Measuring the Economic Returns from Festivals and Special Events

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WHY MEASURE THE IMPACT OF FESTIVALS AND SPECIAL?

- Provide Tourism Managers and Directors with data about the effectiveness of activities and programs carried out in the community

- Encourage Support for the tourism in the community

- Improve Decision Making

- Enhance Tourism Opportunities in community

- Increase Revenue, Employment, and Income in the community
Introduction

• Festivals and special events play an important role in the development of communities.

• These events are growing forms of tourism, especially in rural areas that are struggling to revitalize local economies and drawing people to these areas.

• It is important to recognize that festivals and events are attractions that have drawing power and staying power. This means that they not only bring in new visitors, but they help to keep visitors in the area longer.
Length of Events

- Events can range from one day to one week in duration.
- The types of visitors will vary.
- Research suggests that participant-based events may yield greater expenditure per person than spectator-based events.
Size of Events

- Size of events vary, and larger events have greater potential economic impact because of attendance and media coverage.
- The economic impact of events may differ due to the length, size, and type of event developed and the market attracted to that event.
- Therefore, it is also useful to classify events to assess economic performance against other types of events.
Factors Contributing to a Successful Event

- Increasing visitor length of stay in region/town
- Increasing visitor expenditure in region/town
- Increasing destination awareness
- Increasing civic pride or community support

These factors are obviously beneficial to an area and its tourism industry, although the cost at which they are obtained must be justified.
Typical Costs Associated with Tourism Development

• Traffic congestion
• Road accidents
• Vandalism
• Police and fire protection
• Environmental degradation

• Garbage collection
• Increased prices to local residents in retail and restaurant establishments
• Loss of access
• Disruption of residents’ lifestyle.
Methods, Data Collection, and Information

- In measuring tourism economic impact many issues must be reviewed, including questionnaire design, sampling of event participants, data processing, the development of multipliers for the area just to name a few.
- One of the main methods of data or information collection required to measure the economic benefits of festivals and special events to the host community is the participant or visitor survey.
Cruisin’ the Coast Attendee Survey

Please be aware that the information collected from this survey will be used for research. Your participation in this survey is completely voluntary. By filling out this survey, you are consenting to participate. Thank you for your time.

City ___________________________ State _______ Zip ______

How many people are in your party? ______

Income Level:
☐ <$30,000 ☐ $30,000 to 50,000 ☐ $50,000-100,000 ☐ $100,000+

What is your primary reason for being in the area?
☐ I live here. ☐ Cruisin’ the Coast
☐ Visiting friends/family ☐ Other ______________________

If staying away from home, how many nights will you be in the area? ______

Where are you staying? Check one.
☐ Private Residence/Home ☐ Hotel ☐ Bed and Breakfast
☐ Campground ☐ RV

How many years have you attended Cruisin’ the Coast? ______

How did you hear about the event? Check as many as apply.
☐ Newspaper ☐ Television ☐ Magazine
☐ Posters ☐ Word of Mouth ☐ Radio
☐ Social Networking ☐ Attend yearly

What was the highlight of the festival for your group? ___________________________

Please rate the festival from 1 to 10. 1 being the lowest and 10 the highest. ______
How much will you spend on the following?
Mark closest amount or write in other amount.

Gasoline
- $0-$10
- $11-$20
- $21-$30
- Other $____

Food and Drink
- $0-$20
- $21-$40
- $41-$60
- Other $____

Festival Vendors and Exhibitors
- $0-$50
- $51-$100
- $101-$150
- Other $____

Other stores
- $0-$50
- $51-$100
- $101-$150
- Other $____

Hotel/Lodging
- $0-$50
- $51-$100
- $101-$150
- Other $____

Total Spending
- $0-$100
- $101-$200
- $201-$300
- Other $____

Discrimination based upon race, color, religion, sex, national origin, age, disability, or veteran’s status is a violation of federal and state law and MSU policy and will not be tolerated. Discrimination based upon sexual orientation or group affiliation is a violation of MSU policy and will not be tolerated.

Your comments:
________________________________________
________________________________________
________________________________________
• Using this type of survey, it is easier to ask visitors about their spending and behavior patterns.
• The survey also gives the community opportunities to ask the participants some demographic-based questions to assist in the compilation of a market profile.
Data and Information Collection

• The main method of data collection is the participant or visitor survey.

• Types of questions to ask:
  • Demographic information
  • Spending patterns
  • Event specific information
  • Others
    • Is the tourist in town specifically for the event?
    • How long is the tourist staying?
    • Where will the tourist be staying?
Data Entry

• Data must be entered accurately
• Analysis can be performed using Microsoft Excel.
  • SPSS can also be used, but is not required.
Assessing non-local participant numbers

- Spending by non-local participants is the spending that is used for the economic impact assessment.
- Spending by local participants does not increase the “economic pie” of the area.
Table 1. Projected Total Attendance at the Market Street Arts and Crafts Festival, 2011

<table>
<thead>
<tr>
<th>Category</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>In-State</td>
<td></td>
</tr>
<tr>
<td>Non-local (NL)</td>
<td>2,949</td>
</tr>
<tr>
<td>Local (L)</td>
<td>26,827</td>
</tr>
<tr>
<td>Out of State (OFS)</td>
<td>4,315</td>
</tr>
<tr>
<td>Total</td>
<td>34,091</td>
</tr>
</tbody>
</table>
How Do We Measure the Economic Impact of F&SE?

