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Estimated Economic  
Impact on  
Tangipahoa Parish  
of the June 2007  
Production of  
*The Wizard of Oz*

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A production of the  
Southeastern Louisiana University  
Opera/Music Theatre Program

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January 2009

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Southeastern Louisiana  
University  
Business Research Center  
&  
College of Business

Herb Holloway  
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January 27, 2009

The Southeastern Louisiana University Business Research Center (BRC) is jointly operated by the Southeast Louisiana Business Center and the Southeastern College of Business. The BRC provides applied economic analyses and research studies that aid business and economic development efforts for the five-parish Northshore region of southeast Louisiana. The Center represents one aspect of the University's commitment to economic development in the region.

The Center is located in the Southeast Louisiana Business Center on Martens Drive, two blocks west of the main campus of Southeastern Louisiana University. The Business Research Center is a proud member of the Association for University Business and Economic Research (AUBER) and the Council for Community and Economic Research (C2ER).

The following study was conducted using generally accepted research methods, models and techniques.

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Sincerely,

A handwritten signature in black ink that reads 'William Joubert'.

William Joubert  
Director  
Business Research Center

**Southeastern Louisiana University Business Research Center**  
*A Collaborative Effort of the Southeast Louisiana Business Center and  
the Southeastern Louisiana University College of Business*

## Economic Impact of the 2007 Production of *The Wizard of Oz*

### Introduction

The Southeastern Louisiana University Opera/Music Theatre Program staged a production of *The Wizard of Oz* in June 2007. The three performances, held at Southeastern's Columbia Theatre for the Performing Arts in Hammond, Louisiana, were attended by 1,859 theatregoers.

### Analysis Methodology

This analysis utilized the input-output method to estimate the economic impacts of the 2007 production of *The Wizard of Oz* on the Tangipahoa Parish economy. The input-output method is based on the economic linkages between various sectors and industries, which cause every dollar of expenditures to "ripple through" the local economy. This results in every dollar of expenditures being "multiplied" to various degrees, causing a larger economic effect than the original amount of the expenditure. These "ripple" or "multiplier" effects continue to contribute to the economic impact of the expenditure until the effects leave the study area or become too small to measure.

The total economic impact of an event consists of *direct*, *indirect*, and *induced* effects. *Direct* effects of an artistic production are the immediate economic effects of expenditures in the area by organizers of the production and theatregoers who attend the performances. Production expenditures include staffing wages and benefits, set construction, administration and promotional expenses, etc. Audience expenditures included in the direct effects are all non-admission spending by patrons while they are in the community for the performance, such as dining and beverage expenditures, local retail shopping, and gasoline purchases.

*Indirect* effects occur in sectors that supply materials, goods, and services to those industries that were directly impacted by the event-related expenditures. For example, restaurants are *directly* impacted by expenditures of theatregoers. The suppliers who provide food, paper products, utilities, etc. to the restaurants are *indirectly* impacted, when the restaurants purchase more of these items in response to their increased sales. In turn, businesses that provide goods and services to the restaurant suppliers are indirectly impacted from the increased activities of the restaurant suppliers. These indirect impacts continue to contribute to the economic impact of the event under study until the subsequent expenditures become too small to measure or leave the study area, e.g. if the paper product supplier purchased the napkins he or she sells to the restaurants from outside the study area, that impact chain would stop. However, other expenditures by the paper product supplier, such as fuel and maintenance for a delivery truck, may continue to accrue to the study area.

*Induced* effects are created by the increase in consumer spending generated by increased payrolls in the directly and indirectly impacted industries. In the example above, restaurants will hire staff to handle the extra customers from the event in question. These restaurant employees will then spend their wages on food, housing, entertainment, etc. In addition, the restaurant supply companies increase their payrolls, also resulting in additional consumer spending. The sum of all of the impacts deriving from increased payroll spending is the induced effect.

The sum of the direct, indirect, and induced effects represents the total economic impact. The total economic impact divided by the direct effect yields the economic impact *multiplier* of the event in question. For most events the multiplier will be between 1.0 and 2.0.

IMPLAN Professional 2.0<sup>®</sup> software and structural matrices were utilized to complete the economic impact analysis of the 2007 Southeastern Opera/Music Theatre Program production of *The Wizard of Oz*.

### **Background and Data**

The producer maintained detailed records of production expenditures, which were utilized in calculating the production expenditure impacts on the Parish.

