# The Economic Value of Arts, Cultural, and Heritage Organizations to the Central Iowa Economy

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December 2015

# **Overview of Findings**

This is an analysis of the regional economic contributions attributable to organizations receiving financial support from Bravo Greater Des Moines. The analysis is based on a survey of those organizations that was completed in 2015. That survey provided information about operational costs, employment, payroll, and visitorship. The survey information was then used to estimate the total economic contribution of these organizations to the central lowa economy. Considering all linkages to the regional economy Bravo-funded venues supported

- \$120.9 million in total regional economic output, of which
- > \$73.4 million was value added (the equivalent of GDP), and of that
- \$45.2 million was labor income flowing to 2,336 jobholders in the central lowa economy

All of these organizations are sources of artistic, cultural, and educational enrichment, and they have value as intrinsic and important components of the regional economy. They produce services that employ and pay workers, require inputs from regional businesses, and are consumed by households, schools, and other regional and statewide institutions that serve lowa.

These institutions are also strong components of the collective quality of life enjoyed in central lowa. It is widely recognized that an essential element of regional livability includes access to an array of life-enriching opportunities. Vibrant modern urban economies have strong cultural, artistic, and entertainment foundations. This study merely measures their economic value to the region. Their total worth to the region and to the state is much greater and, in large part, immeasurable.

#### Introduction

This study estimates the regional economic value of the many regional organizations supported by Bravo Greater Des Moines (hereafter Bravo) in the Des Moines / West Des Moines Metropolitan Statistical

Area comprised of Dallas, Guthrie, Madison, Polk, and Warren County. The values are estimated using an input-output model of the regional economy, which estimates the value of activity in the funded organizations along with all associated linkages those organizations have with the remainder of the central lowa economy. This evaluation looked at the 58 entities that received financial support from Bravo, and survey information about their operations was used for this assessment. This evaluation is provided as a for-a-fee service of lowa State University in support of regional economic development and community economic education.

Table 1 is a list of the surveyed organizations. They are divided into those primarily providing artistic or entertainment services to the community, of which there were 37, and the 21 providing cultural, heritage, or educational services to the region. This classification has a functional purpose as it allows for dividing the economic activity so that it aligns with the industrial classifications contained within the modeling system used for this study. Subsequent tables will describe the overall contributions of each classification to the regional economy as well as combined values to determine the overall economic effects of these regional assets.

Table 1
Bravo Funded Organizations

Primarily Cultural, Heritage, or

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Primarily Arts an	<b>Educational Organizations</b>	
After School Arts Program	Des Moines Symphony Association	Altoona Area Historical Society
Ankeny Art Center	Des Moines Vocal Arts Ensemble	Ankeny Area Historical Society
Ankeny City Band	Downtown Events Group	Blank Park Zoo Foundation
Ankeny Community Chorus	Gateway Dance Theatre	Clive Historical Society
Ankeny Community Theater	Greater Des Moines Music Coalition	CultureALL
Ballet Theatre of Des Moines	Greater Des Moines Public Art Foundation	Greater Des Moines Botanical Garden
Central Iowa Wind Ensemble	Heartland Youth Choir	Historic Valley Junction Foundation
City Voices	Hoyt Sherman Place Foundation	I'll Make Me a World in Iowa
Civic Music Association of Des Moines	Iowa Shakespeare Experience	Iowa Architectural Foundation
Clive Public Arts Advisory Commission	Iowa Youth Chorus	Iowa Asian Alliance
Des Moines Art Center	Metro Arts Alliance	Iowa Gold Star Museum
Des Moines Arts Festival	Music Under the Stars	Iowa Hall of Pride
Des Moines Choral Society	Pride of Iowa Barbershop	Italian-American Cultural Center of Iowa
Des Moines Community Orchestra	Repertory Theater of Iowa	Latino Resources, Inc.
Des Moines Community Playhouse	StageWest Theater Company	Living History Farms Foundation
Des Moines Gay Men's Chorus	Tallgrass Theatre Company	Polk County Heritage Gallery
Des Moines Metro Opera	Waukee Area Arts Council	Salisbury House Foundation
Des Moines Performing Arts	West Des Moines Public Art Advisory Commission	Science Center of Iowa
Des Moines Social Club		State Historical Museum of Iowa
		Urbandale Historical Society
		West Des Moines Historical Society

<sup>&</sup>lt;sup>1</sup> Guthrie and Madison County were added to the Des Moines MSA county list after the 2000 census. West Des Moines attained a core population in excess of 50,000 in 2002, according to U.S. Census estimates. Soon thereafter the region was classified as the Des Moines / West Des Moines Metropolitan Statistical Area.

