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Programs that Work

The Economic Impact of 30 Sports Tournaments, Festivals, and Spectator Events in Seven U.S. Cities

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ABSTRACT: Most tourism attractions in the U.S. are financed and/or managed by public park and recreation agencies. Although park and recreation agencies are the engines of tourism, their central role in generating the economic impact emanating from tourists is not widely recognized by taxpayers or elected officials. Economic impact studies are a key tool for enhancing awareness of this role. The conceptual rationale for undertaking economic impact studies is presented. They enable agencies to produce economic balance sheets to supplement their legally required financial balance sheets.

Economic impact studies provide "best guesses" rather than inviolable accuracy. Different procedures and underlying assumptions may be adopted, and often these are inappropriate because study sponsors are more interested in generating high estimates of economic impact that will legitimize a position rather than searching for truth. Four principles central to the integrity of economic impact analyses are reviewed. They are (1) exclusion of local residents; (2) exclusion of "time-switchers" and "casuals"; (3) use of income rather than sales output measures of economic impact; and (4) careful interpretation of employment measures. Mischievous manipulation of analyses invariably involves abusing one or more of these four principles.

Results from 30 economic impact studies undertaken in 7 cities are reported and the patterns emerging from them are discussed. The data from the 14 studies relating to sports tournaments suggested that: if an overnight stay is not required, then the economic impact on a community is likely to be small; $55 per day is a reasonable basis for estimating expenditures at youth soccer tournaments; and $100 per participant per day is likely to be a reasonable basis for estimating the expenditures at adult softball tournaments.

Data from the 16 festival and spectator events suggested that: large numbers of participants and spectators do not necessarily equate to a large economic impact; failure to identify time-switchers and casuals and remove them from the analyses is likely to greatly distort the results; reasonably accurate measures of economic impact are dependent upon reasonably accurate counts of visitors to the events; the economic impact of mega events is extraordinary; a larger proportion of sports tournaments are likely to generate substantial positive economic impacts; if an overnight stay is not require, then the economic impact on the community is likely to be small.

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Introduction

Economic development is a political priority in most communities because it is viewed as a means of enlarging the tax base. The enlargement provides additional tax revenues that governments can use either to improve the community's infrastructure, facilities, and services, or to reduce the level of taxes paid by existing residents. It is seen also as a source of jobs and incomes that enable residents to improve their quality of life. In many communities, tourism is recognized as an important contributor to economic development, but the central role of park and recreation agencies in creating tourism business is frequently overlooked.

The broad field of travel is commonly divided into four major segments based upon purpose of trip. They are (i) business-related travel; (ii) personal business, including visiting friends or relatives; (iii) conventions and meetings; and (iv) pleasure travel. There is some overlap between these trip purpose segments. For example, while the primary trip purpose may be attending a convention or visiting friends and relatives, this may be integrated with pleasure activities. Traditionally, the term "tourist" has referred only to pleasure travelers and does not embrace the other three trip purposes.

Pleasure travelers are stimulated to leave home and visit another community only if there are attractions which entice them there. If a list is made of tourism attractions in a community likely to entice visitors, it is likely that most of them will be operated, by the public sector or by nonprofit organizations. A large proportion of these attractions is likely to be the responsibility of park and recreation agencies. This leads to the conclusion that in most communities, *tourism is a business that the public sector drives, and park and recreation agencies are central to that business.* In these communities, park and recreation agencies are the engines of tourism.

In 1998, the National Recreation and Park Association announced that it was soliciting cities to participate in a study of the economic impact of sports tournaments, festivals and spectator events that were organized or facilitated by park and recreation agencies. The study's goal was to collect data from a substantial number of events that would be reasonably accurate, and to make estimates of the economic impacts of these events which would be free from the types of common errors and abuses found in economic impact studies. It was anticipated that reviewing the results from a relatively large number of case studies may reveal consistent patterns of expenditures and useful parameters which could be used to estimate expenditures and economic impact in communities where it was not possible to collect and analyze empirical data.

The seven cites that volunteered to participate in the study were: Boise, Idaho; College Station, Texas; Des Moines, Iowa; Everett, Washington; Grand Rapids, Michigan; Lansing, Michigan; and Scottsdale, Arizona. They were reasonably diverse in size and geographical location. The study was coordinated by the authors and involved estimating the economic impact of 30 events during the year in these seven cities. To avoid the possibility of embarrassment to any of the cooperating cities, they are identified only as cities A through G in this paper.

The Rationale For Economic Impact Studies

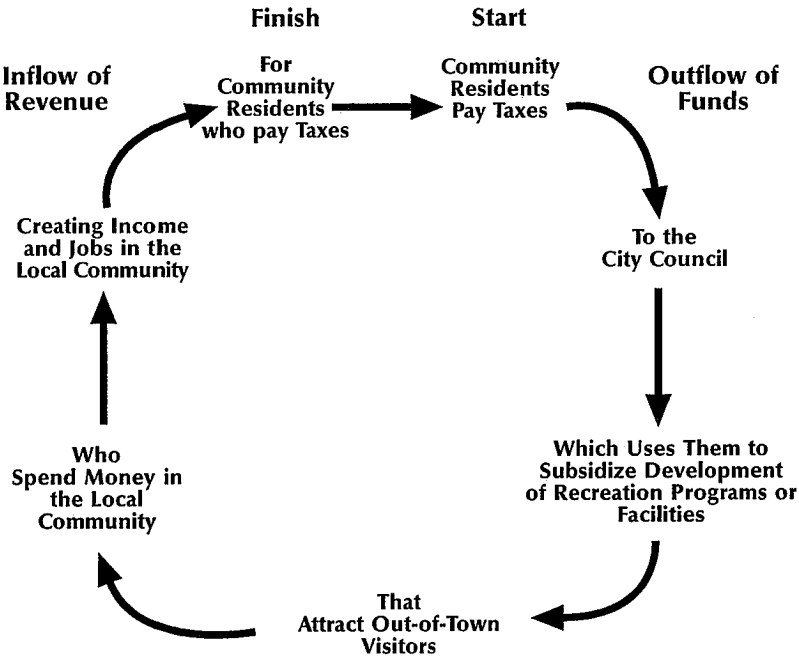
When the parks and recreation department in city A reported the financial consequences of organizing and hosting a national softball championship tournament, it reported a loss of $9,375. When the convention and visitors bureau in that community reported the consequences of hosting the same event, it reported an economic gain to the community of $525,000. It is obvious which agency was likely to be viewed most positively by elected officials and taxpayers. Why did the two agencies report such disparate data from the same event? The answer to this question is that they used different approaches for demonstrating accountability for their public funds.

