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**Economic Impact of the 32nd Annual Peter Anderson Arts and Crafts Festival
Ocean Springs, Mississippi**

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Abstract: Festivals provide an economic enhancement to large and small towns and rural communities in Mississippi. This study used activity days, attendance and expenditures by survey respondents to develop a spending profile of a typical visitor at the Peter Anderson festival. In addition, activity days and survey attendance helped to estimate the total number of visitors at the 2-day festival. The spending profile and total visitors help to estimate the total expenditures of festival participants and derive their economic impacts in Ocean Springs and surrounding communities in Mississippi.

Besides their own expenditures, festival-goers impacted the local economy by drawing visitors from outside the local area and state. These nonlocal visitors have a much greater impact on the local economy than do local visitors because their spending is imported into the area. These groups usually spend more on entertainment, food, lodging, and gasoline than local visitors.

This study incorporates the economic contributions of out-of-area visitors, out-of-state visitors, and festival vendors in deriving their economic impacts in the local and surrounding areas of the state. Results showed that the Peter Anderson Arts and Crafts Festival created \$13.6 million in total output, \$2.5 million in total income², \$4.3 million in value-added, and 102 full- or part-time jobs.

Key Words: festival expenditures, in-state visitors, out-of-state visitors, vendors, economic impacts, total income, employment, output, value-added, taxes

Introduction

Festivals are an integral part of the economies of most communities in Mississippi. The economic benefits of festivals can be assigned a dollar value, but no amount of money will accurately reflect the personal and social benefits of these events.

Festivals can increase tourism in the area. These events not only bring outside revenue to the community, but they allow even the smallest towns to celebrate and capitalize on the unique aspects of their area.

The Mississippi Main Street Association asked MSUES to determine the economic impact and market reach of the festival to the local community and the county. The project also seeks to identify effective marketing strategies and ways to improve planning and implementation of future festivals.

² Total income includes wages and salaries, sole proprietor income, profits and rents.

Objectives and Purpose of the Study

The study had two purposes:

- to evaluate the local economic impact of the Peter Anderson Arts Festival
- to provide basic market information about the event by examining attendees' travel distances, attendance frequency, satisfaction with the event, and purchases in the area and at the festival.

The specific objectives of the study were:

- What is the demographic profile of the festival-goers?
- What is the economic impact of the festival, including spending only by nonlocal in-state visitors, out-of-state visitors, and vendors?
- What is the economic significance of spending by local visitors the festival on the Ocean Springs and Jackson County economy?

Methods

This study is the first attempt to measure the economic impact and market characteristics of the Peter Anderson festival in Ocean Springs, Mississippi. The analysts developed a short survey instrument based on similar types of special events in other areas. The instrument contained six questions and space for open-ended comments on selected items (see Appendix C). The data obtained from the survey provided the basis for estimating the festival's economic impact and helped to measure other statistics crucial to understanding the overall market and visitor dynamics by market areas.

Data Collection

The study used intercept surveys to collect information from festival-goers. The survey was short and only required a few minutes for respondents to complete.

Data used in the paper were based on a sample of 207 visitors to the two-day Peter Anderson festival held in Ocean Springs, Mississippi. From this sample, the analysts estimated total attendance at the festival. Two students were hired to administer the survey to attendees with the help of volunteers. The survey instrument used to collect the data is shown in Appendix C.

Estimating Attendance

Most festivals lack sufficient information to make changes, improvements, or justify continued existence and support of these events to key decision makers. Knowing how many people attend a festival is valuable for documenting their importance as a major player in community and economic development in the area which few festivals collect. Reasonably accurate data on attendance counts may allow vendors to estimate their sales and festival organizers to project the economic impact of the event.

Because many festivals have multiple points at which patrons can enter the event, counting all who attend the festival is difficult. The study used two main entrances into the festival. The number of people entering the festival each hour was extrapolated to form an estimate of the number entering the gate during each 1-hour period during the day.

Because the festival grounds officially opened at 10 a.m. each day, counts were taken after 10 a.m. until closing, or about 4:00 p.m. If people entered the festival grounds before the counts began at 10 a.m. each day, they were neither counted nor included in the study.

