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Issues in Tourism Event Economic Impact Studies: The Case of the Albuquerque International Balloon Fiesta

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Several methodological issues have emerged from the economic analysis of tourism attractions, including errors in sampling and analysis, misrepresentation of these issues, the application of a refinsed research methodology is described to measure the spatial distribution of visitor expenditures and economic impacts attributed to a stated tourism attraction. The 1995 Kodak Albuquerque International Balloon Fiesta (AIBF), considered the largest ballooning event in the world, was used as the focal attraction for this study. Direct, indirect, and induced economic effects based on the variables of output, income, and employment were examined using IMPLAN, an econometric model first developed by the United States Department of Agriculture Forest Service. Detailed analyses on multiplier effects, linkages, and leakeage attributed to the event are presented in the results and discussion sections. Discussion and recommendations based upon the study may provide a clearer picture of the consequences of staged tourism attractions.

Introduction

Studies of the economic impact of tourism or recreation activities started in the 1960s and have since attracted the attention of many researchers (Johnson & Moore, 1993; Kanters & Botkin, 1992; Mescon & Vozikis, 1985; Mules & McDonald, 1994; Simmons & Urquhart, 1994; Turco, 1995; Vert, 1978; West 1993; Yardley *et al.*, 1990). Several methodological issues have emerged from this research area (Crompton & McKay, 1994), including errors in sampling and analysis, misrepresentation of results, and the appropriate use (or misuse) of multipliers (Archer, 1984).

The majority of previous studies have focused on only assessing the total economic impact in terms of output, income, and number of jobs generated by a specific tourist or recreation activity (Ruiz *et al.*, 1994; Vert, 1978). Overemphasis on presentation of the total impact, rather than on interpretation of the resulting estimates and description of the application limitations, has often resulted in misunderstanding of the study results. Moreover, some researchers and destination marketers have used economic impact figures to justify or promote the tourism activities. As a consequence, these studies provide little information for improved planning, management, and development of staged tourism attractions.

Several economic impact studies of staged tourism attractions have neglected to differentiate between the direct, indirect and induced effects. The analysis of

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multiplier effects (i.e. the direct, indirect and induced effect) helps to identify the effects of change on each industry caused by a specific activity or activities. The indirect effect is the measurement of backward linkages of a given industry to local input sources; it denotes linkages to local input suppliers. The induced effect indicates the levels of value added and income generated per unit of industry output. The larger the export, the smaller the indirect effect, while large induced effects contribute to large total multipliers for the high value-added export-production industries (Ruitz, 1994). To know the economic potential of a staged tourism attraction, spatial questions of how and to what extent money flows throughout and outside the local economy need to be answered.

The misuse of multipliers is not the sole cause of inaccurate results in economic impact research. Uncritical acceptance of certain questionable assumptions can also lead to unreliable estimates and misinterpretation of economic impact of a special event. One of these issues is the tendency to exclude the expenditures of event visitors who travel for reasons other than to attend the event from the economic impact assessment. It is assumed that they would visit the local community even if the festival did not occur, and their expenditures are therefore not included in economic impact calculation. However, it must be kept in mind that in some cases secondary visitors, those who state their primary purpose for visiting is not the event, purposely time their trips to coincide with the special event. In this case, it is unknown whether they extend their trips or increase their spending in the local area because of the event. However, their spending on the event grounds should be considered new money to the local area because this portion of their expenditures was expected and included in their travel budget. In other words, visiting the event grounds is not likely to cause a reduction in their spending in the local area during their trips. Recently, analysts have included spending by area residents within an economy that would have occurred locally in the absence of the event. This effect, called import substitution, can be a significant component of overall economic impact, and may be fully as large as the traditional or primary expenditures generated by visitor spending into the area (Cobb & Weinberg, 1993).

In regional economic impact studies, researchers have tended to exclude local resident expenditures from their impact estimates (Dawson *et al.*, 1993; Johnson & Sullivan, 1993; Pedersen, 1990). It is suggested that only visitor expenditures generate new money for the study area, and therefore that only this portion of the expenditures should be calculated in the economic impact. It is usually assumed that if residents had not spent money at the event, they would have spent it later by purchasing other products or services in the local area. However, a special event may entice residents to spend their money locally rather than outside the economy. This part of local resident income would otherwise vacate the region. As this portion of retained income is attributable to the special event, excluding these expenditures may underestimate its economic impact.

