Technical Memo

Kem C. Gardner POLICY INSTITUTE
THE UNIVERSITY OF UTAH

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Subject: Economic contributions of arts organizations

The Utah Division of Arts & Museums requested guidance from the Kem C. Gardner Policy Institute to develop grant/funding selection criteria that address arts and cultural organizations' contributions to Utah's economy. This memo provides a limited review of the literature on the economic impacts of the arts, evaluates existing tools and data, summarizes the results of data requests to six of Arts & Museums' grantees and an exploration of various economic modeling approaches using that data, and provides recommendations for the implementation of economic analyses of arts organizations in Utah.

Terms Used

Economic Impacts arise when "new" money enters a region (e.g., a state or county) from outside; for example, a grant from the National Endowment for the Arts to the Utah Symphony | Utah Opera or the purchase of tickets for the Utah Shakespeare Festival by residents of Nevada. The recipient of these funds spends them to pay employees' salaries and to purchase goods and services from local vendors, who in turn use the new income to pay their employees and purchase inputs from their suppliers, and so on. These employees also spend their new earnings in the local economy to pay for housing, groceries, entertainment and other consumer goods. Some of the money will "leak" out of the region when goods or services are purchased from elsewhere. These rounds of spending within the region produce the multiplier effects, which are generally measured in terms of increased output (sales) by local firms, new jobs and employee earnings, and increased gross domestic product (also called value added). In the case of RIMS II and IMPLAN, two widely used economic impact models, the impacts are calculated by multiplying the amount of the new money entering the region by output, employment, earnings and value added "multipliers" for the specific industry receiving the funds.

Economic Contributions are similar to economic impacts and are calculated using the same multipliers. However, rather than applying the multipliers only to new, external money entering the region, they are applied to an organization's total revenues regardless of source. This results in a measure of the level of local economic activity supported by the organization instead of just the new jobs, etc. created by the influx of

outside funds. It shows the organization's current role in the local economy rather than its addition to economic growth.

Direct, Indirect and Induced Effects are different phases in the multiplier process. The direct effects arise when the organization under study purchases goods and services needed to produce its output (concerts, plays, exhibits, etc.). The indirect effects arise when the local providers of these goods and services in turn purchase from their local suppliers, who purchase from their local suppliers, and so on. Induced impacts occur when employees at the original organization and at the "upstream" suppliers spend their earnings in the local economy.

Final Demand Multipliers are applied to the new revenues (final demand) received by an industry or organization in the case of economic impacts, or to the total revenues in the case of economic contributions, to calculate changes in output, employment, earnings and gross domestic product in the local economy.

Direct-Effect Multipliers are applied to the "direct" employment or earnings at the organization in question to estimate the total number of jobs or earnings supported by that organization through its purchases in the local economy.

Earnings consist of wages and salaries, employer contributions for health insurance, and the income of self-employed proprietors.

Employment counts full- and part-time jobs equally. It is not an FTE measure of employment.

Gross Domestic Product is the value of goods and services produced for the use of households, governments, business investment and for export, less the cost of the goods and services used in the production process. What remains is the value added by employees and owners.

Literature Review

The Gardner Policy Institute conducted a brief review of the literature on the arts and economic development. Analyzing the economic impacts of particular arts organizations is a well-established field. It is a subsector of the multiplier analysis that has been applied to most other sectors of the economy using tools dating back to the 1950s. Current research tends more toward the relationship between the presence of arts and cultural organizations in general and economic growth through their role in attracting highly skilled workers and new firms, or by fostering innovation and creative thinking in the commercial sector.

Peter Pedroni and Stephan Sheppard examined whether arts and culture output contributes to long-run economic growth.[1] They analyzed data on 384 metropolitan areas for the years 1990 through 2006 and found that "there appears to be a causal connection in which increases in local culture production generate permanent increases in local GDP."[2] Their analysis was purely statistical and, as such, did not examine *how* arts and culture create economic growth. Nonetheless, this would argue for supporting the arts for their effects beyond any immediate and direct economic impacts. Strictly speaking, organizations that serve an entirely local audience probably produce very little to no economic impacts. But there may still be economic

rationales for supporting them due to their contributions to economic growth by improving the attractiveness of the region to firms and entrepreneurs, promoting creative thinking, etc.