While we value these organizations as the sources of artistic, cultural, and educational enrichment, they all have value as intrinsic and important components of the regional economy. All of these organizations produce services that employ and pay workers, require inputs from regional businesses, and are consumed by households, schools, and other regional and statewide institutions that serve lowa. They are also important components of the regional quality of life to be enjoyed in the region. It is widely recognized that an important component to regional livability includes access to an array of artistic, entertainment, and cultural opportunities. Vibrant modern urban economies have strong cultural, artistic, and entertainment foundations, and these organizations contribute strongly to the region's total bundle of amenities.<sup>2</sup>

## **Compiling the Direct Values**

This study uses a current input output model of the regional economy. The "inputs" into that model are the overall annual operational characteristics of the organizations that were surveyed. Table 2 contains those values. In all, the arts and entertainment organizations had \$41.2 million in operating expenditures in fiscal 2015, and the cultural and educational organizations had \$21.2 million in expenditures. The arts and entertainment group paid 1,411 job holders of all types \$13.7 million in labor incomes, while the cultural and educational group paid 367 job holders \$10.45 million in labor incomes. These are among the primary direct inputs used to model the value of these organizations to the regional economy.

Table 2
Selected Direct Characteristics

	Arts and Entertainment		Cultur	al, Heritage, or	Total	
	7 60 0 0		Educational			
Operating expenditures	\$	41,179,429	\$	21,224,900	\$	62,404,329
Employee payroll	\$	13,662,762	\$	10,451,787	\$	24,114,549
Full-time employees		153		192		345
Part-time employees		1,258		175		1,433
Total employees		1,411		367		1,778
Within-region visitors		1,641,248		1,294,593		2,935,841
Out-of-region visitors		394,697		369,827		764,524
Total visitors		2,035,945		1,664,420		3,700,365

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<sup>&</sup>lt;sup>2</sup> The most notable recent argument for the importance of nurturing creative activities is found in Florida, Richard, The Rise of The Creative Class (Basic Books, 2002). He talks about the importance of a wide array of creative activities when profiling modern economic growth, not just the artistic or cultural subset of that total. Many, however, narrowly reduce his treatise as one arguing that the arts create the conditions for broader economic growth. Florida's work in fact concludes there is a very strong coincidence of many creative groupings to include the necessary talents of scientists, educators, professionals, as well as artists or performers in healthy and dynamic metropolitan economies. Since, there have been energetic efforts nationwide to consider the importance of artistic and cultural assets within regional economic development and promotional activities.

Visitorship amounts are also listed in Table 2. Visitorship has an important role to play when calculating regional economic values. While local residents would be expected to patronize local arts, entertainment, or cultural facilities, visitors from outside of the region can be considered otherwise indifferent as to where they seek and obtain these services. Consequentially, those visitors have a measurable positive impact on the regional economy when they choose to patronize arts and cultural facilities in the Des Moines area. They represent service exports, i.e., sales to non-local persons, and the additional spending they make on travel, lodging, and other necessities is added to the impact estimates.

Table 2 also provides the foundation for estimating boosted visitor spending attributable to these institutions. For fiscal 2015, the cash-register value of that spending is estimated at \$13.04million. That value was arrived at by using historical surveys and analyses of visitor spending in the Des Moines region.<sup>3</sup> For each visitor, spending was allocated across dining, miscellaneous retail, and transportation costs. The probability of an overnight stay is also addressed in the estimation process. Finally, the institutions were scored as to whether they would be expected to be the primary reason for the visit to the region or a secondary reason. The sum of those values and weights produced the expected increment to spending, which were then included in the economic modeling.

