The Economic Impacts and Related Community Benefits of the Aronoff Center for the Arts

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Aronoff Center Economic Impacts

Over the past 20 years, the Aronoff Center's \$175 million in total spending (in 2015 dollars) has had a total economic impact of more than \$365 million.

For the 2013-14 season, Aronoff Center operations accounted for \$9.83 million in expenditures. The total economic impact of the Aronoff Center's spending in the 2014 fiscal year totaled \$20.5 million.

During fiscal year 2014, the Aronoff Center employed 373 people; of those 59 were full-time positions and 314 were part-time employees, who collectively had over \$5 million in earnings. Overall, the employment impacts of the Aronoff Center totaled \$8.94 million in earnings and the employment of 498 workers.

Attendance and Visitor Spending

Attendance at the Aronoff Center's 2013-14 performance season numbered 420,470 patrons. Earlier this year, the attendance reached a collective 20-year total of 8.81 million.

Many Aronoff Center patrons go to downtown restaurants in conjunction with attending a performance. More than \$6.53 million was spent at downtown bars and restaurants by Aronoff Center patrons during the 2013-14 season.

One in six of these patrons comes from outside the Cincinnati Metropolitan Statistical Area (MSA), and patrons' dining at restaurants, combined with other spending for parking, hotel stays, and other retail purchases produced a total of \$6.71 million in visitor spending. The result is a total economic impact of almost \$13.9 million and approximately 170 jobs with total earnings of \$4.15 million.

Combined Economic and Fiscal Impacts

The combined economic impact of the Aronoff Center and visitor spending amounts to over \$34.3 million in fiscal year 2014.

This combination of spending by the Aronoff Center and non-local visitors directly produced \$1.45 million in local tax revenues for the City and County in the 2014 fiscal year.

The Aronoff Center relies on a combination of its dedicated volunteer corps and financial support – including both in-kind donations and development income – to ensure smooth operations and fund its educational and other community programs.

Community Benefits

The benefits of the Aronoff Center extend beyond its economic impacts. Education programs such as *SchoolTime* and *Artists on Tour* are important teaching initiatives that educators are able to use with their classes. This programming "creates a pathway to learning that is profoundly engaging."

The Arts in Healing program aims to engage patients through the arts and expedite their physical and emotional healing processes.



PART B. ECONOMIC IMPACTS

I. INTRODUCTION

The Aronoff Center for the Arts (Aronoff Center) is celebrating its 20th anniversary during the 2015-2016 performance season. The Cincinnati Arts Association, which operates the Aronoff Center, commissioned the Economics Center to study the Aronoff Center's economic impact over the last twenty years, as well as its related community benefits on the 15-county Cincinnati Metropolitan Statistical Area (MSA).¹ Studying the Aronoff Center at this scale helps local leaders, arts patrons, donors, and prospective funders to better understand the economic impacts and community benefits derived from the Aronoff Center.

An economic impact number represents the total dollar amount of economic transactions that occur because of an organization or industry's expenditures, providing a picture of economic activity. It demonstrates how many additional dollars circulate in the economy due to every dollar that an organization or industry spends.

This report analyzes the Aronoff Center's expenditures over the past twenty years, and the resulting economic activity via sales and job creation.



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¹ The 15-county Cincinnati MSA includes: Hamilton, Butler, Clermont, Warren, and Brown Counties in Ohio; Boone, Kenton, Campbell, Gallatin, Grant, Pendleton, and Bracken Counties in Kentucky; and Dearborn, Franklin, and Ohio Counties in Indiana. It is also described as the Cincinnati metro area.

II. IMPACTS OF ARONOFF CENTER SPENDING

Spending by the Aronoff Center

During the 2013-14 season, the Aronoff Center directly spent \$9.30 million on operations expenditures.² Certain other miscellaneous expenditures that occurred in conjunction with the operation of the Aronoff Center also contribute to its economic impact. This "miscellaneous" spending amounted to \$343,000 during the 2013-14 performance year.

