

95 Express Annual Operations Report: Fiscal Year 2017-2018

Executive Summary

The 95 Express program operates 21 miles of express lanes, 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 Broward Boulevard with access from/to I-595 via the Stirling Road express lanes ingress/egress

District Six, from its SunGuide® Transportation Management Center (TMC) in Miami, is responsible for tolling operations for the facility. The District Four SMART SunGuide® Center and District Six SunGuide TMC manage resources within their respective districts for incident management. 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) and revenue information shown herein is provided to the district from FTE SunPass® offices.

The FY 2017-2018 executive summary edition of the annual report highlights facility-wide performance measures for speed, volume and revenue, as well as other facility metrics such as device availability, transit ridership, and performance improvements for 95 Express Segment 1 due to new Express Lane Markers installed in December 2016.

FY 2017-2018 was the first full fiscal year of operations for Segments 2 and 3 of the 95 Express Program with four segments that started operations on October 16, 2016. The FY was marked with events that impacted trip volumes and revenue. Hurricane Irma caused tolls to be suspended for approximately 16 days starting September 9, 2017. Starting May 2017 and through the FY, a pavement rehabilitation project on I-95 in Miami-Dade County temporarily relocated the Segment 1N entrance 2/3 of a mile further north. This reduction of segment length resulted in an interim maximum toll of \$10.00 for Segment 1N (\$0.50 less than the original max toll of \$10.50). Construction for long-term roadwork has included Segment 1 closures as well as detouring traffic from the general purpose lanes into the express lanes during continuous weekend lane closures. During these construction activities, tolls are set to zero along the three NB segments to accommodate general purpose motorists.

For FY 2017-2018, 95 Express serviced 49,525,583 vehicle trips (an increase of 14% with respect to the previous FY), bringing the total since opening (December 5, 2008) to approximately 235 million trips. Average monthly toll revenue increased 4.5% to approximately \$4.2 million, bringing total revenue for the FY to approximately \$49.9 million. Toll exempt registered vehicles increased by 1.2% for a total of 9,179 registrations, however, toll exempt trips grew by 16.2% to approximately 1.77 million toll exempt trips for the FY.

Table 1 outlines performance measures that the Department reports on its website, www.95express.com. Each segment is shown individually with comparisons to the previous FY. Colored arrows are used to quickly identify the annual comparisons.



Table 1 – 95 Express FY 2017-2018 Statistics

FY 2017-2018 Statistics	Segment 1 (7 miles)		Segment 2 (1 mile)		Segment 3 (4 miles)							
	1S	1N	2S	2N	3S	3N						
Trips (vehicles)												
- ITD Trips**	90,743,984	95,366,195	14,276,962	11,804,475	12,401,274	10,430,785						
- FY 2017-2018 Total Trips	11,175,328	10,468,637	8,170,591	6,645,423	7,246,437	5,819,167						
- FY 2017-2018 Average Monthly Trips	931,277	872,386	680,883	553,785	603,870	484,931						
- % Increase/Decrease to Previous FY	↓ -3.2%	↓ -2.5%	↑ 0.4%	↓ -3.4%	↑ 5.4%	↓ -5.4%						
- FY 2017-2018 Average Exempt Monthly Trips	37,565	35,122	23,255	20,468	17,181	14,281						
- % Increase/Decrease to Previous FY	↓ -0.4%	↓ -1.5%	↑ 4.4%	↑ 4.1%	↑ 5.8%	↑ 4.3%						
Revenue												
- ITD Revenue**	\$ 94,371,964	\$ 120,436,038	\$ 7,215,732	\$ 4,769,031	\$ 5,222,224	\$ 4,269,538						
- FY 2017-2018 Revenue	\$ 15,240,892	\$ 22,342,565	\$ 4,204,493	\$ 2,643,242	\$ 3,086,258	\$ 2,355,398						
- FY 2017-2018 Average Monthly Revenue	\$ 1,270,074	\$ 1,861,880	\$ 350,374	\$ 220,270	\$ 257,188	\$ 196,283						
Tolls (Rounded to Nearest \$0.25)												
- Range Charged for Month	\$0.00 - \$10.50	\$0.00 - \$10.00	\$0.00 - \$3.00	\$0.00 - \$3.00	\$0.00 - \$0.50	\$0.00 - \$0.50						
- Average Weekday	\$1.75	\$3.00	\$0.50	\$0.50	\$0.50	\$0.50						
- Average Peak Period*	\$2.75	\$7.00	\$0.75	\$0.50	\$0.50	\$0.50						
- Average Weekend	\$0.75	\$0.50	\$0.50	\$0.50	\$0.50	\$0.50						
- Average Off Peak	\$1.50	\$1.75	\$0.50	\$0.50	\$0.50	\$0.50						
- 85th Percentile	\$3.25	\$8.25	\$0.50	\$0.50	\$0.50	\$0.50						
- 95th Percentile	\$5.00	\$9.75	\$1.75	\$0.50	\$0.50	\$0.50						
Volume (vehicles)												
- FY 2017-2018 Average Weekday	34,480	31,993	24,797	20,225	22,396	17,829						
- % Increase/Decrease to Previous FY	↓ -0.8%	0.0%	↑ 0.8%	↓ -2.6%	↑ 5.3%	↓ -6.1%						
- FY 2017-2018 Average Peak Period*	9,126	7,387	5,024	4,552	4,418	3,947						
- % Increase/Decrease to Previous FY	↓ -0.3%	↓ -0.1%	↓ -1.2%	↓ -4.1%	↑ 5.5%	↓ -10.3%						
Speed (mph) (EL Target ≥ 45 mph)												
	EL	LL	EL	LL	EL	LL	EL	LL	EL	LL	EL	LL
- Pre-95 Express Peak Period Conditions** ¹	20	15	18	18	24	28	56	40	35	52	68	55
- FY 2017-2018 Average Weekday	60	57	59	55	62	57	65	58	70	63	74	65
- FY 2017-2018 Average Peak Period*	57	43	39	25	44	51	62	56	70	62	69	56
ITD Average Operated Above 45 MPH												
	99.5%		96.9%		95.2%		99.9%		99.7%		98.9%	
FY 2017-2018 Avg. Operated Above 45 MPH	98.6%		89.6%		95.0%		99.9%		99.6%		99.5%	
- % Increase/Decrease to Previous FY	↓ -0.3%	↓ -5.0%	↓ -0.4%	↑ 0.1%	↓ -0.3%	↓ -0.3%	↓ -0.3%					
Remained Open to Motorists												
	73.6%		74.9%		98.9%		98.8%		98.3%		98.8%	
Closed due to Planned Construction	24.7%		22.5%		0.7%		1.0%		1.0%		0.6%	
Closed due to Non-recurring Events (<5% Target)	1.7%		2.6%		0.4%		0.2%		0.7%		0.5%	
- % Increase/Decrease to Previous FY	↓ -0.7%	↓ -1.5%	0.0%	↑ 0.1%	↓ -0.2%	↓ -0.9%						

