

The Economic Impact of Nonprofit Arts & Culture Organizations in Oklahoma



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The Arts Mean Business

Robert L. Lynch, President and CEO, Americans for the Arts

The key lesson from *The Economic Impact of Nonprofit Arts and Culture Organizations in Oklahoma* study is that communities that invest in the arts reap the additional benefit of jobs, economic growth, and a quality of life that positions those communities to compete in our 21st century creative economy. In my travels across the country, business and government leaders often talk to me about the challenges of funding the arts and other community needs amid shrinking resources. They worry about jobs and the economic performance of their community. How well are they competing in the high-stakes race to attract new businesses? Is their region a magnet for a skilled and creative workforce? I am continually impressed by their commitment to doing what is best for their constituents and to improving quality of life for all. The findings from this study send a clear and welcome message: leaders who care about community and economic development can feel good about choosing to invest in the arts.

Most of us appreciate the intrinsic benefits of the arts—their beauty and vision; how they inspire, sooth and connect us. When it comes time to make tough funding choices, however, elected officials and business leaders also need to have strong and credible data that demonstrate the economic benefits of a vibrant nonprofit arts and culture industry.

Right now, cities around the world are competing to attract new businesses as well as our brightest young professionals. International studies show that the winners will be communities that offer an abundance of arts and culture opportunities. As the arts flourish, so will creativity and innovation—the fuel that drives our global economy.

This study is great news for those whose daily task is to strengthen the economy and enrich quality of life. No longer do business and elected leaders need to choose between arts and economic prosperity. Nationally, as well as locally, the arts mean business!

Americans for the Arts is the nation's leading nonprofit organization for advancing the arts in America. Established in 1960, Americans for the Arts is dedicated to representing and serving local communities and creating opportunities for every American to participate in and appreciate all forms of the arts.

Americans for the Arts has conducted economic impact studies in all 50 states and more than 200 communities, with research methodology developed by highly regarded economists from the Georgia Institute of Technology.



The Economic Impact of Nonprofit Arts and Culture Organizations in Oklahoma

This study provides compelling new evidence that the nonprofit arts and culture are a significant industry in the State of Oklahoma—one that generates \$314.8 million in local economic activity.

This spending—\$176.5 million by nonprofit arts and culture organizations and an additional \$138.3 million in event-related spending by their audiences—supports 10,156 full-time equivalent jobs, generates \$211 million in household income to local residents, and delivers \$29.4 million in local and state government revenue. This economic impact study sends a strong signal that when we support the arts, we not only enhance our quality of life, but we also invest in the State of Oklahoma's economic well-being.

For the Oklahoma study, researchers collected detailed expenditure and attendance data from 247 nonprofit arts and culture organizations in rural and metropolitan areas throughout the state. The organizations had a range of operating budgets from \$0 to \$14,110,800. In addition, a total of 2,781 audience intercept surveys were collected from attendees to nonprofit arts and culture events during 2008-09. Project economists customized input/output analysis models to calculate specific and reliable findings.

This study focuses solely on the economic impact of nonprofit arts and culture organizations and event-related spending by their audiences. Not included in this study are spending by individual artists and the for-profit arts and culture sector.

Defining Economic Impact

This study uses four measures to define economic impact:

- Full-Time Equivalent (FTE) Jobs describes the total amount of labor employed. Economists measure FTE jobs, not the total number of employees, because it is a more accurate measure that accounts for part-time employment.
- Resident Household Income (often called Personal Income) includes salaries, wages, and entrepreneurial income paid to local residents.
- Revenue to Local and State Government includes revenue from taxes (i.e., income, property, or sales) as well as funds from license fees, utility fees, filing fees, and similar sources.

Economic Impact of the ENTIRE Arts and Culture Industry in Oklahoma

Total spending by nonprofit arts and culture organizations and their audiences totaled \$314.8 million in the State of Oklahoma during 2008. The following table shows the direct economic impact of this spending—that is, the initial economic effect of these expenditures.

DIRECT Impact of the Nonprofit Arts & Culture Industry (Spending by Nonprofit Arts and Culture Organizations <u>and</u> Thier Audiences)	
Total Expenditures ¹	\$314,766,098
Full-Time Equivalent Jobs	4,551
Resident Household Income	\$97,804,000
Local Government Revenue	\$4,087,000
State Government Revenue	\$6,954,000

These direct economic impacts create an additional indirect economic impact on the economy. The local expenditures continue to have an economic impact on the economy until the money eventually “leaks out” of the region (i.e., is spent outside the State of Oklahoma). The total economic impact is the combination of the direct economic impact and the indirect economic impact. The table below shows the total economic impact of the \$314.8 million spent by nonprofit arts and culture organizations and their audiences during 2008.

TOTAL Impact of the Nonprofit Arts & Culture Industry (Spending by Nonprofit Arts and Culture Organizations <u>and</u> Thier Audiences)	
Total Expenditures ¹	\$314,766,098
Full-Time Equivalent Jobs	10,156
Resident Household Income	\$210,964,000
Local Government Revenue	\$10,334,000
State Government Revenue	\$19,088,000

Direct And Indirect Economic Impact: How A Dollar Is Re-Spent In The Economy

The Economic Impact of Nonprofit Arts and Culture Organizations in Oklahoma study uses a sophisticated economic analysis called input/output analysis to measure economic impact. It is a system of mathematical equations that combines statistical methods and economic theory. Input/output analysis enables economists to track how many times a dollar is “re-spent” within the local economy, and the economic impact generated by each round of spending. How can a dollar be re-spent? Consider the following example:

A theater company purchases a gallon of paint from the local hardware store for \$20, generating the direct economic impact of the expenditure. The hardware store then uses a portion of the aforementioned \$20 to pay the sales clerk’s salary; the sales clerk re-spends some of the money for groceries; the grocery store uses some of the money to pay its cashier; the cashier then spends some for the utility bill; and so on. The subsequent rounds of spending are the indirect economic impacts.

Thus, the initial expenditure by the theater company was followed by four additional rounds of spending (by the hardware store, sales clerk, grocery store, and the cashier). The effect of the theater company’s initial expenditure is the direct economic impact. The effects of the subsequent rounds of spending are all of the indirect impacts. The total impact is the sum of the direct and indirect impacts.

