

An Economic Contribution Analysis of United States Marshals Museum
To
Sebastian County and Fort Smith MSA

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By
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Background

The report summarizes findings from a contribution study of the activities at United States Marshals Museum (USMM) for 2020 and a steady state 2021-2029 period. A contribution study focuses on total economic activities within a study area. It takes no account of the distributional effects of the activities within the study area.¹ The activities analyzed here are limited to those associated directly to the museum visitors. That is, those activities associated with the operation of the museum and the purchases of food, beverage, and merchandise at the museum. In addition, the study addresses accompanying tourist activities of museum visitors. These activities include visitor's expenditures for overnight stays, food, transportation, shopping, and recreation associated with a single overnight stay in Sebastian County.

Study Area and Methodology

This is a multi-regional contribution analysis. Sebastian County is the primary region where all museum visitors expenditures are assumed to occur. These expenditures are the visitor's direct effects of visiting the museum. In addition, when the museum visitor's activities include tourist activities, Sebastian County is the primary region for tourist expenditures. These expenditures are the tourist's direct effects.² The direct expenditures of both museum visitors and tourist support indirect and induced expenditures. Direct expenditures have indirect effects that are associated with the required business-to-business purchases (interindustry purchases) that are necessary to produce the goods and services the visitors and tourists are demanding as well as the business supporting these activities indirectly. These latter effects are multiplier effects associated with the repeating rounds of interindustry spending. Due to the additional direct and indirect expenditures, economic activity increases in the primary region. Consequently, incomes rise for some workers, managers, and households inducing more consumer expenditures in the economy. These types of expenditures are induced expenditures or induced effects. Induced expenditures also have multiplier effects.

In this USMM model of economic activity, visitors and tourist direct expenditures occur in Sebastian County, they then spill over into the rest of Ft Smith MSA's counties (Crawford, Franklin, Le Flora, and Sequoyah Counties), and for that matter they spill into rest of the nation. This model tracks expenditures in the Fort Smith MSA that presumably originate from the museum visitors and tourist expenditures in Sebastian County. The study estimates museum visitors and tourist contributions to Sebastian County, and it then analyzes how this economic activity interacts and spills over into the rest of Fort Smith MSA. (Sebastian Co + Rest of Ft Smith MSA Counties = Ft Smith MSA)

¹ Distribution effects occur when a new activity in a community displaces preexistent activities in the community. That is, there is a redistribution of economic activity from older activities to newer activity.

² Museum visitors living less than 60 minutes from the museum are not considered tourist. However, their activities at the museum are included in the analysis. This inclusion of local visitors' activities at the museum means this is an economic contribution study instead of an economic impact study.

Visitors and Tourist Distinction

The study distinguishes between visitors to the museum and the tourist following the LCP methodology and data.³ LCP method defines time to distance catchments as shown accompanying table. Local visitors live within an one-hour distance of the USMM. Non-local visitors are those residing within one-hour to two- hours of the USSM. Tourists are domestic and international travelers living outside the two-hour catchment.

Distinctions between tourist and museum visitors at USMM follow:

Attendance at USMM				
Visitors and Tourist Distinction				
Catchments	2020		Average 2022-2029	
0-30 Minutes-Local Visitors	24,669	16.4%	14,207	10.0%
30-60 Minutes Local Visitors	14,206	9.4%	7,971	5.6%
Local Visitors	38,875	25.8%	22,178	15.6%
60-120 Minutes Non-Local Visitors	56,072	37.2%	32,712	23.1%
Domestic Tourist	55,153	36.6%	86,220	60.8%
International Tourist	430	0.3%	688	0.5%
Total Visitors (Attendance) USMM	150,531	100.0%	141,798	100.0%
Source: LDP Report, Attendance Evolution				

- For the contribution analysis, all attendees to the museums are visitors.
- Tourists include non-local attendees to the museum. Non-local attendees live outside the 60-120 minute primary market as defined in the LDP report.⁴

Museum Visitors and Expenditures

LDP’s report provided data on the expected admission prices and the age distributions of attendees. In addition, the report had estimates of vendor sales associated with visitors spending while at the museum. Using this data, estimates of the expected direct expenditures of visitors to the museum are possible. The accompanying table shows the findings from these estimates.⁵

³ United States Marshals Museum, Fort Smith. Leisure Development Partners, LLP, 42 Brook Street, London, W1k 5Db.