Park and recreation agencies traditionally have provided financial reports, while the tradition in the tourism field has been to provide economic reports. The different reporting methods have resulted in the two types of agencies occupying very different positions in the minds of public officials. By using economic reports, many convention and visitor bureaus have persuaded elected officials and decision-makers that they are central contributors to their communities' economic health. In contrast, park and recreation agencies generally have not been successful in creating a similarly prominent position in decision-makers' minds regarding the economic contribution of their services, because they have used only financial reports.

Figure 1 illustrates the conceptual reasoning for advocating that park and recreation agencies develop economic balance sheets to supplement financial information. It shows that residents of a community "give" funds to their city council in the form of taxes. The city council uses a proportion of these funds to subsidize production of an event or development of a facility. The facility or event attracts nonresident visitors who spend money in the local community both inside and outside of the events and facilities that they visit. This new money from outside of the community creates income and jobs in the community for residents. This completes the cycle. Community residents are responsible for providing the initial funds, and they receive a return on their investment in the form of new jobs and more household income.

The traditional financial balance sheet presented by park and recreation agencies assumes that the cycle shown in figure 1 starts and ends with the city council, rather than with a community's residents. This is narrow and misleading because it includes only the taxes and revenues that accrue to local government from the event or facility. Such a narrow definition

Figure 1
The Conceptual Rationale for Developing an Economic Balance Sheet



suggests that concern should be focused on income accruing to the council from lease fees, admission revenues, increased sales tax revenues, and other revenue sources. However, this approach is flawed conceptually because the money invested does not belong to the council; rather, it belongs to the city's residents. Although it is efficient for the residents' investment to be funneled through the council, the return that residents receive is what is important, not merely the proportion of the total return that filters back to the council. The purpose of economic impact studies is to measure the economic return to residents.

The difference between the financial and economic approaches is illustrated in table 1. The park and recreation department's financial balance sheet showed a net loss of $9,375 from the tournament. However, if the agency used an economic balance sheet, as tourism agencies do, then it would show a net return of $273,000, $511,000 or $150,000 depending on whether economic impact was reported in terms of direct expenditures, sales impact, or impact on personal incomes. (These figures were calculated by taking the gross amounts shown and subtracting from them the $14,000 net cost to taxpayers of hosting the event.)

The capital cost of the softball complex at which these events were held was approximately $2 million, which means that, if the personal income measure of economic impact was used (the reasons for preferring this measure are discussed later in the paper), the investment would pay for itself after 14 similar tournaments. How many other investments does a city have that pay for themselves in two years (assuming seven tournaments per year) and that continue to contribute $1 million to residents annually for the next 20 years?

The Basic Principles of Economic Impact Studies

Because economic impact studies use complex procedures and produce quantifiable outcomes, often there is a presumption in the minds of "bottom-line" oriented audiences who are unfamiliar with the technique that the analyses are "scientific" and, hence, the outputs are objective and unequivocal. This is fallacious. They offer a misleading guise of statistical

Table 1
A Comparison of the Economic Return and the Financial Return to City A From an Amateur Softball Association's Men's 40 and Over Fast-Pitch National Tournament

Context	
All 37 teams that qualified for the tournament were from outside the local area. The average number of players per team was 15. Some players brought family and friends with them, so the average size of the contingent associated with each team, including the players, was 21. Because it was an elimination tournament, the length of time that the teams stayed in the community varied from two to six nights.	
Economic Return	
A survey of the players revealed the following:	
Total expenditures in the local area by players and their family and friends	$287,000
An input-output model that calculated multipliers concluded the following:	
Total economic impact on sales	$525,000
Total economic impact on personal income	$164,000
Financial Return	
Income to the city parks and recreation department from entry fees	$ 4,625
Costs incurred by the department, including manpower, to host the event	$ 14,000
Net financial loss to the city	$ 9,375
Pay-Back Period	
The cost of constructing the softball complex was almost $2 million. Based on economic return to residents in terms of personal income, the capital cost of the complex would be repaid after 14 similar tournaments.	

sophistication. Economic impact analysis is an inexact process and output numbers should be regarded as a "best guess" rather than as being inviolably accurate. Indeed, if a study was undertaken by five different individuals, it is probable that there would be five different results.

There are several points in an analysis at which different procedures and underlying assumptions can be made which will substantially impact the final result. Unfortunately, this means there is a temptation to adopt inappropriate procedures and assumptions in order to generate high economic impact numbers that will position an agency more favorably in the minds of elected officials. Sometimes errors are the result of genuine lack of understanding of economic impact analyses and the procedures used in them, but in other instances they are committed deliberately and mischievously to generate large numbers and mislead stakeholders.

