



2023 TRAFFIC VOLUME SUMMARY MEMORANDUM

BREVARD COUNTY, FLORIDA

June 2024



2023 Traffic Volume Summary Memorandum

Brevard County, Florida

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CONTENTS

Introduction	1
2023 Traffic Volume Summary	1
Highest Volumes	2
Largest Volume Increase by Percentage	3
Most Constrained Roadways	5

LIST OF FIGURES

Figure 1: Average 2023 Volume by Planning Area	2
Figure 2: Percent Change in Average Volume by Planning Area (2022-2023)	4
Figure 3: Average 2023 V/C Ratio by Planning Area	6

LIST OF TABLES

Table 1: Highest Traffic Volumes by Planning Area	2
Table 2: Largest Absolute Volume Percentage Change by Planning Area	4
Table 3: Most Constrained Roadways by Planning Area	6

INTRODUCTION

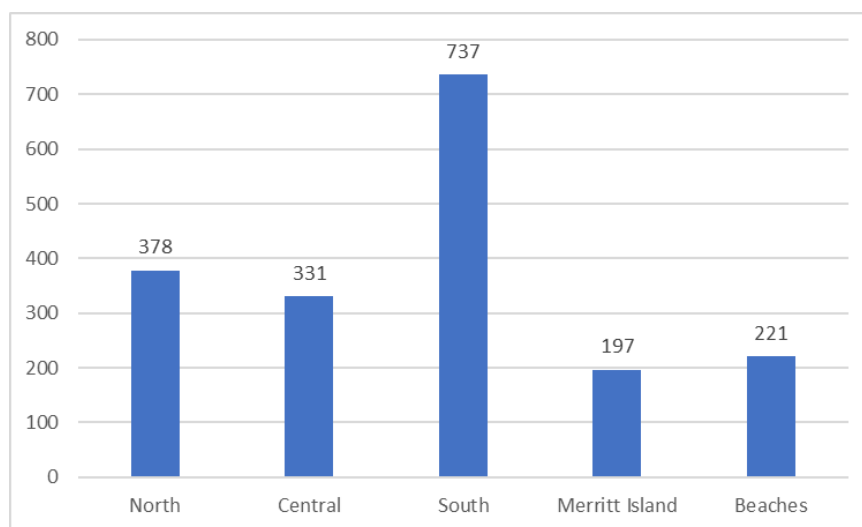
The Space Coast Transportation Planning Organization (SCTPO) collects annual traffic counts to support a variety of transportation monitoring programs. The traffic counts also support local government transportation concurrency programs that monitor roadway capacities and traffic volumes and manage the traffic impacts of planned developments.

The SCTPO utilizes a consultant to collect forty-eight (48) hour directional traffic counts by fifteen (15) minute intervals at over 500 specified locations. These traffic counts are organized by the following planning areas:

- North (covering Titusville and adjacent communities);
- Central (covering the Cocoa, Rockledge, Viera, and adjacent communities);
- South (covering the Melbourne, West Melbourne, Palm Bay, and adjacent communities);
- Merritt Island (covering unincorporated Merritt Island); and
- Beaches (covering Cape Canaveral, Cocoa Beach, Indian Harbour Beach, and other beachside communities).

The planning areas above vary in size and the number of roadways counted. **Figure 1** shows the number of lane miles in each planning area. Lane miles are calculated by multiplying the length of each roadway segment by the number of lanes on the segment.

Figure 1: Lane Miles by Planning Area



Traffic counts are taken during the weekday period from 12:01 AM, Monday, through 12:00 noon Friday. Florida Department of Transportation (FDOT) seasonal factors are used to adjust raw traffic counts and develop Average Annual Daily Traffic (AADT) volumes. The SCTPO applies a reduced seasonal adjustment on certain local and collector roadways that experience less seasonal fluctuation in traffic volumes. The complete 2023 volume counts are provided in the SCTPO Traffic Counts Historical Report.

