

## Brief Summary of the Economic Impact of the Bailey-Matthews Shell Museum in Sanibel, Florida

In estimating the economic impact of the Bailey-Matthews Shell Museum, we used an approximate budget of \$682,000 per year. We calculated the impact of visitors based on an estimated 40,000 attendees per year to the museum (excluding special school programs). Examining address and survey data made available to us by the Shell Museum, we calculated that approximately 88% of gallery attendees came from outside Lee County. These “nonlocal” visitors (an estimated 35,200 per year) bring money, through their local expenditures, into the Lee County economy that most likely would otherwise have been spent in their own county.

The summary of results provided below represent the total economic impact of the Bailey-Matthews Shell Museum as estimated using an inter-industry model of the flow of goods and services between sectors of the economy in Lee County. Expenditures are made by the museum; those monies circulate through the local economy. The suppliers of goods and services to the museum increase their own purchases to meet the new demand; increased local employment results in additional expenditures by local households. Similar modeling has been undertaken to estimate the impact of expenditures by nonlocal visitors as well.

The results are calculated for the specific case of the Bailey-Matthews Shell Museum and Lee County. Estimates of average spending by each nonlocal visitor are based upon an extensive national survey by Americans for the Arts of expenditures made by nonlocal visitors on the day of attendance to a cultural site or event.<sup>1</sup>

### Results:

- The \$682,000 in annual expenditures by the Bailey-Matthews Shell Museum has an estimated economic impact of \$1,216,499. Sectors of the Lee County local economy (beyond the museum sector) that experience a significant increase in economic activity due to the presence of the museum are *real estate, wholesale trade, food services, and offices of physicians and dentists*. In addition, the expenditures of the Shell Museum result in an estimated 14 jobs locally.
- An estimated 35,200 visitors from outside Lee County visit the Bailey-Matthews Shell Museum each year. The local expenditures made during their visits have a total economic impact of approximately \$2,260,422. Sectors of the local economy that benefit most from their presence are *food services, hotels and motels, retail stores, real estate, and wholesale trade*. The expenditures of visitors result in an additional 30 jobs locally.

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<sup>1</sup> Information on the Americans for the Arts study is available for download at [http://www.artsusa.org/information\\_services/research/services/economic\\_impact/default.asp](http://www.artsusa.org/information_services/research/services/economic_impact/default.asp). The survey was carefully designed to only count the expenditures directly tied to visiting a cultural organization on a specific day, so as not to “take credit” for expenditures primarily resulting from an extended vacation or other reasons for traveling.

- The total economic impact of the Bailey-Matthews Shell Museum consists of the impact of its own annual expenditures and the local expenditures made by visitors who reside outside Lee County. *The total economic impact of the Bailey-Matthews Shell Museum is approximately \$3,476,922 annually. The total impact in terms of local employment is an estimated 44 jobs.*

The Bailey-Matthews Shell Museum benefits its community in many ways beyond its economic impact. This summary is only an estimate of the economic impact of the museum on Lee County's local economy.

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### **About the Bailey-Matthews Shell Museum**

Since its opening to the public in 1995, the Bailey-Matthews Shell Museum has operated as an information and reference center for national and international scientists, students, and shell enthusiasts who are interested in the marine, terrestrial, and land mollusks of the Gulf of Mexico and Florida. The Museum established the Evening Lecture Series in early 1996, a winter season (October-April) monthly series of lectures given by leading specialists in malacology and natural history. The series is now given in collaboration with the Sanibel-Captiva Shell Club. The Museum started an official collaboration with Lee County schools in 1997, and helps pay for transportation and admission of schoolchildren. In 1997 the Museum became the publisher (with the Museum Director as Editor) of *The Nautilus*, the second oldest English-language malacological journal (since 1886).

More information about the museum is available at [www.shellmuseum.org](http://www.shellmuseum.org).

### **About the Williams College Center for Creative Community Development (C<sup>3</sup>D)**

The Center for Creative Community Development (C<sup>3</sup>D) was founded in June 2004 with an initial grant from The Ford Foundation and subsequent funding from the Institute of Museum and Library Services, New England Foundation for the Arts, Massachusetts Cultural Council and others. C<sup>3</sup>D is a research organization working to better quantify and characterize the impacts that neighborhood-based arts and cultural organizations have on their surrounding communities. The Center provides sound data and case studies that can be used for case-making as well as for planning and evaluation purposes. Such measurements are essential for communities to manage the process of change, and to ensure equitable distribution of the benefits created by cultural economic development.

C<sup>3</sup>D is located on the campus of Williams College in Williamstown, Massachusetts, and is directed by Stephen Sheppard, Class of 2012 Professor of Economics. Professor Sheppard (PhD from Washington University) is an economist who specializes in inter-industry analysis and the use of economic geography to analyze the impacts of brownfields, cultural amenities and other influences on household income, job creation, housing markets and neighborhood development.

More information about C<sup>3</sup>D and its analyses is available at [www.c-3-d.org](http://www.c-3-d.org).

## **About this Study**

The economic impacts reported above are based on standard input/output analysis. This type of model has been in use at least since the publication in 1960 of Walter Isard's important book *Methods of Regional Analysis: an Introduction to Regional Science* (M.I.T. Press). An input/output model is a set of mathematical formulas whose values are based on statistical analysis of actual observations. In this case, the formulas are designed to represent the working of the local economy. The economic impact estimates provided here are the result of a predictive model that estimates the amount of aggregate local income and employment that is attributable to expenditures by a particular cultural organization and its non-local visitors (visitors living outside the county). The model is designed for analysis at the county level, meaning the estimates cover impacts occurring throughout the county in which the organization is located.

The input-output model utilizes data from a variety of sources (including the U.S. Bureau of Economic Analysis, the U.S. Bureau of Labor, and the U.S. Census Bureau) to characterize the flow of goods and services among sectors of the economy and the employment and consumption patterns of different sectors of the local economy. The sectors are identified by NAICS (North American Industry Classification System) codes. Much of the data is collected at the county level through a survey process that examines the spending patterns of representative firms in every sector of the economy in every county throughout the country. The data collected provides estimates of the purchasing patterns of each sector of the county economy, identifying how much of every dollar spent in one particular sector is received as income in every other sector of the county economy, and how much of every dollar "leaks" outside the county economy or is considered "final consumption." The input-output economic model divides the economy up into over 400 sectors ranging from "Abrasive Products" to "Wood window and door manufacturing". Not all of these sectors are present in every local area. The model also draws heavily on data from the federal ES202 database of unemployment insurance filings and the "Regional Economic Information System" of the U.S. Bureau of Economic Analysis.

This study was supported by a research grant from the Institute of Museum and Library Services.

For more detailed background on our input/output models for cultural organizations, you are encouraged to visit <http://www.williams.edu/Economics/ArtsEcon/econpages/FAQ.html>.