

SHOW THEM THE MONEY!

CALCULATING THE ECONOMIC IMPACT OF AMERICA'S ORCHESTRAS

*Government Affairs Office
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A Service of the Resource Center of the

AMERICAN  SYMPHONY ORCHESTRA LEAGUE

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“Artistic organizations are not exempt from the principles that make for successful achievement of organizational mission. Symphony orchestras have a product to market and sell, just as do for-profit businesses. Musicians sometimes object to references to their output as a product, reacting to the crassness that this terminology suggests. But just as a business needs effective management of its resources to create and sell its products profitably and to ensure its continued existence, so does a symphony orchestra. The fact that the product is ephemeral, inspirational, and even quasi-spiritual does not change this organizational truth.”¹

Michael J. Schmitz
Former President,
Milwaukee Symphony Orchestra

First, a few words about the title. For those of you dusting this off from your shelves in the year 2010, the title is our slightly wry twist of a phrase, “Show me the money,” made popular in 1997 by a Hollywood movie about the money-driven world of professional sports agents. The phrase became so common that within three months of the movie, even people who hadn’t seen it knew the phrase; within another three months, everyone was sick of it.

But doggedly, the League stands in the face of supercilious fashion, and now that the phrase is becoming mildly unhip, we set our jaw and appropriate this variation of the catch-phrase for our own purposes. But never mind that: It’s a good title for this paper. Orchestras really do need to get better at “showing them”—public officials and the public at large—how orchestras contribute to, and help drive, the economy.

Why is this important? The ruling political-social currency of recent years makes it so. Fairly or not, arts institutions are more frequently called upon to

demonstrate their manifold benefits in order to maintain, let alone build, public and private sector financial support. Even more challenging is the notion in some corners that our tax-exemption itself, as charities serving a public good, needs skeptical “review.” In other words, what’s so good about arts institutions that they deserve to be tax-exempt, and get donations that are tax deductible to the donors?

There are many good and even powerful responses to that kind of query, but in this paper, let’s just deal with one of them: orchestras as generators of economic activity, as net pluses in the world of business and public investment—not as supplicants or dependents.

“Show Them the Money” shows you how and why to make the case for your orchestra as an economic benefactor to your community. The paper examines methods for quantifying your economic impact, and provides a how-to for orchestra staff and others. Armed with improved data, you can make a stronger case not only to local, state, and federal government, but also to corporate and other private funders and potential partners in your programs.

Christopher Cooper of the League Government Affairs Office did the vast majority of the work on this, with significant edits by Robin Perry Allen and myself, and input from others acknowledged elsewhere in the paper. We think this resource paper is a valuable and long-term contribution to the ability of America’s orchestras to educate others, and to reinforce their larger understanding of the important role music and musical institutions play in our society. We hope you find it useful, and we ask that you share with us the results of your research and advocacy using this important tool.

—John Sparks, June, 1997

¹ Schmitz, Michael. “Musician Participation in Symphony Orchestra Management: The Milwaukee Symphony Orchestra Experience,” *Harmony* (Deerfield, IL: The Symphony Orchestra Institute, October, 1996, p.23)

Orchestras: A Nonprofit Industry that Generates Profits for the Community

Orchestras, as an industry, help drive the economic engine of their communities. They generate revenue by attracting tourism, keeping local “entertainment” dollars in the community, employing significant numbers of workers, earning income through ticket sales and promotions, and recycling that income back into the community.

The interaction of dollars produced by an orchestra is magnified several times through the input-output interaction of industries in the local economy. When an orchestra spends money to print its programs, it contributes to the economic viability of several local industries: graphic designers, type service bureaus, computer hardware and software manufacturers, printers, the paper industry, the lumber industry (to provide raw materials for paper), staple manufacturers (binding), the steel industry (materials for staples). Every dollar earned and spent by orchestras ripples through the local and regional economies.

Orchestra Audiences Support Local Businesses

Orchestras have other effects on the local economy that are often overlooked. When the Philadelphia Orchestra players went on strike in September 1996, nearby restaurants and parking garages felt the effects of diminished downtown crowds almost immediately. At Cafe Academie at the Doubletree Hotel, dinner crowds dropped 75 percent on scheduled performance nights. At the Kinney Systems Inc. parking garage near the Academy of Music, evening business declined by 50 percent².

When the San Francisco Symphony musicians went on strike in late 1996, the loss rippled through the local economy. One local restaurant, Ivy’s, closed because of customer loss from the strike as well as the (temporary) closure of San Francisco’s Opera House and City Hall for seismic work. According to Carol Piasante, a spokeswoman for the San Francisco Chamber of Commerce, the economic consequences of the Symphony’s absence are an indication of their important cultural presence in the San Francisco economic mix³.