Most research projects are predicated on a search for truth, but the goal in economic impact studies is less auspicious; it is to legitimize a position. Usually, they are undertaken in order to justify a public expenditure in quantitative dollar terms, with the expectation that the results will reinforce the case for sustaining or increasing resources allocated to the service. In these circumstances, there is a temptation to manipulate the procedures to strengthen the case.

In this section, four principles central to the integrity of economic impact analyses are reviewed. They are: (a) exclusion of local residents; (b) exclusion of "time-switchers" and "casuals"; (c) use of income rather than sales output measures of economic impact; (d) careful interpretation of employment measures. Mischievous manipulation of analyses invariably involves abusing one or more of these four principles.

(a) Exclusion of Local Residents

Economic impact attributable to a sports tournament, festival, event, or facility relates only to new money injected into an economy by visitors, media, vendors, external government entities, or banks and investors from outside the community. Only those visitors who reside outside the jurisdiction and whose primary motivation for visiting is to attend the event, or who stay longer and spend more because of the event, should be included in an economic impact study.

Expenditures by those who reside in the community do not contribute to an event's economic impact because these expenditures represent a recycling of money that already existed there. It is probable that if local residents did not spend this money at the tournament or event, then they would have disposed of it either now or later by purchasing other goods and services in the community. Twenty dollars spent by a local family at a community event is likely to be twenty less dollars spent on movie tickets or other entertainment elsewhere in the community. Thus, expenditures associated with the event by local residents are likely to be switched spending, which offers no net economic stimulus to the community. Hence, it should not be included when estimating economic impact.

This widespread admonition from economists to disregard locals' expenditures is frequently ignored because when expenditures by local residents are omitted, the economic impact numbers become too small to be politically useful. To rectify this, two disconcerting new terms have emerged. Some agencies now report that their event contributed $X million "to local economic activity". Along with "economic activity" the synonymous term "economic surge" also is now being used. Both of these terms are used to describe *all* expenditures associated with an event or facility, irrespective of whether they derive from residents or from out-of-town visitors. This generates the high numbers that study sponsors seek, but the economic surge or economic activity figures are meaningless. They are used by advocates to deliberately mislead stakeholders for the purpose of boosting their advocacy position, because most elected officials, media representatives and residents mistakenly assume that "economic activity" and "economic surge" are synonymous with measures of economic impact.

(b) Exclusion of "Time-Switchers" and "Casuals"

Expenditures from out-of-town visitors should be net of "time-switchers" and "casuals". Some non-local spectators at an event may have been planning a visit to the community for some time, but changed the timing of their visit to coincide with the event. The spending of these *time-switchers* cannot be attributed to the event since it would have occurred without the event, albeit at a different time of the year.

Casuals are visitors who were already in the community, attracted by other features, and who elected to go to the event instead of doing something else. For example, at the minor league baseball games in city C that were surveyed, approximately one-third of the spectators reported they were either time-switchers or casuals. The casuals may have been there visiting friends or relatives or for business purposes, and attended the games as a pleasant way to spend the summer evening. Their expenditures in city C could not be attributed to the baseball games, because they were already in the city and it is likely they would have spent that money in the community on something else if there had been no baseball games.

Expenditures by time-switchers and casuals would have occurred without the event, so income generated by their expenditures should not be attributed to it. However, if visitors who qualify as members of these two groups stay in the jurisdiction for more days than they would have done if the event had not been held, then their expenditures on those extra days should be included in the economic impact analysis.

Time-switchers and casuals can usually be disregarded when the event is a team sport and its economic impact is almost all contributed by the participants and family or friends traveling with them. If an agency hosts a softball tournament, for example, it is unlikely that any players on the teams that enter will be time-switchers or casuals. Their reason for visiting the community is likely to be exclusively associated with the team's tournament involvement. However, if the event is a festival; if much of its impact is

generated by spectators rather than participants; or if it is the impact of a facility rather than an event that is being measured, then there may be substantial numbers of time-switchers and casuals.

(c) Use of Income rather than Sales (Output) Measures

Economic impact can be expressed by a variety of different indicators, but almost all of them involve use of the multiplier concept. This concept recognizes that when visitors to an event spend money in a community, their initial direct expenditures stimulate economic activity and create additional business turnover, personal income, employment, and government revenue in the host community. An explanation of the multiplier concept is beyond the scope of this paper, but it can be likened to the ripples set up in a pool if more water is poured into the system. The pool represents the economy and the additional water symbolizes extra spending by the outside visitors. The ripples show the spread of money through the economy.

In this study, the IMPLAN input-output modeling system was used to calculate the multiplier effect at each event. IMPLAN produces three different types of economic impact measures that are commonly reported. They are sales (output), personal income, and employment. Because the first two of these are both measured in dollars, they are often confused. A *sales (output)* measure reports the effect of an extra unit of visitor spending on economic activity within a host community. It relates visitor expenditure to the increase in business turnover that it creates. It is a rather esoteric measure with very limited practical value. It may be of some interest to economists interested in researching industry interdependencies; to business proprietors interested in sales impacts; or to officials in governmental entities who are interested in approximating sales revenues which may accrue from injections of funds into particular sectors, but it does not offer insights that are useful for guiding policy decisions of locally elected officials.

The *personal income* measure of economic impact reports the effect of an extra unit of visitor spending on the changes that result in level of personal income in the host community. In contrast to the sales output indicator, the income measure has substantial practical implications for stakeholders because it enables them to relate the economic benefits received by residents to the costs they invested (figure 1).

In an analysis of a park and recreation agency special event, sports tournament or facility, sales measures of economic impact are unlikely to be of interest to local residents. The point of interest is likely to be the impact of visitors' expenditures on residents' personal incomes. Most government officials and taxpayers are likely to be interested only in knowing how much extra income residents will receive from the injection of funds from visitors. Their interest in value of sales *per se* is likely to be limited, since it does not directly impact residents' standard of living.