Another small but important component of direct expenditures is capital investment for major facility improvements and equipment upgrades. These investments are variable from year to year, but the Aronoff Center must continually spend money for this purpose. Over the five years (2010 through 2014), these expenditures averaged \$185,100 per year. Altogether, direct expenditures for the Aronoff Center in fiscal year 2014 (FY 2014) totaled \$9.83 million.

In the 20 years from its opening through the end of 2014-15 season, expenditures made by the Aronoff Center totaled more than \$175 million in 2015 dollars.

Spending by the Aronoff Center for the Arts			
FY 2014 20-Year Tota			
Operations Expenditures	\$9,298,900	\$166,715,700	
Miscellaneous Spending	\$343,000	\$6,151,700	
Capital Expenditures	\$185,100	\$2,373,100	
All Direct Expenditures	\$9,827,000	\$175,240,500	

Economic Impact

This spending generates additional economic activity in the region. The indirect impact of these expenditures adds another \$10.6 million to the local economy. The total economic impact of the Aronoff Center's direct expenditures comes to \$20.5 million in FY 2014.

Similarly, the Aronoff Center's \$175 million in total spending over the past 20 years has had a substantially larger economic impact, totaling more than \$365 million (in 2015 dollars) for the Aronoff Center's 20-year history.

Economic Impact of the Aronoff Center for the Arts			
	FY 2014	20-Year Total	
All Direct Expenditures	\$9,827,000	\$175,240,500	
Indirect Impact	\$10,641,700	\$189,767,900	
Total Economic Impact	\$20,468,700	\$365,008,400	

² Cincinnati Ballet expenditures are excluded from this figure, except for facility related expenses, which are captured in Aronoff Center expenditures.



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The operation of the Aronoff Center requires a wide range of staffing from arts administration professionals to the technical production staff. Recruiting and managing this staff is complex because the allocation of hours worked among staff members varies greatly depending on the time of year and the respective positions held. While some paid employees are full-time, others only work half-time and many work only ten hours a week during the Aronoff's primary performance season. Some paid employees, who handle occasional duties, only work about 30 hours a year.

During FY_2014, the Aronoff Center employed 373 individuals. These jobs were comprised of 59 full-time positions and 314 part-time employees. The following table shows the total paid staff and the associated \$5.01 million in earnings for FY 2014.

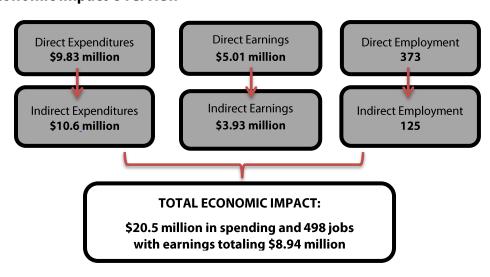
Total Paid Staff and Earnings (2014)		
Total Employees 373		
Total Employee Earnings	\$5,010,859	

Spillover effects were felt by the region's economy due to the Aronoff Center's spending and employment. An additional 125 workers were indirectly employed in the region as a result of the Aronoff Center's direct economic activity, and another \$3.93 million in indirect earnings was generated due to the Aronoff Center's expenditures.

Overall, the direct and indirect employment impacts totaled to over \$8.94 million in earnings and the employment of 498 workers throughout the local economy.

Total Earnings and Employment Impacts		
Earnings Jobs		
Direct Impact	\$5,010,859	373
Indirect Impact	\$3,930,630	125
Total Impact \$8,941,489 498		

Total Economic Impact Overview





III. IMPACTS OF VISITOR SPENDING

Attendance

Attendance at the Aronoff Center totalled 420,470 patrons during the 2013-14 performance season and currently averages about 400,000 annually. The largest draw is the *Broadway in Cincinnati* series, which accounts for 58 percent of all attendance. Other major attractions at the Aronoff Center include the Cincinnati Ballet, the resident arts organizations that call the Jarson Kaplan Theater home, Weston Art Gallery exhibitions, and a wide range of top performers and events.