Mayors who work in thriving communities fully understand the connection between the arts industry and city revenues. Besides providing jobs, the arts industry generates government and business revenues. The arts have played an important role in the economic revitalization of many of our state’s cities and is a window to the spirit of our people.

Mike Burdge
Vice Mayor of Sand Springs, Oklahoma
President, Oklahoma Conference of Mayors

Economic Impact Of Spending By Nonprofit Arts And Culture ORGANIZATIONS In Oklahoma

Nonprofit arts and culture organizations are active contributors to their business community. They are employers, producers, and consumers. They are members of the chamber of commerce as well as key partners in the marketing and promotion of their cities, regions, and states. Spending by nonprofit arts and culture organizations totaled \$176.5 million in the State of Oklahoma during 2008. This spending is far-reaching: organizations pay employees, purchase supplies, contract for services, and acquire assets within their community. These actions, in turn, support jobs, create household income, and generate revenue to the local and state governments.

Data were collected from 247 nonprofit arts and culture organizations in the State of Oklahoma. Each provided detailed budget information about more than 40 expenditure categories for fiscal year 2008 (e.g., labor, payments to local and non-local artists, operations, materials, facilities, and asset acquisition) as well as their total attendance figures. The following tables demonstrate the direct and total impacts of this spending.

DIRECT Economic Impact of Spending by Nonprofit Arts and Culture Organizations in the State of Oklahoma

Total Expenditures ¹	\$176,493,375
Full-Time Equivalent Jobs	2,415
Resident Household Income	\$59,501,000
Local Government Revenue	\$804,000
State Government Revenue	\$2,711,000

TOTAL Economic Impact of Spending by Nonprofit Arts and Culture Organizations in the State of Oklahoma

Total Expenditures ¹	\$176,493,375
Full-Time Equivalent Jobs	7,046
Resident Household Income	\$137,483,000
Local Government Revenue	\$4,486,000
State Government Revenue	\$9,505,000

Economic Impact Of Spending By Nonprofit Arts And Culture AUDIENCES In Oklahoma

The nonprofit arts and culture, unlike most industries, leverage a significant amount of event-related spending by its audiences. For example, when patrons attend an arts event, they may pay to park their car in a garage, purchase dinner at a restaurant, eat dessert after the show, and pay a babysitter upon their return home. This spending generates related commerce for local businesses such as restaurants, parking garages, hotels, and retail stores.

To measure the impact of nonprofit arts and culture audiences in the State of Oklahoma, data were collected from 2,781 event attendees during 2008-09. Researchers used an audience-intercept methodology, a standard technique in which patrons complete a written survey about their event-related spending while attending the event. The 247 nonprofit arts and culture organizations that responded to the detailed organizational survey reported that the aggregate attendance to their events was 5.2 million. These attendees spent a total of \$138.3 million, excluding the cost of event admission. The following tables demonstrate the direct and total impacts of this spending.

DIRECT Economic Impact of Spending by Nonprofit Arts and Culture Audiences in the State of Oklahoma (excluding the cost of event admission)

Total Expenditures ¹	\$138,272,723
Full-Time Equivalent Jobs	2,136
Resident Household Income	\$38,303,000
Local Government Revenue	\$3,283,000
State Government Revenue	\$4,234,000

TOTAL Economic Impact of Spending by Nonprofit Arts and Culture Audiences in the State of Oklahoma (excluding the cost of event admission)

Total Expenditures ¹	\$138,272,723
Full-Time Equivalent Jobs	3,110
Resident Household Income	\$73,481,000
Local Government Revenue	\$5,848,000
State Government Revenue	\$9,583,000

Visitors Spend More

In addition to spending data, the 2,781 audience survey respondents were asked to provide the ZIP code of their primary residence, enabling researchers to determine which attendees were residents (i.e., live within State of Oklahoma) and which were non-residents (live outside the State). In the State of Oklahoma, 89.1 percent of the 5.2 million nonprofit arts attendees were residents 10.9 percent were non-residents.

Non-resident arts and culture event attendees spent an average of 156 percent more than resident attendees per person (\$57.67 vs. \$22.53). As would be expected from a traveler, higher spending was typically found in the categories of lodging, meals, and transportation. These data demonstrate that when a community attracts cultural tourists, it harnesses significant economic rewards.

Event-Related Spending by Arts and Culture Event Attendees Totaled \$138.3 million in the State of Oklahoma (excluding the cost of event admission)

	Residents	Non-Residents	All State of OK Event Attendees
Total Event Attendance	4,678,333	569,965	5,248,298
Percent of Attendees	89.1%	10.9%	100%
Average Dollars Spent Per Attendee	\$22.53	\$57.67	\$26.35
Total Event-Related Spending	\$105,402,842	\$32,869,881	\$138,272,723

Nonprofit Arts and Culture Event Attendees Spend an Average of \$26.35 Per Person in the State of Oklahoma (excluding the cost of event admission)

	Residents	Non-Residents	All State of OK Event Attendees
Refreshments/Snacks During Event	\$3.19	\$4.28	\$3.30
Meals Before/After Event	\$7.49	\$14.37	\$8.24
Souvenirs and Gifts	\$4.41	\$7.60	\$4.76
Clothing and Accessories	\$1.65	\$2.92	\$1.79
Ground Transportation	\$2.60	\$8.79	\$3.28
Event-Related Child Care	\$0.21	\$0.22	\$0.21
Overnight Lodging (<i>one night only</i>)	\$2.62	\$19.28	\$4.43
Other	\$0.36	\$0.21	\$0.34
Total Per Person Spending	\$22.53	\$57.67	\$26.35

Voluntarism And In-Kind Contributions: An Economic Impact Beyond Dollars

A significant contribution to nonprofit arts and culture organizations was made as a result of voluntarism. In 2008, 29,618 arts volunteers donated 849,447 hours to the State of Oklahoma's nonprofit arts and culture organizations. This represents a donation of time with an estimated value of \$17,201,302 (Independent Sector estimates the value of the average 2008 volunteer hour to be \$20.25).² While these arts volunteers may not have an economic impact as defined in this study, they clearly have an enormous impact by helping the State of Oklahoma's nonprofit arts and culture organizations function as a viable industry.

