

### 95 Express Annual Operations Report: Fiscal Year 2020-2021

#### General

The Florida Department of Transportation's (FDOT) District Six Transportation Systems Management & Operations (TSM&O) Office operates 21 miles of the 95 Express facility, with three congestion-priced tolling segments in each direction. Segment 1 in Miami-Dade County extends from just north of SR 836 to the Golden Glades Interchange (SR 826/Florida's Turnpike). Segment 2 is also in Miami-Dade County from north of the Golden Glades Interchange to just south of Ives Dairy Road. Segment 3 is in Broward County from Hallandale Beach Boulevard to Stirling Road.

District Six, from its SunGuide<sup>®</sup> Transportation Management Center (TMC) in Miami, is responsible for tolling operations for the facility. The District Four Regional Transportation Management Center (RTMC) and District Six SunGuide TMC manage resources within their respective districts for incident management. The Florida's Turnpike Enterprise (FTE) is responsible for consolidating the tolls collected by drivers' transponders at the six segments and billing those customers accordingly. All express lanes trip (or traffic volume) information shown herein is provided to the district from FTE SunPass<sup>®</sup> offices. 95 Express has serviced approximately 371 million trips since opening on December 5, 2008.

A reduction in traffic demand was observed in the last two fiscal years (FY) due to the COVID-19 pandemic. FY 2020-2021 had 42,112,617 vehicle trips, an 18% decrease in total volume when compared to FY 2018-2019, the last fiscal year before the COVID-19 pandemic. Starting in the third quarter of FY 2019-2020 (March 2020) safety measures and stay-at-home orders restricted activities within Miami-Dade and Broward counties to essential services. These measures along with behavioral changes in the population derived from COVID-19, resulted in a dramatic decrease in traffic volumes. Stay-at-home orders continued into FY 2020-2021 and evolved into different safety measures, continuing to affect vehicular movement. Therefore, although volume decline started in FY 2019-2020 (16% decrease when compared to FY 2018-2019), it continued to shrink an additional 1.6% in FY 2020-2021.

A temporary segment length reduction in Segment 1 was left in place during FY 2020-2021. A pavement rehabilitation project on I-95 temporarily shortened Segment 1 by approximately 2/3 of a mile for each direction. The ingress to Segment 1N was relocated north in May 2017 and the egress from Segment 1S was relocated north in April 2019. These modifications have been kept in place through FY 2020-2021 by the I-395/SR 836/I-95 Design-Build Project. This reduction of segment length resulted in the reduction of the maximum tolls for both segments (originally \$10.50) with an interim maximum toll of \$10.00 for Segment 1N and \$9.75 for Segment 1S.



### **Operations/Traffic Statistics** –General Statistics

The table below outlines 95 Express performance measures. Each segment is shown individually with comparisons to the previous FY. Colored arrows are used to quickly identify the annual comparisons.