The conceptual model shown in figure 1, which illustrates the rationale for economic impact studies, specifies that their purpose is to compare how much money residents invest in a park and recreation event or facility, with how much income they receive from it. The notion of sales transactions does not appear anywhere in the model and, from the perspective of residents and elected officials, it is irrelevant to the analysis. Nevertheless, because sales measures of economic impact are frequently three or more times larger than personal income indicators, sponsors of economic impact studies invariably report economic impact in terms of sales rather than personal income. The higher numbers appear to better justify the public investment that is being advocated, but they are meaningless for this purpose.

(d) Careful Interpretation of Employment Measures

An *employment* multiplier coefficient measures the effect of an extra unit of visitor spending on employment in the host community. There are three important caveats regarding the estimates of employment that should be noted. First, estimates include both full-time and part-time jobs, and do not distinguish between them. The employment measure does not identify the number of hours worked in each job, or the proportions of jobs which are full and part time. However, it seems reasonable to posit that local businesses are unlikely to hire additional full-time employees in response to additional demands created by a tournament or event, because the extra business demand will last only for a few days. In these situations, the number of employees is not likely to increase. Rather, it is the number of hours that existing employees work that is likely to increase. Existing employees are likely to be requested to work overtime or to be released from other duties to accommodate this temporary peak demand. At best, only a few very short-term additional employees may be hired. Thus, for example, it is unlikely that anything like 326 jobs will be created in city D by the River Festival (Table 3), and the few jobs that do emerge will be short-term, part-time jobs. However, decision-makers easily may be misled into assuming these are full-time positions.

Second, the employment estimates assume that all existing employees are fully occupied, so an increase in external visitor spending will require an increase in level of employment within the jurisdiction. In the context of the front desk of a hotel, for example, the employment estimator assumes that the existing staff would be unable to handle additional guests checking in for overnight stays associated with a tournament. However, in many cases, they are sufficiently underemployed to do this, so additional staff would not be needed. In these situations, the employment coefficient is exaggerated.

A third potentially misleading corollary of employment estimates is that they imply all new jobs will be filled by residents from within the community. However, it is possible that some proportion of them will be filled by commuters from outside the community. In these cases, it is inappropriate to conclude that all the jobs benefit the community's residents.

Review of the Economic Impacts of 14 Sports Tournaments

It was anticipated that reviewing the results from a relatively large number of case studies may reveal some consistent patterns of expenditures. However, researchers will be quick to point out that results from the tournaments and events in the seven cities reported here are likely to differ from those obtained by studies done on similar events in other communities, because the contexts are likely to be different:

> Unique factors include the geographic proximity of the participating teams to the host site, novelty of the destination for spectators and participants, the size of the sport venue, the location of the sport venue to the business district, the level of supporting infrastructure in the host community, changes in the format of the event (e.g. amount of rest between matches) and time between qualifying tournaments and the championship tournament. The shorter the time, the less opportunity for sport tourists to plan their trips. The amount of positive or negative media attention, promotional budget, weather and accessibility also play a factor in the economic impact outcomes. (Delpy & Li 1998, 232)

Notwithstanding these reservations, in contexts and communities where managers have no empirical data but are required by stakeholders to provide estimates of visitors' expenditures and economic impact, or need such estimates to help reposition their agency, the results from these case studies suggest useful parameters for providing "intelligent guesses". The questionnaire used to collect the data is shown in Figure 2.

A summary of results from the 14 team sports events that were studied is given in table 2. To avoid the possibility of embarrassment to any of the cooperating cities, their identities have been protected and have been replaced by letter symbols which are shown in the left hand column. Columns 2 and 3 list the names of the events and their duration in days, respectively.

Sampling participants in team sports can be done either by surveying every nth team or by surveying every nth individual. In most cases, it is more convenient to sample teams since team members are often grouped together while waiting to play, practicing or at social gatherings. Column 4 shows that this was done in 11 of the 14 studies. In the remaining three studies, individuals were interviewed without reference to the teams they represented.

Column 5 reports the average size of the team squads. This information was obtained either from the questionnaire, or from event organizers in those cases where teams were required to provide them with tournament rosters. Column 6 was derived by multiplying the data in columns 4 and 5.

Figure 2
Festival and Spectator Events Questionnaire1

1. Have you come to this event from out-of-town? Yes_____ No_____

2. What is the zip code at your home address? _____

3. Which of the following days will you be at this event? (Please circle ***all*** that apply)
   Friday Saturday Sunday

4. How many people (**including yourself**) are in your immediate group? (This is the number of people for whom you typically pay the bills. e.g., your family or close friends) _____ people

5. To better understand the economic impact of the (Name of Event), we are interested in finding out the approximate amount of money you and other visitors in your immediate group will spend, including travel to and from your home. We understand that this is a difficult question, but please do your best because your responses are very important to our efforts. **DURING THE COURSE OF YOUR VISIT, WHAT WAS THE APPROXIMATE AMOUNT YOUR IMMEDIATE GROUP WILL SPEND IN EACH OF THE FOLLOWING CATEGORIES:**

TYPE OF EXPENDITURE	Amount spent in the (name of city) area	Amount spent outside the (name of city) area
A. Food & Beverages (restaurants, concessions, grocery stores, etc.)	_____	_____
B. Entertainment, Lounges & Bars (cover charges, drinks, etc.)	_____	_____
C. Retail Shopping (clothing, souvenirs, gifts, etc.)	_____	_____
D. Lodging Expenses (hotel, motel, etc.)	_____	_____
E. Private Auto Expenses (gas, oil, repairs, parking fees, etc.)	_____	_____
F. Rental Car Expenses	_____	_____
G Any Other Expenses	_____	_____

Please identify: _____

IF YOU DO NOT LIVE IN (Name of City), PLEASE ANSWER THE FOLLOWING QUESTIONS.

