INCIDENCE OF SARASOTA COUNTY'S

PROPOSED 1 CENT SURTAX FOR INFRASTRUCTURE

Who would pay the surtax?

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1.0 Introduction

Sarasota County voters authorized a 1-cent sales surtax to fund infrastructure projects. The 1-cent sales surtax applies to the first $5,000 of any purchase that is subject to the State sales tax. Proceeds from the surtax can only be used to invest in public infrastructure projects such as parks, roads, sidewalks, libraries, and schools. Surtax funds cannot be used to pay general operating expense of the County.

Sarasota County has commissioned this study by PFM Group Consulting, LLC ("PFM") to quantify the share of the surtax that would be paid by non-residents, including tourists. PFM has developed and applied a reliable methodology to quantify surtax payments by non-residents based on three complimentary approaches: (1) survey and analytical; (2) comparable county; and (3) regression.

2.0 Methodology and Results

2.1 Overview

PFM utilized three methodologies to quantify the percentage of County sales taxes collected from non-residents and tourists. By employing three independent methodologies, PFM can test the results to assure reliability. The three methodological approaches used were: (a) a combination of analytical and survey-based approaches; (b) comparable county approach; and (c) regression analysis. These are each described below.

2.2 Survey and Analytical Research

This approach involves a combination of analytical procedures and survey-derived data. Table 1 shows sales tax collections in Sarasota County by type of store for 2019 referred, to as "kind code". PFM selected 2019 as the base year to avoid the impacts of the Covid19 recession and recovery period.

Table 1. Sales Tax Collections in Sarasota County by Store Type

Kind	2019
Food & Beverage Stores	34,410,311
Meat Markets, Poultry	553,053
Vegetable & Fruit Markets, Fruit Juice Stands	234,547
Bakeries	653,310
Eating & Drinking Places (not restaurants)	1,177,609
Candy, Nut, Confectionary & Dairy Product Stores	1,033,143
Restaurants, Lunchrooms, Catering Services	63,225,260

Drinking Places (Alcoholic beverages served on premises)	3,784,253
Apparel & Accessory Stores	18,543,724
Shoe Stores	1,846,800
Feed & Seed Stores, Retail Nurseries	1,265,170
Paint, Wallpaper & Hardware Dealers	6,057,383
Farm Implements & Equipment Suppliers	966,087
General Miscellaneous Merchandise Stores	57,336,890
Used Merchandise Stores, Second-Hand Stores, Antique Shops	2,994,271
Sewing, Needlework & Piece Goods Stores	438,742
Automotive Dealers (Sale & Lease), Tag Agencies & Tax Collectors	93,009,067
Automotive Accessories & Parts	4,670,101
Gasoline Service Stations	1,420,781
Automobile Repair & Services	10,029,790
Aircraft Dealers	220,926
Boat Dealers	5,114,918
Home Furniture, Furnishings & Equipment	17,696,061
Household Appliances & Accessories	2,929,383
Store & Office Equipment, Office Supplies	1,618,267
Radio, Television, Consumer Electronics, Computers, Music Stores	9,728,797
Building Contractors	4,391,736
Heating & Air Conditioning	1,692,702
Electrical, Plumbing, Well Drilling, Pipes	1,436,269
Decorating, Painting, Papering, Drapery Installation	1,512,276
Roofing & Sheet Metal	757,496
Lumber aand Other Building Materials Dealers	28,198,478
Hotel/Motel Accommodations, Rooming Houses, Camps & Other Lodging Places	34,332,979
Barber Shops, Beauty Shops & Personal Appearance Services	2,074,977
Book Stores	789,707
Tobacco Stores & Stands	662,297
Florists	466,758
Fuel Dealers, LP Gas Dealers	178,841
Funeral Directors, Crematories & Monuments	23,058
Scrap Metal, Junk Yards, Salvaged Material	192,023
Itinerant Vendors, Peddlers, Direct Selling Establishments	1,008,889
Laundry, Garment, Linen & Other Cleaning Services	1,090,099
Machine Shops, Foundries, Iron Work	82,519
Horse, Cattle & Pet Dealers	212,012
Camera & Photographic Supply Stores	182,284
Storage & Warehousing	170,651
Gifts, Cards, Novelty, Hobby, Crafts & Toy Stores	3,215,898
Social, Fraternal, Commercial Clubs & Associations (All Dues)	134,423
Industrial Machinery	1,540,431
Admissions, Amusement & Recreation Services	7,932,124
Rental of Tangible Personal Property	3,908,270