FY 2020-2021 Statistics		gment 1	(7 m	(7 miles)		Segment 2 (1		nile)	Se	Segment 3		(4 miles)	
		15		1N		25		2N		35		3N	
Trips (vehicles)													
- ITD Trips**	121,892,903		125,707,322		36,580,003		29,887,810		31,454,388		25,756,004		
- FY 2020-2021 Total Trips	9,821,150		9,591,531		7,084,178		5,563,937		5,556,160		4,495,661		
- FY 2020-2021 Average Monthly Trips	818,429 799,294		799,294	590,348		463,661		463,013		374,638			
- % Increase/Decrease to Previous FY		2.3%	╇	-1.6%		2.6%	╇	-3.1%	➡	-6.7%	╇	-7.7%	
Volume (vehicles)													
- FY 2020-2021 Average Weekday		29,628		28,406		21,430		16,612		16,931		13,567	
- % Increase/Decrease to Previous FY		-1.1%	➡	-3.7%		0.9%	➡	-5.0%	➡	-9.1%	╇	-9.8%	
<ul> <li>FY 2020-2021 Average Peak Period*</li> </ul>		7,114		6,782		4,118		3,928		3,231		3,162	
- % Increase/Decrease to Previous FY	•	-7.9%		4.9%	+	-3.3%		3.8%	+	-11.3%	╇	-0.2%	
Speed (mph) (EL Target ≥ 45 mph)	EL	LL	EL	LL	EL	LL	EL	ш	EL	LL	EL	LL	
- Pre-95 Express Peak Period Conditions** <sup>1</sup>	20	15	18	18	24	28	56	40	35	52	68	55	
- FY 2020-2021 Average Weekday	72	61	69	60	71	61	68	61	78	67	78	67	
<ul> <li>FY 2020-2021 Average Peak Period*</li> </ul>	68	51	52	34	69	59	65	56	79	67	75	61	
ITD Average Operated Above 45 MPH		99.4%		96.2%		96.6%		99.8%		99.7%		99.6%	
FY 2020-2021 Avg. Operated Above 45 MPH		99.9%		96.6%		99.6%		99.8%		99.8%		99.9%	
- % Increase/Decrease to Previous FY		1.4%		2.8%		2.8%		0.1%	➡	-0.1%		0.6%	
Remained Open to Motorists		96.3%		96.2%		99.2%		99.5%		97.5%		98.1%	
Number of Construction Events		41		34		16		11		33		25	
Closed due to Planned Construction		2.0%		1.1%		0.3%		0.4%		1.5%		1.1%	
Number of Non-recurring Events		343		547		68		38		192		137	
Closed due to Non-recurring Events (<5% Target)		1.6%		2.7%		0.5%		0.2%		1.0%		0.8%	
- % Increase/Decrease to Previous FY	-	-10.1%		18.4%		72.4%		100.0%		51.5%		12.7%	

1 Increase/Decrease vs. Previous Fiscal Year (FY) Average.

EL (Express Lanes); LL (Local Lanes); ITD (Inception to Date); FY (Fiscal Year); \*Peak Period = 6-9 AM (Southbound) and 4-7 PM (Northbound) \*\*1N Commenced Tolling on 12/5/2008; 1S on 1/15/2010; 2N, 2S, 3N and 3S on 10/16/2016

<sup>1</sup> Sources: 1N/1S - FDOT "2008 I-95 Managed Lanes Monitoring Report"; 2N/2S; 3N/3S - FDOT "2012 I-95 Managed Lanes Monitoring Report" All data shown is based on best available information at time of report.



#### **Operations/Traffic Statistics** – Tubular Markers (TMs)

Tubular Markers (TMs) are the flexible plastic tubes that create a buffer separation between the express lanes and the general use lanes. Until fall of 2016, TMs were placed at 10-foot spacing. As traffic volumes increased annually in the express lanes, motorists were observed illegally crossing over the TMs. This dangerous movement (defined as "lane diving") continued to increase over time. As a result, the Department increased its Florida Highway Patrol (FHP) patrolling presence in the express lanes, ticketing those motorists making the illegal movement.

On December 21, 2016, the Department completed installation of new TMs in both directions of Segment 1. The current TMs are more durable and are now placed five feet apart. The objective was to deter motorists from lane diving and improve operations of the express lanes. The following table shows the comparative values for specific performance criteria that are tracked monthly and compared to the performance of the facility prior to the installation.

Pre-, During, and Post-installation Performance Metric Data (Segment 1)								
Performance Metric	Monthly Avg. for Six Months Before New TM Installation	Monthly Avg. During New TM Installation	Monthly Avg. After New TM Installation <sup>5</sup>					
ELM Replacement <sup>1</sup>	4,030	21	469					
Lane Diving (Citations + Warnings) <sup>2</sup>	152	82	9					
Crashes in Express Lanes <sup>3</sup>	81	60	50					
Vehicle Throughput <sup>4</sup>	1,874,077	1,816,973	1,716,213					

#### Pre-, During, and Post-Installation Performance Metric Data (Segment 1)

Through the end of FY 2020-2021 the new TMs have contributed to the following average monthly improvements for 95 Express Segment 1:

- TM replacement has decreased 88%.
- Lane diving has decreased 94%.
- Crashes within the facility have decreased by 39%.