Not only are orchestras a significant economic stimulus, but in many localities they generate more in

income tax, sales tax, and other taxes for city and state governments than their direct appropriation. Few public investments generate such a high monetary return.

Orchestras Improve “Liveability” and Revitalize Urban Centers

Orchestras also contribute to local economies in less tangible ways. The driving force behind business location today is the labor pool. Businesses are likely to locate where a skilled work force lives, or at least in areas that could attract these workers. Liveability affects where people want to locate, and orchestras are an important index for the quality of life of an area.

Image is a critical factor in a city’s economic success; cities depend in part on how residents and outsiders *perceive* their liveability. Symphony orchestras and other arts organizations contribute personality and character to a city’s image. The neighborhoods of New York City are often defined by the artistic institutions located within them. An orchestra helps a community to draw positive public attention from the press and outsiders that can contribute to the renewal of community image.

Finally, orchestras can contribute very directly to the renewed development and revitalization of urban areas, helping to stem physical and commercial decay. An orchestra provides a lively street atmosphere, a presumption of safe evening activities, and involvement of neighborhood young people in educational outreach programs. Each of these often overlooked benefits directly affects economic well-being, and orchestras should take credit where credit is due by objectively measuring their positive impact and persuasively disseminating that information.

Why Calculate Economic Impact?

Economic impact data can be compelling to public officials and business people who make decisions about where and how to invest their charitable funds. Although many who give to orchestras do so for reasons other than economic impact, the *amount* that public officials and business people give is often associated with an expected return on their contribution. Economic impact data can be an extremely effective way of demonstrating positive return on invested contributions.

² “A Melancholy Note For Business,” *The Philadelphia Inquirer*, September 24, 1996.

³ “Civic Center Slowdown,” *San Francisco Examiner*, December 11, 1996.

For years the Spokane Symphony received a portion of funds collected from a tax on hotel stays. Funds raised from this tax were to be used to promote Spokane as a tourist destination. After the election of a new county commissioner in 1996, however, some of the commissioners wanted to use the money to promote the county's public golf courses and fairgrounds instead of the orchestra⁴. Citing priorities other than live music, two of the three commissioners voted not to fund the orchestra.

Fortunately, community criticism of this decision persuaded the commissioners to hold a hearing appealing the decision. Over a period of three days, the staff of the Spokane Symphony gathered information to make the case for continued funding. They had to show that because the orchestra was a tourist attraction, it was a higher funding priority than the county's golf courses or fairgrounds. Making the case required both concrete data and effective interpretation.

The Spokane Symphony had previously performed a rudimentary economic impact analysis using the local Chamber of Commerce formulas. That impact assessment included an overview of the local expenditures by the orchestra and an estimate of the extended economic impact to the region. What the orchestra needed now was a more in-depth assessment of the economic activity generated by their operations and its effect on county tax revenues. Knowing those numbers would allow the orchestra to point to concrete data to support anecdotal evidence of its value as a tourist attraction.

Using methods outlined in this report, the American Symphony Orchestra League was able to calculate the amount of state and local government revenue and full-time equivalent jobs produced by the economic activity generated through the Spokane Symphony's operations. This information was then used to support the basic case that, for a city the size of Spokane, the public knowledge that the city *has* a high caliber orchestra helps promote an image that attracts tourists. Promotion of the orchestra triggers a train of positive images about Spokane that attracts people who may also want to play

golf or visit the fairgrounds. The economic activity that is generated by this promotion has a real, verifiable dollar figure. When the orchestra can cite the actual state and local government revenue generated, the case for continued funding is much stronger.

Ultimately, the Spokane Symphony was successful in convincing the county commissioners to reverse their decision to deny funding, partly due to the persuasiveness of the economic impact data. One commissioner warned that the orchestra would have to prove that the county got a good return on its investment if it wanted to be funded again⁵. This commissioner's comment highlights the fact that economic impact analysis is an ongoing process. It should be continuously revisited and refined so that orchestras have a clearer idea of how their activities affect the local economy.

Return on Investment

The utility of economic impact data is not limited to appeals for public funds, however. When Bell Atlantic CEO Raymond W. Smith announced a \$13 million pledge toward Philadelphia's proposed performing arts center (the largest single gift in the company's 12-year history), it wasn't name recognition that he cited as the main motivating factor.

"Having our name associated with a great project will have some promotional value, but not near the value of the money we're putting in," Smith said. "But just half a percent more of growth in business and residences in Philadelphia would result in additional revenues for us. If this fulfills its promise of creating a vital Center City Philadelphia...we will get our money back."⁶

Public officials would be hard-pressed to justify cuts in public arts subsidies in light of information that the net industrial output of the arts (literary arts, media arts, performing arts, and visual arts from both nonprofit and for-profit sectors) is \$314.5 billion in the United States, or six percent of the Gross National Product (GNP)⁷. Likewise, local government officials might be persuaded to rethink cuts in appropriations to orchestras when they examine the broader economic impact in their own communities.