Despite the many efforts to estimate the economic impact of staged tourism attractions, few studies have examined the spatial distribution of visitor expenditures (Long & Perdue, 1990; Turco, 1992). Spatial distribution of economic impact refers to the geographic location of direct and secondary economic effects generated by the visitors' expenditures within and outside of the event. Direct effects are geographically distributed because special event visitors often make

purchases during all phases of a trip: at home, *en route*, and at or near the event site. Indirect impact is likely to take place far from the location of the direct effect due to interregional industry linkages (Turco, 1992). Without considering the spatial distribution of visitors' expenditures, the resulting impact will be overestimated. To address the spatial distribution issue in the economic impact assessment, the local area (examining area) needs to be defined, and visitor expenditures tracked geographically.

Previous economic impacts of staged tourism attractions were understood on the basis of total output, income, and employment. Little is known of an event's significance to individual industries within a designated economy. Without understanding the impact distribution in the local economy, local businesses are unaware of the total impact, due to the festival, on each individual industry. Therefore, it is important to know the distribution of the impacts among local industries.

The purpose of this study was to measure the spatial distribution of visitor expenditures attributed to a staged tourism attraction, and to estimate the economic impacts resulting from those expenditures. The 1995 Kodak Albuquerque International Balloon Fiesta (AIBF), considered the largest ballooning event in the world, was used as the tourism attraction for this study. Data from this study were proprietary in nature and not released by the AIBF until 1998. Direct, indirect, and induced economic effects based on the variables of output, income, and employment were examined using IMPLAN, an econometric model first developed by the United States Department of Agriculture Forest Service. The distribution of economic impacts among local industries was also determined. Detailed analyses of multiplier effects, linkages, and leakage attributed to the event are presented in the results and discussion sections of this paper. Study results and discussions may provide a clearer picture of the many options researchers have when estimating the economic impacts of staged tourism attractions, and the consequences of their choices.

Methodology

The 25th Annual Kodak Albuquerque International Balloon Fiesta was held on a 77 acre park leased from the City of Albuquerque, from 7–15 October 1995. Albuquerque is located in Bernalillo County, New Mexico. The event featured a musical concert, four mass ascensions, balloon glow, daily balloon competitions, and sales of food, beverages, and gift items.

Turco's (1992) visitor survey was used to collect visitor geographic and demographic information, and to determine their travel patterns and expenditures. A questionnaire was designed, and personal interviews were undertaken on the festival grounds by a group of trained interviewers. The IMPLAN model was utilised to estimate the total economic impacts of expenditures made by the balloon festival visitors.

To represent the appropriate daily proportion of the total visitor attendance in the Balloon Fiesta, the sampling of days, times, and daily sample size for the 1995 AIBF study was systematically stratified to match Balloon Fiesta attendance figures over the past three years. Two-hour sampling periods were randomly selected from all possible operation hours of the festival. The number of interviewers for each sampling period was determined by the sample size. This

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sampling strategy reduces the possibility of conducting a disproportionate number of interviews at participation times or days when the proportion of a particular group of visitors tends to be high. The total sample size (n = 750) was determined by considering an acceptable precision level (\pm 3.5%) while also balancing human and financial resource requirements.

The expenditure categories listed in the questionnaire included visitor's major expenditures made at the festival grounds as well as in the local area. The expenditure of visiting group instead of the individual visitor was collected in this study. On-site spending items were categorised as food and beverages, entertainment, souvenirs, and film, while off-site purchasing items included lodging, meal, gasoline, retail shopping, public transport, film, and entertainment. To capture the spatial distribution of the total economic impact generated by balloon festival visitors' expenditures, the visitors were asked only to report their spending on and off the event grounds in Albuquerque.