At some point during the current performance season, the Aronoff Center will surpass 9,000,000 in total attendance since its doors were first opened. Over the past 20 years, a total of 8.81 million people have been entertained and inspired in one of the Aronoff Center's theaters.

"The development of the Aronoff Center occurred at the beginning of the revitalization of downtown. It was an important seed that took root before all the other organizations and efforts, and it continues to serve as an anchor." Dan Lincoln, President/CEO, Cincinnati USA Convention and Visitors Bureau.

Recent Attendance Growth

As shown in the table below, recent attendance growth has been substantial for two of the three categories of performances at the Aronoff Center. The increased attendance for the *Broadway in Cincinnati* series and the Cincinnati Ballet has more than made up for the decline in other performances. The decline in the other productions is, in general, a reflection of fewer dates being available for those performances in the past two years. Overall, this growth demonstrates that the Aronoff Center fills an important role in providing arts and cultural opportunities for many people.

Total Ticket Purchases				
	2011-12	2013-14	2-year	
	& 2012-13	& 2014-15	period	
	seasons	seasons	growth	
Broadway Series	401,577	517,360	28.8%	
Cincinnati Ballet	96,936	127,714	31.8%	
other performances	158,053	141,183	-10.7%	

"The Aronoff Center has been a catalyst to a much more active downtown nightlife scene. The area was reinvented with other uses and businesses that also draw people to downtown Cincinnati." David Ginsburg, President and CEO, Downtown Cincinnati Incorporated. Ginsburg also notes that the Aronoff Center's presence has played an important role in making Cincinnati a place of interest for investment. The resulting development and revitalization has increasingly attracted people from both in and out of Cincinnati to the downtown area.



Attracting Visitors to the Region

Based on ticket purchase data, much of this recent growth in attendance has come from patrons who live outside the Cincinnati area. Growth for the *Broadway Series in Cincinnati* and the Cincinnati Ballet has been very strong from this demographic segment, resulting in an increasing share of ticket purchases being made by non-local visitors. During the 2013-14 performance season, 16.8 percent of all tickets were purchased by people living outside the Cincinnati metro area.

Non-Local Ticket Purchases				
	2011-12	2013-14	2-year	Non-local as
	& 2012-13	& 2014-15	period	% of total in
	seasons	seasons	growth	past 2 years
Broadway Series	39,486	60,580	53.4%	11.7%
Cincinnati Ballet	15,092	21,579	43.0%	16.9%
other performances	46,763	41,288	-11.7%	29.2%

Downtown Spending

Extrapolating from recent survey research conducted by the Aronoff Center about the spending patterns of patrons, the Economics Center examined the level of downtown restaurant spending generated as a result of people attending performances at the Aronoff Center. On average, about 60 percent of people who attend a performance at the Aronoff Center, dine and/or visit bars downtown, spending an average of \$26 per person. This means that more than \$6.53 million was spent at downtown bar and restaurant establishements by Aronoff Center patrons during the 2013-14 season. Of course, non-local visitors have a higher average spending rate, which is reflected in the table below.

Spending at Downtown Restaurants				
	2013-14	Estimated		
	attendance	spending		
Local patrons	349,900	\$4,775,300		
Non-local patrons	70,570	\$1,757,400		
All Aronoff Center patrons	420,470	\$6,532,700		

"A good winter show lineup at the Aronoff Center can really help restaurant traffic in this historically slower season." Ben Castle, CFO, Boca Restaurant Group

Mr. Castle also noted that the site for the restaurant, Nada, was chosen in part because of its close proximity to the Aronoff Center.



Visitor Spending Impacts

As the preceding table shows, much of this downtown restaurant spending comes from local residents who are attending the shows. This part of spending does not create an economic impact because it would otherwise probably occur at another venue but still within the region. However, spending in the downtown area from visitors residing outside the Cincinnati region does generate additional economic activity.

