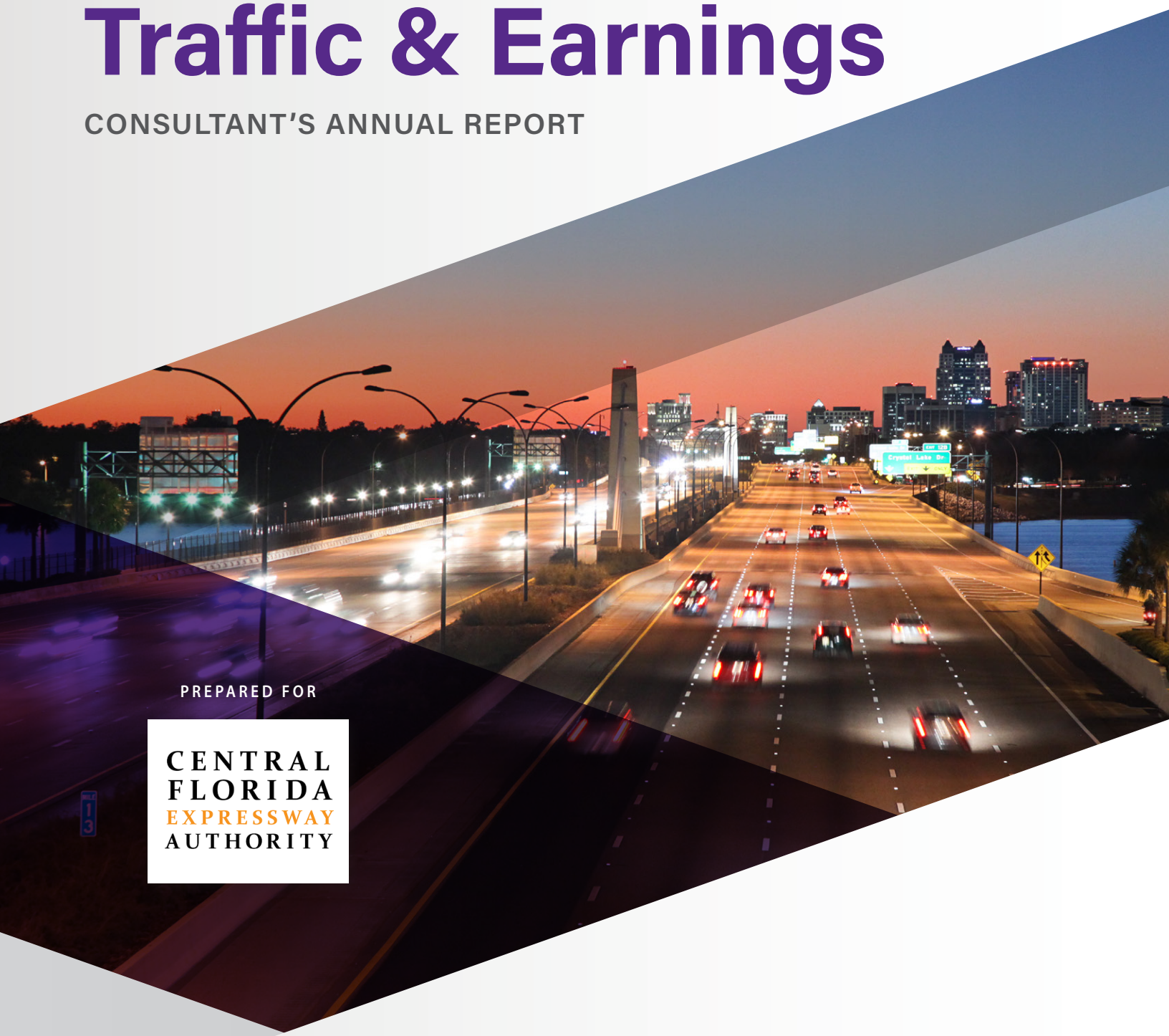
CENTRAL FLORIDA EXPRESSWAY AUTHORITY

FY 2020 General Traffic & Earnings

CONSULTANT'S ANNUAL REPORT



PREPARED FOR

CENTRAL FLORIDA EXPRESSWAY AUTHORITY

CDM Smith

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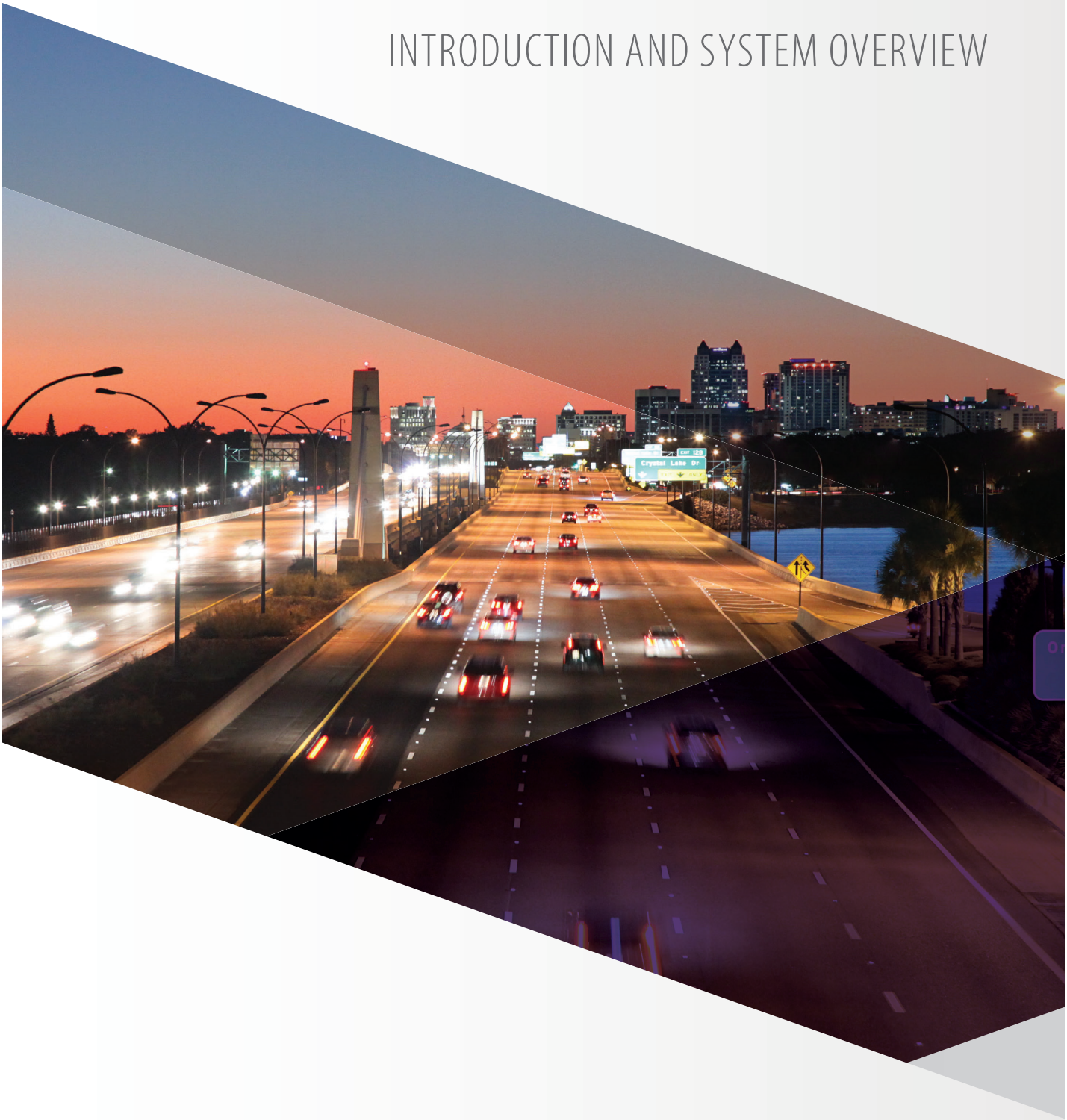
CHAPTER 1

INTRODUCTION AND SYSTEM OVERVIEW



INTRODUCTION AND SYSTEM OVERVIEW

1.1 Introduction

This Annual Report, which was prepared for the Central Florida Expressway Authority (CFX), contains a summary of the Fiscal Year (FY) 2020 traffic and revenue (T&R) performance characteristics and 30-year forecasts of T&R for seven of the toll facilities that constitute the CFX System (the "System"). The eighth toll facility, S.R. 451, is not reported on because there are no associated plaza groups for the facility. This report also includes a brief discussion of the external factors that influence future T&R. Any changes in sources or methodologies that have occurred since the last report are noted in the text.

The purposes of this report are to describe current T&R trends for the System, to summarize the forecasting methodology used to develop the future estimates and to provide both short-term and long-term forecasts of T&R for the CFX System. This report contains a description of historical T&R from FY 2001 through FY 2020, along with projected T&R for FY 2021 through FY 2050. CFX's fiscal year ends on June 30th and begins on July 1st of the preceding calendar year. Future year traffic projections are also presented as Annual Average Daily Traffic (AADT), but on a calendar year basis.

This chapter contains an overview of the CFX System, a description of the current toll rate schedule, a comparison of CFX toll rates with other toll facilities across the nation, a summary of the COVID-19 pandemic impacts, a summary of historical annual transactions and revenue with percentages by facility, monthly transactions and revenue, historical electronic toll collection (ETC) usage, recent events that have an impact on system T&R, a summary of the forecasting methodology and the T&R estimates over the next 30 years for the System.

Chapter 2 contains a review of socioeconomic indicators (historical trends and current conditions). Chapters 3 through 9 contain summaries of T&R performance and forecasts for each of CFX's toll facilities. Traffic profiles for each facility are included in the Appendix.

1.2 System Description

The current CFX System consists of seven toll facilities:

- S.R. 528 – Martin B. Andersen Beachline Expressway
- S.R. 408 – Spessard Lindsay Holland East-West Expressway
- S.R. 417 – Central Florida GreeneWay
- S.R. 429 – Daniel Webster Western Beltway
- S.R. 414 – John Land Apopka Expressway
- S.R. 453
- S.R. 538 – Poinciana Parkway

A location map of the eight facilities and the region they serve can be found in **Figure 1-1**, Central Florida Expressway System. S.R. 451 is the Western Beltway Connector Road.

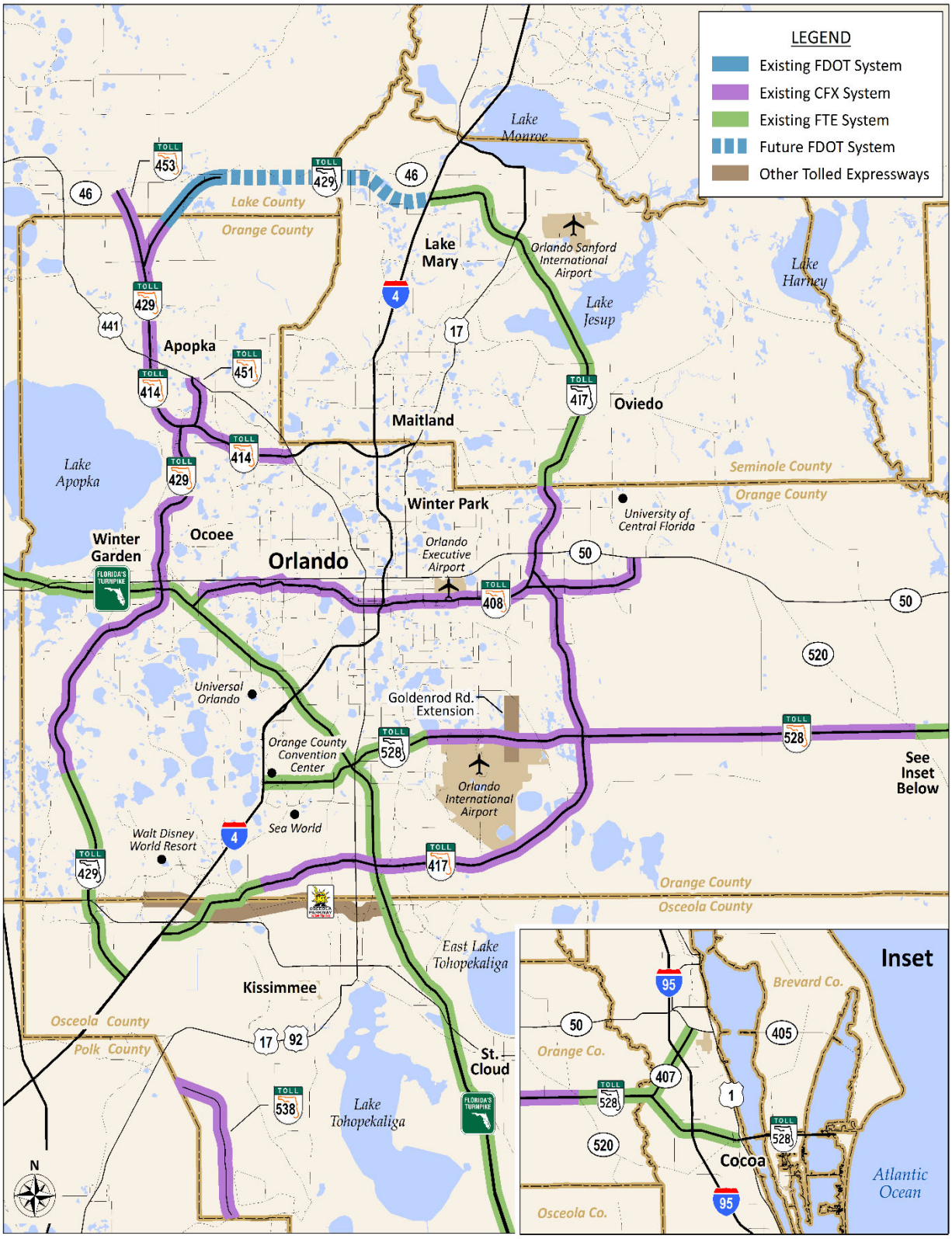
The CFX System as it exists today is the result of many improvement and expansion projects, constructed over the 56-year period between 1963 and 2020. The first facility is the 23-mile S.R. 528 Beachline Expressway, which opened to traffic in 1967. Presently, the facility extends from the S.R. 482/Sand Lake Road/Boggy Creek Road interchange on the west end to S.R. 520 on the eastern end, connecting Orlando to the Space Coast. Until recently it had three mainline toll plazas: Airport Main, Beachline Main, and Dallas Main, and two pairs of ramp plazas. In March 2016, the Airport Main Plaza was removed, and toll collection was transferred to Florida Turnpike Enterprise's (FTE) Beachline West Main Plaza. New ramp plazas were also installed at the Conway Road and Boggy Creek Road Interchanges with tolls collected to and from the east. FTE owns and operates the western 8 miles of S.R. 528 from Boggy Creek Road to Interstate 4 (I-4) and the eastern end from S.R. 520 to S.R. 407 and U.S. 1 in Brevard County.

The second facility is S.R. 408 East-West Expressway, which first opened to traffic in 1973. This facility currently runs 22 miles from the Florida's Turnpike/Old Winter Garden Road overpass on the western end to the S.R. 50/East Colonial Drive interchange on the eastern end. S.R. 50 is another main parallel highway. S.R. 408 has four mainline toll plazas: Hiawassee Main, Pine Hills Main, Conway Main, and Dean Main, along with 10 pairs of ramp plazas plus two single ramp plazas.

The next facility is S.R. 417 Central Florida GreeneWay, which first opened to traffic in 1988. S.R. 417 is the eastern/southern beltway around Orlando with the CFX portion extending 33 miles from International Drive on the southern end to the Aloma Avenue/Seminole County Line on the northern end. It has four mainline plazas: John Young Main, Boggy Creek Main, Curry Ford Main, and University Main, along with 12 pairs of ramp plazas. FTE owns and operates toll facilities on S.R. 417 on either side of the CFX toll facility completing the beltway.

The fourth facility is S.R. 429 Western Beltway, which as its name suggests is the western beltway around Orlando. S.R. 429 first opened to traffic in 2000. The CFX portion of S.R. 429 extends 31 miles from Seidel Road in west Orange County on the southern end to Mt. Plymouth Road on the northern end. Of the 31 miles, three miles are part of a dual route with S.R. 414 (John Land Apopka Expressway). Until recently S.R. 429 had two mainline toll plazas: Forest Lake Main and Independence Main, along with five pairs of ramp plazas. In July 2017, the Ponkan Main Plaza opened to traffic as an all-electronic toll (AET) collection facility. In April 2018, the Mt. Plymouth Main Plaza also opened to traffic as an AET facility. The portion of S.R. 429 with the Ponkan and Mt. Plymouth Main Plazas was developed and constructed as the Wekiva Parkway. The 2-mile Western Beltway Connector Road (S.R. 451) is the former S.R. 429 connection to U.S. 441 extending from S.R. 414 on the southern end to U.S. 441 on the northern end. FTE owns and operates toll facilities on S.R. 429 from Seidel Road to I-4 in Osceola County and operates the portion from Mt. Plymouth north into Seminole County, which is owned by the Florida Department of Transportation (FDOT). Eventually, this portion of the Western Beltway will be completed with a connection in the north to I-4 and S.R. 417.

Figure 1-1
Central Florida Expressway System



The fifth facility, which opened to traffic in 2009, is the 9-mile S.R. 414 John Land Apopka Expressway. Of the nine miles, three are part of a dual route with S.R. 429. S.R. 414 extends Maitland Boulevard from U.S. 441 westerly to S.R. 429/Western Beltway, to relieve congestion on U.S. 441. The Apopka Expressway has one mainline plaza, Coral Hills Main, and two pairs of ramp plazas.

The sixth facility, which opened to traffic in 2018, is the 2-mile portion of the S.R. 453 project locally known as the Wekiva Parkway or the Mount Dora Connector. S.R. 453 provides a connection from S.R. 429 northwest to Mount Dora via S.R. 46 in Lake County. S.R. 453 has one mainline plaza, Coronado Main, and no ramp plazas.

The seventh facility, S.R. 538 Poinciana Parkway, is a 7-mile toll facility built by the Osceola County Expressway Authority (OCX) and operated by CFX as a non-system facility in FY 2019. S.R. 538 opened to traffic in April of 2016 and in December of 2018 the CFX Board unanimously supported transitioning control of the facility from OCX to CFX. The facility was acquired by CFX as a System facility as of December 2019. This facility extends from Cypress Parkway in Poinciana north to the end of the bridge at Ronald Reagan Parkway/Kinney Harmon Road. S.R. 538 has two mainline toll plazas: Marigold Main and Koa Main, with no ramp plazas.

Goldenrod Road Extension is a 2-mile toll facility built and operated by CFX, but not part of the CFX System. Opened to traffic in 2003, this toll facility extends Goldenrod Road from S.R. 15/Narcoossee Road southerly to Heintzelman Boulevard and serves as a reliever to S.R. 15/Narcoossee Road. The facility has an interchange with S.R. 528 and one mainline toll plaza, the Goldenrod Main.

Table 1-1 is a summary of CFX System facilities with the corresponding lengths and opening years.

Table 1-1
CFX System Facilities

CFX System Current	Length (miles)	Year
S.R. 528 - Martin Andersen Beachline Expressway	23	1967
S.R. 408 - Spessard Holland East West Expressway	22	1973
S.R. 417 - Central Florida Greeneway	32	1988
S.R. 429 - Daniel Webster Western Beltway	31	2000
S.R. 414 - John Land Apopka Expressway	9	2009
S.R. 451 - Western Beltway Connector Road	2	2012
S.R. 538 - Poinciana Parkway	7	2016
S.R. 453	2	2018
Current System Total[A]	125	
CFX Non-System		
Goldenrod Road Extension	2	2003

Notes:

A - Of the 31 miles on S.R. 429 and nine miles on S.R. 414, three are part of a dual route between the two expressways. The three miles are only included once in the calculation of CFX System total miles.

1.3 Toll Rates

On February 26, 2009, the CFX Board approved a series of System wide toll rate adjustments. The toll rate policy included a one-time adjustment and a series of increases to keep pace with inflation. The policy stated that all tolls be adjusted to reflect the higher of either the combined annual increases to the Consumer Price Index for All Urban Consumers (CPI-U) in the South or three percent per year (applied linearly, i.e., a 15 percent increase on the original toll every five years). The one-time adjustment occurred on April 5, 2009, in which toll rates at all mainline plazas (except the recently opened Coral Hills) and most toll ramp locations increased by $0.25. The purpose of the rate increase was to counterbalance declining System revenues, to stabilize the fiscal integrity of CFX, and to fortify the ability to improve and expand the System in the future. Since then, there were several changes to the tolls collected at main and ramp plazas, including the addition of the Dallas Main plaza and Dallas ramp plazas, the addition of C.R. 437A ramp plazas, the removal of the Valencia College Lane ramp plazas, the removal of the Airport Main plaza and the addition of ramp plazas at Boggy Creek Road and Conway Road. The Schofield Road ramps on S.R. 429 opened in FY 2015 and were added to the table. The Airport Plaza was removed, and the Boggy Creek Road/McCoy Road and Conway Road/Tradeport Drive interchanges added in March 2016.

Then on July 1, 2012 (the beginning of FY 2013), CFX implemented a rate differential for the first time for cash and electronic customers. Customers who paid tolls with ETC now paid a lower toll rate than cash customers. The rate differential encouraged participation in the ETC program, thereby helping CFX maintain lower toll collection costs. Also, as previously explained, CFX implemented the first toll rate adjustment to keep pace with inflation.

On February 9, 2017, the Board voted unanimously to eliminate the planned 15 percent toll rate adjustment scheduled for July 1, 2017 (FY 2018). A new "Customer First" toll policy was adopted, which delayed the next toll rate adjustment until July 1, 2018 (FY 2019). The Board cited the agency's strong financial health in recent years as the primary reason for this decision. Going forward customers will see an annual increase in tolls based on CPI (with a floor of 1.5%), which is lower and more gradual than the original 15 percent increase every five years. The FY 2020 toll rates are presented in **Table 1-2**. The rates shown in this table come from the second toll rate adjustment under the new toll policy at a CPI adjustment of 2.22%. In accordance with CFX's Toll Policy, the next toll rate adjustment will be implemented on July 1, 2020 (FY 2021) and every subsequent year.

Table 1-2
CFX System Toll Rates, FY 2020 (as of July 1, 2019)

Roadway	Electronic Toll Schedule					Cash Toll Schedule					Pay By Plate Toll Schedule				
	2 Axles [A]	3 Axles	4 Axles	5 Axles	6 Axles	2 Axles [A]	3 Axles	4 Axles	5 Axles	6 Axles	2 Axles [A]	3 Axles	4 Axles	5 Axles	6 Axles
S.R. 528															
Boggy Creek Road/McCoy Road	$1.13	$1.13	$1.13	$1.13	$1.13	$1.25	$1.25	$1.25	$1.25	$1.25					
Conway Road/Tradeport Drive	$1.13	$1.13	$1.13	$1.13	$1.13	$1.25	$1.25	$1.25	$1.25	$1.25					
Beachline Main Plaza	$0.91	$1.79	$2.09	$2.66	$2.66	$1.25	$2.00	$2.50	$3.00	$3.00					
Innovation Way	$0.61	$0.61	$0.61	$0.61	$0.61	$0.75	$0.75	$0.75	$0.75	$0.75					
Dallas Blvd.	$0.52	$0.52	$0.52	$0.52	$0.52	$0.75	$0.75	$0.75	$0.75	$0.75					
Dallas Main Plaza [B]	$0.78	$1.05	$1.30	$1.30	$1.30	$1.50	$1.75	$2.00	$2.00	$2.00					
S.R. 408															
Good Homes Road	$0.28	$0.28	$0.28	$0.28	$0.28	$0.50	$0.50	$0.50	$0.50	$0.50					
Hiawassee Main Plaza	$0.86	$1.71	$1.99	$2.57	$2.57	$1.00	$2.00	$2.25	$3.00	$3.00					
Hiawassee Road	$0.57	$0.57	$0.57	$0.57	$0.57	$0.75	$0.75	$0.75	$0.75	$0.75					
Pine Hills Main Plaza	$1.13	$1.71	$1.99	$2.57	$2.57	$1.25	$2.00	$2.25	$3.00	$3.00					
Old Winter Garden Road	$0.86	$0.86	$0.86	$0.86	$0.86	$1.00	$1.00	$1.00	$1.00	$1.00					
John Young Parkway (S.R. 423)	$0.86	$0.86	$0.86	$0.86	$0.86	$1.00	$1.00	$1.00	$1.00	$1.00					
Orange Blossom Trail	$0.57	$0.57	$0.57	$0.57	$0.57	$0.75	$0.75	$0.75	$0.75	$0.75					
Mills Avenue	$0.57	$0.57	$0.57	$0.57	$0.57	$0.75	$0.75	$0.75	$0.75	$0.75					
Bumby Avenue	$0.57	$0.57	$0.57	$0.57	$0.57	$0.75	$0.75	$0.75	$0.75	$0.75					
Conway Road	$0.86	$0.86	$0.86	$0.86	$0.86	$1.00	$1.00	$1.00	$1.00	$1.00					
Andes/Semoran Blvd.	$1.13	$1.13	$1.13	$1.13	$1.13	$1.25	$1.25	$1.25	$1.25	$1.25					
Conway Main Plaza	$1.13	$1.71	$1.99	$2.57	$2.57	$1.25	$2.00	$2.25	$3.00	$3.00					
Semoran Blvd. (S.R. 436)	$0.86	$0.86	$0.86	$0.86	$0.86	$1.00	$1.00	$1.00	$1.00	$1.00					
Dean Road	$0.57	$0.57	$0.57	$0.57	$0.57	$0.75	$0.75	$0.75	$0.75	$0.75					
Dean Main Plaza	$0.86	$1.71	$1.99	$2.57	$2.57	$1.00	$2.00	$2.25	$3.00	$3.00					
Rouse Road	$0.57	$0.57	$0.57	$0.57	$0.57	$0.75	$0.75	$0.75	$0.75	$0.75					
S.R. 417															
John Young Main Plaza	$1.43	$1.99	$2.57	$3.13	$3.13	$1.75	$2.25	$3.00	$3.50	$3.50					
John Young Parkway (S.R. 423)	$0.86	$0.86	$0.86	$0.86	$0.86	$1.00	$1.00	$1.00	$1.00	$1.00					
Orange Blossom Trail	$0.57	$0.57	$0.57	$0.57	$0.57	$0.75	$0.75	$0.75	$0.75	$0.75					
Landstar Blvd.	$0.50	$0.50	$0.50	$0.50	$0.50	$0.50	$0.50	$0.50	$0.50	$0.50					
Boggy Creek Main Plaza	$1.43	$1.99	$2.57	$3.13	$3.13	$1.75	$2.25	$3.00	$3.50	$3.50					
Boggy Creek Road	$1.13	$1.13	$1.13	$1.13	$1.13	$1.25	$1.25	$1.25	$1.25	$1.25					
Lake Nona Blvd.	$0.86	$0.86	$0.86	$0.86	$0.86	$1.00	$1.00	$1.00	$1.00	$1.00					
Narcoossee Road	$0.86	$0.86	$0.86	$0.86	$0.86	$1.00	$1.00	$1.00	$1.00	$1.00					
Moss Park Road	$0.57	$0.57	$0.57	$0.57	$0.57	$0.75	$0.75	$0.75	$0.75	$0.75					
Innovation Way	$0.57	$0.57	$0.57	$0.57	$0.57	$0.75	$0.75	$0.75	$0.75	$0.75					
Lee Vista Blvd.	$0.57	$0.57	$0.57	$0.57	$0.57	$0.75	$0.75	$0.75	$0.75	$0.75					
Curry Ford Main Plaza	$0.86	$1.71	$1.99	$2.57	$2.57	$1.00	$2.00	$2.25	$3.00	$3.00					
Curry Ford Road (S.R. 552)	$0.57	$0.57	$0.57	$0.57	$0.57	$0.75	$0.75	$0.75	$0.75	$0.75					
Colonial Drive (S.R. 50)	$0.57	$0.57	$0.57	$0.57	$0.57	$0.75	$0.75	$0.75	$0.75	$0.75					
University Main Plaza	$0.86	$1.71	$1.99	$2.57	$2.57	$1.00	$2.00	$2.25	$3.00	$3.00					
University Blvd.	$0.57	$0.57	$0.57	$0.57	$0.57	$0.75	$0.75	$0.75	$0.75	$0.75					
S.R. 429															
Schofield Road	$0.57	$0.57	$0.57	$0.57	$0.57	$0.75	$0.75	$0.75	$0.75	$0.75					
New Independence Parkway	$0.86	$0.86	$0.86	$0.86	$0.86	$1.00	$1.00	$1.00	$1.00	$1.00					
Independence Main Plaza	$1.43	$1.99	$2.57	$3.13	$3.13	$1.75	$2.25	$3.00	$3.50	$3.50					
C.R. 535	$0.57	$0.57	$0.57	$0.57	$0.57	$0.75	$0.75	$0.75	$0.75	$0.75					
S.R. 438	$0.30	$0.30	$0.30	$0.30	$0.30	$0.50	$0.50	$0.50	$0.50	$0.50					
West Road	$0.86	$0.86	$0.86	$0.86	$0.86	$1.00	$1.00	$1.00	$1.00	$1.00					
Forest Lake Main Plaza	$1.43	$1.99	$2.57	$3.13	$3.13	$1.75	$2.25	$3.00	$3.50	$3.50					
C.R. 437A	$0.57	$0.57	$0.57	$0.57	$0.57	$0.75	$0.75	$0.75	$0.75	$0.75					
Ponkan Main Plaza	$0.82	$1.23	$1.64	$2.04	$2.04	N/A	N/A	N/A	N/A	N/A	$1.41	$1.82	$2.23	$2.63	$2.63
Mt. Plymouth Main Plaza	$0.77	$1.16	$1.53	$1.92	$1.92	N/A	N/A	N/A	N/A	N/A	$1.36	$1.75	$2.12	$2.51	$2.51
S.R. 453															
Coronado Main Plaza	$0.66	$1.00	$1.33	$1.67	$1.67	N/A	N/A	N/A	N/A	N/A	$1.25	$1.59	$1.92	$2.26	$2.26
S.R. 414															
Coral Hills Main Plaza	$1.13	$1.71	$2.27	$2.85	$2.85	$1.25	$2.00	$2.50	$3.25	$3.25					
Keene Road	$0.57	$0.57	$0.57	$0.57	$0.57	$0.75	$0.75	$0.75	$0.75	$0.75					
Hiawassee Road	$0.30	$0.30	$0.30	$0.30	$0.30	$0.50	$0.50	$0.50	$0.50	$0.50					
S.R. 538															
Marigold Main Plaza	$2.05	$3.10	$4.10	$5.15	$6.15	N/A	N/A	N/A	N/A	N/A	$2.25	$3.30	$4.30	$5.35	$6.35
Koa Main Plaza	$0.50	$0.75	$1.00	$1.25	$1.50	N/A	N/A	N/A	N/A	N/A	$0.70	$0.95	$1.20	$1.45	$1.70

Notes:

A - Includes motorcycles.

B - The toll listed for this plaza includes the toll collected for FDOT, which is $0.26 for transponder transactions or $0.75 for cash transactions regardless of the number of axles.

1.3.1 DISCOUNT PROGRAMS

In 1998, CFX began a frequent-user discount program for customers who utilize E-PASS transponders. The discount program helped CFX with a Florida Transportation Commission (FTC) performance measure that required 75 percent of the total transactions to be completed utilizing ETC transponders. This performance measure was instituted by the FTC in 2007. The E-PASS discount program offered a five percent rebate to ETC customers with 40 or more CFX transactions per month and a ten percent rebate to customers with 80 or more CFX transactions per month. While E-PASS is compatible with other interoperable transponders, transactions on those systems were not eligible for the frequent user discount. Only transactions on CFX facilities that were paid through ETC received this discount, including SunPass and LeeWay.

In May 2016, CFX replaced the frequent-user discount program with a new Customer Loyalty Discount Program. The Customer Loyalty Discount Programs is exclusive to E-PASS customers and is a tiered program that provides toll discounts based on the number of transactions per transponder each month. All E-PASS customers are automatically eligible to participate in the program so there is no enrollment process or monthly fee. The program offers a ten percent rebate to E-PASS customers with 40 or more CFX electronic transactions per month and a 15 percent rebate to customers with 80 or more CFX electronic transactions per month. The discount will only be offered in months when actual toll revenue exceeds the revenue projections by more than 2.0 percent.

In the first fiscal year of implementation (FY 1998), the rebates totaled approximately $0.7 million, or approximately 0.7 percent of the total System revenues. In FY 2020, the discount program has grown to $16.4 million, or approximately 3.5 percent of the total System revenues. This growth is indicative of the significant increase in transponder usage overall and the frequency of trips made by electronic toll customers. In FY 2020 the paid in-lane revenues collected through ETC reached 92.4 percent.

Beginning in FY 2016 (July 2015), CFX implemented the Beltway Discount Program. This discount program, offered for a six-year period, provides relief for and options to customers during the construction activities on I-4. The program provides an additional 5.0 percent discount to customers with 20 or more transactions in a month on the CFX "beltway" facilities, which include S.R. 417, S.R. 429 and S.R. 414. The discount will only be offered in months when actual toll revenue exceeds the revenue projections by more than 2.0 percent. In FY 2020, this discount program provided $3.9 million in rebates to customers. This discount program will expire on June 30, 2021.

Beginning February 1, 2016 (FY 2016), CFX launched a discount program offering rebates to school buses using CFX facilities. A 99.0 percent rebate is now given to school buses equipped with special E-PASS transponders transporting students on official school business from school districts in Orange, Brevard, Lake, Osceola, Seminole, Polk and Volusia Counties. The rebate is only offered in months when actual toll revenue exceeds the revenue projections by more than 2.0 percent. In FY 2020, this discount program provided $0.2 million in rebates to Central Florida school districts.

1.3.2 TOLL RATE COMPARISON TO OTHER U.S. TOLL FACILITIES

As shown in **Table 1-3**, the FY 2020 average toll rates per mile on CFX's seven facilities are comparable to the average toll rates on other toll facilities across the United States. The average rates per mile for CFX's facilities are between 13.9 and 41.0 cents per mile for cash/video rates, and 11.1 and 35.4 cents per mile for electronic toll rates. The average cash rate for the CFX System is 20.0 cents per mile and the average ETC rate is 15.9 cents per mile. Toll rates on CFX facilities vary depending on the opening year of the facility and the initial toll rate, and the relative toll adjustments that have taken place since the opening of the facility.

Table 1-3
Toll Rate Comparison with Other U.S. Toll Facilities

State	Toll Facility	Notes	Initial Opening Year	Most Recent Toll Increase	Facility Type	Length (miles)	Passenger Cars			
							Toll Rates		Rate-Per-Mile (cents)	
							Base (Cash/ Video)	Electronic	Base (Cash/ Video)	Electronic
TX	TX DOT, Grand Parkway		2011	Jan-20	U	58	-	$12.79	-	22.0
TX	Harris County Toll Road Authority - Westpark Tollway		2004	Sep-15	U	13	-	$3.00	-	23.1
TX	Harris County Toll Road Authority - Sam Houston Tollway		1988	Jan-16	U	70	-	$12.00	-	17.1
TX	Harris County Toll Road Authority - Hardy Toll Road		1987	Jul-16	U	21	-	$3.00	-	14.2
NY	New York State Thruway		1954	Dec-18	R/U	496	-	$23.99	-	4.8
CA	San Joaquin Hills Corridor (SR 73)		1996	Jul-19	R/U	15	$8.65	$8.65	57.7	57.7
CO	Northwest Parkway		2003	Jun-19	U	10	$5.10	$4.10	53.7	43.2
VA	Chesapeake Expressway (Route 168)		2001	May-16	R	16	$8.00	$8.00	50.0	50.0
CO	E-470		1991	Jan-20	R/U	47	$22.55	$14.25	48.3	30.5
CA	Eastern Toll Road (SR 241)		1998	Jul-19	R/U	24	$10.78	$10.78	44.9	44.9
VA	Dulles Greenway		1995	Apr-19	R/U	14	$5.80	$5.80	41.4	41.4
FL	CFX S.R. 538 (Poinciana Parkway)		2016	Dec-19	R/U	7	$2.95	$2.55	41.0	35.4
DE	Delaware Turnpike (I-95)		1963	Oct-07	R/U	11	$4.00	$4.00	35.7	35.7
FL	CFX S.R. 453		2018	Jul-19	R/U	4	$1.25	$0.66	35.7	18.9
VA	Dulles Toll Road	E	1984	Jan-19	C	13	$4.75	$4.75	35.4	35.4
CA	South Bay Expressway		2007	Jun-12	C	10	$3.50	$2.75	35.0	27.5
FL	Miami Dade Expressway, Gratigny Parkway, SR 924		1992	Jul-18	U	5	$1.88	$0.94	34.8	17.4
MD	Maryland Inter County Connector		2011	Jul-15	P	18	$5.78	$3.86	32.3	21.6
FL	Miami Dade Expressway Authority - Dolphin Expressway (SR 836)		1969	Jul-18	U	14	$4.52	$2.26	32.3	16.1
FL	Miami Dade Expressway, Airport Expressway, SR 112		1961	Jul-18	U	4	$1.32	$0.66	31.4	15.7
TX	North Texas Tollway Authority - President George Bush TPK		1998	Jul-19	U	51	$14.75	$9.82	28.6	19.1
TX	North Texas Tollway Authority - Dallas North Tollway		1968	Jul-19	U	32	$8.61	$5.73	26.9	17.9
FL	Miami Dade Expressway, Don Shula Expressway (SR 874)		1974	Jul-18	U	7	$1.86	$0.92	26.6	13.1
TX	North Texas Tollway Authority - Sam Rayburn Tollway		2008	Jul-19	U	26	$6.74	$4.49	25.9	17.3
FL	Lee Roy Selmon Crosstown Expressway (SR 618)		1976	Jul-20	U	15	$3.85	$3.13	25.7	20.9
IL	Veterans Memorial Tollway		1989	Mar-20	R/U	30	$7.60	$3.80	25.5	12.7
SC	Greenville Southern Connector		2001	Jan-20	R/U	16	$4.00	$3.50	25.0	21.9
FL	CFX S.R. 408 (East-West Expressway)		1973	Jul-19	U	22	$4.50	$3.98	20.4	18.0
FL	CFX S.R. 429 (Western Beltway)	B	2000	Jul-19	R/U	31	$6.27	$4.45	20.2	14.4
FL	CFX System (All Facilities)	A	-	Jul-19	R/U	125	$24.97	$19.89	20.0	15.9
FL	Florida's Turnpike, Polk Parkway		1998	Oct-17	U	25	$4.50	$3.21	18.0	12.8
FL	CFX S.R. 417 (Central Florida Greeneway)		1989	Jul-19	R/U	32	$5.50	$4.58	17.2	14.3
PA	Pennsylvania Turnpike		1940	Mar-20	R	360	$59.60	$41.35	16.6	11.5
FL	Osceola Parkway (S.R. 522)		1995	Jul-20	U	12	$2.00	$2.00	16.1	16.1
FL	Florida's Turnpike, Veterans Expressway		1994	Oct-17	U	15	$2.41	$1.87	16.1	12.5
FL	Florida's Turnpike, Beachline West		1973	Oct-17	U	8	$1.25	$0.80	15.3	9.8
FL	CFX S.R. 528 (Beachline Expressway)		1967	Jul-19	R/U	23	$3.25	$2.56	14.1	11.1
FL	CFX S.R. 414 (Apopka Expressway)	B	2009	Jul-19	R/U	9	$1.25	$1.11	13.9	12.3
FL	Florida's Turnpike, Western Beltway		2005	Oct-17	R/U	11	$1.50	$1.07	13.6	9.7
WV	West Virginia Turnpike		1954	Jan-19	R	88	$12.00	$7.80	13.6	8.9
NH	Blue Star Turnpike		1950	Jul-09	R	16	$2.00	$1.40	12.3	8.6
NJ	New Jersey Turnpike		1951	Jan-12	R/U	118	$13.85	$13.85	11.7	11.7
DE	Korean War Veterans Memorial Highway (SR 1)		1993	Aug-14	R/U	51	$6.00	$6.00	11.7	11.7
FL	Florida's Turnpike, Sawgrass Expressway		1986	Oct-17	U	23	$2.68	$2.14	11.7	9.3
IL	Tri-State Tollway		1958	Mar-20	U	77	$9.00	$4.50	11.6	5.8
FL	Florida's Turnpike, Homestead Extension		1973	Oct-17	U	47	$5.36	$4.28	11.4	9.1
FL	Florida's Turnpike, Ticket System		1957	Oct-17	R	155	$16.50	$12.37	10.6	8.0
IL	Reagan Memorial Tollway		1958	Mar-20	C	96	$10.20	$5.10	10.6	5.3
IL	Jane Addams Memorial Tollway		1958	Mar-20	C	79	$7.90	$3.95	10.1	5.0
FL	Florida's Turnpike, Southern Coin System		1957	Oct-17	U	43	$4.18	$3.21	9.7	7.5
FL	Florida's Turnpike, Suncoast Parkway		2001	Jan-20	U	42	$4.02	$3.21	9.6	7.6
OH	Ohio Turnpike		1954	Jan-20	R	241	$20.00	$13.50	8.3	5.6
IN	Indiana Toll Road		1956	Jul-20	R	157	$12.00	$12.04	7.6	7.7
FL	Florida's Turnpike, Northern Coin System		1957	Oct-17	U	67	$5.00	$4.28	7.5	6.4
MA	Massachusetts Turnpike	C	1957	Oct-16	C	123	$7.95	$4.25	6.5	3.5
KS	Kansas Turnpike		1956	Oct-18	R	236	$15.00	$11.15	6.4	4.7
ME	Maine Turnpike		1947	Nov-12	R	111	$7.00	$6.45	6.3	5.8
NJ	Garden State Parkway	D	1954	Jan-12	R/U	173	$8.25	$8.25	4.8	4.8
NH	Spaulding Turnpike		1956	Oct-07	R	33	$1.50	$1.06	4.5	3.2
FL	FDOT, Alligator Alley		1966	Oct-17	R	78	$3.25	$2.94	4.2	3.8

R:Rural, U:Urban, C:Commuter

Notes:

A - CFX System total length (miles) does not include the two miles for S.R. 451 (Wester Beltway Connector Road).

B - Of the 23 miles on S.R. 429 and nine miles on S.R. 414, three are part of a dual route between the two expressways. The three miles are only included once in the calculation of CFX System total miles.

C - Commuter rate of $1.50 available with minimum purchase of 25 trips good for 45 days.

D - For passenger cars, no toll charged for 48-mile portion between interchanges 1 and 6.

E - S.R. 453 is 2-miles, toll is for 2 miles plus 1.5 miles of SR 429 to Kelly Park Road.

1.3.3 ELASTICITY

The effect of a change in toll rates on T&R can be analyzed with the microeconomic concept of elasticity. Elasticity represents the relative change in traffic (or revenue) as a result of a relative change in toll rate with other factors held constant. Generally, a number of factors can affect elasticity, including diversion to competing facilities, changes in travel modes, trip consolidation/trip chaining, and/or adjustment in timeframe of travel. The effects of changes in toll rate on the various facilities of the CFX System depend on the value of travel time savings, the availability of alternative parallel highways, local driver's knowledge of alternative/substitute routes and the level of congestion. Evaluating the degree of elasticity of a historic toll rate increase on the CFX facilities provides guidance in forecasting the elasticity of future toll rate increases.

Elasticity is calculated as the percentage change in traffic (or revenue) divided by the percentage change in toll rate. Traffic elasticity typically (and logically) has a negative algebraic sign, in that an increase in toll results in a reduction in traffic. For traffic, the higher the absolute value of elasticity the greater the decline in traffic. Typically, but with limitations, revenue elasticity has a positive algebraic sign. An elasticity value of 1.0 would represent a case in which the response to a change in toll was unitary (perfectly elastic). That is, the relative change in revenue would be the same as the change in toll rate. Expected elasticity values are lower than 1.0, or relatively inelastic, which would yield smaller percentage decreases in traffic, and consequently smaller revenue increases.

The effect of the July 2018 toll rate increase on traffic was not profound for several reasons. This rate increase was the first indexing of toll rates to the Consumer Price Index. For calendar year 2018 the change in CPI was calculated at 2.05%, which calculated to a few pennies at most locations. To determine elasticity of the FY 2019 toll rate increase, T&R from two months (May and June) in FY 2018 was compared against the T&R for the two months after the increase in FY 2019 and adjusted for seasonality. The overall growth on the facilities overshadowed the effect of the toll rate increase, which resulted in no noticeable traffic elasticity. The most recent toll rate adjustment of 2.22% in July 2019 (FY 2020) took place during the COVID-19 pandemic, making it impossible to determine the elasticity of demand.

The third most recent toll rate adjustment was in July 2012. This rate increase created a toll differential for the first time on CFX facilities. Electronic toll rates were increased by 9.0 percent, which equates to between $0.03 and $0.12 depending on the location. Cash toll rates were increased by $0.25 at most locations, based on the policy to round the cash rate up to the next quarter. There was a shift in the method of payment from cash to ETC as a result of the rate increase, as customers took advantage of the toll rate differential. To determine elasticity of the FY 2013 toll rate increase, T&R from four months (July – October) in FY 2012 was compared against the T&R for the same four months in FY 2013. Comparing the traffic from the same timeframe of the prior year avoided seasonality issues but involved issues of growth in traffic. The impacts from the July 1, 2012 toll rate adjustment on T&R, including the calculated elasticity for a four-month period (July through October) are presented in **Table 1-4**.

Table 1-4
Elasticity of July 2012 Toll Rate Increase

Facility	Toll Increase	Traffic		Revenue	
		Impact	Elasticity	Impact	Elasticity
S.R. 528	11%	1.3%	N/A	12.5%	N/A
S.R. 408	13%	-1.8%	-0.14	10.8%	0.83
S.R. 417	14%	-1.9%	-0.14	12.1%	0.86
S.R. 429	15%	0.7%	N/A	15.3%	N/A
S.R. 414	17%	13.7%	N/A	33.6%	N/A

The traffic elasticity on both S.R. 408 and S.R. 417 were -0.14, with a very minor impact to the traffic. S.R. 528 was excluded from the elasticity calculation due to the recent opening of Dallas Boulevard Main Plaza and the reduction of the $1.50 toll rate to $0.75 at Beachline Main Plaza. S.R. 429 and S.R. 414 were excluded from the elasticity calculation since these facilities experienced increases in traffic over the period. Both facilities had just recently opened to traffic with higher initial annual growth rates and had influences beyond the toll rate change. These facilities also serve areas that were still experiencing development growth, as compared to S.R 408 and S.R. 417 that served developed urban areas of Orlando.

S.R. 408 and S.R. 417 had revenue elasticity of 0.83 and 0.86, respectively. This means that some customers responded to the toll rate increase by using alternative routes or switching from cash to ETC. For the entire CFX System, ETC participation increased approximately 4.0 percent over the prior year (July – October). The 4.0 percent increase was not entirely a result of the conversion of cash customers to ETC because normal growth is embedded in the T&R calculations and it is difficult to identify and remove.

1.4 COVID-19 Update

The coronavirus disease is an infectious disease caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), identified in December 2019, hence the name COVID-19. Since the first appearance of the disease in China, it has spread across the world. The World Health Organization declared the outbreak a pandemic on March 11, 2020. In the majority of cases the symptoms are moderate to mild. In some cases, however, the symptoms advance to pneumonia, organ failure and death. COVID-19 has been reported as the cause of deaths from both heart failure and stroke. The mortality rates have been higher with elderly people and people with pre-existing conditions such as cardiovascular disease and diabetes.

The primary way the virus spreads is through direct, close contact between people, via airborne droplets from coughing, sneezing and talking. The virus may also be communicated when someone touches a contaminated surface and then touches their face (mouth, nose or eyes). Guidance provided to prevent infection includes frequent hand washing, use of face masks and social distancing. This has led to restrictions such as stay at home orders and closures.

From the beginning, public health officials also talked about a COVID-19 vaccine that would provide acquired immunity to the virus, reducing the number of hospitalizations and deaths. The

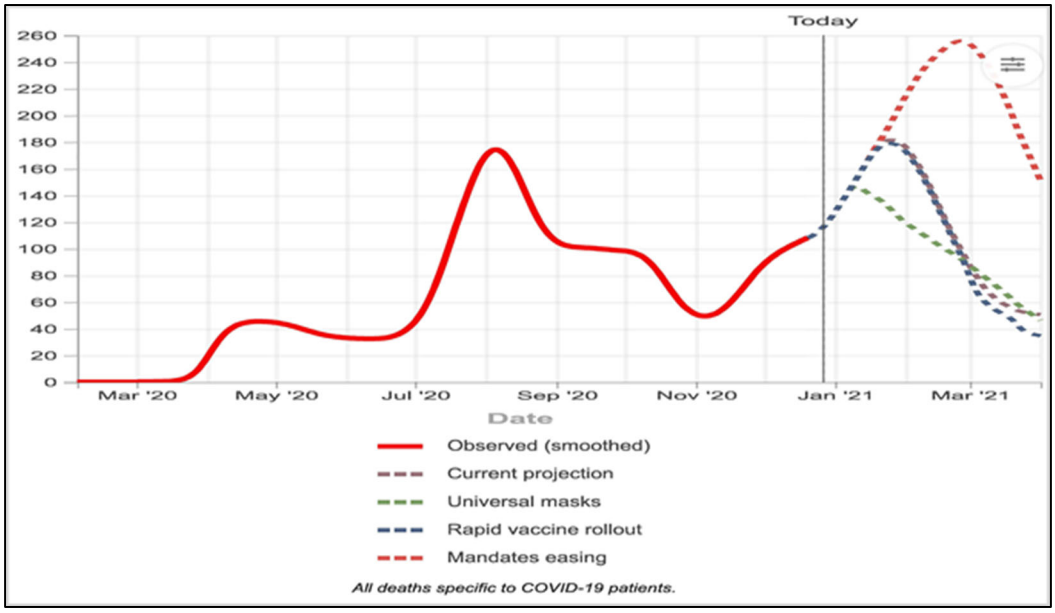
development of safe and effective vaccines normally takes several years, but the urgency associated with COVID-19 led to unprecedented collaboration between and within the pharmaceutical industry and governments, sharing information and compressing schedules. Genetic sequence data for COVID-19 was published on January 11, 2020. The U.S. Food and Drug Administration (FDA) authorized three vaccines for emergency use: Pfizer-BioNTech COVID-19 Vaccine on December 11, 2020; Moderna COVID-19 Vaccine on December 18, 2020; and Janssen COVID-19 Vaccine (Johnson & Johnson) on February 27, 2021. At this point, nine additional vaccines have been authorized by at least one national regulatory agency and many more vaccine candidates are in various stages of development, including clinical trials.

There are a number of statistical models that have been used to describe and forecast the spread of the COVID-19 pandemic. The focus of these models has been on predicting the need for critical medical equipment, such as ICU beds. Based on assumptions about the rates of infection and mortality and about future levels of contact between people, each of these models comes with its own range of estimates. More recently, these models have introduced the assumptions about the distribution and efficacy of the vaccines and about variants of the virus. Some of these variants might have higher rates of transmissibility, increased virulence and reduced effectiveness from the vaccines. The continuation of various social distancing policies is also far from certain.

Since initial outbreak, the Institute for Health Metrics and Evaluation (IHME), University of Washington, developed and frequently updated forecasts for every country, with separate forecasts for every state in the United States. The IHME forecasts have included projections of daily deaths, total deaths, hospital resources, daily infections and testing, social distancing and mask use. Every published forecast starts with updated information about recent experience.

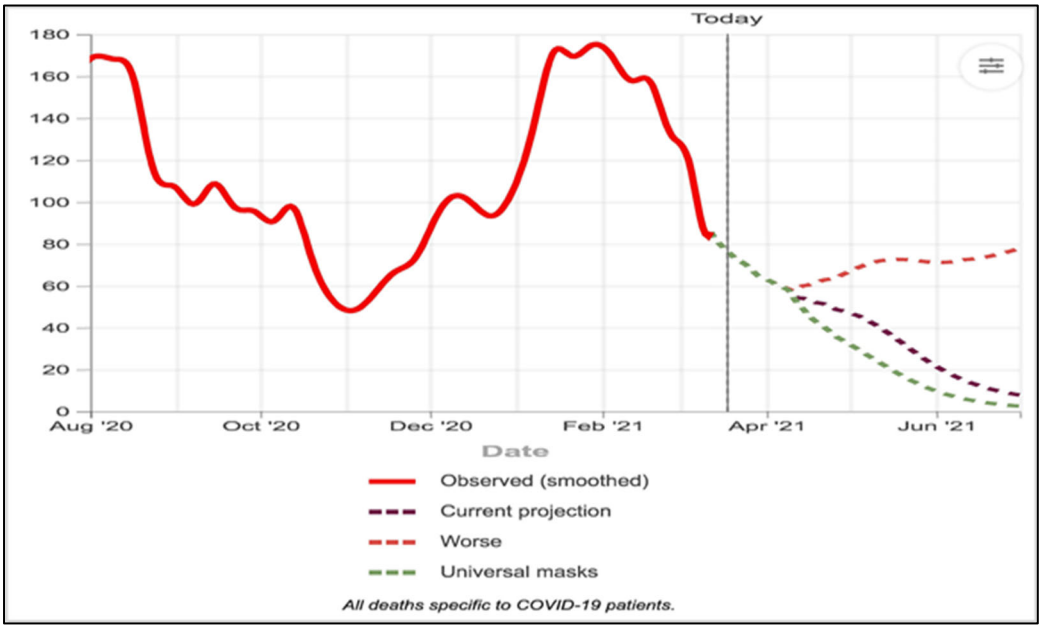
Figure 1-2 contains a complete history of the number of daily deaths from COVID-19 in Florida (since February 2020) and an earlier projection of the daily deaths (starting on December 23, 2020). The projections reflect the uncertainty at the time of the projection about continuation of social distancing policies and mask usage, as well as assumptions about the roll-out of the recently identified vaccines. **Figure 1-3** has graphs of the more recent IHME projections of daily deaths in Florida. While this graph includes less history, the forecast period is extended. The reasons for uncertainty in these projections include assumptions about continued increases in mobility, decreases in mask use, vaccine hesitancy and reduced cross-variant immunity. In all but the worst projection, the number of daily deaths decline rapidly by July. Most people understand the importance of the vaccines and the beneficial effects on public health. This is demonstrated by recent changes in traffic volumes. Note that the then current projections in IHME forecasts from December are a close match to actual results through the middle of March.

Figure 1-2
Earlier Projection of Daily Deaths from COVID-19 in Florida



Source: Institute for Health Metrics and Evaluation, Updated December 23, 2020

Figure 1-3
Recent Projection of Daily Deaths from COVID-19 in Florida



Source: Institute for Health Metrics and Evaluation, Updated March 17, 2021

1.4.1 RECENT EVENTS

Early on, the primary way of combating the spread of COVID-19 was regulations and recommendations for social distancing and stay at home orders. This resulted in the closings of schools, restaurants, malls, sporting events and other public venues. As a result, many people lost their jobs resulting in an unprecedented increase in unemployment claims. There has also been an escalation in the number of people working from home. The combined result was also a dramatic effect on people's travel behavior, leading to a reduction in travel. Additionally, state and local restrictions and general concern regarding the spread of the virus produced major impacts to regional travel patterns. To some extent, because CFX roadways are tolled, they have experienced more severe reductions as congestion clears on other, competitive, non-tolled roads. More recently, the FDA announcements of three vaccines authorized for emergency use provided much needed relief. Shortly thereafter, Governor Ron DeSantis announced plans for distribution of the vaccines.

Federal, state and local governments have responded to COVID-19 with advice and orders as events progressed. The following is a summary of key events, from orders to close through to more recent permissions to reopen, the rollout of the of the vaccines and other events that had an impact on T&R:

- On March 1, 2020, the Florida Department of Health declared a public health emergency, as the Centers for Disease Control and Prevention (CDC) confirmed cases of coronavirus in Florida.
- On March 9, 2020, Governor DeSantis declared a state of emergency in responding to COVID-19; and then on March 12, 2020, he announced school closings.
- On March 12, 2020, Orlando-area attractions closed indefinitely, including Walt Disney World (WDW), Universal Studies and Sea World.
- CFX closed the customer service center on March 18, 2020, suspended cash toll collection by collectors on March 19, 2020 and closed the Headquarters building on March 23, 2020.
- Orange County introduced a curfew on March 20. Osceola and Orange Counties instituted a stay-at-home order on March 25, 2020.
- Seminole County issued a social distancing mandate on March 27, 2020.
- Governor DeSantis issued a statewide stay at home order on April 1, 2020.
- President Trump signs the $2.2T Coronavirus Aid, Relief and Economic Security (CARES) Act on March 27, 2020, providing $1,200 stimulus checks.
- On April 18, 2020, Governor DeSantis announced that schools will be closed through the end of the year.
- Governor DeSantis announced the reopening plan on April 29, 2020, to start on May 4, 2020.
- Governor DeSantis allows reopening of select industries with "enhanced safety protocols" on May 9, 2020.
- On May 12, 2020, WDW began accepting reservations for July 2020.
- Florida's Full Phase 1 Reopening began on May 18, 2020, with all 67 counties allowed to start reopening.
- On May 21, 2020, Universal Studios announced phased reopening to begin on June 5.
- Gatorland and Funspot reopened on May 22, 2020.

- On May 27, 2020, Governor DeSantis considered the plan for reopening of WDW and SeaWorld.
- Kennedy Space Center visitor Complex reopened with new measures on May 28, 2020.
- CFX reinstated cash toll collection on June 1, 2020.
- Florida's Phase 2 reopening began on June 5, 2020, excluding Miami, Broward and Palm Beach Counties.
- Downtown Orlando 8 PM curfew was lifted on June 7, 2020 and the Orange County 10 PM curfew was lifted on June 8, 2020.
- SeaWorld opened with limited capacity and reservation requirements on June 11, 2020.
- Governor DeSantis issued a statewide Executive Order to ban on-site alcohol sales and consumption on June 26, 2020.
- 9th Circuit Courts in Orange and Osceola Counties returned to Phase 1 on June 29, 2020.
- Several South Florida beaches closed for July 4th holiday.
- WDW reopened Magic Kingdom and Animal Kingdom on July 11, 2020 and Hollywood Studios and Epcot on July 15, 2020; all at only 25 percent capacity; and then increased to 35 percent capacity on December 29, 2020.
- Governor DeSantis rescinded Executive Order requiring travelers from Connecticut, New Jersey and New York to self-quarantine for 14 days upon arrival.
- Florida public schools reopened for in-person learning on August 31, 2020 with optional virtual classroom learning.
- Florida bars were allowed to reopen at 50 percent capacity beginning September 14, 2020.
- Governor DeSantis lifted all COVID-19 restrictions on businesses statewide with no capacity restrictions beginning September 25, 2020.
- CFX reopened the customer service center to the public on November 9, 2020.
- Orlando water parks reopened first week in March, including Volcano Bay and Blizzard Beach.
- Governor DeSantis announced his Seniors First Vaccine Strategy on December 2, 2020 (long care residents, health care workers and people 65 and older were eligible for the vaccine.
- FDA authorized for emergency use the Pfizer-BioNTech COVID-19 Vaccine on December 11, 2020 and the Moderna COVID-19 Vaccine on December 18, 2020.
- President Trump signs $900B Bipartisan-Bicameral Omnibus COVID Relief Deal on December 27, 2020, providing $600 stimulus checks to many Americans in the last week of year.
- UCF announced return to normal in-person classes beginning with fall semester, which starts on August 23, 2021.
- FDA authorized emergency use of the Janssen (Johnson and Johnson) vaccine on February 27. 2021.
- Governor DeSantis issued an order allowing law enforcement officers, firefighters, and K-12 teachers and staff aged 50 and older to receive coronavirus vaccines on March 1, 2021, which was changed to all teachers including day care/preschool teachers on March 4, 2021
- President Biden signed the $1.9T American Rescue Plan Act of 2021 on March 11, 2021 providing $1,400 stimulus checks to many Americans.
- As of March 29, 2021, more than 3.2M Florida seniors have been vaccinated (70% population), eligibility opened to populations 40 and older, with all adult population eligible for vaccinations on April 5, 2021.

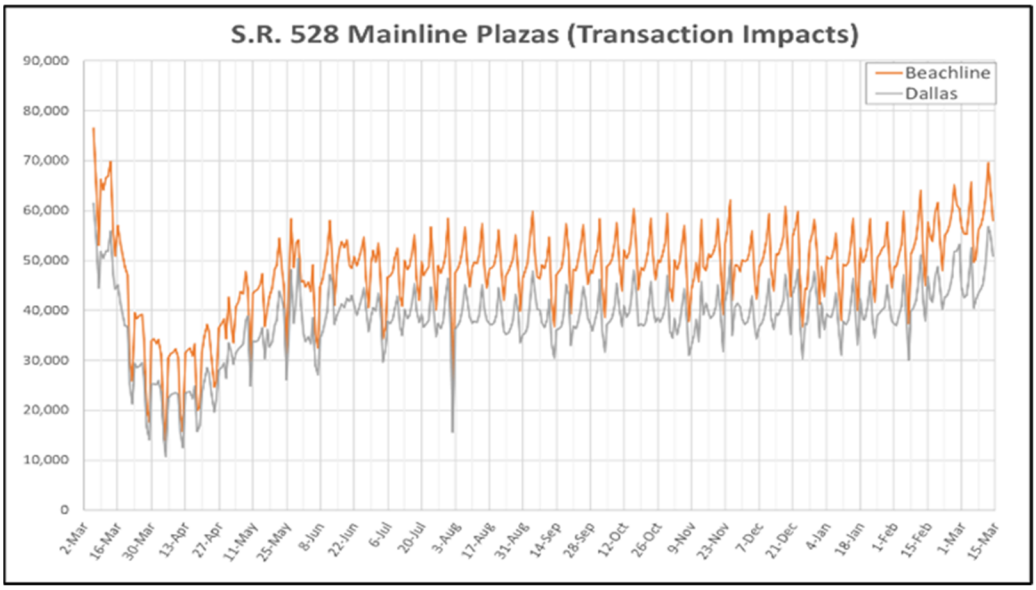
In addition to the COVID-19 pandemic, several other events occurred in 2020 and 2021 that impacted CFX System facilities. CFX acquired the Poinciana Parkway on December 31, 2019 (FY 2020). The Poinciana Parkway is a 7.2 mile-long, two-lane, two-way, limited access toll road extending from the Cypress Parkway in Poinciana north to the Polk-Osceola County line. The Poinciana Parkway was developed by the Osceola County Expressway Authority (OCX) and opened to traffic in April of 2016. The facility has been operated by CFX since the road opened to traffic. The Florida Legislature required that CFX consider acquiring the Poinciana Parkway as part of the legislation creating and expanding the geographic base of CFX. During their December 2019 meeting, the CFX Board unanimously approved the acquisition of the Poinciana Parkway. CFX has assumed all governance, control, and maintenance of the Poinciana Parkway. The FY 2019 Annual Report included a partial year forecast for the Poinciana Parkway in FY 2020 and a full year forecast in FY 2021 and beyond.

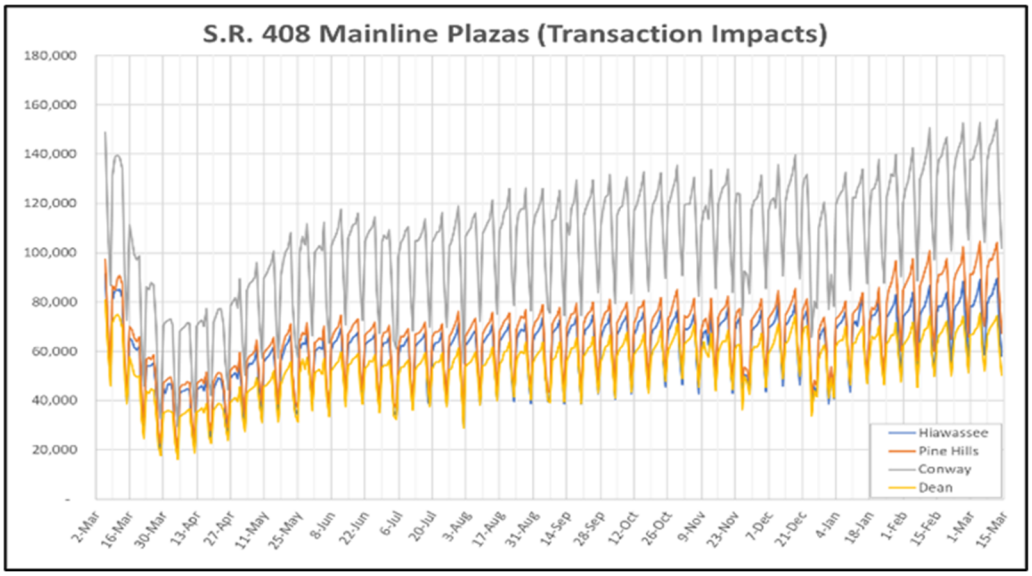
CFX also implemented a toll rate adjustment based on the "Customer First" Toll Policy on July 1, 2020 (FY 2021). The CFX toll policy specifies the CPI-U in the South, which was 1.45% in calendar year 2019. CDM Smith recommended 1.50%, the floor by policy, to adjust the toll amounts. The ETC toll rates at all plazas were increased by 1.50% rounded to the nearest penny. The new ETC toll rates were increased by approximately $0.01 at ramp plazas and up to $0.05 at mainline plazas for larger axle vehicles. Cash toll rates were also adjusted up to the next quarter if the new ETC toll rate fell within 10% of the cash rate. Cash toll rates were generally increased at mainline plazas for larger axle vehicles, with no changes to the cash toll rates at ramp plazas. FY 2021 was also the first year with the new Pay by Plate (PBP) toll rate, adopted by the CFX Board on October 10, 2019 and implemented on July 1, 2020. The PBP toll rate was set to twice the ETC toll rate at all locations. Except for cashless toll locations, this was a significant change in toll. The proportion of tolls paid through the PBP process has been on the rise especially during the prior three years.

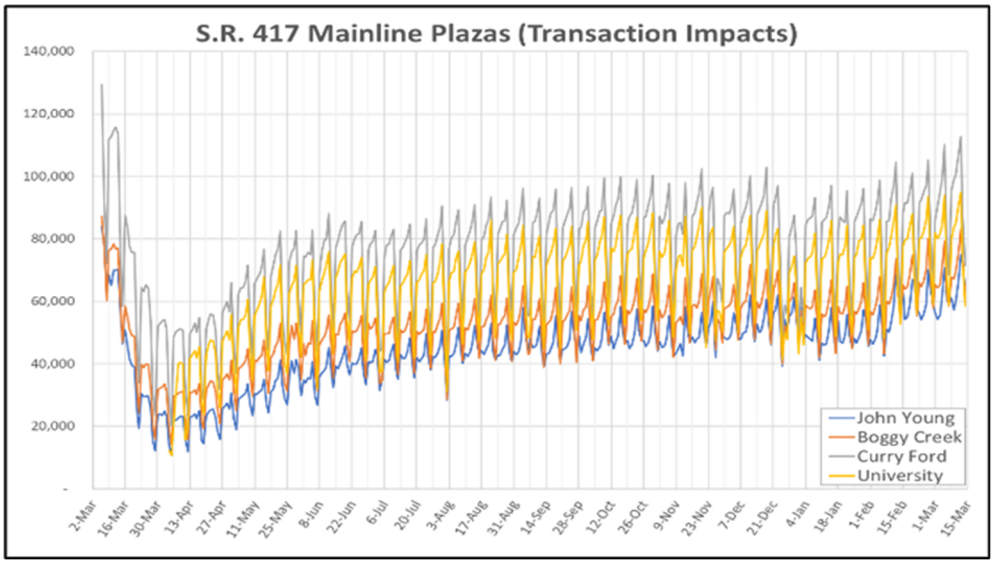
1.4.2 RECENT IMPACTS

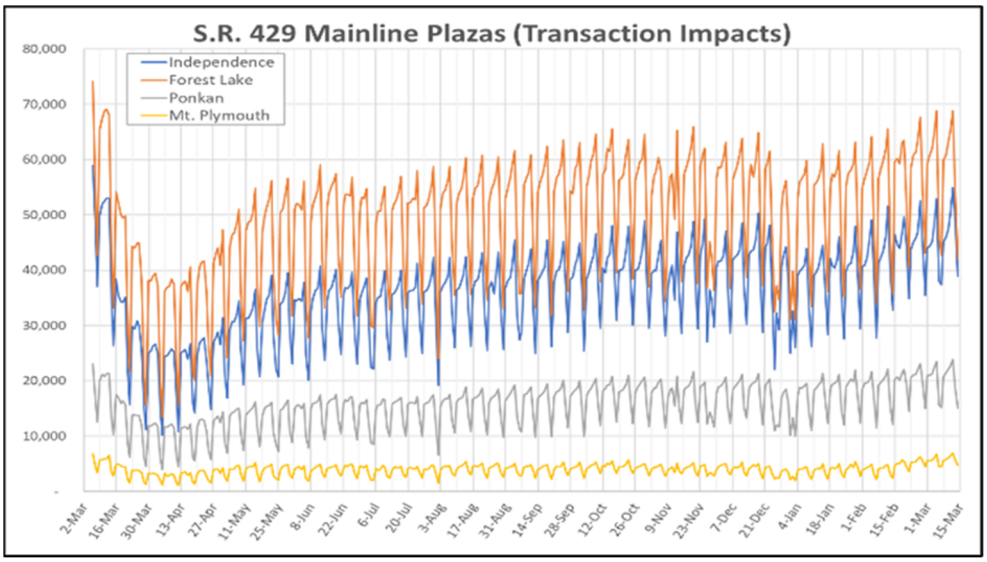
COVID-19 has had a negative impact on T&R across the CFX System. The graphs in **Figure 1-4** show recent daily transactions at mainline toll plazas, from March 2, 2020 through March 14, 2021. These are raw transactions from the Infinity toll collection system. As expected, the number of transactions on weekend days is lower than on weekdays. It is clear that the number of transactions dropped at all mainline toll plazas during the second week of March 2020. The effects bottomed out during the second week of April 2020. While there was substantial variation by toll plaza, there was substantial recovery in May 2020, which slowed down in June and July 2020. Recovery picked up again in August 2020 and then plateaued through January 2021, with variations up and down at various holidays. Hurricane Dorian passed through Central Florida in early September 2019 and Hurricane Isaias early in August 2020. The impacts on T&R are noticeable. Most recently, there has been another burst of recovery in February and March, related to the rollout of the vaccines. As explained below, these results vary by toll location.

Figure 1-4
Recent Daily Transactions (March 2020 – March 2021)






S.R. 417 Mainline Plazas (Transaction Impacts)
140,000
120,000
100,000
80,000
60,000
40,000
20,000
-
John Young
Boggy Creek
Curry Ford
University
2-Mar
16-Mar
30-Mar
13-Apr
27-Apr
11-May
25-May
8-Jun
22-Jun
6-Jul
20-Jul
3-Aug
17-Aug
31-Aug
14-Sep
28-Sep
12-Oct
26-Oct
9-Nov
23-Nov
7-Dec
21-Dec
4-Jan
18-Jan
1-Feb
15-Feb
1-Mar
15-Mar


S.R. 429 Mainline Plazas (Transaction Impacts)
80,000
70,000
60,000
50,000
40,000
30,000
20,000
10,000
-
Independence
Forest Lake
Ponkan
Mt. Plymouth
2-Mar
16-Mar
30-Mar
13-Apr
27-Apr
11-May
25-May
8-Jun
22-Jun
6-Jul
20-Jul
3-Aug
17-Aug
31-Aug
14-Sep
28-Sep
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4-Jan
18-Jan
1-Feb
15-Feb
1-Mar
15-Mar

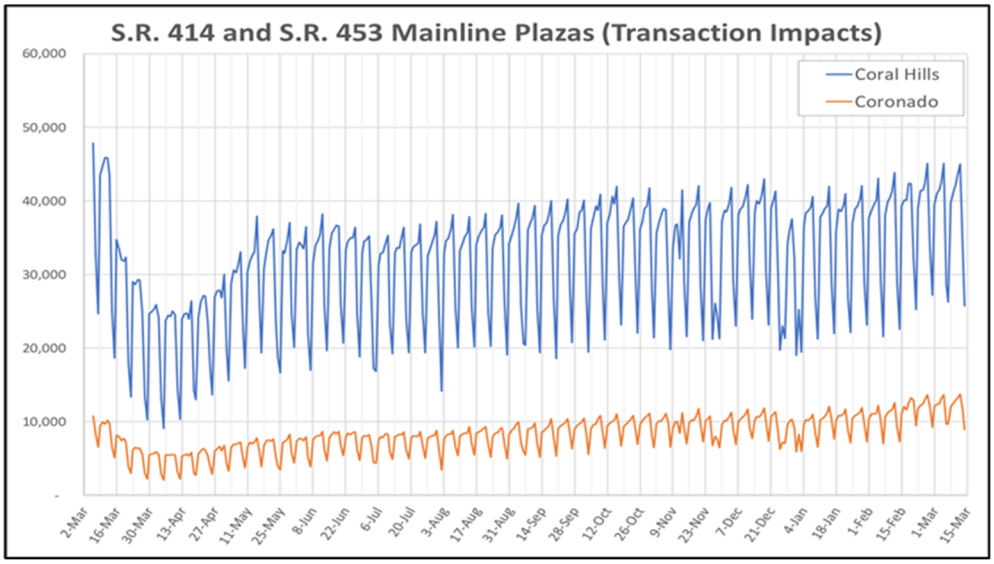

S.R. 414 and S.R. 453 Mainline Plazas (Transaction Impacts)
60,000
50,000
40,000
30,000
20,000
10,000
-
Coral Hills
Coronado
2-Mar
16-Mar
30-Mar
13-Apr
27-Apr
11-May
25-May
8-Jun
22-Jun
6-Jul
20-Jul
3-Aug
17-Aug
31-Aug
14-Sep
28-Sep
12-Oct
26-Oct
9-Nov
23-Nov
7-Dec
21-Dec
4-Jan
18-Jan
1-Feb
15-Feb
1-Mar
15-Mar

Figure 1-5 contains a graph with a comparison between the total number of daily transactions at all mainline toll plazas since COVID-19 first appeared (March 2020 through March 2021, i.e., during FY 2020/21) and the number of transactions that occurred on the same day of week during pre-COVID-19 times (March 2019 through February 2020, i.e., during FY 2019/20). Transactions at the former Airport mainline toll plaza, as well as transactions at the University, Marigold and Koa mainline toll plazas, are not included. The proportional change of aggregate daily transactions during the COVID-19 pandemic compared to pre-COVID-19 transactions is defined as the impact or variance.

Figure 1-5
Aggregate Daily Transactions at Mainline Plazas

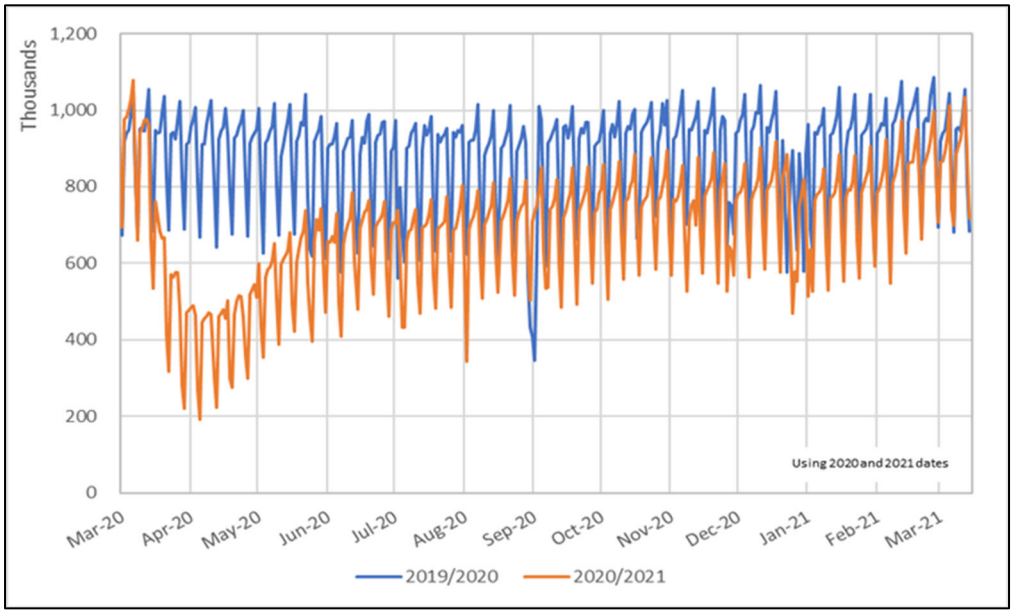


Figure 1-6 is a plot of the aggregate daily transaction variance since the start of the COVID-19 pandemic. These are the rolling average of the daily transaction variance during the prior week. The year-over-year variance in daily transactions works well, accounting for seasonal variation in traffic. Holidays like the Fourth of July and Labor Day are exceptions, as are hurricanes. Holidays are exceptions when the days of the week do not match. The use of the rolling average masks the variations by day of week. Note that Hurricane Dorian occurred in September 2019 and Hurricane Isaias occurred in August 2020. There was more travel during the end of year holidays, i.e., Christmas 2020 and New Year 2021. There was another upward trend beginning in February 2021.

Figure 1-6
Variance in Aggregate Daily Transactions (Rolling Average)

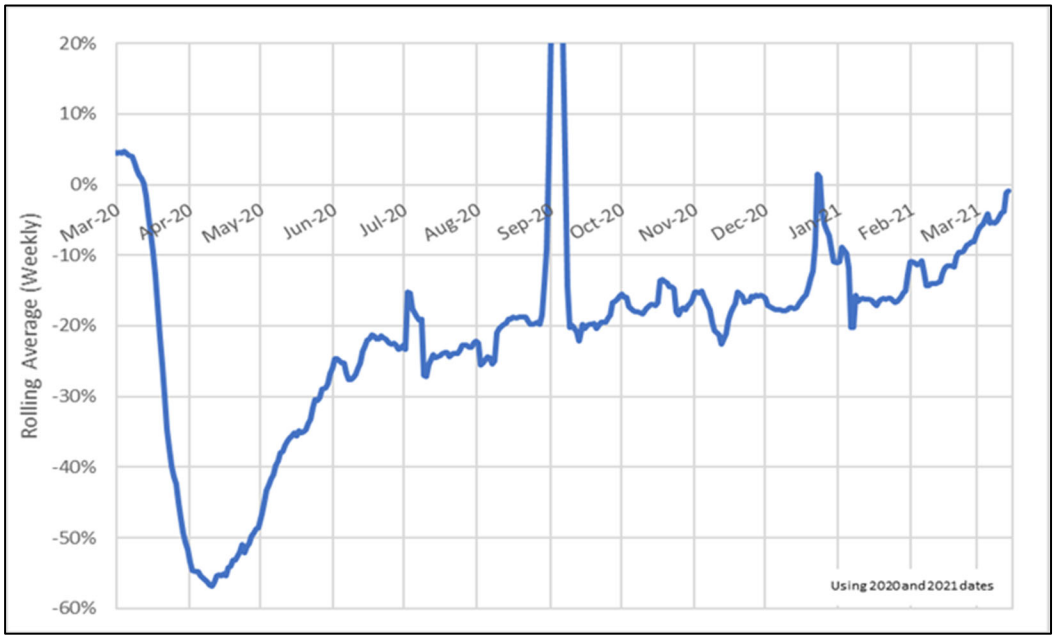


Table 1-5 contains a summary of the weekly variance in transactions at mainline toll plazas and the weekly variance in the aggregate transactions. During the week ending Sunday, April 12, 2020, the aggregate number of transactions was 55% lower than it was during FY 2019. Since then, the impacts have steadily improved.

Beginning in February 2021, the aggregate weekly transaction variance improved by roughly 2.6% per week. The aggregate weekly variance was -14.2% during the first week in February and was -1.3% during the second week in March 2021. Over this six-week period, the variance at every mainline plaza improved.

The mainline toll plazas most severely impacted have been those located near tourist destinations, i.e., John Young Parkway and Boggy Creek on S.R. 417. The impacts to the transactions at these plazas have been consistently more severe than the average. Transactions at plazas serving UCF (University on S.R. 417 and Dean on S.R. 408) were initially more impacted. This makes sense given the impacts of COVID-19 on the theme parks and UCF. The toll plazas with a lesser degree of impact have been those located along S.R. 429 (Forest Lake and Ponkan), S.R. 414 (Coral Hills) and S.R. 453 (Coronado). This analysis, comparing current year versus prior year, has annual growth embedded (or hidden) in the estimates. These are relatively new facilities, experiencing higher growth, in the form of ramp-up, than other toll locations. The main plazas on S.R. 408 (Hiawassee, Pine Hills and Conway) have been impacted just below the average. University Main was not reporting in the first two months due to a conversion to the Infinity system.

The mainline plazas with positive variances during the second week of March are Coronado, Ponkan, Pine Hills, Coral Hills, Conway, Mount Plymouth and Hiawassee, ranked by variance.

Table 1-5
Recent Weekly Transaction Variance

Week Ending, Sunday	Beachline	Dallas	Hiawassee	Pine Hills	Conway	Dean	John Young Pkwy	Boggy Creek	Curry Ford	University	Independence	Forest Lake	Ponkan	Mt Plymouth	Coral Hills	Coronado	Aggregate (w/o Univ)	Weekly Rate of Change in Aggregate
	S.R. 528		S.R. 408				S.R. 417				S.R. 429				S.R. 414	S.R. 453		
1-Mar	2.9%	4.3%	4.2%	2.8%	4.1%	3.0%	3.0%	3.6%	1.9%		7.6%	7.6%	13.7%	1.8%	12.5%	26.2%	4.5%	
8-Mar	3.5%	6.8%	2.1%	2.2%	2.4%	3.5%	-2.9%	1.0%	3.9%		4.6%	6.1%	8.7%	-3.7%	11.4%	21.6%	3.4%	-1.2%
15-Mar	-4.5%	0.5%	-5.7%	-6.4%	-6.5%	-8.8%	-16.1%	-11.8%	-5.3%		-5.8%	-1.6%	0.7%	-9.0%	4.2%	10.1%	-6.1%	-9.5%
22-Mar	-32.2%	-30.0%	-29.5%	-29.2%	-31.7%	-35.5%	-51.6%	-42.2%	-35.1%		-37.0%	-25.6%	-20.8%	-29.8%	-20.3%	-14.7%	-33.6%	-27.5%
29-Mar	-49.0%	-50.7%	-42.8%	-42.8%	-45.7%	-49.6%	-66.4%	-57.5%	-50.7%		-48.6%	-38.8%	-37.2%	-44.2%	-35.6%	-33.8%	-48.3%	-14.7%
5-Apr	-54.1%	-55.5%	-50.2%	-50.0%	-52.2%	-56.3%	-71.4%	-62.8%	-57.2%		-54.1%	-45.4%	-43.0%	-49.0%	-42.3%	-37.7%	-54.4%	-6.1%
12-Apr	-57.0%	-59.1%	-49.8%	-49.6%	-52.3%	-56.0%	-71.7%	-63.5%	-57.6%		-53.2%	-45.1%	-43.1%	-53.0%	-41.9%	-38.7%	-54.8%	-0.4%
19-Apr	-54.1%	-55.9%	-47.6%	-47.3%	-49.6%	-52.7%	-71.3%	-62.6%	-55.8%		-51.7%	-43.1%	-43.0%	-46.9%	-40.4%	-37.9%	-52.8%	2.0%
26-Apr	-50.8%	-51.5%	-44.7%	-44.6%	-47.3%	-52.2%	-69.7%	-60.5%	-53.9%		-50.0%	-40.1%	-39.4%	-44.9%	-38.3%	-33.2%	-50.4%	2.3%
3-May	-39.7%	-37.8%	-38.0%	-37.3%	-40.8%	-45.6%	-64.4%	-54.5%	-47.6%	-46.7%	-44.1%	-33.4%	-32.6%	-34.2%	-30.9%	-27.5%	-43.2%	7.2%
10-May	-35.0%	-34.0%	-32.8%	-32.7%	-34.4%	-36.7%	-60.1%	-49.6%	-41.7%	-40.0%	-38.7%	-27.1%	-28.2%	-30.1%	-24.2%	-23.0%	-37.6%	5.6%
17-May	-31.7%	-30.2%	-29.7%	-29.7%	-32.4%	-35.3%	-57.8%	-46.7%	-39.2%	-36.3%	-34.4%	-23.9%	-25.1%	-28.5%	-17.3%	-19.3%	-34.6%	3.0%
24-May	-27.0%	-25.1%	-26.0%	-25.6%	-27.4%	-31.2%	-53.7%	-42.9%	-34.5%	-31.3%	-28.9%	-20.0%	-23.5%	-27.5%	-15.6%	-16.6%	-30.5%	4.1%
31-May	-22.3%	-18.0%	-20.8%	-20.6%	-21.7%	-22.9%	-48.3%	-37.2%	-31.3%	-28.3%	-27.6%	-17.9%	-22.6%	-25.6%	-12.5%	-14.8%	-25.8%	4.7%
7-Jun	-29.8%	-29.1%	-22.1%	-22.6%	-21.9%	-25.9%	-49.5%	-39.6%	-30.4%	-26.3%	-26.3%	-17.1%	-21.0%	-26.7%	-13.0%	-13.8%	-27.5%	-1.6%
14-Jun	-21.1%	-17.8%	-14.2%	-19.5%	-17.6%	-20.9%	-45.2%	-35.4%	-28.0%	-23.2%	-25.2%	-15.4%	-17.8%	-25.0%	-11.2%	-9.3%	-22.9%	4.5%
21-Jun	-17.8%	-16.1%	-17.6%	-17.3%	-16.3%	-20.6%	-43.4%	-32.7%	-26.1%	-22.4%	-25.2%	-12.7%	-15.2%	-20.6%	-9.4%	-5.2%	-21.6%	1.4%
28-Jun	-22.5%	-18.5%	-15.1%	-19.8%	-18.4%	-22.0%	-44.5%	-34.9%	-26.9%	-23.7%	-26.5%	-16.9%	-16.9%	-22.3%	-14.2%	-6.2%	-23.4%	-1.9%
5-Jul	-21.8%	-20.4%	-13.8%	-13.3%	-13.7%	-17.2%	-41.5%	-30.8%	-22.9%	-21.6%	-25.5%	-13.1%	-14.1%	-17.8%	-0.2%	-5.3%	-20.0%	3.4%
12-Jul	-25.5%	-21.1%	-20.8%	-17.9%	-19.7%	-24.5%	-41.8%	-34.6%	-28.8%	-28.2%	-26.3%	-19.3%	-19.9%	-25.1%	-17.4%	-12.7%	-24.9%	-4.9%
19-Jul	-24.3%	-19.8%	-20.0%	-20.7%	-18.4%	-21.3%	-40.8%	-34.1%	-28.4%	-26.9%	-25.3%	-16.6%	-18.4%	-24.3%	-15.6%	-10.6%	-23.9%	1.0%
26-Jul	-23.9%	-21.9%	-18.0%	-22.4%	-17.2%	-14.5%	-40.4%	-33.2%	-27.2%	-24.1%	-24.1%	-15.2%	-16.3%	-22.9%	-15.4%	-7.8%	-22.8%	1.0%
2-Aug	-26.9%	-25.6%	-19.9%	-20.4%	-18.9%	-22.7%	-40.6%	-33.2%	-28.1%	-25.6%	-25.9%	-18.3%	-19.9%	-27.5%	-16.6%	-12.7%	-24.6%	-1.8%
9-Aug	-21.6%	-19.2%	-17.4%	-18.0%	-14.7%	-21.7%	-37.4%	-29.4%	-25.4%	-21.0%	-23.3%	-14.8%	-16.3%	-20.7%	-14.4%	-10.0%	-21.3%	3.3%
16-Aug	-18.8%	-16.3%	-16.3%	-16.5%	-13.1%	-18.4%	-33.7%	-27.9%	-22.6%	-17.5%	-20.7%	-13.5%	-11.6%	-13.6%	-14.7%	-5.1%	-19.0%	2.3%
23-Aug	-21.2%	-18.7%	-18.0%	-17.9%	-14.4%	-18.2%	-33.6%	-27.3%	-24.2%	-18.5%	-20.1%	-13.4%	-12.4%	-16.1%	-15.0%	-4.1%	-19.9%	-0.9%
30-Aug	-4.7%	-5.5%	-10.3%	-10.5%	-9.5%	-16.0%	-26.3%	-21.7%	-17.8%	-11.1%	-14.7%	-5.3%	-5.7%	-8.3%	-5.6%	0.8%	-12.6%	7.3%
6-Sep	4.9%	7.2%	9.7%	10.5%	10.7%	4.0%	-15.2%	-4.3%	6.5%	8.0%	3.0%	15.0%	18.7%	23.4%	18.4%	22.5%	6.2%	18.8%
13-Sep	-22.2%	-17.7%	-21.6%	-21.2%	-21.5%	-27.2%	-28.7%	-27.3%	-24.4%	-24.2%	-19.1%	-16.9%	-17.5%	-20.3%	-17.6%	-12.0%	-22.3%	-28.5%
20-Sep	-21.4%	-18.5%	-14.8%	-15.0%	-13.5%	-20.4%	-30.8%	-26.3%	-34.0%	-19.5%	-16.4%	-13.1%	-13.5%	-21.7%	-12.4%	-4.5%	-20.2%	2.1%
27-Sep	-19.0%	-16.0%	-12.8%	-12.3%	-6.3%	-19.3%	-29.7%	-25.1%	-27.7%	-17.8%	-15.2%	-11.5%	-9.3%	-15.7%	-10.5%	1.2%	-16.9%	3.3%
4-Oct	-20.6%	-18.3%	-14.6%	-14.5%	-7.8%	-18.3%	-30.6%	-24.5%	-23.1%	-17.9%	-16.1%	-10.9%	-9.3%	-16.8%	-10.3%	1.9%	-17.0%	-0.1%
11-Oct	-18.3%	-10.3%	-14.2%	-13.9%	-19.4%	-16.5%	-31.7%	-25.8%	-21.5%	-13.7%	-17.5%	-8.0%	-5.4%	-8.8%	-8.9%	6.3%	-17.6%	-0.6%
18-Oct	-16.3%	-13.4%	-11.4%	-11.6%	-9.1%	-16.4%	-30.5%	-23.3%	-19.1%	-12.4%	-13.3%	-4.2%	-0.3%	-8.6%	-4.3%	14.5%	-14.2%	3.4%
25-Oct	-20.4%	-25.0%	-15.4%	-15.2%	-16.2%	-17.3%	-30.9%	-24.4%	-21.9%	-13.8%	-17.0%	-10.7%	-4.3%	-6.6%	-11.4%	7.7%	-18.3%	-4.1%
1-Nov	-19.8%	-18.4%	-12.8%	-10.9%	-13.2%	-12.3%	-28.9%	-22.5%	-19.8%	-13.6%	-14.3%	-8.5%	-0.4%	-12.8%	-10.0%	11.9%	-15.5%	2.9%
8-Nov	-23.6%	-23.6%	-17.5%	-16.7%	-13.0%	-12.9%	-34.4%	-27.8%	-23.9%	-16.2%	-21.5%	-13.1%	-1.1%	-20.7%	-14.6%	13.9%	-19.3%	-3.9%
15-Nov	-22.9%	-21.3%	-18.2%	-17.6%	-13.5%	-16.8%	-32.3%	-26.1%	-24.5%	-18.5%	-21.9%	-14.0%	-6.9%	-24.2%	-15.1%	6.7%	-19.7%	-0.4%
22-Nov	-19.9%	-19.2%	-14.6%	-15.2%	-10.6%	-16.8%	-30.0%	-23.1%	-21.8%	-13.8%	-16.7%	-9.4%	-0.4%	-22.2%	-11.4%	18.5%	-16.7%	3.0%
29-Nov	-19.5%	-19.2%	-11.7%	-12.2%	-7.3%	-12.5%	-27.9%	-22.8%	-20.5%	-16.1%	-16.3%	-10.2%	-5.1%	-23.6%	-7.7%	6.9%	-15.5%	1.2%
6-Dec	-22.7%	-22.4%	-14.1%	-14.5%	-10.8%	-16.7%	-30.4%	-25.1%	-23.9%	-16.4%	-16.7%	-12.0%	-5.2%	-17.6%	-11.0%	9.3%	-17.8%	-2.3%
13-Dec	-21.3%	-21.3%	-13.5%	-13.9%	-10.5%	-14.9%	-30.9%	-24.4%	-24.8%	-16.1%	-19.1%	-12.7%	-4.8%	-21.9%	-11.0%	11.2%	-17.6%	0.1%
20-Dec	-20.6%	-20.1%	-8.9%	-8.8%	-3.3%	-6.6%	-27.3%	-22.5%	-20.6%	-15.1%	-14.8%	-11.4%	-1.6%	-18.6%	-10.1%	15.1%	-13.7%	4.0%
27-Dec	-17.6%	-19.0%	-4.1%	-4.0%	5.4%	6.2%	-27.7%	-20.5%	-13.1%	-10.3%	-18.5%	-6.4%	3.6%	-15.5%	-1.6%	19.1%	-9.6%	4.1%
3-Jan	-14.7%	-12.8%	-9.6%	-8.1%	-3.9%	-5.2%	-25.1%	-19.9%	-18.1%	-45.6%	-18.2%	-11.9%	-2.4%	-21.2%	-8.0%	15.7%	-12.6%	-3.0%
10-Jan	-21.3%	-21.8%	-10.3%	-12.5%	-7.9%	-11.3%	-30.3%	-24.7%	-23.0%	-26.7%	-18.6%	-13.9%	-6.3%	-29.0%	-10.5%	15.2%	-16.4%	-3.8%
17-Jan	-23.1%	-22.4%	-10.0%	-11.1%	-8.6%	-12.1%	-32.1%	-27.3%	-24.0%	-19.4%	-20.2%	-14.0%	-3.0%	-25.4%	-12.6%	17.3%	-17.1%	-0.7%
24-Jan	-19.9%	-19.4%	-9.5%	-11.2%	-6.9%	-11.1%	-31.7%	-27.1%	-23.8%	-21.3%	-20.8%	-13.5%	-1.0%	-16.5%	-13.2%	17.0%	-16.3%	0.9%
31-Jan	-14.9%	-14.6%	-5.9%	1.8%	-3.8%	-10.1%	-27.3%	-22.8%	-20.5%	-1.2%	-13.6%	-10.1%	1.9%	-12.3%	-8.9%	16.2%	-11.6%	4.7%
7-Feb	-20.6%	-22.3%	-6.5%	2.1%	-5.4%	-12.3%	-31.6%	-25.4%	-22.1%	-20.1%	-15.8%	-12.5%	-3.6%	-27.7%	-10.2%	13.4%	-14.2%	-2.6%
14-Feb	-18.3%	-18.2%	-5.7%	3.1%	-2.2%	-11.8%	-24.6%	-22.2%	-21.6%	-16.7%	-17.2%	-13.1%	-6.0%	-28.0%	-10.9%	9.4%	-12.6%	1.6%
21-Feb	-15.6%	-15.7%	-4.9%	3.2%	0.1%	-9.4%	-21.2%	-17.8%	-20.5%	-11.2%	-13.7%	-10.5%	1.8%	-11.2%	-8.6%	27.5%	-10.0%	2.6%
28-Feb	-9.3%	-8.1%	-5.3%	4.7%	0.2%	-9.2%	-20.2%	-15.2%	-16.6%	-13.6%	-11.9%	-8.1%	3.2%	-2.0%	-6.4%	28.1%	-7.7%	2.3%
7-Mar	-11.8%	-10.1%	-2.4%	7.4%	3.7%	-5.9%	-20.6%	-13.5%	-16.1%	-12.0%	-8.6%	-3.9%	10.3%	-5.0%	2.1%	53.4%	-5.6%	2.2%
14-Mar	-7.4%	-1.6%	2.3%	12.6%	5.8%	-5.9%	-14.3%	-10.3%	-8.9%	-8.4%	-3.0%	-1.8%	13.7%	4.0%	5.9%	54.0%	-1.3%	4.2%

These plazas now have more transactions than they did during pre-COVID-19 times. The improved variances at Coronado, Ponkan, Mount Plymouth and Coral Hills may have to do with land development and to ramp-up for Wekiva Parkway.