Interviewers were instructed to approach every 11th visitor (age 16 years or older) during five of the nine days of the Balloon Fiesta and to ask the spectators to participate in the survey. A qualifying question was asked to ensure that spectators were only interviewed once. Spectators interviewed earlier were politely excluded from the study by interviewers. An adult or head of a household was selected for the interviews, as s/he would have better knowledge about the group's expenditures on the trip.

The IMPLAN (Impact Analysis for PLANning) input-output model was selected from other models to analyse the total economic impact of the expenditures generated by event visitors. A comparison of three I-O models (REMI-II, IMPLAN, and REMI) conducted by Rickman and Schwer (1995) found no significant difference in multipliers after benchmarking the models, although the models differ substantially. They conclude that the 'ready-to-use' I-O-based models offer an appropriate format for conducting the indirect effects as part of an economic impact study.

A regional IMPLAN model was developed for Bernalillo County using 1992 economic data. In order to be consistent with the IMPLAN database, the 1995 expenditures were adjusted to 1992 dollars using producer price deflators.

Visitors' expenditures collected from the visitor survey were submitted to the IMPLAN model, with a list of 528 industries, to construct a regional I/O model of Bernalillo County and to estimate the total economic impact on the city of Albuquerque. The reports generated from the IMPLAN impact analysis were used to assess the economic impacts and to analyse the inter-industry relationships. Several regional multipliers and some other reports were also produced by the IMPLAN model to analyse the local economic structure.

Results and Discussion

Total of on-site and off-site visitors' expenditures

In this study, the economic impacts caused by on-site and off-site visitor expenditures were assessed separately. The visitor expenditure information was collected based on the travel party instead of the individual visitor. To obtain visitor expenditure totals, the number of visitor groups was first calculated by dividing the total event attendance by the average visitor group size and

Expenditure item	Total amount
Lodging	11,043,157.00
Food	10,682,917.00
Gasoline	2,468,544.60
Shopping	8,743,925.40
Transport	334,881.10
Entertainment	2,219,979.00
Film	668,245.20
Total	39,175,649.00

Table 1 Off-site expenditures attributable to the event

Table 2 On-site expenditures attributable to the event (after adjustment)

Expenditure item	Total amount
Food	2,527,031
Entertainment	907,231
Film	382,250
Gifts	3,944,522
Total	7,761,034

frequency of attendance. The number of visitor groups can be derived by the equation VG = T/G/F, where VG = number of visitor groups, T = total attendance, G = group size, and F = frequency of attendance. Based on attendance, visitor group size, and frequency of attendance, a total of 55,229 visitor groups attended the event. Visitor groups averaged 4.5 persons in size, stayed in Albuquerque 4.4 nights, and attended the event 2.5 days.

Referring to the economic impact resulting from visitors' off-site expenditures, only primary visitors' expenditures were included in the impact analysis. Regarding the impact caused by visitors' on-site expenditures, two other visitor groups' expenditures, besides the primary visitor groups, were added to the impact analysis to calculate the impact properly. The first group was the nonlocal visitors who planned their trips to coincide with the balloon festival. The second group was composed of local residents who stated that they would have travelled outside of the community if the event had not occurred. Table 1 shows that the primary visitor groups spent \$39.18 million in the city of Albuquerque. After the adjustment, the festival visitors generated \$7.76 million of total on-site expenditures (see Table 2). The above off-site and on-site expenditures were then used to measure the total economic impact.

Economic impact resulting from visitors' off-site and on-site expenditures

The results show that visitors' off-site expenditures resulted in \$54.7 million of total industry output, \$31.32 million of total income, and 1236 jobs in the local community. Among \$54.7 million of output, approximately \$26.6 million was generated from direct effect, \$23 million from the induced effect, and only \$5.2 from the indirect effect (see Tables 3, 4, & 5).

