

The Economic Impact of South Carolina's Arts-Related Economic Cluster

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## OVERVIEW

Throughout the 21st century, one of the principal contributors that has helped to facilitate higher rates of economic growth and development in local regions across the United States has been a strong and vibrant "creative cluster." The creative cluster can be formally defined as a group of industries that broadly encompass science and technology, arts, culture, media and entertainment, business, management, and the professions. Individuals working in the creative cluster are typically distinguished by the intellectual (rather than manual) labor that they contribute to the local economy, which can range from occupations such as engineers and scientists to web artists and graphic designers.

Perhaps the most well-known body of research conducted on the creative cluster comes from economist Richard Florida and his seminal work that examines a group of workers he labels the "creative class." Florida argues that the clustering of this creative workforce in local areas helps to attract and retain the highly productive and rapidly expanding knowledge-economy industry segments (e.g., high-tech advanced manufacturing, life sciences, information technology) that rely on access to workers in occupations contained within the creative cluster.

The purpose of this study is to estimate the economic impact of the portion of the creative cluster in South Carolina associated with all arts, design, crafts, and related activities – defined specifically as the "arts-related cluster." Arts and culture are essential to any region's quality of life and local identity, and as such can serve as an engine of economic development through improving tourism and helping a region attract and retain skilled labor. This latter benefit is especially important in 2023 as South Carolina and the United States continue to face a significant labor shortage that has emerged following the COVID-19 pandemic.



## ASSESSING THE IMPACT OF SOUTH CAROLINA'S ARTS-RELATED CLUSTER

Estimating the economic impact of South Carolina's arts-related cluster begins by first identifying the specific industries in which most of the output produced consists of artistic content. The Arts and Cultural Production Satellite Account – housed within the National Endowment for the Arts (NEA) – quantifies the historical economic impact of the arts-related cluster in the United States as a whole and, as such, maintains specific guidelines that the NEA uses to define the arts-related cluster. These NEA guidelines can then be combined with data from the U.S. Census Bureau, the U.S. Department of Commerce, the U.S. Department of Labor, and the U.S. Bureau of Economic Analysis to determine the direct impact of the arts-related cluster. The direct impacts of the arts-related cluster, therefore, consists of all ongoing business operations associated with firms contained within at least one of the NEA-identified industries. These industries include, for example, museums, performing arts companies, fine arts education, interior design, and photography. Such business operations lead to various labor and non-labor expenditures that are made in the local economy and stimulate demand.

Yet these direct impacts do not provide a complete picture of the impact of the arts-related cluster on the South Carolina economy. The expenditures that occur as part of the ongoing operations of the arts-related cluster also lead to additional job creation and economic activity throughout the local region by way of the economic multiplier effect (or economic ripple effect). Economic multiplier effects can be divided into direct, indirect, and induced impacts. The direct effect represents an initial change in economic activity. This includes, for example, the initial dollars that are regularly injected into South Carolina directly through all ongoing operations associated with a performing arts center. This would include any employee wages and benefits, ongoing facilities maintenance, promotional materials, computer equipment, or other overhead and administrative costs. This spending increases demand for goods and services and leads to the creation of new jobs and more income for employees and suppliers of the various firms supplying materials to the performing arts center.





The indirect effect reflects all of the additional economic impacts resulting from inter-industry linkages between other local businesses in South Carolina. For example, consider a stage equipment purchase that is made by the aforementioned performing arts center. In this situation, the equipment provider would, as a result of the performing arts center's purchase, experience an increase in demand. This would require this equipment provider to purchase additional raw materials to accommodate the new increase in demand and to potentially hire additional employees if the increase in demand were sufficiently high. The vendors of the equipment provider would then experience an increase in demand and have to purchase additional inputs as well, and so on. These indirect effects ripple through the economy of South Carolina.

The induced effect reflects additional economic activity that results from increases in the spending of household income. For example, when the aforementioned equipment provider hires new workers to satisfy an increase in demand, these workers will earn incomes. They will then spend part of this new income locally on, for example, food, entertainment, or housing. These industries will then see an increase in demand for their goods and services, which will lead to higher incomes for some of their employees, part of which will also be spent locally.

These successive rounds of indirect and induced spending do not go on forever, which is why a specific value can be calculated for each of them. In each round, money is "leaked out" for a variety of reasons. For example, firms may purchase some of their supplies from vendors located outside of the local area. In addition, employees will save part of their income or spend part of it with firms located outside of South Carolina. In order to determine the total economic impact that will result from an initial direct impact, economic multipliers are used. An economic multiplier can be used to determine the total impact (direct, indirect, and induced) that results from an initial change in economic activity (the direct impact). Multipliers are different in each sector of the economy and are largely determined by the size of the local supplier network as well as the particular region being examined. In addition, economic multipliers are available to calculate not just the total impact, but also the total employment and income levels associated with the total impact.



