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ABSTRACT

This report examines the economic impact of cultural institutions on their communities in Columbus (Ohio), Minneapolis/St. Paul (Minnesota), St. Louis (Missouri), Salt Lake City (Utah), San Antonio (Texas), and Springfield (Illinois). For each city, tables are included which list data in the following categories: (1) audience per capita spending; (2) direct economic effects of examined institutions; (3) government revenues as a percentage of examined institutions' operating budgets; (4) secondary economic effects of examined institutions; and (5) estimated revenues and costs to local government related to examined institutions by city. The report also contains detailed information on Standard Metropolitan Statistical Area (SMSA) demographics including: (1) SMSA selected businesses related to arts and culture; (2) SMSA estimated audiences and spending by examined institutions; (3) SMSA audiences of examined institutions by residence and spending; (4) SMSA nonlocal audiences by examined institutions; (5) SMSA estimated institutions by sources of government support; and (6) SMSA estimated revenues and costs to local government related to examined institutions. (BZ)

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Economic Impact of Arts and Cultural Institutions

Case Studies in
Columbus
Minneapolis/St. Paul
St. Louis
Salt Lake City
San Antonio
Springfield

National Endowment
for the Arts



Research Division
January 1981

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Columbus
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Springfield**

National Endowment for the Arts, Washington, D.C.

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PREFACE

The publication of this Research Division report culminates a five-year exploration of the economic role of arts and cultural institutions in urban communities. While numerous promising technical approaches to this subject were proposed to the Research Division, resource constraints restricted efforts to the development and extensive application of a single model by the Center for Metropolitan Planning and Research of The Johns Hopkins University. The selected model, using a series of equations adapted from a previous study of educational institutions, was first applied to six institutions in metropolitan Baltimore. Results were published in Research Division Report #6, Economic Impact of Arts and Cultural Institutions: A Model for Assessment and a Case Study in Baltimore (see list at the back of this report).

The objective of the six additional case studies reported here was to permit examination of such local factors as city size and regional importance on estimated economic effects. Recognition of these factors is a necessary step to appropriate use of cultural impact data in policy making and planning for economic development.

Few research efforts in the arts and culture have combined the energies of as many individuals and organizations as this six-city study which was carried out through the assistance of local project sponsors. The extensive listing of each participating institution's staff and volunteers that appears at the end of this publication only begins to suggest the degree of local involvement. For the Johns Hopkins University, Center for Metropolitan Planning and Research, David Cwi served as principal investigator and provided much of the analytical material summarized in this report. The project manager was D. Alden Smith. David Greytak of Syracuse University assisted the Center by developing co-efficients used to estimate secondary economic effects. Assisting with computer programming and database management were Mark Keintz and Brian Peters. The audience study sampling design and selected portions of the analysis were the work of Ralph B. Taylor. Technical assistance in design and analysis were provided by Allen Goodman and Henry Henderson, while Patty Strott served as project secretary. The project work was guided by an advisory committee that aided in the selection of the six study cities from a field of seventy-five. Members of the committee were Jim Gasser, The U.S. Conference of Mayors; Bette Treadwell, National League of Cities; Joan Simmons, National Governors' Conference; Ken Kahn, National Assembly of State Arts

Agencies; and John Blaine, National Assembly of Community Arts Agencies. Individuals whose previous or parallel work contributed to the conceptual framework of the project are cited throughout the text.

This publication presents the procedures, findings, and implications of the six-city study in summary form. Full project documentation is contained in unpublished reports and monographs which may be examined at or obtained on interlibrary loan from the library of the National Endowment for the Arts, 2401 E Street, N.W., Washington, D.C. 20506; telephone 202/634-7640.

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. The Economic Impact of Eight Cultural Institutions on the Economy of the St. Louis SMSA, volume I; Technical Supplement, volumes II and III; unpublished reports. (Baltimore: The Johns Hopkins University, Center for Metropolitan Planning and Research, 1980).

. The Economic Impact of Five Cultural Institutions on the Economy of the San Antonio SMSA, volume I; Technical Supplement, volumes II and III; unpublished reports. (Baltimore: The Johns Hopkins University, Center for Metropolitan Planning and Research, 1980).

. The Economic Impact of Ten Cultural Institutions on the Economy of the Salt Lake City SMSA, volume I; Technical Supplement, volumes II and III; unpublished reports. (Baltimore: The Johns Hopkins University, Center for Metropolitan Planning and Research, 1980).

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INTRODUCTION

Report organization

This report examines the economic impact of cultural institutions on their communities. An approach developed in a pilot project in Baltimore in 1976 has been applied to follow-up studies in six other U.S. cities. The findings are presented here in summary form.

Chapter I of the report presents an overview of the six-city study, describing technical matters of procedures and data collection, and discusses traditional approaches to community economic analysis including the interindustry analysis used here. Audience spending is examined, especially in regard to the study's restrictive protocol which attributes to the institution only those expenditures made by visitors who came to the community for the sole reason of using the institution. The chapter reviews direct and secondary effects of culture-related expenditures.

Succeeding chapters examine the application of economic impact analysis in the six cities of the study: Columbus, Minneapolis/St. Paul, St. Louis, Salt Lake City, San Antonio, and Springfield, Illinois. Each city is described in terms of its institutions, economy, and broader cultural community, direct and secondary economic effects of selected institutions, and institution-related government revenues and expenditures.

The Baltimore pilot project

The city studies presented here are a continuation of a pilot project conducted in Baltimore (Research Division Report #6, Economic Impact of Arts and Cultural Institutions: A Model for Assessment and a Case Study in Baltimore, Washington: National Endowment for the Arts, 1977; see list at the back of this report) This project sought to develop an approach to conducting useful and credible cultural economic impact studies consistent with the cultural field's resource constraints. The adopted approach was based on J. Caffrey and H. Isaacs's Estimating the Impact of a College or University on the Local Economy (Washington: American Council on Education, 1971).

In the Baltimore report, David Cwi and Katherine Lyall sought to improve on the clarity and scope of cultural economic impact analysis by clearly distinguishing effects on local business volume and expenditures, costs and revenues to government, and effects on personal income and

jobs. Needed data were acquired through available institutional internal accounts, audience and employee surveys, and local, state, and federal documents.

The study focused on the Baltimore Opera, the Walters Art Gallery, the Baltimore Symphony, the Morris A. Mechanic Theatre, the Baltimore City Ballet, the Baltimore Museum of Art, Center Stage, and the Arena Players. In fiscal 1976 the examined institutions and their employee households spent \$6.8 million in the Baltimore U.S. Bureau of the Census Standard Metropolitan Statistical Area or SMSA; their audiences and patrons spent an additional \$4.6 million in association with their attendance; and their guest artists spent an additional \$68,000. These institution-related expenditures prompted secondary effects as local businesses that benefited made additional local purchases. These additional purchases were estimated to eventually total \$18.5 million. In addition, local governments in the Baltimore SMSA incurred some \$700,000 in expenditures required to provide services to the institutions' employee households. While tax-exempt themselves, the institutions accounted for at least \$150,000 in local tax revenues from such sources as retail sales, income, and property taxes. It was estimated that the total of institution-related spending would support some 770 local jobs in addition to the 404 provided by the institutions themselves.

Role of additional case studies

While the Baltimore pilot project served to identify and refine research and analytical approaches, it did not attempt to assess the role and relative importance of cultural activities to the local economic development process. It was hoped that additional studies would lead to a better understanding of the similarities and differences among institutions of various types and permit analysis of the economic development role of cultural institutions. Toward these ends, data were analyzed utilizing traditional concepts of community economic analysis.

Study sponsors and participating institutions

To identify cities interested in conducting an economic impact case study utilizing the procedures piloted in Baltimore, letters were sent to local and state arts agencies and announcements were placed in cultural publications. This prompted interest from some seventy cities and institutions. Approximately twenty continued their interest after understanding the effort required. The six participating cities were selected from this group with the assistance of a national advisory com-

mittee. The resulting case studies have already been released in each participating city, along with technical supplements reviewing study procedures and presenting the data on audience, institutions, and staff used to estimate economic effects.

Sponsors included a state arts council, a united arts fund, an arts alliance, and two nonprofit arts councils. The demands imposed by data collection methods, especially the need to conduct simultaneous audience studies over several weeks, sharply limited the number of institutions that could be included in each of the six cities of the study. Consequently, the arts and cultural organizations' data in each city are best thought of as an illustrative cross section rather than as a probability sample.

Art museums and symphonies were examined in all six cities; theatres in five; museums of science and art centers in four; performing arts, modern dance, ballet, and opera companies in three; museums of history in two; and a chamber orchestra in one.

Reasons for participation

Interviews with local study sponsors suggested that an interest in "ammunition for advocacy" was a primary motivation for participating in the study; they hoped also that the study would prove that there were economic returns on public and private cultural funding. Sponsors hoped to influence foundation as well as legislative decisions, and their interest in advocacy included enhancing the "competitiveness" of their constituency.

Sponsors indicated that three main benefits influenced participation by local institutions. First, the sponsor retained complete administrative and financial responsibility; second, the institutions received an audience survey; and third, the institutions understood the study's advocacy potential, including the fact that the project was a national study involving The Johns Hopkins University and the National Endowment for the Arts, and that it would reach a wide audience of cultural administrators.

Results of interviews and a questionnaire survey of cultural administrators and community leaders in the six cities indicated little agreement on the level of anticipated value of the studies in any area but advocacy. These individuals were asked to report the areas in which they thought the study would prove useful, some of which were: long-range planning by local and state arts councils; municipal budget allocations; events sponsored by local arts institutions; management of institutions;

improving publicity to promote tourism; interest in culture by municipal tourist-development agencies; and making people more aware of the needs of their local cultural institutions.

Cultural administrators cited secondary benefits to their organizations consistent with an advocacy focus. In particular, their interests lay in enhancing visibility and prestige, and increasing support from corporations and government.

The community leaders generally believed that the study would lead to increased budget allocations. Details of questionnaire procedures and findings are discussed in Ralph B. Taylor's Arts Economic Impact Studies: An Examination of Some Process Issues (unpublished monograph, Baltimore: The Johns Hopkins University, Center for Metropolitan Planning and Research, 1980). This monograph also explores changes in expectations after completion of the study.

Study management

As already noted, the six case studies reviewed in this report were developed in partnership with local sponsors and each was responsible for the local data collection following procedures developed at The Johns Hopkins University, Center for Metropolitan Planning and Research. Study coordinators selected by the local sponsors varied in background and included a graduate student intern, a private consultant, institution staff, and a professor at a local university.

Coordinators from each city participated in workshops held in Baltimore at Johns Hopkins in October 1978. These workshops were developed to orient study coordinators to all phases of the data collection process. Supplemental materials regarding conduct or documentation of each data collection procedure were developed and forwarded as procedures were implemented.

The ability of cities to undertake these tasks simultaneously was materially affected by constraints in study coordinator time, the ongoing availability of other local study staff, and cooperation from local institutions. In the interest of data quality, only data collection efforts that could be successfully managed by local study staff were encouraged. Because at any one time the cities may have been engaged in differing aspects of the data collection effort, constant monitoring by telephone of progress and problems was necessary.

Project uses

The primary purpose of arts and cultural institutions is to add to creative expres-

sion and quality of life, and not to generate dollars and jobs for the community. To substitute the economic value of the arts for their human, spiritual, and aesthetic value could be dangerous. The economic value of the arts should be viewed as a by-product and not the primary reason for their existence. It would be a serious and self-defeating mistake for institutions to make artistic decisions on the basis of potential economic impact.

However, because culture competes with other activities in the city for financial support, and because the cost of arts support has risen, institutions wish to prove that the arts benefit the community economically. Economic impact studies show how money flows between the arts and the local economy. They demonstrate that the cultural and economic development of a community can be complementary.

Arts and cultural economic impact studies also can be used to influence resource allocations from government and private sources. During a 1977 National Endowment for the Arts workshop, it was noted that "in the competition for public dollars, economic impact information was what legislators 'listened to.' By having this information available, legislators would find it easier to justify arts appropriations" (David Cwi, ed., Research in the Arts: Proceedings of the Conference in Policy-Related Studies of the National Endowment for the Arts, Baltimore: Walter Arts Gallery, 1977). The arts return a portion of public funds, and also generate economic benefits throughout the community. Economic impact studies can tell business owners that they are investing wisely. They are an effective consciousness-raising tool, because they alert government, business, foundations, and the general community to the arts. The arts can gain a competitive advantage for increasingly hard-to-get funding by participating in the studies.

More specifically, economic impact studies can affect the following areas of advocacy and community planning. They can help to preserve and increase local and state art budgets, promote tourism, and assist in long-range planning by local and state arts councils. They may interest local tourist development agencies in the arts, provide a basis for approaching economic development organizations, and assist businesses (restaurants, tour operations, vendors, etc.) in appraising their potential markets.

Economic impact studies are also useful for internal policy analysis and forecasting. Organizations may learn more about their operations and markets. They may

want to change programs to attract additional audiences. A museum, for example, may be able to save money by learning more about its attendance—it may be able to decrease the number of days it operates and increase its hours of operation on other days without significantly affecting its drawing power. Using study data, institutions may find they can make better use of their limited resources.

Obviously, a local organization or agency considering the initiation of an extensive economic impact study should weigh the costs in light of anticipated uses. Where the production of advocacy material is a main objective, general observations drawn from this and other economic impact studies may be adequate. For such purposes, particular attention should be paid to the "simple indicators" of economic effects presented in Chapter I.

Culture and central cities. Although these studies are intended to identify effects on entire U.S. Bureau of the Census Standard Metropolitan Statistical Areas or SMSAs, economic development practitioners in central cities may have a special interest in their findings. The examined events and facilities were typically located in the central city. In addition to visitors from outside the SMSA, these activities regularly bring thousands of suburban residents back to the city and can help draw people to redeveloped downtown and neighborhood areas. This may help maintain markets for other city businesses and create an urban environment attractive to residents and visitors alike. The study documents cited in the preface offer detailed data on audience residence and distance traveled to attend cultural institutions.

Data collection

To assess the local economic effects of arts and cultural institutions, each institution's direct effect in terms of local spending for goods and services was first identified, together with salaries and wages to local residents and local spending by guest artists and audiences. These and other data were then used to estimate secondary effects involving local businesses and government. Required data on audience spending were acquired through extensive audience surveys during the fall and winter of 1979.

Audience survey. The audience survey required the development of self-administered questionnaires, implementation procedures and management plans, and sampling frames, documentation, and data handling procedures relating to editing and key-punching. Audience questionnaires and procedures reflected the Baltimore pilot project and were designed to allow each city to add questions.

During the survey period, attenders at the arts and cultural institutions were given questionnaires. The form, after identifying the study sponsors, explaining its purpose, and promising anonymity to participants, posed a number of compound questions. The first set concerned place of residence and length of time there, age, number of people in the household, and years of education of the respondent; also, how far the respondent had come to use the institution, and how much admission had been paid. The next questions concerned the party with which the respondent had come: how many in the party; had they spent any money in connection with coming, such as transportation, refreshments outside the institution, refreshments or purchases inside the institution; or expenses for such matters as babysitting and parking?

The third group of questions singled out visitors from out of town: had they come expecting to attend the institution, and if so was attendance the sole reason for the visit; how many nights would they spend in town; how many in their party, and how much did the party expect to spend during this visit?

The questions that followed explored the respondent's use and support of examined cultural activities. The respondent was asked, for each of the examined institutions: was he or she a member or subscriber; how many times the respondent had attended in the last twelve months, and how much money had been contributed to the institution in that period over and above memberships, tickets, and other fees; how much had been contributed in that period by the respondent to combined arts and cultural fund-raising campaigns in the relevant city.

The final questions were demographic: marital status, sex, race or ethnic group, total family income in the last year, employment status, and occupation.

Prior to the orientation workshop, study coordinators gathered requisite audience data for each event or day during the survey period, such as estimated attendance by performance or event.

Separate technical supplements for each city study (available through the library of the National Endowment for the Arts) identify sampled event days for each institution and present information on response rates. Response rates of 70 percent and higher were common in all cities, with surveys designed to obtain a minimum of five hundred completed audience questionnaires at each institution.

Institutional data inventory. Coordinators were provided with suggested procedures for securing requisite data from institutional internal financial accounts. These procedures sought to be responsive to institutional unwillingness to "open the books" for inspection and at the same time sought to gather data of sufficient quality for study purposes. A principal concern was to identify nonlabor expenditures made with local firms.

To determine local expenditures, coordinators identified the staff person at the examined institution most knowledgeable about local vendors and accounts payable, and sought the most detailed available statement of institutional expenses identifying which expenditures were made locally. Invoices were inspected as a supplementary measure where necessary.

Additional data on attendance, staffing, and other matters were provided in this institutional data inventory, as well as counts by a random number table to select bank account balance dates.

Community data inventory. Study coordinators were oriented to requisite community data and likely local sources, and were provided with an Annotated Community Data Inventory intended to take account of the unique features of each community. Subsequently, the documented community data items were sent to local planning agencies and chambers of commerce for review. Johns Hopkins staff gathered specific data on each city's economy, business, and employment.

Government data. To complete the relevant data, study staff collected information on governmental expenditures on all levels in the SMSA, together with tax rates and bases for local jurisdictions.

Weighting and estimation issues

The data collection procedures prompted the need to deal with weighting and estimation issues.

Audiences. The systematic sampling of an audience necessitates weighting the number of respondents of differing party-sizes due to the differing probabilities of various size parties receiving questionnaires. A detailed description of this procedure and caveats regarding its use are in a Johns Hopkins University working paper by D. Alden Smith, "The Systematic Sampling of Parties at Arts and Cultural Events: Weighting Procedures for Party-Specific Items," (Baltimore: Center for Metropolitan Planning and Research, 1980).

Any analysis of visitors must deal with a limited number of cases or small percentage of visitors in the audience on the dates surveyed. These circumstances advised an analysis of visitor mean spending across all sampled institutions rather than on an institutional basis. Furthermore, since some institutions had relatively few visitors outside the SMSA during the sampling period, estimates of total sole-reason visitors may be based on a small number of sampled visitors. These institutions are noted in tables in individual city chapters.

Employees. The employee survey used ZIP codes to categorize employees into local taxing districts that cross political boundaries. Part-time employees were aggregated into full-time equivalents.

Estimates of local spending by institutional employees were based on their personal salary and wage income. Costs to local government, however, were based on employee household data, since the majority of these effects are only meaningful in terms of households.

Community taxes. These included taxes on business and residential property, sales, transit, hotels, parking, gasoline, restaurants, admissions, and income. Study procedures focused on institution-related sales to vendors in the SMSA and identified property taxes on business-related property or inventory on an SMSA basis. Consequently, the estimation of local property taxes attributed to the examined institutions is complex because selected taxes can change over time; there may be a large number of local taxing authorities; taxing districts may overlap; data such as market value or taxable value and assessment ratio may not be readily available; and tax policy may differ by type of property—business inventories may or may not be taxable at a different rate than business real property.

Procedures required the development of an aggregate tax rate for all taxing authorities and jurisdictions within a county and the weighting of all counties within the SMSA. This was accomplished by weighting for differences in assessment ratios and property tax rates.

Local residential property tax attributable to institutional employees owning homes can be calculated directly using average property tax reported by the full-time employees in the employee survey. Property taxes due to institutional employees who rent living quarters can be estimated on the assumptions that 25 percent of rent or employee's household income goes to rent

and that 20 percent of rent would eventually go to landlord property taxes.

The calculation of sales taxes must take account of differing tax rates and taxable transactions by local jurisdictions. The aggregate of all institution, audience, and guest artist spending subject to sales tax is identified and then multiplied by the appropriate tax rate. If only a percentage of locally generated sales tax revenues is returned to local jurisdictions, spending is multiplied by that percent.

Jurisdictions may have differing sales tax rates. If so, attributable sales taxes can be apportioned by the percent of total SMSA sales taxes collected in each jurisdiction.

Transit taxes, where applicable, were levied in a similar fashion to sales taxes and treated similarly for the purposes of the study.

To estimate hotel taxes, first the estimated number of sole-reason visitors was multiplied by the average length of their visit. This figure was adjusted by the percent reporting spending on lodging (corrected for party size) to identify the number of paid nights in the area. According to Laventhol and Horwath's "U.S. Lodging Industry, 1978," Philadelphia, 1978, the average daily rate for occupancy in 1977 was \$15.81 per person. Assuming two persons per room, this figure was multiplied by the number of person nights for the estimated dollar value of hotel spending by sole-reason visitors. The result, plus the spending on hotels by guest artists (from the institutional data inventories), provided an estimate of total spending at hotels. This amount can be "taxed" at the appropriate rate.

To estimate parking revenues, assuming one party per car, the adjusted number of local parties and nonlocal sole-reason parties was multiplied by the estimated percent of attenders arriving by car. This figure was multiplied by the estimated parking cost per car (average hours of stay times average cost per hour in public lots) to get the parking revenues to local government for each institution.

Gasoline taxes were estimated by multiplying the average distance traveled by the adjusted number of local and sole-reason parties to get total miles traveled. This figure was then divided by an assumed twenty miles per gallon to estimate gallons used. Local excise taxes per gallon are then applied. No estimate was made of gasoline usage by the examined institutions' employees or by guest artists.

Restaurant taxes, where applicable, can be calculated directly from estimated spending in restaurants and bars, using appropriate local tax rates.

Data on admission taxes, where applicable, were provided by the institutions.

Income tax estimates frequently involve jurisdictional problems as noted previously with other tax items. One frequent problem is whether the tax is collected where the employee lives, works, or in both places. Income taxes, where applicable, were calculated as described in the Baltimore pilot project report.

CHAPTER I

AN OVERVIEW OF THE SIX-CITY STUDY

Community economic impact analysis

A brief introduction to several traditional approaches to the analysis and modeling of community economic growth and development will provide a traditional framework from within which to evaluate the impact of cultural activities considered solely as economic enterprises in their own right. This will also assist persons interested in placing case study findings within this broader context.

The first approach, Keynesian multipliers, focuses on the cascading effect of a dollar of spending in a community as it is respent over and over to generate additional jobs and income. The second, the economic base model approach, focuses on the sources of community income, especially local firms that generate income through exports of goods, services, and labor. The third approach, interindustry analysis, explains the cascading of income through the community in terms of the purchases that local firms make from one another and the business volume created by employee spending.

Keynesian multipliers. Several cultural economic impact studies utilize Keynesian multipliers; this method of analysis is based on the work of John Maynard Keynes and estimates the total impact on the economy of an injection of additional income. On the Keynesian model, income is pictured as rippling through the economy, being spent and respent as it becomes income to firms, then wages, then again income to firms. Keynesian analysis traces the cascading effect of a dollar of spending in a community by estimating the propensity to consume when there is a change in income. The ratio of the change in consumption to the change in income is "the marginal propensity to consume." The ratio will be less than one since some portion of a change of income may not be spent on consumption due to such factors as savings and taxes.

Keynesian analysis, when applied to a specific economy, makes it possible to identify a marginal propensity to consume goods and services that are produced locally. Dollars spent on imported goods and services are a form of "leakage." Taxes and savings by households and firms are additional sources of leakage.

On the Keynesian model, as income is being spent and respent, it is reduced after each round by leakage. The total of all these successively smaller fractions of the original unit of income is an arithmetic multiplier that can be estimated in terms of personal incomes of local business volume.

Economic base model. The premise of the economic base model is that the growth of a region or city is principally determined by its status as an exporter of goods, services, or labor. Export sales include not only goods or services flowing out of the region but expenditures in the region by nonlocal buyers of goods and services that are specific to the community, due to such factors as geography, climate, or history.