Parking lots and garages near the Aronoff Center accommodate thousands of non-local patrons every year. It is assumed that an average of \$8 is spent for each car parked in conjunction with attending a performance. Visitor spending on parking services for the 2013-14 season, estimated at \$188,000, generated a total of \$348,200 in additional spending in the local economy.

Many of the visitors live far enough away from downtown Cincinnati to warrant an overnight visit within the local region. Under these circumstances, it is assumed that on average, two people spend one hotel night at a rate of \$120. During the 2013-14 season, this spending of \$3.00 million generated a total of \$5.97 million in additional economy activity locally.

The spending category that generates the greatest amount of new economic activity in the Cincinnati MSA is dining and retail spending. Restaurants attract the patronage of a majority of visitors seeing a show at the Aronoff Center. This makes sense given that eating out before or after a major event is customary for many people. During the 2013-14 season, \$3.54 million in spending on dining and retail resulted in a total of over \$7.54 million in additional economic activity. This spending generated approximately 54 percent of the total additional spending generated in the local economy during the 2013-14 season.

As shown in the table below, during the 2013-14 season, this \$6.71 million in visitor spending produced a total economic impact of almost \$13.9 million and an estimated 170 jobs with total earnings of \$4.15 million, based on economic modeling.

Economic Impact of Visitor Spending				
	Direct –	Eco	onomic Impact	
	Spending	Total Spending	Earnings	Jobs
Parking	\$188,000	\$348,200	\$74,100	2
Hotel	\$3,001,900	\$5,967,200	\$1,812,500	65
Dining/Retail	\$3,528,300	\$7,543,200	\$2,262,700	103
Total Impact	\$6,718,200	\$13,858,600	\$4,419,300	170



IV. COMBINED ECONOMIC IMPACTS

The total economic impact of the Aronoff Center is the combination of the impacts of its direct spending and the non-local patron spending. The combined economic impact between these two spending sources amounts to over \$34.3 million as illustrated in the table below.

Combined Economic Impacts of the Aronoff Center in FY 2014			
Aronoff Spending Impact \$20,486,700			
Visitor Spending Impact \$13,858,600			
Combined Economic Impact	\$34,345,300		

V. FISCAL IMPACTS

The Economics Center utilized admissions tax data, entertainers' and withholdings tax data, and sales tax data provided by the Aronoff Center to calculate the direct fiscal impact for the 2013-2014 season. The taxes collected by the Aronoff Center include admissions tax, sales tax, and local income tax, as shown in the first three rows of the table below.

Visitor spending also generates tax revenues for Cincinnati and Hamilton County. The County receives sales tax, the City and County receive hotel tax, and the City receives income taxes on earnings, as shown in the next three lines of the table. The total tax contribution for FY 2014 amounts to \$1.45 million.

Direct Local Fiscal Impacts of the Aronoff Center in FY 2014		
Admissions Tax	\$590,500	
On-site Sales Tax	\$60,000	
Local Earnings Tax	\$270,700	
Off-site Sales Tax	\$103,800	
Hotel Tax	\$315,200	
Off-site Local Earnings Tax	\$107,000	
Combined Fiscal Impact	\$1,447,200	



VI. SUPPORT FOR THE ARONOFF CENTER

The Aronoff Center could not operate without its extensive volunteer corps. During the recently completed fiscal year, nearly 800 volunteers contributed over 79,000 hours of time in various capacities. While ushers account for 93 percent of this work, volunteers, including some ushers, also serve in a variety of other areas in order to ensure smooth operations and positive patron experiences.

The total value of these volunteered hours is \$1.70 million, according to the Independent Sector's³ calculation of the hourly value of volunteer service.

