June 2023

PREPARED FOR

CENTRAL FLORIDA EXPRESSWAY AUTHORITY

GENERAL TRAFFIC AND EARNINGS

Consultant's Annual Report

CDM Smith

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INTRODUCTION AND SYSTEM OVERVIEW

INTRODUCTION AND SYSTEM OVERVIEW

1.1 Introduction

Prepared for the Central Florida Expressway Authority (CFX), this annual report contains a summary of the Fiscal Year (FY) 2022 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 facility, S.R. 451, is not reported because it is non-tolled and 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 data 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 System. This report contains a description of historical T&R from FY 2002 through FY 2022, along with projected T&R for FY 2023 through FY 2052. 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 CFX's 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 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 the following seven toll facilities:

- S.R. 528 – Martin B. Andersen Beachline Expressway
- S.R. 408 – Spessard L. Holland East-West Expressway
- S.R. 417 – Central Florida GreeneWay
- S.R. 429 – Daniel Webster Western Beltway/Wekiva Parkway
- 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.

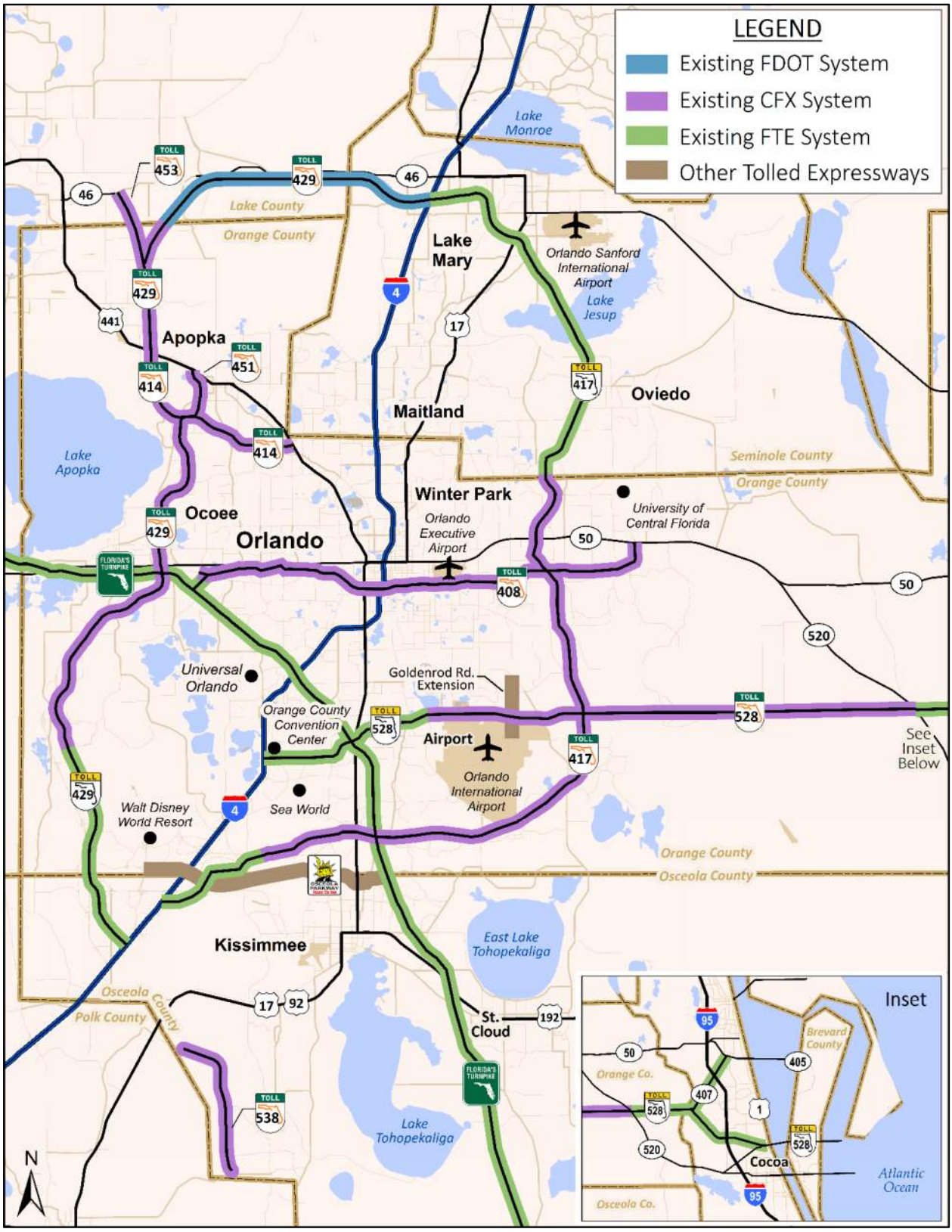
The System as it exists today is the result of many improvement and expansion projects, constructed over the 58-year period between 1963 and 2022. The first facility is the 23-mile S.R. 528 Beachline Expressway, which opened to traffic in 1967. Presently, this facility extends from the S.R. 482/Sand 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 eight 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 Spessard L. Holland 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. 408 has four mainline toll plazas: Hiawassee Main, Pine Hills Main, Conway Main, and Dean Main, along with ten 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/Wekiva Parkway, 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 FY 2018, the Ponkan Main Plaza and Mt. Plymouth Main Plaza opened to traffic as all-electronic toll (AET) collection facilities. 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). This portion of the Western Beltway is mostly opened to traffic and will be completed with a connection in the north to I-4 and S.R. 417 in 2023.

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) in FY 2016 and operated by CFX as a non-system facility until 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.

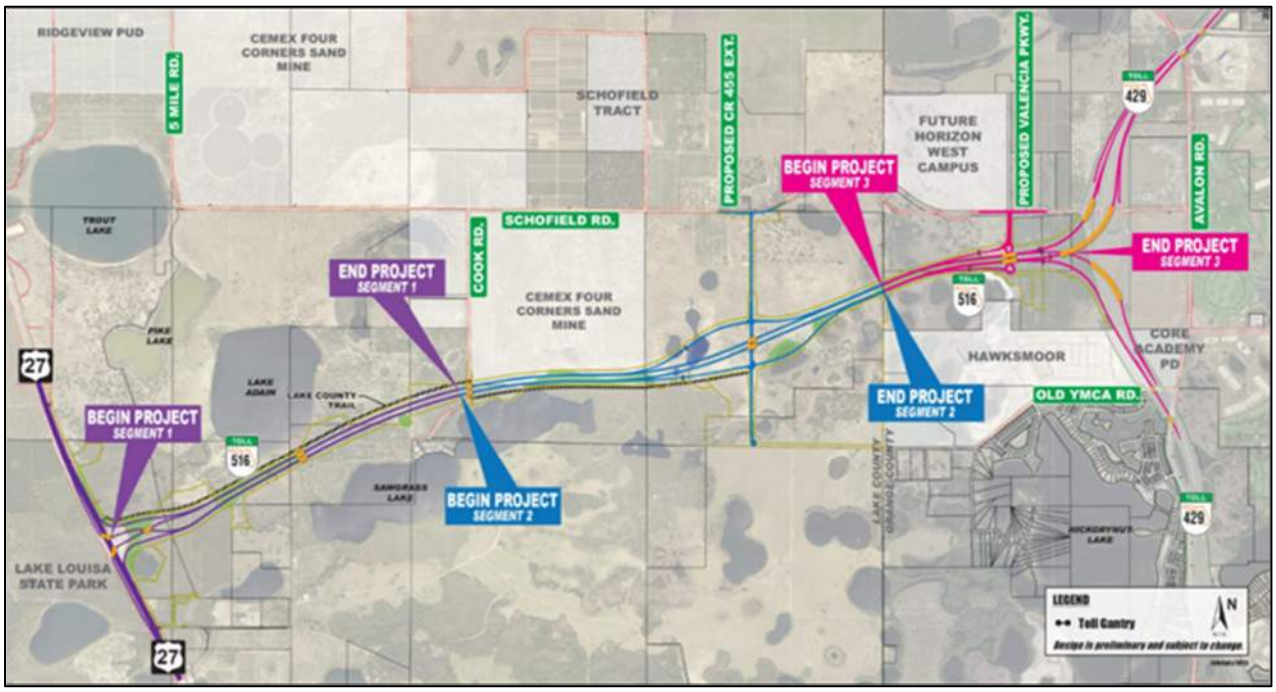
1.2.1 LAKE/ORANGE EXPRESSWAY (S.R. 516)

Identified as a system expansion project need in the last four consecutive Central Florida Expressway Authority (CFX) master plans, the Lake/Orange Expressway (LOE) is a proposed 5-mile toll facility providing needed east-west connectivity in south Lake County and west Orange County. A strategic transportation investment in Central Florida, the future expressway will provide a nonstop access route linking heavily traveled U.S. 27 to S.R. 429.

On October 10, 2019, the CFX Board unanimously approved the Lake/Orange County Connector Project Development and Environment (PD&E) Study and advanced the project to production phases that include design and construction. The PD&E study area fell within the Lake County Wellness Way Area Plan and the Orange County Horizon West Special Planning Area, with Wellness Way anticipated to generate over 26,000 jobs and Horizon West growing to a projected workforce of more than 27,000 employees.

The Design Phase began in late 2020 and was broken into three design segments as shown in Figure 1-2. Segment 1 begins at U.S. 27 and ends at Cook Road. This segment includes a fly-under system interchange at U.S. 27, the realignment of U.S. 27 to avoid impacts to Lake Louisa State Park and an adjacent multi-use trail. Segment 2 beings at Cook Road and ends at the county line and includes a new local access full interchange at the future CR 455 Extension. Segment 3 starts at the county line and extends to S.R. 429 and includes a new local access partial interchange at Valencia Parkway and a full access system to system interchange at S.R. 429. Construction is expected to begin in FY 2024.

