inputs (resources) by an activity (domestically produced and imported goods and services); and total value added generated by an activity (Conningarth Consultants, 2006b). Table 3 reflects the effects on production (using the production multipliers) by foreign expenditure resulting from the festival.

The spending of the foreign *festinos* in 2009 was predominantly expenditure on tourist activities. From Table 3, it is clear that the largest direct impacts are in trade and accommodation (32.3%), financial and business services (28.9%) and manufacturing (27.4%). Through the 'backward linkages', large indirect and induced impacts are also experienced in the community services sector,

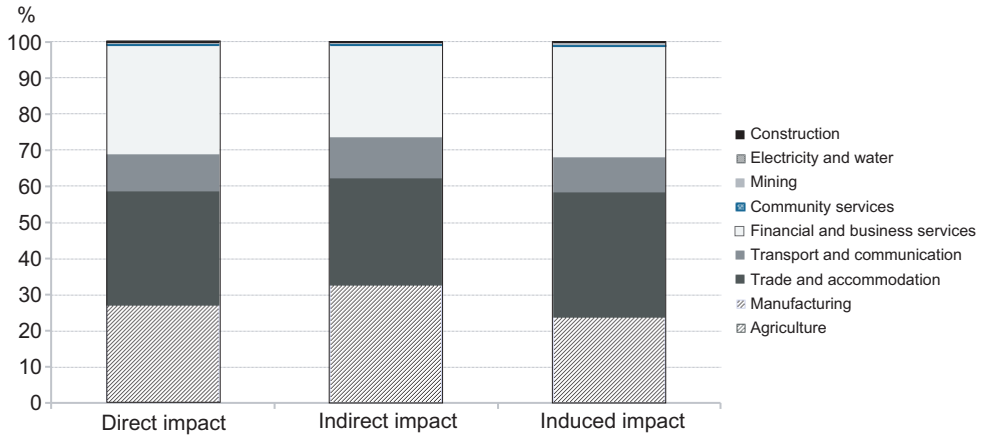

Figure 1. Foreign expenditure in the region by activity sector.
Note: The bars for 'construction', 'electricity and water', 'mining', 'community services' and 'agriculture' are either not visible or hardly visible since each of these sectors represents less than 0.6% of the total change across sectors.

reflecting an indirect impact of R14.7 thousand and an induced impact of R20.0 thousand. Note that if the authors ignore the direct effect in the community services sector, 68.3% of the total increase in production is as a result of 'backward linkages', with direct foreign expenditure representing only 31.7%. A more detailed (disaggregated) analysis of the various sectors can be made, but falls beyond the scope of this study.

All the acquisitions of goods and services from non-regional suppliers, that is, suppliers outside the Eastern Cape, were included in the analysis and might therefore have had a significant direct or indirect effect on the province's economy. By including this indirect impact, although small in significance, we present a more comprehensive estimate of the impact of the Grahamstown National Arts Festival on the province.

The value of the purchases of goods and services from regional suppliers was then classified using the basic sector aggregation as classified by the South African Reserve Bank and Statistics South Africa, and its distribution by activity sector is shown in Figure 1.

In terms of the analysis of the expenditure by foreign *festinos*, the first conclusion is that the direct effect represents 36%, the indirect effect 28% and the induced effect 36% of the total increase in foreign expenditure. The second conclusion is that the activity sectors that benefited most from the expenditure of the festival's foreign *festinos* were trade and accommodation, financial and business services and manufacturing. The total impact resulting from expenditure by foreigners in these sectors in 2009 surpassed R9.2 million and represented some 11.1% of the total expenditure made by all *festinos* of the 2009 Grahamstown National Arts Festival in the region.

The rest of South Africa's expenditure. In order to estimate the economic impact of the expenditure made by *festinos* residing in the rest of South Africa, an approach was followed similar to that for the expenditure by foreign *festinos*.

Table 4. Impact through production multipliers (ZAR, 2000 prices) – rest of South Africa visitors.