The increased traffic volumes passing through the Pine Hills, Conway and Hiawassee mainline plazas may be the result of the early completion of significant portions of the I-4 Ultimate improvements. The lower levels of congestion on I-4 have resulted in increased traffic volumes, some of it coming from S.R. 408. The variances at Pine Hills have been positive since the last week in January and at Conway since the middle of February.

Not all mainline plazas have recovered to pre-COVID-19 conditions. The mainline plazas on S.R. 417 and, to a lesser degree, the mainline plazas on S.R. 528 still have the largest negative variances. The transaction variances at the John Young Parkway, Boggy Creek, Curry Ford, University, Beachline and Dallas mainline plazas have improved but continue to lag behind the other mainline plazas. The mainline plazas on S.R. 417 between Orlando International Airport and the theme parks have consistently had the larger impacts compared to other plazas. Some items to note are that the transaction data for University plaza is incomplete due to a conversion to the Infinity system; the Easter holiday was late in 2019 (April 21) and early in 2020 (April 12); and since tolls that were collected at the former Airport plaza are now collected by FTE, these transactions are not included.

Figure 1-7 contains a summary of daily systemwide toll revenue, between March 2, 2020 and March 15, 2021, along with toll revenue from the prior year.

Figure 1-7
Estimated Daily Toll Revenue

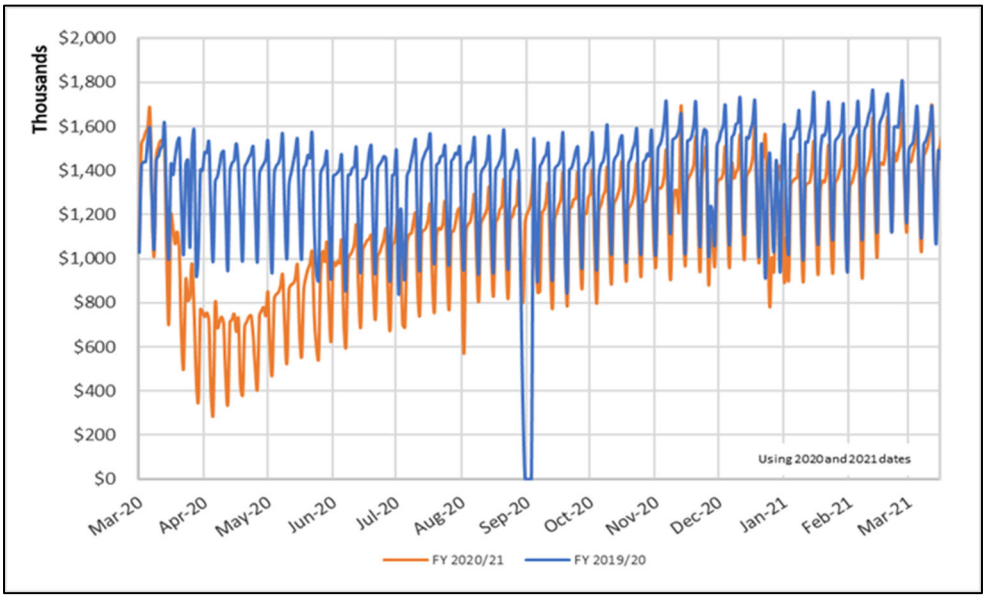


Figure 1-8 has the variances in aggregate daily toll revenue, FY 2020/21 over FY 2019/20. These are the rolling average of daily revenue variance over the prior week. The patterns in transaction and revenue variances are very similar. The rolling average of daily transactions and daily revenue are shown together in **Figure 1-9**. The variance in revenue has benefited from the changes in toll policy, specifically the toll rate adjustment and new PBP toll rate, instituted on July 1, 2020. Prior to that date, the revenue variance has generally been lower than the transaction variance. Since that date, the revenue variance has been noticeably higher than the transaction variance. Over the last nine months, the revenue variance has been 4.3% higher (or better) than the transaction variance. Also, both the transaction and revenue variances have recovered during February and early March 2021.

Figure 1-8
Variance in Daily Toll Revenue (Rolling Average)

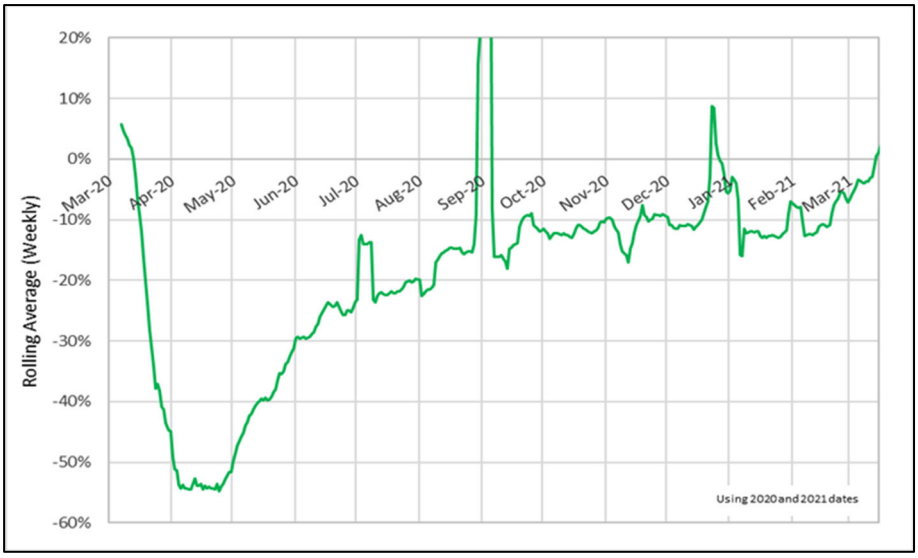
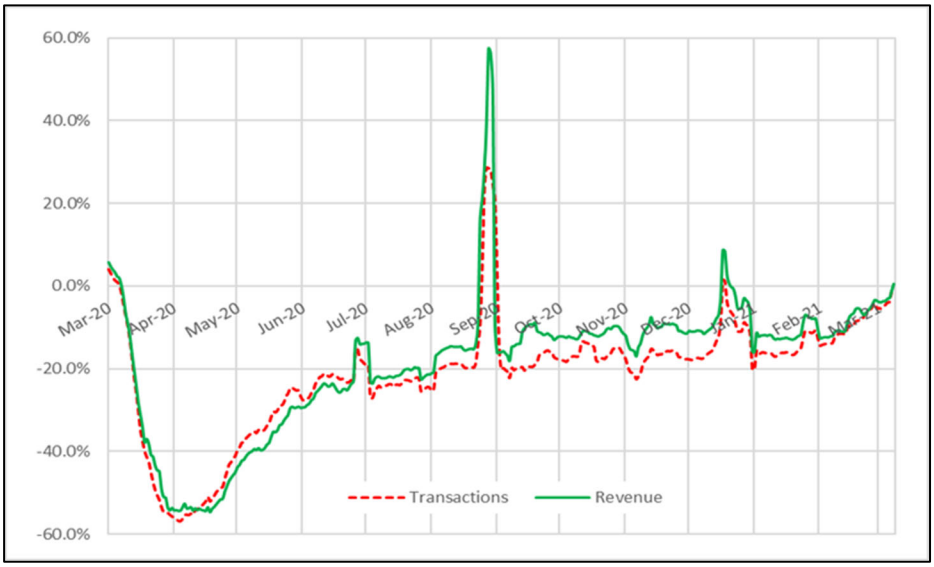


Figure 1-9
Comparison Between Transaction and Revenue Variance



1.5 System Historical Transactions and Toll Revenues

1.5.1 DEFINITIONS

When a customer drives through a CFX toll location and pays the toll, the transaction and revenue is classified as "Paid In-Lane." The customer has the option to pay the toll in the lane with cash or through ETC. When a customer drives through a CFX toll location and does not pay the toll while passing through, the transaction and revenue is classified as "Unpaid In-Lane." The only way for the customer to pay the toll afterwards is through a process known as Pay by Plate (PBP). Non-revenue producing transactions are another very small portion of Unpaid In-Lane transactions. Total transactions are the sum of paid in-lane and unpaid in-lane transactions. Total revenue is the sum of paid in-lane revenue and the revenue collected through PBP, estimated as an accrued amount.

PBP toll invoicing is an option for customers that do not pay the toll in the lane and choose to forgo the benefits of lower ETC toll rates. With PBP, an image of the customer's license plate is captured when the vehicle passes through the toll plaza location. During processing, the cash toll rate for that particular plaza plus a 20-cent per transaction processing fee is assessed to the vehicle's owner. A monthly toll invoice is generated and mailed to the registered owner of the vehicle. Payment is due within 30 days to avoid toll violations and fines. The following section includes a breakdown of transactions and revenues by paid in-lane and PBP.

1.5.2 ANNUAL PAID IN-LANE TRANSACTION AND REVENUE TRENDS

A history of annual paid in-lane transactions and revenues for the seven toll facilities from FY 2001 to FY 2020 is presented in **Table 1-6**. The annual data is based on the CFX Monthly Statistical Reports and is not reconciled to the audited fiscal year end results. Also, more detailed information on history is presented in Chapters 3 through 9 of this report. These historical tables do not include PBP transactions and revenues, only those that are paid in-lane. For this and other reasons, the information presented in this section may differ slightly from the data presented in the FY 2020 Comprehensive Annual Financial Report (CAFR) and other information in this report.

As shown, the total System paid in-lane transactions in FY 2020 decreased by 49.0 million, or 11.2 percent, compared to FY 2019. Paid in-lane revenues experienced a decline of $41.0 million or 9.2 percent during the same period. FY 2020 paid in-lane transactions and revenues were negatively impacted by the effects of the COVID-19 pandemic beginning in March 2020. CFX temporarily suspended cash toll collections shifting those transactions to PBP in the period beginning March 19, 2020 through May 31, 2020 to reduce the potential exposure of both drivers and employees to the COVID-19 virus. Cash toll collections resumed on June 1, 2020. The slower growth in paid in-lane transactions and revenues in FY 2020 can also be attributed to an increase in customers utilizing the PBP program, a trend that has been reported for several years.

S.R. 417 had the greatest number of annual paid in-lane transactions with 125.9 million and the greatest amount of paid in-lane revenue with $133.9 million in FY 2020, which continues to surpass paid in-lane transactions and revenue on S.R. 408. In FY 2020, S.R. 408 had 124.7 million paid in-lane transactions and $123.3 million in paid in-lane revenue. S.R. 528 had 68.0 million paid in-lane transactions and $66.4 million in paid in-lane revenue. S.R. 429 had 52.7 million paid in-lane transactions and $62.5 million in revenue for FY 2020. S.R. 414 experienced 13.1 million

in paid in-lane transactions and $14.1 million in paid in-lane revenue for FY 2020. S.R. 453 had 2.3 million paid in-lane transactions and $1.6 million in paid in-lane revenues in its second full year of operation, which is a slight increase over FY 2019. S.R. 538, the newest facility on the CFX System, had 1.7 million paid in-lane transactions and $2.8 million in paid in-lane revenue for FY 2020.

Historical paid in-lane transactions for the CFX System since FY 2001 are displayed in **Figure 1-10**. The grey line represents the number of paid in-lane transactions and shows how overall transactions have increased over the last 20 years. The bars represent the annual growth (percent change) of transactions. The same information for paid in-lane revenues is depicted in **Figure 1-11**. Paid in-lane transaction and revenue growth patterns exhibited on the System follow roughly the same growth pattern. This pattern does shift in times of toll rate increases, as shown in the revenue growth in FY 2009/2010, FY 2013 and FY 2019.

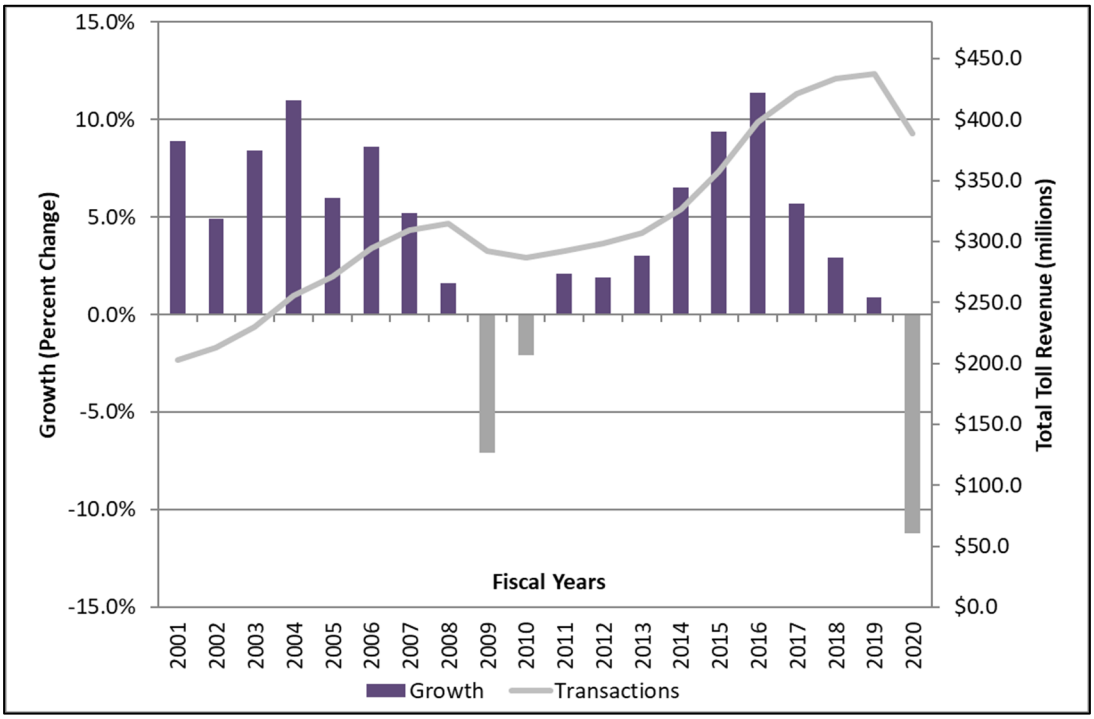
System growth in paid in-lane transactions and revenue was consistently strong up through FY 2007. Transactions and revenue exhibited double-digit growth in FY 2000 and in FY 2004. The growth in paid in-lane transactions and revenue fell to below 5 percent in FY 2002, the first time annual growth rates fell below 5 percent since FY 1992. The downturn in growth was primarily due to a national economic slowdown in the first half of FY 2002, accompanied by the events of September 11, 2001. In FY 2005, System paid in-lane transaction and revenue growth was over 5 percent even though the State of Florida was impacted by four hurricanes that resulted in toll suspensions on all CFX plazas for 21 days in August and September of 2004. Then, in FY 2008 the first signs of the Great Recession appeared with paid in-lane transaction and revenue growth slowing down as the housing and construction industry across the State of Florida slowed down.

Table 1-6
System Totals – Historical Paid In-Lane Transactions and Revenue
FY 2001 – FY 2020

Fiscal Year Ending	S.R. 528	S.R. 408	S.R. 417	S.R. 429	S.R. 414	S.R. 453	S.R. 538	TOTAL	Percent Change
TRANSACTIONS (millions)									
2001 [A]	32.4	104.4	62.3	3.5				202.6	
2002 [B,C]	31.6	110.1	64.9	5.8				212.4	4.8%
2003	33.7	116.1	71.3	9.5				230.6	8.6%
2004 [D]	37.5	124.7	79.6	13.8				255.6	10.8%
2005 [E,F]	39.7	127.8	87.2	16.4				271.1	6.1%
2006 [G]	42.4	135.4	96.2	20.2				294.2	8.5%
2007 [H]	44.5	138.3	102.4	24.4				309.6	5.2%
2008 [I,J]	44.8	139.0	104.5	26.6				314.9	1.7%
2009 [K,L]	40.7	131.3	94.8	25.1	0.6			292.5	-7.1%
2010 [K]	40.9	126.0	89.3	25.0	5.3			286.5	-2.1%
2011	42.5	126.7	90.9	25.9	6.5			292.5	2.1%
2012 [M]	47.5	126.2	90.7	26.4	7.3			298.1	1.9%
2013 [N]	57.6	123.5	90.3	27.2	8.3			306.9	3.0%
2014	59.7	129.7	97.2	30.7	9.5			326.8	6.5%
2015	64.3	138.2	109.3	35.2	10.6			357.6	9.4%
2016 [O]	71.5	146.2	127.4	41.2	12.0			398.3	11.4%
2017 [P]	76.8	147.7	138.1	45.5	12.8			420.9	5.7%
2018 [Q,R,S]	76.7	145.2	145.9	51.7	13.4	0.5		433.4	3.0%
2019 [T]	77.1	141.1	145.5	57.6	13.9	2.2		437.4	0.9%
2020 [U,V,W]	68.0	124.7	125.9	52.7	13.1	2.3	1.7	388.4	-11.2%
TOLL REVENUES (millions)									
2001 [A]	$29.2	$66.2	$41.3	$3.3				$140.0	
2002 [B,C]	$28.7	$69.7	$42.6	$5.1				$146.1	4.4%
2003	$30.6	$73.2	$46.5	$7.2				$157.5	7.8%
2004 [D]	$34.3	$78.7	$51.6	$9.2				$173.8	10.3%
2005 [E,F]	$36.1	$80.4	$56.7	$10.5				$183.7	5.7%
2006 [G]	$38.4	$85.1	$62.6	$13.5				$199.6	8.7%
2007 [H]	$40.0	$86.5	$66.9	$17.4				$210.8	5.6%
2008 [I,J]	$40.1	$86.1	$68.5	$19.0				$213.7	1.4%
2009 [K,L]	$38.5	$88.3	$66.8	$19.0	$0.6			$213.2	-0.2%
2010 [K]	$46.6	$107.7	$79.0	$23.5	$4.2			$261.0	22.4%
2011	$48.4	$108.3	$80.1	$24.4	$5.1			$266.3	2.0%
2012 [M]	$48.7	$107.7	$80.5	$24.9	$5.7			$267.5	0.5%
2013 [N]	$54.5	$119.3	$91.2	$29.4	$7.7			$302.1	12.9%
2014	$56.3	$125.2	$98.3	$33.5	$9.1			$322.4	6.7%
2015	$60.4	$133.0	$110.4	$38.9	$10.4			$353.1	9.5%
2016 [O]	$66.7	$140.1	$129.0	$46.1	$12.0			$393.9	11.6%
2017 [P]	$71.8	$141.0	$140.4	$51.7	$13.0			$417.9	6.1%
2018 [Q,R,S]	$71.8	$138.3	$148.4	$58.3	$13.8	$0.3		$430.9	3.1%
2019 [T]	$73.8	$136.6	$152.6	$66.7	$14.6	$1.3		$445.6	3.4%
2020 [U,V,W]	$66.4	$123.3	$133.9	$62.5	$14.1	$1.6	$2.8	$404.6	-9.2%

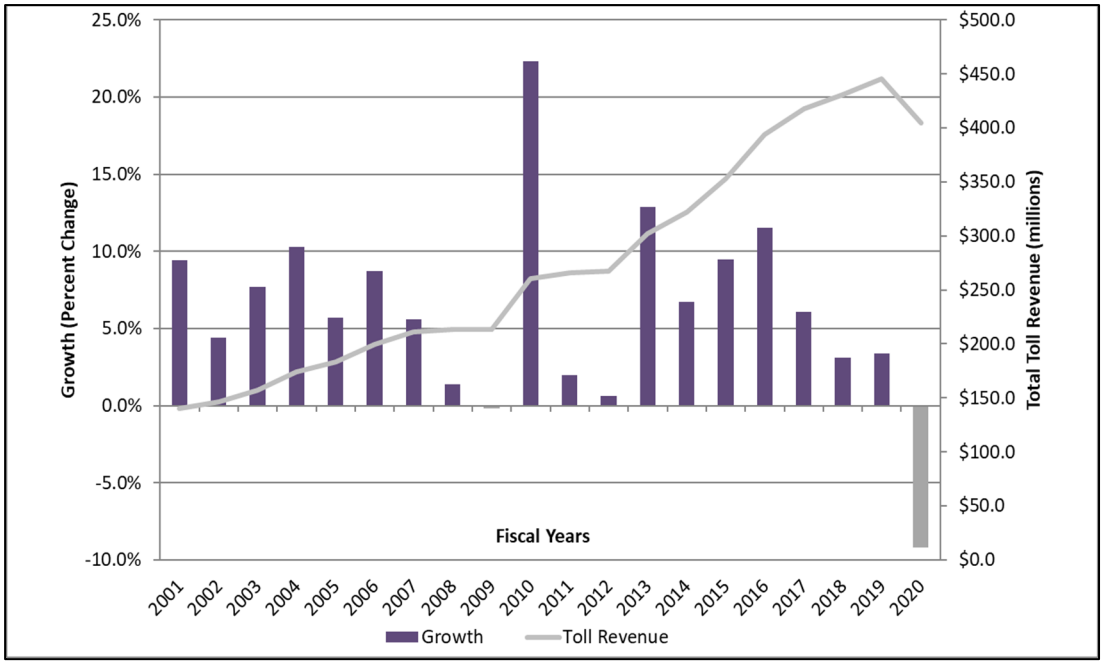
Notes:
A - Forest Lake Plaza on S.R. 429 opened in 2000.
B - C.R. 535 ramps on S.R. 429 opened in 2002.
C - Effects of the events on September 11, 2001.
D - Express lanes opened at University Main plaza.
E - Express lanes opened at Curry Ford and Dean Main plazas.
F - Effects from 2004 hurricane season (4 storms with toll suspensions).
G - Express lanes opened at Boggy Creek, John Young Parkway, and Hiawassee Main Plazas.
H - Express lanes opened at Pine Hills main plaza.
I - Express lanes opened at Conway Main plaza.
J - First effects of national economic recession.
K - Tolls increased Systemwide in April 2009.
L - Coral Hills Plaza opened 2009.
M - Dallas Main Plaza opened to traffic on March 19, 2012.
N - Tolls increased Systemwide in July 2012.
O - Beachline Airport Main plaza closed in March 2016.
P - Effects from Hurricane Matthew in October 2016.
Q - Effects from Hurricane Irma in September 2017.
R - Ponkan Main Plaza opened in July 2017.
S - Mt. Plymouth Main Plaza and Coronado Main Plaza opened in April 2018.
T - Tolls increased Systemwide in July 2018.
U - Poinciana Parkway acquired by CFX in December 2019.
V - Tolls increased Systemwide in July 2019.
W - Effects from Hurricane Dorian in September 2019 and first effects of COVID-19 pandemic began in March 2020.

Figure 1-10
CFX System Historical Paid In-Lane Transactions and Annual Growth
FY 2001 – FY 2020



Source: CFX Statistical Report June 2020

Figure 1-11
CFX System Historical Paid In-Lane Revenue and Annual Growth
FY 2001 – FY 2020



Source: CFX Statistical Report June 2020

In FY 2009, paid in-lane transactions actually decreased by 7.1 percent, which can be attributed to the economic recession and the Systemwide toll rate increase. Paid in-lane revenues only dipped into negative growth in FY 2009. The April 2009 toll rate increase slowed the negative revenue growth in FY 2009 to only -0.2 percent growth. The negative growth would have been worse without the toll rate increase, which included the last three months of FY 2009. The first nine months of FY 2010 were also impacted by the toll rate increase with paid in-lane revenues increasing 22.4 percent in FY 2010, while paid in-lane transactions still experienced a negative 2.1 percent annual growth. Also, during FY 2009, paid in-lane transactions were negatively impacted by two days of toll suspensions during Tropical Storm Fay. FY 2011 through FY 2013 showed stable paid in-lane transaction growth with each year increasing 2 to 3 percent despite the toll rate increase at the beginning of FY 2013. From FY 2014 through FY 2016, or the period of extraordinary growth, paid in-lane transactions on CFX facilities grew at faster rates than those seen prior to the Great Recession. Since FY 2016, paid in-lane transactions increased over prior years, but growth has tapered off, in part due to the migration from paid in-lane to PBP. Paid in-lane revenues climbed to nearly $431 million in FY 2018.

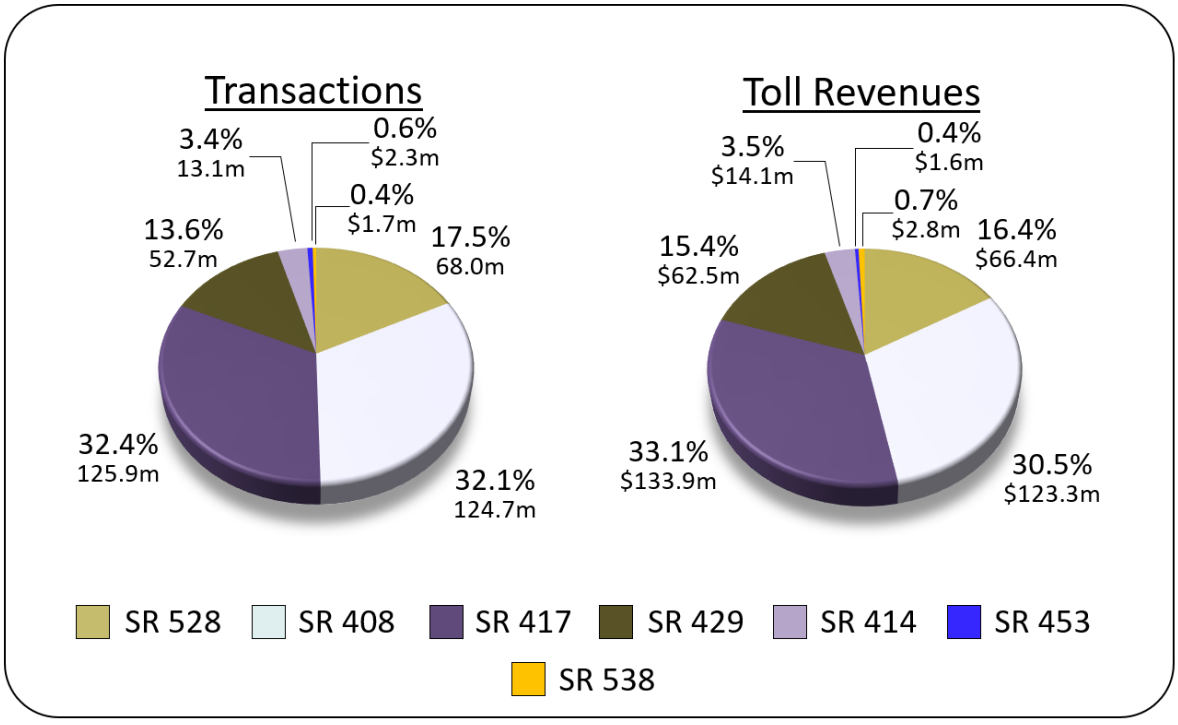
In October 2016 (FY 2017), Hurricane Matthew tracked parallel to the Florida coast as a Category 3 storm with winds up to 130 miles per hour. Tolls were suspended on the CFX System beginning at 8:00 pm on October 5, 2016 through early on October 10, 2016. The toll suspension resulted in a loss of approximately 4.6 million transactions and $4.5 million in toll revenues on the CFX System. In September 2017 (FY 2018), Hurricane Irma tracked parallel to the Florida coast as a Category 4 storm with winds up to 155 miles per hour. Tolls were suspended on CFX toll facilities beginning on September 5, 2017 through September 20, 2017 resulting in a transaction loss of approximately 19.3 million and a toll revenue loss of $19.2 million on the CFX System. In FY 2019, both transactions and revenue increased over FY 2018, due in part to Hurricane Irma, and the increase in transactions and revenue that were lost in FY 2018, but also in part to natural growth on these facilities. Paid in-lane transactions and revenue were 0.9 percent higher and 3.4 percent higher, respectively, than FY 2018. The slower growth in paid in-lane transactions and revenues in FY 2019 can be attributed in part to an increase in customers utilizing the PBP program.

In FY 2020, both transactions and revenue decreased, due to the negative impacts of the COVID-19 pandemic, which was explained in greater detail in Section 1.4. Paid in-lane transactions and revenue were 11.2 percent lower and 9.2 percent lower, respectively, than FY 2019. More customers continued to use the PBP program as well due to the suspension of cash tolls on all CFX facilities from March 19, 2020 to May 31, 2020. September 2019 transactions and revenues were also negatively impacted by toll suspensions during Hurricane Dorian.

1.5.3 ANNUAL PAID IN-LANE TRANSACTIONS AND REVENUE BY FACILITY

Figure 1-12 contains a summary of the FY 2020 paid in-lane transactions and revenues by facility, both the number and as a percentage of the System. The largest share of the paid in-lane transactions and revenue were reported on S.R. 417, with 32.4 percent, or 125.9 million of the paid in-lane transactions and 33.1 percent, or $133.9 million of the revenues. Paid in-lane transactions on S.R. 408 were 32.1 percent of the System or 124.7 million and paid in-lane revenues were 30.5 percent of the System or $123.3 million. S.R. 528 comprised 17.5 percent, or 68.0 million of the paid in-lane transactions and 16.4 percent, or $66.4 million of the paid in-lane revenues. S.R. 429 paid in-lane transactions represented 13.6 percent, or 52.7 million of the System paid in-lane transactions and 15.4 percent, or $62.5 million of the System paid in-lane revenues. S.R. 414 paid in-lane transactions were reported at 13.1 million or 3.4 percent, while paid in-lane revenues were reported at $14.1 million or 3.5 percent of the System paid in-lane revenues. Paid in-lane transactions on S.R. 453 were 2.3 million or 0.6 percent of the System and paid in-lane revenues were $1.6 million or 0.4 percent of the System. S.R. 538 represented 1.7 million or 0.4 percent of System paid in-lane transactions and $1.6 million or 0.4 percent of System paid in-lane revenues for FY 2020.

Figure 1-12
CFX System Paid In-Lane Transactions and Revenue by Facility
FY 2020



Source: CFX Statistical Report June 2020

1.5.4 ANNUAL PBP TRANSACTION AND REVENUE TRENDS

A history of annual PBP transactions and revenue on the total CFX System from FY 2011 to FY 2020 are presented in **Table 1-7**. PBP transactions and revenue are recorded by toll location and accrued monthly by plaza group, however Table 1-7 shows the annual totals for the CFX System as reported at year end.

Table 1-7
CFX System – Historical PBP Transactions and Revenue
FY 2011 – FY 2020

Fiscal Year	Transactions (millions)	Percent Change	Toll Revenues (millions)	Percent Change
	TRANSACTIONS (millions)			
2011	3.1		$3.3	
2012	4.4	41.9%	$4.6	39.4%
2013	5.4	22.7%	$6.9	50.0%
2014	6.8	25.9%	$8.4	21.7%
2015	8.8	29.4%	$11.0	31.0%
2016	12.2	38.6%	$15.7	42.7%
2017	14.6	19.7%	$22.4	42.7%
2018	21.6	47.9%	$24.4	8.9%
2019	43.6	101.9%	$49.9	104.5%
2020	48.6	11.5%	$57.7	15.6%

Source: Unaudited data provided by CFX

PBP transactions have increased from 3.1 million in FY 2011 to 48.6 million in FY 2020, while PBP revenues have increased from $3.3 million to $57.7 million over the same period. In FY 2020, PBP transactions increased 11.5 percent and PBP revenues increased 15.6 percent over FY 2019. This increase in PBP transactions and revenues in FY 2020 contributed to the slower growth and/or decline in paid in-lane transactions and revenues compared to FY 2019. The trends show that more customers are choosing the PBP method of payment. As previously mentioned, CFX temporarily suspended cash toll collection on all facilities from March 19, 2020 to May 31, 2020 in response to the COVID-19 pandemic. During this time, customers were able to pay via ETC or PBP. Growth in PBP transactions and revenues is expected to decline beginning in FY 2021 due to a new PBP toll rate adopted by the CFX Board that went into effect on July 1, 2020, at which time the PBP toll rate at all toll locations was increased to twice the ETC toll rate. Due to the new PBP toll rate implemented, it is anticipated that a portion of customers currently paying via PBP will switch to paying in the lane through ETC to avoid the higher toll rate.

1.5.5 MONTHLY PAID IN-LANE TRANSACTION SEASONAL VARIATION

In **Table 1-8**, monthly paid in-lane transactions are normalized to the average number of paid in-lane transactions per day. Normally, using the average number of paid in-lane transactions per day allows for an easy comparison of the variations in relative travel demand over the year. Most often the seasonal pattern of usage changes slightly from year to year based on the number of weekdays in a given month, but in FY 2020 this seasonality was overshadowed by the impacts in

travel demand from the COVID-19 pandemic. Therefore, the factors in Table 1-8 should not be relied on for typical monthly seasonal trends on the CFX System.

The average number of paid in-lane transactions per day on the System in FY 2020 ranged from a high of 1,308,300 in February 2020 to a low of 528,200 in April of 2020. March through June transactions were negatively impacted by the COVID-19 pandemic. This data is presented in a graphical format in **Figure 1-13**. Each month's average paid in-lane transactions per day appear as a percentage of the average for the fiscal year. As shown in the figure, February paid in-lane transactions were 23.3 percent above average and April paid in-lane transactions were 50.2 percent below the average. February 2020 included an additional day of toll collection compared to February 2019 due to the leap year. April 2020 was the first full month with negative COVID-19 impacts.

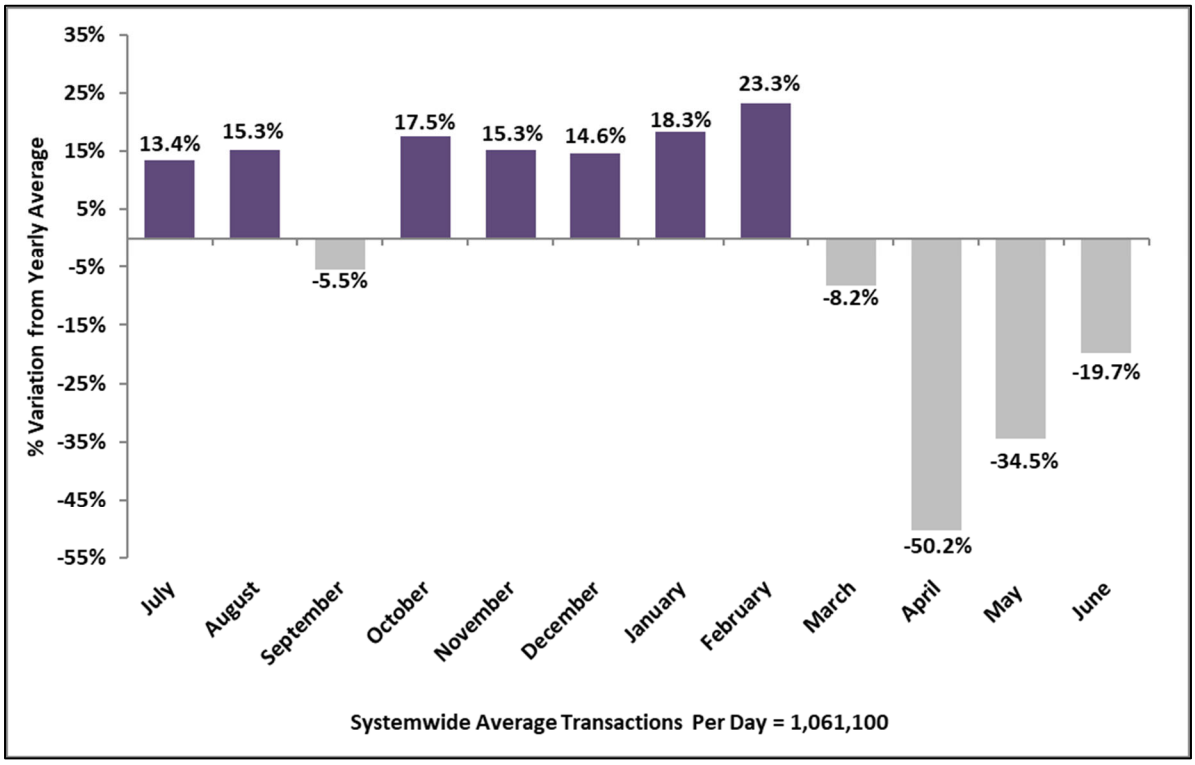
Typically, paid in-lane transactions were are lower than average for the first half of the year and higher than average for the second half of the year. This is a normal pattern for seasonal variation, with the spring months being the peak season, due to an increase in the number of tourists and seasonal residents in the area. However, the COVID-19 pandemic negatively impacted the pattern for March through June. September 2019 was also negatively impacted by toll suspensions during Hurricane Dorian. The seasonal patterns vary on different facilities, with the Beachline Expressway having the strongest seasonal variation due to its proximity to the Orlando International Airport (OIA) and the tourist attractions.

Table 1-8
CFX System - Monthly Seasonal Variation in Paid In-Lane Transactions
FY 2020

Month	Number of Days in Month	Paid In-Lane Transactions	Average Transactions Per Day	Seasonal Factor
July	31	37,291,028	1,202,900	1.134
August	31	37,925,544	1,223,400	1.153
September	30	30,080,763	1,002,700	0.945
October	31	38,666,814	1,247,300	1.175
November	30	36,692,525	1,223,100	1.153
December	31	37,690,383	1,215,800	1.146
January	31	38,930,230	1,255,800	1.183
February	29	37,941,036	1,308,300	1.233
March	31	30,189,668	973,900	0.918
April	30	15,847,296	528,200	0.498
May	31	21,545,363	695,000	0.655
June	30	25,557,516	851,900	0.803
Average		***32,363,181***	***1,061,100***	***1.000***
Total Year	**366**	**388,358,166**		

Source: CFX Statistical Report June 2020

Figure 1-13
CFX System Variation in Paid In-Lane Transactions Per Day, By Month
FY 2020



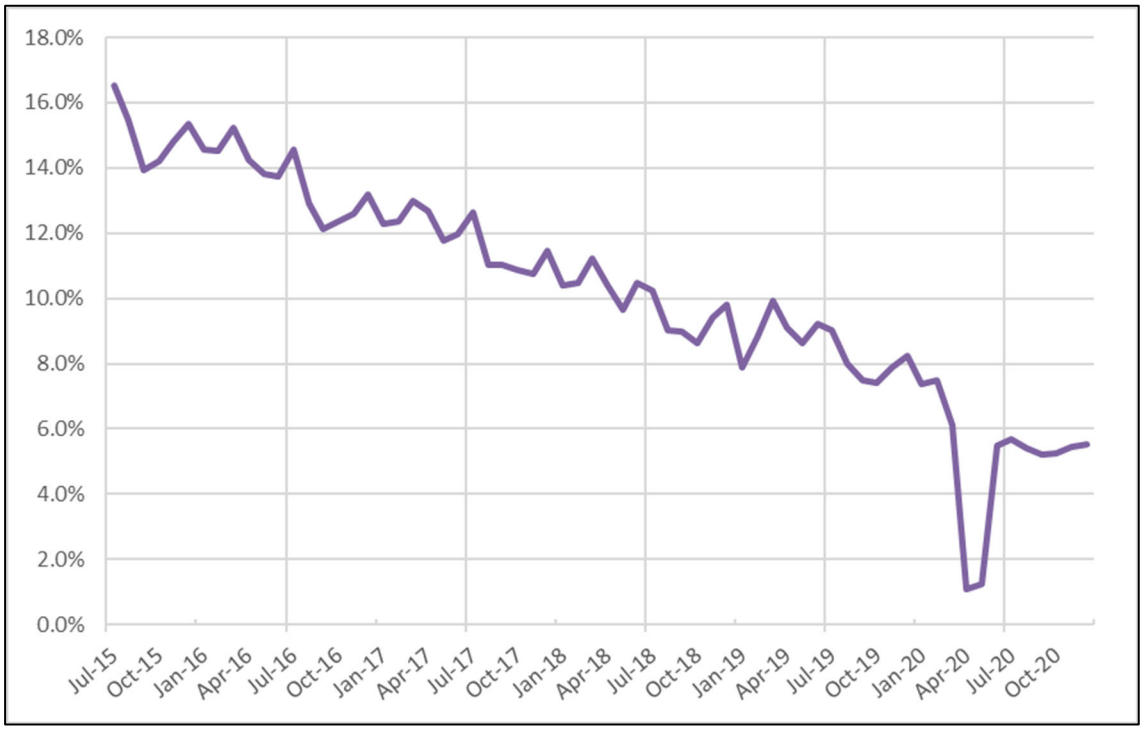
Source: CFX Statistical Report June 2020

1.5.6 RECENT TRENDS

Several trends in transaction and revenue conditions influence recent and future results. Some of these are long-term trends and others have been developing over the past few years. We have used the latest information for the first half of FY 2021.

The proportion of paid in-lane transactions that were paid with cash has been declining. **Figure 1-14** contains a graph of the proportion paid with cash by month. At the beginning of FY 2016, approximately 15% of paid in-lane transactions were paid with cash. During the first half of FY 2021, only 5% of these paid in-lane revenue transactions were paid with cash. An increasing share of the customers who pay in the lane are paying with ETC. The period when cash toll collection was suspended is visible in the graph.

Figure 1-14
Proportion Paid In-Lane Transactions Paid with Cash
By Month, July 2015 to April 2021

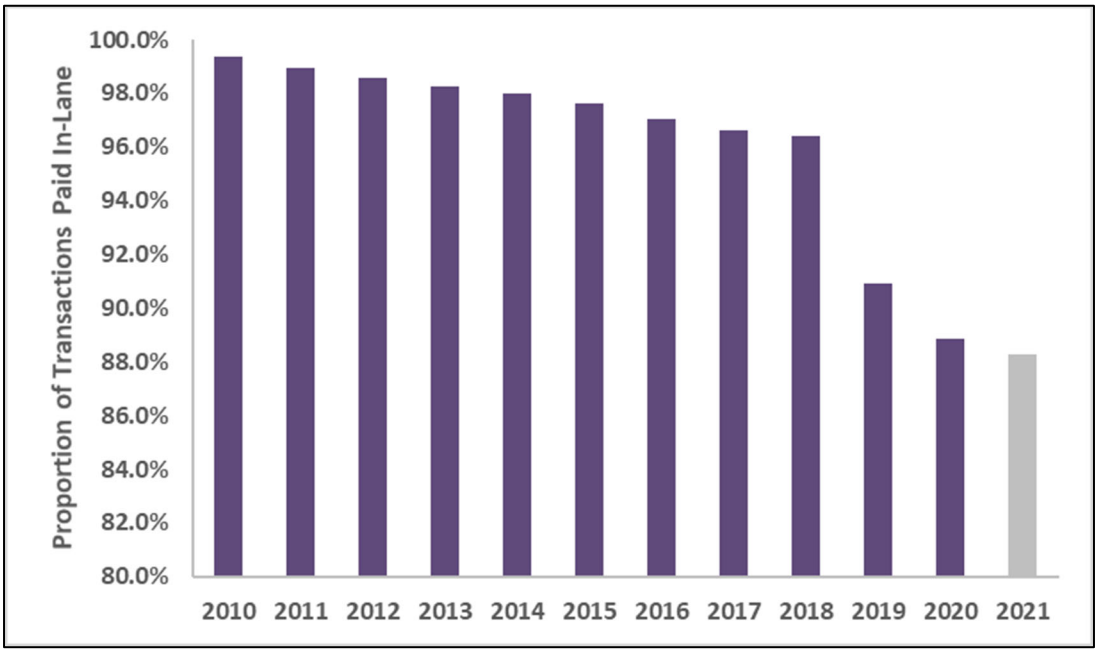


Source: CFX Monthly T&R Analysis

The proportion of transactions that are paid in-lane has also been declining for some time. **Figure 1-15** is a graph with the proportion of all transactions that were paid in-lane since FY 2010. In FY 2010, 99.3 percent of all paid in-lane transactions were paid with cash or ETC. In FY 2020, this number dropped to 88.9 percent. Expectations are that this value will decline further in FY 2021 to 88.3 percent. A similar pattern occurs on all CFX expressways. This means that an increasing number of customers are using the PBP process.

This recent trend is unexpected, since CFX has taken many steps to incentivize customers to pay tolls in the lane. It is anticipated that future paid-in lane transactions will increase over time due to the implementation of the new PBP toll rates. Customers can pay with cash at every toll location except the five toll locations associated with the recently opened S.R. 429/Wekiva Parkway and the recently opened S.R. 538/Poinciana Parkway. CFX offers convenient ways for customers to obtain transponders (including free sticker tags) and provides easy ways to put funds into their accounts (including the ability use cash in the reload lanes at several mainline toll plazas).

Figure 1-15
Proportion of Transactions Paid In-Lane
FY 2010 – FY 2021



Source: CFX Monthly T&R Analysis

The increase in the number and proportion of customers choosing PBP means that it takes CFX a longer time and costs more to collect the toll. Furthermore, CFX is not able to collect all toll revenue owed by PBP customers. Like the private sector, CFX now has an accounts receivable (AR). The December 2020 aging report is provided in **Table 1-9**. A portion of the initial unpaid in-lane transactions are recognized and reclassified as transactions by ETC account holders. CFX now accrues revenue for unpaid in-lane transactions at approximately 56 percent of the initial billed amount.

Table 1-9
CFX Pay by Plate Aging Report
As of December 31, 2020

CENTRAL FLORIDA EXPRESSWAY AUTHORITY
PAY BY PLATE AGING REPORT
AS OF DECEMBER 31, 2020

Month UTN/PBP was Created	Total Transactions Associated with an UTN/PBP(1)	Toll Revenue Billed	Toll Revenue Paid-to-Date	Toll Revenue M-Tolled-to-Date(2)	Total Toll Revenue Collected-to-Date	Percentage of Billed Revenue Collected-to-Date
Dec-18	2,103,211	$2,512,093.99	$1,876,973.26	$161,876.70	$2,038,849.96	81.16%
Jan-19	5,109,472	$6,154,818.14	$4,535,945.77	$477,281.75	$5,013,227.52	81.45%
Feb-19	6,126,952	$7,551,176.68	$5,469,370.89	$622,423.20	$6,091,794.09	80.67%
Mar-19	4,912,381	$5,888,459.43	$4,188,153.57	$470,218.16	$4,658,371.73	79.11%
Apr-19	5,109,028	$5,973,670.26	$4,172,611.51	$501,144.89	$4,673,756.40	78.24%
May-19	4,243,152	$5,424,858.80	$3,743,893.45	$464,621.92	$4,208,515.37	77.58%
Jun-19	4,804,660	$5,978,697.06	$4,059,803.40	$549,262.27	$4,609,065.67	77.09%
Jul-19	5,332,720	$6,534,580.24	$4,330,772.16	$689,754.54	$5,020,526.70	76.83%
Aug-19	6,260,606	$7,581,858.70	$4,988,385.59	$784,552.87	$5,772,938.46	76.14%
Sep-19	5,332,685	$6,482,173.99	$4,311,206.32	$646,555.72	$4,957,762.04	76.48%
Oct-19	6,371,641	$7,713,379.96	$4,927,981.73	$824,506.79	$5,752,488.52	74.58%
Nov-19	6,055,534	$7,448,412.08	$4,828,952.99	$812,530.23	$5,641,483.22	75.74%
Dec-19	6,178,315	$7,702,838.60	$4,870,296.34	$871,673.27	$5,741,969.61	74.54%
Jan-20	7,434,890	$8,947,588.80	$5,350,257.66	$1,107,724.59	$6,457,982.25	72.18%
Feb-20	7,978,541	$10,069,822.29	$5,789,208.79	$1,225,669.34	$7,014,878.13	69.66%
Mar-20	6,160,740	$7,571,651.97	$4,154,806.71	$917,761.74	$5,072,568.45	66.99%
Apr-20	6,000,728	$6,478,287.06	$3,502,319.16	$775,707.90	$4,278,027.06	66.04%
May-20	5,064,318	$5,238,909.26	$2,737,257.40	$630,423.66	$3,367,681.06	64.28%
Jun-20	6,092,685	$6,276,270.15	$3,135,612.42	$696,199.10	$3,831,811.52	61.05%
Jul-20	5,535,821	$7,318,639.11	$3,226,258.99	$822,030.81	$4,048,289.80	55.31%
Aug-20	6,375,974	$11,912,400.76	$4,537,100.93	$1,093,943.47	$5,631,044.40	47.27%
Sep-20	5,950,316	$11,170,333.26	$3,867,863.39	$909,017.60	$4,776,880.99	42.76%
Oct-20	5,923,274	$11,093,561.33	$3,352,324.30	$765,287.49	$4,117,611.79	37.12%
Nov-20	6,238,481	$11,586,672.15	$2,798,366.88	$552,943.60	$3,351,310.48	28.92%
Dec-20	6,188,390	$11,470,638.07	$1,145,128.46	$304,658.29	$1,449,786.75	12.64%
TOTALS	**142,884,515**	**$192,081,792.14**	**$99,900,852.07**	**$17,677,769.90**	**$117,578,621.97**	**61.21%**

(1) Transactions associated with an PBP could have occurred up to one year prior to PBP creation.
(2) M-tolls are paid from an E-PASS account after the PBP is created.

Source: CFX Statistical Report December 2020

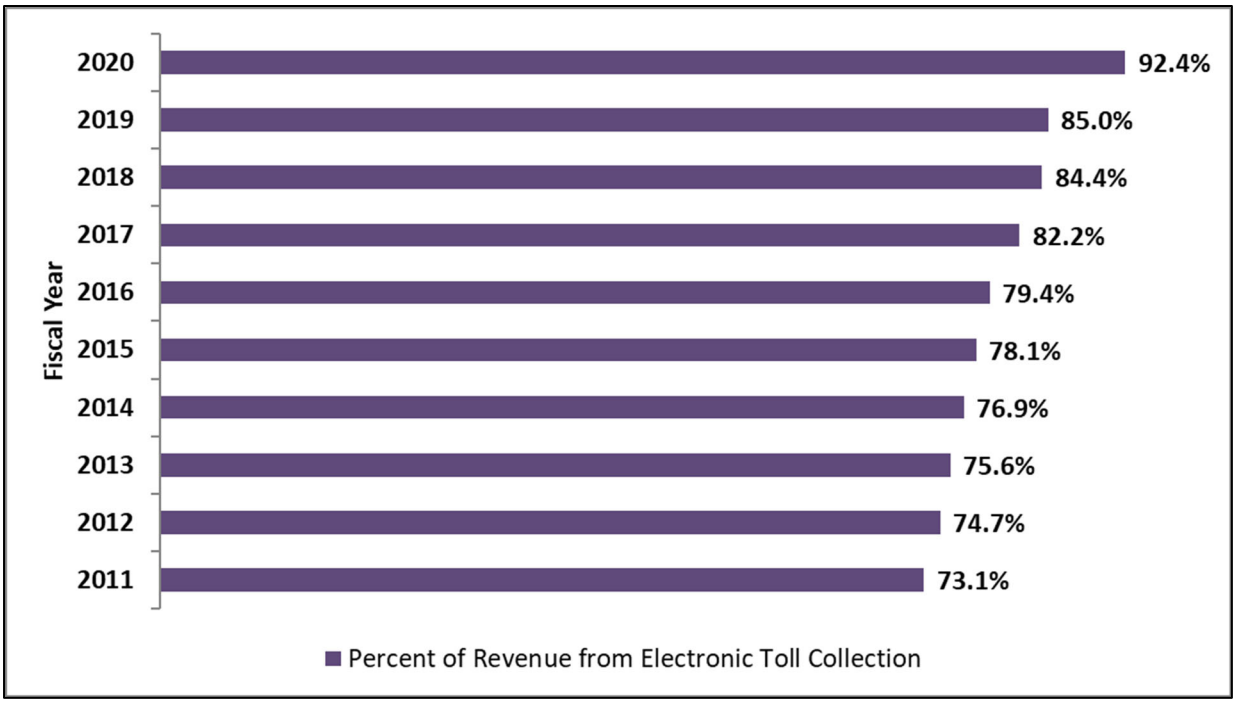
1.6 ETC Usage

In 1994, CFX introduced the first ETC program in Florida, known as E-PASS. During that year there were approximately 2,300 E-PASS transponders in use on the System. As of FY 2020 the number has grown to 912,619 transponders and approximately 539,700 active E-PASS accounts. As shown in **Figure 1-16**, paid in-lane revenues collected through ETC during FY 2020 accounted for 92.4 percent. PBP revenues are not included. The percent of paid in-lane revenues from ETC has grown steadily for the past 10 years, from only 73.1 percent in FY 2011. ETC transactions account for over 90 percent of daily paid in-lane revenue on all CFX System facilities. Many customers purchase E-PASS to take advantage of the lower electronic toll rate and pay on average 23 percent less in tolls. In FY 2013, E-PASS became interoperable with North Carolina Quick Pass and Georgia Peach Pass. This means that Quick Pass and Peach Pass transponders are accepted on CFX facilities and E-PASS transponders are accepted on the North Carolina and Georgia facilities. ETC usage is still expected to increase as customers shift to ETC to take advantage of

the lower ETC toll rate and convenience of paying tolls electronically, especially with implementation of PBP toll rates that are now twice the ETC toll rate as of July 2020 (FY 2021).

Beginning May 11, 2016, CFX implemented a pilot program called The Reload Lane to encourage and increase E-PASS usage. CFX offered this drive-through lane on S.R. 408 at the Conway Main Plaza for customers to sign up for an E-PASS electronic transponder or replenish an existing E-PASS account from 6:00 a.m. to 8:00 p.m. daily. This program was the first of its kind in the continental United States and provided customer convenience and multiple payment options (cash, check, and debit/credit card). The program was expanded to S.R. 417 and S.R. 429 in FY 2017. Due to the success of this program, the CFX Board approved the expansion of the Reload Lane capabilities to all manned toll plaza lanes on all system facilities, expected to be completed by FY 2022.

Figure 1-16
CFX System Percent of Paid In-Lane Revenue from Electronic Toll Collection
FY 2011 – FY 2020



Source: CFX Statistical Report June 2020

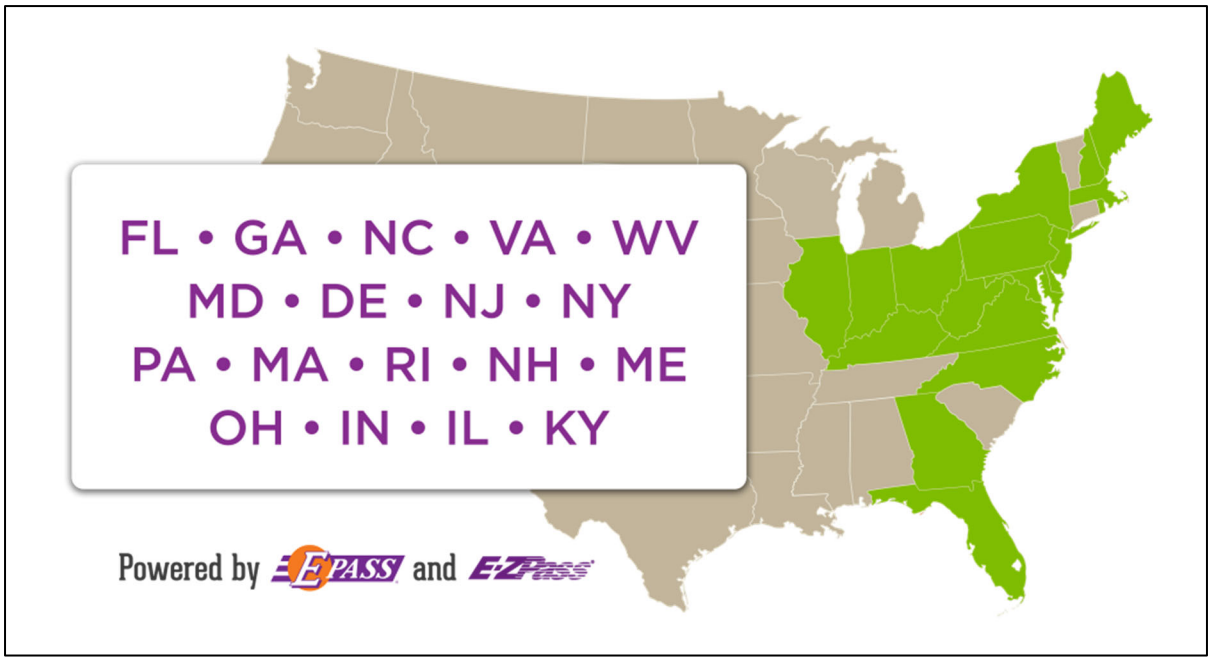
CFX continues to offer toll discount incentives to customers through various discount programs. The Beltway Discount Program, implemented in July 2015, offers discounts for transactions on S.R. 417, S.R. 429 and S.R. 414 during construction activities on I-4 through the end of FY 2021. Also, the Customer Loyalty Discount Program introduced in May 2016 offers discounts to frequent users of all facilities for E-PASS transactions. Both of these programs are discussed in more detail in Section 1.3.1 of this chapter. Recently, CFX began offering CollegePass in its first branded E-PASS partnership with the University of Central Florida (UCF), the University of Florida (UF) and Florida State University (FSU). These special sticker tags cost $18.50 plus tax and an additional $10 for new customers to activate a prepaid toll account. CollegePass works the same

way as regular sticker tag transponders and offers the same discounts and benefits exclusive to E-PASS customers. Regular sticker tags are still available at no cost to the customer.

In November 2017, CFX announced the development of a interoperability agreement with the E-ZPass group, the largest group of toll road operators in the United States. The agreement made CFX the first expressway system in Florida to accept E-ZPass, which is a network of toll road agencies operating from Maine to North Carolina and west through Illinois. Following the announcement of the new agreement, CFX unveiled a new portable transponder that would be accepted on facilities that use both E-PASS and E-ZPass, called the E-PASS Xtra.

In 2020, CFX introduced Uni, a portable toll pass. Uni is the only Florida-based transponder that works in 18 states with all the benefits of E-PASS. Customers can enjoy benefits including one account and one invoice for travel in 18 states, no account fees, transferrable from vehicle to vehicle, works with rental cars and motorcycles, and pays for parking at Orlando International Airport. Uni offers the same benefits as E-PASS Xtra, but with newer, future-ready toll technologies.

Uni goes where you go.



1.7 Forecasting Methodology

The estimates of future annual T&R for the CFX System, contained in this annual report, were derived from a complex process involving both a traditional four-step, travel demand model and a series of T&R models both designed specifically for this purpose. The overall approach was to develop estimates of future paid in-lane transactions and then separate estimates of future unpaid in-lane transactions. The forecasts of paid in-lane transactions were obtained through the application of annual growth rates by plaza group. The early-year growth rates came from recent

experience and trends and the outer-year growth rates reflect results from the travel demand model. With estimates of both types of transactions, the final step was to prepare estimates of future toll revenue and the effects of the discount programs. At the risk of over-simplification, the forecasts of future toll revenues were estimated as the sum of the product of the traffic forecasts (converted to the number of annual transactions) and the toll rate at each tolling point on the CFX System. This section of the report provides an overview of the forecasting methodology and general approach used to estimate T&R.

1.7.1 TRAVEL DEMAND MODEL

The long-term growth rates are based on results from the series of travel demand models known as the CFX Model 3.X. These models were developed and continually improved versions the prior model. The more recent model CFX Model 3.3 has been used for project-specific forecasts including the S.R. 538/Poinciana Parkway. The foundation for the model used was the 2009 Orlando Urban Area Transportation Study (OUATS) Model, developed by MetroPlan Orlando. Model features outside of the MetroPlan Orlando area (Orange, Seminole and Osceola Counties) are based on the 2005 Central Florida Regional Planning Model (CFRPM) produced by Florida Department of Transportation, District 5.

The models were calibrated to recent conditions, including socioeconomic (SE) data from the US Census and Woods and Poole data in the traditional CFRPM zone systems. The calibration was based on the transportation networks taken from the two operational models. The networks and associated counts were reviewed using aerial photography and updated as necessary. Data from the National Highway Travel Survey (NHTS) Florida was acquired and used to calibrate the trip length distributions for five trip purposes (home-based work, home-based shopping, home-based social recreation, home-based other and non-home-based trips). The treatment of external trips was also carefully reviewed and improved, as was the use of time penalties and turn prohibitions.

To make the model more sensitive to network and tolling considerations, it was calibrated to match historical traffic counts on mainline and ramp segments on the CFX System. In the validation year, almost all transactions were Paid In-Lane transactions. The calibration process utilized an approach called Origin-Destination Matrix Estimation (ODME) to enhance the replication of observed traffic patterns, especially on the CFX System. Technical documentation of the model development process is available separately. At the conclusion, the model provided a very close fit to travel patterns in general and especially close to travel on the CFX System.

Turning to the production of traffic forecasts, SE data forecasts were developed in three planning horizon years (2025, 2035, and 2045) corresponding to the years with SE data forecasts. The SE data forecasts were developed from a combination of growth rates by county and the spatial pattern of development from the MPO plans. Population growth rates were developed from the Medium level population projections by county from the most recent publication by the Bureau of Economic and Business Research (BEBR), College of Business Administration at the University of Florida. Forecasts of employment were based on estimates of future employment by county produced by Woods and Poole. Control totals for each county by data set were developed and applied to the spatial distribution of growth by zone as adopted by the MPOs.

Future year transportation networks were created for each of the planning horizon years. The future year networks were updated to include the latest network improvements from the Long-

Range Transportation Plans (LRTPs) and Transportation Improvement Programs (TIPs) for all MPOs covered by the model. These included MetroPlan Orlando, Lake-Sumter MPO, Space Coast TPO, River to Sea TPO and Polk County TPO. The future networks included all improvements identified in the CFX Work Program and Master Plan. The future year networks also included improvement projects identified in the Florida DOT Strategic Intermodal System's (SIS) 1st and 2nd 5-year plans, and SIS Cost Feasible 2040 Plan, as well as Florida Turnpike Enterprise's 5-Year Work Program along with the 2010 Update of Florida's Turnpike Enterprise Master Plan.

The Customer First Toll Policy, adopted by the CFX Board for implementation in FY 2018, was incorporated in the travel demand model. In this way, the model provided direct estimates of the effect of future SE data, network improvements and toll rate adjustments on CFX System traffic.

1.7.2 HISTORIC TRANSACTIONS AND REVENUE

The T&R Model was built on an up-to-date history of transactions and revenue for each plaza group by month, found in the CFX Monthly Statistical Report. The data, which describes the paid in-lane transactions and revenue, has been used in the past as the basis for development of the travel demand model and for the T&R estimates. In prior forecasts, the impacts of Uniform Toll Notices (UTNs) and PBP were handled separately at a system level. Given recent changes, these are now separately forecast by plaza group. Since the historic data includes the effect of vehicle class on T&R, the forecasts of future T&R already also include these effects.

Data on unpaid in-lane transactions and revenue also comes from the CFX Monthly Statistical Report and the **2020 Comprehensive Annual Financial Report** (2020 CAFR). The separate analysis and forecasts of unpaid in-lane (PBP) transactions and revenue necessarily includes violations and leakage.

The revenue impacts of the discount programs are based on information contained in the 2020 CAFR and handled separately at a system level.

1.7.3 PAID IN-LANE TRANSACTIONS

The T&R Model is a spreadsheet that includes a combination of history and prior forecasts, along with the new forecasts.

Recent paid in-lane transaction data was used to assess the impacts of the three recent weather events (Hurricane Matthew in FY 2017, Hurricane Irma in FY 2018 and Hurricane Dorian in FY 2020). The impacts of the COVID-19 pandemic, which began in March 2020, were also considered. This data was then used to identify growth trends by plaza group with and without the hurricanes and COVID-19. The transaction estimates for FY 2021, the first year in the forecast, were developed from the first half year of actual results extended to the remainder of the year. The estimates for FY 2022 and beyond were adjusted or "trued up" to reflect achievable expectations for the first fiscal year in the new forecast.

Then, mid-term growth rates were developed from the combination of recent growth and the growth rates derived from the travel demand model. The long-term growth rates come from the travel demand model with some adjustment.

The effect of the combination of travel demand model and the T&R model is such that the paid in-lane transaction estimates are controlled to match base year values. Growth in the paid in-lane transaction estimates is primarily determined by changes from the travel demand model,

modified by recent experience. This includes the effects of changes in the spatial pattern of SE activity, changes in transportation network and changes in toll rate.

1.7.4 PAY BY PLATE (PBP) TRANSACTIONS

The estimates of PBP transactions utilize preliminary transaction results by plaza group from FY 2019 and FY 2020 and the first six months of FY 2021. PBP transactions are described as the unpaid in-lane transactions as a proportion of the paid in-lane transactions with an applied accrual rate. With the new PBP toll rate adopted by the CFX Board in October 2019, that was implemented on July 1, 2020 (FY 2021), it is anticipated that a portion of the PBP transactions will move back to paid in-lane transactions, ETC, and a portion will stay. The forecast includes an assumption that 100% of the forecasted unpaid in-lane transactions will remain in FY 2021, 90% will remain in FY 2022, and 80% of forecasted unpaid in-lane transaction will remain in FY 2023 and beyond. **Table 1-10** contains the proportions of paid in-lane transactions used to determine the PBP transactions.

For FY 2021, the average proportion of the first six months was used to estimate the unpaid in-lane transactions with an accrual rate of 58%. For FY 2022 the proportion was calculated as the difference in proportion of paid in-lane transactions from FY 2020 and FY 2021 added to the prior year with an accrual rate of 51%. For FY 2023 and beyond the proportion was calculated as the difference in proportion of paid in-lane transactions from the two prior years added to the most recent prior year with an accrual rate of 48%. Over time as the number of PBP customers shrinks, it will be more difficult to collect tolls from those remaining in PBP, hence the lower accrual rate.

Table 1-10
Unpaid In-Lane Transactions as Proportion of Paid In-Lane Transactions

Plaza Group		FY 2020	FY 2021	FY 2022	FY 2023 and Beyond
Airport Main	S.R. 528	21.0%	22.6%	20.3%	18.7%
Beachline Main		22.1%	28.4%	25.5%	25.2%
Dallas Main		16.0%	20.0%	18.0%	17.6%
Hiawassee Main	S.R. 408	21.6%	26.4%	23.7%	23.0%
Pine Hills Main		24.9%	30.0%	26.9%	26.0%
Conway Main		23.7%	27.4%	24.6%	23.4%
Dean Main		23.9%	26.7%	24.0%	22.4%
John Young Main	S.R. 417	21.7%	26.6%	23.9%	23.2%
Boggy Creek Main		20.0%	25.2%	22.6%	22.2%
Curry Ford Main		19.4%	22.5%	20.2%	19.2%
University Main		20.8%	22.5%	20.2%	18.7%
Forest Lake Main	S.R. 429	19.8%	23.1%	20.7%	19.8%
Independence Main		17.3%	20.0%	18.0%	17.1%
Ponkan Main		21.2%	24.0%	21.6%	20.3%
Mt. Plymouth Main		20.3%	22.0%	19.8%	18.3%
Coral Hills Main	S.R. 414	20.8%	23.7%	21.3%	20.1%
Coronado Main	S.R. 453	21.6%	25.8%	23.2%	22.3%
Marigold Main	S.R. 538	62.7%	52.9%	47.5%	38.3%
Koa Main		52.4%	43.3%	38.9%	31.0%

Source: CFX Monthly T&R Analysis

1.7.5 TOLL REVENUE

Just like the process with transactions, recent paid in-lane revenue data was used to assess the impacts of the three recent hurricanes. This data was then used to identify growth trends by plaza group. The transaction estimates for FY 2021 were developed from the first half year of actual results extended to the remainder of the year. The estimates for FY 2022 and beyond were adjusted or "trued up" to reflect achievable expectations for the first fiscal year in the new forecast.

Then, once again, mid-term growth rates were developed from the combination of recent growth and the growth rates derived from the travel demand model. The long-term growth rates from the travel demand model with some adjustment.

The effect of the combination of travel demand model and the T&R model is such that the paid in-lane revenue estimates are controlled to match base year values. Growth in the paid in-lane revenue estimates is primarily determined by changes from the travel demand model, modified by recent experience. This includes the effects of changes in the spatial pattern of SE activity, changes in transportation network and changes in toll rate. Because of the indexed toll rates, the growth rates in revenue are higher than the growth rates in transactions. The traffic and revenue forecasts, while pursued independently, are related through the effective toll rate. The planned toll rate increases are visible in future effective toll rates.

The revenue collected from the PBP process in each plaza group is determined by calculating the initial billed amount of revenue. For FY 2021 and beyond, the initial billed amount was calculated as the PBP transactions times twice the ETC toll rate, escalated according to the Customer First toll policy (1.5% per year). This change is due to a new PBP toll rate that was implemented on July 1, 2020 (FY 2021). **Table 1-11** contains a summary of the effective toll rates by plaza group for FY 2020. The total revenue is the sum of the revenue from paid in-lane transactions and the revenue collected from the PBP process.

Table 1-11
Effective Toll Rates (FY 2020)

Plaza Group		ETC	Cash	PBP
Airport Main	S.R. 528	$1.14	$1.26	$1.27
Beachline Main		$1.01	$1.23	$1.14
Dallas Main		$0.57	$0.69	$0.75
Hiawassee Main	S.R. 408	$0.83	$0.87	$0.93
Pine Hills Main		$1.08	$1.13	$1.19
Conway Main		$1.08	$1.11	$1.19
Dean Main		$0.85	$0.91	$0.97
John Young Main	S.R. 417	$1.19	$1.39	$1.37
Boggy Creek Main		$1.23	$1.53	$1.50
Curry Ford Main		$0.90	$0.95	$1.00
University Main		$0.87	$0.92	$0.97
Forest Lake Main	S.R. 429	$1.27	$1.38	$1.52
Independence Main		$1.15	$1.46	$1.41
Ponkan Main		$0.89	$0.00	$1.21
Mt. Plymouth Main		$0.90	$0.00	$1.16
Coral Hills Main	S.R. 414	$1.08	$0.98	$1.16
Coronado Main	S.R. 453	$0.69	$0.00	$0.89
Marigold Main	S.R. 538	$2.17	$0.00	$4.08
Koa Main		$0.54	$0.00	$0.94

Source: CFX Monthly T&R Analysis
Note: $0.00 indicates no cash toll collection

1.7.6 FORECASTING ASSUMPTIONS

T&R estimates for the CFX System are predicated on the following basic assumptions, all of which are considered reasonable for the purposes of this T&R study:

- Toll rates at each location are in nominal or future-year dollars, conforming to the recent toll rate policy. Toll rate adjustments (indexed tolls) are applied every year based on the net change in CPI of 1.5 percent in FY 2021 and 1.5 percent each year thereafter.
- Inflation is assumed to be 2.5 percent annually which includes the adjustment for real income growth. The value of time is likewise expected to increase by 2.5 percent per year.
- Future transportation projects were assumed as defined in the locally adopted plans. The projects listed in the locally adopted Transportation Improvement Programs (TIP) and the 2045 Long Range Transportation Plans (LRTP) were reviewed and compared with the prior model and with the CFRPM. Most of the projects in the TIP were assumed to be built by FY 2018, but some occur later depending on the horizon year. The Cost Feasible LRTP projects were reviewed and included in the corresponding future-year. CFX improvements were assumed and included based on projects identified in the 2040 Master Plan. Details on future projects that impact specific system components are provided in each chapter.

- The complete Wekiva Parkway, from US 441 to I-4, was included in the models by the horizon year of 2023. T&R from the CFX portion of the Wekiva Parkway are included in the System totals reported in this annual report. The new toll facility is reported as part of S.R. 429 and the new facility S.R. 453.
- The estimates assume that the I-4 Ultimate project will be completed and opened to traffic in FY 2022.
- No local, regional or national emergency, outside of the current COVID-19 pandemic, will arise which would abnormally restrict the use of motor vehicles, or substantially alter economic activity or freedom of mobility.
- Motor fuel will remain in adequate supply, and long-term increases in price will not significantly exceed the overall rate of inflation throughout the forecast period.
- The CFX System will be well-maintained, efficiently operated and effectively signed and promoted to encourage maximum usage.
- Forecasted transactions are the sum of paid in-lane and unpaid in-lane transactions. Forecasted revenue is the sum of paid in-lane revenue and revenue accrued for unpaid in-lane transactions. Allowances for the discount programs are included separately on a System-wide basis.

Any significant departure from the above basic assumptions could materially affect estimated traffic and toll revenues for the CFX System.

1.8 System Forecasts

1.8.1 SYSTEM TRANSACTION AND TOLL REVENUE FORECASTS

The total transactions and toll revenue by facility and for the System as a whole are summarized in **Table 1-12** and **Table 1-13**. The tables are divided into paid in-lane transactions and revenue and PBP transactions and revenue. This information is presented for historical transactions and toll revenue since FY 2010 and estimates in a 30-year forecast. The forecasts were produced by mainline plaza groups, aggregated to toll facility and then to the CFX System.

Table 1-12
CFX System Transaction Forecast (Millions)

Fiscal Year		Paid In-Lane	PBP	Total	Percent Annual Change
2010	Actual	286.5	1.8	288.3	
2011		292.5	3.1	295.6	2.5%
2012		298.1	4.4	302.5	2.3%
2013[A]		306.9	5.4	312.3	3.2%
2014		326.8	6.8	333.6	6.8%
2015		357.6	8.8	366.4	9.8%
2016[B]		398.3	12.2	410.5	12.0%
2017[C]		420.9	14.6	435.5	6.1%
2018[D,E]		433.4	21.6	455.0	4.5%
2019[F]		437.4	43.6	481.0	5.7%
2020[G]		388.4	48.6	437.0	-9.1%
2021[H]	Forecast	374.9	49.5	424.4	-2.9%
2022[I]		431.6	40.6	472.2	11.3%
2023		470.2	32.7	502.9	6.5%
2024		493.4	34.6	528.0	5.0%
2025		506.4	35.3	541.7	2.6%
2026		515.0	35.7	550.7	1.7%
2027		522.8	36.3	559.1	1.5%
2028		530.5	37.1	567.6	1.5%
2029		538.3	37.7	576.0	1.5%
2030		546.0	38.1	584.1	1.4%
2031		552.7	38.7	591.4	1.2%
2032		559.9	38.8	598.7	1.2%
2033		566.7	39.4	606.1	1.2%
2034		573.0	40.0	613.0	1.1%
2035		579.7	40.4	620.1	1.2%
2036		586.0	40.8	626.8	1.1%
2037		592.2	41.4	633.6	1.1%
2038		598.2	41.7	639.9	1.0%
2039		604.3	42.4	646.7	1.1%
2040		610.5	42.7	653.2	1.0%
2041		616.2	43.2	659.4	0.9%
2042		621.9	43.3	665.2	0.9%
2043		627.7	43.7	671.4	0.9%
2044		633.0	44.3	677.3	0.9%
2045		638.4	44.5	682.9	0.8%
2046		643.4	45.0	688.4	0.8%
2047		648.4	45.5	693.9	0.8%
2048		653.3	46.1	699.4	0.8%
2049		657.9	46.2	704.1	0.7%
2050		662.4	46.3	708.7	0.7%

Fiscal Year	Compound Annual Average Growth Rates (CAAGR)		
2010 - 2020	3.1%	39.0%	4.2%
2020 - 2030	3.5%	-2.4%	2.9%
2030 - 2040	1.1%	1.1%	1.1%
2040 - 2050	0.8%	0.8%	0.8%

Notes:

Actual transaction data provided by CFX from Monthly Statistical Reports.

A - Systemwide toll rate increase.

B - Airport Main Plaza closes, new ramp plazas open at beginning of FY 2016.

Transactions for tolls collected at the Turnpike plaza not included.

C - Effects from Hurricane Matthew in October 2016.

D - Ponkan Main plaza opened on July 27, 2017 and Mount Plymouth Main opened on April 1, 2018 (S.R. 429).

Coronado Main plaza opened on April 1, 2018 (S.R. 453).

E - Effects from Hurricane Irma in September 2017.

F - First year of implementation of "Customer First" toll rate policy and assumed toll rate increase of 2.05% in FY 2019.

Annual toll rate increase of 2.05% in FY 2019 and 1.5% assumed annually throughout forecast period.

G - Effects from Hurricane Dorian in September 2019 and first effects of COVID-19 pandemic began in March 2020.

H - New toll rates for PBP customers, set at 2.0 times the ETC rate.

I - Completion of I-4 Ultimate project.

Table 1-13
CFX System Toll Revenue Forecast - Before Discounts (Millions)

Fiscal Year		Paid In-Lane	PBP	Total	Percent Annual Change
2010	Actual	$261.0	$2.2	$263.2	
2011		$266.3	$3.3	$269.6	2.4%
2012		$267.5	$4.6	$272.1	0.9%
2013[A]		$302.1	$6.9	$309.0	13.6%
2014		$322.4	$8.4	$330.8	7.1%
2015		$353.1	$11.0	$364.1	10.1%
2016[B]		$393.9	$15.7	$409.6	12.5%
2017[C]		$417.9	$22.4	$440.3	7.5%
2018[D,E]		$430.9	$24.4	$455.3	3.4%
2019[F]		$445.6	$49.9	$495.5	8.8%
2020[G]		$404.6	$57.8	$462.4	-6.7%
2021[H]	Forecast	$398.2	$96.5	$494.7	7.0%
2022[I]		$462.8	$85.9	$548.7	10.9%
2023		$511.8	$71.9	$583.7	6.4%
2024		$541.5	$75.5	$617.0	5.7%
2025		$560.0	$77.7	$637.7	3.4%
2026		$577.0	$80.3	$657.3	3.1%
2027		$593.5	$82.3	$675.8	2.8%
2028		$609.9	$84.8	$694.7	2.8%
2029		$626.9	$87.1	$714.0	2.8%
2030		$643.9	$89.1	$733.0	2.7%
2031		$660.6	$91.3	$751.9	2.6%
2032		$677.2	$93.7	$770.9	2.5%
2033		$693.8	$95.9	$789.7	2.4%
2034		$711.2	$98.2	$809.4	2.5%
2035		$727.6	$100.4	$828.0	2.3%
2036		$745.3	$102.5	$847.8	2.4%
2037		$762.6	$104.9	$867.5	2.3%
2038		$780.4	$107.4	$887.8	2.3%
2039		$798.1	$109.9	$908.0	2.3%
2040		$816.3	$112.3	$928.6	2.3%
2041		$834.8	$115.0	$949.8	2.3%
2042		$853.3	$117.3	$970.6	2.2%
2043		$872.1	$119.7	$991.8	2.2%
2044		$890.9	$122.2	$1,013.1	2.1%
2045		$910.2	$124.7	$1,034.9	2.2%
2046		$929.8	$127.2	$1,057.0	2.1%
2047		$949.3	$129.9	$1,079.2	2.1%
2048		$968.4	$132.3	$1,100.7	2.0%
2049		$988.5	$135.2	$1,123.7	2.1%
2050		$1,008.3	$137.8	$1,146.1	2.0%

Fiscal Year	Compound Annual Average Growth Rates (CAAGR)		
2010 - 2020	4.5%	38.7%	5.8%
2020 - 2030	4.8%	4.4%	4.7%
2030 - 2040	2.4%	2.3%	2.4%
2040 - 2050	2.1%	2.1%	2.1%

Notes:

Actual transaction data provided by CFX from Monthly Statistical Reports.

A - Systemw ide toll rate increase.

B - Airport Main Plaza closes, new ramp plazas open at beginning of FY 2016.

Transactions for tolls collected at the Turnpike plaza not included.

C - Effects from Hurricane Matthew in October 2016.

D - Ponkan Main plaza opened on July 27, 2017 and Mount Plymouth Main opened on April 1, 2018 (S.R. 429).

Coronado Main plaza opened on April 1, 2018 (S.R. 453).

E - Effects from Hurricane Irma in September 2017.

F - First year of implementation of "Customer First" toll rate policy and assumed toll rate increase of 2.05% in FY 2019.

Annual toll rate increase of 2.05% in FY 2019 and 1.5% assumed annually throughout forecast period.

G - Effects from Hurricane Dorian in September 2019 and first effects of COVID-19 pandemic began in March 2020.

H - New toll rates for PBP customers, set at 2.0 times the ETC rate.

I - Completion of I-4 Ultimate project.

1.8.2 SYSTEM AVAILABLE REVENUES

The System Available Revenue is defined as paid in-lane revenue plus revenue from PBP, less the discounts. The calculations are summarized in **Table 1-14**. CFX instituted a more convenient method of payment for PBP tolls in June 2009. CFX's PBP business rules were also modified in 2010 to require all outstanding tolls be paid in order for a customer to renew their Florida vehicle registration. The paid in-lane revenues plus the revenue from PBP is expected to increase from the actual $468.3 million collected in FY 2020 to $733.0 million in FY 2030, $928.6 million in FY 2040 and $1,146.1 million in FY 2050.

Table 1-14 also shows total revenue less the discounts during the fiscal year to equal Available Revenue. The discount programs are discussed in detail in Section 1.3.1 of this chapter. The resulting Available System Revenue can be used by CFX for their operating and maintenance budget and debt service. The Available Revenues are projected to increase from the actual $451.9 million in FY 2020 to estimated amounts of $706.2 million in FY 2030, $890.5 million in FY 2040 and $1,094.0 million in FY 2050.

1.8.3 NON-SYSTEM REVENUES

The Goldenrod Road Extension is a toll facility operated by CFX. It was constructed as an extension of the existing Goldenrod Road (S.R. 551) to provide an additional north-south facility operated by CFX as a Non-System project in the vicinity of the Orlando International Airport (OIA). Goldenrod Road was a four-lane state-maintained facility that terminated at Narcoossee Road. The Goldenrod Road Extension continues the roadway south from the terminus at Narcoossee Road to Cargo Road on the airport property. There is one interchange on the facility at S.R. 528, just east of the airport. The Greater Orlando Aviation Authority (GOAA) constructed Heintzelman Boulevard, a four-lane facility that connects with the Goldenrod Road Extension at Cargo Road and then extends south through the OIA. Heintzelman Boulevard is not currently signed for use by the general public and serves as an access road for airport employees.

Construction of the Goldenrod Road Extension began in January 2001 and was opened to traffic in March 2003. This project was jointly funded by CFX, Orange County, the City of Orlando, GOAA and private developers, with CFX serving as the lead agency on the project. The Goldenrod Road Extension is tolled at one location. A mainline plaza, with a toll of $0.50 is located north of the interchange with S.R. 528. Revenues generated by the toll on the Goldenrod Road Extension are not included as part of CFX's System revenues. Revenues generated by this non-System roadway are not pledged as part of the System revenues available for debt service. Such revenues will be used to repay funds used by the partners for the construction of the roadway as well as the continued operations and maintenance expenses. According to the agreements between the project's partners, once toll revenues have paid for project costs (including toll operations and maintenance), the toll plaza will be removed, and the City of Orlando will assume ownership of the roadway.

Table 1-14
CFX System Toll Revenues Available (Millions)

Fiscal Year		Paid In-Lane Revenue[E]	PBP Revenue[F]	Total Revenue	Discounts[G]	Available Revenue	Percent Annual Change
2010	Actual	$262.0	$1.1	$263.1	$9.4	$253.6	
2011		$266.5	$3.0	$269.5	$9.5	$260.0	2.5%
2012		$267.9	$4.3	$272.2	$9.6	$262.6	1.0%
2013[A]		$302.7	$6.3	$309.0	$10.8	$298.2	13.5%
2014		$322.8	$8.1	$330.9	$11.7	$319.1	7.0%
2015		$353.1	$11.0	$364.1	$13.2	$350.9	10.0%
2016		$393.9	$15.7	$409.6	$18.7	$390.9	11.4%
2017		$418.5	$21.8	$440.3	$16.6	$423.7	8.4%
2018		$430.8	$27.3	$458.1	$16.3	$441.8	4.3%
2019[B]		$445.6	$38.0	$483.6	$20.4	$463.2	4.8%
2020		$407.2	$61.1	$468.3	$16.4	$451.9	-2.4%
2021[C]	Forecast	$398.2	$96.5	$494.7	$18.7	$476.0	5.3%
2022[D]		$462.8	$85.9	$548.7	$17.4	$531.3	11.6%
2023		$511.8	$71.9	$583.7	$19.5	$564.2	6.2%
2024		$541.5	$75.5	$617.0	$20.9	$596.1	5.7%
2025		$560.0	$77.7	$637.7	$21.9	$615.8	3.3%
2026		$577.0	$80.3	$657.3	$22.9	$634.4	3.0%
2027		$593.5	$82.3	$675.8	$23.8	$652.0	2.8%
2028		$609.9	$84.8	$694.7	$24.8	$669.9	2.7%
2029		$626.9	$87.1	$714.0	$25.8	$688.2	2.7%
2030		$643.9	$89.1	$733.0	$26.8	$706.2	2.6%
2031		$660.6	$91.3	$751.9	$27.8	$724.1	2.5%
2032		$677.2	$93.7	$770.9	$28.9	$742.0	2.5%
2033		$693.8	$95.9	$789.7	$29.9	$759.8	2.4%
2034		$711.2	$98.2	$809.4	$31.0	$778.4	2.4%
2035		$727.6	$100.4	$828.0	$32.1	$795.9	2.2%
2036		$745.3	$102.5	$847.8	$33.3	$814.5	2.3%
2037		$762.6	$104.9	$867.5	$34.4	$833.1	2.3%
2038		$780.4	$107.4	$887.8	$35.6	$852.2	2.3%
2039		$798.1	$109.9	$908.0	$36.8	$871.2	2.2%
2040		$816.3	$112.3	$928.6	$38.1	$890.5	2.2%
2041		$834.8	$115.0	$949.8	$39.3	$910.5	2.2%
2042		$853.3	$117.3	$970.6	$40.6	$930.0	2.1%
2043		$872.1	$119.7	$991.8	$42.0	$949.8	2.1%
2044		$890.9	$122.2	$1,013.1	$43.3	$969.8	2.1%
2045		$910.2	$124.7	$1,034.9	$44.7	$990.2	2.1%
2046		$929.8	$127.2	$1,057.0	$46.1	$1,010.9	2.1%
2047		$949.3	$129.9	$1,079.2	$47.6	$1,031.6	2.0%
2048		$968.4	$132.3	$1,100.7	$49.0	$1,051.7	1.9%
2049		$988.5	$135.2	$1,123.7	$50.5	$1,073.2	2.0%
2050		$1,008.3	$137.8	$1,146.1	$52.1	$1,094.0	1.9%

Fiscal Year	Compound Annual Average Growth Rate (CAAGR)				
2010 - 2020	4.5%	50.1%	5.9%	5.7%	5.9%
2020 - 2030	4.7%	3.8%	4.6%	5.0%	4.6%
2030 - 2040	2.4%	2.3%	2.4%	3.6%	2.3%
2040 - 2050	2.1%	2.1%	2.1%	3.2%	2.1%

Notes:

A - Systemwide toll rate adjustments.

B - CFX Board adopted "Customer First" toll policy on February 9, 2017, implemented with Systemwide increase on July 1, 2018 (FY 2019). The floor of 1.5% increase was implemented in July 1, 2020 (FY 2021). Further adjustments (estimated at 1.5%) are included at the beginning of all subsequent fiscal years.

C - New toll rates for customers paying toll through the Pay By Plate (PBP) process, set at 2.0 times the ETC rate.

D - Adjustment for completion of I-4 Ultimate.

E - **Paid In-Lane Revenue** is provided and audited by CFX. System paid in-lane revenue may not equal the sum of paid in-lane revenue by plaza group, presented in Table 1-13 due to rounding and end-of-year adjustments. The adjustments occur periodically thorughout the fiscal year and are not tied to the collected revenue of any particular plaza group.

F - PBP Revenue is provided and audited by CFX. System PBP revenue may not equal the sum of PBP revenue in Table 1-13 due to rounding and end-of-year revenue collected in-lane; in FY 2020, PBP revenue was 15.0% of the in-lane revenue; in FY 2021, the PBP revenue is forecasted to be over 24.0% of the in-lane revenue; these long-term forecasts maintain PBP revenue as just under 14.0% of the in-lane revenue.

G - CFX operates three Discount Programs, which are explained in detail in Chapter 1 of this report. Historical information on the E-PASS discount comes from the 2020 CAFR.

1.9 Disclaimer

CDM Smith used currently-accepted professional practices and procedures in the development of these traffic and revenue estimates. However, as with any forecast, it should be understood that differences between forecasted and actual results may occur, as caused by events and circumstances beyond the control of the forecasters. In formulating the estimates, CDM Smith reasonably relied upon the accuracy and completeness of information provided (both written and oral) by CFX. CDM Smith also relied upon the reasonable assurances of other independent parties and is not aware of any material facts that would make such information misleading.

CDM Smith made qualitative judgments related to several key variables in the development and analysis of the traffic and revenue estimates that must be considered as a whole; therefore, selecting portions of any individual result without consideration of the intent of the whole may create a misleading or incomplete view of the results and the underlying methodologies used to obtain the results. CDM Smith gives no opinion as to the value or merit of partial information extracted from this report.