Figure 1-2
Lake/Orange Expressway Design Segments



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 due to the Great Recession, to stabilize the fiscal integrity of CFX, and to fortify the ability to improve and expand the System in the future.

Then on July 1, 2012 (the beginning of FY 2013), CFX implemented a rate differential between 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). Instead, 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 2022 toll rates are presented in Table 1-2. The rates shown in this table come from the fourth toll rate adjustment under the new toll policy at a CPI adjustment of 1.50%. In accordance with CFX's Toll Policy, the next toll rate adjustment was implemented on July 1, 2022 (FY 2023). Additional toll rate adjustments are assumed for every subsequent year.

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 and is adjusted each year as the electronic rate is adjusted in compliance with the Customer First toll rate policy. 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. This may be in part due to customer travel frequency and/or the convenience of PBP compared to establishing a transponder account.

There have been several changes to the toll rate schedule due to additions and deletions of main and ramp plazas, including the addition of the Dallas Main plaza and Dallas ramp plazas in March 2012, the addition of C.R. 437A ramp plazas in January 2013, the removal of the Valencia College Lane ramp plazas in March 2013, the addition of the Schofield Road ramps on S.R. 429 in May 2015, the removal of the Airport Main plaza and the addition of ramp plazas at Boggy Creek Road and Conway Road in March 2016, the opening of the SR 429/Wekiva Parkway in April 2018, the purchase of the Poinciana Parkway in Dec 2018, and the addition of the Stoneybrook West Ramps in October 2020. These changes to toll plazas on the System are reflected in the table.

Table 1-2
CFX System Toll Rates, FY 2022 (as of July 1, 2021)

Toll Locations	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	$1.17	$1.17	$1.17	$1.17	$1.17	$1.50	$1.50	$1.50	$1.50	$1.50	$2.34	$2.34	$2.34	$2.34	$2.34
Conway Road/Tradeport Drive	$1.17	$1.17	$1.17	$1.17	$1.17	$1.50	$1.50	$1.50	$1.50	$1.50	$2.34	$2.34	$2.34	$2.34	$2.34
Beachline Main Plaza	$0.93	$1.85	$2.15	$2.74	$2.74	$1.25	$2.25	$2.50	$3.25	$3.25	$1.86	$3.70	$4.30	$5.48	$5.48
Innovation Way	$0.63	$0.63	$0.63	$0.63	$0.63	$0.75	$0.75	$0.75	$0.75	$0.75	$1.26	$1.26	$1.26	$1.26	$1.26
Dallas Boulevard	$0.54	$0.54	$0.54	$0.54	$0.54	$0.75	$0.75	$0.75	$0.75	$0.75	$1.08	$1.08	$1.08	$1.08	$1.08
Dallas Main Plaza [B]	$0.54	$0.81	$1.08	$1.08	$1.08	$0.75	$1.00	$1.25	$1.25	$1.25	$1.08	$1.62	$2.16	$2.16	$2.16
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	$0.56	$0.56	$0.56	$0.56	$0.56
Hiawassee Main Plaza	$0.88	$1.77	$2.05	$2.65	$2.65	$1.00	$2.00	$2.50	$3.00	$3.00	$1.76	$3.54	$4.10	$5.30	$5.30
Hiawassee Road	$0.59	$0.59	$0.59	$0.59	$0.59	$0.75	$0.75	$0.75	$0.75	$0.75	$1.18	$1.18	$1.18	$1.18	$1.18
Pine Hills Main Plaza	$1.17	$1.77	$2.05	$2.65	$2.65	$1.50	$2.00	$2.50	$3.00	$3.00	$2.34	$3.54	$4.10	$5.30	$5.30
Old Winter Garden Road	$0.88	$0.88	$0.88	$0.88	$0.88	$1.00	$1.00	$1.00	$1.00	$1.00	$1.76	$1.76	$1.76	$1.76	$1.76
John Young Parkway (S.R. 423)	$0.88	$0.88	$0.88	$0.88	$0.88	$1.00	$1.00	$1.00	$1.00	$1.00	$1.76	$1.76	$1.76	$1.76	$1.76
Orange Blossom Trail	$0.59	$0.59	$0.59	$0.59	$0.59	$0.75	$0.75	$0.75	$0.75	$0.75	$1.18	$1.18	$1.18	$1.18	$1.18
Mills Avenue	$0.59	$0.59	$0.59	$0.59	$0.59	$0.75	$0.75	$0.75	$0.75	$0.75	$1.18	$1.18	$1.18	$1.18	$1.18
Bumby Avenue	$0.59	$0.59	$0.59	$0.59	$0.59	$0.75	$0.75	$0.75	$0.75	$0.75	$1.18	$1.18	$1.18	$1.18	$1.18
Conway Road	$0.88	$0.88	$0.88	$0.88	$0.88	$1.00	$1.00	$1.00	$1.00	$1.00	$1.76	$1.76	$1.76	$1.76	$1.76
Andes/Semoran Boulevard	$1.17	$1.17	$1.17	$1.17	$1.17	$1.50	$1.50	$1.50	$1.50	$1.50	$2.34	$2.34	$2.34	$2.34	$2.34
Conway Main Plaza	$1.17	$1.77	$2.05	$2.65	$2.65	$1.50	$2.00	$2.50	$3.00	$3.00	$2.34	$3.54	$4.10	$5.30	$5.30
Semoran Boulevard (S.R. 436)	$0.88	$0.88	$0.88	$0.88	$0.88	$1.00	$1.00	$1.00	$1.00	$1.00	$1.76	$1.76	$1.76	$1.76	$1.76
Dean Road	$0.59	$0.59	$0.59	$0.59	$0.59	$0.75	$0.75	$0.75	$0.75	$0.75	$1.18	$1.18	$1.18	$1.18	$1.18
Dean Main Plaza	$0.88	$1.77	$2.05	$2.65	$2.65	$1.00	$2.00	$2.50	$3.00	$3.00	$1.76	$3.54	$4.10	$5.30	$5.30
Rouse Road	$0.59	$0.59	$0.59	$0.59	$0.59	$0.75	$0.75	$0.75	$0.75	$0.75	$1.18	$1.18	$1.18	$1.18	$1.18
S.R. 417															
John Young Main Plaza	$1.47	$2.05	$2.65	$3.23	$3.23	$1.75	$2.50	$3.00	$3.75	$3.75	$2.94	$4.10	$5.30	$6.46	$6.46
John Young Parkway (S.R. 423)	$0.88	$0.88	$0.88	$0.88	$0.88	$1.00	$1.00	$1.00	$1.00	$1.00	$1.76	$1.76	$1.76	$1.76	$1.76
Orange Blossom Trail	$0.59	$0.59	$0.59	$0.59	$0.59	$0.75	$0.75	$0.75	$0.75	$0.75	$1.18	$1.18	$1.18	$1.18	$1.18
Landstar Boulevard	$0.50	$0.50	$0.50	$0.50	$0.50	$0.50	$0.50	$0.50	$0.50	$0.50	$1.00	$1.00	$1.00	$1.00	$1.00
Boggy Creek Main Plaza	$1.47	$2.05	$2.65	$3.23	$3.23	$1.75	$2.50	$3.00	$3.75	$3.75	$2.94	$4.10	$5.30	$6.46	$6.46
Boggy Creek Road	$1.17	$1.17	$1.17	$1.17	$1.17	$1.50	$1.50	$1.50	$1.50	$1.50	$2.34	$2.34	$2.34	$2.34	$2.34
Lake Nona Boulevard	$0.88	$0.88	$0.88	$0.88	$0.88	$1.00	$1.00	$1.00	$1.00	$1.00	$1.76	$1.76	$1.76	$1.76	$1.76
Narcoossee Road	$0.88	$0.88	$0.88	$0.88	$0.88	$1.00	$1.00	$1.00	$1.00	$1.00	$1.76	$1.76	$1.76	$1.76	$1.76
Moss Park Road	$0.59	$0.59	$0.59	$0.59	$0.59	$0.75	$0.75	$0.75	$0.75	$0.75	$1.18	$1.18	$1.18	$1.18	$1.18
Innovation Way/Dowden Road	$0.59	$0.59	$0.59	$0.59	$0.59	$0.75	$0.75	$0.75	$0.75	$0.75	$1.18	$1.18	$1.18	$1.18	$1.18
Lee Vista Boulevard	$0.59	$0.59	$0.59	$0.59	$0.59	$0.75	$0.75	$0.75	$0.75	$0.75	$1.18	$1.18	$1.18	$1.18	$1.18
Curry Ford Main Plaza	$0.88	$1.77	$2.05	$2.65	$2.65	$1.00	$2.00	$2.50	$3.00	$3.00	$1.76	$3.54	$4.10	$5.30	$5.30
Curry Ford Road (S.R. 552)	$0.59	$0.59	$0.59	$0.59	$0.59	$0.75	$0.75	$0.75	$0.75	$0.75	$1.18	$1.18	$1.18	$1.18	$1.18
Colonial Drive (S.R. 50)	$0.59	$0.59	$0.59	$0.59	$0.59	$0.75	$0.75	$0.75	$0.75	$0.75	$1.18	$1.18	$1.18	$1.18	$1.18
University Main Plaza	$0.88	$1.77	$2.05	$2.65	$2.65	$1.00	$2.00	$2.50	$3.00	$3.00	$1.76	$3.54	$4.10	$5.30	$5.30
University Boulevard	$0.59	$0.59	$0.59	$0.59	$0.59	$0.75	$0.75	$0.75	$0.75	$0.75	$1.18	$1.18	$1.18	$1.18	$1.18
S.R. 429															
Schofield Road	$0.59	$0.59	$0.59	$0.59	$0.59	$0.75	$0.75	$0.75	$0.75	$0.75	$1.18	$1.18	$1.18	$1.18	$1.18
New Independence Parkway	$0.88	$0.88	$0.88	$0.88	$0.88	$1.00	$1.00	$1.00	$1.00	$1.00	$1.76	$1.76	$1.76	$1.76	$1.76
Independence Main Plaza	$1.47	$2.05	$2.65	$3.23	$3.23	$1.75	$2.50	$3.00	$3.75	$3.75	$2.94	$4.10	$5.30	$6.46	$6.46
Stoneybrook West Parkway	$0.59	$0.59	$0.59	$0.59	$0.59	$0.75	$0.75	$0.75	$0.75	$0.75	$1.18	$1.18	$1.18	$1.18	$1.18
C.R. 535	$0.59	$0.59	$0.59	$0.59	$0.59	$0.75	$0.75	$0.75	$0.75	$0.75	$1.18	$1.18	$1.18	$1.18	$1.18
S.R. 438	$0.30	$0.30	$0.30	$0.30	$0.30	$0.50	$0.50	$0.50	$0.50	$0.50	$0.60	$0.60	$0.60	$0.60	$0.60
West Road	$0.88	$0.88	$0.88	$0.88	$0.88	$1.00	$1.00	$1.00	$1.00	$1.00	$1.76	$1.76	$1.76	$1.76	$1.76
Forest Lake Main Plaza	$1.47	$2.05	$2.65	$3.23	$3.23	$1.75	$2.50	$3.00	$3.75	$3.75	$2.94	$4.10	$5.30	$6.46	$6.46
C.R. 437A	$0.59	$0.59	$0.59	$0.59	$0.59	$0.75	$0.75	$0.75	$0.75	$0.75	$1.18	$1.18	$1.18	$1.18	$1.18
Ponkan Main Plaza	$0.84	$1.27	$1.68	$2.10	$2.10	N/A	N/A	N/A	N/A	N/A	$1.68	$2.54	$3.36	$4.20	$4.20
Mt. Plymouth Main Plaza	$0.79	$1.20	$1.57	$1.98	$1.98	N/A	N/A	N/A	N/A	N/A	$1.58	$2.40	$3.14	$3.96	$3.96
S.R. 453															
Coronado Main Plaza	$0.68	$1.04	$1.37	$1.73	$1.73	N/A	N/A	N/A	N/A	N/A	$1.36	$2.08	$2.74	$3.46	$3.46
S.R. 414															
Coral Hills Main Plaza	$1.17	$1.77	$2.33	$2.93	$2.93	$1.50	$2.00	$2.75	$3.25	$3.25	$2.34	$3.54	$4.66	$5.86	$5.86
Keene Road	$0.59	$0.59	$0.59	$0.59	$0.59	$0.75	$0.75	$0.75	$0.75	$0.75	$1.18	$1.18	$1.18	$1.18	$1.18
Hiawassee Road	$0.30	$0.30	$0.30	$0.30	$0.30	$0.50	$0.50	$0.50	$0.50	$0.50	$0.60	$0.60	$0.60	$0.60	$0.60
S.R. 538															
Marigold Main Plaza	$2.11	$3.20	$4.22	$5.31	$6.33	N/A	N/A	N/A	N/A	N/A	$4.22	$6.40	$8.44	$10.62	$12.66
Koa Main Plaza	$0.52	$0.77	$1.04	$1.29	$1.54	N/A	N/A	N/A	N/A	N/A	$1.04	$1.54	$2.08	$2.58	$3.08