2023 TRAFFIC VOLUME SUMMARY

The 2023 SCTPO traffic volumes were reviewed to identify notable trends in each planning area that should be monitored closely in future years.

HIGHEST VOLUMES

Figure 2 displays the average 2023 volume in each planning area, with the largest average volumes being in the South planning area. This coincides with the large population and employment areas in Melbourne and Palm Bay. **Table 1** summarizes the roadway segments in each planning area with the highest roadway volumes in 2023, as well as a comparison to where these segments ranked in 2022. The largest volumes were collected in the South planning area on Palm Bay Road.

Figure 2: Average 2023 Volume by Planning Area

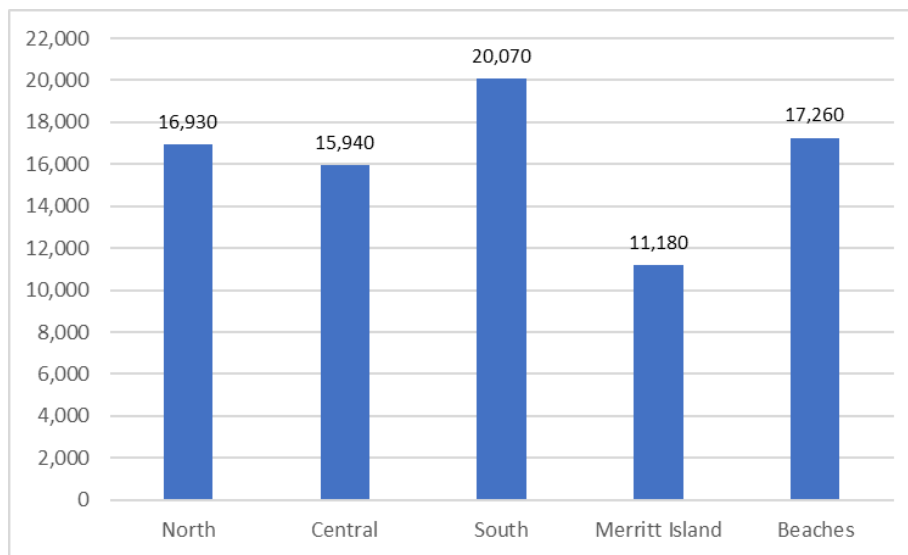


Table 1: Highest Traffic Volumes by Planning Area

Planning Area	Roadway	From	To	2022 Planning Area Rank	2023 Planning Area Rank	2023 Traffic Volume
North	US 1	Canaveral Groves Blvd.	Camp Rd.	6	1	30,420
	SR 50	I-95	SR 405	1	2	29,480
	US 1	SR 528	Canaveral Groves Blvd.	5	3	26,900
	US 1	Knox Mcrae Dr.	Country Club Dr.	2	4	26,340
	US 1	SR 50	Knox Mcrae Dr.	9	5	25,750
Central	US 1	Barton Blvd.	Florida Ave.	1	1	40,620
	SR 528	Industry Rd.	US 1	7	2	40,080
	SR 528	Orange Co	SR 407	6	3	37,620
	US 1	Pineda Cswy. (SR 404)	Suntree Blvd.	5	4	35,290
	US 1	Rosa Jones Dr.	SR 520	4	5	34,570

Table 1: Highest Traffic Volumes by Planning Area (Continued)