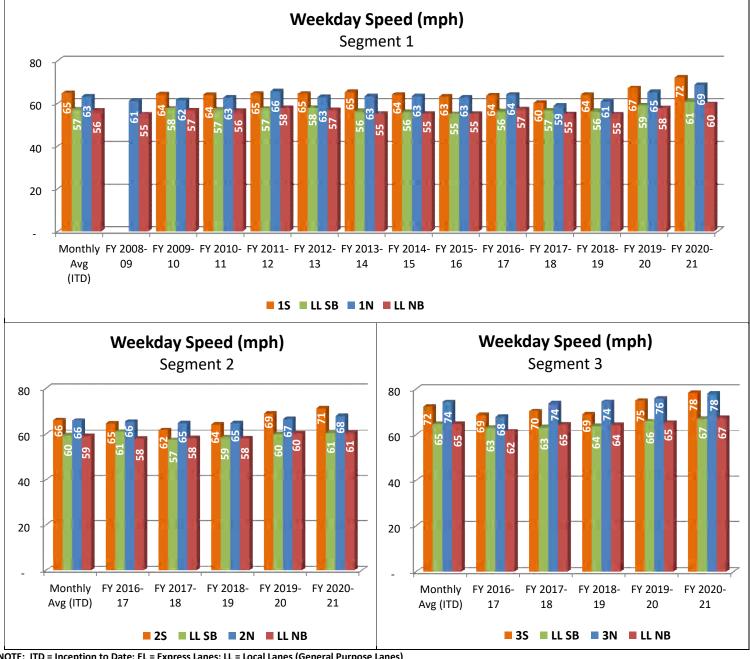
<sup>1</sup>Data provided by District Six's Asset Maintenance Contractor <sup>2</sup>Data provided by FHP (Though Invoicing for District Six FHP Hireback Program) <sup>3</sup>Data provided by District Six SunGuide® Center (via SunGuide® Software) <sup>4</sup>Data provided by Florida's Turnpike (via Monthly Toll Gantry Reports) <sup>5</sup>Monthly average from December 22, 2016 through June 30, 2021



# **Operations/Traffic Statistics** - Speed Data

95 Express average speeds met or exceeded the facility's 45 MPH operational speed target for weekdays and peak periods. Facility-wide weekday and peak period speeds for the Express Lanes (EL) increased 10 and 21 percent when compared to FY 2018-19 (before COVID-19). On Local Lanes (LL) the increment was 6 and 16 percent on average when compared to FY 2018-19.

The following graphs show the facility's average speed by segment in both overall (weekdays) and peak periods, by fiscal year since inception.

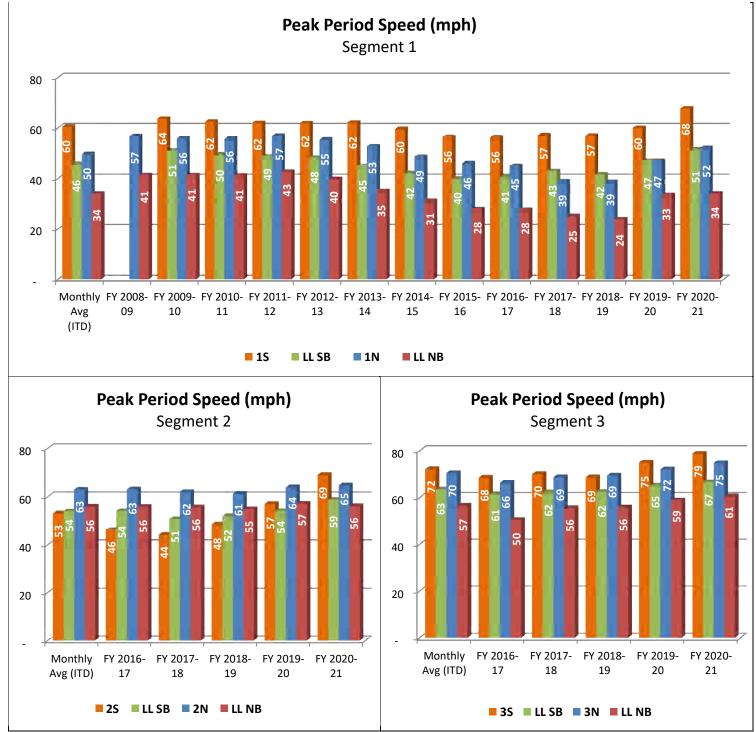


NOTE: ITD = Inception to Date; EL = Express Lanes; LL = Local Lanes (General Purpose Lanes) NOTE: 1N Commenced Tolling on 12/5/2008; 1S on 1/15/2010; 2N, 2S, 3N and 3S on 10/16/2016