The community's export industries are referred to as the basic sector of the local economy. Employment and income in this sector are treated as essentially a function of outside demand for the region's exports. Since no community is capable of producing all the goods and services it requires, leakage is inevitable. The basic or export sector is important because it brings new dollars into the community through export sales, providing the income the community needs to purchase imports and fund local growth.

Workers in export industries as well as the export industries themselves require supporting services such as trade, medical and legal services, and a variety of other personal services. The firms providing these services are referred to as the nonbasic sector. Workers in the nonbasic sector are themselves consumers of nonbasic services.

Thus, the theory holds that all economic activity is either basic or nonbasic, and that local economic growth and stability are essentially determined by demand elsewhere in the world for the goods and services that comprise the export or basic sector.

From this point of view, demand in the nonbasic sector is dependent on demand in the basic sector. If the basic sector expands then there is increased income available to the community allowing for expansion of the nonbasic sector. Consequently, industries that simply service local needs are not as important as those that have a market outside the community, unless the local service industry is directly linked to an export earner in the sense that its absence or shrinkage would have negative effects on the export sector.

Thus, a firm may produce a product which is sold locally to a manufacturer who incorporates it as a part in a final product which is sold outside the community. In this technological or production sense the firms are linked; both would be considered part of the basic sector. An industry that has a limited export role would be considered relatively unimportant from the standpoint of economic base theory unless it was tied technologically to export earners, especially if residents were willing to substitute another locally available activity rather than rely on imports—attend a local movie theatre rather than travel to another city for a leisure activity not available locally.

Various techniques have been used to identify the size of a community's basic industry and estimate the impact in the non-basic sector of basic sector expansion. The simplest approach involves the assumption that all employment in certain categories is basic. For example, it is commonly assumed that all manufacturing and agricultural production is for export and therefore basic, and that all construction, trade, and services are nonbasic. However, many industries identified as basic and nonbasic by this approach will be found to have markets both within and outside the local community. The challenge then is to identify the extent to which activity in any one industry is export oriented.

Once the proportion of an industry that is basic or nonbasic has been determined, it is possible to develop "economic base multipliers." By identifying the ratio of basic employment (or income) to nonbasic, it is possible to create a base multiplier. If the ratio is 1:2 then the base multiplier is three. When basic employment increases by one, two other jobs will be created in the nonbasic sector.

The significance of the economic base model is clear. In effect it attempts to identify firms in the region with a primarily local market and distinguish them from firms which earn income through sales outside the metropolitan area.

Available cultural impact studies tend to focus on the export issue by providing data on the role of culture in tourist development. This is due in large measure to the focus on performing and visual arts institutions as opposed, say, to individual artists and craftworkers or film and other arts industries that incur export sales through sales of their products or labor in other cities.

The institutions examined in the case

studies are thought to predominantly incur export sales by drawing visitors to the community, thereby contributing to tourism development.

Data from the city studies can help identify the extent to which the institutions are themselves export earners. The case studies do not examine the extent to which the availability of local cultural activities restrict imports, including sales that might have gone for leisure, arts, and other pursuits outside the community had there been no locally available activities.

Interindustry analysis. The Keynesian multiplier and economic base model approaches to economic analysis operate on two basic concepts: that spending in the local economy involves continuous economic exchanges between households and firms as well as leakage from the economy due to imports and other factors.

The third approach, interindustry analysis, examines the economy at a highly disaggregated level, tracing the flow of dollars at the household and firm level as well as linkages among firms that might be confusing when expressed solely in terms of the economic base model.

To produce and sell an additional unit of output, local firms require a variety of resources, including goods, services, and labor. This relationship is technological in the sense that the firm's production requirements make it dependent on other firms, some of which are local and others that are not.

Direct effects refer to the purchases of goods, services, and labor that a firm requires to produce an additional unit of output. These direct expenditures lead to indirect expenditures as suppliers of needed goods and services make purchases of their own in order to produce the output for the buying firm. In this way, the original sale achieves a multiplier effect the size of which will vary by industry as a function of its requirements for locally available goods, services, and labor. Other things being equal, the larger and more diversified the economy, the more likely the needs can be supplied locally, and hence the higher the "multiplier."

Interindustry analysis addresses the "linked" industry issue by distinguishing technologically linked enterprises from industries linked through employee households. Firms devote a portion of their business volume to purchasing the goods and services they need from other businesses. Households receive a portion of

these sales revenues as wages. Local spending by households creates additional demand that also results in indirect effects among local firms. The business volume created by the production requirements of technologically linked firms—indirect demand—can be distinguished from the "induced" demand created by wages to their employees that are spent locally.

If a drugstore is the beneficiary of household demand by a wage earner in the steel industry, this is treated as an "induced" demand. It is not an "indirect" effect of steel production because the "output" of the drugstore is not required in the process of making and selling steel. The essential fact to bear in mind is that industries are only credited with the induced demand created by their own wage bill.

Since labor is an input to the production process, it is possible to use interindustry or input-output analysis not only to identify total local business volume associated with a sale in any one industry, but to estimate as well total jobs and salaries in the other business sectors benefiting from this activity. These salaries represent income from sales received by each firm's employees. Total business volume is then the sum of indirect transactions among firms and the induced local business activity prompted by wages respent locally by their employees.

As part of the six-city study, coefficients based on input-output analysis were used to estimate the indirect and induced business volume associated with the fiscal 1978 local expenditures of the examined institutions, their staff households, and audiences. This approach is based on procedures especially commissioned for this project, reported by David Greytak and Dixie Blackley, in "Multiplier Analysis: Arts and Cultural Institutions" (unpublished monograph, The Maxwell School, Syracuse University, 1980). The component of this business volume devoted to salaries was also identified. Indirect and induced business volume are simply called secondary business volume for the purposes of this study. Since secondary wages represent the portion of secondary business volume paid to local households as wages, the two can be identified separately but are not additive. Included among secondary effects are the costs and revenues to local government.

The arts as export earners

In discussing the role of the arts as a tourist industry, Dick Netzer has stated the issue in this way: "...the arts can be a significant export earner by being an

important factor in attracting tourists, conventions and other business visitors. I stress 'important factor' for it is quite improper to ascribe to the arts the economic benefits of visitors who in reality are attracted by entirely different attributes of the urban area—gambling in Las Vegas, the centrality of Chicago, the beauty and sparkling ambience of San Francisco, the monumental structures and government activity in Washington, the business opportunities of Houston and the Twin Cities—and happen to visit a museum or go to the theater. For the arts themselves to be a powerful attractive factor, they must offer a concentration that is large, diverse and quite unlike the arts available in dozens of other places. And, by this standard, only New York and Los Angeles rate; in other cities, only negligible fractions of the visitors come largely because of the arts as such." (A National Conference on the Role of the Arts in Urban Economic Development, The Minneapolis Arts Commission, 1978, unpublished remarks).

Netzer emphasized that if culture is not the principal factor in attracting non-residents, then any sales to these visitors are not export sales. This criterion may be too restrictive as a description of export sales to the arts. However, the approach has policy utility because it focuses attention on the drawing power of the arts as opposed to simply their sales to tourists.

It may be proper to attribute economic benefits to the arts and cultural institutions even if their audience was drawn to the community for noncultural reasons. These persons may have incurred an admission cost representing money that would not have spent locally at all if it had not been spent on the arts. For these visitors, culture is not a substitute for some other equally attractive local activity. Further, even when not solely responsible for tourist visits, the availability of arts and cultural activities may act as an additional inducement to visit, perhaps increasing the number of visits or length of stay. In these circumstances, the availability of culture acts as an additional inducement to visit, allowing for other local sales as well.

The accurate description of arts export sales aside, the essential policy question is whether the arts create a market by drawing visitors to the community or respond to a visitor market created by other community advantages.

Restrictive protocol. Audience spending estimates were based, as in some other economic impact studies, on an analysis of self-administered questionnaires asking the respondent to report actual or planned ex-

penditures in several general categories—restaurant, bar, hotel, motel, and public transportation. Other studies have attributed to cultural institutions the spending of all visitors in their audiences including those in the city for reasons other than cultural attendance. This study, however, adopted a protocol which limited visitor spending that might be credited as an impact of culture.

For the purpose of this analysis, all visitor admission payments to institutions were counted inasmuch as they are income to the institution. However, it seems inappropriate to attribute to the arts and cultural institutions the ancillary spending of visitors who are in the community for noncultural reasons but, once there, decide to use the available culture. City studies therefore attribute to the arts and cultural institutions the ancillary spending of visitors who report that they were drawn to the community solely because of their interest in one of the examined cultural activities.

This protocol may be viewed as conservative. It does not, for example, credit arts and cultural institutions with the ancillary expenditures of persons who expected to attend although this was not the sole reason for the visit.

This approach has a dramatic effect on the volume of tourist spending attributable to the examined institutions by severely restricting the number of visitors counted. In addition, the protocol excludes the larger-spending group of culture audiences who were in the community for other reasons and who tend to stay for a night or more. Thus, the protocol can sharply limit the counted volume of visitor spending attributable to individual institutions. The magnitude of this effect is a function of the size of the audience and the proportion of sole-reason attenders. The protocol especially affects the museums in the sample, several of which reported a large volume of nonlocal attenders, proportionately few of whom were in the city solely to use the museums. Consequently, the effect of the protocol on each city's case study is significantly affected by the proportion of museums in the mix of institutions they chose to examine.

Results of audience surveys. As part of the case studies, self-administered audience surveys were conducted at each institution. This effort resulted in approximately thirty thousand responses. Nonlocal audiences in the SMSA were asked to report whether they had anticipated attending the surveyed activity when they made their plans to come to the city. They were also asked whether this was the sole

reason for their being in the community.

Since examined institutions do not constitute a probability sample, it would be inappropriate to generalize in a statistical sense from them to the broader universe of cultural institutions. This is especially true because institutions, even institutions of the same type, vary widely. It is clear, however that many cultural attractions are capable of creating a visitor market on their own and that they apparently respond as well to demand by visitors who are in the community for other than cultural reasons. Of the nearly 7.2 million in total audiences in the six cities, 20 percent, or 1.4 million, were visitors. Nearly 300,000 were sole-reason attenders in six cities because they came specifically for cultural reasons.

The variations within cities are due to a number of factors. The extremely high percentage of visitors in Springfield audiences reflects the inclusion of the Old State Capitol and the Art Collection, Illinois State Museum. These major tourist attractions accounted for 78 percent of total audiences and 97 percent of visitors. In San Antonio, the Witte Museum and the Museum of Transportation account for the bulk of visitors. In all cities, the inclusion of other institutions would no doubt have affected the visitor and local audience mix.

The data indicate that museums in the six cities have a considerably higher proportion of their visitors from outside the region than the performing arts, ranging from 10.9 percent to 80.7 percent. Nonlocal performing arts audiences were almost always under 10 percent of the total.

Among visitors, there was great variation among the institutions in the percentage who had expected to attend when making plans to come to the community. At art, science, and history museums or facilities, this ranged from 25.3 percent to 70.4 percent of visitor audiences. At performing arts groups the range was from 35.3 percent to 91.7 percent of visiting audiences. Attending performing arts events generally requires more advance planning than other cultural activities. Among visitors for whom attendance at the institution was their sole reason for being in the community, the performing arts had a higher percentage than the museums. Again, there is tremendous variation by institution so that there are as few as 6.1 percent and as many as 88.5 percent of sole-reason visitors in performing arts audiences.

Factors affecting drawing power. Data on nonlocal visiting audiences suggest wide

variations in drawing power among individual activities, whether they are viewed as attractions that contribute to a decision to visit a region or as activities used once a visitor is in the community.

Institutions vary in type and quality; they may be sold out to local audiences or may not be well known outside their community; some may not be conveniently located to the general public and centers of visitor activity. The cost of admission will vary as will the ease with which tickets may be purchased. Museums, for example, may be open daily and admission may be free, while certain performing arts activities may be high priced, with tickets available only at the box office or by subscription, and there may be only a few performances a year. In these circumstances, nonlocal audiences could not attend unless they planned ahead.

Culture and central cities. Although these studies are intended to identify effects on the entire U.S. Bureau of the Census Standard Metropolitan Statistical Area or SMSA, economic development practitioners in central cities may have a special interest in their findings. The examined events and facilities were typically located in the central city. In addition to visitors from outside the SMSA, these activities regularly bring thousands of suburban residents back to the city and can help draw people to redeveloped downtown and neighborhood areas. This may help maintain markets for other city businesses and create an urban environment attractive to residents and visitors alike.

Estimated audience spending. Tables presenting audience summary data are found in each of the six city chapters. The effect of the protocol discussed above is especially significant in St. Louis. While all nonlocal attenders there are estimated to have spent \$74.8 million, sole-reason visitors reported spending only \$1.3 million. Across all six cities, the figures are \$132.8 million and \$7.3 million. In short, the protocol eliminates over \$120 million in audience spending, over half of which is accounted for by the St. Louis study alone.

By including total spending incurred by visitors during their stay, it is possible to derive differing audience spending estimates depending on the protocol adopted. For example, using as a base the ancillary spending reported by local audiences, it is possible to derive two radically different estimates of per capita audience spending, depending on whether ancillary spending by all visitors is included or only spending by sole-reason visitors.

Table I-1 Audience per capita spending

	Local and nonlocal (sole reason)	Total audience
Columbus	\$ 3.83	\$ 9.34
Minneapolis/ St. Paul	\$ 4.35	\$ 8.65
St. Louis	\$ 3.44	\$27.53
Salt Lake City	\$ 3.56	\$ 9.76
San Antonio	\$ 5.66	\$27.52
Springfield	\$ 4.65	\$14.21

Table I-1 indicates the range of values produced by these two procedures. As the more detailed audience spending tables in individual city chapters show, museums particularly benefit from procedures that count all expenditures by all visitors because of the lower incidence of sole-reason visitors to museums.

Questions may be raised also regarding local audience spending. It may be argued that here, too, the only audience effects traceable directly to an institution are audience payments for admission. If audience members happen also to go to a bar or restaurant, it is not clear how this is tied to the operation of the institution as a direct, indirect, or induced effect. A local resident might have gone to the restaurant even if he had not gone to the arts event. To claim that these ancillary expenditures are an impact of cultural institutions appears to suggest that attending an activity causes the audience to spend over and above their admission cost. At issue is whether audience members would have spent the money in the SMSA even if they had not attended the activity.

In the city studies, ancillary spending by local audiences and sole-reason visitors was included among the direct effects attributed to the examined institutions.

Table I-2

Direct economic effects of examined institutions

	Columbus		Minneapolis/ St. Paul		St. Louis	
Local expenditures for goods and services	\$1,525,012	40%	\$ 7,335,778	26%	\$ 5,248,714	25%
Employee salaries and wages	\$2,045,981	32%	\$10,852,362	38%	\$ 7,652,004	37%
Local audience spending	\$1,669,070	26%	\$ 7,339,916	26%	\$ 6,600,197	32%
Nonlocal, sole-reason audience spending	\$ 964,368	15%	\$ 2,967,612	10%	\$ 1,290,134	6%
Guest artist spending	\$ 132,390	2%	\$ 104,223	---	\$ 119,576	---
Total	\$6,336,821	100%	\$28,599,891	100%	\$20,910,625	100%
Institutions	6		10		8	
Attendance	698,920		2,765,448		2,503,500	
Operating budgets	\$4,249,182		\$21,787,947		\$13,922,589	
Local expenditures	\$3,570,993		\$18,188,148		\$12,900,718	

Direct and secondary economic effects

Direct economic effects by city. Table I-2 presents direct economic effects for the institutions examined in each city. It is important here to reemphasize that the forty-nine institutions are not a scientific and weighted sample of various types of cultural institutions. Effects might have been significantly different had sponsors selected a different mix of local cultural resources. The examined institutions are best viewed as illustrative of the range of differences within and among institution types. They help also to illuminate essential factors that determine the local impact of the arts.

Institution-related local expenditures. The forty-nine institutions had total attendance of 7.2 million and operating budgets totaling \$51 million of which 51 percent or \$26.1 million was devoted to local salaries and wages. An additional \$17.3 million or 34 percent of total expenditures was spent locally for goods and

services. Overall, some 85 percent or \$43.4 million of total operating expenditures were spent locally for goods, services, and wages.

Local and visitor audiences at the institutions spent \$17.5 million and \$7.3 million respectively, representing 25 percent and 11 percent of total local expenditures of \$68.7 million. (Local expenditures for goods and services were 25 percent of total local expenditures while local salaries and wages comprised 38 percent of local spending.) Guest artists spent \$472,974, less than 1 percent of total local expenditures.

The magnitude and weight of an individual direct effect either by city or across cities reflects the impact of individual institutions. Two institutions in Springfield—the Illinois State Museum and the Old State Capitol—are particularly influential with respect to the magnitude and impact of nonlocal sole-reason audience spending, and account for virtually all such spending in Springfield.

Salt Lake City	San Antonio	Springfield	Total
\$1,804,405 30%	\$ 940,226 25%	\$ 396,654 13%	\$17,250,789 23.8%
\$3,115,024 51%	\$1,485,402 40%	\$ 981,461 33%	\$26,132,234 38.5%
\$ 749,467 12%	\$ 692,722 19%	\$ 431,526 14%	\$17,482,898 21.5%
\$ 381,491 6%	\$ 585,469 16%	\$1,133,727 38%	\$ 7,322,801 15.2%
\$ 30,110 ---	\$ 32,224 ---	\$ 54,451 2%	\$ 472,974 2.0%
\$6,080,497 100%	\$3,736,043 100%	\$2,997,819 100%	\$68,661,696 100.0%
10	5	10	49
348,772	467,350	410,411	7,194,401
\$6,104,073	\$3,041,073	\$1,912,786	\$51,017,650
\$4,919,429	\$2,425,628	\$1,378,115	\$43,383,031

Simple indicators of institution impact.

For the group as a whole, the ratio of total direct effects to total operating expenditures was 1.34 while direct effects totaled roughly \$9.54 per attender. However, inspection of the data at the institution level reveals the danger of such simple indicators of institution impact. For example, organizations with respectable budgets but low attendance can have a relatively high impact per attender. A more interesting measure is simply the ratio of total direct effects to total operating revenues. This measure ignores size of institutional budget and rewards local institutional spending, local audience size and spending, especially attendance and spending by sole-reason visitors. Because this emphasizes sole-reason visitors, it penalizes museums.

This ratio for the mix of institutions in each city is presented below. Springfield benefits from tourist spending at the sites noted earlier.

Columbus	1.49
Minneapolis/St. Paul	1.31
St. Louis	1.50
Salt Lake City	.99
San Antonio	1.23
Springfield	1.57

The ratio for Salt Lake City reflects the relatively small size of audiences and the limited number of sole-reason visitors (as compared to the institutional mix identified in other cities).

Influences on direct economic effects

An institution's direct effects as defined in this report are essentially an expression of the size of its own operating budget, the percentage of it spent locally, and the magnitude of sole-reason visitor and local audience spending. The inclusion of audience spending and the restrictive protocol adopted for local and visitor audiences can have a significant impact on any single institution's direct effects.

Local spending by examined institutions. As is evident from Table I-2, institutions in all cities were able to meet a high proportion of their operating needs locally, principally because the bulk of their operating budget was devoted to local salaries and wages. This table contains the information necessary to determine for each city the proportion of total operating budgets devoted to local expenditures for salaries and wages and goods and services.

Subsidy support. The institutions examined in this study are either nonprofit cor-

porations or government agencies. Consequently, budget size reflects not only revenues earned in the marketplace but the ability and willingness of individuals, firms, and government to provide subsidy support. The history, patterns, and practice of such support vary by city. Subsidy support is particularly important to museums and other facilities which offer free admission and rely on "unearned" income for the bulk of their operating budget. There were some performing arts institutions in the sample, however, for which subsidy, especially government support, was the single largest source of revenue.

The ability of an institution to produce income reflects regional market conditions and the availability of public and private support. Presumably, these factors are responsive to the quality of an institution's programming and management.

Because of the importance of revenues to government that are attributable to cultural institutions, which are among the secondary effects to be discussed, the extent to which an institution's local spending represented a return to the community of local, state, or federal tax revenues was identified. Table I-3 gives this data by city. Again, the results for each city reflect only the examined institutions and may not represent the entire universe of local nonprofit cultural resources.

As noted previously, aggregate data by and across cities can be distinctly influenced by individual institutions. Once again, the Springfield data reflect the inclusion of the Illinois State Museum and the Old State Capitol which are state funded and account for 81 percent of reported operating budgets. In San Antonio, the Carver Cultural Center is almost completely funded through local appropriations. In St. Louis, the Museum of Science and Natural History, McDonnell Planetarium, and the St. Louis Art Museum are subdistricts of the Metropolitan Zoological Park and Museum District which assesses a property tax for their support in St. Louis City and County. Tables in the individual city chapters present data on tax revenues and sources for each institution.

For the group of forty-nine institutions as a whole, eleven derived 40 percent or more of operating revenues from governmental sources, nine derived 20 percent to 40 percent, six derived 10 percent to 20 percent, fifteen derived less than 10 percent, and three reported no income from government; data were not available on the other institutions. These data do not include an accounting of federally-funded CETA positions.

Table I-3

Government revenues as a percentage of examined institutions' operating budgets

	Local	State	Federal	Total
Columbus	2.1%	2.2%	2.9%	7.2%
Minneapolis	.4%	3.1%	3.6%	7.1%
St. Louis	24.2%	7.8%	5.8%	37.8%
Salt Lake City	6.3%	14.0%	11.5%	31.8%
San Antonio	26.5%	.2%	8.7%	35.4%
Springfield	1.2%	76.7%	2.7%	80.6%

Secondary economic effects

Earlier in this overview a basic definition was given of interindustry analysis as a tool for identifying other than direct effects of spending by households and firms. As part of the city case studies coefficients and multipliers derived from interindustry studies have been used to estimate indirect and induced business volume, personal income, and jobs. For the purpose of this study, these are referred to as secondary effects. While study procedures allow an estimate of these effects, it cannot be inferred that none would have occurred in the absence of one or more of the specific institutions examined as part of this study.

In addition to secondary business volume, income, and jobs, the study sought to estimate the initial expansion of the local credit base due to bank deposits held locally by the institutions, their employees, and the local businesses benefiting from institution-related direct effects. Each examined institution and its employees provided estimates of average daily balances in checking and savings accounts. Local cash-to-business volume ratios were used to estimate cash held by firms benefiting from institution-related expenditures.

Area firms benefiting from institution-related direct effects have, over time, invested in the plant, inventory, and equipment needed to support this business volume. To estimate the fiscal 1978 value of these investments in business property, it was first necessary to estimate the total value of all local business property.

Business real property associated with institutional direct effects was assumed to be proportional to institutional direct effects as a percentage of total local fiscal 1978 business volume in each city. Table I-4 presents estimates of each of these secondary effects discussed earlier. (This does not include salaries and jobs at the examined cultural institutions. The forty-nine institutions provided 1,618 full-time employment opportunities paying \$25,132,234 in salaries and wages.)

Influences on secondary economic effects

The principal influences on secondary business volume, jobs, and income are the magnitude of direct effects and local requirements of the local industries that benefit. It has already been pointed out that multiplier estimates will vary inversely with the volume of imports of goods, services, and labor, and other forms of leakage; and that the more the local economy can supply, the greater the proportion of local direct effects retained and respent locally.

Institution-related effects on the local credit base are a function of the number of employees, their household incomes and cash management practices, together with institutional practices regarding time and demand accounts. These varied widely. Estimates of the current value of backup inventory, equipment, and property vary directly with local estimates of the value of business property and the ratio of the

direct effects for each city to total local business volume.

Government revenues and costs

In addition to estimating the direct and secondary effects discussed earlier, this study sought to identify selected fiscal 1978 effects on local governments attributable to the examined institutions.