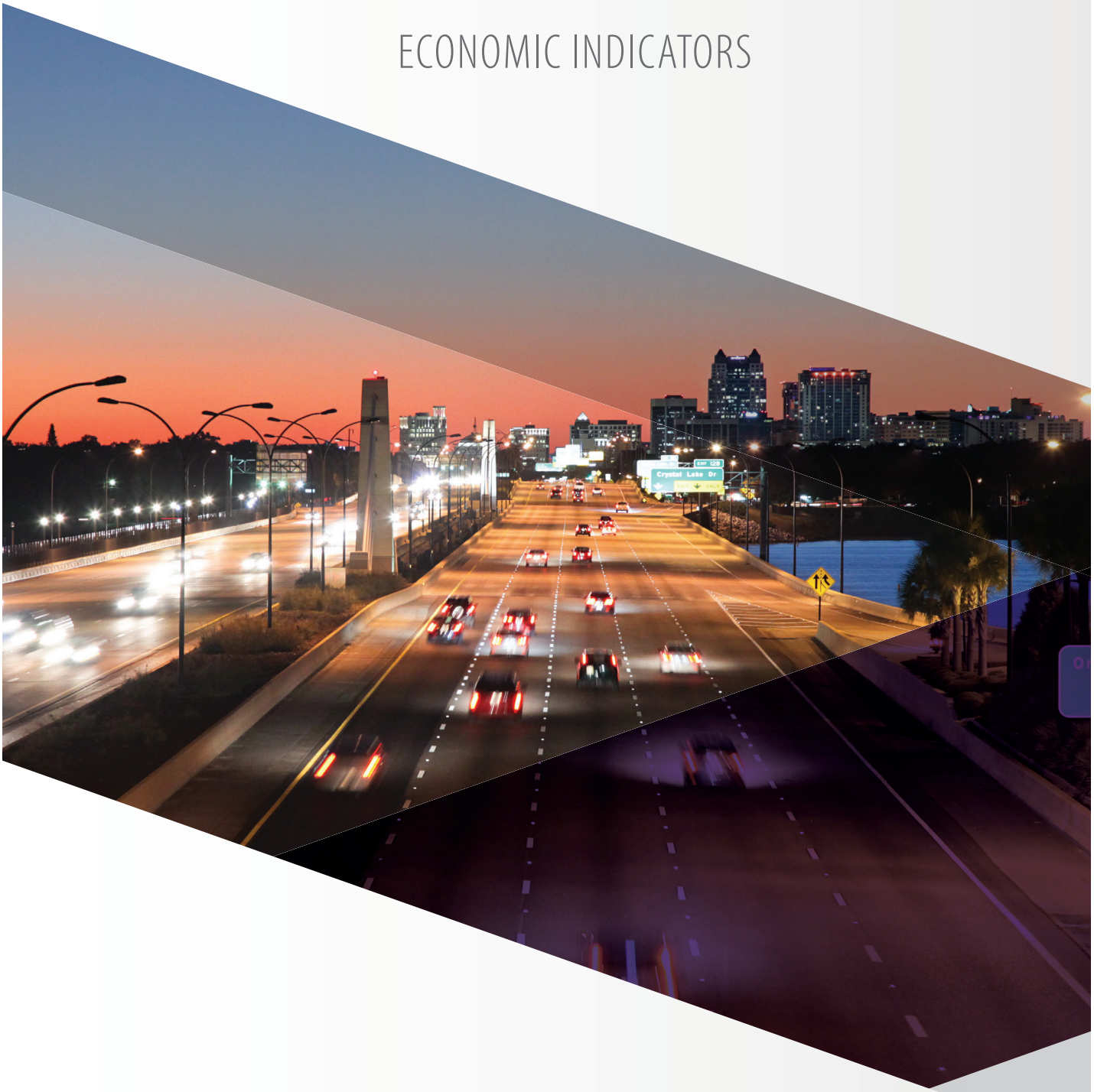
All estimates and projections reported herein are based on CDM Smith's experience and judgment and on a review of information obtained from multiple agencies, including CFX. These estimates and projections may not be indicative of actual or future values and are therefore subject to substantial uncertainty. Certain variables such as future developments, economic cycles, pandemics, government actions, climate change related events, or impacts related to advances in automotive technology etc. cannot be predicted with certainty and may affect the estimates or projections expressed in this report, such that CDM Smith does not specifically guarantee or warrant any estimate or projection contained within this report.

While CDM Smith believes that the projections and other forward-looking statements contained within the report are based on reasonable assumptions as of the date of the report, such forward-looking statements involve risks and uncertainties that may cause actual results to differ materially from the results predicted. Therefore, following the date of this report, CDM Smith will take no responsibility or assume any obligation to advise of changes that may affect its assumptions contained within the report, as they pertain to socioeconomic and demographic forecasts, proposed residential or commercial land use development projects and/or potential improvements to the regional transportation network.

CDM Smith is not, and has not been, a municipal advisor as defined in Federal law (the Dodd Frank Bill) to CFX and does not owe a fiduciary duty pursuant to Section 15B of the Exchange Act to CFX with respect to the information and material contained in this report. CDM Smith is not recommending and has not recommended any action to CFX. CFX should discuss the information and material contained in this report with any and all internal and external advisors that it deems appropriate before acting on this information.

CHAPTER 2

ECONOMIC INDICATORS



ECONOMIC INDICATORS

Regional travel demand is driven in part by the level, rate of growth, and spatial pattern of socioeconomic activity, such as population, housing, employment, retail sales and tourism. Socioeconomic growth is a major factor in determining future use of toll roads. Other important factors specific to the Central Florida area include enplanement activity at the Orlando International Airport (OIA), enrollment at the University of Central Florida (UCF) and attendance at area attractions. These factors can all be fundamentally traced to underlying socioeconomic variables, so it is important to understand the socioeconomic conditions in which the CFX facilities operate. This chapter contains a review of socioeconomic factors relevant to CFX and comparative data (historical and forecast) for the counties within the study area (Brevard, Lake, Orange, Osceola, Polk, Seminole and Volusia Counties) and the State of Florida.

2.1 COVID-19 Socioeconomic Impacts

COVID-19 detrimentally impacted the United States, affecting lives, livelihoods, and everyday behaviors since the virus first appeared in mid-March 2020. An ensuing pandemic, with multiple infectious peak periods, altered societal norms, including travel and economic activities. After more than a year, "normal" pre-COVID-19 activities have yet to fully return; however, with the proliferation of ongoing vaccinations, the worst has passed, and a resumption of normalcy is on the horizon. COVID-19 has triggered a significant contraction in socioeconomic activity at the national, state, and regional levels.

2.1.1 NATIONAL REAL GROSS DOMESTIC PRODUCT

National real Gross Domestic Product (GDP) shrank by an annualized 5.0 percent in the first quarter of 2020, which was significant considering the loss occurred almost entirely in March, with growth having occurred in both January and February. Real GDP fell by an annualized 31.4 percent in the second quarter of 2020, which was an unprecedented order-of-magnitude outlier since quarterly data were published (1947). No other quarter in the last 75 years was even close; the first quarter of 1958 was the previous record contraction at 10.0 percent annualized, and the most severe impact during the Great Recession was 8.4 percent annualized in the fourth quarter of 2008. Quarter 3 in 2020 partially rebounded by an annualized 33.4 percent, followed by a smaller 4.3 percent increase in the fourth quarter. While the Quarter 3 growth appears large, it did not reflect a full bounce-back, and the annual 2020 real GDP declined 3.5 percent in total.

Such an annual decline had not been unobserved since 1946 (11.6 percent loss, reflecting the unravelling of the WWII boom years). As the official arbiter of economic cycles, the National Bureau of Economic Research (NBER) designated the COVID-19 pandemic a recession, beginning in February 2020, which is still ongoing.

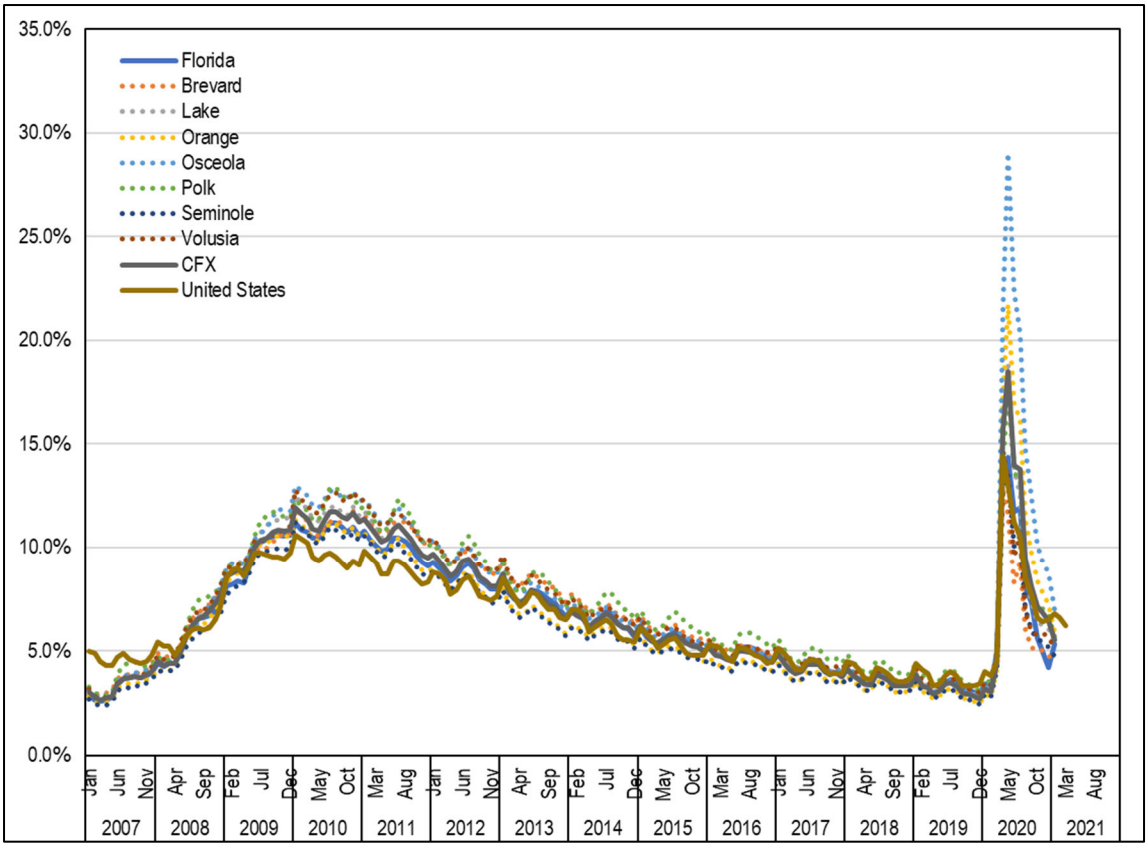
2.1.2 FLORIDA REAL GROSS STATE PRODUCT

Economic impacts to Florida from COVID-19 were similar to the nation. Gross State Product (GSP) in Quarter 1 and Quarter 2 of 2020 shrank by an annualized 4.3 percent and 30.1 percent, respectively, a similar magnitude as the nation, and only slightly less severe. Quarter 3 rebounded at the same 33.4 percent annualized national pace, with Quarter 4 slightly slower than the national level at 3.1 percent. In total, Florida's economy contracted 2.9 percent in 2020. Quarterly data for MSAs/counties are not published by the Bureau of Economic Analysis, and annual 2020 data for substate geographies are not yet released; however, areas within Florida highly dependent on tourism and related services industries were impacted more severely by COVID-19, given travel and social distancing restrictions.

2.1.3 UNEMPLOYMENT RATES

The monthly unemployment rates from 2007 to 2021 for Florida, the United States and the seven-county Central Florida area are presented in **Figure 2-1**. Tourism-dependent regions within Florida were particularly impacted by COVID-19. April and May 2020 had the highest unemployment rates during the pandemic, in the immediate aftermath of the virus circulating and during the initial policy responses that effectively shuttered businesses and social activities as preemptive, precautionary measures. Prior to COVID-19, unemployment rates were at historically low levels, in the low-to-mid 3.0 percent range during late 2019. In April 2020, the national unemployment rate (seasonally unadjusted) spiked to 14.4 percent; Florida peaked in May 2020 at 14.3 percent, which are rates notably higher than the worst months during the 2007-2009 Great Recession, which were around 10.0 percent. Within Central Florida, the unemployment rates were even worse, peaking at 18.5% in May 2020 for the seven-county area, with Orange and Osceola Counties the hardest hit, at 21.7% and 29.0%, respectively. Many employees returned to previous jobs, or found other employment, albeit all with additional safety precautions implemented, resulting in the unemployment rates subsequently declining. At the beginning of 2021, unemployment rates are back down into the 5.0 percent to 6.0 percent range.

Figure 2-1
Monthly Unemployment Rates
2007 – 2021



Source: U.S. Census Bureau

2.1.4 ECONOMIC OUTLOOK

Many forecasting sources published national real GDP data since COVID-19 began, typically with rolling, quarterly updates to reflect the ongoing impacts and changing policy responses. Various sources were compiled and compared; see **Table 2-1** depicting forecasts of growth in national real GDP for 2021 and 2022. An average 4.4 percent is forecasted for 2021, ranging from 3.2 percent to 6.2 percent, effectively a rebounding back to 2019 real GDP levels, but with no additional growth above 2019 levels. In 2022, real GDP is forecasted to continue positive growth, but with some deceleration.

Moody's Analytics projects a three-year economic rebounding from COVID-19, with 4.6 percent, 6.6 percent, and 4.5 percent annual growth in Florida for 2021, 2022, and 2023, respectively; growth rates similar to pre-Great Recession trends. After 2023, annual growth is projected to decelerate from about 3.0 percent to 2.5 percent through 2050. In the Central Florida MSA, Moody's three-year rebounding is more aggressive, with 4.8%, 8.8%, and 5.7%, respectively, decelerating thereafter from 4.0% to 3.0% annually through 2050. Moody's projects employment to return to pre-COVID-19 levels for Florida by 2022, and for the Orlando MSA by 2023. Population growth forecasts are not appreciably impacted in Moody's data.

Table 2-1
National Real GDP Forecasts 2021 – 2022

Source	Release Date	2021	2022
Wells Fargo Securities Economics Group	February 19, 2021	6.2%	5.1%
Bank of Montreal (BMO) Capital Markets Economics	February 19, 2021	6.0%	4.0%
ScotiaBank Global Economics	February 4, 2021	5.8%	4.3%
International Monetary Fund (IMF): World Economic Outlook	January 2021	5.1%	2.5%
University of Michigan: Research Seminar in Quantitative Economics (RSQE)	February 19, 2021	4.8%	3.9%
Congressional Budget Office (CBO)	February 11, 2021	4.6%	2.9%
Federal Reserve Bank of Philadelphia: Survey of Professional Forecasters*	February 12, 2021	4.5%	3.7%
Conference Board	February 10, 2021	4.4%	N/A
Royal Bank of Canada (RBC) Economics	December 15, 2020	4.4%	2.7%
Economist Intelligence Unit (EIU): Global Forecasting Service	February 16, 2021	4.3%	3.0%
Federal Reserve Bank: Federal Open Market Committee (FOMC)	December 16, 2020	4.2%	3.2%
TD Economics	December 15, 2020	4.1%	3.3%
National Association of Realtors	January 30, 2021	4.0%	3.5%
Energy Information Administration (EIA): Short-Term Energy Outlook	February 4, 2021	3.8%	4.2%
World Bank	January 2021	3.5%	3.3%
PNC Financial Services Group	January 2021	3.4%	3.2%
National Association for Business Economics (NABE)*	December 2020	3.4%	N/A
Organization for Economic Cooperation and Development (OECD)	December 9, 2020	3.2%	3.5%
Average		4.4%	3.5%

2.2 Population

2.2.1 HISTORICAL TRENDS

Historical population trends for the seven counties in the study area and the State of Florida from 1980 through 2019 are included in **Table 2-2**. The corresponding compound average annual growth rates (CAAGR) for population in the same years are included in **Table 2-3**. Population in the study area has grown by two and one-half times since 1980, growing from approximately 1.7 million to nearly 4.5 million in 2019, or equivalent to a growth rate of 2.6 percent per year. Long-term historical population growth decelerated from 3.8 percent per year in the 1980s to 2.2 percent per year between 2000 and 2010, and 1.9 percent since 2010. Since 1980, Osceola County was the fastest growing county in the study area, with average growth of 5.3 percent per year. Brevard and Volusia Counties experienced the slowest relative growth of 2.0 percent per year from 1980 to 2019. Nearly one third of the study area population is in Orange County, which is home to almost 1.4 million residents. The State's total population grew from 9.7 million in 1980 to nearly 21.5 million in 2019, or an increase of 2.0 percent per year on average. Historically, population growth in the study area has outpaced the State of Florida over the last three decades. The rates of growth in each county and for the State have gradually declined over this period.

Table 2-2
Population – Historical Trend
1980 – 2019

County	1980	1990	2000	2010	2019
Brevard	272,959	398,978	476,230	543,376	601,942
Lake	104,870	152,104	210,528	297,052	367,118
Orange	470,865	677,491	896,344	1,145,956	1,393,452
Osceola	49,287	107,728	172,493	268,685	375,751
Polk	321,652	405,382	483,924	602,095	724,777
Seminole	179,752	287,529	365,196	422,718	471,826
Volusia	258,762	370,712	443,343	494,593	553,284
Area Total	1,658,147	2,399,924	3,048,058	3,774,475	4,488,150
Florida	9,746,961	12,937,926	15,982,378	18,801,310	21,477,737

Source: U.S. Census Bureau

Table 2-3
Population – Historical Growth Rates (CAAGR)
1980 – 2019

County	1980-'90	1990-'00	2000-'10	2010-'19	1980-'19
Brevard	3.9%	1.8%	1.3%	1.1%	2.0%
Lake	3.8%	3.3%	3.5%	2.4%	3.3%
Orange	3.7%	2.8%	2.5%	2.2%	2.8%
Osceola	8.1%	4.8%	4.5%	3.8%	5.3%
Polk	2.3%	1.8%	2.2%	2.1%	2.1%
Seminole	4.8%	2.4%	1.5%	1.2%	2.5%
Volusia	3.7%	1.8%	1.1%	1.3%	2.0%
Area Total	3.8%	2.4%	2.2%	1.9%	2.6%
Florida	2.9%	2.1%	1.6%	1.5%	2.0%

Source: U.S. Census Bureau

School enrollment is an additional indicator of socioeconomic activity in Central Florida. **Table 2-4** summarizes school enrollment by year and county, including the total percent change and CAAGR. School enrollment in Osceola County experienced the most growth since 2011 at an average pace of 2.7 percent annually. School enrollment was essentially unchanged in the last decade in Brevard County (0.0 percent per year). Overall, school enrollment in the study area grew 1.0 percent per year on average since 2011. These numbers are not directly comparable to total population due to the number of families in the study area without school-age children and the potential for home-schooling. The number of school enrollments declined in 2020 for the first time since 2011, which can be partially attributed to the COVID-19 pandemic and parents choosing the home-schooling option. Also, the 2020 totals are estimates, as final numbers will not be released until the end of the school year in June or July 2021.

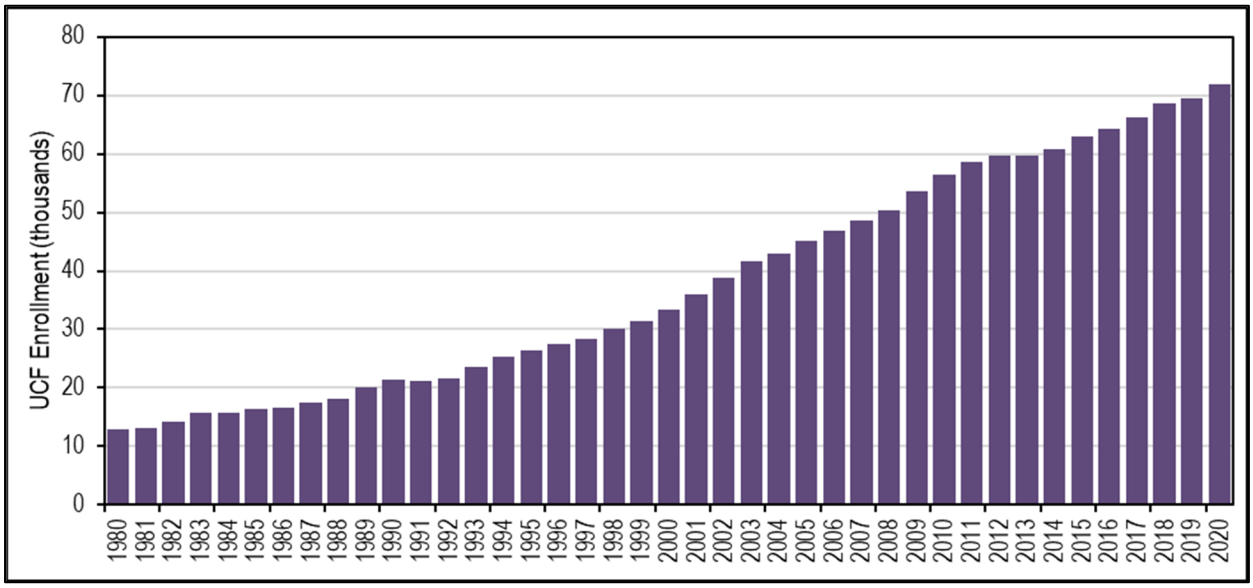
Table 2-4
Historical School Enrollment by County
2011 – 2020

County	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2011-'20 % Δ	2011-20 CAAGR
Brevard	71,042	70,529	70,071	71,119	71,634	72,408	72,467	72,646	73,106	70,996	-0.1%	0.0%
Lake	40,563	40,760	40,971	41,322	41,839	41,866	42,643	43,409	44,473	43,706	7.7%	0.8%
Orange	178,847	182,438	185,594	190,380	195,408	198,984	203,950	206,451	207,751	199,851	11.7%	1.2%
Osceola	54,193	55,881	57,239	58,465	61,141	62,561	66,010	67,632	69,378	68,640	26.7%	2.7%
Polk	94,629	95,634	96,144	97,877	99,247	101,051	102,863	104,305	106,782	105,368	11.3%	1.2%
Seminole	63,843	64,105	64,019	65,428	66,236	67,055	67,281	67,247	67,301	66,226	3.7%	0.4%
Volusia	61,403	61,056	60,935	61,351	62,304	62,269	62,132	62,027	62,121	61,088	-0.5%	-0.1%
Area Total	564,520	570,403	574,973	585,942	597,808	606,194	617,346	623,716	630,911	615,875	9.1%	1.0%

Source: Florida Department of Education

UCF opened in 1968 with fewer than 2,000 enrolled students. As shown in **Figure 2-2,** annual enrollment increased over the years, as UCF became a large-scale university, with nearly 72,000 students in 2020. Long-term annual growth averaged 4.4 percent per year from 1980 to 2020, due to opening of new programs, campus facilities and the increasing number of transfer students. While the enrollment numbers are significant, many students only attend part-time. Many students attend classes on-line and for that reason may not travel to the main campus in Orlando. Many classes in 2020 were held virtually due to the COVID-19 pandemic.

Figure 2-2
Historical UCF Enrollment
1980 – 2020



Source: University of Central Florida

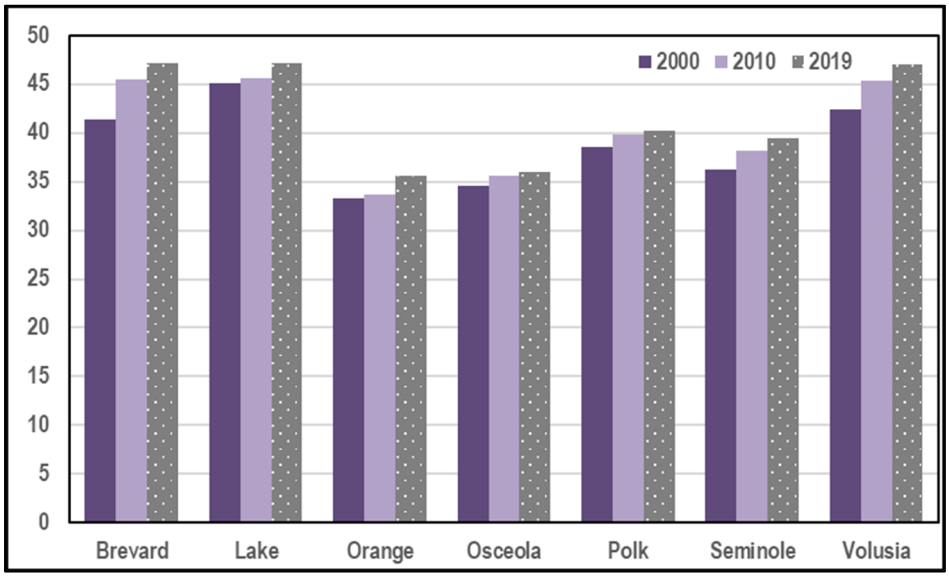
A comparison of the age distributions of study area population in 2000, 2010, and 2019 is shown in **Table 2-5**. A majority of the 2019 population (58.4 percent) is made up of the working-age group, ages 20 to 64, who typically make the majority of commuter and business-related trips. The previous 2000 and 2010 census years' population data reflects similar trends. The median ages for the study area counties in years 2000, 2010, and 2019 are shown in **Figure 2-3**. Brevard and Lake Counties have the highest median age reflecting the presence of retirement communities. Volusia also has significantly older median age than other counties in the area. All counties had a higher median age in 2010 than in 2000, and in 2019 over 2010, indicating a general aging of the population.

Table 2-5
Historical Population by Age
2000, 2010, 2019

Age	2000 Census		2010 Census		2019 Estimate	
	Population	Percent	Population	Percent	Population	Percent
0-4	184,700	6.1%	221,562	5.9%	243,229	5.4%
5-19	615,697	20.2%	732,041	19.4%	796,605	17.7%
20-24	185,459	6.1%	264,847	7.0%	280,090	6.2%
25-34	405,961	13.3%	473,023	12.5%	625,107	13.9%
35-44	486,110	15.9%	490,323	13.0%	573,363	12.8%
45-54	395,565	13.0%	552,868	14.6%	558,182	12.4%
55-64	289,212	9.5%	453,437	12.0%	583,782	13.0%
65-74	262,234	8.6%	318,580	8.4%	468,123	10.4%
75+	223,120	7.3%	267,794	7.1%	359,669	8.0%
Total	3,048,058	100.0%	3,774,475	100.0%	4,488,150	100.0%

Source: U.S. Census Bureau

Figure 2-3
Median Age by County
2000, 2010, 2019



Source: U.S. Census Bureau

2.2.2 PROJECTIONS

The University of Florida's Bureau of Economic and Business Research (BEBR) updates population forecasts annually for all Florida counties with three scenarios: low, medium, and high. Medium-level BEBR population projections are typically used to develop transportation plans. **Table 2-6** is a summary of the 2020 BEBR medium forecasts, expressed as CAAGRs, released in April 2020. Future long-term population growth for the study area through 2040 is projected to average 1.4 percent per year, which is higher than the 1.1 percent per year projected for the State of Florida. Over the forecast period from 2019 through 2040, Osceola County is projected to experience the fastest population growth rate of 2.3 percent per year. Volusia County is expected to have the lowest growth rate of only 0.7 percent per year through 2040. All growth rates decelerate over time.

Table 2-6
Population – Projected Growth Rates (CAAGR)
2019 – 2040

County	2019-'20	2020-'30	2030-'40	2019-'40
Brevard	1.3%	1.0%	0.6%	0.8%
Lake	2.6%	2.1%	1.3%	1.7%
Orange	2.4%	1.8%	1.1%	1.5%
Osceola	3.8%	2.9%	1.7%	2.3%
Polk	2.0%	1.5%	0.9%	1.2%
Seminole	2.1%	1.6%	1.0%	1.3%
Volusia	1.2%	0.9%	0.6%	0.7%
Area Total	2.1%	1.6%	1.0%	1.4%
Florida	1.6%	1.3%	0.8%	1.1%

Source: University of Florida Bureau of Economic and Business Research 2020

2.3 Housing Units

2.3.1 HISTORICAL TRENDS

The number of housing units is another key measure in transportation planning. As indicated in **Table 2-7**, the number of housing units in the study area expanded over 2.75 times from 700 thousand in 1980 to over 1.9 million in 2019. Orange County has the largest concentration of housing units in the seven-county study area with nearly 557 thousand in 2019. The corresponding CAAGRs are shown in **Table 2-8** for the same years. Long-term, the number of housing units in the study area grew from 1980 to 2019 by an average of 2.6 percent per year. Historical housing unit growth slowed down from 4.4 percent per year in the 1980s to 1.1 percent per year from 2010 to 2019. This is a similar deceleration trend as population. Osceola County experienced the fastest housing unit growth with an average of 5.0 percent per year while Volusia County was the slowest with only 1.9 percent annual growth between 1980 and 2019. Overall, the historical housing unit growth in the study area has outpaced the growth in the State of Florida and has grown from a 16 percent share of statewide housing units to over 19 percent.

Table 2-7
Housing Units – Historical Trend
1980 – 2019

County	1980	1990	2000	2010	2019
Brevard	113,900	185,150	222,072	269,864	282,830
Lake	50,511	75,707	102,829	144,996	163,587
Orange	184,701	282,686	361,349	487,839	556,898
Osceola	23,825	47,959	72,293	128,170	162,677
Polk	134,873	186,225	226,376	281,214	304,440
Seminole	68,154	117,841	147,080	181,307	193,938
Volusia	124,427	180,983	211,938	254,226	264,145
Area Total	700,391	1,076,551	1,343,937	1,747,616	1,928,515
Florida	4,378,867	6,100,250	7,303,108	8,989,580	9,674,053

Source: U.S. Census Bureau

Table 2-8
Housing Units – Historical Growth Rates (CAAGR)
1980 – 2019

County	1980-'90	1990-'00	2000-'10	2010-'19	1980-'19
Brevard	5.0%	1.8%	2.0%	0.5%	2.4%
Lake	4.1%	3.1%	3.5%	1.3%	3.1%
Orange	4.3%	2.5%	3.0%	1.5%	2.9%
Osceola	7.2%	4.2%	5.9%	2.7%	5.0%
Polk	3.3%	2.0%	2.2%	0.9%	2.1%
Seminole	5.6%	2.2%	2.1%	0.8%	2.7%
Volusia	3.8%	1.6%	1.8%	0.4%	1.9%
Area Total	4.4%	2.2%	2.7%	1.1%	2.6%
Florida	3.4%	1.8%	2.1%	0.8%	2.1%

Source: U.S. Census Bureau

2.3.2 PROJECTIONS

Table 2-9 is a summary of the long-term housing growth forecasts as published by Woods & Poole.[1] The table also contains information from recent publications by Fishkind & Associates, Inc. for the period 2019 through 2040. Future long-term housing growth for the study area is projected to average 1.3 percent per year through 2040. Osceola and Lake Counties are forecasted to experience the fastest housing growth with average rates of 2.3 and 1.7 percent per year, respectively, while Brevard County is expected to have the slowest growth of about 0.7 percent per year. The housing unit forecasts presented here are not consistent with the BEBR population forecasts for some counties. The BEBR forecasts were used in the development of the future year single-family and multi-family housing unit control totals in the travel demand model.

Table 2-9
Housing Units – Projected Growth Rates (CAAGR)
2019 – 2040

County	2019-'20	2020-'30	2030-'40	2019-'40
Brevard	1.4%	1.0%	0.4%	0.7%
Lake	2.5%	2.0%	1.3%	1.7%
Orange	2.2%	1.8%	1.2%	1.5%
Osceola	3.1%	2.6%	1.9%	2.3%
Polk	1.8%	1.4%	0.9%	1.1%
Seminole	1.9%	1.4%	0.9%	1.1%
Volusia	1.5%	1.0%	0.5%	0.8%
Area Total	2.0%	1.6%	1.0%	1.3%
Florida	1.8%	1.3%	0.9%	1.1%

Source: Woods & Poole Economics, Inc. 2020 and Fishkind & Associates, Inc.
*Lake, Orange, and Osceola are from Fishkind (as "dwelling units"); the remainder are from Woods & Poole (as "households"); the area total is a weighted average.

[1] Woods & Poole does not guarantee the accuracy of this data. The use of this data and the conclusions drawn from it are solely the responsibility of the Consulting Team.

2.4 Employment

2.4.1 HISTORICAL TRENDS

The employment numbers presented below in **Table 2-10** and **Table 2-11** come from the Bureau of Economic Analysis (BEA). Orange County dominates the regional employment base with 43.7 percent of the seven-county total. Long-term employment growth in the study area averaged 3.1 percent per year since 1980. Growth was strong between 1980 and 1990 at 4.7 percent per year but decelerated between 2000 and 2010 to only 1.4 percent per year, with strongest growth rates in Osceola and Lake Counties for those years. Since 2010, employment growth increased to 3.4 percent per year, with Osceola County averaging the strongest growth of 5.3 percent per year. Historically, the growth in study area employment outpaced the State of Florida by an average of approximately 0.5 percent per year.

Table 2-10
Total Employment – Historical Trend
1980 – 2019

County	1980	1990	2000	2010	2019
Brevard	129,188	202,232	242,259	256,563	313,828
Lake	46,281	58,326	86,269	113,201	153,720
Orange	291,166	516,943	735,810	822,557	1,168,750
Osceola	19,483	43,173	63,735	101,338	161,252
Polk	156,846	194,693	234,576	255,704	322,930
Seminole	61,621	121,188	186,059	217,211	292,966
Volusia	105,796	146,833	177,896	211,634	258,590
Area Total	810,381	1,283,388	1,726,604	1,978,208	2,672,036
Florida	4,687,521	6,740,289	8,881,279	9,805,154	12,857,048

Source: Bureau of Economic Analysis

Table 2-11
Total Employment – Historical Growth Rates (CAAGR)
1980 – 2019

County	1980-'90	1990-'00	2000-'10	2010-'19	1980-'19
Brevard	4.6%	1.8%	0.6%	2.3%	2.3%
Lake	2.3%	4.0%	2.8%	3.5%	3.1%
Orange	5.9%	3.6%	1.1%	4.0%	3.6%
Osceola	8.3%	4.0%	4.7%	5.3%	5.6%
Polk	2.2%	1.9%	0.9%	2.6%	1.9%
Seminole	7.0%	4.4%	1.6%	3.4%	4.1%
Volusia	3.3%	1.9%	1.8%	2.3%	2.3%
Area Total	4.7%	3.0%	1.4%	3.4%	3.1%
Florida	3.7%	2.8%	1.0%	3.1%	2.6%

Source: Bureau of Economic Analysis

2.4.2 PROJECTIONS

Employment in the study area is projected to grow by an average of 1.7 percent per year through 2050 as shown in **Table 2-12**, which is similar to the forecast statewide growth. Osceola County's total employment is forecasted to increase the fastest at 2.9 percent per year while Brevard and Volusia Counties are forecasted with the slowest annual growth of 1.0 percent through 2050.

Table 2-12
Total Employment – Projected Growth Rates (CAAGR)
2019 – 2050

County	2019-'20	2020-'30	2030-'40	2040-'50	2019-'50
Brevard	1.3%	1.2%	0.9%	0.8%	1.0%
Lake	2.2%	2.1%	1.9%	1.7%	1.9%
Orange	2.3%	2.1%	1.8%	1.6%	1.9%
Osceola	3.2%	3.1%	2.9%	2.8%	2.9%
Polk	1.6%	1.5%	1.2%	1.0%	1.2%
Seminole	2.1%	2.0%	1.7%	1.6%	1.8%
Volusia	1.4%	1.3%	0.9%	0.8%	1.0%
Area Total	2.0%	1.9%	1.6%	1.5%	1.7%
Florida	1.8%	1.7%	1.5%	1.4%	1.5%

Source: Woods & Poole Economics, Inc., 2020

Table 2-13 shows the employment projections by major sector (industrial, commercial, and service industries). Future long-term employment growth for the study area is projected to average 0.3 percent per year for the industrial sector, 1.4 percent per year for the commercial sector and 2.0 percent per year for the service sector through 2050. Growth in jobs in the commercial and service sectors reflects the strength of the Central Florida tourism industry. The industrial sector is expected to experience slower long-term growth.

Table 2-13
Employment by Sector – Projected Growth Rates (CAAGR)
2018 – 2050

Area	2019-'20	2020-'30	2030-'40	2040-'50	2019-'50
Industrial	0.4%	0.3%	0.3%	0.2%	0.3%
Commercial	2.0%	1.7%	1.2%	1.1%	1.4%
Service	2.3%	2.2%	1.9%	1.7%	2.0%

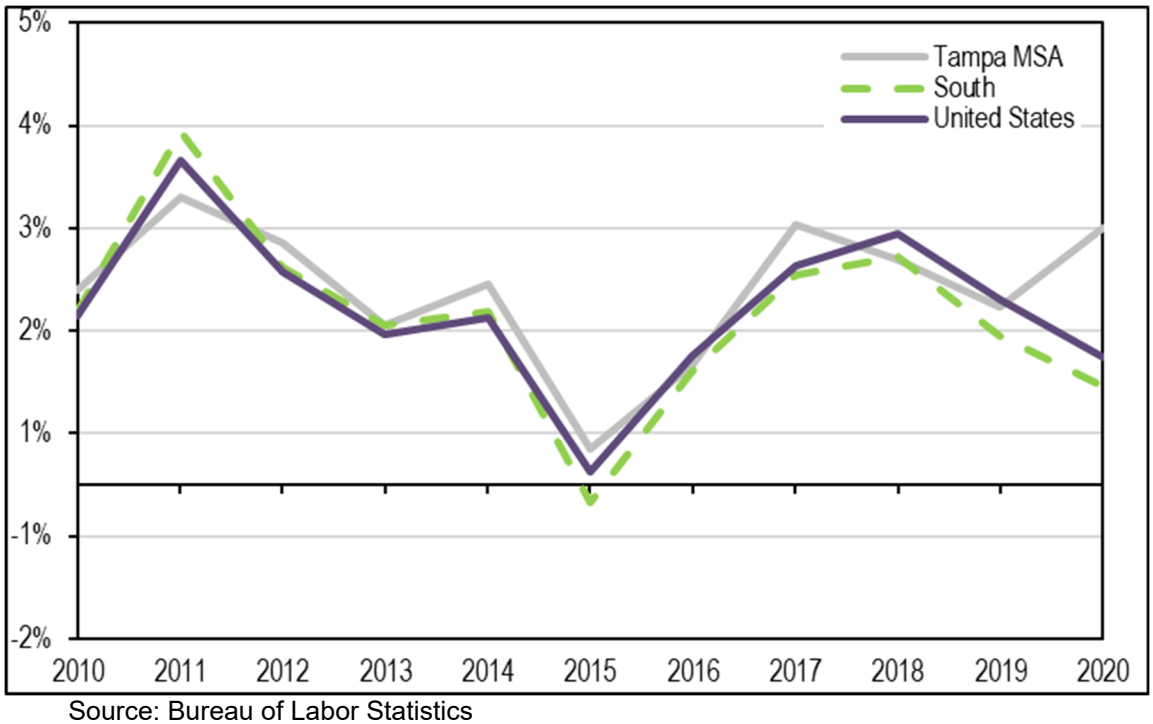
Source: Woods & Poole Economics, Inc., 2020

2.5 Consumer Price Index and Income

2.5.1 CONSUMER PRICE INDEX

The Consumer Price Index (CPI) measures the national average price of an average basket of goods and services compared to a fixed base period (indexing). Changes in the CPI are a measure of price inflation. The historical year-over-year change in the CPI, or annual inflation, for 2010 through 2020 is shown in **Figure 2-4**. In 2009, annual deflation occurred for the first time since 1955 due to the start of the severe global recession, the Great Recession. Since 2009, inflation resumed, albeit at a slower pace than historically, hovering between 2.0 and 3.5 percent per year, except in 2015 when there were almost no price increases over the prior year. Inflation decelerated from 2011 to 2015; however, inflation has accelerated slightly since. Other indices reported are for the Tampa MSA (note that Orlando MSA is not separately tracked by the BLS) and the South Region (Southeastern U.S. States), which generally trend closely with national price changes.

Figure 2-4
Change in Consumer Price Index (CPI)
2010 - 2020



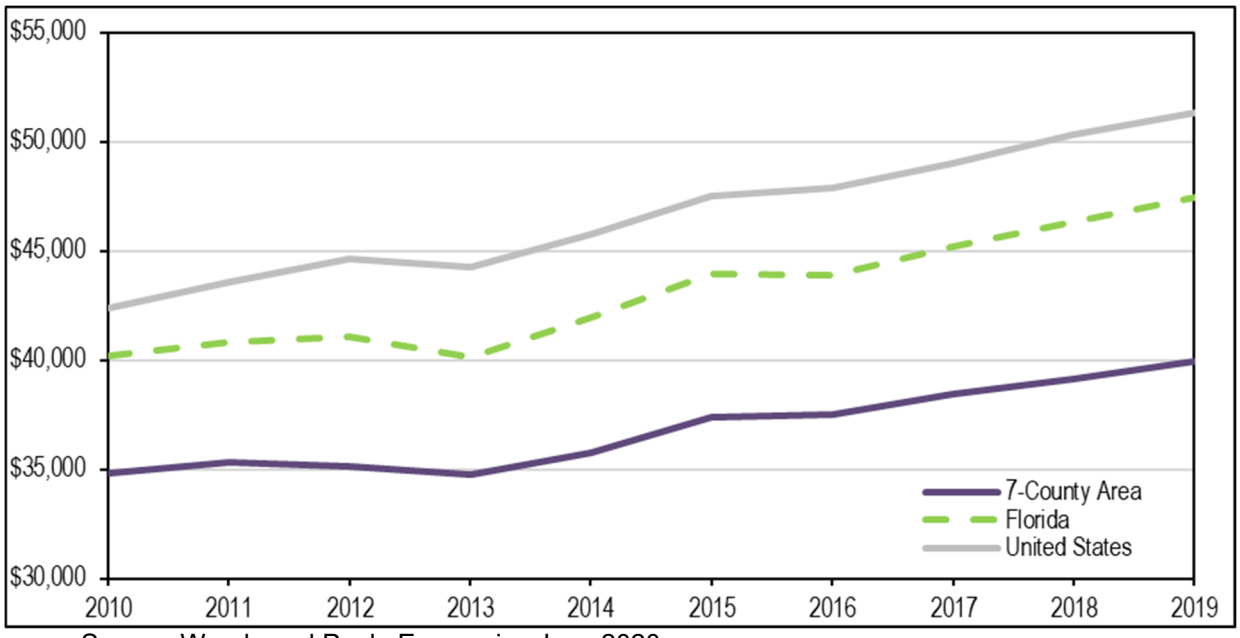
Source: Bureau of Labor Statistics

2.5.2 INCOME

Travel demand is sensitive to, among other things, the amount of disposable income available to households. A reliable indicator of an individual's propensity to pay tolls in exchange for travel time savings on other toll-free alternatives is their personal income. This is a key input into the assessment of the value of time, as there are typically relationships between income, value of time and the customer's willingness to pay tolls. Real personal income is income adjusted for inflation.

The historical ten-year real per capita income trends since 2010 for the U.S., Florida, and the seven-county study area are shown in **Figure 2-5**. The levels of real personal income per capita for Florida and the seven-county study area are steadily rebounding from their recession decline in 2009 with CAAGRs from 2010 through 2019 of 2.1 and 1.7 percent per year, respectively. Real personal income per capita for the U.S. grew 2.4 percent per year since the recession, between 2010 and 2019.

Figure 2-5
Total Real Personal Income Per Capita
2010 - 2019 (2012 Dollars)

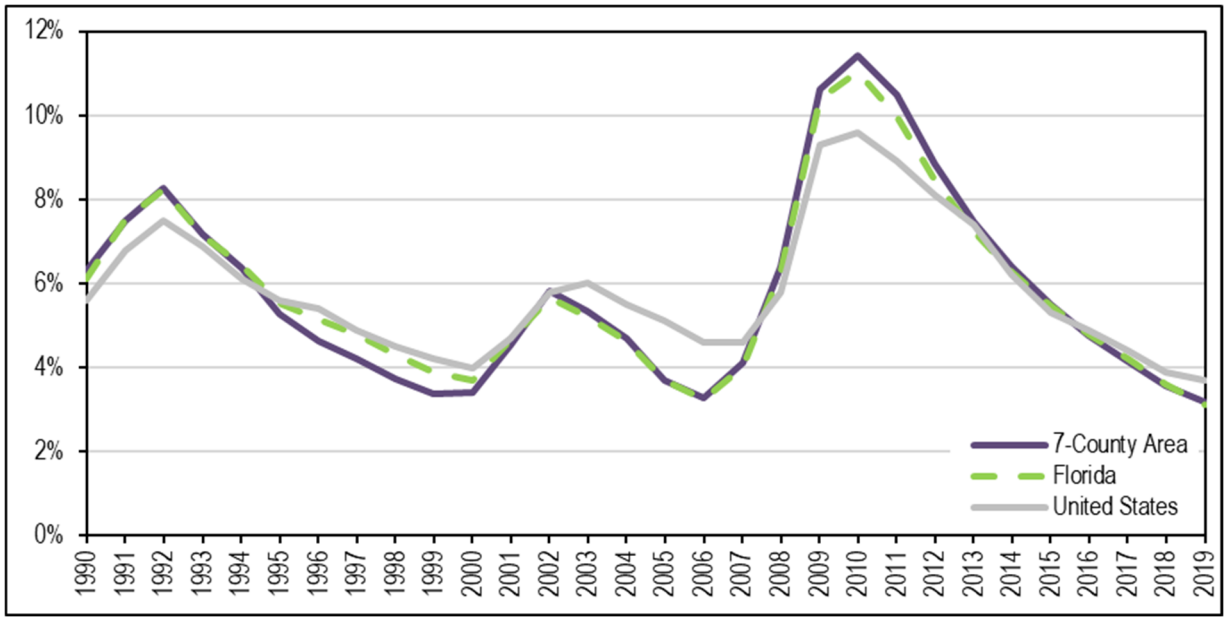


Source: Woods and Poole Economics, Inc., 2020

2.6 Unemployment

The unemployment rate in the study area had been traditionally lower than in other parts of the State and lower than the national rates since 1994. However, in 2008 the study area had an unemployment rate of 6.4 percent, which was higher than the United States rate for the first time in fifteen years. Between 2009 and 2012, the unemployment rate in the study area exceeded the unemployment rates in both Florida and the United States. **Figure 2-6** shows the historical unemployment rates for the study area, Florida, and the United States from 1990 through 2019. The study area's unemployment rate has ranged from a low of 3.2 percent in 2019 to a high of 11.4 percent in 2010. In 2018 the study area unemployment rate decreased again to an average of 3.2 percent, and once again lower than the national average of 3.7 percent. The study area's unemployment rate has historically been quite close to the Florida average, which had an unemployment rate of 3.1 percent in 2019.

Figure 2-6
Historical Unemployment Rate Comparison
1990 – 2019



Source: Bureau of Labor Statistics

2.7 Regional Tourism

As shown in **Table 2-14**, Orlando hosted a record 75.8 million visitors in 2019, which was an increase of 1.1 percent over the 75.0 million visitors in 2018. Tourism stagnated after the September 11th terrorist attacks, and remained tepid during the Great Recession, but increased every year since 2011. Tourism declined significantly to only 35.2 million visitors, or by 53.6 percent, in 2020 due to the COVID-19 pandemic and the corresponding travel restrictions, including the closure of area attractions through the Summer of 2020. International tourists held steady in 2019 with 6.5 million visitors, but also declined in 2020 to only 1.6 million visitors.

Table 2-14
Tourism – Orlando Visitors (Millions)
2011 – 2020

Visitors	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2011-'20 CAAGR
Domestic	51.4	52.9	54.4	57.4	60.6	62.3	65.9	68.6	69.3	33.6	-4.6%
International	3.8	4.3	4.9	5.4	5.9	5.7	6.2	6.5	6.5	1.6	-9.2%
Total	55.2	57.2	59.3	62.8	66.5	68.0	72.0	75.0	75.8	35.2	-4.9%

Source: Visit Orlando

In 2020, the Metro Orlando area hotel occupancy rate was only 41.5 percent, a decrease of 34.6 percent from 2019. As mentioned above, this decline is due to the travel restrictions put in place during the COVID-19 pandemic and the overall reduction in tourists in the Orlando area. Data is shown in **Table 2-15**. The 2020 average daily room rate was $109.74, which was a 13.6 percent decline compared to 2019. The majority of these lodging units are concentrated around Walt Disney World, International Drive (near Universal Studios, SeaWorld, and the Orange County Convention Center), and in the Kissimmee area.

Table 2-15
Metro Orlando Area Lodging
2011 – 2020

Metro Orlando	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Occupancy Rate	67.6%	68.8%	71.0%	71.9%	77.0%	75.5%	79.3%	77.5%	76.1%	41.5%
Average Daily Rate	$94.11	$96.88	$101.53	$107.26	$112.00	$116.00	$121.53	$127.32	$126.95	$109.74
Room-Night Demand (millions)	28.5	29.3	30.1	N/A*	33.0	33.0	34.7	34.5	34.5	15.3

*2014 room night demand not available at the time of report preparation.
Source: Visit Orlando

The historical and projected enplanements, or boardings, for the Orlando International Airport (OIA) are shown in **Table 2-16** and **Table 2-17**. OIA had an increase of over 6 million enplanements from 1990 to 2000, a decade increase of over 69 percent. Enplanements totaled 24.2 million for 2019, 64.9 percent above the 2000 total. Since 1990, total enplanements at OIA have almost tripled, with a 3.6 percent per year growth rate. The United States Department of Transportation Federal Aviation Administration (FAA) forecasts that OIA enplanements will grow by an average of 2.5 percent per year through 2040. Enplanements are an indicator of tourism and economic growth. As of the publication of this document, the enplanement data for 2020 was not available.

Table 2-16
Historical OIA Enplanements
1990 – 2019

	1990	2000	2010	2019
Enplanements	8,683,491	14,683,594	16,651,359	24,220,689

Source: Federal Aviation Administration Terminal Area Forecasts

Table 2-17
Projected Growth in OIA Enplanements
2019 - 2040

	2019-'20	2020-'30	2030-'40	2019-'40
Enplanements	6.1%	2.3%	2.3%	2.5%

Source: Federal Aviation Administration Terminal Area Forecasts

Metropolitan Orlando is home to several of the largest theme parks in the nation, which will continue to contribute to the growth in Central Florida. This growth is due to new and future attractions that these theme parks have planned to attract tourists to the area. Downtown Disney has been transformed into Disney Springs with new shopping, dining and entertainment choices which were opened in phases beginning in 2015. The grand opening of Disney Springs took place in July 2016; however, many new restaurants and shops have continued to be added. Disney also opened Pandora - the World of Avatar at Animal Kingdom in 2017, Toy Story Land at Magic Kingdom in summer 2018, and Star Wars: Galaxy's Edge at Hollywood Studios in 2019. In 2020, Disney opened the Riviera Resort, which is the first stand-alone Disney resort property to open in seven years. Universal opened Volcano Bay water theme park in 2017. Several new projects opened in 2018 at Universal Studios including a ride based on the Fast & Furious and the new Aventura Hotel. In 2019, Universal Studios introduced Hagrid's Magical Creatures Motorbike Adventure in The Wizarding World of Harry Potter. Universal Studios also opened its first two value-priced hotels at the new Endless Summer Resort. The two new hotels include the Surfside Inn and Suites, which opened in Summer 2019, and the Dockside Inn and Suites, which opened in 2020. In 2020, Universal debuted a new live-action stunt show called The Bourne Stuntacular and will open the new Jurassic World VelociCoaster in Summer 2021.

As shown in **Table 2-18**, the Magic Kingdom attracted an estimated 21.0 million visitors in 2019, which had the highest attendance of all Orlando-area theme parks. Universal Studios at Universal Orlando had the highest recent growth with an 8.4 percent average annual increase in attendance compared to 2012. SeaWorld exhibited a serial year-over-year decline, averaging -2.0% per year. Wet 'n Wild closed at the end of 2016 and was redeveloped into Volcano Bay, opening in mid-2017. As of the publication of this document, the attraction attendance for 2020 was not available.

Table 2-18
Central Florida Attraction Attendance
2012- 2019 (Millions)

Theme Parks	2012	2013	2014	2015	2016	2017	2018	2019	2012-'19
Disney's Magic Kingdom	17.5	18.6	19.3	20.5	20.4	20.5	20.9	21.0	2.6%
Disney's Epcot Center	11.1	11.2	11.5	11.8	11.7	12.2	12.4	12.4	1.7%
Disney's Animal Kingdom	10.0	10.2	10.4	10.9	10.8	12.5	13.8	13.9	4.8%
Disney's Hollywood Studios	9.9	10.1	10.3	10.8	10.8	10.7	11.3	11.5	2.1%
Islands of Adventure at Universal Orlando	8.0	8.1	8.1	8.8	9.4	9.5	9.8	10.4	3.8%
Universal Studios at Universal Orlando	6.2	7.1	8.3	9.6	10.0	10.2	10.7	10.9	8.4%
Seaworld Orlando	5.4	5.1	4.7	4.8	4.4	4.0	4.6	4.6	-2.0%
Water Parks									
Typhoon Lagoon	2.1	2.1	2.2	2.3	2.3	2.3	2.3	2.2	1.0%
Blizzard Beach	1.9	2.0	2.0	2.1	2.1	1.9	2.0	2.0	0.4%
Aquatica	1.5	1.6	1.6	1.6	1.5	1.4	1.6	1.5	0.0%
Volcano Bay (formerly Wet 'n Wild)	1.2	1.3	1.3	1.3	1.3	Closed	1.7	1.8	5.5%

Source: Visit Orlando – Themed Entertainment Association (TEA) and AECOM

2.8 Fuel Prices

Figure 2-7 contains weekly retail prices for regular-grade gasoline in Florida, from July 2013 through December 2020 (FY 2014 – FY 2020, plus remainder of CY 2020). From July 2013 through June 2014, gasoline prices fluctuated within a relatively narrow range around $3.50 per gallon. Beginning October 2014, however, motor fuel prices began a noticeable decline. Since March 2016, prices started to increase slightly to $2.79 at the beginning of October 2018. However, since then, average prices have fluctuated and were at $2.17 at the end of December 2020. Based on current forecasts from the U.S. Energy Information Administration, underlying near term price forecasts are expected to remain low. This should prove positive to current trends in strong passenger car and commercial vehicle traffic growth on CFX facilities.

Figure 2-7
Average Retail Fuel Prices – Florida (Regular Grade/Gallon)
FY 2014– December 2020

Source: U.S. Energy Information Administration

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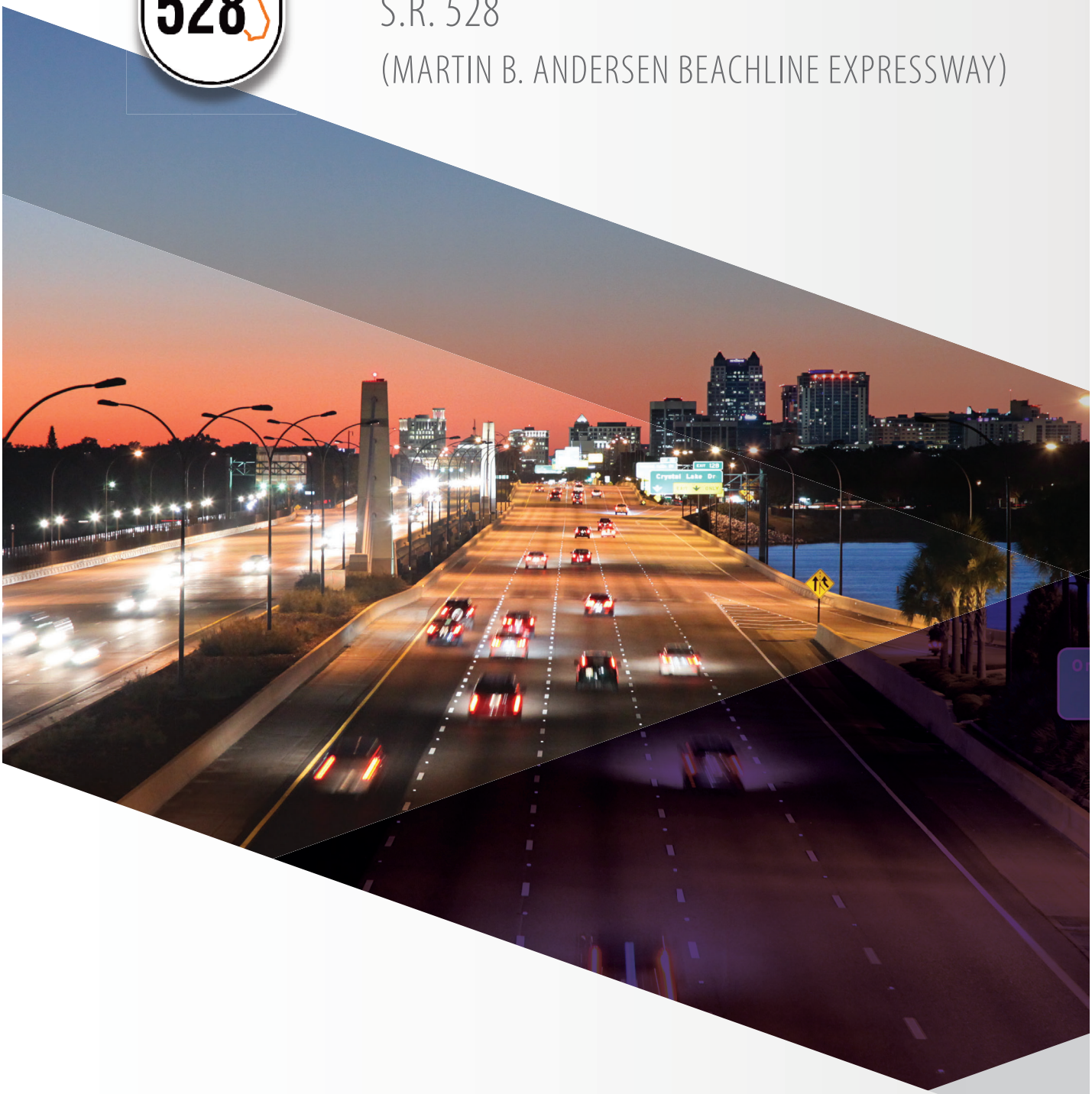
CHAPTER 3

S.R. 528

(MARTIN B. ANDERSEN BEACHLINE EXPRESSWAY)



S.R. 528 (MARTIN B. ANDERSEN BEACHLINE EXPRESSWAY)

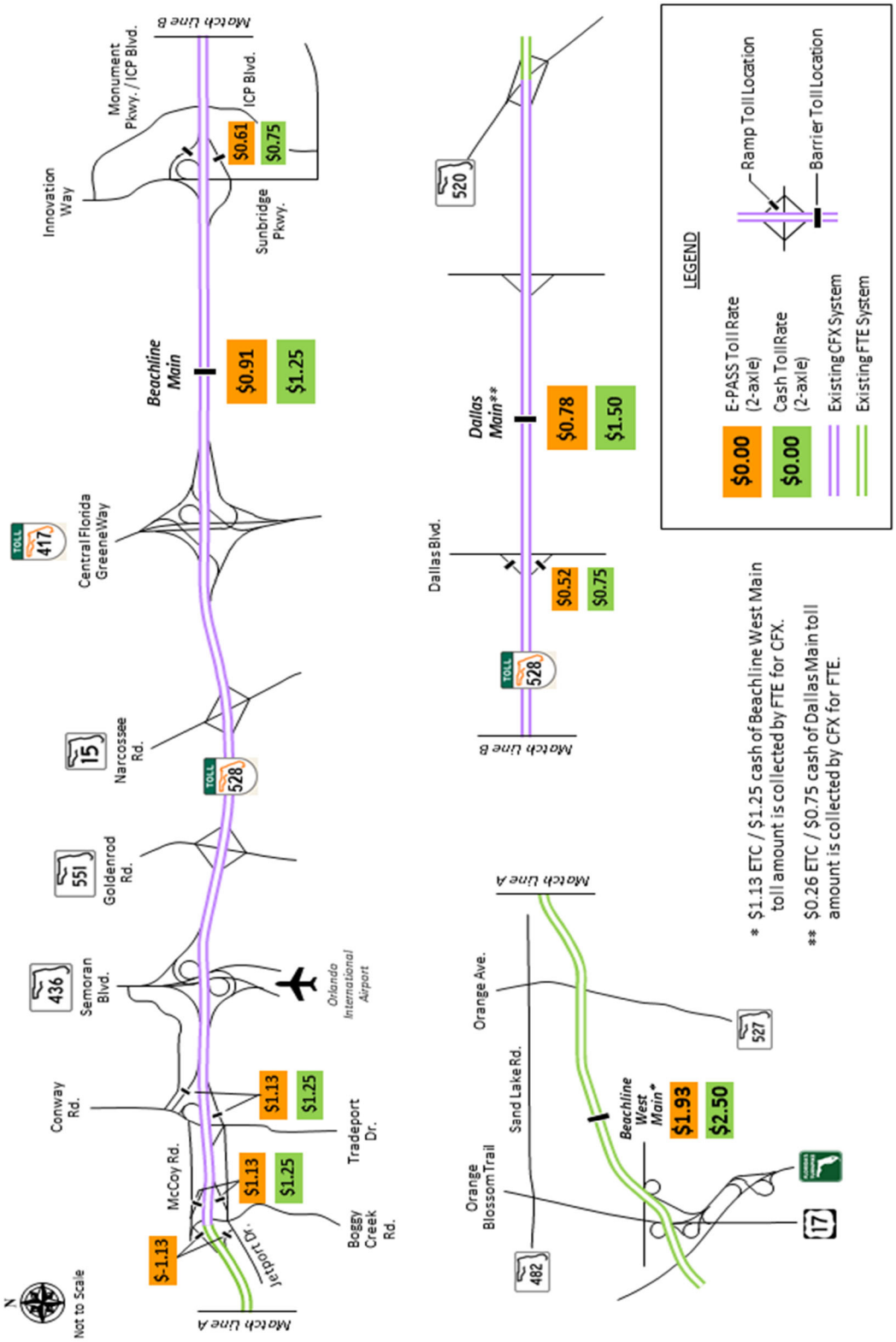
3.1 Facility Description

S. R. 528, also known as the Martin B. Andersen Beachline Expressway, is a 41-mile expressway that extends east from Interstate 4 (I-4) in the International Drive resort area to U.S. Highway 1 in Brevard County near the Atlantic Ocean. The Beachline Expressway is owned, operated and maintained by two agencies, CFX and FTE. CFX is responsible for the 23-mile portion of S.R. 528 from Boggy Creek Road/Sand Lake Road east to S.R. 520 with three mainline plaza groups including the Airport Main, Beachline Main and Dallas Main. Ramp tolls are located at the Boggy Creek Road/McCoy Road ramps to/from the east, the Conway Road/Tradeport Drive ramps to/from the east, the Innovation Way interchange to/from the east, and the Dallas Boulevard ramps to/from the west. FTE is responsible for the 8-mile segment of S.R. 528 from I-4 east to Boggy Creek Road known as the Beachline West Expressway with one mainline toll plaza. FTE is also responsible for the 15-mile portion of S.R. 528 from S.R. 520 east to Interstate 95 known as the Beachline East Expressway. A map of the CFX portion and the FTE western portion of S.R. 528, including the FY 2020 toll rates for the mainline and ramp toll plazas, is shown in **Figure 3-1**.

The original segment of S.R. 528 opened in 1967 as the Bee Line Expressway, providing a direct tolled route from Orlando starting at Narcoossee Road to the Space Coast. In July 1983, the segment of S.R. 528 from McCoy Road to S.R. 436/Semoran Boulevard was upgraded to a limited-access expressway, the Airport Main plaza was added, and the Airport Interchange was opened to traffic. The Airport Interchange connects the Orlando International Airport (OIA) with S.R. 528 and with S.R. 436. This 2.6-mile segment was a six-lane, limited-access expressway with frontage roads extending from an interchange with McCoy Road to the Airport interchange. S.R. 528 remained the only limited-access route into OIA until the south access road at Boggy Creek Road and John Young Parkway sections of S.R. 417 opened in July 1993.

In July 2009, the S.R. 528 Beachline Main plaza was converted to the express lane configuration. The express lanes allowed electronic customers to continue through the mainline toll collection point at highway speeds without having to stop or slow down. Automatic coin and manual cash customers were diverted off the roadway to an adjacent traditional toll plaza and required to merge back into traffic after paying the toll. This provided a more efficient means of toll collection, greatly reducing delays to customers and increasing throughput at the toll plaza.

Figure 3-1
S.R. 528 Facilities and Toll Rates



In May 2010, a roadway connection named Monument Parkway was completed between the S.R. 528/International Corporate Park (ICP) Interchange and the southern extension of Alafaya Trail/Innovation Way in east Orange County. This connection allowed traffic coming from Innovation Way to access S.R. 528 via the ICP interchange, which reduced travel times to S.R. 528. In March 2012, the Dallas Main plaza and Dallas Boulevard ramp plazas were opened to create toll equity for the traffic movements between S.R. 417 and the ICP interchange resulting from the Monument Parkway connection with Innovation Way. CFX collects $0.26 per ETC transaction and $0.75 per cash transaction for FTE tolls at the Dallas Main plaza.

Starting in FY 2013, S.R. 528 was the center of discussions for creation of a super corridor with intercity passenger rail service from All Aboard Florida, operating as Brightline, future utility needs, future expansion of S.R. 528, and possibly commuter rail. The acquisition phase of the super corridor was completed by the end of FY 2015 through negotiated purchases with the property owners and easements in favor of Virgin Trains USA, whose contributions offset the cost of the corridor. Construction on the West Palm Beach to Orlando section of Brightline started in June of 2019, with five contractors responsible for the 170-mile project and is expected to be completed in late 2022.

Starting in November 2014, CFX began removal of the Airport Main Plaza. The removal was due to several factors including on-going concerns that S.R. 528 customers heading west from the Orlando International Airport encountered two mainline toll plazas, as well as operational issues for ETC customers having to weave across cash lanes to reach the S.R. 436/Airport exit. In March 2016, an "Interagency Toll Collection Agreement" with FTE facilitated the transfer of toll collections from the Airport Main Plaza to FTE's Beachline West Main Plaza. The mainline toll plaza was removed and new ramp plazas were installed at the Conway Road and Boggy Creek Road Interchanges with tolls collected to and from the east. ETC customers with 2-axle vehicles now pay a combined toll of $1.91 at the Beachline West Main Plaza; $0.80 represents the FTE toll amount and $1.11 represents the CFX toll amount. With the combined toll structure, ETC customers using the Boggy Creek Road interchange are eligible for a $1.11 rebate when entering S.R. 528 westbound at Boggy Creek Road and passing through the Beachline West Plaza, and also when traveling eastbound on S.R. 528 passing through the Beachline West Plaza then exiting at Boggy Creek Road, because customers pay the full price at the Beachline West Plaza, but do not use CFX facilities. The Airport Main plaza group consists of the sum of T&R collected by FTE and the T&R collected by CFX.

In July 2016, CFX began construction of a new interchange between S.R. 528 and Innovation Way to improve connectivity to S.R. 528 in east Orange County and to accommodate the development of the Innovation Way corridor and to accommodate the Brightline train. The project included four ramps with two ramp plazas and the extension of Innovation Way to Aerospace Parkway with a connection to International Corporate Park Boulevard and the future Sunbridge Parkway. The ramp plazas feature both exact coin and ETC only lanes. This project also involved removal of the existing S.R. 528/ICP Boulevard interchange. The project was completed and the final ramps on the interchange opened to traffic in March 2018.

In March of 2018, an unsolicited proposal from Virgin Trains USA/Brightline was received by the Florida Department of Transportation (FDOT) for the potential leasing of rights of way owned by

FDOT and CFX for the purpose of constructing and operating intercity passenger rail service extension between Orlando and Tampa. The rights of way owned by CFX that were identified in the proposal include portions of State Roads 417 and 528. Pursuant to the unsolicited proposal, FDOT and CFX issued a Request for Proposals (RFP) for the leasing of rights of way for intercity passenger rail service between Orlando and Tampa. FDOT granted Virgin Trains USA/Brightline approval to negotiate with transportation agencies for rights of way leases, which has a current deadline of July 31, 2021.

3.2 Historical Transactions and Toll Revenues

As defined in Chapter 1, CFX transactions and toll revenues are classified as either Paid In-Lane (ETC and cash) or Unpaid In-Lane (PBP and non-revenue). Total transactions are the sum of paid in-lane and unpaid in-lane transactions. Total revenue is the sum of paid in-lane revenue and the revenue collected through PBP, estimated as an accrued amount. The following section includes a breakdown of toll-paying transactions and toll revenues by paid in-lane and then by PBP.

3.2.1 ANNUAL PAID IN-LANE TRANSACTION AND REVENUE TRENDS

A history of annual paid in-lane transactions at the Beachline Main, Airport Main and Dallas Main plaza groups from FY 2001 to FY 2020 are presented in the top half of **Table 3-1**. Annual paid in-lane revenues are also summarized and totaled in the bottom half of the table. The S.R. 528 annual paid in-lane transaction and revenue trends including annual growth are also presented visually in **Figure 3-2** and **Figure 3-3**. These historical tables do not include PBP transactions and revenues, only those that are paid in-lane. For these reasons, the information presented in this section may differ slightly from the data presented in the FY 2020 Comprehensive Annual Financial Report (CAFR) and other information in this report.

Table 3-1
S.R. 528 Plaza Groups – Historical Paid In-Lane Transactions and Revenue
FY 2001 – FY 2020

Fiscal Year	Airport Main	Beachline Main	Dallas Main	TOTAL	Airport Main	Beachline Main	Dallas Main	TOTAL
	TRANSACTIONS (millions)				PERCENT CHANGE			
2001	19.8	12.6		32.4				
2002 [A]	19.0	12.6		31.6	-4.0%	0.0%		-2.5%
2003	20.0	13.7		33.7	5.3%	8.7%		6.6%
2004	22.6	14.9		37.5	13.0%	8.8%		11.3%
2005 [B]	24.6	15.1		39.7	8.8%	1.3%		5.9%
2006	26.5	15.9		42.4	7.7%	5.3%		6.8%
2007	27.8	16.7		44.5	4.9%	5.0%		5.0%
2008 [C]	28.2	16.6		44.8	1.4%	-0.6%		0.7%
2009 [D]	25.6	15.1		40.7	-9.2%	-9.0%		-9.2%
2010 [E]	25.4	15.5		40.9	-0.8%	2.6%		0.5%
2011	26.2	16.3		42.5	3.1%	5.2%		3.9%
2012 [F]	26.8	16.4	4.3	47.5	2.3%	0.6%		11.8%
2013 [F,G]	26.4	16.7	14.5	57.6	-1.4%	1.8%	237.2%	21.3%
2014	27.0	17.6	15.1	59.7	2.3%	5.4%	4.1%	3.6%
2015	28.8	19.0	16.4	64.2	6.7%	8.0%	8.6%	7.5%
2016 [H]	32.6	20.9	18.0	71.5	13.2%	10.0%	9.8%	11.4%
2017 [I]	36.6	21.7	18.5	76.8	12.3%	3.8%	2.8%	7.4%
2018 [J]	36.8	21.6	18.3	76.7	0.5%	-0.5%	-1.1%	-0.1%
2019 [K]	36.8	22.0	18.3	77.1	0.0%	1.9%	0.0%	0.5%
2020 [L,M]	31.9	19.6	16.5	68.0	-13.3%	-10.9%	-9.8%	-11.8%
	TOLL REVENUES (millions)				PERCENT CHANGE			
2001	$15.5	$13.7		$29.2				
2002 [A]	$15.0	$13.7		$28.7	-3.2%	0.0%		-1.7%
2003	$15.7	$14.9		$30.6	4.7%	8.8%		6.6%
2004	$17.9	$16.4		$34.3	14.0%	10.1%		12.1%
2005 [B]	$19.4	$16.7		$36.1	8.4%	1.8%		5.2%
2006	$20.9	$17.5		$38.4	7.7%	4.8%		6.4%
2007	$21.8	$18.2		$40.0	4.3%	4.0%		4.2%
2008 [C]	$22.1	$18.0		$40.1	1.4%	-1.1%		0.3%
2009 [D]	$21.6	$16.9		$38.5	-2.3%	-6.1%		-4.0%
2010 [E]	$26.2	$20.4		$46.6	21.3%	20.7%		21.0%
2011	$27.0	$21.4		$48.4	3.1%	4.9%		3.9%
2012 [F]	$27.5	$19.0	$2.2	$48.7	1.9%	-11.2%		0.6%
2013 [F,G]	$30.9	$16.0	$7.6	$54.5	12.4%	-15.8%	243.9%	11.8%
2014	$31.6	$16.8	$7.9	$56.3	2.3%	5.1%	4.4%	3.4%
2015	$33.6	$18.2	$8.6	$60.4	6.3%	8.3%	8.9%	7.3%
2016 [H]	$37.3	$20.0	$9.4	$66.7	11.0%	9.9%	9.3%	10.4%
2017 [I]	$41.4	$20.7	$9.7	$71.8	11.0%	3.5%	3.2%	7.6%
2018 [J]	$41.6	$20.6	$9.6	$71.8	0.5%	-0.5%	-1.0%	0.0%
2019 [K]	$42.0	$21.3	$10.5	$73.8	1.0%	3.4%	9.4%	2.8%
2020 [L,M]	$36.6	$20.2	$9.6	$66.4	-12.9%	-5.2%	-8.6%	-10.0%

Notes:

A - Effects of the events on September 11, 2001.

B - Effects from 2004 hurricane season (4 storms with toll suspensions).

C - First effects of national economic recession.

D - Systemwide toll rate increase in April 2009. Beachline Main plaza converted to open road tolling in July of 2009.

E - Monument Parkway connection to ICP ramps opened to traffic.

F - Dallas Main Plaza opened to traffic on March 19, 2012. Beachline Main plaza toll reduced from $1.50 to $0.75.

G - Systemwide toll rate increase in July 2013. Implementation of cash and electronic toll rate differential.

H - Airport Main Plaza stopped collecting tolls on 1/31/16. All transactions and toll revenues are from ramps or the FTE plaza.

I - Effects from Hurricane Matthew in October 2016.

J - Effects from Hurricane Irma in September 2017.

K - Systemwide toll rate increase in July 2018.

L - Systemwide toll rate increase in July 2019.

M - Effects from Hurricane Dorian in September 2019 and first effects of COVID-19 pandemic began in March 2020.

As shown, total paid in-lane transactions on S.R. 528 in FY 2020 decreased by 9.1 million, or 11.8 percent, compared to FY 2019. Paid in-lane revenues experienced a decline of 10.0 percent during the same period. Total facility paid in-lane transactions and revenues have increased annually over the past twenty years with only four exceptions in FY 2002, FY 2009, FY 2018, and FY 2020. FY 2020 paid in-lane transactions and revenues were negatively impacted by the effects of the COVID-19 pandemic beginning in March 2020. Cash toll collection was also suspended on the facility from March 19, 2020 through May 31, 2020 in response to COVID-19 safety protocols. The slower growth in paid in-lane transactions and revenues in FY 2020 can also be attributed to an increase in customers utilizing the PBP program.

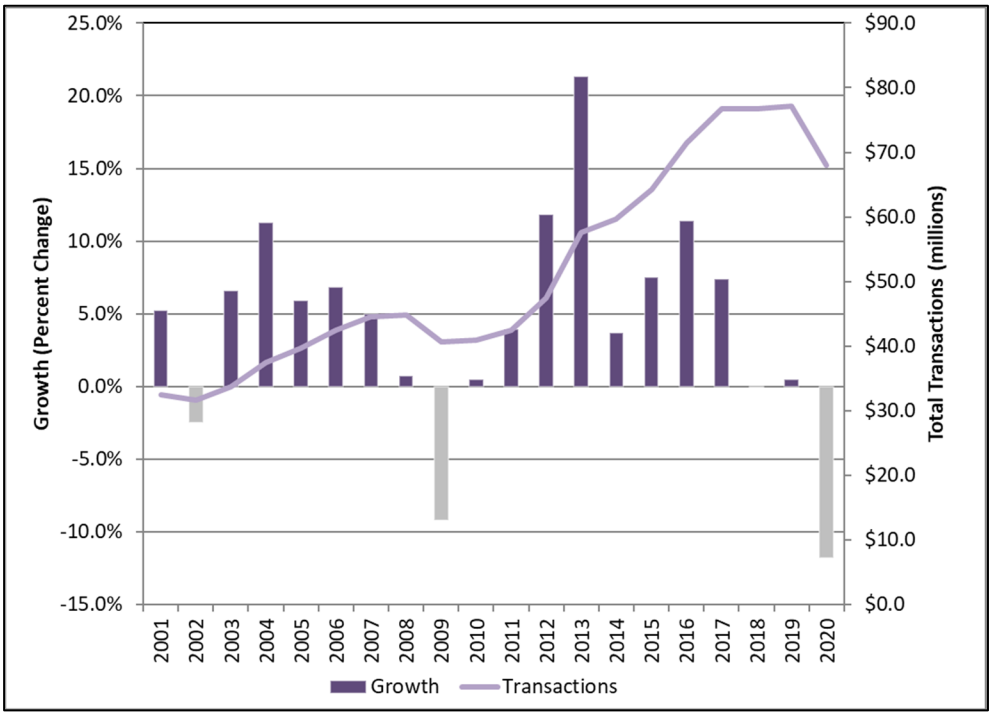
The FY 2002 decrease in paid in-lane transactions of 4.0 percent at the Airport Main plaza group was caused by the reduction of tourism travel in Florida because of the September 11th terrorist attack. Paid in-lane revenues also declined at this plaza group by 3.2 percent. The impact at the Beachline Main plaza group was less with no growth during the year.

In FY 2008, the Beachline Main plaza group experienced a decrease of 0.6 percent in paid in-lane transactions and a decrease of 1.1 percent in paid in-lane revenues. This was the first year of decline since the plaza opened and can be attributed to the start of the Great Recession.

In FY 2009, paid in-lane transactions at the Airport Main and Beachline Main plaza groups decreased by 9.2 percent and 9.0 percent, respectively. Paid in-lane revenues also declined by 2.3 percent at the Airport Main plaza group and by 6.1 percent at the Beachline Main plaza group. FY 2009 paid in-lane transactions and revenues were affected by the Great Recession and then by the Systemwide toll rate increase. The toll rate increase in April 2009 impacted the last three months of FY 2009. Also, in FY 2009, tolls were suspended on the facility for nearly two days in August 2008 due to Tropical Storm Fay.

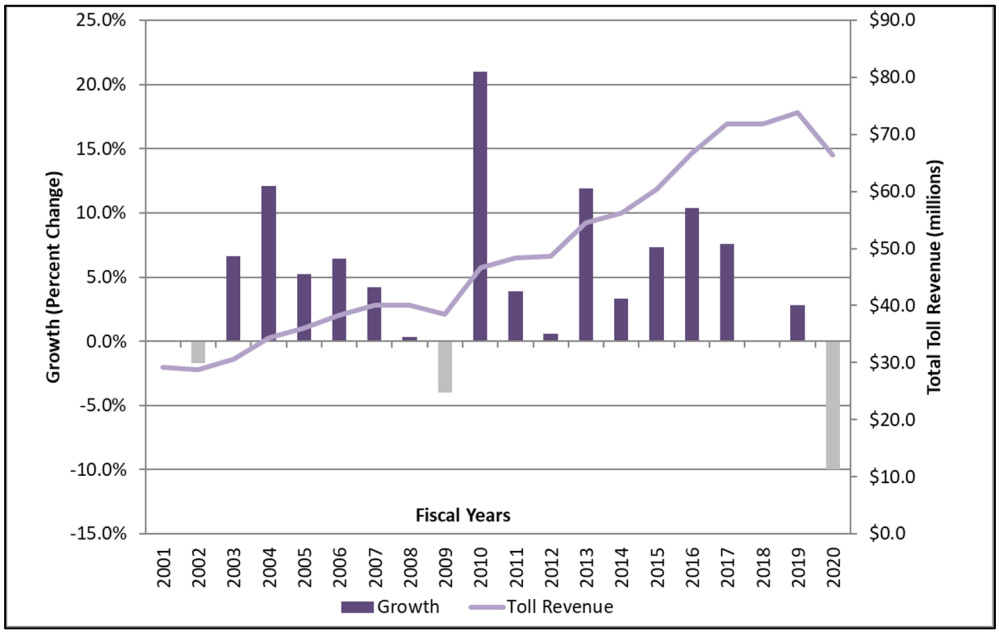
Paid in-lane transactions continued to decline in the Airport Main plaza group in FY 2010 by 0.8 percent due to the continued impacts of the economic recession and the toll rate increase. In FY 2010, paid in-lane revenues on the Airport Main and Beachline Main plaza groups increased significantly due to the additional revenue collected from the Systemwide toll rate increase. The toll rate increase impacted growth during the first nine months of the fiscal year. Paid in-lane transactions and revenue at the Beachline Main plaza group had a slightly higher growth rate than the Airport Main plaza group, caused by the opening of the Monument Parkway connection between Innovation Way and S.R. 528/ International Corporate Park interchange, which provided alternative access in this area of east Orange County.

Figure 3-2
S.R. 528 Historical Paid In-Lane Transactions and Annual Growth
FY 2001 – FY 2020



Source: CFX Statistical Report June 2020

Figure 3-3
S.R. 528 Historical Paid In-Lane Revenue and Annual Growth
FY 2001 – FY 2020



Source: CFX Statistical Report June 2020

In FY 2011, paid in-lane transactions at both the Airport Main and Beachline Main plaza group increased compared to the prior year. In FY 2012, the Dallas Main plaza opened to traffic to create toll equity for customers on S.R. 528 by collecting the same toll at two locations. At this time, tolls for 2-axle vehicles at the Beachline Main plaza were reduced from $1.50 to $0.75. The decrease in tolls resulted in a paid in-lane revenue decline of 11.2 percent on the Beachline Main plaza group compared to the prior year. The toll previously collected on behalf of FDOT at the Beachline Main plaza also shifted to the Dallas Main plaza. The Dallas Main plaza, which opened in March 2012, collected $2.2 million in paid in-lane revenues and reported 4.3 million paid in-lane transactions during its first three months of operation in FY 2012. Overall, S.R. 528 paid in-lane transactions would have been relatively flat in FY 2012 compared to FY 2011 without the additional transactions from this new plaza.

In FY 2013, paid in-lane transactions at the Airport Main plaza group declined by 1.4 percent, while paid in-lane revenues increased by 12.4 percent over FY 2012. This was expected due to the recent systemwide toll rate increase that went into effect on July 1, 2012 (FY 2013). The Beachline Main plaza group experienced an increase of 1.8 percent in paid in-lane transactions and decrease of 15.8 percent in paid in-lane revenues in FY 2013. As previously mentioned, tolls at the Beachline Main plaza were reduced in March 2012 along with the opening of the Dallas Main plaza. The Beachline Main plaza was also included in the FY 2013 systemwide toll rate increase. In FY 2013, paid in-lane transactions at the Dallas Main plaza increased by 237.2 percent and paid in-lane revenues increased by 243.9 percent compared to FY 2012. This can be attributed to the first full year of toll collection at this new plaza. In FY 2013, the combined paid in-lane revenues collected at the Beachline Main and Dallas Main plazas were slightly less 0.9 percent than the amount collected at the single plaza in the prior year.

In FY 2014, paid in-lane transactions at the Airport Main plaza group increased by 2.3 percent and paid in-lane revenues increased by 2.3 percent compared to FY 2013. The Beachline Main plaza group paid in-lane transactions increased by 5.4 percent and paid in-lane revenues increased by 5.1 percent over FY 2013. In FY 2014, Dallas Main plaza group paid in-lane transactions increased by 4.1 percent and paid in-lane revenues increased by 4.4 percent compared to FY 2013. This growth rate is significantly reduced compared to the growth observed in FY 2013, primarily due to the fact that FY 2013 was the first full year of transactions and toll revenues at the Dallas Main plaza group. All plaza groups experienced significant growth again in FY 2015.

In FY 2016, the Airport Main plaza group paid in-lane transactions increased by 13.2 percent; Beachline Main plaza group paid in-lane transactions increased by 10.0 percent; and Dallas Main plaza group paid in-lane transactions increased by 9.8 percent over FY 2015. Over the same period, the Airport Main plaza paid in-lane revenues increased by 11.0 percent, Beachline Main plaza group paid in-lane revenues increased by 9.9 percent; and Dallas Main plaza group paid in-lane revenues increased by 9.3 percent over FY 2015. 2016 was a leap year so February 2016 included an extra day of transactions and toll revenue collection compared to February 2015. Part of the increase at the Airport Main Plaza group is due to the change in the toll plan, or addition of the Boggy Creek Road and Conway Road ramp plazas, as a result of the mainline plaza removal. Transactions at the FTE Beachline West Main Plaza are included as part of the Airport Main Plaza group.

In October 2016 (FY 2017), Hurricane Matthew tracked parallel to the Florida coast as a Category 3 storm with winds up to 130 miles per hour. Tolls were suspended on the CFX System beginning at 8:00 p.m. on October 5, 2016 through early on October 10, 2016. The toll suspension resulted in a loss of approximately 0.8 million transactions and $0.7 million in toll revenues on S.R. 528. In September 2017 (FY 2018), Hurricane Irma tracked parallel to the Florida coast as a Category 4 storm with winds up to 155 miles per hour. Tolls were suspended on CFX toll facilities beginning on September 5, 2017 through September 20, 2017 resulting in a transaction loss of approximately 3.4 million and a toll revenue loss of $3.2 million on S.R. 528.

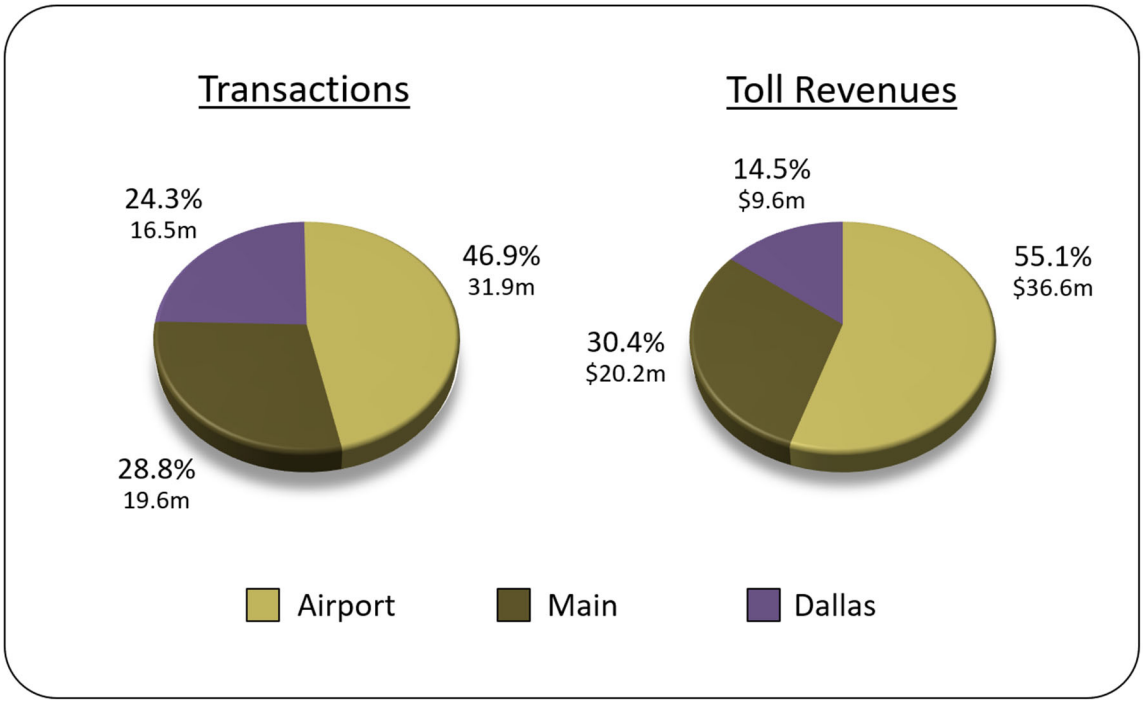
In FY 2018, the Airport Main plaza group paid in-lane transactions increased by 0.5 percent, Beachline Main plaza group paid in-lane transactions decreased by 0.5 percent and Dallas Main plaza group paid in-lane transactions decreased by 1.1 percent over FY 2017. Paid in-lane revenues for each plaza group followed the same trends compared to FY 2017. As previously mentioned, September 2017 transactions and revenues were negatively impacted by toll suspensions during Hurricane Irma.

In FY 2019, the Airport Main plaza group paid in-lane transactions showed no growth, Beachline Main plaza group paid in-lane transactions increased by 1.9 percent and Dallas Main plaza group paid in-lane transactions also showed no growth compared to FY 2018. Paid in-lane revenues increased at each plaza group during the same period due to the FY 2019 toll rate increase. As previously mentioned, the slower growth in paid in-lane transactions and revenues in FY 2019 can be attributed to customers choosing to pay via the PBP program.

In FY 2020, all S.R. 528 plaza groups experienced a decline in paid in-lane transactions and revenues, despite the FY 2020 toll rate increase. The declines in both paid in-lane transactions and revenues can primarily be attributed to the negative impacts of COVID-19 as explained in further detail in Chapter 1. September 2019 transactions and revenues were also negatively impacted by toll suspensions during Hurricane Dorian.

The paid in-lane transactions and revenues by plaza group and as a percentage of total S.R. 528 paid in-lane transactions and revenues for FY 2020 are shown in **Figure 3-4**. The Airport Main plaza group represented 31.9 million paid in-lane transactions or 46.9 percent of total S.R. 528 paid in-lane transactions. The Beachline Main plaza group carried 19.6 million or 28.8 percent of total paid in-lane transactions on the facility. Finally, the Dallas Main plaza group represented 16.5 million or 24.3 percent of total S.R. 528 paid in-lane transactions in FY 2020.

Figure 3-4
S.R. 528 Paid In-Lane Transactions and Revenue by Plaza Group
FY 2020



Source: CFX Statistical Report June 2020

The annual totals and percentages for paid in-lane revenues differ from those reported for annual paid in-lane transactions because of differences in toll rates. As shown, the Airport Main plaza group represented $36.6 million in paid in-lane revenues or 55.1 percent of total S.R. 528 paid in-lane revenues. The Beachline Main plaza group carried $20.2 million or 30.4 percent of paid in-lane revenues on the facility. Finally, because of the lower toll, the Dallas Main plaza group represented $9.6 million or 14.5 percent of total S.R. 528 paid in-lane transactions in FY 2020.

3.2.2 ANNUAL PBP TRANSACTION AND REVENUE TRENDS

A history of annual PBP transactions and revenue on S.R. 528 from FY 2011 to FY 2020 are presented in **Table 3-2**. PBP transactions and toll revenues are recorded by toll location and accrued monthly by plaza group, however Table 3-2 shows the annual totals for S.R. 528 as reported at year end.

Table 3-2
S.R. 528 – Historical PBP Transactions and Revenue
FY 2011 – FY 2020

Fiscal Year	Transactions (millions)	Percent Change	Toll Revenues (millions)	Percent Change
	TRANSACTIONS (millions)			
2011	0.5		$0.5	
2012	0.7	40.0%	$0.6	20.0%
2013	1.0	42.9%	$1.0	66.7%
2014	1.2	20.0%	$1.2	20.0%
2015	1.6	33.3%	$1.6	33.3%
2016	2.2	37.5%	$2.3	43.8%
2017	2.7	22.7%	$3.8	65.2%
2018	3.2	18.5%	$3.8	0.0%
2019	6.0	87.5%	$6.2	63.2%
2020	7.1	18.3%	$7.9	27.4%

Source: Unaudited data provided by CFX

PBP transactions have increased from 0.5 million in FY 2011 to 7.1 million in FY 2020, while PBP revenues have increased from $0.5 million to $7.9 million over the same period. In FY 2020, PBP transactions increased 18.3 percent and PBP revenues increased 27.4 percent over FY 2019. This increase in PBP transactions and revenues in FY 2020 has contributed to the slower growth and/or decline in paid in-lane transactions and revenues compared to FY 2019. The trends show that more customers are choosing the PBP method of payment. CFX temporarily suspended cash toll collection on all facilities from March 19, 2020 to May 31, 2020 in response to the COVID-19 pandemic. During this time, customers were only able to pay via ETC or PBP. PBP transactions and revenues are expected to decline beginning in FY 2021 due to a new PBP toll rate adopted by the CFX Board that went into effect on July 1, 2020, at which time the PBP toll rate at all toll locations was increased to twice the ETC toll rate. Due to the new PBP toll rate implemented, it is anticipated that a portion of customers paying via PBP will switch to paying in the lane through ETC to avoid the higher toll rate.

3.2.3 MONTHLY PAID IN-LANE TRANSACTION SEASONAL VARIATION

In **Table 3-3**, monthly paid in-lane transactions are normalized to the average number of paid in-lane transactions per day. Using average number of paid in-lane transactions per day allows for an easy comparison of the variations in relative travel demand over the year. The pattern of seasonal usage changes slightly from year to year, based on the number of weekdays in each month, but in FY 2020 this seasonality was overshadowed by the impacts in travel demand from the COVID-19 pandemic. Therefore, the factors in Table 3-3 should not be relied on for typical monthly seasonal trends on S.R. 528.