On-site visitor expenditures generated \$9.77 million of total output, \$5.59

	Direct	Indirect	Induced	Total
Hotels and lodging places	6.86	0.04	0.23	7.13
Eating and drinking	4.21	0.02	1.33	5.56
Food stores	4.60	0.04	0.60	5.24
Automobile repair and Services	1.99	0.10	0.56	2.65
Owner-occupied dwellings	0.00	0.00	2.24	2.24
General merchandise stores	1.71	0.03	0.49	2.22
Real estate	0.00	0.62	1.42	2.03
Wholesale trade	0.40	0.32	1.00	1.72
Apparel made from purchased materials	1.45	0.06	0.20	1.71
Apparel and accessory stores	1.40	0.02	0.27	1.69
Amusement and recreation services	1.46	0.00	0.20	1.66
Doctors and dentists	0.00	0.00	1.50	1.50
Automobile rental and leasing	1.32	0.05	0.09	1.46
Hospitals	0.00	0.00	1.39	1.39
Miscellaneous retail	0.31	0.04	0.83	1.17
Other sectors	0.88	3.84	10.62	15.34
Total	26.58	5.16	22.96	54.70

Table 3 Changes in output (\$m)(off-site expenditures) due to AIBF, Bernalillo County, New Mexico, 1995

Table 4 Changes in income (\$m)(off-site expenditures) due to AIBF, BernalilloCounty, New Mexico, 1995

	Direct	Indirect	Induced	Total
Hotels and lodging places	5.10	0.03	0.17	5.30
Food stores	3.36	0.03	0.44	3.83
Eating and drinking	2.16	0.01	0.68	2.85
General merchandise stores	1.11	0.02	0.32	1.44
Owner-occupied dwellings	0.00	0.00	1.38	1.38
Doctors and dentists	0.00	0.00	1.23	1.23
Hospitals	0.00	0.00	1.00	1.00
Real estate	0.00	0.28	0.64	0.92
Apparel and accessory stores	0.74	0.01	0.15	0.89
Amusement and recreation services	0.77	0.00	0.11	0.88
Wholesale trade	0.19	0.15	0.48	0.83
Automobile repair and services	0.60	0.03	0.17	0.80
Apparel made from purchased materials	0.63	0.03	0.09	0.74
Miscellaneous retail	0.016	0.02	0.42	0.60
Automobile rental and leasing	0.44	0.02	0.03	0.48
Other sectors	0.41	2.10	5.65	8.16
Total	15.65	2.71	12.95	31.32

	Direct	Indirect	Induced	Total
Hotels and lodging places	218	1	7	226
Eating and drinking	156	1	49	206
Food stores	142	1	19	162
General merchandise stores	59	1	17	76
Amusement and recreation services	46	0	6	52
Apparel and accessory stores	42	1	8	51
Miscellaneous retail	10	1	28	39
Hospitals	0	0	27	27
Apparel made from purchased materials	2	1	3	27
Wholesale trade	6	4	14	24
Automobile repair and services	18	1	5	24
Real estate	0	7	14	21
Doctors and dentists	0	0	20	20
Automobile rental and leasing	16	1	1	18
Owner-occupied dwellings	0	0	0	0
Other sectors	14	65	182	261
Total	750	84	402	1236

Table 5 Changes in employment (off-site expenditures) due to AIBF, BernalilloCounty, New Mexico, 1995

Table 6 Total impact of on-site expenditures after adjustment

	Direct	Indirect	Induced	Total
Total Output (\$m)	4.66	0.91	4.21	9.77
Total Income (\$m)	2.72	0.49	2.37	5.59
Employment (number of jobs)	140	14	73	228

million of total income, and 228 jobs in the local community (see Table 6). Among \$9.77 million of total output, \$6.49 million was produced on-site from primary visitor expenditures. The balance of output was generated by secondary visitor expenditures, and by expenditures from residents who remained in Albuquerque to attend the event rather than travelling outside the area. In this study, 19% of the non-local visitors planned their trips to coincide with the balloon festival. They spent \$1,677,649 at the festival grounds, which created a total output of \$2.06 million and total income of \$1.18 million in Albuquerque. In addition, 12% of local visitors stated that they stayed in Albuquerque to attend the balloon festival rather than travelling outside. This group of visitors added \$927,353 of expenditures to the local community, which generated \$1.23 million of output and \$0.69 million of income.