↑ ↓ 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

¹ 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 – Express Lane Markers (ELMs)

95 Express Segment 1 (from just north of SR 836 to the Golden Glades Interchange) benefitted in December 2016 from a physical improvement to the facility: new Express Lane Markers (ELMs). ELMs are the flexible plastic poles that create a buffer separation between the express lanes and the general purpose lanes. Until the fall of 2016, ELMs were placed at 10-foot spacing. As traffic volumes increased annually in the express lanes, motorists were observed illegally crossing over the ELMs; sometimes causing crashes. This dangerous movement (defined as “lane diving”) continued to increase over time. As a result, the Department increased its Florida Highway Patrol (FHP) presence in the express lanes; ticketing those motorists making the illegal movement.

As of December 21, 2016, the Department completed installation of new ELMs which are more durable and at a new distance of five feet apart. The objective was to deter motorists from the “lane diving” movement and, in turn, improve operations of the express lanes. Table 2 shows the comparative values for specific performance criteria that are tracked monthly and compared to the performance of the facility prior to the installation.

Table 2 – Pre-, During, and Post-Installation Performance Metric Data

Performance Metric	Monthly Avg. for Six Months Before New ELM Installation	Monthly Avg. During New ELM Installation	Monthly Avg. After New ELM Installation ⁵
ELM Replacement ¹	4,030	21	334
Lane Diving (Citations + Warnings) ²	152	82	12
Crashes in Express Lanes ³	81	60	53
Vehicle Throughput ⁴	1,874,077	1,816,973	1,851,799

Disclaimers: Data for ELM replacement for September and October 2017 are not included due to the impact of Hurricane Irma. Also, data for all other performance metrics are not included for September 2017 due to Hurricane Irma.

Through the end of FY 2017-2018 the new ELMs have contributed to the following average monthly improvements for 95 Express Segment 1:

- ELM replacement has decreased 92%;
- Lane diving has decreased 92%;
- Crashes within the facility have decreased by 34%; and,
- Express lanes volume has decreased by 1.2%.
- ELM replacement has decreased from 48% to 2%

For monthly performance updates on the new ELMs, please visit www.95express.com

¹Data provided by Archer Western (Contractor on I-95 Pavement Rehab Project) and DBI (District Six's Asset Maintenance Contractor)

²Data provided by FHP (Though Bi-weekly Invoicing for District Six FHP Hireback Program)

³Data provided by District Six SunGuide® Center (via SunGuide® Software)

⁴Data provided by Florida's Turnpike (via Monthly Toll Gantry Reports)

⁵Monthly average from December 22, 2016 through June 30, 2018

Operations/Traffic Statistics - Speed Data

Charts 1 and 2 depict the monthly average speed reliability of the 95 Express facility by direction. Speed reliability is the percent time the express lanes are operating above 45 MPH during the peak period (red dashed line shown is the 90% goal for the facility).