In addition, the nonprofit arts and culture organizations surveyed for this study were asked about the sources and value of their in-kind support. In-kind contributions are non-cash donations such as materials (e.g., office supplies from a local retailer), facilities (e.g., rent), and services (e.g., printing costs from a local printer). The 247 responding nonprofit arts and culture organizations in the State of Oklahoma reported that they received in-kind contributions with an aggregate value of \$6,299,955 during 2008. These contributions were received from a variety of sources including corporations, individuals, and government.

As chair of Oklahoma Creativity, Inc, I can see our three legs come together. Creativity in Commerce, Education and Cultural will place Oklahoma heads and shoulders ahead of our competing neighbors. The arts are the glue that holds the three together.

Ken Ferguson
Chair and CEO, NBanC
Chair Oklahoma Creativity, Inc.

Conclusion

The nonprofit arts and culture are a \$314.8 million industry in the State of Oklahoma—one that supports 10,156 full-time equivalent jobs and generates \$29.4 million in local and state government revenue. Nonprofit arts and culture organizations, which spend \$176.5 million annually, leverage a remarkable \$138.3 million in additional spending by arts and culture audiences—spending that pumps vital revenue into local restaurants, hotels, retail stores, parking garages, and other businesses in the State of Oklahoma.

By demonstrating that investing in the arts and culture yields economic benefits, this study lays to rest a common misconception: that communities support the arts and culture at the expense of local economic development. In fact, they are investing in an industry that supports jobs, generates government revenue, and is a cornerstone of tourism. This report shows conclusively that **the arts mean business in the State of Oklahoma!**

Oklahoma is deeply fortunate to have a diverse and dynamic arts community. Not only does an active arts community vastly improve our quality of life and increase cultural opportunity, but the arts are also a vital part of economic growth. Oklahoma's vibrant world of the arts – music, dance, theater, film, literature, the visual arts and more – is critical to our state's present and future prosperity.

Brad Henry
Governor of Oklahoma

The arts are critical in attracting and retaining good businesses in our economy. The value of creativity cannot be overstated. The arts in our schools, and our communities, help our students, and indeed ourselves, to dream. Such dreams result in ideas, products, technologies and, ultimately, jobs.

Dick Rush
President and CEO
State Chamber of Oklahoma

Economic Impact Calculator

Estimating Economic Impact In The State Of Oklahoma

To make it easier to compare the economic impacts of different organizations within the State of Oklahoma, the project researchers calculated the economic impact per \$100,000 of spending by nonprofit arts and culture organizations and their audiences.

Economic Impact Per \$100,000 Of Spending By Nonprofit Arts And Culture ORGANIZATIONS

For every \$100,000 in spending by a nonprofit arts and culture organization in the State of Oklahoma, there was the following total economic impact.

Ratios of Economic Impact Per \$100,000 of Spending by Nonprofit Arts and Culture ORGANIZATIONS in the State of Oklahoma	
Full-Time Equivalent Jobs	3.99
Resident Household Income	\$77,897
Local Government Revenue	\$2,542
State Government Revenue	\$5,385

An Example of How to Use the Organizational Spending Calculator Table (above)

An administrator from a nonprofit arts and culture organization that has total expenditures of \$250,000 wants to determine the organization's total economic impact on full-time equivalent (FTE) employment in the State of Oklahoma. The administrator would:

1. Determine the amount spent by the nonprofit arts and culture organization;
2. Divide the total expenditure by 100,000; and
3. Multiply that figure by the FTE employment ratio per \$100,000 for the State of Oklahoma.

Thus, \$250,000 divided by 100,000 equals 2.5; 2.5 times 3.99 (from the table above—*Ratios of Economic Impact Per \$100,000 of Spending by Nonprofit Arts and Culture Organizations in Oklahoma*) equals a total of 10.0 full-time equivalent jobs supported (both directly and indirectly) within the State of Oklahoma by that nonprofit arts and culture organization. Using the same procedure, the estimate can be calculated for resident household income and local and state government revenue.

Economic Impact Per \$100,000 Of Spending By Nonprofit Arts And Culture AUDIENCES

The economic impact of event-related spending by arts audiences also can be derived for individual or groups of nonprofit arts and culture organizations and events in the State of Oklahoma.

The first step is to determine the total estimated event-related spending by arts and culture event attendees (excluding the cost of admission). To derive this figure, multiply the average per person event-related expenditure in the State of Oklahoma by the total event attendance. The ratios of economic impact per \$100,000 in spending then can be used to determine the total economic impact of the total estimated audience spending.

Average Per Person Event-Related Spending by All Arts and Culture Event Attendees in the State of Oklahoma (excluding the cost of event admission)

Refreshments/Snacks During Event	\$3.30
Meals Before/After Event	\$8.24
Souvenirs and Gifts	\$4.76
Clothing and Accessories	\$1.79
Ground Transportation	\$3.28
Event-Related Child Care	\$0.21
Overnight Lodging (one night only)	\$4.43
Other	\$0.34
Total Per Person Spending	\$26.35

Ratios of Economic Impact Per \$100,000 of Spending by Nonprofit Arts and Culture AUDIENCES in the State of Oklahoma

Full-Time Equivalent Jobs	2.25
Resident Household Income	\$53,142
Local Government Revenue	\$4,229
State Government Revenue	\$6,931

An Example of How to Use the Audience Spending Calculator Tables (page 13)

An administrator wants to determine the total economic impact of the 25,000 total attendees to his/her organization's nonprofit arts and culture events on full-time equivalent (FTE) employment in the State of Oklahoma. The administrator would:

1. Determine the total estimated audience spending by multiplying the average per person expenditure for the State of Oklahoma by the total attendance to nonprofit arts and culture events;
2. Divide the resulting total estimated audience spending by 100,000; and
3. Multiply that figure by the FTE employment ratio per \$100,000 for the State of Oklahoma.

