Central Iowa's Music Economy

Dave Swenson
Department of Economics, Iowa State University
March 2014

Summary of Findings

Central lowa's music economy was evaluated in this report. The music economy was defined as musical performance organizations, music promotions, independent music artists, music stores, music radio, sound recording industries, and musical instrument manufacturing. The central lowa economy evaluated includes Dallas, Guthrie, Madison, Polk, and Warren County – the counties constituting the Des Moines – West Des Moines Metropolitan area.

As defined for this study, central lowa's music economy is a prominent component of the regional economy.

- The industries studied had 968 job holders employed by music industry firms who earned \$23.85 million in labor income in 2013
- When that information was entered into an input output model of the regional economy, Central Iowa's music industry supported, when accounting for all multiplier effects:
 - 1,322 total jobs in the five-county region,
 - \$39.62 million in labor income, and
 - \$65.81 million in regional value added, a number that is analogous to regional gross domestic product (GDP).

The Central lowa economy is immense. There were more than 415,000 jobs in the region, and the region produced over \$46.1 billion in overall GDP in 2013. Although the music economy is obviously quite small in comparison to the whole, it nonetheless comprises a substantial fraction of the creative, artistic, and entertainment economy and contributes strongly to the overall quality of life enjoyed in the region.

Introduction

Different elements of Iowa's and central Iowa's creative economy have been analyzed over the years, the most recent of which were evaluations of all Bravo-funded activities and a separate evaluation of the Des Moines Opera. The purpose of those studies was to demonstrate the regional economic contribution of selected cultural events and entertainment venues in the metropolitan area. This short study looks at a hard-to-measure subset of the metro's economic vitality: the regional music economy.

It is initially difficult to zero-in on defining and limiting dimensions. Firms that make money from music range from promoters, restaurants and bars, to music stores and service providers that repair musical instruments. For this analysis, it was determined that the central lowa music industry would be limited to the elements of the economy that generated income from promoting, performing, or otherwise distributing music in the region. That constrained the measurement to the following economic activities in the central lowa economy:

Table 1

Musical performance organizations
Music promotions
Independent musical artists
Music stores
Music radio
Sound recording industries
Musical instrument manufacturing

Dining and drinking establishments, where a noticeable amount of musical activity takes place, do not produce music¹; rather, they use musical performances to entice dining and drinking. The value of the musical activity is measured as payments to promoters or to the actual musicians. Genuine musical promotions, however, in fact do, by their organizing activities, generate music and music performance attendance; and the bulk of their gross sales are linked to musical productions. For 2013, for example, as Table 2 shows, just three venues in the metropolitan area accounted for over 86,000 attendees. Gross ticket sales from those venues were important components of the baseline valuation of the region's music industry.

⁻

¹ If dining or drinking establishments in fact act as musical promoters, it is not possible to sort out that economic activity from their core operations. If entertainers are from the local region, payments to them show up in our analysis of independent musical artists. If payments accrue to out-of-region artists, then all that is missed are the profits (or losses) by those venues on the promotion.

Table 2

Major Central Iowa Music Venues

	2013
	Attendance
Iowa State Fair	52,013
80 / 35	15,720
Hoyt Sherman	18,586

There are other elements of genuine music activity that are impossible to quantify. For example, there are many independent music teachers, but there is no feasible way to count those people let alone the economic value of their work. There are, of course, many music and voice teachers as part of the private and public education systems in the metropolitan region, but those professionals are rightly classified as educators, and the product they convey is the ability to perform music. Those activities cannot be counted, willy-nilly, as part of the music industry any more than a drivers' education teacher could be counted as part of the nation's automobile industry. Finally, music is considered essential for ballet, other dance, and for stage musicals. Those musical activities are not counted in this evaluation as there is no reasonable way in which to apportion the musical contribution or to determine whether or not those activities were not already counted in the other categories (i.e., independent musicians).