It should be noted that, due to the difficulty in obtaining local business records, the leakage caused by non-local vendors' business receipts were not considered in this study. This may lead to an overestimation of the impact resulting from visitor on-site expenditures. However, the overall impact of visitor on-site expenditures may be underestimated because conservative Local Purchase Coefficient (LPC) rates were used in the analysis. This then led to a

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conservative economic impact estimate of visitors on-site and off-site expenditures. In addition, the employment indicator in the IMPLAN model is a mix of full-time and part-time employment. Because the majority of festival staff are usually volunteers, the employment multiplier may not be properly applied to a short-term event such as the Balloon Fiesta. While the tourism industry is plagued by studies overestimating its economic impacts, underestimation is equally as inaccurate. Limiting the scope of an economic impact study means that the total impacts may not be known, rather only the impacts of the variables under investigation, as was the case here.

Distribution of economic impact among local industries

Ranked in order, the sectors most affected by the event (those receiving more than 2.0% of the total amount of output) were: (1) hotel and lodging places; (2) eating and drinking places; (3) food stores; (4) automobile repair and services; (5) owner-occupied dwellings; (6) general merchandise sectors; (7) real estate; (8) wholesale trade; (9) apparel made from purchased materials; (10) apparel and accessory stores; (11) amusement and recreation; (12) doctors and dentists; (13) automobile rental and leasing; (14) hospitals; and (15) miscellaneous retail. The above 15 sectors comprised 72% of the total output. The direct and secondary economic impacts resulting from the balloon festival visitors tended to be concentrated in the service sectors. The impact reports show that the hotel and lodging places, eating and drinking, food stores, automobile repair and services, and owner-occupied dwellings were the five largest output and income receivers. The significant impacts on owner-occupied dwellings, real estate, doctors and dentists, and hospitals were mostly caused by the induced effect (the effect from the re-spending of the households' income). The shopping expenditures directly produced impacts on the general merchandise stores, apparel and accessory stores, wholesale trade, and miscellaneous retail sectors. Although visitors initially injected \$3.35 million into public transport, it only generated \$3.01 million of total output and \$1.44 million of total income to the local area. This outcome was mainly due to the high leakage occurring in the first round of production in the automobile rental and leasing and transportation service sectors.

The IMPLAN Type-III multiplier, defined as the ratio of total effects (sum of direct, indirect, and induced effects) to direct effects, was used in this study for analysis. Multiplier effects denote the interdependency of a given industry on a regional economy. The output multipliers suggest that the increased sales from traditional tourism industries such as amusement and recreation services, eating and drinking, and hotels and lodging places have high impact, per unit of output, on the local area (see Table 7). Conversely, transportation services and automobile rental and leasing had less impact, per unit of output, on the local economy. Food and beverages, the second largest visitors' expenditure item, brought the largest impact to the local economy. The eating and drinking industry had a high Type-III output multiplier of 2.23, which shows its strong linkage to the local economy. Although lodging was the largest visitor expenditure category, the low output multiplier effect and high import propensity in the lodging sector contributed to its high leakage. The relatively higher income multiplier rates of eating and drinking, amusement and recreation services, automobile rental and

	Direct	Indirect	Induced	Total
Miscellaneous retail	1.000	0.323	1.010	2.334
Amusement and recreation services	1.000	0.308	0.968	2.276
Eating and drinking	1.000	0.173	1.052	2.225
Apparel and accessory stores	1.000	0.305	0.918	2.223
General merchandise stores	1.000	0.187	0.988	2.175
Hotels and lodging places	1.000	0.139	0.901	2.040
Food stores	1.000	0.105	0.862	1.967
Wholesale trade	1.000	0.305	0.503	1.807
arAutomobile rental and leasing	1.000	0.317	0.458	1.775
Automobile repair and services	1.000	0.343	0.402	1.774
Hospitals	1.000	0.154	0.585	1.739
Real estate	1.000	0.314	0.378	1.693
Apparel made from purchased materials	1.000	0.163	0.478	1.641
Doctors and dentists	1.000	0.120	0.405	1.523
Owner-occupied dwellings	1.000	0.113	0.029	1.142
Other sectors	1.000	0.210	0.613	1.823

Table 7 Regional multiplier: output multiplier (\$m 1992)