Chart 1 – 95 Express Speed Reliability - Northbound (FY 2017-2018)

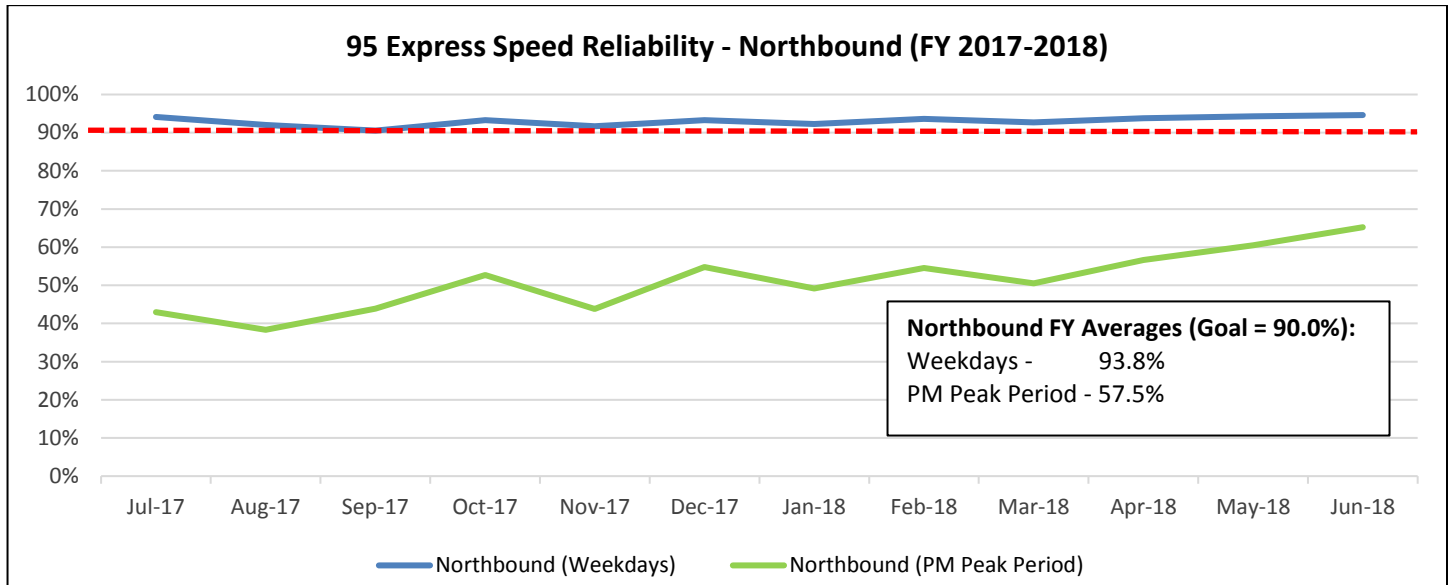
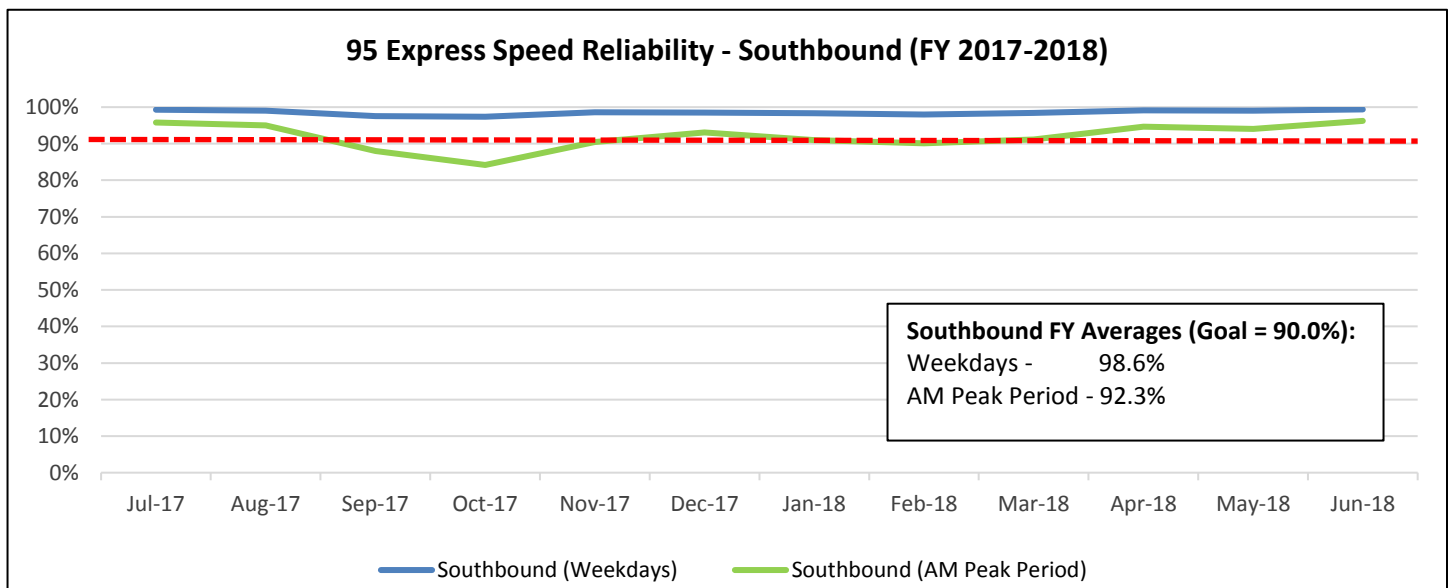


Chart 2 – 95 Express Speed Reliability - Southbound (FY 2017-2018)

