

## UNDERSTANDING THE *ARTS & ECONOMIC PROSPERITY IV* CALCULATOR

Because of the variety of communities studied and the rigor with which the *Arts & Economic Prosperity IV* study was conducted, nonprofit arts and culture organizations located in communities that did not participate in the study can estimate their local economic impact by using this tool. Estimates can be derived for both spending by nonprofit arts and culture organizations and event-related spending generated by their audiences.

### **BUT FIRST, THE FINE PRINT . . . WHEN USING ESTIMATES DERIVED BY THE *ARTS & ECONOMIC PROSPERITY III* CALCULATOR, ALWAYS KEEP THE FOLLOWING CAVEATS IN MIND:**

- 1) The results of this analysis are based on averages of similarly populated communities.
- 2) Your results are estimates. This method of estimating economic impact is not a substitute for conducting a customized economic impact study on your community. (The Standard Deviation and the 95% confidence interval provide a sense of how well the averages represent the sets of numbers from which they were derived).
- 3) Input/output models were customized for each of these similarly populated communities, providing very specific employment, household income, and government revenue data.

### **ECONOMIC IMPACT OF SPENDING BY NONPROFIT ARTS AND CULTURE ORGANIZATIONS**

Researchers developed a calculator that provides an estimated economic impact per \$100,000 of spending by nonprofit arts and culture organizations. Thus, every \$100,000 of spending by a nonprofit arts and culture organization has the following estimated total impact on its community.

Table 1: Economic Impact Per \$100,000 of Spending by Organizations

Population Cohort	Full-Time Equivalent Jobs	Resident Household Income	Local Government Revenue	State Government Revenue
Fewer than 50,000	3.24	\$73,227	\$3,537	\$4,284
50,000 to 99,999	3.70	\$84,132	\$3,489	\$4,109
100,000 to 249,999	3.68	\$82,457	\$3,825	\$4,491
250,000 to 499,999	3.54	\$86,526	\$3,913	\$5,031
500,000 to 999,999	3.33	\$84,772	\$4,065	\$5,381
1,000,000 or More	3.31	\$83,867	\$4,123	\$4,790
<b>Avg. of All Study Regions</b>	<b>3.46</b>	<b>\$82,084</b>	<b>\$3,819</b>	<b>\$4,656</b>
Standard Deviation	0.86	\$13,592	\$1,189	\$1,481
95% Confidence Interval	0.14	\$2,268	\$198	\$247

An Example of How to Use Table 1

An administrator from an arts and culture organization that spends \$250,000 wants to determine the organization’s economic impact on full-time equivalent employment on its community of 300,000 people. The administrator would:

- 1) Find the appropriate population grouping in Table 1—in this example, the “250,000 to 499,999” population grouping;
- 2) Determine the amount spent by the nonprofit arts and culture organization—in this example, \$250,000;
- 3) Divide that total expenditure by 100,000; and
- 4) Multiply the resulting figure by the FTE Jobs economic impact ratio from the “250,000 to 499,999” population grouping in Table 1.

Thus, \$250,000 divided by 100,000 equals 2.5; 2.5 times **3.54** (from Table 1) equals a total of **8.9** full-time equivalent jobs supported within the community. The same estimate can be made for household income and revenues to local and state government.

**ECONOMIC IMPACT OF EVENT-RELATED SPENDING BY ARTS AND CULTURE AUDIENCES**

The economic impact of event-related spending by arts and culture audiences can be derived similarly. The first step is to locate the median dollar amount spent per person directly as a result of attending a nonprofit arts and culture event (excluding the cost of admission). Identify your population group column; the number at the bottom is the per-attendee estimate of event-related spending.

**Table 2: Median Per Person Event-Related Audience Spending**

Expenditure Category	POPULATION COHORT					
	Fewer than 50,000	50,000 to 99,999	100,000 to 249,999	250,000 to 499,999	500,000 to 999,999	1,000,000 or More
Refreshments during event	\$2.93	\$2.14	\$2.45	\$2.85	\$2.58	\$3.57
Meals before/after event	\$9.63	\$7.77	\$8.61	\$8.97	\$11.86	\$11.11
Souvenirs and gifts	\$3.59	\$2.05	\$2.06	\$2.00	\$2.33	\$2.32
Clothing or accessories	\$1.29	\$1.05	\$1.02	\$1.20	\$0.98	\$1.46
Transportation (gas, bus, taxi)	\$2.15	\$2.03	\$1.79	\$2.37	\$2.58	\$2.97
Child care	\$0.31	\$0.26	\$0.27	\$0.24	\$0.29	\$0.35
Lodging (one night only)	\$3.71	\$2.73	\$1.52	\$2.37	\$2.53	\$2.12
Other/miscellaneous	\$1.04	\$0.70	\$0.64	\$0.78	\$0.70	\$0.62
<b>Total</b>	<b>\$22.47</b>	<b>\$20.31</b>	<b>\$19.07</b>	<b>\$21.90</b>	<b>\$24.02</b>	<b>\$25.64</b>

Once the proper median per-person event-related expenditure has been selected, that amount must be multiplied by the total attendance to your organization’s arts and culture events. This will provide an estimated total amount of event-related audience spending. Using this total dollar figure, the following table can be used to determine the economic impact of audience spending. Thus, every \$100,000 of event-related spending by nonprofit arts and culture audiences generates the following total economic impact on the community:

**Table 3: Economic Impact Per \$100,000 of Event-Related Spending by Arts Audiences**

Population Cohort	Median Per Person Event-Related Expenditure	Full-Time Equivalent Jobs	Resident Household Income	Local Government Revenue	State Government Revenue
Less than 50,000	\$22.47	2.50	\$50,122	\$4,977	\$4,837
50,000 to 99,999	\$20.31	2.77	\$60,371	\$5,241	\$5,677
100,000 to 249,999	\$19.07	2.84	\$59,133	\$5,155	\$5,689
250,000 to 499,999	\$21.90	2.84	\$62,535	\$5,338	\$6,686
500,000 to 999,999	\$24.02	2.52	\$52,014	\$4,848	\$5,767
1,000,000 and above	\$25.64	2.68	\$59,359	\$5,039	\$6,361
<b>Avg. of All Study Regions</b>	<b>\$22.47</b>	<b>2.69</b>	<b>\$57,140</b>	<b>\$5,100</b>	<b>\$5,802</b>
Standard Deviation		0.60	\$14,045	\$1,483	\$1,767
95% Confidence Interval		0.10	\$2,343	\$247	\$295

An Example of How to Use Tables 2 and 3

An administrator wants to determine the economic impact of his organization’s 25,000 arts and culture event attendees on full-time equivalent employment in his community of 300,000 people. The administrator would:

- 1) Find the appropriate population grouping in each table—in this case, the “250,000 to 499,999” population grouping;
- 2) Use Table 2 to find the median per person expenditure for that population group—in this example, \$21.90 per person;
- 3) Determine the **total audience spending** by multiplying the median per person expenditure by the total attendance (25,000)— $\$21.90 \times 25,000 = \$547,500$ .
- 4) Divide the total audience spending amount by 100,000; and
- 5) Multiply that figure by the FTE Jobs economic impact results from the “250,000 to 499,999” population grouping in Table 3.

Thus, \$547,500 divided by 100,000 equals 5.475; 5.475 times **2.84 FTE Jobs** (from Table 3) equals a total of **15.5** full-time equivalent jobs supported within the community. The same estimates can be made for household income and revenue to local and state government.