# **Operations/Traffic Statistics** - Speed Data (Cont.)

95 Express average peak period speeds met or exceeded the facility's 45 MPH operational speed target on all segments in the current fiscal year. See below for average peak period speeds for the Express Lanes (EL) and Local Lanes (LL) by segment for all fiscal years from inception.

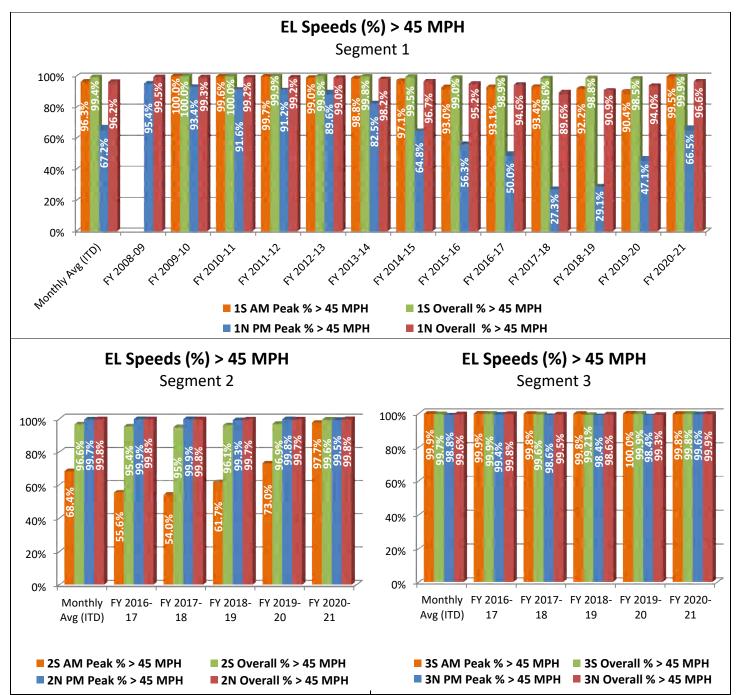


NOTE: ITD = Inception to Date; EL = Express Lanes; LL = Local Lanes (General Purpose Lanes) NOTE: 1N Commenced Tolling on 12/5/2008; 1S on 1/15/2010; 2N, 2S, 3N and 3S on 10/16/2016 NOTE: Peak Period is defined as 6-9 AM (southbound) and 4-7 PM (northbound).



## **Operations/Traffic Statistics** - Speed Data (Cont.)

Overall speed reliability for each 95 Express segment exceeded the facility's 90% goal as shown below. However, the graphs show 95 Express speed reliability during the peak period for Segment 1N was 66.5%. Speed reliability for the entire 95 Express facility during weekdays was 99.7% and 99.8% for the northbound and southbound directions respectively, while speed reliability for the peak periods was 80.1% for the northbound PM peak and 99.5% for the southbound AM peak.