Thus, 25,000 times \$26.35 (from the top table on the preceding page—*Average Per Person Event-Related Spending by Arts and Culture Event Attendees in Oklahoma*) equals \$1,317,500; \$1,317,500 divided by 100,000 equals 13.18; 13.18 times 2.25 (from the bottom table on the preceding page—*Ratios of Economic Impact Per \$100,000 of Spending by Nonprofit Arts and Culture Audiences in Oklahoma*) equals a total of 29.7 full-time equivalent jobs supported (both directly and indirectly) within Oklahoma by that nonprofit arts and culture organization. Using the same procedure, the estimate can be calculated for resident household income and local and state government revenue.

In addition to our strategic location, low cost of living and high quality workforce, Ardmore's arts and cultural amenities make this community appealing to any prospective business or industry considering relocation. This study documents the key role played by the nonprofit arts and culture industry in our state.

Wes Stucky
President and CEO
Ardmore Development Authority

About this Study

The Economic Impact of Nonprofit Arts and Culture Organizations in Oklahoma was conducted by Americans for the Arts and focuses solely on nonprofit arts and culture organizations and their audiences in Oklahoma. Public arts councils and public presenting facilities/institutions are included as are select programs embedded within another organization (that have their own budget and play a substantial role in the cultural life of the community). The study excludes spending by individual artists and the for-profit arts and entertainment sector

For the Oklahoma study, researchers collected detailed expenditure and attendance data from 247 nonprofit arts and culture organizations in rural and metropolitan areas throughout the state and 2,781 of their attendees. The project economists, from the Georgia Institute of Technology, customized input/output analysis models for the State of Oklahoma to provide reliable economic impact data, specifically full-time equivalent jobs, household income, and local and state government revenue.

As a partner in this study, the Oklahoma Arts Council agreed to participate and complete three participation criteria: (1) identify and code the universe of nonprofit arts and culture organizations in the state (2) disseminate, collect, and review for accuracy expenditure surveys from those organizations (3) conduct a minimum of 2,000 audience-intercept surveys.

Surveys Of Nonprofit Arts And Culture ORGANIZATIONS

Using the Urban Institute's National Taxonomy of Exempt Entity (NTEE) ³ codes as a guideline, eligible nonprofit arts and culture organizations were identified. Those organizations whose primary purpose is to promote appreciation for and understanding of the visual, performing, folk, and media arts received a web-based survey. Sent via email, the survey collected detailed information about their 2008 fiscal year expenditures in more than 40 expenditure categories, including labor, local and non-local artists, operations, materials, facilities, and asset acquisition.

In the Oklahoma study, researchers collected detailed expenditure and attendance data from 247 out of 529 total eligible nonprofit arts and culture organizations identified by the Oklahoma Arts Council — a response rate of 47 percent. The responding organizations had a range of operating budgets from \$0 to \$14,110,800. This study's results are based solely on the actual survey data collected, not on fiscal projections. The less-than-100 percent response rates suggest an understatement of the economic impact findings. The following NTEE categories of nonprofit arts, culture, and humanities organizations were included in this study:

A02	Management and Technical Assistance Organizations	A6B	Singing or Choral Organizations
A03	Professional Societies and Associations	A6C	Music Groups, Bands, or Ensembles
A05	Research Institutes and Policy Analysis Organizations	A6D	Music Composition Organizations
A11	Single Support Organizations	A6E	Performing Arts Schools
A12	Fund Raising and Fund Distributing Organizations	A71	Art History Organizations
A23	Cultural and Ethnic Awareness Organizations	A76	Literary Service Organizations and Activities
A24	Folk Arts and Traditional Arts Organizations	A82	Historical Societies
A25	Arts Education Organizations	A84	Fairs, Festivals, and other Commemorative Events
A26	Arts Councils and City Presenting Facilities	A91	Artist Service Organizations
A31	Film and Video Organizations		
A32	Public Access Television Studios		
A40	Visual Arts Organizations		
A45	Architectural Organizations		
A46	Drawing Organizations		
A47	Ceramic Arts Organizations		
A48	Art Conservation Organizations		
A51	Art Museums		
A52	Children's Museums		
A53	Folk Arts and Ethnic Museums		
A54	History Museums		
A55	Marine and Maritime Museums		
A56	Natural History and Natural Science Museums		
A57	Science and Technology Museums		
A58	Sports and Hobby Museums		
A59	Specialized Museums		
A61	Performing Arts Centers		
A62	Dance Organizations		
A63	Ballet Organizations		
A64	Choreography Organizations		
A65	Theaters		
A66	Playwriting Organizations		
A67	Musical Theaters		
A68	Music Organizations		
A69	Symphony Orchestras		
A6A	Theaters		

Surveys Of Nonprofit Arts And Culture AUDIENCES

Audience-intercept surveying, a common and accepted research method, was completed to measure spending by audiences at nonprofit arts and culture events. Patrons were asked to complete a short survey while attending an event. A total of 2,781 attendees completed the survey. The randomly selected respondents provided itemized expenditure data on attendance-related activities such as meals, souvenirs, transportation, and lodging. Data were collected from 2008 to 2009 (to guard against seasonal spikes or drop-offs in attendance) as well as at a broad range of events (a night at the opera will typically yield more spending than a Saturday children's theater production, for example). Using total attendance data for 2008 (collected from the organization surveys), standard statistical methods were then used to derive a reliable estimate of total expenditures by attendees. The survey respondents provided information about the entire party with whom they were attending the event. With an average travel party size of three people, these data actually represent the spending patterns of more than 8,300 attendees, significantly increasing the reliability of the data.

Economic Analysis

A common theory of community growth is that an area must export goods and services if it is to prosper economically. This theory is called economic-base theory, and it depends on dividing the economy into two sectors: the export sector and the local sector. Exporters, such as automobile manufacturers, hotels, and department stores, obtain income from customers outside of the community. This "export income" then enters the local economy in the form of salaries, purchases of materials, dividends, and so forth, and becomes income to local residents. Much of it is re-spent locally; some, however, is spent for goods imported from outside of the community. The dollars re-spent locally have a positive economic impact as they continue to circulate through the local economy. This theory applies to arts organizations as well as to other producers.