To estimate the economic impacts in this study, a detailed structural model (known as an input-output model) of South Carolina that contains specific information on economic linkages between all industries within the state was used. The input-output modeling software IMPLAN was used in conjunction with other customized regional forecasting models that were developed to calculate all estimates. This allowed for the inclusion of additional local data, industry knowledge, and recent economic growth patterns.

### **Economic Impact Estimates**

Businesses within the creative industries in South Carolina that are directly tied to the arts are estimated to currently employ a total of 81,756 workers across the state. Expenditures made towards all wages and salaries to support this total employment volume, combined with all associated non-labor expenditures (e.g., facilities maintenance, promotional materials, computer equipment, etc...) generates this direct economic impact.

These direct impacts also lead to significant multiplier effects that make the total economic impact of the arts-related cluster far larger. The structural input-output models used in this analysis estimate impacts in terms of three specific measures: economic output, employment, and labor income. Economic output reflects the dollar value of all final goods and services that can be attributed (directly or indirectly) to the arts-related cluster. It can also be thought of as an aggregate measure of total spending activity that results from all direct expenditures within the local economy made by arts-related businesses. Because it includes all spending by consumers and businesses on both goods and services, it is an all-inclusive measure of the impact on total economic activity. Employment measures the total number of total jobs associated with total economic output. Labor income reflects all employee compensation associated with total employment estimates, including wages, salaries, and benefits. **Table 1** below highlights these estimates.

#### Table 1 – Current Annual Economic Impact of the South Carolina Arts-Related Cluster

	Employment	Labor Income	Total Economic Impact
Direct Effect	81,756	\$3,662,984,582	\$7,514,826,220
Multiplier Effect	41,794	\$1,991,736,220	\$6,547,700,128
Total Impact	123,550	\$5,654,720,802	\$14,062,526,348





The 81,756 employees that work for all of South Carolina's arts-related businesses (along with all associated local non-labor expenditures) generate approximately \$7.5 billion in annual economic output. This level of direct economic activity then subsequently leads to additional rounds of local spending activity – known as the multiplier effect – which totals approximately \$6.5 billion in additional economic output for South Carolina along with 41,794 additional jobs. These multiplier effects reflect the increased demand for goods and services of local suppliers resulting from local expenditures on the part of arts-related businesses as well as the local economic activity generated across all industries (e.g., retail, housing, healthcare, etc.) that is the result of increased household spending resulting from employees spending their wages. *The combination of all direct effects and their subsequent multiplier effects lead to a total annual economic impact of approximately* **\$14.1 billion, which supports a total of 123,550 jobs in South Carolina each year.** 

To put these estimates into context, it is important to first recognize the sheer volume of employment supported by the arts-related cluster. More specifically, *as of 2023, the arts-cluster is estimated to support (directly and indirectly) approximately 5.5 percent of the total employment base in South Carolina.* 

In addition to this significant impact on employment, the arts-cluster also offers substantial contributions to the Palmetto State through the state tax revenue that it generates each year. As previously documented, the total annual economic impact of the arts-related cluster on the state of South Carolina totals approximately \$14.1 billion. Historically, every additional dollar that is generated in economic activity (i.e., nominal gross state product) within South Carolina also generates 4.7 cents in new state tax revenue.<sup>1</sup> Thus, by applying this figure to the total economic activity generated by the arts-related cluster, the tax revenue from this total volume of activity can be estimated.<sup>2</sup> Such an estimate reveals that *the annual total estimated tax revenue generated for the state of South Carolina that arises from the arts-related cluster each year is \$360.2 million.* 

<sup>1</sup> The historical relationship between South Carolina nominal gross state product and the South Carolina general funds revenue (as measured and tracked by the South Carolina Board of Economic Advisors) was estimated by the Division of Research using industry-standard time-series regression techniques.

<sup>2</sup> Economic output represents the value of industry production and is therefore not synonymous with gross state product. As such, the dollar value of all intermediate inputs was subtracted from economic output before the 4.7-cent estimate was applied to estimate total tax revenue.



### The **economic impact** of South Carolina's **Ärts-Related Economic Cluster**



#### The total economic impact

of the South Carolina arts-related cluster, which represents both the direct and indirect demand generated by the local spending activity of all arts-related businesses, their suppliers, and their employees.



### The total number of local jobs

supported by the arts-related cluster. This level of employment represents 5.5 percent of the total employment base in South Carolina and also generates nearly \$5.7 billion in wages and salaries.



# The annual total estimated tax revenue generated

for the state of South Carolina that arises from the arts-related cluster each year.

Investing in the arts invests in South Carolina.



### MISSION

With a commitment to excellence across the spectrum of our state's cultures and forms of expression, the South Carolina Arts Commission pursues its public charge to develop a thriving arts environment, which is essential to quality of life, education and economic vitality for all South Carolinians.



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