Sector	Direct impact	Indirect impact	Induced impact	Total impact	Percentage (total)
Agriculture	16,060.60	8,684.50	20,600.20	45,345.30	0.10
Mining	43,424.00	28,221.10	47,204.50	118,849.50	0.30
Manufacturing	3,714,646.40	3,521,322.90	3,245,434.90	10,481,404.20	24.90
Electricity and water	776.20	474.50	736.60	1,987.30	0.00
Construction	13,656.70	13,055.30	14,298.10	41,010.00	0.10
Trade and accommodation	4,646,048.50	3,409,141.60	5,138,077.80	13,193,268.00	31.40
Transport and communication	2,777,756.30	2,334,498.30	2,538,332.50	7,650,587.00	18.20
Financial and business services	3,814,841.90	2,498,911.10	3,926,381.70	10,240,134.70	24.40
Community services	81,007.40	74,271.50	100,547.90	255,826.70	0.60
Total (ZAR)	*15,108,218.00*	*11,888,580.60*	*15,031,614.10*	*42,028,412.80*	*100.00*

Table 4 reflects the effects on production (using the production multipliers) by expenditure of *festinos* from the rest of South Africa resulting from the festival.

Table 4 illustrates that the largest direct impacts are in trade and accommodation (31.4%), in manufacturing (24.9%) and in financial and business services (24.4%). Through the 'backward linkages', large indirect and induced impacts are also experienced in the transport and communication sector (see also Figure 2), reflecting an indirect impact of R2.3 million and an induced impact of R2.5 million. If the direct effect in the transport and communication sector is ignored, 63.7% of the total increase in production is a result of 'backward linkages', with direct expenditure by *festinos* from the rest of South Africa representing only 36.3% of the total impact.

Based on the data collected, the authors estimated that total impact of expenditure by *festinos* from the rest of South Africa in the region might exceed R42.0 million (approximately 50.9% of total expenditure). Figure 2 presents the total expenditure per activity sector by *festinos* from the rest of South Africa.

As in the case of foreigners, the results of the study suggest that the sectors that benefit most from expenditure by *festinos* from the rest of South Africa are, in order of importance, trade and accommodation, manufacturing and financial and business services (please refer to Figure 2). The expenditure in these three sectors of economic activity represents more than 81% of the total expenditure by the *festinos* from the rest of South Africa at the festival.

The analysis of the expenditure by *festinos* from the rest of South Africa indicates that the direct effect represents 35.9%, the indirect effect 28.3% and the induced effect 35.8% of the total increase in local expenditure. Given the estimation of the economic impact presented above, it should be kept in mind that, by definition, calculation of the economic impact should include only the expenditure that would not have occurred in the absence of the event.

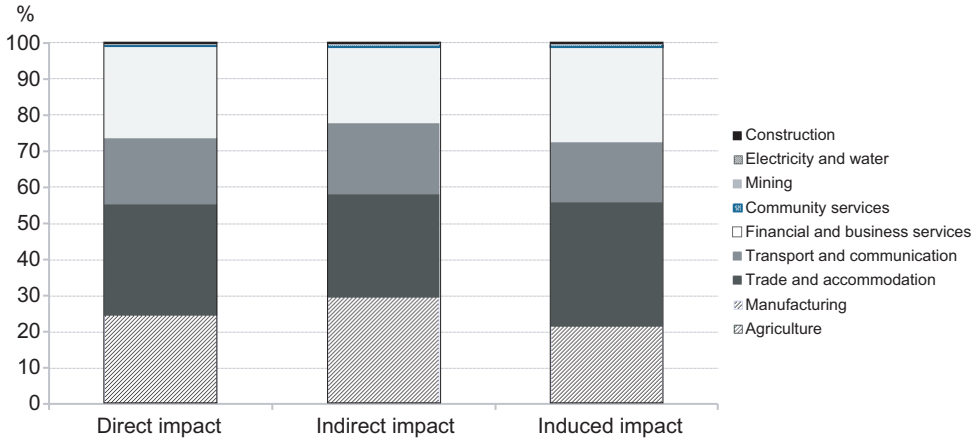

Figure 2. Rest of South African expenditure in the region per activity sector. *Note*: The bars for 'construction', 'electricity and water', 'mining', 'community services' and 'agriculture' are either not visible or hardly visible since each of these sectors represents less than 0.6% of the total change across sectors.