Studying Economic Impact Using Input/Output Analysis

To derive the most reliable economic impact data, input-output analysis is used to measure the impact of expenditures by nonprofit arts and culture organizations and their audiences. This is a highly regarded type of economic analysis that has been the basis for two Nobel Prizes in economics. The models are systems of mathematical equations that combine statistical methods and economic theory in an area of study called econometrics. The analysis traces how many times a dollar is re-spent within the local economy before it leaks out, and it quantifies the economic impact of each round of spending. This form of economic analysis is well suited for this study because it can be customized specifically to each community.

An input/output model was customized for the State of Oklahoma based on the local dollar flow between 533 finely detailed industries within its economy. This was accomplished by using detailed data on employment, incomes, and government revenues provided by the U.S. Department of Commerce (e.g., County Business Patterns, Regional Economic Information System, Survey of State and Local Finance), local tax data (sales taxes, property taxes, and miscellaneous local option taxes), as well as the survey data from the responding nonprofit arts and culture organizations and their audiences.

The Input/Output Process

The input-output model is based on a table of 533 finely detailed industries showing local sales and purchases. The local and state economy of each community is researched so the table can be customized for each community. The basic purchase patterns for local industries are derived from a similar table for the U.S. economy for 2002 (the latest detailed data available from the U.S. Department of Commerce). The table is first reduced to reflect the unique size and industry mix of the local economy, based on data from County Business Patterns and the Regional Economic Information System of the U.S. Department of Commerce. It is then adjusted so that only transactions with local businesses are recorded in the inter-industry part of the table. This technique compares supply and demand and estimates the additional imports or exports required to make total supply equal total demand. The resulting table shows the detailed sales and purchase patterns of the local industries. The 533-industry table is then aggregated to reflect the general activities of 32 industries plus local households, creating a total of 33 industries. To trace changes in the economy, each column is converted to show the direct requirements per dollar of gross output for each sector. This direct-requirements table represents the “recipe” for producing the output of each industry.

The economic impact figures for the Oklahoma Study of the Economic Impact of the Nonprofit Arts and Culture Industry were computed using what is called an “iterative” procedure. This process uses the sum of a power series to approximate the solution to the economic model. This is what the process looks like in matrix algebra:

$$T = IX + AX + A^2X + A^3X + \dots + A^nX.$$

T is the solution, a column vector of changes in each industry’s outputs caused by the changes represented in the column vector X. A is the 33 by 33 direct-requirements matrix. This equation is used to trace the direct expenditures attributable to nonprofit arts organizations and their audiences. A multiplier effect table is produced that displays the results of this equation. The total column is T. The initial expenditure to be traced is IX (I is the identity matrix, which is operationally equivalent to the number 1 in ordinary algebra). Round 1 is AX, the result of multiplying the matrix A by the vector X (the outputs required of each supplier to produce the goods and services purchased in the initial change under study). Round 2 is A²X, which is the result of multiplying the matrix A by Round 1 (it answers the same question applied to Round 1: “What are the outputs required of each supplier to produce the goods and services purchased in Round 1 of this chain of events?”). Each of columns 1 through 12 in the multiplier effects table represents one of the elements in the continuing but diminishing chain of expenditures on the right side of the equation. Their sum, T, represents the total production required in the local economy in response to arts activities.

Calculation of the total impact of the nonprofit arts on the outputs of other industries (T) can now be converted to impacts on the final incomes to local residents by multiplying the outputs produced by the ratios of household income to output and employment to output. Thus, the employment impact of changes in outputs due to arts expenditures is calculated by multiplying elements in the column of total outputs by the ratio of employment to output for the 32 industries in the region. Changes in household incomes,

local government revenues, and state government revenues due to nonprofit arts expenditures are similarly transformed. The same process is also used to show the direct impact on incomes and revenues associated with the column of direct local expenditures.

End Notes

1. Americans for the Arts' proprietary economic impact methodology does not employ the use of an expenditure multiplier. The "Total Expenditures" figure listed on the data tables on Pages 5, 7, and 8 of this report are identical because we measure the economic impacts of only the actual expenditures reported. An explanation of the difference between "direct" and "total" economic impacts can be found on Page 6 of this report.
2. Giving and Volunteering in the United States 2008, Independent Sector, 2009.
3. The National Taxonomy of Exempt Entities (NTEE)—developed by the National Center for Charitable Statistics at the Urban Institute—is a definitive classification system for nonprofit organizations recognized as tax exempt by the Internal Revenue Code. This system divides the entire universe of nonprofit organizations in ten broad categories, including "Arts, Culture, and Humanities." The Urban Institute estimates that there are approximately 100,000 nonprofit arts and culture organizations currently operating in the United States.

Frequently Used Terms

This section provides a glossary of economic impact terminology, sorted alphabetically in ascending order.

Cultural Tourism

Travel directed toward experiencing the arts, heritage, and special character of a place.

Direct Economic Impact

A measure of the economic effect of the initial expenditure within a community. For example, when the symphony pays its players, each musician's salary, the associated government taxes, and full-time equivalent employment status represent the direct economic impact.

Direct Expenditures

The first round of expenditures in the economic cycle. A paycheck from the symphony to the violin player and a ballet company's purchase of dance shoes are examples of direct expenditures.

Econometrics

The process of using statistical methods and economic theory to develop a system of mathematical equations that measures the flow of dollars between local industries. The input-output model developed for this study is an example of an econometric model.

Econometrician

An economist who designs, builds, and maintains econometric models.

Full-Time Equivalent (FTE) Jobs

A term that describes the total amount of labor employed. Economists measure FTE jobs—not the total number of employees—because it is a more accurate measure of total employment. It is a manager's discretion to hire one full-time employee, two half-time employees, four quarter-time employees, etc. Almost always, more people are affected than are reflected in the number of FTE jobs reported due to the abundance of part-time employment, especially in the nonprofit arts and culture industry.