#### **Computing the Total Economic Values**

Input-output models (IO) are detailed compilations of a region's industrial structure, and they are used to evaluate the size of an industry or a group of industries and the value of those industries to a regional economy considering all regional inter-industrial transactions. The IO model for this analysis is made up of all of the industries and institutions contained within the five-county Des Moines / West Des Moines MSA. There are four kinds of economic values that are reported out of the modeling exercise:

- Industrial output: This is the value of what is produced by industries as measured on an annual basis. For many firms, it is analogous to gross sales.
- Value added: This represents payments to workers, to proprietors, to investors, and the indirect taxes that are part of production. Value added is analogous to gross regional product (GDP).
- Labor income: This is a subset of value added. It includes all wages, salaries, and benefits that are paid to workers and proprietors.
- Jobs. These are the actual number of full-time and part-time positions in industries, not the number of employed persons. Many employed persons have more than one job; hence, there are always more jobs in an economy than employed persons.

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<sup>&</sup>lt;sup>3</sup> The visitor spending values reflect my own research, and they are significantly lower than values that are assumed by many local tourism officials or by state tourism surveys. One reason for this is that my values also include a probability that the visit is the primary reason for a visit or a secondary reason; hence, the visitor values are adjusted downward to reflect that probability.

These economic values are reported by four levels:

- Direct values: These are the values that are attributed to the firm or firms that are being assessed.
- Indirect values: All of the firms that are assessed require inputs from the regional economy.

  The degree to which the direct firms link to regional suppliers constitutes the indirect values.
- Induced values: When the workers in the direct firms and the workers in the supplying (indirect) industries convert their paychecks to household spending, they induce more economic activity in the region to meet household needs.
- Total values: The sum of direct, indirect, and induced values equals the total value or economic effect of an industry or group of industries to the region.

Table 3 presents the modeled results of the arts and entertainment sub-set of the survey. Those institutions had an estimated \$41.2 million in output in 2015, which required 1,411 jobs making \$14.48 million in labor income. Those Bravo-supported institutions required \$13.2 million in regionally-supplied inputs, which in turn supported an additional 117 jobs making \$4.3 million in labor income. When the direct and the indirect workers converted their labor incomes into household spending, they induced \$13.5 million in additional output in the region, which in turn required 113 jobs making \$4.6 million in labor income. Summed, then, the arts and entertainment group accounted for \$67.8 million in regional economic total output, \$41.4 million in total value added (or GDP), \$23.4 million in labor income, and 1,641 jobs.

Table 3

Arts and Entertainment Total Economic Values

	Jobs	1	Labor Income	Value Added	Output
Direct	1,411		14,481,004	25,346,414	41,179,429
Indirect	117		4,261,673	8,040,895	13,185,035
Induced	113		4,632,256	8,018,896	13,476,597
Total	1,641	\$	23,374,933	\$ 41,406,205	\$ 67,841,061

Table 4 contains the very same type of estimates for the cultural, heritage, and educational organizations. Looking only at the total values, those entities supported \$39.3 million in regional industrial output, \$23.9 million of value added (or GDP), \$16.7 million in total labor income, and 500 jobs.

Table 4

Cultural Heritage	or Educational Tota	l Economic Values
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	Jobs	Labor Income	Value Added	Output
Direct	367	10,875,903	12,354,473	21,224,900
Indirect	55	2,542,342	5,774,497	8,601,988
Induced	78	3,314,845	5,738,917	9,489,643
Total	500	\$ 16,733,091	\$ 23,867,887	\$ 39,316,531

Table 5 presents the combined results. Overall, Bravo-funded Des Moines area organizations accounted for \$107.2 million in regional economic output, supported \$65.3 million in value added, and explained \$40.1 million in area labor income to flowing 2,131 jobs in FY 2015.

Table 5

**Combined Bravo Supported Programs Total Economic Values** 

	Jobs	Labor Income	Value Added	Output
Direct	1,778	25,356,907	37,700,887	62,404,329
Indirect	172	6,804,016	13,815,392	21,787,023
Induced	191	7,947,101	13,757,813	22,966,240
Total	2,141	\$ 40,108,024	\$ 65,274,093	\$ 107,157,592

The next table (Table 6) presents the regional economic impacts of visitorship. Readers will remember that out-of-region visitors were estimated to have spent \$13.04 million in retail purchases, transport, dining and drinking, and for lodging coincident with their visits. Spending was allocated for retail, transport related, dining and drinking, and lodging. When those values were entered into the modeling system, they resulted in \$8.2 million in direct regional output requiring 152 jobs making \$3.2 million in labor incomes. When all rounds of economic activity worked their way through the economy, visitor spending supported \$13.8 million in total regional output, \$8.1 million in value added, \$5.1 million in labor income, and 195 jobs.<sup>4</sup>

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<sup>&</sup>lt;sup>4</sup> Readers will notice that the direct output value of \$8.2 million is much less than the estimated \$13.04 million in sales. When modeling visitor spending, total spending on retail goods (gasoline, general merchandise, etc.) is not entered into the model. The portion that represents the cost of the good that is sold, to include all in-transport costs, is first excluded as it is not counted as a component of retailers' output; however, all other retail costs (inputs, labor, O&M, etc.) are counted as output.