Planning Area	Roadway	From	To	2022 Planning Area Rank	2023 Planning Area Rank	2023 Traffic Volume
South	Palm Bay Rd.	Culver Dr.	I-95 East Ramp	2	1	68,470
	Palm Bay Rd.	I-95 East Ramp	Hollywood Blvd.	1	2	66,800
	Malabar Rd.	San Filippo Dr.	I-95	3	3	52,160
	Palm Bay Rd.	Hollywood Blvd.	Dairy Rd.	4	4	51,940
	US 1	Sarno Rd.	Eau Gallie Blvd. (SR 518)	5	5	51,210
Merritt Island	SR 520	Humphrey Bridge	N.Tropical Tr.	1	1	46,700
	SR 528	US 1	N Courtenay Pkwy. (SR 3)	2	2	39,270
	SR 520	N.Tropical Tr.	SR 3	3	3	37,790
	SR 528	N Courtenay Pkwy. (SR 3)	N Banana River Dr.	5	4	37,750
	SR 528	N Banana River Dr.	SR 401	10	5	36,050
Beaches	Pineda Cswy. (SR 404)	US 1	Tropical Tr.	1	1	45,160
	Pineda Cswy. (SR 404)	S Tropical Tr.	S Patrick Dr. (SR 513)	2	2	41,160
	Eau Gallie Blvd. (SR 518)	Causeway	S Patrick Dr. (SR 513)	4	3	34,360
	US 192	Causeway	Riverside Dr.	NC*	4	32,960
	SR A1A	Fisher Dr.	St. Lucie Ln.	3	5	32,020

*Not counted in 2022

LARGEST VOLUME INCREASE BY PERCENTAGE

Figure 3 displays how much the average volume in each planning area has changed from 2022 to 2023. Volumes have been reduced by 4 to 6 percent in the North and South planning areas. There do not seem to be any apparent explanations for this, but the trends will be monitored in future years. **Table 2** summarizes the roadway segments in each planning area with the highest roadway volume increase by percentage. The largest increases in volume were collected in the South planning area on Parkway Drive and Malabar Road.

Figure 3: Percent Change in Average Volume by Planning Area (2022-2023)

