

Sarasota County Economic Impact Analysis of Spring Training

date: Tue, Jul 21, 2009 at 6:32 AM

subject: Fwd: FW: spring training findings

Dear Sarasota City and County Commissioners:

Citizens for Responsible Government has always believed that sound, independent analysis of the return on investment from hosting spring training is required for a wise decision on the issue. My request for the County's assistance in gathering monthly taxable sales data was made to further this aim. Our state representative was able to assist with having the Department of Revenue provide the monthly sales tax data required for an analysis specific to Sarasota's economy. This information was received by Dr. Phil Porter, who is a recognized expert in sports economics and a professor of economics at the University of South Florida. **Dr. Porter received monthly sales tax data since 1980 for the state and all Florida counties, including Sarasota.** He then ran an analysis and came to the conclusions outlined below. The information below is in raw form after being adjusted for variables. It is provided to you in this form so you have timely information. The data can be put into charts and/or tables as well for easier understanding. Dr. Porter's analysis is consistent with accepted practice among economists.

Some commissioners have take issue with taxable sales being an accepted measure of economic performance. Using taxable sales as a measure of economic growth is accepted practice and considered reliable and a standard measure by economists and our state government. Taxable sales growth was recently discussed by our Secretary of State, Kurt Browning, to share some recent positive news about Florida's economic performance. Dismissing taxable sales as an economic measure is outside mainstream thinking and standard practice.

The argument that spring training is an economic driver in Sarasota is not supported by our economic history.

Best regards,

Cathy Antunes
Citizens for Responsible Government

From: Porter, Philip
Sent: Monday, July 20, 2009 5:24 PM
To: cathy.antunes
Subject: spring training findings

Cathy,

Attached is a summary of the taxable sales data analysis I conducted concerning the impact of spring training on Sarasota County. Here are the steps I conducted in my analysis:

1. I adjusted all sales in Sarasota County and Florida State by the consumer price index. All data now reflect May, 2009 dollar values.
2. I removed seasonal effects from state and county data – this accounts for holiday shopping and differential reporting times for firms of varying sizes.
3. I accounted for Hurricane Charley and the period 1987-88 when Florida briefly taxed services.
4. I accounted for time trends.
5. I accounted separately for spring training interruptions – the 1990 lockout which partially stopped spring training and the 1995 strike which eliminated it entirely.

My findings:

1. The controls and variables I used account for 99% of the variation in Sarasota taxable sales. That is, nearly every sales change can be accounted for.
2. State sales and time trends explain most of the data variation. The interpretation is that over the entire data set (1980 to the present) Sarasota accounts for approximately $6/10^{\text{th}}$ of 1% of total Florida sales, and this fraction is higher in later years (Sarasota is growing faster than all Florida).
3. Hurricane Charley reduced sales in Sarasota County by \$18 million in August/September 2004.
4. All the above effects were very significant. That is, we are reasonably sure they did affect sales in Sarasota.
5. Taxing services increased taxable sales throughout the state, but less in Sarasota County than state-wide (the coefficient for the time period was negative in Sarasota). This was not significant but would be explained by a smaller than average service sector in Sarasota relative to the rest of Florida.
6. The lockout of 1990 appeared to increase sales in Sarasota County by \$993,785.29 but this is insignificant.
7. The strike of 1995 appeared to increase sales in Sarasota County by \$3,316,110.79 but this too is insignificant.

My conclusion: Cancelling spring training games appears to *increase* sales in Sarasota and the more games you cancel the greater the sales increase. However, because the coefficients are insignificant, the most we can say is that there is no evidence that hosting spring training games in any way contributes positively to sales of taxable items in Sarasota. That other variables like Hurricane Charley do show up as significant testifies to the quality of the model.

SUMMARY OUTPUT

Regression Statistics

Multiple R 0.9946
 R Square 0.9893
 Adjusted R Square 0.9890
 Standard Error 5,459,815.5234
 Observations 353.0000

ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	8.0000	9.44031E+17	1.18004E+17	3958.587	0
Residual	344.0000	1.02545E+16	2.98096E+13		
Total	352.0000	9.54285E+17			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	-20,460,226.0431	2389100.814	-8.563986049	3.7E-16	-25159310	-15761142	-25159310	-15761142
Florida Seasonally Adjusted Real Sales	0.0062	0.000188175	32.76276154	8.4E-108	0.005795	0.0065353	0.005795	0.0065353
Hurricane Charley	-5,628,945.6314	5479990.635	-1.027181615	0.305057	-16407451	5149560.1	-16407451	5149560.1
After Charley	-12,684,557.0175	5481079.081	-2.314244482	0.021243	-23465204	-1903910	-23465204	-1903910
Spring training 90lockout	993,785.2985	5475560.151	0.181494728	0.856086	11763577	-9776006	11763577	-9776006
Spring training 95strike	3,316,110.7911	5480456.624	0.605079288	0.545525	14095533	-7463311	14095533	-7463311
time	-98,767.3982	15325.05756	-6.444830488	3.91E-10	-128910	-68624.79	-128910	-68624.79
timesq	835.0711	31.58270528	26.44077019	7.15E-85	772.95154	897.19057	772.95154	897.19057
Service	-2,612,711.1688	2015942.192	-1.296024846	0.195836	-6577836	1352413.2	-6577836	1352413.2