Table 8 Regional multiplier: income multiplier (\$m 1992)

	Direct	Indirect	Induced	Total
Miscellaneous retail	0.510	0.181	0.589	2.509
Amusement and recreation services	0.528	0.169	0.565	2.389
Eating and drinking	0.512	0.095	0.613	2.385
Apparel and accessory stores	0.528	0.171	0.536	2.339
Automobile repair and services	0.304	0.178	0.227	2.334
Automobile rental and leasing	0.329	0.166	0.267	2.318
General merchandise stores	0.649	0.105	0.576	2.049
Wholesale trade	0.485	0.170	0.293	1.955
Real estate	0.451	0.163	0.221	1.851
Apparel made from purchased materials	0.433	0.086	0.297	1.840
Hotels and lodging places	0.743	0.078	0.526	1.812
Food stores	0.730	0.059	0.503	1.769
Hospitals	0.724	0.083	0.321	1.586
Doctors and dentists	0.819	0.068	0.235	1.371
Owner-occupied dwellings	0.615	0.057	0.017	1.120
Other sectors	0.606	0.119	0.357	1.786

leasing, apparel and accessory stores, and general merchandise stores indicate that more money will be generated by every dollar of direct income. Comparatively, hotels and lodging and food stores have a relatively small income multiplier effect on local economy (see Table 8).

It should be noted that the computed impacts from on-site visitor expenditures are more limited compared to results from the off-site expenditures. This is because the leakage of on-site expenditures via allied event businesses (i.e. food, beverage, concession vendors, entertainers, etc.) was not considered in this study. The residency of the vendors mainly determines the leakage of on-site visitor expenditures. Seven of the 59 vendors were nonresidents of the Albuquerque area. The portion of on-site visitor expenditures received by non-local vendors may be carried out of the local area and may constitute a significant amount of money (Long & Perdue, 1990).

Conclusions

The total impact of a staged tourism attraction in a local economy may be much larger than the spending associated with only attending the attraction (i.e. admission, parking, concession receipts). The cumulative effects of visitors' expenditures in a regional economy are mainly determined by its economic condition. In this study, a large portion of visitor transportation expenditures leaked out immediately at the first round of transaction, and therefore reduced the total amount of economic impact. This leakage problem is particularly obvious in remote and rural communities where the current levels of service-oriented infrastructure and industry are not adequate to capture visitor spending. Hosting a large-scale special event in a rural community may not benefit the local economy, because the high degree of import tendency in a rural area usually causes high leakage and benefits other regions. Planners should first examine the local economic resources before a staged tourism attraction is promoted as an income generator.

For most small businesses, the interdependencies and relationships of businesses within an economy (and therefore the multiplier coefficients) are beyond their control and influence. Granted, campaigns by economic development and chamber of commerce offices encouraging merchants to transact with one another and 'buy locally' may minimise imports and subsequent income leakage, but some businesses have no choice but to purchase their necessary goods and services from suppliers outside the local economy. Nevertheless, staged tourism events, particularly in remote areas, typically generate direct or first-round transactions that are beneficial to local businesses. To these many small business owners, the initial tourism transactions are their primary concern.

The study's results indicate that the 1995 Albuquerque International Balloon Fiesta benefited local businesses by attracting visitors to participate in other tourism or recreation activities in the local community. Primary visitors not only made purchases at the event grounds, but also spent a large amount of money off-site in the Albuquerque area. This indicates that a special event can elicit the disbursement of tourism spending to other local businesses. The results also show that, if well promoted, a special event can be a powerful strategy for boosting local tourism industries. Hence, cooperation between festival organisers and local tourism-related industries should be encouraged.

Recommendations

Event holders and tourism researchers seeking to measure the economic impacts of their operations should be mindful of the methodological issues surrounding this type of research, including the inappropriate use of multiplier coefficients, import substitution, and failure to adjust event attendance totals to reflect repeat tourist visits. The consequences of these issues will lead to impact figures that are inaccurate, and discredit the event organisation.