Fabrication & Sales of Cabinets, Windows, Doors, Awnings, Septic Tanks, Neon Signs, Plastic, etc.	1,741,483
Manufacturing	17,697,630
Bottlers	282,610
Communication, Telephone, Telegraph, Radio & Television Stations **	2,811,877
Transportation, Railroads, Airlines, Bus, Trucking Lines	787,933
Graphic Arts, Printing, Publishing, Engraving, Binding, Blueprinting	2,369,716
Insurance, Banking, Savings & Loans, Research Information Services, Income Tax Reports	109,734
Sanitary & Industrial Supplies	1,352,264
Repair of Tangible Personal Property	2,623,559
Advertising	157,333
Nurseries, Landscapes, Tree Experts	951,204
Vending Machine Operators	215,880
Importing & Exporting	181,636
Medical, Dental, Surgical, Optical & Related Professional Services	523,896
Wholesale Dealers	21,509,111
Schools, Colleges & Educational Services	101,275
Lease or Rental of Commercial Real Property	37,294,668
Privately Owned Parking Lots, Boat Docks & Aircraft Hangars	817,275
Utilities, Electric, Gas, Water, Sewer	10,359,620
Exempt Facilities	14,974
Other Professional Services	1,074,935
Taxable Services (per Chapter 212, F.S.)	3,514,455
Veterinary Services	179,654
Miscellaneous	1,477,204
Other ***	1,606,563
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Total of All Kind Codes	546,902,332

Source: Florida Department of Revenue

These data are the foundation for the analytical analysis. The initial step is to review each category or kind code to assess whether it is likely that non-residents and tourists purchase the good or service. Step two is to estimate the percentage purchased by non-residents. For example, non-residents will account for nearly 100% of all sales at hotels and motels. Few Sarasota County residents stay at hotels and motels in the County. By contrast, few tourists or other non-residents are likely to purchase lumber and building materials in Sarasota County.

Furthermore, many kind codes have very low levels of sales. Therefore, it is not efficient to invest much analytical time on these categories, because whatever volume is sold to non-residents will make little difference in the overall estimate for total sales to non-residents and tourists.

Therefore, it is useful to focus on those categories that account for large shares of overall sales and that have a substantial likelihood of significant sales to non-residents. For example, a significant portion of sales at grocery stores, general merchandise stores, apparel stores, and at auto dealers are likely from non-residents and/or tourists.

To make best use of the time and resources available for this study, PFM focused on sales from the store categories shown in Table 2. These categories directly accounted for 49% of total sales tax collections in Sarasota County in 2019.

Table 2. Categories of Sales Selected for Survey Research
Total Sales Tax Collections and Contribution to Total for 2019

Category	Sales Tax	% Total
Food & Beverage Stores	$34,410,311	6%
Restaurants, Lunchrooms, Catering Services	$63,225,260	12%
Apparel & Accessory Stores	$18,543,724	3%
General Miscellaneous Merchandise Stores	$57,336,890	10%
Automotive Dealers (Sale & Lease), Tag Agencies & Tax Collectors	$93,009,067	17%
	=========	=====
Total	$266,525,252	49%

To determine the percentage of sales from non-residents in these store categories, PFM commissioned a survey. ReconMR conducted the survey from July 19, 2021 through July 30, 2021. The survey was conducted by phone. Categories of businesses identified in Table 2 were randomly selected.

The survey produced 82 completed interviews. As discussed below, non-residents account for 25% of all sales tax collections in Sarasota County. The results are accurate to within +/- 10% of their totals.   Thus, we can be 95% confident that the percentage of sales taxes from non-residents lies between 15% and 35%.

Table 3 presents a summary of the survey results for the stores identified in Table 2. For these stores, sales to non-residents ranges from 25% at food and beverage stores (ie. grocery stores and similar outlets) to 40% at general merchandise stores.