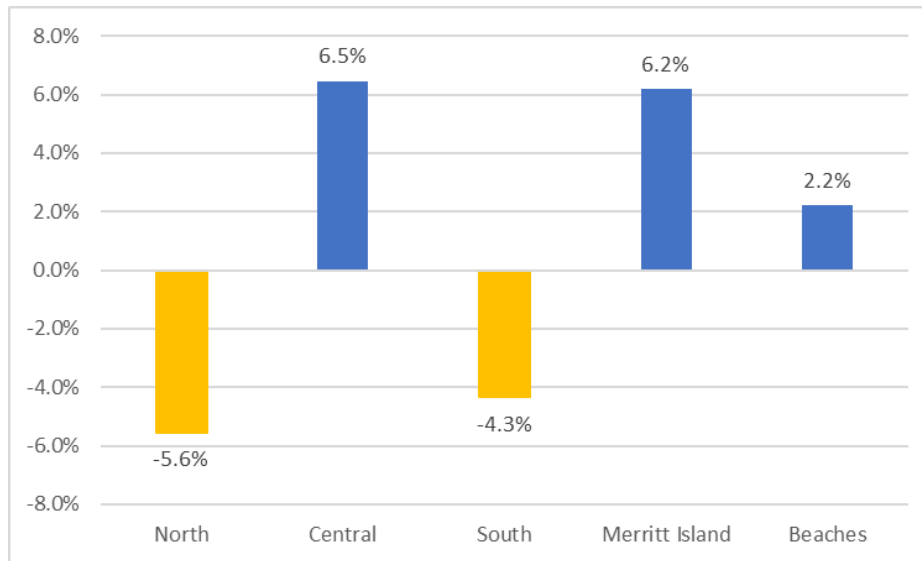


Table 2: Largest Absolute Volume Percentage Change by Planning Area

Planning Area	Roadway	From	To	2023 Absolute Volume Change Percentage	2023 Traffic Volume
North	Barna Ave.	SR 50	Knox Mcrae Dr.	22%	11,300
	SR407	SR 528	I-95	-21%	5,710
	US 1	Fay Blvd.	Kings Hwy.	-20%	23,210
	SR 405 (Columbia Blvd.)	Grissom Pkwy.	Sisson Rd.	20%	17,510
	US 1 (SB Hopkins Ave.)	South St.	Grace St.	-16%	12,530
Central	SR 528	SR 407	I-95	36%	33,200
	Barnes Blvd.	Murrell Rd.	US 1	-29%	10,200
	SR 528	Industry Rd.	US 1	28%	40,080
	Stadium Pkwy.	Judge F Jamieson Wy	Viera Blvd.	27%	21,070
	US 1	Suntree Blvd.	Viera Blvd.	27%	32,070
South	Parkway Dr.	Turtlemound Rd.	Wickham Rd.	71%	5,290
	Malabar Rd.	St. Johns Heritage Pkwy.	Jupiter Blvd.	46%	14,860
	Minton Rd.	Emerson Dr.	Palm Bay Rd.	-35%	34,050
	Lake Andrew Dr.	Pineda Cswy.	Strom Park Dr.	-33%	7,350
	Pineda Cswy.	Lake Andrew Dr.	I-95	32%	20,010

Table 2: Largest Volume Percentage Change by Planning Area (Continued)

Planning Area	Roadway	From	To	2023 Volume Change Percentage	2023 Traffic Volume
Merritt Island	N. Courtenay Pkwy. (SR 3)	N Tropical Tr.	Space Commerce Way	32%	9,250
	Space Commerce Wy.	SR 3	Nasa Cswy.	29%	5,720
	Hall Rd.	N Tropical Tr.	N Courtenay Pkwy. (SR 3)	-28%	2,140
	N. Courtenay Pkwy. (SR 3)	SR 528 N Ramps	Hall Rd.	21%	21,690
	SR 528	N Banana River Dr.	SR 401	21%	36,050
Beaches	SR A1A	N End Of One Way Pairs	Tulip Ave.	-19%	25,000
	SR A1A (NB Only)	Minutemen Cswy.	N End Of One Way Pairs	-15%	10,420
	Pineda Cswy. (SR 404)	US 1	Tropical Tr.	13%	45,160
	SR A1A (SB Only)	Minutemen Cswy.	S End Of One Way Pairs	-13%	9,250
	SR A1A (NB Only)	S End Of One Way Pairs	Minutemen Cswy.	-11%	9,100

MOST CONSTRAINED ROADWAYS

By dividing 2023 roadway volumes by roadway capacities, the SCTPO calculated volume-to-capacity (v/c) ratios that indicate how constrained a roadway is. The SCTPO considered a roadway to be congested if the v/c ratio is greater than 0.85. A v/c ratio over 1.0 indicates a roadway that is over capacity. **Figure 4** shows the average v/c ratio by planning area, indicating that the South planning area is on average the most congested. **Table 3** summarizes the roadway segments in each planning area with the highest v/c ratios. The 2022 v/c ratio rank by planning area is also provided to demonstrate how the v/c ranking has changed compared to the 2023 v/c ratios. The one-way pair on SR 520 in the Central planning area and Babcock Street and Ellis Road in the South planning area have especially high v/c ratios.