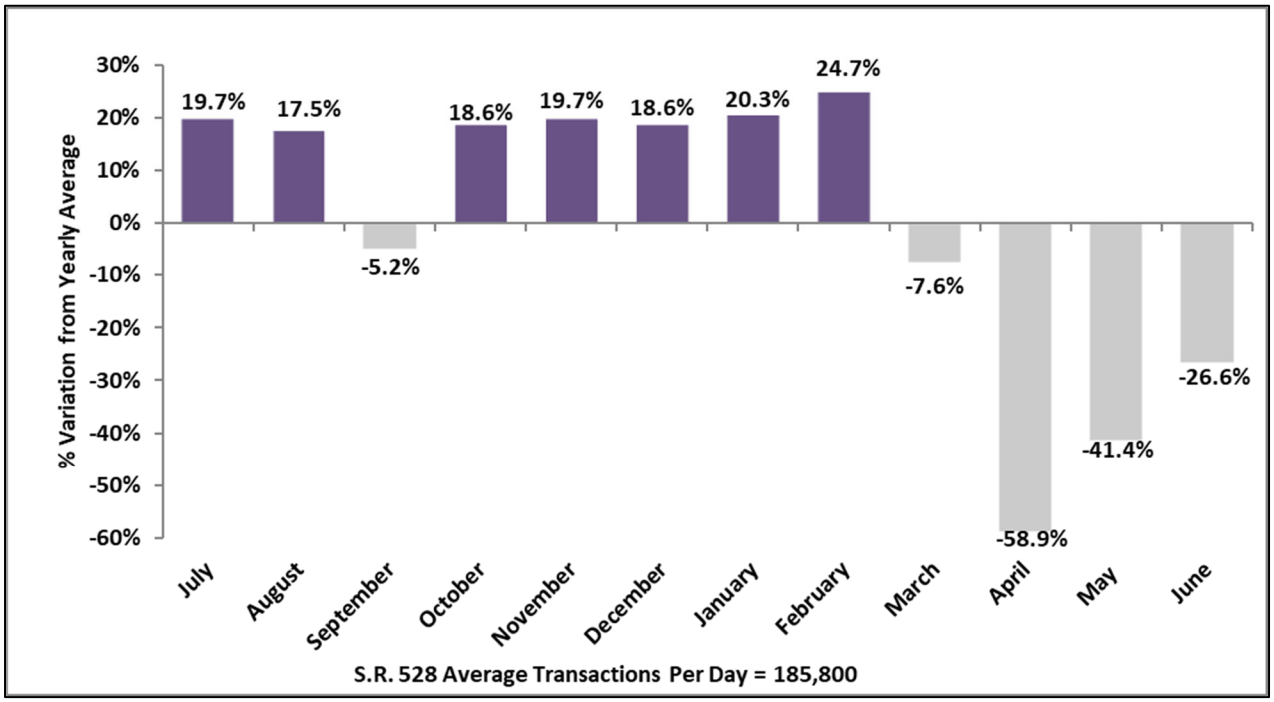
Average paid in-lane transactions per day in FY 2020 on S.R. 528 ranged from a high of approximately 231,700 in February 2020 to a low of 76,400 in April 2020. March is typically the month with the highest average number of transactions per day due to a large number of tourists and seasonal residents in the area during the Spring, however it was negatively impacted by the COVID-19 pandemic, which began in March 2020. This data is presented in a graphical format in **Figure 3-5**. The paid in-lane transactions for each month appear as a percentage of the average for the fiscal year. September 2019 paid in-lane transactions were negatively impacted by toll suspensions during Hurricane Dorian. February paid in-lane transactions were 24.7 percent above average and April paid in-lane transactions were 58.9 percent below average for the facility. February included an extra day of toll collection due to the leap year and April was the first full month with COVID-19 impacts. September 2019 was also negatively impacted by toll suspensions during Hurricane Dorian.

Table 3-3
S.R. 528 – Monthly Seasonal Variation in Paid In-Lane Transactions
FY 2020

Month	Number of Days in Month	Paid In-Lane Transactions	Average Transactions/Day	Seasonal Factor
July	31	6,893,778	222,400	1.197
August	31	6,771,248	218,400	1.175
September	30	5,285,851	176,200	0.948
October	31	6,832,257	220,400	1.186
November	30	6,672,531	222,400	1.197
December	31	6,833,713	220,400	1.186
January	31	6,930,744	223,600	1.203
February	29	6,719,085	231,700	1.247
March	31	5,319,573	171,600	0.924
April	30	2,291,378	76,400	0.411
May	31	3,372,778	108,800	0.586
June	30	4,088,560	136,300	0.734
Average		***5,667,625***	***185,800***	***1.000***
Total Year	**366**	**68,011,496**		

Source: CFX Statistical Report June 2020

Figure 3-5
S.R. 528 Variation in Paid In-Lane Transactions Per Day, By Month
FY 2020



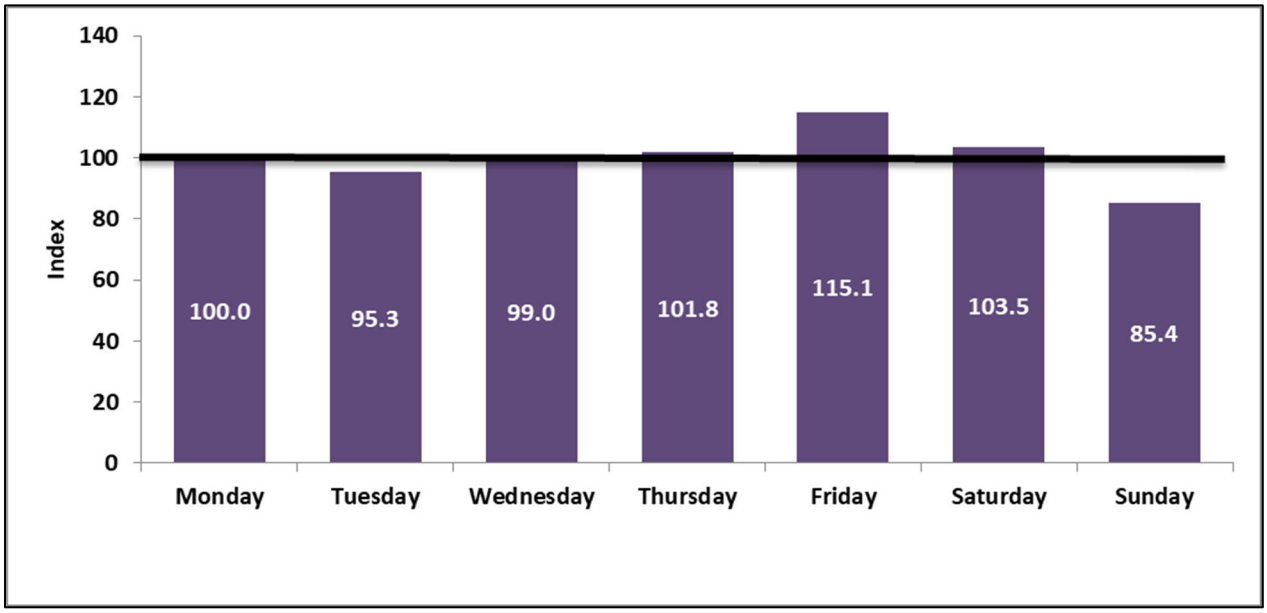
Source: CFX Statistical Report June 2020

3.2.4 DAY-OF-WEEK TRANSACTION VARIATION

Figure 3-6 contains a comparison of transactions by day of week in FY 2020. This data is presented as an index, where the average day equals 100. An index value of 100 for a given day of the week would indicate that day's transactions were precisely the same volume as the facility's average. A value of 120 would indicate a day that has 20 percent greater volume than the average. The data used for this analysis was for a typical week in March 2020, before the COVID-19 pandemic. The data includes transactions at mainline plazas only (no ramps).

FY 2020 weekday transactions on S.R. 528 fluctuated over the course of the five-day work week. Transactions were highest on Fridays, with an index value of 115.1 (15.1 percent higher than the average day), volumes on Thursdays had an index value of 101.8, and volumes on Monday through Wednesday ranged from index values of 95.3 to 100.0. Saturday volumes were similar to Thursday volumes with an index value of 103.5. The lowest volumes were on Sunday with an index value of 85.4 (14.6 percent lower than the average day). The higher volumes on Fridays and Saturdays can be attributed to weekend and tourism travel using S.R. 528. It is unusual for a facility to have an index below average on weekdays and higher than average on weekend days.

Figure 3-6
S.R. 528 Variation in Transactions, by Day of Week
FY 2020



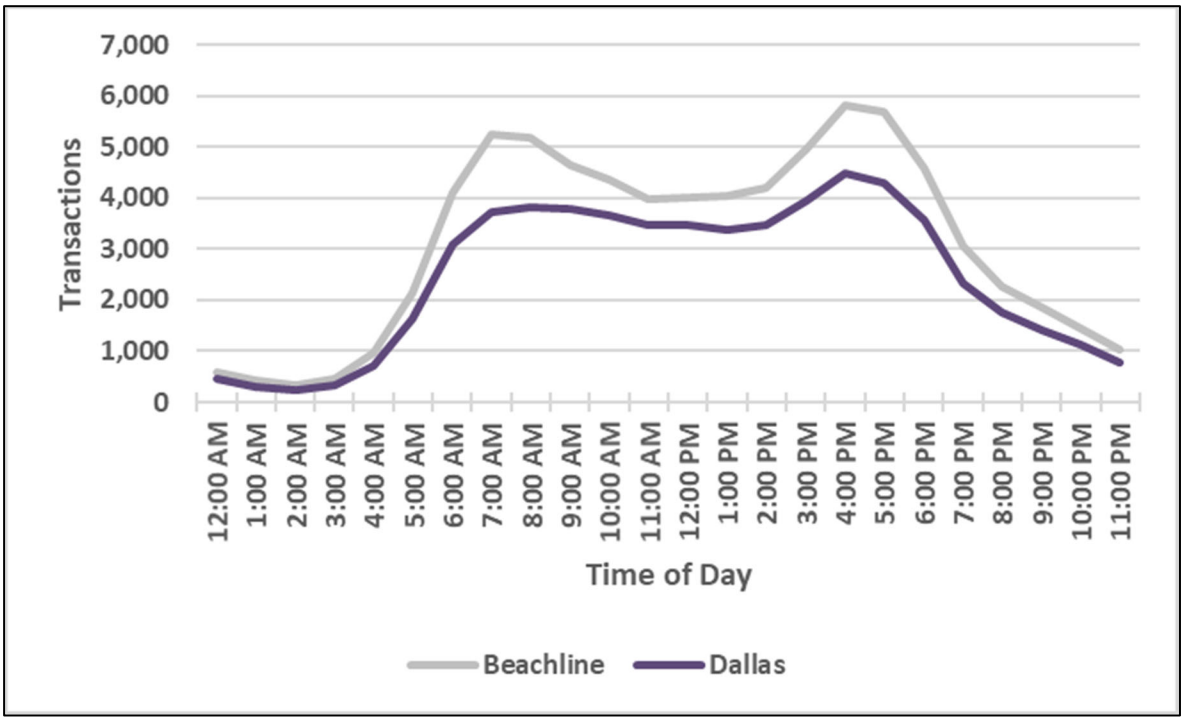
Source: Unaudited lane transaction data – March 2020

3.2.5 HOURLY TRAFFIC DISTRIBUTION

The hourly distribution of traffic includes information on the usage characteristics of the facility. The hourly distributions represent counts taken during a typical week at the mainline toll plazas in the month of March, before the COVID-19 pandemic. The typical weekday distribution is shown in **Figure 3-7** and the weekend distribution is shown in **Figure 3-8**. The figures contain the sum of traffic volumes in both directions.

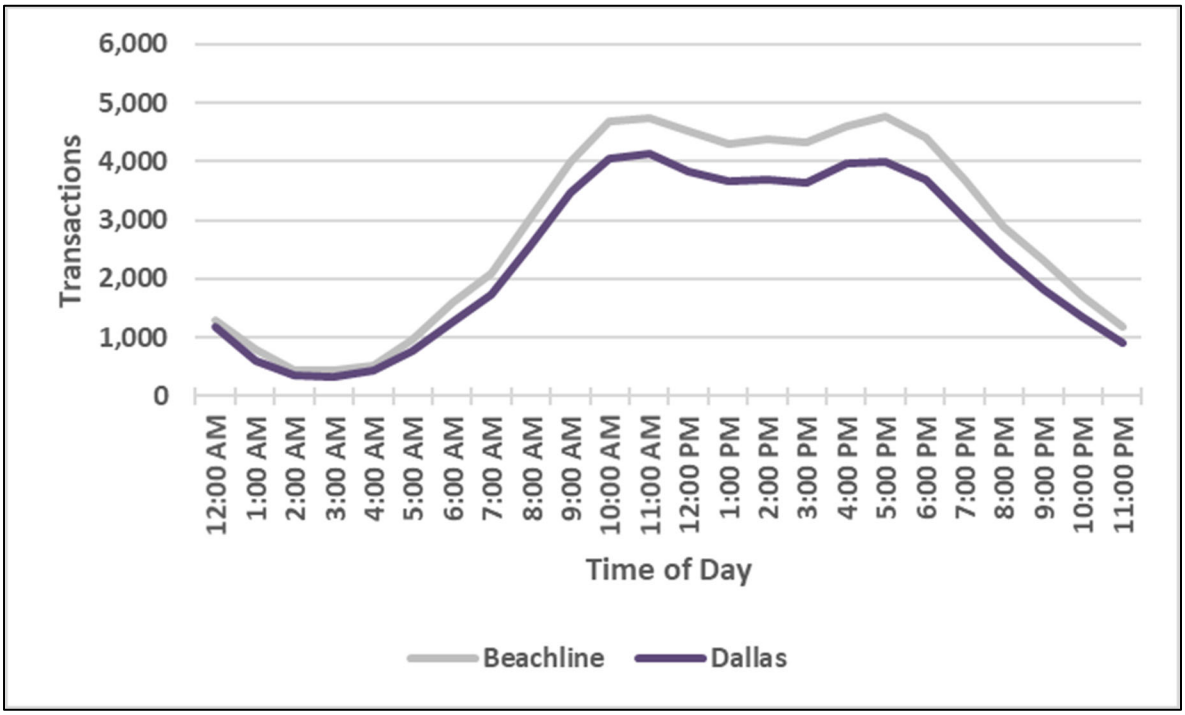
The two mainline toll plaza locations on S.R. 528 exhibit similar hourly traffic patterns. On weekdays, travel demand at both locations is bimodal, with both a morning and an evening peak hour. The Beachline and Dallas mainline plazas both experience slightly higher peak volumes in the evening hours than in the morning hours. The highest peak hour volumes during the week were 5,800 per hour beginning at 4:00 p.m. at the Beachline mainline plaza and 4,500 per hour beginning at 4:00 p.m. at the Dallas mainline plaza. On weekends, there is a clear peak between 10:00 a.m. and 11:00 a.m. and another peak in the afternoon at 5:00 p.m. reflecting traffic heading to the beach for the day.

Figure 3-7
S.R. 528 Hourly Traffic Variation (Weekday)
FY 2020 (March)



Source: Unaudited lane traffic data – March 2020

Figure 3-8
S.R. 528 Hourly Traffic Variation (Weekend)
FY 2020 (March)



Source: Unaudited lane traffic data – March 2020

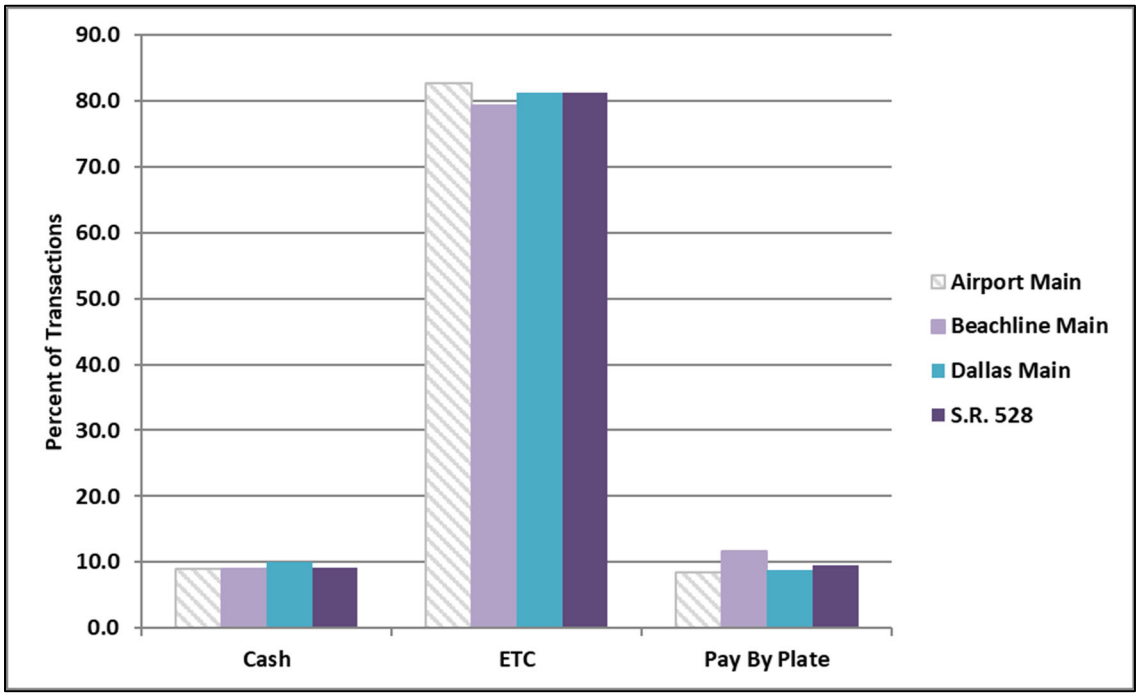
3.2.6 TRANSACTIONS AND REVENUE BY PAYMENT TYPE

The distributions of transactions and revenue by payment type and plaza group during FY 2020 are presented in **Figure 3-9** and **Figure 3-10**. Customers pay tolls in one of three ways: cash, ETC, and PBP. As defined in Chapter 1 of this report, paid in-lane transactions and revenue include cash and ETC payments made when a customer travels through a CFX toll location. The remaining transactions and revenue are classified as unpaid in-lane, which includes PBP and a small portion of non-revenue transactions. PBP transactions and revenues are estimated monthly based on an accrual rate of 60 percent of all unpaid in-lane transactions and revenues. It is important to note that the data presented in the following two figures is based on unaudited transaction and toll revenue data and may not match the audited data shown in other tables and figures in this chapter. It is also important to note that cash toll collection at all toll plazas was suspended from March 19, 2020 to May 31, 2020 due to COVID-19 safety protocols.

As shown in Figure 3-9, the share of ETC transactions ranged from a low of 79.4 percent at the Beachline Main plaza group to a high of 82.7 percent at the Airport Main plaza group. Overall, ETC transactions on S.R. 528 accounted for 81.3 percent of total transactions on the facility. The share of cash transactions ranged from a low of 8.9 percent at the Beachline Main and Airport Main plaza groups to a high of 10.0 percent at the Dallas Main plaza group. Overall, cash transactions on S.R. 528 accounted for 9.2 percent of total transactions on the facility. The PBP transactions ranged from a low of 8.4 percent at the Airport Main plaza group to a high of 11.7 percent of transactions at the Beachline Main plaza group. Overall, PBP transactions on S.R. 528 accounted for 9.5 percent of total transactions on the facility.

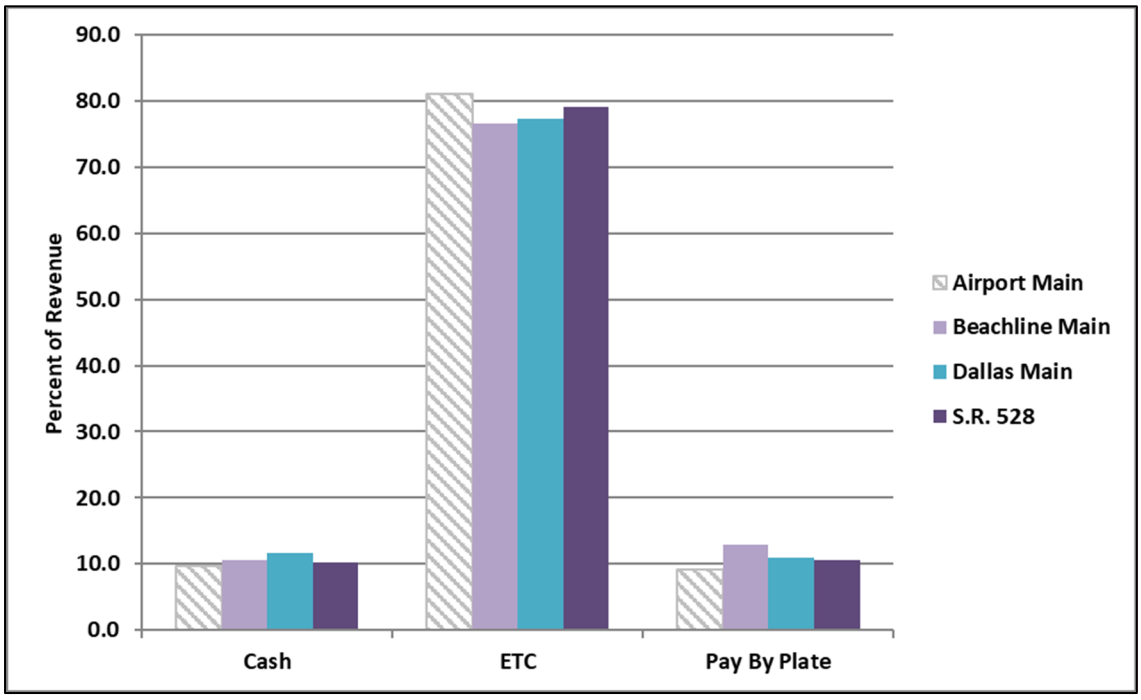
As shown in Figure 3-10, the share of toll revenues by payment type is comparable to the share of transactions. The share of ETC toll revenues ranged from a low of 76.7 percent at the Beachline Main plaza group to a high of 81.1 percent at the Airport Main plaza group. Overall, ETC toll revenues accounted for 79.2 percent of total toll revenues on S.R. 528. The share of cash toll revenues ranged from a low of 9.7 percent at the Airport Main plaza group to a high of 11.7 percent at the Dallas Main plaza group. Overall, cash toll revenues accounted for 10.2 percent of total toll revenues on S.R. 528. The shares of PBP toll revenues ranged from a low of 9.2 percent at the Airport Main plaza group to a high of 12.8 percent at the Beachline Main plaza group. Overall, PBP toll revenues accounted for 10.6 percent of total toll revenues on S.R. 528.

Figure 3-9
S.R. 528 Percent of Transactions by Payment Type
FY 2020



Source: Unaudited transaction data provided by CFX

Figure 3-10
S.R. 528 Percent of Revenue by Payment Type
FY 2020



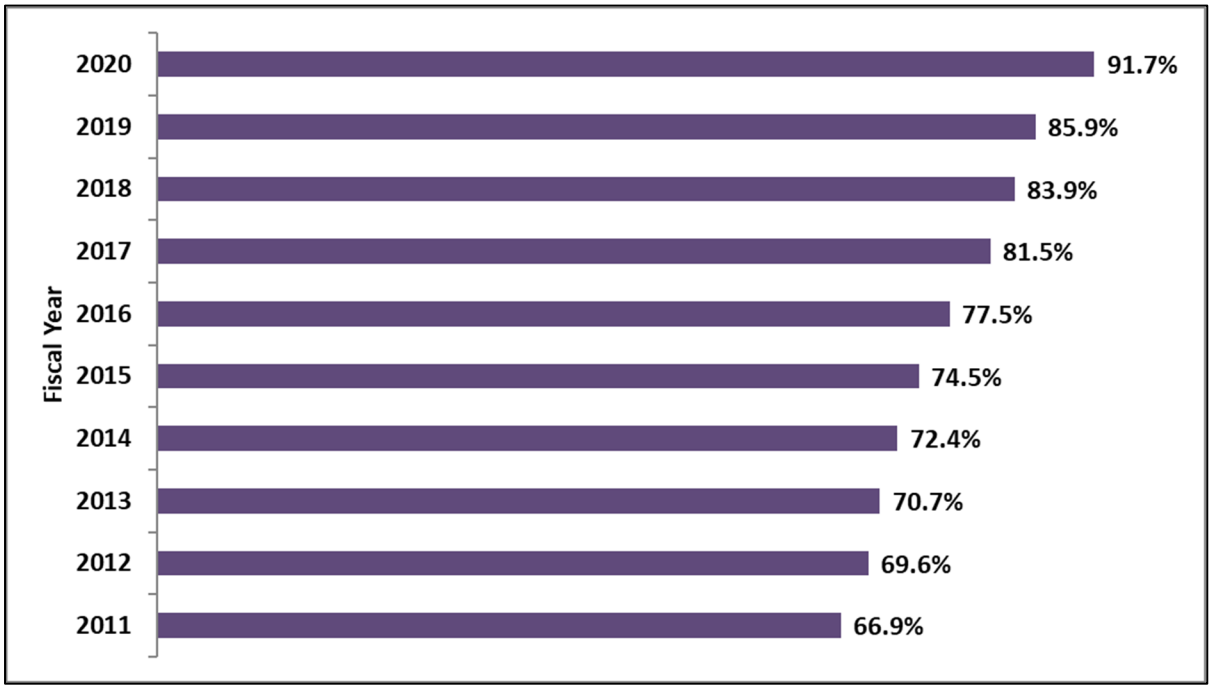
Source: Unaudited toll revenue data provided by CFX

3.3 ETC Usage

The percent of paid in-lane revenues generated from ETC over the past ten fiscal years on S.R. 528 are shown in **Figure 3-11**. PBP revenues are not included. The proportion of ETC toll revenues collected by CFX has steadily increased on the facility. In FY 2011, ETC revenues represented 66.9 percent of total revenues on the facility. In FY 2020, ETC revenues were 91.7 percent. S.R. 528 The data below differs from Figure 3-10 because it only includes the annual comparison of paid in-lane revenue and not all revenue types. ETC revenues are lower than the total System ETC revenues due to the significant number of tourists that use the facility. ETC usage is still expected to increase as customers shift to ETC to take advantage of the lower ETC toll rate and the convenience of paying tolls electronically, especially with the implementation of the PBP toll rates that are now twice the ETC toll rate as of July 2020 (FY 2021).

Beginning May 11, 2016, CFX implemented a pilot program called The Reload Lane to encourage and increase E-PASS usage. This program is the first of its kind in the continental United States and provides customer convenience and multiple payment options (cash, check, and debit/credit card). Due to the success of this program, the CFX Board approved the expansion of the Reload Lane capabilities to all manned toll plaza lanes on all system facilities, expected to be completed by FY 2022.

Figure 3-11
S.R. 528 Percent of Paid In-Lane Revenue from Electronic Toll Collection
FY 2011 – FY 2020



Source: CFX Statistical Report June 2020

3.4 Forecasted Transactions and Toll Revenues

Based on the recently adopted "Customer First Toll Policy," toll rate adjustments (indexed tolls) were applied to the T&R forecasts every year based on the net change in CPI for the prior year, which equated to 1.45 percent in FY 2021. Because the change in CPI was lower than the 1.5 percent floor, CDM Smith used 1.5 percent to adjust the FY 2021 toll amounts. CDM Smith used the floor of 1.5 percent per year every year thereafter in the forecast period.

Future transportation improvements that could influence the T&R forecasts for S.R. 528 include the projects listed in **Table 3-4**, assumed completed in each model horizon year. System improvements, such as the S.R. 528 widening projects from S.R. 417 to Innovation Parkway and from S.R. 436 to S.R. 417 will help growth rates in the near term as these are areas of congestion. The improvement to FTE's portion of S.R. 528 from I-4 to McCoy Road should result in higher growth rates in the near term. System improvements, such as S.R. 528 from Innovation Parkway to S.R. 520, will add to growth in the long term. The improvements to feeder roads, including Narcoossee Road and Conway Road positively impact the traffic and revenue growth on S.R. 528 throughout the forecast horizon.

Table 3-4
S.R. 528 - Key Transportation Improvements

Facility	From	To	Year	Jurisdiction	Improvement
Interstate 4	SR 434	Kirkman Rd	2025	FDOT	Widen to 10 Lanes
Central Florida Pkwy	International Drive	SR 423 (John Young Pkwy)	2025	Orange County	Widen to 6 Lanes
Destination Pkwy	Universal Blvd	John Young Pkwy	2025	Orange County	Widen to 6 Lanes
International Dr	Hawaian Ct	SR 482	2025	Orange County	Widen to 6 Lanes
SR 15 (Narcoossee Rd)	SR 528 (BeachLine Expwy)	Lee Vista Blvd	2025	Orange County/FDOT	Widen to 6 Lanes
SR 482/Sand Lake Rd	Turkey Lake Rd	W. of John Young Pkwy	2025	FDOT	Widen to 6-lanes
SR 528	SR 417	Innovation Pkwy	2025	CFX	Widen to 6-lanes
SR 528	SR 436	SR 417	2025	CFX	Widen to 8-lanes
Kirkman Road Extension	SR 528 (BeachLine Expwy)	Sand Lake Rd	2025	Orange County	New 4 lane Highway
Florida's Turnpike	Minneola	Orange/Lake County Line	2025	FDOT	Widen to 6 lanes
Nova Rd (CR 532)	US 192	Eden Dr	2035	Osceola County	Widen to 4 Lanes
Nova Rd (CR 532)	Eden Dr	Deer Park Rd	2035	Osceola County	Widen to 4 Lanes
International Dr	SR 482	Kirkman Rd	2035	Orange County	Widen to 6 Lanes
Universal Blvd	SR 482	Pointe Plaza Ave	2035	Orange County	Widen to 6 Lanes
Florida's Turnpike	US 27	US 19	2035	FDOT	Widen to 6 lanes
Florida's Turnpike	US 19	Minneola/Hancock Rd	2035	FDOT	Widen to 6 lanes
Nova Rd (CR 532)	Deer Park Rd	Orange County Line	2045	Osceola County	Widen to 4 Lanes
Nova Rd	Alligator Lake Rd	US 192	2045	Osceola County	Widen to 4 Lanes
International Drive South	Westwood Blvd	Hawaiian Ct	2045	Orange County	Widen to 6 Lanes
US 192	Nova Rd	Pine Grove Rd	2045	FDOT	Widen to 6-lanes
SR 528	Innovation Pkwy	SR 520	2045	CFX	Widen to 6-lanes

Historical and projected transactions and toll revenues for each of the S.R. 528 plaza groups and for all of S.R. 528 are summarized in **Table 3-5** and **Table 3-6**. The tables are divided into Paid in-lane and PBP transactions and revenue. Paid in-lane transactions and revenue by plaza group include ETC and cash collection. PBP is only reported as a total on the facility level. The increase in transactions and revenue in FY 2016 over FY 2015 can partially be attributed to the opening of the two ramp plazas at Conway Road/Tradeport Drive and Boggy Creek Road/Sand Lake Road because of the relocation/removal of the Airport Main Plaza toll collection point to Beachline West.

The paid in-lane transactions on S.R. 528 are expected to grow 3.4 percent per year through FY 2030 and then lower rates through the end of the forecast period because of the impact of toll rate adjustments. PBP transactions are forecasted to decline an average of 3.4 percent per year through FY 2030 and then increase slightly through the forecast period. Total transactions on S.R. 528 are projected to increase during the forecast period from the actual of 75.1 million in FY 2020 to 117.1 million in FY 2050. The paid in-lane revenues on S.R. 528 are projected to increase over the forecast period, from the FY 2020 actual of $66.4 million to $154.6 million in FY 2050. PBP revenues are projected to increase from $7.9 million in FY 2020 to $13.2 million in FY 2050. Total revenues on S.R. 528 are projected to increase during the forecast period from the actual $74.3 million in FY 2020 to $167.8 million in FY 2050. Total transactions are forecasted to increase an average of 2.9 percent per year from FY 2020 to FY 2030. Total revenues during the same period are forecasted to increase an average of 4.0 percent per year. Total transactions and revenues are forecasted to increase at an average of 0.9 and 2.2 percent per year from FY 2030 to FY 2040, and 0.7 and 2.1 percent per year from FY 2040 to FY 2050, respectively.

Table 3-5
S.R. 528 Plaza Groups – Transaction Projections (Millions)
FY 2021 – FY 2050

Fiscal Year		Airport Main	Beachline Main	Dallas Main	Paid In-Lane	PBP	Total	Percent Annual Change
2010	Actual	25.4	15.5		40.9	0.3	41.2	
2011		26.2	16.3		42.5	0.5	43.0	4.4%
2012[A,C]		26.8	16.4	4.3	47.5	0.7	48.2	12.1%
2013[B]		26.4	16.7	14.5	57.6	1.0	58.6	21.6%
2014		27.0	17.6	15.1	59.7	1.2	60.9	3.9%
2015		28.8	19.0	16.4	64.2	1.6	65.8	8.0%
2016		32.6	20.9	18.0	71.5	2.2	73.7	12.0%
2017[D]		36.6	21.7	18.5	76.8	2.7	79.5	7.9%
2018[E]		36.8	21.6	18.3	76.7	3.2	79.9	0.5%
2019[F]		36.8	22.0	18.3	77.1	6.0	83.1	4.0%
2020[G]		31.9	19.6	16.5	68.0	7.1	75.1	-9.6%
2021[H]	Forecast	29.0	18.1	15.2	62.3	6.9	69.2	-7.9%
2022[I]		36.5	21.5	18.7	76.7	4.7	81.4	17.6%
2023		40.1	23.4	20.1	83.6	4.5	88.1	8.2%
2024		41.8	24.6	20.9	87.3	4.8	92.1	4.5%
2025		42.7	25.1	21.3	89.1	4.7	93.8	1.8%
2026		43.3	25.4	21.6	90.3	4.8	95.1	1.4%
2027		43.9	25.7	22.0	91.6	4.7	96.3	1.3%
2028		44.5	25.9	22.2	92.6	4.9	97.5	1.2%
2029		45.0	26.1	22.5	93.6	5.0	98.6	1.1%
2030		45.6	26.4	22.7	94.7	5.0	99.7	1.1%
2031		46.1	26.6	22.9	95.6	5.0	100.6	0.9%
2032		46.7	26.8	23.1	96.6	5.0	101.6	1.0%
2033		47.1	27.0	23.4	97.5	5.1	102.6	1.0%
2034		47.5	27.2	23.6	98.3	5.2	103.5	0.9%
2035		48.0	27.4	23.8	99.2	5.2	104.4	0.9%
2036		48.4	27.6	24.0	100.0	5.3	105.3	0.9%
2037		48.8	27.8	24.2	100.8	5.3	106.1	0.8%
2038		49.2	28.0	24.4	101.6	5.3	106.9	0.8%
2039		49.7	28.2	24.5	102.4	5.4	107.8	0.8%
2040		50.1	28.4	24.7	103.2	5.5	108.7	0.8%
2041		50.5	28.6	24.9	104.0	5.6	109.6	0.8%
2042		50.9	28.8	25.1	104.8	5.6	110.4	0.7%
2043		51.4	29.0	25.4	105.8	5.6	111.4	0.9%
2044		51.8	29.2	25.5	106.5	5.6	112.1	0.6%
2045		52.2	29.4	25.7	107.3	5.7	113.0	0.8%
2046		52.6	29.6	25.9	108.1	5.7	113.8	0.7%
2047		53.1	29.8	26.0	108.9	5.8	114.7	0.8%
2048		53.5	30.0	26.2	109.7	5.9	115.6	0.8%
2049		54.0	30.2	26.3	110.5	5.8	116.3	0.6%
2050		54.4	30.4	26.5	111.3	5.8	117.1	0.7%

Fiscal Year	Compound Annual Average Growth Rate (CAAGR)					
2010 - 2020	2.3%	2.4%		5.2%	37.2%	6.2%
2020 - 2030	3.6%	3.0%	3.2%	3.4%	-3.4%	2.9%
2030 - 2040	0.9%	0.7%	0.8%	0.9%	1.0%	0.9%
2040 - 2050	0.8%	0.7%	0.7%	0.8%	0.5%	0.7%

Notes:
Actual revenue data provided by CFX from Monthly Statistical Reports.
A - Dallas Main plaza opened to traffic on March 19, 2012.
B - Systemwide toll rate increase.
C - Airport Main Plaza closed and new ramp plazas opened in March 2016.
D - Effects from Hurricane Matthew in October 2016.
E - Effects from Hurricane Irma in September 2017.
F - First year of implementation of "Customer First" toll rate policy.
G - Effects from Hurricane Dorian in September 2019 and first effects of COVID-19 pandemic began in March 2020.
H - New toll rates for PBP customers, set at 2.0 times the ETC rate.
I - Completion of I-4 Ultimate project.

Table 3-6
S.R. 528 Plaza Groups – Toll Revenue Projections (Millions)
FY 2021 – FY 2050

Fiscal Year		Airport Main	Beachline Main	Dallas Main	Paid In-Lane	PBP	Total	Percent Annual Change
2010	Actual	$26.2	$20.4		$46.6	$0.3	$46.9	
2011		$27.0	$21.4		$48.4	$0.5	$48.9	4.3%
2012[A,C]		$27.5	$19.0	$2.2	$48.7	$0.6	$49.3	0.8%
2013[B]		$30.9	$16.0	$7.6	$54.5	$1.0	$55.5	12.6%
2014		$31.6	$16.8	$7.9	$56.3	$1.2	$57.5	3.6%
2015		$33.6	$18.2	$8.6	$60.4	$1.6	$62.0	7.8%
2016		$37.3	$20.0	$9.4	$66.7	$2.3	$69.0	11.3%
2017[D]		$41.4	$20.7	$9.7	$71.8	$3.8	$75.6	9.6%
2018[E]		$41.6	$20.6	$9.6	$71.8	$3.8	$75.6	0.0%
2019[F]		$42.0	$21.3	$10.5	$73.8	$6.2	$80.0	5.8%
2020[G]		$36.6	$20.2	$9.6	$66.4	$7.9	$74.3	-7.1%
2021[H]	Forecast	$34.1	$19.0	$8.9	$62.0	$12.2	$74.2	-0.1%
2022[I]		$43.2	$22.8	$10.6	$76.6	$9.1	$85.7	15.5%
2023		$48.2	$25.3	$11.8	$85.3	$7.9	$93.2	25.6%
2024		$49.6	$25.8	$12.1	$87.5	$7.6	$95.1	2.0%
2025		$50.9	$26.3	$12.4	$89.6	$7.7	$97.3	2.3%
2026		$52.3	$26.9	$12.7	$91.9	$7.7	$99.6	2.4%
2027		$53.7	$27.6	$13.0	$94.3	$8.1	$102.4	2.8%
2028		$55.2	$28.2	$13.3	$96.7	$8.2	$104.9	2.4%
2029		$56.7	$28.9	$13.7	$99.3	$8.6	$107.9	2.9%
2030		$58.1	$29.5	$14.0	$101.6	$8.6	$110.2	2.1%
2031		$59.5	$30.1	$14.3	$103.9	$8.9	$112.8	2.4%
2032		$60.9	$30.7	$14.6	$106.2	$9.1	$115.3	2.2%
2033		$62.3	$31.4	$15.0	$108.7	$9.3	$118.0	2.3%
2034		$63.7	$32.1	$15.4	$111.2	$9.4	$120.6	2.2%
2035		$65.0	$32.7	$15.7	$113.4	$9.7	$123.1	2.1%
2036		$66.5	$33.4	$16.0	$115.9	$9.9	$125.8	2.2%
2037		$68.0	$34.0	$16.4	$118.4	$10.1	$128.5	2.1%
2038		$69.4	$34.7	$16.7	$120.8	$10.2	$131.0	1.9%
2039		$70.9	$35.4	$17.1	$123.4	$10.5	$133.9	2.2%
2040		$72.5	$36.2	$17.4	$126.1	$10.8	$136.9	2.2%
2041		$74.0	$36.9	$17.8	$128.7	$11.0	$139.7	2.0%
2042		$75.6	$37.6	$18.1	$131.3	$11.1	$142.4	1.9%
2043		$77.3	$38.3	$18.5	$134.1	$11.5	$145.6	2.2%
2044		$78.9	$39.1	$18.8	$136.8	$11.7	$148.5	2.0%
2045		$80.6	$39.8	$19.2	$139.6	$11.9	$151.5	2.0%
2046		$82.3	$40.7	$19.6	$142.6	$12.1	$154.7	2.1%
2047		$84.1	$41.5	$20.0	$145.6	$12.5	$158.1	2.2%
2048		$85.8	$42.2	$20.3	$148.3	$12.6	$160.9	1.8%
2049		$87.6	$43.0	$20.7	$151.3	$12.9	$164.2	2.1%
2050		$89.5	$43.9	$21.2	$154.6	$13.2	$167.8	2.2%

Fiscal Year	Compound Annual Average Growth Rate (CAAGR)					
2010 - 2020	3.4%	-0.1%		3.6%	38.7%	4.7%
2020 - 2030	4.7%	3.9%	3.8%	4.3%	0.9%	4.0%
2030 - 2040	2.2%	2.1%	2.2%	2.2%	2.3%	2.2%
2040 - 2050	2.1%	1.9%	2.0%	2.1%	2.0%	2.1%

Notes:
Actual revenue data provided by CFX from Monthly Statistical Reports.
A - Dallas Main plaza opened to traffic on March 19, 2012.
B - Systemw ide toll rate increase.
C - Airport Main Plaza closed and new ramp plazas opened in March 2016.
D - Effects from Hurricane Matthew in October 2016.
E - Effects from Hurricane Irma in September 2017.
F - First year of implementation of "Customer First" toll rate policy.
G - Effects from Hurricane Dorian in September 2019 and first effects of COVID-19 pandemic began in March 2020.
H - New toll rates for PBP customers, set at 2.0 times the ETC rate.
I - Completion of I-4 Ultimate project.

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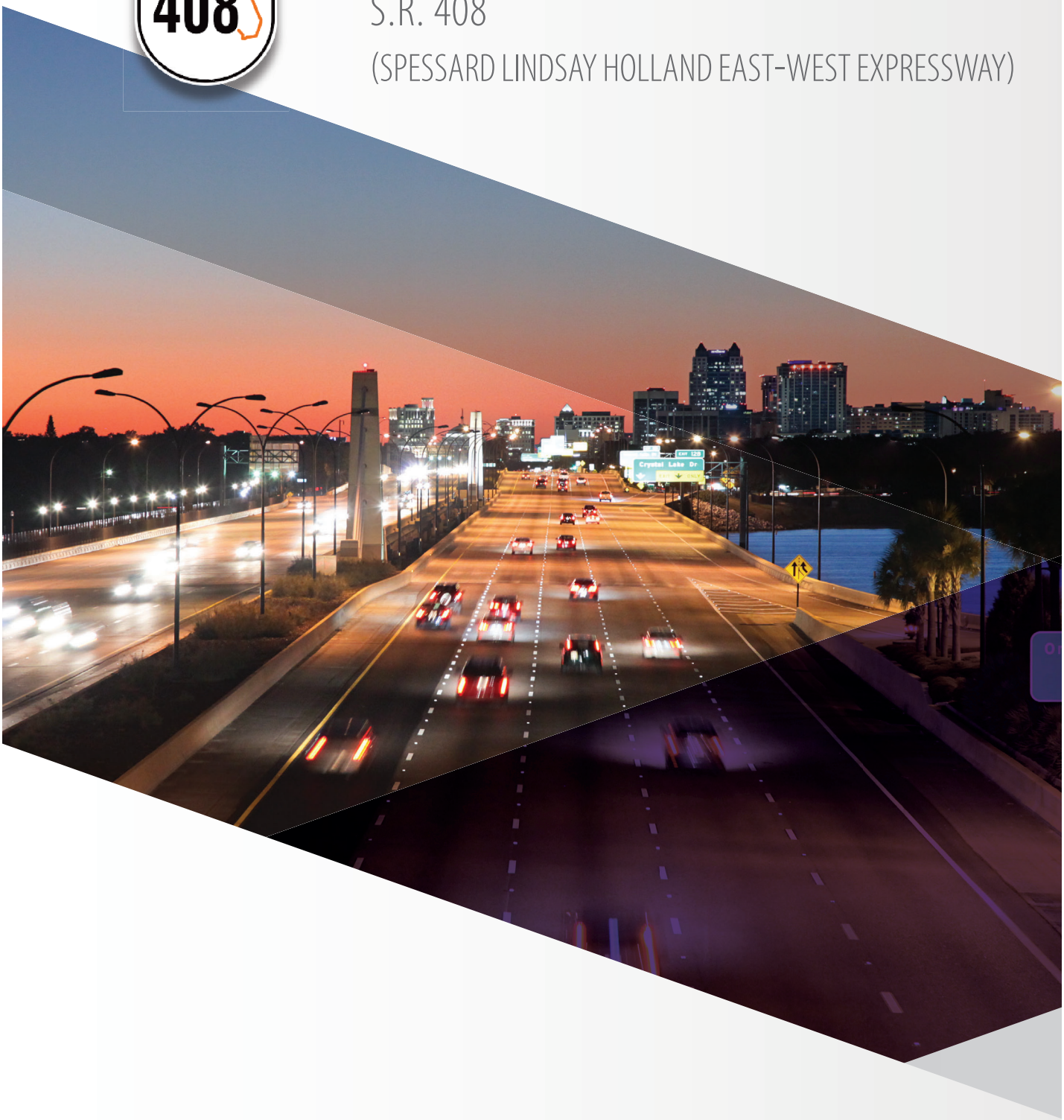
CHAPTER 4

S.R. 408

(SPESSARD LINDSAY HOLLAND EAST-WEST EXPRESSWAY)



S.R. 408 (SPESSARD LINDSAY HOLLAND EAST-WEST EXPRESSWAY)

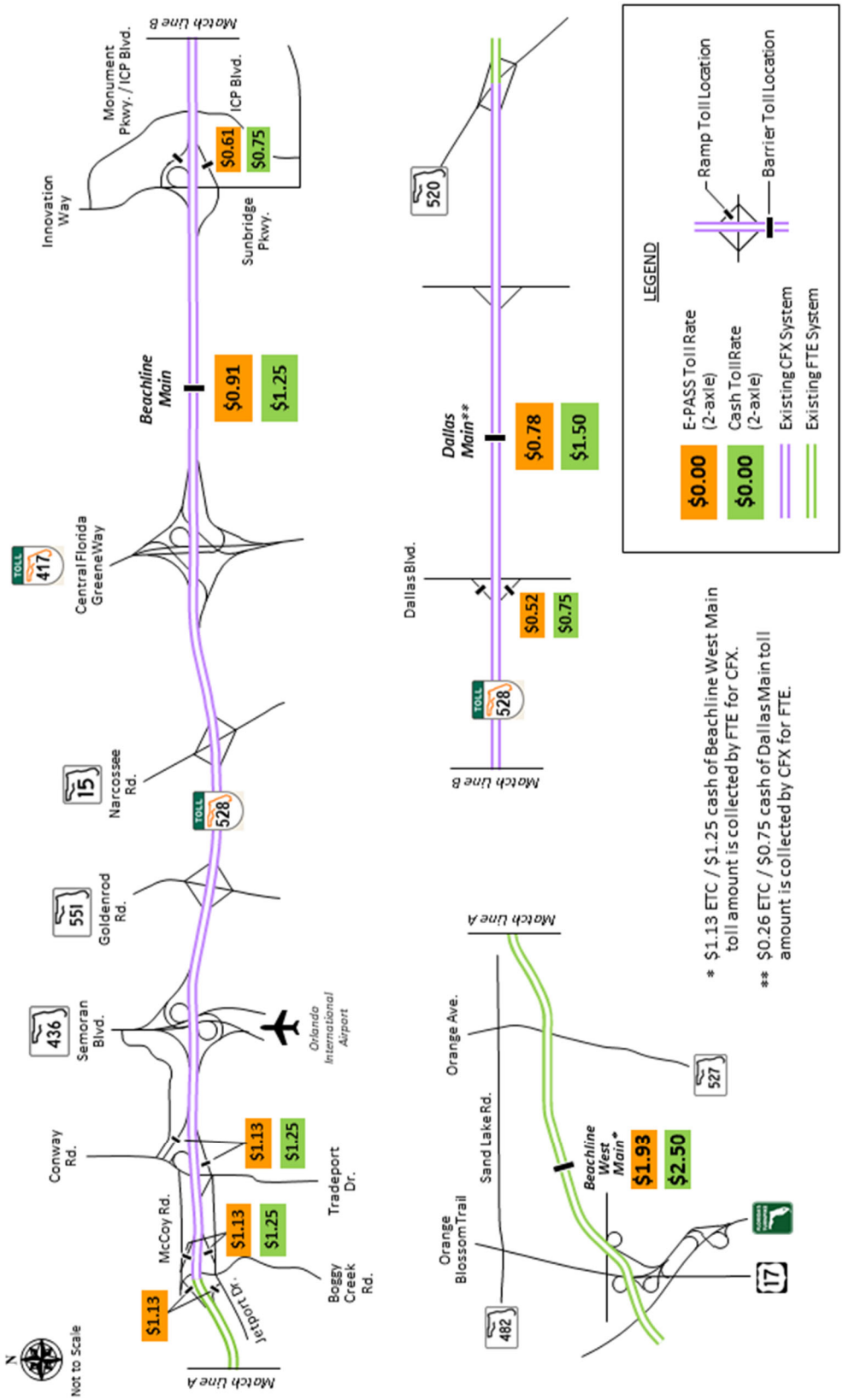
4.1 Facility Description

S.R. 408, also known as the Spessard Lindsay Holland East-West Expressway, is a 22-mile expressway that serves east-west commuter traffic across the Orlando urban area and provides fast and efficient access to and from the Orlando central business district. The East-West Expressway provides direct access to Interstate 4 (I-4) with an interchange that provides customers with a direct route to other major employment centers in the Metro Orlando area. A map of S.R. 408 including the FY 2020 CFX toll rates for the mainline and ramp toll plazas is shown in **Figure 4-1**. S.R. 408 has four plaza groups: the Hiawassee Main plaza group (including tolled interchanges at Good Homes Road and Hiawassee Road); the Pine Hills Main plaza group (including tolled interchanges at Old Winter Garden Road, John Young Parkway, U.S. 92/441 and Mills Avenue); the Conway Main plaza group (including tolled interchanges at Bumby Avenue, Conway Road and Andes Avenue/Semoran Boulevard); and the Dean Main plaza group (including tolled interchanges at Dean Road and Rouse Road).

The original 13.8-mile section of S.R. 408 opened to traffic in 1973, beginning on the west side of Orlando at an intersection with S.R. 50, west of Kirkman Road, and ending at S.R. 50 east of Goldenrod Road (S.R. 551). This included the Holland West Main plaza (relocated and renamed Pine Hills in 2006) and Holland East Main plaza (reconstructed and renamed Conway in 2008).

CFX completed a major expansion project in 1989 that extended S.R. 408 six miles eastward from its existing terminus near Goldenrod Road to a new interchange with S.R. 50, east of Alafaya Trail (S.R. 434). The expansion also included interchanges at Dean Road, Rouse Road and Alafaya Trail. The Dean Mainline plaza was also added, which is located between Dean Road and Rouse Road. In 1990, CFX, in cooperation with Florida's Turnpike Enterprise, completed another expansion that extended the S.R. 408 westward five miles from its original western terminus to an interchange with Florida's Turnpike. A new connection with S.R. 50 was provided west of Good Homes Road at Clarke Road. This expansion included interchanges at Hiawassee Road, Good Homes Road and S.R. 50/Clarke Road. The Hiawassee Mainline plaza was added and located between Hiawassee Road and Good Homes Road. S.R. 408 currently extends from Florida's Turnpike on the west to S.R. 50 (east of S.R. 434) on the east.

Figure 4-1
S.R. 408 Facilities and Toll Rates



The S.R. 408 mainline plazas have all been converted to the express toll lane configuration. In 2005 and 2006, the Hiawassee, Pine Hills and Dean Mainline plazas were converted. The Conway Mainline plaza was converted, and two express toll lanes were opened in each direction in 2008, with an additional lane added in each direction in 2009.

Starting in 2003, CFX commenced on a significant widening project, from Hiawassee Road to Oxalis Avenue, adding one lane in each direction west of downtown Orlando and two lanes in each direction east of downtown. This $600M widening project was completed in FY 2011.

In August 2006, the ramps to and from the west at Good Homes Road were added to connect with the new south-access ramp improvements at the junction with Florida's Turnpike. CFX also widened the Good Homes Road bridge to accommodate Orange County's widening of Good Homes Road between S.R. 50 and Old Winter Garden Road.

In March 2013, CFX completed the widening of S.R. 408 began between Oxalis Avenue and S.R. 417 as well as the reconfiguration of the S.R. 408/S.R. 417 systems interchange. In January 2013, CFX completed the widening of S.R. 408 between Goldenrod Road and Chickasaw Trail from four to five lanes in each direction. This project included new ramps at Chickasaw Trail for travel to and from downtown Orlando, as well as a new frontage road to improve access to and from downtown Orlando for the communities in the area of Valencia College Lane and Econlockhatchee Trail.

In July 2018, CFX completed the widening of S.R. 408 from Good Homes Road to east of Hiawassee Road. This two-mile project added a travel lane in each direction (from two to three lanes) and widened the ramp from westbound S.R. 408 to Good Homes Road from one to two lanes.

As part of a partnership project, FDOT reconstructed the I-4/S.R. 408 interchange as part of the I-4 Ultimate project. The reconstruction will improve transitions between S.R. 408 and I-4, including new flyover ramps, direct connection ramps from the eastbound and westbound I-4 Express Lanes to S.R. 408, and the reconstruction of the S.R. 408 travel lanes over I-4 to include 3 lanes in each direction over the viaduct and a reconstructed off ramp to Orange Avenue.

In December 2017, CFX completed a milling and resurfacing project on SR. 408 from the Lake Underhill bridge to Yucatan Drive. This 1.7-mile project included the addition of one express toll lane in each direction at the Conway Road Main Plaza.

In FY 2020, CFX completed the widening of S.R. 408 from east of S.R. 417 to east of Alafaya Trail. This 3.24-mile project added one travel lane to S.R. 408 in each direction (two lanes to three lanes), widened the on-ramp from northbound Alafaya Trail to westbound S.R. 408 (one lane to two lanes), and added an additional Express Lane at the Dean Road Main Plaza.

4.2 Historical Transactions and Toll Revenues

As defined in Chapter 1, CFX transactions and toll revenues are classified as either Paid In-Lane (ETC and cash) or Unpaid In-Lane (PBP and non-revenue). Total transactions are the sum of paid in-lane and unpaid in-lane transactions. Total revenue is the sum of paid in-lane revenue and the

revenue collected through PBP, estimated as an accrued amount. The following section includes a breakdown of toll-paying transactions and toll revenues by paid in-lane and PBP.

4.2.1 ANNUAL PAID IN-LANE TRANSACTION AND REVENUE TRENDS

A comprehensive historical record of the paid in-lane transactions and toll revenues on S.R. 408 at the Hiawassee Main, Pine Hills Main, Conway Main and Dean Main plaza groups from FY 2001 to FY 2020 is presented in **Table 4-1**. The facility data and annual growth are also presented visually in **Figure 4-2** and **Figure 4-3**. This table and figures do not include PBP transactions and revenues, only those that are paid in-lane. For this reason, the information presented in this section may differ slightly from the data presented in the FY 2020 Comprehensive Annual Financial Report (CAFR) and other information in this report.

As shown, total paid in-lane transactions on S.R. 408 in FY 2020 decreased by 16.4 million, or 11.6 percent, compared to FY 2019. Paid in-lane revenues experienced a decline of 9.7 percent during the same period. FY 2020 paid in-lane transactions and revenues were negatively impacted by the effects of the COVID-19 pandemic beginning in March 2020. CFX temporarily suspended cash toll collections and shifted to PBP from March 19, 2020 to May 31, 2020 to reduce the potential exposure of both drivers and employees to the COVID-19 virus. Cash toll collections resumed on June 1, 2020. The slower growth in paid in-lane transactions and revenues in FY 2020 can also be attributed to an increase in customers utilizing the PBP program.

Paid in-lane transaction and revenue growth from FY 2001 through FY 2006 were stable with annual growth in all plaza groups. FY 2007 was the first year with a revenue decline at any plaza group on S.R. 408. The decline of 0.4 percent at the Pine Hills Main plaza group can be attributed to construction at the mainline plaza when it was being relocated to its current location. The new plaza opened in November 2006 and included express lanes for E-PASS and other interoperable transponder customers. Due to the relocation of the Pine Hills mainline plaza, the John Young Parkway ramp plazas to/from the west were demolished and new ramp plazas were constructed to/from the east. New ramp plazas were also constructed at the westbound Old Winter Garden Road exit ramp and at the eastbound Mercy Drive entrance ramp.

In FY 2008, paid in-lane transactions decreased at the Conway Main plaza group by 2.3 percent and revenues decreased by 2.4 percent. Paid in-lane transactions also decreased at the Dean Main plaza group by 2.8 percent while revenues decreased by 2.3 percent. These declines can be attributed to the beginning of the Great Recession, and to construction and widening of the facility which included the addition of express lanes at the Conway mainline plaza. Paid in-lane transactions declined at all four S.R. 408 plaza groups in FY 2009 as a result of the continuing impacts of the economic recession and the implementation of a Systemwide toll rate increase. The toll rate increase impacted growth during the last three months of FY 2009. The largest paid in-lane transaction decline was seen at the Pine Hills Main plaza group which was 8.3 percent lower than the prior year with a corresponding revenue decline of 1.3 percent.

In FY 2010, annual paid in-lane transactions declined at all four plaza groups. Despite the decrease in paid in-lane transactions, revenues significantly increased at all plazas as a result of the first full year of revenue collection after the Systemwide toll rate increase, which impacted growth during the first nine months.

FY 2011 paid in-lane transactions decreased at the Hiawassee Main plaza group by 0.4 percent and at the Dean Main plaza group by 0.8 percent due to construction on S.R. 408. Paid in-lane revenues also declined at both facilities by approximately 1.0 percent. Paid in-lane transactions and revenues at the Pine Hills Main plaza group remained unchanged while the Conway Main plaza group showed very little growth compared to FY 2010. This slow growth continued in FY 2012 with all plaza groups experiencing paid in-lane transaction and revenue declines or no growth compared to the prior year.

Paid in-lane transactions declined while revenues increased at all four plaza groups in FY 2013, due to the toll rate adjustment that went into effect at the beginning of the fiscal year, on July 1, 2012. In FY 2014, paid in-lane transactions and revenues increased at all four plaza groups. The increase in paid in-lane transactions in FY 2014 was expected after the decline occurred in FY 2013 due to the toll rate increase, which impacted traffic for a short period.

In FY 2015, paid in-lane transactions and revenues increased over FY 2014 at all four plaza groups. The Hiawassee Main plaza group experienced the largest increase in both paid in-lane transactions and revenues. The same trend continued in FY 2016 during which paid in-lane transactions increased by 5.8 percent and revenues increased by 5.3 percent. The Hiawassee Main plaza group experienced the largest increase in paid in-lane transactions and revenues for the second consecutive year. This increase in paid in-lane transactions and toll revenues can be partially attributed to customers using S.R. 429 as an alternative to I-4 during construction activities and traveling between Florida's Turnpike and S.R. 408.

In October 2016, Hurricane Matthew tracked parallel to the Florida coast as a Category 3 storm with winds up to 130 miles per hour. Tolls were suspended on the CFX System beginning at 8:00 p.m. on October 5, 2016 through early on October 10, 2016. The toll suspension resulted in a loss of approximately 1.7 million transactions and $1.6 million in revenues on S.R. 408. In September 2017 (FY 2018), Hurricane Irma tracked parallel to the Florida coast as a Category 4 storm with winds up to 155 miles per hour. Tolls were suspended on CFX toll facilities beginning on September 5, 2017 through September 20, 2017 resulting in a transaction loss of approximately 6.7 million and a toll revenue loss of $6.4 million on S.R. 408.

In FY 2018, paid in-lane transactions on S.R. 408 decreased by approximately 2.5 million, or 1.7 percent, compared to FY 2017. FY 2018 paid in-lane revenues decreased by $2.7 million, or 1.9 percent compared to FY 2017. In FY 2018, paid in-lane transactions and revenues increased 0.7 percent at the Hiawassee Main plaza group over FY 2017. The Pine Hills Main plaza group experienced no growth in paid in-lane transactions and a decline in paid in-lane revenues over the same period. Paid in-lane transactions at the Conway Main plaza group declined by 3.2 percent and revenues declined by 3.4 percent. At the Dean Main plaza group, paid in-lane transactions declined by 3.3 percent and revenues declined by 3.6 percent. As previously mentioned, September 2017 transactions and revenues were negatively impacted by toll suspensions during Hurricane Irma.

Table 4-1
S.R. 408 Plaza Groups – Historical Paid In-Lane Transactions and Revenue
FY 2001 – FY 2020

Fiscal Year	Hiawassee Main	Pine Hills Main	Conway Main	Dean Main	TOTAL	Hiawassee Main	Pine Hills Main	Conway Main	Dean Main	TOTAL
	TRANSACTIONS (millions)					PERCENT CHANGE				
2001	17.1	25.7	42.5	19.1	104.4					
2002 [A]	18.7	26.7	43.8	20.9	110.1	9.4%	3.9%	3.1%	9.4%	5.5%
2003	20.2	28.0	45.5	22.4	116.1	8.0%	4.9%	3.9%	7.2%	5.4%
2004	22.0	29.9	48.5	24.3	124.7	8.9%	6.8%	6.6%	8.5%	7.4%
2005 [B]	22.7	30.8	49.1	25.2	127.8	3.2%	3.0%	1.2%	3.7%	2.5%
2006 [C]	24.1	32.2	51.8	27.3	135.4	6.2%	4.5%	5.5%	8.3%	5.9%
2007 [D]	25.7	32.5	51.9	28.2	138.3	6.6%	0.9%	0.2%	3.3%	2.1%
2008 [E]	27.2	33.7	50.7	27.4	139.0	5.8%	3.7%	-2.3%	-2.8%	0.5%
2009 [F]	25.2	30.9	49.3	25.9	131.3	-7.4%	-8.3%	-2.8%	-5.5%	-5.5%
2010 [F]	23.3	28.4	49.0	25.3	126.0	-7.5%	-8.1%	-0.6%	-2.3%	-4.0%
2011	23.2	28.4	50.0	25.1	126.7	-0.4%	0.0%	2.0%	-0.8%	0.6%
2012	23.1	28.4	50.1	24.6	126.2	-0.4%	0.0%	0.2%	-2.0%	-0.4%
2013 [F]	22.5	27.6	48.9	24.5	123.5	-2.5%	-3.0%	-2.3%	-0.5%	-2.1%
2014	24.1	29.2	51.1	25.3	129.7	7.1%	5.8%	4.5%	3.3%	5.0%
2015	26.4	31.6	53.9	26.3	138.2	9.5%	8.2%	5.5%	4.0%	6.6%
2016	28.6	33.7	56.4	27.5	146.2	8.3%	6.6%	4.6%	4.6%	5.8%
2017 [G]	29.6	34.2	56.4	27.5	147.7	3.5%	1.5%	0.0%	0.0%	1.0%
2018 [H]	29.8	34.2	54.6	26.6	145.2	0.7%	0.0%	-3.2%	-3.3%	-1.7%
2019 [I]	29.8	33.6	52.4	25.3	141.1	0.0%	-1.8%	-4.0%	-4.9%	-2.8%
2020 [J,K]	26.6	30.1	46.2	21.8	124.7	-10.7%	-10.4%	-11.8%	-13.8%	-11.6%
	TOLL REVENUES (millions)					PERCENT CHANGE				
2001	$8.2	$18.7	$30.4	$8.9	$66.2					
2002 [A]	$9.1	$19.5	$31.3	$9.8	$69.7	11.0%	4.3%	3.0%	10.1%	5.3%
2003	$9.9	$20.3	$32.5	$10.5	$73.2	8.8%	4.1%	3.8%	7.1%	5.0%
2004	$10.8	$21.8	$34.7	$11.4	$78.7	9.1%	7.4%	6.8%	8.6%	7.5%
2005 [B]	$11.2	$22.5	$35.0	$11.7	$80.4	3.7%	3.2%	0.9%	2.6%	2.2%
2006 [C]	$11.8	$23.6	$36.9	$12.8	$85.1	5.4%	4.9%	5.4%	9.4%	5.8%
2007 [D]	$12.7	$23.5	$37.0	$13.3	$86.5	7.6%	-0.4%	0.3%	3.9%	1.6%
2008 [E]	$13.0	$24.0	$36.1	$13.0	$86.1	2.4%	2.1%	-2.4%	-2.3%	-0.5%
2009 [F]	$13.3	$23.7	$37.6	$13.7	$88.3	2.3%	-1.3%	4.2%	5.4%	2.6%
2010 [F]	$16.4	$26.8	$46.1	$18.4	$107.7	23.3%	13.1%	22.6%	34.3%	22.0%
2011	$16.2	$26.8	$47.1	$18.2	$108.3	-1.2%	0.0%	2.2%	-1.1%	0.6%
2012	$16.0	$26.7	$47.2	$17.8	$107.7	-1.2%	-0.4%	0.2%	-2.2%	-0.6%
2013 [F]	$18.0	$29.3	$51.9	$20.1	$119.3	12.4%	9.6%	10.0%	13.2%	10.8%
2014	$19.2	$31.0	$54.2	$20.8	$125.2	6.7%	5.9%	4.4%	3.3%	4.9%
2015	$21.0	$33.4	$56.9	$21.7	$133.0	9.4%	7.7%	5.0%	4.3%	6.2%
2016	$22.6	$35.5	$59.4	$22.6	$140.1	7.6%	6.3%	4.4%	4.1%	5.3%
2017 [G]	$23.3	$36.1	$59.1	$22.5	$141.0	3.1%	1.7%	-0.5%	-0.4%	0.6%
2018 [H]	$23.5	$36.0	$57.1	$21.7	$138.3	0.9%	-0.3%	-3.4%	-3.6%	-1.9%
2019 [I]	$24.1	$36.0	$55.5	$21.0	$136.6	2.6%	0.0%	-2.8%	-3.2%	-1.2%
2020 [J,K]	$22.1	$32.7	$50.1	$18.4	$123.3	-8.3%	-9.2%	-9.7%	-12.4%	-9.7%

Notes:

A - Effects of the events on September 11, 2001.

B - Effects from 2004 hurricane season (4 storms with toll suspensions).

C - Mills Avenue on-ramp to westbound S.R. 408 permanently closed.
Dean Main plaza converted to open road tolling in August 2005.

D - Holland West plaza relocated to Pine Hills plaza on November 10, 2006.
Hiawassee and Pine Hills Main plazas converted to open road tolling in FY 2006.

E - First effects of national economic recession.

F - Systemwide toll rate increase in July 2013. Conway Main plaza converted to open road tolling in Nov 2008.

G - Effects from Hurricane Matthew in October 2016.

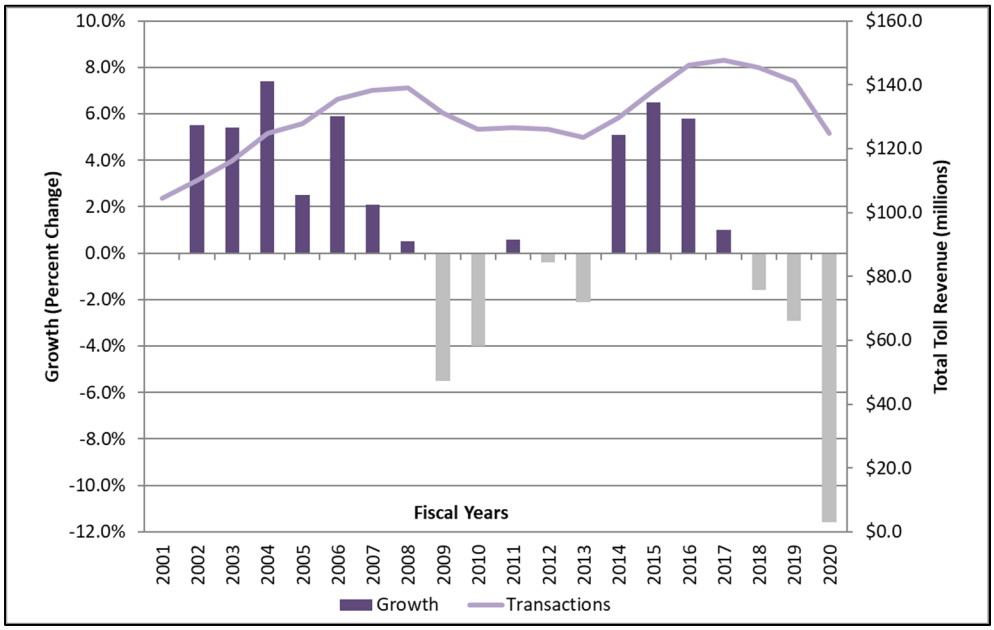
H - Effects from Hurricane Irma in September 2017.

I - Systemwide toll rate increase in July 2018.

J - Systemwide toll rate increase in July 2019.

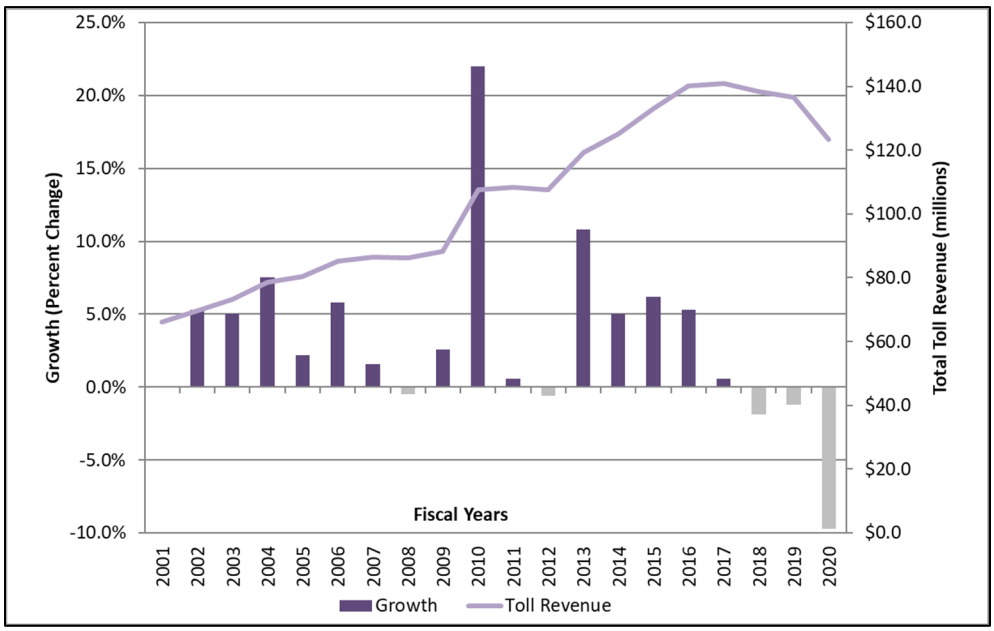
K - Effects from Hurricane Dorian in September 2019 and first effects of COVID-19 pandemic began in March 2020.

Figure 4-2
S.R. 408 Historical Paid In-Lane Transactions and Annual Growth
FY 2001 – FY 2020



Source: CFX Statistical Report June 2020

Figure 4-3
S.R. 408 Historical Paid In-Lane Revenue and Annual Growth
FY 2001 – FY 2020



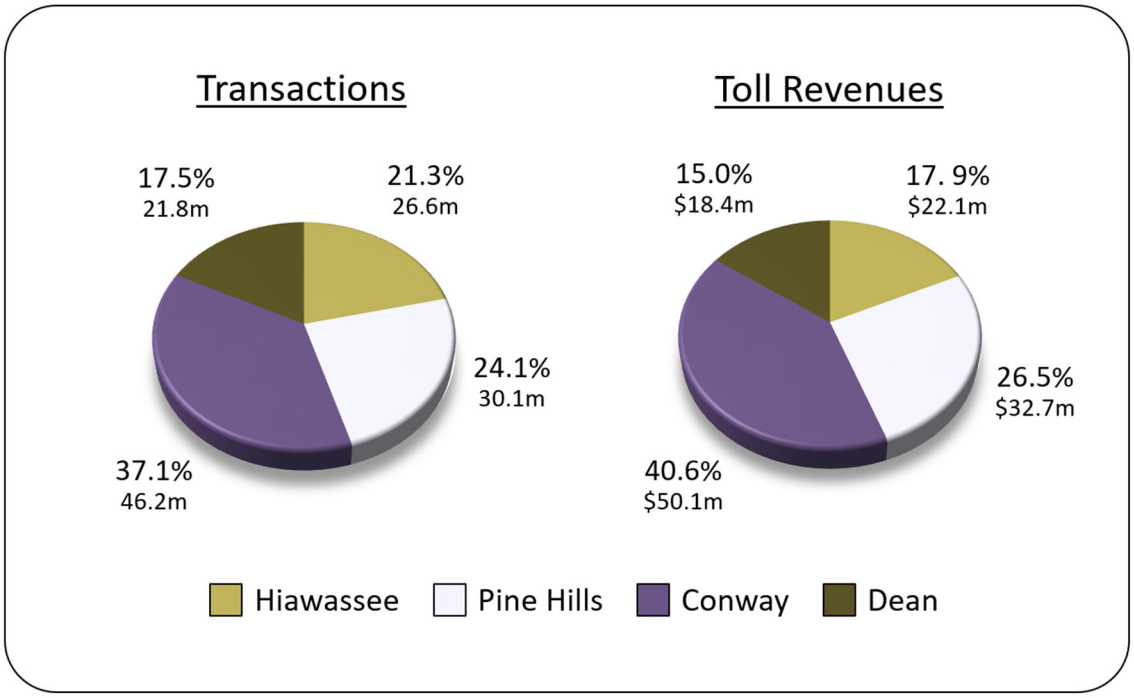
Source: CFX Statistical Report June 2020

As shown, paid in-lane transactions on S.R. 408 in FY 2019 decreased by approximately 4.1 million, or 2.8 percent, compared to FY 2018. FY 2019 paid in-lane revenues decreased by $1.7 million, or 1.2 percent compared to FY 2018. In FY 2019, paid in-lane transactions showed no growth and revenues increased 2.6 percent at the Hiawassee Main plaza group over FY 2018. The Pine Hills Main plaza group experienced a decline in paid in-lane transactions of 1.8 percent and no growth in revenues over the same period. Paid in-lane transactions at the Conway Main plaza group declined by 4.0 percent and revenues declined by 2.8 percent. At the Dean Main plaza group, paid in-lane transactions declined by 4.9 percent and revenues declined by 3.2 percent. The slower growth in paid in-lane transactions and revenues in FY 2019 can be attributed to an increase in customers utilizing the PBP program.

In FY 2020, all S.R. 408 plaza groups experienced a decline in paid in-lane transactions and revenues, despite the FY 2020 toll rate increase. The declines in both paid in-lane transactions and revenues can primarily be attributed to the negative impacts of COVID-19 as explained in greater detail in Chapter 1. Out of the four plaza groups, the Dean Main plaza group was affected the most from the COVID-19 traffic impacts, due to its proximity to the University of Central Florida campus. September 2019 transactions and revenues were also negatively impacted by toll suspensions during Hurricane Dorian.

The paid in-lane transactions and toll revenues by plaza groups and as a percentage of total S.R. 408 paid in-lane transactions and toll revenues for FY 2020 are presented in **Figure 4-4**. The largest portion of the paid in-lane transactions on S.R. 408 during FY 2020 were reported at the Conway Main plaza group, with 46.2 million or 37.1 percent. The Pine Hills Main, Hiawassee Main, and Dean Main plaza groups reported 30.1, 26.6 and 21.8 million paid in-lane transactions respectfully and each contributed between 17.5 and 24.1 percent of total S.R. 408 paid in-lane transactions for FY 2020.

Figure 4-4
S.R. 408 Paid In-Lane Transactions and Revenue by Plaza Group
FY 2020



Source: CFX Statistical Report June 2020

The annual totals and percentages for paid in-lane toll revenues are similar to the trends reported for annual paid in-lane transactions. As shown, the Conway Main plaza group represented $50.1 million in paid in-lane toll revenues or 40.6 percent of total S.R. 408 paid in-lane toll revenues. The Pine Hills Main plaza group represented $32.7 million or 26.5 percent of total paid in-lane revenues on the facility. The Hiawassee Main plaza group represented $22.1 million or 17.9 percent and the Dean Main plaza group represented $18.4 million or 15.0 percent of total paid in-lane revenues on the facility. Toll rates are higher and there are more supporting ramp locations with higher toll rates in the Pine Hills and Conway plaza groups therefore those plaza groups have a higher proportion of facility revenues than transactions.

4.2.2 ANNUAL PBP TRANSACTION AND REVENUE TRENDS

A history of annual PBP transactions and toll revenues on S.R. 408 from FY 2011 to FY 2020 is presented in **Table 4-2**. PBP transactions and toll revenues are recorded by toll location and accrued monthly by plaza group, however Table 4-2 shows the annual totals for S.R. 408 as reported at year end.

Table 4-2
S.R. 408 – Historical PBP Transactions and Revenue
FY 2011 – FY 2020

Fiscal Year	Transactions (millions)	Percent Change	Toll Revenues (millions)	Percent Change
	TRANSACTIONS (millions)			
2011	1.4		$1.8	
2012	1.8	28.6%	$2.4	33.3%
2013	2.2	22.2%	$3.5	45.8%
2014	2.7	22.7%	$4.2	20.0%
2015	3.4	25.9%	$5.3	26.2%
2016	4.5	32.4%	$6.9	30.2%
2017	5.1	13.3%	$9.2	33.3%
2018	8.9	74.5%	$9.8	6.5%
2019	16.2	82.0%	$17.7	80.6%
2020	17.6	8.6%	$19.3	9.0%

Source: Unaudited data provided by CFX

PBP transactions have increased from 1.4 million in FY 2011 to 17.6 million in FY 2020, while PBP revenues have increased from $1.8 million to $19.3 million over the same period. In FY 2020, PBP transactions increased 8.6 percent and PBP revenues increased 9.0 percent over FY 2019. This increase in PBP transactions and revenues in FY 2020 has contributed to the slower growth and/or decline in paid in-lane transactions and revenues compared to FY 2019. The trends show that more customers are choosing the PBP method of payment. As previously mentioned, CFX temporarily suspended cash toll collection on all facilities from March 19, 2020 to May 31, 2020 in response to the COVID-19 pandemic. During this time, customers were only able to pay via ETC or PBP. Growth in PBP transactions and revenues is expected to decline beginning in FY 2021 due to a new PBP toll rate adopted by the CFX Board that went into effect on July 1, 2020, at which time the PBP toll rate at all toll locations was increased to twice the ETC toll rate. Due to the new PBP toll rate implemented, it is anticipated that a portion of customers currently paying via PBP will switch to paying in the lane through ETC to avoid the higher toll rate.

4.2.3 MONTHLY PAID IN-LANE TRANSACTION SEASONAL VARIATION

In **Table 4-3**, monthly paid in-lane transactions are normalized to the average number of paid in-lane transactions per day. Using the average number of paid in-lane transactions per day allows for an easy comparison of the variations in relative travel demand over the year. The seasonal pattern of usage changes slightly from year to year based on the number of weekdays in a given month, but in FY 2020 this seasonality was overshadowed by the impacts in travel demand from the COVID-19 pandemic. Therefore, the factors in Table 4-3 should not be relied on for typical monthly seasonal trends on S.R. 408.

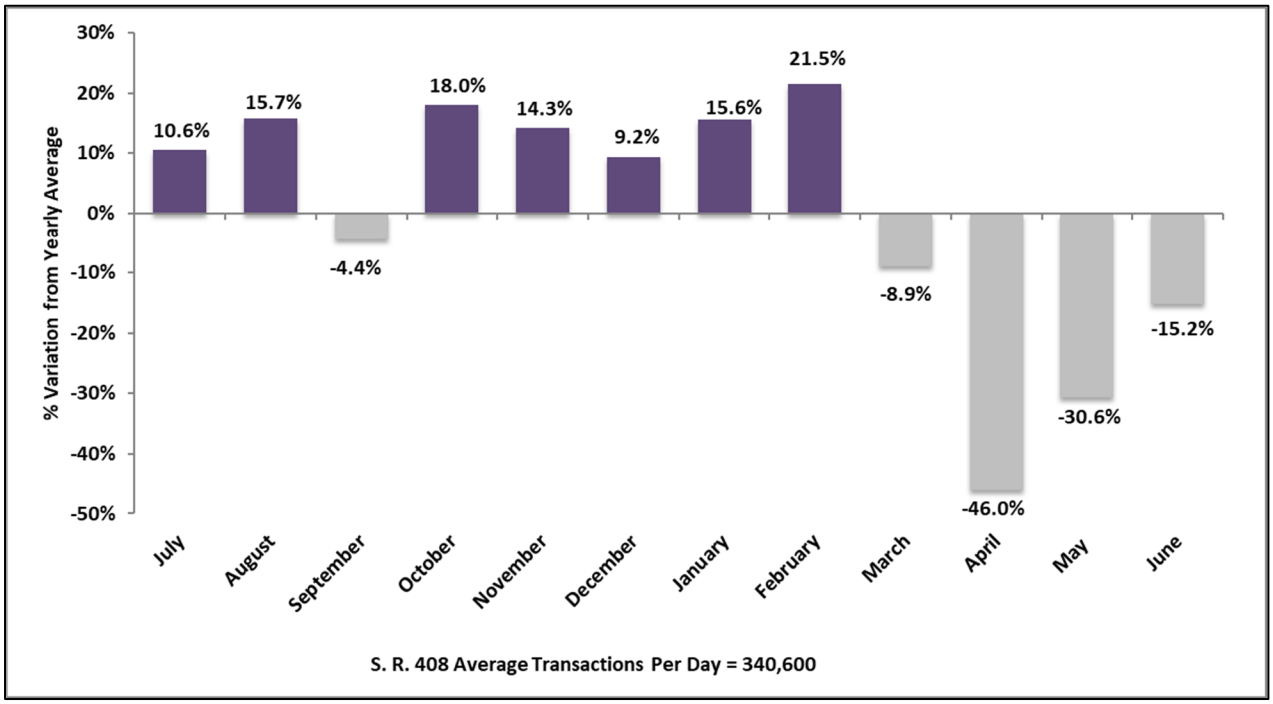
The average number of paid in-lane transactions per day in FY 2020 on S.R. 408 ranged from a high of 413,700 in February 2020 to a low of 183,800 in April 2020. March through June transactions were negatively impacted by the COVID-19 pandemic. This data is presented in a graphical format in **Figure 4-5**. The paid in-lane transactions for each month appear as a percentage of the average for the fiscal year. September 2019 paid in-lane transactions were negatively impacted by toll suspensions during Hurricane Dorian. As shown in the figure, February paid in-lane transactions were 21.5 percent above average and April paid in-lane transactions were 46.0 percent below average for the facility. February 2020 included an additional day of toll collection compared to February 2019 due to the leap year. April 2020 was the first full month with negative COVID-19 impacts.

Table 4-3
S.R. 408 – Monthly Seasonal Variation in Paid In-Lane Transactions
FY 2020

Month	Number of Days in Month	Paid In-Lane Transactions	Average Transactions/Day	Seasonal Factor
July	31	11,679,438	376,800	1.106
August	31	12,219,492	394,200	1.157
September	30	9,765,224	325,500	0.956
October	31	12,458,074	401,900	1.180
November	30	11,675,763	389,200	1.143
December	31	11,536,062	372,100	1.092
January	31	12,211,531	393,900	1.156
February	29	11,998,791	413,700	1.215
March	31	9,617,644	310,200	0.911
April	30	5,515,108	183,800	0.540
May	31	7,331,835	236,500	0.694
June	30	8,667,076	288,900	0.848
Average		***10,389,670***	***340,600***	***1.000***
Total Year	**366**	**124,676,038**		

Source: CFX Statistical Report June 2020

Figure 4-5
S.R. 408 Variation in Paid In-Lane Transactions per Day, by Month
FY 2020



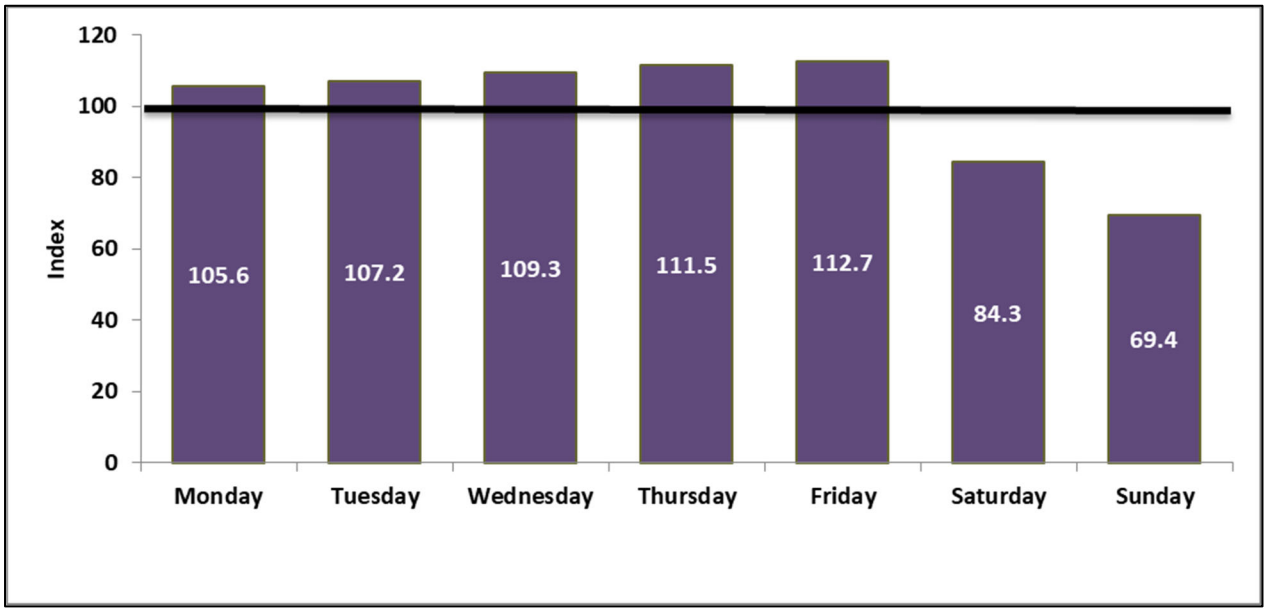
Source: CFX Statistical Report June 2020

4.2.4 DAY-OF-WEEK TRANSACTION VARIATION

Figure 4-6 contains a comparison of transactions by day of week in FY 2020. This data is presented as an index, where the average day equals 100. An index value of 100 for a given day of the week would indicate that day's transactions were precisely the same volume as the facility average. A value of 120 would indicate a day that has 20 percent greater volume than the average. The data used for this analysis was for a typical week in March 2020, before the COVID-19 pandemic. The data includes transactions at mainline plazas only (no ramps).

During FY 2020, transactions on S.R. 408 fluctuated over the course of the five-day work week. Transactions were highest on Fridays, with an index value of 112.7 (12.7 percent higher than the average day), volumes on Monday through Thursday ranged from index values of 105.6 to 111.5. This is consistent with prior year trends. Transactions decline significantly on Saturdays and Sundays, which have index values of 84.3 and 69.4, or 15.7 and 30.6 percent lower than the average day.

Figure 4-6
S.R. 408 Variation in Transactions, by Day of Week
FY 2020



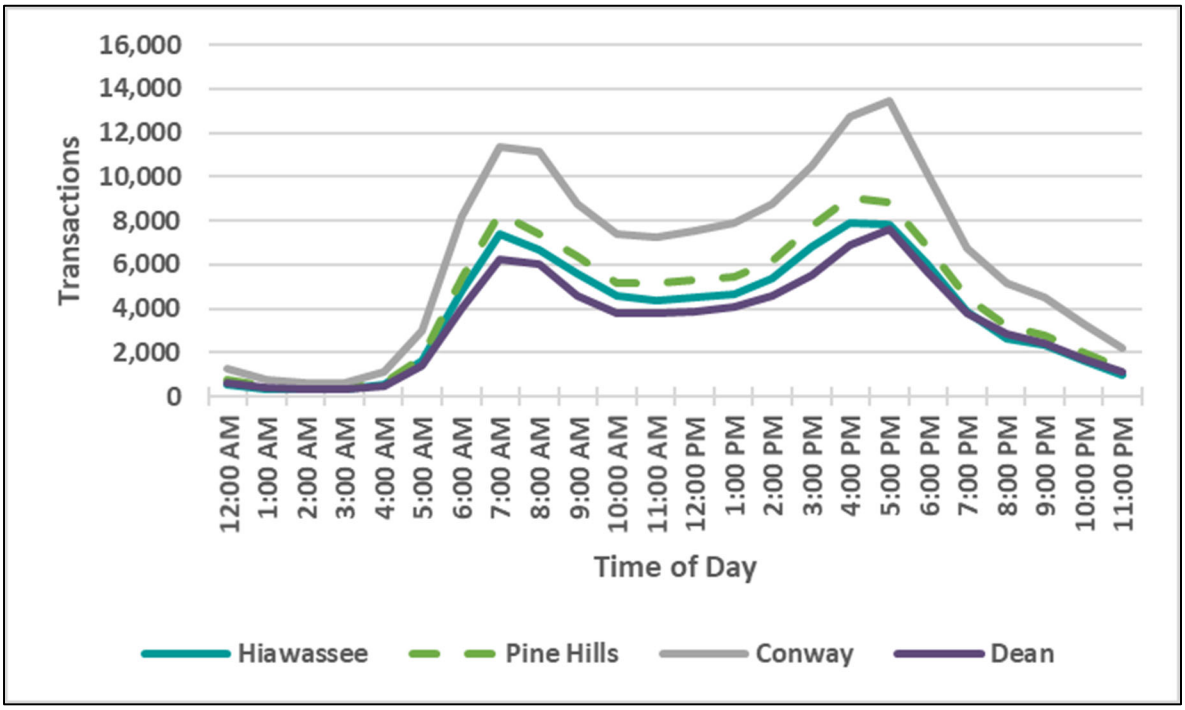
Source: Unaudited lane transaction data – March 2020

4.2.5 HOURLY TRAFFIC DISTRIBUTION

The hourly distribution of traffic includes information on the usage characteristics of travel on the facility. The hourly distributions represent traffic counts taken during a typical week at the mainline plazas in the month of March 2020, before the COVID-19 pandemic. The typical weekday distribution is shown in **Figure 4-7** and the weekend distribution is shown in **Figure 4-8**. The figures contain the sum of traffic volumes in both directions.

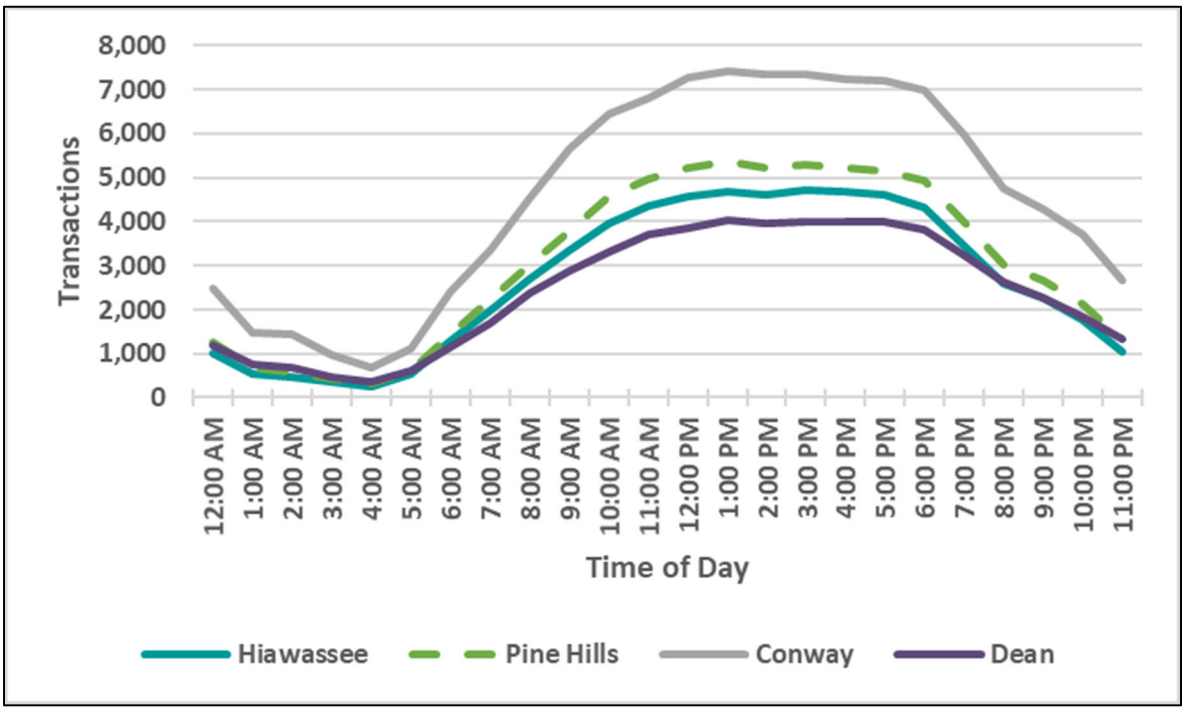
The four mainline locations on S.R. 408 exhibit similar hourly traffic patterns. On weekdays, travel demand at all four locations is bimodal, with both morning and evening peak hours. Traffic volumes in the evening peak hours at all four mainline plazas are higher than in the morning peak hours. The highest peak hour volumes during the week were 13,400 per hour beginning at 5:00 P.M. at the Conway mainline plaza, 9,000 per hour beginning at 4:00 p.m. at the Pine Hills mainline plaza, 7,900 per hour beginning at 4:00 p.m. at the Hiawassee mainline plaza and 7,600 per hour beginning at 5:00 p.m. at the Dean mainline plaza. On weekends, the distributions are unimodal with no clear morning or evening peak periods, indicating that many customers use the facility for non-work trip purposes.