Table 3. Summary of Survey Results

Kind Code	% Non-Resident
Food & Beverage Stores	25%
Restaurants, Lunchrooms, Catering Services	32%
Apparel & Accessory Stores	40%
General Miscellaneous Merchandise Stores	40%
Automotive Dealers (Sale & Lease), Tag Agencies & Tax Collectors	25%

PFM applied these percentages directly to the total sales for each of these kind codes. Then PFM applied the same percentages of sales to non-residents for similar kind codes. For example, the 25% share at food & beverage stores was applied to meat markets and bakeries since they are like grocery and beverage stores. Similarly, the 32% share of sales to non-residents at restaurants was applied to the similar categories of eating and drinking places and to drinking places.

For all the other categories that were not directly related to those surveyed, PFM applied analytical judgement as discussed above. For instance, 99% of all sales at hotels and motels was estimated to be to non-residents and tourists. Zero percent of lumber sales are expected to be to non-residents and tourists. Finally, for miscellaneous stores, utilities, and leases or rentals of commercial real estate, PFM applied used an estimate of 35% of these sales to non-residents based on the survey average for the kind categories surveyed and shown in Table 3.

Table 4 presents the detailed calculations supporting the estimate that 25% of all sales taxes collected in Sarasota County in 2019 came from non-residents and tourists. The column labeled "2019" is the total amount of sales taxes generated from the store type or kind code. The column "% Non-Resident" is the percentage of the sales from non-residents and tourists in Sarasota County. The column "Sales Tax" is the product of 2019 X % Non-Resident. Since the volume of sales varies significantly by kind code, each kind code is separately calculated. Comparing: (a) the total sales tax collections in 2019 of $546,902,332 to (b) the sales taxes from sales to non-residents of $138,090,868 produces (c) the share of sales accounted for by non-residents of 25% of all sales taxes collected in 2019.

Table 4. Detailed Results of Percent of Sales Taxes Collected from Non-residents and Tourists in Sarasota County

Kind	2019	% Non-Resident	Sales Tax
Food & Beverage Stores	$34,410,311	25%	$8,602,578
Meat Markets, Poultry	$553,053	25%	$138,263
Vegetable & Fruit Markets, Fruit Juice Stands	$234,547	25%	$58,637
Bakeries	$653,310	25%	$163,327
Eating & Drinking Places (not restaurants)	$1,177,609	32%	$375,788
Candy, Nut, Confectionary & Dairy Product Stores	$1,033,143	15%	$154,971
Restaurants, Lunchrooms, Catering Services	$63,225,260	32%	$20,175,883
Drinking Places (Alcoholic beverages served on premises)	$3,784,253	32%	$1,207,597
Apparel & Accessory Stores	$18,543,724	40%	$7,352,041
Shoe Stores	$1,846,800	40%	$732,202
Feed & Seed Stores, Retail Nurseries	$1,265,170	0%	$0
Paint, Wallpaper & Hardware Dealers	$6,057,383	0%	$0
Farm Implements & Equipment Suppliers	$966,087	0%	$0
General Miscellaneous Merchandise Stores	$57,336,890	40%	$22,732,391
Used Merchandise Stores, Second-Hand Stores, Antique Shops	$2,994,271	20%	$593,570
Sewing, Needlework & Piece Goods Stores	$438,742	0%	$0
Automotive Dealers (Sale & Lease), Tag Agencies & Tax Collectors	$93,009,067	25%	$23,466,903
Automotive Accessories & Parts	$4,670,101	25%	$1,178,302
Gasoline Service Stations	$1,420,781	25%	$358,474
Automobile Repair & Services	$10,029,790	25%	$2,530,593
Aircraft Dealers	$220,926	0%	$0
Boat Dealers	$5,114,918	25%	$1,290,533
Home Furniture, Furnishings & Equipment	$17,696,061	0%	$0
Household Appliances & Accessories	$2,929,383	0%	$0
Store & Office Equipment, Office Supplies	$1,618,267	0%	$0
Radio, Television, Consumer Electronics, Computers, Music Stores	$9,728,797	0%	$0
Building Contractors	$4,391,736	0%	$0
Heating & Air Conditioning	$1,692,702	0%	$0
Electrical, Plumbing, Well Drilling, Pipes	$1,436,269	0%	$0
Decorating, Painting, Papering, Drapery Installation	$1,512,276	0%	$0
Roofing & Sheet Metal	$757,496	0%	$0
Lumber aand Other Building Materials Dealers	$28,198,478	0%	$0
Hotel/Motel Accommodations, Rooming Houses, Camps & Other Lodging Places	$34,332,979	99%	$33,989,649
Barber Shops, Beauty Shops & Personal Appearance Services	$2,074,977	10%	$207,498
Book Stores	$789,707	10%	$78,971
Tobacco Stores & Stands	$662,297	10%	$66,230
Florists	$466,758	5%	$23,338
Fuel Dealers, LP Gas Dealers	$178,841	5%	$8,942
Funeral Directors, Crematories & Monuments	$23,058	0%	$0
Scrap Metal, Junk Yards, Salvaged Material	$192,023	0%	$0