⁴ *Spokesman-Review*, "County Won't Give \$17,000 to Symphony," March 7, 1997.

⁵ Commissioner Kate McCaslin quoted by the *Spokesman-Review*, "County Sings New Tune on Symphony," March 19, 1997.

⁶ "Bell Links Arts-Center Pledge, Regional Prosperity," *The Philadelphia Inquirer*, September 26, 1996.

⁷ Kultural Econometrics International, *The American Arts Industry* (Washington, D.C.:National Endowment for the Arts, 1992).

“As we struggle to compete in the global economy, the growth of our conceptual powers is essential to our future,” proclaimed New York Lieutenant Governor Stan Lundine in 1993. “A culturally active community attracts corporations, tourists, and jobs. A single artist—for example, a writer whose book becomes a best seller and a movie—creates literally hundreds of jobs.”⁸

Helping public officials understand the economic dimension of a vibrant cultural community and the orchestra’s contribution to that vibrancy is essential to continued direct and indirect public support.

Economic impact data can also be an effective development tool. Depending on the specificity of the study, *orchestras could accurately determine their impact on a prospective donor’s industry*. The ability to cite actual figures that indicate the orchestra’s direct and indirect impact on the local banking industry, for example, can add depth to an orchestra’s appeal for support. This makes the link between the orchestra and the economic interest of specific corporate sponsors tangible.

“We believe our customers appreciate the contributions we make to the arts,” said Irving W. Marks, President of Marks Jewelers in Houston, Texas, acknowledging the connection between support for local arts institutions and customer loyalty. “Ultimately,” says Marks, “whatever is good for the arts is good for the community, and whatever is good for the community is good for our business.”⁹

Fostering the perception among corporate leaders that support for the orchestra brings more than name recognition can be accomplished through accurate economic impact analysis. Appreciation for an orchestra’s economic impact helps orchestras compete among a growing array of interests all asking for the same contributed dollar.

How to Calculate Economic Impact

Three primary methods are used to determine an orchestra’s economic impact: a) input-output methods based on the ground-breaking study of the economic

impact of the arts in Baltimore, by David Cwi and Catherine Lyall¹⁰; b) methods that extrapolate from The National Assembly of Local Arts Agencies’ (NALAA) “Arts in the Local Economy” study¹¹; and c) census methods. The method of measurement selected affects all aspects of the impact studies.

INPUT-OUTPUT METHODS

The adaptation of traditional economic impact studies to the arts was largely the work of David Cwi and Catherine Lyall in a 1977 study prepared for the National Endowment for the Arts. This study was designed to develop and refine research methods for assessing the economic impact of arts and cultural institutions in Baltimore. Following the Baltimore study, Cwi conducted a study of six other U.S. cities, which provided a solid foundation for methods used to calculate the economic impact of arts institutions nationwide.

The Basic Tools

• *Using a Multiplier*

The most important methodological pattern established in the Baltimore study was use of a multiplier to arrive at a total economic value of the arts in an economy. The multiplier measures the degree to which spending for and by the arts circulates in a local economy. It involves computation of the number of times a dollar is re-spent within an economy marked by geographical boundaries before it leaks out¹².

A multiplier is not simply a number by which to multiply the expenditures—using the multiplier in this across-the-board fashion results in an inflated impact assessment that is unrealistic. For example, the Cedar Valley Cultural Council’s economic impact statement for its Resource Plus program makes the following assertion:

The combined annual operating and capital budgets for Resource Plus members

⁸ Lundine, Stan. Speech before the Alliance of New York State Arts Councils, Saratoga, New York, October 14, 1993.

⁹ Business Committee for the Arts, *Business and the Arts: Building Partnerships for the Future* (New York, N.Y.:Business Committee for the Arts, Inc., 1995).

¹⁰ National Endowment for the Arts, *Economic Impact of Arts and Cultural Institutions: A Model for Assessment and a Case Study in Baltimore* (Washington, D.C.:National Endowment for the Arts, 1977).

¹¹ National Assembly of Local Arts Agencies, *Arts in the Local Economy* (Washington, D.C.:National Assembly of Local Arts Agencies, 1994).

¹² Radich, Anthony. National Endowment for the Arts, *Twenty Years of Economic Impact Studies of the Arts: A Review* (Washington, D.C.:National Endowment for the Arts, DRAFT).

totaled \$9,636,593 in 1995. An additional \$1,232,897 was received in gifts and grants. Since one dollar turns over four times in a community, these educational and cultural institutions impacted the local economy by more than \$45 million¹³.

Calculating how many times a dollar turns over in a community depends on the size of the community, the type of industry that originated the dollar, and the interaction of industries within that community. Sound economic tools have been developed to measure the interaction of money spent by multiple industries, and the use of these tools significantly increases the credibility of economic impact statements.