Volunteers, Hours, and Value of Service			
Position	Volunteers	Hours	
Usher	758	73,863	
Guest Services	200	5,321	
Total	796	79,184	
Total Value	\$1,699,300		

Another component of support for the Aronoff Center is in-kind donations, which amounts to \$142,400 in FY 2014. Among all the various types of in-kind donations, advertising, food/catering, and auction-related donations account for a large share of all in-kind support.

Development income constitutes an extremely important share of the Aronoff Center's annual revenues. Most of the money raised by the Aronoff Center comes from local sources. In FY 2014, only 2.7 percent of all development income came from non-local sources.

Development income comes primarily from sponsorships, fundraising, and grants. In all, this income amounts to \$904,000. Sponsorships are a key source of funds that help to underwrite major productions, and general fundraising provides resources for a variety of activities. Grant money is allocated primarily among Aronoff Center's various education programs, its *Arts in Healing* program, and the Weston Art Gallery.

³ "Value of Volunteer Time | Independent Sector."



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VII. COMMUNITY PROGRAMS

The benefits of the Aronoff Center extend beyond its economic impacts. Through an examination of other information provided by the Cincinnati Arts Association, the Economics Center has assessed the benefits of its community programs.

Education Programs

Research on the Value of Arts Education

The programs organized by the Aronoff Center are valuable to students of a wide age range. Studies of partnerships between schools and professional arts associations have documented positive student learning and behavioral outcomes. As emphasized in the report *The Arts in Education*, "The arts have been shown to create environments and conditions that result in improved academic, social and behavioral outcomes for students, from early childhood through the early and later years of schooling."⁴

There are a number of significant reports on the learning outcomes of arts education in schools locally and internationally.⁵ "Certain forms of arts instruction enhance and complement basic reading skills, language development and writing skills. For example, dance

"Young people will be the inventors of new cultural pattern and social philosophies of tomorrow. They will need to be able to design the materials, conditions and community to fit this new world." Anne Bamford, The Wow Factor: Global Research Compendium on the Impact of the Arts in Education, Münster: Waxman, 2006.

has been employed to develop reading readiness in very young children, and the study of music has provided a context for teaching language skills."⁶ Studies demonstrating improvement in the behavior of students as a result of participation in the arts in schools include: those showing improvements in capacity to empathize, and improvements in cooperation, collaboration, and communication⁷

It is evident that enhancing education through arts contributes to student success and accomplishment. Through multiple advantages, the incorporation of arts into education paves a way for next generation's role in the work place and the community.

⁷ Catteral, Chapleau & Iwanga, 1999, Learning In the Arts and Student Academic and Social Development (pp. 70-71); (Hunter, M. (2005) Education and the Arts Research Overview: A summary report prepared for the Australia council for the Arts, Australia Council for the Arts, Sydney).



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⁴ Perso, T., G. Nutton, J. Fraser, SR Sillburn, and A. Tait. 'The Arts' in Education: A Review of Arts in Schools and Arts-based Teaching Models That Improve School Engagement, Academic, Social and Cultural Learning. Rep. Menzies School of Health Research, 15 July 2011. Web. 28 Sept. 2015.

⁵ Bamford, 2006; Catterall, Chapleau & Iwanaga, 1999; Wetter, Koerner, Schwaninger, 2009; Rothman & McMillan, 2003

⁶ Ruppert, Sandra A. Critical Evidence: How the Arts Benefit Student Achievement. N.p.: National Assembly of State Arts Agencies, 2006.

Overview of Aronoff Center Programming

Since its inception, the Aronoff Center's arts education programs have reached over 1.3 million people in and beyond the Cincinnati metro area. In FY 2014, the Aronoff Center spent \$386,500 in support of arts education programs. These arts education programs positively impact the quality of life in Greater Cincinnati.

