# The Economic Contribution of the Des Moines Metro Opera

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# Introduction

This is an evaluation of the regional economic contribution of the Des Moines Metro Opera (DMMO) for fiscal year 2011. The analysis is based on their fiscal 2011 expenditures and activities, and the evaluation was conducted using an input-output model of the Des Moines – West Des Moines Metropolitan region containing the counties of Polk, Dallas, Warren, Madison, and Guthrie.

# **Des Moines Metro Opera Initial Economic Activity**

Relying on their Cultural Data Project (CDP) report for fiscal 2011, Table 1 informs us the DMMO had \$2.1 million to total expenditures, of which \$440,182 were paid to 7.5 employees in labor costs. The remaining expenditures, \$1.658 million, represented purchases of goods or services in the production of entertainment.

#### Table 1

### **Direct Economic Factors**

Fiscal '11 Expenditures	\$ 2,097,990
Labor Costs	\$ 440,182
All Other Expenditures	\$ 1,657,808
Total Jobs	7.5

Table 2 provides additional information about the DMMO using the master database that was compiled of all BRAVO- funded activities in the region. The DMMO reported 35,794 attendees in that database, 72 percent of whom were to attend education or outreach activities. And of all attendees, 20,691 were from outside of the Metro area; consequently, their patronage is considered net new economic activity (or an export of sales) for the purpose of estimated the total regional economic contribution of the DMMO.

#### Table 2

Characteristics of Attendance		
Total Attendance	35,794	
Education and Outreach	25,853	
Attendance from outside of the Metro area	20,691	
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### Characteristics of Attendance

# **Economic Analysis Foundations and Results**

The regional economic contribution of the DMMO was constructed using a "bill of goods" modeling approach. Because they reported their spending in very high detail for fiscal 2011, it was possible to very cleanly itemize their expenditures in the regional economy within the modeling structure. The \$1.658 million in other expenditures reported in Table 1 were entered into the input-output (IO) model for each category of spending. Additionally, the \$440,182 in labor costs were also entered as household spending.

Secondly, because 20,691 of the DMMO attendees were from outside of the Metro area, they are classified as visitors who "but-for" the opera would not have attended an activity that was produced by this institution in the region. Technically, visitor spending is considered new spending to the region, while spending by local residents represents their normal spending for entertainment. New spending, i.e., visitor spending, produces an economic impact in that it represents net new productivity to the region. There will thus be two dimensions analyzed: the operational value of the DMMO, as well as its tourism or visitorship value.

In the subsequent table there will be four types of economic outcomes described. The first is <u>industrial</u> <u>output</u>, which is the value of production over the course of a year. For the DMMO it is mainly its expenditures (with minor adjustments). <u>Value added</u> is the next indicator, and it is composed of the wages and salaries paid to workers, their benefits, returns to management paid to proprietors, investment incomes, and all indirect taxes that are part of the production process. Value added is the same thing as Gross Domestic Product (GDP), which is the preferred measure of economic activity on an annual basis. <u>Labor income</u> is a subset of value added. It is composed of wages and salaries, employee benefits, plus proprietors' incomes. The last economic outcome is jobs. Jobs include both full-time and part-time workers, and there are always more jobs in an economy than employed persons as many people hold more than one job. In the modeling process, jobs are the annualized job value for a particular industry. So, if an organization seasonally hires 100 persons for a short period of employment, that value might be reduced to 10 persons on an annualized basis for the purposes of modeling.

There are four levels of economic activity reported, as well. <u>Direct</u> activities refer to the actual industry or industries that we are initially measuring; here that is the DMMO. <u>Indirect</u> activity measures the sum of inputs required by the direct firms, to include, in this case, substantial payments to independent contracting artists and other performers. When workers in the direct firms and the indirect firms convert their incomes into household spending, they <u>induce</u> a final round of economic activity to meet household needs. The sum of direct, indirect, and induced activity constitutes the total economic activity associated with a particular type of industrial evaluation.