Along these lines Arthur C. Nelson and others assessed the relationship between the presence of performing arts organizations and the growth of the "knowledge class."[3] The knowledge class is defined rather broadly to encompass managers; business and financial operations specialists; computer specialists and mathematicians; architects and engineers; life, physical and social scientists; teachers and librarians; arts, design, entertainment, sports and media occupations; and sales, services, wholesale and manufacturing workers. For three types of performing arts organizations—symphony, opera and ballet/dance—Nelson et al. found that "[t]he presence of one professional performing arts organization is associated with a 1.1% change in the share of knowledge class employment between 2000 and 2010, two organizations are associated with a 1.5% change in share, and all three are associated with a 2.2% change in share."[4] Knowledge-class jobs tend to pay above-average wages, and several of the occupations are prevalent in industries targeted by the Governor's Office of Economic Development as strategic industry clusters.

Kevin McCarthy and others argued in 2004 for a broader consideration of the benefits of the arts beyond merely instrumental economic, cognitive, behavioral and health impacts.[5] They argued that "the arts can create and foster a range of intrinsic benefits that are primarily personal, but they can also generate private benefits that have indirect, spillover effects on the public sphere, as well as direct effects on the public sphere."[6] These include the purely private pleasure gained from experiencing a work of art, cognitive growth and a broader understanding of one's fellow humans, and the creation and strengthening of social bonds. The policy implications of their findings suggested increasing demand for the arts would be a better approach than maintaining the supply: "build a market for the arts by cultivating the capacity of individuals to gain benefits from arts experiences."[7]

In a 2014 special issue of the Federal Reserve Bank of San Francisco's *Community Development Investment Review* on "Creative Placemaking," Stephan Sheppard of Williams College discussed three general approaches to evaluating the local impacts of arts organizations.[8] A strictly economic analysis uses organizational budgets, spending by nonresident visitors and impact multipliers. This can be done retrospectively for existing organizations, or prospectively for new organizations. A local quality-of-life analysis examines changes in housing prices as "an indication of the ability of cultural organizations to enhance the desirability of a community as a residential location and to enhance the wealth and wellbeing of local residents."[9] But it is not clear if the organizations enhance the wealth and wellbeing of existing residents or simply attract wealthier, better-off residents to the neighborhood. This can be done only retrospectively and involves sophisticated econometric modelling. Finally, social network analysis examines how arts organizations increase a region's "social capital" by facilitating interactions among community residents. This type of analysis requires surveying arts organizations and their visitors, preferably on an ongoing basis to capture changes over time. While the latter two approaches would provide interesting information about the place of the arts in Utah's economy, they do not offer a timely assessment of the effects of individual organizations. For the purposes of the present project the first approach is the most appropriate. In fact, it is the approach used in most of the existing arts impact calculators, e.g. the Georgia Council for the Arts, Americans for the Arts and impact analyses by WESTAF (see below).

Existing Tools and Data

There are a few existing tools for calculating the economic impacts of arts organizations. These range from Americans for the Arts' Arts and Economic Prosperity Calculator, which any organization in the country can use, to the Georgia Council for the Arts' impact calculator, which was designed specifically for Georgia's state and county economies, to custom analyses conducted by organizations like the Western States Arts Federation.

The Americans for the Arts' Arts and Economic Prosperity Calculator averages the results of existing arts impact analyses from around the country, grouped by community size. Any arts organization can select the population of its community and enter its total expenses and, optionally, the total attendance at its events. The calculator then produces employment, income and state and local government revenue impacts. These results are rough estimates of an organization's economic impacts at best, as the calculator does not account for variations in the economic conditions of particular counties or states that affect how much of an organization's spending recirculates in the local economy. Many local arts organizations use this calculator to assess their impacts, and some have customized it to their region.[10]

The Georgia Council for the Arts' Arts Economic Impact Calculator is probably the most sophisticated public arts impact calculator we came across. It was created by Dr. Bruce Seaman at Georgia State University and asks nine questions of organizations, three of which are optional and one of which does not factor into the impact calculations. The questions determine the organization's out-of-state share of income, share of spending within its home county, share of spending within the state, and the shares of the audience from outside the county and from outside the state. "Audience" here follows the National Endowment for the Arts' definition and comprises "all parties participating in arts programming," including employees, volunteers and active board members as well as visitors and other participants. From these inputs are calculated local and in-state spending of out-of-state funds and the resulting impacts on county economic output, county tax revenues and state sales tax revenues.

