

Quantifying the Economic Impact of the Florida Museum of Natural History on Alachua County and Florida

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Table 1: FLMNH Economic Impact

The economic impact of the Florida Museum of Natural History (FLMNH) is reported in terms of five different metrics: gross output, earnings, employment, value added, and tax revenues. Gross output represents the sum of intermediate inputs and value added. Value added represents the total compensation of employees, owners, and government, plus gross operating surplus, and is comparable to GDP. Earnings represents wages and salaries plus proprietors' income. Employment represents a count of job and includes both full-and part-time workers. Although gross output represents the total activity generated in the region, it is duplicative in the sense that some goods and services go into the production of other goods and services.¹ This can be illustrated by an example; a construction firm buys concrete from a concrete producer, then that money is passed along to workers of the concrete producer as wages and salaries; in the case of gross output, the money will be counted twice, whereas in the case of value added, the money will only be counted when it is passed along as wages and salaries. Finally, tax revenues represent taxes collected by governments operating in the region. Output, earnings, employment, and value added were calculated using Regional Input-Output multipliers (RIMS) from the Bureau of Economic Analysis (BEA). Tax revenues were calculated using population data from the Bureau of Economic and Business Research, visitor data from Visit Florida's Annual Visitor Study, and tax data from the Florida Department of Revenue (FDOR). In our results, we consider the economic impact of FLMNH on two regions: Alachua County and the state of Florida. Finally, all data in this report has been inflation-adjusted to 2014 U.S. dollars.

	Alachua				
SFY	Output	Earnings	Employment	Value Added	Tax Revenues
2010	\$68,165,472.21	\$24,722,878.17	787.66	\$45,017,520.12	\$1,059,749.65
2011	\$58,950,442.40	\$21,910,008.39	700.32	\$39,076,882.46	\$867,040.67
2012	\$56,655,798.06	\$21,510,789.69	695.56	\$37,805,608.95	\$712,972.85
2013	\$61,019,672.26	\$22,999,146.91	757.57	\$40,674,411.16	\$744,589.89
2014	\$60,186,244.04	\$23,045,577.62	739.14	\$40,272,115.43	\$734,520.88

	Florida				
SFY	Output	Earnings	Employment	Value Added	Tax Revenues
2010	\$69,235,266.55	\$27,451,191.24	824.62	\$45,292,689.60	\$5,307,685.51
2011	\$79,768,443.96	\$30,775,791.60	970.75	\$51,781,717.77	\$4,354,432.61
2012	\$73,374,061.15	\$28,858,822.11	915.57	\$47,882,598.51	\$3,944,416.83
2013	\$77,953,431.75	\$30,558,263.80	983.67	\$50,806,624.85	\$4,336,601.70
2014	\$70,762,315.73	\$28,456,625.48	889.54	\$46,492,919.50	\$4,128,331.82

Table 2: FLMNH Impact from External Funding

The economic impact from external funding of FLMNH is created using the same methodology described above, but here we only consider funds that came from outside of the region. For many, this gives the results more meaning. The reason for this is based on the theory that an organization that

does business within the region simply displaces another organization that could do the same business. However, an organization that is bringing in outside funds is actually increasing the overall wealth of the region. In order to determine the impact of external funding, FLMNH revenue and visitors were broken down by source region; also, data collected from the FLMNH Visitor Surveys were used.

Alachua					
SFY	Output	Earnings	Employment	Value Added	Tax Revenues
2010	\$24,214,437.68	\$8,815,584.55	279.97	\$16,003,857.60	\$375,331.70
2011	\$20,969,293.18	\$7,823,350.01	249.36	\$13,910,729.26	\$307,598.73
2012	\$20,184,073.54	\$7,691,737.05	248.13	\$13,479,186.20	\$253,572.77
2013	\$21,722,409.78	\$8,218,584.90	270.11	\$14,491,485.57	\$264,787.04
2014	\$21,450,000.30	\$8,243,664.43	263.77	\$14,364,323.86	\$261,443.14