Data obtained from these intervals were converted to hourly counts and then daily counts based on the opening and closing times of the festival. That is, attendance counts obtained during a one-hour time period were multiplied by the total number of hours the festival was opened on that day. This was done for each station where patrons could enter the festival. The sum of the daily counts from each station provides an estimate of festival attendance for that day. Summing daily counts provide an estimate of total attendance based on the number of days in the festival. This resulted in the following estimates of daily attendance: Saturday, 52,234; and Sunday, 52,230. The estimated total attendance was 104,564.

Survey Tabulations

Demographics and Market Information

Visitors to the Peter Anderson Arts and Crafts Festival were interested in arts and crafts. When asked, "Is attending this event your primary reason for being in the area?" about 61.2 percent of the respondents said yes. About 64.73 percent of respondents had a gross household income of less than \$75,000 a year, and 35.26 percent earned \$100,000 or more a year.

Because most of the attendees were from the immediate and surrounding counties, it was assumed that most were repeat visitors to the festival. The average size for this group was 3.61 people; the average group size for out-of-state-visitors was 2.01 people.

Geography

Survey respondents were asked to give their primary residence ZIP code. About 76.80 percent indicated that they were residents of the area or from other areas in the state. About 23.2 percent of the attendees were from outside the state. The primary residence ZIP codes of the survey subjects were used to create a map of the event's market area (Figure 1).

Figure 1. Geographic Distribution of Visitors Attending the Peter Anderson Arts and Crafts Festival in Ocean Springs, Mississippi, 2010



Model Preparation

Once the surveys were completed, the principal investigators and students entered the data into an Excel-based spreadsheet. The data was analyzed, summarized, and prepared for inclusion into the IMPLAN Input-Output model for analysis. For comparison and information purposes, the data in Appendix B reflects input from survey respondents with local and non-local zip codes.

Retail Spending

Visitors

MSU-ES conducted 208 intercept surveys of visitors at the festival in November 2010. More than 60 percent of the visitors said that attending the festival was their primary reason for being in the area.

About 138 of the respondents reported making some purchases during the festival. Table 1 itemizes the total money spent in Ocean Springs and surrounding communities. Spending by in-state local visitors accounted for 53.68 percent of total sales during the festival in 2010. Spending by in-state non-local visitors accounted for 4.72 percent of total sales during this period. Out-of-state visitors accounted for the remaining 41.6 percent of total sales during the festival in 2010.

The average visitor party spent \$196.86 during this two-day event in Ocean Springs. Spending by in-state visitors average \$149.86, while spending for out-of-state visitors averaged \$352.16. A detailed breakdown of spending by party size is shown in Appendix Table 10.

Economic Impacts

Direct Effects

One of the objectives of this project was to understand the economic importance of the arts and crafts festival on the region. Average expenditures among visitors attending the festival were determined from survey responses. Among survey respondents, the average spending was \$116.34. Spending and amounts were divided into the following main categories:

- food services and drinking establishments (restaurants, concessions, bars) -- \$87.67
- general merchandise stores (clothing, souvenirs, gifts, etc.) -- \$113.92
- hotel lodging and accommodations -- \$312.21
- other lodging accommodations (B&B, R.V parks) -- \$45.00
- gasoline -- \$49.07
- other expenses -- \$ 92.69

- purchases from festival vendors and exhibitors -- \$176.93

A detailed, estimated breakdown of direct spending by visitors and geographic location (in-state or out-of-state) for each category is in Table 1. Based on survey results, about 80,308 of the estimated 104,562 attendees at the festival were visitors from the immediate area and state; that's about 76.80 percent of the total crowd. Their direct economic impact was estimated to exceed \$12 million. Direct spending by out-of-state visitors was estimated at almost \$8.6 million. Direct spending of both groups totaled almost \$20.6 million.

Because most economies cannot produce all goods and services locally, some are produced outside the immediate area and imported to the region. When this happens, economists margin to account for this importing of outside goods and services. For example, expenditures like gasoline, lodging, and general merchandise, and purchases from independent artists, writers, and performers were margined to account for the fact that not all retail sales revenues will stay in the local area. Thus, final impacts are smaller than they would otherwise be.

