

**ECONOMIC IMPACTS OF THE *FLORIDA BOTANICAL GARDENS* AND
RELATED CULTURAL ATTRACTIONS IN PINELLAS COUNTY FLORIDA**

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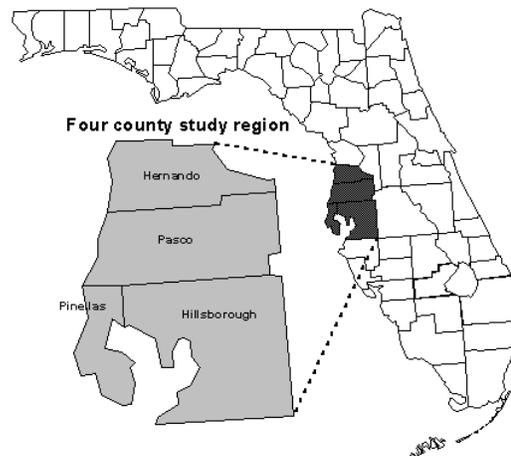
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INTRODUCTION

This report estimates the potential regional economic impacts associated with construction, operations and tourism in the *Heritage Village, Florida Botanical Gardens* and *Gulf Coast Museum of Art* attractions. All three attractions are housed within a 180 acre site of Pinewood Cultural Park in Pinellas County, Florida and serve as research and public education vehicles on issues related to the arts, history and environment.

The economic region is defined to include the Florida counties of Hillsborough, Hernando, Pinellas and Pasco and is consistent with the commuting pattern-based definition offered by the Bureau of Economic Analysis (Figure 1).

Figure 1. Map of the four-county study region



Three types of economic impacts are associated with overnight visitors in the Pinellas County region. Direct economic impacts include facility construction, operations and overnight visitor expenditures in the region. These impacts initiate a chain of economic events as workers are hired and as these facilities make purchases from other regional businesses. Regional businesses experience increased sales as a result of supplying inputs to these facilities and in turn, increase their purchases (indirect effects). Subsequently, the increased income accruing to employees in the region from direct and indirect activities leads to increased spending by regional households (induced effects). The total impact of overnight visitors on the regional economy is the sum of the direct, indirect and induced effects. Total impact estimates are reported here for output, employment, value-added and employee compensation. Impacts are reported for the three attractions and are reported separately on the basis of 1,000 overnight visitors to facilitate use of the results with differing levels of visitor attendance.

The IMPLAN input-output modeling system was utilized to assess the regional economic impacts of the three cultural facilities and associated overnight visitors in the 4-county region. IMPLAN was originally developed by the USDA Forest Service in 1979 and was subsequently privatized in 1993 by the Minnesota IMPLAN Group (MIG),

Inc., Stillwater, MN. The IMPLAN system consists of database and software components. The database portion offers economic and sociodemographic descriptions for United States counties (including all Florida counties) across 528 economic sectors. The categorization of sectors is based on the US Department of Commerce's 4-digit Standard Industrial Classification system. The software component of the IMPLAN system performs calculations for a pre-defined study area (here, the 4-county Florida region) to assess economic impacts relevant to the region. Economic impacts were estimated using 1997 Florida IMPLAN data, the most recent information available.

ASSUMPTIONS AND ANALYSIS

The time horizon for this analysis is three years (2000-2002) and the analysis considers the construction, annual operating budget and overnight visitor expenditures associated with the *Heritage Village*, *Florida Botanical Gardens* and *Gulf Coast Museum of Art*, respectively (Table 3). Overnight tourist visitors, defined as multi-day visitors residing outside the 4-county region, were the only visitor group considered because this group introduces outside dollars into the region that ultimately trigger the chain of economic impacts noted earlier.