Arriving at Reasonable Baseline Estimates

Components of important portions of lowa's music industry have been measured in a periodic survey conducted by Bravo, the Des Moines area umbrella organization that provides funding and support for area cultural, entertainment, and heritage organizations. That survey contains information about employment, payroll, total expenditures, and the number of visitors to those different venues. That data set provided very good data for the following Bravo-supported organizations that are key suppliers of musical entertainment in the metro:

Table 3

Des Moines Symphony
Des Moines Choral Society
Des Moines Community Orchestra
Des Moines Diversity Chorus
Des Moines Gay Men's Chorus

Des Moines Metro Opera

Des Moines Vocal Arts Ensemble Greater Des Moines Music Coalition

Heartland Youth Choir Iowa Youth Chorus Music Under the Stars

Musical performers and musical promotions data for the region were derived from national data from the Bureau of Labor Statistics (BLS) that were then apportioned first to the Iowa economy, and then to the central Iowa economy on a pro-rata. Those data were used to discern both the number of businesses and employees engaged in promotion and performance, as well, separately, of the number of occupations that aligned with those industries. Retail music stores data were obtained from the County Business Patterns data for the metropolitan area and calibrated in part by 2007 Census of Retail data from the U.S. Commerce Department. There are no reliable data on musical instrument repair, though it was assumed the lion's share of that service is handled through area music stores.

Music radio for central lowa was estimated by identifying the major area radio stations, controlling for those with primarily musical formats, and then measuring market shares as gauged through Arbitron ratings. That evaluation determined that close to 50 percent of radio station output (or listenership) in the region was primarily through the airing of music.² Again, the primary criteria for inclusion were entities that promoted, performed, or produced musical output; as music is the basis for advertising support (or public underwriting in the case of lowa Public Radio's music programs), then those media outlets were counted as part of the region's music industry. Those values were then derived iteratively from employment and payroll data from the BLS for radio broadcasting.

Finally, the BLS contains information on sound recording businesses in the region. It was assumed for this analysis that capacity dealt with music recording in the main. There was also information in our model and from the BLS that allowed us to infer there were at least 10 musical instrument manufacturing jobs in the region.

² It may appear that the inclusion of music radio and the exclusion of dining and drinking venues that sponsor music is arbitrary, but the argument for inclusion is that "but for" the musical programming, those radio stations would not have the listenership or the sponsorship (or advertising) that underwrites their businesses. Were it not for music, the station would have no revenue; the same cannot be said for dining and drinking establishments.

Table 4 contains the initial estimate of the size of the central lowa music industry before considering all multiplied-through linkages. The major music producing, performing, or supporting industries in the region are estimated to have supported 968 jobs and \$23.85 million in labor income payments to all employees in those industries.

Table 4

Initial Economic Values	Employment	ı	Labor Income
Musical Performance & Promotion	610		7,267,778
Music Stores	224		6,018,271
Music Radio	103		8,412,935
Sound Recording	21		1,549,709
Musical Instrument Manufacturing	10		601,333
Total	968	\$	23,850,026

These data were used to initially "shock" the appropriate respective sectors in an input-output model of the central lowa economy to determine the potential total economic contribution of these industries to the area economy.

Economic Analysis Foundations and Results

The regional economic contribution of the music industry was estimated using an input-output model of the central lowa economy. In the subsequent tables there will be four types of economic outcomes described. The first is <u>industrial output</u>, which is the value of production over the course of a year. For the music industry of central lowa estimated annual expenditures are used as an approximation of the output value of the center. <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 or even fewer 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 music industry of central lowa and the values align with figures displayed above in Table 4. <u>Indirect</u> activity measures the sum of inputs required by the direct firms, to include all goods and services required to operate their businesses or services. 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.

The Findings

Table 5 contains the regional economic contributions of the combined musical performance, which includes independent artists and music organizations, and the promotion sectors. For 2013 it was projected that combined sector had \$30.5 million in output, which required 610 jobs earning \$7.3 million in labor incomes. Those performers and promoters required \$9.43 million in inputs from the central lowa economy, which in turn supported 86 jobs making \$3.7 million in labor incomes. When the direct and indirect jobholders converted their earnings into household spending, they induced another \$7.54 million in regional output and \$2.71 million in labor incomes to another 60 job holders. Combined, this sector explained \$47.54 million in regional output, \$27.7 million in value added (or GDP), of which \$13.68 million was labor income paid to 755 job holders.