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Itinerant Vendors, Peddlers, Direct Selling Establishments	$1,008,889	0%	$0
Laundry, Garment, Linen & Other Cleaning Services	$1,090,099	0%	$0
Machine Shops, Foundries, Iron Work	$82,519	0%	$0
Horse, Cattle & Pet Dealers	$212,012	0%	$0
Camera & Photographic Supply Stores	$182,284	40%	$72,270
Storage & Warehousing	$170,651	5%	$8,533
Gifts, Cards, Novelty, Hobby, Crafts & Toy Stores	$3,215,898	40%	$1,275,009
Social, Fraternal, Commercial Clubs & Associations (All Dues)	$134,423	0%	$0
Industrial Machinery	$1,540,431	0%	$0
Admissions, Amusement & Recreation Services	$7,932,124	95%	$7,535,518
Rental of Tangible Personal Property	$3,908,270	95%	$3,712,857
Fabrication & Sales of Cabinets, Windows, Doors, Awnings, Septic Tanks, Neon Signs, Plastic, etc.	$1,741,483	0%	$0
Manufacturing	$17,697,630	0%	$0
Bottlers	$282,610	0%	$0
Communication, Telephone, Telegraph, Radio & Television Stations **	$2,811,877	0%	$0
Transportation, Railroads, Airlines, Bus, Trucking Lines	$787,933	0%	$0
Graphic Arts, Printing, Publishing, Engraving, Binding, Blueprinting	$2,369,716	0%	$0
Insurance, Banking, Savings & Loans, Research Information Services, Income Tax Reports	$109,734	0%	$0
Sanitary & Industrial Supplies	$1,352,264	0%	$0
Repair of Tangible Personal Property	$2,623,559	0%	$0
Advertising	$157,333	0%	$0
Nurseries, Landscapes, Tree Experts	$951,204	0%	$0
Vending Machine Operators	$215,880	0%	$0
Importing & Exporting	$181,636	0%	$0
Medical, Dental, Surgical, Optical & Related Professional Services	$523,896	0%	$0
Wholesale Dealers	$21,509,111	0%	$0
Schools, Colleges & Educational Services	$101,275	0%	$0
Lease or Rental of Commercial Real Property	$37,294,668	0%	$0
Privately Owned Parking Lots, Boat Docks & Aircraft Hangars	$817,275	0%	$0
Utilities, Electric, Gas, Water, Sewer	$10,359,620	0%	$0
Exempt Facilities	$14,974	0%	$0
Other Professional Services	$1,074,935	0%	$0
Taxable Services (per Chapter 212, F.S.)	$3,514,455	0%	$0
Veterinary Services	$179,654	0%	$0
Miscellaneous	$1,477,204	0%	$0
Other ***	$1,606,563	0%	$0
	==========		==========
Total of All Kind Codes	$546,902,332		$138,090,868
			25%

2.3   Comparable County Analysis

The second methodology utilized was a comparable county approach. In a perfect world there would be a set of counties in Florida exactly like Sarasota in all ways except that they would have no sales to non-residents or tourists. Then, all we would need to do is to compare the sales per person in the comparables to Sarasota County to determine the share of sales in Sarasota County that are from non-residents.

Of course, such a perfect set of comparables does not exist. To identify comparable counties for the purposes of quantifying sales to non-residents, we must first recognize that sales to residents are closely related to income. In fact, the relationship between income per capita and sales per capita is very strong, measured at a correlation of 0.71. This essentially means that 71% of the variation in sales per person is tied to income per person. Figure 1 illustrates this close relationship between income per capita and sales per capita. Sarasota County is denoted in red in Figure 1.