⁴ Non-local visitors’ visits to the USMM may be a day trip. In which case, their expenditures would be different than those of a tourist.

⁵ Local visitors’ expenditures are included in this estimate of direct visitor’s expenditures. Normally, local expenditures are excluded from an economic impact study because they are redistributions of expenditures from one local activity to another. One merchant’s gain is another merchant’s loss. Since these expenditures are not excluded, this is a study of the USMM gross contributions of economic activities to the study area.

Estimates of the Direct Visitor's Expenditures at the USMM						
Type of Visitor	Admissions Prices by Visitors Age Groups		2020		Average 2022-2029	
	Admissions Price	Percentage of Visitors	Visitors Mix 2020	Admission Yield (Price*Mix Visitors)	Visitors Mix Ave 2022-2029	Admission Yield (Price*Mix Visitors)
Adult	\$12.5	33%	49,675	\$620,940	43,048	\$538,098
Children	\$7.0	17%	25,590	\$179,132	22,176	\$155,233
Senior, Military	\$7.5	20%	30,106	\$225,796	26,090	\$195,672
Educational Group	\$6.0	10%	15,053	\$90,319	13,045	\$78,269
Other Groups	\$7.5	5%	7,527	\$56,449	6,522	\$48,918
Members	\$5.0	7%	10,537	\$52,686	9,131	\$45,657
Complimentary		8%	12,042	\$0	10,436	\$0
Total		100%	150,531	\$1,225,322	130,448	\$1,061,847
Visitors Spending at USMM						
Vendor Sales	Average Sales Per Visitor	% of Visitors	# Visitors 2020	Spending	# Visitors Average 2022-2029	Spending
Food and Beverage	\$2.00	100%	150,531	\$301,062	130,448	\$260,896
Merchandise	\$3.00	100%	150,531	\$451,593	130,448	\$391,344
Other	\$0.50	100%	150,531	\$75,266	130,448	\$65,224
Merchandise + Other	\$3.50			\$526,859		\$456,568
Total Spending	\$5.50			\$827,921		\$717,464
Source: LDP Report Pages 35-37						

Tourist Expenditures

Since there was no specific data available for tourist spending in Sebastian County, the study inferred daily expenditure from state and national data sources.⁶ Several estimates were crosschecked by internet searches of actual prices in the Fort Smith Area. The bottom up daily expenditure estimate was \$170.61 for overnight tourist.

To estimate total tourist expenditures, the study assumed:

- All tourists purchase a common bundle of goods and services, and they have single overnight stay in Sebastian County.⁷ The analysis made adjustments for group activities when appropriate.
- The group size is set at 3.1 people per group.⁸

Estimates of tourist expenditure based on LCP's tourist estimate for 2020 reflect the initial attraction of the USMM. To replicate a longer run steady state in tourist visitation, the analysis used LCP's average

⁶ U.S. Travel Answer Sheet, U.S. Travel Association, <https://www.ustravel.org/answersheet>. Per Diem Rates, GSA, <https://www.gsa.gov/travel/plan-book/per-diem-rates>.

⁷ Day tripping non-local visitors' purchases may differ from those of a tourist. If non-local visitors' expenditure are limit service restaurants and gasoline stores only, estimates of the direct total daily expenditures of tourist falls by 23.6% in 2020 and over the steady state they fall by 12.8%. Consequently, the overall impacts of total tourist contributions would fall proportionally.

⁸ Table 9, Study of Potential Arkansas Visitors Summary, Online vs. Mail, 2016 Studies of Potential Arkansas Visitors, AR Department of Parks and Tourism.

number of annual tourist over the 2022-2029 periods. The accompanying tables summarize the estimates.

Year 2020

In the first year of operations, LDP’s tourist estimates are approximately 111,656 or 74% of attendees to USMM. Provided the daily spending estimates reflect actual tourist expenditures, annual tourist expenditures could approach \$13.8 million.

Tourist Expenditures Sebastian County 2020								
Expenditure Category	Daily Spending	International	Number in Party	Domestic	Number in Party	60-120 minutes	Number in Party	Expenditures
Full Serv Restaurants	\$54.95	430	1.0	55,153			1	\$3,054,375
Limited Serv Restaurants	\$54.95	0	1.0	0		56,072	1	\$3,081,217
Hotels and Motels	\$37.60	430	3.1	55,153	3.1	56,072	3.1	\$1,354,282
Gasoline Stores	\$32.37	430	3.1	55,153	3.1	56,072	3.1	\$1,165,970
Amusement and Rerecreation	\$22.84	430	1.0	55,153	1	56,072	1	\$2,549,732
General Mechanizing	\$22.86	430	1.0	55,153	1	56,072	1	\$2,552,120
Daily Spending	\$170.61							\$13,757,697

Years 2021-2029

LDP’s average attendance and tourist estimates indicate 141,798 tourists per year in the steady state. In the steady state years, approximately 84% of USMM attendees will be tourist. Tourist expenditures could approach \$14.7 million per year.