Figure 4: Average 2023 V/C Ratio by Planning Area

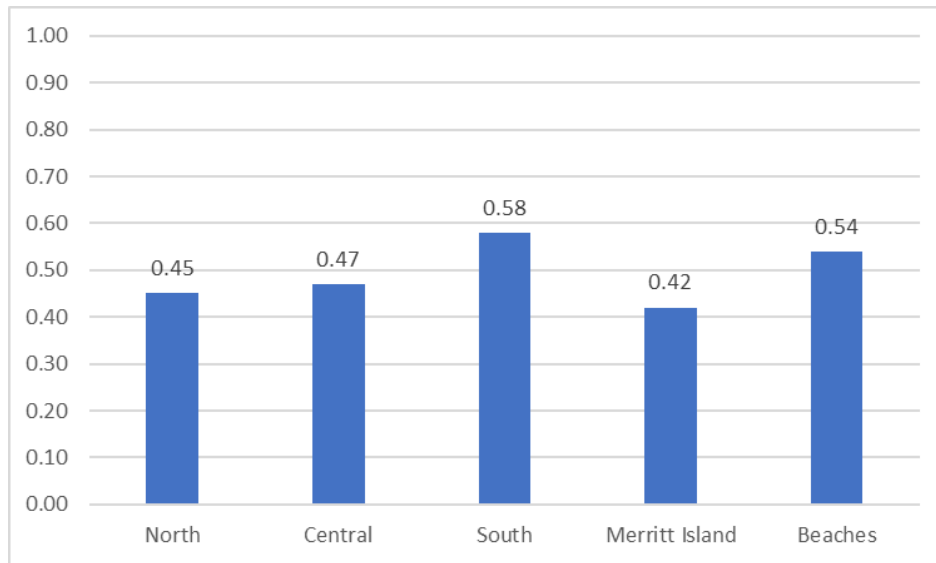


Table 3: Most Constrained Roadways by Planning Area

Planning Area	Roadway	From	To	2022 V/C Ratio Planning Area Rank	2023 V/C Ratio	2023 Traffic Volume
North	SR 405 (South St.)	SR 50	Fox Lake Rd.	1	1.01	18,790
	SR 46	I-95	US 1	2	0.90	12,790
	SR 46	Volusia Co.	Fawn Lake Blvd.	4	0.78	6,520
	Grissom Pkwy.	Bridge Rd.	Fay Blvd.	11	0.76	13,470
	SR 46	Fawn Lake Blvd.	I-95	7	0.75	10,660
Central	SR 520 (WB)	Delannoy Ave.	Brevard Ave.	1	1.22	23,720
	SR 520 (EB)	Delannoy Ave.	Riveredge Blvd.	3	1.16	22,570
	SR 520 (WB)	Causeway	Delannoy Ave.	4	1.15	22,260
	SR 520 (EB)	Forrest Ave.	Brevard Ave.	5	1.13	22,060
	SR 520 (EB)	Brevard Ave.	Delannoy Ave.	2	1.13	22,000
South	Babcock St.	Foundation Park Blvd.	Malabar Rd. (SR 514)	1	1.28	22,570
	Ellis Rd.	I-95 Interchange	John Rodes Blvd.	2	1.21	18,840
	Ellis Rd.	East Dr.	Wickham Rd.	12	1.18	18,370
	Babcock St.	Waco Blvd.	Foundation Park Blvd.	9	1.16	20,450
	Palm Bay Rd.	Culver Dr.	I-95 East Ramp	23	1.14	68,470

Table 3: Most Constrained Roadways by Planning Area (Continued)

Planning Area	Roadway	From	To	2022 V/C Ratio Planning Area Rank	2023 V/C Ratio	2023 Traffic Volume
Merritt Island	S. Courtenay Pkwy.	Cone Rd.	Fortenberry Rd.	1	0.89	13,920
	SR 520	Humphrey Bridge	N. Tropical Tr.	7	0.78	46,700
	N. Courtenay Pkwy. (SR 3)	Merritt Ave.	Needle Blvd.	4	0.77	32,030
	N. Courtenay Pkwy. (SR 3)	Crockett Blvd.	Pioneer Rd.	6	0.76	31,760
	N. Courtenay Pkwy. (SR 3)	Lucas Rd.	Crockett Blvd.	13	0.75	31,490
Beaches	SR A1A	Miami Ave.	US 192	1	1.07	18,920
	SR A1A	Ocean Ave.	Miami Ave.	3	0.97	17,250
	S. Patrick Dr. (SR 513)	Desoto Pkwy.	Jackson Ct.	5	0.96	17,940
	SR A1A	Fisher Dr.	St. Lucie Ln.	4	0.94	32,020
	S. Patrick Dr. (SR 513)	Berkeley St.	Ocean Blvd.	11	0.86	15,910