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 Program 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.

CFX recently announced that the Customer Loyalty Discount Program would be replaced with a new E-PASS Volume Savings Program starting in October 2022 (FY 2023). This program will also be exclusive to E-PASS customers and is the same concept as the Customer Loyalty Discount Program: tiered and with no enrollment process or monthly fee. The program will offer a 20 percent rebate to customers with 40 or more CFX electronic transactions per month and a 25 percent rebate to customers with 80 or more CFX electronic transactions per month.

Beginning in FY 2016 (July 2015), CFX implemented the Beltway Discount Program. This discount program, offered for a six-year period, provided relief for and options to customers during the construction activities on I-4. The program provided an additional 5.0 percent discount to customers with 20 or more transactions in a month on the CFX "beltway" facilities, which included S.R. 417, S.R. 429, and S.R. 414. The discount was only offered in months when actual toll revenue exceeded the revenue projections by more than 2.0 percent. This discount program expired on June 30, 2021, as a majority of the I-4 Ultimate project was complete.

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 2022, this discount program provided $0.2 million in rebates to Central Florida school districts.

Beginning January 1, 2023 (FY 2023) through December 31, 2023 (FY 2024), E-PASS customers or Florida interoperable toll pass customers with 35 or more toll transactions per transponder in a single month will automatically receive a 50 percent credit to their account. This is part of the 2023

Toll Relief Program (Senate Bill 6A) enacted by Governor Ron DeSantis on December 15, 2022. The 2023 Toll Relief Program is for 2-axle vehicles only, and customers qualifying for this program will not receive the E-PASS Volume Savings Program discounts while the program is in effect.

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 2022, the discount program has grown to $17.3 million, or approximately 2.8 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 2022 the paid in-lane revenues collected through ETC reached 95.6 percent.