All data assumptions underlying this analysis were provided by the Pinellas County Cooperative Extension Service. Per annum overnight visitor expenditures for each cultural attraction were calculated by multiplying the number of overnight visitor-days for each attraction (Table 1) by average 1998 per-person-day expenditures on food, entertainment, retail purchases, accommodations and rental cars in Pinellas County (Table 2). This analysis assumes that 200,000 persons will attend *Heritage Village*, 250,000 persons will attend the *Florida Botanical Gardens* and 100,000 persons will visit the *Gulf Coast Museum of Art* each year. Attendance estimates of *Heritage Village* and *Gulf Coast Museum of Art* were divided by one-half to reflect that these attractions are one-half day experiences. Overnight visitor impacts were calculated by taking annual attendance estimates per attraction and multiplying total visitor-days by 70% (Table 1). The value of 70% was based on the proportion of overnight visitors in the Dali Museum of St. Petersburg, Florida. No construction activities are anticipated in *Heritage Village* during the 2000-2002 annual period and the duration of construction activities in the *Gulf Coast Museum of Art* are projected to last during the first year only (2000). Values assigned to construction, operational and overnight visitor expenditures are assumed to remain constant each annual period.

Information from tables 1 and 2 were used to estimate the overnight visitor impacts for use in the IMPLAN impact analysis (Table 3). Per annum direct impact values associated with overnight visitors were calculated by multiplying overnight visitor attendance to total per person- day overnight visitor expenditures for each attraction. The annual operations and construction impacts featured in table 3 reflect the same values listed in table 1. As noted earlier, these assumptions were based on information provided by the Pinellas County Cooperative Extension Service.

Table 1. Estimated annual overnight visitor and attendance, operating and construction expenditures for three cultural attractions in Pinellas County, Florida.

	Heritage Village	Florida Botanical Gardens	Gulf Coast Museum of Art
Estimated Annual Attendance	200,000	250,000	100,000
Visitor Days (adjusted for half-visitor days where applicable)	100,000	250,000	50,000
Overnight Visitor Days (adjusted by 70%)	70,000	175,000	35,000
Annual Operations	\$621,890	\$2,000,000	\$1,000,000
Construction	NA	\$8,000,000	\$6,500,000

Table 2. Local overnight visitor expenditures per person-day and per thousand-person day in Pinellas County, 1998.

Expense Item	Amount Per Person-Day	Amount Per Thousand-Person Day
Total Overnight Visitor Expenditures	\$75.01	\$75,010
Lodging	\$28.58	\$28,580
Food/Entertainment	\$26.55	\$26,550
Retail Purchases	\$10.28	\$10,280
Rental Car	\$9.60	\$9,600

Source: St. Petersburg/Clearwater Area Convention & Visitors Bureau, 1998 Annual Visitor Profile, by W.J. Klages, Research Data Services, Inc., March 17, 1999.

Table 3. Annual direct impacts of construction, operational and overnight visitor expenditures associated with the *Heritage Village*, *Florida Botanical Gardens* and *Gulf Coast Museum of Art* attractions, 2000-2002.

Impacts	Heritage Village (\$1000)	Florida Botanical Gardens (\$1000)	Gulf Coast Museum of Art (\$1000)
Construction	NA	8,000*	6,500**
Operations	621.9	2,000	1,000
Overnight Visitors	5,250.7	13,126.8	2,625.4

*Recurring impact throughout the 2000-2002 period.

**Impact present only during the year 2000.

RESULTS

Total economic impacts for the combined cultural attractions will vary between the year 2000 and the years 2001 and 2002, owing to first-year construction activities in the *Florida Gulf Coast Art Museum* (Table 4). During the year 2000, construction and operations activities will increase output by \$31.7 million, stimulate employment by 343 jobs, increase value-added by \$16.2 million and stimulate labor income by \$12.9 million. During the years 2001 and 2002, construction and operations activities will increase output by \$20.1 million, stimulate employment by 220 jobs, increase value-added by \$10.0 million and stimulate labor income by \$11.6 million. Tourism will stimulate output by \$32.8 million, increase employment by 543 jobs, increase value-added by \$18.6 million and stimulate labor income by \$11.7 million.