Sarasota County has a relatively high income per capita at $66,678 ranking 7th in Florida, the County ranks 8th in sales tax collections per capita. The reasons why Sarasota County has relatively high sales tax collections per capita is because of its relatively high per capita income and the large volume of sales in Sarasota County to non-residents and to tourists.

Figure 1. Income per Person and Sales Tax Collections per Person
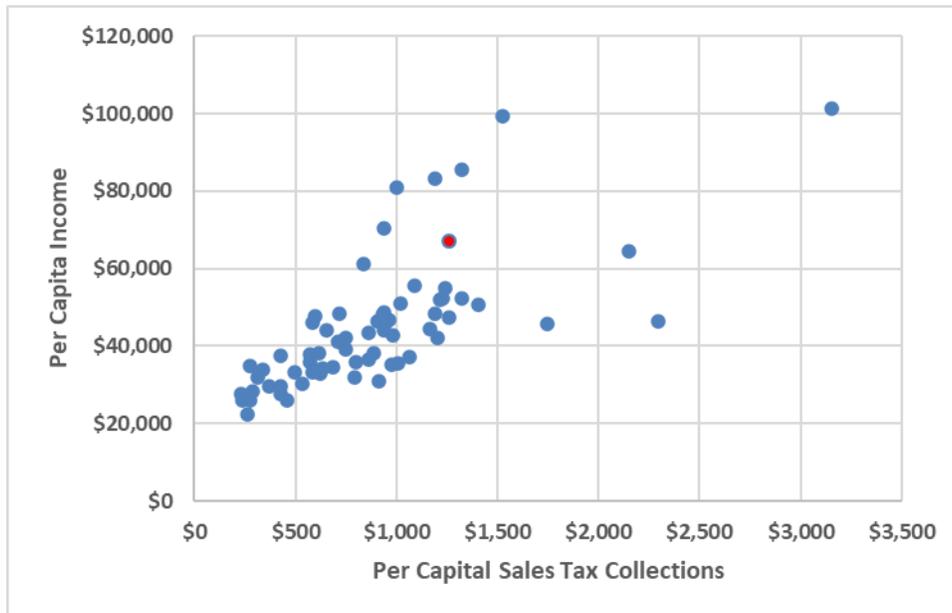
Therefore, for the purposes of this study comparable counties will be identified based on their incomes per capita. Table 5 displays a set of counties comparable to Sarasota based on per capita income. The table also compares each county's sales tax collections per capita to Sarasota's and highlights the variation of each one compared to Sarasota County.

Table 5. Comparable Counties Based on Per Capita Income and Sales Tax Collections Per Capita

County	2019 Sales Tax Collections	2019 Population	2019 Sales Tax Collections per capita	2019 per capita income	Variation v Sarasota
Palm Beach	$1,778,258,418	1,496,770	$1,188.1	$83,268	-6%
Indian River	$160,278,426	159,923	$1,002.2	$80,818	-21%
St. Johns	$248,896,952	264,672	$940.4	$70,498	-25%
Sarasota	$546,902,332	433,742	$1,260.9	$66,878	0%
Nassau	$74,044,277	88,625	$835.5	$61,329	-34%
Pinellas	$1,063,861,616	974,996	$1,091.1	$55,607	-13%
Miami-Dade	$3,379,944,648	2,716,940	$1,244.0	$54,902	-1%

The variances in sales tax collections per capita compared to Sarasota County ranges from -34% to 1%. On average Sarasota County has sales tax collections per capita 14% higher than counties with comparable per capita incomes. All of the comparable counties shown in Table 5 have some volume of sales to non-residents of those counties. If we assume a modest 10% share of sales to non-residents in the comparable counties, then Sarasota County is experiencing sales to non-residents of 24%.

This estimate of sales to non-residents of Sarasota County of 24% compares favorably to the 25% estimate based on the survey/analytical method. This test confirms the reliability of the survey/analytical method.

2.4 Regression Analysis

The third methodology to estimate the share of sales taxes collected from non-residents of Sarasota County employed econometric analysis using the ordinary least squares regression technique. Econometric analysis is a statistical technique based on economic modeling. In this case the economic model seeks to explain variations in sales tax collections per capita across Florida's 67 counties in 2019 as a function of income per capita and the volume of tourists.