Revenues to local governments included local real estate taxes paid by the examined institutions and their employee households, and a portion of business property taxes attributable to institution-related direct effects. Other examined revenue sources included local sales and income taxes, lodging and gasoline taxes, admission taxes, and parking revenues. In each case study, real estate taxes accounted for the greatest portion (47 percent and 76 percent) of local government revenues related to the examined institutions. In Columbus and Minneapolis/St. Paul, about 50 percent of these property tax revenues are attributed to assessments over time by businesses responding to institution-related direct effects. The proportion for Springfield is 30 percent, and for Salt Lake City 21 percent. Cities varied in terms of the relative importance of other estimated revenue sources. Two SMSAs assessed a local income tax, one assessed a restaurant tax, one assessed an admission tax, while sales tax estimates across cities varied by taxable items and rates.

Table I-4 Secondary economic effects of examined institutions

	Columbus	Minneapolis/ St. Paul	St. Louis	Salt Lake City
Institutions	6	10	8	10
Business volume	\$10,539,968	\$57,211,537	\$42,246,030	\$9,978,282
Personal income	\$ 4,044,301	\$21,720,604	\$15,899,168	\$3,876,184
Full-time jobs	574	3,053	2,005	631
Initial expansion of the local credit base	\$ 3,221,487	\$ 6,849,136	\$ 6,058,120	\$2,970,735
Current value of back-up inventory, equipment, and property	\$ 4,442,864	\$15,837,042	\$12,445,444	\$2,408,853

Costs to local governments included an estimate of the local governmental operating expenditures required to provide services to employee households, including the costs of public instruction for households with children in public schools. Local government contracts for services, grants, operating subsidies and other support were also identified. Study procedures apportioned to all employee households a share of local governmental operating expenditures in all areas except public education. Separate cost estimates were derived for households with children in local public schools.

Table I-5 summarizes local revenues and expenditures attributable to examined institutions in the six cities. A more complete picture of these effects, including their variation from institution to institution, can be gained by examining Table 9 in each city chapter. No information is available which indicates whether the identified effects are typical of the broader universe of local institutions or are specific to the examined mix of institutions.

In reviewing them, bear in mind the limited nature of the analysis and the procedures used to derive estimates when this was necessary. Sales, income, and property tax estimates do not include taxes paid by individuals and firms benefiting from institution-related secondary effects. In addition, favorable or unfavorable spillover effects on local business opportunities and stability have not been assessed,

San Antonio		Total
5		49
\$6,185,327	\$129,380,000	\$129,380,000
\$2,345,260	\$49,202,463	\$49,202,463
347	6,771	6,771
\$ 862,529	\$ 20,863,712	\$ 20,863,712
\$1,044,720	\$ 37,822,775	\$ 37,822,775

Table I-5

Estimated revenues and costs to local government related to examined institutions by city

City	Revenues	Costs
Columbus	\$ 381,251	\$ 245,349
Minneapolis/ St. Paul	\$2,135,340	\$1,146,525
St. Louis	\$1,117,059	\$3,987,435
Salt Lake City	\$ 405,680	\$ 635,590
San Antonio	\$ 126,083	\$ 859,749
Springfield	\$ 187,581	\$ 110,867

nor has neighborhood residential quality as it affects property and other tax revenues. More generally, no attempt has been made to assess the governmental costs and benefits associated with the more subtle and indirect effects that may be associated with the arts. In addition, no information is available by which to assess whether the identified effects are typical of the broader universe of available local institutions or are specific to the examined mix of institutions.

Procedures focused on sources of locally generated revenues, including sales, income, and property taxes, and parking and other appropriate local revenues sources. Property tax revenues were the single largest revenue source in each city. Property tax receipts as a percentage of estimated tax revenue are presented below.

Columbus	58%
Minneapolis/St. Paul	69%
St. Louis	61%
Salt Lake City	76%
San Antonio	47%
Springfield	57%

In Columbus and Minneapolis/St. Paul, about 50 percent of these property tax revenues are attributable to investments over time by businesses responding to institution-related direct effects. The proportion for Springfield is 30 percent, and for Salt Lake City 21 percent. Cities varied in terms of the relative importance of other estimated revenue sources. Two SMSAs assessed a local income tax, one assessed a restaurant tax, one assessed an admission tax, while sales tax estimates across cities varied by taxable items and rates.

Foregone property tax. Finally, the examined institutions include a mix of facilities owned and operated either by government or nonprofit corporations, and therefore are tax-exempt. In several cities, the lack of assessed valuation data and other limitations made it impossible to derive estimates of foregone property taxes.

Simple indicators of tax effects. For reasons noted in the earlier discussion of simple indicators of institution impact, it is dangerous to present such indicators that do not take account of differences across institutions. It is interesting to note, however, that when institutions are aggregated, tax revenue estimates as a percentage of total institutional operating expenditures are similar across cities:

Columbus	9%
Minneapolis/St. Paul	10%
St. Louis	8%
Salt Lake City	7%
San Antonio	4%
Springfield	10%

Effects not examined

This report has treated arts and cultural institutions quite narrowly by focusing on activities considered simply as local economic enterprises. This focus may not capture the total range of benefits to local residents. It has been observed that cultural institutions have a role in economic development apart from the economic activity directly related to their operations; that their availability affects the perceptions, satisfactions, and resulting behavior of households and firms, including decisions to locate in the community or remain and expand. Arts and other facilities may be useful in helping to create surroundings attractive to tourist and convention visitors, to establish a climate in which the decision to locate or remain in the inner city, city, or region is viewed favorably.

Policy observations

Data take on policy significance when they answer questions of public interest and

help shape decisions regarding goals, and the programs best suited to achieve them. The development of policy is as much a matter of asking the right questions as of compiling the quality data needed for answers. In an unpublished report to the Arts Endowment's Research Division, Dick Netzer made the following assessment of the policy significance of available economic impact literature, an assessment based on his understanding of how arts and cultural advocates were posing such questions: "Our interviewees repeatedly noted the need for studies of the economic impact of the arts, in connection with advocacy, in the sense of demonstrating that public expenditure for support of the arts is a 'good buy.' It is virtually impossible to think of any other conceivable use of data of this type, data that are expensive to produce . . ." (Final Report on a Feasibility Study for an Economic Data Program on the Condition of Arts and Cultural Organizations, New York: New York University, 1977). Netzer's analysis presumes that these advocates are, in effect, utilizing impact studies to assess the cost/benefit of governmental appropriations funneled through the arts and culture.

It is presumed that the question of cultural economic impact is framed as follows: In general, do public dollars devoted to culture have more impact than public money spent for other purposes? Advocates are aware that some decision-makers believe culture is a "drain" on the local economy and have concluded that this is a stumbling block to increased appropriations.

For example, among the press reports accompanying the release of the Salt Lake City case study was an article headlined "Local Arts Spell Big Business." The story quoted a staff member of the local arts council who indicated that the case study "should put a new light on the arts" and went on to say, "It has long been the assumption of certain individuals that the arts are some kind of drain on the city treasury. That expenditures for the arts are justifiable only through an intangible quotient called the 'quality of life,' that the arts are somehow feeding in the trough of public subsidies—subsidies that by implication should be eliminated." (The Salt Lake City Tribune, March 30, 1980).

Do appropriations have any economic significance in terms of jobs, and income and tax revenues, and is that impact sufficient to counter the view that the arts are a net "drain" on the local economy? There is the clear suggestion that some cultural activities are responsible for as much in tax revenues as they get in appropriations and that they have noticeable if modest impacts

on jobs and income in other sectors of the economy. Further, it is clear that cultural programs can serve both residents and visitors in a metropolitan area. Cultural activities may sometimes be solely responsible for inducing persons outside metropolitan areas to make day and night trips. It may be assumed that even when cultural organizations are not solely responsible for these visits, they may often be one among other planned activities, and so may directly contribute to increasing the number of audience visits.

At the same time, it is also clear that the nonprofit institutions examined in this study are small businesses that sell the majority of their "output" to local residents. It is interesting in this vein to note a commercial parallel, that the gross sales of an average McDonald's restaurant unit totals on the average some \$1 million annually. This is considerably larger than the annual budgets of most nonprofit cultural activities. In the context of local business volume, the examined institutions have a relatively modest impact, even taking into account spending by local audiences and visitors. Further, there is tremendous variability among institutions and inherent constraints on expanding the impact of cultural institutions considered simply as local economic enterprises.

There are many ways to express the question of economic impact. Rather than valuing cultural activities simply as economic enterprises in their own right, they could have been investigated as tools for achieving specific development objectives. In these circumstances, the decision makers posing the economic impact question are not legislators, but community development agencies determining whether cultural activities have any value for their noncultural purposes.

This point of view may be particularly important to persons concerned with community revitalization as opposed to regional economic growth. In their own right, cultural activities may be only modestly important as generators of business activity within an SMSA. However, they may have considerably more importance for place-specific objectives. These objectives may not be expressed in terms of increasing net economic benefits to the region, but devoted instead to improving the distribution of economic activities and investments to assure the revitalization of places within the region.

These revitalization objectives may be expressed in terms of outcomes, e.g., the retention and attraction of firms and households, as well as in terms of the attitudinal and satisfaction dimensions that are thought to induce behaviors relevant to the process of community revitalization.

Caveats on merging cultural and economic development planning. One concern during the Baltimore research, discussed previously, was the potential misuse of economic impact data in the development of cultural policy. Programs might be favored on the basis of the scale of their own direct and secondary effects on the local economy. If decision makers are encouraged to treat investments in cultural activities because they solve particular economic development problems, the risk occurs of defining development objectives solely in terms of short-run community revitalization goals. In providing this analysis of the economic effects of a sample of cultural activities, it is not advocated that impact data are to be used as important determinants of public policy toward arts and culture, especially in the absence of support of arts and culture for their own sake.

The need for additional research. The cultural institutions examined in this study are either nonprofit corporations or government agencies. They encompass the various types of museums and performing arts activities that are the typical focus of advocacy efforts. However, the bulk of the nation's literary, visual arts, musical and performing arts output is produced by commercial enterprises.

Apart from additional questions concerning the economic impact of the culture industry, however it is defined, it is evident that an adequate framework within which to evaluate the more indirect and subtle effects claimed for cultural activities does not exist. Preliminary work suggests that further examinations of cultural impact will require understanding the success of an arts or cultural activity in its own terms and how this reflects other aspects of community life while contributing to specific objectives.

A willingness, for example, to invest in a community's cultural life will be determined by a variety of matters ranging from historical and social factors to property taxes, the (perceived) safety of a neighborhood, the availability of investment capital, current energy and mortgage related market pressure, special city inducements to invest, changes in family size and structure, suburban no-growth policies, and so forth. Cultural effects may vary with the quality and frequency of activities. It may prove impossible to develop economic models specifying the community conditions under which particular levels and quality of cultural output are not only feasible but likely to achieve economic development objectives. The ability to anticipate development outcomes and the imagination to use arts and culture effectively in a community context may always be more art than science.

CHAPTER II

THE COLUMBUS ECONOMY AND ARTS AND CULTURAL INSTITUTIONS

The following institutions in the Columbus Standard Metropolitan Statistical Area or SMSA were selected for study by the Greater Columbus Arts Council:

Ballet Metropolitan
Columbus Museum of Art
Columbus Symphony Orchestra
Center of Science and Industry
Players Theatre of Columbus
Columbus Association for the
Performing Arts (Ohio Theatre)

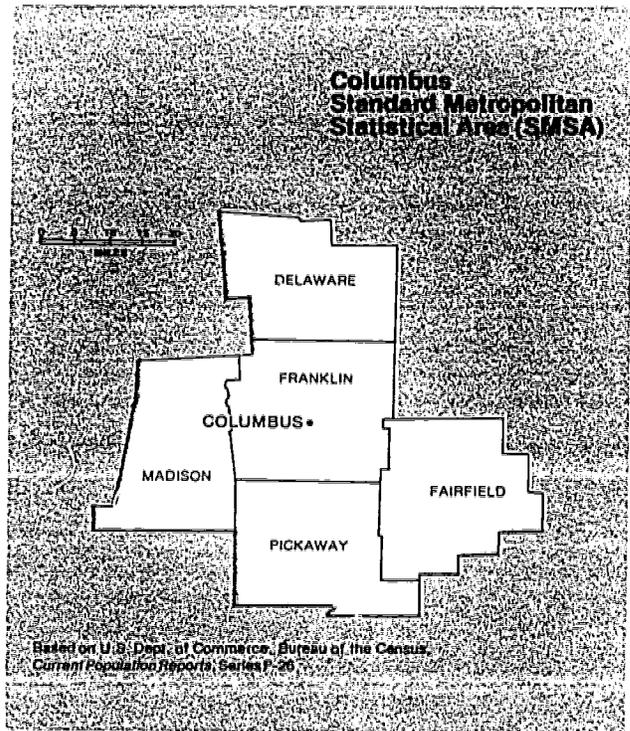
These represent a range of organizational types and include some of the more well-known local institutions. Their selection resulted from locally initiated efforts to identify interested organizations.

The successful completion of the Columbus project was due to the efforts of a number of persons, including the principal project staff of the Arts Council. Ric Wanetik, executive director of the Council, served as study director and Tim Sublette, assistant director, was responsible for coordinating the day-to-day tasks. Jackie Brown, program associate, assisted in the collection of operating and financial information. A corps of students recruited through the high school art leagues helped in the distribution of audience study questionnaires. Other staff persons and volunteers are identified at the end of this report.

Columbus institutions

In 1878, a group of Columbus citizens decided that the city should have a place in which to enjoy the visual arts. By the turn of the century, an art school had been organized and funds raised to house an art gallery. The main building was built in 1931, and a new wing opened in 1974. The Columbus Museum of Art (formerly the Columbus Gallery of Fine Arts) houses a broad selection of paintings and sculpture augmented by decorative and ethnic arts objects. Lectures, classes, films, and concerts are available to the public.

The Columbus Association for the Performing Arts, formed in 1969, has restored the former Loew's and United Artists Ohio Theatre, built in 1928, as a performing arts center. In addition to performances by the Ballet Metropolitan and the Columbus



Symphony Orchestra, the Ohio Theatre hosts performances by Broadway touring shows, various ethnic dance companies, jazz concerts, and movies, as well as performances by many local artists and groups.

Players Theatre was formed as a club in 1923. In 1966, the theatre opened its doors to the public and now produces plays for adults and children, as well as offering classes and workshops. This community theatre now produces six to eight major productions each season.

Ballet Metropolitan was incorporated as a club in the State of Ohio as a nonprofit organization in September 1974. Ballet Metropolitan presents classic and modern programs; sixty-three performances were planned for the 1979-80 season.

The Center of Science and Industry opened to the public in April 1964, and is a part of the Franklin County Historical Society. The center's exhibitions are primarily in the fields of science, health, history, and industry.

The Columbus Symphony, which was founded in 1952, presents concerts of classical, chamber, ensemble, choral, operatic, and popular music. The symphony also presents free or low-cost public service events for the community.

Table II-1

Columbus SMSA demographics

Age (1977)		Education (1970)	
18-24	15.9%	Less than 5 years	2.7%
25-34	16.8%	4 years of high school or more	60.7%
35-49	16.1%	4 years of college or more	14.0%
50 and over	21.7%		
Median age	27.7	Median education	12.3

Columbus economy and the broader cultural community

An examination of the economy and broader cultural community of the city and Columbus SMSA will contribute to an understanding of the effects ascribed to the six examined institutions. Table II-1 presents useful market data such as the Effective Buying Income (EBI), a measure of the buying power of households after government deductions for taxes, social insurance, and lesser items; it also shows income, age, education, and population information.

The Columbus SMSA consists of the city of Columbus and the counties of Franklin, Fairfield, Delaware, Pickaway, and Madison. In this study the terms "local," "the Columbus metropolitan area," and "the Columbus region" are used interchangeably to identify the Columbus SMSA. The SMSA population is estimated to have grown from 1,017,847 in 1970 to 1,072,000 in 1976 ("Population Estimates and Projections," U.S. Dept. of Commerce, Census Bureau, Series P-25, No. 739, November 1978). The City of Columbus is estimated to have a population of approximately 530,000.

Columbus was established in 1812 as a planned political center by an act of the Ohio legislature. The city became the capital of Ohio in 1816, and later the seat of Franklin County. Today, government plays an important role in the eco-

nomie stability of the Columbus SMSA, accounting for over 19 percent of employment ("Central Ohio: 79 Outlook," Columbus Business Forum, Columbus Area Chamber of Commerce, January 1979). The State of Ohio employs over twenty thousand area residents not including Ohio State University which employs 16,241 people.

The federal government (excepting the armed forces) employs over eleven thousand; the City of Columbus approximately 7,500; the Columbus Public Schools over seven thousand; and Franklin County roughly 4,500.

The largest private employers are Western Electric; F & R Lazarus Company; Sears Roebuck and Company; and Ohio Bell Telephone Company, each of which employed over five thousand workers. The Fisher Body division of General Motors Corporation, Nationwide Insurance Co., Kroger Company, and Conrail each employed over three thousand workers. In addition, there were twenty-six firms that each employed between one thousand and three thousand workers. The home offices of fifty-two insurance companies were located in Columbus. Overall, 24 percent of the employed work force worked in retail and wholesale trade, 20 percent in manufacturing, and nearly 20 percent in services and miscellaneous industries. (Employment data derived from "Largest Employers in the Columbus Area," Columbus Regional Information Center, Columbus Area Chamber of Commerce, May 1979.)

Population (selected years)		Household income (1977)	
1960	682,962	\$8,000-\$9,999	6.0%
1970	1,017,847	\$10,000-\$14,999	18.0%
1975	1,068,514	\$15,000-\$24,999	33.9%
1977	1,082,100	\$25,000 and over	21.2%
<u>Population change</u>		1977 median household income	\$16,336
1960-1970	+20.4%	1969 median household income	\$10,460
1970-1975	+5.8%	Average annual change in per capita income 1969-74	7.2%

The manufacturing sector of the Columbus economy has undergone a period of rapid growth and diversification since the establishment of a large aircraft plant in Columbus in 1941. This diversification has included the establishment of major plants specializing in the production of space equipment, automotive parts, electrical equipment and appliances, china-ware, glass, coated fabrics, shoes, and food products. Rapid expansion has been encouraged by the city's favorable geographic location and a transportation network which includes five major railroads, an extensive highway network, and an airport, Port Columbus.

The Columbus Business Forum reports that "the movement toward a service-oriented economy is reflected in the opening of several new businesses in areas supporting recreation and tourism, health, and other social services." It reports further that new restaurants are opening, and numerous improvements have been developed, including the Ohio Center convention complex with its companion six hundred-room Hyatt Regency hotel, the three hundred-room Marriott Inn, and the Hilton Inn East. The Chamber of Commerce believes that these projects have generated new confidence in downtown Columbus as a place to work, shop, and live; the development of downtown as an entertainment and leisure center has been further enhanced by the programs of Columbus arts and cultural organizations.

The examined institutions are only six of the 170 nonprofit arts and cultural organizations identified by the Greater Columbus Arts Council. Although the examined institutions may typify the impact of various kinds of institutions, they do not represent the full range of locally available commercial and nonprofit activities. It is clear that the examined institutions do not exhaust the impact of the "culture industry." For example, census data for 1970 show a total of 2,847 employed writers, artists, and entertainers in the Columbus SMSA, excluding individuals employed in art galleries and other arts-related positions. (Where Artists Live: 1970, Research Division Report #5. Washington: National Endowment for the Arts, 1977; see list at the back of this report.) Only 123 persons were employed full time at the examined institutions. The yellow pages of the Columbus metropolitan area telephone directory list over one thousand enterprises which can be considered culture-related in the broadest sense. These range from music, art, and theatrical suppliers to book and record dealers, design firms, and commercial photographers.

Data on the impact of some elements of these additional business sectors are available

from the 1977 statistics in the U.S. Bureau of the Census County Business Patterns series. Table II-2 details various data on businesses used by the general public.

Direct economic effects

The direct economic effects of the examined institutions include local spending for goods and services, salaries and wages to local residents, and expenditures by guest artists and by local and nonlocal audiences. Table II-3 presents selected data on institutional direct effects during fiscal 1978.

Local institutional expenditures for goods, services, and salaries. It is estimated that the examined institutions made 70 percent of their expenditures for goods and services with local vendors and that this totaled \$1,525,012. The percentage of nonlabor expenditures made locally by the examined institutions ranged from 14 percent to 98 percent. An additional \$2,045,981 was spent for salaries and wages to local households. No estimate has been made of the impact of additional earned and other income by institutional employee households, which in some instances was as high as 10 percent.

Table II-2 Columbus SMSA selected businesses related to arts and culture

Business	Number	Employees	Payroll
Television, radio, and motion picture	71	585	\$ 6,184,000
Music and record stores	35	167	\$ 1,543,000
Book stores	28	212	\$ 1,379,000
Photography stores	21	85	\$ 634,000
Movie theaters (except drive-ins)	32	467	\$ 2,028,000
Total	187	1,516	\$11,768,000

Table II-3

Columbus SMSA estimated direct economic effects of examined institutions

	Total	Percent of total direct spending	Single institution	
			Lowest	Highest
Local institution expenditures for goods and services	\$1,525,012	24%	\$42,800	\$618,158
Employee salaries and wages	\$2,045,981	32%	\$54,325	\$743,574
Local audience spending (other than ticket prices)	\$1,669,070	26%	\$61,577	\$663,800
Sole reason visitor spending	\$ 964,368	15%	\$ 5,938	\$602,381
Guest artist spending	\$ 132,390	2%	\$ 0	\$146,100
Total	\$6,336,821	99%		

Table II-4

Columbus SMSA estimated audiences and spending by examined institutions

Institution	Audience			Institution total
	Local	Nonlocal	Nonlocal (sole reason)	
Ballet Metropolitan	22,178	3,610	2,244	25,788
Center of Science and Industry	159,050	53,016	13,996	212,066
Columbus Association for the Performing Arts	201,763	47,327	41,832	249,090
Columbus Museum of Art	71,412	11,625	3,238	83,037
Columbus Symphony Orchestra	101,670	7,653	5,248	109,323
Players Theatre of Columbus	18,831	785	412	19,616
Total	574,904	124,016	66,970	698,920

Guest artist spending. Each year, cultural institutions contract with nonresident designers, directors, conductors, featured soloists, and touring groups. These nonresident "guest artists" were reported to have spent a total of \$132,390 locally. No attempt has been made to estimate spending by guest artist entourage.

Audience spending. Decisions regarding the handling of audience data can have a major impact on economic effect estimates. This study's conservative approach was to include the ancillary spending of visitors only if attendance at the arts event was their sole reason for being in the community. This protocol is discussed in Chapter I. At some institutions, however, sole-reason visitors are only a small percentage of total visitor attendance and spending. Many visitors indicated that they had planned ahead of time to attend a cultural activity although that was not the sole reason for their visit. Table II-4 presents a summary of audience data for Columbus.

Audience spending		
Local	Nonlocal	Nonlocal (sole reason)
\$ 63,651	\$ 10,679	\$ 32,314
\$ 324,462	\$ 2,593,414	\$ 201,542
\$ 663,800	\$ 2,315,122	\$ 602,381
\$ 195,669	\$ 568,667	\$ 46,627
\$ 359,911	\$ 374,366	\$ 75,571
\$ 61,577	\$ 38,400	\$ 5,933
\$1,699,070	\$6,066,561	\$964,368

Table II-5

Columbus SMSA audiences of examined institutions by residence and spending

	Average for all institutions	Single institution range	
		Lowest	Highest
Audience residence			
In Columbus	47.3%	43.9%	53.6%
Outside Columbus but in SMSA	35.0%	31.2%	42.4%
Outside SMSA	17.7%	4.0%	24.9%
Audience spending			
Percent of local audience reporting	72.0%	53.0%	80.0%
Per capita spending	\$ 2.90	\$2.04	\$3.54
Sole reason nonlocal audience per capita spending	\$14.40	---	---
Not sole reason nonlocal audience per capita spending	\$89.44	---	---

*Due to small sample sizes, analysis of nonlocal audience data was not conducted by individual institutions.