Figure 4-7
S.R. 408 Hourly Traffic Variation (Weekday)
FY 2020 (March)



Source: Unaudited lane traffic data – March 2020

Figure 4-8
S.R. 408 Hourly Traffic Variation (Weekend)
FY 2020 (March)



Source: Unaudited lane traffic data – March 2020

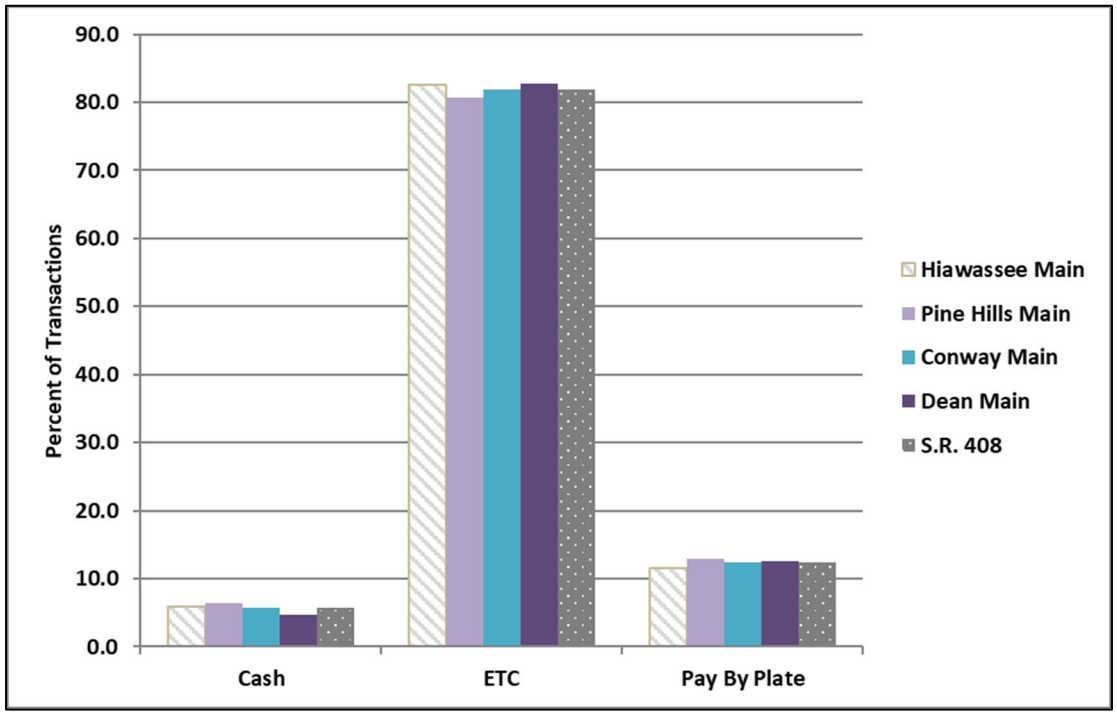
4.2.6 TRANSACTIONS AND REVENUE BY PAYMENT TYPE

The distributions of transactions and revenue by payment type by plaza group during FY 2020 are presented in **Figure 4-9** and **Figure 4-10**. Customers pay tolls in one of three ways: cash, ETC, and PBP. As defined in Chapter 1 of this report, paid in-lane transactions and revenue include cash and ETC payments made when a customer travels through a CFX toll location. The remaining transactions and revenue are classified as unpaid in-lane, which includes PBP and a small portion of non-revenue transactions. PBP transactions and revenues are estimated monthly based on an accrual rate of approximately 60 percent of all unpaid in-lane transactions and revenues. It is important to note that the data presented in the following two figures is based on unaudited transaction and toll revenue data and may not match the audited data shown in other tables and figures in this chapter. It is also important to note that cash toll collection at all toll plazas was suspended from March 19, 2020 to May 31, 2020 due to COVID-19 safety protocols.

As shown in Figure 4-9, the share of ETC transactions ranged from a low of 80.7 percent at the Pine Hills Main plaza group to a high of 82.8 percent at the Dean Main plaza group. Overall, ETC transactions on S.R. 408 accounted for 81.9 percent of total transactions on the facility. The cash transactions accounted for the smallest share, between 4.7 to 6.3 percent of transactions at all plaza groups. Overall, cash transactions on S.R. 408 accounted for 5.7 percent of total transactions on the facility. Cash transactions have been trending lower each year but are almost 2% lower than FY 2019 because CFX suspended cash toll collection for over two months in FY 2020 to reduce the potential exposure of both drivers and employees to the COVID-19 virus. The share of PBP transactions ranged from a low of 11.5 percent at the Hiawassee Main plaza group to a high of 13.0 percent at the Pine Hills Main plaza group. Overall, PBP transactions on S.R. 408 accounted for 12.4 percent of total transactions on the facility.

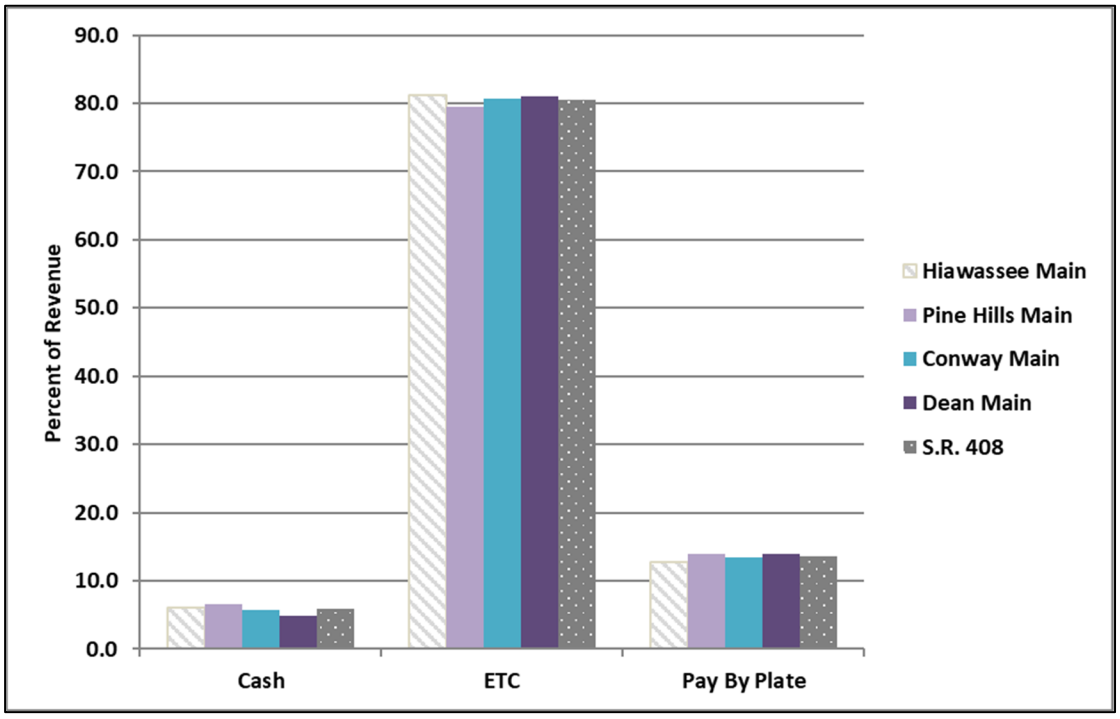
As shown in Figure 4-10, the share of toll revenues by payment type is comparable to the share of transactions. The share of ETC toll revenues ranged from a low of 79.5 percent at the Pine Hills Main plaza group to a high of 81.2 percent at the Hiawassee Main plaza group. Overall, ETC toll revenues on S.R. 408 accounted for 80.5 percent of total toll revenues on the facility. The share of cash toll revenues ranged from a low of 4.9 percent at the Dean Main plaza group to a high of 6.5 percent at the Pine Hills Main plaza group. Overall, cash toll revenues on S.R. 408 accounted for 5.9 percent of total toll revenues on the facility. The share of PBP toll revenues ranged from a low of 12.7 percent at the Hiawassee Main plaza group to highs of 14.0 percent at the Pine Hills Main and Dean Main plaza groups. Overall, PBP toll revenues on S.R. 408 accounted for 13.6 percent of total toll revenues on the facility.

Figure 4-9
S.R. 408 Percent of Transactions by Payment Type
FY 2020



Source: Unaudited transaction data provided by CFX

Figure 4-10
S.R. 408 Percent of Revenue by Payment Type
FY 2020



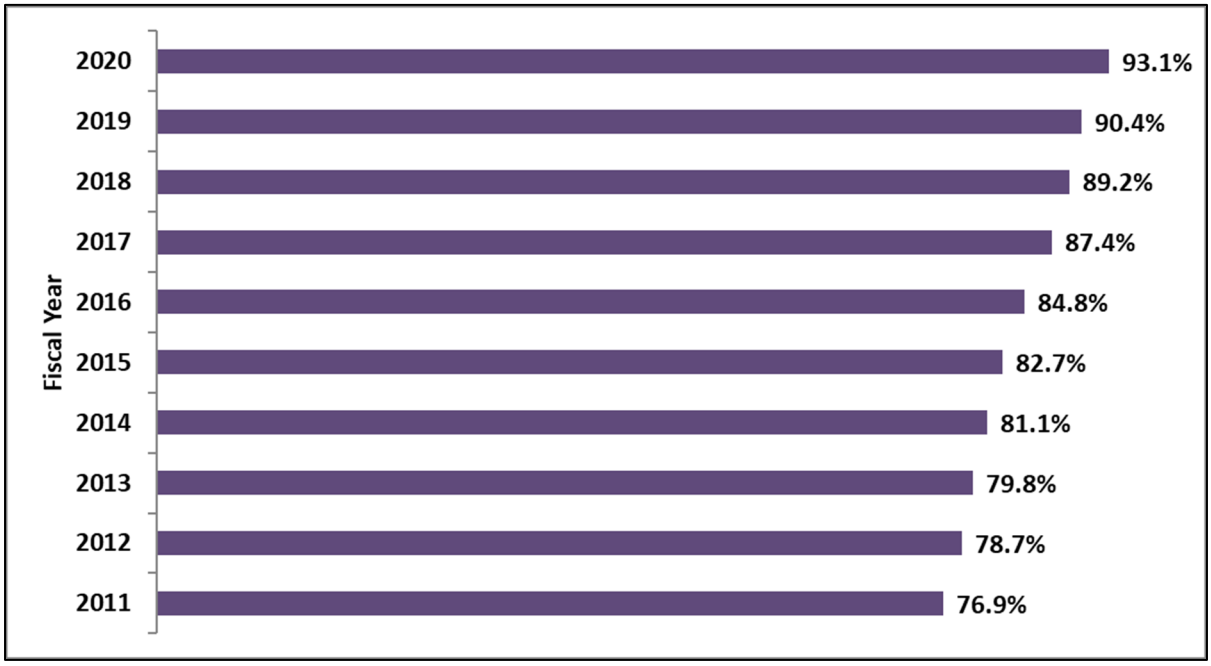
Source: Unaudited toll revenue data provided by CFX

4.3 ETC Usage

The percent of paid in-lane revenues generated from ETC over the past ten fiscal years on S.R. 408 is shown in **Figure 4-11**. PBP revenues are not included. The share of paid in-lane toll revenue collected through ETC has steadily increased on the facility. In FY 2011, ETC revenues totaled 76.9 percent of total paid in-lane revenues on the facility. By the end of FY 2020, ETC revenues reached 93.1 percent. The data below differs from Figure 4-10 because it only includes the annual comparison of paid in-lane revenue and not all revenue types. ETC usage is still expected to increase as customers shift to ETC to take advantage of the lower ETC toll rate and convenience of paying tolls electronically, especially with implementation of PBP toll rates that are now twice the ETC toll rate as of July 2020 (FY 2021).

Beginning May 11, 2016, CFX implemented a pilot program called The Reload Lane to encourage and increase E-PASS usage. CFX now offers this drive-through lane on S.R. 408 at the Conway Main Plaza for customers to sign up for an E-PASS electronic transponder or replenish an existing E-PASS account from 6:00 a.m. to 8:00 p.m. daily. This program is the first of its kind in the continental United States and provides customer convenience and multiple payment options (cash, check, and debit/credit card). The program was expanded with the opening of a second Reload Lane at the John Young Main Plaza on S.R. 417 in March 2017 and a third location at the Forest Lake Main Plaza on S.R. 429 in May 2017. Due to the success of this program, the CFX Board approved the expansion of the Reload Lane capabilities to all manned toll plaza lanes on all system facilities, expected to be completed by FY 2022.

Figure 4-11
S.R. 408 Percent of Paid In-Lane Revenue from Electronic Toll Collection
FY 2011 – FY 2020



Source: CFX Statistical Report June 2020

4.4 Forecasted Transactions and Toll Revenues

Based on the recently adopted "Customer First Toll Policy," toll rate adjustments (indexed tolls) were applied to the T&R forecasts every year based on the net change in CPI for the prior year, which equated to 1.45 percent in FY 2021. Because the change in CPI was lower than the 1.5 percent floor, CDM Smith used 1.5 percent to adjust the FY 2021 toll amounts. CDM Smith used the floor of 1.5 percent per year every year thereafter in the forecast period.

Future transportation improvements that influence the T&R forecasts for S.R. 408 include the projects listed in **Table 4-4**, assumed completed in each model horizon year. System improvements, such as the S.R. 408 widening projects from S.R. 417 to Alafaya Trail on the east and from Hiawassee Road to Clarke Road on the west will help growth rates in the near term as these are areas of congestion. The major improvements to S.R. 50 may be contributing to the recent slowdown in growth on S.R. 408, but feeder road improvements, including Alafaya Trail, John Young Parkway, Hiawassee Road and U.S. 441, positively impact the traffic and revenue growth on S.R. 408 throughout the forecast horizon.

Table 4-4
S.R. 408 - Key Transportation Improvements

Facility	From	To	Year	Jurisdiction	Improvement
Interstate 4	SR 434	Kirkman Rd	2025	FDOT	Widen to 10 lanes
SR 408	SR 417	Alafaya Trl	2025	CFX	Widen to 6-lanes
SR 408	Hiawassee Rd	Clark Rd	2025	CFX	Widen to 6-lanes
SR 423 (John Young Pkwy)	SR 50 (Colonial Dr)	Shader Rd	2025	Orange County/FDOT	Widen to 6 Lanes
SR 50	East of SR 417	Old Cheney Highway	2025	FDOT	Widen to 6-lanes
SR 50	SR 429	East of West Oaks Mall	2025	FDOT	Widen to 6-lanes
Florida's Turnpike	Minneola	Orange/Lake County Line	2025	FDOT	Widen to 6 lanes
Alafaya Trl	Huckleberry Finn Dr	Lake Underhill Rd	2035	Orange County	Widen to 6 Lanes
Hiawassee Rd	SR 50	Silver Star Rd	2035	Orange County	Widen to 6 Lanes
SR 50	East of Old Cheney Hwy	SR 520	2035	FDOT	Widen to 6-lanes
Florida's Turnpike	US 27	US 19	2035	FDOT	Widen to 6 lanes
Florida's Turnpike	US 19	Minneola/Hancock Rd	2035	FDOT	Widen to 6 lanes
US 441 (SR 500)	SR 44	N of SR 46	2035	FDOT	Widen to 6-lanes
SR 50	CR 565 (Villa City)	CR 565A (Montevista)	2035	FDOT	Widen to 4-lanes
SR 408 East Extension	Challenger Pkwy	SR 50	2045	CFX	New 4-lane expressway
US 441 (Orange Blossom Trl)	SR 50 (Colonial Dr)	John Young Pkwy	2045	FDOT	Widen to 6 Lanes
US 27	Florida Turnpike Ramps- N	South of SR 19	2045	FDOT	Widen to 6-lanes
CR 455/Hartle Rd	Lost Lake Rd	Good Hearth Blvd	2045	Lake County	Widen to 4-lanes
CR 455/Hartle Rd	Hartwood Marsh	Lost Lake Rd	2045	Lake County	Widen to 2-lanes
CR 33	SR 50	Simon Brown Rd	2045	Lake County	Widen to 4-lanes

Historical and projected transactions and toll revenues for each of the S.R. 408 plaza groups and for all of S.R. 408 are shown in Tables **4-5** and **4-6**. The tables are divided into paid in-lane and PBP transactions and revenue. Paid in-Lane transactions and revenue by plaza group include ETC and cash collection. PBP is only reported as a total on the facility level.

The forecasts are based on the completion of the Interstate 4 Ultimate, especially the completion of the I-4/S.R. 408 interchange improvements. While these improvements provide congestion relief on I-4, there are positive impacts to the S.R. 408 T&R forecasts. The growth rates for the remainder of the forecast period are also moderate but steady. The paid in-lane transactions on S.R. 408 are expected to grow 2.3 percent per year through FY 2030 and then lower rates through

the end of the forecast period because of the impact of toll rate adjustments. PBP transactions are forecasted to decrease dramatically in FY 2022 and FY 2023 and then increase at an average of 3.3 percent per year through FY 2030 and then increase at a slow pace through the remainder of the forecast period. The initial decline in PBP transactions is expected due to the new PBP toll rate implemented in FY 2021, which is now twice the ETC toll rate at all toll locations. Total transactions are expected to grow 1.8 percent per year through FY 2030, 0.6 percent per year from FY 2030 to FY 2040, and 0.4 percent per year from FY 2040 to FY 2050. The paid in-lane revenues on S.R. 408 are projected to increase significantly over the forecast period, from the FY 2020 actual of $123.3 million to $249.0 million in FY 2050. PBP revenues are projected to increase from $19.3 million in FY 2020 to $43.4 million in FY 2050. Total revenues are expected to grow from $142.6 million in FY 2020 to $292.4 million in FY 2050. S.R. 408 total revenues are forecasted to increase an average of 3.7 percent per year through FY 2030, 1.9 percent per year from FY 2030 to FY 2040, and 1.7 percent per year from FY 2040 to FY 2050.

Table 4-5
S.R. 408 Plaza Groups – Transaction Projections (Millions)
FY 2021 – FY 2050

Fiscal Year		Hiawassee Main	Pine Hills Main	Conway Main	Dean Main	Paid In-Lane	PBP	Total	Percent Annual Change
2010	Actual	23.3	28.4	49.0	25.3	126.0	0.8	126.8	
2011		23.2	28.4	50.0	25.1	126.7	1.4	128.1	1.0%
2012		23.1	28.4	50.1	24.6	126.2	1.8	128.0	-0.1%
2013[A]		22.5	27.6	48.9	24.5	123.5	2.2	125.7	-1.8%
2014		24.1	29.2	51.1	25.3	129.7	2.7	132.4	5.3%
2015		26.4	31.6	53.9	26.3	138.2	3.4	141.6	6.9%
2016		28.6	33.7	56.4	27.5	146.2	4.5	150.7	6.4%
2017[B]		29.6	34.2	56.4	27.5	147.7	5.1	152.8	1.4%
2018[C]		29.8	34.2	54.6	26.6	145.2	8.9	154.1	0.9%
2019[D]		29.8	33.6	52.4	25.3	141.1	16.2	157.3	2.1%
2020[E]		26.6	30.1	46.2	21.8	124.7	17.6	142.3	-9.5%
2021[F]	Forecast	26.2	30.8	47.6	20.9	125.5	18.4	143.9	1.1%
2022[G]		28.9	34.4	49.9	23.9	137.1	14.7	151.8	5.5%
2023		30.9	35.6	51.0	25.7	143.2	11.5	154.7	1.9%
2024		32.0	36.4	51.9	26.6	146.9	11.8	158.7	2.6%
2025		32.6	37.0	52.5	27.2	149.3	12.1	161.4	1.7%
2026		33.2	37.6	52.9	27.4	151.1	12.1	163.2	1.1%
2027		33.6	38.1	53.2	27.6	152.5	12.4	164.9	1.0%
2028		34.2	38.5	53.6	27.8	154.1	12.5	166.6	1.0%
2029		34.7	39.0	53.9	28.1	155.7	12.6	168.3	1.0%
2030		35.1	39.5	54.2	28.3	157.1	12.6	169.7	0.8%
2031		35.5	39.8	54.4	28.4	158.1	12.7	170.8	0.6%
2032		35.9	40.2	54.7	28.6	159.4	12.8	172.2	0.8%
2033		36.2	40.5	54.9	28.8	160.4	13.0	173.4	0.7%
2034		36.6	40.7	55.1	28.9	161.3	13.1	174.4	0.6%
2035		36.9	41.0	55.3	29.0	162.2	13.1	175.3	0.5%
2036		37.2	41.2	55.6	29.3	163.3	13.1	176.4	0.6%
2037		37.5	41.5	55.8	29.4	164.2	13.2	177.4	0.6%
2038		37.9	41.7	55.9	29.5	165.0	13.1	178.1	0.4%
2039		38.2	41.9	56.1	29.6	165.8	13.3	179.1	0.6%
2040		38.5	42.1	56.3	29.8	166.7	13.4	180.1	0.6%
2041		38.8	42.4	56.4	29.9	167.5	13.4	180.9	0.4%
2042		39.0	42.6	56.6	30.0	168.2	13.4	181.6	0.4%
2043		39.3	42.8	56.8	30.1	169.0	13.5	182.5	0.5%
2044		39.6	43.0	56.9	30.2	169.7	13.6	183.3	0.4%
2045		39.8	43.1	57.1	30.4	170.4	13.5	183.9	0.3%
2046		40.1	43.3	57.2	30.5	171.1	13.7	184.8	0.5%
2047		40.3	43.4	57.3	30.6	171.6	13.7	185.3	0.3%
2048		40.6	43.6	57.5	30.7	172.4	13.9	186.3	0.5%
2049		40.8	43.7	57.6	30.8	172.9	13.9	186.8	0.3%
2050		41.0	43.8	57.7	30.9	173.4	13.9	187.3	0.3%

Fiscal Year	Compound Annual Average Growth Rate (CAAGR)						
2010 - 2020	1.3%	0.6%	-0.6%	-1.5%	-0.1%	36.2%	1.2%
2020 - 2030	2.8%	2.8%	1.6%	2.6%	2.3%	-3.3%	1.8%
2030 - 2040	0.9%	0.6%	0.4%	0.5%	0.6%	0.6%	0.6%
2040 - 2050	0.6%	0.4%	0.2%	0.4%	0.4%	0.4%	0.4%

Notes:
Actual transaction data provided by CFX from Monthly Statistical Reports.
A - Systemwide toll rate increase.
B - Effects from Hurricane Matthew in October 2016.
C - Effects from Hurricane Irma in September 2017.
D - First year of implementation of "Customer First" toll rate policy.
E - Effects from Hurricane Dorian in September 2019 and first effects of COVID-19 pandemic began in March 2020.
F - New toll rates for PBP customers, set at 2.0 times the ETC rate.
G - Completion of I-4 Ultimate project.

Table 4-6
S.R. 408 Plaza Groups – Toll Revenue Projections (Millions)
FY 2021– FY 2050

Fiscal Year		Hiawassee Main	Pine Hills Main	Conway Main	Dean Main	Paid In-Lane	PBP	Total	Percent Change
2010	Actual	$16.4	$26.8	$46.1	$18.4	$107.7	$1.0	$108.7	
2011		$16.2	$26.8	$47.1	$18.2	$108.3	$1.8	$110.1	1.3%
2012		$16.0	$26.7	$47.2	$17.8	$107.7	$2.4	$110.1	0.0%
2013[A]		$18.0	$29.3	$51.9	$20.1	$119.3	$3.5	$122.8	11.5%
2014		$19.2	$31.0	$54.2	$20.8	$125.2	$4.2	$129.4	5.4%
2015		$21.0	$33.4	$56.9	$21.7	$133.0	$5.3	$138.3	6.9%
2016		$22.6	$35.5	$59.4	$22.6	$140.1	$6.9	$147.0	6.3%
2017[B]		$23.3	$36.1	$59.1	$22.5	$141.0	$9.2	$150.2	2.2%
2018[C]		$23.5	$36.0	$57.1	$21.7	$138.3	$9.8	$148.1	-1.4%
2019[D]		$24.1	$36.0	$55.5	$21.0	$136.6	$17.7	$154.3	4.2%
2020[E]		$22.1	$32.7	$50.1	$18.4	$123.3	$19.3	$142.6	-7.6%
2021[F]	Forecast	$22.1	$34.3	$52.9	$18.0	$127.3	$34.9	$162.2	13.7%
2022[G]		$24.6	$38.4	$56.7	$19.6	$139.3	$30.9	$170.2	4.9%
2023		$26.6	$40.2	$59.1	$21.2	$147.1	$25.8	$172.9	1.6%
2024		$27.9	$41.5	$60.3	$22.3	$152.0	$26.6	$178.6	3.3%
2025		$28.8	$42.7	$61.4	$23.1	$156.0	$27.2	$183.2	2.6%
2026		$29.6	$44.0	$62.8	$23.6	$160.0	$28.1	$188.1	2.7%
2027		$30.5	$45.2	$64.0	$24.0	$163.7	$28.5	$192.2	2.2%
2028		$31.4	$46.3	$65.2	$24.5	$167.4	$29.4	$196.8	2.4%
2029		$32.2	$47.5	$66.4	$25.0	$171.1	$29.8	$200.9	2.1%
2030		$33.0	$48.6	$67.7	$25.5	$174.8	$30.5	$205.3	2.2%
2031		$33.8	$49.7	$68.9	$26.0	$178.4	$31.1	$209.5	2.0%
2032		$34.6	$50.7	$70.0	$26.6	$181.9	$31.8	$213.7	2.0%
2033		$35.4	$51.9	$71.2	$27.0	$185.5	$32.2	$217.7	1.9%
2034		$36.2	$52.9	$72.5	$27.5	$189.1	$33.1	$222.2	2.1%
2035		$37.0	$53.9	$73.6	$28.0	$192.5	$33.5	$226.0	1.7%
2036		$37.8	$54.9	$74.8	$28.5	$196.0	$34.3	$230.3	1.9%
2037		$38.6	$56.0	$76.1	$29.0	$199.7	$34.8	$234.5	1.8%
2038		$39.4	$57.0	$77.3	$29.5	$203.2	$35.6	$238.8	1.8%
2039		$40.3	$58.0	$78.5	$30.0	$206.8	$36.1	$242.9	1.7%
2040		$41.1	$59.1	$79.8	$30.5	$210.5	$36.7	$247.2	1.8%
2041		$41.9	$60.2	$81.1	$31.2	$214.4	$37.4	$251.8	1.9%
2042		$42.8	$61.2	$82.4	$31.7	$218.1	$38.2	$256.3	1.8%
2043		$43.6	$62.3	$83.7	$32.2	$221.8	$38.7	$260.5	1.6%
2044		$44.6	$63.3	$85.0	$32.7	$225.6	$39.4	$265.0	1.7%
2045		$45.4	$64.5	$86.4	$33.3	$229.6	$40.1	$269.7	1.8%
2046		$46.3	$65.5	$87.7	$33.8	$233.3	$40.7	$274.0	1.6%
2047		$47.2	$66.6	$89.0	$34.4	$237.2	$41.5	$278.7	1.7%
2048		$48.0	$67.6	$90.4	$34.9	$240.9	$42.0	$282.9	1.5%
2049		$49.0	$68.8	$91.8	$35.5	$245.1	$42.8	$287.9	1.8%
2050		$49.9	$69.8	$93.2	$36.1	$249.0	$43.4	$292.4	1.6%

Fiscal Year	Compound Annual Average Growth Rate (CAAGR)						
2010 - 2020	3.0%	2.0%	0.8%	0.0%	1.4%	34.4%	2.8%
2020 - 2030	4.1%	4.0%	3.1%	3.3%	3.6%	4.7%	3.7%
2030 - 2040	2.2%	2.0%	1.7%	1.8%	1.9%	1.9%	1.9%
2040 - 2050	2.0%	1.7%	1.6%	1.7%	1.7%	1.7%	1.7%

Notes:
Actual transaction data provided by CFX from Monthly Statistical Reports.
A - Systemwide toll rate increase.
B - Effects from Hurricane Matthew in October 2016.
C - Effects from Hurricane Irma in September 2017.
D - First year of implementation of "Customer First" toll rate policy.
E - Effects from Hurricane Dorian in September 2019 and first effects of COVID-19 pandemic began in March 2020.
F - New toll rates for PBP customers, set at 2.0 times the ETC rate.
G - Completion of I-4 Ultimate project.

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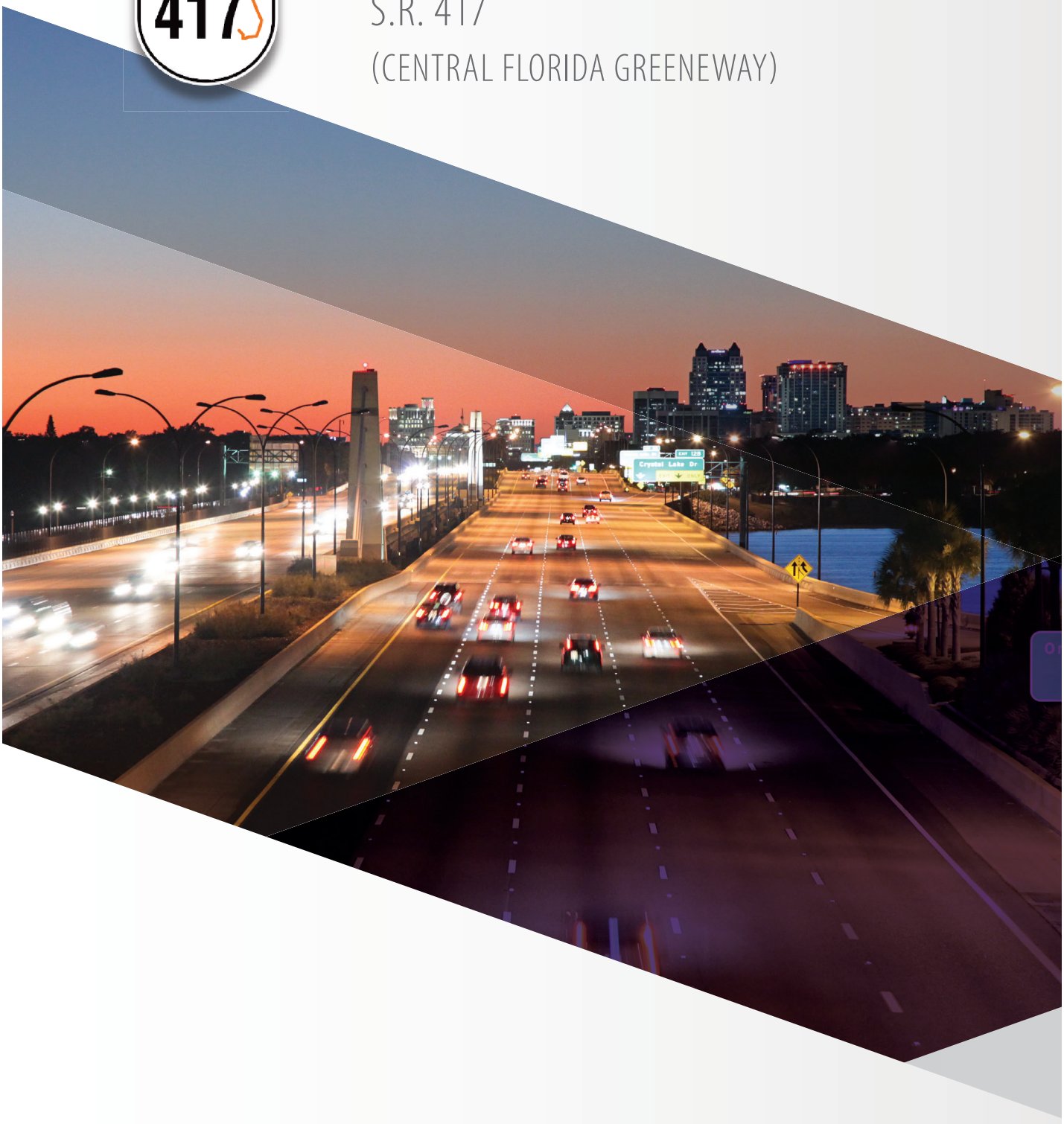
CHAPTER 5

S.R. 417

(CENTRAL FLORIDA GREENEWAY)



S.R. 417 (CENTRAL FLORIDA GREENEWAY)

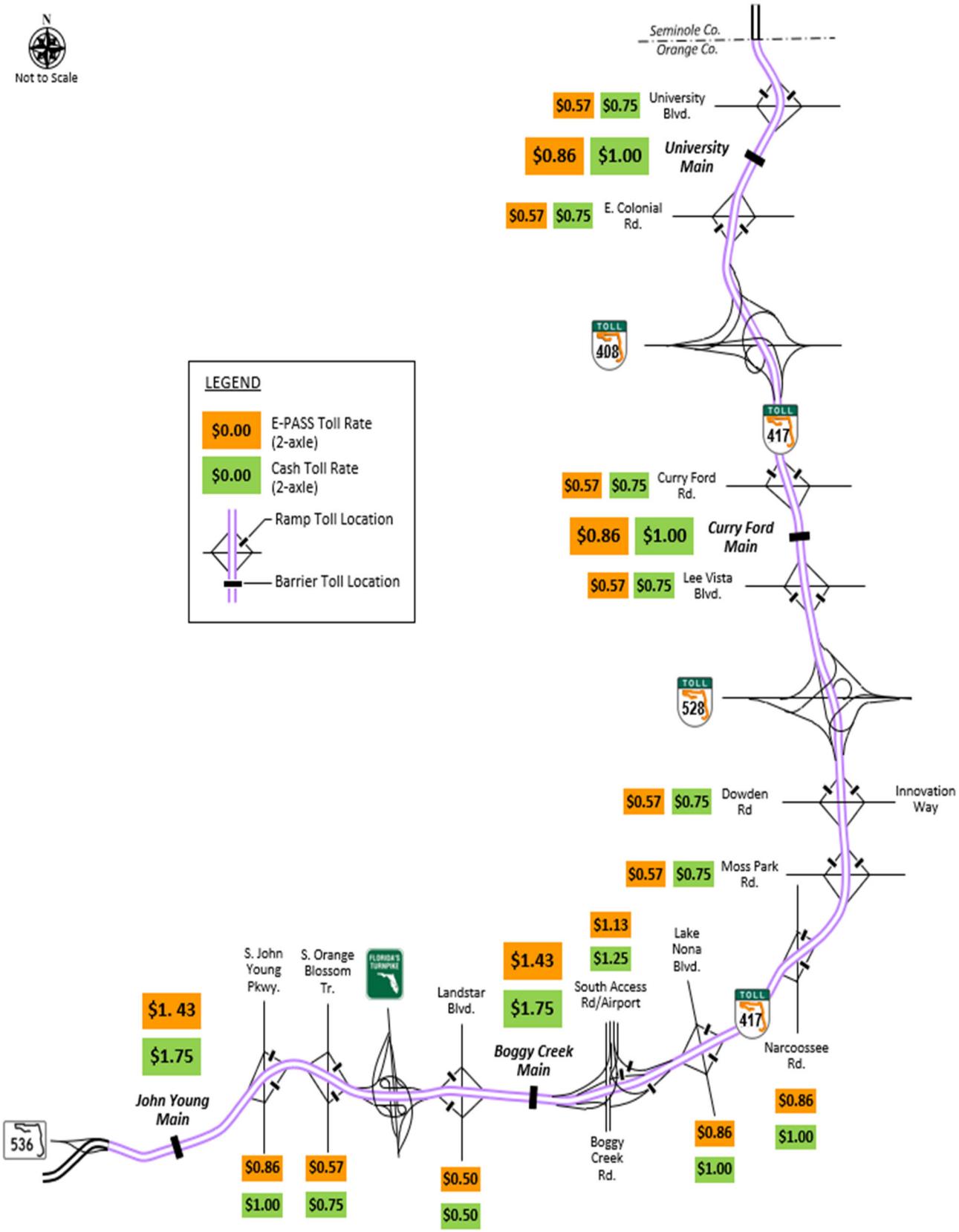
5.1 Facility Description

S. R. 417, also known as the Central Florida GreeneWay, is a 55-mile expressway that serves as an eastern and southern beltway around Orlando and providing a connection between the residential areas, northeast, east and southeast of Orlando in Orange, Seminole and Osceola Counties to S.R. 408 and downtown Orlando. It also significantly enhances access to the Orlando International Airport (OIA) as an alternative to S.R. 528 and S.R. 436. CFX owns and operates the largest portion of S.R. 417 (32 miles) extending east and north from International Drive to the Orange-Seminole County line. FTE extended S.R. 417 north and west from the Orange-Seminole County line to I-4. FTE also extended S.R. 417 in a westerly direction from International Drive to provide a connection to I-4 in the vicinity of the attractions. A map of CFX's portion of S.R. 417 including the FY 2020 CFX toll rates for the mainline and ramp toll plazas is shown in **Figure 5-1**.

The first section of S.R. 417 to be constructed by CFX was from S.R. 408 to the Orange-Seminole County line including the University Mainline plaza. This section opened to traffic in December 1988 and toll collection began at the plaza in January 1989. The University Main plaza group included interchanges at S.R. 408, Valencia College Lane, S.R. 50 and University Boulevard. The next section extended from S.R. 408 to S.R. 528, was completed in June 1990 and toll collection began in July 1990. The interchanges associated with the Curry Ford Main plaza group are S.R. 528, Lee Vista Boulevard and Curry Ford Road. The final section of S.R. 417 includes the Boggy Creek and John Young Mainline plaza groups, extending from International Drive to S.R. 528. This section opened to traffic with toll collection in July 1993. The Boggy Creek Main plaza group includes interchanges at Boggy Creek Road, Lake Nona Boulevard, Narcoossee Road, Moss Park Road and Innovation Way. The John Young Main plaza group includes interchanges at John Young Parkway, U.S. 441/Orange Blossom Trail and Landstar Boulevard. FTE opened the section of the limited-access expressway between International Drive and I-4 in June 1996 and the S.R. 417 connection to U.S. 17-92 in Seminole County in 1994 and from U.S. 17-92 to I-4 in Seminole County in September 2002.

In July 2003, the University Mainline toll plaza was the first plaza in Florida to be converted from conventional toll lanes to Open Road Tolling (ORT) lanes. CFX chose this plaza for the first conversion due to its heavy traffic and extensive ETC usage. Conversions followed at the Curry Ford Mainline plaza in July 2005 and the Boggy Creek and John Young Mainline plazas in March 2007.

Figure 5-1
S.R. 417 Facilities and Toll Rates



In January 2012, CFX completed the widening of S.R. 417 from four to six lanes between S.R. 528 and Curry Ford Road to help reduce traffic congestion during peak periods. Also, in January 2013, CFX completed work on the modified S.R. 408/S.R. 417 Interchange project. As part of the interchange improvement project, Valencia College Lane ramps to and from the north were closed and ramps to and from the south were rerouted to a new access point at Chickasaw Trail on S.R. 408. This new interchange improved access and mobility to those living and working in east Orange County.

In January 2015, CFX opened a partial interchange between S.R. 417 and Florida's Turnpike, providing ramps from southbound S.R. 417 to southbound Florida's Turnpike and from northbound Florida's Turnpike to northbound S.R. 417. In May 2016, FTE opened an additional ramp for motorists traveling southbound on S.R. 417 to access Florida's Turnpike northbound toward Interstate 4. Also, two new ramps were opened for motorists traveling north on S.R. 417 from Hunter's Creek to access Florida's Turnpike in both the north and south directions. This completed five of the eight ramps planned for the interchange. FTE is currently constructing the remainder of the ramps to complete the system-to-system interchange.

In May 2015, CFX completed the widening of S.R. 417 between Curry Ford Road and Lake Underhill Road from four to six lanes. The project also included improvements to the southbound off ramp to Curry Ford Road and the Curry Ford Road northbound on ramp. In February 2016, CFX completed the interchange improvements at S.R. 417/Boggy Creek Road and opened the new airport ramps. This improvement provided better access to and from OIA for customers in South Orange and Osceola Counties.

CFX completed reconstructing several ramps of the S.R. 417/S.R. 408 interchange. Phase One of the project was the widening of S.R. 417 between Berry Dease Road and S.R. 408. This 1.6-mile project added travel lanes in both directions (from four to six lanes) and realigned the northbound S.R. 417 ramp to eastbound S.R. 408. This phase was completed in the fall of 2017. Phase Two included building new and realigned ramps from westbound S.R. 408 to southbound S.R. 417, northbound S.R. 417 to westbound S.R. 408, and eastbound S.R. 408 to southbound S.R. 417. This phase was completed in 2020.

In September 2018, CFX began widening S.R. 417 from south of Econlockhatchee Trail to the Orange/Seminole County line. The 3.2-mile project added a travel lane in both directions, expanding the expressway from four to six lanes. The project also included eliminating one cash lane in each direction at the University Main Plaza and replacing it with an Open Road Tolling (ORT) lane, for a total of three ORT lanes (dedicated ETC lanes) in each direction. The improvement was also completed in 2020.

Starting is FY 2020, CFX has programmed a significant widening program on S.R. 417 between S.R. 536/International Drive and S.R. 528. Approximately 21 miles of S.R. 417 will be widened from 4 to 6 lanes including a hardened shoulder for Peak Time Shoulder Use (PTSU) for an 8-lane section during peak hours. The S.R. 417 widening projects consist of five segments; the widening has been divided into contiguous parts to minimize the impact to motorists. Construction on all segments is anticipated to be start in 2021 and be complete by the end of 2023.

5.2 Historical Transactions and Toll Revenues

As defined in Chapter 1, CFX transactions and toll revenues are classified as either Paid In-Lane (ETC and cash) or Unpaid In-Lane (PBP and non-revenue). Total transactions are the sum of paid in-lane and unpaid in-lane transactions. Total revenue is the sum of paid in-lane revenue and the revenue collected through PBP, estimated as an accrued amount. The following section includes a breakdown of toll-paying transactions and toll revenues by paid in-lane and PBP.

5.2.1 ANNUAL PAID IN-LANE TRANSACTION AND REVENUE TRENDS

S.R. 417 annual paid in-lane transactions at the John Young Main, Boggy Creek Main, Curry Ford Main and University Main plaza groups from FY 2001 to FY 2020 are presented in the top half of **Table 5-1**. The history of annual paid in-lane toll revenues is also summarized and totaled in the bottom half of the table. The facility data and annual growth are also presented visually in **Figure 5-2** and **Figure 5-3**. These historical tables do not include PBP transactions and revenues, only those that are paid in-lane. For this reason, the information presented in this section may differ slightly from the data presented in the FY 2020 Comprehensive Annual Financial Report (CAFR) and other information in this report.

As shown, total paid in-lane transactions on S.R. 417 in FY 2020 decreased by 19.6 million, or 13.5 percent, compared to FY 2019. Paid in-lane revenues experienced a decline of 12.3 percent during the same period. FY 2020 paid in-lane transactions and revenues were negatively impacted by the effects of the COVID-19 pandemic beginning in March 2020. CFX temporarily suspended cash toll collections and shifted to PBP from March 19, 2020 to May 31, 2020 to reduce the potential exposure of both drivers and employees to the COVID-19 virus. Cash toll collections resumed on June 1, 2020. The slower growth in paid in-lane transactions and revenues in FY 2020 can also be attributed to an increase in customers utilizing the PBP program.

Total facility paid in-lane transactions and revenues increased annually from FY 2001 through FY 2008. With the decreasing paid in-lane transactions and revenues across the System and the threat of an economic recession, CFX instituted a Systemwide toll rate increase in FY 2008 and 2009. Paid in-lane transactions decreased at all four plaza groups in FY 2009 due to both the economic downturn and the Systemwide toll rate increase. The April 2009 toll rate increase impacted the last three months of FY 2009. During the same year, paid in-lane revenues at the John Young Main plaza group and Boggy Creek Main plaza group decreased by 3.6 and 5.7 percent, respectively. Paid in-lane revenues at the Curry Ford Main and University Main plaza groups remained relatively unchanged from FY 2008. FY 2009 paid in-lane transactions and revenues were also impacted by Tropical Storm Fay in August 2008.

FY 2010 paid in-lane transactions continued to decline at all four plaza groups as a result of the economic downturn and the toll rate increase, which impacted the first nine months of the fiscal year. However, paid in-lane toll revenues increased significantly at all plaza groups due to the higher toll rates.

Table 5-1
S.R. 417 Plaza Groups – Historical Paid In-Lane Transactions and Revenue
FY 2001 – FY 2020

Fiscal Year	John Young Main	Boggy Creek Main	Curry Ford Main	University Main	TOTAL	John Young Main	Boggy Creek Main	Curry Ford Main	University Main	TOTAL
	TRANSACTIONS (millions)					PERCENT CHANGE				
2001	14.5	10.8	14.8	22.2	62.3					
2002 [A]	14.5	11.0	15.7	23.7	64.9	0.0%	1.9%	6.1%	6.8%	4.2%
2003	15.7	12.3	17.9	25.4	71.3	8.3%	11.8%	14.0%	7.2%	9.9%
2004 [B]	17.1	13.5	20.4	28.6	79.6	8.9%	9.8%	14.0%	12.6%	11.6%
2005 [C]	18.9	15.2	22.9	30.2	87.2	10.5%	12.6%	12.3%	5.6%	9.5%
2006 [D]	20.8	17.3	25.7	32.4	96.2	10.1%	13.8%	12.2%	7.3%	10.3%
2007 [E]	22.3	19.1	27.5	33.5	102.4	7.2%	10.4%	7.0%	3.4%	6.4%
2008	23.6	20.3	27.6	33.0	104.5	5.8%	6.3%	0.4%	-1.5%	2.1%
2009 [F]	21.5	18.4	24.9	30.0	94.8	-8.9%	-9.4%	-9.8%	-9.1%	-9.3%
2010 [F]	19.6	17.5	23.6	28.6	89.3	-8.8%	-4.9%	-5.2%	-4.7%	-5.8%
2011	20.1	18.6	23.2	29.0	90.9	2.6%	6.3%	-1.7%	1.4%	1.8%
2012 [G]	20.6	18.8	23.1	28.2	90.7	2.5%	1.1%	-0.4%	-2.8%	-0.2%
2013 [H]	21.0	19.7	23.4	26.2	90.3	1.8%	4.6%	1.3%	-7.0%	-0.5%
2014	22.6	21.9	25.2	27.5	97.2	7.6%	11.2%	7.7%	5.0%	7.6%
2015	25.7	25.3	28.3	30.0	109.3	13.7%	15.5%	12.3%	9.1%	12.4%
2016	30.6	31.0	32.5	33.3	127.4	19.1%	22.5%	14.8%	11.0%	16.6%
2017 [I]	34.8	34.6	34.2	34.5	138.1	13.7%	11.6%	5.2%	3.6%	8.4%
2018 [J]	37.2	38.1	35.8	34.8	145.9	6.9%	10.1%	4.7%	0.9%	5.6%
2019 [K]	36.9	39.3	35.4	33.9	145.5	-0.8%	3.1%	-1.1%	-2.6%	-0.3%
2020 [L,M]	30.7	34.2	31.8	29.2	125.9	-16.8%	-13.0%	-10.2%	-13.9%	-13.5%
	TOLL REVENUE (millions)					PERCENT CHANGE				
2001	$12.7	$10.6	$7.7	$10.3	$41.3					
2002 [A]	$12.7	$10.8	$8.1	$11.0	$42.6	0.0%	1.9%	5.2%	6.8%	3.1%
2003	$13.6	$12.0	$9.2	$11.7	$46.5	7.1%	11.1%	13.6%	6.4%	9.2%
2004 [B]	$14.6	$13.1	$10.5	$13.4	$51.6	7.4%	9.2%	14.1%	14.5%	11.0%
2005 [C]	$16.0	$14.7	$11.7	$14.3	$56.7	9.6%	12.2%	11.4%	6.7%	9.9%
2006 [D]	$17.4	$16.6	$13.2	$15.4	$62.6	8.7%	12.9%	12.8%	7.7%	10.4%
2007 [E]	$18.7	$18.2	$14.0	$16.0	$66.9	7.5%	9.6%	6.1%	3.9%	6.9%
2008	$19.7	$19.2	$13.9	$15.7	$68.5	5.3%	5.5%	-0.7%	-1.9%	2.4%
2009 [F]	$19.0	$18.1	$13.9	$15.8	$66.8	-3.6%	-5.7%	0.0%	0.6%	-2.5%
2010 [F]	$21.0	$19.9	$17.7	$20.4	$79.0	10.5%	9.9%	27.3%	29.1%	18.3%
2011	$21.6	$20.6	$17.3	$20.6	$80.1	2.9%	3.5%	-2.3%	1.0%	1.4%
2012 [G]	$22.1	$20.8	$17.3	$20.3	$80.5	2.3%	1.0%	0.0%	-1.5%	0.5%
2013 [H]	$25.3	$24.3	$19.8	$21.8	$91.2	14.3%	16.9%	14.5%	7.5%	13.3%
2014	$27.2	$26.9	$21.3	$22.9	$98.3	7.7%	10.7%	7.5%	5.0%	7.8%
2015	$30.6	$30.8	$24.0	$25.0	$110.4	12.5%	14.5%	12.7%	9.2%	12.3%
2016	$35.9	$37.7	$27.6	$27.8	$129.0	17.3%	22.4%	15.0%	11.2%	16.8%
2017 [I]	$40.4	$42.0	$29.1	$28.9	$140.4	12.5%	11.4%	5.4%	4.0%	8.8%
2018 [J]	$43.0	$45.7	$30.5	$29.2	$148.4	6.4%	8.8%	4.8%	1.0%	5.7%
2019 [K]	$44.3	$48.6	$30.7	$29.0	$152.6	3.0%	6.3%	0.7%	-0.7%	2.8%
2020 [L,M]	$37.1	$42.6	$28.6	$25.6	$133.9	-16.3%	-12.3%	-6.8%	-11.7%	-12.3%

Notes:

A - Effects of the events on September 11, 2001.

B - University Main plaza converted to open road tolling plaza in July 2003.

C - Effects from 2004 hurricane season (4 storms with toll suspensions).

D - Curry Ford Main plaza converted to open road tolling plaza in July 2005.

E - Boggy Creek Main and John Young Main plazas converted to open road tolling plazas in March 2007.

F - Systemwide toll rate increase in April 2009.

G - Widening of S.R. 417 between S.R. 408 and S.R. 528. Valencia College Lane ramps closed.

H - Systemwide toll rate increase in July 2013. Implementation of cash and electronic toll rate differential.

I - Effects from Hurricane Matthew in October 2016.

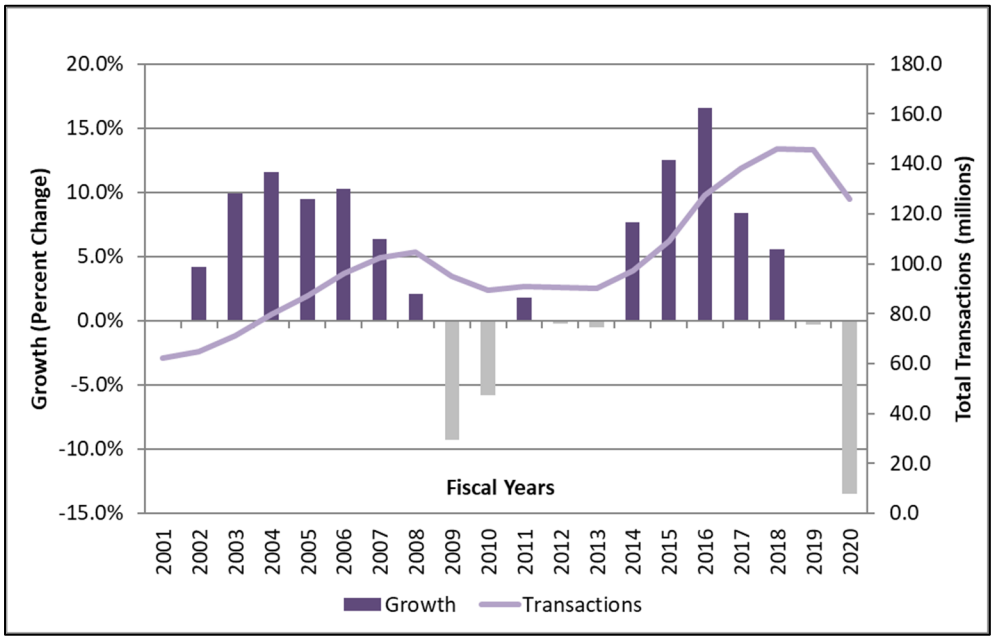
J - Effects from Hurricane Irma in September 2017.

K - Systemwide toll rate increase in July 2018.

L - Systemwide toll rate increase in July 2019.

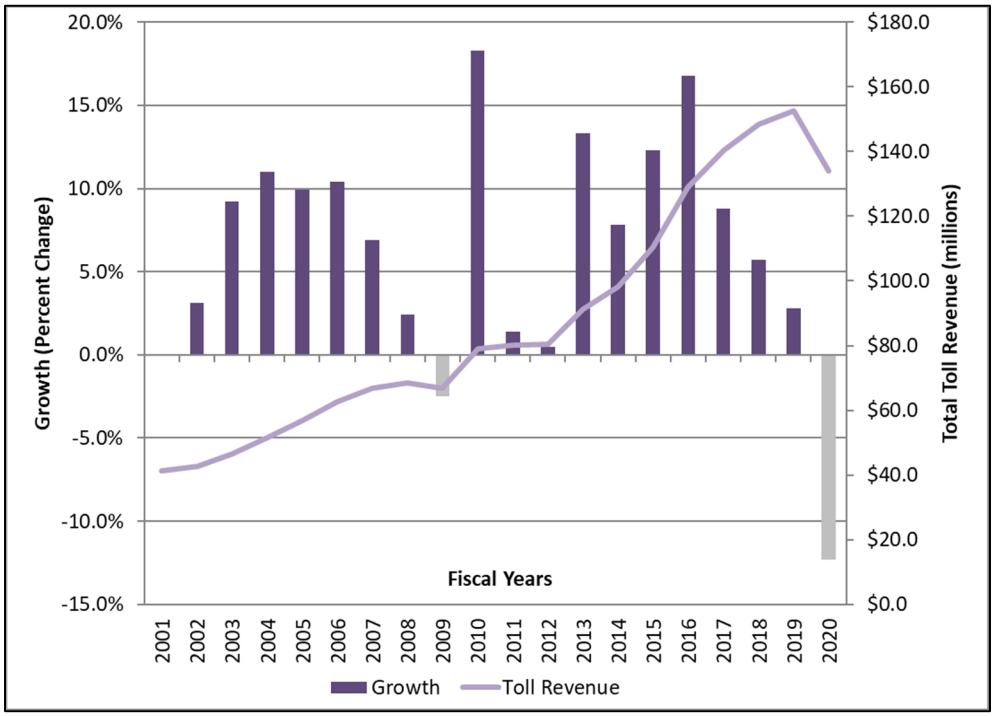
M - Effects from Hurricane Dorian in September 2019 and first effects of COVID-19 pandemic began in March 2020.

Figure 5-2
S.R. 417 Historical Paid In-Lane Transactions and Annual Growth
FY 2001 – FY 2020



Source: CFX Statistical Report June 2020

Figure 5-3
S.R. 417 Historical Paid In-Lane Revenue and Annual Growth
FY 2001 – FY 2020



Source: CFX Statistical Report June 2020

As shown, Curry Ford Main was the only plaza group with a decline in paid in-lane transactions and revenues in FY 2011. The losses in paid in-lane transactions and revenues can be attributed to the S.R. 417 widening activities between Curry Ford and S.R. 528. This trend continued at the Curry Ford Main plaza group in FY 2012 with a decrease of 0.4 percent in paid in-lane transactions and no growth in revenues. Construction of the widening project was completed in FY 2013. Also, in FY 2012, the University Main plaza group experienced a decline of 2.8 percent in paid in-lane transactions and a decline of 1.5 percent in revenues. This plaza group was impacted by the construction of the S.R. 408/S.R. 417 systems interchange. FY 2012 was also the first full year that the Valencia College Lane ramps had been permanently closed.

In FY 2013, University Main plaza group was the only one that experienced a decline in paid in-lane transactions, a decrease of 7.0 percent as compared to FY 2012. All other plaza groups experienced an increase in paid in-lane transactions despite the July 2012 toll rate adjustment. Paid in-lane revenues at all plaza groups increased in FY 2013, overall 13.3 percent.

In FY 2014, all plaza groups experienced growth in paid in-lane transactions and toll revenues. Overall, S.R. 417 paid in-lane transactions increased 7.6 percent and toll revenues increased 7.8 percent over FY 2013. FY 2015 and FY 2016 experienced double-digit growth in both paid in-lane transactions and revenues, which is referred to as the period of extraordinary growth. In FY 2017, paid in-lane transactions increased 8.4 percent and toll revenues increased 8.8 percent compared to FY 2016. Boggy Creek Main, John Young Main and Curry Ford Main plaza groups continued paid in-lane transaction and revenue growth can be attributed to Medical City and Lake Nona developments along these sections of S.R. 417, as well as the opening of the partial interchange at Florida's Turnpike. Over the four-year period, paid in-lane transactions and revenue increased by more than 50 percent.

In October 2016 (FY 2017), Hurricane Matthew tracked parallel to the Florida coast as a Category 3 storm with winds up to 130 miles per hour. Tolls were suspended on the CFX System beginning at 8:00 p.m. on October 5, 2016 through early on October 10, 2016. The toll suspension resulted in a loss of approximately 1.5 million in transactions and $1.5 million in toll revenues on S.R. 417. In September 2017 (FY 2018), Hurricane Irma tracked parallel to the Florida coast as a Category 4 storm with winds up to 155 miles per hour. Tolls were suspended on CFX toll facilities beginning on September 5, 2017 through September 20, 2017 resulting in a transaction loss of approximately 6.4 million and a toll revenue loss of $6.5 million on S.R. 417.

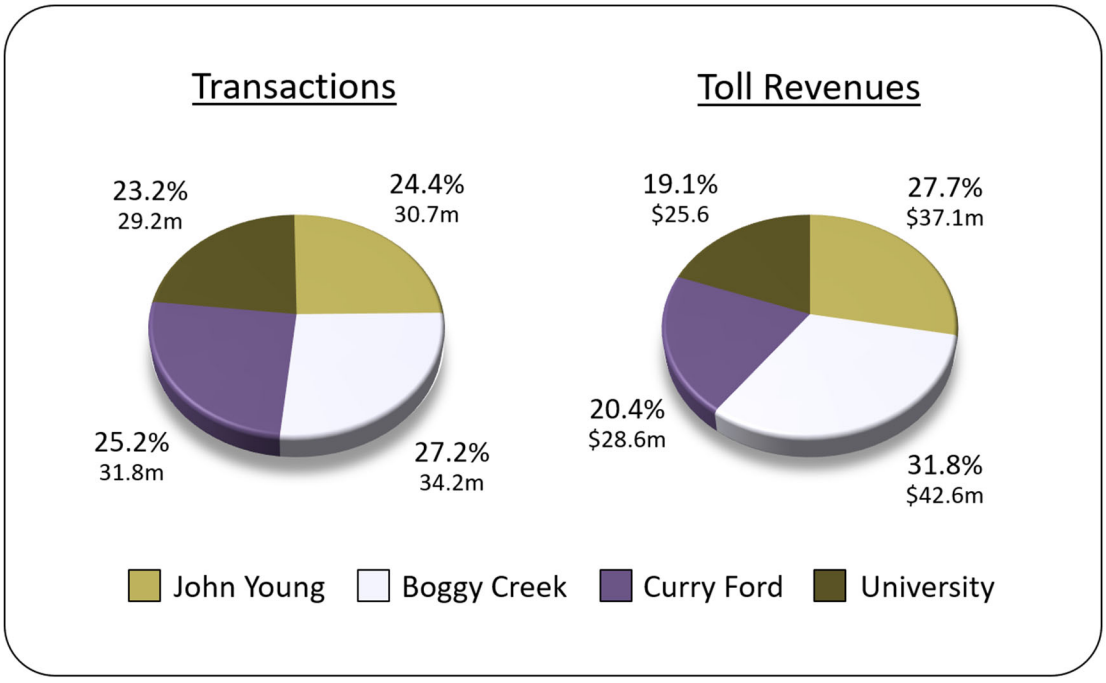
In FY 2018, all plaza groups experienced growth in paid in-lane transactions and toll revenues. Overall, S.R. 417 paid in-lane transactions increased 5.6 percent and toll revenues increased 5.7 percent over FY 2017. As previously mentioned, September 2017 paid in-lane transactions and toll revenues were negatively impacted by toll suspensions during Hurricane Irma.

In FY 2019, S.R. 417 paid in-lane transactions decreased by 0.3 percent and toll revenues increased 2.8 percent over FY 2018. Boggy Creek was the only plaza group that experienced growth in paid in-lane transactions of 3.1 percent in FY 2019. Paid in-lane toll revenues increased at all plaza groups except University Main, which decreased by 0.7 percent compared to FY 2018. The slower growth in paid in-lane transactions and revenues in FY 2019 can be attributed to an increase in customers utilizing the PBP program.

In FY 2020, all S.R. 417 plaza groups experienced a decline in paid in-lane transactions and revenues, despite the FY 2020 toll rate increase. The declines in both paid in-lane transactions and revenues can be attributed to the negative impacts of COVID-19 as explained in further detail in Chapter 1. The John Young Main was the plaza group affected the most from COVID-19 impacts due to its proximity to the attractions area, but Boggy Creek Main and University were also severely impacted due to their location near the airport and the University of Central Florida. September 2019 transactions and revenues were also negatively impacted by toll suspensions during Hurricane Dorian.

The paid in-lane transactions and toll revenues by plaza group and as a percentage of total S.R. 417 paid in-lane transactions and toll revenues for FY 2020 are presented in **Figure 5-4**. As shown, the Boggy Creek Main plaza group represented 34.2 million paid in-lane transactions or 27.2 percent of total S.R. 417 paid in-lane transactions. The Curry Ford Main plaza group had the second highest amount of paid in-lane transactions at 31.8 million or 25.2 percent. The John Young Main and University Main plaza groups followed close behind with 30.7 and 29.2 million paid in-lane transactions, respectively. In years prior to FY 2016, the John Young Main plaza group consistently had a more paid in-lane transactions than Boggy Creek Main, however the Boggy Creek Main plaza group has surpassed John Young Main three of the last five years. It is important to note that the Boggy Creek plaza group has more supporting ramp toll locations, some with fairly high toll rates. The Curry Ford plaza group transactions were not as severely affected by COVID-19 as the other plaza groups on S.R. 417. University Main plaza group paid in-lane transactions were surpassed by Curry Ford Main plaza group paid in-lane transactions for the past three years.

Figure 5-4
S.R. 417 Paid In-Lane Transactions and Revenue by Plaza Group
FY 2020



Source: CFX Statistical Report June 2020

The annual totals and percentages for paid in-lane revenues are also presented in Figure 5-4. The Boggy Creek Main and John Young Main plaza groups had the highest amounts of paid in-lane revenue. This is attributable to the fact that these two plaza groups have longer distances between mainline plazas which results in higher toll amounts and to the number of tolled ramp locations. The Boggy Creek Main plaza group reported the highest paid in-lane revenues of $42.6 million or 31.8 percent of total S.R. 417 paid in-lane revenues. The University Main plaza group represented the lowest amount of paid in-lane revenues on S.R. 417 with $25.6 million or 19.1 percent of total paid in-lane revenues.

5.2.2 ANNUAL PBP TRANSACTION AND REVENUE TRENDS

A history of annual PBP transactions and toll revenues on S.R. 417 from FY 2011 to FY 2020 are presented in **Table 5-2**. PBP transactions and toll revenues are recorded by toll location and accrued monthly by plaza group, however Table 5-2 shows the annual totals for S.R. 417 as reported at year end.

Table 5-2
S.R. 417 – Historical PBP Transactions and Revenue
FY 2011 – FY 2020

Fiscal Year	Transactions (millions)	Percent Change	Toll Revenues (millions)	Percent Change
	TRANSACTIONS (millions)			
2011	1.0		$0.9	
2012	1.3	30.0%	$1.2	33.3%
2013	1.6	23.1%	$1.8	50.0%
2014	2.0	25.0%	$2.2	22.2%
2015	2.7	35.0%	$3.0	36.4%
2016	3.9	44.4%	$4.7	56.7%
2017	4.8	23.1%	$6.7	42.6%
2018	6.8	41.7%	$7.6	13.4%
2019	14.9	119.1%	$17.4	128.9%
2020	15.4	3.4%	$18.8	8.0%

Source: Unaudited data provided by CFX

PBP transactions have increased from 1.0 million in FY 2011 to 15.4 million in FY 2020, while PBP revenues have increased from $0.9 million to $18.8 million over the same period. In FY 2020, PBP transactions increased 3.4 percent and PBP revenues increased 8.0 percent over FY 2019. This increase in PBP transactions and revenues in FY 2020 has contributed to the slower growth and/or decline in paid in-lane transactions and revenues compared to FY 2019. Trends show that more customers are choosing the PBP method of payment. CFX temporarily suspended cash toll collection on all facilities from March 19, 2020 to May 31, 2020 in response to the COVID-19 pandemic. During this time, customers were able to pay via ETC or PBP. Growth in PBP transactions and revenues is expected to decline beginning in FY 2021 due to a new PBP toll rate adopted by the CFX Board that went into effect on July 1, 2020, at which time the PBP toll rate at all toll locations increased to twice the ETC toll rate. Due to the new PBP toll rate implemented,

it is anticipated that a portion of customers paying via PBP will switch to paying in the lane through ETC to avoid the higher toll rate.

5.2.3 MONTHLY PAID IN-LANE TRANSACTION SEASONAL VARIATION

In **Table 5-3**, monthly paid in-lane transactions are normalized to average number of paid in-lane transactions per day. Using average number of paid in-lane transactions per day allows for an easy comparison of the variations in relative travel demand over the year. The seasonal pattern of usage will change from year to year based on the number of weekdays in a given month, but in FY 2020 this seasonality was overshadowed by the impacts in travel demand from the COVID-19 pandemic. Therefore, the factors in Table 5-3 should not be relied on for typical monthly seasonal trends on S.R. 417.

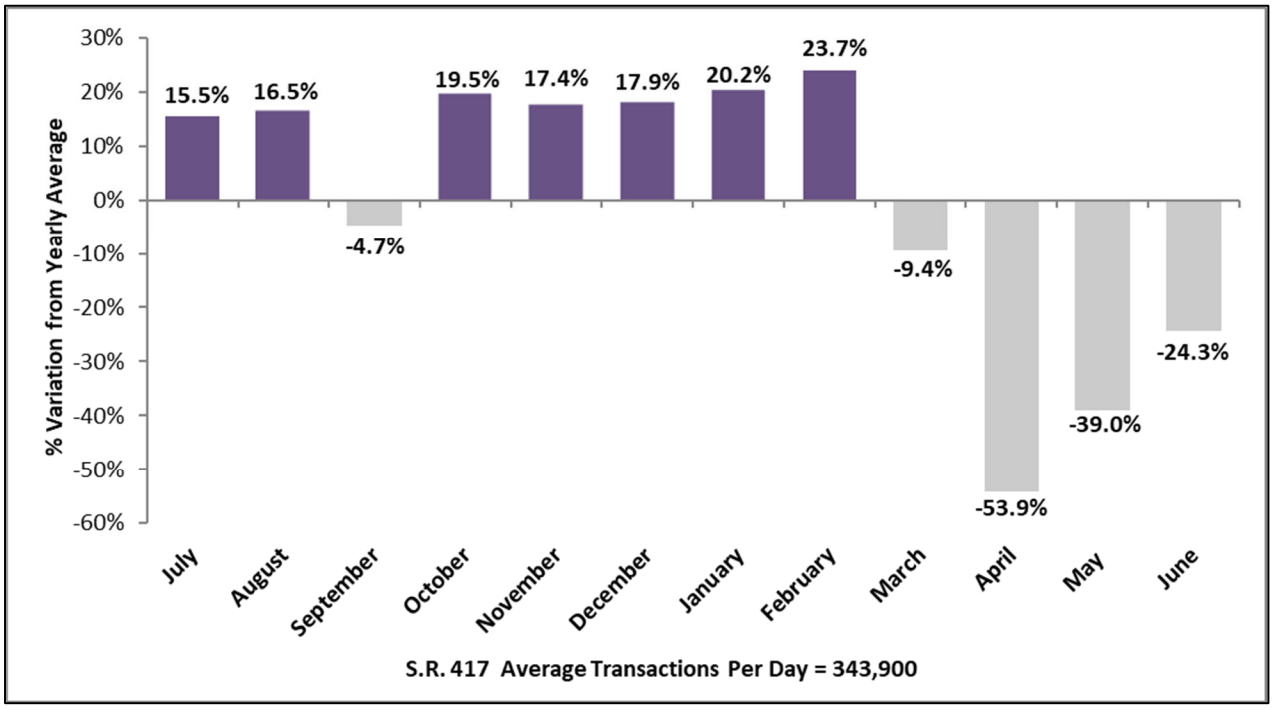
Average number of paid in-lane transactions per day in FY 2020 on S.R. 417 ranged from a high of 425,500 in February 2020 to a low of 158,400 in April 2020. March is typically the month with the highest average number of transactions per day due to a large number of tourists and seasonal residents in the area during the Spring, however it was negatively impacted by the COVID-19 pandemic, which began in March 2020. This data is presented in a graphical format in **Figure 5-5**. The paid in-lane transactions for each month appear as a percentage of the average for the fiscal year. September 2019 paid in-lane transactions were negatively impacted by toll suspensions during Hurricane Dorian. February paid in-lane transactions were 23.7 percent above average and April paid in-lane transactions were 53.9 percent below average for the facility. February 2020 included an additional day of toll collection compared to February 2019 due to the leap year. April 2020 was the first full month with negative COVID-19 impacts.

Table 5-3
S.R. 417 – Monthly Seasonal Variation in Paid In-Lane Transactions
FY 2020

Month	Number of Days in Month	Paid In-Lane Transactions	Average Transactions/Day	Seasonal Factor
July	31	12,309,915	397,100	1.155
August	31	12,414,391	400,500	1.165
September	30	9,829,067	327,600	0.953
October	31	12,741,522	411,000	1.195
November	30	12,114,635	403,800	1.174
December	31	12,564,538	405,300	1.179
January	31	12,817,215	413,500	1.202
February	29	12,339,365	425,500	1.237
March	31	9,656,208	311,500	0.906
April	30	4,751,484	158,400	0.461
May	31	6,502,192	209,700	0.610
June	30	7,814,047	260,500	0.757
Average		***10,487,882***	***343,900***	***1.000***
Total Year	**366**	**125,854,579**		

Source: CFX Statistical Report June 2020

Figure 5-5
S.R. 417 Variation in Paid In-Lane Transactions Per Day, By Month
FY 2020



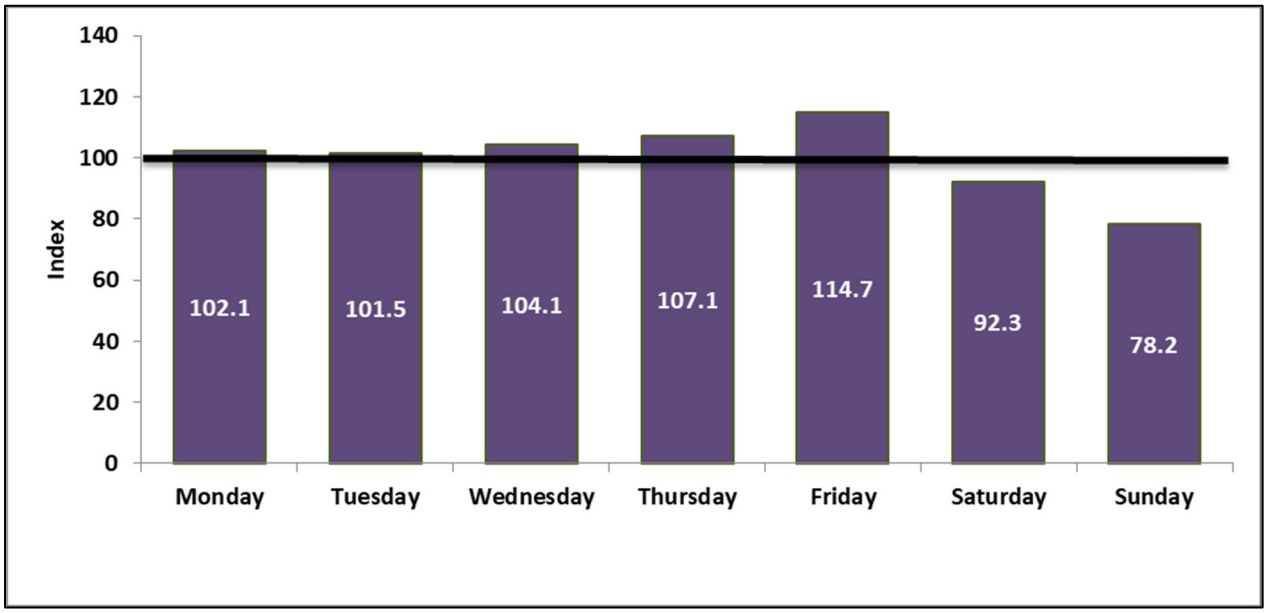
Source: CFX Statistical Report June 2020

5.2.4 DAY-OF-WEEK TRANSACTION VARIATION

Figure 5-6 contains a comparison of transactions by day of week in FY 2020. This data is presented as an index, where the average day equals 100. An index value of 100 for a given day of the week would indicate that day's transactions were precisely the same volume as the facility average. A value of 120 would indicate a day that has 20 percent greater volume than the average. The data used for this analysis was for a typical week in March 2020, before the COVID-19 pandemic. The data includes transactions at mainline plazas only (no ramps).

As shown, daily transactions on S.R. 417 fluctuated over the course of the week. Transactions were highest on Fridays, with an index value of 114.7 (14.7 percent higher than the average day). Volumes on Monday through Thursday ranged from index values of 101.5 to 107.1. Saturday volumes were closer to early weekday volumes with an index value of 92.3. Transactions decline significantly on Sundays, which have an index value of 78.2, or 21.8 percent lower than the average day.

Figure 5-6
S.R. 417 Variation in Transactions, by Day of Week
FY 2020



Source: Unaudited lane transaction data – March 2020

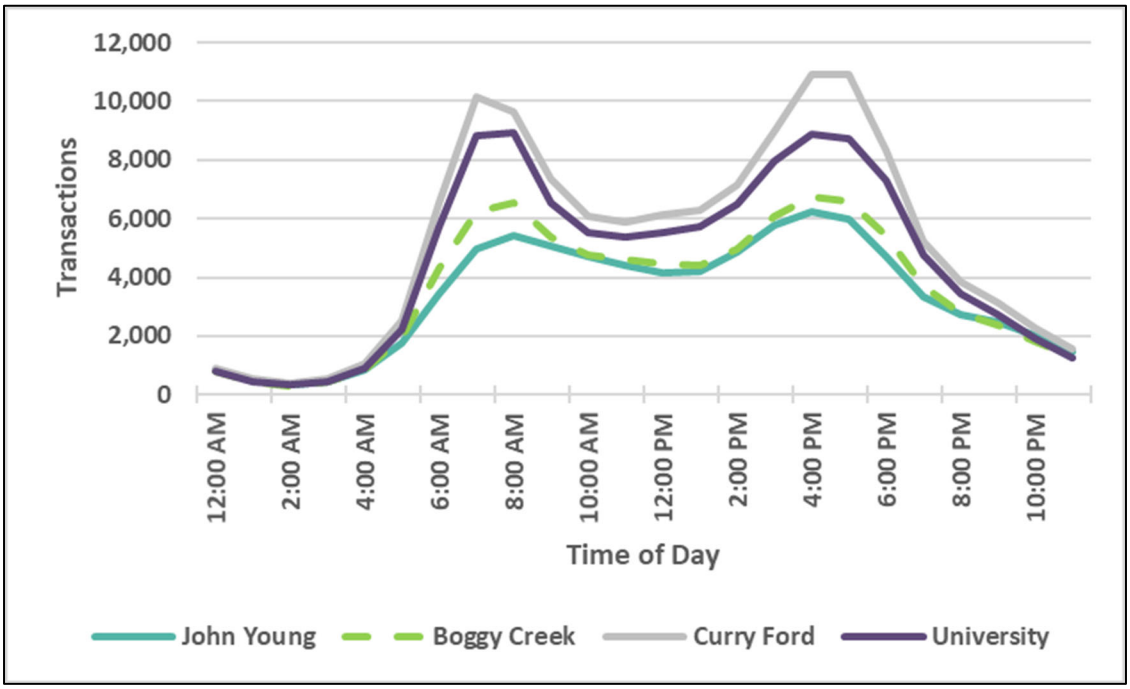
5.2.5 HOURLY TRAFFIC DISTRIBUTION

The hourly distribution of traffic includes information on the usage characteristics of travel on the facility. The hourly distributions represent traffic counts taken during a typical week at the mainline plazas in the month of March 2020, before the COVID-19 pandemic. The typical weekday distribution is shown in **Figure 5-7** and the weekend distribution is shown in **Figure 5-8**. The figures contain the sum of traffic volumes in both directions.

The four mainline locations on S.R. 417 exhibit similar hourly traffic patterns. On weekdays, travel demand at all four locations is bimodal, with both morning and evening peak hours. Traffic volumes are higher in the evening peak hours than in the morning peak hours at all four mainline plazas. The highest peak hour volumes during the week were 10,900 per hour beginning at 5:00 p.m. at the Curry Ford mainline plaza, 8,900 per hour beginning at 4:00 p.m. at the University mainline plaza, 6,700 per hour beginning at 4:00 p.m. at the Boggy Creek mainline plaza and 6,200 per hour beginning at 4:00 p.m. at the John Young mainline plaza. The University and Curry Ford mainline plazas serve a relatively higher portion of trips in peak hours.

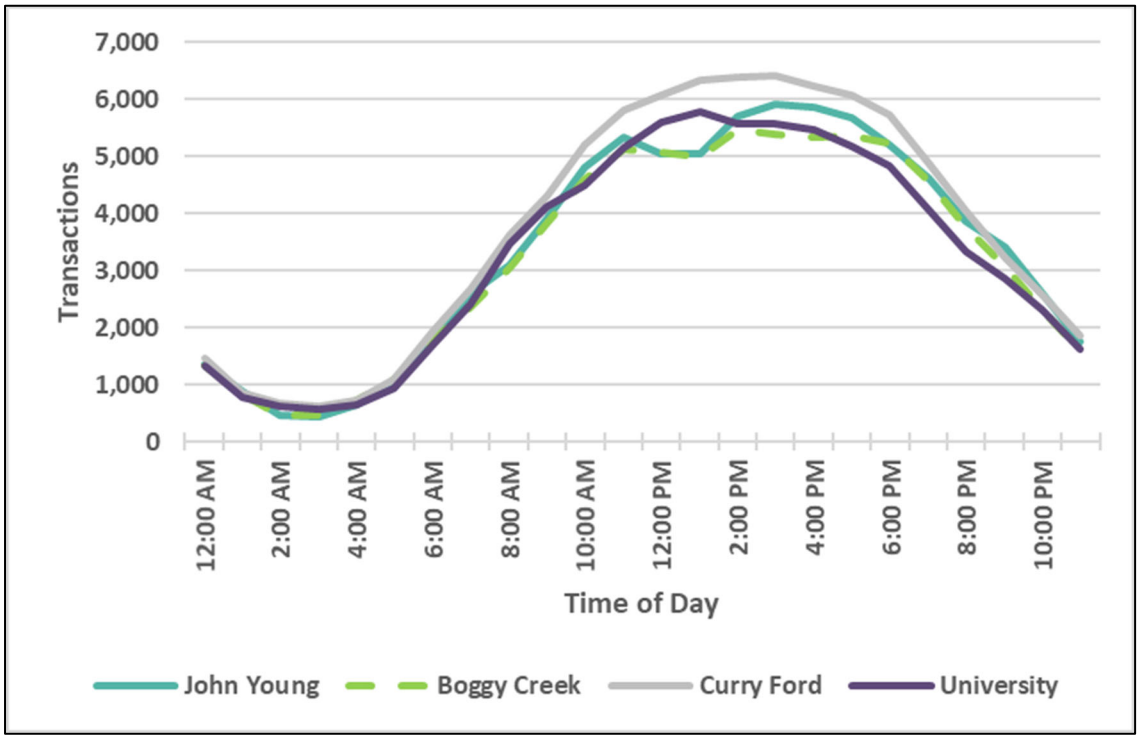
On weekends, the volumes are lower and the distributions are unimodal, with no clear morning or evening peak periods, indicating that many customers use the facility for non-work trip purposes. The Boggy Creek Main and John Young Main plaza groups both have lower transaction volumes at the mainline plazas than at ramp plazas, which are not included in the daily traffic distribution analysis. The daily traffic distribution at all plaza groups would be at similar levels if ramp transactions were included.

Figure 5-7
S.R. 417 Hourly Traffic Variation (Weekday)
FY 2020 (March)



Source: Unaudited lane traffic data – March 2020

Figure 5-8
S.R. 417 Hourly Traffic Variation (Weekend)
FY 2020 (March)



Source: Unaudited lane traffic data – March 2020

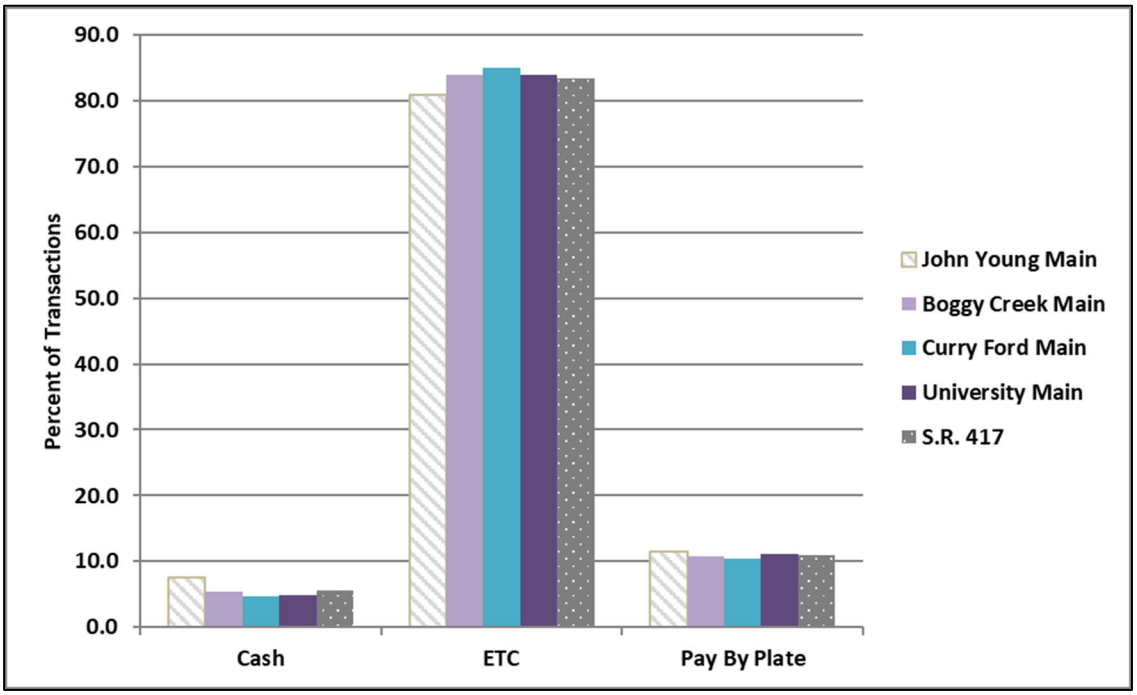
5.2.6 TRANSACTIONS AND REVENUE BY PAYMENT TYPE

The distribution of transactions and revenue by payment type by plaza group during FY 2020 is presented in **Figure 5-9** and **Figure 5-10**. Payment types can be classified in one of three ways: cash, ETC, and PBP. As defined in Chapter 1 of this report, paid in-lane transactions and revenue include cash and ETC payments made when a customer travels through a CFX toll location. The remaining transactions and revenue are classified as unpaid in-lane, which includes PBP and a small portion of non-revenue transactions. PBP transactions and revenues are estimated monthly based on an accrual rate of 60 percent of all unpaid in-lane transactions and revenues. It is important to note that the data presented in the following two figures is based on unaudited transaction and toll revenue data and may not match the audited data shown in other tables and figures in this chapter. It is also important to note that cash toll collection at all toll plazas was suspended from March 19, 2020 to May 31, 2020 due to COVID-19 safety protocols.

As shown in Figure 5-9, the share of ETC transactions ranged from a low of 80.9 percent at the John Young Main plaza group to a high of 85.0 percent at the Curry Ford Main plaza group. Overall, ETC transactions on S.R. 417 accounted for 83.5 percent of total transactions on the facility. The share of cash transactions ranged from a low of 4.6 percent at the Curry Ford Main plaza group to a high of 7.6 percent at the John Young Main plaza group. Overall, cash transactions on S.R. 417 accounted for 5.6 percent of total transactions on the facility. Cash transactions were down over prior years as cash toll collection was temporarily suspended for over two months in FY 2020 to reduce the potential exposure of both drivers and employees to the COVID-19 virus. The share of PBP transactions ranged from a low of 10.4 percent at the Curry Ford Main plaza group to a high of 11.5 percent at the John Young Main plaza group. Overall, PBP transactions on S.R. 417 accounted for 10.9 percent of total transactions on the facility.

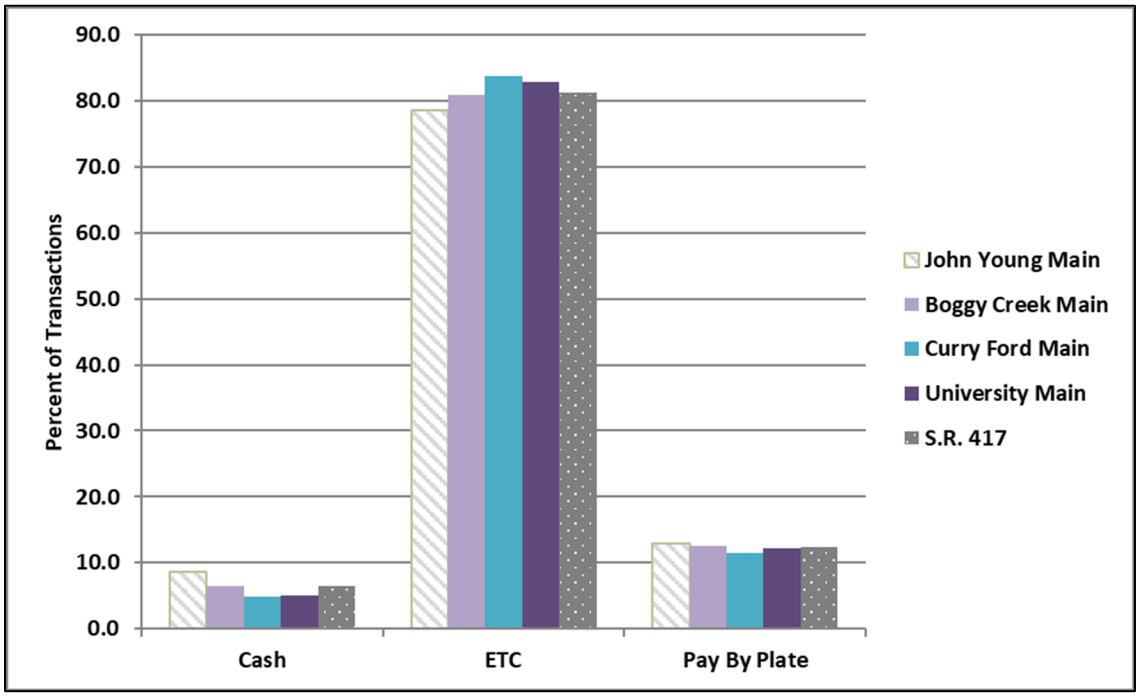
As shown in Figure 5-10, the share of toll revenues by payment type is comparable to the share in transactions. The share of ETC toll revenues ranged from a low of 78.6 percent at the John Young Main plaza group to a high of 83.8 percent at the Curry Ford Main plaza group. Overall, ETC transactions on S.R. 417 accounted for 81.2 percent of total toll revenues on the facility. The share of cash toll revenues ranged from a low of 4.8 percent at the Curry Ford Main plaza group to a high of 8.6 percent at the John Young Main plaza group. Overall, cash toll revenues on S.R. 417 accounted for 6.5 percent of total toll revenues on the facility. The share of PBP toll revenues ranged from a low of 11.4 percent at the Curry Ford Main plaza group to a high of 12.8 percent at the John Young Main plaza group. Overall, PBP toll revenues on S.R. 417 accounted for 12.3 percent of total toll revenues on the facility.

Figure 5-9
S.R. 417 Percent of Transactions by Payment Type
FY 2020



Source: Unaudited transaction data provided by CFX

Figure 5-10
S.R. 417 Percent of Revenue by Payment Type
FY 2020



Source: Unaudited toll revenue data provided by CFX

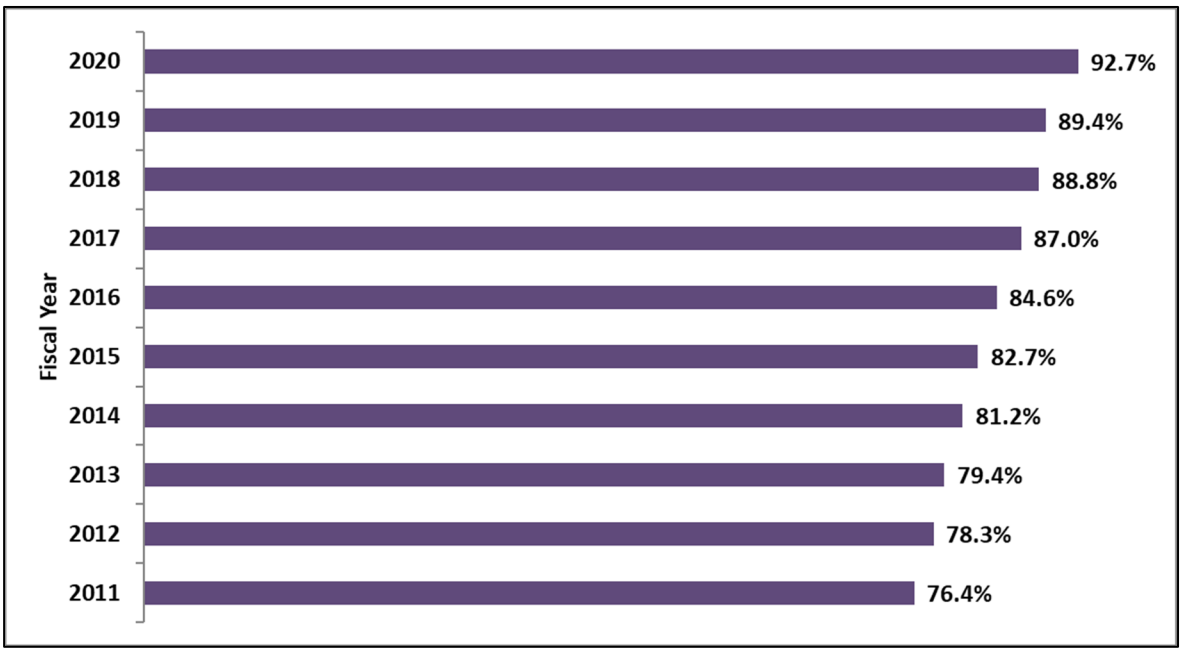
5.3 ETC Usage

The percent of paid in-lane revenues generated from ETC over the past ten fiscal years on S.R. 417 is shown in **Figure 5-11**. PBP revenues are not included. Over this time, ETC revenues have steadily increased on the facility. In FY 2011, ETC revenues totaled 76.4 percent of total revenues on the facility. In FY 2020, ETC revenues reached 92.7 percent. The data below differs from Figure 5-10 because it only includes the annual comparison of paid in-lane revenue and not all revenue types. ETC usage is expected to increase as customers shift from cash to ETC to take advantage of the lower ETC toll rate and the convenience of paying tolls electronically, especially with implementation of PBP toll rates that are now twice the ETC toll rate as of July 2020 (FY 2021).

Beginning May 11, 2016, CFX implemented a pilot program called The Reload Lane to encourage and increase E-PASS usage. CFX now offers this drive-through lane on S.R. 408 at the Conway Main Plaza for customers to sign up for an E-PASS electronic transponder or replenish an existing E-PASS account from 6:00 a.m. to 8:00 p.m. daily. This program is the first of its kind in the continental United States and provides customer convenience and multiple payment options (cash, check, and debit/credit card). The program was expanded with the opening of a second Reload Lane at the John Young Main Plaza on S.R. 417 in March 2017 and a third location at the Forest Lake Main Plaza on S.R. 429 in May 2017. Due to the success of this program, the CFX Board approved the expansion of the Reload Lane capabilities to all manned toll plaza lanes on all system facilities, expected to be completed by FY 2022.