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

As shown in Table 1-3, the FY 2022 average toll rates per mile on CFX's seven reported 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 15.2 and 22.7 cents per mile for cash rates, 23.0 and 75.1 cents per mile for video rates, and 11.5 and 37.6 cents per mile for ETC rates. The average cash rate for the CFX System is 17.4 cents per mile, the average video rate is 32.8 and the average ETC rate is 16.4 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	Facility	Initial Opening Year	Most Recent Toll Change	Miles	Passenger Cars						Collection Method for Full Length Trips
					Toll Rates			Rate-Per-Mile			
					ETC	Cash	Video	ETC	Cash	Video	
FL	Florida's Turnpike, I-4 Selmon Exp Connector	2014	Oct-17	1	$0.79		$1.05	79.0		105.0	AET with Video
CA	TCA, San Joaquin Hills Toll Road	1996	Jul-21	15	$8.82		$8.82	58.8		58.8	AET with Video
CA	TCA, Foothill Toll Road	1993	Jul-21	12	$6.66		$6.66	55.5		55.5	AET with Video
CO	Northwest Parkway	2003	Jan-21	10	$4.40		$5.40	46.3		56.8	AET with Video
CA	TCA, Eastern Toll Road	1998	Jul-21	24	$10.99		$10.99	45.8		45.8	AET with Video
VA	Dulles Greenway	1995	Jan-22	14	$5.80	$5.80		41.4	41.4		Traditional
TX	TxDOT, Loop 1	2007	Jan-22	3	$1.21		$1.82	40.3		60.7	AET with Video
TX	CTRMA, 183A	2007	Jan-22	9	$3.49		$5.24	38.8		58.2	AET with Video
FL	CFX, SR 538 (Poinciana Parkway)	2016	Jul-21	7	$2.63		$5.26	37.6		75.1	AET with Video
TX	MCTRA, SH 249 Toll	2020	Jan-22	4	$1.31			36.4			AET Transponder Only
VA	MWAA, Dulles Toll Road	1984	Apr-20	13	$4.75	$4.75	$4.75	35.4	35.4	35.4	Traditional
TX	CTRMA, 183 Toll	2019	Jan-22	8	$2.60		$3.90	32.5		48.8	AET with Video
TX	CTRMA, 45 SW Toll	2019	Jan-22	4	$1.06		$1.59	30.3		45.4	AET with Video
CO	E-470	1991	Jan-22	47	$13.95		$22.25	29.9		47.7	AET with Video
TX	TxDOT, SH 249 Toll	2020	Jan-22	15	$4.27		$6.41	28.9		43.3	AET with Video
CA	SANDAG, South Bay Expressway (SR 125)	2007	Jun-12	10	$2.75	$3.50	$5.50	27.5	35.0	55.0	Traditional
TX	Fort Bend Parkway Toll Road	2004	Jan-22	8	$2.07			25.9			AET Transponder Only
TX	CTRMA, SH 71 Toll	2017	Jan-22	4	$0.99		$1.49	25.4		38.2	AET with Video
FL	THEA, Lee Roy Selmon Crosstown Expressway	1976	Jul-21	17	$4.16		$5.24	24.6		31.0	AET with Video
TX	Ft. Bend Toll Road, Grand Parkway	2014	Jan-22	12	$2.94			24.5			AET Transponder Only
TX	TxDOT, Grand Parkway	2011	Jan-22	58	$13.83			23.8			AET Transponder Only
SC	Connector 2000, Southern Connector	2001	Jan-22	16	$3.70	$4.00		23.1	25.0		Traditional
TX	HCTRA, Westpark Tollway	2004	Apr-20	13	$3.00		$3.50	23.1		26.9	AET with Video
TX	Fort Bend Westpark Tollway	2005	Jan-22	10	$2.28			22.8			AET Transponder Only
TX	NTTA, Chisholm Trail Parkway	2014	Jul-21	28	$6.10		$9.16	22.1		33.2	AET with Video
MD	MTA, Intercounty Connector	2011	Jul-15	18	$3.86		$5.78	22.1		33.0	AET with Video
NC	NCTA, Triangle Expressway	2012	Jan-22	15	$3.29		$5.07	21.8		33.6	AET with Video
TX	NETRMA, Toll 49	2006	Jan-21	32	$6.64		$9.97	20.8		31.2	AET with Video
VA	RMTA, Powhite Parkway	1973	Sep-08	3	$0.70	$0.70		20.6	20.6		Traditional
VA	RMTA, Downtown Expressway (SR 195)	1976	Sep-08	3	$0.70	$0.70		20.6	20.6		Traditional
PA	Penn Turnpike, Southern Beltway (I-576)	2006	Oct-21	19	$3.90		$7.80	20.5		41.1	AET with Video
FL	CFX, SR 429 (Wekiva Parkway)	2018	Jul-21	8	$1.63		$3.26	20.4		40.8	AET with Video
TX	NTTA, President George Bush Turnpike	1998	Jul-21	51	$10.39		$15.60	20.2		30.3	AET with Video
TX	HCTRA, Tomball Tollway	2015	Apr-20	8	$1.50		$1.75	20.0		23.3	AET with Video
IL	Ill. Tollway, IL 390	2016	Jan-22	10	$1.90		$3.80	19.4		38.8	AET with Video
TX	NTTA, Dallas North Tollway	1968	Jul-21	32	$6.06		$9.10	18.9		28.4	AET with Video
FL	FDOT, Wekiva Parkway	2016	Oct-17	12	$2.26		$3.01	18.8		25.1	AET with Video
FL	MDX, Gratigny Parkway (SR 924)	1992	Jul-18	5	$0.94		$1.88	18.8		37.6	AET with Video
FL	CFX, SR 408 (East-West Expressway)	1973	Jul-21	22	$4.10	$5.00	$8.20	18.6	22.7	37.3	Traditional
TX	TxDOT, SH 45 North	2007	Jan-22	13	$2.42		$3.64	18.6		28.0	AET with Video
TX	NTTA, 360 Tollway	2018	Jul-21	10	$1.80		$2.71	18.6		27.9	AET with Video
FL	MDX, Snapper Creek Expressway (SR 878)	2010	Jul-18	3	$0.46		$0.92	18.4		36.8	AET with Video
FL	Florida's Turnpike, First Coast Expressway	2019	Jul-19	12	$2.20		$3.45	18.3		28.8	AET with Video
TX	NTTA, Sam Rayburn Tollway	2008	Jul-21	26	$4.74		$7.12	18.2		27.4	AET with Video
TX	HCTRA, Sam Houston Toll Road	1988	Apr-20	70	$12.00		$14.25	17.1		20.4	AET with Video
FL	CFX, SR 453	2018	Jul-21	4	$0.68		$1.36	17.0		34.0	AET with Video
FL	Osceola County, Osceola Parkway	1995	Oct-21	12	$2.06	$2.50	$4.12	16.6	20.2	33.2	Traditional
FL	**CFX System**	**1967-2018**	**Jul-21**	**125**	**$20.49**	**$19.00**	**$40.98**	**16.4**	**17.4**	**32.8**	**Traditional**
TX	TxDOT, SH 130	2007	Jan-22	49	$8.00		$12.00	16.3		24.5	AET with Video
FL	MDX, Dolphin Expressway (SR 836)	1969	Jul-18	14	$2.26		$4.52	16.1		32.3	AET with Video
TX	TxDOT, SH 45 Southeast	2009	Jan-22	7	$1.19		$1.79	16.1		24.2	AET with Video
FL	CFX, SR 417 (Central Florida GreeneWay)	1989	Jul-21	32	$4.70	$5.50	$9.40	14.7	17.2	29.4	Traditional
TX	HCTRA, Hardy Toll Road	1987	Apr-20	21	$3.00		$3.50	14.2		16.6	AET with Video
MA	MassDOT, Boston Extension	1964	Oct-16	12	$1.70		$3.55	14.2		29.6	AET with Video
FL	Mid-Bay Bridge Auth, Walter F. Spence Pky	2014	Oct-15	11	$1.50		$2.00	13.6		18.2	AET with Video
FL	Florida's Turnpike, Southern Connector Ext	1996	Oct-17	6	$0.80	$1.25		13.3	20.8		Traditional
FL	MDX, Don Shula Expressway (SR 874)	1974	Jul-18	7	$0.93		$1.86	13.3		26.6	AET with Video
FL	CFX, SR 414 (John Land Apopka Expressway)	2009	Jul-21	9	$1.17	$1.50	$2.34	13.0	16.7	26.0	Traditional
FL	Florida's Turnpike, Polk Parkway (SR 570)	1998	Oct-17	25	$3.21	$4.50	$4.50	12.8	18.0	18.0	Traditional
FL	CFX, SR 429 (Daniel Webster Western Beltway)	2000	Jul-21	23	$2.94	$3.50	$5.88	12.8	15.2	25.6	Traditional
IL	Ill. Tollway, Veterans Memorial Tollway	1989	Jan-22	30	$3.80		$7.60	12.8		25.5	AET with Video
FL	Florida's Turnpike, Seminole Exp (SR 417)	1989	Oct-17	17	$2.13	$2.50		12.5	14.7		Traditional
FL	Florida's Turnpike, Veterans Exp (SR 589)	1994	Oct-17	15	$1.87		$2.41	12.5		16.1	AET with Video
FL	CFX, SR 528 (Martin Andersen Beachline)	1967	Jul-21	23	$2.64	$3.50	$5.28	11.5	15.2	23.0	Traditional
OK	Oklahoma TPK, John Kilpatrick Turnpike	1991	Jul-21	31	$3.20		$6.65	10.3		21.3	AET with Video
FL	Florida's Turnpike, Beachline Exp West (SR 528)	1973	Oct-17	8	$0.80	$1.25		10.0	15.6		Traditional
FL	Florida's Turnpike, Western Beltway (SR 429)	2005	Oct-17	11	$1.07	$1.50		9.7	13.6		Traditional
FL	Florida's Turnpike, Suncoast Pkwy (SR 589)	2001	Feb-22	55	$5.34		$6.97	9.7		12.7	AET with Video
FL	Florida's Turnpike, Sawgrass Exp (SR 869)	1986	Oct-17	23	$2.14		$2.68	9.3		11.7	AET with Video
FL	Florida's Turnpike, HEFT (SR 821)	1973	Oct-17	47	$4.28		$5.36	9.1		11.4	AET with Video
OK	Oklahoma TPK, Kickapoo Turnpike	2020	Jan-22	21	$1.90		$3.95	9.0		18.8	AET with Video
OK	Oklahoma TPK, Creek Turnpike	1992	Jul-19	34	$3.00	$3.75		8.7	10.9		Traditional
VA	VDOT, Powhite Parkway Extension	1988	Jul-99	10	$0.75	$0.75		7.5	7.5		Traditional
NY	NYSTA, Niagara Thruway	1959	Jan-21	14	$0.95		$1.24	6.8		8.9	AET with Video
IL	Ill Tollway, Tri-State Tollway	1958	Jan-22	77	$4.50		$9.00	5.8		11.7	AET with Video
NY	NYSTA, New England Thruway	1958	Jan-21	15	$0.83		$1.08	5.5		7.2	AET with Video
FL	FDOT, Pinellas Bayway System	1962	Oct-17	15	$0.67	$1.38		4.4	9.0		Traditional

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 the result of a relative change in toll rate with other factors held constant. Generally, several factors can affect elasticity, including diversion to competing facilities, changes in travel modes, trip consolidation/trip chaining, and/or adjustment in the 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 toll locations. To estimate the 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 1.50% in July 2021 (FY 2022) took place during the COVID-19 pandemic recovery, making it impossible to determine the elasticity of demand.

Another 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 because 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
S.R. 453	n/a	n/a	n/a	n/a	n/a

The traffic elasticity on both S.R. 408 and S.R. 417 was -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 Sustainability

As part of CFX's commitment to explore more sustainable practices, the Authority adopted a Sustainability Study in April of 2019 and has begun to implement several key recommended elements. These key elements include deployment of Photovoltaic (PV) power solutions, improved energy efficiency at CFX buildings and readiness for vehicle electrification. The first PV project CFX implemented was at the Hiawassee Mainline toll plaza on S.R. 408. Elevated ground mount PV arrays were installed in the dry retention ponds adjacent to the toll plaza and provided connections to two (2) meter locations that power the Hiawassee Data Center (~320 kW) and the Mainline Plaza Building (~250kW). CFX has also piloted a floating PV installation which includes onsite power storage to power a Dynamic Message Sign (DMS) on S.R. 429 near the Schofield Road interchange and another floating PV installation at the Independence Main Plaza building (160 kW). CFX has funded an additional five PV (or solar) deployment projects,

including installations at eight toll plaza facilities with a total capital investment of just under $10M in the FY 2022 – FY 2026 work plan.

To identify improvements for energy efficiency at CFX buildings, an energy audit was conducted at the headquarters building. The energy audit provided several recommendations including implementation of internal LED lighting, advancements in lighting controls and HVAC controls among other low-cost/high return energy reductions. Next steps for sustainability could include replacing appropriate fleet vehicles with all-electric or Plug in Hybrid vehicles (PHEV). The Sustainability Study found that converting a single traditional combustion vehicle to a PHEV or Battery Electric vehicle (BEV) would prevent release of 5- 10 thousand pounds of CO^2 annually.

CFX is also collaborating with Utah State University's Advancing Sustainability through Powered Infrastructure for Roadway Electrification (ASPIRE) research center to test an EV charging solution for new expressways. An in-pavement dynamic wireless charging pilot program is under design for the S.R. 516/Lake Orange Expressway expansion project.