As discussed above, there is a demonstrably, strong, positive, relationship between per capita income and sales tax collections per capita. This strong, positive, relationship is consistent with microeconomics, and frankly common sense. Similarly, it is reasonable to expect that the more tourists there are in a county, the higher its sales tax collections per capita will be. These are testable hypotheses. The equation is as follows:

Sales tax collections per person$_i$ = C + B1 * Income per person$_i$ + B2 * tourists$_i$

Where: i represents each of the 67 Florida counties
                C is the constant term, or intercept, for a linear equation
                B1 is the influence of income per Person on Sales tax collections per person in each county
                B2 is the influence of the number of tourists in each county

Since there are no reliable estimates for the number of tourists in each Florida county in 2019, we use a proxy variable – tourist tax collections. Most Florida counties have enacted tourist development taxes. While these vary across the counties, they do provide a useful proxy variable for the number of tourists in 2019.

In a regression analysis using the least squares approach, the values for C, B1 and B2 are estimated to produce the best fitting line to the data. This is accomplished through a statistical procedure that minimized the squared differences between the line and the data. Hence the name "least squares".

Table 6 contains the results of the least squares regression analysis. The model produced a very good fit to the data as evidenced by the Adjusted R Square value of 0.76. This means that the model explained 76% of the variation in sales tax collections per capita across all 67 Florida counties in 2019. Given that sales tax collections per capita ranged from $2 to $3,152 this is a very good fit. The F statistic at over 100 means that the overall model provides very reliable overall results.

We are particularly interested in the values of the coefficients for income/person and TDT/person (our proxy for the number of tourists). In both cases the coefficient estimates are highly significant and reliable. The coefficient estimates have very low standard errors and as a result very high t stat values. Any t stat value above 2.0 means that the coefficient estimate is statistically significant and different from zero. The P-value is a measure of the probability that the coefficient estimate is not what is measure, but instead is zero. As shown, there is zero probability that the coefficient estimates are zero.

Table 6. Least Squares Regression Results

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.87
R Square	0.76
Adjusted R Square	0.76
Standard Error	248.82
Observations	67

ANOVA

	df	SS	MS	F	Significance F
Regression	2	12807462.5	6403731.23	103.4352	8.9E-21
Residual	64	3962275.69	61910.5577		
Total	66	16769738.2			

	Coefficients	Standard Error	t Stat	P-value	Lower 95%
Intercept	207.08	93.92	2.20	0.03	19.45
TDT/Person	3.60	0.43	8.42	0.00	2.75
2019 per capita income	0.01	0.00	5.57	0.00	0.01

Table 7 provides the interpretation of the meaning of these coefficient estimates for this study. In Sarasota County the income/person is $66,878. TDT/person is $39, and sales tax collections/person is $1,261. The coefficients from the regression inform about the contribution of income/person to sales tax collection/person holding all other variables constant. Similarly, the coefficient on TDT/person reflects the relative contribution of tourists holding all other variables constant.

To determine the relative contribution of tourists to sales tax collections per person, the coefficients are each multiplied by their corresponding data points just as in the original equation that was estimated using the regression analysis. The relative contribution of tourists is 15% using this approach.

Table 7. Interpreting the Regression Coefficients

Sarasota	Data	Coefficient	Product	% Total
TDT/Person	$39	3.60	$142	15%
2019 per capita income	$66,878	0.01	$806	85%
			========	
			$948	

3.0   Conclusions

In this study PFM used three methodologies to estimate the contribution of non-residents and tourists to sales tax collections in Sarasota County. The three approaches were: (1) survey/analytical; (2) comparable county; and (3) regression. Table 8 reconciles the results from all three methods. PFM weighted the results equally since each methodology is equally reliable. The reconciled estimate is 22%.

Table 8. Summary of Results

Method	Non-Resident	Weight	Total
Survey/Analytical	25%	33%	8%
Comparable County	24%	33%	8%
Regression	15%	33%	5%
			======
Total			22%

Non-residents and tourists contribute 15%-25% of sales taxes in Sarasota County. This means that of each $1 of sales taxes collected in Sarasota County at least 15% are paid for by non-residents. Therefore, if the proposed 1 cent surtax is approved by Sarasota County voters, at least 15% of the cost will be contributed by non-residents and tourists. However, with two approaches yielding values of 24% and 25%, it is most likely that non-residents contribute substantially more. The best overall estimate is that non-residents pay 22% of all sales taxes in Sarasota County.