Tourist Expenditures Sebastian County (Average Number of Tourist 2022-2029)								
Expenditure Category	Daily Spending	International	Number in Party	Domestic	Number in Party	60-120 minutes	Number in Party	Expenditures
Full Serv Restaurants	\$54.95	688	1	86,220	1		1	\$ 4,775,618
Limited Serv Restaurants	\$54.95	-	1	0	1	32,712	1	\$ 1,797,557
Hotels and Motels	\$37.60	688	3.1	86,220	3.1	32,712	3.1	\$ 1,450,868
Gasoline Stores	\$32.37	688	3.1	86,220	3.1	32,712	3.1	\$ 1,249,126
Amusement and Rerecreation	\$22.84	688	1	86,220	1	32,712	1	\$ 2,731,576
Genrenal Mechanizing	\$22.86	688	1	86,220	1	32,712	1	\$ 2,734,134
Daily Spending	\$170.61							\$ 14,738,879

Economic Contributions

The study utilized the Implan Model software to estimate USMM economic contribution to the Fort Smith, MSA. The study focused USMM’s contributions to Sebastian County’s economy. The analysis constructed a multi-regional economic model to estimate economic interaction between USMM, Sebastian County, and the rest of the Fort Smith MSA. Two groups of museum activities are analyzed incorporating museum admissions and vendor purchases. Evaluations of tourist activities are combined with the activities at the museum to arrive at an estimate of the overall contribution of USMM to Sebastian County.

Visitors to USMM Contributions to Sebastian County: Admissions and Vendor Sales 2020

An Implan simulation used total visitor’s admissions to estimate the contribution of museum visitors to local supply chain activities and activities related to household income changes. Likewise, inputting vender sales by type of activity into an Implan simulation provided estimates of their contributions to local economic activities.

Contributions of Admissions at USMM				
Contribution Analysis 1	Final Demand			
Event	2020			
Admission Yield (Sales) 202	\$1,225,322.00			
Sebastian County (2018 Prices)				
Impact Type	Direct Effect	Indirect Effect	Induced Effect	Total Effect
Employment	16	3.8	3.4	23.2
Labor Income	\$559,255	\$172,746	\$138,235	\$870,236
Value Added	\$573,009	\$357,728	\$255,556	\$1,186,293
Output	\$1,241,934	\$582,485	\$436,618	\$2,261,036
Rest of Ft Smith MSA Counties (2018 Prices)				
Impact Type	Direct Effect	Indirect Effect	Induced Effect	Total Effect
Employment	0	0.2	0.1	0.2
Labor Income	\$0	\$5,587	\$1,913	\$7,500
Value Added	\$0	\$10,326	\$3,854	\$14,180
Output	\$0	\$27,975	\$9,204	\$37,179
Combined County's Contributions				
Impact Type	Direct Effect	Indirect Effect	Induced Effect	Total Effect
Employment	16	4	3.5	23.4
Labor Income	\$ 559,255	\$ 178,333	\$ 140,148	\$ 877,736
Value Added	\$ 573,009	\$ 368,054	\$ 259,410	\$ 1,200,473
Output	\$ 1,241,934	\$ 610,460	\$ 445,822	\$ 2,298,215

