Economic Impact of the Art in the Pass Festival

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Introduction

This economic impact study evaluates the 2013 Art in the Pass Festival held at War Memorial Park in Pass Christian, Mississippi on April 6 and 7. The City of Pass Christian is located in Harrison County on Mississippi’s Gulf Coast. The 2010 census estimates there are 4,712 residents in Pass Christian with 194,029 in the entire county. Since 1995, Pass Christian has hosted the festival with the purpose of providing visitors with an appreciation of fine arts and crafts, and the opportunity to purchase original artwork created by professional and emerging artists.

The Art in the Pass Festival promotes community development by engaging volunteers to help coordinate and host the event. People of all walks of life enjoy the festival with opportunities to participate in cooking demonstrations, network with artists, and contribute to the scholarship fundraiser. Festival coordinators have sought insight to improve the festival with the hope of attracting new residents and business owners to locate to the town. For the past several years, festival coordinators co-located Art in the Pass Festival with a children’s education outreach event called Celebrate the Gulf, hosted by the Mississippi Department of Marine Resources. Celebrate the Gulf is co-located in War Memorial Park and blends very effectively with Art in the Pass. For this economic impact analysis, both events were considered one all-encompassing festival.

The Art in the Pass Festival generated an estimated 6,864 of total attendees who generated local sales during the two-day period of over $525,000. Of this total, out-of-town attendees generated approximately $360,000 in sales to the economy, and local attendees generated $165,000. Additionally, the economic impact of these sales added an additional $153,000 in earnings to the economy through a “ripple effect” that occurs when sales are generated.

Non-profit Fundraising

The Art in the Pass Festival hosts a silent auction and sells chances to win original artwork in order to raise funds for the Dot Hector and Gretchen Harris Memorial Art Scholarship. Two $1,000 art scholarships are given annually to high school seniors who plan to study art in college.

Economic Impact Analysis

This impact study seeks to know quantitatively the effect of tourism expenditure on the local economy particularly local earnings. The economic activity of tourism is linked with other industries in the general economy. Visitor spending figures only illustrate a portion of the importance of an industry or individual facility to the regional economy. The impact of quality of life and the potential that this festival
will attract tourist back are not considered because of the difficulty of monetizing these potential consequences. Indirect effects in the regional economy are created by hotel and restaurant purchases of goods and services such as food, office supplies, accounting services and marketing materials. Induced effects result from employees spending their income in the local economy.

Additional impacts occur when companies affiliated with hotel or restaurants either directly or indirectly have a ripple effect in the buying and selling of goods and services. This may include fuel, food, equipment, and services from other local and regional firms. These purchases lead to further inter-industry activities that represent the indirect impact. Appendix A provides a glossary of definitions used in this study.

**Multiplier Effects**

Input-output analysis generates estimates of indirect economic impacts commonly referred to as "multiplier effects." Multiplier effects measure the impacts on output, income, and employment that result from an increase in final demand. An increase in final demand (an additional dollar of output or employee compensation, or one additional job in the sector) results in a total increase in output, income, or employment in the economy equal to its multiplier. That is, multipliers estimate the amount of direct, indirect, and induced effects on income or employment that result from each additional dollar of output, additional job, and additional dollar of employee compensation in a sector. This study will estimate the direct, indirect, and induced impacts in terms of local earnings.

**Visitor Impact**

The Art in the Pass Festival attracted thousands of visitors from outside the region, but the majority of the people were from Harrison County and south Mississippi. An intercept survey was conducted during the festival to determine the home location and spending patterns of attendees. A copy of the intercept survey instrument is provided in Appendix B. A four-member team from the University of Southern Mississippi conducted the survey at the War Memorial Park. Travel parties were approached randomly to seek their willingness to respond to survey questions. Table 1 displays basic information about the completed surveys. The survey was completed by 197 travel parties, which represented 486 total visitors (an average of 2.47 persons per party). A travel party is either a household or non-household members traveling together. Out-of-town visitors are the driver of economic impacts because they spend money in the local economy that would not have otherwise been spent. Approximately 40.3% of the surveys were completed by attendees from outside the immediate area. Over the two-day period of time, an estimated 4,098 local citizens attended the festival and 2,766 out-of-town visitors attended the festival totaling 6,864 estimated attendees.
Table 1