In recent years, thanks to the insights and collaboration of local educators, productions aimed toward students have only become more engaging and useful. They have also served as important teaching tools that educators are able to use with their classes. As a result, programs like this are highly valued by teachers.

| Education Programming at the Aronoff Center

Programs that bring students to the Aronoff Center for performing arts experiences are a major and vitally important form of educational programming. The primary, on-site education program at the Aronoff Center is *SchoolTime*. The *SchoolTime* program presents local and nationally-touring arts education events at the Aronoff Center. In 2014 – 2015, *SchoolTime* offered 25 performances reaching more than 14,550 students ranging from pre-school to 12th grades. Additionally, a limited number of discounted tickets are available to schools in the Greater Cincinnati Area for other performances at the Aronoff Center. These tickets are subsidized through contributions from generous corporate donors.

"What's amazing about SchoolTime is that when kids read a book and then see it on stage: the connection is incredible and the kids are so incredibly excited. It develops their interest in reading and brings the books to life. Through this program, many students will crave the theater when they grow up. It creates a pathway to learning that is profoundly engaging." Kim Russell, teacher, Pleasant Hill Academy

In-School Arts Education Programming

The Aronoff Center also offers many arts education programs to engage students at schools in 22 counties within and beyond the Cincinnati metro area. One of these programs is *Artists on Tour* which brings several local artists to schools. This program is the largest offered by the Aronoff Center, reaching nearly 17,000 students last year.

The Aronoff Center also collaborates with other Greater Cincinnati organizations for special programs. An example of this is the Elementary Art Show, which offers students in grades K-8 the opportunity to display their work at the Aronoff Center in the Fifth Third Bank Theatre.

"When our kids get to the theater or when the artists come to us, it's amazing to watch their eyes light up as they are amazed by the stories and the performances." Janice Ball, Covington Schools

The Overture Awards rewards excellence in arts for students in grades 9-12. Its mission is to encourage arts education as an integral part of a student's academic experience and to create an environment that encourages training in, and appreciation of, the arts. The Overture Awards Competition is the area's largest solo arts competition and offers awards in six artistic disciplines: creative writing, dance, instrumental music, theatre, visual art, and vocal music. For



the upcoming 2016 competition, students may win up to \$4,000 in scholarships. Judges at all levels of the competition are drawn from the professional arts community.

Program Efficiency

The Aronoff Center delivers these programs through a variety of formats, including a number of onsite and in-school arrangements. These programs generally have a relatively low cost per student.

Education Program Delivery Costs and Contacts			
Program	Cost	Reached	Per Student
Aronoff Center (On-Site)			
SchoolTime	\$78,234	14,552	\$5.38
Ticket & Transport Subsidies	\$79,283		
In-School			
Artists on Tour	\$36,563	16,802	\$2.18
The Overture Awards	\$72,436	2,449	\$29.58
Special Programs	\$4,893	310	\$15.78
Elementary Art show	\$2,050	310	\$2.92
Other			
Building Diverse Audiences	\$1,200	1,488	\$0.81
Emerging Arts Leaders	\$2,612	198	\$13.19
Donor on Tour	\$19,835	3,510	\$5.65

Arts in Healing

The *Arts in Healing* program, which is funded by ArtsWave and TriHealth, is another way in which the Aronoff Center is using the arts to change people's lives. As noted in the *Arts in Healing* program description, "art engagement can play an important role in healing not just the body, but mind and spirit of an individual."

Still in its early stages, *Arts in Healing* aims to accomplish the following goals: 1) enhance the medical experience through the arts, 2) practice and investigate the use of the arts in healing and well-being, and 3) build community around the arts, health, and medicine. During the development and planning phases, the VA Medical Center, UC Health, and

"People heal in different ways. Live performances help create a calming, soothing environment that is just wonderful. It's different from just listening to music; patients can and do interact with the artist, and they open up." Nalda Gordon, Psychosocial Rehabilitation and Recovery Center, Cincinnati VA Medical Center

Hamilton County Child and Family Services are the focus areas for the program.

Economic analysis of similar programs in other parts of the country indicates that efforts similar to *Arts in Healing* have measurable health impacts that translate into economic impacts such as reduced hospital stays and treatment costs, improved physical and psychological health outcomes, and reduced need for medication.