Retained locals

The retained local section focuses on money that would have left the area if the festival had not been held. The retained local model allows us to see how festivals and other events contribute to the local economy by encouraging their residents to stay and spend recreation rands within the area.

Eastern Cape expenditure. In order to estimate the economic impact of the expenditure made by *festinos* residing in the Eastern Cape, a similar approach was followed as that with the expenditure of foreign *festinos* and *festinos* residing in the rest of South Africa. Based on the information collected from the surveys carried out during the 2009 festival, the authors estimated that the direct impact in the region resulting from the locals' expenditure amounted to approximately R11.2 million (approximately 37.9% of total expenditure), distributed among the nine activity sectors, as presented in Figure 3.

The value of the purchases of goods and services made to regional suppliers by *festinos* residing in the Eastern Cape is presented in Figure 3.

The activity sectors that benefited most from expenditure by locals in relation with the Grahamstown National Arts Festival were trade and accommodation, financial and business services, manufacturing and, to a lesser extent, transport and communication. Given that these *festinos* hailed from the Eastern Cape, it was understandable that their expenditure in the latter sectors would be less than that of foreigners and non-Eastern Cape residents (please refer to Figure 3).

It is important to note that the direct impact of the locals' expenditure (R11.2 million) represents more than 37.9% of the adjusted total expenditure of all *festinos* (R29.7 million) of the festival in 2009. The quantification of the direct, indirect and induced impact of locals' expenditure at the festival in the region is summarized in Table 5.

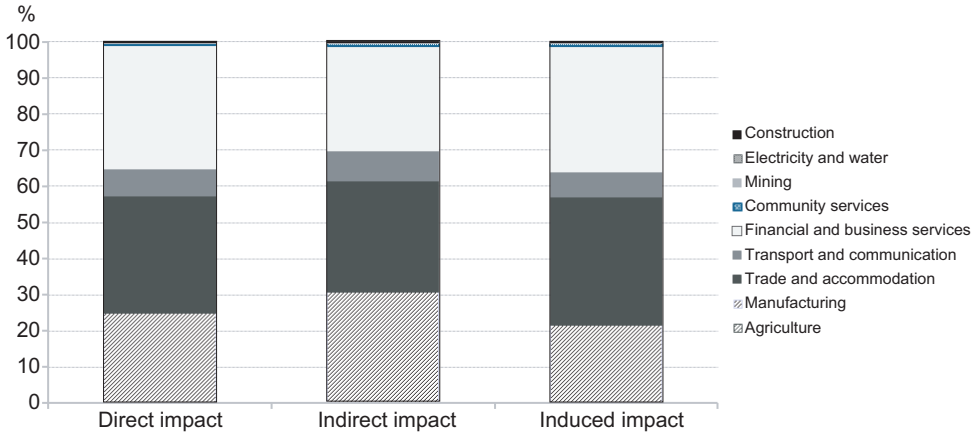

Figure 3. Local expenditure in the region by activity sector.
Note: The bars for 'construction', 'electricity and water', 'mining', 'community services' and 'agriculture' are either not visible or hardly visible since each of these sectors represents less than 0.6% of the total change across sectors.

In Table 5, it is clear that the largest direct impact is on trade and accommodation (33.0%) and on financial and business services (33.0%). Through the 'backward linkages', large indirect and induced impacts are also experienced in the manufacturing sector, reflecting an indirect impact of R2.7 million and an induced impact of R2.5 million. If the direct effect in the manufacturing sector is ignored, 64.6% of the total increase in production is as a result of 'backward linkages', with direct local expenditure representing only 35.4% of the total impact.