Indirect Impact

Each time a dollar changes hands, there is a measurable economic impact. When people and businesses receive money, they re-spend much of that money locally. Indirect impact measures the effect of this re-spending on jobs, household income, and revenue to local and state government. It is often referred to as secondary spending or the dollars "rippling" through a community. When funds are eventually spent non-locally, they are considered to have "leaked out" of the community and therefore cease to have a local economic impact. Indirect impact is the sum of the impact of all rounds of spending.

Input-Output Analysis

A system of mathematical equations that combines statistical methods and economic theory in an area of economic study called econometrics. Economists use this model (occasionally called an inter-industry model) to measure how many times a dollar is re-spent in, or “ripples” through, a community before it leaks out (see Leakage). The model is based on a matrix that tracks the dollar flow between 533 finely detailed industries in each community. It allows researchers to determine the economic impact of local spending by nonprofit arts and culture organizations on jobs, household income, and government revenue.

Leakage

The money that community members spend outside of a community. This non-local spending has no economic impact within the community. A ballet company purchasing shoes from a non-local manufacturer is an example of leakage. If the shoe company were local, the expenditure would remain within the community and create another round of spending by the shoe company.

Multiplier (often called Economic Activity Multiplier)

An estimate of the number of times that a dollar changes hands within the community before it leaks out of the community (for example, the theater pays the actor, the actor spends money at the grocery store, the grocery store pays its cashier, and so on). This estimate is quantified as one number by which all expenditures are multiplied. For example, if the arts are a \$10 million industry and a multiplier of three is used, then it is estimated that these arts organizations have a total economic impact of \$30 million. The convenience of a multiplier is that it is one simple number its shortcoming, however, is its reliability. Users rarely note that the multiplier is developed by making gross estimates of the industries within the local economy with no allowance for differences in the characteristics of those industries, usually resulting in an overestimation of the economic impact. In contrast, the input-output model employed in **The Economic Impact of Nonprofit Arts and Culture Organizations in Oklahoma** study is a type of economic analysis tailored specifically to the State of Oklahoma and, as such, provides more reliable and specific economic impact results.

Resident Household Income (often called Personal Income)

The salaries, wages, and entrepreneurial income residents earn and use to pay for food, mortgages, and other living expenses. It is important to note that resident household income is not just salary. When a business receives money, for example, the owner usually takes a percentage of the profit, resulting in income for the owner.

Revenue To Local And State Government

Local and state government revenue is not derived exclusively from income, property, sales, and other taxes. It also includes license fees, utility fees, user fees, and filing fees. Local government revenue includes funds to city and county government, schools, and special districts.

Frequently Asked Questions

This section answers some common questions about this study and the methodology used to complete it.

How were the eligible nonprofit arts organizations in each community selected?

Local partners attempted to identify their universe of nonprofit arts and culture organizations using the Urban Institute's National Taxonomy of Exempt Entity (NTEE) codes as a guideline. Eligible organizations included those whose primary purpose is to promote appreciation for and understanding of the visual, performing, folk, and media arts. Public arts councils, public presenting facilities or institutions, and embedded organizations that have their own budget also were included if they play a substantial role in the cultural life of the community.

What type of economic analysis was done to determine the study results?

An input-output analysis model was customized for the State of Oklahoma to determine the local economic impact of nonprofit arts and culture organizations and arts audiences. Americans for the Arts, which conducted the research, worked with a highly regarded economist's from the Georgia Institute of Technology to design the input-output model used for this study.

What other information was collected in addition to the arts surveys?

In addition to detailed expenditure data provided by the surveyed organizations, extensive wage, labor, tax, and commerce data were collected from local, state, and federal governments for use in the input-output model.

Why doesn't this study use a multiplier?

When many people hear about an economic impact study, they expect the result to be quantified in what is often called a multiplier or an economic activity multiplier. The economic activity multiplier is an estimate of the number of times a dollar changes hands within the community (e.g., a theater pays its actor, the actor spends money at the grocery store, the grocery store pays the cashier, and so on). It is quantified as one number by which expenditures are multiplied. The convenience of the multiplier is that it is one simple number. Users rarely note, however, that the multiplier is developed by making gross estimates of the industries within the local economy and does not allow for differences in the characteristics of those industries. Using an economic activity multiplier usually results in an overestimation of the economic impact and therefore lacks reliability.

Why are the admissions expenses excluded from the analysis of audience spending?

Researchers make the assumption that any admissions dollars paid by event attendees are typically collected as revenue for the organization that is presenting the event. The organization then spends those dollars. The admissions paid by audiences are excluded because those dollars are captured in the operating budgets of the eligible nonprofit arts and culture organizations on the Organizational Expenditure Survey. This methodology avoids "double-counting" those dollars in the analysis.

How is the economic impact of arts and culture organizations different from other industries?

Any time money changes hands there is a measurable economic impact. Social service organizations, libraries, and all entities that spend money have an economic impact. What makes the economic impact of arts and culture organizations unique is that, unlike most other industries, they induce large amounts of related spending by their audiences. For example, when patrons attend a performing arts event, they may purchase dinner at a restaurant, eat dessert after the show, and return home and pay the baby-sitter. All of these expenditures have a positive and measurable impact on the economy.

Will decision makers believe these results?

Yes, this study makes a strong argument to decision makers, but you may need to provide them with some extra help. It will be up to the user of this report to educate the public about economic impact studies in general and the results of this study in particular. The user may need to explain (1) the study methodology used; (2) that economists created an input-output model for the State of Oklahoma and (3) the difference between input-output analysis and a multiplier. The good news is that as the number of economic impact studies completed by arts organizations and other special interest areas increases, so does the sophistication of community leaders whose influence these studies are meant to affect. Today, most decision makers want to know what methodology is being used and how and where the data were gathered.

You can be confident that the input-output analysis used in this study is a highly regarded model in the field of economics (the basis of two Nobel Prizes in economics). However, as in any professional field, there is disagreement about procedures, jargon, and the best way to determine results. Ask 12 artists to define art and you will get 24 answers; expect the same of economists. You may meet an economist who believes that these studies should be done differently (for example, a cost-benefit analysis of the arts).

In Appreciation

This study could not have been completed without the cooperation of the 2,781 patrons who generously took the time to complete audience intercept surveys while attending an arts and culture event in the State of Oklahoma.