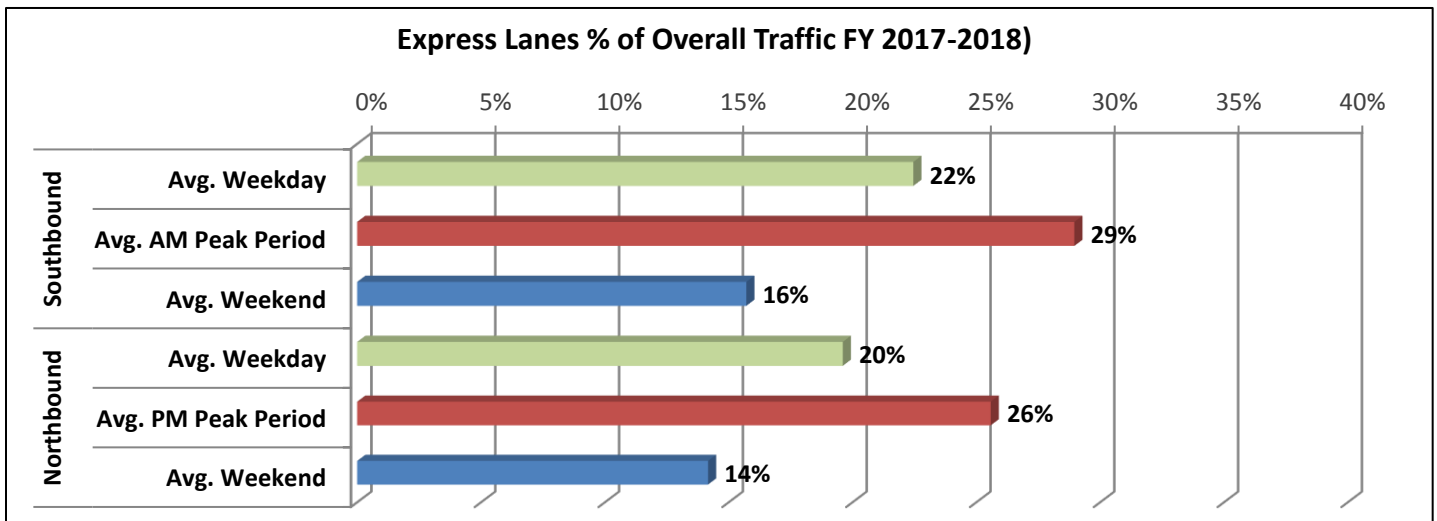


NOTES: Peak Period is from 6 AM – 9 AM in the Southbound direction and from 4 PM – 7 PM in the Northbound direction.

Operations/Traffic Statistics - Volume Data

95 Express averages two express lanes and four general use lanes per direction. Chart 3 depicts the annual percent of express lanes usage compared to the overall corridor volume by direction. With Segments 2 and 3 of the 95 Express Program in their first full fiscal year of operation, the facility experienced a 14% increase in vehicle trips compared to last year. Traffic distribution among the express lanes and the general purpose lanes showed little to no change with respect to last year.

Chart 3 – 95 Express Percentage of Overall Traffic (FY 2017-2018)

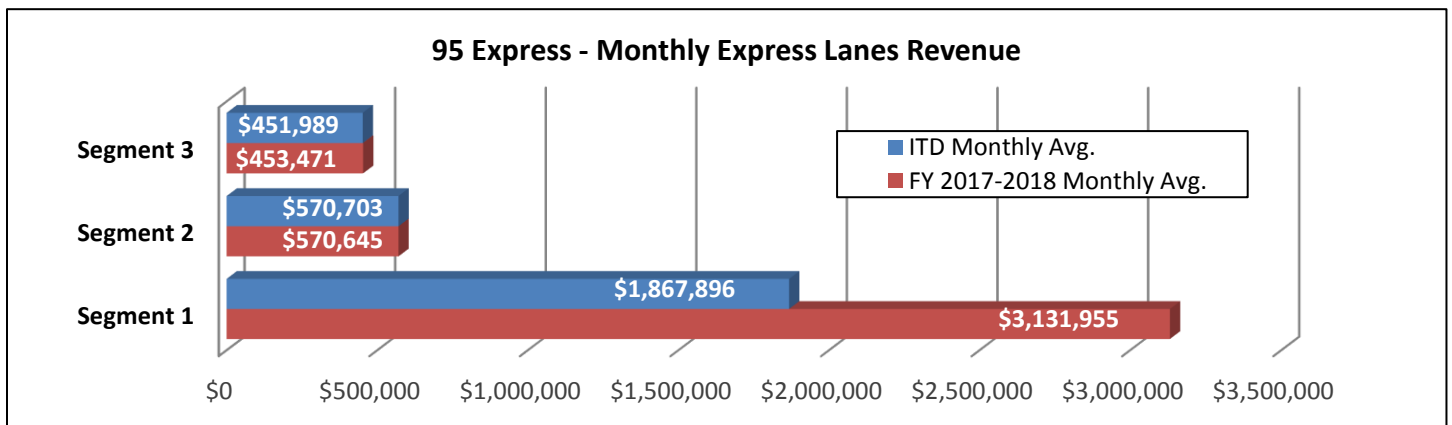


NOTE: Peak Period is from 6 AM – 9 AM in the Southbound direction and from 4 PM – 7 PM in the Northbound direction.

Revenue

Chart 4 shows the FY 2017-2018 average monthly revenue per segment versus its total since inception. 95 Express collected nearly \$4.2 million on average each month in FY 2017-2018; a 4.5% increase above the previous FY.