*Origins of Surveyed Festival Attendees and Vendors*

<table>
<thead>
<tr>
<th>Completed Survey</th>
<th>Travel Parties</th>
<th>Total Persons</th>
<th>%</th>
<th>Attendees</th>
<th>Vendors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local</td>
<td>113</td>
<td>290</td>
<td>59.7%</td>
<td>4098</td>
<td>21 (19.4%)</td>
</tr>
<tr>
<td>Out-of-town</td>
<td>84</td>
<td>196</td>
<td>40.3%</td>
<td>2766</td>
<td>87 (80.6%)</td>
</tr>
<tr>
<td>Total</td>
<td>197</td>
<td>486</td>
<td></td>
<td>6,864</td>
<td>108</td>
</tr>
</tbody>
</table>

Survey respondents were asked their home zip code to differentiate between local residents versus out-of-town residents. The locations of survey respondent’s homes are displayed on Map 1. Out-of-town visitors primarily came from Hancock County, St. Tammany Parish, New Orleans, East Baton Rouge, and Mobile County. In Mississippi, people came from Wilkinson, Greene, Jackson, Stone, and Oktibbeha Counties. In addition to festival attendees being surveyed, vendors were also asked to complete a festival survey because the out-of-town vendors were considered to be direct contributors to the local economy. A total of one hundred eight vendors participated in the festival, out of which eighty-seven were out-of-town vendors. Travel distances are indicated on Map 2. Fifty-two (52) vendors completed the survey during the festival and their spending was included in the analysis.

Based upon survey results, festival coordinators might consider targeted advertisements in the Mobile, Alabama region and the Hattiesburg, Mississippi region to increase awareness for future festivals.
Map 1. Count of participants by home zip code.

Map 2. Count of vendors by home zip code.
Visitor Spending Patterns

In addition to being asked their home zip codes, visitors were asked to estimate their spending in a variety of categories. Based on these responses, average spending per person figures was calculated. Multiplying the average spending per person by the estimated number of out-of-town attendees yielded an overall estimate of visitor spending as indicated in Table 2. The survey data suggests that nearly $350,000 was spent by out-of-town visitors. The majority of this spending was directly related to the festival—food & drink, shopping, and lodging.

Table 2

<table>
<thead>
<tr>
<th>NAICS</th>
<th>Description</th>
<th>Per Person (Average)</th>
<th>Total Spending $</th>
<th>Local Purchasing (60%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>485999</td>
<td>Transportation</td>
<td>$34.33</td>
<td>$94,947</td>
<td>57,000</td>
</tr>
<tr>
<td>722310</td>
<td>Food and Drinks</td>
<td>16.04</td>
<td>44,369</td>
<td>27,000</td>
</tr>
<tr>
<td>453920</td>
<td>Shopping</td>
<td>25.63</td>
<td>70,914</td>
<td>43,000</td>
</tr>
<tr>
<td>531110</td>
<td>Lodging</td>
<td>17.07</td>
<td>47,205</td>
<td>28,000</td>
</tr>
<tr>
<td>713990</td>
<td>Recreation</td>
<td>12.30</td>
<td>34,010</td>
<td>20,000</td>
</tr>
<tr>
<td>813410</td>
<td>Vendor Fees</td>
<td>125</td>
<td>10,881</td>
<td>7,000</td>
</tr>
<tr>
<td>812990</td>
<td>Other Spending</td>
<td>20.88</td>
<td>57,761</td>
<td>35,000</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>$251.25</td>
<td>$360,087</td>
<td>217,000</td>
</tr>
</tbody>
</table>

The Regional Purchase Coefficient (RPC) is the proportion of regional demand fulfilled from regional production and is an important consideration for measuring the true economic impact of visitor spending. When tourists purchase goods from out-of-town vendors, there is no local impact at the first round of spending as all the money “leaks” from the region. Even with spending at local establishments, some of the spending immediately leaks from the region. Stynes (1997) estimated that “Generally, only sixty to seventy percent of tourist spending appears as final demand in a local region” (p. 17). For example, the industry classification for food and drink “NAICS code: 722310” spending amount was $27,000. The multiplier effect for food service contractors is 1.36 or $36,595 in local earnings. Local
earnings were calculated for each industry category included in the survey. For the purpose of this impact study, only sixty percent of the total estimated spending was used in calculating the economic impact.

**Local Earning Generation**

EMSI Input/Output modeling software was used to determine the economic impact of Art In The Pass Festival using local earnings as its primary calculation. Festival attendees’ total spending adjusted for regional purchasing coefficient was $217,000. This was entered by industry classification into the “Input” category of the model, which subsequently generated three output categories of local earnings: direct, indirect, and induced. The overall economic impact resulted from adding festival spending to local earnings, which resulted in an overall effect of $153,880, as shown in Table 3.