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 location. During processing, the PBP toll rate for that plaza, which is twice the ETC toll rate as of July 1, 2020 (FY 2021), is charged 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 2012 to FY 2022 is presented in **Table 1-5**. 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 2022 Comprehensive Annual Financial Report (CAFR) and other information in this report.

Historical paid in-lane transactions for the CFX System since FY 2012 are displayed in **Figure 1-3**. The grey line represents the number of paid in-lane transactions and shows how overall transactions have increased over the last 10 years. The bars represent the annual growth (percent change) of transactions. The same information for paid in-lane revenues is depicted in **Figure 1-4**. Paid in-lane transaction and revenue growth patterns exhibited on the System are similar.

FY 2013 showed stable transaction growth of 3.0 percent despite the toll rate increase at the beginning of FY 2013. From FY 2014 through FY 2016, transactions on CFX facilities grew at faster rates than those seen prior to the Great Recession, a period of extraordinary growth. 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 grew to $433.4 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, despite the impacts of the storms, but also in part due 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 transactions and revenues in FY 2019 can be also attributed in part to an increase in customers utilizing the PBP program. Additionally, some CFX expressways experienced reductions in paid in-lane transactions potentially due shift of SunPass® transaction processing to the state's Centralized Customer Service System (CCSS) that year. It should be noted that CFX systemwide PBP transactions more than doubled in FY 2019, from 21.6 million during the prior year to 43.6 million.

In FY 2020, both transactions and revenue decreased, due to the negative impacts of the COVID-19 pandemic. Because the fiscal year begins in July, FY 2020 only included four months of the impacts of the COVID-19 pandemic. Thus, although April 2020 (FY 2020) contained the deepest impacts of the COVID-19 pandemic, additional impacts also occurred during the early months of FY 2021, which included a full year of travel reductions and the initial recovery. 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. Tolls were suspended on CFX toll facilities beginning on September 1, 2019 through September 5, 2019 resulting in a transaction loss of approximately 5.3 million and a toll revenue loss of $5.4 million.

Table 1-5
System Totals – Historical Paid In-Lane Transactions and Revenue
FY 2012 – FY 2022

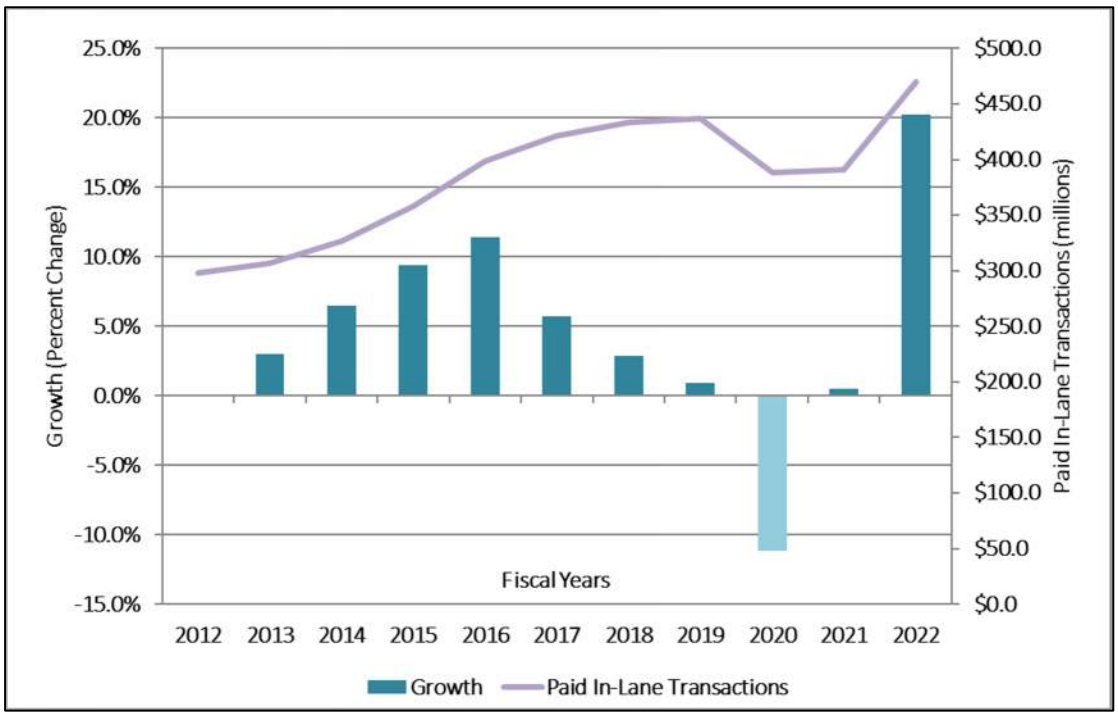
Fiscal Year Ending	S.R. 528	S.R. 408	S.R. 417	S.R. 429	S.R. 414	S.R. 453	S.R. 538	TOTAL	Percent Change
TRANSACTIONS (millions)									
2012 [A]	47.5	126.2	90.7	26.4	7.3			298.1	-
2013 [B]	57.6	123.5	90.3	27.2	8.3			306.9	3.0%
2014	59.7	129.7	97.2	30.7	9.5			326.8	6.5%
2015	64.3	138.2	109.3	35.2	10.6			357.6	9.4%
2016 [C]	71.5	146.2	127.4	41.2	12.0			398.3	11.4%
2017 [D]	76.8	147.7	138.1	45.5	12.8			420.9	5.7%
2018 [E,F,G]	76.7	145.2	145.9	51.7	13.4	0.5		433.4	3.0%
2019 *	77.1	141.1	145.5	57.6	13.9	2.2		437.4	0.9%
2020 * [H,I]	68.0	124.7	125.9	52.7	13.1	2.3	1.7	388.4	-11.2%
2021 * [J]	62.8	130.9	122.4	54.1	13.4	3.0	3.9	390.5	0.5%
2022 *	79.1	155.8	146.7	64.0	15.2	3.9	4.8	469.5	20.2%
TOLL REVENUES (millions)									
2012 [A]	$48.7	$107.7	$80.5	$24.9	$5.7			$267.5	-
2013 [B]	$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 [C]	$66.7	$140.1	$129.0	$46.1	$12.0			$393.9	11.6%
2017 [D]	$71.8	$141.0	$140.4	$51.7	$13.0			$417.9	6.1%
2018 [E,F,G]	$71.8	$138.3	$148.4	$58.3	$13.8	$0.3		$430.9	3.1%
2019 *	$73.8	$136.6	$152.6	$66.7	$14.6	$1.3		$445.6	3.4%
2020 * [H,I]	$66.4	$123.3	$133.9	$62.5	$14.1	$1.6	$2.8	$404.6	-9.2%
2021 * [J]	$62.4	$133.8	$131.2	$64.9	$14.8	$2.1	$6.6	$415.8	2.8%
2022 *	$79.9	$163.0	$161.6	$78.5	$17.3	$2.9	$8.3	$511.5	23.0%

*Indicates systemwide toll rate increase according to Customer First Toll Policy

Notes:
A - Dallas Main Plaza opened to traffic on March 19, 2012.
B - Systemwide toll rate increase in July 2012. Implementation of cash and electronic toll rate differential.
C - Beachline Airport Main plaza closed in March 2016.
D - Effects from Hurricane Matthew in October 2016.
E - Effects from Hurricane Irma in September 2017.
F - Ponkan Main Plaza opened in July 2017.
G - Mt. Plymouth Main Plaza and Coronado Main Plaza opened in April 2018.
H - Poinciana Parkway acquired by CFX in December 2019.
I - Effects from Hurricane Dorian in September 2019 and first effects of COVID-19 pandemic began in March 2020.
J - Continued effects of COVID-19 pandemic.

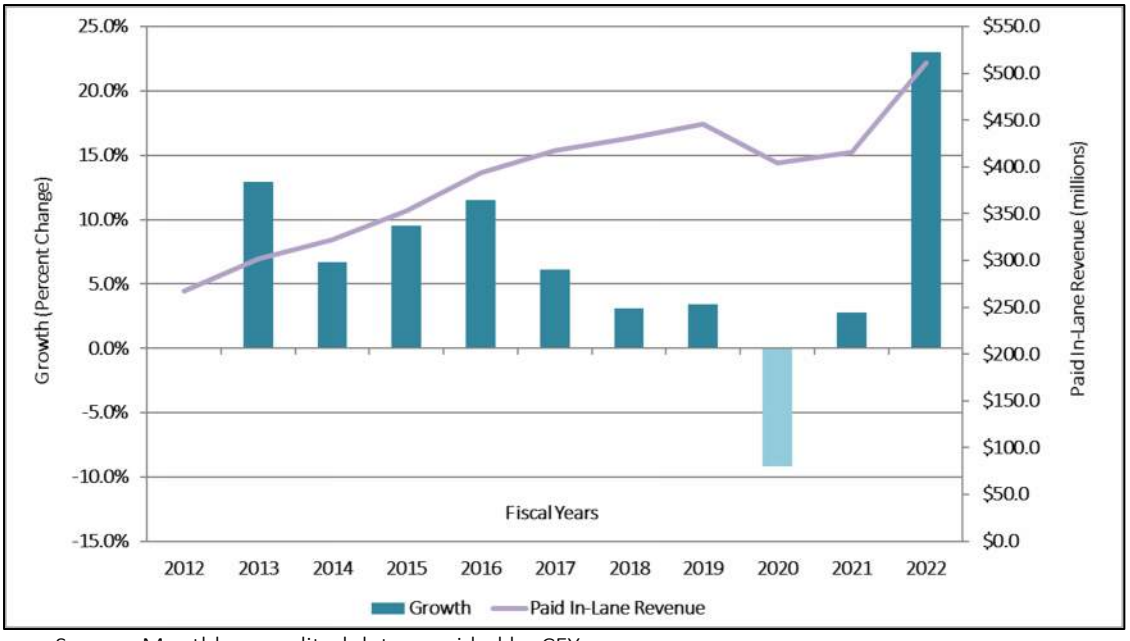
In FY 2021, total System transactions and revenue increased 0.5 percent and 2.8 percent respectively, compared to FY 2020. This slow growth can be partially attributed to the continued recovery from the COVID-19 pandemic. However, CFX system revenues increased at a higher rate than transactions due to the FY 2021 toll rate adjustment. In FY 2022, total System transactions and revenue increased 20.2 percent and 23.0 percent respectively, compared to FY 2021. The increases in both transactions and revenue reflects the recovery from the negative impacts of the COVID-19 pandemic. The FY 2022 toll rate adjustment was another factor in the increase in revenue.