Table 1. Estimated Spending by all Visitors with Local Retailers and Vendors at the Peter Anderson Arts and Crafts, 2010

Expense	In-State: Local	In-State: Non- local	Out-of- State	Total
Food Services and Drinking Establishments (Restaurants, Concessions, Bars)	\$1,624,727.5	\$60,070.5	\$1,050,332.5	\$2,735,130.5
General Merchandise Stores (Clothing, Souvenirs, Gifts)	2,498,400	70,190	964,462	3,533,052
Hotel Lodging and Accommodations	-	541,000	2,952,826	3,493,826
Other Lodging Accommodations (B&B, R.V. Parks)	-	-	250,561	250,561
Gasoline	559,627	76,741	633,827	1,270,196
Other Expenses	2,710,774	141,002	758,644	3,610,420
Purchases from festival vendors and exhibitors	3,655,192	82,585	1,953,450	5,691,227
Total	\$11,048,721	\$971,590	\$8,564,103	\$20,584,413

Indirect and Total Effects

Since economic impact analysis is concerned only with money entering the town from outside its boundaries, the analysis disregarded spending by local attendees. To ensure that only out-of-town visitors were included in the analysis, a question about where the respondent lived was asked.

The Peter Anderson festival attracted vendors from inside and outside the city of Ocean Springs and the state. Again, because economic impact is concerned only with new money entering the

town from outside its boundaries, the analyses disregarded spending by local residents. This calculation estimated direct expenditures at \$8.6 million. Using the IMPLAN input-output model, the total impact of the Peter Anderson festival on the Jackson County economy in gross output or sales was estimated at approximately \$13.6 million. The total impact on total value added (TVA) was estimated at \$4.26 million (Table 2). TVA is more accurate as a measure of the economic impacts than spending, because it reflects the actual returns to the factors of production (that is, land, labor, capital and management) in the form of rents, wages, interest, and profits. It was estimated the festival contributed \$4.26-million to TVA, including \$3.04 million directly and an additional \$1.24 million through indirect and induced impacts.

This economic activity supported 102 temporary jobs in Jackson County, including 84 jobs directly attributable to the event itself, and another 18 jobs throughout the rest of the economy through indirect (10 jobs) and induced (8 jobs) effects.

Table 2. Economic Impact of Peter Anderson Arts and Crafts Festival, 2010

Impact Type	Employment	Total Income ³	Total Value Added	Output
Direct	84.4	\$ 1,858,169	\$ 3,041,283	\$ 11,514,081
Indirect	10.2	406,951	668,322	1,198,801
Induced	7.6	268,555	546,594	897,205
Total	102.2	2,533,675	4,256,199	13,610,087

The top sectors affected by the Peter Anderson Arts and Crafts Festival were hotels and motels, retail stores (including clothing, food and beverage, general merchandise, and gasoline). Table 3 contains more information about the impact on these specific sectors.

Table 3. Top Five Sectors Impacted by Expenditures at the Peter Anderson Arts and Crafts Festival (\$1,000), 2010

Sector	Description	Employment	Total ⁴ Income	Value Added	Output
411	Hotels and motels, including casino hotels	43.2	\$ 907,071	\$ 1,619,924	\$ 3,495,719
413	Food services and drinking places	27.5	527,758	736,685	1,503,572
329	Retail Stores - General merchandise	10.5	299,386	487,153	560,230
326	Retail Stores - Gasoline stations	4.3	110,509	179,324	210,330
361	Imputed rental activity for owner-occupied dwellings			152,236	208,375

³ Total income includes wages and salaries, sole proprietor income, profits and rents.

⁴ The reader should not attempt to divide total income by employment to get the average compensation per worker. As noted earlier, total income includes employee wages and salaries, sole proprietor income, profits and rents. So employee compensation is just one part of the total income in the study.

Tax Revenues

Local government revenues associated with the Peter Anderson festival consist of sales taxes on attendee spending in Ocean Springs and other municipalities in Jackson County. Because the city has a general 7 percent tax on all purchases and an additional 2 percent tax on lodging restaurant sales, different tax rates were applied to specific purchases by attendees at the festival.

For example, the special tax (2 percent) was applied only to the cost of lodging and food sales in restaurants. Most purchases by attendees during the two-day events were subject to the general 7 percent sale tax, regardless of their residency.

Table 4 contains the tax impacts associated with the Peter Anderson Festival. The results show that retail spending by festival-goers produced more than \$265,568 in tax revenues for local officials in Ocean Springs and surrounding areas.