An estimated 124,016 visitors from outside the SMSA attended the examined institutions during fiscal 1978. They comprised from 4 percent to 24.9 percent of total attendance, depending on the institution. Of these visitors, 66,970 are estimated to have visited Columbus specifically to attend the institutions under study.

As seen in Table II-5, local audiences spent sums ranging from an average of \$2.04 to \$3.54 per person for items such as meals and parking. During fiscal 1978, local audiences are conservatively estimated to have spent about \$2.90 per capita, or \$1,669,070 over and above admission fees.

As shown in Table II-6, many other visitors expected to attend while visiting Columbus, but it was not their sole reason. Visitors from outside the SMSA are of special interest inasmuch as their spending represents "new" dollars, money which had not been in the community until that time. Across all examined institutions, nonlocal sole-reason visitors traveled a mean of sixty-three miles and reported per capita expenditures of \$14.40, resulting in total expenditures of \$964,368 that can be conservatively attributed to the drawing power of the examined

cultural activities. Persons for whom attendance at the cultural institutions was not the sole reason for visiting the community traveled a mean of sixty-eight miles and spent \$89.44 per capita, totaling \$5,102,194. One reason for this large difference is that in the sole-reason group only 5 percent stayed at hotels for a mean of 0.26 nights, whereas in the non-sole-reason group 19 percent stayed at hotels for a mean of 4.06 nights.

Table II-6 Columbus SMSA nonlocal audiences by examined institutions

Institution	Audience sample size	Nonlocal proportion of total audience	Proportion of nonlocal who expected to attend	Proportion of nonlocal who were sole-reason
Ballet Metropolitan	497	14.1%	85.2%	62.3%
Center of Science and Industry	516	24.9%	60.2%	26.6%
Columbus Association for the Performing Arts (Ohio Theatre)	531	18.8%	93.6%	88.5%
Columbus Museum of Art	369	13.8%	70.2%	27.7%
Columbus Symphony Orchestra	504	7.2%	89.3%*	67.9%*
Players Theatre of Columbus	476	4.0%	88.2%*	52.9%*

*Because of relatively small nonlocal audience, these data should be treated with caution.

Table II-7

**Columbus SMSA
estimated secondary
economic effects
of examined institutions**

Secondary business volume generated by institution-related direct effects	\$10,539,968
Secondary personal incomes generated by institution-related direct effects (excluding \$2,045,981 in salaries to organizational employees)	\$ 4,044,301
Secondary full-time jobs in the Columbus SMSA attributable to institution-related direct effects (excluding 123 full-time organizational employees)	574
Initial expansion of the local credit base	\$ 3,221,487
Current value of backup inventory, equipment, and property	\$ 4,442,864

Secondary economic effects

Direct-effect spending leads to secondary effects when the institution-related expenditures within the community are in turn resented by local firms and households. The study estimates the level of five secondary effects of institution-related spending in 1978. Responding of initial dollars introduced into the local economy is estimated to result in \$10,539,968 in local secondary business volume. Of this amount, an estimated \$4,044,301 is paid out in wages to employees. This personal income represents 574 full-time jobs in the Columbus SMSA.

Additional secondary effects include an expansion of the local credit base due to deposits in local banks by the examined institutions, their employees, and the local businesses benefiting from institution-related direct effects. It is estimated that in fiscal 1978 average monthly balances in business and employee savings and checking accounts totaled \$3,419,777. When reduced by federal and state cash reserve requirements, this allows an initial expansion of the credit base totaling \$3,221,487.

Finally, area firms benefiting from institution-related direct and secondary business activity are estimated to have invested \$4,442,864 in plant, inventory, and equipment in support of this business volume. This represents the fiscal 1978 value of these assets, not expenditures made in fiscal 1978; a portion of the assets may, however, have been acquired in that year. Expenditures were not necessarily made with local firms. Table II-7 presents estimates for each of the secondary effects discussed above.

Table II-8

Columbus SMSA examined institutions by sources of government support

	Federal	State	Local	Total
	\$ 1,375	\$ 7,300	\$ 3,000	\$ 11,675
	---	---	\$30,000	\$ 30,000
	---	\$23,800	\$ 6,000	\$ 29,800
	\$ 50,000	\$27,328	\$32,350	\$109,678
	\$ 70,500	\$29,550	\$12,695	\$112,745
	---	\$ 6,100	\$ 4,282	\$ 10,382
Total	\$121,875	\$94,078	\$88,327	\$304,280

Government revenues and expenditures

In addition to estimating the direct and secondary effects on businesses and individuals attributable to the examined institutions, this study has sought to estimate the effect on local Columbus government revenues and expenditures in fiscal 1978. Local governmental revenues examined include real estate taxes paid to metropolitan area jurisdictions by the examined institutions and their employee households, as well as a portion of property taxes paid by businesses benefiting from institution-related direct effects. Estimates were also made of local sales and income tax revenues attributable to institution-related direct effects. Additional governmental revenues identified include local hotel taxes, gasoline taxes, and parking revenues.

Estimates of costs to local governments in the Columbus SMSA are based on estimates of local governmental operating costs associated with the provision of services to employee households including the cost of public instruction for households with children in the public schools. (No estimate has been made of the costs associated with services to the institutions themselves.) Government expenditures in support of the examined institutions

included grants, operating subsidies, and service contracts; they are presented in Table II-8. Foregone property taxes are estimated at \$171,391 in fiscal 1978.

Table II-9 Columbus SMSA
estimated revenues and costs
to local government
related to examined institutions

Revenues	
Real estate taxes paid by institutions, employees, and business property serving them	\$221,585
Locally retained sales tax on institution-related business volume	\$ 5,521
Local income tax revenues attributable to institutional employees and their households	\$ 51,215
State aid to local governments attributable to institutional employee households	\$ 11,898
Hotel taxes	\$ 2,251
Gasoline tax	\$ 4,948
Parking revenues, estimated	\$ 83,833
Total	\$381,251
Costs	
Operating costs of local governments and schools for services to employee households	\$157,022
Grants to study institutions	\$ 88,327
Total	\$245,349

Table II-9 summarizes institution-related governmental revenues and costs. Included as costs are local governmental grants and fees for services. In reviewing Table II-9, bear in mind the limited nature of this analysis. No information is available by which to judge whether or not the identified effects on business, individuals, and government are typical of the broader universe of all Columbus area cultural institutions. The tax effects shown are specific to the examined mix of institutions.

Revenues to local government include real estate taxes and taxes on business property devoted to servicing the institutions. Income taxes, sales taxes, local hotel taxes, gasoline taxes, state aid to local governments, and parking revenues totaled \$381,251 in local government revenues attributable to the examined institutions. An employee survey indicates that employees at the examined institutions contribute to both costs and revenues of government. They live in the city of Columbus or elsewhere in Franklin County, and approximately 38 percent of them pay taxes as homeowners; they report a total of twenty-five children in local public schools.

Sales, income, and property tax estimates are undoubtedly conservative inasmuch as no estimate has been made of taxes paid by individuals benefiting from institution-related secondary effects. In addition, no attempt has been made to assess the incidental effects of institutional activities on surrounding taxable property values, which may be positive or negative. Finally, no attempt has been made to assess the governmental costs or benefits associated with the more subtle effects discussed in the overview.

Costs to local government included operating costs of local governments and schools and local government grants to the examined institutions for a total cost to local government of \$245,349. As noted above, this does not include additional costs that may be associated with specific governmental services to the examined institutions.

CHAPTER III

THE MINNEAPOLIS/ST. PAUL ECONOMY AND ARTS AND CULTURAL INSTITUTIONS

The following institutions in the Minneapolis/St. Paul Standard Metropolitan Statistical Area or SMSA were selected for study by the Twin Cities Metropolitan Arts Alliance:

Children's Theatre Company
Chimera Theatre
Cricket Theatre
Guthrie Theatre
Minneapolis Institute of Arts
Minnesota Dance Theatre
Minnesota Orchestral Association
St. Paul Chamber Orchestra
Walker Art Center
The Science Museum of Minnesota

These represent a range of organizational types and include some of the more well-known local institutions. Their selection resulted from locally initiated efforts to identify interested organizations.

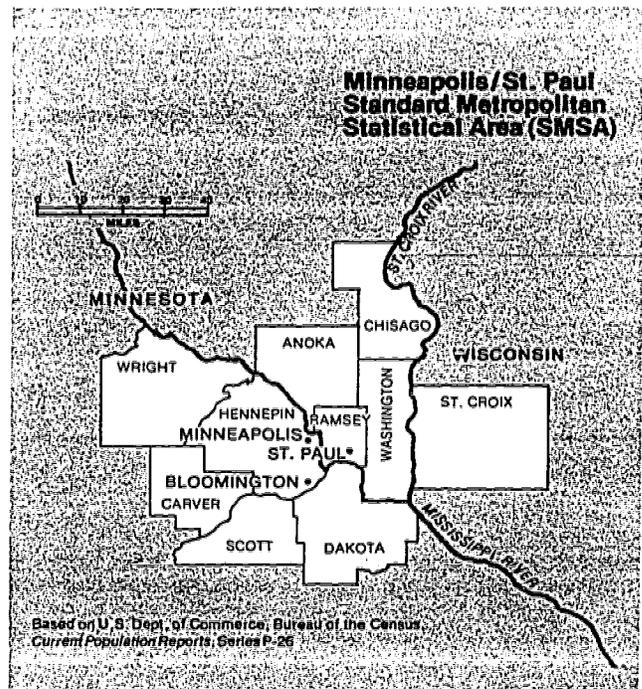
The examined activities repeatedly demonstrate the importance of committed groups and individuals in local cultural development. The successful completion of the Minneapolis/St. Paul project was due to the efforts of a number of persons, including the principal project staff of the Metropolitan Arts Alliance. William Driver, managing director of the Alliance, served as study director, also coordinator of the day-to-day tasks. Dr. Julien L. Phillips assisted in the coordination of requisite audience studies. Other staff persons and volunteers who actively participated in the project are identified at the end of this report.

Minneapolis/St. Paul institutions

Chimera Theatre came into existence in 1969 through the purchase of the remaining assets of the defunct Eastside Theatre. The Chimera Theatre held 290 performances in 1978-79 and also over fifty educational classes.

The Minnesota Dance Theatre and School was founded in 1961 as The Contemporary Dance Playhouse by choreographer and artistic director Loyce Houlton. It is now the largest dance organization in the Midwest with twenty professional dancers, 3,600 students, and thirty dance works in repertoire.

The Guthrie Theatre opened in 1963, largely due to the efforts of Oliver Rea, Peter



Zeisler, and Sir Tyron Guthrie, marking the start of the regional professional theatre movement. In 1979 the Guthrie presented a total of twenty-one performances and presentations, and 473 workshops and classes.

The Minneapolis Society of Fine Arts was established in 1883, and created the Minneapolis Institute of Arts (MIA) in 1915. The original museum building was completed in 1915; a new wing was added in 1927, and the building again expanded in 1974. Its current collection numbers over sixty thousand works of art and presents a broad range of community education programs.

In 1961 the Moppet Players launched the first full-time theatre for children in Minnesota. In 1965 the Moppet Players became the Children's Theatre Company of MIA, and in 1973 became a member of the Minneapolis Society of Fine Arts (along with MIA and the Minneapolis College of Art and Design). In 1975 the theatre company became fully independent.

The St. Paul Chamber Orchestra was founded in 1967 and consists of twenty-six full-time professional musicians and two conductors.

The Cricket Theatre was founded by Bill Semons in 1971. At the time of the study, the Cricket Theatre was operating out of

Table III-1

Minneapolis/St. Paul SMSA demographics

Age (1977)		Education (1970)	
18-24	14.6%	Less than 5 years	1.7%
25-34	18.2%	4 years of high school or more	66.1%
35-49	15.7%	4 years of college or more	14.8%
50 and over	21.3%		
Median age	27.9	Median education	12.4

a converted movie theatre in northeast Minneapolis. Since then, it has moved into new quarters at the Hennepin Center for the Arts. The Cricket Theatre is dedicated to bringing new plays to the Minneapolis/St. Paul area.

The Science Museum of Minnesota traces its beginnings to 1907 when a small group of St. Paul businessmen, headed by Charles W. Ames, met to discuss the "intellectual and scientific growth of St. Paul." Ames proposed a series of free lectures and Thomas Irvine pledged financial support. The St. Paul Institute of Arts and Letters was born, and later became The Science Museum of Minnesota. In 1927 the museum moved to the Merriam mansion on Capitol Hill, and in 1965, needing new space, it moved into a new building at 30 East Tenth Street. In 1978 The Science Museum opened its own new building across the street on Wabasha. The Science Museum also maintains a planetarium and exhibit hall in the Minneapolis Public Library, Lee and Rose Warner Nature Center near Marine-on-the-St. Croix, and Metcalf Natural History Study Center at Afton.

Walker Art Center began as a gallery that exhibited the extensive private collection of paintings and prints, begun in 1874, of Thomas Barlow Walker. In 1879, Walker built the first public art gallery in the Midwest. By the 1920s the T. B. Walker Art Galleries had expanded to cover nearly a city block as the Walker Art Center, which was sup-

ported by an annual operating grant from the T.B. Walker Family Foundation. Since by the 1970s many of Walker's descendants had left Minnesota, the art center was put under the control of a board of directors drawn from the Minneapolis/St. Paul community. In 1976, the foundation transferred the bulk of the assets of the art center to the board of directors, which launched a major endowment fund drive.

The Minnesota Orchestra was founded in 1903 as the Minneapolis Symphony Orchestra. The ninety-five-member orchestra is world-renowned and currently presents a fifty-two-week season with performances in the Minnesota cities of Minneapolis, St. Paul, St. Joseph, and Rochester.

Minneapolis/St. Paul economy and the broader cultural community

An examination of the economy and broader cultural community of the Twin Cities and SMSA of Minneapolis/St. Paul contributes to an understanding of the effects ascribed to the eight examined arts institutions. Table III-1 presents market data such as Effective Buying Income (EBI), a measure of the buying power of households after government deductions for taxes, social insurance, and lesser items; it also shows age, education, population, and income information.

The Minneapolis/St. Paul SMSA consists of Hennepin, Ramsey, Anoka, Dakota, Washing-

Population (selected years)	
1960	1,482,030
1970	1,965,391
1975	2,010,841
1977	2,042,900

Population change	
1960-1970	23.0%
1970-1975	3.2%

Household income (1977)	
\$8,000-\$9,999	5.5%
\$10,000-\$14,999	17.1%
\$15,000-\$24,999	37.3%
\$25,000 and over	20.9%

1977 median household income	\$16,915
1969 median household income	\$11,682
Average annual change in per capita income 1969-74	7.7%

ton, Wright, Scott, Carver, and Chisago counties in Minnesota and St. Croix county in Wisconsin. In this study, the terms "local," "the Minneapolis/St. Paul metropolitan area," "the Minneapolis/St. Paul region," and "Twin Cities SMSA" are used interchangeably to identify the Minneapolis/St. Paul SMSA, and figures are for 1978, unless otherwise specified. The 1978 population of the nine Minnesota counties of the SMSA was estimated to be 2,063,770, and the SMSA business volume \$22,015,371,080.

In 1977, the Twin Cities SMSA ranked fifteenth in the nation in population with 2,042,900, up from seventeenth in 1970 with 1,965,391 (Sales and Marketing Management, Vol. 121; No. 2, July 24, 1978, pp. 6-115).

The history of the area dates to the late seventeenth century, when explorers passed through the site of St. Paul. By 1805 an unofficial treaty with the Sioux had been made. St. Paul was incorporated in 1854, and Minneapolis was chartered as a city in 1867.

Minneapolis's first major industries were based on water power: sawmills and flour mills. St. Paul developed as a commercial center, particularly for the fur trade. Banking and railroading developed quickly in St. Paul, as did the manufacture of boots and shoes. Minneapolis advanced from a flour milling center to become the country's primary wheat market.

Unless otherwise noted, the following information is taken largely from the Greater Minneapolis Chamber of Commerce's publication, Profile—Economic and Demographic Information on the Minneapolis/St. Paul Metropolitan Area (Fall, 1978).

In 1976 there were 38,457 firms in the SMSA, of which 3,375 were involved in manufacturing, 4,114 in wholesale trade, 9,769 in retail trade, and 11,046 in services. Twenty-eight of the manufacturing firms, four of the retail firms, and fourteen of the service firms each employed more than one thousand people. In 1976, manufacturing accounted for 30 percent of the employed work force with services accounting for 31.5 percent, retail trade 25.3 percent, and wholesale trade 10 percent. Fortune (May and June 1978) listed thirteen Twin Cities companies among its top 500 and eleven others in its second 500 industrial companies ranked by sales. Thirteen Twin Cities companies were listed by Fortune (July 1978) among the largest nonindustrial corporations in the nation. Well-known firms such as Control Data, Honeywell, Univac (Division of Sperry Rand), 3M, General Mills, and Pillsbury started here and continue to grow. In the past twenty-five years Control Data has grown from infancy to a corporation employing over ten thousand people locally.

The growth of the electronics and related science industries in Minnesota has been

spectacular. Early in 1955 there were eighty-nine such firms employing slightly over 26,000 people; by the end of 1967 there were 159 companies employing over 87,000 people, an employment growth of 237 percent. A recent study by the Minnesota Department of Economic Development showed 93,600 persons employed in the electronics related industries.

These firms and others have helped make the Twin Cities one of the largest business centers between Chicago and the West Coast. The area is the distribution center for the upper Midwest. Minneapolis is also the headquarters for the Ninth Federal Reserve District Bank.

Business is attracted to Minneapolis/St. Paul for several reasons, including its geographic location and transportation services. The Twin Cities area is the hub of the upper Midwest's transportation network and is served by ten passenger airlines, six barge lines, three interstate bus lines, six freight railroads and Amtrak, and over one hundred truck lines. Minneapolis/St. Paul also has a strategic location at the head of navigation on the Mississippi River and the port now handles in excess of three million tons annually. The Twin Cities are the nation's seventh largest distribution center and the third largest trucking distribution center, while the Minneapolis/St. Paul airport is ranked second nationally for remaining open year around—over seven million travelers pass through each year.

Industrial development in the Minneapolis metropolitan area continues at a rapid pace.

Urban renewal projects, new office buildings, retail facilities, and shopping centers have totaled over \$500 million in the last ten years. In 1971, four of the largest office buildings were under construction: the fifty-seven-story IDS Center, the tallest building between Chicago and San Francisco; the Federal Reserve Bank Building; the Midwest Plaza; and the Peavey Building. The twin-towered Hennepin County Government Center was completed in 1974. Under construction at the time of this study were the First Minneapolis-Hines Pillsbury Center, a two-towered complex housing the new Pillsbury world headquarters and the First National Bank of Minneapolis; Northwestern National Bank's twenty million dollar computer center in the Gateway area; and Northwestern National Life Insurance Company's twenty-story companion tower to the company's home office building. Other companies expanding in the city include Honeywell, Lutheran Brotherhood, and Sears Roebuck and Company. In the spring of 1979, construction was expected to begin on the City Center project, a \$120 million complex which will feature a new Donaldson's department store, shopping complex, hotel, and the Northwestern Bank Tower.

The Twin Cities have also become a popular convention and tourism area. The 100,000-square-foot Minneapolis Exhibit Hall seats fourteen thousand people and there are 9,500 seats in the adjoining main auditorium. In 1977 Minneapolis was the site for 356 conventions bringing \$54 million into the area.

The cultural community includes thirty-seven art galleries, thirteen fine arts

Table III-2

Minneapolis/St. Paul SMSA selected businesses related to arts and culture

Businesses	Number	Employees	Payroll
Television-radio enterprises	155	881	\$ 8,479,000
Music and record stores	81	711	\$ 5,651,000
Book stores	59	279	\$ 1,575,000
Photography stores	30	221	\$ 1,368,000
Movie theatres (except drive-in)	50	1,245+	\$ 2,923,000+
Total	375	3,337+	\$19,996,000+

Table III-3

Minneapolis/St. Paul SMSA estimated direct economic effects of examined institutions

	Total	Percent of total direct spending	Single institution	
			Lowest	Highest
Local institution expenditures for goods and services	\$ 7,335,778	26%	\$141,137	\$1,622,068
Employee salaries and wages	\$10,852,362	38%	\$226,220	\$1,969,802
Local audience spending (other than ticket price)	\$ 7,339,916	26%	\$ 38,002	\$1,777,701
Sole-reason visitor spending	\$ 2,967,612	10%	\$ 11,374	\$1,111,746
Guest artist spending	\$ 104,223	---	\$ 0	\$ 35,991
Total direct spending	\$28,599,891	100%		

*Less than 1 percent.

museums and institutions, thirty-nine playhouses, and eighty-five movie theatres. There are a museum of natural history, many community and children's theatres, and fine libraries. Minneapolis/St. Paul is one of the six locations in the United States to host the Metropolitan Opera annually.

The examined institutions were selected from the many nonprofit arts and cultural organizations in the Twin Cities SMSA. Although these ten may perhaps typify the impact of various types of institutions, they do not represent the full share of locally available commercial and nonprofit activities. It is clear that the examined institutions do not exhaust the impact of the "cultural industry." For example, 1970 census data show a total of 7,048 employed writers, artists, and entertainers in the Twin Cities SMSA, excluding individuals employed in art galleries and other arts-related positions (Where Artists Live: 1970, Research Division Report #5, Washington: National Endowment for the Arts, 1977; see list at back of this report). Only 777 persons were employed full time at the examined institutions. The yellow pages of the Twin Cities metropolitan area telephone directory list over 2,600 enterprises which can be considered culture-related in the broadest sense. These range from music, art, and theatrical suppliers to book and record

dealers, design firms, and commercial photographers. Data on the impact of some elements of these cultural business sectors are available from the 1977 statistics in the U.S. Bureau of the Census County Business Patterns series. Table III-2 details various data on businesses used by the general public.

Direct economic effects

The direct economic effects of the examined institutions include local spending for goods and services, salaries and wages to local residents, and expenditures by guest artists and by local and nonlocal audiences. Table III-3 presents selected data on institution-related direct economic effects during fiscal 1978.

Local institutional expenditures for goods, services, and salaries. It is estimated that the examined institutions made 70 percent of their expenditures for goods and services with local vendors and that this totaled \$7,335,778. The percentage of nonlabor expenditures made locally by the examined institutions ranged from 55 percent to 99 percent. An additional \$10,852,362 was spent for salaries and wages to local households. No estimate has been made of the impact of additional earned and other income by institutional employee households; in some cases it was as high as 20 percent.

Table III-4

Minneapolis/St. Paul SMSA estimated audiences and spending by examined institutions

	Audience			Institution total
	Local	Nonlocal	Nonlocal (sole reason)	
	124,027	13,781	7,166	137,808
	111,497	7,117	629	118,614
	29,742	2,239	640	31,981
	336,252	84,063	42,032	420,315
	369,000	81,000	21,150	450,000
	10,920	697	430	11,617
	445,539	18,564	7,426	464,103
	33,571	1,399	455	34,970
	541,200	118,800	24,420	660,000
	388,076	47,964	7,849	436,040
	2,389,824	375,624	112,197	2,765,448

Guest artist spending. Each year, cultural institutions contract with nonresident designers, directors, conductors, featured soloists, touring groups, and others. These nonresident "guest artists" were reported to have spent a total of \$104,223 locally. No attempt has been made to estimate spending by guest artist entourage.

