

## The Economic Impact of Nonprofit Arts and Cultural Organizations and Their Audiences in the City of Worcester, MA (Fiscal Year 2015)

Direct Economic Activity	Arts and Cultural Organizations	+	Arts and Cultural Audiences	=	Total Industry Expenditures
<b>Total Industry Expenditures</b>	\$64,504,636		\$61,185,858		<b>\$125,690,494</b>

### Economic Impact of Spending by Arts and Cultural Organizations and Their Audiences

Total Economic Impact of Expenditures	Economic Impact of Organizations	+	Economic Impact of Audiences	=	Total Economic Impact
Full-Time Equivalent (FTE) Jobs Supported	2,801		1,261		<b>4,062</b>
Household Income Paid to Residents	\$46,052,000		\$26,741,000		<b>\$72,793,000</b>
Revenue Generated to <u>Local</u> Government	\$3,107,000		\$1,327,000		<b>\$4,434,000</b>
Revenue Generated to <u>State</u> Government	\$2,579,000		\$2,888,000		<b>\$5,467,000</b>

### Event-Related Spending by Arts and Cultural Audiences Totaled \$61.2 million (excluding the cost of admission)

Attendance to Arts and Culture Events	Resident <sup>1</sup> Attendees	+	Nonresident <sup>1</sup> Attendees	=	All Cultural Audiences
Total Attendance to Arts and Culture Events	1,866,265		390,404		<b>2,256,669</b>
Percentage of Total Attendance	82.7%		17.3%		100.0%
Average Event-Related Spending Per Person	\$26.43		\$30.38		\$27.12
<b>Total Event-Related Expenditures</b>	<b>\$49,325,384</b>		<b>\$11,860,474</b>		<b>\$61,185,858</b>

### Nonprofit Arts and Cultural Event Attendees Spend an Average of \$27.12 Per Person (excluding the cost of admission)

Category of Event-Related Expenditure	Resident <sup>1</sup> Attendees	Nonresident <sup>1</sup> Attendees	All Cultural Audiences
Meals and Refreshments	\$16.25	\$17.14	\$16.40
Souvenirs and Gifts	\$6.24	\$3.27	\$5.73
Ground Transportation	\$1.95	\$4.39	\$2.37
Overnight Lodging (one night only)	\$0.00	\$4.53	\$0.78
Other/Miscellaneous	\$1.99	\$1.05	\$1.83
<b>Average Event-Related Spending Per Person</b>	<b>\$26.43</b>	<b>\$30.38</b>	<b>\$27.12</b>

Source: *Arts & Economic Prosperity 5: The Economic Impact of Nonprofit Arts and Cultural Organizations and Their Audiences in the City of Worcester*. For more information about this study or about other cultural initiatives in the City of Worcester, visit the Worcester Cultural Coalition's web site at [www.worcestermass.org/arts-culture-entertainment/worcester-cultural-coalition](http://www.worcestermass.org/arts-culture-entertainment/worcester-cultural-coalition).

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## About This Study

This Arts & Economic Prosperity 5 study was conducted by Americans for the Arts to document the economic impact of the nonprofit arts and culture industry in 341 communities and regions (113 cities, 115 counties, 81 multicounty or multicounty regions, 10 states, and 12 individual arts districts)—representing all 50 U.S. states and the District of Columbia. The diverse communities range in population (1,500 to more than 4 million) and type (small rural to large urban). Project economists from the Georgia Institute of Technology customized an input-output analysis model for each participating region to provide specific and localized data on four measures of economic impact: full-time equivalent jobs, household income, and local and state government revenue. These localized models allow for the uniqueness of each local economy to be reflected in the findings.

Americans for the Arts partnered with 250 local, regional, and statewide organizations that represent the 341 study regions (30 partners included multiple study regions as part of their participation). **To complete this customized analysis for the City of Worcester, the Worcester Cultural Coalition joined the study as one of the 250 partners.**

## Surveys of Nonprofit Arts and Cultural ORGANIZATIONS

Each of the 250 partner organizations identified the universe of nonprofit arts and cultural organizations that are located in its region(s) using the Urban Institute's National Taxonomy of Exempt Entity (NTEE) coding system, a definitive classification system for nonprofit organizations recognized as tax exempt by the Internal Revenue Code. In addition, the study partners were encouraged to include other types of eligible organizations if they play a substantial role in the cultural life of the community or if their primary purpose is to promote participation in, appreciation for, and understanding of the visual, performing, folk, and literary and media arts. These include government-owned or government-operated cultural facilities and institutions; municipal arts agencies and councils; private community arts organizations; unincorporated arts groups; living collections (such as zoos, aquariums, and botanical gardens); university presenters, programs, and facilities; and arts programs that are embedded under the umbrella of a nonarts organization or facility (such as a hospital or church). In short, if it displays the characteristics of a nonprofit arts and cultural organization, it is included. *For-profit businesses (e.g., Broadway, motion picture theaters) and individual artists were excluded from this study.*

Nationally, data was collected from a total of 14,439 organizations for this study. Response rates among all eligible organizations located in the 341 study regions was 54.0 percent, and ranged from 9.5 percent to 100 percent. Responding organizations had budgets ranging from \$0 to \$785 million (Smithsonian Institution). It is important to note that each study region's results are based solely on the actual survey data collected. There are no estimates made to account for nonresponding organizations. Therefore, the less-than-100 percent response rates suggest an understatement of the economic impact findings in most of the individual study regions.

**In the City of Worcester, 57 of the 57 eligible nonprofit arts and cultural organizations participated in this study—an overall participation rate of 100.0 percent.** A list of the participating organizations can be obtained from the Worcester Cultural Coalition.

## Surveys of Nonprofit Arts and Cultural AUDIENCES

Audience-intercept surveying, a common and accepted research method, was completed in all 341 study regions to capture information about spending by audiences at nonprofit arts and culture events. Patrons were selected randomly and asked to complete a short survey while attending an event. A total of 212,691 attendees completed the survey. The respondents provided itemized travel party expenditure data on attendance-related activities such as meals, souvenirs, transportation, and lodging. Data was collected throughout the year to guard against seasonal spikes or drop-offs in attendance, and at a broad range of events (because a night at the opera will typically yield more spending than a Saturday children's theater production). Using total attendance data for 2015 (collected from the participating organizations), standard statistical methods were then used to derive a reliable estimate of total arts event-related expenditures by attendees in each study region.

**In the City of Worcester, a total of 762 valid audience-intercept surveys were collected from attendees to nonprofit arts and cultural performances, events, and exhibitions during 2016.**

## Studying Economic Impact Using Input-Output Analysis

To derive the most reliable economic impact data, input-output analysis was used to measure the impact of expenditures by nonprofit arts and cultural organizations and their audiences. This highly-regarded type of economic analysis has been the basis for two Nobel Prizes in economics. The models are systems of mathematical equations that combine statistical methods and economic theory in an area of study called econometrics. The analysis traces how many times a dollar is respent within the local economy before it leaves the community, and it quantifies the economic impact of each of those rounds of spending. Project economists customized an input-output model for each of the 341 participating study regions based on the local dollar flow among 533 finely detailed industries within its economy. This was accomplished by using detailed data on employment, incomes, and government revenues provided by the U.S. Department of Commerce (County Business Patterns, the Regional Economic Information System, and the Survey of State and Local Finance), state and local tax data (e.g., sales taxes, lodging tax, property taxes, income tax, and miscellaneous local option taxes), and the survey data collected from the responding arts and cultural organizations and their audiences.

<sup>1</sup> For the purpose of this study, residents are attendees who live within Worcester County; nonresidents live elsewhere.