Among other resources for state arts agencies, the Western States Arts Federation (WESTAF) has conducted several economic analyses for state and county arts organizations, including the Creative Vitality Index and economic impact analyses. The study they produced for Utah in 2000, "The Economic Impacts of Utah's Cultural Sector," is a fairly traditional economic impact analysis using input-output multipliers. For the study, WESTAF researchers surveyed 188 arts organizations, plus an unspecified number of individual artists,[11] and collected data on employment, wages and benefits, taxes, and in-state operating expenditures, purchases of goods and services, and construction expenditures. From the direct wages and benefits they calculated the earnings impacts (calling the result the "economic" impact) and from the direct employment they computed total employment impacts. For these calculations they used the direct-effect multipliers for the Other Membership Organizations industry sector. The researchers also multiplied reported construction and renovation spending by the final demand earnings and employment multipliers for the Other New Construction sector to estimate the impacts of arts organizations' capital campaigns. WESTAF also produced a Creative Vitality Index analysis for the state in 2012.

The National Assembly of State Arts Agencies (NASAA) features several state, regional and national studies related to the economic impacts of the arts and culture on its web site (the page was last updated in February 2013).[12] Some are simple profiles or inventories of a state's creative industries. Several states,

including Utah, have calculated a creative vitality index. There are also several examples of traditional economic impact analyses. These latter use either an input-output approach with RIMS or IMPLAN multipliers, or a more dynamic model like REMI (e.g., Connecticut).

The U.S. Bureau of Economic Analysis and the National Endowment for the Arts have collaborated to create the Arts and Cultural Production Satellite Account (ACPSA) of the National Income and Product Accounts.[13] The latter are produced by the BEA and used to measure the nation's economy, including gross domestic product. The ACPSA defines the "core" and "supporting" arts and cultural production industries within the larger economy. The core sectors comprise the performing arts; independent artists, writers and performers; museums; design services; fine arts education; selected education services; and original entertainment. They are those sectors "in which output is identified as primarily contributing to arts and culture."[14] The supporting sectors consist of "the commodities that support the core category through publication, dissemination of the creative process, or other supportive functions."[15] They include rental and leasing, agents and promoters, grant-making and giving services, book publishing, other publishing, information services, selected manufactured goods and some construction. There is also a small arts and culture portion (0.2 percent) pulled from across all other industries.

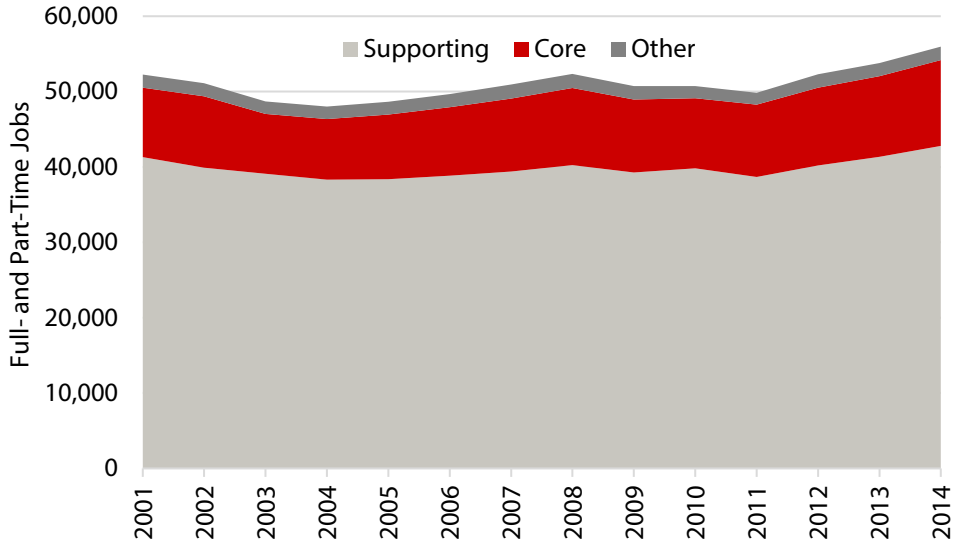
The tables in the Arts and Cultural Production Satellite Account draw a picture of the size of the arts and culture "industry" nationally and in each state. At the national level, the ACPSA provides data on the production of arts- and culture-related goods and services by the core and supporting arts and culture sectors; the total supply of arts and culture goods and services, including imports; consumption of these goods and services by households, businesses, government and as exports; employment and compensation of employees in the core and supporting arts and cultural production sectors; and each sector's contribution to gross domestic product (here called value added). Newly released state-level data show employment and compensation in the core and supporting arts and culture sectors. All of the tables, national and state, show the arts and culture portion of each component industry. For example, in 2014 24 percent of construction employment and compensation in Utah were arts related (e.g., building museums and theaters) versus 97 percent of employment and compensation at performing arts companies. In determining these shares, "the guiding principle was to separate the creative from the repetitive."[16]