Studies published in medical journals have documented these benefits, and local healthcare professionals have seen the positive effects in their patients. "Data show that such programs result in patients requiring shorter hospital stays, less medication, and having fewer complications – all of which translates to a reduction in healthcare costs" for patients, insurance providers and the government.⁸

"For some, artistic endeavors are a helpful mode of intervention. This can create an opening in the protective shell when many other strategies can't. For some people, when they can freely express themselves without any judgment or criticism, they have just sort of blossomed." Nalda Gordon, Cincinnati VA Medical Center

Weston Art Gallery

The Weston Art Gallery offers a museum-quality space for a diverse mix of emerging and professional artists in fields such as painting, sculpture, textiles, prints, photography, film, and electronic media. Each year, the Weston Art Gallery presents eight to ten exhibitions that reflect the broad range of artistic talent in the Cincinnati region. The Weston Art Gallery's diverse programming has brought the work of more than 900 artists to nearly 500,000 people of all ages since its inaugural exhibition in 1995.

⁸ Arts in healthcare: 2009 State of the field report. Washington, DC: Society for the Arts in Healthcare.



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PART D. METHODOLOGY

The Economics Center utilized various financial documents provided by the Aronoff Center for its 2014 fiscal year (FY 2014), ending August 31, 2014 -- which corresponds to the 2013-14 performance season -- to calculate the Aronoff Center's economic impact and employment impact on the Cincinnati MSA.

The Economics Center captured the direct and indirect impacts of the Aronoff Center's spending activities on the local economy. These expenditures circulate to entities providing various operational services. For purposes of this analysis, only direct expenditures circulated locally were accounted for. These data were gathered from the Aronoff Center's 2014 Statement of Activity, as well as numerous other financial and program reports.

Indirect impacts consist of spending from Aronoff Center patrons in local businesses before and after shows. The only indirect spending accounted for in this analysis is spending from out-of-town patrons because they are bringing "new" money into the Cincinnati MSA. Spending from local patrons does not yield a net new economic impact because their spending is simply a recirculation of money within the Cincinnati MSA. Nonetheless, local patron spending should still be noted as it serves as a vital source of income to downtown businesses. Indirect impact data were gathered from a survey given by the Aronoff Center to Aronoff Center patrons to determine their spending habits before and during shows.

The Economics Center used the Aronoff Center's personnel data to assess employment expenditures as well as the wider impacts of such expenditures. Additionally, the Economics Center calculated the number of total jobs generated in the Cincinnati MSA through Aronoff's spending activities. The difference between total jobs generated and the number of Aronoff employees, is the indirect impact of Aronoff's spending activities in terms of job creation.

In order to capture a holistic picture of Aronoff's various impacts, the Economics Center applied multipliers to Aronoff's local and non-local expenditures, direct and indirect expenditures, and employment for the 2013-2014 season, and separately, for its entire 20 years of operation. These multipliers account for the effects of Aronoff-related spending on other business operations within the Cincinnati MSA. According to modeling done by the U.S Department of Commerce's Bureau of Economic Analysis, performing arts institutions such as the Aronoff Center have an output multiplier of 2.0829 in the Cincinnati MSA. This means that each \$1 million Aronoff spends on operations yields a total output equivalent to \$2,082,900 across all industries in the Cincinnati MSA. Similar economic multipliers are used to determine the overall economic impact on household earnings and total employment.

Furthermore, the Economics Center evaluated the Aronoff Center's local fiscal impact by gathering tax expenditure data from FY2014.

Finally, the Economics Center's calculation of the aggregate economic impact over the last 20 years required by converting total expenditure and impact figures for previous years into 2015 dollars.



About the Economics Center

The Research and Consulting division of the Economics Center provides the knowledge building blocks that help clients make better policy and economic development decisions. Our dynamic approach and critical data analysis empower leaders to respond to changing economic conditions, strengthen local economies and improve the quality of life for their communities.

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