Audience spending. Decisions regarding the handling of audience data can have a major impact on economic effect estimates. This study's conservative approach was to include the ancillary spending of nonlocal visitors only if attendance at the arts event was their sole reason for being in the community. This protocol is discussed in Chapter I. At some institutions, however, sole-reason visitors are only a small percentage of total visitor attendance and spending. Many visitors indicated that they had planned ahead of time to attend, although that was not the sole reason for their visit. Table III-4 presents a summary of audience data for Minneapolis/St. Paul.

An estimated 375,624 visitors from outside the SMSA attended the examined institutions during fiscal 1978. They comprised from 4.2 percent to 20.5 percent of total attendance depending on the institution. Of these visitors, 112,197 are estimated to have visited the Twin Cities specifically to attend the institutions under study.



Table III-5

Minneapolis/St. Paul SMSA audiences of examined institutions
by residence and spending

	Average for all institutions	Single institution range	
		Lowest	Highest
Audience residence			
In Minneapolis/St. Paul	41.3%	31.1%	59.8%
Outside Minneapolis/St. Paul but in SMSA	45.1%	29.7%	57.6%
Outside SMSA	13.6%	4.2%	20.5%
Audience spending			
Percent of local audience reporting	71.0%	46.0%	86.0%
Per capita spending	\$ 3.07	\$2.13	\$3.99
Sole-reason nonlocal audience per capita spending	\$26.45	---*	---*
Not sole-reason nonlocal audience per capita spending	\$69.54	---*	---*

*Due to small sample sizes, analysis of nonlocal audience data was not conducted by individual institutions.

As seen in Table III-5, local audiences spent sums ranging from an average of \$2.13 to \$3.99 per person per visit for items such as meals and parking. During fiscal 1978, local audiences are conservatively estimated to have spent \$7,339,916 over and above admission fees.

One reason for this large difference in expenditures is that in the sole-reason group 18 percent stayed at hotels for a mean of 0.77 nights, whereas in the non-sole-reason group 20 percent stayed at hotels for a mean of 4.29 nights.

As shown in Table III-6, many other visitors expected to attend while visiting the Twin Cities, but it was not their sole reason. Visitors from outside the SMSA are of special interest inasmuch as their spending represents "new" dollars, money which had not been in the community until that time. Across all examined institutions, nonlocal sole-reason visitors traveled a mean of seventy-seven miles to attend and reported per capita expenditures of \$26.45, resulting in total expenditures of \$2,967,610 that can be conservatively attributed to the drawing power of the examined cultural activities. Persons for whom attendance at the cultural institutions was not the sole reason for visiting the community traveled a mean of seventy-three miles and spent \$69.54 per capita, totaling \$18,318,714.

Table III-6 Minneapolis/St. Paul SMSA nonlocal audiences by examined institutions

Institution	Audience sample size	Nonlocal proportion of total audience	Proportion of nonlocal who expected to attend	Proportion of nonlocal who were sole-reason
Children's Theatre Company	461	10.3%	81.8%	52.3%
Chimera Theatre	638	6.0%	35.3%	8.8%
Cricket Theatre	646	7.3%	65.9%	29.3%
Guthrie Theatre	892	20.5%	91.6%	50.0%
Minneapolis Institute of Arts	427	17.7%	75.3%	26.0%
Minnesota Dance Theatre	450	6.1%	96.2%*	61.5%*
Minnesota Orchestral Association	1,013	4.3%	88.6%	40.0%
St. Paul Chamber Orchestra	931	4.2%	77.1%	31.4%
The Science Museum of Minnesota	828	18.2%	61.4%	20.7%
Walker Art Center	524	11.0%	70.4%	16.7%

*Because of relatively small nonlocal audience, these data should be treated with caution.

Table III-7

**Minneapolis/St. Paul SMSA
estimated secondary
economic effects
of examined institutions**

Secondary business volume generated by institution-related direct effects	\$57,211,537
Secondary personal incomes generated by institution-related direct effects (excluding \$10,852,362 in salaries to organization employees)	\$21,720,604
Secondary full-time jobs in the St. Louis SMSA attributable to institution-related direct effects (excluding 777 full-time organizational employees)	3,053
Initial expansion of the local credit base	\$ 6,849,136
Current value of backup inventory, equipment, and property	\$15,837,042

Secondary economic effects

Direct-effect spending leads to secondary effects when the institution-related expenditures within the community are in turn respent by local firms and households. The study estimates the level of five secondary effects of institution-related spending in 1978. Respending of initial dollars introduced into the local economy is estimated to result in \$57,211,537 in local secondary business volume. Of this amount, an estimated \$21,720,604 is paid out in wages to employees. This personal income represents 3,053 full-time jobs in the Minneapolis/St. Paul SMSA.

Additional secondary effects include an expansion of the local credit base due to deposits in local banks by the examined institutions, their employees, and the local businesses benefiting from institution-related direct effects. It is estimated that in fiscal 1978 average monthly balances in business and employee savings and checking accounts totaled \$7,576,561. When reduced by federal and state cash reserve requirements, this allows an initial expansion of the credit base totaling \$6,849,136.

Finally, area firms benefiting from institution-related direct and secondary business activity are estimated to have invested \$15,837,042 in plant, inventory, and equipment in support of this business volume. This represents the fiscal 1978 value of these assets, not expenditures made in fiscal 1978; a portion of the assets may, however, have been acquired in that year. Expenditures were not necessarily made with local firms. Table III-7 presents estimates for each of the secondary effects discussed above.

Government revenues and expenditures

In addition to estimating the direct and secondary effects on businesses and individuals attributable to the examined institutions, this study has sought to estimate the effect on local Minneapolis/St. Paul government revenues and expenditures in fiscal 1978.

Table III-8

Minneapolis/St. Paul SMSA examined institutions by sources of government support

Institutions	Federal	State	Local	Total
Chitka, Inc. (Insurance Company)	\$ 37,500	\$ 75,000	\$ 8,000	\$ 120,500
Chitka, Inc. (Insurance Company)	---	---	\$18,500	\$ 18,500
Chitka, Inc. (Insurance Company)	\$ 7,500	\$ 14,000	---	\$ 21,500
Chitka, Inc. (Insurance Company)	\$155,000	\$117,285	\$ 6,000	\$ 278,285
Chitka, Inc. (Insurance Company)	\$119,534	\$107,450	---	\$ 226,984
Chitka, Inc. (Insurance Company)	\$ 16,162	\$ 44,030	---	\$ 60,192
Chitka, Inc. (Insurance Company)	\$160,000	\$170,000	\$ 8,000	\$ 338,000
Chitka, Inc. (Insurance Company)	\$ 80,000	\$ 67,795	\$30,000	\$ 177,795
Chitka, Inc. (Insurance Company)	---	---	---	---
Chitka, Inc. (Insurance Company)	\$214,245	\$ 85,295	\$ 7,000	\$ 306,540
Total	\$789,941	\$680,855	\$77,500	\$1,548,296

Table III-9

**Minneapolis/St. Paul SMSA
estimated revenues and costs
to local government
related to examined institutions**

Revenues	
Real estate taxes paid by the arts institutions, their employees, and business property serving the institutions	\$1,483,786
Admissions tax	\$ 171,101
Local income tax revenues attributable to institutional employees and their households	\$ 0
State aid to local governments attributable to institutional employee households	\$ 195,710
Transient lodging tax	\$ 7,148
Gasoline tax	\$ 31,576
Parking revenues, estimated	\$ 246,019
Total	\$2,135,340
Costs	
Operating costs of local governments and schools for services to employee households	\$1,069,025
Grants to study institutions	\$ 77,500
Total	\$1,146,525

Estimates of costs to local governments in the Twin Cities area are based on estimates of local governmental operating costs associated with services to employee households, including the cost of public instruction for households with children in the public schools but excluding costs associated with services to the institutions themselves. Table III-9 summarizes institution-related governmental costs and revenues. Included as costs are local governmental grants and fees for services. In reviewing Table III-9, the limited nature of this analysis should be kept in mind. No information is available by which to judge whether or not the identified effects on business, individuals, and government are typical of the broader universe of Twin Cities area cultural institutions. The tax effects shown are specific to the examined mix of institutions.

Revenues to local government include real estate taxes, taxes on business property devoted to servicing the institutions, admission taxes, local hotel taxes, gasoline taxes, state aid to local governments, and parking revenues. These totaled \$2,135,340 in local government revenues attributable to the examined institutions. An employee survey indicates that employees at the examined institutions contribute to both costs and revenues of government. They live in the Twin Cities or in Hennepin County, and approximately 37 percent of them pay taxes as homeowners; they report a total of 179 children in local public schools.

Sales, income, and property tax estimates are undoubtedly conservative inasmuch as no estimate has been made of taxes paid by individuals benefiting from institution-related secondary effects. In addition, no attempt has been made to assess the incidental effects of institutional activities on surrounding taxable property values, which may be positive or negative. Finally, no attempt has been made to assess the governmental costs or benefits associated with the more subtle effects that may result from the arts, which are discussed in the overview.

Costs to local government included operating costs of local governments and schools and local government grants to the examined institutions for a total cost to local government of \$1,146,525. As noted earlier, this does not include additional costs that may be associated with specific governmental services to the examined institutions.

CHAPTER IV

THE ST. LOUIS ECONOMY AND ARTS AND CULTURAL INSTITUTIONS

The following institutions in the St. Louis Standard Metropolitan Statistical Area or SMSA were selected for study by the Arts and Education Council of Greater St. Louis:

St. Louis Art Museum
St. Louis Conservatory and School
for the Arts (CASA)
St. Louis Symphony Orchestra
Missouri Botanical Garden
McDonnell Planetarium
Loretto-Hilton Repertory Theatre
Museum of Science and Natural History
Dance Concert Society

These represent a range of organizational types and include some of the more well-known local institutions. Their selection resulted from locally initiated efforts to identify interested organizations.

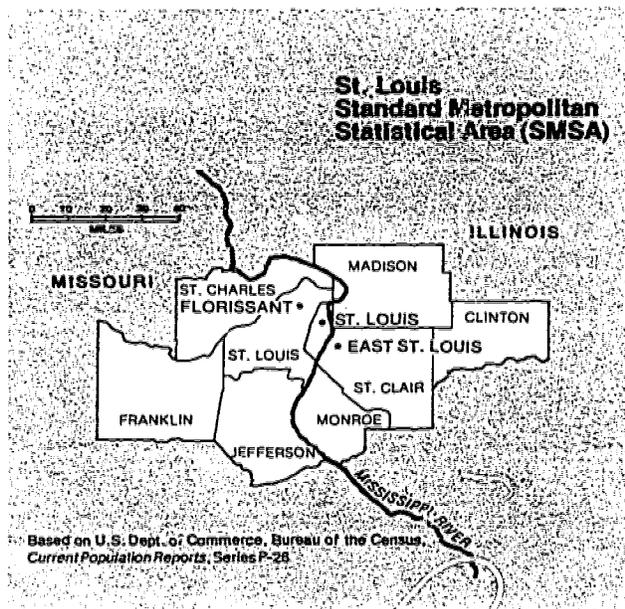
The successful completion of the St. Louis project was due to the efforts of a number of persons, including the principal project staff of the Arts and Education Council. Richard Tombaugh, executive director of the Council, served as study director and Joseph Davis, of Resources Management, Inc., was responsible for coordinating the day-to-day tasks. Other staff persons and volunteers who actively participated in the project are identified at the end of this report.

St. Louis institutions

CASA was founded in 1974 as the result of a merger between a college-level institute (the St. Louis Institute of Music) and an inner-city community school (the Community Music School). In 1977-78 CASA had an enrollment at four branches of more than 1,200 students who received instruction in music, voice, dance, drama, and art.

The Missouri Botanical Garden opened to the public in 1859, largely due to the vision of Henry Shaw, a retired businessman. The first botanical garden in the United States, it considers research, education, and display to be its three primary functions. The library at the Missouri Botanical Garden is considered among the top four or five botanical libraries in the world.

The Dance Concert Society was founded in 1966 to sponsor nationally and internationally acclaimed contemporary dance companies in performance. The society's scope has



widened recently to include the sponsorship of extended educational residencies of four or more companies each year.

The Loretto-Hilton Center was opened by Webster College in 1966. The first professional theatrical company produced by Webster College incurred large debts, and was closed after four years of operation. The theatre reopened in 1971 as an independent nonprofit corporation under an arrangement that allows the theatre to use college-owned facilities. In addition to the main-stage program, this professional repertory theatre also produces a touring company that performs for students in elementary and junior high schools, and for immobilized senior citizens.

The St. Louis Symphony Orchestra, the nation's second oldest major orchestra, is ranked among the best in the United States. The symphony's permanent home is Powell Symphony Hall, formerly the St. Louis Theatre, remodeled in 1968. During the 1977-78 season there were fifty regular subscription concerts, fifteen pops concerts, ten special Christmas concerts, forty-five educational concerts for children and young adults, and a six-concert baroque orchestra series, all held in Powell Hall. The symphony presented an additional fifty concerts in the area, and toured in thirty-one cities.

The St. Louis Art Museum was founded in 1907. It is now a subdistrict of the Metropolitan Zoological Park and Museum

Table IV-1

St. Louis SMSA demographics

Age (1977)		Education (1970)	
18-24	12.2%	Less than 5 years	4.3%
25-34	15.6%	4 years of high school or more	48.0%
35-49	16.7%	4 years of college or more	10.1%
50 and over	24.9%		
Median age	29.7	Median education	11.7

District established in 1971 by an act of the Missouri State Legislature. The museum is well-known for its galleries of primitive and pre-Columbian art.

The Museum of Science and Natural History is another subdistrict of the Metropolitan Museum and was founded in 1972.

The McDonnell Planetarium was financed by a 1956 bond issue, and opened to the public in 1963. Currently, the planetarium is also a subdistrict of the Metropolitan Zoological Park and Museum District.

St. Louis economy and the broader cultural community

An examination of the economy and broader arts community of the city and SMSA of St. Louis contributes to an understanding of the effects ascribed to the eight examined arts institutions. Table IV-1 presents useful market data such as the Effective Buying Income (EBI), a measure of the buying power of households after government deductions for taxes, social insurance, and lesser items; it also shows age, education, population, and income information. The St. Louis SMSA consists of the city of St. Louis; the Missouri counties of Franklin, Jefferson, St. Charles, and St. Louis; and the Illinois counties of Clinton, Madison, Monroe, and St. Clair. In this study,

the terms "local," "the St. Louis metropolitan area," and "the St. Louis region" are used interchangeably to identify the St. Louis SMSA. In 1977 the St. Louis SMSA ranked twelfth in the nation with a population of 2,378,000. This represented a 1.3 percent drop from 1970, when the St. Louis SMSA ranked tenth with a population of 2,410,884 (County and City Data Book 1977, U.S. Dept. of Commerce, Census Bureau, pp. 578, 696). The estimated population in 1978 was 2,453,000 (Mark Twain Bancshares).

Situated on the banks of the Mississippi River close to the mouth of the Missouri River, St. Louis was founded as a French fur-trading post in 1764. The town later passed into Spanish and finally American ownership. In the early nineteenth century, St. Louis became the primary staging point for pioneers moving west.

The St. Louis business community had fourteen Forbes 500 firms listed (May 1978) for sales, with twelve St. Louis firms in the top 500 for assets. Fortune (May/June 1978) cited twenty St. Louis industrial firms among the nation's top one thousand industries in 1977.

The area's industrial sector provides the greatest number of local jobs. In particular, the automobile industry is a major

Population (selected years)		Household income (1977)	
1960	2,060,103	\$8,000-\$9,999	5.4%
1970	2,410,884	\$10,000-\$14,999	16.6%
1975	2,366,542	\$15,000-\$24,999	34.9%
1977	2,378,000	\$25,000 and over	22.3%
<u>Population change</u>		1977 median household income	\$15,876
1960-1970	+12.4%	1969 median household income	\$10,504
1970-1975	-1.7%	Average annual change in per capita income 1969-74	7.3%

employer. At the time of this study, Chrysler Corporation and General Motors each employed more than five thousand persons, while Ford Motor Company and a motor vehicle parts corporation, A.C.F. Industries, each employed more than three thousand. Electrical and energy-related companies were also major employers. Emerson Electric Company, Union Electric Company, Southwestern Bell Telephone Company, and Olin Corporation each employed more than five thousand persons, while McGraw-Edison Corporation employed more than three thousand. Other major employers included Famous-Barr, Sears Roebuck and Company, McDonnell-Douglas Corporation, Monsanto Company, and Washington University. In all, there were ninety-six organizations that each employed one thousand or more workers (Large Employers of Metro St. Louis 1979, Business Information Center, St. Louis Regional Commerce and Growth Association). The broad scope of arts activities available in greater St. Louis is indicated by the large number of institutions, a total of 116, that belong to the Arts and Education Council of Greater St. Louis. These institutions range from music and theatre groups to a public radio station and a sculpture garden. The SMSA has ten colleges and universities as well as five community colleges (The Arts and Education Council of Greater St. Louis: 1977 Annual Report, St. Louis, Mo.).

The examined institutions were selected from the many nonprofit arts and cultural organizations in the St. Louis SMSA. Although these eight may perhaps typify the impact of various kinds of institutions, they do not represent the full range of locally available commercial and nonprofit activities. It is clear that the examined institutions do not exhaust the impact of the "cultural industry." For example, census data for 1970 show a total of 5,765 employed writers, artists, and entertainers in the St. Louis SMSA, excluding individuals employed in art galleries and other arts-related positions (Where Artists Live: 1970, Research Division Report #5. Washington: National Endowment for the Arts, 1977; see list at the back of this report). Only 510 persons were employed full time at the examined institutions. The yellow pages of the St. Louis metropolitan area telephone directory list over one thousand enterprises which can be considered culture-related in the broadest sense. These range from music, art, and theatrical suppliers to book and record dealers, design firms, and commercial photographers.

Data on the impact of some elements of these cultural business sectors are available from the 1977 statistics in the U.S. Bureau of the Census County Business Patterns series. Table IV-2 details data on businesses used by the general public.

Direct economic effects

The direct economic effects of the examined institutions include local spending for goods and services, salaries and wages to local residents, and expenditures by guest artists and by local and nonlocal audiences. Table IV-3 presents selected data on direct effects during fiscal 1978.

Local institutional expenditures for goods, services, and salaries. It is estimated that the examined institutions made 82 percent of their expenditures for goods and services with local vendors and that this totaled \$5,248,714. The percentage of nonlabor expenditures made locally by the examined institutions ranged from 43 percent to 95 percent. An additional \$7,652,004 was spent for salaries and wages to local households. No estimate has been made of the impact of additional earned and other income by institutional employee households, which in some instances was as high as 15 percent.

Guest artist spending. Each year, cultural institutions contract with nonresident designers, directors, conductors, featured soloists, touring groups, and others. These nonresident "guest artists" were reported to have spent a total of \$119,576 locally. No attempt has been made to estimate spending by guest artist entourage.

Table IV-2 St. Louis SMSA selected businesses related to arts and culture

Businesses	Number	Employees	Payroll
Television-radio enterprises	116	513	\$ 4,531,000
Music and record stores	62	413	\$ 2,520,000
Bookstores	35	238	\$ 1,338,000
Photography stores	32	208	\$ 1,118,000
Movie theatres (except drive-ins)	46	626+	\$ 2,251,000+
Total	291	1,998+	\$11,758,000+

Table IV-3

St. Louis SMSA estimated direct economic effects of examined institutions

	Total	Percent of total direct spending	Single institution	
			Lowest	Highest
Local institution expenditures for goods and services	\$ 5,248,714	25%	\$60,600	\$1,414,789
Employee salaries and wages	\$ 7,652,004	37%	\$50,043	\$3,490,612
Local audience spending (other than ticket price)	\$ 6,600,197	32%	\$ 7,326	\$1,259,028
Sole-reason visitor spending	\$ 1,290,134	6%	\$ 2,472	\$ 101,313
Guest artist spending	\$ 119,576	---*	\$ 0	\$ 56,980
Total	\$20,910,625	100%		

*Less than 1 percent.

Table IV-4

St. Louis SMSA estimated audiences and spending by examined institutions

Institution	Audience			Institution total
	Local	Nonlocal	Nonlocal (sole reason)	
Dance Concert Society	8,923	672	409	9,595
Loratto-Hilton Repertory Theatre	118,726	6,249	1,590	124,975
McDonnell Planetarium	193,946	79,217	4,024	273,163
Missouri Botanical Gardens	194,596	119,268	7,383	313,864
Museum of Science and Natural History	114,945	30,555	2,221	145,500
St. Louis Art Museum	574,221	212,383	11,936	786,604
St. Louis Conservatory and School for the Arts (CASA)	7,326	227	76	7,553
St. Louis Symphony Orchestra	783,289	58,957	12,033	842,246
Total	1,995,972	507,528	39,672	2,503,500

Audience spending. Decisions regarding the handling of audience data can have a major impact on economic effect estimates. This study's conservative approach was to include the ancillary spending of non-local visitors only if attendance at the arts event was their sole reason for being in the community. This protocol is discussed in Chapter I. At some institutions, however, sole-reason visitors are only a small percentage of total visitor attendance and spending. Many visitors indicated that they had planned ahead of time to attend a cultural activity although that was not the sole reason for their visit. Table IV-4 presents a summary of audience data for St. Louis.

An estimated 507,528 visitors from outside the SMSA attended the examined institutions during fiscal 1978. They comprised from 2.6 percent to 38.4 percent of total attendance depending on the institution. Of these visitors, 39,672 are estimated to have visited St. Louis specifically to attend the institutions under study.

Audience spending		Nonlocal visitors (sole reason)
Local	Nonlocal	
\$ 26,769	\$ 88,998	\$ 13,301
\$ 455,908	\$ 20,515	\$ 51,707
\$ 647,780	\$ 5,412,195	\$ 130,860
\$ 646,059	\$ 5,798,987	\$ 240,095
\$ 132,187	\$ 500,351	\$ 72,227
\$ 1,269,028	\$ 1,785,477	\$ 388,159
\$ 77,326	\$ 3,1439	\$ 2,472
\$ 3,415,110	\$ 1,614,767	\$ 391,313
\$ 6,600,197	\$ 7,762,239	\$ 1,290,134

Table IV-5

St. Louis SMSA audiences of examined institutions by residence and spending

	Average for all institutions	Single institution range	
		Lowest	Highest
Audience residence			
In St. Louis	17.6%	12.4%	26.1%
Outside St. Louis but in SMSA	62.1%	42.4%	82.5%
Outside SMSA	20.3%	2.6%	38.4%
Audience spending			
Percent of local audience reporting	63.0%	26.0%	78.0%
Per capita spending	\$ 3.31	\$1.00	\$4.36
Sole reason nonlocal audience per capita spending	\$ 32.52	---	---
Not sole reason nonlocal audience per capita spending	\$157.04	---	---

*Due to small sample sizes, analysis of nonlocal audience data was not conducted by individual institutions.

As seen in Table IV-5, local audiences spent sums ranging from an average of \$1.00 to \$4.36 per person per visit for items such as meals and parking. During fiscal 1978, local audiences are conservatively estimated to have spent \$6,600,197 over and above admission fees.

reason group 22 percent stayed at hotels for a mean of 0.63 nights, whereas in the non-sole-reason group 29 percent stayed at hotels for a mean of 4.06 nights.