There are many ways to measure the economic value of and industry or event.

- Evaluate the costs and benefits to the host community, which include measuring direct costs and revenues to organizers.
- Measure total attendance, visitor expenditures, vendor expenditures and revenues, plus organizers’ expenditures.
- Estimate direct and indirect economic benefits, including employment, value-added income, and taxes.
Models

Two of the most usual economic models for performing this type of analysis are the IMPLAN Input-Output model and Benefit-Cost Analysis.

- Input-output models create linkages between industries in the local economy.
Measuring the economic impact

- The economic impacts of events on the economy of an area can be categorized into primary and secondary economic impacts.
  - The primary impact is the direct economic impact of the event, using expenditures of survey participants or business sales.
  - Secondary impacts are those that result from the introduction of new money into the economy and the spending of wages and salaries by workers supporting these events.
- The inclusion of secondary impacts provides a more accurate assessment of the impact.
Multipliers calculate the secondary economic impact of spending in an area. The most common multipliers used by analysts in economic impact assessments are:

- Output multiplier
- Employment multiplier
- Value-added or income multiplier

The value-added or income multiplier measures the total amount of income left after leakages (such as savings, imported goods and services, taxes etc.,) have been accounted for.

This is the most accurate measure as it reflects the income left in the region after the increase in economic activity due to tourist expenditure.
DESCRIBING THE ECONOMIC IMPACTS AND RETURNS

Examples from the 2011 Market Street Arts and Crafts Festival
Direct Impact

- The number of non-local participants should be multiplied by the average spending of these participants

Table 4. Estimated Spending by Visitors with Local Retailers and Vendors at the Market Street Arts and Crafts Festival, 2011

<table>
<thead>
<tr>
<th>Expense*</th>
<th>In-State: Local</th>
<th>In-State: Non-local</th>
<th>Out-of-State</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food Services and Drinking Establishments (Restaurants, Concessions, Bars)</td>
<td>$1,451,150</td>
<td>$38,914</td>
<td>$534,502</td>
<td>$2,024,567</td>
</tr>
<tr>
<td>General Merchandise Stores (Clothing, Souvenirs, Gifts, etc.)</td>
<td>587,002.08</td>
<td>49,515.33</td>
<td>680,108</td>
<td>$1,316,625</td>
</tr>
<tr>
<td>Hotel Lodging and Accommodations</td>
<td>601,837.65</td>
<td>46,965.76</td>
<td>645,089</td>
<td>$1,293,892</td>
</tr>
<tr>
<td>Purchases from Vendors and Exhibitors at Festival</td>
<td>575,737.44</td>
<td>54,895.05</td>
<td>754,000</td>
<td>$1,384,632</td>
</tr>
<tr>
<td>Gasoline</td>
<td>447,386.08</td>
<td>57,969.17</td>
<td>796,224</td>
<td>$1,301,579</td>
</tr>
<tr>
<td>Total</td>
<td>$3,663,114</td>
<td>$248,260</td>
<td>$3,409,923</td>
<td>$7,321,297</td>
</tr>
</tbody>
</table>
Total Impact

- Use IMPLAN input-output model to estimate total impact and impact on Total Value Added.

Table 5. Economic Impact of the Market Street Arts and Crafts Festival, 2011

<table>
<thead>
<tr>
<th>Impact Type</th>
<th>Employment</th>
<th>Total Income</th>
<th>Total Value Added</th>
<th>Output</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct</td>
<td>35</td>
<td>$983,004</td>
<td>$1,406,678</td>
<td>$2,402,947</td>
</tr>
<tr>
<td>Indirect</td>
<td>4</td>
<td>132,945</td>
<td>216,946</td>
<td>415,868</td>
</tr>
<tr>
<td>Induced</td>
<td>6</td>
<td>205,966</td>
<td>371,801</td>
<td>619,478</td>
</tr>
<tr>
<td>Total</td>
<td>45</td>
<td>1,321,915</td>
<td>1,995,425</td>
<td>3,438,293</td>
</tr>
</tbody>
</table>
Public Finances

• Local government revenues associated with these types of events come from sales taxes on visitors’ spending.
### Impact of Market Street Arts and Crafts Festival on Sales Tax Receipts, 2011

<table>
<thead>
<tr>
<th>Item</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food Services and Drinking Establishments (Restaurants, Concessions, Bars)</td>
<td>$26,218</td>
</tr>
<tr>
<td>General Merchandise Stores (Clothing, Souvenirs, Gifts, etc.)</td>
<td>17,050</td>
</tr>
<tr>
<td>Hotel Lodging and Accommodations</td>
<td>16,756</td>
</tr>
<tr>
<td>Purchases from Vendors and Exhibitors Present at Festival.</td>
<td>17,931</td>
</tr>
<tr>
<td>Gasoline</td>
<td>16,855</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$94,811</strong></td>
</tr>
</tbody>
</table>