Table 6
Visitor Spending Total Economic Impacts

	Jobs	Labor Income	V	alue Added		Output
Direct	152	3,214,685		4,801,727		8,172,907
Indirect	18	885,778		1,542,443		2,638,916
Induced	25	1,012,835		1,753,119		2,946,567
Total	195	\$ 5,113,298	\$	8,097,289	\$	13,758,390

Finally, Table 7 summarizes the Bravo-funded organization total values with the visitor values. In all, \$120.9 million in regional output, \$73.4 million in value added, \$45.2 million in labor income, and 2,336 jobs are supported.

Table 7

Total Regional Economic Activity Supported by Bravo-Funded Activities

	Bravo-Funded Organizations	Visitor Effects	Total Economic Effects
Total regional output \$	107,157,594	13,758,390	120,915,984
Total value added \$	65,274,093	8,097,289	73,371,381
Total labor income \$	40,108,024	5,113,298	45,221,322
Total jobs	2,141	195	2,336

#### **Conclusions and Context**

The artistic, entertainment, cultural, heritage, and educational institutions receiving assistance from Bravo make important contributions to the central lowa economy. They directly or indirectly support 2,336 jobs and \$54.2 million in labor income. The combined regional economy is, however, very large. In 2014, there were 460,000 jobs in the region, and total personal income was \$29.4 billion.

Readers may notice that the phrase "economic impact" was only used when describing the visitorship outcomes. The vast majority of the activities studied provide services and enrichment opportunities to regional residents primarily – slightly less than three-quarters of patronage is local. As such, these venues serve a regional market overwhelmingly. The fractions that serve non-local markets – patronage by non-residents, for example – constitute export sales and, therefore, an increment to regional economic activity based on service exports.

The total economic value of the organizations to the regional economy is contained in Table 7. Nearly 26 percent of visitors were from out of the region. It is appropriate, then, to apportion 26 percent of the

values reported in Table 5 plus all of the values in Table 6, the visitor effects, as the economic impact values. Combined, just on a jobs basis, 730 of the jobs, about 31 percent of total jobs supported, are supported by non-local patronage. The remaining 69 percent of jobs exist to serve regional demands.

Modern urban economies require a wide array of economic, social, cultural, artistic, and natural amenities to sustain population levels and support growth. It is increasingly the case that a region's artistic and cultural foundations are important quality of life elements in the bundle of amenities that urban settlers value. While this study quantifies the economic value of these amenities using conventional measures, their overall worth to society is wholly intangible. And the nature of intangibles is that they are difficult, if not foolish, to attempt to price.

## **Addendum: State and Local Fiscal Impacts**

All employment contributes to government accounts. Workers pay state and local taxes, fees, and charges. Those contributions, in turn, pay for the government services that workers and their families rely on.

As reported in Table 7, all Bravo-funded organizations ultimately supported \$45.2 million in labor incomes in fiscal 2015. Those labor incomes, in turn, supported own-source revenues for state and local governments. Table 8 provides those estimates. State revenue support amounted to \$2.82 million in taxes coupled with \$1.40 in charges and fees for a total of \$4.22 million. All local government tax collections were \$1.82 million plus \$1.31 million in charges for a total of \$3.13 million. Combined state and local own-source receipts were \$7.35 million.

Table 8
Estimated Fiscal Impacts

	State Government	All Local Governments
Total Taxes	2,816,481	1,820,470
Income Taxes	1,299,987	34,767
Sales Taxes	1,213,780	183,397
Property Taxes	-	1,575,257
All Other Taxes	302,714	27,049
Charges and Fees	1,401,754	1,310,759
Total Own Source Revenues	\$ 4,218,235	\$ 3,131,230