Figure 1-3
CFX System Historical Paid In-Lane Transactions and Annual Growth
FY 2012 – FY 2022



Source: Monthly unaudited data provided by CFX

Figure 1-4
CFX System Historical Paid In-Lane Revenue and Annual Growth
FY 2012 – FY 2022

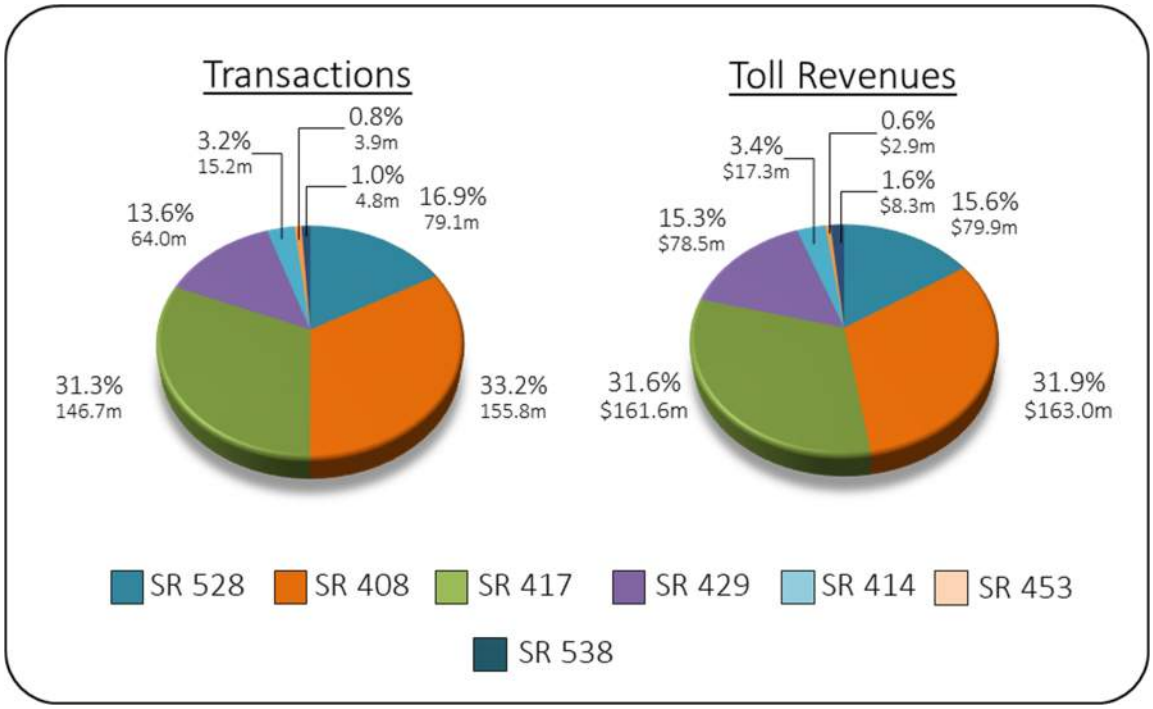


Source: Monthly unaudited data provided by CFX

1.5.3 ANNUAL PAID IN-LANE TRANSACTIONS AND REVENUE BY FACILITY

Figure 1-5 contains a summary of the FY 2022 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. 408, with 33.2 percent, or 155.8 million of the paid in-lane transactions and 31.9 percent, or $163.0 million of the revenues. Paid in-lane transactions on S.R. 417 were 31.3 percent of the System or 146.7 million and paid in-lane revenues were 31.6 percent of the System or $161.6 million. S.R. 528 comprised 16.9 percent, or 79.1 million of the paid in-lane transactions and 15.6 percent, or $79.9 million of the paid in-lane revenues. S.R. 429 paid in-lane transactions represented 13.6 percent, or 64.0 million of the System transactions and 15.3 percent, or $78.5 million of the System revenues. S.R. 414 paid in-lane transactions were reported at 15.2 million or 3.2 percent, while paid in-lane revenues were reported at $17.3 million or 3.4 percent of the System revenues. Paid in-lane transactions on S.R. 453 were 3.9 million or 0.8 percent of the System and revenues were $2.9 million or 0.6 percent of the System. S.R. 538 represented 4.8 million or 1.0 percent of System transactions and $8.3 million or 1.6 percent of System revenues for FY 2022.

Figure 1-5
CFX System Paid In-Lane Transactions and Revenue by Facility
FY 2022



Source: Monthly unaudited data provided by CFX

1.5.4 ANNUAL PBP TRANSACTION AND REVENUE TRENDS

A history of annual PBP transactions and revenue on the total CFX System from FY 2012 to FY 2022 are presented in Table 1-6. PBP transactions and revenue are recorded by toll location and accrued monthly by plaza group for each facility, however Table 1-6 shows the annual totals for the CFX System as reported at year end.

PBP transactions have increased from 4.4 million in FY 2012 to 59.9 million in FY 2022, while PBP revenues have increased from $4.6 million to $119.9 million over the same period. In FY 2022, PBP transactions increased 13.2 percent and PBP revenues increased 15.4 percent over FY 2021. As shown in the table, the rate of growth in PBP transactions is recently trending downward. During the early part of the COVID-19 pandemic, cash toll collection was suspended for several months. For this reason, PBP transactions and revenue increased year-over-year in FY 2020 and in FY 2021. The significant increase in PBP revenues in FY 2021 can also be attributed to the new PBP toll rate adopted by the CFX Board that went into effect on July 1, 2020 (FY 2021). At that time, the PBP toll rate at all toll locations was increased to twice the ETC toll rate, reflecting the cost to collect PBP tolls. Because of the new PBP toll rate, it was anticipated that going forward a portion of customers paying via PBP will switch to ETC to avoid the higher toll rate. However, recent trends do not reflect this result. This may be due to customer travel frequency and/or the convenience of PBP compared to establishing a transponder account. Overall, the recent increase in customer preference for PBP has contributed to a smaller share of paid in-lane transactions and revenue.

Table 1-6
CFX System – Historical PBP Transactions and Revenue
FY 2012 – FY 2022

Fiscal Year	Transactions (millions)	Percent Change	Toll Revenues (millions)	Percent Change
TRANSACTIONS (millions)				
2012	4.4	-	$4.6	-
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%
2021	52.9	8.8%	$103.9	80.1%
2022	59.9	13.2%	$119.9	15.4%

Source: Monthly unaudited data provided by CFX

1.5.5 MONTHLY PAID IN-LANE TRANSACTION SEASONAL VARIATION

In Table 1-7, monthly paid in-lane transactions are normalized to the average number of paid in-lane transactions per day. Considering the average number of 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.

Average transactions per day in FY 2022 Systemwide ranged from a low of approximately 1,195,400 in January 2022 to a high of 1,409,300 in April 2022. February through April are typically the months with the highest average number of transactions per day due to the large number of tourists and seasonal residents in the area during the spring. These data are presented in a

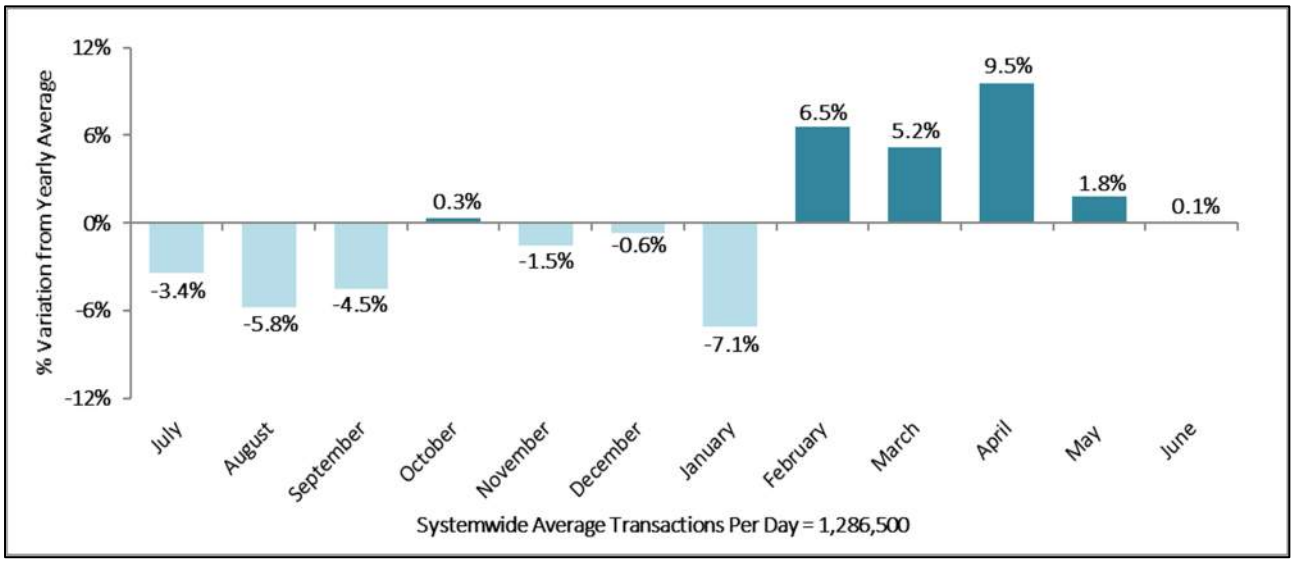
graphical format in Figure 1-6. The transactions for each month appear as a percentage of the average for the fiscal year. April paid in-lane transactions were 9.5 percent above average and January paid in-lane transactions 7.1 percent below average for the facility. It is also important to note that there was a slight decline in January and February transactions due in part to a surge in COVID infections from the Omicron variant after the 2021 holiday season.

