

# **ECONOMIC IMPACT OF THE ARTS ON THE OKLAHOMA CITY AREA ECONOMY FOR 1978**

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**The purpose of this study was to determine the type and magnitude of economic impacts on the Oklahoma City economy by 34 arts agencies, organizations, festivals, shows, programs, and other events. The direct and secondary impacts on the Oklahoma City economy in terms of spending and employment were significant. Further analysis indicated that the industry was in need of state, local, and foundation aid in order to match expenditures to revenues. The study was unique in estimating the impacts of festivals and shows on the local economy.**

## **INTRODUCTION**

The daily enrichment of our lives has been an adequate motivation for the support of the arts. While this is a sufficient reason for the encouragement of the arts, documentation of the total economic impact of the arts on the local economy is needed to understand the impact of the arts industry on our lives.

The arts in Oklahoma City represent a sizable business, although the arts industry relative to other industries is small. For example, one month's payroll at the General Motors assembly plant located near Oklahoma City is approximately five times the gross wages received in the arts industry for an entire year. Similar comparisons could be made for employment, expenditures, and taxes. Yet the contribution in dollars and employment is substantial. The arts industry buys goods and services, employs labor, contributes to the tax rolls, and attracts large numbers of people to auditoriums, galleries, concert halls, and museums each year. Each of these economic measures can be calculated and/or estimated.

## **METHODS**

This study makes calculations and estimates for attendance, employment, expenditures, income, and taxes. In addition, the ripple effect or multiplier effect is used in order to estimate the total economic impact of the expenditures of the arts industry in Oklahoma City, in 1978.

Most arts organizations fail to generate sufficient revenues to cover all the expenditures during the course of a season. The shortfall in revenues is called the "income gap". In this study the income gap for the arts industry is calculated, and public and private funding designed to fill in the gap is measured and compared to such efforts in other cities and states throughout the United States.

The study includes data gathered from 34 nonprofit organizations, festivals, programs, and other events under the umbrella of the Arts Council of Oklahoma City. In addition, four organizations and shows not under the Arts Council were included because of their relevance to the arts industry. The study does not reveal the details of the separate economic data provided by any organization, nor include any aspect of the "commercial" sector of the arts industry (i.e., commercial galleries). "Noncultural" forms of entertainment (movie, pop concerts) were also excluded.

The economic impact of arts organizations on the Oklahoma City (OKC) area was determined through the use of the main features of a model developed at Johns Hopkins University (1) for the city of Baltimore. Other studies were used to determine the proper methodology and to identify national, state, and local norms. These studies had been made for the cities of Dallas (2), Greenville, South Carolina (3), Chicago (4), and Indianapolis (5). The academic literature was surveyed to yield information from studies by Sullivan and Wassal (6), The Ford Foundation (7), the National Endowment for the Arts (8), the Commonwealth of Massachusetts (9), the Washington Center for Metropolitan Studies (10), Caffrey and Isaacs (11), and Weiss and Gooding (12).

The present study expands on other studies in the field by measuring the economic impacts of festivals and shows in addition

to agencies and institutions. For purposes of expenditures and attendance, such shows were treated as economic entities to determine direct and secondary impacts. They were not included in calculations of total industry income or income gaps. The majority did not have formalized budgets, and they did not have exact calculations of sales (revenues). However, reasonable *estimates* could be made for expenditures and attendance.

## RESULTS

There were 577 performances by arts organizations in 1978 (or the 1977-78 season). Events (festivals, exhibitions, classes, and shows) totaled 2,769. Total attendance at all performances and festivals (excluding exhibitions, classes, and shows) was 1,329,243. The percentage of total attendance from OKC proper was 66.1%, from the OKC suburbs 18.2%, and from out-of-area 15.7%. The percentage distribution of attendance according to type of organization was music 14.6%, theater 6.9%, dance 1.5%, visual arts 31.3%, and other (including festivals) 45.7%. Festivals accounted for 38.1% of total attendance and represented the vast majority of nonpaying attendance. In addition, one organization reported a television audience of undetermined size.

The direct economic impacts from the arts sector of the economy to the OKC area include: full-time and part-time employment; local expenditures by institutions, employees, guest artists, local audiences, and nonlocal audiences; and local tax revenues generated. Data for these direct economic impacts were gathered through a survey of local agencies and institutions.

The labor force utilized by the arts sector may be divided into three classes: full-time paid, part-time paid, and volunteers. In 1978, the total number of full-time paid employees was 121, and 126 part-time positions were held. A total of 5,629 volunteers contributed 113,502 hours to various agencies, institutions, programs, festivals, and shows. Festivals accounted for 8.8% of total hours volunteered and for 53.3% of total volunteers.