Regarding the analysis of the expenditure of *festinos* from the Eastern Cape, it can be concluded that the direct effect represents 36.0%, the indirect effect 27.7% and the induced effect 36.3% of the total increase in local expenditure. By including the expenditure that would have occurred in the region independently of the existence of the festival, less conservative figures for the economic impact are estimated. It is reasonable to expect that in the absence of the festival, the available revenue from these local *festinos* would have been less and, as such, its volume of expenditure in the region would have been less.

Overall impact

This section represents the overall spending in the local economy that can be attributed to the festival by *festinos* (locals and visitors from abroad and from the rest of South Africa). Although the locals do not bring money into the community from outside regions as visitors do, it is valuable to include their spending as it has the effect of initiating economic activity within the local economy. Examined in this way, a festival's contribution to a local economy is comparable to a local business that both draws money from and contributes to its community. To consider only the tourist rand in terms of economic impact would underestimate greatly the complete financial benefits of festivals and

Table 5. Impact through production multipliers (ZAR, 2000 prices) – local visitors.

Sector	Direct impact	Indirect impact	Induced impact	Total impact	Percentage (total)
Agriculture	10,807.30	5,843.90	13,862.10	30,513.30	0.10
Mining	29,536.80	19,243.90	32,073.90	80,854.60	0.30
Manufacturing	2,813,134.40	2,667,958.20	2,455,139.80	7,936,232.40	25.40
Electricity and water	605.80	370.30	574.90	1,551.00	0.00
Construction	13,326.40	12,739.50	13,952.20	40,018.10	0.10
Trade and accommodation	3,626,344.20	2,660,910.90	4,010,384.00	10,297,639.10	33.00
Transport and communication	849,564.40	713,995.90	776,337.70	2,339,898.10	7.50
Financial and business services	3,841,866.00	2,516,613.30	3,954,196.00	10,312,675.30	33.00
Community services	62,396.60	57,208.10	77,447.70	197,052.50	0.60
Total (in ZAR)	*11,247,581.90*	*8,654,884.10*	*11,333,968.30*	*31,236,434.40*	*100.00*

similar events. In addition, this study recognizes that without festivals, a significant amount of money would leave the area due to locals seeking an alternative venue for entertainment in other regions.

This study has determined that the usefulness of the overall impact is that it allows one to measure the amount of money that the festival circulates through the local economy from every source from which the festival draws financial impact. However, in order to evaluate the total impact of the festival in the region, it is necessary to 'correct' the direct impact by the multiplier effect. Hence, as a way of estimating the total impact of the Grahamstown National Arts Festival in the region, production multipliers were used for each one of the activity sectors. The multiplication of the direct impact in each activity sector for the specific production multipliers gives the total impact of the festival for each of the regional economy sectors, as indicated in Table 6 below. The sum of the impacts in each of the sectors gives us, in turn, an estimate of the total impact of the festival in the region.

The analysis of the results indicates that the direct economic impact of the festival and its visitors in the region (which is in the order of R29.7 million) can result in an additional R52.7 million of indirect impact, giving a total annual impact in the region in excess of R82.4 million. That is equivalent to an aggregated production multiplier in the order of 2.77. Therefore, for each rand spent by *festinos* in the region, 177 cents are generated additionally in terms of indirect expenditure. The aggregated production multiplier is obtained by dividing the total impact by the direct impact.

Considering the multipliers for each component (foreign, local and the rest of South Africa) of expenditures, one can say that those resulting from out-of-province *festinos* have a greater impact as multiplier (2.79) than does spending by foreign and local *festinos* on production (2.77). This means that for each rand spent at the festival by out-of-province *festinos*, an additional R1.79 is generated in the Eastern Cape economy (see Tables 4 and 6).

Table 6. Grahamstown National Arts Festival impact on regional production.