Table 4. Impact of Peter Anderson Arts and Crafts Festival on Sales Tax Receipts in Jackson County, Mississippi, 2010

Item	Amount
Lodging	\$ 48,490
Restaurant and prepared foods	35,420
General merchandise	92,508
Gasoline	16,449
Independent artists, writers, and performers	73,701
Total	266,568

All tax revenues were projected to come from the 7 percent general sales tax in the city. Of total sales tax receipts in Jackson County, general merchandise accounted for the largest share (34.7 percent) followed by independent artists, writers, and performers (27.6 percent). More than 18.2 percent of the tax revenues were derived from overnight lodging, bed and breakfast, and R.V. parks in the county and Ocean Springs. This provided further evidence that most of the festival-goers were from the local area in 2010. Restaurant and prepared foods comprised 13.3 percent of total tax revenues, and gasoline store sales accounted for the remaining 6.2 percent of total sales tax receipts in the county.

Conclusions

Attendees' spending could be estimated in a number of ways, but not all of those ways are accurate. For example, totaling direct spending by all festival-goers (in-state and out-of-state visitors) can overstate the impact of the special event. Thus, the number of local attendees was included in the overall count of event attendance, but their spending was not used to determine the economic impact of the festival.

The results suggest that for each dollar of direct sales, another 18 cents in secondary effects (mainly induced effects) occurred, yielding a total sales effect of \$13.6 million. Although positive, these impacts did not create any full-time employment, only 102 part-time jobs.

Appendix A

Summary Statistics and Key Results from Peter Anderson Festival Survey in Ocean Springs, Mississippi, 2010

Key Results:

- About 125 of the 210 visitors who responded to the survey said attending this event was their primary reason for being in the area.
- About 157 of the 210 respondents to the survey were from Mississippi; 52 respondents were from outside Mississippi; and only one respondent was from outside the U.S.
- The mean party sizes of in-state and out-of-state visitors were 3.16 and 2.91, respectively.
- The preferred housing arrangement was a private house. Of those who answered the survey question, 150 of 157 in-state visitors stayed in private homes compared to 37 out-of-state respondents.
- Only a few of the respondents reported stayed in commercial lodging facilities. The number of in-state and out-of-state respondents staying in these facilities was 2 and 10, respectively.
- The mean number of overnight stays for in-state and out-of-state respondents were 1 and 2.5, respectively.
- About 73.15 and 81.82 percent, respectively, of in-state and out-of-state visitors had incomes above \$50,000 a year.
- Of the 104,564 visitors, about 66.56 percent lived within 50 miles of Ocean Springs, Mississippi.
- Of the 104,564 visitors, about 80,245 (or 76.74 percent) lived in Mississippi.

Appendix B
Summary of Survey Tables

Table 1. Primary Reason of Visitors Being in the Area is Festival

Response	In-State	Out-of-State
Yes	267	123.5
No	219	25
NA	4	0

Table 2. City and State of Visitors Attending the Peter Anderson Arts and Crafts Festival, 2010

City	State	Visitors Per Party
Acme	PA	2
Alabaster	AL	2
Annapolis	MD	2
Baton Rouge	LA	4
Bay St. Louis	MS	3
Belle Chasse	LA	6
Biloxi	MS	42
Birmingham	AL	4
Black	AL	1
Booneville	MS	6
Brandon	MS	2
Collinsville	MS	2
Columbus	MS	5
Corinth	MS	6
Crawfordville	AR	5
Crystal Springs	MS	4
Dallas	TX	3
Daphne	AL	2
Diamondhead	MS	9
Douglasville	GA	2
Earlysville	VA	2
Fairaday	LA	2
Fairhope	AL	2
Foley	AL	2
Gautier	MS	24
Gretna	LA	3
Gulfport	MS	55
Hattiesburg	MS	9
Hot Springs	AR	4
Houston	TX	4.5
Irvington	TX	5
Jackson	MS	4
Kenner	LA	2
Long Beach	MS	40

Lucedale	MS	2
Madisonville	LA	4
Magee	MS	6
Memphis	TN	10
Mesquite	TX	3
Metairie	LA	2
Miami	FL	2
Milton	FL	2
Mobile	AL	21
Moselle	MS	2
Moss Point	MS	17
Muscatine	IA	3
New Orleans	LA	22
Ocean Springs	MS	175
Pascagoula	MS	18
Pass Christian	MS	8
Roswell	GA	5
Saucier	MS	16
Seminary	MS	3
Slidell	LA	4
St. Augustine	FL	2
St. Martin	MS	4
Starkville	MS	8
Summerland	BC, Canada	2
Thomaston	GA	4
Tunica	MS	2
Vancleave	MS	2
Vicksburg	MS	4
Waveland	MS	6
Westwego	LA	2
Wildwood	MO	1