Table 3

*Local Earnings Created by Festival Visitor Spending*

<table>
<thead>
<tr>
<th>INPUT</th>
<th>OUTPUT</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Initial</td>
</tr>
<tr>
<td>Festival Spending for Local Economy ($)</td>
<td>$217,000</td>
</tr>
<tr>
<td>Local earnings</td>
<td>Aggregate Effect on Earnings</td>
</tr>
</tbody>
</table>

The EMSI Input/Output model reveals $8,276 of the spending by out-of-town visitors as direct impact, $987 as indirect and $26,268 as an induced impact. Figure 1 shows the breakdown with the initial local earnings. The initial effect is comprised of the $118,344 in new spending from visitors that the festival helped create after adjusting for retail margins. The direct, indirect, and induced effects all result in the spinoff spending.

The direct effect flows out of the initial impact. The $118,344 refers to local businesses, which become more active as they sell more to the retailers and hotels where the visitors spent their money. This
is supply chain activity. As the supply chain businesses increase their sales, they buy more from other local vendors.

The indirect effect is really a secondary supply chain effect — this is spending from the supply chains of businesses who say increased sales from the festival. This happens when those businesses increased activity prompts increased spending in an industry setting off the same kind of reaction in its own supply chain, and for this study resulted in $8,276 indirect spending from the festival.

The induced effect is a much broader effect, as evidenced by the number of jobs represented there, for a total ripple effect of $987 additional local earnings spending as indicated in Figure 1. The increase in economic activity can further increase demand and growth of other businesses within the geographic region.

Figure 1. EMSI Input/Output Model indicating additional local earnings spending calculations.

Spending By Local Attendees and Vendors

As is typical for festivals, local attendees spent a lesser amount compared to out-of-town visitors. Table 4 displays per person spending patterns for local attendees. Based to the survey data, it is estimated that locals spent almost $166,000 on activities related to the festival in the local economy as compared to $217,000 for out-of-town attendees. Spending by local attendees and local vendors are not included in the estimated economic impact. Only out-of-town participants are evaluated for economic impact.
Table 4

Spending by Local Attendee and Local Vendors

<table>
<thead>
<tr>
<th>NAICS</th>
<th>Description</th>
<th>Per Person (Average)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>485999</td>
<td>Transportation</td>
<td>$1.69</td>
<td>$6,952</td>
</tr>
<tr>
<td>722310</td>
<td>Food and Drinks</td>
<td>4.99</td>
<td>20,461</td>
</tr>
<tr>
<td>453920</td>
<td>Shopping</td>
<td>17.54</td>
<td>71,899</td>
</tr>
<tr>
<td>531110</td>
<td>Lodging</td>
<td>4.76</td>
<td>19,501</td>
</tr>
<tr>
<td>924120</td>
<td>Recreation</td>
<td>2.75</td>
<td>11,276</td>
</tr>
<tr>
<td>813410</td>
<td>Vendor Fees</td>
<td>125.00</td>
<td>2,619</td>
</tr>
<tr>
<td>812990</td>
<td>Other Spending</td>
<td>8.02</td>
<td>32,869</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>$47.77</td>
<td>$165,577</td>
</tr>
</tbody>
</table>

Medium of Advertisement Information

According to participants surveyed, the use of newspaper as a medium of advertisement for the Art in the Pass Festival had a great impact. Seventy percent (70%) of the participants who completed the survey heard of the festival through the newspapers and ten percent (10%) through word of mouth. Figure 2 shows the percentage breakdown of all the methods employed in advertising the festival.

![Figure 2. Medium of advertisement for communicating the festival.](image)

Conclusion

The Art in the Pass Festival generated an estimated 6,864 of total attendees who generated local sales during the two-day period of over $525,000. Of this total, out-of-town attendees generated
approximately $360,000 in sales to the economy, and local attendees generated $165,000. Additionally, the economic impact of these sales added an additional $153,000 in earnings to the economy through a “ripple effect” that occurs when sales are generated.
Appendix A

Definition of Terms

To understand the full effect that a firm or industry has on the economy, including its impact on other sectors, input-output analysis is employed. Input-output analysis is founded on the principle that industries are interdependent. One industry purchases inputs from other industries and households (i.e. labor) then sells outputs to other industries, households, and government. Additional induced impacts occur when workers involved in direct and indirect activities spend their wages on consumer goods produced or sold in the region and local economy. Therefore, economic activity in one sector impacts other sectors.

Crowd Count: For an efficient data collection, the four-member team from the University of Southern Mississippi were paired up and assigned two different positions at the venue; the north and south ends of the War Memorial Park. The crowd count was taken hourly, beginning from 10:05am on Saturday and 10:40 am on Sunday. The last counts were taken at 2:00 pm and 12 pm on Saturday and Sunday respectively. Because the festival had open entrance points on three of the four sides of War Memorial Park, the survey team had to rely on estimated crowd counts. This was accomplished by sectioning the park into four quadrants. Each member then used a hand counter to tally all people within their respective quadrant simultaneously while the other quadrants were being counted. The four quadrants were then added together to obtain a crowd count. The surveys were conducted in between these periods after each crowd count.