Sectors	Foreign spending	EC spending	Rest of SA spending	Direct impact	Production multipliers	Total impact
Agriculture	0.004	0.011	0.016	0.031	2.823	0.086
Mining	0.010	0.030	0.043	0.083	2.745	0.226
Manufacturing	0.889	2.813	3.715	7.417	2.815	20.927
Electricity and water	0.000	0.001	0.001	0.002	2.560	0.004
Construction	0.003	0.013	0.014	0.030	3.003	0.091
Trade and accommodation	1.043	3.626	4.646	9.315	2.840	26.453
Transport and communication	0.346	0.850	2.778	3.973	2.754	10.943
Financial and business services	0.988	3.842	3.815	8.645	2.684	23.205
Community services	0.016	0.062	0.081	0.159	3.160	0.504
Total (ZAR)	*3.299*	*11.248*	*15.108*	*29.655*		*82.438*

Notes: Unit is R million except for the variable 'Production multipliers'. 'Direct impact' is the sum of foreign, EC and rest of SA spending.

One of the elements of the additional value added that will result from the festival is the remuneration of employees, which in turn affects household income. The household income multiplier thus measures the magnitude of changes that will occur both to household income and to spending/saving patterns. In particular, the impact on low-income households can be highlighted, as this can be used as an indicator of the extent to which the festival contributes to poverty alleviation throughout the provincial economy.

Using the same SAM for the Eastern Cape region (PROVIDE, 2006), it is also possible to estimate the impact of the festival at the level of family income. In order to do so, specific household income multipliers for each activity sector were calculated. These were later multiplied by the values of the total sectors' impacts (please refer to Table 7).

The aggregated income multiplier, valued at 0.26, can be interpreted as the increment of the Eastern Cape's family income for each rand of expenditure incurred by the *festinos* in the region. It should be emphasized that this multiplier is intended more to illustrate the concept of money drawn into the region being partly re-spent in the community, perhaps through several rounds, than it is to be an exact figure that mirrors what is actually occurring in the local economy. The multiplier will very much depend on the types of businesses benefiting from spending by *festinos*, with some businesses providing much higher value added to the region than others in terms of both personal (that is, employed local residents) and business (that is, local ownership) income. The authors estimated that currently a total of R21.3 million of remunerations in the Eastern Cape would not have taken place annually if the event did not exist.

Labour is a key element of the production process. This indicator measures job creation and indicates the extent to which each sector contributes towards the creation of employment opportunities and, ultimately, each sector's

Table 7. Grahamstown National Arts Festival impact on family income.

Sectors	Total impact (R million)	Indirect and induced impacts (R million)			Percentage (total)
		Rest of the households	Low-income households	Total households	
Agriculture	0.086	0.032	0.025	0.057	0.30
Mining	0.226	0.020	0.022	0.042	0.20
Manufacturing	20.927	2.240	2.309	4.548	21.40
Electricity and water	0.004	0.000	0.000	0.001	0.00
Construction	0.091	0.012	0.012	0.024	0.10
Trade and accommodation	26.453	3.738	4.024	7.762	36.50
Transport and communication	10.943	1.226	1.319	2.544	11.90
Financial and business services	23.205	2.944	3.213	6.158	28.90
Community services	0.504	0.076	0.083	0.159	0.70
Total	*82.438*	*10.288*	*11.007*	*21.296*	*100.00*

contribution towards distributing salaries and wages between various types of labourers, which in turn should affect the economy positively.

Accordingly, and based on the values presented previously, it is possible to estimate the impact of the Grahamstown National Arts Festival on the level of jobs in the Eastern Cape region. Based on figures contained in the Eastern Cape SAM, and using data on the labour force per province relative to the business volume and jobs per activity sector in South Africa for 2006, it was possible to obtain an estimate of the impact of the festival regarding the regional job level, as indicated in Table 8.

Table 8. Grahamstown National Arts Festival impact on employment.

Sectors	Total impact (R million)	Labour multipliers	Equivalent jobs (number)
Agriculture	0.086	21.129	1.80
Mining	0.226	2.272	0.50
Manufacturing	20.927	18.542	388.00
Electricity and water	0.004	2.020	0.00
Construction	0.091	2.362	0.20
Trade and accommodation	26.453	4.726	125.00
Transport and communication	10.943	4.812	52.70
Financial and business services	23.205	1.655	38.40
Community services	0.504	5.082	2.60
Total	*82.438*		*≈609*

Note: The labour multiplier is an indication of the number of job opportunities that will be created as a result of changes in the production of one million by a particular activity.