- **Using Standard Statistical Areas**

Another important feature of early economic impact analyses is confining a study to an existing statistical area, which produces the most comprehensive and accurate figures and allows for a variety of additional analyses to be pursued. The standard metropolitan statistical area (SMSA), an area of defined population density identified by the census bureau as a unique statistical unit, is frequently used as a base for defining study areas. This helps define the geographical boundaries of an economy and provides researchers with an especially rich source of aggregate statistics.

- **RIMS II**

The Regional Input-Output Modeling System (RIMS II) was developed by the U.S. Bureau of Economic Analysis to determine the multipliers for spending within a statistical area on other industries within the area. For example, RIMS II would contain the multipliers for an orchestra's advertising and promotional expenses within the region. By calculating the orchestra's expenditure on advertising and then multiplying by the multiplier for arts industries on the advertising industry (determined by RIMS II), an orchestra can know the degree to which its advertising expenditure circulates in the local economy¹⁴. The sum of these calculations for each kind of expenditure results in the total economic impact for an orchestra's direct expenditures.

Input-Output Modeling

Input-output analysis is a technique for quantitatively analyzing the interdependence of industries in an economy. It studies the interrelations among producers as buyers of each other's outputs, as users of resources, and as sellers to final consumers. In an input-output model, the output product of each sector of the economy is set equal to the input consumption of that product by other industries plus the consumption by final consumers. All inputs and outputs are expressed in the same units (usually in monetary units per unit of time, for example in dollars per year). The system of producers and consumers is divided into different branches, which are defined in terms of the resources they require as inputs and what they produce as outputs. The quantities of input and output for a given time period are entered into a matrix that one can use to analyze what happens across various sectors of an economy.

The input-output matrix is a multi-dimensional arrangement of industries and coefficients that help predict the consequences of a course of action, or (as in the case of economic impact) the impact of a certain expenditure within a complex system of business relationships. RIMS II is a type of input-output matrix (See APPENDIX A).

A thorough input-output analysis will provide the economic impact of specific expenditures by a specific industry within an economy defined by geographic boundaries. The result of such an analysis is a very accurate portrayal of the economic activity supported by the orchestra's operations. The input-output modeling process is an ideal method to study the impact of the orchestra on the local economy because it is tailored to each community. The RIMS II model is based on a table of 471 industries showing local sales and purchases.

To determine the economic impact of an orchestra using RIMS II, researchers divide the orchestra's expenditures into two groups—expenditures *within* the orchestra's SMSA and expenditures *outside* the SMSA. (Outside expenditures have no impact on the local economy and should not be included in the impact estimate.) Researchers then estimate impacts from each area of expenditure by applying appropriate multipliers from the RIMS II input-output tables for the SMSA

¹³ From the Cedar Valley Cultural Council's Resource Plus web page, <http://www.cedarnet.org/resource/reimpact.html>

¹⁴ The Cincinnati Symphony Orchestra, for instance, performed an economic impact study in 1990. Using RIMS II data, the CSO was able to calculate that the \$602,859 it spent on promotion had a local impact of \$1,117,399.

being studied. The total impact of the orchestra is computed by adding the orchestra's expenditure areas to total expenditures¹⁵. This number represents the total economic activity within the SMSA resulting from the direct operations of the orchestra.

Audience Spending

A more complete picture of an orchestra's economic impact would include a calculation of audience spending *directly* related to attendance at a performance. It is difficult to estimate performance-related spending by out-of-area visitors, since not all visitors who attend arts events come to an area for the arts event alone. Thus, all the money spent in an area by visitors who attend an orchestra performance should not be counted in a computation of the economic impact. The degree to which the orchestra serves as an attraction must be considered in comparison with the drawing power of other arts events and general attractions.

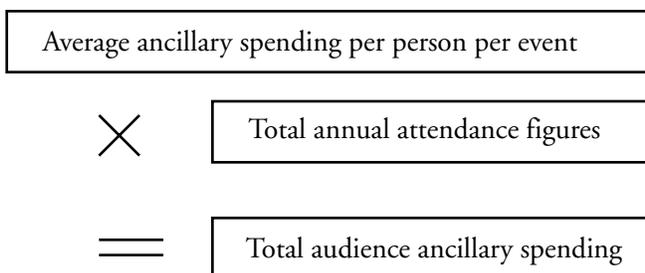
Calculating the amount of ancillary spending by audience members attending an orchestra concert requires randomly surveying them on concert-related expenses. To accomplish this, an orchestra could survey audience members arriving for a concert, asking them to report voluntarily the amounts they spent on transportation, dining, lodging, parking, and baby-sitting associated with attending the concert. Following some basic surveying procedures will ensure more accurate data that is statistically relevant.