In 2014, the most recent year available, 3.1 percent of Utah's total employment and 3.9 percent of total compensation came from arts and cultural production: 55,965 jobs earning almost $3.0 million. The largest core arts and cultural sectors in Utah in 2014 were promoters of performing arts and similar events (1,593 jobs), advertising (1,505 jobs), education services (1,178), performing arts companies (1,166) and architectural services (1,030). The largest supporting sectors were government (12,595 jobs), retail (11,483), publishing (4,752), motion pictures (4,281) and broadcasting (2,685). Arts- and culture-related employment in only the government and retail sectors combined accounted for 43 percent of total arts and culture employment in Utah.

Since 2001, arts and culture employment has grown 7 percent in the state versus 30 percent growth across all industries. This masks declines from 2001 to 2004 and 2008 to 2011 (see Figure 1). Arts and culture employment has increased 12 percent since 2011, adding 6,134 jobs, faster than the economy as a whole, which grew by 8 percent. Two-thirds of arts and culture growth came from the supporting sectors (4,109 jobs) and 30 percent from growth in the core sectors (1,822 jobs). Of core sector growth, the largest

contributors were advertising (351 jobs), performing arts companies (287), promoters of performing arts and similar event (246), and fine arts education (208).

Figure 1: Arts and Cultural Production Employment in Utah, 2001–2014



Source: U.S. Bureau of Economic Analysis, Arts and Cultural Production Satellite Account.

Arts & Museums Grantees

The Gardner Policy Institute talked to administrators at Utah Symphony | Utah Opera, Thanksgiving Point, Tuacahn Center for the Arts and Epicenter. We requested data on revenues, payroll, non-payroll expenditures and the number of employees and volunteers. For revenues we requested the amount from out-of-state and from outside the home county of the organization. On the expenditure side we requested the amounts spent in Utah and in the home county. Not all organizations were able to provide the full level of detail requested, particularly with respect to identifying home-county expenditures and revenues. Alternatively, data from publicly available IRS Form 990s is sufficient for a contribution analysis based on total revenues, employment and payroll. We obtained this data for the Casino Star Foundation and the Cache Valley Center for the Arts. Table 1 summarizes the data collected for these six organizations.

Table 1: Selected Organizations' Direct Data

	USUO	Thanksgiving Pt.	Tuacahn	Epicenter	Casino Star Fdn.	Cache CfA
Sector	Performing Arts Companies	Museums, Historical Sites, Zoos and Parks	Promoters of Performing Arts	Civic Organizations	Motion Picture and Video Industries	Civic Organizations
County	Salt Lake	Utah	Washington	Emery	Sanpete	Cache
Year	2015–16	2015	2016	2016	FY2015	2016
Total Revenues	$24,075,707	$22,260,347	$12,413,427	$276,850	$211,998	$1,138,686
Employment	142	731	441	11	14	73
Payroll	$14,155,361	$9,060,244	$4,014,174	$150,533	$34,692	$516,067

Note: Payroll amounts for USUO, Thanksgiving Point and Cache Valley Center for the Arts include benefits; all others are wages and salaries only.
Source: Subject organizations and IRS Form 990 (Casino Star Foundation data and Tuacahn employment).