As shown in Table IV-6, many other visitors expected to attend while visiting St. Louis, but it was not their sole reason. Visitors from outside the SMSA are of special interest inasmuch as their spending represents "new" dollars, money which had not been in the community until that time. Across all examined institutions, nonlocal sole-reason visitors traveled a mean of eighty-two miles and reported per capita expenditures of \$32.52, resulting in total expenditures of \$1,290,134 that can be conservatively attributed to the drawing power of the examined cultural activities. Persons for whom attendance at the cultural institutions was not the sole reason for visiting the community traveled a mean of eighty miles and spent \$157.04 per capita, totaling \$73,472,106. One reason for this large difference is that in the sole-

Table IV-6 St. Louis SMSA nonlocal audiences by examined institutions

Institution	Audience sample size	Nonlocal proportion of total audience	Proportion of nonlocal who expected to attend	Proportion of nonlocal who were sole-reason
Dance Concert Society	837	6.7%	80.4%	6.1%*
Loretto-Hilton Repertory Theatre	1,162	5.1%	56.4%*	25.5%*
McDonnell Planetarium	225	28.6%	37.3%	5.1%
Missouri Botanical Gardens	525	38.4%	52.1%	6.2%
Museum of Science and Natural History	534	21.4%	53.6%	7.3%
St. Louis Art Museum	364	26.8%	66.3%	5.6%
St. Louis Conservatory and School for the Arts (CASA)	116	2.6%	100.0%*	33.3%*
St. Louis Symphony Orchestra	728	7.3%	67.3%*	20.4%*

*Because of relatively small nonlocal audiences, these data should be treated with caution.

Table IV-7

**St. Louis SMSA
estimated secondary
economic effects
of examined institutions**

Secondary business volume generated by institution-related direct effects	\$42,246,030
Secondary personal incomes generated by institution-related direct effects (excluding \$7,652,004 in salaries to organizational employees)	\$15,899,168
Secondary full-time jobs in the St. Louis SMSA attributable to institution-related direct effects (excluding 510 full-time organizational employees)	2,005
Initial expansion of the local credit base	\$ 6,058,120
Current value of backup inventory, equipment, and property	\$12,445,444

Secondary economic effects

Direct-effect spending leads to secondary effects when the institution-related expenditures within the community are in turn respend by local firms and households. The study estimates the level of five secondary effects of institution-related spending in 1978. Respending of initial dollars introduced into the local economy is estimated to result in \$42,246,030 in local secondary business volume. Of this amount, an estimated \$15,899,168 is paid out in wages to employees. This personal income represents 2,005 full-time jobs in the St. Louis SMSA.

Additional secondary effects include an expansion of the local credit base due to deposits in local banks by the examined institutions, their employees, and the local businesses benefiting from institution-related direct effects. It is estimated that in fiscal 1978 average monthly balances in business and employee savings and checking accounts totaled \$6,641,360. When reduced by federal and state cash reserve requirements, this allows an initial expansion of the credit base totaling \$6,058,120.

Finally, in fiscal 1978 area firms benefiting from institution-related direct and secondary business activity are estimated to have invested \$12,445,444 in plant, inventory, and equipment in support of this business volume. This represents the fiscal 1978 value of these assets, not expenditures made in fiscal 1978; a portion of the assets may, however, have been acquired in that year. Expenditures were not necessarily made with local firms. Table IV-7 presents estimates for each of the secondary effects discussed above.

Government revenues and expenditures

In addition to estimating the direct and secondary effects on businesses and individuals attributable to the examined institutions, this study has sought to estimate the effect on local St. Louis government revenues and expenditures in fiscal 1978. Local governmental revenues examined include real estate taxes paid to metropolitan area jurisdictions by the examined institutions and their employee households, as well as a portion of property taxes paid by businesses benefiting from institution-related direct effects. Estimates were also made of local sales and income tax revenues attributable to institution-related direct effects. Additional governmental revenues identified include local hotel taxes, gasoline taxes, and parking revenues. Government expenditures in support of examined institutions included grants, operating subsidies, and services contracts; these are presented in Table IV-8. No allowance is made for foregone property taxes.

Table IV-8

St. Louis SMSA examined institutions by sources of government support

	Federal	State	Local	Total
	\$ 29,451	\$ 64,144	\$ 0	\$ 80,000
	\$ 55,000	\$ 106,626	\$ 115,000	\$ 276,626
	\$ 0	\$ 0	\$ 291,025	\$ 291,025
	\$ 0	\$ 40,000	\$ 40,000	\$ 80,000
	\$ 0	\$ 0	\$ 538,225	\$ 538,225
	\$215,000	\$ 81,780	\$2,108,372	\$2,405,152
	\$333,906	\$ 17,300	\$ 0	\$ 351,206
	\$169,682	\$ 770,947	\$ 282,876	\$1,223,505
Total	\$803,039	\$1,080,797	\$3,375,498	\$5,259,334

Table IV-9

**St. Louis SMSA
estimated revenues and costs
to local government
related to examined institutions**

Revenues	
Real estate taxes paid by the arts institutions, their employees, and business property serving them.	\$ 683,664
Locally retained sales tax on institution-related business volume	\$ 163,500
Local income tax revenues attributable to institutional employees	\$ 61,012
State aid to local governments attributable to institutional employee households	\$ 134,400
Hotel taxes	4,266
Restaurant tax	\$ 69,955
Parking revenues, estimated	\$ 262
Total	\$1,117,059
Costs	
Operating costs of local governments and schools for services to employee households	\$ 611,937
Direct appropriations to three of the institutions	\$2,937,622
Grants to study institutions	\$ 437,876
Total	\$3,987,435

Estimates of costs to local governments in the St. Louis area are also based on estimates of local governmental operating costs associated with services to employee households, including costs of public instruction for households with children in public schools but excluding costs associated with services to the institutions themselves. Table IV-9 summarizes institution-related governmental costs and revenues. Included as costs are local governmental grants and fees for services. In reviewing Table IV-9, the limited nature of this analysis should be kept in mind. No information is available by which to judge whether or not the identified effects on business, individuals, and government are typical of the broader universe of all St. Louis area cultural institutions. The tax effects shown are specific to the examined mix of institutions.

Revenues to local government include real estate taxes and taxes on business property, income taxes, sales taxes, local hotel taxes, gasoline taxes, restaurant taxes, state aid to local governments, and parking revenues. These totaled \$1,117,059 in local government revenues attributable to the examined institutions. An employee survey indicated that employees at examined institutions contribute to both costs and revenues of government. They live in the city or the county of St. Louis; approximately 46 percent of them pay taxes as homeowners; they report a total of 224 children in local public schools.

Sales, income, and property tax estimates are undoubtedly conservative inasmuch as no estimate has been made of taxes paid by individuals benefiting from institution-related secondary effects. In addition, no attempt has been made to assess the incidental effects of institutional activities on surrounding taxable property values, which may be positive or negative. Finally, no attempt has been made to assess the governmental costs or benefits associated with the more subtle effects discussed in the overview.

Costs to local government included operating costs of local governments and schools, local government grants to the examined institutions, and direct appropriations for a total cost to local government of \$3,987,435. As noted earlier, this does not include additional costs that may be associated with specific governmental services to the examined institutions.

CHAPTER V

THE SALT LAKE CITY ECONOMY AND ARTS AND CULTURAL INSTITUTIONS

The following institutions in the Salt Lake City Standard Metropolitan Statistical Area or SMSA were selected for study by the Utah Arts Council:

Ballet West
Pioneer Memorial Theatre
Repertory Dance Theatre
Salt Lake Art Center
Theatre 138
Tiffany's Attic
Utah Museum of Fine Arts
Utah Symphony
Utah Opera Company
Ririe-Woodbury Dance Company

These represent a range of organizational types and include some of the more well-known local institutions. Their selection resulted from locally initiated efforts to identify interested organizations.

The successful completion of the Salt Lake City project was due to the efforts of a number of persons, including the principal project staff of the Arts Council. Ruth Draper, director of the Council, served as study director and John M. Garbett, a graduate student at the University of Utah and an intern at the Council, was responsible for coordinating the day-to-day tasks. M. Kristin Wallengren Garbett helped supervise the audience surveys. Other staff persons and volunteers who actively participated in the project are identified at the end of this report.

Salt Lake City institutions

Ballet West was founded in 1963 as the Utah Civic Ballet by William F. Christensen and Mrs. John M. Wallace. The ballet performs in the Capitol Theatre (the restored Orpheum), which reopened October 18, 1978. The Capitol provides office and performance facilities for Ballet West, Repertory Dance Theatre, and Ririe-Woodbury Dance Company. The 1978-79 season included 120 performances by thirty-nine dancers.

The Repertory Dance Theatre was formed in 1965 as the result of a partnership between the Rockefeller Foundation and the University of Utah. In 1977, the university terminated its financial liability with all organizations and activities not involved in full-time, in-class teaching. The organization's founder, the late Virginia Tanner, also founded Salt Lake City's



Children's Dance Theatre. This professional modern dance company has a repertoire of over one hundred pieces.

The Utah Opera Company was founded in 1976, largely due to the initiative of a native son of Utah, the tenor Glade Patterson. The company performs in the Capitol Theatre. The 1978-79 season consisted of three productions with twelve performances. The company's opera-in-the-schools program involved free operatic programs in approximately fifty schools throughout the state.

Pioneer Memorial Theatre grew out of the University of Utah's Theatre Department in 1962 under the chairmanship of Dr. C. Lowell Lees. It is housed on the campus of the university and presents approximately 120 performances a year, utilizing the talents of some four hundred artists. Each year one of its productions tours throughout Utah. The Children's Theatre Season, consisting of four plays, is also presented annually.

The Utah Symphony opened its fortieth season in September 1979, with concerts inaugurating its new ten-million-dollar home, Symphony Hall. The orchestra presents over two hundred concerts each season, and under the direction of maestro Maurice Abravanel, grew from an obscure ensemble to one of the country's major symphony orchestras.

Table V-1

Salt Lake City SMSA demographics

Age (1977)		Education (1970)	
18-24	13.8%	Less than 5 years	1.8%
25-34	15.8%	4 years of high school or more	68.5%
35-49	14.7%	4 years of college or more	15.0%
50 and over	18.9%		
Median age	24.7	Median education	12.5

The Salt Lake Art Center opened its doors in 1933 in the Salt Lake Art Barn, a structure developed through the donated design and construction efforts of individual artists, community members, and the Salt Lake City Corporation. In May 1979 the art center moved into new quarters in downtown Salt Lake City next to Symphony Hall. The center presents forty to fifty changing exhibitions per year, half of which feature Utah artists. It maintains a school offering approximately thirty professionally taught classes, and houses a sales shop where buyers may purchase works by Utah artists and craftsmen. It is the home of the Utah Media Center, a forum for film and video studies, and offers its space for other cultural programs including music, theatre, and dance.

Theatre 138 was created in 1966 by three energetic individuals: Ariel Ballif, artistic director; Tom Carlin, house manager; and Stewart Falconer, production manager. The theatre owns its building, located in downtown Salt Lake City, and presents 175 to two hundred performances each year, employing nine to twelve artists for each performance. It is host to the Utah Arts Council's playwriting competition, offers a children's theatre workshop throughout the year, and gives individual acting instruction. Theatre 138 features a yearly operetta and an annual musical. With Utah Arts Council support, it offers a series

producing new scripts by Utah playwrights. The Utah Museum of Fine Arts is the primary cultural resource for the visual arts in the State of Utah. Founded in 1951, it moved into a new building on the campus of the University of Utah in 1970, and operates under the direction of E. Frank Sanguinetti. The museum presents a continuous series of temporary exhibitions which bring to the region treasures from other museums and private collections. These reinforce the museum's own collection which is always on view. Throughout the year, local and national performing artists perform in the museum's galleries and 420-seat auditorium. Chamber music series, poetry readings, film series, and dance concerts are included in its programming. The museum presents guided tours, gallery talks, and a docent training course. A series of fifteen to twenty traveling exhibitions from the museum's collections are available free of charge to schools, galleries, churches, libraries, and other nonprofit organizations. Selected objects from the museum's collection are made available to Utah teachers for use in the classroom.

The Ririe-Woodbury Dance Company was created in 1964 by co-directors Joan Woodbury and Shirley Russon Ririe. Throughout the year it presents some fifty formal concerts and sixty lecture-demonstrations, including two home seasons at the Capitol Theatre in Salt Lake City. This modern

Population (selected years)	
1960	383,035
1970	705,458
1975	782,845
1977	823,200

Population change	
1960-1970	+22.4%
1970-1975	+11.1%

Household income (1977)	
\$8,000 - \$9,999	5.8%
\$10,000 - \$14,999	19.4%
\$15,000 - \$24,999	35.2%
\$25,000 and over	18.6%

1977 median household income	\$15,886
1969 median household income	\$9,952
Average annual change in per capita income 1969-74	8.0%

dance company offers narrated concerts, children's shows, demonstrations, narrated community performances, choreography for children, teacher workshops, parent-child workshops, and production workshops and seminars.

Salt Lake economy and the broader cultural community

An examination of the economy and broader cultural community of the salt lake SMSA contributes to an understanding of the effects ascribed to the ten examined institutions. Table V.1 presents useful market data such as the effective buying income (EBI), a measure of the buying power of households after government deductions for taxes, social insurance, and lesser items; it also shows income, age, education, and population information.

The Salt Lake City/Ogden SMSA consists of the Utah counties of Salt Lake, Tooele, Davis, and Weber. In this study, the terms "local," "the salt lake city/ogden metropolitan area," and "the salt lake city/ogden region" are used interchangeably to identify the salt lake city/ogden SMSA. In 1978 the salt lake city/ogden SMSA was estimated to have a total population of 839,600 (Community Data Inventory, information supplied by the Bureau of Economic and Business Research, University of Utah). Salt Lake City itself had an estimated

population of 176,200 in 1977 (Sales and Marketing Management, Vol. 121, No. 2, July 24, 1978, p. C-111).

Salt Lake City is the state capital of Utah and the seat of salt lake county. The city was founded in 1847 by Brigham Young and approximately 1,700 settlers. Since the early 1900s, the local copper mines and the Geneva steel plant in Utah Valley have greatly contributed to the growth of metal fabricating industries. Other major industries include food processing, printing and publishing, oil refining, the manufacture of clay products, radio equipment, electronics, and textiles.

Salt Lake County alone contains twenty companies that employ over one thousand workers each and an additional thirty firms that employ between five hundred and one thousand workers (Major Non-Agricultural and Non-Governmental Employers, Salt Lake Area Chamber of Commerce, February 1979). In 1977 the county's civilian labor force numbered 254,400, with 27 percent in wholesale and retail trade, 18.8 percent employed by governments, 17.6 percent in service and miscellaneous industries, 15.3 percent in manufacturing, 7.6 percent in transportation, communication, and utilities, 6.1 percent in financial and insurance companies, 5.7 percent in construction, and 2.6 percent in mining. Eighty-eight percent of the nonagricultural work force is un-



affiliated with any union ("Salt Lake Spectrum," Salt Lake Area Chamber of Commerce, Dept. of Economic Development).

Salt Lake City is the geographic center of the eleven western states, and is the hub of the interstate highway system, the western railroad network, and the west's air traffic system. The area's transportation network has sixteen major trucking firms, four Class I railroads, and an international airport served by six major airlines.

Educational facilities include the University of Utah with approximately 25,000 students, the Utah Technical College, Westminster College, and Weber State College. Among cultural facilities are the Pioneer Museum, the Planetarium, the Natural History Museum, and the Hogle Zoo, all located in Salt Lake City. Other cultural activities available to residents and visitors range from chamber music recitals at the Utah Museum of Fine Arts to rock concerts at the twenty-million-dollar Salt Palace. The examined institutions were selected from the many nonprofit arts and cultural organizations in the Salt Lake City SMSA. Although these ten may perhaps typify the impact of various types of institutions, they do not represent the full range of locally available commercial and nonprofit activities. It is clear that the examined institutions do not exhaust the impact of the "culture industry." For example, cen-

sus data for 1970 show a total of 1,585 employed writers, artists, and entertainers in the Salt Lake City SMSA, excluding individuals employed in art galleries and other arts-related positions (Where Artists Live: 1970, Research Division Report #5, Washington: National Endowment for the Arts, 1977; see list at back of this report). Only seventy-five persons were employed full time at the examined institutions. The yellow pages of the Salt Lake metropolitan area telephone directory list over one thousand enterprises which can be considered culture-related in the broadest sense. These range from music, art, and theatrical suppliers to book and record dealers, design firms, and commercial photographers.

Data on the impact of some elements of these cultural business sectors are available from the 1977 statistics in the U.S. Bureau of the Census County Business Patterns series. Table V-2 details various data on businesses used by the general public.

Direct economic effects

The direct economic effects of the examined institutions include local spending for goods and services, salaries and wages to local residents, and expenditures by guest artists and by local and nonlocal audiences. Table V-3 presents selected data on institutional direct effects during fiscal 1978.

Table V-2 Salt Lake City SMSA selected businesses related to arts and culture

Businesses	Number	Employees	Payroll
Television, radio, enterprises	36	203	\$1,494,000
Music and record stores	35	254	\$1,808,000
Bookstores	15	186+	\$ N.A.
Photography stores	7	73	\$ 253,000
Movie theatres (except drive-ins)	41	496	\$1,388,000
Total	134	1,212+	\$4,943,000

Table V-3

Salt Lake City SMSA estimated direct economic effects of examined institutions

	Total	Percent of total direct spending	Single institution	
			Lowest	Highest
Local institution expenditures for goods and services	\$1,804,405	30%	\$11,486	\$ 654,365
Employee salaries and wages	\$3,115,024	51%	\$14,100	\$1,646,820
Local audience spending (other than ticket price)	\$ 749,467	12%	\$ 5,933	\$ 216,689
Sole-reason visitor spending	\$ 381,491	6%	\$ 4,375	\$ 102,700
Guest artist spending	\$ 30,110	--*	\$ 0	\$ 23,782
Total	\$6,080,497	100%		

*Less than 1 percent.

Table V-4

Salt Lake City SMSA estimated audiences and spending by examined institutions

Institution	Audience			Institution total
	Local	Nonlocal	Nonlocal (sole reason)	
Ballet West	61,033	8,323	3,052	69,356
Pioneer Memorial Theatre	95,880	6,120	2,244	102,000
Repertory Dance Theatre	10,044	756	551	10,800
Ririe-Woodbury Dance Company	12,555	945	689	13,500
Salt Lake Arts Center	9,500	500	200	10,000
Theatre 138	7,493	741	156	8,234
Tiffany's Attic	2,025	475	130	2,500
Utah Museum of Fine Arts	60,520	7,480	1,224	68,000
Utah Opera Company	7,416	824	396	8,240
Utah Symphony	50,528	5,614	2,695	56,142
Total	316,994	31,778	11,337	348,772

Local institutional expenditures for goods, services, and salaries. It is estimated that the examined institutions made 60 percent of their expenditures for goods and services with local vendors and that this totaled \$1,804,405. The percentage of non-labor expenditures made locally by the examined institutions ranged from 30 percent to 97 percent. An additional \$3,115,024 was spent for salaries and wages to local households. No estimate has been made of the impact of additional earned and other income by institutional employee households, which in some instances was almost 25 percent.

Guest artist spending. Each year, cultural institutions contract with nonresident designers, directors, conductors, featured soloists, touring groups, and others. These nonresident "guest artists" were reported to have spent a total of \$30,110 locally. No attempt has been made to estimate spending by guest artist entourage.

Audience spending. Decisions regarding the handling of audience data can have a major impact on economic effect estimates. This study's conservative approach was to include the ancillary spending of nonlocal visitors only if attendance at the arts event was their sole reason for being in the community. This protocol is discussed in Chapter I. At some institutions, however, sole-reason visitors are only a small percentage of total visitor attendance and spending. Many visitors indicated that they had planned ahead of time to attend although that was not the sole reason for their visit. Table V-4 presents a summary of audience data for Salt Lake City. An estimated 31,778 visitors from outside the SMSA attended the examined institutions during fiscal 1978. They comprised from 5 percent to 18.9 percent of total attendance depending on the institution. Of these visitors, 11,337 are estimated to have visited Salt Lake City specifically to attend the institutions under study.

Audience spending		
Local	Nonlocal	Nonlocal (sole reason)
\$208,733	\$ 652,902	\$102,700
\$216,689	\$ 480,086	\$ 75,511
\$ 29,128	\$ 59,305	\$ 18,541
\$ 36,410	\$ 74,131	\$ 23,185
\$ 10,355	\$ 39,223	\$ 6,730
\$ 21,954	\$ 58,128	\$ 5,249
\$ 5,933	\$ 37,262	\$ 4,375
\$ 56,284	\$ 586,772	\$ 41,188
\$ 20,987	\$ 64,639	\$ 13,325
\$142,994	\$ 440,393	\$ 90,687
\$749,467	\$2,492,841	\$381,491

Table V-5

Salt Lake City SMSA audiences of examined institutions by residence and spending

	Average for all institutions	Single institution range	
		Lowest	Highest
Audience residence			
In Salt Lake City	55.5%	26.0%	69.4%
Outside Salt Lake City but in SMSA	35.4%	25.2%	60.5%
Outside SMSA	9.1%	5.0%	18.9%
Audience spending			
Percent of local audience reporting	57.0%	25.0%	85.0%
Per capita spending	\$ 2.36	\$0.93	\$3.42
Sole-reason nonlocal audience per capita spending	\$ 33.65	---	---
Not sole-reason nonlocal audience per capita spending	\$103.29	---	---

*Due to sample small sizes, analysis of nonlocal audience data was not conducted by individual institutions.

As seen in Table V-5, local audiences spent sums ranging from an average of \$0.93 to \$3.42 per person per visit for items such as meals and parking. During fiscal 1978, local audiences are conservatively estimated to have spent \$749,467 over and above admission fees.

for this large difference in expenditures is that in the sole-reason group 12 percent stayed at hotels for a mean 0.80 nights, and in the non-sole-reason group 25 percent stayed at hotels for a mean 6.49 nights.

As shown in Table V-6, many other visitors expected to attend while visiting Salt Lake City, but it was not their sole reason. Visitors from outside the SMSA are of special interest inasmuch as their spending represents "new" dollars, money which had not been in the community until that time. Across all examined institutions, nonlocal sole-reason visitors traveled a mean of sixty-three miles and reported per capita expenditures of \$33.65, resulting in total expenditures of \$381,491 that can be conservatively attributed to the drawing power of the examined cultural activities. Persons for whom attendance at the cultural institutions was not the sole reason for visiting the community traveled a mean of sixty-one miles and spent \$103.29 per capita, totaling \$2,111,351. One reason

Table V-6 Salt Lake City SMSA nonlocal audiences by examined institutions

Institution	Audience sample size	Nonlocal proportion of total audience	Proportion of nonlocal who expected to attend	Proportion of nonlocal who were sole-reason
Ballet West	1,682	12.5%	75.2%	36.4%
Pioneer Memorial Theatre	1,330	5.8%	58.8%	37.3%
Repertory Dance Theatre	315	6.7%	83.3%*	72.2%*
Ririe-Woodbury Dance Company	N.A.	N.A.	N.A.	N.A.
Salt Lake Arts Center	161	5.0%	60.0%*	40.0%*
Theatre 138	266	9.2%	52.6%*	21.1%*
Tiffany Theatre	291	18.9%	65.0%	27.1%
Utah Museum of Fine Arts	178	10.9%	61.1%*	16.7%*
Utah Opera Company	N.A.	N.A.	N.A.	N.A.
Utah Symphony	879	9.6%	66.7%	48.3%

*Because of relatively small nonlocal audience, these data should be treated with caution.