Florida					
SFY	Output	Earnings	Employment	Value Added	Tax Revenues
2010	\$22,753,898.47	\$8,946,039.47	271.01	\$14,848,913.96	\$1,804,979.85
2011	\$26,520,825.64	\$10,141,009.77	322.34	\$17,172,104.19	\$1,457,392.64
2012	\$24,213,491.25	\$9,440,500.81	301.41	\$15,761,557.66	\$1,309,293.56
2013	\$25,773,129.46	\$10,013,813.96	324.23	\$16,755,232.32	\$1,442,297.35
2014	\$23,176,677.74	\$9,242,427.00	290.65	\$15,190,193.33	\$1,365,705.48

Table 3: Indirect and Induced Jobs Supported by FLMNH Activities

The indirect and induced employment impact of FLMNH activities refers to the jobs supported by the existence of FLMNH excluding those directly employed by FLMNH. Indirect jobs are those provided by suppliers of FLMNH, while induced jobs are those supported by household spending of the direct and indirect workers. Additionally, included are the top 4 industries that attribute their employees to the existence of FLMNH. Due to the impact of visitor spending, most of these industries are related to travel and tourism.

	2014	2013	2012	2011	2010
	Percentage of Total				
Total, Alachua	56.30%	56.33%	53.83%	56.37%	61.27%
Arts, entertainment, and recreation	14.63%	13.10%	7.83%	13.29%	24.53%
Real estate and rental and leasing	6.88%	6.90%	6.27%	5.95%	6.57%
Food services and drinking places	4.56%	4.94%	4.31%	4.53%	5.48%
Retail trade	4.71%	5.00%	4.41%	4.50%	5.33%
Total of top 4, Alachua	30.78%	29.94%	22.82%	28.27%	41.90%
Total, Florida	63.69%	66.56%	64.87%	68.04%	62.91%
Arts, entertainment, and recreation	18.88%	24.00%	19.80%	27.09%	16.22%
Real estate and rental and leasing	8.50%	9.04%	8.32%	8.33%	7.35%

Retail trade	6.31%	7.44%	6.74%	7.35%	5.79%
Administrative and waste management services	5.32%	5.95%	5.43%	5.68%	4.73%
Total of top 4, Florida	39.01%	46.43%	40.29%	48.45%	34.09%

Table 4: Total Jobs Provided by FLMNH

This data come directly from FLMNH records, hence does not require much explanation.

SFY	2015	2014	2013	2012	2011	2010
Full Time	201	180	193	197	181	170
Part Time (FTE)	118.25	143	147.9	122	102	106.7
Outside Alachua	13	13	13	13	13	13
Outside Florida	1	1	1	1	1	1
Total	319.25	323	340.9	319	283	276.7

Table 5: Total Revenue ROI

The return on investment (ROI) from FLMNH activities divides the total economic impact of FLMNH on Alachua (and Florida, respectively) by total revenue. Output, earnings, value added, and tax revenues ROI is per dollar; employment ROI is per million dollars. This can be interpreted as “the economic impact of every dollar of revenue FLMNH brings in.”

	Alachua				
	2010	2011	2012	2013	2014
Output	3.66	3.43	2.66	3.33	2.66
Earnings	1.33	1.27	1.01	1.26	1.02
Employment	42.26	40.74	32.66	41.35	32.72
Value Added	2.42	2.27	1.78	2.22	1.78
Tax Revenues	0.06	0.05	0.03	0.04	0.03

	Florida				
	2010	2011	2012	2013	2014
Output	3.71	4.64	3.44	4.26	3.13
Earnings	1.47	1.79	1.35	1.67	1.26
Employment	44.24	56.47	42.99	53.69	39.38
Value Added	2.43	3.01	2.25	2.77	2.06
Tax Revenues	0.28	0.25	0.19	0.24	0.18

Table 6: Total Revenue External ROI

Total Revenue External ROI divides the impact of external funding by total revenue. This can be interpreted as “the economic impact of foreign dollars for every dollar of revenue FLMNH brings in.”