With regard to the number of jobs generated in the regional economy because of the existence of the Grahamstown National Arts Festival, Table 8 indicates that 609 job positions may depend on the festival, in addition to the number of employees involved directly in the festival itself. Consequently, the absence of the festival would have implied a reduction of 609 jobs in the region, together with a reduction in the number of positions/employees directly involved. The most affected sectors would have been manufacturing, trade and accommodation and transport and communication activities. The analysis found that employment multipliers were lowest in the service industries (for example, tourism) and highest in the resource-based industries (for example, manufacturing) in nearly all regions of the province. The resource industries have larger multiplier effects because their average wages tend to be higher and they spend substantial amounts of money on goods and services. Generally speaking, the more money that can be drawn into and kept in the community, the greater the employment benefits.

Findings and implications

From the analyses above, it is clear that the Grahamstown National Arts Festival is a major economic generator for the region and the province by every measure. This finding supports research by Gelan (2003), Van Heerden (2003) and Saayman and Saayman (2004). As a summary, the estimated multiplier effects (along with the direct impacts already provided in the previous section) are presented in Table 9 below. These multiplier impacts are for the whole of the Eastern Cape Province.

The Grahamstown National Arts Festival as a whole generates 609 jobs in total, equivalent to 501 person years[2] of employment. Again, this research supports findings by Walpole and Goodwin (2000) and Saayman and Rossouw (2008). This employment generates over R90.6 million in labour income. As

Table 9. Socio-economic impacts of the Grahamstown National Arts Festival in the Eastern Cape Province.

Type of impact	Jobs (number)	Labour income (R million)	Capital (R million)	GGP[a] (R million)	Output (R million)
Direct	–	33,358,783	23,372,317	13,483,200	29,654,713
Indirect	–	21,690,178	17,404,522	9,178,633	23,112,680
Induced	–	35,589,183	20,900,837	12,009,043	29,670,440
Total	*609*	*90,638,145*	*61,677,676*	*34,670,876*	*82,437,834*

Note: [a]Gross geographic product (GGP) is a measure of the value that is added to each product produced in the Eastern Cape economy by the various economic sectors at each stage of the production process. GGP for a specific sector is calculated as the difference between the revenue the sector earns and the amount it pays for the products of other sectors it uses as intermediate goods (Conningarth Consultants, 2006b). It is important to note that the concept of GGP was developed to prevent double counting and to attribute a part of the national GDP to each sector.

well as employment, the economic contribution of the festival can be measured in terms of GDP and economic output. As such, the festival generates R13.5 million in direct gross geographic product (GGP) and R29.7 million in direct economic output. With multiplier effects (that is, direct + indirect + induced), the festival is estimated to generate a potential R34.7 million in GGP and R82.4 million in economic output for the Eastern Cape economy.

Festinos to the Grahamstown National Arts Festival spent mostly on accommodation, food and beverages, purchases and shows. As might be expected for a multiple-day event, accommodation was the largest expenditure category at the festival, whereas at short-term festivals and events, food and beverages usually attract the most spending. These results are consistent with other studies of short-term events. Restaurant meals, other food and beverages, lodging, entertainment, shopping, admission fees and auto-related expenses have been identified as the main categories of spending (see, for example, Gartner and Holecek, 1983, or Ryan, 1998). The total spending figures are also consistent with findings on other short-term events. Adding to the above, the results also indicate that *festinos* from the rest of South Africa have a much higher impact than foreigners and locals. Therefore, the emphasis from a marketing policy point of view should be on attracting visitors from the other provinces. It is also evident from the results that local *festinos* make up a high percentage of the *festinos*, which, to a certain degree, limits the economic impact of the event. Even though it is important for locals to support festivals and events, from an economic point of view one would like to see more *festinos* from other areas. Again, this supports the notion that marketing campaigns should attract visitors from further afield.