Table V-7

**Salt Lake City SMSA
estimated secondary
economic effects
of examined institutions**

Secondary business volume generated by institution-related direct effects	\$9,978,282
Secondary personal incomes generated by institution-related direct effects (excluding \$3,115,024 in salaries to organizational employees)	\$3,876,184
Secondary full-time jobs in the Salt Lake City SMSA attributable to institution-related direct effects (excluding 75 full-time organizational employees)	631
Initial expansion of the local credit base	\$2,970,735
Current value of backup inventory, equipment, and property	\$2,408,853

Secondary economic effects

Direct-effect spending leads to secondary effects when the institution-related expenditures within the community are in turn respend by local firms and households. The study estimates the level of five secondary effects of institution-related spending in 1978. Respending of initial dollars introduced into the local economy is estimated to result in \$9,978,282 in local secondary business volume. Of this amount, an estimated \$3,876,184 is paid out in wages to employees. This personal income represents 631 full-time jobs in the Salt Lake City SMSA.

Additional secondary effects include an expansion of the local credit base due to deposits in local banks by the examined institutions, their employees, and the local businesses benefiting from institution-related direct effects. It is estimated that in fiscal 1978 average monthly balances in business and employee savings and checking accounts totaled \$3,169,229. When reduced by federal and state cash reserve requirements, this allows an initial expansion of the credit base totaling \$2,970,735.

Finally, area firms benefiting from institution-related direct and secondary business activity are estimated to have invested \$2,408,853 in plant, inventory, and equipment in support of this business volume. This represents the fiscal 1978 value of these assets, not expenditures made in fiscal 1978; a portion of these assets may, however, have been acquired in that year. Expenditures were not necessarily made with local firms. Table V-7 presents estimates for each of the secondary effects discussed above.

Government revenues and expenditures

In addition to estimating the direct and secondary effects on businesses and individuals attributable to the examined institutions, this study has sought to estimate the effect on local Salt Lake City institutions supported by government revenues as seen in Table V-8 in fiscal 1978. Research on the implications of economic impact data for regional cost-sharing of arts and cultural institutions by the several units of government that comprise a metropolitan area can be found in David Cwi's "Regional Cost-Sharing of Arts and Cultural Institutions," Northeast Regional Science Review, Vol. 9, 1979.

Table V-8

Salt Lake City SMSA examined institutions by sources of government support

Institution	Federal	State	Local	Total
Ballet West	\$ 67,000	\$194,200	\$ 32,800	\$ 294,000
Pioneer Memorial Theatre	\$ 12,000	\$ 80,000	\$254,000	\$ 346,000
Repertory Dance Theatre	\$ 24,480	\$ 45,000	\$ 14,362	\$ 83,842
Ririe-Woodbury Dance Company	\$ 66,110	\$ 40,230	\$ 4,000	\$ 110,340
Salt Lake Arts Center	\$ 15,000	\$ 26,000	\$ 7,500	\$ 48,500
Theatre 138	\$ 700	\$ 8,200	\$ ---	\$ 8,900
Tiffany's Attic	N.A.	N.A.	N.A.	N.A.
Utah Museum of Fine Arts	N.A.	N.A.	N.A.	N.A.
Utah Opera Company	\$ ---	\$ 37,000	\$ 2,800	\$ 39,800
Utah Symphony	\$515,000	\$375,000	\$ 70,000	\$ 960,000
Total	\$700,290	\$883,930	\$385,462	\$1,891,382

Table V-9

**Salt Lake City SMSA
estimated revenues and costs
to local government
related to examined institutions**

Revenues	
Real estate taxes paid by the institutions, their employees, and business property serving them	\$ 306,794
Locally retained sales tax on institution-related business volume	\$ 26,755
Local income tax revenues attributable to institutional employees	\$ 0
State aid to local governments attributable to institutional employee households	\$ 66,192
Hotel taxes	\$ 758
Parking revenues, estimated	\$ 5,181
Total	\$405,600
Costs	
Operating costs of local governments and schools for services to employee households	\$250,128
Grants to 8 study institutions	\$385,462
Total	\$635,590

Estimates of costs to local governments in the Salt Lake City area are based on estimates of local governmental operating costs associated with services to employee households, including the cost of public instruction for households with children in the public schools, but excluding costs associated with services to the institutions themselves. Table V-9 summarize institution-related governmental costs and revenues. Included as costs are local governmental grants and fees for services. In reviewing Table V-9, the limited nature of this analysis should be kept in mind. No information is available by which to judge whether or not the identified effects on business, individuals, and government are typical of the broader universe of Salt Lake City area cultural institutions. The tax effects shown are specific to the examined mix of institutions.

Revenues to local government include real estate taxes, taxes on business property devoted to serving the institutions, income taxes, sales taxes, local hotel taxes, state aid to local governments, and parking revenues. These totaled \$405,680 in local government revenues attributable to the examined institutions. An employee survey indicates that employees at the examined institutions contribute to both costs and revenues of government. They live in the city of Salt Lake or in Salt Lake County, and approximately 54 percent of them pay taxes as homeowners; they report a total of 109 children in local public schools.

Sales, income, and property tax estimates are undoubtedly conservative inasmuch as no estimate has been made of taxes paid by individuals benefiting from institution-related secondary effects. In addition, no attempt has been made to assess the incidental effects of institutional activities on surrounding taxable property values, which may be positive or negative. Finally, no attempt has been made to assess the governmental costs or benefits associated with the more subtle effects that may result from the arts; which are discussed in the overview.

Costs to local government include operating costs of local governments and schools and local government grants to the examined institutions for a total cost to local government of \$635,590. As noted earlier, this does not include additional costs that may be associated with specific governmental services to the examined institutions.

CHAPTER VI

THE SAN ANTONIO ECONOMY AND ARTS AND CULTURAL INSTITUTIONS

The following institutions in the San Antonio Standard Metropolitan Statistical Area or SMSA were selected for study by the Arts Council of San Antonio:

San Antonio Symphony
San Antonio Opera
Carver Cultural Center
Witte Museum
Museum of Transportation

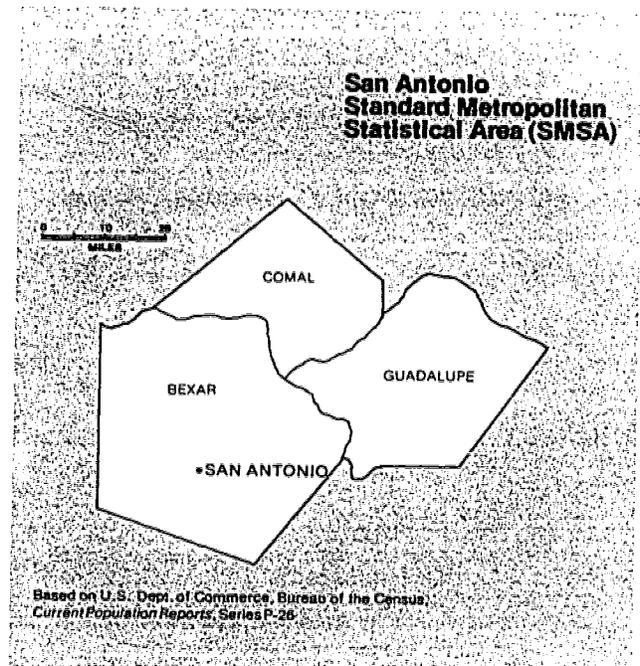
These represent a range of organizational types and include some of the more well-known local institutions. Their selection resulted from locally initiated efforts to identify interested organizations.

The successful completion of the San Antonio project was due to the effort of a number of persons, including the principal project staff of the Arts Council. Robert Canon, executive director of the Council, served as study director and Nancy Broomall, the Council's assistant director, was responsible for coordinating the day-to-day tasks. Other staff persons and volunteers who actively participated in the project are identified at the end of this report.

San Antonio institutions

The Symphony Society of San Antonio consists of the San Antonio Symphony and the San Antonio Symphony Opera. The symphony was founded in 1939 and currently gives over 165 performances annually, including a subscription series of fourteen concerts, a pop series, a mastersingers series, a series of children's concerts, and three opera productions.

The Carver Community Cultural Center opened in 1977. Constructed in 1929 and originally called the Colored Library-Auditorium, it was renamed the Carver Library Auditorium in 1938 and served the black community, but currently programs in the visual and performing arts are offered to persons of all cultural and socioeconomic backgrounds. Activities include workshops and lecture demonstrations to provide opportunities for study and learning from the arts professions, classes and training to stimulate local artistic expression and creativity, and performances and exhibitions of professional artists and companies. The Carver Community Cultural Center is a division of the City of San



Antonio and all events are free to the public.

The San Antonio Museum Association, established in 1923, opened its first facility, the Witte Museum, in 1926. The Witte was originally devoted to displays of natural history and science but through the years it developed and acquired collections of art, archaeology, early Texas furniture and decorative arts, photography, transportation, and ethnic arts. A second facility, the San Antonio Museum of Transportation, opened in 1969. The museum association has been completing work on the San Antonio Museum of Art, an adaptive reuse of the former Lone Star Brewery industrial complex. The museum association also conducts educational, publications, and community outreach programs.

Table VI-1

San Antonio SMSA demographics

Age (1977)		Education (1970)	
18-24	14.8%	Less than 5 years	13.6%
25-34	14.2%	4 years of high school or more	46.8%
35-49	15.4%	4 years of college or more	10.2%
50 and over	21.1%		
Median age	25.5	Median education	11.5

San Antonio economy and the broader cultural community

An examination of the economy and broader cultural community of San Antonio contributes to an understanding of the effects ascribed to the five examined arts institutions. Table VI-1 presents useful market data such as the Effective Buying Income (EBI), a measure of the buying power of households after government deductions for taxes, social insurance, and lesser items; it also shows income, age, education, and population information.

The San Antonio Bureau of the Census Standard Statistical Area (SMSA) consists of Bexar, Guadalupe, and Comal counties. In this study, the terms "local," "the San Antonio metropolitan area," and "the San Antonio region" are used interchangeably to identify the San Antonio SMSA. In 1970 the population of the SMSA was 888,179, with 708,582 residing in the city. The 1977 SMSA population was estimated to be 996,800.

San Antonio was founded on May 1, 1718 by a Spanish military expedition. After the Mexican revolution of 1821, San Antonio became a part of Mexico. In 1836 Texas declared its independence, and nine years later joined the United States.

In the late 1800s, San Antonio was a major cattle center, and the starting point of the famous Chisholm Trail. During and after World War II, San Antonio became a

major military center with Fort Sam Houston of the U.S. Army and four important U.S. Air Force bases. In 1978 these bases employed 43,489 military personnel and 29,043 civilians; in addition, there were 26,734 retired military personnel in the area ("Military Statistics: The Economic Impact on San Antonio 1978," Economic Research Dept. of the Greater San Antonio Chamber of Commerce). In April 1978, the employed civilian work force numbered 376,200, including 93,500 working for federal, state, and local governments; 68,900 in retail and commercial trade; 68,200 in service industries; 45,750 in manufacturing; 23,850 in finance, insurance, and real estate; 23,750 in construction; 21,050 in wholesale trade; and 15,250 in transportation, communications, and utilities ("Business Barometer, May 1979," Economic Research Dept. of the Greater San Antonio Chamber of Commerce).

San Antonio remains the commercial and financial center for South Texas, and is served by four railroads, forty-four common-carrier truck lines, a major highway system, two municipal airports with eleven scheduled airlines, and five bus lines ("San Antonio Facts," Economic Research Dept. of the Greater San Antonio Chamber of Commerce, January 1, 1979. Information in the following two paragraphs also derived from this source). Other cultural events attractive to residents and visitors include Fiesta San Jacinto, Texas Folklife Festival, and San Antonio Livestock Exposition and Rodeo.

Population (selected years)

1960	687,151
1970	888,179
1975	981,566
1977	996,800

Population change

1960-1970	20.7%
1970-1975	10.0%

Household income (1977)

\$8,000-\$9,999	7.7%
\$10,000-\$14,999	20.0%
\$15,000-\$24,999	28.3%
\$25,000 and over	17.6%

1977 median household income	\$13,953
1969 median household income	\$ 7,981
Average annual change in per capita income 1969-74	8.2%

The examined institutions were selected from the many nonprofit arts and cultural organizations in the San Antonio SMSA. While these five may typify the impact of various types of institutions, they do not represent the full range of locally available commercial and nonprofit activities. It is clear that the examined institutions do not exhaust the impact of the "culture industry." For example, census data for 1970 show a total of 1,979 employed writers, artists, and entertainers in the San Antonio SMSA, excluding individuals employed in art galleries and other arts-related positions (Where Artists Live: 1970, Research Division Report #5, Washington: National Endowment for the Arts, 1977; see list at the back of this report). There were sixty-one full-time employees at the examined institutions. The yellow pages of the San Antonio area telephone directory list 1,200 enterprises which can be considered culture-related in the broadest sense. These range from music, art, and theatrical suppliers to book and record dealers, design firms, and commercial photographers.

Data on the impact of some elements of these cultural business sectors are avail-

able from the 1977 statistics in the U.S. Bureau of the Census County Business Patterns series. Table VI-2 details various data on businesses used by the general public.

Direct economic effects

The direct economic effects of the examined institutions include local spending for goods and services, salaries and wages to local residents, and expenditures by guest artists and local and nonlocal audiences. Table VI-3 presents selected data on institutional direct effects during fiscal 1978.

Local institutional expenditures for goods, services, and salaries. It is estimated that the examined institutions made 60 percent of their expenditures for goods and services with local vendors and that this totaled \$940,226. The percentage of non-labor expenditures made locally by the examined institutions ranged from 60 percent to 61 percent. An additional \$1,485,402 was spent for salaries and wages to local households. No estimate has been made of the impact of additional earned and other income by institutional employee households, which in some instances was as high as 20 percent.

Table VI-2 San Antonio SMSA selected businesses related to arts and culture

Businesses	Number	Employees	Payroll
Television, radio, enterprises	75	396	\$3,481,000
Music and record stores	47	286	\$1,698,000
Book stores	34	121	\$ 663,000
Photography shops	9	63	\$ 386,000
Movie theatres (except drive-ins)	26	431	\$1,901,000
Total	191	1,297	\$8,129,000

Table VI-3

San Antonio SMSA estimated direct economic effects of examined institutions

	Total	Percent of total direct spending	Single institution	
			Lowest	Highest
Local institution expenditures for goods and services	\$ 940,226	25%	\$42,347	\$481,412
Employee salaries and wages	\$1,485,402	40%	\$87,676	\$981,610
Local audience spending (other than ticket price)	\$ 692,722	19%	\$60,832	\$278,841
Sole-reason visitor spending	\$ 585,469	16%	\$22,386	\$226,621
Guest artist spending	\$ 32,224	---*	\$ 660	\$ 23,100
Total	\$3,736,043	100%		

*Less than 1 percent

Table VI-4

San Antonio SMSA estimated audiences and spending by examined institutions

Institution	Audience			Institution total
	Local	Nonlocal	Nonlocal (sole reason)	
Carver Cultural Center	36,121	2,719	699	38,840
Museum of Transportation	31,208	104,478	5,563	135,686
San Antonio Opera	13,026	3,674	2,756	16,700
San Antonio Symphony	63,993	2,666	600	66,659
Witte Museum	134,058	75,407	6,074	209,465
Total	278,406	188,944	15,692	467,350

Guest artist spending. Each year, cultural institutions contract with nonresident designers, directors, conductors, featured soloists, touring groups, and others. These nonresident "guest artists" were reported to have spent a total of \$32,224 locally. No attempt has been made to estimate spending by guest artist entourage.

Audience spending. Decisions regarding the handling of audience data can have a major impact on economic effect estimates. This study's conservative approach was to include the ancillary spending of nonlocal visitors only if attendance at the arts event was their sole reason for being in the community. This protocol is discussed in Chapter I.

At some institutions, however, sole-reason visitors are only a small percentage of total visitor attendance and spending. Many visitors indicated that they had planned ahead of time to attend although that was not the sole reason for their visit. Table VI-4 presents a summary of audience data for San Antonio.

An estimated 188,944 visitors from outside the SMSA attended the examined institutions during fiscal 1978. They comprised from 4.5 percent to 77.7 percent of total attendance depending on the institution. Of these visitors, 15,692 are estimated to have visited San Antonio specifically to attend the institutions under study.

Audience spending		No. of visitors (sole reason)	Total
Local	Nonlocal		
\$ 65,740	18,740	35	180
76,747	101,851	107	556
6,600,632	79,175	112	526
210,357	11,487	2	386
7,872	5,742	26	621
669,712	165,770	635	1,692

Table VI-5

San Antonio SMSA audiences of examined institutions by residence and spending

	Average for all institutions	Single institution range	
		Lowest	Highest
Audience residence			
In San Antonio	39.8%	15.4%	75.3%
Outside San Antonio but in SMSA	19.8%	6.9%	23.5%
Outside SMSA	40.4%	4.5%	71.2%
Audience spending			
Percent of local audience reporting	60.0%	45.0%	95.0%
Per capita spending	\$ 2.49	\$1.82	\$4.67
Sole reason nonlocal audience per capita spending	\$37.31	---	---
Not sole reason nonlocal audience per capita spending	\$91.66	---	---

*Due to small sample sizes, analysis of nonlocal audience data was not conducted by individual institutions.

As seen in Table VI-5, local audiences spent sums ranging from an average of \$1.82 to \$4.67 per person per visit for items such as meals and parking. During fiscal 1978, local audiences are conservatively estimated to have spent \$692,722 over and above admission fees.

As shown in Table VI-6, many other visitors expected to attend while visiting San Antonio, but it was not their sole reason. Visitors from outside the SMSA are of special interest inasmuch as their spending represents "new" dollars, money which had not been in the community until that time.

Across all examined institutions, nonlocal sole-reason visitors traveled a mean of eighty-two miles and reported per capita expenditures of \$37.31, resulting in total expenditures of \$585,469 that can be conservatively attributed to the drawing power of the examined cultural activities. Persons for whom attendance at the cultural institutions was not their sole reason for visiting the community traveled a mean of eighty miles and spent \$69.54 per capita, totaling \$15,880,278.

Table VI-6 San Antonio SMSA nonlocal audiences by examined institutions

Institution	Audience sample size	Nonlocal proportion of total audience	Proportion of nonlocal who expected to attend	Proportion of nonlocal who were sole-reason
Carver Cultural Center	343	6.8%	45.0%*	25.0%*
Museum of Transportation	131	77.7%	25.3%	5.3%
San Antonio Opera	182	21.1%	91.7%	75.0%
San Antonio Symphony	705	4.5%	42.3%*	23.1%*
Witte Museum	554	36.9%	40.9%	8.1%

*Because of relatively small nonlocal audiences, these data should be treated with caution.

Table VI-7

**San Antonio SMSA
estimated secondary
economic effects
of examined institutions**

Secondary business volume generated by institution-related direct effects	\$6,185,327
Secondary personal incomes generated by institution-related direct effects (excluding \$1,485,402 in salaries to organizational employees)	\$2,345,260
Secondary full-time jobs in the St. Louis SMSA attributable to institution-related direct effects (excluding 61 full-time organizational employees)	347
Initial expansion of the local credit base	\$ 862,529
Current value of backup inventory, but not equipment and property	\$1,044,720

Secondary economic effects

Direct-effect spending leads to secondary effects when the institution-related expenditures within the community are in turn respent by local firms and households. The study estimates the level of five secondary effects of institution-related spending in 1978. Respending of initial dollars introduced into the local economy is estimated to result in \$6,185,327 in local secondary business volume. Of this amount, an estimated \$2,345,260 is paid out in wages to employees. This personal income represents 347 full-time jobs in the San Antonio SMSA.

Additional secondary effects include an expansion of the local credit base due to deposits in local banks by the examined institutions, their employees, and the local businesses benefiting from institution-related direct effects. It is estimated that in fiscal 1978 average monthly balances in business and employee savings and checking accounts totaled \$954,137. When reduced by federal and state cash reserve requirements, this allows an initial expansion of the credit base totaling \$862,529.

Finally, area firms benefiting from institution-related direct and secondary business activity are estimated to have invested \$1,044,720 in plant, inventory, and equipment in support of this business volume. This represents the fiscal 1978 value of these assets, not expenditures made in fiscal 1978; a portion of the assets may, however, have been acquired in that year. Expenditures were not necessarily made with local firms. Table VI-7 presents estimates for each of the secondary effects discussed above.

Government revenues and expenditures

In addition to estimating the direct and secondary effects on businesses and individuals attributable to the examined institutions, this study has sought to estimate the effect on local San Antonio government revenues and expenditures, and the institutions they support, as seen in Table VI-8.

Table VI-8

San Antonio SMSA examined institutions by sources of government support

Institution	Federal	State	Local	Total
Carver Cultural Center	\$ 12,900	\$3,840	\$155,520	\$ 172,260
San Antonio Symphony	\$ 87,000	---	\$470,000	\$ 557,000
Symphony Opera House	\$165,000	\$ ---	\$181,500	\$ 346,500
Total	\$264,900	\$3,840	\$807,020	\$1,075,760

*(Includes Witte Museum and San Antonio Museum of Transportation.)
 **(Includes San Antonio Symphony and San Antonio Symphony Opera.)



Table VI-9

**San Antonio SMSA
estimated revenues and costs
to local government
related to examined institutions**

Revenues	
Real estate taxes paid by the institutions, their employees, and business property serving them*	\$ 59,042
Locally retained sales tax on institution-related business volume	\$ 32,218
Local income tax revenues attributable to institutional employees	\$ 0
State aid to local governments attributable to institutional employee households	\$ 15,074
Hotel taxes	\$ 6,120
Taxes to local transit authority	\$ 5,762
Parking revenues, estimated	\$ 7,867
Total	\$126,083
Costs	
Operating costs of local governments and schools for services to employee households	\$ 52,729
Direct appropriations to one institution	\$155,520
Grants to study institutions	\$651,500
Total	\$859,749

*Data unavailable for real estate taxes on business property servicing the institutions.

Estimates of costs to local governments in the San Antonio area are based on estimates of local governmental operating costs associated with services to employee households, including the cost of public instruction for households with children in the public schools, but excluding costs associated with services to the institutions themselves. Table VI-9 summarizes institution-related governmental costs and revenues. Included as costs are local governmental grants and fees for services. In reviewing Table VI-9, the limited nature of this analysis should be kept in mind. No information is available by which to judge whether or not the identified effects on business, individuals, and government are typical of the broader universe of San Antonio area cultural institutions. The tax effects shown are specific to the examined mix of institutions.

Revenues to local government included real estate taxes paid by the institutions and their employees, income taxes, local hotel taxes, transit taxes, state aid to local governments, and parking revenues for a total of \$126,083 in local government revenues attributable to the institutions. An employee survey indicates that employees at the examined institutions contribute to both costs and revenues of government. They live in the city of San Antonio or elsewhere in Bexar County, and approximately 47 percent of employees are homeowners; they report a total of eighteen children in local public schools.

Sales, income, and property tax estimates are undoubtedly conservative inasmuch as no estimate has been made of taxes paid by individuals benefiting from institution-related secondary effects. In addition, no attempt has been made to assess the incidental effects of institutional activities on surrounding taxable property values, which may be positive or negative. Finally, no attempt has been made to assess the governmental costs or benefits associated with the more subtle effects that may result from the arts, which are discussed in the overview.

Costs to local government include operating costs of local governments and schools, local government grants, and direct appropriations to the examined institutions for a total cost to local government of \$859,749. As noted earlier, this does not include additional costs that may be associated with specific governmental services to the examined institutions.