Chart 4 – 95 Express Average Monthly Transactions by Toll Amount (FY 2017-2018)



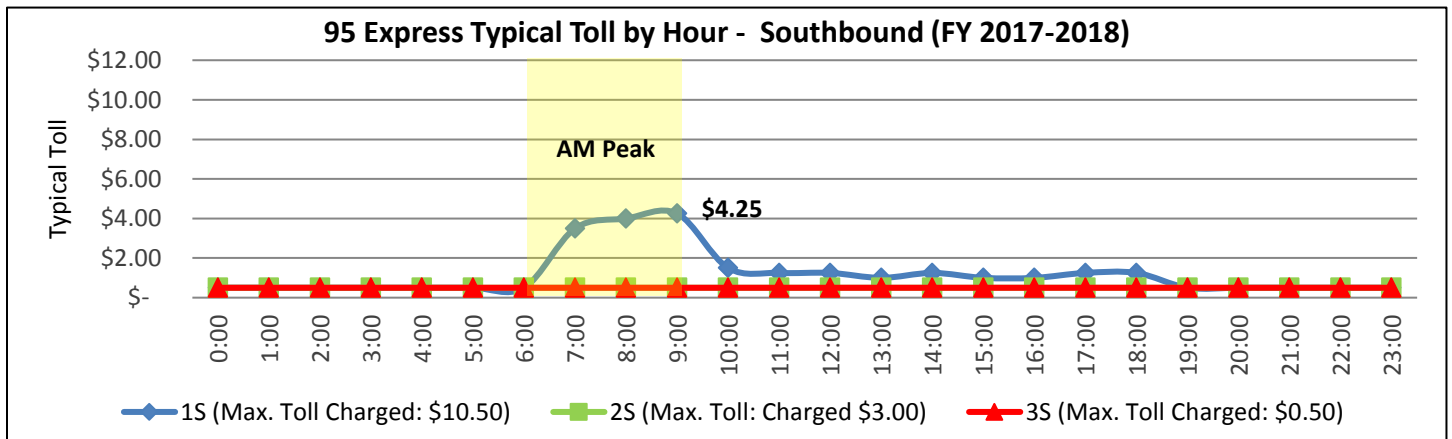
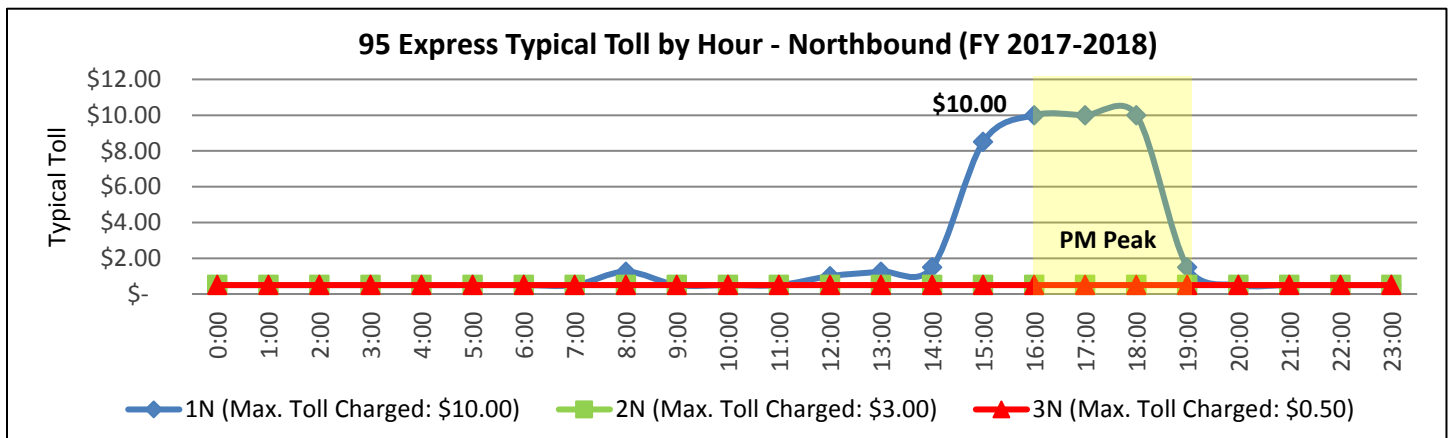
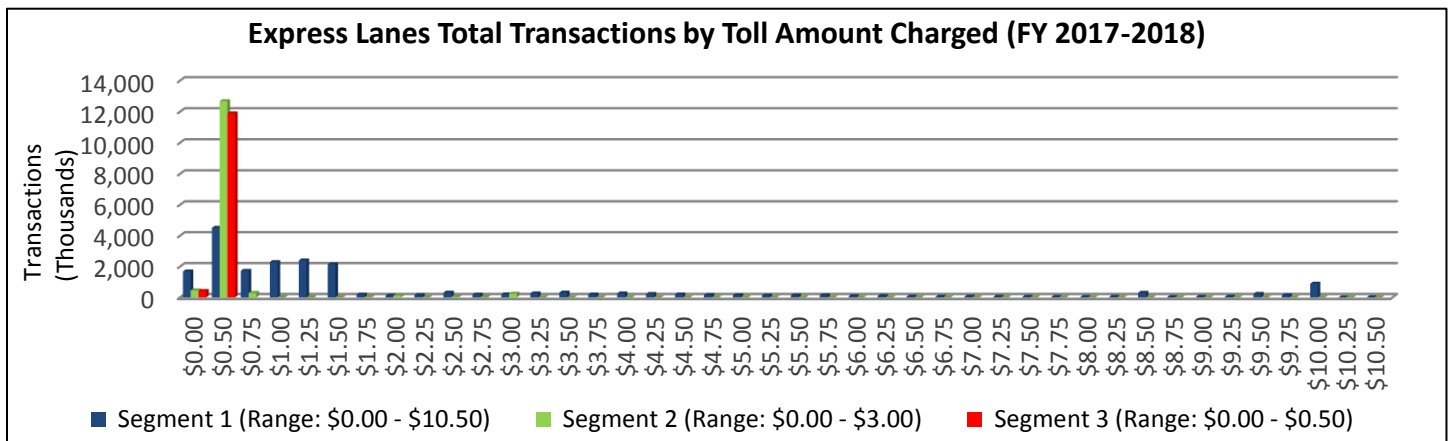
NOTES: ITD equals Inception to Date.

