

# Economic Impact of the Woodville Deer and Wildlife Festival

*Prepared by*

Brian Richard, Ph.D.

Alison Crumpton

**The Trent Lott Center of Excellence for  
Economic Development and Entrepreneurship**

**Department of Economic and Workforce Development  
The University of Southern Mississippi**

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# Economic Impact Analysis

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## INTRODUCTION

This economic impact analysis looks at the 2011 Woodville Deer and Wildlife Festival, held in Woodville, Mississippi. The city of Woodville is located in Wilkinson County, on Mississippi's western border with Louisiana. The 2010 census estimates there are 1,096 residents in Woodville with 9,878 in the county. Since 2008, the city of Woodville has hosted the festival with a purpose of providing visitors with a sense of the community and various outdoor hunting activities offered in Woodville and the surrounding areas. Festival coordinators have sought insight to improve the festival, with the hope of attracting new residents and business owners to relocate to the town.

## ECONOMIC IMPACT ANALYSIS

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. 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 who are engaged with hotel or restaurants or whose companies depend directly or indirectly on the purchase goods and services such as fuel, food, equipment and services from other local and regional firms. These purchases lead to further inter-industry activities that represent the indirect impact.

### *Multipliers*

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 and indirect impacts in terms of employment and personal income.

## VISITOR IMPACTS

The Woodville Dear and Wildlife Festival attracted thousands of visitors, the majority of whom travelled from outside the immediate region. A survey was conducted during the festival to determine the home location and spending patterns of attendees. Table 1 displays basic information about the completed surveys. The survey was completed by 148 travel parties, which included 510 total visitors (an average of 3.45 persons per party). Out of town visitors are the driver of economic impacts as they are spending

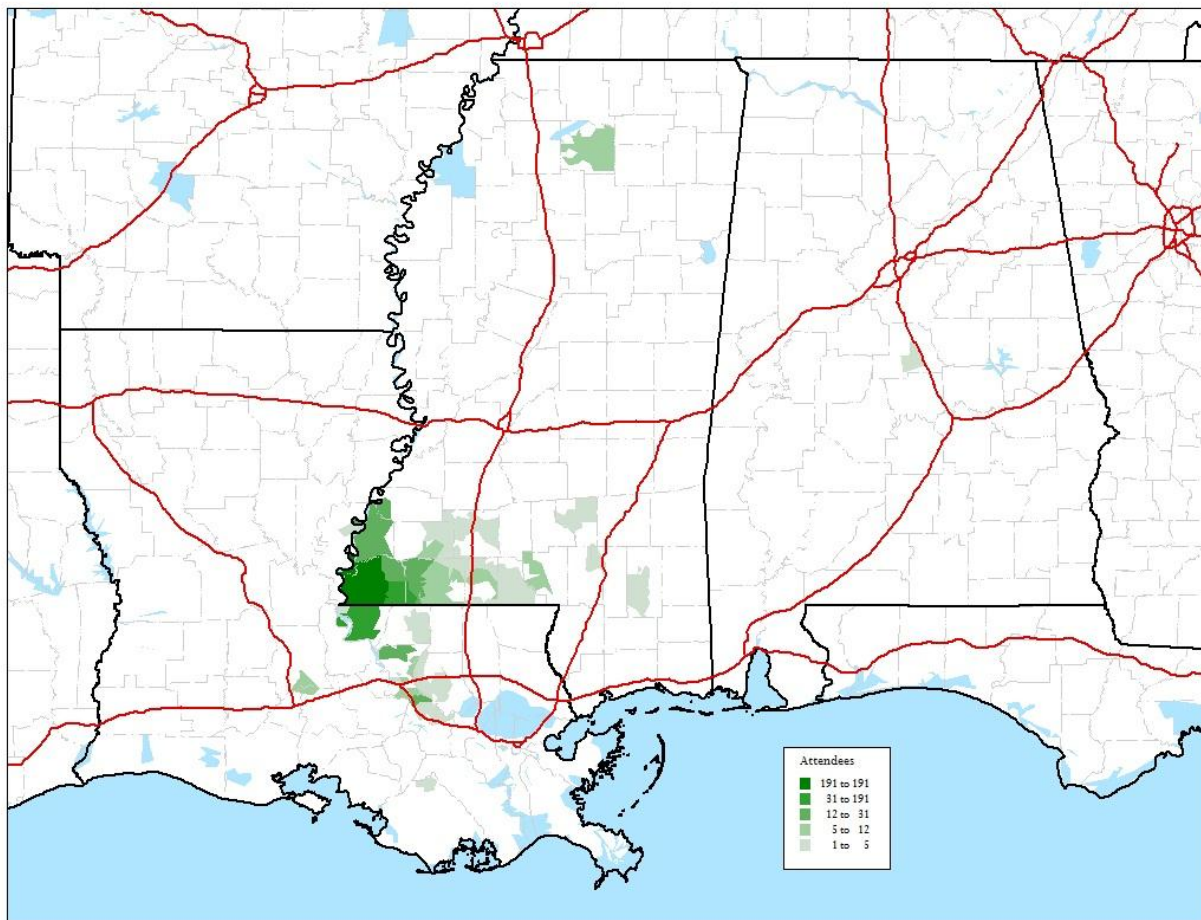
money in the local economy that would not have otherwise been spent. About 62.5 percent of the surveys were completed by attendees from outside the immediate area.

Table 1. Completed Surveys.