CFX also continues to offer toll discount incentives to customers through various discount programs. The I-4 Commuter Discount Program, implemented in July 2015, offers discounts for transactions on S.R. 417, S.R. 429 and S.R. 414 during construction activities on I-4.

Figure 5-11
S.R. 417 Percent of Paid In-Lane Revenue from Electronic Toll Collection
FY 2011 – FY 2020



Source: CFX Statistical Report June 2020

5.4 Forecasted Transactions and Toll Revenues

Based on the recently adopted "Customer First Toll Policy," toll rate adjustments (indexed tolls) were applied to the T&R forecasts every year based on the net change in CPI for the prior year, which equated to 1.45 percent in FY 2021. Because the change in CPI was lower than the 1.5 percent floor, CDM Smith used 1.5 percent to adjust the FY 2021 toll amounts. CDM Smith used the floor of 1.5 percent per year every year thereafter in the forecast period.

Future transportation improvements that influence the T&R forecasts for S.R. 417 include the projects listed in **Table 5-4**, assumed completed in each model horizon year. Growth rates remain above 2.1% per year through 2022 due to additional system improvements on S.R. 417 between International Drive and S.R. 528. These segments of S.R. 417 are programmed to be widened in the next three years. Feeder road improvements, such as Boggy Creek Road, Innovation Way, Lake Nona Blvd., and Narcoossee Road also positively impact the forecasted T&R growth on S.R. 417 through 2025. The growth rates for the remainder of the forecast period are moderate and steady. Continued investment and growth in the Medical City area contribute to positive transaction and revenue growth on S.R. 417. Improvements to competitors, including Osceola Parkway Extension, will have impacts on the long-term forecast.

Table 5-4
S.R. 417 - Key Transportation Improvements

Facility	From	To	Year	Jurisdiction	Improvement
Interstate 4	SR 434	Kirkman Rd	2025	FDOT	Widen to 10 lanes
Jeff Fuqua Blvd	.13 miles South of Boggy Creek Rd	Heintzelman Blvd	2025	Orange County	Widen to 4 Lanes
Boggy Creek Rd	Orange Co Line	SR 417	2025	Orange County	Widen to 4-lanes
Boggy Creek Rd	SR 417	Wetherbee Rd	2025	Orange County	Widen to 4-lanes
SR 15 (Narcoossee Rd)	SR 528 (BeachLine Expwy)	Lee Vista Blvd	2025	Orange County/FDOT	Widen to 6 Lanes
SR 417	International Dr	Boggy Creek Rd	2025	CFX	Widen to 6-lanes
SR 417	Boggy Creek Rd	SR 528	2025	CFX	Widen to 6-lanes
SR 46	Mellonville Rd	SR 415	2025	FDOT	Widen to 4-lanes
Lake Nona Blvd	Tavistock Lakes Blvd	SR 417 (Greenway)	2025	Orange County	Widen to 6 Lanes
Innovation Way/Dowden Rd	SR 417	SR 528	2035	Orange County	New 4-lane Road
Orange Ave	Town Center Blvd	Osceola County Line	2035	Orange County/FDOT	Widen to 4-lanes
John Young Pkwy	Pleasant Hill Rd	Portage Rd	2035	FDOT	Widen to 6-lanes
Narcoossee Rd	US 192	Orange County Line	2035	Osceola County	Widen to 6 Lanes
Osceola Parkway Ext/SR 534	Boggy Creek Rd	Narcoossee Rd	2035	CFX	New 4-lane Expressway
US 17-92	Lake Mary Blvd	Airport Rd	2035	FDOT	Widen to 6-lanes
Wekiva Pkwy	Mount Plymouth Rd	Interstate 4	2035	FDOT	New 4 lane expressway
SR 426/CR 419	Pine Ave	West of Lockwood Blvd	2045	FDOT	Widen to 4-lanes
Osceola Parkway Ext/SR 534	Narcoossee Rd	Cyrils Rd	2045	CFX	New 4-lane Expressway
NE Connector/SR 534	Cyrils Rd	Nova Rd	2045	CFX	New 4-lane Expressway
US 17-92	Lake Mary Blvd	SR 417	2045	FDOT	Widen to 6-lanes

Transaction and toll revenue projections for each toll plaza group and for all of S.R. 417 are summarized in **Table 5-5** and **Table 5-6**. The tables are divided into paid in-lane transactions and revenue and PBP transactions and revenue. Paid in-lane transactions and revenue by plaza group include ETC and cash collection. PBP is only reported as a total on the facility level.

The paid in-lane transactions on S.R. 417 are expected to grow 3.7 percent per year through FY 2030 and then lower rates through the end of the forecast period because of the impact of toll rate adjustments. PBP transactions are forecasted to decrease an average of 2.4 percent per year through FY 2030 and then increase slightly through the forecast period. Total transactions on S.R. 417 are projected to increase during the forecast period from the actual of 141.3 million in FY 2020 to 239.1 million in FY 2050. The paid in-lane revenues on S.R. 417 are projected to increase significantly over the forecast period, from the FY 2020 actual of $133.9 million to $345.9 million in FY 2050. PBP revenues are projected to increase from $18.8 million in FY 2020 to $49.3 million in FY 2050. Total revenues on S.R. 417 are projected to increase during the forecast period from the actual $152.7 million in FY 2020 to $395.2 million in FY 2050. Total transactions and revenues are forecasted to increase an average of 3.2 and 4.9 percent per year through FY 2030, 1.2 and 2.5 percent per year from FY 2030 to FY 2040, and 0.9 and 2.3 percent per year from FY 2040 to FY 2050, respectively.

Table 5-5
S.R. 417 Plaza Groups – Transaction Projections (Millions)
FY 2021 – FY 2050

Fiscal Year		John Young Main	Boggy Creek Main	Curry Ford Main	University Main	Paid In-Lane	PBP	Total	Percent Annual Change
2010	Actual	19.6	17.5	23.6	28.6	89.3	0.6	89.9	
2011		20.1	18.6	23.2	29.0	90.9	1.0	91.9	2.2%
2012[A]		20.6	18.8	23.1	28.2	90.7	1.3	92.0	0.1%
2013[B]		21.0	19.7	23.4	26.2	90.3	1.6	91.9	-0.1%
2014		22.6	21.9	25.2	27.5	97.2	2.0	99.2	7.9%
2015		25.7	25.3	28.3	30.0	109.3	2.7	112.0	12.9%
2016		30.6	31.0	32.5	33.3	127.4	3.9	131.3	17.2%
2017[C]		34.8	34.6	34.2	34.5	138.1	4.8	142.9	8.9%
2018[D]		37.2	38.1	35.8	34.8	145.9	6.8	152.7	6.9%
2019[E]		36.9	39.3	35.4	33.9	145.5	14.9	160.4	5.0%
2020[F]		30.7	34.2	31.8	29.2	125.9	15.4	141.3	-11.9%
2021[G]	Forecast	27.5	31.8	28.9	27.1	115.3	15.3	130.6	-7.6%
2022[H]		33.1	36.6	33.6	30.8	134.1	13.3	147.4	12.9%
2023		38.0	41.2	37.8	34.5	151.5	9.9	161.4	9.5%
2024		40.3	44.0	40.9	36.4	161.6	10.8	172.4	6.8%
2025		41.4	45.3	42.9	37.4	167.0	11.1	178.1	3.3%
2026		42.3	46.2	44.0	37.6	170.1	11.2	181.3	1.8%
2027		43.1	47.0	44.9	37.8	172.8	11.4	184.2	1.6%
2028		43.9	47.9	45.8	37.9	175.5	11.7	187.2	1.6%
2029		44.6	48.7	46.7	38.2	178.2	11.8	190.0	1.5%
2030		45.4	49.5	47.6	38.4	180.9	12.1	193.0	1.6%
2031		46.1	50.3	48.4	38.5	183.3	12.4	195.7	1.4%
2032		46.9	51.2	49.2	38.6	185.9	12.4	198.3	1.3%
2033		47.6	52.0	50.1	38.7	188.4	12.5	200.9	1.3%
2034		48.3	52.8	50.8	38.8	190.7	12.8	203.5	1.3%
2035		49.0	53.5	51.6	38.9	193.0	13.0	206.0	1.2%
2036		49.7	54.3	52.3	39.0	195.3	13.2	208.5	1.2%
2037		50.4	55.0	53.0	39.0	197.4	13.4	210.8	1.1%
2038		51.2	55.7	53.8	39.1	199.8	13.6	213.4	1.2%
2039		51.8	56.5	54.5	39.2	202.0	13.8	215.8	1.1%
2040		52.5	57.3	55.2	39.4	204.4	13.8	218.2	1.1%
2041		53.1	57.9	55.9	39.4	206.3	14.1	220.4	1.0%
2042		53.7	58.6	56.7	39.5	208.5	14.1	222.6	1.0%
2043		54.3	59.3	57.4	39.5	210.5	14.3	224.8	1.0%
2044		54.9	59.9	58.1	39.6	212.5	14.6	227.1	1.0%
2045		55.6	60.5	58.8	39.6	214.5	14.6	229.1	0.9%
2046		56.2	61.1	59.5	39.6	216.4	14.8	231.2	0.9%
2047		56.8	61.7	60.2	39.7	218.4	15.0	233.4	1.0%
2048		57.3	62.3	60.8	39.7	220.1	15.2	235.3	0.8%
2049		57.9	62.8	61.5	39.7	221.9	15.3	237.2	0.8%
2050		58.4	63.4	62.1	39.7	223.6	15.5	239.1	0.8%

Fiscal Year	Compound Annual Average Growth Rate (CAAGR)						
2010 - 2020	4.6%	6.9%	3.0%	0.2%	3.5%	38.3%	4.6%
2020 - 2030	4.0%	3.8%	4.1%	2.8%	3.7%	-2.4%	3.2%
2030 - 2040	1.5%	1.5%	1.5%	0.3%	1.2%	1.3%	1.2%
2040 - 2050	1.1%	1.0%	1.2%	0.1%	0.9%	1.2%	0.9%

Notes:
Actual transaction data provided by CFX from Monthly Statistical Report.
A - Widening of S.R. 417 between S.R. 408 and S.R. 528. Valencia College lane ramps closed.
B - Systemwide toll rate increase.
C - Effects from Hurricane Matthew in October 2016.
D - Effects from Hurricane Irma in September 2017.
E - First year of implementation of "Customer First" toll rate policy.
F - Effects from Hurricane Dorian in September 2019 and first effects of COVID-19 pandemic began in March 2020.
G - New toll rates for PBP customers, set at 2.0 times the ETC rate.
H - Completion of I-4 Ultimate project.

Table 5-6
S.R. 417 Plaza Groups – Toll Revenue Projections (Millions)
FY 2021 – FY 2050

Fiscal Year		John Young Main	Boggy Creek Main	Curry Ford Main	University Main	Paid In-Lane	PBP	Total	Percent Annual Change
2010	Actual	$21.0	$19.9	$17.7	$20.4	$79.0	$0.6	$79.6	
2011		$21.6	$20.6	$17.3	$20.6	$80.1	$0.9	$81.0	1.8%
2012[A]		$22.1	$20.8	$17.3	$20.3	$80.5	$1.2	$81.7	0.9%
2013[B]		$25.3	$24.3	$19.8	$21.8	$91.2	$1.8	$93.0	13.8%
2014		$27.2	$26.9	$21.3	$22.9	$98.3	$2.2	$100.5	8.1%
2015		$30.6	$30.8	$24.0	$25.0	$110.4	$3.0	$113.4	12.8%
2016		$35.9	$37.7	$27.6	$27.8	$129.0	$4.7	$133.7	18.0%
2017[C]		$40.4	$42.0	$29.1	$28.9	$140.4	$6.7	$147.1	10.0%
2018[D]		$43.0	$45.7	$30.5	$29.2	$148.4	$7.6	$156.0	6.1%
2019[E]		$44.3	$48.6	$30.7	$29.0	$152.6	$17.4	$170.0	9.0%
2020[F]		$37.1	$42.6	$28.6	$25.6	$133.9	$18.8	$152.7	-10.2%
2021[G]	Forecast	$33.8	$39.5	$26.5	$24.5	$124.3	$29.7	$154.0	0.9%
2022[H]		$42.7	$46.0	$31.1	$27.2	$147.0	$28.4	$175.4	13.9%
2023		$49.7	$52.7	$35.5	$29.8	$167.7	$23.9	$191.6	9.2%
2024		$54.3	$57.0	$38.7	$30.4	$180.4	$25.8	$206.2	7.6%
2025		$56.6	$59.2	$40.4	$31.0	$187.2	$26.7	$213.9	3.7%
2026		$58.5	$61.2	$41.9	$31.6	$193.2	$27.7	$220.9	3.3%
2027		$60.3	$63.1	$43.3	$32.2	$198.9	$28.3	$227.2	2.9%
2028		$62.1	$65.0	$44.7	$32.8	$204.6	$29.2	$233.8	2.9%
2029		$64.0	$67.0	$46.2	$33.4	$210.6	$29.9	$240.5	2.9%
2030		$65.9	$68.9	$47.7	$33.9	$216.4	$30.9	$247.3	2.8%
2031		$67.8	$70.9	$49.1	$34.5	$222.3	$31.6	$253.9	2.7%
2032		$69.6	$72.8	$50.5	$35.1	$228.0	$32.4	$260.4	2.6%
2033		$71.5	$74.8	$51.8	$35.6	$233.7	$33.4	$267.1	2.6%
2034		$73.4	$76.8	$53.3	$36.2	$239.7	$34.0	$273.7	2.5%
2035		$75.2	$78.7	$54.7	$36.7	$245.3	$35.0	$280.3	2.4%
2036		$77.2	$80.8	$56.1	$37.4	$251.5	$35.7	$287.2	2.5%
2037		$79.2	$82.8	$57.5	$37.9	$257.4	$36.7	$294.1	2.4%
2038		$81.1	$85.0	$59.1	$38.5	$263.7	$37.3	$301.0	2.3%
2039		$83.2	$87.0	$60.6	$39.0	$269.8	$38.5	$308.3	2.4%
2040		$85.3	$89.2	$62.1	$39.6	$276.2	$39.3	$315.5	2.3%
2041		$87.4	$91.4	$63.8	$40.2	$282.8	$40.3	$323.1	2.4%
2042		$89.5	$93.6	$65.4	$40.7	$289.2	$41.2	$330.4	2.3%
2043		$91.7	$95.9	$67.1	$41.3	$296.0	$42.2	$338.2	2.4%
2044		$94.0	$98.2	$68.7	$41.9	$302.8	$43.0	$345.8	2.2%
2045		$96.2	$100.5	$70.5	$42.5	$309.7	$44.0	$353.7	2.3%
2046		$98.6	$102.9	$72.3	$43.2	$317.0	$45.0	$362.0	2.3%
2047		$100.9	$105.3	$74.0	$43.7	$323.9	$45.9	$369.8	2.2%
2048		$103.3	$107.7	$75.9	$44.3	$331.2	$47.0	$378.2	2.3%
2049		$105.7	$110.2	$77.8	$44.9	$338.6	$48.2	$386.8	2.3%
2050		$108.2	$112.6	$79.6	$45.5	$345.9	$49.3	$395.2	2.2%

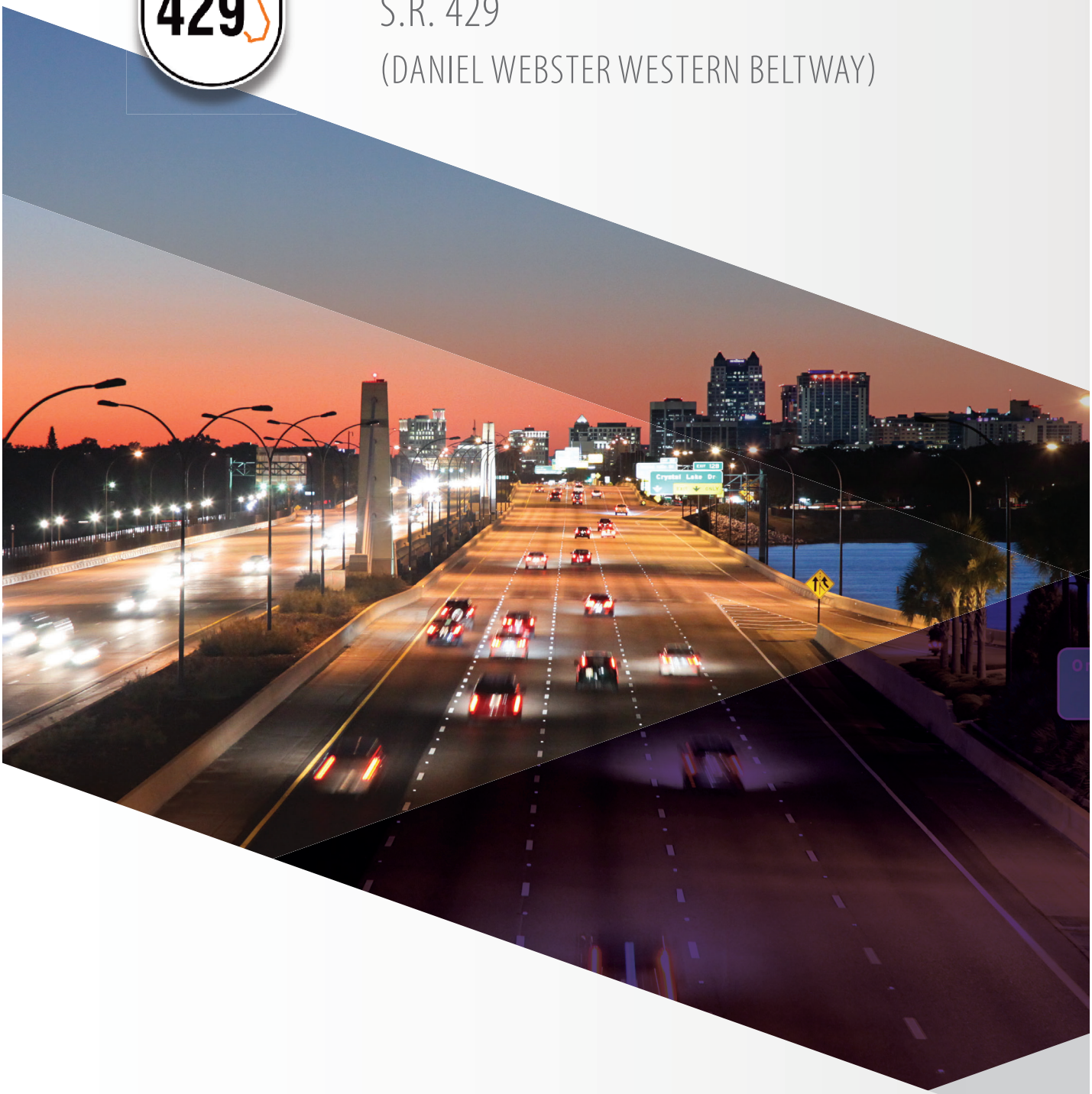
Fiscal Year	Compound Annual Average Growth Rate (CAAGR)						
2010 - 2020	5.9%	7.9%	4.9%	2.3%	5.4%	41.1%	6.7%
2020 - 2030	5.9%	4.9%	5.2%	2.8%	4.9%	5.1%	4.9%
2030 - 2040	2.6%	2.6%	2.7%	1.6%	2.5%	2.4%	2.5%
2040 - 2050	2.4%	2.4%	2.5%	1.4%	2.3%	2.3%	2.3%

Notes:
Actual transaction data provided by CFX from Monthly Statistical Report.
A - Widening of S.R. 417 between S.R. 408 and S.R. 528. Valencia College lane ramps closed.
B - Systemwide toll rate increase.
C - Effects from Hurricane Matthew in October 2016.
D - Effects from Hurricane Irma in September 2017.
E - First year of implementation of "Customer First" toll rate policy.
F - Effects from Hurricane Dorian in September 2019 and first effects of COVID-19 pandemic began in March 2020.
G - New toll rates for PBP customers, set at 2.0 times the ETC rate.
H - Completion of I-4 Ultimate project.

CHAPTER 6

S.R. 429

(DANIEL WEBSTER WESTERN BELTWAY)



S.R. 429 (DANIEL WEBSTER WESTERN BELTWAY)

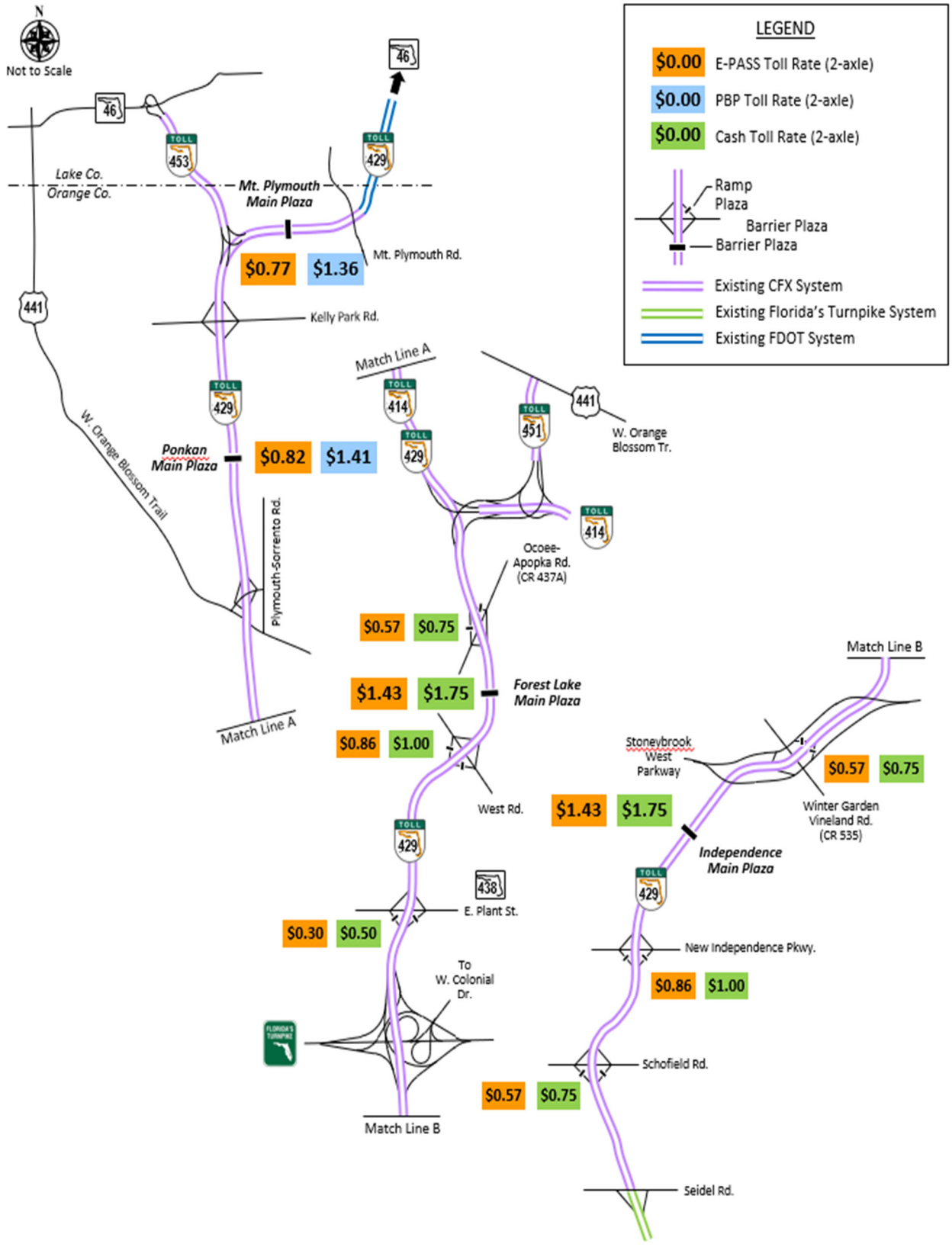
6.1 Facility Description

S.R. 429, also known as the Daniel Webster Western Beltway, is a 34-mile expressway that extends north from I-4 in Osceola County to U.S. Highway 441 in Apopka. As its name suggests, it comprises a majority of the western beltway around Orlando. The Western Beltway is owned and operated by two agencies, CFX and FTE. CFX is responsible for the 31-mile portion of S.R. 429 from Seidel Road north to Mt. Plymouth Road and FTE is responsible for the 11-mile segment of S.R. 429 from I-4 north to Seidel Road. On the CFX portion there are four mainline toll plazas: the Independence Main Plaza, Forest Lake Main Plaza, Ponkan Main, and Mt. Plymouth Main. Ramp toll plazas associated with the Independence Main plaza group are located at the New Independence Parkway, Winter Garden Vineland Road and Schofield Road interchanges. Ramp toll plazas associated with the Forest Lake Main plaza group are located at the East Plant Street (S.R. 438), West Road and Ocoee-Apopka Road interchanges. There are no ramp toll plazas associated with the Ponkan Main and Mt. Plymouth Main plaza groups. Of the 23 miles on S.R. 429, three miles are part of a dual route with S.R. 414. A map of CFX's portion of S.R. 429 including the FY 2020 CFX toll rates for the mainline and ramp toll plazas is shown in **Figure 6-1**.

The original 10-mile segment of S.R. 429, known as Part A, opened to traffic in July of 2000 from S.R. 50 to U.S. 441, with the connection to Florida's Turnpike opening in November 2001. It was the first expressway on the CFX System to have an open road tolling style toll plaza for ETC customers, providing a direct route from the Turnpike to Apopka and much needed access to West Orange County. The next segment, a 4.5-mile segment of S.R. 429, Part C, opened to traffic in December 2002 and connected to Winter Garden Vineland Road. CFX's segment from Winter Garden Vineland to Seidel Road was opened to traffic in December of 2005, in conjunction with FTE's first segment from Seidel Road to U.S. 192. FTE opened its segment of S.R. 429 Part C, connecting to I-4, in December of 2006.

In June of 2010, construction began on the westward extension of S.R. 414, the Apopka Expressway. The new connection of S.R. 414 and S.R. 429 required that approximately 1 mile of current S.R. 429 roadway be removed and in May of 2012 a new interchange opened from S.R. 429 northbound to S.R. 414 eastbound and from S.R. 414 westbound to S.R. 429 southbound. The old segment of S.R. 429 north of the current S.R. 414 interchange was designated as S.R. 451. The Ocoee-Apopka Road Interchange was also relocated south of the S.R. 414/S.R. 429 Interchange with new tolled ramps added to and from the north. S.R. 429 serves as an alternative route to I-4 and provides a direct connection from Florida's Turnpike to Walt Disney World and

Figure 6-1
S.R. 429 Facilities and Toll Rates



Tampa for travelers from the northern and western portions of the Orlando urban area. In May 2015, CFX opened the new full interchange between S.R. 429 and Schofield Road to provide additional access to this rapidly growing area of West Orange County.

The extension of S.R. 429, locally known as the Wekiva Parkway, is a 27-mile expressway that extends S.R. 429 into northwest Orange, northeast Lake, and east Seminole counties. From a CFX vision in the *Year 2000 Long Range Expressway Plan*, completed in 1983, the Wekiva Parkway – then known as the Western Bypass and later as the Western Beltway, Part B, is now open to traffic. CFX started construction of its 9 miles in January of 2015 and completed its portion of the Wekiva Parkway with the opening on April 1, 2018. The project also added two additional plaza groups to S.R. 429 along CFX's section of the Wekiva Parkway: the Ponkan Main Plaza, about 3.2 miles north of the current S.R. 429 terminus which opened July 28, 2017 (FY 2018); and the Mt. Plymouth Main Plaza, about 3.6 miles from the Ponkan Main Plaza which opened April 1, 2018 (FY 2018). These are all electronic toll (AET) locations, the first on the CFX System. Customers pay toll with ETC or through the PBP process. There are no toll booths to pay the toll with cash. The Wekiva Parkway also included construction of S.R. 453, discussed in Chapter 8. FDOT is still constructing its 18-mile portion of Wekiva Parkway, expected to open in 2022, except for the section from Mt. Plymouth Road to CR 46, which opened in January 2016.

In March 2016, CFX completed the improvements at the S.R. 429/Winter Garden Vineland Road C.R. 535) interchange in west Orange County, which began in August 2015. This project extended the southbound S.R. 429 off ramp to C.R. 535/Stoneybrook West Parkway and included the resurfacing of approximately one-half mile of southbound S.R. 429 near the interchange. The improvement helped with afternoon traffic backups on the S.R. 429 mainline from the off ramp.

In December 2018, CFX completed widening the entrance ramp to northbound S.R. 429 from C.R. 535/Winter Garden Vineland Road. This project, which runs from C.R. 535 to the Stoneybrook West Parkway overpass, will improve traffic flow with the additional lane on the entrance ramp.

In August 2019, CFX completed a ramp improvement project on S.R. 429 at Kelly Park Road which included adding a turn lane and widening the entrance ramp to Kelly Park Road to southbound S.R. 429.

In February 2020, CFX started construction on a new set of ramps to S.R. 429 at Stoneybrook West Parkway. New ramps providing access to and from the north, complement the existing ramps at C.R. 535 and provide additional access for residents west of C.R. 535. These ramps feature all-electronic tolling for toll collection using ETC, such as E-PASS and other interoperable transponders and PBP video toll collection.

In May 2020, CFX completed a ramp improvement project on the S.R. 429/New Independence Parkway interchange, which included widening the S.R. 429 southbound ramp to New Independence Parkway.

CFX has programmed a significant widening program on SR 429 between Tilden Road and S.R. 414. Approximately 13 miles of S.R. 429 will be widened from 4 to 6 lanes including a hardened shoulder for Part Time Shoulder Use (PTSU) for an 8-lane section during peak hours. The S.R. 429 widening projects consist of three segments; the widening has been divided into contiguous parts to minimize the impact to motorists. Construction on all segments is anticipated to be start in FY 2021 and be complete by the middle of 2024.

6.2 Historical Transactions and Toll Revenues

As defined in Chapter 1, CFX transactions and toll revenues are classified as either Paid In-Lane (ETC and cash) or Unpaid In-Lane (PBP and non-revenue). Total transactions are the sum of paid in-lane and unpaid in-lane transactions. Total revenue is the sum of paid in-lane revenue and the revenue collected through PBP, estimated as an accrued amount. The following section includes a breakdown of toll-paying transactions and toll revenues by paid in-lane and PBP.

6.2.1 ANNUAL PAID IN-LANE TRANSACTION AND REVENUE TRENDS

The history of S.R. 429 annual paid in-lane transactions for the Forest Lake Main, Independence Main, Ponkan Main and Mt. Plymouth Main plaza groups from FY 2001 (opening year) to FY 2020 are presented in the top half of **Table 6-1**. Annual paid in-lane toll revenues are also summarized and totaled in the bottom half of the table. The facility data and annual growth are also presented visually in **Figure 6-2** and **Figure 6-3**. These historical tables and figures do not include PBP transactions and revenues, only those that are paid in-lane. For these reasons, the information presented in this section may differ slightly from the data presented in the FY 2020 Comprehensive Annual Financial Report (CAFR) and other information in this report.

As shown, total paid in-lane transactions on S.R. 429 in FY 2020 decreased by 4.9 million, or 8.5 percent, compared to FY 2019. Paid in-lane revenues experienced a decline of 6.3 percent during the same period. FY 2020 paid in-lane transactions and revenues were negatively impacted by the effects of the COVID-19 pandemic beginning in March 2020. CFX temporarily suspended cash toll collections and shifted to PBP from March 19, 2020 to May 31, 2020 to reduce the potential exposure of both drivers and employees to the COVID-19 virus. Cash toll collections resumed on June 1, 2020. The slower growth in paid in-lane transactions and revenues in FY 2020 can also be attributed to an increase in customers utilizing the PBP program.

Since its opening, S.R. 429 had only three years of negative growth in paid in-lane transactions, which occurred in FY 2009, FY 2010, and FY 2020 as a result of the Great Recession, the toll rate

increase in April 2009, and the COVID-19 pandemic. Paid in-lane revenues had a year of no growth in FY 2009 and negative growth in FY 2020. In FY 2009, Forest Lake Main plaza group had negative growth of 4.2 percent, but Independence Main plaza group had positive growth of 7.0 percent. Much of the fluctuations in FY 2009 and FY 2010 can be attributed to the slowdown in the economy and the FY 2009 toll rate increase. The toll rate adjustment impacted transactions during the last three months of FY 2009 and the first nine months of FY 2010. With the toll rate increase, paid in-lane revenues in FY 2010 recovered with a growth of 23.7 percent, or $4.5 million for the facility, while paid in-lane transactions only decreased by 0.4 percent. Another toll rate increase occurred in FY 2013, which negatively impacted transactions.

In FY 2014, all plaza groups experienced growth in paid in-lane transactions and toll revenues. Overall, S.R. 429 paid in-lane transactions increased 12.9 percent and toll revenues increased 14.0 percent over FY 2013. FY 2014 began a four-year period of extraordinary growth. FY 2015, FY 2016 and FY 2017 experienced double-digit growth in both paid in-lane transactions and revenues. Over the four-year period, paid in-lane transactions and revenue increased by more than 50 percent.

In FY 2018, S.R. 429 paid in-lane transactions increased by 13.6 percent over FY 2017 and revenues increased by 12.8 percent. In FY 2018, paid in-lane transactions at the Forest Lake Main plaza group and Independence Main plaza group increased by 4.3 percent and 8.1 percent, respectively, over FY 2017. During the same period, paid in-lane toll revenues at the Forest Lake Main and Independence Main plaza groups increased by 4.2 percent and 10.7 percent. FY 2018 was the opening year for the Ponkan Main and Mt. Plymouth Main plaza groups.

In October 2016 (FY 2017), Hurricane Matthew tracked parallel to the Florida coast as a Category 3 storm with winds up to 130 miles per hour. Tolls were suspended on the CFX System beginning at 8:00 p.m. on October 5, 2016 through early on October 10, 2016. The toll suspension resulted in a loss of approximately 0.5 million transactions and $0.6 million in toll revenues on S.R. 429. In September 2017 (FY 2018), Hurricane Irma tracked parallel to the Florida coast as a Category 4 storm with winds up to 155 miles per hour. Tolls were suspended on CFX toll facilities beginning on September 5, 2017 through September 20, 2017 resulting in a transaction loss of approximately 2.2 million and a toll revenue loss of $2.5 million on S.R. 429.

In FY 2019, all plaza groups experienced growth in paid in-lane transactions and toll revenues. FY 2019 was the first full year of toll collection at the Ponkan Main and Mt. Plymouth Main plaza groups. Overall, S.R. 429 paid in-lane transactions increased 11.4 percent and toll revenues increased 14.4 percent over FY 2018.

In FY 2020, all S.R. 429 plaza groups experienced a decline in paid in-lane transactions and revenues, despite the FY 2020 toll rate increase. The declines in both paid in-lane transactions and revenues can be attributed to the negative impacts of COVID-19 as explained in greater detail in Chapter 1. September 2019 transactions and revenues were also negatively impacted by toll suspensions during Hurricane Dorian.

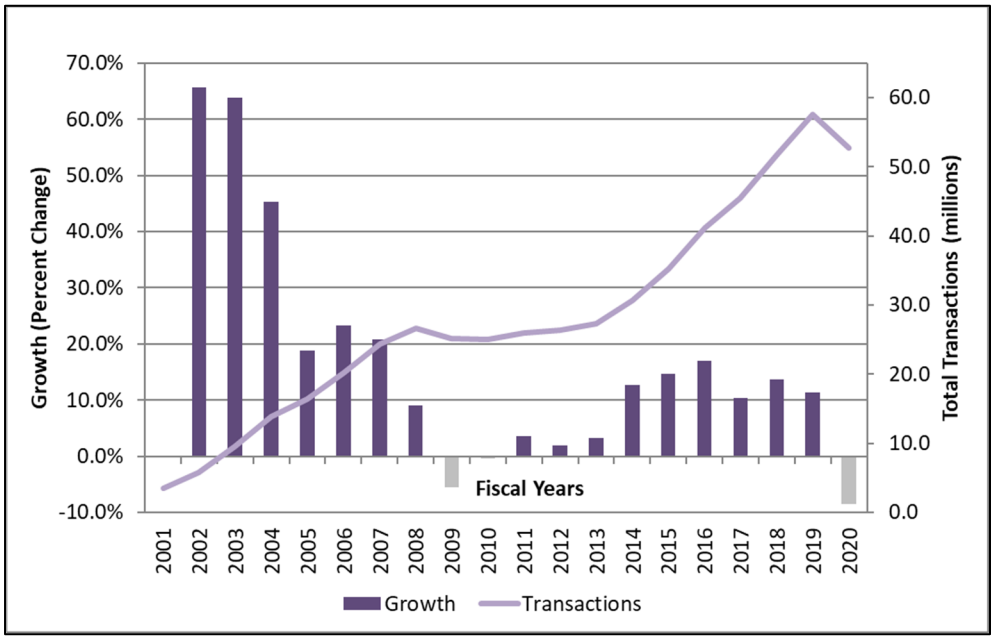
Table 6-1
S.R. 429 Plaza Groups – Historical Paid In-Lane Transactions and Revenue
FY 2001 – FY 2020

Fiscal Year	Forest Lake Main [A]	Independence Main	Ponkan Main	Mt. Plymouth Main	TOTAL	Forest Lake Main [A]	Independence Main	Ponkan Main	Mt. Plymouth Main	TOTAL
	TRANSACTIONS (millions)					PERCENT CHANGE				
2001	3.5				3.5					
2002 [B]	5.8				5.8	65.7%				65.7%
2003 [C]	8.0	1.5			9.5	37.9%				63.8%
2004	9.5	4.3			13.8	18.8%	186.7%			45.3%
2005 [D]	10.8	5.6			16.4	13.7%	30.2%			18.8%
2006 [E]	12.8	7.4			20.2	18.5%	32.1%			23.2%
2007 [F]	14.1	10.3			24.4	10.2%	39.2%			20.8%
2008 [G]	14.2	12.4			26.6	0.7%	20.4%			9.0%
2009 [H]	12.9	12.2			25.1	-9.2%	-1.6%			-5.6%
2010	13.0	12.0			25.0	0.8%	-1.6%			-0.4%
2011	13.4	12.5			25.9	3.1%	4.2%			3.6%
2012	13.6	12.8			26.4	1.5%	2.4%			1.9%
2013 [I]	14.2	13.0			27.2	4.7%	1.6%			3.2%
2014	16.1	14.6			30.7	13.4%	12.3%			12.9%
2015	18.3	16.9			35.2	13.7%	15.8%			14.7%
2016	21.4	19.8			41.2	16.9%	17.2%			17.0%
2017 [J]	23.4	22.1			45.5	9.3%	11.6%			10.4%
2018 [K,L]	24.4	23.9	3.0	0.4	51.7	4.3%	8.1%			13.6%
2019 [M]	25.7	25.5	4.9	1.5	57.6	5.3%	6.7%	63.3%	275.0%	11.4%
2020 [N,O]	23.8	22.7	4.8	1.4	52.7	-7.4%	-11.0%	-2.0%	-6.7%	-8.5%
	TOLL REVENUE (millions)					PERCENT CHANGE				
2001	$3.3				$3.3					
2002 [B]	$5.1				$5.1	54.5%				54.5%
2003 [C]	$6.8	$0.4			$7.2	33.3%				41.2%
2004	$8.1	$1.1			$9.2	19.1%	175.0%			27.8%
2005 [D]	$9.1	$1.4			$10.5	12.3%	27.3%			14.1%
2006 [E]	$10.7	$2.8			$13.5	17.6%	100.0%			28.6%
2007 [F]	$11.8	$5.6			$17.4	10.3%	100.0%			28.9%
2008 [G]	$11.9	$7.1			$19.0	0.8%	26.8%			9.2%
2009 [H]	$11.4	$7.6			$19.0	-4.2%	7.0%			0.0%
2010	$13.7	$9.8			$23.5	20.2%	28.9%			23.7%
2011	$14.1	$10.3			$24.4	2.9%	5.1%			3.8%
2012	$14.2	$10.7			$24.9	0.7%	3.9%			2.0%
2013 [I]	$17.1	$12.3			$29.4	20.6%	14.6%			18.1%
2014	$19.5	$14.0			$33.5	13.8%	14.1%			14.0%
2015	$22.1	$16.8			$38.9	13.3%	20.0%			16.1%
2016	$25.9	$20.1			$46.0	17.2%	19.6%			18.3%
2017 [J]	$28.4	$23.3			$51.7	9.7%	15.9%			12.4%
2018 [K,L]	$29.6	$25.8	$2.6	$0.3	$58.3	4.2%	10.7%			12.8%
2019 [M]	$32.1	$29.1	$4.2	$1.3	$66.7	8.4%	12.8%	61.5%	333.3%	14.4%
2020 [N,O]	$30.4	$26.6	$4.3	$1.2	$62.5	-5.3%	-8.6%	2.4%	-7.7%	-6.3%

Notes:

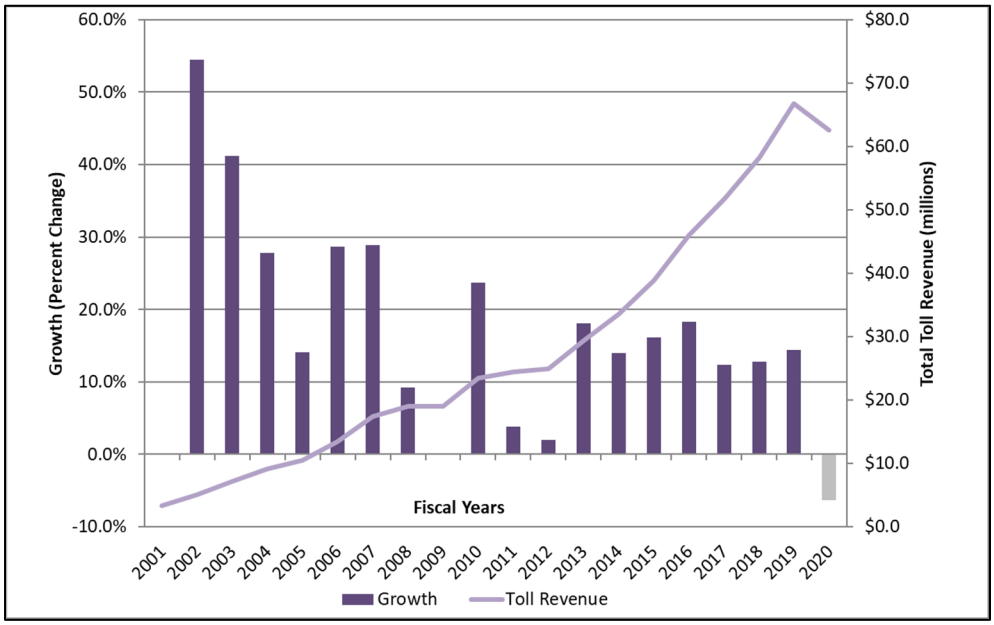
A - Opened to traffic on July 8, 2000. Toll collection began one week after facility opened to traffic.
B - Interchange ramps to/from existing S.R. 429 at Florida's Turnpike opened in November 2001.
C - Interchange ramps to/from C.R. 535 opened in December 2002.
D - Effects from 2004 hurricane season (4 storms with toll suspensions).
E - Independence Main plaza opened in December 2005. FTE opened section to U.S. 192.
F - FTE opened section from U.S. 192 to I-4 in December 2006.
G - First effects of national economic recession.
H - Systemwide toll rate increase in April 2009.
I - Systemwide toll rate increase in July 2012. Implementation of cash and electronic toll rate differential.
J - Effects from Hurricane Matthew in October 2016.
K - Ponkan Main plaza opened on July 28, 2017. Mt. Plymouth Main plaza opened on April 1, 2018.
L - Effects from Hurricane Irma in September 2017.
M - Systemwide toll rate increase in July 2018.
N - Systemwide toll rate increase in July 2019.
O - Effects from Hurricane Dorian in September 2019 and first effects of COVID-19 pandemic began in March 2020.

Figure 6-2
S.R. 429 Historical Paid In-Lane Transactions and Annual Growth
FY 2001 – FY 2020



Source: CFX Statistical Report June 2020

Figure 6-3
S.R. 429 Historical Paid In-Lane Revenue and Annual Growth
FY 2001 – FY 2020

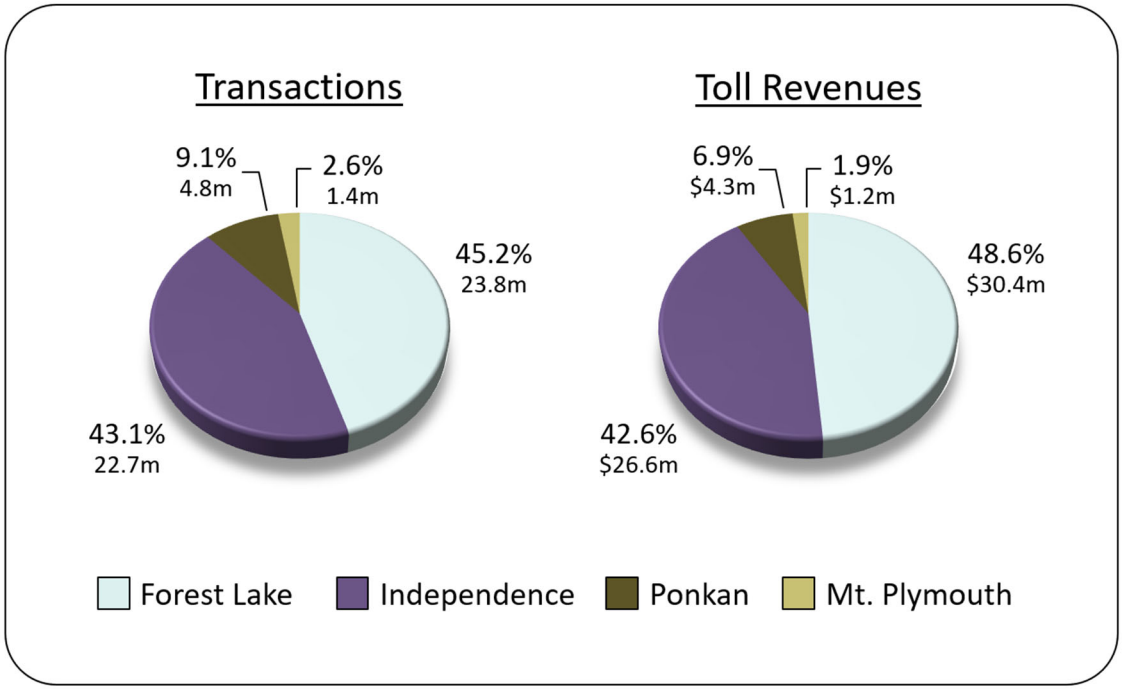


Source: CFX Statistical Report June 2020

The paid in-lane transactions and toll revenues by plaza group and as a percentage of total S.R. 429 paid in-lane transactions and toll revenues for FY 2020 are presented in **Figure 6-4**. As shown, the Forest Lake Main plaza group represented 23.8 million paid in-lane transactions or 45.2 percent of total S.R. 429 paid in-lane transactions. Independence Main plaza group represented 22.7 million or 43.1 percent of total paid in-lane transactions on the facility. The Ponkan Main plaza represented 4.8 million paid in-lane transactions or 9.1 percent of the total, and the Mt. Plymouth Main plaza carried the remaining 1.4 million or 2.6 percent of total paid in-lane transactions on the facility.

The annual totals and percentages for paid in-lane toll revenues are similar to the trends reported for annual paid in-lane transactions. Having more ramp toll plazas and a higher mainline toll rate, the Forest Lake Main plaza group represented $30.4 million in paid in-lane toll revenues or 48.6 percent of total S.R. 429 paid in-lane toll revenues. Independence Main plaza group represented $26.6 million, or 42.6 percent of total paid in-lane revenue on the facility. The Ponkan Main plaza represented $4.3 million or 6.9 percent of the total, and the Mt. Plymouth Main plaza carried the remaining $1.2 million, or 1.9 percent of total paid in-lane toll revenues on the facility.

Figure 6-4
S.R. 429 Paid In-Lane Transactions and Revenue by Plaza Group
FY 2020



Source: CFX Statistical Report June 2020

6.2.2 ANNUAL PBP TRANSACTION AND REVENUE TRENDS

A history of annual PBP transactions and toll revenues on S.R. 429 from FY 2011 to FY 2020 are presented in **Table 6-2**. PBP transactions and toll revenues are recorded by toll location and accrued monthly by plaza group, however Table 6-2 shows the annual totals for S.R. 429 as reported at year end.

Table 6-2
S.R. 429 – Historical PBP Transactions and Revenue
FY 2011 – FY 2020

Fiscal Year	Transactions (millions)	Percent Change	Toll Revenues (millions)	Percent Change
	TRANSACTIONS (millions)			
2011	0.3		$0.2	
2012	0.4	33.3%	$0.3	50.0%
2013	0.5	25.0%	$0.4	33.3%
2014	0.6	20.0%	$0.6	50.0%
2015	0.9	50.0%	$0.8	33.3%
2016	1.3	44.4%	$1.4	75.0%
2017	1.6	23.1%	$2.0	42.9%
2018	2.0	25.0%	$2.5	25.0%
2019	5.0	150.0%	$6.9	176.0%
2020	6.0	20.0%	$8.6	24.6%

Source: Unaudited data provided by CFX

PBP transactions have increased from 0.3 million in FY 2011 to 6.0 million in FY 2020, while PBP revenues have increased from $0.2 million to $8.6 million over the same period. In FY 2020, PBP transactions increased 20.0 percent and PBP revenues increased 24.6 percent over FY 2019. This increase in PBP transactions and revenues in FY 2020 has contributed to slower growth in paid in-lane transactions and revenues compared to FY 2019. The trends show that more customers are choosing the PBP method of payment. CFX temporarily suspended cash toll collection on all facilities from March 19, 2020 to May 31, 2020 in response to the COVID-19 pandemic. During this time, customers were able to pay via ETC or PBP. Growth in PBP transactions and revenues is expected to decline beginning in FY 2021 due to a new PBP toll rate adopted by the CFX Board that went into effect on July 1, 2020, at which time the PBP toll rate at all toll locations was increased to twice the ETC toll rate. Due to the new PBP toll rate implemented, it is anticipated that a portion of customers currently paying via PBP will switch to paying in the lane through ETC to avoid the higher toll rate.

6.2.3 MONTHLY PAID IN-LANE TRANSACTION SEASONAL VARIATION

In **Table 6-3**, monthly paid in-lane transactions are normalized to average number of paid in-lane transactions per day in each month. Using average number of paid in-lane transactions per day allows for an easy comparison of the variations in relative travel demand over the year. The pattern of seasonal usage changes slightly from year to year, based on the number of weekdays in each month, but in FY 2020 this seasonality was overshadowed by the impacts in travel demand from the COVID-19 pandemic. Therefore, the factors in Table 6-3 should not be relied on for typical monthly seasonal trends on S.R. 429.

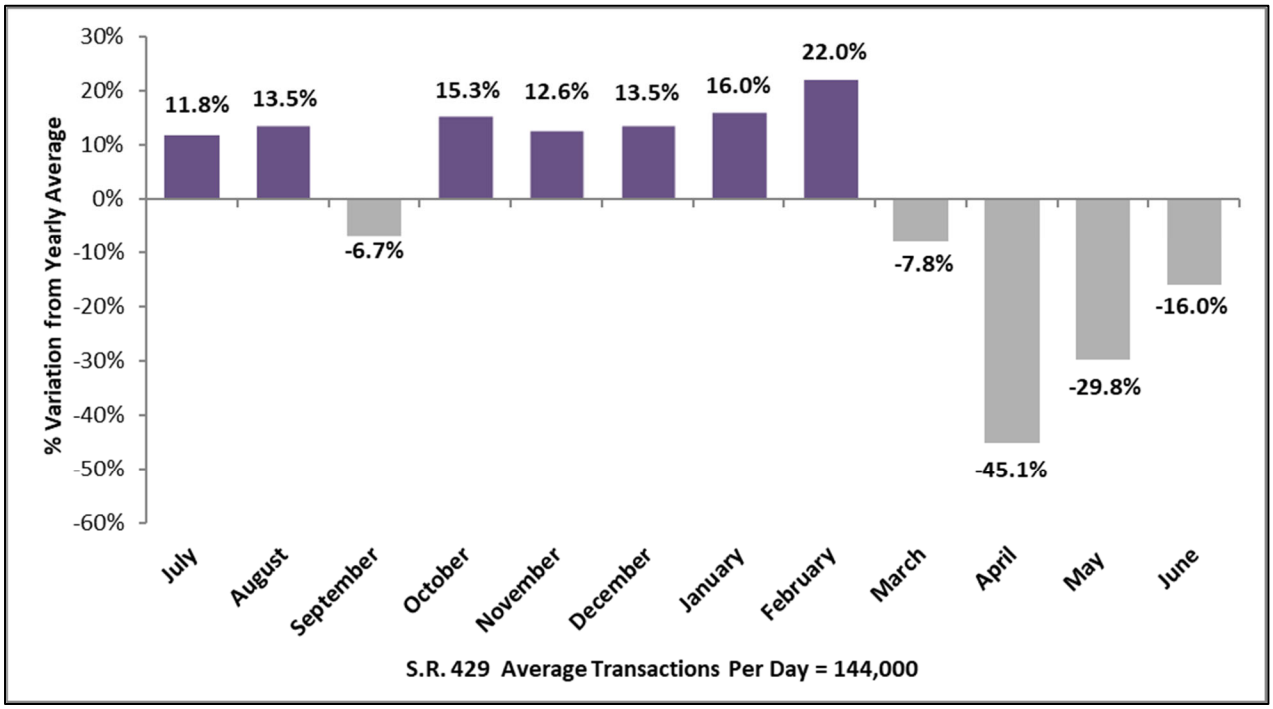
As presented in Table 6-3, average paid in-lane transactions per day in FY 2020 on S.R. 429 ranged from a high of 175,700 in February 2020 to a low of 79,000 in April 2020. March through June transactions were negatively impacted by the COVID-19 pandemic. This data is presented in a graphical format in **Figure 6-5**. Each month's average daily paid in-lane transactions appear as a percentage of the average for the fiscal year. September 2019 paid in-lane transactions were negatively impacted by toll suspensions during Hurricane Dorian. Paid in-lane transactions in February were 22.0 percent above average and paid in-lane transactions in April were 45.1 percent below average for the facility. February 2020 included an additional day of toll collection compared to February 2019 due to the leap year. April 2020 was the first full month with negative COVID-19 impacts. Typically, the paid in-lane transactions are lower than average for the first half of the FY and higher than average for the second half of the FY. The seasonal pattern of usage will change slightly from year to year based on the number of weekdays in a given month.

Table 6-3
S.R. 429 – Monthly Seasonal Variation in Paid In-Lane Transactions
FY 2020

Month	Number of Days in Month	Paid In-Lane Transactions	Average Transactions/Day	Seasonal Factor
July	31	4,992,371	161,000	1.118
August	31	5,067,807	163,500	1.135
September	30	4,031,610	134,400	0.933
October	31	5,148,968	166,100	1.153
November	30	4,865,665	162,200	1.126
December	31	5,069,809	163,500	1.135
January	31	5,176,227	167,000	1.160
February	29	5,096,134	175,700	1.220
March	31	4,115,573	132,800	0.922
April	30	2,369,993	79,000	0.549
May	31	3,134,603	101,100	0.702
June	30	3,629,424	121,000	0.840
Average		***4,391,515***	***144,000***	***1.000***
Total Year	**366**	**52,698,184**		

Source: CFX Statistical Report June 2020

Figure 6-5
S.R. 429 Variation in Paid In-Lane Transactions Per Day, By Month
FY 2020



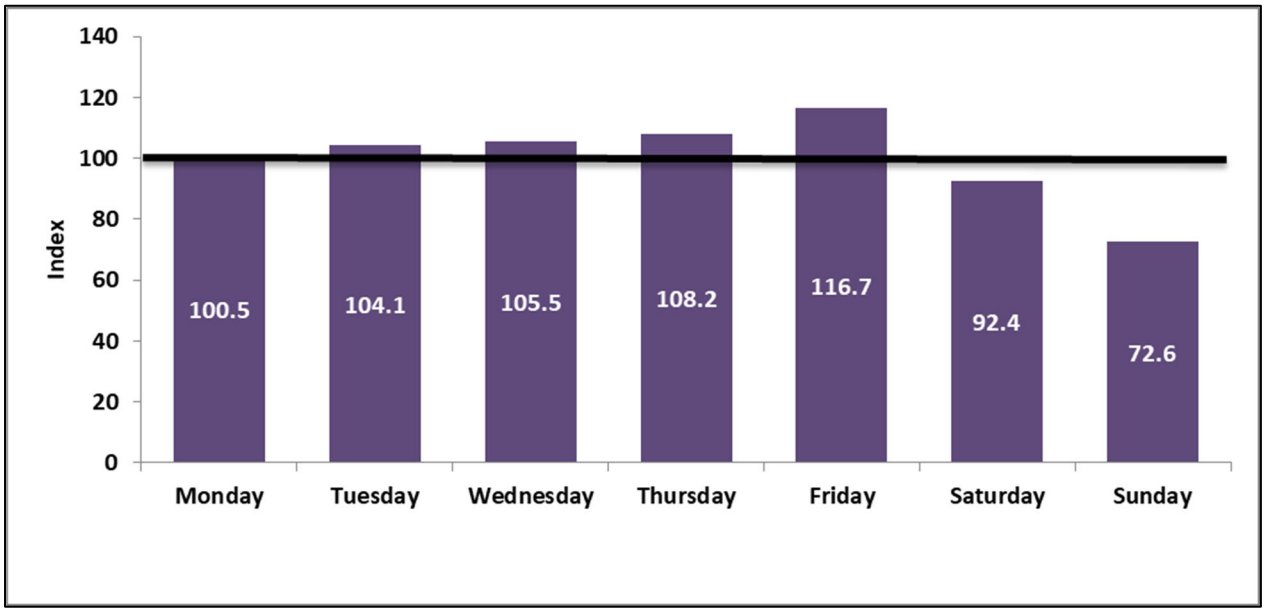
Source: CFX Statistical Report June 2020

6.2.4 DAY-OF-WEEK TRANSACTION VARIATION

Figure 6-6 contains a comparison of transactions by day of week in FY 2020. This data is presented as an index, where the average day equals 100. An index value of 100 for a given day of the week would indicate that day's transactions were precisely the same as the facility average. A value of 120 would indicate a day that has 20 percent greater volume than the average. The data used for this analysis was for a typical week in March 2020, before the COVID-19 pandemic. The data includes transactions at mainline plazas only (no ramps).

As shown, weekday transactions on S.R. 429 fluctuated over the course of the week. Transactions were highest on Fridays, with an index value of 116.7 (16.7 percent higher than the average day), volumes on Thursdays had an index value of 108.2, and volumes on Monday through Wednesday ranged from index values of 100.5 to 105.5. Saturday volumes were lower than early weekday volumes with an index value of 92.4 but higher than other commuter facilities. Transactions decline significantly on Sundays, which have an index value of 72.6, or 27.4 percent lower than the average day.

Figure 6-6
S.R. 429 Variation in Transactions, by Day of Week
FY 2020



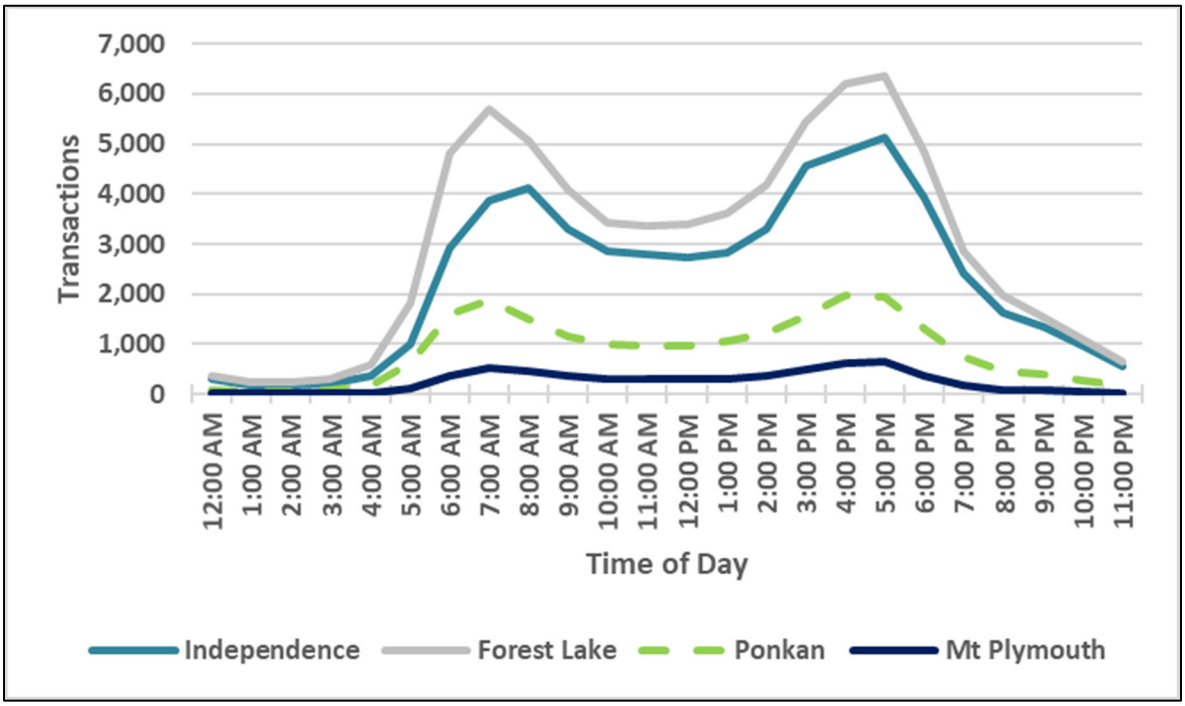
Source: Unaudited lane transaction data – March 2020

6.2.5 HOURLY TRAFFIC DISTRIBUTION

The hourly distribution of traffic volumes includes information on the usage characteristics of travel on the facility. The hourly distributions represent counts taken during a typical week at the mainline plazas in the month of March 2020, before the COVID-19 pandemic. The typical weekday distribution is shown in **Figure 6-7** and the weekend distribution is shown in **Figure 6-8**. The figures contain the sum of traffic volumes in both directions.

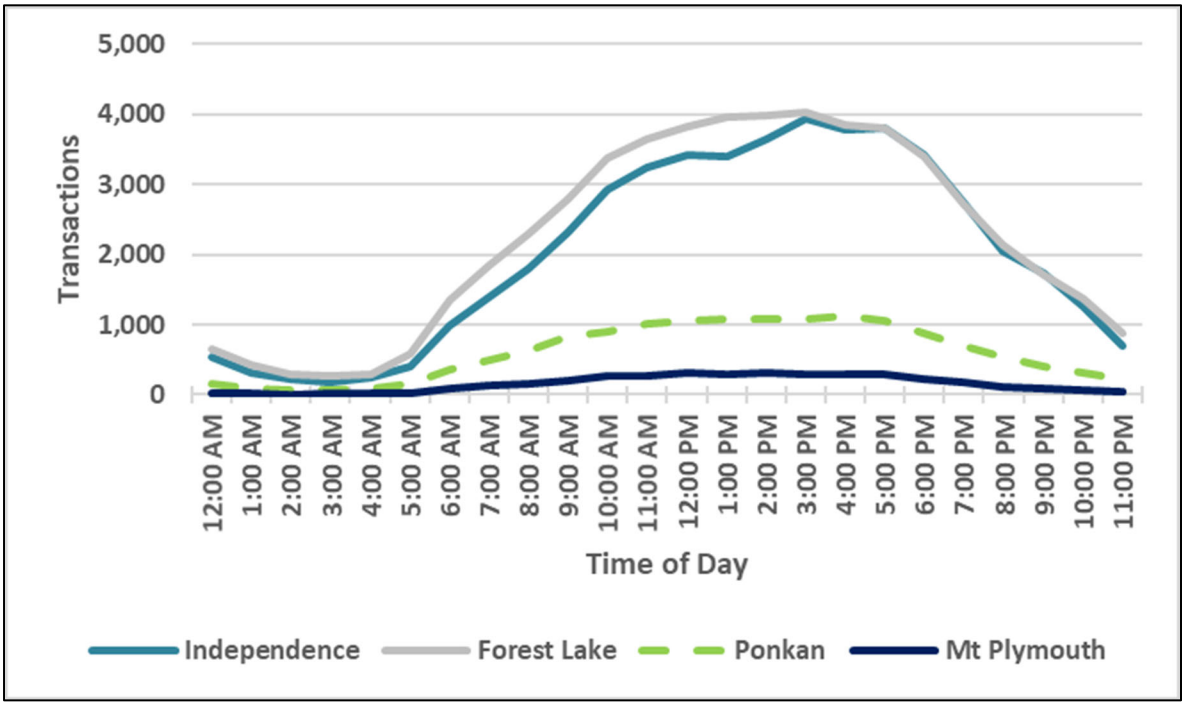
The four mainline toll locations on S.R. 429 exhibit similar hourly traffic patterns. On weekdays, travel demand at all four locations is bimodal, with both morning and evening peak hours. Traffic volumes in the evening peak hours at all mainline plazas are higher than in the morning peak hours. The highest peak hour volumes during the week were 6,400 per hour beginning at 5:00 p.m. at the Forest Lake mainline plaza, 5,100 per hour beginning at 5:00 p.m. at the Independence mainline plaza, 2,000 per hour beginning at 4:00 p.m. at the Ponkan mainline plaza, and 640 per hour beginning at 5:00 p.m. at the Mt. Plymouth mainline plaza. On weekends, the volumes are lower and the distributions unimodal. There are single peak periods (no morning or evening peaks), indicating that many customers use the facility for non-work trip purposes in the middle of the weekend days.

Figure 6-7
S.R. 429 Hourly Traffic Variation (Weekday)
FY 2020 (March)



Source: Unaudited lane traffic data – March 2020

Figure 6-8
S.R. 429 Hourly Traffic Variation (Weekend)
FY 2020 (March)



Source: Unaudited lane traffic data – March 2020

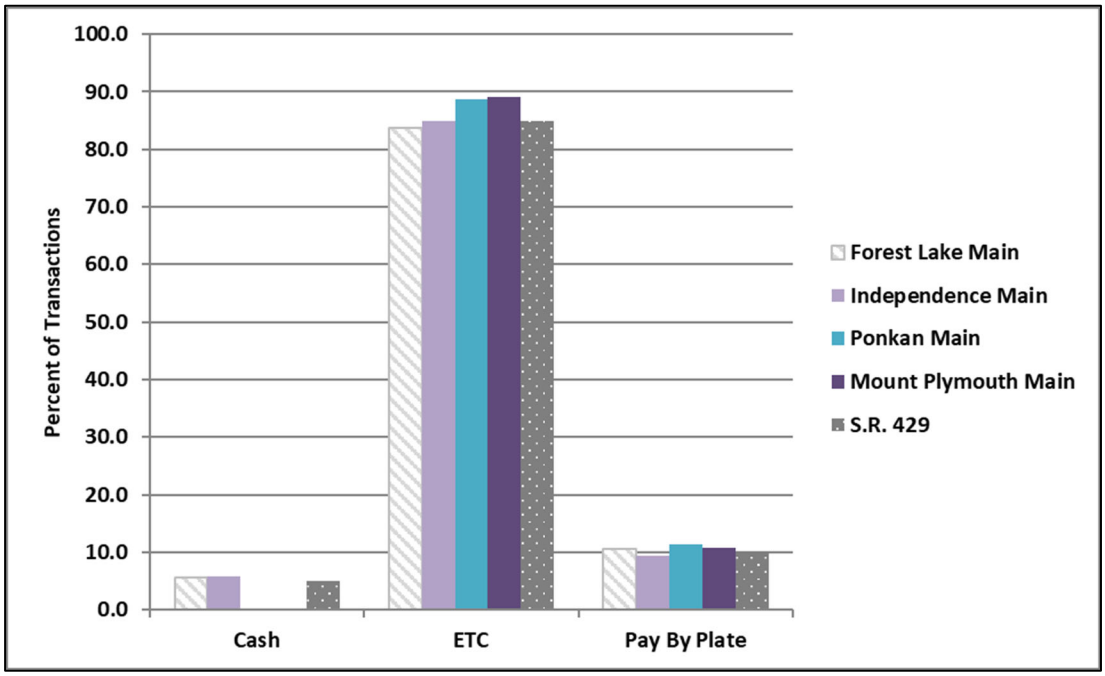
6.2.6 TRANSACTIONS AND REVENUE BY PAYMENT TYPE

The distributions of transactions and revenue by payment type by plaza group during FY 2020 are presented in **Figure 6-9** and **Figure 6-10**. Payment types can be classified in one of three ways: cash, ETC, and PBP. As defined in Chapter 1 of this report, paid in-lane transactions and revenue include cash and ETC payments made when a customer travels through a CFX toll location. The remaining transactions and revenue are classified as unpaid in-lane, which includes PBP and a small portion of non-revenue transactions. PBP transactions and revenues are estimated monthly based on an accrual rate of 60 percent of all unpaid in-lane transactions and revenues. It is important to note that the data presented in the following two figures is based on unaudited transaction and toll revenue data and may not match the audited data shown in other tables and figures in this chapter. It is also important to note that cash toll collection at all toll plazas was suspended from March 19, 2020 to May 31, 2020 due to COVID-19 safety protocols.

As shown in Figure 6-9, the share of ETC transactions ranged from a low of 83.8 percent at the Forest Lake Main plaza group to a high of 89.1 percent at the Mount Plymouth Main plaza group. The Mount Plymouth and Ponkan mainline plazas, as part of the Wekiva Parkway, both have AET collection. Overall, ETC transactions on S.R. 429 accounted for 84.8 percent of total transactions on the facility. The share of cash transactions ranged from a low of 0.0 percent at the Ponkan Main and Mount Plymouth Main plaza to a high of 5.7 percent at the Independence Main plaza group. Overall, cash transactions on S.R. 429 accounted for 5.0 percent of total transactions on the facility. Cash transactions have been trending lower each year but are lower than FY 2019 because CFX suspended cash toll collection for over two months in FY 2020 to reduce the potential exposure of both drivers and employees to the COVID-19 virus. The PBP transactions accounted for between 9.4 and 11.3 percent of transactions at all plaza groups. Overall, PBP transactions on S.R. 429 accounted for 10.2 percent of total transactions on the facility.

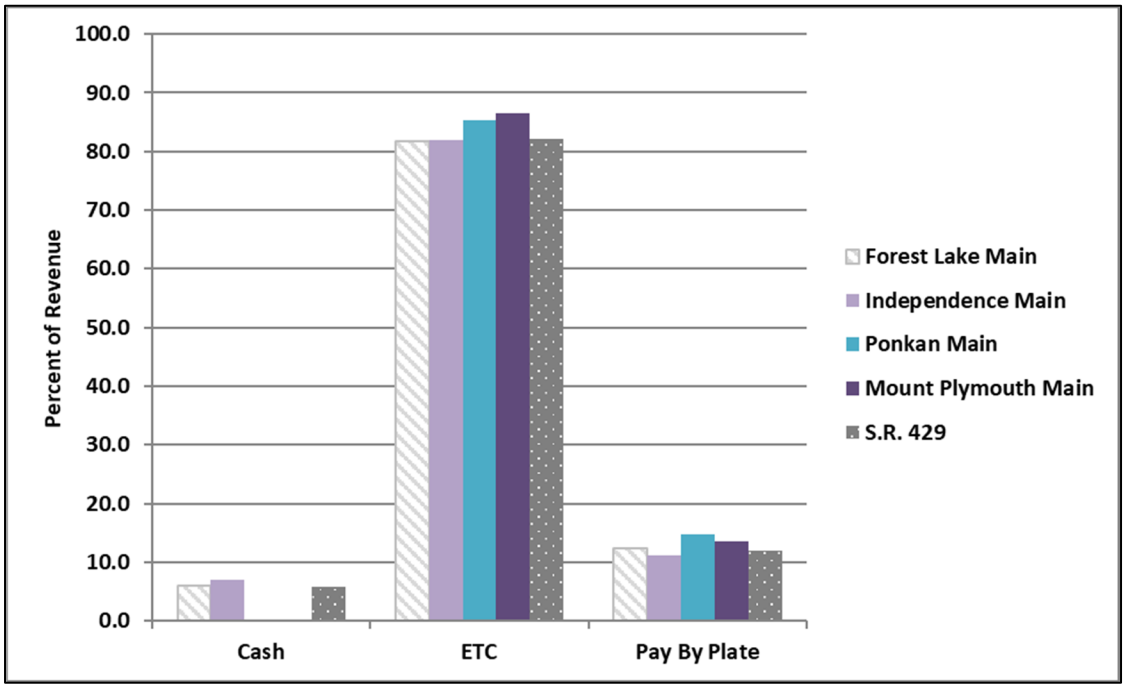
As shown in Figure 6-10, the share of toll revenues by payment type is comparable to the share in transactions. The share of ETC toll revenues ranged from a low of 81.7 percent at the Forest Lake Main plaza group to a high of 86.5 percent at the Mount Plymouth Main plaza. The share of cash toll revenues ranged from a low of 0.0 percent at the Ponkan Main and Mount Plymouth Main plaza to a high of 7.0 percent at the Independence Main plaza group. The share of PBP toll revenues ranged from a low of 11.1 percent to a high of 14.7 percent at all plaza groups.

Figure 6-9
S.R. 429 Percent of Transactions by Payment Type
FY 2020



Source: Unaudited transaction data provided by CFX

Figure 6-10
S.R. 429 Percent of Revenue by Payment Type
FY 2020



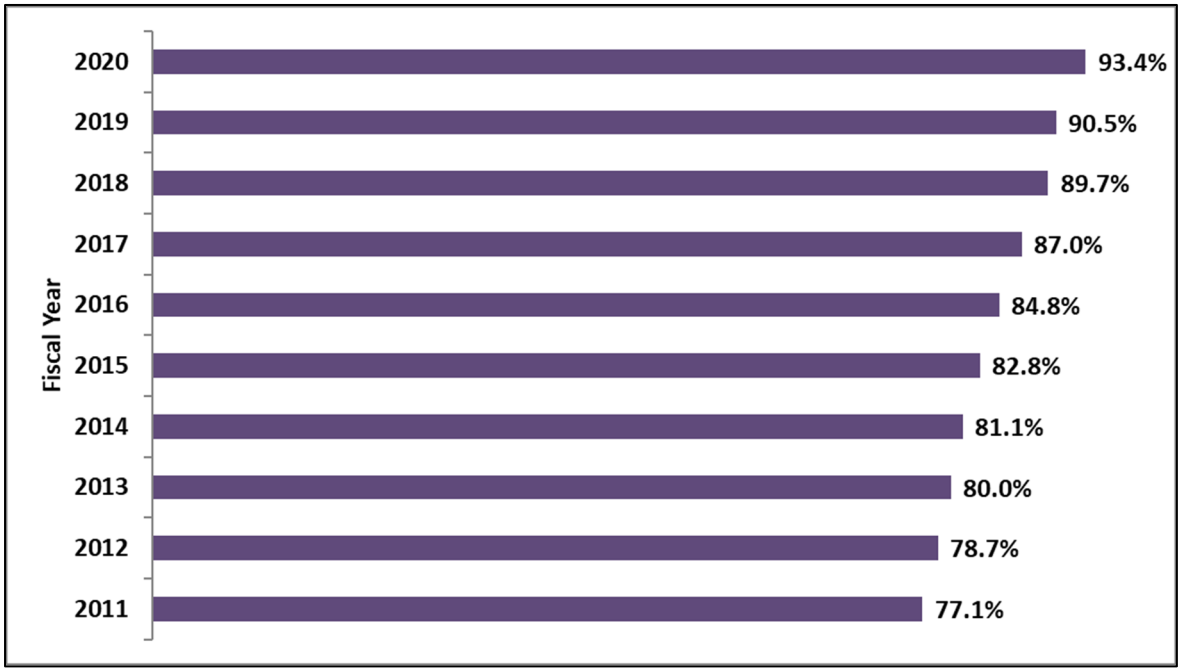
Source: Unaudited toll revenue data provided by CFX

6.3 ETC Usage

The percent of paid in-lane revenues collected from ETC over the past ten fiscal years on S.R. 429 are shown in **Figure 6-11**. PBP revenues are not included. Over this time, ETC revenues have steadily increased on the facility. In FY 2011, ETC revenues totaled 77.1 percent of total revenues. By the end of FY 2020, ETC revenues reached 93.4 percent. The data below differs from Figure 6-10 because it only includes the annual comparison of paid in-lane revenue and not all revenue types. ETC usage is expected to increase as customers shift from cash to ETC to take advantage of the lower ETC rate and the convenience of paying tolls electronically especially with implementation of PBP toll rates that are now twice the ETC toll rate as of July 2020 (FY 2021).

Beginning on May 11, 2016, CFX implemented a pilot program called The Reload Lane to encourage and increase E-PASS usage. CFX now offers this drive-through lane on S.R. 408 at the Conway Main Plaza for customers to sign up for an E-PASS electronic transponder or replenish an existing E-PASS account from 6:00 a.m. to 8:00 p.m. daily. This program is the first of its kind in the continental United States and provides customer convenience and multiple payment options (cash, check, and debit/credit card). The program was expanded with the opening of a second Reload Lane at the John Young Main Plaza on S.R. 417 in March 2017 and a third location at the Forest Lake Main Plaza on S.R. 429 in May 2017. CFX also continues to offer toll discount incentives to customers through various discount programs. The I-4 Commuter Discount Program, implemented in July 2015, offers discounts for transactions on S.R. 417, S.R. 429 and S.R. 414 during construction activities on I-4. Due to the success of this program, the CFX Board approved the expansion of the Reload Lane capabilities to all manned toll plaza lanes on all system facilities, expected to be completed by FY 2022.

Figure 6-11
S.R. 429 Percent of Paid In-Lane Revenue from Electronic Toll Collection
FY 2011 – FY 2020



Source: CFX Statistical Report June 2020

6.4 Forecasted Transactions and Toll Revenues

Based on the recently adopted "Customer First Toll Policy," toll rate adjustments (indexed tolls) were applied to the T&R forecasts every year based on the net change in CPI for the prior year, which equated to 1.45 percent in FY 2021. Because the change in CPI was lower than the 1.5 percent floor, CDM Smith used 1.5 percent to adjust the FY 2021 toll amounts. CDM Smith used the floor of 1.5 percent per year every year thereafter in the forecast period.

In addition to the Wekiva Parkway, future transportation improvements that could influence the T&R forecasts for S.R. 429 include the projects listed in **Table 6-4**. Completion of these projects was assumed in each model horizon year.

Several important growth areas in the Orlando metropolitan areas are along S.R. 429. Developments in Horizon West area of West Orange County are actively constructing, specifically near the Schofield Road and New Independence Parkway Interchanges. Growth in this part of Orange County is reflected in the T&R forecast for the Independence Main Plaza Group.

Table 6-4
S.R. 429 - Key Transportation Improvements

Facility	From	To	Year	Jurisdiction	Improvement
Interstate 4	SR 434	Kirkman Rd	2025	FDOT	Widen to 10 lanes
SR 429	SR 50	SR 414	2025	CFX	Widen to 6-Lanes
SR 429	CR 535	SR 50	2025	CFX	Widen to 6-Lanes
Wekiva Pkwy	Mount Plymouth Rd	Interstate 4	2025	FDOT	New 4 lane expressway
Osceola Polk Line Rd (CR 532)	US 17/92	Lake Wilson Rd	2025	Osceola County/CFX	Widen to 4-lanes
Poinciana Pkwy (SR 538)	Cypress Pkwy	Kinney Harmon Rd	2025	CFX	Widen to 4-lanes
Poinciana Parkway Ext. (SR 538)	Kinney Harmon Rd	Osceola Polk Line Rd (CR 532)	2025	CFX	New 4-lane Expressway
Florida's Turnpike	Minneola	Orange/Lake County Line	2025	FDOT	Widen to 6 lanes
SR 429	Schofield Road	CR 535	2035	CFX	Widen to 6-Lanes
Lake/Orange County Connector (SR 516)	US 27	SR 429	2035	CFX	New 4 lane expressway
Old Lake Wilson Rd	Osceola Polk Line Rd (CR 532)	Sinclair Rd	2035	Osceola County	Widen to 4-lanes
Funie Steed Rd	Westside Blvd	Old Lake Wilson Rd (CR 545)	2035	Osceola County	Widen to 4 Lanes
New Independence Pkwy	Lake County Line	SR 429	2035	Orange County	New/Widen 4 Lanes
SR 438/Silver Star Rd	SR 429	Bluford Ave	2035	FDOT	Widen to 4-lanes
Avalon Rd (CR 545)	Hartzog Rd	Seidel Rd	2035	Orange County	Widen to 4 Lanes
Avalon Rd (CR 545)	Seidel Rd	New Independence Pkwy	2035	Orange County	Widen to 4 Lanes
Avalon Rd (CR 545)	New Independence Pkwy	SR 50	2035	Orange County	Widen to 4 Lanes
Ocoee-Apopka Rd	Silver Star Rd	Clarcona-Ocoee Rd	2035	Orange County	Widen to 4 Lanes
SR 414 Expressway Ext	US 441	SR 434/Forest City Rd	2035	FDOT/CFX	New 4-lane expressway
Florida's Turnpike	US 27	US 19	2035	FDOT	Widen to 6 lanes
Florida's Turnpike	US 19	Minneola/Hancock Rd	2035	FDOT	Widen to 6 lanes
US 441 (SR 500)	SR 44	N of SR 46	2035	FDOT	Widen to 6-lanes
SR 50	CR 565 (Villa City)	CR 565A (Montevista)	2035	FDOT	Widen to 4-lanes
Plant Street (SR 438)	9th Street	West Crown Point Rd	2045	FDOT	Widen to 4-lanes
Plymouth Sorrento Rd	US 441	Orange County Line	2045	Orange County	Widen to 6-lanes
Ponkan Rd	Plymouth Sorrento Rd	CR 437	2045	Orange County	Widen to 6-lanes
Sadler Rd	US 441	Mt Plymouth Rd	2045	Orange County	Widen to 6-lanes
US 17-92	Pleasant Hill Rd	Portage Rd	2035	FDOT	Widen to 6-lanes
US 17-92	Ham Brown Rd	Pleasant Hill Rd	2045	Osceola County/FDOT	Widen to 6-Lanes
US 17-92	Old Tampa Hwy	Poinciana Blvd	2045	Osceola County/FDOT	Widen to 4 Lanes
SR 44	US 441	E. of Orange Ave	2045	FDOT	Widen to 4-lanes
SR 44	SR 44 & Orange Ave	CR 46A	2045	FDOT	Widen to 4-lanes
CR 437 Realignment	Oak Tree Dr	SR 46	2045	Lake County	Widen to 2-lanes
US 27	Florida Turnpike Ramps- N	South of SR 19	2045	FDOT	Widen to 6-lanes
SR 19	CR 48	CR 561	2045	FDOT	Widen to 4-lanes
SR 19	CR 455	CR 48	2045	FDOT	Widen to 4-lanes
SR 19	SR 50	CR 455	2045	FDOT	Widen to 4-lanes
CR 455/Hartle Rd	Lost Lake Rd	Good Hearth Blvd	2045	Lake County	Widen to 4-lanes
CR 455/Hartle Rd	Hartwood Marsh	Lost Lake	2045	Lake County	Widen to 2-lanes
CR 33	SR 50	Simon Brown Rd	2045	Lake County	Widen to 4-lanes

CFX System improvements including the Wekiva Parkway have improved access and the potential for growth in NW Orange County. The growth potential is also demonstrated by the planned improvements to the CFX System including S.R. 429 from S.R. 50 to S.R. 414 and C.R. 535 to S.R. 50, as well as a planned expansion project, the Lake Orange County Connector, between S.R. 429 and U.S. 27 and a new local road, Wellness Way. Planned improvements to the local street system including Silver Star Road, Plant Street and Avalon Road, serve as feeder roads to S.R. 429 and positively impact T&R in the near term and long-term forecasts.
Transaction and toll revenue forecasts for S.R. 429 are summarized in **Table 6-5** and **Table 6-6**. The tables are divided into paid in-lane transactions and revenue and PBP transactions and revenue. Paid in-lane transactions and revenue by plaza group include ETC and cash collection. PBP is only reported as a total on the facility level.

The paid in-lane transactions on S.R. 429 are expected to grow 4.9 percent per year through FY 2030 and then lower rates through the end of the forecast period because of the impact of toll rate adjustments. PBP transactions are forecasted to decrease an average of 0.2 percent per year through FY 2030 and then increase through the forecast period. Total transactions on S.R. 429 are projected to increase during the forecast period from the actual of 58.7 million in FY 2020 to 125.9 million in FY 2050. The paid in-lane revenues on S.R. 429 are projected to increase over the forecast period, from the FY 2020 actual of $62.5 million to $198.6 million in FY 2050. PBP revenues are projected to increase from $8.6 million in FY 2020 to $21.6 million in FY 2050. Total revenues are projected to increase over the forecast period from the actual of $71.1 million in FY 2020 to $220.2 million in FY 2050. Of this increase, a total of $7.4 million in FY 2021 increasing to $43.8 million in FY 2050 is expected to be collected at the two Wekiva Parkway toll plazas on S.R. 429. S.R. 429 is expected to recover in FY 2022 from the COVID-19 pandemic due to continued ramp-up as a newer facility. PBP transactions are expected to decline in FY 2022 due to the completion of the I-4 Ultimate project.

Table 6-5
S.R. 429 Plaza Groups – Transaction Projections (Millions)
FY 2021 – FY 2050

Fiscal Year		Forest Lake Main	Independence Main	Ponkan Main	Mount Plymouth Main	Paid In-Lane	PBP	Total	Percent Annual Change
2010	Actual	13.0	12.0			25.0	0.2	25.2	
2011		13.4	12.5			25.9	0.3	26.2	4.0%
2012		13.6	12.8			26.4	0.4	26.8	2.3%
2013[A]		14.2	13.0			27.2	0.5	27.7	3.4%
2014		16.1	14.6			30.7	0.6	31.3	13.0%
2015		18.3	16.9			35.2	0.9	36.1	15.4%
2016		21.4	19.8			41.2	1.3	42.5	17.6%
2017[B]		23.4	22.1			45.5	1.6	47.1	10.9%
2018[C,D]		24.4	23.9	3.0	0.4	51.7	2.0	53.7	14.0%
2019[E]		25.7	25.5	4.9	1.5	57.6	5.0	62.6	16.6%
2020[F]		23.8	22.7	4.8	1.4	52.7	6.0	58.7	-6.2%
2021[G]	Forecast	23.9	22.1	5.3	1.5	52.8	6.1	58.9	0.3%
2022[H]		27.7	25.6	6.3	2.4	62.0	5.6	67.6	14.8%
2023		30.5	28.2	6.9	2.9	68.5	4.8	73.3	8.4%
2024		32.4	29.7	7.4	3.5	73.0	5.1	78.1	6.5%
2025		33.2	30.7	7.8	3.9	75.6	5.2	80.8	3.5%
2026		33.7	31.4	8.2	4.2	77.5	5.4	82.9	2.6%
2027		34.2	32.2	8.5	4.5	79.4	5.4	84.8	2.3%
2028		34.7	32.9	8.9	4.8	81.3	5.6	86.9	2.5%
2029		35.2	33.6	9.2	5.1	83.1	5.8	88.9	2.3%
2030		35.6	34.4	9.6	5.4	85.0	5.9	90.9	2.2%
2031		36.1	35.1	10.0	5.8	87.0	6.0	93.0	2.3%
2032		36.6	35.8	10.4	6.1	88.9	6.0	94.9	2.0%
2033		37.1	36.4	10.7	6.5	90.7	6.2	96.9	2.1%
2034		37.5	37.1	11.1	6.9	92.6	6.3	98.9	2.1%
2035		37.9	37.8	11.5	7.3	94.5	6.5	101.0	2.1%
2036		38.3	38.4	11.9	7.7	96.3	6.6	102.9	1.9%
2037		38.7	39.1	12.3	8.1	98.2	6.7	104.9	1.9%
2038		39.1	39.6	12.6	8.5	99.8	6.9	106.7	1.7%
2039		39.5	40.2	13.0	8.9	101.6	7.1	108.7	1.9%
2040		39.8	40.8	13.4	9.3	103.3	7.1	110.4	1.6%
2041		40.2	41.3	13.8	9.8	105.1	7.2	112.3	1.7%
2042		40.6	41.8	14.2	10.2	106.8	7.3	114.1	1.6%
2043		40.9	42.2	14.5	10.7	108.3	7.4	115.7	1.4%
2044		41.2	42.7	14.9	11.1	109.9	7.6	117.5	1.6%
2045		41.6	43.1	15.3	11.5	111.5	7.6	119.1	1.4%
2046		41.9	43.4	15.6	11.9	112.8	7.7	120.5	1.2%
2047		42.2	43.7	16.0	12.2	114.1	7.9	122.0	1.2%
2048		42.5	44.0	16.3	12.6	115.4	8.0	123.4	1.1%
2049		42.8	44.3	16.6	13.0	116.7	8.1	124.8	1.1%
2050		43.1	44.5	17.0	13.3	117.9	8.0	125.9	0.9%

Fiscal Year	Compound Annual Average Growth Rate (CAAGR)						
2010 - 2020	6.2%	6.6%			7.7%	40.5%	8.8%
2020 - 2030	4.1%	4.2%	7.2%	14.5%	4.9%	-0.2%	4.5%
2030 - 2040	1.1%	1.7%	3.4%	5.6%	2.0%	1.9%	2.0%
2040 - 2050	0.8%	0.9%	2.4%	3.6%	1.3%	1.2%	1.3%

Notes:
Actual transaction data provided by CFX from Monthly Statistical Reports.
A - Systemw ide toll rate increase.
B - Effects from Hurricane Matthew in October 2016.
C - Ponkan Main plaza opened on July 27, 2017 and Mount Plymouth Main opened on April 1, 2018.
D - Effects from Hurricane Irma in September 2017.
E - First year of implementation of "Customer First" toll rate policy.
F - Effects from Hurricane Dorian in September 2019 and first effects of COVID-19 pandemic began in March 2020.
G - New toll rates for PBP customers, set at 2.0 times the ETC rate.
H - Completion of I-4 Ultimate project.