In addition to these direct expenditures, the Grahamstown National Arts Festival has indirect and induced effects on its local host region. In absolute terms, it represents significant contributions to the local economy, particularly to the accommodation and restaurant sectors.

A key reason for the boundless impact is that the output, value added and labour income multipliers are high in the Eastern Cape region, reflecting its more urban character and indicating less substantial leakages out of the local economy. This is consistent with previous studies of short-term events that have found output multipliers in the range of 1.61 to 3.39 and personal income multipliers between 1.83 and 8.87 (Kim *et al*, 1998). The higher multipliers generally were found in urban areas. Urban economies tend to have larger multipliers, partly because of the vast number of sectors and partly because of endless interaction among the sectors, with a greater tendency to purchase inputs from within the region. In the key tourist spending sectors of accommodation and food and beverages, this is offset somewhat by the substantial induced effects of increased employee earnings, and hence spending. To increase the impact of the arts festival, organizers should consider promoting other attractions in the area, adding events to the festival and encouraging visitors to stay longer. Organizers could also offer special show packages in order to increase *festinos*' length of stay, as well as spending. This, however, should be based on proper market segmentation and need analysis.

In order to limit money flowing out of the local economy, the event organizers should also apply a policy of buying services and products from local suppliers. This approach could also contribute to more entrepreneurs entering

the event sector. The policy should therefore make provision that a percentage (to be determined by event organizers) of the festival services and products should consist of local content. This can apply to productions as well as selling local arts and craft.

Finally, from this study it seems that the success of this event is determined by four factors; namely, that it is an annual event, taking place in the same month every year, it offers a wide variety of genres, therefore catering for a large market, it is hosted at the same venue and the festival remains one that has always catered for the English-speaking market. These factors contribute to the fact that *festinos* attending this festival are very loyal to the event.

Conclusion

This article determines the economic value of the Grahamstown National Arts Festival using SAM multipliers. Results show that the festival has a positive impact concerning revenue generation and job creation. These findings therefore indicate that government could use investments in the arts and culture as a way to achieve economic objectives.

From a methodological point of view, the economic impact determined by this study is most likely underestimated, because expenditures by sponsors and festival organizers have been omitted. These could add substantially to the total economic impact of short-term events such as the Grahamstown National Arts Festival. Therefore, future research should consider this. The approach (applying a SAM) followed in this research is a useful way of determining the economic impact of events.

Since the Grahamstown National Arts Festival in the Eastern Cape Province is an annual event, the economic impacts calculated here occur every year. Approximately 86% of the *festinos* had plans to come back, and 77% were themselves repeat visitors. This is also proof that other major events at this time of the year do not have a significant impact on *festinos* attending this event, since most of them come back. These repeat visitors spend as much as first-time visitors, year after year, thus providing continuity for the festival. Repeat visitation reduces the risk of financial failure for the festival and reduces the risk in choosing a destination for the visitor. For a non-local visitor (*festino*), a visit to a once-only event in an unknown destination is a high-risk travel decision, whereas the decision to visit an annual event that has been enjoyable in the past is much easier. The festival also continues to attract new visitors, as evidenced by the upward trend in the number of *festinos* evidenced in the current and past surveys. Given its success both in bringing back repeat visitors (*festinos*) and in attracting new visitors (*festinos*), this festival will maintain its small but significant role in its host region.

Endnotes

1. The common assumption for local resident spending at a festival or event is a zero sum game, except where money is captured that would have been spent outside the province. In this study the retained expenditures of local visitors are included. The assumption is made that small festivals, such as the Grahamstown National Arts Festival, in areas with few other tourism attractions may be critical for retaining locals' discretionary funds. This spending is therefore

captured under 'retained locals' and measured separately from the 'new money' spending so as not to give biased results of the potential impact of spending at the festival.

2. A full-time position for one year constitutes a person-year of employment (also known as a full-time equivalent). As some jobs are part-time or seasonal, these jobs have been converted to person years.

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