Table 4. Estimated total economic impacts of combined cultural attractions, 2000-2002, by year.

	Output (\$1000)	Employment (Jobs)	Value Added (\$1000)	Labor Income (\$1000)
Year 2000				
Construction & Operations	31,684.7	343	16,209.0	12,901.6
Overnight Visitors	32,767.9	543	18,591.0	11,640
Year 2001				
Construction & Operations	20,073.2	220	10,044.2	7,996.8
Overnight Visitors	32,767.9	543	18,591.0	11,640
Year 2002				
Construction & Operations	20,073.2	220	10,044.2	7,996.8
Overnight Visitors	32,767.9	543	18,591.0	11,640

The total economic impacts associated with the *Florida Botanical Gardens* between the years 2000 and 2002 are a \$113.9 million increase in output, an increase in employment by 1,584 individuals, a \$61.7 million increase in value-added and a \$43.1 million increase in labor income (Table 5). The majority of total impacts affiliated with the Botanical Gardens are influenced by overnight visitor expenditures. Overnight visitor expenditures account for 54% of total output impacts, 64% of employment impacts, 57% of value-added impacts and 51% of labor income impacts. Construction expenditures represent 38% of total output impacts, 29% of employment impacts, 37% of value-added impacts and 42% of labor income impacts. Operation expenditures

capture 8% of total output impacts, 7% of employment and labor income impacts, and 8% of value-added impacts.

The *Gulf Coast Museum of Art* attraction will increase output by \$28.7 million, increase employment by 383 individuals, stimulate value-added by \$15.2 million and stimulate labor income by \$11 million (Table 5). Overnight visitor expenditures exert the strongest influence on total impacts. Overnight visitor expenditures account for 43% of total output impacts, 53% of employment impacts, 46% of value-added impacts and 40% of labor income impacts. Construction impacts represent 40% of total output impacts, 32% of employment impacts, 41% of value-added impacts and 45% of labor income impacts. Operational expenses contribute towards 17% of output impacts, 15% of employment and labor income impacts, and 13% of value-added impacts.

Heritage Village will stimulate output by \$27.6 million, increase employment by 442 jobs, stimulate value-added by \$15.2 million and increase labor income by \$9.7 million between the years 2000 and 2002 (Table 5). The majority of these impacts originate from overnight visitor activities. Overnight visitor expenditures account for 89% of total output, employment and value-added impacts, and 90% of labor income impacts. Construction activities represent 11% of total output impacts, 8% of employment and value-added impacts, and 10% of labor income impacts.

Table 5. Estimated economic impacts of *Florida Botanical Gardens, Florida Gulf Coast Art Museum and Heritage Village, 2000-2002.*

Facility	Impact Type	Output (Million \$)*	Employment (Jobs)	Value-Added (Million \$)*	Labor Income (Million \$)*
Florida Botanical Gardens	Construction	42.9	454	22.8	18.1
	Operations	9.6	113	4.1	3.2
	Overnight Visitors	61.4	1,017	34.9	21.8
	Total	113.9	1,584	61.8	43.1
Gulf Coast Museum of Art	Construction	11.6	123	6.2	4.9
	Operations	4.8	57	2.0	1.6
	Overnight Visitors	12.3	203	7.0	4.4
	Total	28.7	383	15.2	10.9
Heritage Village	Operations	3.0	35	1.3	1.0
	Overnight Visitors	24.6	407	13.9	8.7
	Total	27.6	442	15.2	9.7
Total Impacts All Three Facilities		170.2	2,409	92.2	63.7

*Year 2000 Dollars.