6. Did you stay in the (Name of City) area overnight? Yes_____ No_____

6a. If "Yes", how many nights? _____Nights

7. Would you have come to the (Name of City) area at this time even if this event had not been held? Yes_____ No_____

7a. If "Yes", did you stay longer in the (Name of City) area than you would have done if this event had not been held? Yes_____ No_____

7b. If "Yes" (in 7a), how much longer? _____ Days

8. Would you have come to (Name of City) in the next three months if you had not come at this time for this event? Yes_____ No_____

Questions 6 through 8 were not used on the Sports Tournament questionnaire.

Table 2
The Economic Impact of 14 Sports Tournaments

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
						Teams from inside the city		Teams from outside the city			Average Direct Expenditures				Economic Impact		
City	Event Name	Duration (# of Days)	# of Teams (# of Participants)	Average Size of Team Squad	# of Individual Participants	#	%	#	%	Total Expenditure	Per Team	Per Team Per Day	Per Team Member Group	Per Team Member Group Per Day	Sales	Personal Income	Jobs[a]
A	ASA Men's 40-Over Fastpitch National Championship	5	37	14	518	0	0.0	37	100.0	287,425	7,768	1,554	555	111	524,645	164,352	12.8
A	USS Swim Meet	3	24	45	1,079	2	8.3	22	91.7	124,999	5,682	1,894	126	42	236,852	64,201	5.3
A	Boys Soccer Tournament	3	68	15	1,020	5	7.4	63	92.6	128,519	2,040	680	136	45	247,085	69,493	5.7
A	Girls Soccer Tournament	3	70	15	1,050	0	0.0	70	100.0	160,956	2,299	766	153	51	305,070	85,889	6.8
A	Girls Fastpitch Invitational Tournament	3	69	12	828	15	21.7	54	78.3	184,517	3,417	1,139	285	95	351,588	99,811	8.0
B	Hoopin' Downtown Basketball Tournament	1	(584)	N/A	584	N/A	77.8	N/A	22.2	9,589	N/A	N/A	16	16	21,239	7,111	0.4
B	Great Plains Soccer Shoot Out Tournament	2	(1,800)	N/A	1,800	N/A	21.0	N/A	79.0	211,502	N/A	N/A	117	59	483,607	161,692	10.1
C	Magic Classic Softball Tournament	1	(900)	N/A	900	N/A	17.6	N/A	82.4	49,046	N/A	N/A	54	54	92,740	30,254	2.1
A	Whataburger Basketball Shoot Out	4	104	11	1,144	2	1.9	102	98.1	608,458	5,965	1,491	542	136	1,157,000	349,710	26.9
D	Girls U-14 Regional Softball Tournament	3	16	13	208	0	0.0	16	100.0	118,636	7,414	2,472	570	190	290,060	85,955	6.1
E	Invitational Youth Soccer Tournament	4	146	15	2,190	20	13.7	126	86.3	441,424	3,503	876	234	58	825,534	287,878	16.7
A	ASA Men's Fastpitch Softball Championship	3	28	14	392	1	3.6	27	96.4	93,219	3,453	1,151	247	82	176,903	50,904	4.0
A	ASA Men's B Fastpitch National Championship	5	60	14	840	2	3.3	58	96.7	386,999	6,672	1,334	477	95	730,973	211,870	16.7
		3	70			4	5.7	66	94.3								
E	Softball Tournaments	2	55	12	1,788	5	9.1	50	90.9	406,390	3,033	1,153	253	96	579,053	209,751	12.3
		3	24			6	25.0	18	75.0								

a. This figure refers to both full-time and part-time jobs. It assumes the local economy is operating at full capacity and that there is no slack to absorb additional demand created by these events.

It was noted earlier that economic impact referred only to the expenditures of visitors who resided outside the community. Columns 7 and 8 list the number and percentage of teams from within the city (or individuals in the three cases where teams were not surveyed). They were excluded from the analysis, which was confined only to those teams or individuals from outside the city. Their number and percentage is reported in columns 9 and 10. The total expenditure shown in column 11 is derived by extrapolating the expenditures reported by the sample of external visitors to the total number of external visitors to the tournament.

Columns 12 through 15, break-down the total expenditure to a per team average (divide column 11 by column 9), per team per day (divide column 12 by column 3), per team member (divide column 11 by column 6), and per team member per day (divide column 14 by column 3). The purpose of these break-downs is to establish common denominators across tournaments of different duration, with different numbers of teams and different sized squads. Standardizing the data in these ways, facilitates the search for patterns and parameters in the data which is discussed below.

Earlier, it was noted that there are three commonly used measures of economic impact and these are reported in columns 16 through 18. These measures were derived by entering the total expenditure data reported in column 11 into the IMPLAN model by category. (There were 7 categories on the questionnaire)

Patterns and parameters in the sports tournament data

The data in table 2 suggest the following:

1. The obvious and expected relationship that the larger the number of participants from outside the community, the greater the economic impact is likely to be.

2. If an overnight stay is not required, then the economic impact on the community is likely to be small. The highest total expenditures in column 11 correlate strongly with longer tournaments, which presumably required more overnight stays in the community. The two tournaments with the smallest economic impact were both one-day events. Such sports events appear unlikely to be sufficiently extensive or prestigious to attract visitors from far away and, hence, rely primarily on a relatively local clientele. For example, two-thirds of city B's Hoopin' Downtown Basketball Tournament participants, resided within the city, so the event's economic impact was minimal.