Table 1-7
CFX System - Monthly Seasonal Variation in Paid In-Lane Transactions
FY 2022

Month	Number of Days in Month	Paid In-Lane Transactions	Average Transactions Per Day	Seasonal Factor
July	31	38,516,944	1,242,500	0.966
August	31	37,576,894	1,212,200	0.942
September	30	36,872,812	1,229,100	0.955
October	31	40,011,984	1,290,700	1.003
November	30	38,008,790	1,267,000	0.985
December	31	39,626,303	1,278,300	0.994
January	31	37,058,750	1,195,400	0.929
February	28	38,379,414	1,370,700	1.065
March	31	41,960,803	1,353,600	1.052
April	30	42,277,649	1,409,300	1.095
May	31	40,617,825	1,310,300	1.018
June	30	38,646,442	1,288,200	1.001
Average		*39,129,551*	*1,286,500*	*1.000*
Total Year	365	469,554,610		

Source: Monthly unaudited data provided by CFX

Figure 1-6
CFX System Variation in Paid In-Lane Transactions Per Day, by Month
FY 2022



Source: Monthly unaudited data provided by CFX

1.5.6 TRANSACTIONS BY VEHICLE CLASS

The distribution of transactions at each of the plaza groups systemwide by vehicle class (number of axles) for FY 2022 is shown in Table 1-8. Overall, 94.8 percent of all transactions systemwide were made by 2-axle vehicles. The next most frequent vehicle class was the 3-axle classification, which accounted for 1.9 percent of all transactions on the facility. Five or more axle vehicles, which include delivery and service vehicles, accounted for 2.0 percent. Four-axle vehicles represented the smallest category with only 1.3 percent of facility transactions. The highest percentage of two-axle vehicles occurs on S.R. 408, the highest percent of three-or-four-axle vehicles (light trucks) occurs on S.R. 429 (4.5 percent) and the highest percentage of five-or-more-axle vehicles (heavy trucks) occurs on S.R. 528 (4.3 percent).

Table 1-8
Systemwide Percent of Total Transactions by Vehicle Class
FY 2022

Vehicle Class	S.R. 528	S.R. 408	S.R. 417	S.R. 429	S.R. 414	S.R. 453	S.R. 538	Systemwide Total
2-Axle	92.3%	96.8%	94.7%	92.1%	93.3%	94.1%	95.3%	94.8%
3-Axle	2.0%	1.3%	2.2%	2.2%	2.5%	2.4%	3.1%	1.9%
4-Axle	1.4%	0.9%	1.3%	2.3%	1.8%	1.7%	0.9%	1.3%
5 or More Axles	4.3%	1.0%	1.8%	3.4%	2.4%	1.8%	0.7%	2.0%
Total	**100.0%**	**100.0%**	**100.0%**	**100.1%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**

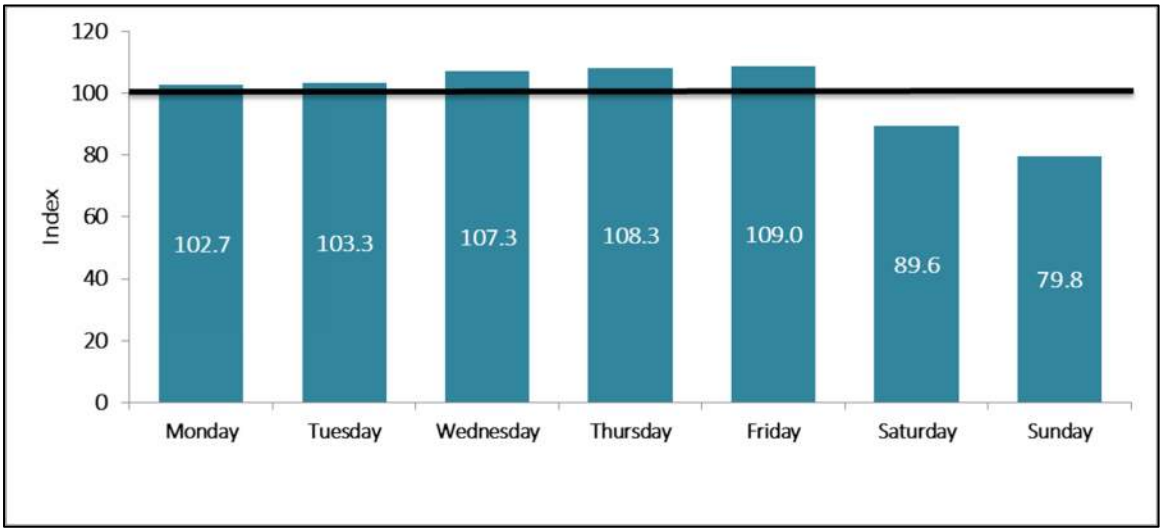
Source: Unaudited Lane transaction data – May 2022

1.5.7 DAY-OF-WEEK TRANSACTION VARIATION

Figure 1-7 contains a comparison of transactions by day of week in FY 2022. These data are 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 indicates a day that has a 20 percent greater volume than the average. As was done in prior years, the data used for this analysis was for a typical week in May 2022. The data includes transactions at mainline plazas only (no ramps).

FY 2022 weekday transactions on the CFX system fluctuated over the course of the five-day work week. Transactions were highest on Fridays, with an index value of 109.0 (9.0 percent higher than the average day), and volumes on Monday through Thursday ranged from index values of 102.7 to 108.3. Saturday and Sunday volumes were similar with index values of 89.6 and 79.8, respectively. The steady volumes on Saturdays and Sundays can be attributed to tourism and recreational/beach-related travel using CFX facilities systemwide.

Figure 1-7
Systemwide Variation in Transactions by Day of Week
FY 2022



Source: Unaudited Lane transaction data – May 2022

1.5.8 RECENT TRENDS

Several T&R trends influenced recent system performance and will continue to influence 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 data for the first half of FY 2023 for the analysis in this section.

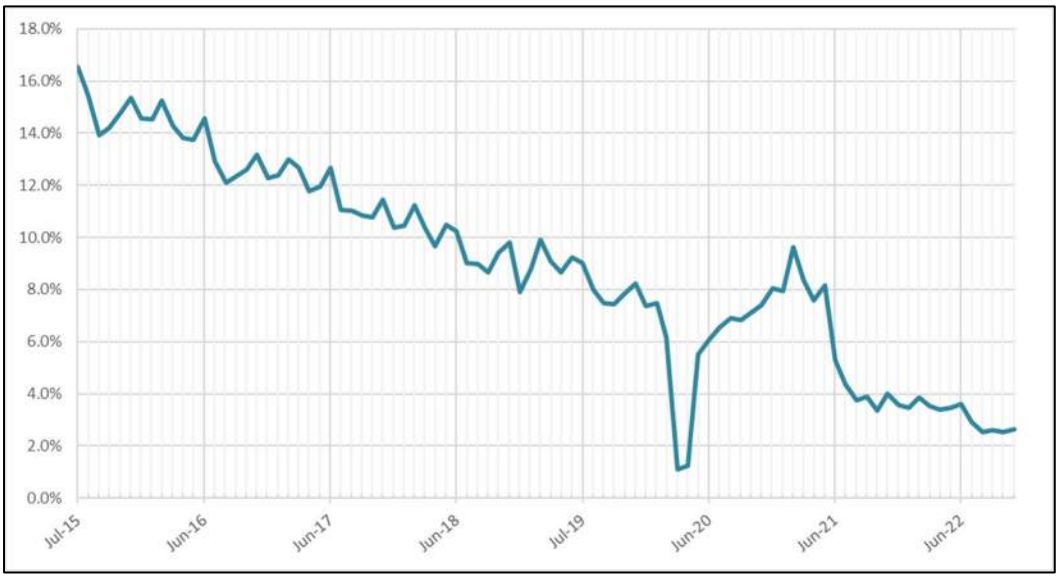
The proportion of paid in-lane transactions that were paid with cash has been declining. Figure 1-8 contains a graph of the proportion paid with cash by month. At the beginning of FY 2016, approximately 16.5 percent of paid in-lane transactions were paid with cash. During the first half of FY 2023, only 2.8 percent 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, from March 19, 2020 to May 31, 2020, is visible in the graph.

The proportion of transactions that are paid in-lane has also been declining for some time. Figure 1-9 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 transactions were paid with cash or ETC, i.e., paid in-lane transactions. In FY 2022, this number dropped to 91.3 percent. Expectations are that this value will decline further in FY 2023 to 88.1 percent. A similar pattern occurs on all CFX expressways. This means that an increasing number of customers are choosing to use PBP.