Vendor Sales: Food, Beverage, and Merchandise Expenditures at USMM				
Contribution Analysis 1	Final Demand			
Event	2020			
Retail-Non Stores	\$526,859			
Food and Drinking Establishments	\$301,062			
Total Change Final Demand	\$827,921			
Sebastian County (2018 Prices)				
Impact Type	Direct Effect	Indirect Effect	Induced Effect	Total Effect
Employment	10.1	1	1.2	12.3
Labor Income	\$217,222	\$48,270	\$50,621	\$316,113
Value Added	\$286,156	\$90,230	\$93,638	\$470,024
Output	\$503,560	\$158,526	\$159,945	\$822,031
Rest of Ft Smith MSA				
Impact Type	Direct Effect	Indirect Effect	Induced Effect	Total Effect
Employment	0	0	0	0.1
Labor Income	\$0	\$2,182	\$713	\$2,895
Value Added	\$0	\$4,535	\$1,439	\$5,974
Output	\$0	\$14,459	\$3,422	\$17,881
Combined County's Contributions				
Impact Type	Direct Effect	Indirect Effect	Induced Effect	Total Effect
Employment	10.1	1	1.2	12.4
Labor Income	\$217,222	\$50,452	\$51,334	\$319,008
Value Added	\$286,156	\$94,765	\$95,077	\$475,998
Output	\$503,560	\$172,985	\$163,367	\$839,912
2018 Prices				

USMM's Combined Contributions Associated with the Attendance Yield and Vendor Sales Activities
2020

Contribution Analysis (Gross Impacts)				
Combined Activities: Admissions to USMM and Vendor's Sales at USMM				
Sebastian County (2018 Prices)				
Impact Type	Direct Effect	Indirect Effect	Induced Effect	Total Effect
Employment	26.1	4.8	4.6	35.5
Labor Income	\$776,477	\$221,016	\$188,856	\$1,186,349
Value Added	\$859,165	\$447,958	\$349,194	\$1,656,317
Output	\$1,745,494	\$741,011	\$596,563	\$3,083,067
Rest of Ft Smith MSA				
Impact Type	Direct Effect	Indirect Effect	Induced Effect	Total Effect
Employment	0	0.2	0.1	0.3
Labor Income	\$0	\$7,769	\$2,626	\$10,395
Value Added	\$0	\$14,861	\$5,293	\$20,154
Output	\$0	\$42,434	\$12,626	\$55,060
Total Contribution in Fort Smith MSA from Activities at USMM				
Impact Type	Direct Effect	Indirect Effect	Induced Effect	Total Effect
Employment	26.1	5	4.7	35.8
Labor Income	\$776,477	\$228,785	\$191,482	\$1,196,744
Value Added	\$859,165	\$462,819	\$354,487	\$1,676,471
Output	\$1,745,494	\$783,445	\$609,189	\$3,138,127
2018 Prices				

Tourism Expenditures Contributions based on projected tourist expenditures 2020

Tourism Expenditures Sebastain County				
Contribution Analysis				
Sebastian County				
Impact Type	Direct Effect	Indirect Effect	Induced Effect	Total Effect
Employment	177.3	21.5	21.2	220
Labor Income	\$3,538,388	\$1,049,520	\$866,002	\$5,453,909
Value Added	\$5,792,241	\$1,905,262	\$1,600,925	\$9,298,428
Output	\$10,723,728	\$3,408,892	\$2,735,223	\$16,867,844
Rest of Ft Smith MSA				
Impact Type	Direct Effect	Indirect Effect	Induced Effect	Total Effect
Employment	0	1.1	0.4	1.5
Labor Income	\$0	\$43,707	\$12,860	\$56,567
Value Added	\$0	\$84,271	\$26,062	\$110,333
Output	\$0	\$234,596	\$61,286	\$295,881
Economic Impacts of Tourist Expenditures in Sebastian County On MSA ("Local Visitors" (0 to 60 minutes) are excluded)				
Impact Type	Direct Effect	Indirect Effect	Induced Effect	Total Effect
Employment	177.3	22.6	21.6	221.5
Labor Income	\$ 3,538,388	\$ 1,093,227	\$ 878,862	\$ 5,510,476
Value Added	\$ 5,792,241	\$ 1,989,533	\$ 1,626,987	\$ 9,408,761
Output	\$ 10,723,728	\$ 3,643,488	\$ 2,796,509	\$ 17,163,725
2018 Prices				

Combined Totals USMM 2020

Summing activities yields the total contribution of USMM to Sebastian County and the rest of Ft Smith.