3. Per team member group per day expenditures across the four boys and girls soccer tournaments were relatively consistent at $45, $51, $58 and $59, suggesting that an expectation of approximately $55 per day is likely to be a reasonable basis for estimating expenditures at youth soccer tournaments.

4. Per team member group, per day expenditures at the seven softball tournaments were $54, $82, $95, $95, $96, $111 and $190. The first and last numbers were extraordinary and unlikely to be typical. The first number relates to a tournament that lasted only one day, so many participants were

not required to stay overnight. The last number was caused by some of the teams travelling over 1,000 miles and, although the tournament was the trip's main purpose, the city's appealing location caused many to view the trip as a family vacation embracing other attractions in the area. This was reflected in the expenditures. The evidence of the other five studies suggests that an expenditure of approximately $100 per participant per day is likely to be a reasonable basis for estimating the expenditures at softball tournaments.

It is unclear why there is such a substantial difference in the expenditure of soccer and softball participants. Four possible explanations are commodification, climate, sub-culture, and age cohorts. Conversations with sporting goods retailers suggest that softball players purchase personal equipment when they visit a community to play a tournament, but this is much less prevalent among soccer players. Such purchases may be stimulated by close interaction with other players for a multiple day period. The players are likely to have time blocks between tournament games when nothing is scheduled, and "hanging out" at stores that sell softball equipment is sometimes an appealing option. Soccer requires specialist clothing, but no personal equipment. Hence, the opportunities for commodification in the context of soccer are much fewer.

A second contributing factor to the differential economic impact of soccer and softball may be climate. If the climate during softball season is superior to that in the soccer season, then it may encourage participants to bring friends and families to a tournament and to engage in other activities. Third, there may be more of a gregarious "party", socialization sub-culture among softball than among soccer players which induces greater expenditures. Fourth, the four soccer tournaments that were surveyed were all youth events, while five of the seven softball tournaments were adult events. It seems intuitively reasonable that expenditures by adult participant groups would be substantially higher than those associated with youth groups.

It was noted earlier that the most useful measure of economic impact is increase in personal income, but that most tourist organizations report economic impact in terms of sales because it generates a much higher dollar number. This point is illustrated in table 2 where the dollar impacts of sales shown in column 16 are typically between three and four times higher than the personal income measures listed in column 17.

Review of the Economic Impacts of 16 Festival and Spectator Events

The format of the analyses summary shown in table 3 is similar to that described in table 2 with two exceptions. First, the columns relating to teams in table 2 are not relevant to the analyses in table 3 where the unit of analysis is individuals. Second, columns 8 and 9 relating to time-switchers and casuals did not appear in table 2, because they were likely to be irrelevant in the context of sports tournaments.

Table 3
The Economic Impact of 16 Festival and Spectator Events

1 City	2 Event Name	3 Duration (# of Days)	4 Mean Length of Stay of Out-of-town Visitors	5 # of Visitor Days	6 Participants/ Spectators from inside the city #	7 %	8 Casuals/Time Switchers #	9 %	10 Participants/[b] Spectators from outside the city #	11 %	12 Total [c] Expenditure	13 Average per Visitor per Day Expenditure	14 Economic Impact Sales	15 Personal Income	16 Jobs[d]
G	Open Golf Tournament	3	2.4	464,000	140,167	30.2	72,500	15.6	251,333	54.2	29,523,070	117	65,856,795	22,389,187	1,232.0
G	Arts Festival	1	1.8	5,000	1,765	35.3	1,588	31.8	1,647	32.9	156,664	95	336,976	113,172	6.1
G	Culinary Festival	2	1.8	35,000	9,638	27.5	11,486	32.8	13,876	39.7	540,658	39	1,175,350	397,707	21.6
F	Annual Arts Festival	3	1.3	500,000	414,000	82.8	40,952	8.2	45,048	9.0	462,428	10	1,037,867	357,237	22.5
E	Rusty Relics Car Show	1	1.2	745[a]	46	6.2	0	0.0	699	93.8	6,562	9	12,500	3,894	0.3
C	Two Minor League Baseball Games	1 day each	1.0	16,895	6,735	39.9	5,438	32.2	4,722	27.9	25,225	5	54,184	17,818	1.3
C	Walk at the Zoo	1	1.1	525	153	29.2	195	37.1	177	33.7	548	3	1,055	345	0.0
C	Yes Festival	2	3.9	6,092	3,442	56.5	560	9.2	2,090	34.3	56,650	27	111,616	36,643	2.6
D	River Festival	4	3.1	1,000,000	135,135	13.5	369,574	37.0	495,291	49.5	5,781,136	12	14,698,137	4,442,505	326.0
F	4th of July Gala Celebration	1	1.7	55,000	48,605	88.4	2,398	4.3	3,997	7.3	34,420	9	74,793	25,474	1.5
E	Triathlon Dash	1	1.1	482[a]	94	19.5	38	7.9	350	72.6	14,841	42	25,693	11,416	0.5
F	Grand Prix Motor Race	3	1.6	85,000	72,425	85.2	4,899	5.8	7,676	9.0	172,764	23	382,446	129,902	7.8
E	Nubian Jam Heritage Celebration	1	1.7	5,000	2,041	40.8	877	17.5	2,082	41.7	32,356	16	64,715	19,678	1.4
D	Women's Fitness Challenge	1	1.3	105,415[a]	83,795	79.5	0	0.0	21,620	20.5	559,246	26	892,808	429,238	23.9
A	Bluebonnet Street Rod Run	3	2.2	1,409[a]	96	6.8	0	0.0	1,313	93.2	55,233	42	104,333	31,980	2.4
D	American Junior Golf Association Tournament	4	5.4	1,259[a]	0	0.0	0	0.0	1,259	100.0	74,868	59	188,414	56,690	4.0

a. The attendence data provided by the agencies for these events were in number of participants, and for purposes of consistency these were transformed in this table to number of visitor days, which includes members of participants' immediate groups.

b. This figure consists of the number of out-of-town visitors whose primary purpose of visit was to attend the event (Out-of-Towners), and the number of out-of-town visitors whose primary reason for their visit was not to attend the event but extended their stay because of it (Extended Stayers).

c. This figure consists of the expenditures by out-of-town visitors and extended stayers.

d. This figure refers to both full-time and part-time jobs. It assumes the local economy is operating at full capacity and that there is no slack to absorb additional demand created by these events.