In addition, Americans for the Arts expresses its gratitude to the 247 nonprofit arts and culture organizations in the State of Oklahoma, listed below, that provided detailed financial and event attendance information about their organization.

The State Of Oklahoma's Participating Nonprofit Arts And Culture Organizations

Act II, Ada	Bartlesville Symphony Orchestra, Bartlesville
AD Buck Museum of Science & History, Tonkawa	Black Liberated Arts Center (BLAC), Oklahoma City
Ada Arts & Humanities Council, Ada	Blackwell Public Library, Blackwell
Alfalfa County Museum, Cherokee	Bonham Revue, Edmond
Alliance Française de Tulsa, Tulsa	Brightmusic Society of Oklahoma, Oklahoma City
Allied Arts, Oklahoma City	Broken Arrow Arts & Humanities Council, Broken Arrow
Allied Arts & Humanities Council of Bartlesville, Bartlesville	Broken Arrow Community Playhouse, Broken Arrow
Alva Community Theatre, Alva	Carmen Public Library, Carmen
Alva Mural Society, Alva	Carpenter Square Theatre, Oklahoma City
Alva Public Library, Alva	Central Art Association, Oklahoma City
American Choral Directors Association, Oklahoma City	Chamber Music in Oklahoma, Oklahoma City
American Indian Cultural Center & Museum, Oklahoma City	Chamber Music Tulsa, Tulsa
American Theatre Company, Tulsa	Chandler-Watts Library, Stratford
Amigo Foundation, Oklahoma City	Charles B. Goddard Center, Ardmore
Among Friends Activity Center, Norman	Cherokee Heritage Center, Tahlequah
Anadarko Community Library, Anadarko	Cherokee Main Street, Cherokee
Ardmore Main Street Authority, Ardmore	Cherokee Strip Museum, Perry
Arkansas River Historical Society, Catoosa	Chickasaw Area Arts Council, Chickasha
Art Students Guild, Muskogee	Chickasaw Nation Division of Arts and Humanities, Ada
Artist Incubation, Guymon	Children's Arts Network, Norman
Arts & Humanities Council of Tulsa, Tulsa	Children's Musical Theatre of Bartlesville, Bartlesville
Arts Adventure Foundation, Ponca City	Chisholm Trail Arts Council, Duncan
Arts Council of Oklahoma City & Stage Center, Oklahoma City	Chisholm Trail Heritage Association, Duncan
Arts for All, Lawton	Cimarron Circuit Opera Company, Norman
Artspace Ponca City Association, Ponca City	City Arts Center, Oklahoma City
Barthelmes Conservatory, Tulsa	City of Clinton - Art Show - Acme Brick Park, Clinton
Bartlesville Art Association, Bartlesville	City of Guymon
Bartlesville Choral Society, Bartlesville	City of Spencer
Bartlesville Civic Ballet, Bartlesville	City of Tulsa - Clark & Heller Theatre
Bartlesville Community Center, Bartlesville	City of Yukon
Bartlesville Public Library, Bartlesville	Claremore - Will Rogers Library, Claremore

Community Youth Activities Program, Purcell
 Cotton County Art Council, Walters
 Creative Oklahoma, Oklahoma City
 Creek Council House Museum Association, Okmulgee
 Cultural Development Corporation of Central OK, OKC
 Dancing Eagles, Sapulpa
 deadCENTER Film Festival, Oklahoma City
 Dreamer Concepts Foundation, Norman
 Duncan Little Theatre, Duncan
 Duncan Public Library, Duncan
 Eastern Oklahoma State College, Wilburton
 Edmond Community Chorale, Edmond
 Edmond Historical Society, Edmond
 Elk City Arts Council, Elk City
 Elk City Carnegie Library, Elk City
 Enid Arts & Science Foundation, Enid
 Enid Symphony Association, Enid
 Euchee (Yuchi) Tribe of Oklahoma, Sapulpa
 Fiber Artists of Oklahoma, Edmond
 Fine Arts Institute of Edmond, Edmond
 Five Civilized Tribes Museum, Muskogee
 Forest Heritage Center, Broken Bow
 Friends of Starlight Concerts, Tulsa
 Frontier Country Historical Museum, Crescent
 Geary Public Library, Geary
 Gene Autry Oklahoma Historical Society, Gene Autry
 Gilbert & Sullivan Society - Light Opera Oklahoma, Tulsa
 Gilcrease Museum, Tulsa
 Go for Baroque, Oklahoma City
 Grady County Historical Society – Museum, Chickasha
 Grand Lake Festivals, Grove
 Great Plains RC & D Association, Cordell
 Grove Community Playmakers, Grove
 Guthrie Arts & Humanities Council, Guthrie
 Guthrie Public Library, Guthrie
 Guy Fraser Harrison Academy, Oklahoma City
 Guymon Community Theatre, Guymon
 Guymon Public Library, Guymon
 Hennessey Public Library, Hennessey
 Individual Artists of Oklahoma, Oklahoma City
 Inner City Dance Institute, Oklahoma City
 Jazz in June, Norman
 Jenks Chamber of Commerce Community Foundation, Jenks
 Julia Crowder McClellan Memorial Library, Mounds
 KGOU Radio - University of Oklahoma, Norman
 Lachenmeyer Arts Center, Cushing
 Langley Public Library, Langley
 Lawton - Fort Sill Art Council, Lawton
 Lawton Arts & Humanities Council, Lawton
 Lawton Community Theatre, Lawton
 Lawton Philharmonic Society, Lawton
 Lincoln County On-Stage, Chandler
 Living Arts of Tulsa, Tulsa
 Logan County Historical Society, Guthrie
 Lyric Theatre of Oklahoma, Oklahoma City
 Mabee-Gerrer Museum of Art, Shawnee
 Main Street Pauls Valley, Pauls Valley
 Major County Historical Society, Fairview
 Margaret Carder Library, Mangum
 Metropolitan Library, Oklahoma City
 Miami Downtown Redevelopment Authority, Miami
 Midwestern Theatre Troupe, Tulsa
 Museum of the Great Plains, Lawton
 Museum of the Red River, Idabel
 Museum of the Western Prairie, Altus
 Muskogee Area Arts Council, Muskogee
 Muskogee Little Theatre, Muskogee
 Mustang Public Library, Mustang
 Newkirk Public Library, Newkirk
 No Man's Land Museum, Goodwell
 Norman Arts Council, Norman
 Norman Community Choral Society, Norman
 Norman Firehouse Art Center, Norman
 Northwestern Oklahoma State University, Alva
 Nowata City-County Library, Nowata
 O.K. City Chorus of Sweet Adelines International, OKC
 OK Mozart, Bartlesville
 Oklahoma Art Guild, Oklahoma City
 Oklahoma Arts Council, Oklahoma City
 Oklahoma Arts Institute, Norman
 Oklahoma Avenue Association, Guthrie
 Oklahoma Bluegrass Club, Oklahoma City
 Oklahoma Children's Theatre, Oklahoma City
 Oklahoma Choral Artists, Oklahoma City
 Oklahoma Choral Association, Oklahoma City
 Oklahoma City Ballet, Oklahoma City
 Oklahoma City Museum of Art, Oklahoma City
 Oklahoma City Orchestra League, Oklahoma City