Contribution Analysis (Gross Impacts)				
Combined Activities: Admissions to USMM, Vendor's Sales at USMM, and Tourism				
Sebastain County				
Impact Type	Direct Effect	Indirect Effect	Induced Effect	Total Effect
Employment	203.4	26.3	25.8	255.5
Labor Income	\$4,314,865	\$1,270,536	\$1,054,858	\$6,640,258
Value Added	\$6,651,406	\$2,353,220	\$1,950,119	\$10,954,745
Output	\$12,469,222	\$4,149,903	\$3,331,786	\$19,950,911
Rest of Ft Smith MSA				
Impact Type	Direct Effect	Indirect Effect	Induced Effect	Total Effect
Employment	0.0	1.3	0.5	1.8
Labor Income	\$0	\$51,476	\$15,486	\$66,962
Value Added	\$0	\$99,132	\$31,355	\$130,487
Output	\$0	\$277,030	\$73,912	\$350,941
Total Contribution				
Impact Type	Direct Effect	Indirect Effect	Induced Effect	Total Effect
Employment	203.4	27.6	26.3	257.3
Labor Income	\$4,314,865	\$1,322,012	\$1,070,344	\$6,707,220
Value Added	\$6,651,406	\$2,452,352	\$1,981,474	\$11,085,232
Output	\$12,469,222	\$4,426,933	\$3,405,698	\$20,301,852
2018 Prices				

Economic Indicators	
Output per Worker	\$79,459
GDP per Worker	\$43,386
Income Per Worker	\$26,251
FTE Jobs	257.3

Economic Multipliers		
	Indirect (Type 1)	Total (Type 2)
Employment	1.13	1.26
Labor Income	1.29	1.54
Value Added	1.35	1.65
Output	1.33	1.60

Steady State Analysis Average 2021-2029

LDP forecast 10 years of attendance and tourist activities. Since they anticipate a stable level of attendance and tourism beginning in 2024 after the novelty effect of USMM wears off, the average values for the 2021-2029 for attendance and tourism reflect a steady state of activity at the museum. The contribution analysis was repeated using these average values. The findings follow.

Average Attendance at USMC 2021-2029

Admissions Average 2021-2029				
Contribution Analysis 1	Final Demand			
Event	Average 2021-2029			
Admission Yield	\$ 1,061,846			
Sebastian County				
Impact Type	Direct Effect	Indirect Effect	Induced Effect	Total Effect
Employment	23.3	5.5	4.9	33.7
Labor Income	\$812,104	\$250,847	\$200,733	\$1,263,685
Value Added	\$832,076	\$519,463	\$371,098	\$1,722,637
Output	\$1,803,433	\$845,836	\$634,021	\$3,283,290
Rest of Ft Smith MSA Counties				
Impact Type	Direct Effect	Indirect Effect	Induced Effect	Total Effect
Employment	0	0.2	0.1	0.3
Labor Income	\$0	\$8,113	\$2,778	\$10,891
Value Added	\$0	\$14,995	\$5,596	\$20,591
Output	\$0	\$40,623	\$13,365	\$53,988
Combined County's Contributions				
Impact Type	Direct Effect	Indirect Effect	Induced Effect	Total Effect
Employment	23.3	5.7	5	34
Labor Income	\$ 812,104	\$ 258,960	\$ 203,511	\$ 1,274,576
Value Added	\$ 832,076	\$ 534,458	\$ 376,694	\$ 1,743,228
Output	\$ 1,803,433	\$ 886,459	\$ 647,386	\$ 3,337,278
2018 Prices				

Vendor Sales at USMM Average Values 2021-2029

Food, Beverage, and Merchandise Expenditures at USMM (Average 2021-2029)				
Contribution Analysis	Final Demand Preview			
Event	Average 2021-2029			
Retail-Non Stores	\$456,568			
All other food and Drinking Establishments	\$260,896			
Total Change Final Demand	\$717,464			
Sebastian County				
Impact Type	Direct Effect	Indirect Effect	Induced Effect	Total Effect
Employment	8.9	0.8	1	10.7
Labor Income	\$183,284	\$40,749	\$42,717	\$266,749
Value Added	\$242,546	\$76,180	\$79,017	\$397,743
Output	\$424,776	\$133,797	\$134,971	\$693,544
Rest of Ft Smith MSA				
Impact Type	Direct Effect	Indirect Effect	Induced Effect	Total Effect
Employment	0	0	0	0.1
Labor Income	\$0	\$1,835	\$601	\$2,437
Value Added	\$0	\$3,813	\$1,213	\$5,026
Output	\$0	\$12,146	\$2,885	\$15,031
Combined County's Contributions				
Impact Type	Direct Effect	Indirect Effect	Induced Effect	Total Effect
Employment	8.9	0.8	1	10.8
Labor Income	\$183,284	\$42,584	\$43,318	\$269,186
Value Added	\$242,546	\$79,993	\$80,230	\$402,769
Output	\$424,776	\$145,943	\$137,856	\$708,575
2018 Prices				