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

Tolls Statistics

Chart 5 shows the frequency of the tolls charged for each segment along with its respective toll range. During the FY an interim maximum toll of \$10.00 was in place for Segment 1N; Roadwork for a pavement rehabilitation project on I-95 moved the ingress further north temporarily, resulting in a shorter EL length and thus reducing \$0.50 to the max toll for Segment 1N. For the year, 85% of trips in Segment 1 were charged \$4.00 or less (on average) and 95% were charged \$9.75 or less. Both values represent an increase of \$0.25 and \$0.75 respectively over the previous year. The bottom two charts (Charts 6 and 7) depict the typical toll for each hour of the day, by direction.

Charts 5, 6, and 7 – 95 Express Transactions and Typical Tolls (FY 2017-2018)



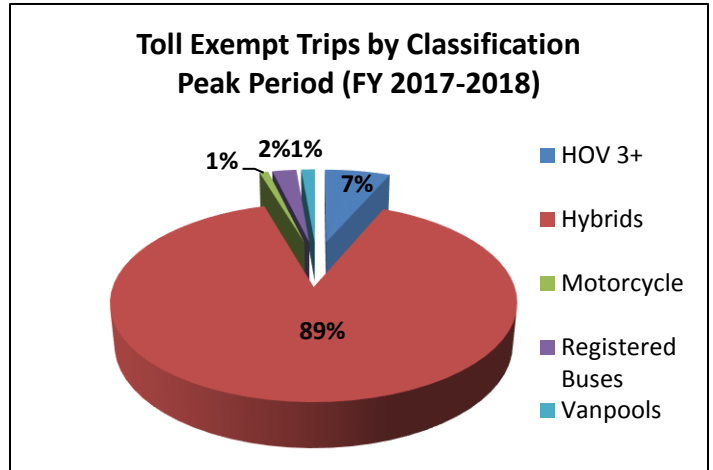
NOTE: Typical Toll represents the toll charged most frequently for each hour shown.

Registrations—Toll Exempt / Hybrid Trips

The total registrations for FY 2017-2018 increased from 9,070 to 9,179 (+1.2%). The 1.77 million Toll Exempt Trips, a 16.2% increase over the previous FY, comprised approximately 3.6% of the total trips for the year. Hybrid vehicles increased to 49% of the registrations this year while their trip distribution remained at 88% of the total exempt weekday trips. In all, hybrid exempt trips accounted for 2.4% of all 95 Express trips.

95 Express Toll Exempt Trips - PEAK PERIOD

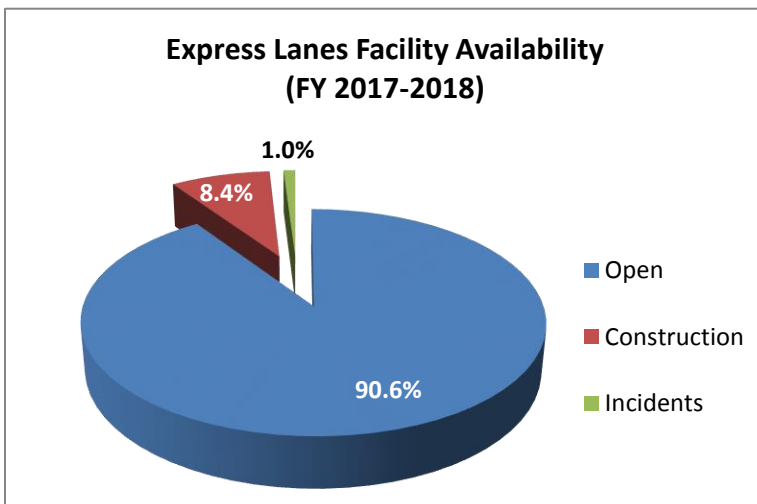
	FY2017-18 Peak Period Exempt	% of Peak Period Exempt
HOV 3+	43,853	6.5%
Hybrids	603,390	88.9%
Motorcycle	5,906	0.9%
Registered Buses	16,144	2.4%
Vanpools	9,213	1.4%
TOTALS	678,506	



NOTE: Peak Period is from 6 AM – 9 AM in the Southbound direction and from 4 PM – 7 PM in the Northbound direction.