Future economic impact studies should seek to determine the portion of secondary or coincidental visitor expenditures made in the local area due to the staged attraction. A supplementary question is necessary, asking these visitors whether they would have taken a trip to the local area if the attraction had not been held. The spending made in the local area by those visitors who would not have visited the local area without the festival should be included in the economic impact calculation.

It was found in this study that the primary festival visitors spent an average of 4.6 nights in Albuquerque and 3.6 nights in other areas of New Mexico. Though the visitors' expenditures made in areas adjacent to Albuquerque were not investigated in this study (i.e. Santa Fe, Taos, Gallup, etc.), their considerable stay in other areas of New Mexico implies that the economic impact on the areas adjoining Albuquerque may be significant. Therefore, future studies of the spatial distribution of visitors' expenditures for a staged tourist attraction, particularly a hallmark event, should consider covering a broader region.

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References

- Archer, B.H. (1984) Economic impact: Misleading multiplier. *Annals of Tourism Research* 11 (3), 517–18.
- Cobb, S. and Weinberg, D. (1993) The importance of import substitution in regional economic impact analysis: Empirical estimates from two Cincinnati area events. *Economic Development Quarterly* 7 (3), 282–6.
- Crompton, J.L. and McKay, S.L. (1994) Measuring the economic impact of festivals and events: Some myths, misapplications, and ethical dilemmas. *Festival Management and Event Tourism* 2 (2), 33–43.
- Dawson, S.A., Blahna, D.J. and Keith, J.E. (1993) Expected and actual regional economic impacts of Great Basin National Park. *Journal of Park and Recreation Administration* (Winter) 45–59.
- Johnson, G.D. and Sullivan, J. (1993) Economic impacts of Civil War battlefield preservation: An ex-ante evaluation. *Journal of Travel Research* 32 (1), 21–9.
- Johnson, R.L. and Moore, E. (1993) Tourism impact estimation. Annals of Tourism Research 20, 279–88.
- Kanters, M.A. and Botkin, M.R. (1992) The economic impact of public leisure services in Illinois. *Journal of Park and Recreation Administration* (Fall), 1–15.
- Long, P. and Perdue, R. (1990) The economic impact of rural festivals and special events: Assessing the spatial distribution of expenditures *Journal of Travel Research* 28 (4), 10–14.
- Mescon, T.S. and Vozikis, G.S. (1985) The economic impact of tourism at port of Miami. Annals of Tourism Research 12, 515–28.
- Mules, T. and McDonald, S. (1994) The economic impact of special events: The use of forecasts. *Festival Management and Event Tourism* 2, 45–53.
- Pedersen, L.D. (1990) Use of IMPLAN to estimate economic impacts stemming from outdoor recreation expenditures in the upper lake states. Unpublished PhD Thesis, Michigan State University.
- Rickman, D. and Schwer, R.K. (1995) A comparison of the multipliers of IMPLAN, REMI, and RIMS II: Benchmarking ready-made models for comparison. *The Annals of Regional Science* 29, 363–74.

- Ruiz, A., Weisskoff, R., Alward, G., Hussain, A. and Maki, W. (1994) Puerto Rico IMPLAN System: Model and Database and Application. Prepared by the Puerto Rico IMPLAN study team for the US Forest Service, Atlanta, Georgia.
- Simmons, D.G. and Urquhart, L. (1994) Measuring economic effects: An example of endurance sports events. *Festival Mangement and Event Tourism* 2, 25–32.
- Turco, D.M. (1995) Measuring the tax impacts of an international festival: Justification for government sponsorship. *Festival Management and Event Tourism* 2, 191–5.
- Turco, D.M. (1992) The spatial distribution of expenditures attributed to a large-scale recreation special event. Unpublished PhD dissertation, University of New Mexico, Albuquerque, New Mexico.
- Vert, B. (1978) The economic impact of tourism in Nepal: An input-output analysis. Unpublished PhD dissertation, Cornell University, New York.
- West, G.R. (1993) Economic significance of tourism in Queensland. *Annals of Tourism Research* 20, 490–504.
- Yardley, J.K., MacDonald, J.H. and Clarke, B.D. (1990) The economic impact of a small, short-term recreation event on a local community. *Journal of Park and Recreation Administration* 4, 71–82.