Table 3. Visitors Attending the Peter Anderson Arts and Crafts Festival, 2010

State	Total Visitors
AL	39
AR	9
BC, Canada	2
FL	6
GA	11
IA	3
LA	51
MD	2
MO	1
MS	490
PA	2
TN	10
TX	10.5
VA	2

Table 4. Geographic Area of Visitors Attending Peter Anderson Arts and Crafts Festival, 2010

Location	In-State	Out-of-State
NA	65	
L	425	
OFS		148.5

NL: Non-local in state

L: Local in state

OFS: Out-of-State

Table 5. Average Party Size Attending Peter Anderson Arts and Crafts Festival, 2010

In-State	Out-of-State
3.16	2.91

Table 6. Days When Visitors Attended the Peter Anderson Arts and Crafts Festival, 2010

Day	In-State	Out-of-State
Friday and Saturday	12	6
Saturday	406	114
Saturday and Sunday	69	28.5

Table 7. Average Number of Nights Away for Peter Anderson Arts and Crafts Festival, 2010

Day	In-State	Out-of-State
Friday and Saturday	0	0.13
Saturday	1.04	2.53
Saturday and Sunday	0	0.63

Table 8. Housing Arrangements of Visitors Attending the Peter Anderson Arts and Crafts Festival, 2010

Property	In-State	Out-of-State
Hotel	2	10
Bed and Breakfast	0	0
Casino	2	2
Private Residence	150	37
Campground	1	0
R.V.	1	2

Table 9. Number of Parties by Income Level Attending the Peter Anderson Arts and Crafts Festival, 2010

Level	In-State	Out-of-State
Less than \$30,000	14	1
\$30,000-\$50,000	26	7
\$50,000-\$100,000	68	18
Above \$100,000	41	18

Table 10. Average Spending of Parties Attending the Peter Anderson Arts and Crafts Festival, 2010

Item	In-State: Local	In-State: Non-local	In-State	Out-of- State
Food Services and Drinking Establishments (Restaurants, Concessions, Bars)	73.80	17.84	77.36	125.76
General Merchandise Stores (Clothing, Souvenirs, Gifts, etc.)	113.48	20.85	113.54	115.48
Hotel Lodging and Accommodations		160.67	160.67	353.55
Other Lodging Accommodations (B&B, R.V. Parks, etc.)	60.00		60.00	30.00
Gasoline	25.42	22.79	36.37	75.89
Any other expenses.	123.13	41.88	94.29	90.83
Purchases from festival vendors and exhibitors.	166.02	24.53	163.08	233.89

Appendix C
Survey Instrument

**Peter Anderson Festival
Economic Impact 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.

ID	Question	Selection	Response/Comments
1	Is attending this event your primary reason for being in the area?	<input type="checkbox"/> No <input type="checkbox"/> Yes	
2	Where do you live?	City _____ State _____ Zip _____	
3	How many people (including yourself) are in your immediate group?		
4	Which of the following days will you attend the festival? (Please circle one.)	<input type="checkbox"/> Friday, Saturday <input type="checkbox"/> Friday AND Saturday	
5.	If staying away from home how many nights will you spend in the area?		
6.	If staying in the area where will you be staying?	1. <input type="checkbox"/> Hotel 2. <input type="checkbox"/> Bed & Breakfast 3. <input type="checkbox"/> Casino 4. <input type="checkbox"/> Private Residence 5. <input type="checkbox"/> Campground 6. <input type="checkbox"/> R.V.	
7.	How did you hear about the festival?		
8.	What is the highlight of the festival for you and your group?		
9.	What is your income level per year?	1. <input type="checkbox"/> Less than \$30,000 2. <input type="checkbox"/> \$30,000 - \$50,000 3. <input type="checkbox"/> \$50,000 - \$100,000 4. <input type="checkbox"/> Above \$100,000	

During your visit, what is the estimated amount your group will spend in each of the following categories?

1.	Food Services and Drinking Establishments (Restaurants, Concessions, Bars)	
2.	General Merchandise Stores (Clothing, Souvenirs, Gifts, etc.)	
3.	Hotel Lodging and Accommodations	
4.	Other Lodging Accommodations (B&B, R.V. Parks, etc.)	
5.	Gasoline	
6.	Any other expenses.	
7.	Purchases from vendors and exhibitors present at festival.	
8.	Please write any additional comments:	

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