Facility Availability

The entire 95 Express Lanes (both directions) were open to motorists 90.6% of the time, while closed 8.4% due to 622 planned construction/maintenance events. The number of construction/maintenance events for FY 2017-2018 increased to 622 events (+78%) and its average duration increased to 7.3 hours (+46%). The non-recurring events caused the express lanes to be closed only 1.0%, below the goal of 5% per year. Non-recurring events decreased to 926 events (-27%), averaging approximately 29 minutes (+7%) per event. These annual totals equate to approximately 26 planned events and 39 incidents every month in each direction along the express lanes.



95 Express Events Causing Closure (FY 2017-2018)	
Amount Closed due to Construction	622
Average Time Closed (hours):	7.3
Amount Closed due to Incident	926
Average Time Closed (minutes):	29

Equipment Availability

Device availability for FY 2017-2018 was significantly affected by damages caused by Hurricane Irma. Chart 8 depicts the availability of the nearly 230 devices. 95 Express devices depicted in the charts below are express lanes vehicle detectors, dedicated lane status DMS (LSDMS), toll amount DMS (TADMS), regular DMS inside the facility, and CCTV cameras for LSDMS and TADMS verification.

Chart 8 – 95 Express Device Availability (FY 2017-2018)

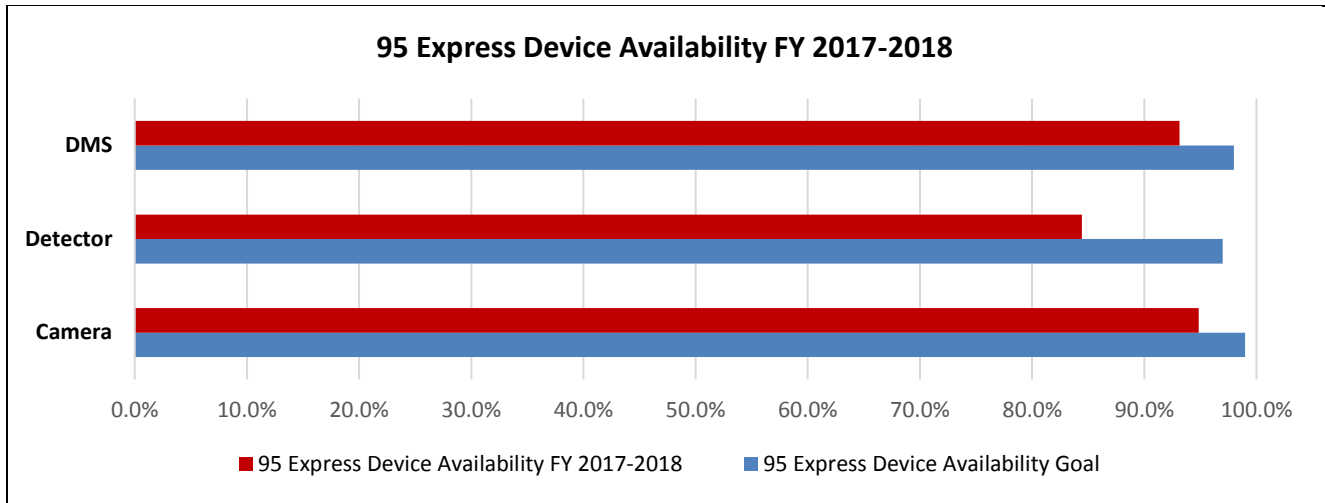
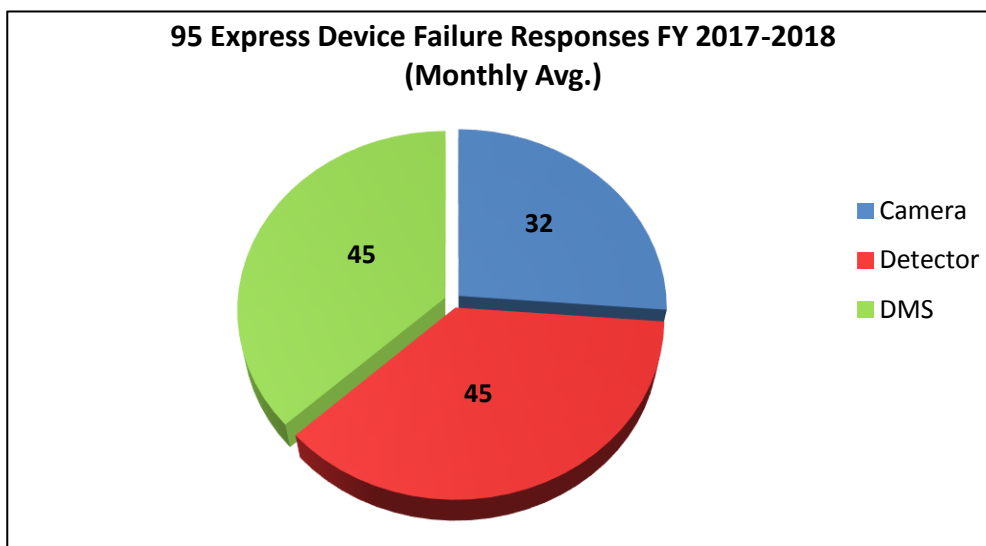


Chart 9 shows the average monthly failure responses (maintenance crews responding to a device failure ticket) for the 95 Express devices. Failures are either deemed as Critical or Non-Critical. A Critical failure is defined as a failure that creates a safety hazard to motorists or a failure of device(s) that greatly impacts the operations of the facility. Since all 95 Express devices are deemed critical devices, their failures are also deemed critical. Procedures are in place between Districts Six and Four for all 95 Express devices that are operated by District Six, but owned and maintained by District Four for coordination of device failures.