The Gardner Policy Institute considered three approaches to modeling the economic effects of arts organizations in Utah. An economic impact analysis considers the amount of an organization's out-of-state or out-of-county revenues and the amount of its in-state or in-county expenditures. These data were either difficult to obtain or not available at all from some of the organizations we surveyed. Also, this approach favors those organizations with a significant nonlocal clientele and/or donor base versus more locally oriented organizations. For these reasons we did not pursue it.

The other two approaches were variations on economic contribution analyses. One compared the results of applying IMPLAN's "total effects" multipliers to an organization's total revenues with the results of applying the "direct effects" multipliers to the organizations' employment and payroll. In five of the six cases the total effects multipliers produced employment contributions that were smaller than the direct employment at the organization, and in four cases the earnings contributions were smaller than the compensation paid by the organization. Additionally, in two cases the county gross domestic product (GDP) contributions from the total effects GDP multiplier were smaller than the direct-effect earnings contributions. Since GDP includes compensation paid to employees, GDP contributions should always be larger than earnings contributions. This approach would be the basis of an economic contribution calculator, in which case the direct-effect employment and earnings contributions should be the only outputs.

Finally, we entered each organization's total revenues, employment and payroll into the full IMPLAN model. This yielded consistent, comparable results for each organization's contributions to employment, earnings and county GDP. Table 2 provides the results, as well as each organization's contribution as a share of county totals. Interestingly, although Utah Symphony | Utah Opera has the largest absolute contributions among those examined, as a share of Salt Lake County they weren't as large as Epicenter's contributions to Emery County. This approach would most likely have to be performed by the Gardner Policy Institute on behalf of Arts & Museums.

Table 2: Comparison of Local Economic Contributions of Sample Organizations Using the IMPLAN Model

	Large, Urban Organizations					
	USUO		Thanksgiving Point		Tuacahn	
Metric	Contribution	Share of Total	Contribution	Share of Total	Contribution	Share of Total
Employment	408	0.05%	888	0.30%	603	0.72%
Earnings	$23,782,926	0.05%	$14,392,093	0.11%	$7,641,827	0.27%
County GDP	$36,314,257	0.05%	$19,164,696	0.09%	$11,659,947	0.25%
	Small, Rural Organizations					
	Epicenter		Casino Star		Cache Valley CfA	
Metric	Contribution	Share of Total	Contribution	Share of Total	Contribution	Share of Total
Employment	12	0.25%	15	0.12%	80	0.11%
Earnings	$169,732	0.08%	$50,112	0.01%	$694,453	0.03%
County GDP	$295,651	0.05%	$91,708	0.02%	$1,300,616	0.03%

Source: Kem C. Gardner Policy Institute analysis using data provided by the organizations and on Form 990, and IMPLAN Online.

Recommendations
Based on our research into the economic impacts of the arts and analysis of various approaches using organization data, the Gardner Policy Institute makes the following recommendations.

1. Economic Contribution Calculator: An economic contribution analysis seems to be the "fairest" method to compare arts organizations. While an economic impact analysis would show how much each organization adds to local or state economic growth through the attraction of new, outside money, it would also favor arts organizations that cater to a nonlocal audience and handicap those that are more locally oriented and funded. A contribution analysis would consider each organization's total revenues, not just those from outside the region, and provide an estimate of its overall presence in the local economy.

Organizations would provide their total revenues, the number of employees, and total wages and salaries and benefits (if any) for the most recent full year. They would indicate their home county[17] and select their particular arts sector from the following list:

- Performing Arts Companies
- Promoters of Performing Arts
- Independent Artists, Writers and Performers
- Museums, Historical Sites, Zoos and Parks
- Individual and Family Services[18]
- Book Publishers
- Motion Picture and Video Industries (including cinemas and film festivals)
- Junior Colleges, Colleges, Universities and Professional Schools
- Other Educational Services[19]
- Grantmaking, Giving and Social Advocacy Organizations
- Civic Organizations

The "calculator" would then report the total employment and earnings supported by an organization in its home county, as well as their shares of countywide jobs and earnings. The Gardner Policy Institute would provide updated multipliers as they became available.

2. GOED Approach: The Gardner Policy Institute would perform on-demand analyses for Arts & Museums using the full IMPLAN model. The annual number and pricing would be negotiated. The Gardner Policy Institute would require total revenues, employment, and wages and salaries plus benefits (if any) from each organization. Alternatively, this data could be obtained from IRS Form 990, although the most recent forms are not always available. Each organization's contributions to employment, earnings and county GDP, including shares of county totals, would be provided in a brief technical memo. There would be a 5-day turnaround time for each analysis, upon delivery of input data.