Completed Surveys	Travel Parties	Total Persons		Attendees
Local	56	191	37.5%	1779
Out of town	92	319	62.5%	2971
Total	148	510		4750

The locations of survey respondent’s homes are displayed on Map 1. Out of town visitors primarily came from south of Woodville towards Baton Rouge and from the Pine Belt of Mississippi to the east. Almost 70 percent (352 out of 510 attendees) live within 40 miles of Woodville. Ninety percent (459 out of 510) live within 100 miles.

Map 1. Count of Survey Respondents 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 were calculated. Multiplying the average spending per person by the estimated number of out of town attendees yields an overall estimate of visitor spending. Table 2 displays those spending estimates. The survey data suggests that about \$93,000 was spent by out of town visitors. The majority of this spending was on spent directly at the festival (entry fees, food & drink, and merchandise in the festival).

Table 2. Spending by Out of Town Visitors.

In-Town Visitors (56 surveys)		
	Per Person	Total
Transportation	\$ 1.39	\$ 2,473
Entry Fee	\$ 3.17	\$ 5,639
Prepared Food/Drink (Outside Festival)	\$ 2.25	\$ 4,003
Groceries (Outside Festival)	\$ 1.08	\$ 1,921
Food and Drinks (In Festival)	\$ 3.86	\$ 6,867
Souvenirs/Merchandise (In Festival)	\$ 4.55	\$ 8,094
Shopping (Outside Festival)	\$ 0.24	\$ 427
Other Expenses	\$ 1.31	\$ 2,330
Total	\$ 17.85	\$ 31,754

As is typical for festivals, local attendees tended to spend less than out of town visitors. Table 3 displays per person spending patterns for local attendees. Based to the survey data, it is estimated that locals spent almost \$32,000 on activities related to the festival.

Table 3. Spending by Local Attendees.

Out-of-Town Visitors (92 surveys)		
	Per Person	Total
Transportation	\$ 8.17	\$ 24,274
Entry Fee	\$ 4.48	\$ 13,310
Prepared Food/Drink (Outside Festival)	\$ 1.85	\$ 5,496
Groceries (Outside Festival)	\$ 1.96	\$ 5,823
Food and Drinks (In Festival)	\$ 4.80	\$ 14,261
Souvenirs/Merchandise (In Festival)	\$ 9.38	\$ 27,869
Shopping (Outside Festival)	\$ 0.49	\$ 1,456
Other Expenses	\$ 0.14	\$ 416
Total	\$ 31.27	\$ 92,906

### **Local Income Generation**

There was some personal income created by the out of town visitor spending at the festival. Table 4 shows that over \$18,000 in personal income was generated by out of town festival attendees after the multiplier effects are calculated. These figures assume that the in festival food and merchandise booths were run by local businesses and employed local citizens.

Table 4. Local Personal Income Created by Festival Visitor Spending.

	Direct	Indirect	Total
Income	\$ 15,726	\$ 2,498	\$ 18,224

## Appendix:

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.

**Direct Economic Impact:** The direct economic impact in case of a festival is the impact created by the out of town visitor spending.

**Indirect Economic Impact:** The indirect economic activity of the visitor spending refers to 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:** The induced economic activity is the additional activity that results from the restaurant and other retail/entertainment establishment employees spending their income in the local economy.

For reporting purposes, the indirect and induced impacts are commonly combined into a single figure and reported as indirect impacts. This is the case in this report. All discussion of indirect impacts includes both the induced and indirect impacts as discussed above.

## PRINCIPAL INVESTIGATOR

The principal investigator on this project was Dr. Brian Richard. He has extensive experience in economic, fiscal and policy research. Brian is currently Assistant Professor in the Department of Economic and Workforce Development at the University of Southern Mississippi. At Southern Miss, his work concentrates on the casino tourism industry, the impacts of economic development projects, local retail and industrial analysis, and research into the state of the southern Mississippi economy. Brian is currently heading up a team of researchers from Mississippi's four research universities that is quantifying the economic impacts of the Gulf Oil Spill.

Previously, Brian was the Director of Research for the Mississippi Gaming Association where he conducted various policy and impact studies of tourism activities in Mississippi and around the U.S. Prior to that he was employed in the Mississippi State Economist's office where he was responsible for Mississippi's IMPLAN economic and fiscal impact model and performed impact studies for a wide variety of industries. He was also responsible for modeling the state's economic performance through Mississippi's leading and coincident economic indicators. Brian also worked in a regional economic planning and development agency where he was responsible for market analysis and feasibility studies for a variety of economic development projects.

Dr. Richard has taught introductory Economics at Millsaps College. He has a finance degree from the University of Washington and a Masters degree in economics from Clemson University. He received his PhD in International Development at Southern Miss.

The Research Associate on this project was Alison Crumpton. She currently works as the Marketing Coordinator for the Trent Lott National Center for Excellence in Economic Development and Entrepreneurship at the University of Southern Mississippi. In this position, Alison coordinates all communication efforts for the Center.

Prior to accepting her current position, Alison was Public Relations/Marketing Coordinator for the School of Music at Southern Miss. She has also worked as a Graphic Designer at Disciple Design in Memphis, Tennessee, as well as a freelance graphic designer. Her diverse background in design, writing and communication prepared her for her role with the Trent Lott National Center. Alison has a B.F.A. in Graphic Design from Mississippi State University and a M.S. in Public Relations from the University of Southern Mississippi.