The total expenditures shown in column 12 are derived from two sources. The first source is visitors who were attracted to the community by the event. Second, the incremental amount spent by casuals and time-switchers which could be attributed to an extension of their stay in the community because of the event.

The data in table 3 suggest the following, patterns and parameters in the festivals and spectator events data:

1. Large numbers of participants and spectators do not necessarily equate to a large economic impact. For example, the Street Rod Run in city A and Junior Golf Tournament in city D, shown as the last two events in table 3 attracted only 1409 and 1259 visitors, respectively. In contrast, the 4th of July Celebration in city F and the minor league baseball games in city C attracted 55,000 and 16,895 visitors, respectively. However, the economic impacts of the Street Rod Run and Junior Golf Tournament events were substantially greater than those accruing from the 4th of July Celebration or minor league baseball games (columns 12 and 15). This is explained by the larger events lasting for only one day, and only 7% and 28% of the 4th of July Celebration and baseball games, respectively, visiting the communities specifically to participate in those events. Further, it seems likely that many of these out-of-town visitors commuted to these events from proximate communities, so their spending on accommodation and food in the host communities was likely to be small.

2. The importance of ascertaining the proportion of visitors who are time-switchers and casuals is clearly demonstrated in columns 8 and 9. In five of the sixteen studies, time-switchers and casuals represented approximately one-third of all visitors. If the questionnaire had asked only for their home address or zip code and, therefore, failed to differentiate them from out-of-town visitors who were attracted specifically by the event, then there would have been a substantial overestimation of the economic impact attributed to these events.

3. Reasonably accurate measures of economic impact are dependent upon reasonably accurate counts of visitors to the events, because the impact estimates are derived by extrapolating from a sample to a total visitation count. In sports events where teams or individuals have to register with the organizers, an accurate count is usually available. Similarly, at gated spectator or festival events which charge an admission, accurate counts are available from ticket sales and/or turnstile counts. However, many festivals are not gated and do not charge admission. In these cases, attendance counts are frequently "guesstimates" made by the organizers. If these are inaccurate, then the economic impacts will be inaccurate. For example, if the River Festival attendance in table 3 was actually 200,000 rather than 1 million then the total expenditure would be $1.15 million rather than $5.78 million! Accuracy in sampling, data collection and analysis is of little use if the total attendance counts are inaccurate.

4. The extraordinary economic impact generated in a local community by a mega-event (as opposed to a typical community festival) is demonstrated by the first event listed in table 3. This golf tournament is a stop on

the men's professional tour. The very high total expenditure (column 12) not only reflects people staying multiple nights in the community and a large proportion of visitors from out-of-town, but also that the visitors are relatively affluent. The almost $30 million estimate in table 3, is limited to the expenditures of spectators and does not include those by the players, officials and their entourages; the extensive number of media representatives; the hospitality expenditures of major companies, or sponsorships. Nevertheless, the $30 million expenditures dwarf the aggregated $8 million and $3.3 million generated by the other 15 festivals and events shown in table 3 and the 14 sports tournaments listed in table 2, respectively.

5. Expenditures by out-of-town visitors exceeded $100,000 at 7 of the 16 special events (Table 3), whereas this figure was exceeded by 11 of the 14 sports tournaments (Table 2). These data suggest that a larger proportion of sports tournaments are likely to generate substantial positive economic impacts than special events (but not mega-events), because of the higher proportion of participants who come from outside the community and the inherent requirement of many sports tournaments that participants stay in the community for multiple days. For small and medium sized communities that lack the resources to stage a large scale festival which will be sufficiently attractive that visitors will stay overnight, these data suggest that sports tournaments are likely to be a superior generator of positive economic impact.

6. If an overnight stay is not required, then the economic impact on the community is likely to be small. This reiterates the pattern noted in the sports tournament data. The per capita expenditures at single day events by out-of-town visitors were $95, $9, $5, $3, $9, $42, $16, and $26 (column 13). The three largest numbers had features that made them atypical one day events. At the Arts Festival, emphasis was on selling art rather than only viewing it. The $95 amount reflects this retailing dimension. Both the Triathlon Dash ($42) and the Women's Fitness Challenge ($26) had an overnight component even though they were one day events. Many participants arrived in the community the previous evening so they would be rested before participating in the next day's athletic event.

Pepresenting the Results of Economic Impact Studies

Three measures of economic impact are shown in Tables 2 and 3. They are sales, personal income, and employment. It was noted earlier in the paper that the only meaningful measure for taxpayers and elected officials in local communities is the personal income that accrues to residents as a result of out-of-town visitor spending at the event. However, this creates an ethical conundrum for park and recreation managers since advocates from tourism, economic development, chambers of commerce, and other agencies, organizations and industrial sectors who seek to demonstrate their economic clout in a community are likely to use the relatively meaningless sales measure, because it is substantially bigger than the personal income measure, and the misleading employment measure.