Total expenditures have a direct impact on the local economy. To calculate the *local direct* expenditure impact, one must subtract gross wages and taxes from total expenditures and multiply the resulting net expenditures by the fraction of purchases made from local firms. From data gathered in the survey of arts agencies and institutions, the value of this fraction was calculated to be 91.1%. Total expenditures totaled \$4,934,727.\* Festivals and shows accounted for 11.3% of this figure. The value of gross wages was \$2,438,862. Taxes not included in gross wages totaled \$45,805. Therefore, local direct expenditures by the arts industry were \$2,232,004. Festivals and shows accounted for 12.2% of this amount.

The U. S. Department of Commerce has estimated (2, p. 10) that approximately 78.4% of net wages become personal consumption expenditures. By adopting the fraction (91.1%) mentioned earlier, an estimate can be made of the fraction of net wages spent in the local economy as personal consumption expenditures. As already noted, gross wages were \$2,438,862. Employee state income tax was \$22,043, and employee federal income tax was \$159,378. Therefore, net wages were \$2,257,441, and consumption expenditures were calculated to be \$1,611,812. Festivals and shows accounted for 12.0% of this figure.

Out-of-town personnel hired by local productions also spend money in the local economy during their stays. There were 468 visiting artists during the 1978 period. The total time spent in the OKC area by these visitors was 1,447 days. The direct local expenditures by guest artists is equal to their average daily expenditures times the total number of visiting days spent in the local community (determined by survey). The average daily expenditure of \$52.07 was estimated from the average of similar figures (adjusted for inflation and regional differences in prices) of other studies (1, p. 69; 2, pp. 12-13) and includes outlays for lodging, restaurants, and retail purchases. The direct local expenditures by guest artists were calculated to be \$75,345. This figure was not affected by festivals and shows.

Expenditures before and after performances (excluding those for tickets) by local area residents have a direct impact on the local economy. These purchases include outlays by audiences on things such as meals

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\* All dollar figures used are the total unrounded figures reported by the arts agencies and institutions. These figures could have been rounded without significant changes in the estimated impacts.

at restaurants, transportation, parking, and babysitters. Of the total attendance of 1,329,243 at all performances and festivals in 1978, 1,120,062 people were from the OKC area. Festivals accounted for 40.7% of this figure. The average expenditure per attendant was estimated to be \$5.29 on the basis of similar figures (adjusted as before) found in other studies (1, p. 27; 2, p. 13; 4, p. 54). The direct local expenditures by local audiences were thus calculated to be \$5,925,127. There is also a direct local impact on the economy due to spending in the community by out-of-town visitors in association with their attendance. These purchases include all those listed for local audiences plus lodging. Attendance from outside the OKC area was 209,181. Festivals accounted for 24.2% of this figure. The average expenditure per party (on the assumption that one party equals 3 individuals in attendance) was estimated at \$33.45 based on similar figures (adjusted as before) found in other studies (1, p. 27; 2, pp. 10-12). The direct local expenditures by nonlocal audiences were thus calculated to be \$2,332,368.

The estimate of total direct local expenditures in the OKC area due to arts activities is obtained by addition of the five previously calculated parts. This figure totaled \$12,176,656 in 1978. Festivals and shows accounted for 28.3% of this sum.

The total direct local expenditures due to arts activities in the OKC area also generate second-order effects (ripple effects or multiplier effects) as local businesses make purchases of their own and pay wages to support the demand by the arts industry for resources, goods, and services. The "multiplier effect" represents an additional flow or circulation of money resulting from the original expenditures associated with the arts industry and its patrons.

The first impact is the secondary purchases by local businesses. A "repurchasing coefficient" (multiplier) is a number used in estimating the magnitude of these additional purchases made by local businesses. The value of the multiplier used was 1.94; it was based on similar figures in other studies (1, p. 80; 2, p. 15; 11, pp. 44-45). In most such surveys the coefficient is used to estimate the sum of direct and secondary effects. In this study, the direct effect was calculated above; therefore, the coefficient must be reduced by one ( $1.94 - 1.00 = 0.94$ ) in computing the secondary impact.\* Thus, the secondary business purchases were calculated to be \$11,446,056. A second impact can now be estimated. The employees of firms directly benefiting from the arts industry and patron business receive a portion of those expenditures as wages, and these wage earners in turn buy goods and services from local businesses. It is estimated that 45% of the total direct local expenditures by the arts industry and patrons are received as income by employees of local firms (7, p. 10). The "responding coefficient" is used to calculate the magnitude of the additional spending. This multiplier was estimated to be 2.857 from similar figures in other studies (1, p. 80; 11, pp. 44-45). The value of this multiplier was also reduced by one ( $2.857 - 1.00 = 1.857$ ) for the reason mentioned above. The local business volume due to arts-industry-related income spent by local business employees was calculated to be \$10,175,422. Secondary impacts (of both types) of festivals and shows accounted for 28.3% of these figures.

Grand total expenditures are simply the sum of total direct local expenditures plus total secondary expenditures. In this study they were \$33,798,134.