Source: Estimates derived as 7% statewide retail sales tax times municipal share of retail taxes (18.5 percent) times total unadjusted spending of $7.3 million by festival goers.
Impacts Resulting from Festivals and Special Events

• Increased expenditures
• Creation of employment
• Increase in labor supply
• Increase in public finances (sales tax receipts)
• Increase in standard of living
• Increased awareness of the area as a travel/tourism destination
Benefit–Cost Analysis

- BCA is a systematic process for calculating and comparing benefits and costs of projects. Projects can range from dams and highways to tourism to training programs and health care systems.
BCA Measures

• There are several indicators from the basic benefit-cost model that can be used to compare the benefits and costs of investments, projects, or decisions. They include:
  • NPV
  • IRR
  • MIRR
  • B-C ratio (or PI index)
  • Pay back period (PBP)
Screen Shot from Excel-based Projection Evaluation Model

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Project Evaluation Inputs:</strong></td>
<td></td>
<td>$</td>
<td>100,000</td>
</tr>
<tr>
<td><strong>Initial cost/investment ($000s)</strong></td>
<td></td>
<td>$</td>
<td>100,000</td>
</tr>
<tr>
<td>Investment YR 1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Investment YR 2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Investment YR 3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Discount rate:</strong></td>
<td></td>
<td>10%</td>
<td></td>
</tr>
<tr>
<td><strong>Terms/years</strong></td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td><strong>Reinvestment rate</strong></td>
<td></td>
<td>8.00%</td>
<td></td>
</tr>
<tr>
<td><strong>Depreciation Inputs</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Asset Type</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Depreciation method</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Cost of asset (dollars)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Expected life of asset (yrs)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>** Salvage value of asset ($)**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Tax rate</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Property</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assessment rate</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Millage (108.69)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Corporate income</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Inflation rate</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>YEAR</strong></td>
<td><strong>Benefit</strong></td>
<td><strong>Investment/ startup Costs</strong></td>
<td><strong>Operating cost</strong></td>
</tr>
<tr>
<td>0</td>
<td>0</td>
<td>0</td>
<td>100000</td>
</tr>
<tr>
<td>1</td>
<td>127000</td>
<td></td>
<td>8700</td>
</tr>
</tbody>
</table>
Screen Shot from Excel-based Projection Evaluation Model. Results from simple tourism analysis

<table>
<thead>
<tr>
<th></th>
<th>F</th>
<th>G</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Project Evaluation Output and Assessment</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NPV</td>
<td>$</td>
<td>7,545</td>
</tr>
<tr>
<td>IRR</td>
<td></td>
<td>18.30%</td>
</tr>
<tr>
<td>MIRR</td>
<td></td>
<td>18.30%</td>
</tr>
<tr>
<td>BCR</td>
<td></td>
<td>1.07</td>
</tr>
<tr>
<td>MCR</td>
<td>$</td>
<td>7,545</td>
</tr>
<tr>
<td>PV benefits</td>
<td>$</td>
<td>115,455</td>
</tr>
<tr>
<td>PV Costs</td>
<td>$</td>
<td>107,909</td>
</tr>
<tr>
<td>Payback amount</td>
<td></td>
<td>7545</td>
</tr>
<tr>
<td>Pacback years</td>
<td></td>
<td>0.07</td>
</tr>
</tbody>
</table>
Lessons Learned

- Only ask for information in the survey that you need to properly do the analysis.
- Be as brief as possible. Brevity is the watch word.
- Ask no more than 10 questions in the survey.
- Standardize the questions and process for use with other events. This builds efficiency into the process and allow tourism directors and managers to compare events and their associated impacts over time.
- Do a test-run of the survey instrument with the persons doing the interviewing of visitors before actually doing the survey.
- Have all interviewers wear similar shirts and/or blouses in color and logo. This makes the process look more professional.
- Instruct the interviewers not to badger an interviewee. If someone does not want to participate in the survey, thank them for their time and move on.
- Don’t send the final report the tourism director or manager but request a face-to-face meeting to go over the results and answer any questions they might have.
- Limit the report to no more than 5 pages.
- Highlight keys results in the report. Such as: total number of visitors to the event, number of visitors from outside the region and state, number of lodging rooms sold, and amount tax revenues generated.
- Help tourism directors and managers to understand some of the factors that can impact negatively the return on tourism events in an area. Such as: length, size, and type of event; size of the town and economic leakage, amount or cost invested in hosting the event.
- Keep it simple and practical. That is, be prepared to give the gist of the report in a one minute “elevator speech.”
SUMMING UP AND MOVING FORWARD

Once the economic impact of an event has been calculated the potential use of this information is almost endless. Figures can be used with policy makers to justify continued support for tourism in the area.

The information on expenditures by sectors could be used to show the direct impact on the local economy resulting from a specific event. These results could then be used to illustrate the benefits of the event to local industry and as a tool for gaining local sponsorship.