Combined Contribution of USMM in Steady State (Average 2021-2029)

Contribution Analysis (Gross Impacts)				
Combined Activities Admissions to USMM and Vendor's Sales at USMM				
Sebastian County				
Impact Type	Direct Effect	Indirect Effect	Induced Effect	Total Effect
Employment	32.2	6.3	5.9	44.4
Labor Income	\$995,388	\$291,596	\$243,450	\$1,530,434
Value Added	\$1,074,622	\$595,643	\$450,115	\$2,120,380
Output	\$2,228,209	\$979,633	\$768,992	\$3,976,834
Rest of Ft Smith MSA				
Impact Type	Direct Effect	Indirect Effect	Induced Effect	Total Effect
Employment	0	0.2	0.1	0.4
Labor Income	\$0	\$9,948	\$3,379	\$13,328
Value Added	\$0	\$18,808	\$6,809	\$25,617
Output	\$0	\$52,769	\$16,250	\$69,019
Combined Contributions				
Impact Type	Direct Effect	Indirect Effect	Induced Effect	Total Effect
Employment	32.2	6.5	6	44.8
Labor Income	\$995,388	\$301,544	\$246,829	\$1,543,762
Value Added	\$1,074,622	\$614,451	\$456,924	\$2,145,997
Output	\$2,228,209	\$1,032,402	\$785,242	\$4,045,853
2018 Prices				

Tourism Expenditures Contributions based on projected tourist expenditures Average 2021-2029

Tourism Expenditures Sebastian County (Average 2021-2029)				
Contribution Analysis				
Sebastian County				
Impact Type	Direct Effect	Indirect Effect	Induced Effect	Total Effect
Employment	195.6	23.2	24.2	243
Labor Income	\$4,094,028	\$1,144,305	\$988,333	\$6,226,665
Value Added	\$6,129,118	\$2,063,373	\$1,827,025	\$10,019,517
Output	\$11,488,532	\$3,685,523	\$3,121,552	\$18,295,606
Rest of Ft Smith MSA Counties				
Impact Type	Direct Effect	Indirect Effect	Induced Effect	Total Effect
Employment	0	1.2	0.4	1.6
Labor Income	\$0	\$47,016	\$14,390	\$61,406
Value Added	\$0	\$90,293	\$29,117	\$119,410
Output	\$0	\$250,764	\$68,761	\$319,526
Economic Impacts of Tourist Expenditures in Sebastian County On MSA ("Local Visitors" (0 to 60 minutes) are excluded)				
Impact Type	Direct Effect	Indirect Effect	Induced Effect	Total Effect
Employment	195.6	24.4	24.6	244.6
Labor Income	\$ 4,094,028	\$ 1,191,321	\$ 1,002,723	\$ 6,288,071
Value Added	\$ 6,129,118	\$ 2,153,666	\$ 1,856,142	\$ 10,138,927
Output	\$ 11,488,532	\$ 3,936,287	\$ 3,190,313	\$ 18,615,132
2018 Prices				

Combined Contributions of USMM and Tourism in Steady State (Average 2021-2029)

Contribution Analysis (Gross Impacts) Sebastian County Steady State				
Combined Activities: Admissions to USMM, Vendor's Sales at USMM, and Tourism				
Sebastian County				
Impact Type	Direct Effect	Indirect Effect	Induced Effect	Total Effect
Employment	227.8	29.5	30.1	287.4
Labor Income	\$5,089,416	\$1,435,901	\$1,231,783	\$7,757,099
Value Added	\$7,203,740	\$2,659,016	\$2,277,140	\$12,139,897
Output	\$13,716,741	\$4,665,156	\$3,890,544	\$22,272,440
Rest of Ft Smith MSA Counties				
Impact Type	Direct Effect	Indirect Effect	Induced Effect	Total Effect
Employment	0.0	1.4	0.5	2.0
Labor Income	\$0.00	\$56,964.00	\$17,769.00	\$74,734.00
Value Added	\$0.00	\$109,101.00	\$35,926.00	\$145,027.00
Output	\$0.00	\$303,533.00	\$85,011.00	\$388,545.00
Total Contribution				
Impact Type	Direct Effect	Indirect Effect	Induced Effect	Total Effect
Employment	227.8	30.9	30.6	289.4
Labor Income	\$5,089,416	\$1,492,865	\$1,249,552	\$7,831,833
Value Added	\$7,203,740	\$2,768,117	\$2,313,066	\$12,284,924
Output	\$13,716,741	\$4,968,689	\$3,975,555	\$22,660,985
2018 Prices				