### **Opera Total Economic Contribution**

Table 3 contains the results of the bill of goods evaluation of the regional economic contribution of the DMMO to the Metro economy. It produced \$2.05 million in direct economic output, which required 7.5 jobs earning \$440,182 in labor income.<sup>†</sup> The opera, however, required \$1.38 million in total inputs, which in turn supported, on an annualized basis, the equivalent of 19.2 jobs making \$543,831.<sup>‡</sup> When the direct workers and the indirect workers converted their pay into household spending, they induced \$940,857 in additional regional output, which required 8.4 job holders making \$355,366 in labor income. Summed, the DMMO accounted directly or indirectly for \$4.37 million in Metro area industrial output, \$1.86 million in value added (or regional GDP), \$1.34 million in labor income, and 35 jobs.

#### Table 3

### Total Economic Contribution of the Des Moines Metro Opera in 2011

	Direct +	Indirect +	Induced =	Total
Output \$	2,049,731	1,378,609	940,857	4,369,197
Value Added \$	440,182	816,497	601,215	1,857,894
Labor Income \$	440,182	543,831	355,366	1,339,379
Jobs	7.5	19.2	8.4	35.1

### **Visitor Spending Economic Impacts**

As was reported above, the DMMO served 20,691 attendees from outside of the region. Relying on visitor spending coefficients compiled for an early study of all Bravo-funded activities in the region, the DMMO's share of visitor spending was computed. Table 4 presents the estimate. In all, the 20,691 visitors would have been expected, via visitor related spending, to support \$209,435 in direct economic

<sup>&</sup>lt;sup>†</sup> Output is less than total expenditures, because the cost of goods sold in the retail and wholesale sectors is not counted as output in those sectors.

<sup>&</sup>lt;sup>†</sup> The DMMO does not employ performers; it hires them as contract workers. In fiscal '11, according to its CDP report, it engaged 115 artists or other contract workers for an estimated 19.35 FTEs. The modeling system, given the spending reported for those contract workers and all of the costs borne by independent artists, reported fewer annualized jobs for that activity, given the reported level of spending for that activity. Consequently, the sum of all indirect job holders, to include the jobs supported in other goods and service suppliers only totals to 19.2 jobs.

activity requiring 3.3 job holders earning \$62,316 in labor incomes. Once all supplying and household spending relationships area compiled, the visitor values for the region grow to \$353,574 in output, \$190,820 in value added, \$117,679 in labor income, and 4.5 jobs.

#### Table 4

Des Moines Opera Visitorship Economic Impacts				
	Direct +	Indirect +	Induced =	Total
Output \$	209,435	69,488	74,652	353,574
Value Added \$	99,411	43,729	47,679	190,820
Labor Income \$	62,316	27,607	27,756	117,679
Jobs	3.3	0.6	0.7	4.5

## **Combined Economic Contributions**

The previous two tables can be summed to arrive at the total regional economic contribution of the DMMO. In addition, the fraction of visitors of all attendees can be applied to Table 3 to apportion the "impact" or visitor portion of that activity, and that can be added to the values in Table 4 to get the estimated economic impact value of the DMMO. Table 5 gives the totals. The DMMO supports or contributes to \$4.72 million in total regional economic output, \$2.05 million in value added, \$1.46 million in labor income, and nearly 40 jobs. A subset of that contribution is its impact, which means its contribution to net-new productivity to the region. Those amounts are \$2.88 million in output, \$1.26 million in value added or GDP, and \$891,917 in labor income to nearly 25 jobs.

#### Table 5

### Final Estimates: Total Economic Contribution and Total Regional Economic Impact of the DMMO

	Total Economic	Total Economic
	Contribution	Impact
Output \$	4,722,771	2,879,222
Value Added \$	2,048,714	1,264,790
Labor Income \$	1,457,058	891,917
Jobs	39.6	24.8