The *Heritage Village*, *Florida Botanical Gardens* and *Gulf Coast Museum of Art* attractions collectively stimulate output by \$170.1 million, increase employment by 2,409 individuals, stimulate value-added by \$92.1 million and increase labor income by \$63.8 million (Table 6). Many regional industrial sectors will be affected by the existence of these three attractions in Pinellas County, Florida. Table 6 lists the ten existing industrial groupings of the 4-county region (representing the aggregation of related sectors) and their associated output, employment, value-added and labor income impact values between 2000-2002. Rankings were determined by ordering output values for each aggregated sector. All values are expressed in year 2000 dollars. The services, trade and construction industries will receive the strongest impact from the three attractions. All three sectors collectively account for 78 % of total output impacts, 56% of employment impacts, 82% of value-added impacts and 89% of labor income impacts.

Table 6. Total impacts ranked by major economic sector for combined cultural attraction construction, operations and overnight visitor expenditures, 2000-2002.

Rank	Economic Sector	Output (\$1000)	Employment (Jobs)	Value Added (\$1000)	Labor Income (\$1000)
1	Services	60,087.4	957.7	34,750.9	26,200.9
2	Trade	40,302.4	984.3	25,414.5	16,737.5
3	Construction	32,233.1	284.3	15,086.4	14,128.5
4	Finance, Insurance & Real Estate	13,829.2	81.3	10,139.7	2,871.5
5	Institutions	10,986.6	0.0	0.0	0.0
6	Transportation, Communications & Public Utilities	6,383.7	42.9	3,932.2	1,824.5
7	Manufacturing	4,431.8	30.0	1,538.4	1,064.3
8	Government	1,325.8	7.6	763.7	666.6
9	Agriculture	449.3	11.9	341.8	222.1
11	Mining	6.5	0.1	3.6	0.7
	Total	170,134.5	2,408.6	92,069.9	63,815.3

Table 7 lists the economic impacts of 1,000 person overnight visitor expenditures in the 4-county region. This is presented because of some degree of uncertainty about actual attendance, proportion of visitors that are overnight visitors, and proportion of visitor-days per overnight visitor. Total impacts in the 4-county region associated with 1,000

annual overnight visitors are an increase in output by \$156.6 thousand, an increase in employment by approximately 3 individuals, an increase in value-added by \$92.6 thousand and an increase in labor income by 60.4 thousand (Table 7). The direct economic effects represent 47% of total output impacts, 56% of employment impacts, 42% of value-added impacts and 41% of labor income impacts. The indirect economic effects account for 13% of output and labor income impacts, 8% of employment impacts and 14% of value-added impacts. The induced economic effects capture 40% of output impacts, 36% of employment impacts, 44% of value-added impacts and 46% of labor income impacts.

Table 7. Annual impacts of overnight visitor expenditures on the 4-county region per 1,000 overnight visitors.

	Output (\$1000)	Employment (Jobs)	Value Added (\$1000)	Labor Income (\$1000)
Direct	74.2	1.4	39.1	25.0
Indirect	20.1	0.2	12.6	7.9
Induced	62.3	0.9	41.0	27.5
Total	156.6	2.5	92.6	60.4

CONCLUSION

This analysis estimated the total economic impacts associated with the *Heritage Village*, *Florida Botanical Gardens* and *Florida Gulf Coast Art Museum* attractions. Specifically, the total economic impacts of expenditures on or by overnight visitors, annual operations and construction between the years 2000 and 2002 were estimated for each attraction. This analysis was restricted to the 4-county region of Hillsborough, Hernando, Pinellas and Pasco counties and data assumptions employed in this study were based on information provided by the Pinellas County Cooperative Extension Service. Results revealed that the combined cultural attractions will stimulate output by \$170.1 million, increase employment by 2,409 jobs, stimulate value-added by \$92.1 million and increase labor income by \$63.8 million between the years 2000 and 2002. Additionally, the annual economic impacts of 1000-person overnight visitor expenditures were presented given some level of uncertainty surrounding actual overnight visitor attendance in each attraction. Each 1,000 person grouping will stimulate output by \$156.6 thousand, increase employment by 3 jobs, stimulate value-added by \$92.6 thousand and stimulate labor income by \$60.4 thousand.