In order to estimate audience expenditures, a two-question survey was distributed to members of the audience at all three performances. Seventy-five responses were received to one question, and 114 to the other. These responses were extrapolated to the entire 1,859 theatregoers, as detailed below:

#### **On average, how much money did you spend locally (excluding show tickets), including food, drinks, gas, etc.?**

Spending <u>Category</u>	# of <u>Responses</u>	% of <u>Responses</u>	Extrapolated <u>#</u>	Mid-point or <u>Average \$</u>	Total Est. <u>Spending</u>
\$0	7	9.3%	174	\$0	\$0
\$5 - \$25	15	20.0%	372	\$15	\$5,580
\$26 - \$40	9	12.0%	223	\$33	\$7,359
\$41 - \$55	14	18.7%	347	\$48	\$16,656
\$56 - \$65	12	16.0%	297	\$60	\$17,820
\$66 - \$75	2	2.7%	50	\$71	\$3,550
Over \$75	<u>16</u>	<u>21.3%</u>	<u>397</u>	<u>\$123</u>	<u>\$48,775</u>
Totals	75	100.0%	1,859	\$53.65	\$99,740

**Before or after the show, did you or do you plan to (check all that apply):**

<u>Type of Expenditure</u>	<u># of Responses</u>	<u>% of Responses</u>	<u>Extrapolated #</u>
Eat at a local restaurant	62	54.4%	1,011
Have drinks locally	16	14.0%	261
Have dessert/coffee locally	7	6.1%	114
Shop in local stores	12	10.5%	196
Purchase gasoline	<u>17</u>	<u>14.9%</u>	<u>277</u>
Totals	114	100.00%	1,859

The first three expenditure categories in the second table above all fall into the “Eating and Drinking” sector for input/output analysis. Because there was no way to link the type of expenditures (from the second table) with the amount spent (from the first table), the authors made the decision to allocate 80% of total theatergoer expenditures to the “Eating and Drinking” sector, 10% to “Miscellaneous Retail” purchases, and 10% to “Gasoline” purchases.

Because of the small number of responses to the first question ( $75/1,859 = 4\%$ ), and theoretical questions regarding the amount of spending that would have occurred regardless of theatergoers decision to attend *The Wizard of Oz*, the total extrapolated patron expenditures were analyzed at the 20%, 50%, and 100% levels. This provides a range of values which should include the “actual” impact, and the reader can determine the level with which they are most comfortable and confident.

**Estimated Economic Impact on Tangipahoa Parish****Production Impacts**

The estimated expenditures were input into the IMPLAN Pro model for Tangipahoa Parish. Retail purchases were margined to reflect the fact that few (if any) of the products purchased are produced locally.

Production expenditures were analyzed separately. Based on the provided production costs and the methodology discussed above, the economic impacts on Tangipahoa Parish of the \$68,466 (\$49,391 locally) spent producing *The Wizard of Oz* in June 2007 are estimated to have been:

Total Economic Impact of Production Expenditures	\$135,812
Earnings Impact	\$ 47,669
Number of Jobs Supported (for 1 year)	0.9

**Theatregoer Impacts**

As detailed previously, based on survey responses, theatergoers were estimated to have spent \$99,740 in Tangipahoa Parish associated with their attendance at The Wizard of Oz performance

(other than their ticket purchase). Based on these estimated patron expenditures and the methodology discussed above, the economic impacts on Tangipahoa Parish of theatergoer spending associated with *The Wizard of Oz* in June 2007 at the 20%, 50%, and 100% levels are estimated to have been:

	Percentage of Est. Expenditures used for Analysis		
	<u>20%</u>	<u>50%</u>	<u>100%</u>
Total Econ. Impact of Theatergoer Expenditures	\$24,693	\$61,732	\$123,463
Earnings Impact	\$ 7,369	\$18,422	\$ 36,843
Number of Jobs Supported (for 1 year)	0.4	1.1	2.2

### **Total Combined Impacts**

When the production impacts and impacts of the various possible levels of theatergoer spending are combined, the total economic impacts of the 2007 production of *The Wizard of Oz* are estimated to have been:

	Production Expenditures + <b>20%</b> of Theatergoer <u>Expenditures</u>	Production Expenditures + <b>50%</b> of Theatergoer <u>Expenditures</u>	Production Expenditures + <b>100%</b> of Theatergoer <u>Expenditures</u>
<b>Total Estimated Economic Impact</b>	<b>\$ 160,505</b>	<b>\$ 197,544</b>	<b>\$ 259,275</b>
<b>Estimated Earnings Impact</b>	<b>\$ 55,038</b>	<b>\$ 66,091</b>	<b>\$ 84,512</b>
<b>Estimated Number of Jobs Supported for 1 year</b>	<b>1.3</b>	<b>2.0</b>	<b>3.1</b>
<b>Estimated State &amp; Local Tax Impact</b>	<b>\$ 4,552</b>	<b>\$ 6,904</b>	<b>\$ 10,823</b>

### **Conclusions**

The 2007 production of *The Wizard of Oz* by the Southeastern Louisiana University Opera/Music Theatre Program contributed a significant influx of spending into the Tangipahoa Parish economy. Actual production cost data and theatergoer expenditure estimates from a patron survey were utilized to conduct an input-output analysis of the total production.

Our analysis indicates that *The Wizard of Oz* had an estimated total economic impact on Tangipahoa Parish of between \$160,505 and \$259,275, depending on the level of estimated theatergoer spending used in the analysis. The event contributed an estimated \$55,038 - \$84,512 of earnings to parish residents, supporting from 1.3 to 3.1 annual full- and part-time jobs. State and local tax impacts were estimated to fall between \$4,552 and \$10,823.