Table 6-6
S.R. 429 Plaza Groups – Toll Revenue Projections (Millions)
FY 2021 – FY 2050

Fiscal Year		Forest Lake Main	Independence Main	Ponkan Main	Mount Plymouth Main	Paid In-Lane	PBP	Total	Percent Annual Change
2010	Actual	$13.7	$9.8			$23.5	$0.1	$23.6	
2011		$14.1	$10.3			$24.4	$0.2	$24.6	4.2%
2012		$14.2	$10.7			$24.9	$0.3	$25.2	2.4%
2013[A]		$17.1	$12.3			$29.4	$0.4	$29.8	18.3%
2014		$19.5	$14.0			$33.5	$0.6	$34.1	14.4%
2015		$22.1	$16.8			$38.9	$0.8	$39.7	16.5%
2016		$26.0	$20.1			$46.0	$1.4	$47.4	19.4%
2017[B]		$28.4	$23.3			$51.7	$2.0	$53.7	13.2%
2018[C,D]		$29.6	$25.8	$2.6	$0.3	$58.3	$2.5	$60.8	13.2%
2019[E]		$32.1	$29.1	$4.2	$1.3	$66.7	$6.9	$73.6	21.1%
2020[F]		$30.4	$26.6	$4.3	$1.2	$62.5	$8.6	$71.1	-3.4%
2021[G]	Forecast	$30.9	$26.0	$4.8	$1.3	$63.0	$13.2	$76.2	7.2%
2022[H]		$36.4	$30.6	$5.9	$2.1	$75.0	$11.8	$86.8	13.9%
2023		$40.7	$34.3	$6.5	$2.7	$84.2	$9.5	$93.7	7.9%
2024		$43.7	$37.2	$7.0	$3.4	$91.3	$10.2	$101.5	8.3%
2025		$45.3	$38.8	$7.5	$3.9	$95.5	$10.7	$106.2	4.6%
2026		$46.7	$40.2	$8.0	$4.2	$99.1	$11.1	$110.2	3.8%
2027		$48.0	$41.8	$8.5	$4.5	$102.8	$11.4	$114.2	3.6%
2028		$49.3	$43.2	$8.9	$4.9	$106.3	$11.8	$118.1	3.4%
2029		$50.6	$44.7	$9.4	$5.3	$110.0	$12.3	$122.3	3.6%
2030		$52.0	$46.2	$9.9	$5.7	$113.8	$12.5	$126.3	3.3%
2031		$53.3	$47.8	$10.4	$6.1	$117.6	$13.0	$130.6	3.4%
2032		$54.7	$49.4	$10.9	$6.6	$121.6	$13.5	$135.1	3.4%
2033		$56.0	$50.9	$11.5	$7.0	$125.4	$13.9	$139.3	3.1%
2034		$57.5	$52.5	$12.0	$7.5	$129.5	$14.4	$143.9	3.3%
2035		$58.8	$54.2	$12.6	$8.1	$133.7	$14.8	$148.5	3.2%
2036		$60.2	$55.8	$13.3	$8.6	$137.9	$15.1	$153.0	3.0%
2037		$61.6	$57.4	$13.8	$9.3	$142.1	$15.6	$157.7	3.1%
2038		$63.1	$59.1	$14.4	$9.8	$146.4	$16.2	$162.6	3.1%
2039		$64.5	$60.7	$15.1	$10.4	$150.7	$16.6	$167.3	2.9%
2040		$65.9	$62.3	$15.7	$11.1	$155.0	$17.1	$172.1	2.9%
2041		$67.4	$63.9	$16.3	$11.7	$159.3	$17.6	$176.9	2.8%
2042		$68.9	$65.5	$17.0	$12.3	$163.7	$17.9	$181.6	2.7%
2043		$70.4	$67.1	$17.6	$13.0	$168.1	$18.4	$186.5	2.7%
2044		$71.9	$68.7	$18.3	$13.6	$172.5	$18.9	$191.4	2.6%
2045		$73.4	$70.2	$19.1	$14.3	$177.0	$19.4	$196.4	2.6%
2046		$74.9	$71.6	$19.7	$15.1	$181.3	$19.9	$201.2	2.4%
2047		$76.4	$73.2	$20.4	$15.7	$185.7	$20.3	$206.0	2.4%
2048		$77.9	$74.6	$21.1	$16.4	$190.0	$20.8	$210.8	2.3%
2049		$79.5	$76.0	$21.8	$17.1	$194.4	$21.3	$215.7	2.3%
2050		$81.1	$77.3	$22.5	$17.7	$198.6	$21.6	$220.2	2.1%

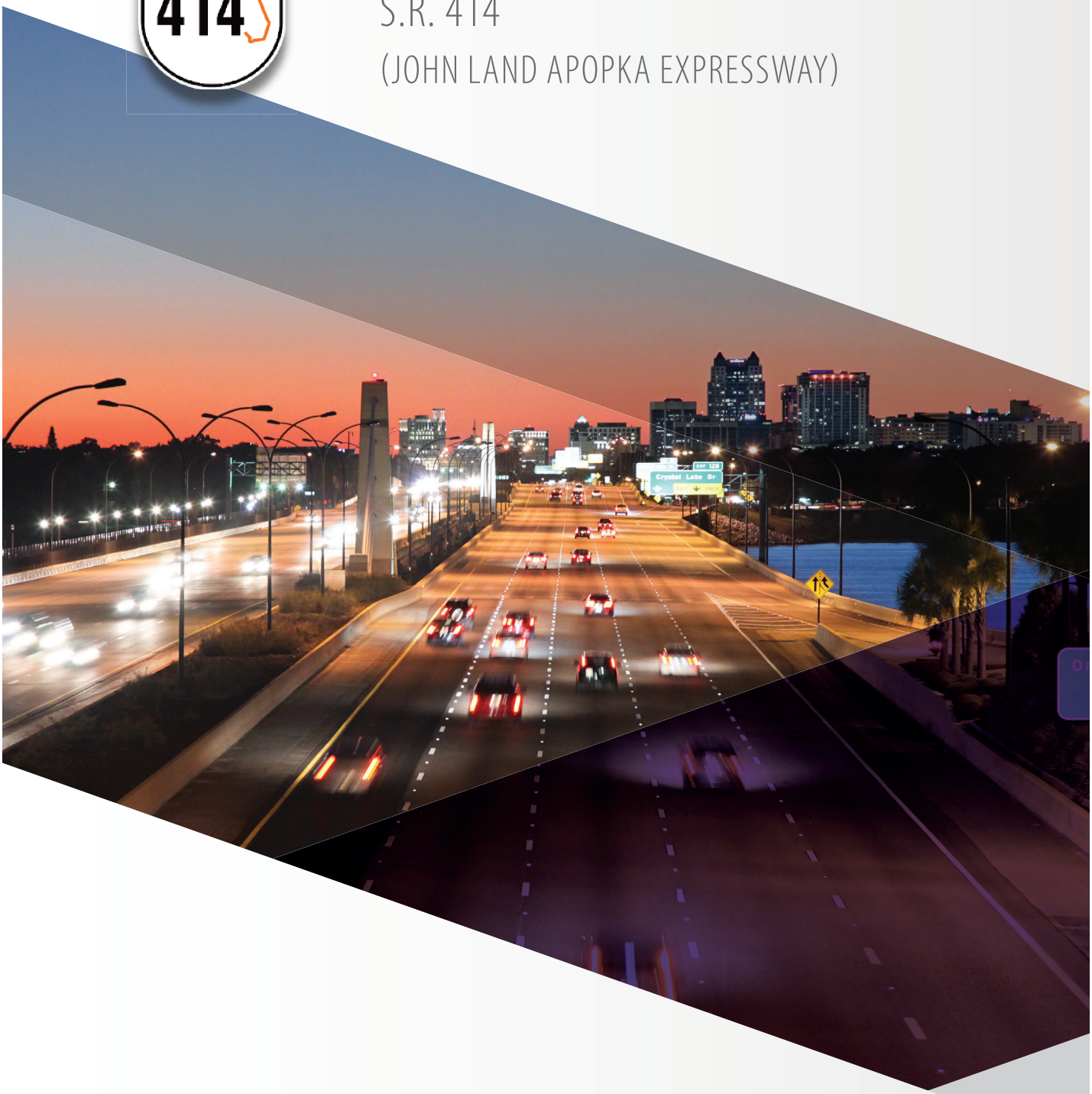
Fiscal Year	Compound Annual Average Growth Rate (CAAGR)						
2010 - 2020	8.3%	10.5%			10.3%	56.1%	11.7%
2020 - 2030	5.5%	5.7%	8.7%	16.9%	6.2%	3.8%	5.9%
2030 - 2040	2.4%	3.0%	4.7%	6.9%	3.1%	3.2%	3.1%
2040 - 2050	2.1%	2.2%	3.7%	4.8%	2.5%	2.4%	2.5%

Notes:
Actual transaction data provided by CFX from Monthly Statistical Reports.
A - Systemwide toll rate increase.
B - Effects from Hurricane Matthew in October 2016.
C - Ponkan Main plaza opened on July 27, 2017 and Mount Plymouth Main opened on April 1, 2018.
D - Effects from Hurricane Irma in September 2017.
E - First year of implementation of "Customer First" toll rate policy.
F - Effects from Hurricane Dorian in September 2019 and first effects of COVID-19 pandemic began in March 2020.
G - New toll rates for PBP customers, set at 2.0 times the ETC rate.
H - Completion of I-4 Ultimate project.

CHAPTER 7

S.R. 414

(JOHN LAND APOPKA EXPRESSWAY)



S.R. 414 (JOHN LAND APOPKA EXPRESSWAY)

7.1 Facility Description

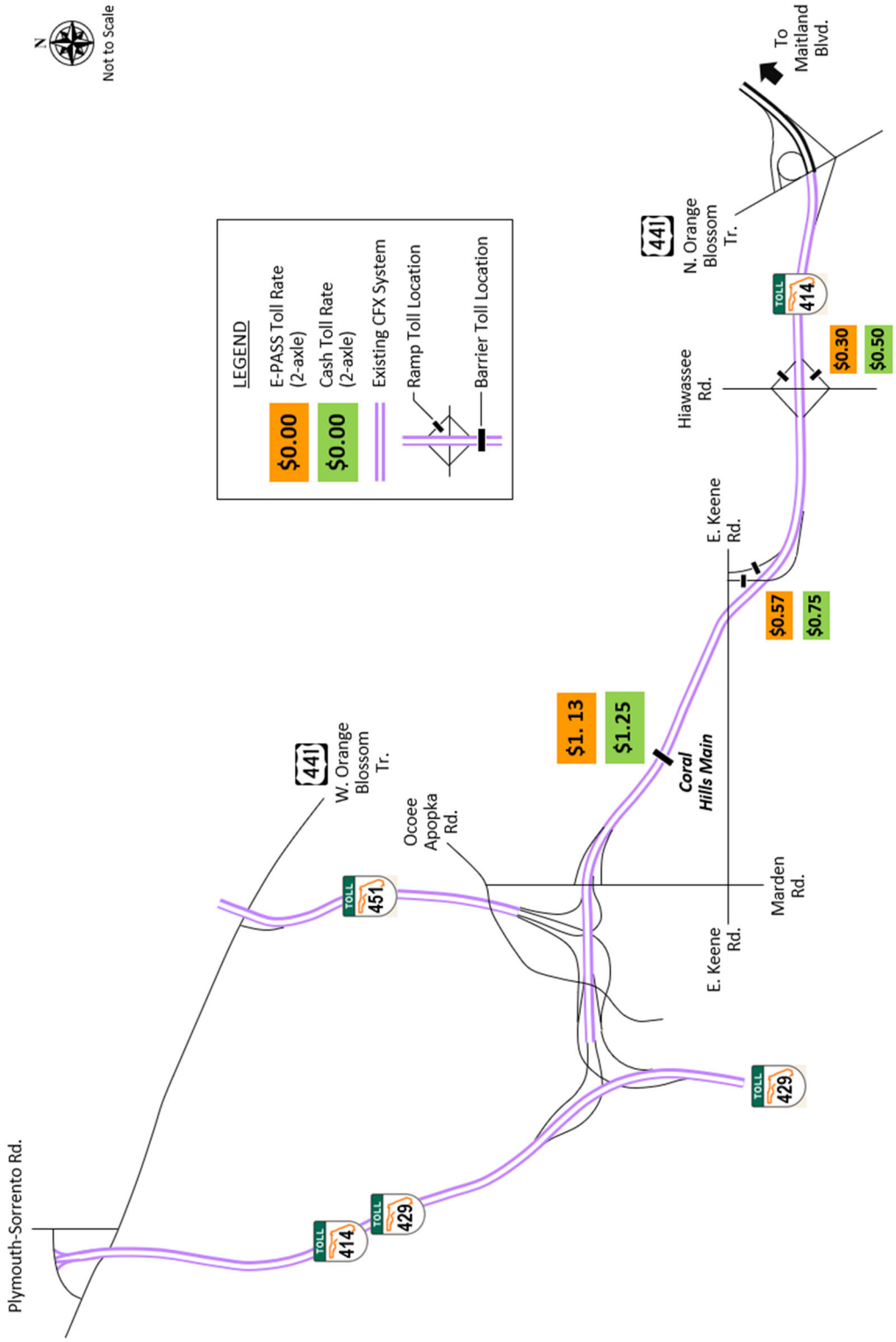
S.R. 414, also known as the John Land Apopka Expressway, is a 9-mile expressway that extends east from S.R. 429 to Maitland Boulevard at U.S. 441 (N. Orange Blossom Trail). Three of these miles are part of a dual route with S.R. 429. This long-awaited expressway improved access between S.R. 429, I-4 and employment centers such as Maitland Center office park. While relieving congestion on U.S. 441 and many local roads in the greater Apopka area, it was the first new, major east-west corridor built in Central Florida in many years. S.R. 414 consists of the Coral Hills Main plaza group. The plaza group has two pairs of ramp toll plazas at the Keene Road and the Hiawassee Road interchanges. Other existing interchanges include S.R. 429, Marden Road, S.R. 451 and U.S. 441/Orange Blossom Trail. A map of S.R. 414 including the FY 2020 CFX toll rates for the mainline and ramp toll plazas is shown in **Figure 7-1**.

CFX began construction on Phase I of the S.R. 414 in January 2007. CFX was able to partially open the new expressway to electronic toll collection customers from S.R. 429 to Hiawassee Road on February 14, 2009, because construction was ahead of schedule. The entire length of Phase I was opened to traffic on May 15, 2009, earlier than originally scheduled.

In June 2010, construction began on Phase II of S.R. 414, which included a new interchange between S.R. 414 and S.R. 429 and an extension of S.R. 429/S.R. 414 northwest to U.S. 441 near Plymouth Sorrento Road. This interchange, which was completed in October 2012, helped improve traffic flow between S.R. 429 and S.R. 414, accommodated future growth in west Orange County and provided improved access to I-4 and the attractions. The extension of S.R. 429/S.R. 414 to U.S. 441 near Plymouth Sorrento Road opened in January 2013. This expressway featured sections with up to six travel lanes (three in each direction) and a new connector road that allows access between S.R. 429 and U.S. 441 near Plymouth Sorrento Road. In addition, the section of S.R. 429 from north of S.R. 414 to U.S. 441 was designated S.R. 451.

In June 2017, a partial interchange opened on S.R. 414 at Marden Road, which allows traffic traveling west on S.R. 414 to exit at Marden Road while traffic on Marden Road can enter on to eastbound S.R. 414. This interchange provides additional local access from S.R. 414, specifically to the new Florida Hospital Apopka and nearby land developments.

Figure 7-1
S.R. 414 Facilities and Toll Rates



7.2 Historical Transactions and Toll Revenues

As defined in Chapter 1, CFX transactions and toll revenues are classified as either Paid In-Lane (ETC and cash) or Unpaid In-Lane (PBP and non-revenue). Total transactions are the sum of paid in-lane and unpaid in-lane transactions. Total revenue is the sum of paid in-lane revenue and the revenue collected through PBP, estimated as an accrued amount. The following section includes a breakdown of toll-paying transactions and toll revenues by paid in-lane and PBP.

7.2.1 ANNUAL PAID IN-LANE TRANSACTION AND REVENUE TRENDS

A history of S.R. 414 annual paid in-lane transactions for the Coral Hills Main plaza group through FY 2020 is presented in the top half of **Table 7-1**. Annual historical paid in-lane toll revenues are summarized and totaled in the bottom half of the table. The facility data and annual growth are also presented visually in **Figure 7-2** and **Figure 7-3**. These historical tables do not include PBP transactions and revenues, only those that are paid in-lane. For this reason, the information presented in this section may differ slightly from the data presented in the FY 2020 Comprehensive Annual Financial Report (CAFR) and other information in this report.

In October 2016 (FY 2017), Hurricane Matthew tracked parallel to the Florida east coast as a Category 3 storm with winds up to 130 miles per hour. Tolls were suspended on the CFX System beginning at 8:00 p.m. on October 5, 2016 through early on October 10, 2016. The toll suspension resulted in a loss of approximately 0.1 million in transactions and $0.1 million in toll revenues on S.R. 414. In September 2017 (FY 2018), Hurricane Irma tracked parallel to the Florida coast as a Category 4 storm with winds up to 155 miles per hour. Tolls were suspended on CFX toll facilities beginning on September 5, 2017 through September 20, 2017 resulting in a transaction loss of approximately 0.6 million and a revenue loss of $0.6 million on S.R. 414.

Total paid in-lane transactions on S.R. 414 in FY 2019 increased by 0.5 million transactions, or 3.7 percent, over FY 2018. Paid in-lane toll revenues increased by $0.8 million, or 5.8 percent, in the same year. The slower growth in paid in-lane transactions and revenues in FY 2019 can be attributed to an increase in customers utilizing the PBP program.

As shown, total paid in-lane transactions on S.R. 414 in FY 2020 decreased by 0.8 million, or 5.8 percent, compared to FY 2019. Paid in-lane revenues experienced a decline of 3.4 percent during the same period. FY 2020 paid in-lane transactions and revenues were negatively impacted by the effects of the COVID-19 pandemic beginning in March 2020. CFX temporarily suspended cash toll collections and shifted to PBP from March 19, 2020 to May 31, 2020 to reduce the potential exposure of both drivers and employees to the COVID-19 virus. Cash toll collections resumed on June 1, 2020. September 2019 transactions and revenues were also negatively impacted by toll suspensions during Hurricane Dorian. The slower growth in paid in-lane transactions and revenues in FY 2020 can also be attributed to an increase in customers utilizing the PBP program.

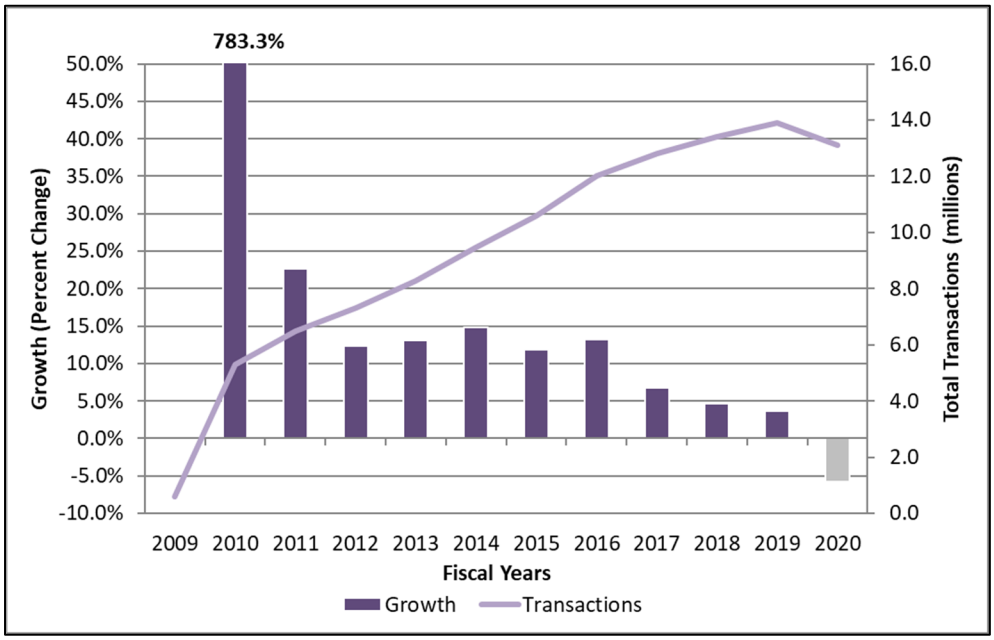
The facility has only been open for 11 years with the first full year of operation in FY 2010. There was no toll rate increase at the Coral Hills Main plaza in FY 2009 since the road was not fully opened until after the toll increase went into effect, however tolls did increase during the FY 2013, FY 2019, and FY 2020 Systemwide toll rate increase. This facility is expected to continue experiencing growth due to the recent opening of the Wekiva Parkway (S.R. 429).

Table 7-1
S.R. 414 Plaza Group – Historical Paid In-Lane Transactions and Revenue
FY 2009 – FY 2020

Fiscal Year	Coral Hills Main	
	TRANSACTIONS (millions)	PERCENT CHANGE
2009 [A]	0.6	
2010	5.3	783.3%
2011	6.5	22.6%
2012	7.3	12.3%
2013 [B]	8.3	13.1%
2014	9.5	14.5%
2015	10.6	11.6%
2016	12.0	13.2%
2017 [C]	12.8	6.7%
2018 [D]	13.4	4.7%
2019 [E]	13.9	3.7%
2020 [F,G]	13.1	-5.8%
	TOLL REVENUE (millions)	PERCENT CHANGE
2009 [A]	$0.6	
2010	$4.2	600.0%
2011	$5.1	21.4%
2012	$5.7	11.8%
2013 [B]	$7.7	35.4%
2014	$9.1	18.2%
2015	$10.4	14.3%
2016	$12.0	15.4%
2017 [C]	$13.0	8.3%
2018 [D]	$13.8	6.2%
2019 [E]	$14.6	5.8%
2020 [F,G]	$14.1	-3.4%

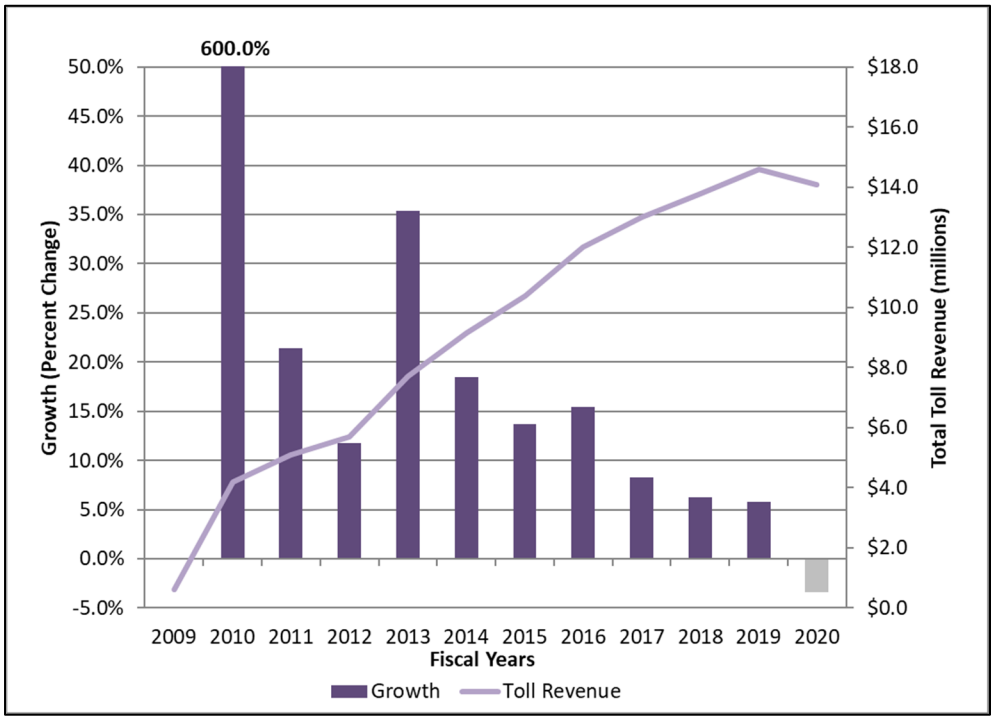
Notes:
A - Opened to electronic traffic on February 14, 2009 and all traffic on May 15, 2009.
B - Systemwide toll rate increase in July 2013. Implementation of cash and electronic toll rate differential. Extension of S.R. 414 to U.S. 441 opened in January 2013.
C - Effects from Hurricane Matthew in October 2016. Marden Rd. interchange opened in June 2017.
D - Effects from Hurricane Irma in September 2017.
E - Systemwide toll rate increase in July 2018.
F - Systemwide toll rate increase in July 2019.
G - Effects from Hurricane Dorian in September 2019 and first effects of COVID-19 pandemic began in March 2020.

Figure 7-2
S.R. 414 Historical Paid In-Lane Transactions and Annual Growth
FY 2009 – FY 2020



Source: CFX Statistical Report June 2020

Figure 7-3
S.R. 414 Historical Paid In-Lane Revenue and Annual Growth
FY 2009 – FY 2020



Source: CFX Statistical Report June 2020

7.2.2 ANNUAL PBP TRANSACTION AND REVENUE TRENDS

A history of annual PBP transactions and toll revenues on S.R. 414 from FY 2011 to FY 2020 are presented in **Table 3-2**. PBP transactions and toll revenues are recorded by toll location and accrued monthly by plaza group, however Table 3-2 shows the annual totals for S.R. 414 as reported at year end.

Table 7-2
S.R. 414 – Historical PBP Transactions and Revenue
FY 2011 – FY 2020

Fiscal Year	Transactions (millions)	Percent Change	Toll Revenues (millions)	Percent Change
	TRANSACTIONS (millions)			
2011	0.1	0.0%	$0.1	0.0%
2012	0.1	0.0%	$0.1	0.0%
2013	0.1	0.0%	$0.1	0.0%
2014	0.2	100.0%	$0.2	100.0%
2015	0.3	50.0%	$0.3	50.0%
2016	0.4	33.3%	$0.4	33.3%
2017	0.4	0.0%	$0.6	50.0%
2018	0.7	75.0%	$0.7	16.7%
2019	1.3	85.7%	$1.5	114.3%
2020	1.6	23.1%	$1.9	26.7%

Source: Unaudited data provided by CFX

PBP transactions have increased from 0.1 in FY 2011 to 1.6 million in FY 2020, while PBP revenues have increased from $0.1 to $1.9 million over the same period. In FY 2020, PBP transactions increased 23.1 percent and PBP revenues increased 26.7 percent over FY 2019. This increase in PBP transactions and revenues in FY 2020 contributed to the slower growth in paid in-lane transactions and revenues compared to FY 2019. The trends show that more customers are choosing the PBP method of payment. As previously mentioned, CFX temporarily suspended cash toll collection on all facilities from March 19, 2020 to May 31, 2020 in response to the COVID-19 pandemic. During this time, customers were able to pay via ETC or PBP. Growth in PBP transactions and revenues is expected to decline beginning in FY 2021 due to a new PBP toll rate adopted by the CFX Board that went into effect on July 1, 2020, at which time the PBP toll rate at all toll locations was increased to twice the ETC toll rate. Due to the new PBP toll rate implemented, it is anticipated that a portion of customers currently paying via PBP will switch to paying in the lane through ETC to avoid the higher toll rate.

7.2.3 MONTHLY PAID IN-LANE TRANSACTION SEASONAL VARIATION

In **Table 7-3**, monthly paid in-lane transactions are normalized to average number of paid in-lane transactions per day in each month. Using average number of paid in-lane transactions per day allows for an easy comparison of the variations in relative travel demand over the year. Normally, the seasonal pattern of usage changes slightly from year to year based on the number of weekdays in a given month. But in FY 2020, the normal patterns of seasonal traffic volumes were overshadowed by the impacts in travel demand from the COVID-19 pandemic. Therefore, the factors in Table 7-3 should not be relied on for typical monthly seasonal trends on S.R. 414.

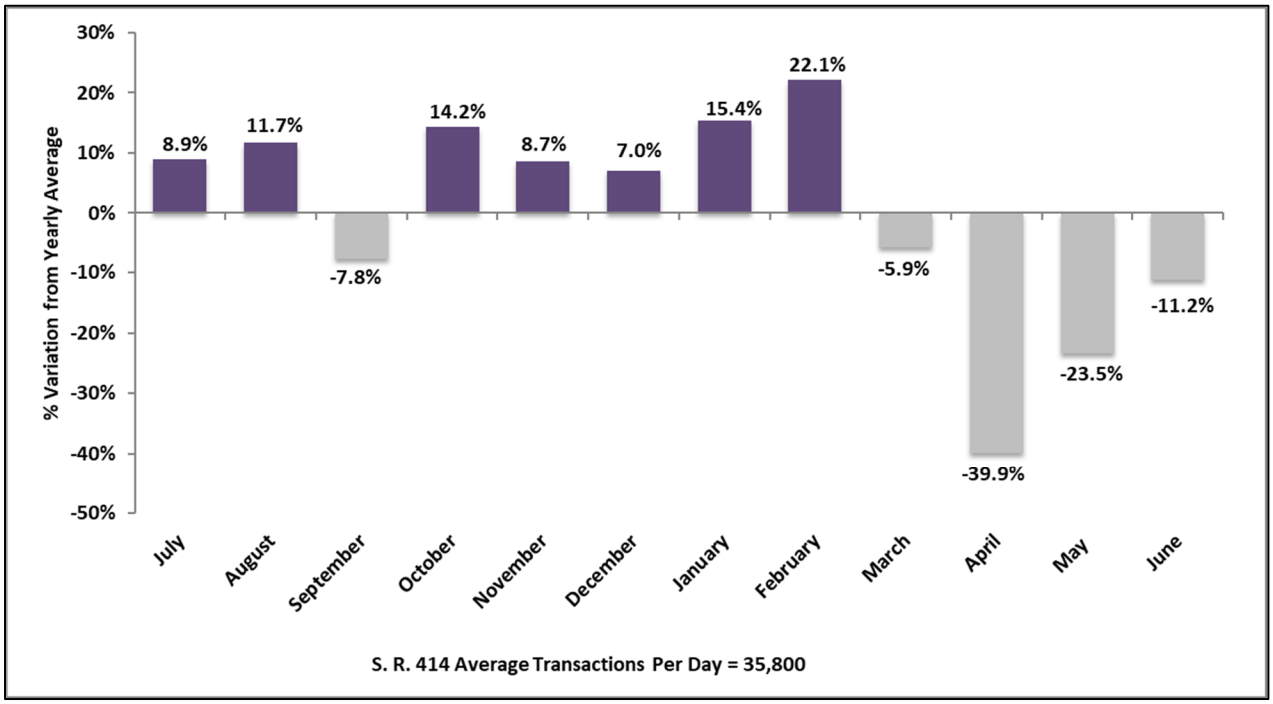
As presented, average paid in-lane transactions per day in FY 2020 on S.R. 414 ranged from a high of 43,700 in February 2020 to a low of 21,500 in April 2020. March through June transactions were negatively impacted by the COVID-19 pandemic. Like other CFX facilities, peak season is typically during spring months as there are more tourists in the area (possibly snowbirds) during the second half of the fiscal year. This data is presented in a graphical format in **Figure 7-4**. Each month's average paid in-lane transactions per day appear as a percentage of the average for the fiscal year. September 2019 paid in-lane transactions were negatively impacted by toll suspensions during Hurricane Dorian. February paid in-lane transactions were 22.1 percent above average and April paid in-lane transactions were 39.9 percent below average for the facility. February 2020 included an additional day of toll collection compared to February 2019 due to the leap year. April 2020 was the first full month with negative COVID-19 impacts.

Table 7-3
S.R. 414 – Monthly Seasonal Variation in Paid In-Lane Transactions
FY 2020

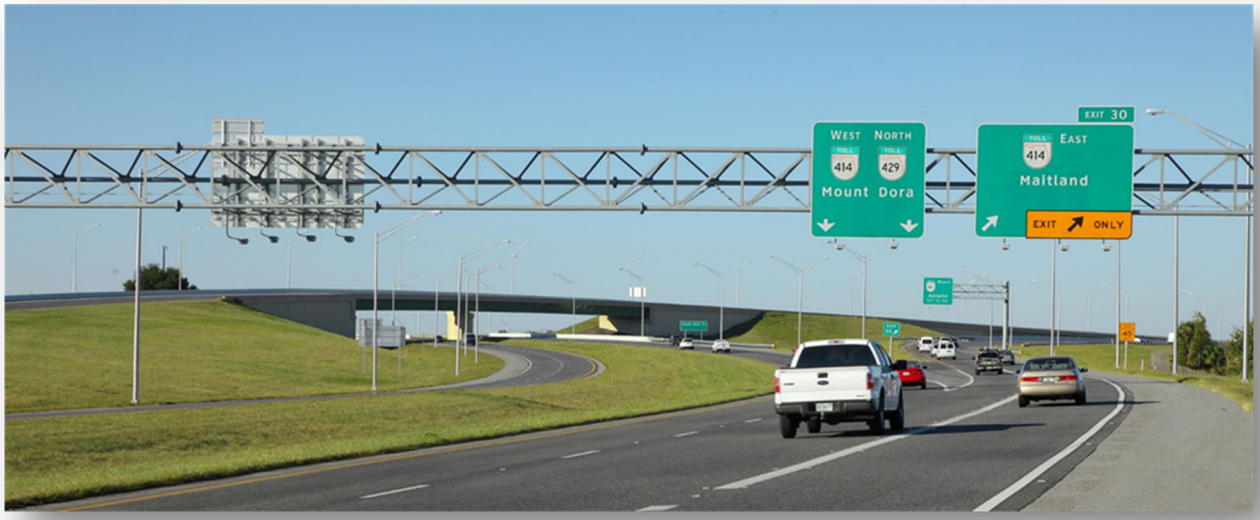
Month	Number of Days in Month	Paid In-Lane Transactions	Average Transactions/Day	Seasonal Factor
July	31	1,208,416	39,000	1.089
August	31	1,240,072	40,000	1.117
September	30	990,002	33,000	0.922
October	31	1,268,579	40,900	1.142
November	30	1,166,183	38,900	1.087
December	31	1,188,518	38,300	1.070
January	31	1,280,528	41,300	1.154
February	29	1,266,360	43,700	1.221
March	31	1,043,330	33,700	0.941
April	30	644,242	21,500	0.601
May	31	849,541	27,400	0.765
June	30	953,820	31,800	0.888
Average		***1,091,633***	***35,800***	***1.000***
Total Year	**366**	**13,099,591**		

Source: CFX Statistical Report June 2020

Figure 7-4
S.R. 414 Variation in Paid In-Lane Transactions Per Day, by Month
FY 2020



Source: CFX Statistical Report June 2020

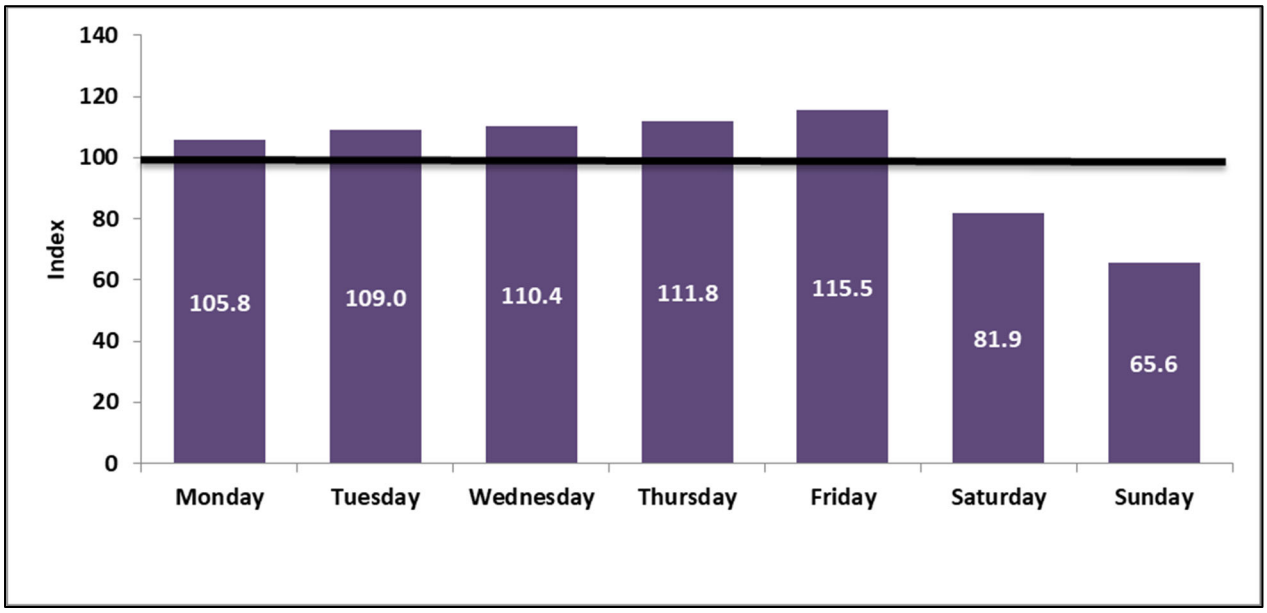


7.2.4 DAY-OF-WEEK TRANSACTION VARIATION

Figure 7-5 contains a comparison of transactions by day of week for FY 2020. This data is presented as an index, where the average day equals 100. An index value of 100 would indicate that a day's transactions were precisely the same as the facility average. A value of 120 would indicate a day that has 20 percent greater volume than the average. The data used for this analysis was for a typical week in March 2020, before the COVID-19 pandemic. This data includes transactions at mainline plazas only (no ramps).

As shown, weekday transactions on S.R. 414 grew over the course of the week. Transactions were highest on Fridays, with an index value of 115.5 (15.5 percent higher than the average day), volumes on Thursdays had an index value of 111.8, and volumes on Monday through Wednesday ranged from index values of 105.8 to 110.4. Transactions decline significantly on Saturdays and Sundays, which have index values of 81.9 and 65.6, or 18.1 and 34.4 percent lower than the average day. This is lower than other CFX facilities probably due to employers in Maitland Center at east end of S.R. 414 being closed on weekends.

Figure 7-5
S.R. 414 Variation in Transactions, by Day of Week
FY 2020

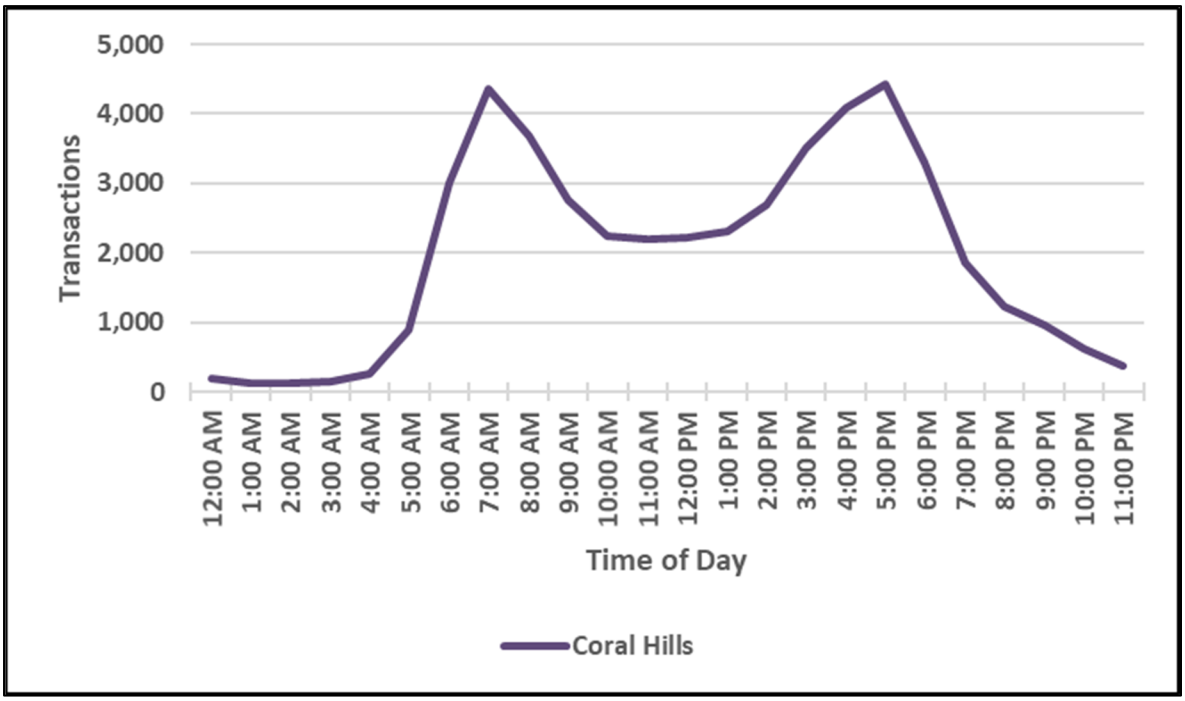


Source: Unaudited lane transaction data – March 2020

7.2.5 HOURLY TRAFFIC DISTRIBUTION

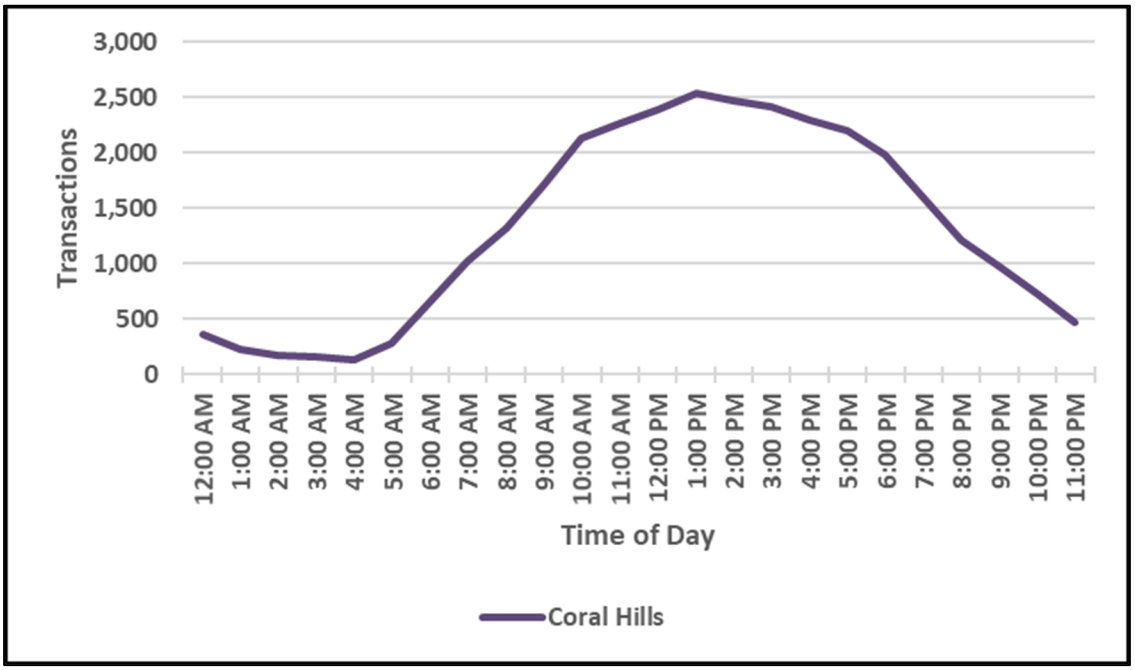
The hourly distribution of traffic includes information on the usage characteristics of travel on the facility. The hourly distributions represent counts taken during a typical week at the mainline plaza in the month of March, before the COVID-19 pandemic. The typical weekday distribution is shown in **Figure 7-6** and the weekend distribution is shown in **Figure 7-7**. The figures contain the sum of traffic volumes in both directions. On weekdays, travel demand at the Coral Hills plaza is bimodal, with both morning and evening peak hours. Traffic volumes in the evening peak hours are only slightly higher than in the morning peak hours. The highest peak hour volumes during the week were 4,400 per hour beginning at 5:00 P.M. On weekends, traffic volumes are lower and unimodal in shape. There is no clear morning or evening peak periods, indicating that many customers use the facility for non-work trip purposes during the middle of the weekend day. This weekend pattern is typical of the weekend usage of other CFX facilities.

Figure 7-6
S.R. 414 Hourly Traffic Variation (Weekday)
FY 2020 (March)



Source: Unaudited lane traffic data – March 2020

Figure 7-7
S.R. 414 Hourly Traffic Variation (Weekend)
FY 2020 (March)



Source: Unaudited lane traffic data – March 2020

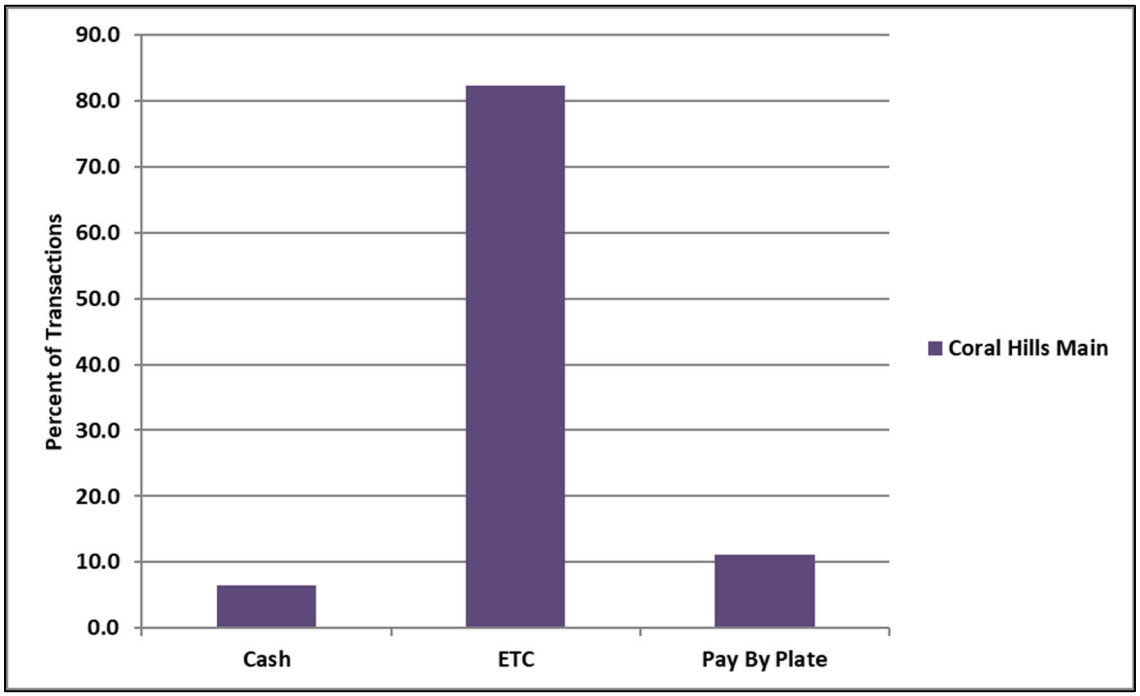
7.2.6 TRANSACTIONS AND REVENUE BY PAYMENT TYPE

The distributions of transactions and revenue by payment type for the Coral Hills Main plaza group during FY 2020 are presented in **Figure 7-8** and **Figure 7-9**. Payment types can be classified in one of three ways: cash, ETC, and PBP. As defined in Chapter 1 of this report, paid in-lane transactions and revenue include cash and ETC payments made when a customer travels through a CFX toll location. The remaining transactions and revenue are classified as unpaid in-lane, which includes PBP and a small portion of non-revenue transactions. PBP transactions and revenues are estimated monthly based on an accrual rate of 60 percent of all unpaid in-lane transactions and revenues. It is important to note that the data presented in the following two figures is based on unaudited transaction and toll revenue data and may not match the audited data shown in other tables and figures in this chapter. It is also important to note that cash toll collection at all toll plazas was suspended from March 19, 2020 to May 31, 2020 due to COVID-19 safety protocols.

As shown in Figure 7-8, the share of ETC transactions at the Coral Hills Main plaza group accounted for 82.4 percent, cash transactions accounted for 6.5 percent, and the remaining 11.1 percent were PBP transactions.

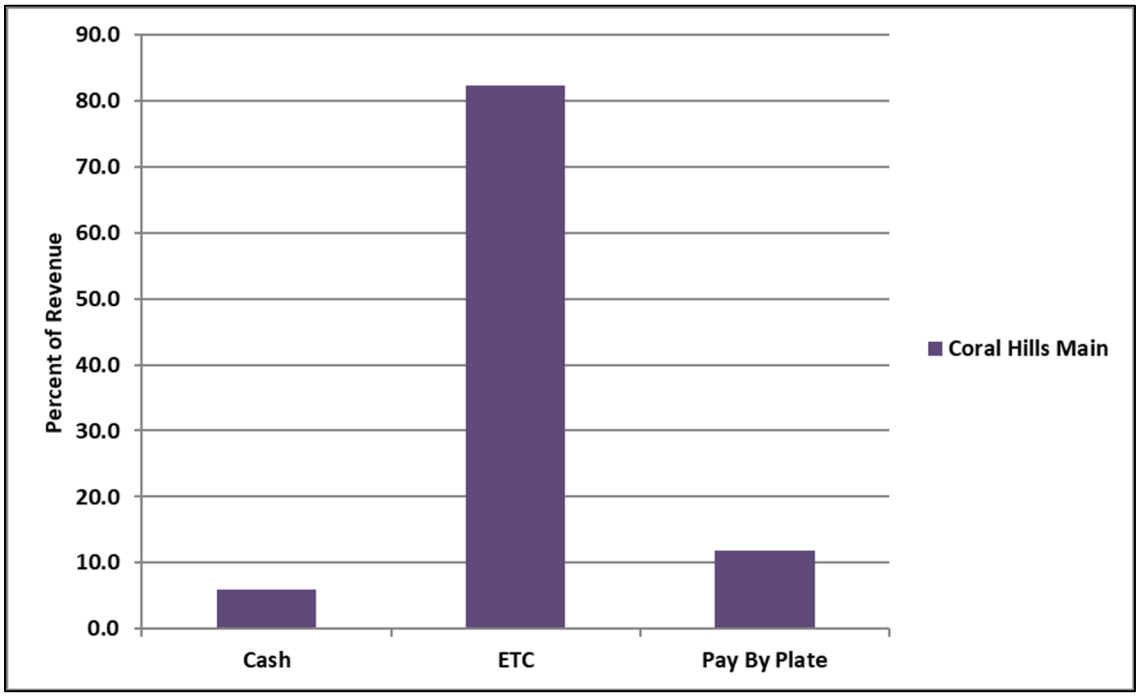
As shown in Figure 7-9, the share of toll revenues by payment type are comparable to the share in transactions. The share of ETC toll revenues accounted for 82.3 percent of toll revenues at the Coral Hills Main plaza group, cash toll revenues accounted for 5.9 percent, and the remaining 11.8 percent were PBP toll revenues.

Figure 7-8
S.R. 414 Percent of Transactions by Payment Type
FY 2020



Source: Unaudited transaction data provided by CFX

Figure 7-9
S.R. 414 Percent of Revenue by Payment Type
FY 2020

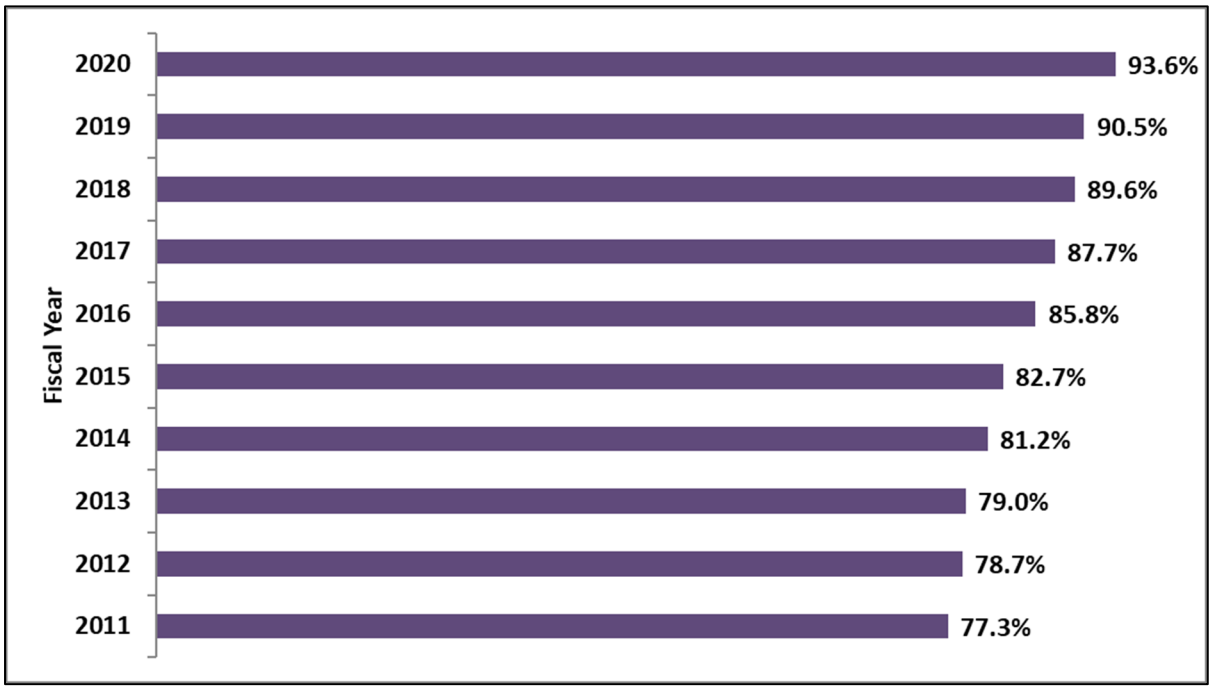


Source: Unaudited toll revenue data provided by CFX

7.3 ETC Usage

The percent of paid in-lane revenues generated from ETC over the past ten fiscal years on S.R. 414 is shown in **Figure 7-10**. PBP revenues are not included. ETC revenues were 77.3 percent during FY 2011. By the end of FY 2020, ETC revenues have reached 93.6 percent of facility paid in-lane revenues. The data below differs from Figure 7-9 because it only includes the annual comparison of paid in-lane revenue and not all revenue types. ETC usage is still expected to increase as customers shift to ETC to take advantage of the lower ETC toll rate and convenience of paying tolls electronically, especially with implementation of PBP toll rates that are now twice the ETC toll rate as of July 2020 (FY 2021). As well, having an E-PASS allows customers to qualify for usage discount programs, including the I-4 Commuter Discount Program, implemented in July 2015, which offers discounts for transactions on S.R. 417, S.R. 429 and S.R. 414 during construction activities on I-4.

Figure 7-10
S.R. 414 Percent of Paid In-Lane Revenue from Electronic Toll Collection
FY 2011 – FY 2020



Source: CFX Statistical Report June 2020

7.4 Forecasted Transactions and Toll Revenues

Based on the recently adopted "Customer First Toll Policy," toll rate adjustments (indexed tolls) were applied to the T&R forecasts every year based on the net change in CPI for the prior year, which equated to 1.45 percent in FY 2021. Because the change in CPI was lower than the 1.5 percent floor, CDM Smith used 1.5 percent to adjust the FY 2021 toll amounts. CDM Smith used the floor of 1.5 percent per year every year thereafter in the forecast period.

Future transportation improvements that could influence the T&R forecasts for S.R. 414, are similar to those that could influence S.R. 429 and include the projects listed in **Table 7-4**, assumed to be completed in each horizon year.

In addition to the S.R. 429/Wekiva Parkway, the major improvements that do not directly connect to S.R. 414 but influence traffic growth on the facility include the I-4 Ultimate project, S.R. 434/Forest City Road from Edgewater Drive to S.R. 414/Maitland Boulevard, and S.R. 414/Maitland Boulevard from Maitland Avenue to I-4. Improvements at S.R. 451 and U.S. 441 are important to T&R estimates in the early years. This feeder road improvement, completed in 2013, extends Vick Road to U.S 441 and the interchange with S.R. 451, to provide a direct connection onto the expressway system.

Table 7-4
S.R. 414 - Key Transportation Improvements

Facility	From	To	Year	Jurisdiction	Improvement
Interstate 4	SR 434	Kirkman Rd	2025	FDOT	Widen to 10 lanes
SR 429	SR 50	SR 414	2025	CFX	Widen to 6-Lanes
SR 429	CR 535	SR 50	2025	CFX	Widen to 6-Lanes
Wekiva Pkwy	Mount Plymouth Rd	Interstate 4	2025	FDOT	New 4 lane expressway
SR 434/Forest City Rd	Edgewater Drive	Orange County Line	2025	FDOT	Widen to 6-lanes
SR 414/Maitland Blvd	Interstate 4	Maitland Ave	2025	FDOT	Widen to 6-lanes
Kennedy Blvd	Wymore Rd	Forest City Rd (SR 434)	2025	Orange Co	Widen to 4-lanes
SR 414 Direct Connect	US 441	SR 434/Forest City Rd	2025	FDOT/CFX	New 4-lane expressway
SR 434	SR 436	Montgomery Rd	2035	FDOT	Widen to 6-lanes
Pine Hills Road Ext	Beggs Rd	US 441	2035	Orange Co	New 4-lane road
Edgewater Dr	Clarcona Rd	Pine Hills Rd	2035	Orange Co	Widen to 4-lanes

Historical and projected transactions and toll revenues for S.R. 414 are summarized in **Table 7-5** and **Table 7-6**. The tables are divided into paid in-lane transactions and revenue and PBP transactions and revenue. Paid in-lane transactions and revenue by plaza group include ETC and cash collection.

The paid in-lane transactions on S.R. 414 are expected to grow 3.8 percent per year through FY 2030 and then lower rates through the end of the forecast period. PBP transactions are forecasted to decline an average of 2.8 percent per year through FY 2030 and then increase through the forecast period. Total transactions on S.R. 414 are projected to increase during the forecast period from the actual of 14.7 million in FY 2020 to 25.1 million in FY 2050. The paid in-lane revenues on S.R. 414 are projected to increase over the forecast period, from the FY 2020 actual of $14.1 million to $37.5 million in FY 2050. PBP revenues are projected to increase from $1.9 million in FY 2020 to $4.5 million in FY 2050. Total revenues on S.R. 414 are projected to increase during the forecast period from the actual $16.0 million in FY 2020 to $42.0 million in FY 2050. Transactions and revenues are forecasted to increase an average of 3.3 and 5.1 percent per year through FY 2030, 1.3 and 2.6 percent per year from FY 2030 to FY 2040, and 0.9 and 2.2 percent per year from FY 2040 to FY 2050, respectively.

Table 7-5
S.R. 414 Plaza Group – Transaction Projections (Millions)
FY 2021 – FY 2050

Fiscal Year		Coral Hills Main	Paid In-Lane	PBP	Total	Percent Annual Change
2010	Actual	5.3	5.3	0.0	5.3	
2011		6.5	6.5	0.1	6.6	24.5%
2012		7.3	7.3	0.1	7.4	12.1%
2013[A]		8.3	8.3	0.1	8.4	13.5%
2014		9.5	9.5	0.2	9.7	15.5%
2015		10.6	10.6	0.3	10.9	12.4%
2016		12.0	12.0	0.4	12.4	13.8%
2017[B]		12.8	12.8	0.4	13.2	6.5%
2018[C,D]		13.4	13.4	0.7	14.1	6.8%
2019[E]		13.9	13.9	1.3	15.2	7.8%
2020[F]		13.1	13.1	1.6	14.7	-3.3%
2021[G]	Forecast	13.4	13.4	1.6	15.0	2.0%
2022[H]		15.1	15.1	1.3	16.4	9.3%
2023		16.4	16.4	1.1	17.5	6.7%
2024		17.1	17.1	1.2	18.3	4.6%
2025		17.5	17.5	1.2	18.7	2.2%
2026		17.8	17.8	1.2	19.0	1.6%
2027		18.1	18.1	1.3	19.4	2.1%
2028		18.4	18.4	1.3	19.7	1.5%
2029		18.8	18.8	1.2	20.0	1.5%
2030		19.1	19.1	1.2	20.3	1.5%
2031		19.3	19.3	1.3	20.6	1.5%
2032		19.6	19.6	1.3	20.9	1.5%
2033		19.9	19.9	1.3	21.2	1.4%
2034		20.1	20.1	1.3	21.4	0.9%
2035		20.4	20.4	1.4	21.8	1.9%
2036		20.6	20.6	1.4	22.0	0.9%
2037		20.8	20.8	1.4	22.2	0.9%
2038		21.1	21.1	1.4	22.5	1.4%
2039		21.3	21.3	1.4	22.7	0.9%
2040		21.5	21.5	1.5	23.0	1.3%
2041		21.8	21.8	1.5	23.3	1.3%
2042		22.0	22.0	1.5	23.5	0.9%
2043		22.2	22.2	1.5	23.7	0.9%
2044		22.4	22.4	1.5	23.9	0.8%
2045		22.6	22.6	1.6	24.2	1.3%
2046		22.8	22.8	1.6	24.4	0.8%
2047		23.0	23.0	1.6	24.6	0.8%
2048		23.2	23.2	1.6	24.8	0.8%
2049		23.3	23.3	1.6	24.9	0.4%
2050		23.5	23.5	1.6	25.1	0.8%

Fiscal Year	Compound Annual Average Growth Rate (CAAGR)			
2010 - 2020	9.5%	9.5%		10.7%
2020 - 2030	3.8%	3.8%	-2.8%	3.3%
2030 - 2040	1.2%	1.2%	2.3%	1.3%
2040 - 2050	0.9%	0.9%	0.6%	0.9%

Notes:
Actual transaction data provided by CFX from Monthly Statistical Reports.
A - Systemw ide toll rate increase.
B - Effects from Hurricane Matthew in October 2016.
C - Effects from Hurricane Irma in September 2017.
D - Wekiva Parkw ay opening in FY 2018.
E - First year of implementation of "Customer First" toll rate policy.
F - Effects from Hurricane Dorian in September 2019 and first effects of COVID-19 pandemic began in March 2020.
G - New toll rates for PBP customers, set at 2.0 times the ETC rate.
H - Completion of I-4 Ultimate project.

Table 7-6
S.R. 414 Plaza Group – Toll Revenue Projections (Millions)
FY 2021 – FY 2050

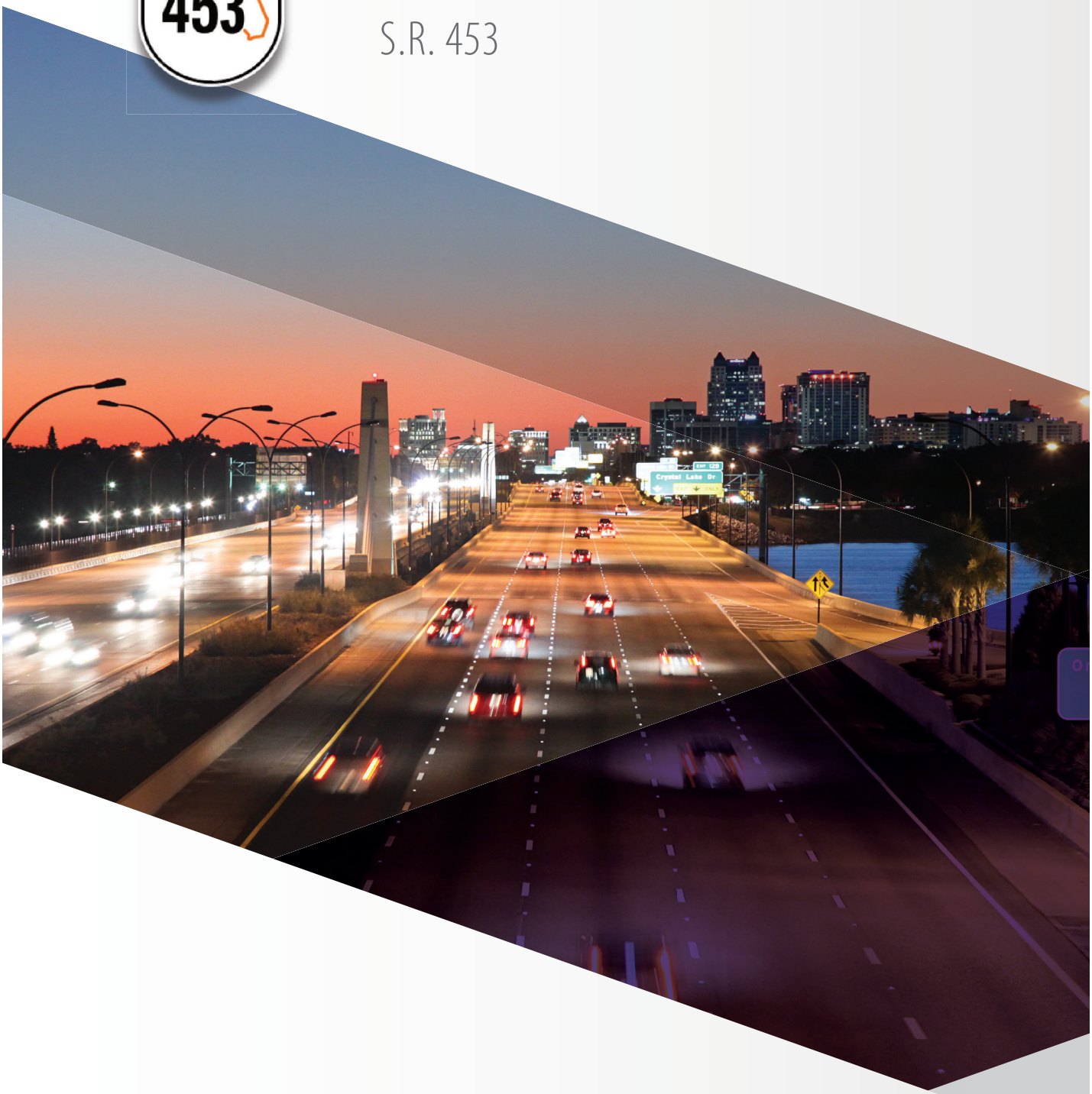
Fiscal Year		Coral Hills Main	Paid In-Lane	PBP	Total	Percent Annual Change
2010	Actual	$4.2	$4.2	$0.0	$4.2	
2011		$5.1	$5.1	$0.1	$5.2	23.8%
2012		$5.7	$5.7	$0.1	$5.8	11.5%
2013[A]		$7.7	$7.7	$0.1	$7.8	34.5%
2014		$9.1	$9.1	$0.2	$9.3	19.2%
2015		$10.4	$10.4	$0.3	$10.7	15.1%
2016		$12.0	$12.0	$0.4	$12.4	15.9%
2017[B]		$13.0	$13.0	$0.6	$13.6	9.7%
2018[C,D]		$13.8	$13.8	$0.7	$14.5	6.6%
2019[E]		$14.6	$14.6	$1.5	$16.1	11.0%
2020[F]		$14.1	$14.1	$1.9	$16.0	-0.6%
2021[G]	Forecast	$14.7	$14.7	$3.1	$17.8	11.3%
2022[H]		$16.8	$16.8	$2.7	$19.5	9.6%
2023		$18.6	$18.6	$2.2	$20.8	6.7%
2024		$19.6	$19.6	$2.4	$22.0	5.8%
2025		$20.3	$20.3	$2.4	$22.7	3.2%
2026		$20.9	$20.9	$2.5	$23.4	3.1%
2027		$21.5	$21.5	$2.6	$24.1	3.0%
2028		$22.1	$22.1	$2.7	$24.8	2.9%
2029		$22.8	$22.8	$2.8	$25.6	3.2%
2030		$23.4	$23.4	$2.8	$26.2	2.3%
2031		$24.1	$24.1	$2.9	$27.0	3.1%
2032		$24.8	$24.8	$3.0	$27.8	3.0%
2033		$25.4	$25.4	$3.1	$28.5	2.5%
2034		$26.1	$26.1	$3.2	$29.3	2.8%
2035		$26.7	$26.7	$3.2	$29.9	2.0%
2036		$27.4	$27.4	$3.3	$30.7	2.7%
2037		$28.0	$28.0	$3.4	$31.4	2.3%
2038		$28.7	$28.7	$3.5	$32.2	2.5%
2039		$29.5	$29.5	$3.5	$33.0	2.5%
2040		$30.2	$30.2	$3.6	$33.8	2.4%
2041		$30.9	$30.9	$3.7	$34.6	2.4%
2042		$31.6	$31.6	$3.8	$35.4	2.3%
2043		$32.3	$32.3	$3.8	$36.1	2.0%
2044		$33.0	$33.0	$3.9	$36.9	2.2%
2045		$33.7	$33.7	$4.0	$37.7	2.2%
2046		$34.5	$34.5	$4.1	$38.6	2.4%
2047		$35.3	$35.3	$4.2	$39.5	2.3%
2048		$36.0	$36.0	$4.3	$40.3	2.0%
2049		$36.7	$36.7	$4.4	$41.1	2.0%
2050		$37.5	$37.5	$4.5	$42.0	2.2%

Fiscal Year	Compound Annual Average Growth Rate (CAAGR)			
2010 - 2020	12.9%	12.9%		14.3%
2020 - 2030	5.2%	5.2%	4.0%	5.1%
2030 - 2040	2.6%	2.6%	2.5%	2.6%
2040 - 2050	2.2%	2.2%	2.3%	2.2%

Notes:
Actual transaction data provided by CFX from Monthly Statistical Reports.
A - Systemwide toll rate increase.
B - Effects from Hurricane Matthew in October 2016.
C - Effects from Hurricane Irma in September 2017.
D - Wekiva Parkway opening in FY 2018.
F - Effects from Hurricane Dorian in September 2019 and first effects of COVID-19 pandemic began in March 2020.
G - New toll rates for PBP customers, set at 2.0 times the ETC rate.
H - Completion of I-4 Ultimate project.

CHAPTER 8

S.R. 453



S.R. 453

8.1 Facility Description

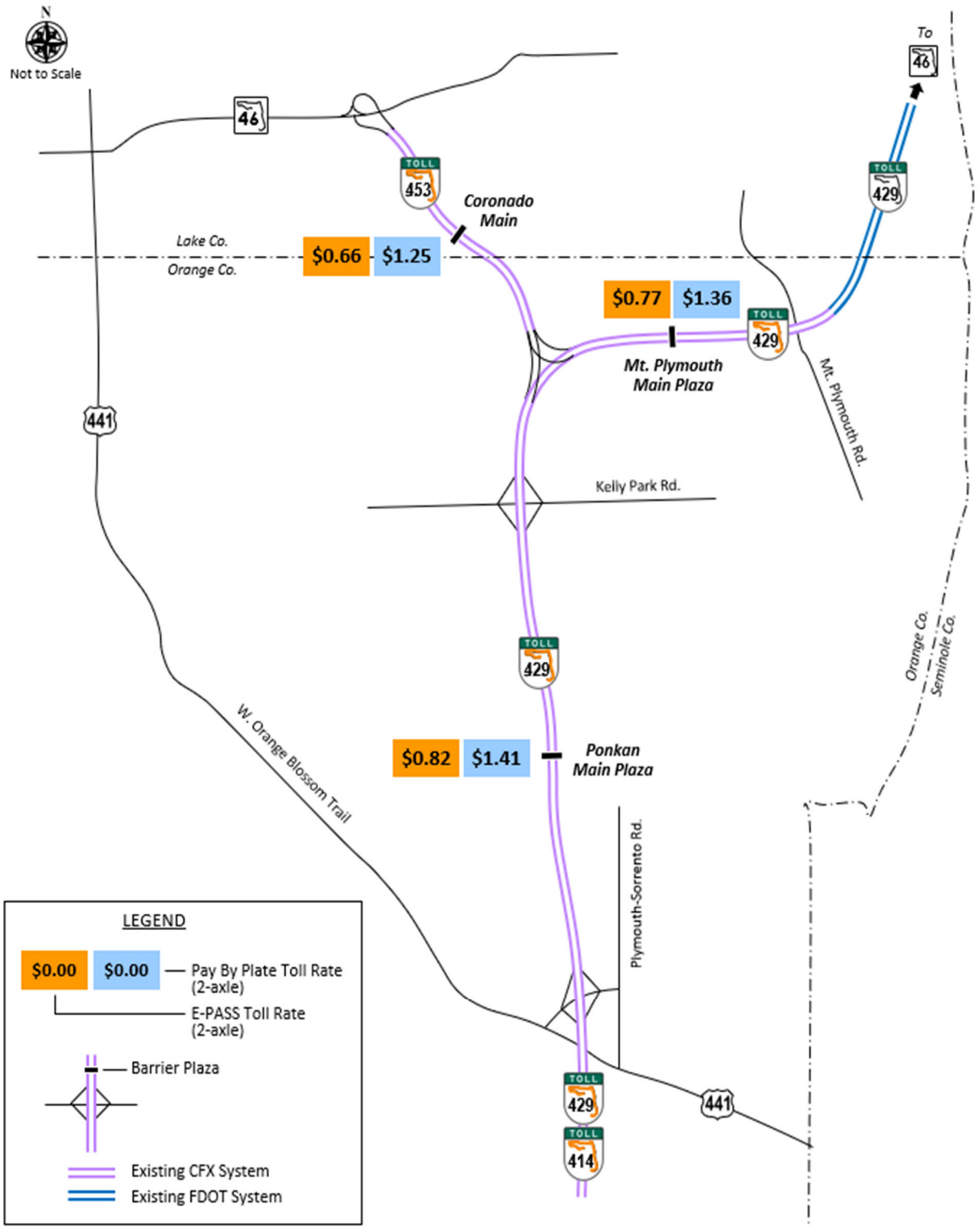
S.R. 453 is a 2.0-mile portion of the CFX System locally known as the Wekiva Parkway, which is a new 27-mile expressway that extends S.R. 429 into northwest Orange, northeast Lake, and west Seminole counties. From a CFX vision in the *Year 2000 Long Range Expressway Plan*, completed in 1983, the CFX portion of the Wekiva Parkway is now finished, with the final section opened on April 1, 2018. The FDOT portions of the project are still under construction and are expected to be fully open in 2022. This long-awaited expressway completes a portion of the Western Beltway around the Orlando metropolitan region.

S.R. 453 provides a connection from the Wekiva Parkway northwest to Mount Dora via S.R. 46 in Lake County. S.R. 453 has one mainline toll plaza, the Coronado Main plaza, which opened on April 1, 2018 (FY 2018). A map that includes the CFX portion of the Wekiva Parkway (S.R. 453) with the FY 2020 toll rates for the plaza is shown in **Figure 8-1**.

S.R. 453 is a spur or extension of S.R. 429, locally known as "Mount Dora Connector," is a new S.R. 429 extension that connects to S.R. 46. S.R. 453 runs about 2.2 miles from the Wekiva Parkway, across the Lake County Line to connect to S.R. 46.

Toll collection on the Wekiva Parkway utilizes an all-electronic toll (AET) collection system, i.e., customers are unable to pay cash on the roadway as there are no toll booths, only toll gantries. On the CFX portion of the Wekiva Parkway, customers either pay with E-PASS or another interoperable transponder or through the PBP video billing process. Video billing customers pay the PBP toll rate, which is $0.59 higher than the ETC rate per transaction and is designed to cover the administrative cost of video billing.

Figure 8-1
S.R. 453 Facilities and Toll Rates



8.2 Historical Transactions and Toll Revenues

As defined in Chapter 1, CFX transactions and toll revenues are classified as either Paid In-Lane (ETC and cash) or Unpaid In-Lane (PBP and non-revenue). Total transactions are the sum of paid in-lane and unpaid in-lane transactions. Total revenue is the sum of paid in-lane revenue and the revenue collected through PBP, estimated as an accrued amount. The following section includes a breakdown of toll-paying transactions and toll revenues by paid in-lane and PBP.

8.2.1 ANNUAL PAID IN-LANE TRANSACTION AND REVENUE TRENDS

A history of S.R. 453 annual paid in-lane transactions for the Coronado Main plaza group through FY 2020 is presented in the top half of **Table 8-1**. Annual historical paid in-lane toll revenues are also summarized and totaled in the bottom half of the table. The facility data and annual growth are also presented visually in **Figure 8-2** and **Figure 8-3**. This table and figures do not include PBP transactions and revenues, only those that are paid in-lane. For this reason, the information presented in this section may differ slightly from the data presented in the FY 2020 Comprehensive Annual Financial Report (CAFR) and other information in this report.

S.R. 453 opened on April 1, 2018 (FY 2018), for a total of three months in FY 2018. FY 2019 was the first full year of toll collection. Total paid in-lane transactions on S.R. 453 at the Coronado Main plaza in FY 2019 were 2.2 million and paid in-lane toll revenues during the same period were $1.3 million.

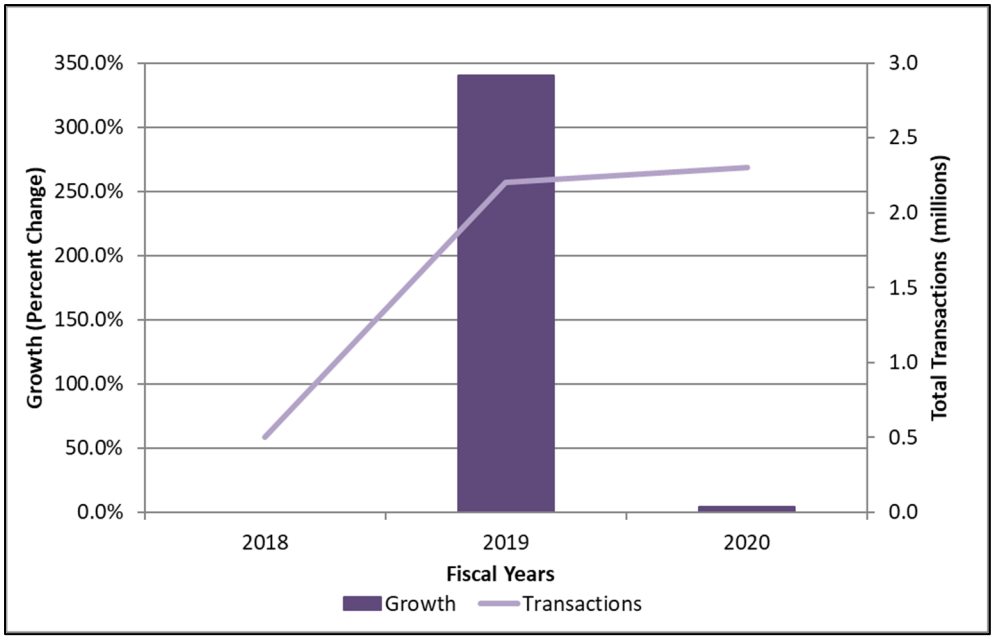
As shown, total paid in-lane transactions on S.R. 453 in FY 2020 increased by 0.1 million, or 4.5 percent, compared to FY 2019. Paid in-lane revenues experienced an increase of 23.1 percent during the same period. FY 2020 paid in-lane transactions and revenues were negatively impacted by the effects of the COVID-19 pandemic beginning in March 2020, but also experienced ramp-up, which was greater than the COVID-19 impacts. September 2019 transactions and revenues were also negatively impacted by toll suspensions during Hurricane Dorian.

Table 8-1
S.R. 453 Plaza Group – Historical Paid In-Lane Transactions and Revenue
FY 2018 – FY 2020

Fiscal Year	Coronado Main	
	TRANSACTIONS (millions)	PERCENT CHANGE
2018[A]	0.5	
2019	2.2	340.0%
2020[B,C]	2.3	4.5%
	TOLL REVENUE (millions)	PERCENT CHANGE
2018[A]	$0.3	
2019	$1.3	333.3%
2020[B,C]	$1.6	23.1%

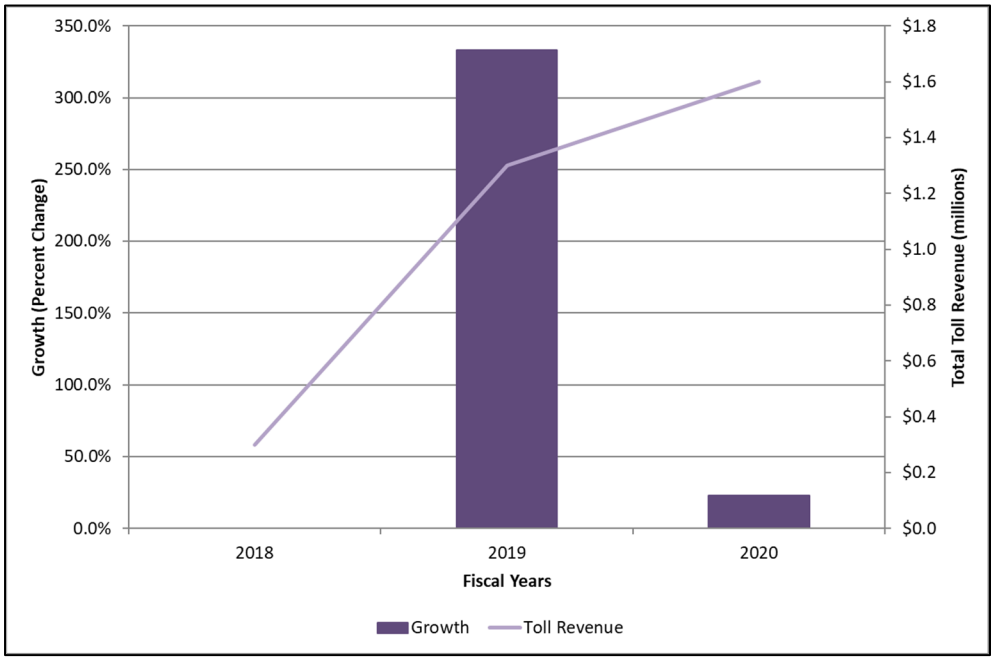
Notes:
A - Coronado Main plaza opened on April 1, 2018.
B - Systemwide toll rate increase in July 2019.
C - Effects from Hurricane Dorian in September 2019 and first effects of COVID-19 pandemic began in March 2020.

Figure 8-2
S.R. 453 Historical Paid In-Lane Transactions and Annual Growth
FY 2018 – FY 2020



Source: CFX Statistical Report June 2020

Figure 8-3
S.R. 453 Historical Paid In-Lane Revenue and Annual Growth
FY 2018 – FY 2020



Source: CFX Statistical Report June 2020

8.2.2 ANNUAL PBP TRANSACTION AND REVENUE TRENDS

A history of annual PBP transactions and toll revenues on S.R. 453 from FY 2018 to FY 2020 are presented in **Table 8-2**. PBP transactions and toll revenues are recorded by toll location and accrued monthly by plaza group, however Table 8-2 shows the annual totals for S.R. 453 as reported at year end.

Table 8-2
S.R. 453 – Historical PBP Transactions and Revenue
FY 2018 – FY 2020

Fiscal Year	Transactions (millions)	Percent Change	Toll Revenues (millions)	Percent Change
	TRANSACTIONS (millions)			
2018	0.0		$0.0	
2019	0.2	0.0%	$0.2	0.0%
2020	0.3	50.0%	$0.3	50.0%

Source: Unaudited data provided by CFX

PBP transactions have increased to 0.3 million in FY 2020, while PBP revenues have also increased to $0.3 million over the same period. The facility still has a small amount of PBP transactions and revenues due to its recent opening in FY 2018 and FY 2019 being the first full year of toll collection. Growth in PBP transactions and revenues is expected to flatten beginning in FY 2021 due to a new PBP toll rate adopted by the CFX Board that went into effect on July 1, 2020, at which time the PBP toll rate at all toll locations was increased to twice the ETC toll rate. Due to the new PBP toll rate implemented, it is anticipated that a portion of customers currently paying via PBP will switch to paying in the lane through ETC to avoid the higher toll rate.

8.2.3 MONTHLY PAID IN-LANE TRANSACTION SEASONAL VARIATION

In **Table 8-3**, monthly paid in-lane transactions are normalized to average number of paid in-lane transactions per day in each month. Using average number of paid in-lane transactions per day allows for an easy comparison of the variations in relative travel demand over the year. Normally, the seasonal pattern of usage changes slightly from year to year based on the number of weekdays in a given month. But in FY 2020, the normal pattern of seasonal variation in traffic was overshadowed by the impacts in travel demand from the COVID-19 pandemic. Therefore, the factors in Table 8-3 should not be relied on for typical monthly seasonal trends on S.R. 453.

As presented, average paid in-lane transactions per day in FY 2020 on S.R. 453 ranged from a high of 7,800 in February 2020 to a low of 3,900 in April 2020. March through June transactions were negatively impacted by the COVID-19 pandemic. Like other CFX facilities, peak season is typically during spring months as there are more tourists in the area (possibly snowbirds) during the second half of the fiscal year. This data is presented in a graphical format in **Figure 8-4**. Each month's average paid in-lane transactions per day appear as a percentage of the average for the fiscal year. September 2019 paid in-lane transactions were negatively impacted by toll suspensions during Hurricane Dorian. February paid in-lane transactions were 25.8 percent

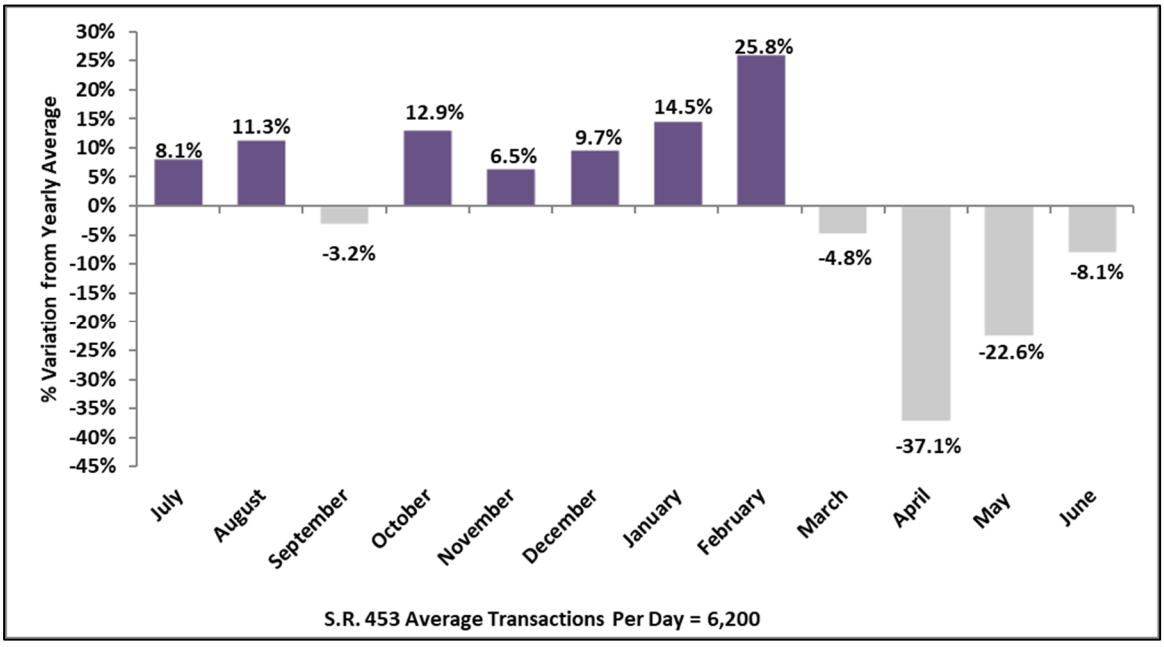
above average and April paid in-lane transactions were 37.1 percent below average for the facility. February 2020 included an additional day of toll collection compared to February 2019 due to the leap year. April 2020 was the first full month with negative COVID-19 impacts.

Table 8-3
S.R. 453 – Monthly Seasonal Variation in Paid In-Lane Transactions
FY 2020

Month	Days in Month	Transactions	Transactions/Day	Factor
July	31	207,110	6,700	1.081
August	31	212,534	6,900	1.113
September	30	179,009	6,000	0.968
October	31	217,414	7,000	1.129
November	30	197,748	6,600	1.065
December	31	210,120	6,800	1.097
January	31	218,659	7,100	1.145
February	29	225,573	7,800	1.258
March	31	184,248	5,900	0.952
April	30	116,454	3,900	0.629
May	31	148,018	4,800	0.774
June	30	170,180	5,700	0.919
Average		***762,356***	***6,200***	***1.000***
Total Year	**366**	**2,287,067**		

Source: CFX Statistical Report June 2020

Figure 8-4
S.R. 453 Variation in Paid In-Lane Transactions Per Day, By Month
FY 2020



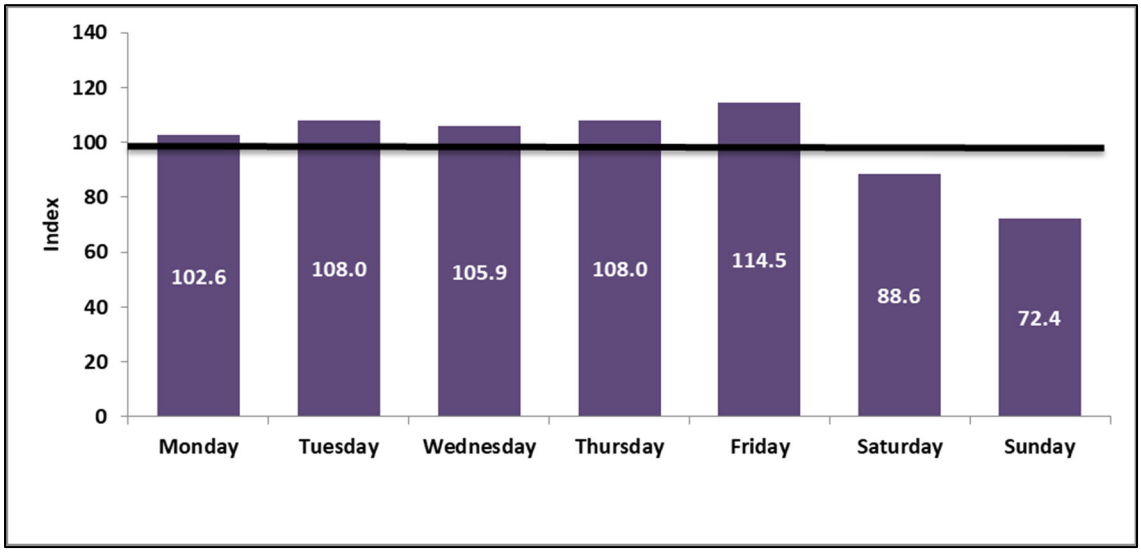
Source: CFX Statistical Report June 2020

8.2.4 DAY-OF-WEEK TRANSACTION VARIATION

Figure 8-5 contains a comparison of transactions by day of the week for FY 2020. This data is presented as an index, where the average day equals 100. An index value of 100 would indicate that the day's transactions were precisely the same volume as the facility average. A value of 120 would indicate a day that has 20 percent greater volume than the average. The data used for this analysis was for a typical week in March 2020, before the COVID-19 pandemic. The data includes transactions at mainline plazas only (no ramps).

FY 2020 weekday transactions on S.R. 453 fluctuated over the course of the five-day work week. Transactions were highest on Fridays, with an index value of 114.5 (14.5 percent higher than the average day), volumes on Monday through Thursday ranged from index values of 102.6 to 108.0. Saturday volumes were slightly lower than weekday volumes with an index value of 88.6, which is still high for a weekend day. Transactions decline on Sunday, which has an index value of 72.4, or 27.6 percent lower than the average day.

Figure 8-5
S.R. 453 Variation in Transactions, by Day of Week
FY 2020



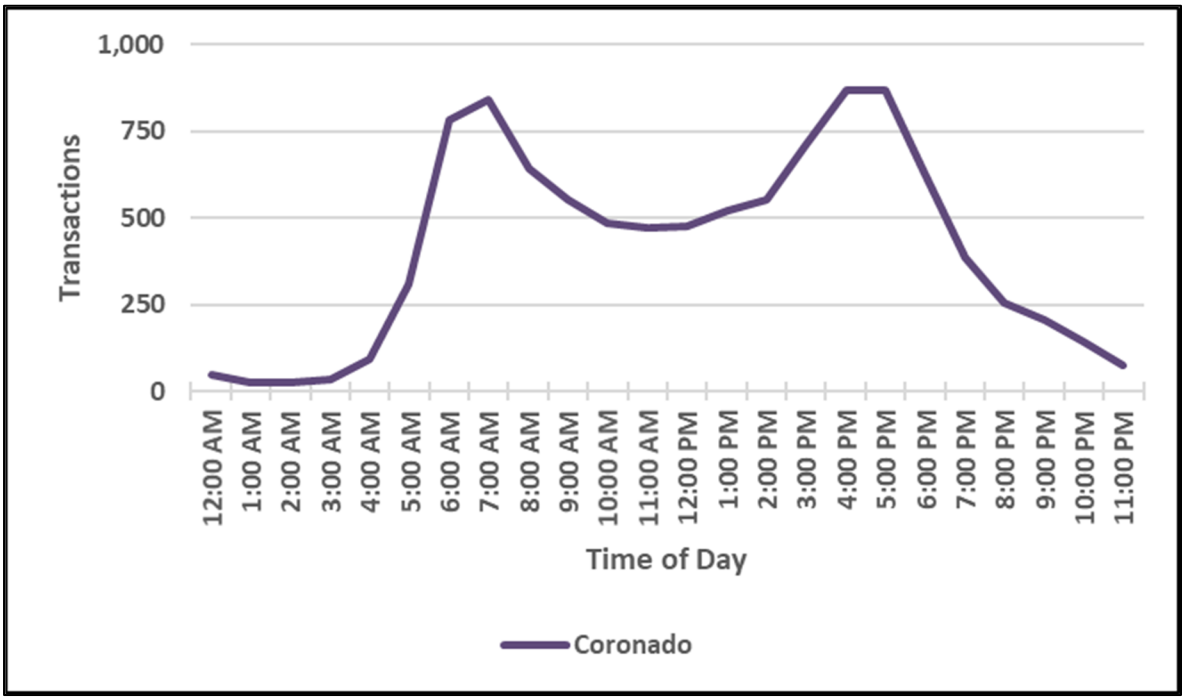
Source: Unaudited lane transaction data – March 2020

8.2.5 HOURLY TRAFFIC DISTRIBUTION

The hourly distribution of traffic includes information on the usage characteristics of the facility. The hourly distributions represent counts taken during a typical week at the mainline toll plaza in the month of March 2020, before the COVID-19 pandemic. The typical weekday distribution is shown in **Figure 8-6** and the weekend distribution is shown in **Figure 8-7**. The figures contain the sum of traffic volumes in both directions.