- **Survey a number of orchestra events.** Statistically, five to six events should suffice.
- **Survey a range of events.** If your orchestra holds a \$20 event as well as a \$60 event, it is important that samples from each of those events be included in the survey data.
- **Survey a range of seasons.** Most orchestras experience peaks and valleys in attendance during the concert season. Surveying at different times ensures that the results are not skewed.
- **Make sure that your sample is truly random.** Audience members who make significant ancillary

expenditures may report more often than those who make none; surveying every *n*th audience member ensures a truly random sample.

- **Avoid double-counting.** You only want to calculate spending that has not already been counted as part of the orchestra's local expenses. This excludes any audience spending that is also earned income for the orchestra. If an audience member purchases a drink during intermission from an orchestra-run concession stand, that expense should not be calculated as ancillary spending. If the drink is purchased from a private catering company under contract to provide beverage service during concerts, then the cost of the drink can be counted towards ancillary audience spending.
- **Make adjustments for families and multi-person parties.** Only the responses of one person in a party of concert attendees should be used to avoid double-counting expenses by family members.

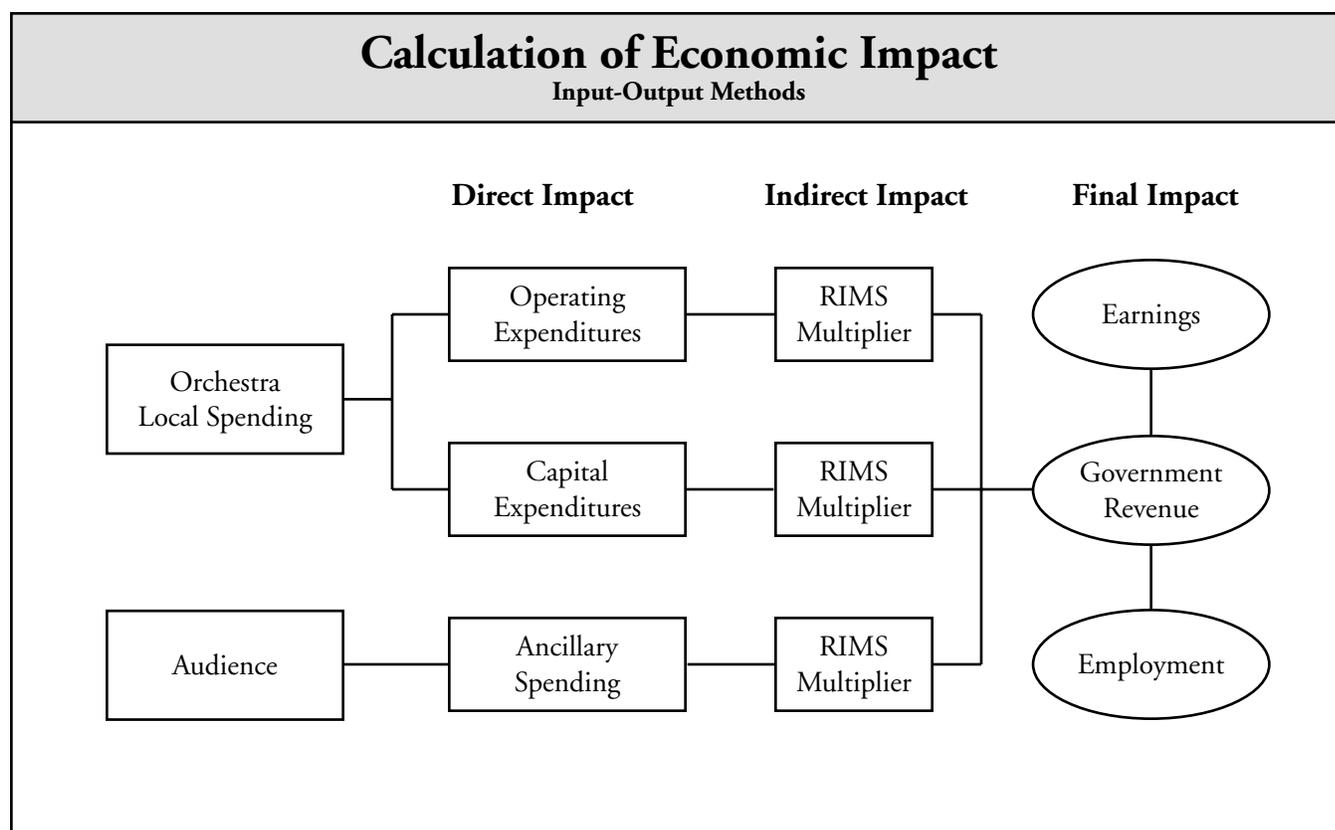
If these basic procedures have been followed, the survey results can be used to calculate the average amount of ancillary spending per audience member per event. Multiply that amount by the total attendance figure for the year to calculate the orchestra's annual ancillary audience spending. To simplify:



[Note: The audience ancillary spending calculation is not a precise estimate, because had the audience members gone to a movie instead of the orchestra concert, some

¹⁵ In the calculation of total economic impact, it is important to exclude "first-round expenditure." This is the calculation of the orchestra's total expenditure plus a multiplier. Because orchestras are nonprofit organizations, input-output methods must be adjusted to reflect the fact that there is little or no residual income from the profit of the orchestra. One way to adjust for this is to exclude the multiplication of total orchestra expenditures by the RIMS II multiplier for arts-type industries (this is called "first-round expenditures"). Since you will be adding the results of specific expenditures (the sum of which is the total orchestra expenditure) to determine total economic impact, then to add the results of aggregate orchestra expenditures as a separate calculation would be redundant.

ancillary spending (gas, hiring a baby-sitter, refreshments) might still have occurred. Nevertheless, it is widely assumed that some of the ancillary expenses associated with attendance at a performing arts event are unique to the performing arts¹⁶.]



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The benefits of using the input-output method are its accuracy and credibility. Detailing the qualitative measures of the relationship between an orchestra and commercial property values, for example, represents a highly credible (and influential) source of information on an orchestra's economic impact.

The input-output tables (which include appropriate multipliers for 33 industries) for specific SMSAs are

available by contacting the Regional Economics Division of the Bureau of Economic Analysis at the Department of Commerce (TEL: 202-606-5343/FAX: 202-606-5311). The regional multipliers available through RIMS II are extrapolated by the Bureau from the last calculation of national economic accounts, which was spring of 1994. Data from the 1996 national calculation will not be available for specific SMSAs until mid-1997.

¹⁶ That is, individuals who have attended an orchestra concert or a play are more likely to spring for cappuccino and tiramisu than those coming from a soccer game, even though they may be the same people. One experience leads to a certain kind of spending. The same person, on another day, will spend differently because of an entirely different event that day. The football game may be followed by a tailgate party; a symphony concert may be preceded by dinner at L'Escargot—the choice of ancillary activity is often just part of the “experience.”

NALAA METHODS

In 1992, NALAA¹⁷ undertook a study, unprecedented in scope and detail, of the economic impact of arts organizations in 33 different communities in 22 states. It was the first study of local arts organizations of this magnitude.

NALAA enlisted the services of economists at Davidson-Peterson Associates to create an input-output model for each participating community. The NALAA study also examined three consecutive fiscal years (1990, 1991, 1992) so that a conservative, accurate estimate of economic impact could be calculated without the possibility of a single year skewing the results.

For the purposes of the NALAA study, the economic impact of the arts was defined as the

employment (full-time-equivalent [FTE] jobs), personal income (salary, wages, and proprietary income), and government revenue created by the dollars spent by each community's nonprofit arts organizations. The study measured only the economic effect of the financial activity of the arts organizations themselves, not the ancillary audience spending. This conservative approach lends credibility to the claim that their results represent a "floor" in calculating the economic impact of the arts.

To make it easier to compare the economic impact of different communities, researchers calculated the economic impact per \$100,000 of local spending by nonprofit arts organizations. Thus, for every \$100,000 spent locally by a nonprofit arts organization, there was the following total economic impact on its community:

Total Economic Impact Per \$100,000 of Local Spending Per Community

(Average of 1990, 1991, and 1992)

Population Group	FTE Jobs	Personal Income	Local Gov't. Revenue	State Gov't. Revenue
Fewer than 100,000	4.55	\$82,142	\$2,293	\$3,618
100,000 to 499,999	4.05	\$88,972	\$3,133	\$4,440
500,000 to 999,999	3.67	\$63,204	\$3,675	\$4,812
1 million or more	3.87	\$95,010	\$4,135	\$%,038
Avg. of communities	4.00	\$90,780	\$3,385	\$4,544

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¹⁷ In October, 1996, NALAA merged with the American Council for the Arts. The new organization is Americans for the Arts.

Because the table has been calculated to reflect the economic impact of arts institutions, it can easily be applied to symphony orchestras. Consider the following example:

A symphony orchestra that spends \$1 million in a community with a population of 250,000 wants to determine the orchestra's economic impact on full-time equivalent employment within the community. The orchestra would 1) find the appropriate population grouping; 2) divide the local expenditures by 100,000; and 3) multiply that figure by the economic impact results from the "100,000 to 499,999" population grouping. Thus, \$1,000,000 divided by 100,000 equals 10; 10 times 4.05 (from the data table) equals a total of 40.5 full-time-equivalent jobs supported in the community by expenditures from the orchestra.