Oklahoma City Philharmonic Society, Oklahoma City
 Oklahoma City Repertory Theatre, Oklahoma City
 Oklahoma City Theatre Company, Oklahoma City
 Oklahoma Community Orchestra Oklahoma, Oklahoma City
 Oklahoma Community Theatre Association, Oklahoma City
 Oklahoma Educational Television Authority (OETA), OKC
 Oklahoma Flute Society, Oklahoma City
 Oklahoma Folklife Council, Oklahoma City
 Oklahoma Humanities Council, Oklahoma City
 Oklahoma Museums Association, Oklahoma City
 Oklahoma Route 66 Museum, Clinton
 Oklahoma Shakespeare in the Park, Oklahoma City
 Oklahoma Territorial Museum, Guthrie
 Oklahoma Visual Arts Coalition, Oklahoma City
 Oklahoma Watermedia Association, Oklahoma City
 Oklahoma Writers Federation, Edmond
 Oklahoma Youth Symphonies, Oklahoma City
 Old Central Culture Council, Yukon
 Old Greer County Museum & Hall of Fame, Mangum
 On Stage Woodward, Woodward
 Opry Heritage Foundation of Oklahoma, Oklahoma City
 Paseo Artists Associations, Oklahoma City
 Pauls Valley Arts Council, Pauls Valley
 Performing Arts Studio, Norman
 Philbrook Museum of Art, Tulsa
 Pioneer Library System, Norman
 Plaza District Association, Oklahoma City
 Ponca City Arts & Humanities Council, Ponca City
 Ponca City Library, Ponca City
 Ponca Playhouse, Ponca City
 Ponca Tribe of Oklahoma, Ponca City
 Poncan Theatre Company, Ponca City
 Prague Public Library, Prague
 Price Tower Arts Center, Bartlesville
 Pryor Area Arts & Humanities Council, Pryor
 Pryor Public Library, Pryor
 Public Library of Enid and Garfield County, Enid
 Pushmataha County - The Push Arts, Antlers
 Quartz Mountain Music Festival at Lone Wolf, Altus
 Ragtime for Tulsa Foundation, Tulsa
 Red Earth, Oklahoma City
 Red River Arts Council, Durant
 Redlands Community College, El Reno
 Reduxion Theatre Company, Oklahoma City
 Respect Diversity Foundation, Edmond
 Roger Miller Museum, Erick
 Sapulpa Community Theatre, Sapulpa
 Seminole Nation Historical Society, Wewoka
 Shattuck Windmill Museum and Park, Shattuck
 Shawnee Little Theatre, Shawnee
 Sherwin Miller Museum of Jewish Art, Tulsa
 Shortgrass Arts & Humanities Council, Altus
 Skiatook Bluegrass Association, Skiatook
 Society for the Revitalization of Downtown Shawnee, Shawnee
 Sooner State Chapter of the American Theatre Organ Soc, Tulsa
 Soutar Memorial Library, Boise City
 Southeastern Oklahoma State University, Durant
 Southeastern Public Library System of Oklahoma, McAlester
 Southern Prairie Library System, Altus
 Southwest Oklahoma Opera Guild, Lawton
 Southwest Playhouse Fine Arts Center, Clinton
 Southwestern Oklahoma State University, Weatherford
 Stillwater Chamber Singers, Stillwater
 Summerstock Productions, Edmond
 Talihina Development Initiative, Talihina
 Talihina Indian Club, Talihina
 Theatre Guild of Elk City, Elk City
 Theatre North, Tulsa
 Theatre Tulsa, Tulsa
 Tonkawa Public Library, Tonkawa
 Tulsa Ballet Theatre, Tulsa
 Tulsa Children's Chorus, Tulsa
 Tulsa Folkloric Dance Theater, Tulsa
 Tulsa Glassblowing Studio, Tulsa
 Tulsa International Mayfest, Tulsa
 Tulsa Opera, Tulsa
 Tulsa Oratorio Chorus, Tulsa
 Tulsa Performing Arts Center, Tulsa
 Tulsa Symphony Orchestra, Tulsa
 Tulsa Youth Symphony, Tulsa
 University of Central Oklahoma - A+ Schools, Edmond
 University of Central Oklahoma - College of Arts, Edmond
 University of Oklahoma - Medieval Fair, Norman
 University of Science & Arts of Oklahoma, Chickasha
 Untitled (ArtSpace), Oklahoma City
 Vietnamese-American Community & Metropolitan Areas, OKC
 Western Oklahoma Ballet Theatre, Clinton
 Western Plains Library System, Clinton

Wewoka Public Library, Wewoka
Will Rogers Memorial Museums, Claremore
Windsong Association, Oklahoma City
Woodward Arts and Theatre Council, Woodward
Woody Guthrie Coalition, Okemah
Woolaroc Museum and Wildlife Preserve, Bartlesville
Wynnewood Public Library, Wynnewood
Yumare Mexican Folkloric Dancers, Oklahoma City

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