CHAPTER VII

THE SPRINGFIELD ECONOMY AND ARTS AND CULTURAL INSTITUTIONS

The following institutions in the Springfield Standard Metropolitan Statistical Area or SMSA were selected for study by Springboard:

Springfield Symphony Orchestra
Springfield Theatre Guild
Springfield Art Association
Springfield Ballet
Art Collection, Illinois
State Museum
Old State Capitol
Community Concert Series
Springfield Municipal Opera
Old State Capitol Art Fair
Great American People Show

These represent a range of organizational types and include some of the more well-known local institutions. Their selection resulted from locally initiated efforts to identify interested organizations.

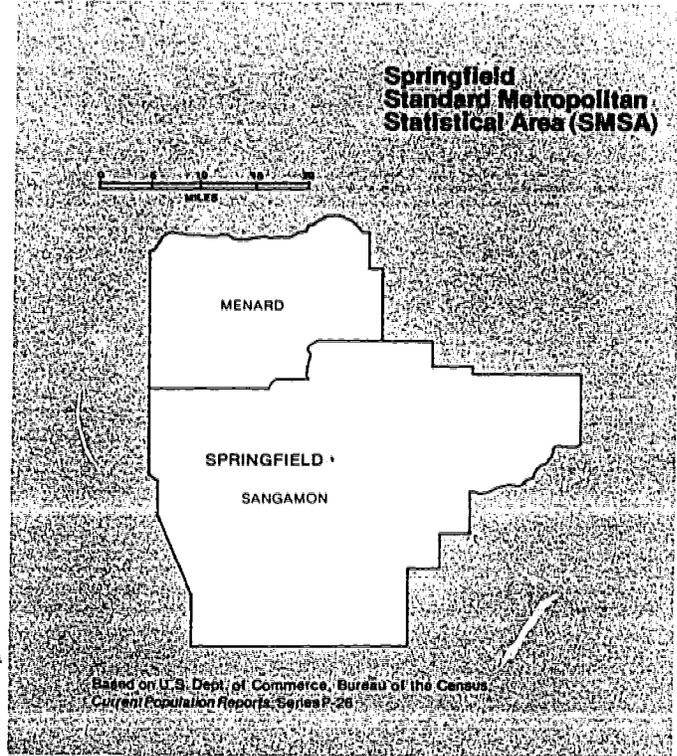
The successful completion of the Springfield project was due to the efforts of a number of persons, including the principal project staff at Springboard and the Center for the Study of Middle-Size Cities at Sangamon State University. Charles Kirchner, board member of Springboard, served as study director; Dr. Phillip Gregg of the Center was responsible for coordinating the day-to-day tasks; Dr. John Bowman, associate professor of economics at Sangamon State assisted; and Andi Rosenstein, a student in the University's Community Arts Management Program, was project administrative assistant. Other staff persons and volunteers are identified at the end of this report.

Springfield institutions

Edwards Place was deeded to the Springfield Art Association in 1913. Since then, it has functioned as an art gallery, museum, and art school. Later, a gallery was built adjoining the house and separate studios have also been constructed.

The art association schedules over fifteen exhibits a year as well as offering art classes, workshops, lectures, and a volunteer art appreciation program in the public schools.

The Springfield Ballet Company was formed in 1975 with the merger of the Copper Coin Ballet Company, founded in 1957, and the



Ballet Concert Group, founded in 1964. The company produces dance performances and provides instructional programs in dance.

The Great American People show was incorporated in December 1975 with a primary purpose of creating new historical drama and presenting educational entertainment.

The Springfield Municipal Opera became a not-for-profit corporation and produced its first show in 1950. The Muni Opera produces a series of amateur musical theatre productions during the summer months.

The Springfield Theatre Guild was incorporated in November 1947. In 1951 the guild's own theatre opened at 101 Lawrence Avenue. In 1967 the Paul Hecker Hall was built to the west of the first building to provide additional facilities. The guild presents five amateur productions each season, as well as sponsoring workshops.

The Springfield Community Concert Association has a long history, starting in 1902 as the Springfield Amateur Musical Club. In 1931 the club joined the Community Concert Association, a division of Columbia Artists Management, Inc. The association

Table VII-1

Springfield SMSA demographics

Age (1977)		Education (1970)	
18-24	11.2%	Less than 5 years	3.2%
25-34	14.5%	4 years of high school or more	56.6%
35-49	15.7%	4 years of college or more	10.4%
50 and over	29.3%		
Median age	31.5	Median education	12.2

presents four concerts by notable artists each year.

The Springfield Symphony Orchestra began performing in 1922, but its current artistic development can be traced to 1952 when Harry Farbman became conductor. The orchestra's present schedule consists of five concerts a season.

The Old Capitol Art Fair was initiated in 1961 to bring visual artists and their work into Springfield, to provide an opportunity for area citizens to see and purchase quality art, and to develop a civic art collection.

The Illinois State Museum was created in 1877 by an act of the Illinois legislature. In 1928, a few years after the museum moved into new quarters in the Centennial Building, Frances Ridgely was hired to develop the art department. The present structure was completed in 1963. The art department provides temporary exhibitions in addition to its permanent collection. The museum is an agency of the State of Illinois.

The Old State Capitol is composed of the Illinois State Historical Library, founded in 1889, and the Illinois State Historical Society, founded in 1899. The library is a state agency.

Springfield economy and the broader cultural community

An examination of the economy and broader cultural community of Springfield contributes to an understanding of the effects ascribed to the ten examined arts institutions. Table VII-1 presents useful market data such as the Effective Buying Income (EBI), a measure of the buying power of households after government deductions for taxes, social insurance, and lesser items; it also shows income, age, education, and population information. The Springfield Standard Metropolitan Statistical Area or SMSA consists of the Illinois counties of Sangamon and Menard. In this study, the terms "local," "the Springfield metropolitan area," and "the Springfield region" are used interchangeably to identify the Springfield SMSA, unless otherwise specified. Springfield, the capital of Illinois and the county seat of Sangamon County, is located 190 miles southwest of Chicago and one hundred miles northeast of St. Louis. The city is one hundred miles north of the 1970 center of population for the U.S. and twenty miles due west of the economic center, for the forty-eight contiguous states.

Sangamon County had a 1975 population of 180,514, up from 171,020 in 1970 (County

Population (selected years)		Household income (1977)	
1960	146,539	\$8,000-\$9,999	6.3%
1970	171,020	\$10,000-\$14,999	16.8%
1975	180,514	\$15,000-\$24,999	33.4%
1977	185,400	\$25,000 and over	20.7%
<u>Population change</u>		1977 median household income	\$16,098
1960-1970	9.8%	1969 median household income	\$10,302
1970-1975	5.0%	Average annual change in per capita income 1969-74	8.8%

and City Data Book 1977, U.S. Dept. of Commerce, Census Bureau). The Springfield Chamber of Commerce projects that Springfield will surpass the national average for per capita income by 1990 (Springfield, Illinois—1990, The Greater Springfield Chamber of Commerce).

Springfield was founded by settlers from North Carolina in 1818 and became the Illinois state capitol six years later. The city is well known as the home of Abraham Lincoln.

Because Springfield is the state capitol, many people in the SMSA are government employees. State government and the service and clerical sectors provide the bulk of Springfield's employment.

In 1977, the State of Illinois was the city's largest single employer with 16,150 employees. Fiat Allis was second with 2,900 workers. Hospitals and insurance companies dominated the remainder of the list of major employers, with St. John's Hospital employing 2,100, Memorial Medical Center employing 1,800, and Franklin Life and Horace Mann Educators Insurance Companies both employing more than one thousand workers (Financial Report: City of Springfield, Illinois: For Fiscal Year March 1, 1978 to Feb. 28, 1979. City of Springfield, Financial Department).

Springfield is the retail trade center for the surrounding agricultural area of nearly ten counties with an estimated population of 400,000. Sangamon County has 965 retail and 304 wholesale firms, and the county's 1977 retail sales approached \$872,000,000. The major sales categories were machinery, farm products, groceries, and automotive equipment. Approximately 71 percent of Sangamon County's commercial activity occurred in Springfield. In addition, the city serves as headquarters for 125 national, regional, and state associations, and eight insurance companies. Total business volume in the SMSA in 1978 was estimated at \$1,875,392,050 (Springfield Chamber of Commerce, adjusted to 1978).

Springfield is served by a major highway network, twenty-six major trucking firms, and five railroads. Two airlines, Ozark and Air Illinois, provide air service.

Springfield's tourism and convention business is growing. Immediately east of the downtown business district is the nearly completed twenty million dollar Springfield Metropolitan Exposition and Auditorium Authority convention center. The Illinois State Fair, held in Springfield each August, attracts nearly a million visitors. Abraham Lincoln's home and tomb as well as the nineteenth-century Illinois State Capitol are popular.

ballet, theatre, poetry workshops, music appreciation groups, choirs, bands, and the annual Old Capitol Art Fair. Four colleges and universities are located in the Springfield area. They are Sangamon State University, Lincoln Land Community College, Springfield College, and Southern Illinois University School of Medicine.

The examined institutions were selected from the many nonprofit arts and cultural organizations in the Springfield SMSA. Although these ten may perhaps typify the impact of various types of institutions, they do not represent the full range of locally available commercial and nonprofit activities. It is clear that the examined institutions do not exhaust the impact of the "culture industry." The yellow pages of the Springfield metropolitan area telephone directory list over three hundred enterprises which can be considered culture-related in the broadest sense. These range from music, art, and theatrical suppliers to book and record dealers, design firms, and commercial photographers.

Data on the impact of some elements of these cultural business sectors are available from the 1977 statistics in the U.S. Bureau of the Census County Business Patterns series. Table VII-2 details various data on businesses used by the general public.

Direct economic effects

The direct economic effects of the examined institutions include local spending for goods and services, salaries and wages to local residents, and expenditures by guest artists and by local and nonlocal audiences. Table VII-3 presents selected data on institutional direct effects during fiscal 1978.

Local institutional expenditures for goods, services, and salaries. It is estimated that the examined institutions made 49 percent of their expenditures for goods and services with local vendors and that this totaled \$396,654. The percentage of nonlabor expenditures made locally by the examined institutions ranged from 18 percent to 100 percent. An additional \$981,461 was spent for salaries and wages to local households. No estimate has been made of the impact of additional earned and other income by institutional employee households, which in some cases was over 35 percent.

Guest artist spending. Each year, cultural institutions contract with nonresident designers, directors, conductors, featured soloists, touring groups, and others. These nonresident "guest artists" were reported to have spent a total of \$54,451 locally. No estimate has been made of spending by guest artist entourage.

Table VII-2 Springfield SMSA selected businesses related to arts and culture

Businesses	Number	Employees	Payroll
Television-radio enterprises	16	105	\$ 816,000
Music and record stores	9	58	\$ 380,000
Bookstores	16	101	\$ 351,000
Photography stores	---	---	\$ ---
Movie theatres (except drive-ins)	7	80	\$ 235,000
Total	48	344	\$1,782,000

Table VII-3

Springfield SMSA estimated direct economic effects of examined institutions

	Total	Percent of total direct spending	Single institution	
			Lowest	Highest
Local institution expenditures for goods and services	\$ 396,654	13%	\$5,020	\$167,914
Employee salaries and wages	\$ 981,461	33%	\$ 240	\$892,527
Local audience spending (other than ticket price)	\$ 431,526	14%	\$4,421	\$134,460
Sole-reason visitor spending	\$1,133,737	38%	\$2,261	\$728,488
Guest artist spending	\$ 54,451	2%	\$ 0	\$ 40,000
Total	\$2,997,819	100%		

Table VII-4

Springfield SMSA estimated audiences and spending by examined institutions

Institution	Audience			Institution total
	Local	Nonlocal	Nonlocal (sole reason)	
Art Collection, Illinois State Museum	81,000	69,000	15,900	150,000
Community Concert Series	4,019	41	12	4,060
Great American People Show	10,655	108	32	10,763
Old State Capitol Art Fair	23,250	1,750	625	25,000
Old State Capitol	32,653	139,204	32,653	171,857
Springfield Art Association	13,950	1,050	375	15,000
Springfield Ballet	3,704	236	134	3,940
Springfield Municipal Opera	13,388	558	377	13,946
Springfield Symphony Orchestra	6,768	282	190	7,050
Springfield Theatre Guild	7,564	1,231	519	8,795
Total	196,951	213,460	50,817	410,411

Audience spending. Decisions regarding the handling of audience data can have a major impact on economic effect estimates. This study's conservative approach was to include the ancillary spending of nonlocal visitors only if attendance at the arts event was their sole reason for being in the community. This protocol is discussed in Chapter I.

At some institutions, however, sole-reason visitors are only a small percentage of total visitor attendance and spending. Many visitors indicated that they had planned ahead of time to attend although that was not the sole reason for their visit. Table VII-4 presents a summary of audience data for Springfield.

An estimated 213,460 visitors from outside the SMSA attended the examined institutions during fiscal 1978. They comprised from 1.1 percent to 80.7 percent of total attendance depending on the institution. Of these visitors, 50,817 are estimated to have visited Springfield specifically to attend the institutions under study.

Audience	Local	Non-Local	Total
1	10,251	10,251	20,502
2	1,268	1,268	2,536
3	714	714	1,428
4	14,729	14,729	29,458
5	9,944	9,944	19,888
6	8,488	8,488	16,976
7	3,366	3,366	6,732
8	990	990	1,980
9	2,239	2,239	4,478
10	1,878	1,878	3,756
11	9	9	18
12	5,816	5,816	11,632

Table VII-5

Springfield SMSA audiences of examined institutions by residence and spending

	Average for all institutions	Single institution range	
		Lowest	Highest
Audience residence			
In Springfield	37.2%	11.9%	83.4%
Outside Springfield but in SMSA	10.8%	7.5%	28.6%
Outside SMSA	52.0%	1.1%	80.7%
Audience spending			
Percent of local audience reporting	40.0%	33.0%	65.0%
Per capita spending	\$ 2.19	\$1.10	\$3.60
Sole-reason nonlocal audience per capita spending	\$22.31	---	---
Not sole-reason nonlocal audience per capita spending	\$65.37	---	---

*Due to small sample sizes, analysis of nonlocal audience data was not conducted by individual institutions.

As can be seen from Table VII-5, local audiences spent sums ranging from an average of \$1.10 to \$3.60 per person per visit for items such as meals and parking. During fiscal 1978, local audiences are conservatively estimated to have spent \$431,526 over and above admission fees.

mean of 0.70 nights, whereas in the non-sole-reason group 38 percent stayed at hotels for a mean of 1.74 nights.

As shown in Table VII-6, many other visitors expected to attend while visiting Springfield, but it was not their sole reason. Visitors from outside the SMSA are of special interest inasmuch as their spending represents "new" dollars, money which had not been in the community until that time. Across all examined institutions, nonlocal sole-reason visitors traveled a mean of seventy-two miles and reported per capita expenditures of \$22.31, resulting in total expenditures of \$1,133,727 that can be conservatively attributed to the drawing power of the examined cultural activities. Persons for whom attendance at the cultural institutions was not their sole reason for visiting the community traveled a mean of eighty-seven miles and spent \$69.54 per capita, for a total of \$10,631,972. One reason for this difference in expenditures is that in the sole-reason group 32 percent stayed at hotels for a

Table VII-6 Springfield SMSA nonlocal audiences by examined institutions

Institution	Audience sample size	Nonlocal proportion of total audience	Mean miles traveled	Mean per capita expenditure
Springfield Symphony Orchestra	282	46.5%	56.6	24.00
Springfield Symphony Orchestra	364	1.1%	66.7	35.88
Springfield Symphony Orchestra	307	80.7%	67.7	26.51
Springfield Symphony Orchestra	381	6.7%	65.3	31.47
Springfield Symphony Orchestra	261	6.6%	72.6	57.13
Springfield Symphony Orchestra	365	3.8%	91.7	66.72
Springfield Symphony Orchestra	331	14.3%	75.6	42.23

*Because of relatively small nonlocal audience, these data should be treated with caution.

Table VII-7

**Springfield SMSA
estimated secondary
economic effects
of examined institutions**

Secondary business volume generated by institution-related direct effects	\$3,223,011
Secondary personal incomes generated by institution-related direct effects (excluding \$981,461 in salaries to organizational employees)	\$1,316,946
Secondary full-time jobs in the Springfield SMSA attributable to institution-related direct effects (excluding 72 full-time organizational employees)	161
Initial expansion of the local credit base	\$ 901,705
Current value of backup inventory, equipment, and property	\$1,643,852

Secondary economic effects

Direct-effect spending leads to secondary effects when the institution-related expenditures within the community are in turn respent by local firms and households. The study estimates the level of five secondary effects of institution-related spending in 1978. Respending of initial dollars introduced into the local economy is estimated to result in \$3,223,011 in local secondary business volume. Of this amount, an estimated \$1,316,946 is paid out in wages to employees. This personal income represents 161 full-time jobs in the Springfield SMSA.

Additional secondary effects include an expansion of the local credit base due to deposits in local banks by the examined institutions, their employees, and the local businesses benefiting from institution-related direct effects. It is estimated that in fiscal 1978 average monthly balances in business and employee savings and checking accounts totaled \$929,607. When reduced by federal and state cash reserve requirements, this allows an initial expansion of the credit base totaling \$901,705.

Finally, area firms benefiting from institution-related direct and secondary business activity are estimated to have invested \$1,643,852 in plant, inventory, and equipment in support of this business volume. This represent the fiscal 1978 value of these assets, not expenditures made in fiscal 1978; a portion of the assets may, however, have been acquired in that year. Expenditures were not necessarily made with local firms. Table VII-7 presents estimates for each of the secondary effects discussed above.

Government revenues and expenditures

In addition to estimating the direct and secondary effects on businesses and individuals attributable to the examined institutions, this study has sought to estimate the effect on local Springfield government revenues and expenditures in fiscal 1978 of institution support; this is detailed in Table VII-8. Research on the implication of economic impact data for regional cost-sharing of arts and cultural institutions by the several units of government that comprise a metropolitan area can be found in David Cwi's "Regional Cost-Sharing of Arts and Cultural Institutions," Northeast Regional Science Review, Vol. 9, 1979.

Table VII-8

Springfield SMSA examined institutions by sources of government support

	Federal	State	SMSA	Total
...	\$ ---	\$ 151,580	\$ ---	\$ 151,580
...	\$ ---	\$ ---	\$ ---	\$ ---
...	\$ ---	\$ 21,300	\$ 1,250	\$ 22,550
...	\$ ---	\$ ---	\$ ---	\$ ---
...	\$51,455	\$1,289,500	\$ ---	\$1,340,955
...	\$ ---	\$ 750	\$ ---	\$ 750
...	\$ ---	\$ ---	\$ 400	\$ 400
...	\$ ---	\$ ---	\$22,000	\$ 22,000
...	\$ ---	\$ 4,000	\$ ---	\$ 4,000
...	\$ ---	\$ ---	\$ ---	\$ ---
TOTAL	\$51,455	\$1,467,130	\$23,650	\$1,542,235

Table VII-9

**Springfield SMSA
estimated revenues and costs
to local government
related to examined institutions**

Revenues	
Real estate taxes paid by institutions, their employees, and business property serving them	\$107,664
Locally retained sales tax on institution-related business volume	\$ 19,085
Local income tax revenues attributable to institutional employees	\$ 0
State aid to local governments attributable to institutional employee households	\$ 24,473
Hotel taxes	\$ 5,956
Gasoline tax	\$ 12,059
Parking revenues, estimated	\$ 18,344
Total	\$187,581
Costs	
Operating costs of local governments and schools for services to employee households	\$ 87,217
Grants to study institutions	\$ 23,650
Total	\$110,867

Estimates of costs to local governments in the Springfield area are based on estimates of local governmental operating costs associated with services to employee households, including the cost of public instruction for households with children in the public schools but excluding costs associated with services to the institutions themselves. Table VII-9 summarizes institution-related governmental costs and revenues. Included as costs are local government grants and fees for services. In reviewing Table VII-9, the limited nature of our analysis should be kept in mind. No information is available by which to judge whether or not the identified effects on business, individuals, and government are typical of the broader universe of Springfield area cultural institutions. The tax effects shown are specific to the examined mix of institutions.

Revenues to local government include real estate taxes, taxes on business property devoted to servicing the institutions, sales taxes, local hotel taxes, gasoline taxes, state aid to local governments, and parking revenues. These totaled \$187,581 in local government revenues attributable to the examined institutions.

An employee survey indicates that employees at the examined institutions contribute to both costs and revenues of government. They live mainly in the city of Springfield or elsewhere in Sangamon County, but 11 percent live in Macon County, which is not part of the Springfield SMSA. Approximately 62 percent of employees pay taxes as homeowners; they report a total of forty-two children in local public schools.

Sales, income, and property tax estimates are undoubtedly conservative inasmuch as no estimate has been made of taxes paid by individuals benefiting from institution-related secondary effects. In addition, no attempt has been made to assess the incidental effects of institutional activities on surrounding taxable property values, which may be positive or negative. Finally, no attempt has been made to assess the governmental costs or benefits associated with the more subtle effects that may result from the arts which are discussed in the overview.

Costs to local government included operating costs of local governments and schools and local government grants to the examined institutions for a total cost to local government of \$110,867. As noted earlier, this does not include additional costs that may be associated with specific governmental services to the examined institutions.

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MINNEAPOLIS/ST. PAUL

Children's Theatre Company: Richard H. Jackson, John Clark Donahue, Jay Bush Chimera Theatre: Gloria Segal, James Borland Cricket Theatre: Preston Townley, Bill Semans, Marcy Dowse Guthrie Theatre: Donald Dwight, William George, Donald Schoenbaum, Donald Michaelis Minneapolis Society of Fine Arts (governing and supporting organization of the Minneapolis Institute of Arts): David McLaughlin, John M. Dozier, James V. Toscano, DeCourcy McIntosh Minneapolis Institute of Arts: Samuel Sachs II, Ruth Humleker, Timothy Fiske Minnesota Dance Theatre: Philip Getts, Loyce Houlton, Beverly Cnare Semon Minnesota Orchestral Association: Stephen R. Pflaum, Richard M. Cisek, Richard Bass, John G. Fischer, Anne Cheney St. Paul Chamber Orchestra: Eugene M. Warlich, Thomas Gerdom Science Museum of Minnesota: John Roe, Wendell A. Mordy Walker Art Center: Alice E. Wittenberg, Martin Friedman, Donald Borrman, Robert Sain Metropolitan Council: Rey Boezi, Roger Israel, Sara Burstein, Victor Ward Twin Cities Metropolitan Arts Alliance: Donald Michaelis, Marcy Dowse, Doug Eichten, Thomas Kigin, Dixon Bond, Ted Crawford, Leigh Kamman, Karla Williams, Ronald Olson, Libby Larsen, Elizabeth Hinz, M.E.G. Roy

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Frank, Ann Des Rosiers, Joyce Volker, Christy Beckmann, Jerry Kvasnicka, Angie Gross, Joe Divito, Stephen Jay, Jane Childs, Michael Christopher, Peter Raven, Rick Daley, Susan Flowers, Tom Warner, Barbara Jennings, James Wood, Susan Sullivan, Joan Bernstein, Ronald Sutherland, Donald Fraziers, Julie Hershey, Rich Hugerman, Peggy Hilpest Consultants: Mark Twain Bancshares

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SPRINGFIELD

Project steering committee: Donald Biggerstaff, Nancy Evans, Dave Kiliman, Bernadette Nolan, Bob Wesley Other project staff at the Center for the Study of Middle-Size Cities: RamIn Behtash, John W. Foley, Daniel Johnson, Jan Kohl, Kathy Landahl, Kathy Oglesby, Sue Ann Schleder, Julie Slack, Ken Stanek, Kathy Wooldridge Participating organizations and designates:

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Springfield Theatre Guild (Mildred Waller-Hay);
Springfield Art Association (Pauline Telford,
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