Table 5

Musical Performance & Promotion Economic Contributions						
Impact Type	Employment	Labor Income	Value Added	Output		
Direct	610	\$7,267,778	\$16,788,431	\$30,461,873		
Indirect	86	\$3,704,001	\$5,995,012	\$9,425,832		
Induced	60	\$2,708,955	\$4,876,463	\$7,648,646		
Total	755	\$13,680,734	\$27,659,906	\$47,536,351		

Table 6 contains the estimates for regional music stores. In all, those stores had \$11.97 million in regional output³, which required 224 job holders making \$6.02 million in labor income. Those stores required \$3.04 million in inputs from the area economy, which paid out \$1.11 million in labor income to 21 more jobs. When the direct and the indirect workers spent their labor incomes, they induced \$4.98 million in additional output in the region, which supported 39 more jobs and \$1.76 million in labor income. Summed, the music stores explained \$19.99 million in regional output, \$14.1 million of value added, and \$8.89 million in labor income received by 284 job holders.

Table 6

Music Stores Economic Contributions						
Impact Type	Employment	La	abor Income	٧	alue Added	Output
Direct	224	\$	6,018,271	\$	8,914,789	\$ 11,969,473
Indirect	21	\$	1,112,594	\$	2,014,448	\$ 3,042,574
Induced	39	\$	1,762,444	\$	3,173,406	\$ 4,976,598
Total	284	\$	8,893,308	\$	14,102,643	\$ 19,988,645

³ Retail output is not the same as gross sales at the cash register. In input-output accounting, the total costs of the goods sold (including wholesale markups and transport costs) are not counted as output. Those transactions are apportioned to the sectors or the region in which they occurred. Only the retailers' margins (overhead, labor, etc.) are counted as output.

Table 7 displays the combined music radio, sound recording, and instrument making contributions. Just the totals will be conveyed. In all, those entities in central lowa accounted for \$42.6 million in output, \$24.05 million in value added, \$17.1 million in labor income, and 283 jobs.

Table 7

Music Radio, Instrument Manufacturing, and Sound Recording Economic Contributions

Impact Type	Employment	L	_abor Income	١	/alue Added	Output
Direct	132	\$	10,563,977	\$	13,408,155	\$ 24,139,697
Indirect	77	\$	3,109,010	\$	4,563,843	\$ 8,919,693
Induced	74	\$	3,377,134	\$	6,077,331	\$ 9,533,130
Total	283	\$	17,050,121	\$	24,049,329	\$ 42,592,520

Table 8 sums all of the preceding values with full recognition that there will still be a minor amount of double-counting⁴. In all, the sectors chosen for analysis explained \$110.12 million in central lowa total industrial output, \$65.8 million in value added (or GDP), of which \$39.6 million was in the form of labor income paid to 1,322 job holders.

Table 8

All Music Sectors Economic Contributions

Impact Type	Employment	Labor Income	Value Added	Output
Total	1,322	39,624,163	65,811,878	110,117,516

Summary

The phrase "economic contribution" has been used, not the phrase "economic impact." The vast majority of musical production and other musical performances or performers in the region serve regional audiences. Accordingly, it represents entertainment or personal fulfillment spending that would have occurred nonetheless in the regional economy. Events like the grandstand shows at the lowa State Fair or 80/35 will both draw from beyond the primary metropolitan area, but there is no reliable estimate of out of region visitorship in either case, so the best that can be said as that a minority fraction of those sales likely accrued to non-region residents.

⁴ After each itemized component was computed, I manually subtracted elements that would have been double counted. For example, I subtracted independent artist "purchases" from the musical organizations so that those regionally supplied inputs were not counted twice. That adjustment does not eliminate all of the duplicative transactions; it does, however, eliminate the bulk of them.