Chart 9 – 95 Express Device Failure Responses (FY 2017-2018)

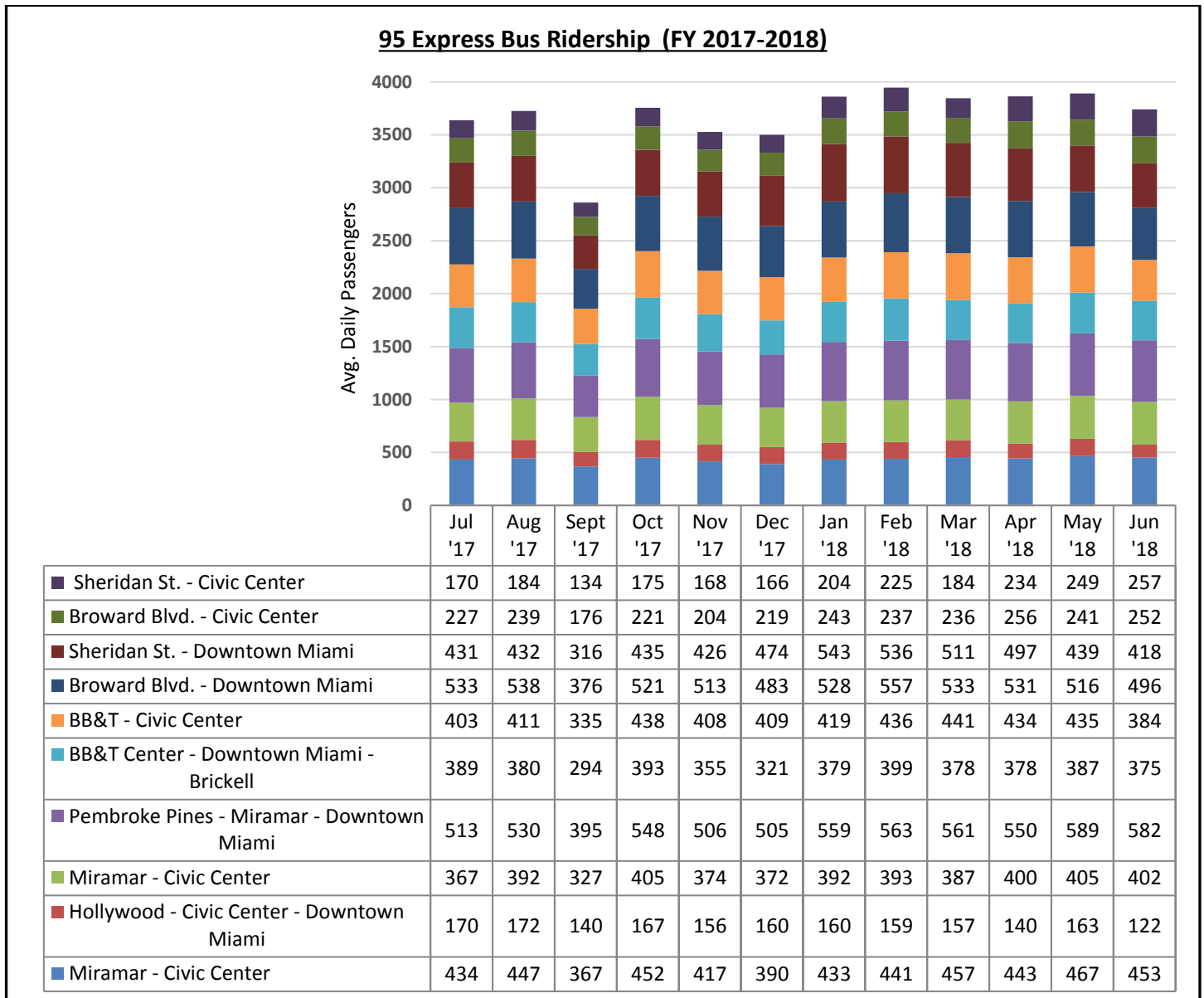


NOTE: DMS equals Dynamic Message Sign

Transit

Chart 10 shows the average weekday boardings for the Miami-Dade Transit (MDT) and Broward County Transit (BCT) express bus routes which utilize 95 Express. Average weekday boardings showed a modest 0.3% growth to 3,679 boardings per day in FY 2017-2018. Not shown on the chart are the average weekday boardings from the Golden Glades Park & Ride route operated by MDT: 1,930 average weekday boardings in FY 2017-2018 (down 2% from previous year). Though this route is part of the 95 Express Bus system, it is not included as part of the Miami Urban Partnership Agreement, which is why it is excluded from Chart 10.

Chart 10 – 95 Express Bus Ridership (FY 2017-2018)



This concludes the executive summary of the 95 Express Annual Report for Fiscal Year 2017-2018. For all previous years' performance, project history and lessons learned, please visit www.95Express.com.