Assumption: The researcher assumed in this report that participants spent at most an hour at the festival.

a) The total tax revenue generated from the event was used in the study as the vendor’s fee for participation.

NB: NAICS 813410 (Civil & Social Organization) is the booth fee. Not part of the totals in Table 1 and 2, but captured in the impact study.

Direct Economic Impact: In the case of a festival, the impact created by the out-of-town visitor spending.

Indirect Economic Impact: Additional jobs and payroll created in the surrounding economy as a result of the purchase of inputs by shops and restaurants where travelers stay and shop. This might be goods such as food, office supplies and computer equipment or services such as accounting and legal services.
**Induced Economic Activity**: Changes in economic activity resulting from household spending of income earned directly or indirectly as a result of tourism spending.

**Local earnings**: The income that is received by all persons from all sources.

**Regional Purchase Coefficient**: The proportion of regional demand fulfilled from regional production.
Appendix B

Art In The Pass Participant Survey Questions

*Have you already been stopped to answer questions about the Event? If Yes, thank the respondent and terminate

1. How many people are in your group: ___ (please give number)
2. Zip code:________________
3. With whom did you come to the event:
   _____family only   _____family/friends   _____alone   _____friends
   ___organization
4. Gender: M_____   F_____
5. Age: _____under 15   _____15-25   _____25-35   _____35-45   _____45 and over
6. Are you spending the night away from home because of this event:
   Yes [ ]   No [ ]
   If the answer is NO, continue to question 7.
   If yes, are you staying
   _____at a hotel or motel
   _____with friends or relatives
7. Please estimate how much you will spent as a result of attending this event
   Transportation (Gas, Vehicle rental, repairs) $_______.00
   Parking $_______.00
   Food & Drinks at restaurants $_______.00
   Shopping (Souvenirs) $_______.00
   Lodging $_______.00
   Recreation (entertainment) $_______.00
   All other spending $_______.00
8. Attendance
   _____Never attended before   _____Attended last year
   _____Attended two years ago   _____Attended three year ago
9. How did you hear about the program
   Newspaper [ ]   Radio [ ]
   Television [ ]   Magazine [ ]
   Poster [ ]   Word of mouth [ ]
   Social Media [ ]   Other ________
10. Highest level of education attained:
    _____high school   _____college   _____graduate school
Acknowledgements

Special thanks goes to the following individuals for their contributions to this impact study.

- Ms. Evelina Shmulker Burnett and the Art in the Pass organizers for assisting The University of Southern Mississippi Economic Development Team with coordinating the in-person arrangements for the study and providing technical assistance before, during, and after the festival.
- Mr. Hunter Campbell and Ms. Madison Campbell for volunteering to survey festival participants.
- Grace Wheeler and Kara Brousard for assisting in entering the raw data from the surveys.
Services Offered by The University of Southern Mississippi Economic Development Outreach

In addition to providing graduate education in economic development through the Master of Science in Economic Development program (MSED) and the Graduate Certificate in Economic Development, the Department of Economic and Workforce Development provides assistance to economic developers across the state through four main approaches:

1. Graduate students can work on class projects involving research for a community (e.g., retail pull factor analysis).
2. Each student is required to do a thesis or capstone project. The capstone project involves completing an actual economic development research study (e.g., feasibility study).
3. Each student is required to do an internship in an economic development organization.
4. Communities can do sponsored research projects and tap into the faculty expertise and university data sources (e.g., EMSI and REMI).

Examples of class projects involving research for communities:

- Retail Analysis for the City of Greenwood
- Feasibility of a Livability Court for the City of Hattiesburg
- Economic Impacts of a Native American Casino in Jones County, Mississippi
- Ecotourism Development in Noxubee County
- Strategic Plans for Stone County, Sunflower County, Bolivar County and Historic Downtown Development Association
- Community Study for the Hattiesburg Mid-Town District
- Entrepreneurial Development Plan for the Area Development Partnership

The University of Southern Mississippi offers economic development training through the following programs:

- True South Economic Development Course—This introductory course is accredited by the International Economic Development Council. It fulfills one of the prerequisites for those who wish to take the examinations for the Certified Economic Developer (CEcD) designation.
- Basic Community Economic Development: Practical Tools for Elected Officials—This course covers key components for attracting new business and industry into a community. It is important for economic developers and elected officials to understand their roles of building a successful economic development team.
References