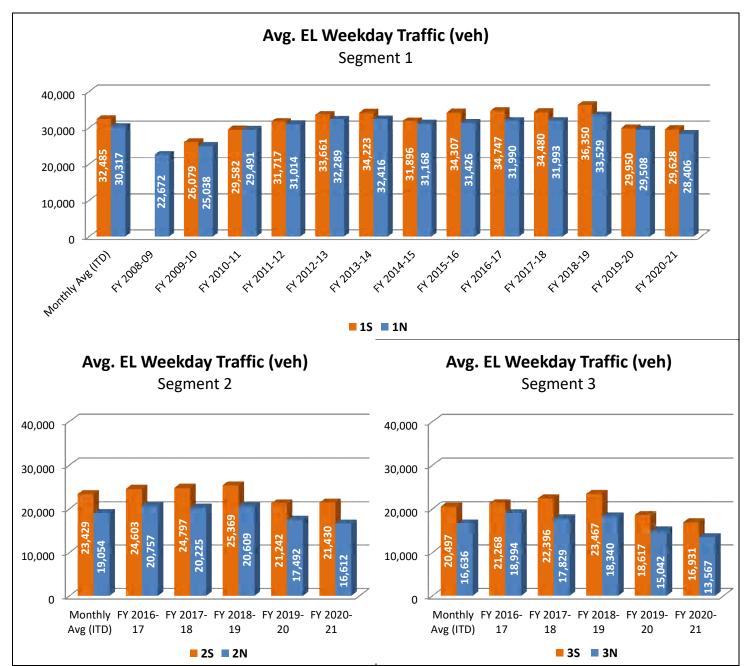


NOTE: ITD = Inception to Date; EL = Express Lanes; LL = Local Lanes (General Purpose Lanes) NOTE: 1N Commenced Tolling on 12/5/2008; 1S on 1/15/2010; 2N, 2S, 3N and 3S on 10/16/2016



# **Operations/Traffic Statistics** - Volume Data

95 Express average weekday volumes were consistent with the previous Fiscal Year average, with volumes for the entire express facility decreasing near 20% when comparing FY 2020-21 to FY 2018-19 (before COVID-19). Average weekday volumes are depicted below by segment for all fiscal years from inception.



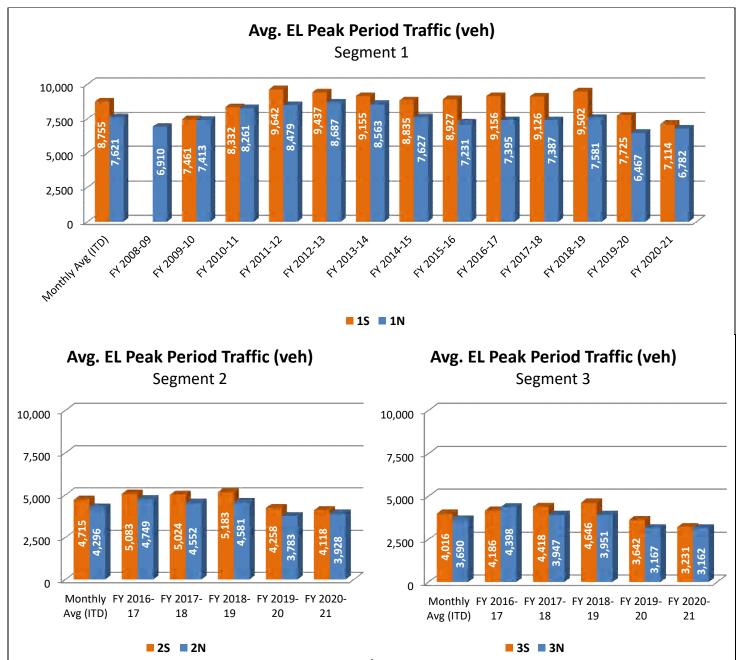
NOTE: ITD = Inception to Date; EL = Express Lanes

NOTE: 1N Commenced Tolling on 12/5/2008; 1S on 1/15/2010; 2N, 2S, 3N and 3S on 10/16/2016



### **Operations/Traffic Statistics - Volume Data** (Cont.)

There was little change in the peak period average volumes when compared to last year. However, 95 Express experienced a 20% decrease in peak period average volume compared to FY 2018-19 (before COVID-19). Average peak period volumes for FY 2020-2021 are depicted below by segment.