Using the NALAA data table is probably the quickest and easiest way to reliably estimate the economic impact of an orchestra on full-time-equivalent jobs, personal income, and local and state government revenue. But the results of these calculations do not include the indirect impact of audience ancillary spending. A more accurate calculation of total economic impact would add ancillary spending to the results of this calculation.

CENSUS METHOD

The census method of measuring economic impact relies less on economic theory and more on comprehensive collection and tabulation of data. The census approach utilizes simple addition to total dollars related to an orchestra. Items such as budget size, the dollar volume of tickets sold, and the overall dollar value of capital construction related to the orchestra are calculated. The items are totaled and reported with little or no adjustment to the sums to take into account

known economic relationships and effects. The findings are aggregative in nature, generally apply inconsistent methodologies, and often use a multiplier on expenditures in an across-the-board manner. Results, therefore, are not nearly as accurate as with the more complex input-output methods¹⁸.

Despite the limitations of the census method, carefully constructed and executed studies that use this method can be useful. For example, Wilkes Community College (Wilkes County, North Carolina) calculated the aggregate economic impact of the annual Merlefest by adding the total revenues from ticket sales (\$566,915), the amount attendees spent on accommodations and peripheral consumer products (\$860,700 based on a North Carolina Department of Tourism survey of Merlefest attendees), and profits reported by a number of nonprofit organizations that provided goods or services for the festival. Wilkes Community College reported a total aggregate economic impact of approximately \$1,630,144¹⁹.

Orchestras could perform the same simple analysis using census methods to get a preliminary idea of their economic impact. For example, an orchestra can add the sum of its annual ticket sales, capital construction costs, and employee salaries to produce an aggregate economic impact. The result of such a calculation is more an estimate of the economic significance of the orchestra's direct operations than an accurate assessment of the orchestra's economic impact on other industries or on the local economy as a whole.

Nevertheless, economic impact studies based on census methods can produce fairly credible results. Moreover, they can set the stage for future, more sophisticated studies by providing a preliminary report on the size and scope of an orchestra's economic activity. An orchestra may not be able to wait for the completion of a methodologically sophisticated study, or may not have substantial resources to invest in a rigorous input-output analysis. In such cases, a collection of data aggregated through very simple methods may be adequate to meet the immediate need.

¹⁸ If the Cincinnati Symphony Orchestra had used an across-the-board multiplier for its economic impact study, the economic impact of the orchestra would have been \$23,783,735, as opposed to the \$17,707,524 calculated using RIMS II. The census method produces a much larger impact, but a less defensible one.

¹⁹ From Merlefest '96—Economic Impact Website, <http://www.wilkes.cc.n...ecimpact/ecimpact.html>

Crunching Numbers

Producing a highly credible economic impact study does not necessarily require an extensive background in economics. In fact, nearly a third of all existing economic impact studies of the arts were performed by the staff of participating organizations. The Montana Arts Council, for example, completed a highly credible study of the economic impact of the arts in Montana²⁰. There is an example of a staff-administered study completed by the Arts Alliance of Jackson and Hinds Counties in Mississippi²¹.

Getting Help

A creative way to administer a credible economic impact study is in cooperation with a local university research center. The Cincinnati Symphony Orchestra's study, for example, was prepared by the Greater Cincinnati Center for Economic Education of the University of Cincinnati at the request of the orchestra and the Greater Cincinnati Chamber of Commerce.

Building coalitions with the local chamber of commerce, other performing arts institutions, and university research centers can help alleviate the resource burden associated with a rigorous study. Coalitions of this type also buttress the credibility of final reports by associating the study with other community groups.

Avoiding Criticism

In their zeal to exhibit the value and impact of their organizations, some advocates make unrealistic claims based on an overestimation of final calculations. It is important to understand that arts institutions operate within a larger economic engine and that the arts represent only one cog (albeit a vital one) in that engine.

The credibility of economic impact studies can be challenged in many ways. One criticism is that they lack rigor—conceptual discipline and correctness of theoretical application²². Many economic impact studies for the arts have been criticized for not identifying data sources, reliance on assumptions made in other studies, faulty

extrapolations from sample data, improper application of extrapolation measures, incorrect interpretation of the degree to which the arts attract visitors to an area and the percentage of their overall giving that can be ascribed to the arts, and misapplication of the multiplier.

This latter objection is most common. Some overzealous advocates may claim that \$1 of government arts funding generates \$20 in arts-related expenditures in the local economy²³. The correct description of this relationship would be that public funds represent 5 percent of all arts-related funds spent in a geographical area. The inaccurate use of the multiplier concept has the added effect of discrediting appropriate uses. For example, a multiplier of 20 is simply unrealistic; the most optimistic multiplier for the arts sector is seldom more than three²⁴.

This is not to be confused with the assertion that each dollar of NEA funding, for example, helps to leverage \$12 in additional donated income to the arts organization. That is not an “economic impact” issue—rather, it is a factor in fund raising.