3. Accounting Approach: This compares organizations simply on the basis of their direct effects, that is, revenues, employment and payroll. Arts & Museums could also request in-state and/or in-county spending amounts and attendance numbers (where relevant). This approach does not capture their indirect and induced effects on the local economy.

Caveats

There are a few issues to keep in mind when using the results of any analysis to compare organizations. Larger organizations will of course have larger absolute effects than smaller ones. Also, for any given size, organizations in Wasatch Front counties will most likely have larger contributions than rural organizations. However, including economic contributions as a share of county totals makes it possible to compare urban versus rural organizations and even large versus small (see Table 2 above). As currently proposed, none of the approaches would capture the effects of other local spending by attendees. For example, patrons of the Utah Shakespeare Festival likely spend money on meals, lodging and other retail purchases in Cedar City when they come to see a play. This would require data on the number of particularly nonlocal attendees and their spending patterns during their visit.

It is also important to keep in mind that the effects produced by any of the proposed approaches will be strictly economic and will not speak to an organization's contributions to local quality of life, capacity building, stronger community ties and other qualitative impacts.

Questions for Arts & Museums

Do you want statewide or county-level effects or both?
Which metric(s) of an organization's contribution do you want?

- Employment
- Earnings
- GDP (available only under GOED approach)
- Output/Sales (available only under GOED approach)

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[1] Peter Pedroni and Stephen Sheppard, "The Economic Consequences of Cultural Spending," in *Creative Communities*, Michael Rushton and Rocco Landesman eds., Washington: Brookings Institution Press, 2013, pp. 166–189.
[2] *Ibid*., p. 187.
[3] Arthur C. Nelson, Casey J. Dawkins, Joanna P. Ganning, Katherine G. Kittrell, and Reid Ewing, "The Association Between Professional Performing Arts and Knowledge Class Growth: Implications for Metropolitan Economic Development," *Economic Development Quarterly*, vol. 30, issue 1, 2016, pp. 88–98.
[4] *Ibid*., p. 93.
[5] Kevin F. McCarthy, Elizabeth H. Ondaatje, Laura Zakaras and Arthur Brooks, *Gifts of the Muse: Reframing the Debate About the Benefits of the Arts*, Santa Monica, Calif.: RAND Corporation, 2004.
[6] *Ibid*., p. 69.
[7] *Ibid*., p. 71.
[8] Stephen Sheppard, "Measuring the Economic and Social Impacts of Cultural Organizations," in *Community Development Investment Review*, vol. 10, issue 2, 2014, pp. 43–48; available at http://www.frbsf.org/community-development/publications/community-development-investment-review/2014/december/creative-placemaking/.
[9] *Ibid*., p. 46.
[10] See, for example, the Greater Philadelphia Cultural Alliance's impact calculator at https://www.philaculture.org/impact.
[11] Surveys were sent to 517 Utah artists, but their response rate was not reported.
[12] See http://www.nasaa-arts.org/Research/Key-Topics/Creative-Economic-Development/Economic-Impact-Studies.php.
[13] Available at https://www.bea.gov/regional/arts-and-culture/index.cfm.
[14] Paul V. Kern, David B. Wasshausen, and Steven L. Zemanek, "U.S. Arts and Cultural Production Satellite Account, 1998–2012," BEA Briefing, January 2015, available at https://www.bea.gov/industry/index.htm#satellite.
[15] *Ibid*., p. 2.
[16] *Ibid*., p. 3.

[17] This would not capture the effects of organizations that travel throughout the state. For example, Utah Symphony | Utah Opera provides performances and workshops in various rural counties in Utah. To the extent that these involved spending by USUO in those communities, they would generate local economic impacts. Estimating those impacts would require data on the amounts and types of spending in each county, e.g., lodging, meals, equipment rental, etc.
[18] For example, Spy Hop Productions is classified as Child and Youth Services by the Utah Department of Workforce Services.
[19] For example, Bad Dog Arts is classified as Other Schools (Fine Arts Schools) by DWS.