If the economic impact of sports tournaments and special events is reported only by personal income, then it is likely to appear insignificant when compared to other economic sectors whose advocates report their impact in sales. The apparent relatively small impact of an event caused through reporting only the personal income measure may translate into commensurately less political and resource support for it from decision-makers and perhaps, ultimately, even withdrawal of appropriations for it. Acting ethically when others do not, could critically damage the event's standing. To resolve the conundrum, it is recommended that all three measures be reported so like measures can be compared to like, but that the limitations of the sales and jobs measures be emphasized. The following paragraphs offer a general template for this:

> There is frequently confusion and misunderstanding in interpreting measures derived from the IMPLAN input-output model which are reported in columns 14, 15 and 16 of table 3. It has become commonplace for tourism, economic development, and other agencies to report economic impact in terms of sales generated. In our view, this is of no value to elected officials or residents. It is used because it generates the highest economic impact number; but residents have no interest in sales generated, they are primarily interested in how it impacts them in terms of personal income.
>
> The jobs economic impact data often are similarly mischievously interpreted. For example, the arts festival in city G suggests that 6.1 jobs were created as a result of the festival. However, it seems reasonable to posit that local businesses are unlikely to hire additional full-time employees in response to additional demands created by the arts festival, because the extra business demand will last only for a few days. In these situations, the number of employees is not likely to increase. Rather, it is the number of hours that existing employees work that is likely to increase. Existing employees are likely to be requested to work overtime or to be released from other duties to accommodate this temporary peak demand. At best, only a few very short-term additional employees may be hired. Hence, it is improbable that anything like 6.1 jobs will be created.
>
> This figure of 6.1 is also optimistic and misleading because in calculating it, the model assumes (i) there was no spare capacity to absorb the extra services and products purchased with this inflow of new funds, and (ii) that no out-of-town residents took any new jobs that did emerge. In fact, the existing staff at hotels, restaurants, retail establishments, etc. are likely to have spare capacity to handle these visitors. If they do not, then it is likely that managers

Table 4.
Economic Impact of Sports Events Held in City A in 1998

Event Name	Date	Duration (# of Days)	# of Teams	Average Size of Team Squad	# of Individual Participants	Teams from inside the city		Teams from outside the city		Total Expenditure	Average Direct Expenditures				Economic Impact		
						#	%	#	%		Per Team	Per Team Per Day	Per Team Member	Per Team Member Per Day	Sales	Personal Income	Jobs[a]
USS Swim Meet	1-23	3	24	45	1,079	2	8.3	22	91.7	124,999	5,682	1,894	126	42	236,852	64,201	5.3
Boys Soccer Tournament	2-20	3	68	15	1,020	5	7.4	63	92.6	128,519	2,040	680	136	45	247,085	69,493	5.7
Girls Soccer Tournament	2-28	3	70	15	1,050	0	0.0	70	100.0	160,956	2,299	766	153	51	305,070	85,889	6.8
Girls Fastpitch Invitational Tournament	5-29	3	69	12	828	15	21.7	54	78.3	184,517	3,417	1,139	285	95	351,588	99,811	8.0
ASA Men's Fastpitch Softball Championship	8-1	3	28	14	392	1	3.7	27	96.4	93,219	3,453	1,151	247	82	176,903	50,904	4.0
ASA Men's Class B National Championship	9-7	5	60	14	840	2	3.3	58	96.7	386,999	6,672	1,334	477	95	730,973	211,870	16.7
Budweiser Tournament	5-2	2	162	14	2,268	30	18.5	132	81.5	303,864	2,302	1,151	164	82	440,655	151,729	9.8
State Girls Fastpitch U-18	7-10	3	34	12	408	1	2.9	33	97.1	112,761	3,417	1,139	285	95	163,523	56,305	3.6
Men's Slowpitch State Class C	7-24	3	101	14	1,414	14	13.9	87	86.1	300,411	3,453	1,151	247	82	435,648	150,005	9.6
State Women's Fastpitch	8-1	2	5	12	60	0	0.0	5	100.0	11,390	2,278	1,139	190	95	16,517	5,687	0.4
Total	-	-	621	-	9,359	70	11.3	551	88.7	1,807,635	-	-	-	-	3,104,814	945,894	69.9

a. This figure refers to both full-time and part-time jobs. It assumes the local economy is operationg at full capacity andthat there is no slack to absorb additional demand created by these events.

will reorganize shift schedules or pay overtime, only if these adjustments are unable to accommodate the additional demand generated by the arts festival, will new jobs be created. Such jobs are likely to be temporary, part-time positions lasting only for the duration of the festival.

The most useful economic impact indicator is that which measures the event's contribution to the personal incomes of residents. This is rarely used by tourism agencies because it is generally three to four times smaller than the sales impact. However, it is the indicator that is likely to be most meaningful to residents.

Agencies should prepare an annual economic impact report each year for their stakeholders. Extrapolations can be made from data included in this report to similar events in the community that were not surveyed. An example, taken from sports tournaments in city A, is shown in table 4. Data from the six sports events listed above the bold line in table 4 were collected by surveys. No surveys were undertaken at the four events below the line. These events were matched with above-the-line events that were most similar and the per team member per day dollar value was used from the matching events to calculate the total expenditure and economic impacts.

The economic impact report in table 4 shows that almost $1 million accrued in new income to city residents, and that out-of-town visitor expenditures resulted in over $3 million of additional sales. This balance sheet was presented to city A's council as part of the budget process and helped solidify the department's position as a contributor to economic development.

Reference

Delpy, L. and M. Li. (1998). The art and science of conducting economic impact studies. *Journal of Vacation Marketing* 4(3):230-254.