NOTE: ITD = Inception to Date; EL = Express Lane

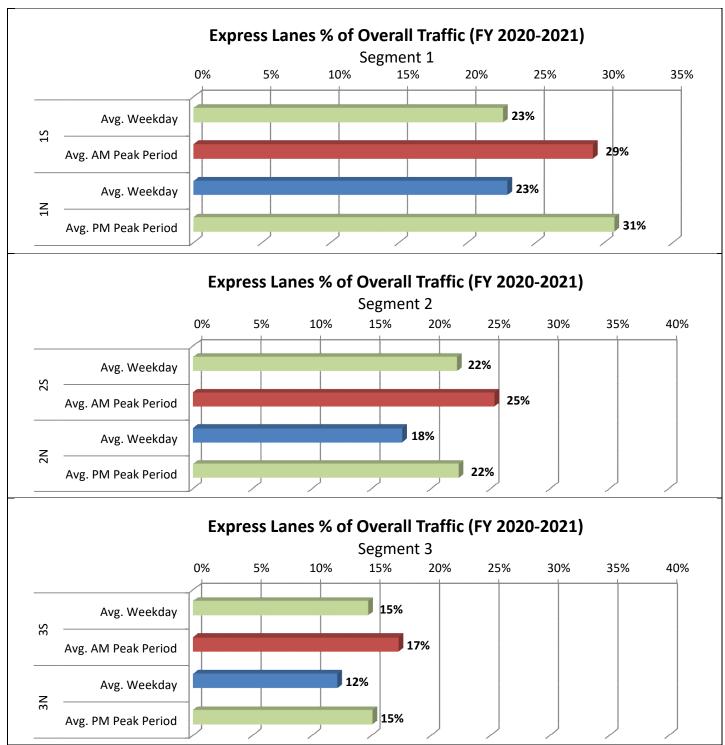
NOTE: Peak Period is defined as 6-9 AM (southbound) and 4-7 PM (northbound).

NOTE: 1N Commenced Tolling on 12/5/2008; 1S on 1/15/2010; 2N, 2S, 3N and 3S on 10/16/2016



# **Operations/Traffic Statistics - Volume Data** (Cont.)

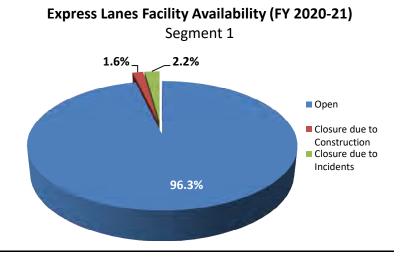
The graphs on this page depict the percentage of traffic using 95 Express compared to the overall I-95 corridor volume by direction for each segment.



NOTE: Peak Period is defined as 6-9 AM (southbound) and 4-7 PM (northbound). NOTE: 1N Commenced Tolling on 12/5/2008; 1S on 1/15/2010; 2N, 2S, 3N and 3S on 10/16/2016



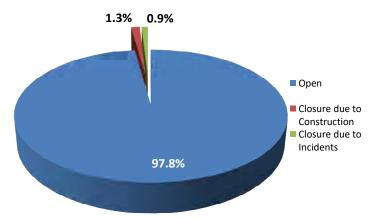
# Facility Availability



Segment 1 of 95 Express was open to motorists 96.3% of the time, while closed 1.6% due to 75 planned construction and/or maintenance events and 2.2% due to 890 nonrecurring events. The construction and maintenance events are typically overnight and each lasted 3.6 hours on average. The non-recurring events caused the express lanes to be closed 26 minutes per event. These annual totals equate to approximately 6 planned events and 74 incidents every month.

Segment 2 of 95 Express was open to motorists 99.3% of the time, while closed 0.3% due to 27 planned construction and/or maintenance events and 0.4% due to 106 nonrecurring events. The construction and maintenance events are typically overnight and each lasted 2.2 hours on average. The non-recurring events caused the express lanes to be closed 35 minutes per event. These annual totals equate to approximately 2 planned events and 9 incidents every month.