	Alachua				
	2010	2011	2012	2013	2014
Output	1.30	1.22	0.95	1.19	0.95
Earnings	0.47	0.46	0.36	0.45	0.36
Employment	15.02	14.51	11.65	14.74	11.68
Value Added	0.86	0.81	0.63	0.79	0.64
Tax Revenues	0.02	0.02	0.01	0.01	0.01

	Florida				
	2010	2011	2012	2013	2014
Output	1.22	1.54	1.14	1.41	1.03
Earnings	0.48	0.59	0.44	0.55	0.41
Employment	14.54	18.75	14.15	17.70	12.87
Value Added	0.80	1.00	0.74	0.91	0.67
Tax Revenues	0.10	0.08	0.06	0.08	0.06

Table 7: UF Funding ROI

UF funding ROI divides the impact of FLMNH by UF funding. This can be interpreted as “the economic impact of every dollar of funding FLMNH receives from UF.”

	Alachua				
	2010	2011	2012	2013	2014
Output	7.15	6.39	6.09	6.26	6.20
Earnings	2.59	2.37	2.31	2.36	2.38
Employment	82.57	75.86	74.82	77.74	76.20
Value Added	4.72	4.23	4.07	4.17	4.15
Tax Revenues	0.11	0.09	0.08	0.08	0.08

	Florida				
	2010	2011	2012	2013	2014

Output	7.26	8.64	7.89	8.00	7.30
Earnings	2.88	3.33	3.10	3.14	2.93
Employment	86.44	105.16	98.49	100.94	91.70
Value Added	4.75	5.61	5.15	5.21	4.79
Tax Revenues	0.56	0.47	0.42	0.45	0.43

Table 8: UF Funding External ROI

UF funding external ROI divides the impact of external FLMNH funding by UF funding. This can be interpreted as “the economic impact of external funding for every dollar of funding FLMNH receives from UF.”

	Alachua				
	2010	2011	2012	2013	2014
Output	2.54	2.27	2.17	2.23	2.21
Earnings	0.92	0.85	0.83	0.84	0.85
Employment	29.35	27.01	26.69	27.72	27.19
Value Added	1.68	1.51	1.45	1.49	1.48
Tax Revenues	0.04	0.03	0.03	0.03	0.03

	Florida				
	2010	2011	2012	2013	2014
Output	2.39	2.87	2.60	2.64	2.39
Earnings	0.94	1.10	1.02	1.03	0.95
Employment	28.41	34.92	32.42	33.27	29.96
Value Added	1.56	1.86	1.70	1.72	1.57
Tax Revenues	0.19	0.16	0.14	0.15	0.14

Table 9: Tax Impact by Revenue Source

Tax Impact by Revenue Source is simply a further breakdown of the economic impact in terms of tax revenues from Table 1. Not all taxes are included.

	Property		Sales		Tourist Development	
	Alachua	Florida	Alachua	Florida	Alachua	Florida
2010	\$669,487.10	\$853,183.18	\$183,317.64	\$1,990,873.47	\$48,240.65	\$28,562.37
2011	\$574,735.51	\$909,221.30	\$118,233.96	\$1,565,583.82	\$54,950.72	\$16,781.08
2012	\$530,902.54	\$824,933.03	\$37,871.03	\$1,481,101.64	\$47,276.86	\$12,652.81
2013	\$581,316.91	\$893,863.10	\$12,202.64	\$1,707,813.71	\$45,657.89	\$10,909.58

2014	\$579,923.12	\$834,896.27	\$11,671.38	\$1,681,202.24	\$43,322.90	\$10,142.26
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Table 10: Visitor Spending

This table represents the total spending of visitors to the region (once again, the two regions we consider are Alachua County and the state of Florida). Notice that, in contrast to table 1, Florida is always a subset of Alachua, as a larger region will have less outside visitors and more residents.

	At Museum		Elsewhere	
	Alachua	Florida	Alachua	Florida
2010	\$913,722	\$670,446	\$23,663,605	\$14,920,734
2011	\$591,361	\$262,149	\$18,923,978	\$21,293,614
2012	\$603,873	\$273,878	\$16,499,989	\$17,148,689
2013	\$788,583	\$336,272	\$18,659,386	\$18,870,107
2014	\$687,930	\$346,440	\$17,083,185	\$14,186,874

ⁱ Bess and Ambargis. *Input-Output Models for Impact Analysis: Suggestions for Practitioners Using RIMS II Multipliers*. March 2011.