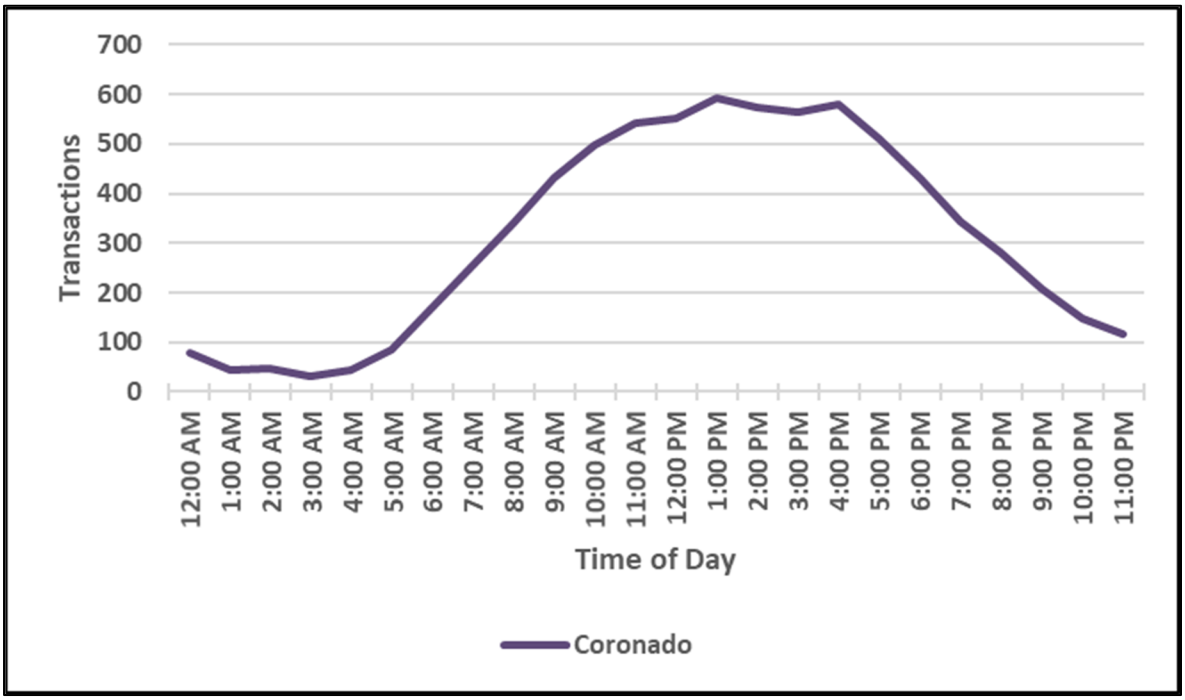
On weekdays on S.R. 453, demand for travel is bimodal, with both morning and evening peak hours. The Coronado mainline plaza experiences slightly higher peak hour volumes in the evening than in the morning. The highest peak hour volumes during the week were 870 per hour beginning at 4:00 p.m. On weekends, the distribution of traffic over the day is unimodal, with uniformly high volumes from 10:00 a.m. through 5:00 p.m.

Figure 8-6
S.R. 453 Hourly Traffic Variation (Weekday)
FY 2020 (March)



Source: Unaudited lane traffic data – March 2020

Figure 8-7
S.R. 453 Hourly Traffic Variation (Weekend)
FY 2020 (March)



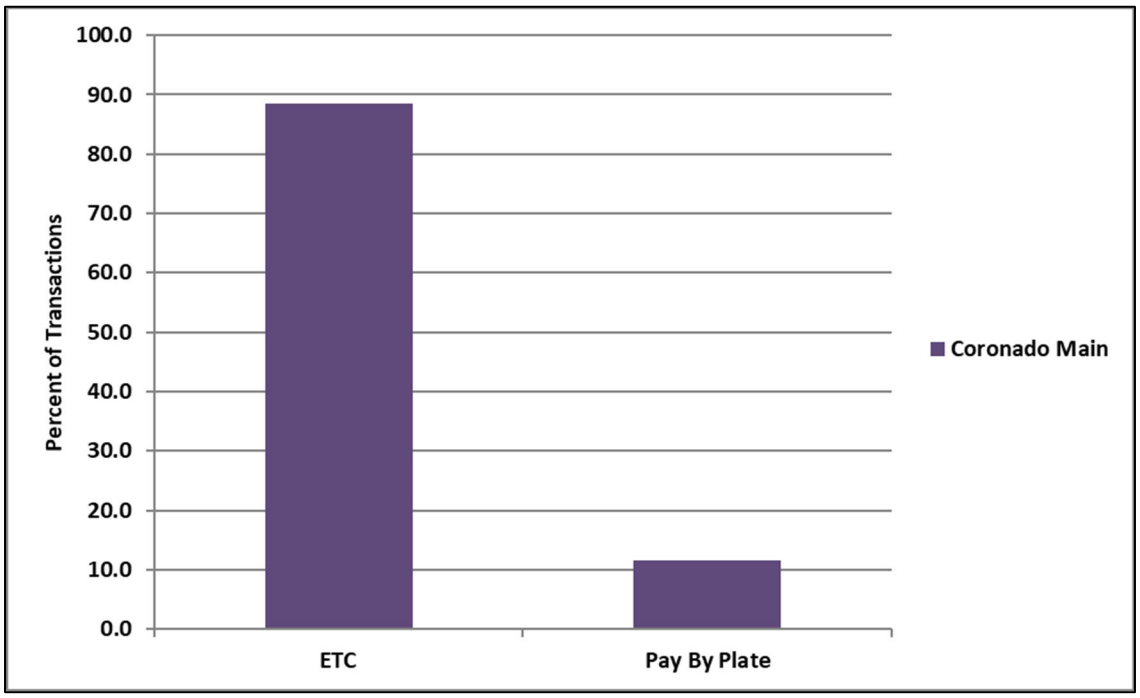
Source: Unaudited lane traffic data – March 2020

8.2.6 TRANSACTIONS AND REVENUE BY PAYMENT TYPE

The distributions of transactions and revenue by payment type during FY 2020 are presented in **Figure 8-8** and **Figure 8-9**. Payment types on S.R. 453 can be classified in one of two ways: ETC and PBP. The Coronado Main plaza is an AET facility, so there is no cash collection. PBP transactions and revenues are estimated monthly based on an accrual rate of 60 percent of all unpaid in-lane transactions and revenues. It is important to note that the data presented in the following two figures is based on unaudited transaction and toll revenue data and may not match the audited data shown in other tables and figures in this chapter.

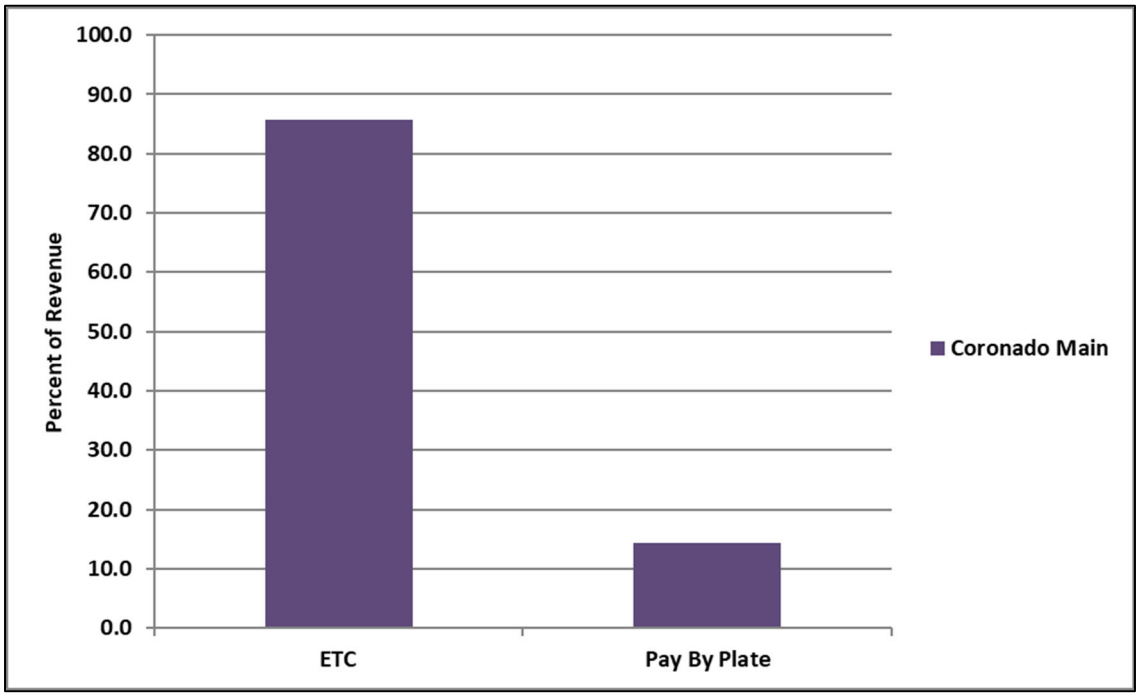
As shown in Figure 8-8, the share of ETC transactions at the Coronado Main plaza accounted for 88.5 percent and the remaining 11.5 percent were PBP transactions. As shown in Figure 8-9, the share of toll revenues by payment type is comparable to the share in transactions. The share of ETC toll revenues accounted for 85.7 percent of toll revenues at the Coronado Main plaza and the remaining 14.3 percent were PBP toll revenues.

Figure 8-8
S.R. 453 Percent of Transactions by Payment Type
FY 2020



Source: Unaudited transaction data provided by CFX

Figure 8-9
S.R. 453 Percent of Revenue by Payment Type
FY 2020



Source: Unaudited toll revenue data provided by CFX

8.3 Forecasted Transactions and Toll Revenues

Based on the recently adopted "Customer First Toll Policy," toll rate adjustments (indexed tolls) were applied to the T&R forecasts every year based on the net change in CPI for the prior year, which equated to 1.45 percent in FY 2021. Because the change in CPI was lower than the 1.5 percent floor, CDM Smith used 1.5 percent to adjust the FY 2021 toll amounts. CDM Smith used the floor of 1.5 percent per year every year thereafter in the forecast period.

Future transportation improvements that influence the T&R forecasts for S.R. 453, are similar to those that could influence S.R. 429, which include the projects listed in **Table 8-4**, assumed to be completed in each forecast year.

Several of the planned improvements listed in Metroplan Orlando's Long Range Transportation Plan and Orange County's 10 Year Transportation Plan provide an upgrade to the transportation system to NW Orange County. Many facilities including Silver Star Road, Plant Street and Avalon Road, serve as feeder roads to S.R. 429 and positively impact T&R in the near term and long-term forecasts. System improvements impacting S.R. 453 include the widening of S.R. 429 from C.R. 535 to S.R. 414 in the near term and from C.R. 535 to Seidel Road in the long-term forecast. Also, the completion of the S.R. 429/Wekiva Parkway has changed travel patterns in this area of NW Orange County and NE Lake County. Virtually any improvement which provides additional connectivity to S.R. 429 from the south and east will inherently benefit S.R. 453 as well. The

construction of the Wekiva Parkway has delayed the need to improve some of the parallel facilities such as Plymouth–Sorrento Road, Round Lake Road and Rock Springs Road.

Table 8-4
S.R. 453 - Key Transportation Improvements

Facility	From	To	Year	Jurisdiction	Improvement
Interstate 4	SR 434	Kirkman Rd	2025	FDOT	Widen to 10 lanes
SR 429	SR 50	SR 414	2025	CFX	Widen to 6-Lanes
SR 429	CR 535	SR 50	2025	CFX	Widen to 6-Lanes
Wekiva Pkwy	Mount Plymouth Rd	Interstate 4	2025	FDOT	New 4 lane expressway
Lake/Orange County Connector (SR 516)	US 27	SR 429	2025	CFX	New 4 lane expressway
New Independence Pkwy	Lake County Line	SR 429	2035	Orange County	New/Widen 4 Lanes
SR 438/Silver Star Rd	SR 429	Bluford Ave	2035	FDOT	Widen to 4-lanes
Avalon Road (CR 545)	Seidel Rd	New Independence Pkwy	2035	Orange County	Widen to 4 Lanes
Avalon Road (CR 545)	New Independence Pkwy	SR 50	2035	Orange County	Widen to 4 Lanes
Ocoee-Apopka Rd	Silver Star Rd	Clarcona-Ocoee Rd	2035	Orange County	Widen to 4 Lanes
US 441 (SR 500)	SR 44	N of SR 46	2035	FDOT	Widen to 6-lanes
Plant Street (SR 438)	9th Street	West Crown Point Rd	2045	FDOT	Widen to 4-lanes
Ponkan Rd	Plymouth Sorrento Rd	CR 437	2045	Orange County	Widen to 6-lanes
Sadler Rd	US 441	Mt Plymouth Rd	2045	Orange County	Widen to 6-lanes
SR 414 Expressway Ext	US 441	SR 434/Forest City Rd	2035	FDOT/CFX	New 4-lane expressway
SR 429	Schofield Rd	CR 535	2035	CFX	Widen to 6-Lanes
Plymouth Sorrento Rd	US 441	Orange County Line	2045	Orange County	Widen to 6-lanes
Ponkan Rd	Plymouth Sorrento Rd	CR 437	2045	Orange County	Widen to 6-lanes
Sadler Rd	US 441	Mt Plymouth Rd	2045	Orange County	Widen to 6-lanes
SR 44	US 441	E. of Orange Ave	2045	FDOT	Widen to 4-lanes
SR 44	SR 44 & Orange Ave	CR 46A	2045	FDOT	Widen to 4-lanes
CR 437 Realignment	Oak Tree Dr	SR 46	2045	Lake County	Widen to 2-lanes

The Coronado Main plaza opened on April 1, 2018 (FY 2018). Historical and projected transactions and toll revenues for S.R. 453 are summarized in **Table 8-5** and **Table 8-6**. The tables are divided into paid in-lane transactions and revenue and PBP transactions and revenue. Paid in-lane transactions and revenue include ETC as cash collection is not possible.

The paid in-lane transactions on S.R. 453 are expected to grow 6.2 percent per year through FY 2030 and then lower rates through the end of the forecast period because of the impact of toll rate adjustments. PBP transactions are forecasted to remain the same through FY 2030 and then increase through the forecast period. Total transactions on S.R. 453 are projected to increase during the forecast period from the actual of 2.6 million in FY 2020 to 7.3 million in FY 2050. During the FY 2021 through FY 2050 forecast period, S.R. 453 traffic is expected to increase an average of 5.6 percent per year from FY 2020 to FY 2030 (due to ramp-up), 2.9 percent per year from FY 2030 to FY 2040 and 2.0 percent per year from FY 2040 to FY 2050. The paid in-lane revenues on S.R. 453 are projected to increase over the forecast period, from the FY 2020 actual of $1.6 million to $7.1 million in FY 2050. PBP revenues are projected to increase from $0.3 million in FY 2020 to $0.9 million in FY 2050. Total revenue on S.R. 453 is projected to increase from the actual of $1.9 million in FY 2020 to $8.0 million in FY 2050. Revenue is expected to increase an average of 7.5 percent per year from FY 2020 to FY 2030 (again due to ramp-up), 3.9 percent per year from FY 2030 to FY 2040 and 3.4 percent per year from FY 2040 to FY 2050.

Table 8-5
S.R. 453 Plaza Group – Transaction Projections (Millions)
FY 2021 – FY 2050

Fiscal Year		Coronado Main	Paid In-Lane	PBP	Total	Percent Annual Change
2010	Actual					
2011						
2012						
2013						
2014						
2015						
2016						
2017						
2018[A]		0.5	0.5	0.0	0.5	
2019[B]		2.2	2.2	0.2	2.4	380.0%
2020[C]		2.3	2.3	0.3	2.6	8.3%
2021[D]	Forecast	2.7	2.7	0.3	3.0	15.4%
2022[E]		3.0	3.0	0.3	3.3	10.0%
2023		3.1	3.1	0.2	3.3	0.0%
2024		3.3	3.3	0.2	3.5	6.1%
2025		3.4	3.4	0.2	3.6	2.9%
2026		3.5	3.5	0.2	3.7	2.8%
2027		3.7	3.7	0.2	3.9	5.4%
2028		3.8	3.8	0.2	4.0	2.6%
2029		4.0	4.0	0.3	4.3	7.5%
2030		4.2	4.2	0.3	4.5	4.7%
2031		4.3	4.3	0.3	4.6	2.2%
2032		4.4	4.4	0.3	4.7	2.2%
2033		4.6	4.6	0.3	4.9	4.3%
2034		4.7	4.7	0.3	5.0	2.0%
2035		4.9	4.9	0.3	5.2	4.0%
2036		5.0	5.0	0.3	5.3	1.9%
2037		5.2	5.2	0.4	5.6	5.7%
2038		5.3	5.3	0.4	5.7	1.8%
2039		5.4	5.4	0.4	5.8	1.8%
2040		5.6	5.6	0.4	6.0	3.4%
2041		5.7	5.7	0.4	6.1	1.7%
2042		5.8	5.8	0.4	6.2	1.6%
2043		6.0	6.0	0.4	6.4	3.2%
2044		6.1	6.1	0.4	6.5	1.6%
2045		6.2	6.2	0.5	6.7	3.1%
2046		6.3	6.3	0.5	6.8	1.5%
2047		6.5	6.5	0.5	7.0	2.9%
2048		6.6	6.6	0.5	7.1	1.4%
2049		6.7	6.7	0.5	7.2	1.4%
2050		6.8	6.8	0.5	7.3	1.4%

Fiscal Year	Compound Annual Average Growth Rate (CAAGR)			
2020 - 2030	6.2%	6.2%	0.0%	5.6%
2030 - 2040	2.9%	2.9%	2.9%	2.9%
2040 - 2050	2.0%	2.0%	2.3%	2.0%

Notes:
Actual transaction data provided by CFX from Monthly Statistical Reports.
A - Coronado Main opened on April 1, 2018 (FY 2018).
B - First year of implementation of "Customer First" toll rate policy.
C - Effects from Hurricane Dorian in September 2019 and first effects of COVID-19 pandemic began in March 2020.
D - New toll rates for PBP customers, set at 2.0 times the ETC rate.
E - Completion of I-4 Ultimate project.

Table 8-6
S.R. 453 Plaza Group – Toll Revenue Projections (Millions)
FY 2021 – FY 2050

Fiscal Year		Coronado Main	Paid In-Lane	PBP	Total	Percent Annual Change
2010	Actual					
2011						
2012						
2013						
2014						
2015						
2016						
2017						
2018[A]		$0.3	$0.3	$0.0	$0.3	
2019[B]		$1.3	$1.3	$0.2	$1.5	400.0%
2020[C]		$1.6	$1.6	$0.3	$1.9	26.7%
2021[D]	Forecast	$2.0	$2.0	$0.5	$2.5	31.6%
2022[E]		$2.2	$2.2	$0.4	$2.6	4.0%
2023		$2.3	$2.3	$0.3	$2.6	0.0%
2024		$2.5	$2.5	$0.3	$2.8	7.7%
2025		$2.6	$2.6	$0.3	$2.9	3.6%
2026		$2.8	$2.8	$0.3	$3.1	6.9%
2027		$2.9	$2.9	$0.4	$3.3	6.5%
2028		$3.1	$3.1	$0.4	$3.5	6.1%
2029		$3.2	$3.2	$0.4	$3.6	2.9%
2030		$3.4	$3.4	$0.5	$3.9	8.3%
2031		$3.6	$3.6	$0.5	$4.1	5.1%
2032		$3.7	$3.7	$0.5	$4.2	2.4%
2033		$3.9	$3.9	$0.5	$4.4	4.8%
2034		$4.1	$4.1	$0.5	$4.6	4.5%
2035		$4.2	$4.2	$0.5	$4.7	2.2%
2036		$4.4	$4.4	$0.5	$4.9	4.3%
2037		$4.6	$4.6	$0.5	$5.1	4.1%
2038		$4.8	$4.8	$0.6	$5.4	5.9%
2039		$4.9	$4.9	$0.6	$5.5	1.9%
2040		$5.1	$5.1	$0.6	$5.7	3.6%
2041		$5.3	$5.3	$0.7	$6.0	5.3%
2042		$5.5	$5.5	$0.7	$6.2	3.3%
2043		$5.7	$5.7	$0.7	$6.4	3.2%
2044		$5.9	$5.9	$0.8	$6.7	4.7%
2045		$6.1	$6.1	$0.8	$6.9	3.0%
2046		$6.3	$6.3	$0.8	$7.1	2.9%
2047		$6.5	$6.5	$0.8	$7.3	2.8%
2048		$6.7	$6.7	$0.8	$7.5	2.7%
2049		$6.9	$6.9	$0.8	$7.7	2.7%
2050		$7.1	$7.1	$0.9	$8.0	3.9%

Fiscal Year	Compound Annual Average Growth Rate (CAAGR)			
2020 - 2030	7.8%	7.8%	5.2%	7.5%
2030 - 2040	4.1%	4.1%	1.8%	3.9%
2040 - 2050	3.4%	3.4%	4.1%	3.4%

Notes:

Actual transaction data provided by CFX from Monthly Statistical Reports.

A - Coronado Main opened on April 1, 2018 (FY 2018).

B - First year of implementation of "Customer First" toll rate policy.

C - Effects from Hurricane Dorian in September 2019 and first effects of COVID-19 pandemic began in March 2020.

D - New toll rates for PBP customers, set at 2.0 times the ETC rate.

E - Completion of I-4 Ultimate project.

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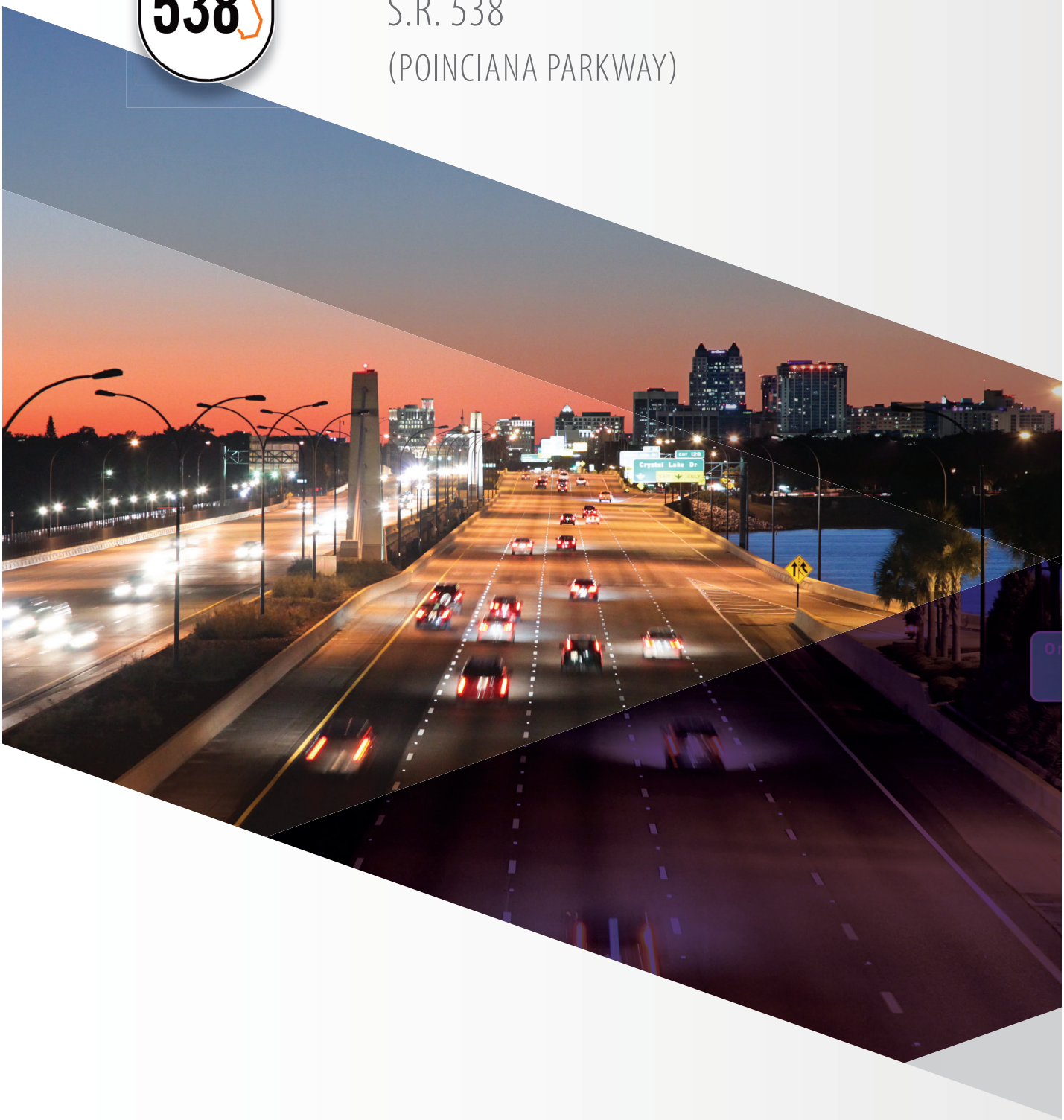
CHAPTER 9

S.R. 538

(POINCIANA PARKWAY)



S.R. 538 (POINCIANA PARKWAY)

9.1 Facility Description

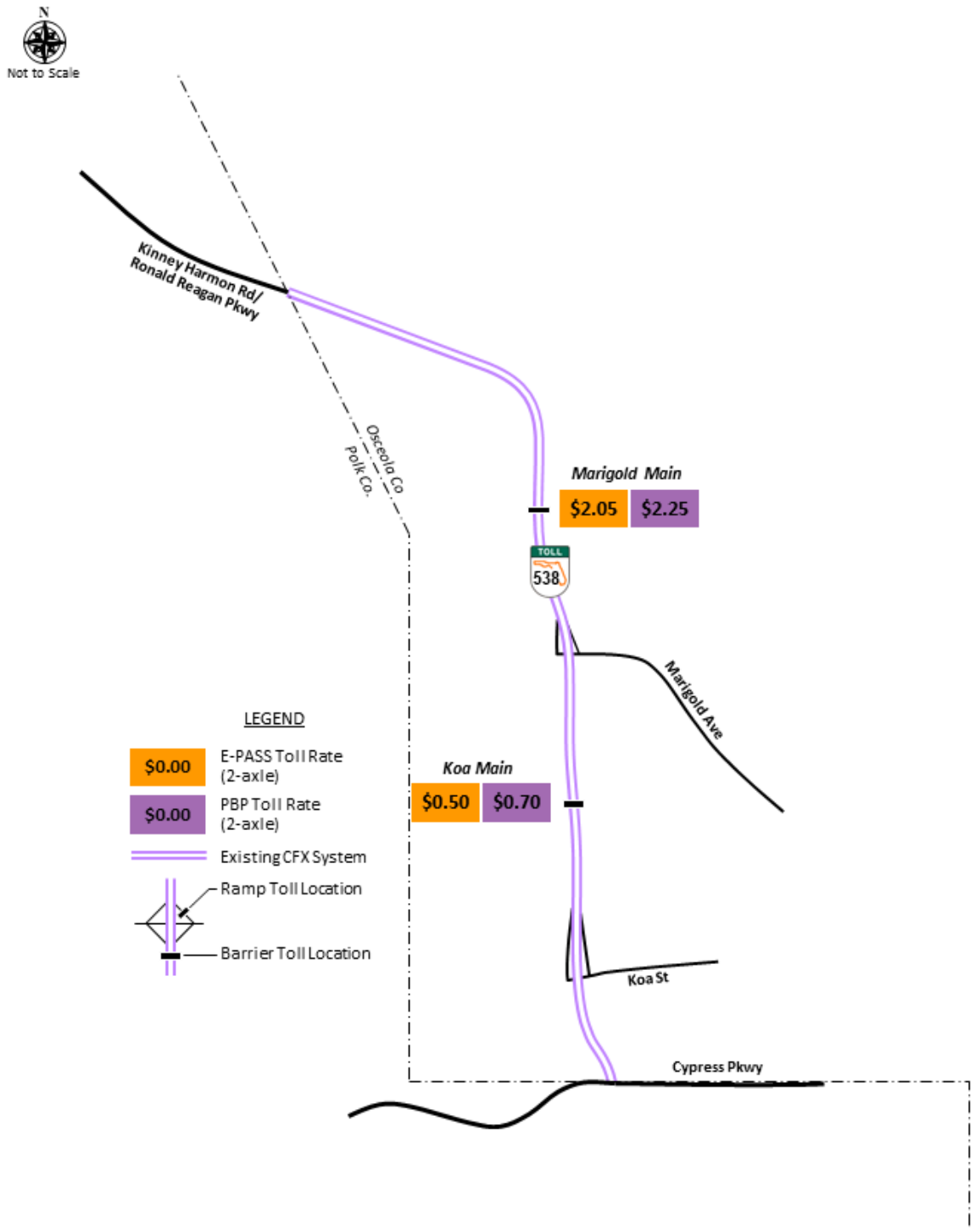
The Poinciana Parkway is a is a 7.2 mile-long, two-lane, two-way, limited access toll road extending from the Cypress Parkway in Poinciana north to the Polk-Osceola County line. The Poinciana Parkway was developed by the Osceola County Expressway Authority (OCX) and opened to traffic in April of 2016. The facility has been operated by CFX for the County since opening. In 2014, the Florida Legislature required that CFX consider acquiring the Poinciana Parkway as part of the legislation (SB 230) creating and expanding the geographic base of CFX. At their December 2019 Board meeting, the CFX Board unanimously approved the acquisition of the Poinciana Parkway, effective December 31, 2019, CFX assumed all governance, control, and maintenance of the Poinciana Parkway. The Parkway has two mainline toll plazas, the Marigold Main and Koa Main, with no associated ramp plazas.

The highway is contiguous with Kinney Harmon Road/Ronald Reagan Parkway in Polk County and connects the Poinciana Parkway to US 17/92 in Loughman. The construction of the Poinciana Parkway included rebuilding Kinney Harmon Road/Ronald Reagan Parkway as a two-lane arterial, building a new mile-long two-lane bridge over the Reedy Creek Mitigation Bank (RCMB), and constructing a two-lane, limited access roadway from the bridge to Cypress Parkway. From the northwest, the Poinciana Parkway passes through the RCMB, over the bridge, and then makes a turn south. South of the bridge, the Poinciana Parkway has grade-separated, half intersections to and from the north (i.e., southbound exit ramps and northbound entrance ramps) with Marigold Avenue and Koa Street and terminates in an at-grade T-intersection with Cypress Parkway. A map of S.R. 538 including the FY 2020 CFX toll rates for the two mainline toll plazas is shown in **Figure 9-1**.

The Poinciana Parkway provides a critical north-south connection to US 17-92 for the residents of the Poinciana community in Osceola and Polk Counties, facilitating access to regional transportation networks, theme parks and the Orlando metropolitan area. Toll collection of the facility is AET at the Marigold Main and Koa Main toll plazas. Customers can pay the toll with either E-PASS and other interoperable transponders or by Pay by Plate (PBP) video billing. The FY 2020 toll rate is $2.05 at Marigold Main and $0.50 at Koa Main, with an additional fee of $0.20 for PBP transactions.

In November of 2018, CDM Smith completed Preliminary T&R forecasts for the potential acquisition of the Poinciana Parkway by CFX. This study evaluated the current two-lane facility as well as an improvement to four lanes which included a new extension to US 17-92 and assumed the toll rate policy implemented by OCX for the existing segment of Poinciana Parkway and $0.18 per mile for the extension segment increased at 1.5% per year, per the CFX Customer First Toll Policy. The forecast considered the transactions and revenues collected since starting revenue

Figure 9-1
S.R. 538 Facilities and Toll Rates



collection in August of 2016 as well as travel demand forecasts using an updated version of the regional travel demand model, CFX Model 3.2. This model incorporated socioeconomic forecasts developed by an independent economist for Osceola County and portions of Orange County, as well as network updates and assumptions of road improvements.

In June 2020, CFX began design on the Poinciana Parkway Extension, which will be separated into two segments, and is expected to improve traffic flow and operation in the area. The first 1.9-mile segment includes the design of the new four-lane expressway from Ronald Reagan Parkway to south of US 17/92. The second 1.2-mile segment includes the design of the new four-lane expressway from south of US 17/92 to CR 532. Design also includes an interchange at US 17/92, tolled ramps at CR 532, and bridges over the CSX railroad, Old Tampa Highway, and US 17/92. Design for both segments is expected to be completed by late 2021.

9.2 Historical Transactions and Toll Revenues

As defined in Chapter 1, CFX transactions and toll revenues are classified as either Paid In-Lane (ETC and cash) or Unpaid In-Lane (PBP and non-revenue). Total transactions are the sum of paid in-lane and unpaid in-lane transactions. Total revenue is the sum of paid in-lane revenue and the revenue collected through PBP, estimated as an accrued amount. The following section includes a breakdown of toll-paying transactions and toll revenues by paid in-lane and PBP. It is important to note S.R. 538 was only part of the CFX System for half of FY 2020 and during that partial year the COVID-19 pandemic negatively impacted traffic and revenue.

9.2.1 ANNUAL PAID IN-LANE TRANSACTION AND REVENUE TRENDS

The S.R. 538 FY 2020 annual paid in-lane transactions for the Marigold Main and Koa plaza groups are presented in the top half of **Table 9-1**. FY 2020 paid in-lane toll revenues are also summarized and totaled in the bottom half of the table. This table and figures do not include PBP transactions and revenues, only those that are paid in-lane. For this reason, the information presented in this section may differ slightly from the data presented in the FY 2020 Comprehensive Annual Financial Report (CAFR) and other information in this report.

Table 9-1
S.R. 538 Plaza Groups – Historical Paid In-Lane Transactions and Revenue
FY 2020

Fiscal Year	Marigold Main[A]	Koa Main[A]	TOTAL	Marigold Main	Koa Main	TOTAL
	TRANSACTIONS (millions)			PERCENT CHANGE		
2020[B]	1.2	0.5	1.7	N/A	N/A	N/A
	TOLL REVENUE (millions)			PERCENT CHANGE		
2020[B]	$2.5	$0.3	$2.8	N/A	N/A	N/A

Notes:
A - Acquired by CFX in December 2019 (FY 2020).
B - First effects of COVID-19 pandemic began in March 2020.

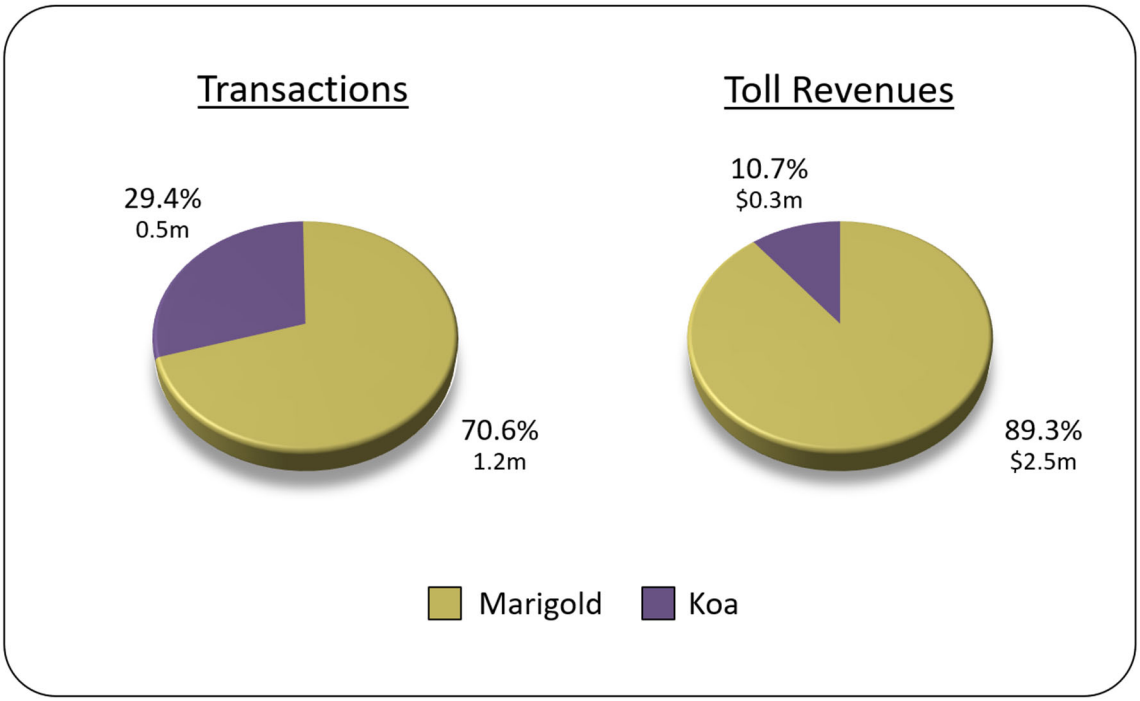
As previously mentioned, CFX acquired S.R. 538 in December 2019 (FY 2020), for a total of seven months in FY 2020. Total paid in-lane transactions on S.R. 538 in FY 2020 were 1.7 million and paid in-lane toll revenues during the same period were $2.8 million.

Total paid in-lane transactions at the Marigold Main plaza in FY 2020 were 1.2 million and paid in-lane toll revenues during the same period were $2.5 million. Total paid in-lane transactions at the Koa Main plaza in FY 2020 were 0.5 million and paid in-lane toll revenues during the same period were $0.3 million. The transactions and revenues include both paid in-lane ETC and unpaid in-lane PBP transactions and revenue. FY 2020 paid in-lane transactions and revenues were negatively impacted by the effects of the COVID-19 pandemic beginning in March 2020.

The paid in-lane transactions and toll revenues by plaza group and as a percentage of total S.R. 538 paid in-lane transactions and toll revenues for FY 2020 are presented in **Figure 9-2**. As shown, the Marigold Main plaza group represented 1.2 million paid in-lane transactions or 70.6 percent of total S.R. 538 paid in-lane transactions. Koa Main plaza group represented 0.5 million or 29.4 percent of total paid in-lane transactions on the facility.

The annual totals and percentages for paid in-lane toll revenues are similar to the trends reported for annual paid in-lane transactions. The Marigold Main plaza group represented $2.5 million in paid in-lane toll revenues or 89.3 percent of total S.R. 538 paid in-lane toll revenues. Koa Main plaza group represented $0.3 million or 10.7 percent of total paid in-lane revenue on the facility. The Marigold Main plaza group represented a significantly higher amount of revenue due to the higher toll rate of $2.05 compared to the $0.50 toll at the Koa Main plaza group.

Figure 9-2
S.R. 538 Paid In-Lane Transactions and Revenue by Plaza Group
FY 2020



Source: CFX Statistical Report June 2020

9.2.2 ANNUAL PBP TRANSACTION AND REVENUE TRENDS

PBP transactions and toll revenues on S.R. 538 for FY 2020 (a partial year) are presented in **Table 9-2**. PBP transactions and toll revenues are recorded by toll location and accrued monthly by plaza group, however Table 9-2 shows the annual totals for S.R. 453 as reported at year end.

Table 9-2
S.R. 538 – Historical PBP Transactions and Revenue
FY 2020

Fiscal Year	Transactions (millions)	Percent Change	Toll Revenues (millions)	Percent Change
2020	0.6	N/A	$1.0	N/A

Source: Unaudited data provided by CFX

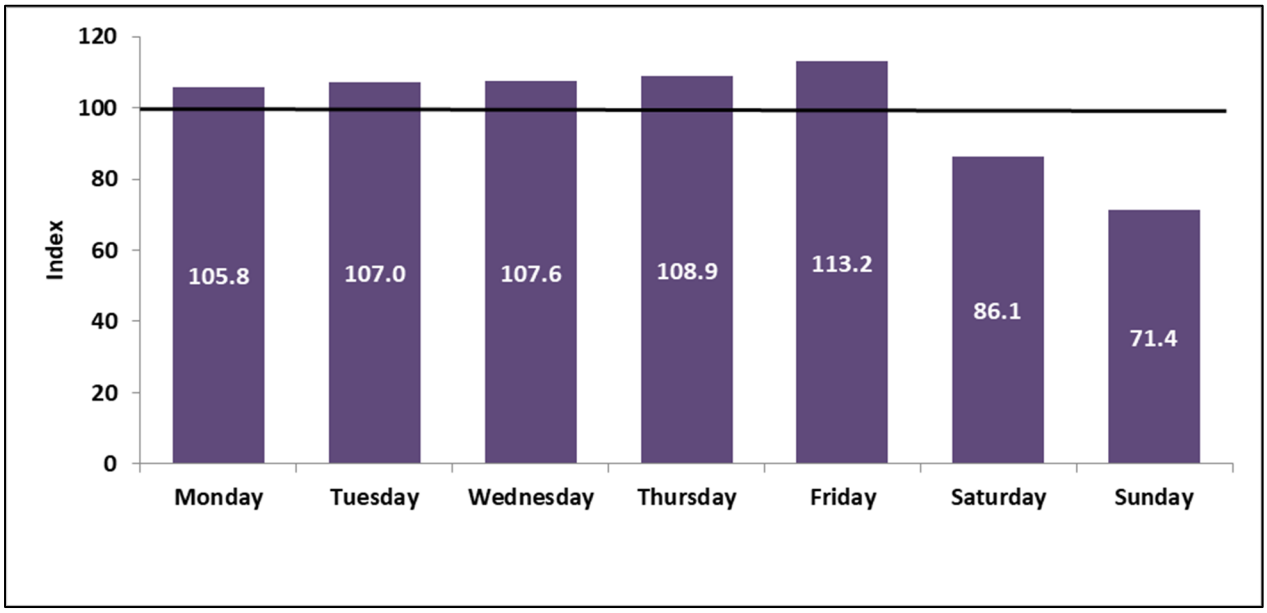
In FY 2020, PBP transactions on S.R. 538 were 0.6 million, while PBP revenues were $1.0 million over the same period. Growth in PBP transactions and revenues is expected to decline beginning in FY 2021 due to a new PBP toll rate adopted by the CFX Board that went into effect on July 1, 2020, at which time the PBP toll rate at all toll locations was increased to twice the ETC toll rate. Due to the new PBP toll rate implemented, it is anticipated that a portion of customers currently paying via PBP will switch to paying in the lane through ETC to avoid the higher toll rate.

9.2.3 DAY-OF-WEEK TRANSACTION VARIATION

Figure 9-3 contains a comparison of transactions by day of the week for FY 2020. This data is presented as an index, where the average day equals 100. An index value of 100 would indicate that the day's transactions were precisely the same volume as the facility average. A value of 120 would indicate a day that has 20 percent greater volume than the average. The data used for this analysis was for a typical week in March 2020, before the COVID-19 pandemic. The data includes transactions at mainline plazas only (no ramps).

FY 2020 weekday transactions on S.R. 538 fluctuated over the course of the five-day work week. Transactions were highest on Fridays, with an index value of 113.2 (13.2 percent higher than the average day), volumes on Monday through Thursday ranged from index values of 105.8 to 108.9. Saturday volumes were slightly lower than weekday volumes with an index value of 86.1, which is still high for a weekend day. Transactions decline on Sunday, which has an index value of 71.4, or 28.6 percent lower than the average day.

Figure 9-3
S.R. 538 Variation in Transactions, by Day of Week
FY 2020



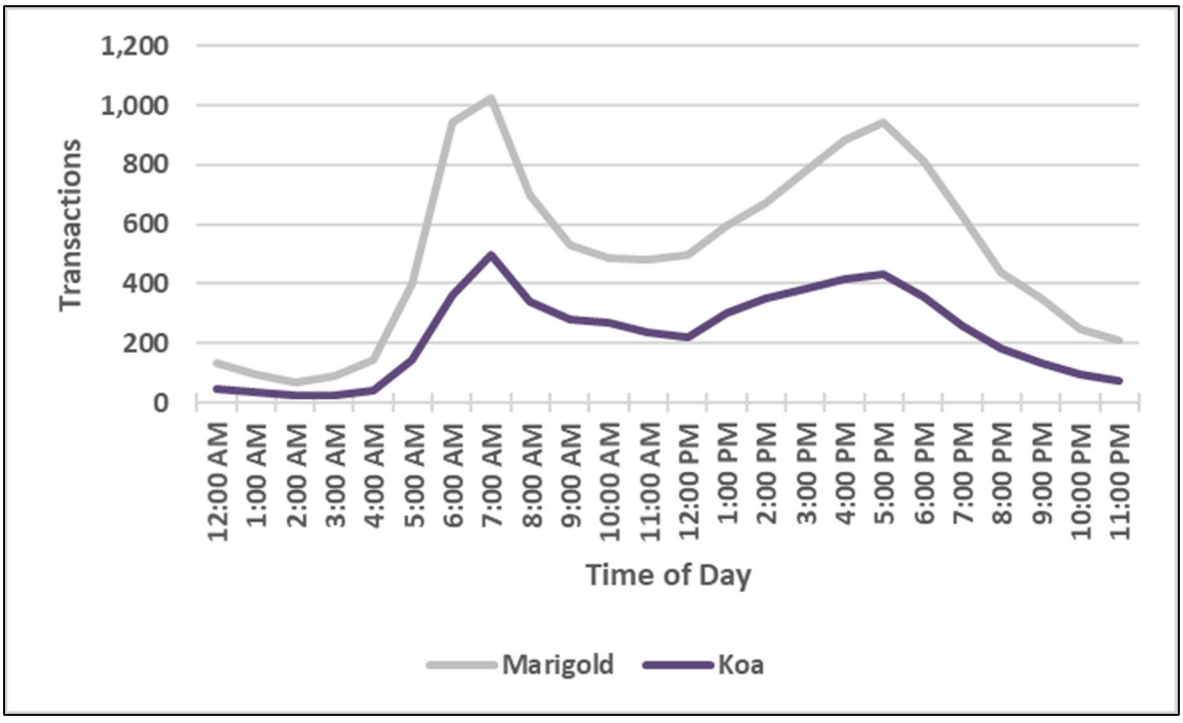
Source: Unaudited lane transaction data – March 2020

9.2.4 HOURLY TRAFFIC DISTRIBUTION

The hourly distribution of traffic includes information on the usage characteristics of the facility. The hourly distributions represent counts taken during a typical week at the mainline toll plaza in the month of March 2020, before the COVID-19 pandemic. The typical weekday distribution is shown in **Figure 9-4** and the weekend distribution is shown in **Figure 9-5**. The figures contain the sum of traffic volumes in both directions.

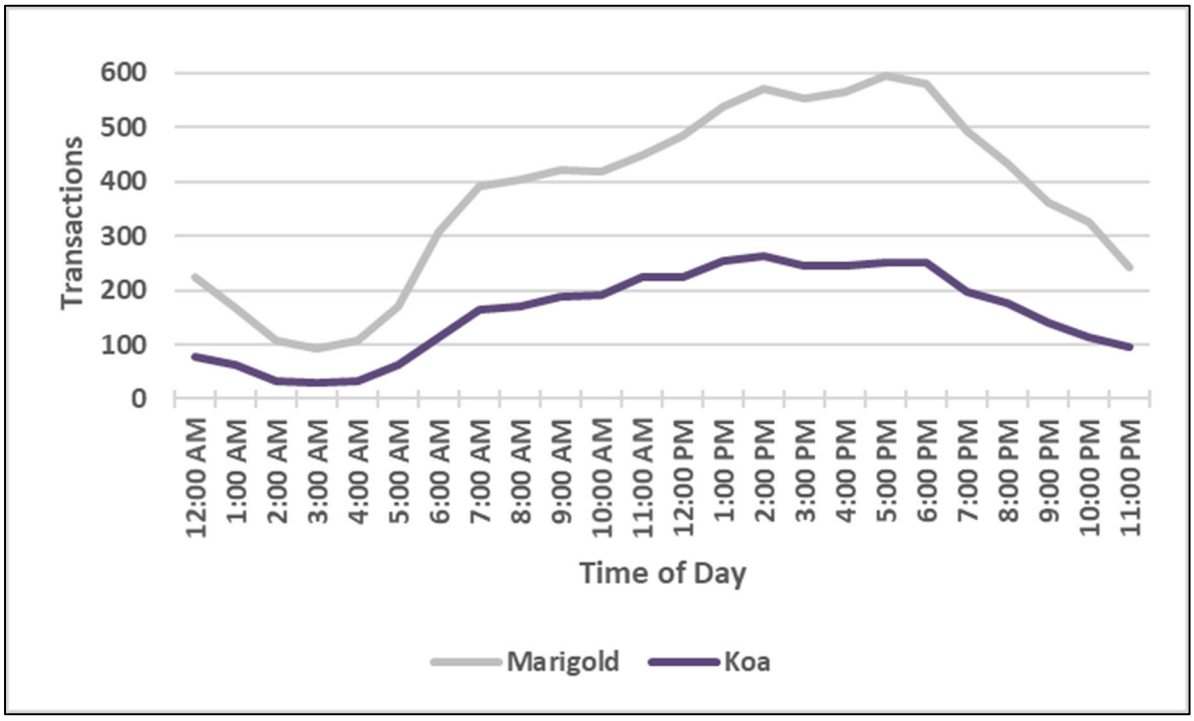
The two mainline toll plaza locations on S.R. 538 exhibit similar hourly traffic patterns. On weekdays, travel demand at both locations is bimodal, with both a morning and an evening peak hour. The Marigold and Koa mainline plazas both experience higher peak volumes in the morning hours than in the evening hours, with the Marigold p.m. noticeably higher. The highest peak hour volumes during the week were 1,000 per hour beginning at 7:00 a.m. at the Marigold mainline plaza and 500 per hour beginning at 7:00 a.m. at the Koa mainline plaza. On weekends, traffic builds all day with a peak of 600 vehicles per hour at 5:00 p.m. at the Marigold mainline plaza and 250 per hour at 5:00 p.m. at the Koa mainline plaza.

Figure 9-4
S.R. 538 Hourly Traffic Variation (Weekday)
FY 2020 (March)



Source: Unaudited lane traffic data – March 2020

Figure 9-5
S.R. 538 Hourly Traffic Variation (Weekend)
FY 2020 (March)



Source: Unaudited lane traffic data – March 2020

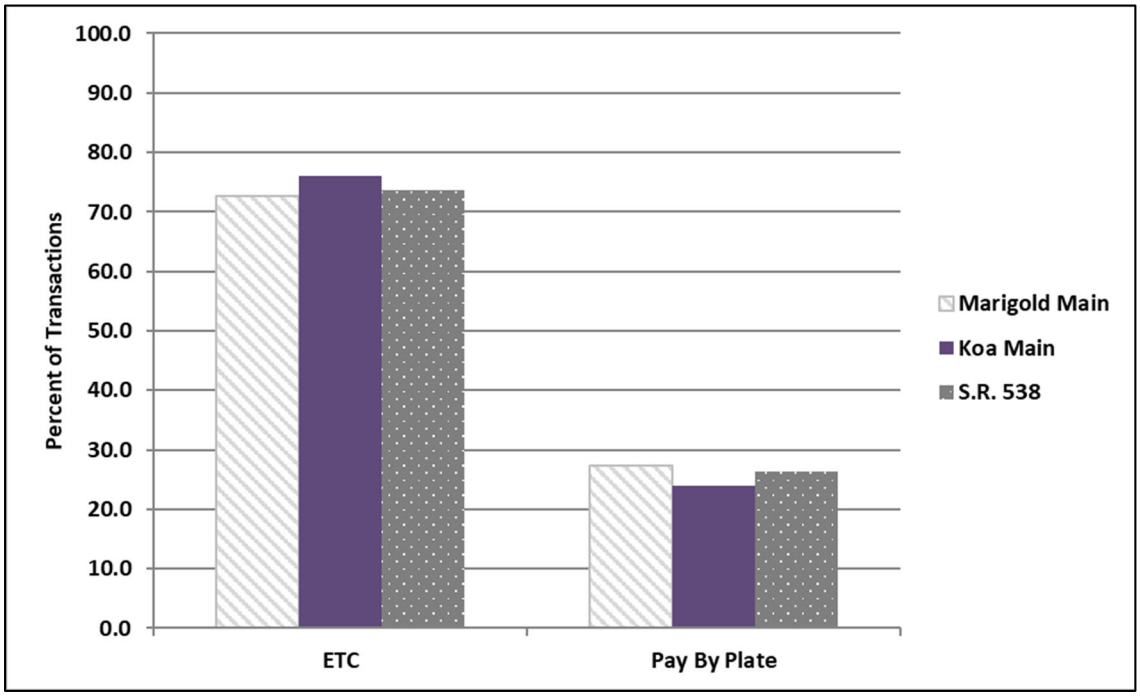
9.2.5 TRANSACTIONS AND REVENUE BY PAYMENT TYPE

The distributions of transactions and revenue by payment type during FY 2020 are presented in **Figure 9-6** and **Figure 9-7**. Payment types on S.R. 538 can be classified in one of two ways: ETC and PBP. The Marigold and Koa Main plazas are both AET facilities, so there is no cash collection. PBP transactions and revenues are estimated monthly based on an accrual rate of 60 percent of all unpaid in-lane transactions and revenues. It is important to note that the data presented in the following two figures is based on unaudited transaction and toll revenue data and may not match the audited data shown in other tables and figures in this chapter.

As shown in Figure 9-6, ETC transactions on S.R. 538 accounted for 73.7 percent of total transactions on the facility while PBP transactions accounted for the remaining 26.3 percent. The share of ETC transactions at the Marigold Main plaza accounted for 72.7 percent and the remaining 27.3 percent were PBP transactions. At the Koa Main plaza, ETC transactions accounted for 76.1 percent and the remaining 23.9 percent were PBP transactions.

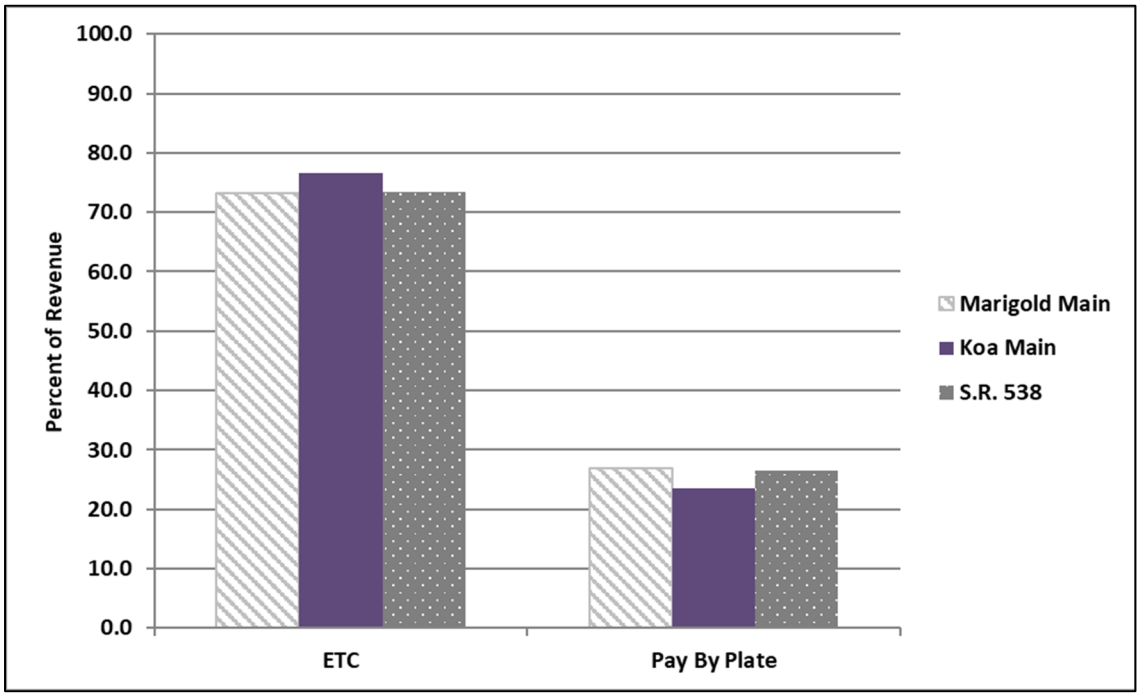
As shown in Figure 9-7, the share of toll revenues by payment type is comparable to the share in transactions. The share of ETC toll revenues accounted for 73.5 percent of toll revenues on S.R. 538 and the remaining 26.5 percent were PBP toll revenues. The share of ETC toll revenues at the Marigold Main plaza accounted for 73.1 percent and the remaining 26.9 percent were PBP toll revenues. At the Koa Main plaza, ETC toll revenues accounted for 76.5 percent and the remaining 26.5 percent were PBP toll revenues.

Figure 9-6
S.R. 538 Percent of Transactions by Payment Type
FY 2020



Source: Unaudited transaction data provided by CFX

Figure 9-7
S.R. 538 Percent of Revenue by Payment Type
FY 2020



Source: Unaudited toll revenue data provided by CFX

9.3 Forecasted Transactions and Toll Revenues

Based on the recently adopted "Customer First Toll Policy," toll rate adjustments (indexed tolls) were applied to the T&R forecasts every year based on the net change in CPI for the prior year, which equated to 1.45 percent in FY 2021. Because the change in CPI was lower than the 1.5 percent floor, CDM Smith used 1.5 percent to adjust the FY 2021 toll amounts. CDM Smith used the floor of 1.5 percent per year every year thereafter in the forecast period.

Future transportation improvements that could influence the T&R forecasts for S.R. 538 include the projects listed in **Table 9-3**, assumed completed in each model horizon year.

Several of the planned improvements provide significant improvements to the transportation system to this area of Osceola County. Many facilities including Osceola Polk Line Road (CR 532), Poinciana Boulevard, Old Lake Wilson Road, US 17-92 and John Young Parkway, serve as feeder roads to S.R. 538 and positively impact T&R in the near term and long-term forecasts. System improvements impacting S.R. 538 include the widening of S.R. 538 from Cypress Parkway to Kinney Harmon Road to a 4-lane expressway, the extension of the S.R. 538 to C.R. 532 and improvements to the I-4/C.R. 532 interchange in the near term and the eventual extension of the S.R. 538 by FDOT to Interstate 4, as well as the Southport Connector Expressway in the long-term forecast. Virtually any improvement which provides additional connectivity in this area of Osceola County will inherently benefit S.R. 538 as well.

Table 9-3
S.R. 538 - Key Transportation Improvements

Facility	From	To	Year	Jurisdiction	Improvement
Interstate 4	SR 434	Kirkman Rd	2025	FDOT	Widen to 10-lanes
Interstate 4	Osceola Polk Line Rd (CR 532)	-	2025	Osceola County/FDOT	Interchange Imp
Cypress Pkwy	Poinciana Pkwy (SR 538)	Marigold Ave	2025	Polk County	Widen to 4-lanes
Marigold Ave	Cypress Pkwy	Sheldrake Rd	2025	Polk County	Widne to 4-lanes
Osceola Polk Line Rd (CR 532)	US 17/92	Lake Wilson Rd	2025	Osceola County/CFX	Widen to 4-lanes
Poinciana Pkwy (SR 538)	Cypress Pkwy	Kinney Harmon Rd	2025	CFX	Widen to 4-lanes
Poinciana Pkwy Ext. (SR 538)	Kinney Harmon Rd	Osceola Polk Line Rd (CR 532)	2025	CFX	New 4-lane Expressway
Poinciana Blvd	Pleasant Hill Rd	Crescent Lakes Blvd	2025	Osceola County	Widen to 4-lanes
Old Lake Wilson Rd	Osceola Polk Line Rd (CR 532)	Sinclair Rd	2035	Osceola County	Widen to 4-lanes
Interstate 4	SR 429	Osceola Polk Line Rd (CR 532)	2035	FDOT	Auxiliary Lanes
Apopka-Vineland Rd (SR 535)	SR 536	I-4 WB Ramp	2035	Orange County/FDOT	Widen to 8 Lanes
Apopka-Vineland Rd (SR 535)	Osceola County Line	SR 536	2035	Orange County/FDOT	Widen to 6 Lanes
US 17-92	Pleasant Hill Rd	Portage Rd	2035	FDOT	Widen to 6-lanes
US 17-92	Poinciana Blvd	Osceola Co. Line	2035	FDOT	Widen to 6-lanes
John Young Pkwy	Pleasant Hill Rd	Portage Rd	2035	FDOT	Widen to 6-lanes
Narcoossee Rd	US 192	Orange County Line	2035	Osceola County	Widen to 6 Lanes
Poinciana Pkwy Ext. (SR 538)	Osceola Polk Line Rd (CR 532)	Interstate 4	2035	FDOT	New 4-lane Expressway
Southport Connector Expwy	Poinciana Pkwy (SR 538)	Pleasant Hill Rd	2035	CFX	New 4-lane Expressway
Vineland Rd (SR 535)	US 192	Orange County Line	2045	Osceola County/FDOT	Widen to 6 Lanes

As previously mentioned, the Poinciana Parkway was acquired by CFX in December 2019 (FY 2020). Historical and projected transactions and toll revenues for S.R. 538 are summarized in **Table 9-4** and **Table 9-5**. The tables are divided into paid in-lane transactions and revenue and PBP transactions and revenue. Paid in-lane transactions and revenue include ETC as cash collection is not possible.

The paid in-lane transactions on S.R. 538 are expected to grow 11.4 percent per year through FY 2030 and then lower rates through the end of the forecast period because of the impact of toll rate adjustments. PBP transactions are forecasted to increase 5.2 percent per year through FY 2039 then remain the same through the forecast period. Total transactions on S.R. 538 are projected to increase during the forecast period from the actual of 2.3 million in FY 2020 to 6.9 million in FY 2050. During the FY 2020 through FY 2050 forecast period, S.R. 538 traffic is expected to increase an average of 10.1 percent per year from FY 2020 to FY 2030 (due to ramp-up and improvements), 1.3 percent per year from FY 2030 to FY 2040 and 0.1 percent per year from FY 2040 to FY 2050. The paid in-lane revenues on S.R. 538 are projected to increase over the forecast period, from the FY 2020 actual of $2.8 million to $15.6 million in FY 2050. PBP revenues are projected to increase from $1.0 million in FY 2020 to $4.9 million in FY 2050. Total revenue on S.R. 538 is projected to increase from the actual of $3.8 million in FY 2020 to $20.5 million in FY 2050. Revenue is expected to increase an average of 13.8 percent per year from FY 2020 to FY 2030 (again due to ramp-up and improvements), 2.3 percent per year from FY 2030 to FY 2040 and 1.7 percent per year from FY 2040 to FY 2050.

Table 9-4
S.R. 538 Plaza Groups – Transaction Projections (Millions)
FY 2021 – FY 2050

Fiscal Year		Marigold Main	Koa Main	Paid In-Lane	PBP	Total	Percent Annual Change
2010	Actual						
2011							
2012							
2013							
2014							
2015							
2016							
2017							
2018							
2019							
2020[A,B]		1.2	0.5	1.7	0.6	2.3	
2021[C]	Forecast	2.0	0.9	2.9	0.9	3.8	65.2%
2022[D]		2.5	1.1	3.6	0.7	4.3	13.2%
2023		2.7	1.2	3.9	0.7	4.6	7.0%
2024		2.9	1.3	4.2	0.7	4.9	6.5%
2025		3.1	1.4	4.5	0.8	5.3	8.2%
2026		3.2	1.5	4.7	0.8	5.5	3.8%
2027		3.2	1.5	4.7	0.9	5.6	1.8%
2028		3.3	1.5	4.8	0.9	5.7	1.8%
2029		3.4	1.5	4.9	1.0	5.9	3.5%
2030		3.4	1.6	5.0	1.0	6.0	1.7%
2031		3.5	1.6	5.1	1.0	6.1	1.7%
2032		3.5	1.6	5.1	1.0	6.1	0.0%
2033		3.6	1.6	5.2	1.0	6.2	1.6%
2034		3.6	1.7	5.3	1.0	6.3	1.6%
2035		3.7	1.8	5.5	0.9	6.4	1.6%
2036		3.7	1.8	5.5	0.9	6.4	0.0%
2037		3.8	1.8	5.6	1.0	6.6	3.1%
2038		3.8	1.8	5.6	1.0	6.6	0.0%
2039		3.9	1.9	5.8	1.0	6.8	3.0%
2040		3.9	1.9	5.8	1.0	6.8	0.0%
2041		3.9	1.9	5.8	1.0	6.8	0.0%
2042		3.9	1.9	5.8	1.0	6.8	0.0%
2043		4.0	1.9	5.9	1.0	6.9	1.5%
2044		4.0	1.9	5.9	1.0	6.9	0.0%
2045		4.0	1.9	5.9	1.0	6.9	0.0%
2046		4.0	1.9	5.9	1.0	6.9	0.0%
2047		4.0	1.9	5.9	1.0	6.9	0.0%
2048		4.0	1.9	5.9	1.0	6.9	0.0%
2049		4.0	1.9	5.9	1.0	6.9	0.0%
2050		4.0	1.9	5.9	1.0	6.9	0.0%

Fiscal Year	Compound Annual Average Growth Rate (CAAGR)				
2020 - 2030	11.0%		11.4%	5.2%	10.1%
2030 - 2040	1.4%		1.5%	0.0%	1.3%
2040 - 2050	0.3%		0.2%	0.0%	0.1%

Notes:
Actual transaction data provided by CFX from Monthly Statistical Reports.
A - The Poinciana Parkway was acquired by CFX in December 2019 (FY 2020) and is only a partial year.
B - First effects of COVID-19 pandemic began in March 2020.
C - New toll rates for PBP customers, set at 2.0 times the ETC rate.
D - Completion of I-4 Ultimate project.

Table 9-5
S.R. 538 Plaza Groups – Toll Revenue Projections (Millions)
FY 2021 – FY 2050

Fiscal Year		Marigold Main	Koa Main	Paid In-Lane	PBP	Total	Percent Annual Change
2010	Actual						
2011							
2012							
2013							
2014							
2015							
2016							
2017							
2018							
2019							
2020[A,B]		$2.5	$0.3	$2.8	$1.0	$3.8	
2021[C]	Forecast	$4.4	$0.5	$4.9	$2.9	$7.8	105.3%
2022[D]		$5.3	$0.6	$5.9	$2.6	$8.5	9.0%
2023		$5.9	$0.7	$6.6	$2.3	$8.9	4.7%
2024		$6.9	$1.3	$8.2	$2.6	$10.8	21.3%
2025		$7.4	$1.4	$8.8	$2.7	$11.5	6.5%
2026		$7.7	$1.4	$9.1	$2.9	$12.0	4.3%
2027		$7.9	$1.5	$9.4	$3.0	$12.4	3.3%
2028		$8.2	$1.5	$9.7	$3.1	$12.8	3.2%
2029		$8.4	$1.5	$9.9	$3.3	$13.2	3.1%
2030		$8.8	$1.7	$10.5	$3.3	$13.8	4.5%
2031		$9.0	$1.7	$10.7	$3.3	$14.0	1.4%
2032		$9.3	$1.7	$11.0	$3.4	$14.4	2.9%
2033		$9.5	$1.7	$11.2	$3.5	$14.7	2.1%
2034		$9.7	$1.8	$11.5	$3.6	$15.1	2.7%
2035		$10.0	$1.8	$11.8	$3.7	$15.5	2.6%
2036		$10.3	$1.9	$12.2	$3.7	$15.9	2.6%
2037		$10.5	$1.9	$12.4	$3.8	$16.2	1.9%
2038		$10.8	$2.0	$12.8	$4.0	$16.8	3.7%
2039		$11.0	$2.0	$13.0	$4.1	$17.1	1.8%
2040		$11.2	$2.0	$13.2	$4.2	$17.4	1.8%
2041		$11.4	$2.0	$13.4	$4.3	$17.7	1.7%
2042		$11.7	$2.2	$13.9	$4.4	$18.3	3.4%
2043		$11.9	$2.2	$14.1	$4.4	$18.5	1.1%
2044		$12.1	$2.2	$14.3	$4.5	$18.8	1.6%
2045		$12.3	$2.2	$14.5	$4.5	$19.0	1.1%
2046		$12.5	$2.3	$14.8	$4.6	$19.4	2.1%
2047		$12.7	$2.4	$15.1	$4.7	$19.8	2.1%
2048		$12.9	$2.4	$15.3	$4.8	$20.1	1.5%
2049		$13.1	$2.4	$15.5	$4.8	$20.3	1.0%
2050		$13.2	$2.4	$15.6	$4.9	$20.5	1.0%

Fiscal Year	Compound Annual Average Growth Rate (CAAGR)				
2020 - 2030	13.4%		14.1%	12.7%	13.8%
2030 - 2040	2.4%		2.3%	2.4%	2.3%
2040 - 2050	1.7%		1.7%	1.6%	1.7%

Notes:
Actual transaction data provided by CFX from Monthly Statistical Reports.
A - The Poinciana Parkway was acquired by CFX in December 2019 (FY 2020) and is only a partial year.
B - First effects of COVID-19 pandemic began in March 2020.
C - New toll rates for PBP customers, set at 2.0 times the ETC rate.
D - Completion of I-4 Ultimate project.

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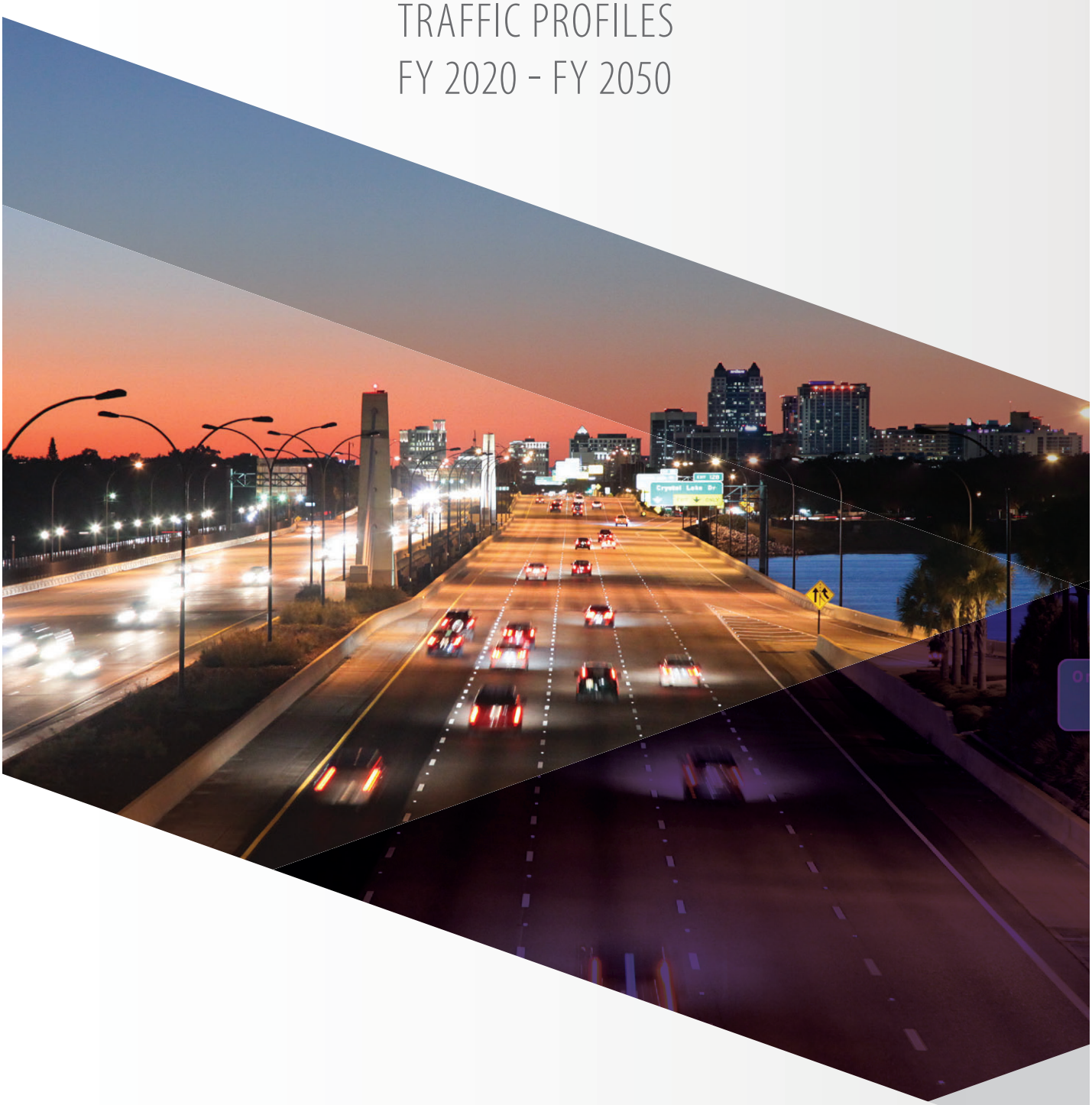
APPENDIX A

TRAFFIC PROFILES
FY 2020 – FY 2050

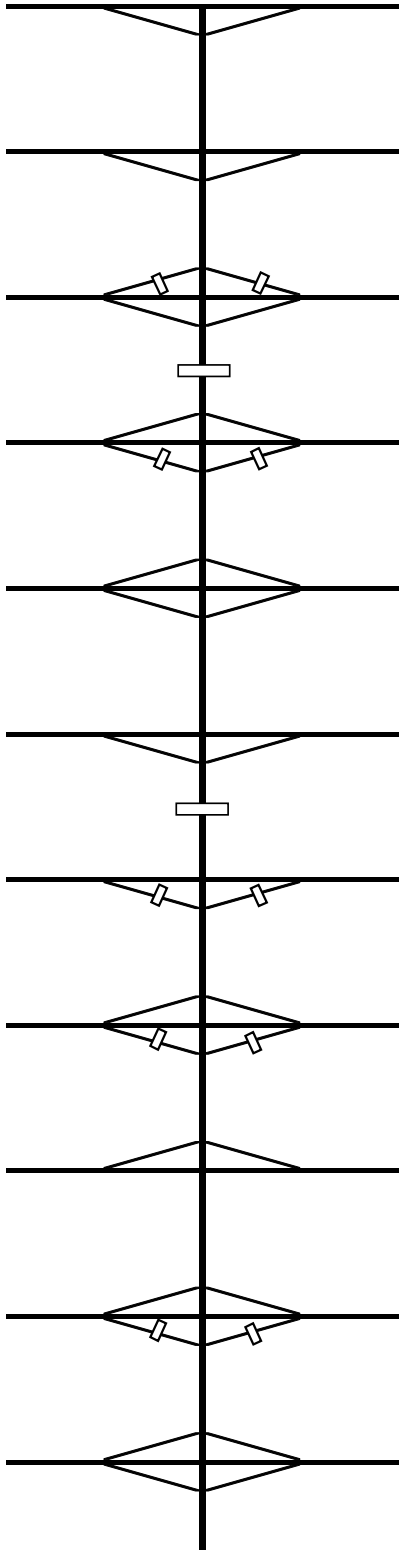


S.R. 528 - Two-Way Daily Revenue Traffic

Cross Street	FY 2020	FY 2030	FY 2040	FY 2050
To S.R. 528 (FL Turnpike)				
	82,300	**101,500**	**111,100**	**125,900**
Boggy Creek Road	6,800	9,700	10,700	12,100
	16,100	22,900	25,000	28,200
	91,600	**114,700**	**125,400**	**142,000**
Tradeport Drive /	6,300	8,900	9,800	11,000
Conway Road	5,700	8,000	8,700	9,800
	91,000	**113,800**	**124,300**	**140,800**
Semoran Boulevard	41,200	51,800	57,400	66,100
	30,900	38,900	43,100	49,600
	80,700	**100,900**	**110,000**	**124,300**
Goldenrod Road	5,200	6,500	7,200	8,400
	8,900	11,200	12,500	14,400
	84,400	**105,600**	**115,300**	**130,300**
Narcoossee Road	22,600	28,400	31,500	36,200
	6,300	7,900	8,800	10,100
	68,100	**85,100**	**92,600**	**104,200**
S.R. 417	36,800	47,900	53,600	58,400
	27,100	36,500	41,900	45,600
Beachline Main	**58,400**	**73,700**	**80,900**	**91,400**
Innovation Way	7,900	8,900	9,500	11,200
	1,700	2,300	2,400	2,800
	52,200	**67,100**	**73,800**	**83,000**
Dallas Boulevard	4,700	6,100	6,700	7,600
Dallas Main	**47,500**	**61,000**	**67,100**	**75,400**
S.R. 520	3,500	4,500	5,000	5,600
	2,800	3,600	4,000	4,500
To S.R. 528 (FL Turnpike)	**46,800**	**60,100**	**66,100**	**74,300**

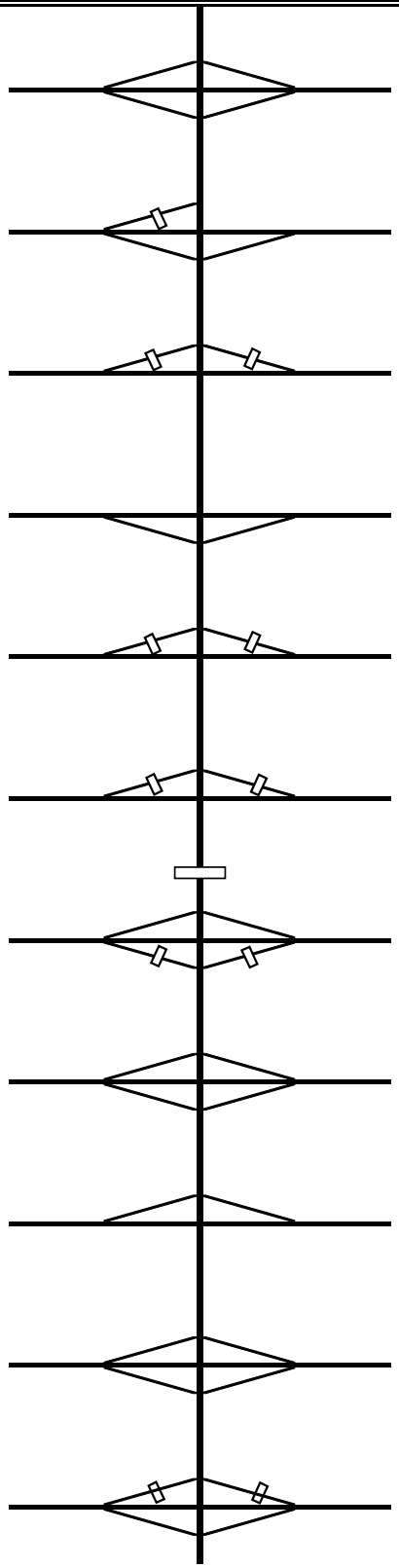
Note: Two-Way Daily Revenue Traffic is a balanced traffic profile of existing and forecasted revenue generating traffic on System facilities, which excludes non-revenue traffic and violations. The profile should not be used for design traffic purposes.

S.R. 408 - Two-Way Daily Revenue Traffic



Cross Street	FY 2020	FY 2030	FY 2040	FY 2050
Turnpike Spur				
	58,700	79,700	87,400	94,500
	58,700	**79,700**	**87,400**	**94,500**
S.R. 50 West				
	8,500	11,700	12,700	13,700
	67,200	**91,400**	**100,100**	**108,200**
Good Homes	10,300	14,200	15,400	16,500
Road	8,700	12,000	13,200	14,100
Hiawassee Main	**65,600**	**89,200**	**97,900**	**105,800**
Hiawassee Road	6,200	9,700	11,400	12,800
	9,800	13,200	14,000	15,000
	69,200	**92,700**	**100,500**	**108,000**
Kirkman Road	8,000	12,400	14,500	16,200
	10,400	14,000	14,600	15,100
	71,600	**94,300**	**100,600**	**106,900**
Pine Hills Road				
	5,800	7,900	8,500	8,800
Pine Hills Main	**77,400**	**102,200**	**109,100**	**115,700**
Old Winter				
Garden Rd	4,500	6,000	6,400	6,600
	81,900	**108,200**	**115,500**	**122,300**
John Young	7,700	11,000	11,900	12,600
Blvd	8,000	10,900	11,600	12,000
	82,200	**108,100**	**115,200**	**121,700**
Tampa Avenue	3,500	5,000	5,400	5,800
	78,700	**103,100**	**109,800**	**115,900**
Orange Blossom	6,800	9,700	10,400	11,000
Trail	7,400	10,100	10,900	11,200
	79,300	**103,500**	**110,300**	**116,100**
Interstate-4	19,000	27,200	29,300	31,000
	56,000	67,900	70,600	72,900
	116,300	**144,200**	**151,600**	**158,000**

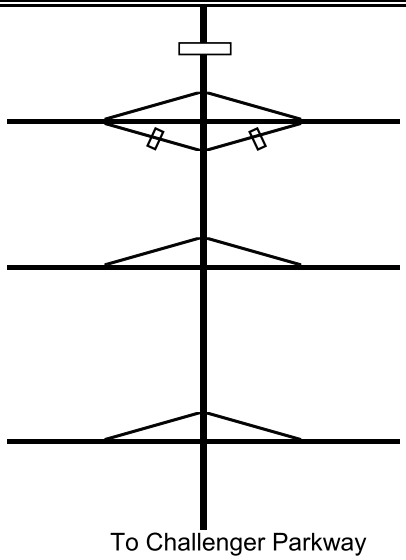
S.R. 408 - Two-Way Daily Revenue Traffic



Cross Street	FY 2020	FY 2030	FY 2040	FY 2050
Orange Avenue/	11,100	14,200	14,900	15,600
Rosalind Avenue	17,700	21,500	22,300	23,000
	122,900	**151,500**	**159,000**	**165,400**
Mills Avenue	1,300	1,700	1,700	1,700
	9,200	11,200	11,700	12,000
	130,800	**161,000**	**169,000**	**175,700**
Bumby Avenue	12,000	15,400	16,100	17,000
	118,800	**145,600**	**152,900**	**158,700**
Crystal Lake Drive	12,700	15,500	16,000	16,600
	131,500	**161,100**	**168,900**	**175,300**
Conway Road	10,400	13,500	14,100	14,900
	121,100	**147,600**	**154,800**	**160,400**
Andes Ave/Semoran	9,000	11,500	12,100	12,600
Conway Main	**112,100**	**136,100**	**142,700**	**147,800**
Semoran Boulevard/	11,500	14,100	14,600	15,100
Yucatan Drive	8,000	10,000	10,400	10,700
	108,600	**132,000**	**138,500**	**143,400**
Goldenrod Road	12,000	14,600	15,200	15,600
	11,200	13,800	14,300	14,800
	107,800	**131,200**	**137,600**	**142,600**
Chickasaw Trail	10,300	12,600	13,200	13,600
	97,500	**118,600**	**124,400**	**129,000**
S.R. 417	55,000	58,600	60,400	62,200
	25,500	28,600	30,300	31,500
	68,000	**88,600**	**94,300**	**98,300**
Dean Road	10,300	12,900	13,600	14,200
	1,700	2,100	2,200	2,300

S.R. 408 - Two-Way Daily Revenue Traffic

Cross Street	FY 2020	FY 2030	FY 2040	FY 2050
Dean Main	**59,400**	**77,800**	**82,900**	**86,400**
Rouse Road	7,600	9,500	10,100	10,500
	1,000	1,200	1,300	1,400
	52,800	**69,500**	**74,100**	**77,300**
Alafaya Trail	22,100	27,800	29,300	30,600
	30,700	**41,700**	**44,800**	**46,700**
S.R. 50	22,300	28,000	29,500	30,800
	8,400	**13,700**	**15,300**	**15,900**



Note: Two-Way Daily Revenue Traffic is a balanced traffic profile of existing and forecasted revenue generating traffic on System facilities, which excludes non-revenue traffic and violations. The profile should not be used for design traffic purposes.

S.R. 417 - Two-Way Daily Revenue Traffic

Cross Street	FY 2020	FY 2030	FY 2040	FY 2050
	68,200	**88,600**	**105,700**	**121,600**
University Boulevard	5,700	7,600	7,800	7,900
	19,400	25,700	26,200	26,600
University Main	**81,900**	**106,700**	**124,100**	**140,300**
S.R. 50	5,700	7,000	7,200	7,300
	7,200	10,100	11,400	12,600
	83,400	**109,800**	**128,300**	**145,600**
S.R. 408	41,000	44,700	45,000	45,200
	40,500	45,100	49,500	52,300
	82,900	**110,200**	**132,800**	**152,700**
Curry Ford Road	7,800	9,200	9,300	9,400
	12,100	15,300	16,300	17,100
Curry Ford Main	**87,200**	**116,300**	**139,800**	**160,400**
Lee Vista Boulevard	5,400	7,300	7,300	7,900
	3,700	5,300	6,100	6,700
	85,500	**114,300**	**138,600**	**159,200**
S.R. 528	44,900	60,200	68,700	76,500
	19,000	25,500	30,700	35,800
	59,600	**79,600**	**100,600**	**118,500**
Dowden Road	4,300	6,400	8,400	10,400
	3,000	5,500	6,200	6,900
	58,300	**78,700**	**98,400**	**115,000**
Moss Park Road	7,500	11,200	13,800	16,400
	3,100	5,700	6,400	7,100
	53,900	**73,200**	**91,000**	**105,700**
Narcoossee Road	13,800	20,600	24,400	28,000
	10,200	16,200	18,300	20,100
	50,300	**68,800**	**84,900**	**97,800**
Lake Nona Road	6,100	9,100	11,400	13,700
	7,400	12,200	13,700	15,100

S.R. 417 - Two-Way Daily Revenue Traffic

Cross Street	FY 2020	FY 2030	FY 2040	FY 2050
	51,600	**71,900**	**87,200**	**99,200**
Boggy Creek Road	9,300	13,800	18,000	21,000
	22,200	35,200	39,600	43,800
Boggy Creek Main	**64,500**	**93,300**	**108,800**	**122,000**
Landstar Boulevard	7,500	11,000	13,600	15,500
	16,500	24,200	26,000	28,200
	73,500	**106,500**	**121,200**	**134,700**
Florida's Turnpike	16,600	24,400	31,000	36,500
	11,500	16,800	18,900	20,900
	68,400	**98,900**	**109,100**	**119,100**
Orange Blossom Trail	8,800	12,300	15,100	17,600
	8,600	11,500	13,100	14,400
	68,200	**98,100**	**107,100**	**115,900**
John Young Parkway	12,500	17,500	20,900	24,100
	8,300	11,200	12,600	13,900
John Young Main	**64,000**	**91,800**	**98,800**	**105,700**
World Center Drive	31,100	43,700	49,400	54,500
	32,900	**48,100**	**49,400**	**51,200**

to Turnpike S.R. 417

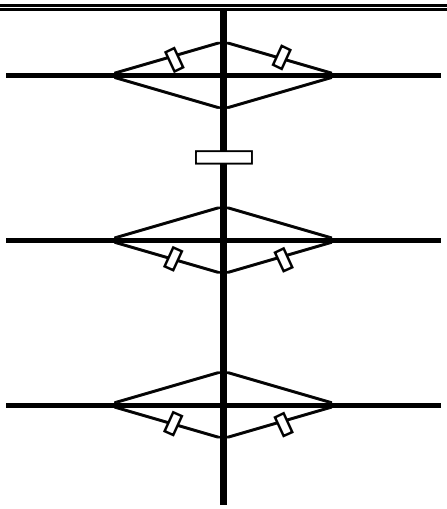
Note: Two-Way Daily Revenue Traffic is a balanced traffic profile of existing and forecasted revenue generating traffic on System facilities, which excludes non-revenue traffic and violations. The profile should not be used for design traffic purposes.

S.R. 429 and S.R. 453 - Two-Way Daily Revenue Traffic

Cross Street	FY 2020	FY 2030	FY 2040	FY 2050
To FDOT Section of S.R. 429 (Wekiva Parkway)				
Mount Plymouth Main	**4,400**	**14,200**	**22,300**	**23,800**
S.R. 453				
Coronado Main	500	3,200	5,800	9,100
(To S.R. 46/Mt. Dora)	5,600	11,100	15,200	18,100
	9,500	**22,100**	**31,700**	**32,800**
Kelly Park Road	300	600	900	1,200
	6,300	9,800	11,500	12,900
Ponkan Main	**15,500**	**31,300**	**42,300**	**44,500**
U.S. 441	600	800	1,000	1,200
	18,400	26,500	28,900	30,500
	33,300	**57,000**	**70,200**	**73,800**
S.R. 414	9,600	14,400	16,200	17,800
	30,800	37,100	41,200	42,400
	54,500	**79,700**	**95,200**	**98,400**
C.R. 437A (Ocoee Apopka Rd)	1,700	2,400	2,700	2,900
	3,500	5,000	5,400	5,800
Forest Lake Main	**56,300**	**82,300**	**97,900**	**101,300**
West Road	2,200	3,100	3,400	3,600
	9,900	14,300	15,600	16,600
	64,000	**93,500**	**110,100**	**114,300**
S.R. 438/	4,200	6,200	6,800	7,200
Plant Street	9,300	13,500	14,700	15,700
	69,100	**100,800**	**118,000**	**122,800**
S.R. 50	7,100	10,200	11,000	11,700
	5,400	7,700	8,400	8,900
	67,400	**98,300**	**115,400**	**120,000**
Florida's Turnpike	34,900	51,100	56,700	61,100
	33,800	51,500	59,100	65,700
	66,300	**98,700**	**117,800**	**124,600**

S.R. 429 and S.R. 453 - Two-Way Daily Revenue Traffic

Cross Street	FY 2020	FY 2030	FY 2040	FY 2050
C.R. 535	29,500	39,400	46,600	48,800
	6,700	10,200	12,300	13,500
Independence Main	**43,500**	**69,500**	**83,500**	**89,300**
New Independence Parkway	10,100	15,300	18,500	20,300
	2,900	4,400	5,300	5,800
	36,300	**58,600**	**70,300**	**74,800**
Schofield Road	7,500	11,300	13,600	15,000
	700	1,000	1,200	1,300
	29,500	**48,300**	**57,900**	**61,100**

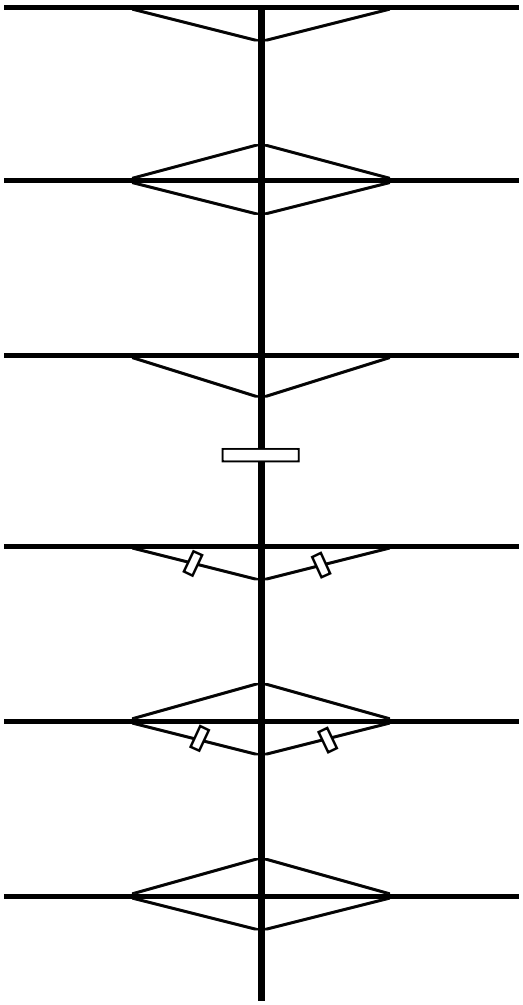


To Turnpike Section of S.R. 429

Note: Two-Way Daily Revenue Traffic is a balanced traffic profile of existing and forecasted revenue generating traffic on System facilities, which excludes non-revenue traffic and violations. The profile should not be used for design traffic purposes.

S.R. 414 - Two-Way Daily Revenue Traffic

Cross Street	FY 2020	FY 2030	FY 2040	FY 2050
S.R. 429				
	40,400	51,500	57,400	62,700
	40,400	**51,500**	**57,400**	**62,700**
US 441 via SR 451	11,500	14,200	15,400	16,600
	3,700	5,800	6,900	7,500
	32,600	**43,100**	**48,900**	**53,600**
Marden Road				
	400	1,000	1,500	1,600
Coral Hills Main	**33,000**	**44,100**	**50,400**	**55,200**
Keene Road / C.R. 435				
	4,000	5,600	6,300	6,800
	37,000	**49,700**	**56,700**	**62,000**
Hiawassee Road	5,500	7,700	8,600	9,300
	4,300	6,000	6,700	7,300
	35,800	**48,000**	**54,800**	**60,000**
U.S. 441	4,900	6,800	7,700	8,300
	10,400	13,700	14,300	14,400
	41,300	**54,900**	**61,400**	**66,100**



To Maitland Blvd.

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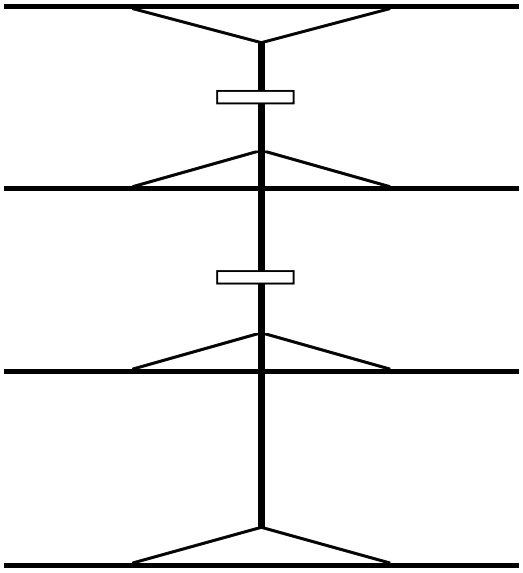
S.R. 538 - Two-Way Daily Revenue Traffic

Cross Street	FY 2020	FY 2030	FY 2040	FY 2050
U.S. 17-92				
	5,400	12,900	14,200	15,400
Marigold Main	**5,400**	**12,900**	**14,200**	**15,400**
Marigold Avenue	3,900	4,400	4,900	5,400
Koa Main	**1,500**	**8,500**	**9,300**	**10,000**
Koa Street	500	2,600	3,100	3,600
	1,000	**5,900**	**6,200**	**6,400**
Cypress Parkway				



Note: Two-Way Daily Revenue Traffic is a balanced traffic profile of existing and forecasted revenue generating traffic on System facilities, which excludes non-revenue traffic and violations. The profile should not be used for design traffic purposes.

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