#### Express Lanes Facility Availability (FY 2020-21) Segment 3

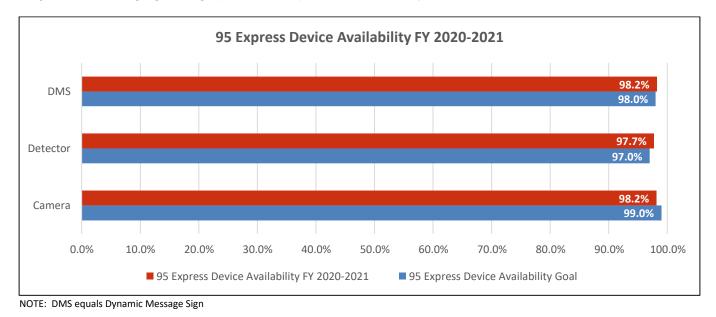


Segment 3 of 95 Express was open to motorists 97.8% of the time, while closed 1.3% due to 59 planned construction and/or maintenance events and 0.9% due to 330 nonrecurring events. The construction and maintenance events are typically overnight and each lasted 3.8 hours on average. The non-recurring events caused the express lanes to be closed 29 minutes per event. These annual totals equate to approximately 5 planned events and 28 incidents every month.

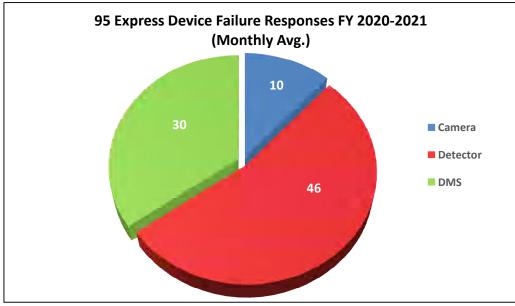


# Equipment Availability

95 Express devices are deemed by the District as the most critical since all combine to provide accurate and timely information to the driver including toll amounts, congestion and closure information, and incident management messaging. The graph below depicts the availability of the near 190 devices.



Below are the average monthly failure responses (maintenance crews responding to a device failure ticket) for the 95 Express devices. Failures are either deemed as Critical or Non-Critical. A Critical failure is defined as a failure that creates a safety hazard to motorists or impact the operations of several devices in the region. Since all 95 Express devices are deemed critical devices, their failures are also deemed critical.

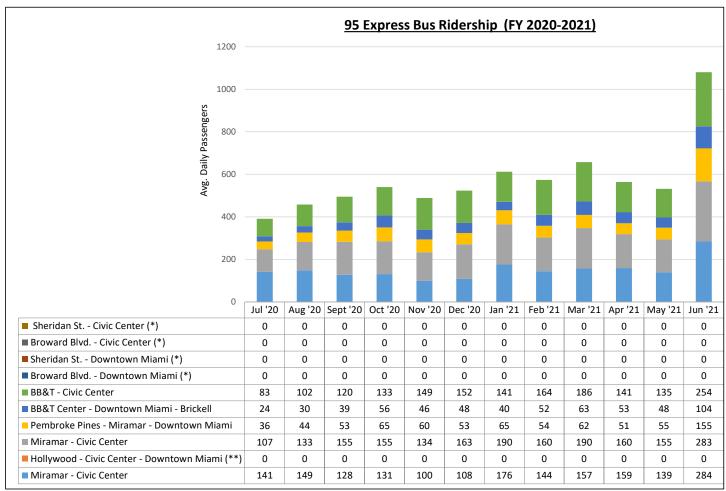


NOTE: DMS equals Dynamic Message Sign



# <u>Transit</u>

The graphic below shows the average weekday boardings for the Miami-Dade Transit (MDT) and Broward County Transit (BCT) express bus routes that utilize 95 Express. Bus service along 95 Express experienced a 78.2% decrease in ridership when compared with the previous FY, with 576 passenger boardings on an average weekday. Four MDT express routes were suspended at the end of March or the beginning of April 2020, due to the COVID-19 pandemic. When compared against FY 2019-2020 the loss in ridership was 84.5%.



(\*) Several MDT express routes were suspended at the end of March or the beginning of April 2020, due to the COVID-19 pandemic.

(\*\*) Route 107 was discontinued by BCT starting March 2019, due to Route 108 having a more direct connection to Downtown Miami and a shorter travel time.

This concludes the 95 Express Annual Report for Fiscal Year 2020-2021. For all previous years' performance, project history, and lessons learned, please visit <u>95Express.com</u>.