That traditional academic rigor may be lacking in some economic impact studies does not mean they should be dismissed. In many situations the research is adequate for the task at hand—persuading the public, potential donors, or legislative bodies of the value of the orchestra in its community.

Packaging the Numbers

The credibility of economic impact studies can also be inhibited by the presentation of the report. Many studies include both a technical report and a final public document. The technical report details the method of the study and reports all of the data; the final document is usually a brochure that summarizes the findings. Many of the technical reports are not well presented; but the summary brochure must be visually appealing, clear, easy to use, and congruent with the advocacy purposes of the study. The summary report should *sell* the symphony orchestra by selling the credibility of the study²⁵.

²⁰ Radich 77

²¹ Arts Alliance of Jackson/Hinds County, *The Economic Impact of the Arts on the Jackson/Hinds County Economy* (Jackson:Economic Analysis Division of the Mississippi Research and Development Center, 1984).

²² Radich 81

²³ Radich 75

²⁴ Radich 75

²⁵ The Cincinnati Symphony Orchestra did not produce a public brochure with its findings. However, the results of its economic impact study were presented directly to the Cincinnati Business Committee, a prominent group of business people who are influential in the community.

Conclusion

Symphony orchestras are vital components in the economies of their communities. They act as integral partners in local industry through their direct operations and the indirect effects of their interaction with other industries. Without the orchestra, the local economy suffers as much in economic terms as the community does in cultural terms.

Orchestras should utilize economic impact analysis to quantify their significance to the local economy. Hard figures backed by sound economic analysis can be used to defend the orchestra as an institution worthy of public and private support. The data produced by a rigorous economic impact study can also be an effective development tool, demonstrating the orchestra's significant return on charitable investment.

Several methods, varying in academic rigor and commitment of resources necessary, are available for orchestras to pursue their own economic impact studies. Orchestras should utilize these methods to build the case for their support by corporate sponsors, public officials, local leaders of commerce, and the citizens who benefit from having an orchestra in their community.

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The mission of the American Symphony Orchestra League is to provide leadership and service to American orchestras while communicating to the American public the value and importance of orchestras and the music they perform. Founded in 1942 and chartered by Congress in 1962, the League promotes the quality, tradition, and value of symphonic music. The League serves more than 800 member symphony, chamber, youth, and university orchestras of all sizes. It supports a network of thousands of musicians, conductors, managers, governing and direct-service volunteers, staff members, and business partners.

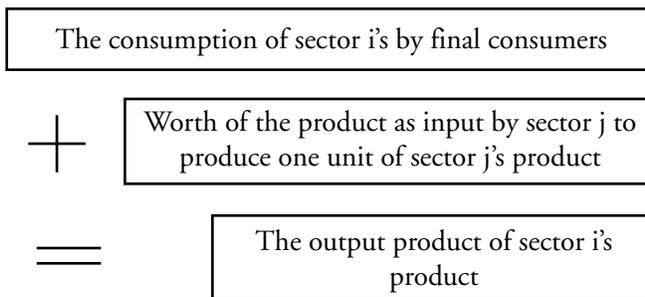
APPENDIX A: Linear Algebraic Model of an Input-Output Matrix

Tracing the possible effects of an expenditure through this kind of matrix is not as daunting as it may seem. Consider the relationship in terms of an orchestra's output products: An orchestra produces a direct product (a concert), but also indirect products (a volume of parking for the concert). The mathematical model below can be used to trace the relationship of the orchestra's indirect product and the industry (the parking garage) that utilizes some of that product to produce its own product (parking space). The formula demonstrates that the total output product of the orchestra is equal to the amount of parking each concert provides to the parking garage, plus the concert itself. The input-output model is used to calculate similar relationships between the direct and indirect products of the orchestra and a number of regional industries.

Now for an economist's explanation of the way the matrix works: Economists use mathematical models to represent in quantitative terms what happens in the real world. For example, we can denote A_{ij} as the worth of the output product of sector i required as input by sector j to produce one unit's worth of its product. Then if we denote X_1, X_2, \dots, X_n the output products of the sectors, the basic relation of the model is:

$$X_i = \sum A_{ij} X_j + Y_i$$

where Y_i is the consumption of product i by final consumers. To simplify, the mathematical formula above can be stated like this:



In a model with three sectors, we have, for example, for the output product X_2 :

$$X_2 = A_{21}X_1 + A_{22}X_3 + Y_2$$

which reads: "out of the total output X_2 the amount $A_{21}X_1$ is used by sector 1 to produce output X_1, \dots , and the amount Y_2 is consumed by final consumers."

Don't worry if you don't understand the matrix algebra used in these studies—most of the work has already been done by economists in the U.S. Bureau of Economic Analysis.