Economic Multipliers		
	Indirect (Type 1)	Total (Type 2)
Employment	1.14	1.27
Labor Income	1.28	1.54
Value Added	1.37	1.71
Output	1.34	1.65

Economic Indicators	
FTE Jobs	286.3
Labor Income Per Worker	\$26,832
GDP per Worker	\$42,040
Output per Worker	\$77,466

Alternative Outcomes: Effects of Different Tourist Expenditure Assumptions in Sebastian County

Contribution Analysis 1

Initially, the study used a 2.45 party size, and an U.S. Travel Association estimated a lodging share of 21.3% of total tourist expenditures to infer a daily expenditure of \$180.⁹ that reduced daily expenditures to \$170. The previous contribution analysis used the daily spending estimate of \$170. This study found the following results using that daily tourist expenditure estimates as discussed previously.

Contribution Analysis 1		
	2020	Average 2021-2029
Annual Tourist Expenditures (Direct Effects)	\$10,723,728	\$11,488,532
Total Contribution of Tourist Expenditures	\$17,163,725	\$18,615,132
2018 Prices		

Contribution Analysis 2

After reviewing the magnitudes of the previous results, the daily spending computation was recomputed using a party size to 3.1 instead of the 2.45 party size, and the USA Travel 21.3% lodging share estimate of daily spending of tourist. This adjustment resulted in a daily spending estimate of \$142 for tourist. Consequently, the contribution analysis for tourist expenditures was repeated using this alternative tourist daily spending estimate. In additional, progressive changes to spending patterns were made including exclusion of direct spending by children and limiting non-local visitors spending to food and gasoline only.

⁹ The daily spending estimates was computed by dividing the GSA's per diem rate by party size ($94/2.45=38.36$). Since this amount is 21.3% of daily spending, dividing by that amount yields daily spending of \$180 ($=38.36/.213$). I made some adjustments to exclude public transportation. These adjustments led to the \$170 estimate of daily spending for public transportation. I used this amount initially in the study, but I think it over estimates the total amount tourist expenditures and associated activities. In Arkansas Department of Parks and Tourism Annual Report, I found 3.1 a survey result indicating a 3.1 party size at Arkansas visitors centers. Substituting this party size estimate to the computation yields an alternative daily spending estimate of \$142.

U.S. Travel Answer Sheet, U.S. Travel Association, <https://www.ustravel.org/answersheet>.

Per Diem Rates, GSA, <https://www.gsa.gov/travel/plan-book/per-diem-rates>.

Table 9, Study of Potential Arkansas Visitors Summary, Online vs. Mail, 2016 Studies of Potential Arkansas Visitors, AR Department of Parks and Tourism.

The following table shows the direct tourist expenditure estimates associated with these new assumptions:

Contribution Analysis 2		
Direct Effects associated with Daily Spending of \$142	2020	Average 2021-2029
Annual Tourist Expenditures (ATE)	\$9,058,140	\$11,106,282
ATE Adjusted for No Children Spending	\$9,506,533	\$9,218,214
ATE Adjusted for No Children Spending and Non-Local Visitors Food & Gas Expenditures Only	\$7,082,149	\$7,996,935
2018 Prices		

The results from contribution analysis using the different direct tourist expenditures estimates under various assumptions are highlighted below only for the steady state.

Total Effect of Daily Spending Estimates of \$142; Alternative Assumptions					
Sebastain County					
Average 2021-2029	Type of Effect	FTE Jobs	Labor Income	GDP	Sales
Daily Expenditures \$170	Total Effect	243	\$6,226,665	\$10,019,517	\$18,295,606
Daily Expenditure \$142	Total Effect	195.1	\$4,903,478	\$7,899,543	\$14,415,597
Daily Expenditure \$142 & No Children Spending	Total Effect	161	\$3,990,948	\$6,431,307	\$11,771,190
Daily Expenditure \$142 & No Children Spending & Adjusted Non-Local Spending	Total Effect	125.3	\$3,034,443	\$4,688,623	\$8,792,433
2018 Prices					

As this table demonstrates, this group of economic indicators are sensitive to daily spending magnitudes and assumptions. Their values decline as the amount of daily tourist expenditures declines, and they also decline as the number of tourist who are spending declines.

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