Besides the 121 full-time jobs and 126 part-time jobs already cited as generated by the arts industry, there were additional jobs created in the local economy due to increased business volume resulting from arts industry and patron spending. This number of additional jobs may be estimated by multiplying total direct local expenditures by a "marginal employment requirement coefficient". The value of the coefficient was set at .000065 based on similar figures found in other studies (1, p. 80). Therefore in this case, 791 additional business employment positions were produced in local firms by the spending of the arts industry and patrons.

Part of the positive impact of the arts industry on local government can be esti-

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\*The multipliers used in this study have been extended to two or three decimal points based on techniques found and used in similar studies (11, pp. 44-45, p. 80; 2, p. 15). No attempt has been made to estimate the level of confidence to be associated with the *estimated* impacts. For example, does attendance in a "live" theater reduce the purchase of movie tickets? The use of unrounded figures in these estimates reflects the precision of calculations, not precision of the estimates.

mated from two sources: (a) sales tax paid on locally purchased goods and services reported by arts agencies, and (b) sales tax paid by local business due to the expanded volume of business induced by the total direct local expenditures of the arts industry and patrons. The sales taxes paid by arts agencies were reported to be \$45,123. Festivals accounted for about 42.4% of this total. An estimated 50.5% of the total of wages of individuals and the expenses of businesses is spent for nontaxable items (2, p. 10). It follows that the remaining 49.5% is spent for taxable items. The tax rate for the local area is 4%. Therefore, the estimated city sales tax generated by the grand total expenditures of \$33,798,134 is \$669,203. Festivals and shows accounted for 28.3% of this figure.

The relationship of total income and total operating expenses for a given year is one way of looking at the financial condition of private, nonprofit cultural organizations (4, p. 12). Out of 15 major organizations (excluding festivals and shows) supplying sufficient data, 7 reported deficits, 4 of which come from very large organizations. The 15 organizations reported total income of \$4,193,706 and total expenses of \$4,377,103 for a net total deficit of \$183,397.

The income gap, the difference between *earned income* and total operating expenses, is another way of viewing the financial condition of arts organizations. Survey findings revealed that, as is the case throughout the nation (4, p. 12), a substantial income gap exists for arts organizations in OKC. Only one of the 15 organizations *earned* enough income to cover all expenses. The total income gap for the 15 major organizations was \$2,199,885 or 50.2% short of total expenses. The four largest organizations accounted for 75.1% of the total income gap. Unearned income was necessary to cover this balance, but even with unearned income of \$2,016,488 there was a net total deficit of \$183,397 as reported above.

For those engaged in private enterprise profit-making or in the balanced-budget world of state and local government, it may be hard to see why these programs cannot be self-supporting. National research at the John Hopkins University Center for Metropolitan Planning and Research indicates that almost all types of arts activities run a deficit (13, p. 8). As costs rise due to inflation (or any other reason) and prices of tickets are not raised as much (to make them available to a large segment of the society), either one of two results can be expected: (a) the income gap increases, or (b) the quality and quantity of the service decrease.

The income gap must be overcome by receipt of various forms of unearned income by the arts organizations. Such unearned income includes individual contributions (sometimes called "memberships"), business contributions, foundation grants, and local government grants. A national study of the arts conducted by The Ford Foundation (7) found that these categories of unearned income could be measured as a percentage of total unearned income and total operating income. A comparison of national norms to the local values revealed that unearned income generation needs to be increased in some areas. The most obvious difference was seen in the category of city government grants. The OKC arts organizations received 0.0% of total unearned income and total income from this source, whereas the national norms were 4.0% and 2.0% respectively\*. Business contributions were strong in the OKC area compared to the national norms, but foundation grants were weak. The OKC area was strong in federal grants and about equal to the national norm in individual contributions. State aid to OKC arts organizations was about half the national norm. The American Council for the Arts recently conducted a survey (14, p. 11) which measured legislative appropriations to state arts agencies. The State of Oklahoma ranked 52nd (out of 55, because territories were included) in per capita expenditures for the arts. These appropriations amounted to 8.2¢ per person in Oklahoma in 1978.

## DISCUSSION

The surveys and analysis indicate that the arts industry expenditures and patron

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\*One organization reported the use of a city building. The market value if such a building were rented is estimated to be \$4,860. Other organizations reported contributions in the form of utilities, facilities, and capital improvements, but the value of these contributions could not be estimated. No line-item city contributions were reported by these organizations. The federally funded CETA program channelled through the city provided \$84,956 for the support of twelve CETA positions.

spending had significant impacts on the OKC area economy during 1978. These impacts included direct and secondary spending of over \$33.7 million, direct and secondary employment represented by over 800 jobs, and local tax receipts of nearly \$670,000.

The industry needs augmented sources of unearned revenue to close the income gap and to continue to provide high-quality service to the community.

### ACKNOWLEDGMENT

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