This recent trend is unexpected, since CFX has taken many steps to incentivize customers to pay tolls in the lane. It was 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 and acquired S.R. 538/Poinciana Parkway. CFX offers convenient ways for

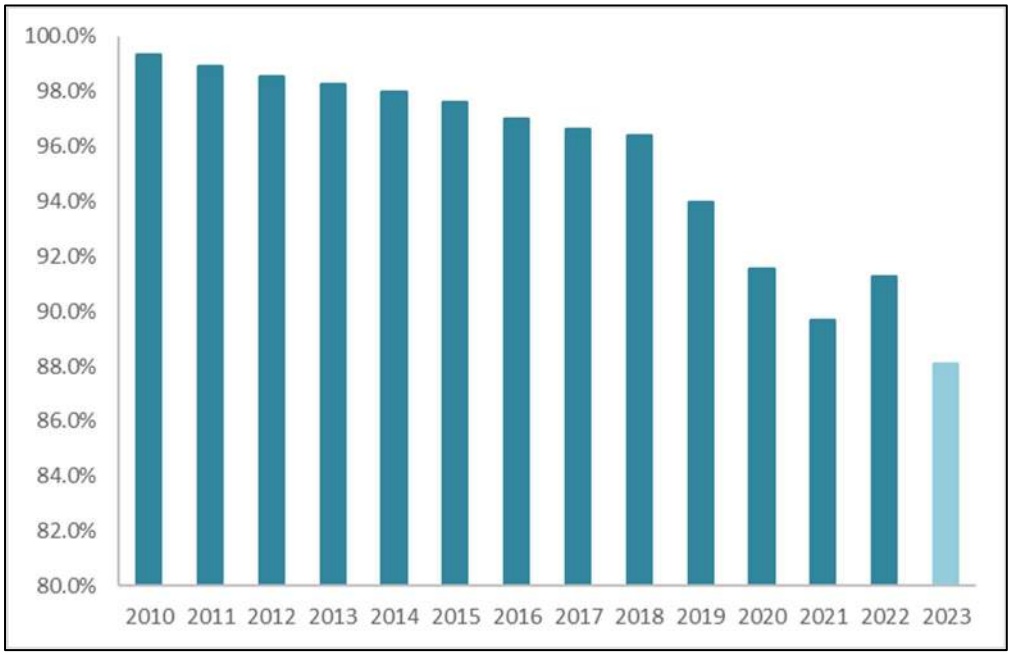
customers to obtain transponders (including free sticker tags) and provides easy ways to add funds to their accounts (including the use of cash in the reload lanes at several mainline toll plazas).

Figure 1-8
Proportion Paid In-Lane Transactions Paid with Cash
by Month, July 2015 to December 2023



Source: CFX Monthly T&R Analysis

Figure 1-9
Proportion of Transactions Paid In-Lane
FY 2010 – FY 2023



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 has added an accounts receivable (AR) for unpaid in-lane revenues. The December 2022 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 (M-Tolls). CFX currently accrues revenue for unpaid in-lane transactions at approximately 50 percent of the initial billed amount. After 24 months, CFX is able to collect approximately 70 percent of unpaid in-lane revenues.

Table 1-9
CFX PBP Aging Report
As of December 31, 2022

CENTRAL FLORIDA EXPRESSWAY AUTHORITY
PAY BY PLATE AGING REPORT
AS OF DECEMBER 31, 2022

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-20	6,188,390	$11,470,638.07	$6,017,888.77	$2,116,116.82	$8,134,005.59	70.91%
Jan-21	6,338,113	$11,712,907.15	$5,901,102.12	$2,281,069.18	$8,182,171.30	69.86%
Feb-21	5,709,714	$10,547,183.73	$5,104,480.65	$2,144,454.70	$7,248,935.35	68.73%
Mar-21	6,608,946	$12,250,562.44	$5,794,406.59	$2,621,182.39	$8,415,588.98	68.70%
Apr-21	6,722,489	$12,481,546.78	$5,901,136.12	$2,602,647.04	$8,503,783.16	68.13%
May-21	7,107,015	$13,193,955.11	$6,022,274.64	$2,677,534.54	$8,699,809.18	65.94%
Jun-21	7,798,150	$14,522,392.99	$6,468,219.62	$2,984,816.76	$9,453,036.38	65.09%
Jul-21	7,159,012	$13,436,680.04	$5,871,974.85	$2,906,299.39	$8,778,274.24	65.33%
Aug-21	7,545,439	$14,294,959.80	$6,058,016.55	$3,221,289.00	$9,279,305.55	64.91%
Sep-21	7,327,806	$13,819,331.33	$5,650,632.87	$3,216,153.00	$8,866,785.87	64.16%
Oct-21	7,316,624	$13,751,077.31	$5,517,511.10	$3,187,779.00	$8,705,290.10	63.31%
Nov-21	7,954,642	$14,990,722.92	$5,947,182.12	$3,395,639.00	$9,342,821.12	62.32%
Dec-21	7,638,247	$14,465,676.59	$5,773,732.05	$3,247,343.00	$9,021,075.05	62.36%
Jan-22	7,662,758	$14,510,143.82	$5,584,193.12	$3,278,176.00	$8,862,369.12	61.08%
Feb-22	8,015,050	$15,126,827.05	$5,575,338.47	$3,298,619.00	$8,873,957.47	58.66%
Mar-22	7,287,760	$13,785,939.54	$5,008,852.55	$2,919,775.00	$7,928,627.55	57.51%
Apr-22	7,826,260	$14,878,364.57	$5,207,062.12	$2,874,564.00	$8,081,626.12	54.32%
May-22	8,191,160	$15,571,561.25	$5,079,688.98	$2,890,151.00	$7,969,839.98	51.18%
Jun-22	8,713,921	$16,578,119.85	$5,171,036.15	$2,862,658.00	$8,033,694.15	48.46%
Jul-22	7,765,468	$15,078,443.95	$4,514,506.16	$2,392,549.00	$6,907,055.16	45.81%
Aug-22	8,397,845	$16,680,444.95	$4,554,521.44	$2,449,606.00	$7,004,127.44	41.99%
Sep-22	8,730,315	$17,246,795.68	$4,201,495.83	$2,221,651.00	$6,423,146.83	37.24%
Oct-22	4,274,460	$8,444,335.05	$1,961,529.13	$1,001,837.00	$2,963,366.13	35.09%
Nov-22	7,660,725	$15,131,344.43	$2,583,017.77	$1,116,445.00	$3,699,462.77	24.45%
Dec-22	8,323,596	$16,650,951.60	$1,288,924.34	$623,331.00	$1,912,255.34	11.48%
TOTALS	**184,263,905**	**$350,620,906.00**	**$126,758,724.11**	**$64,531,685.82**	**$191,290,409.93**	**54.56%**

(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 2022

1.6 ETC Usage

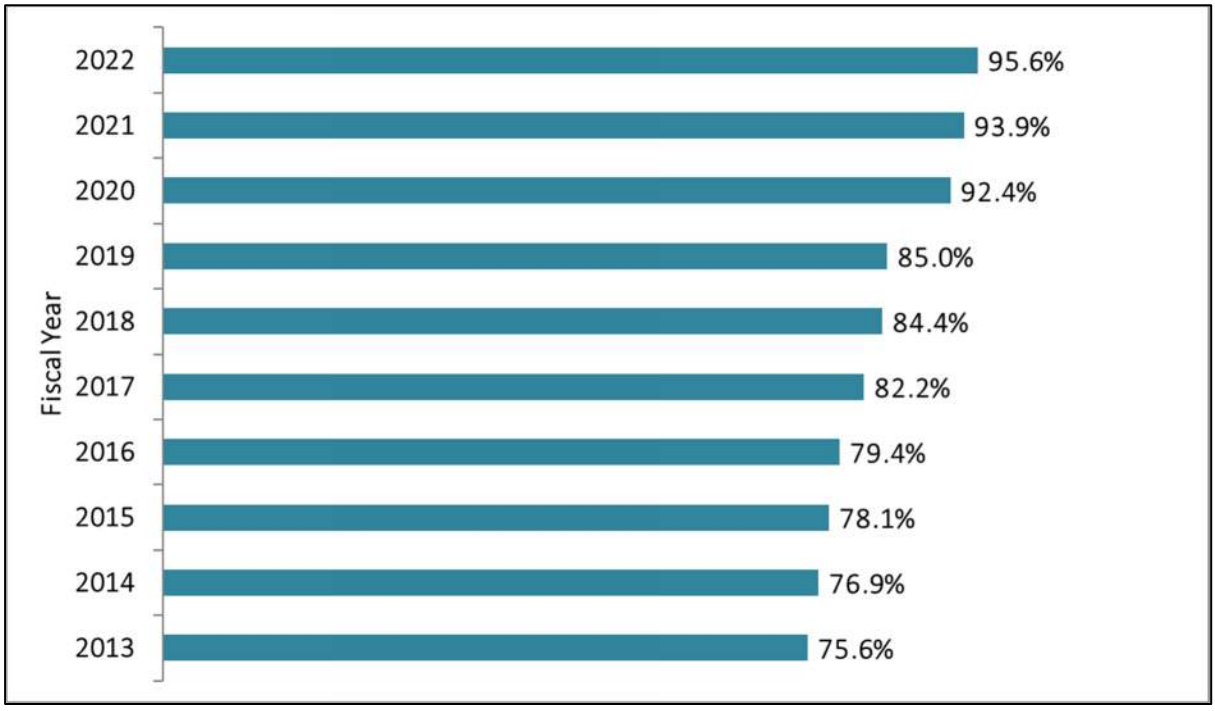
In 1994, CFX introduced the first ETC program in Florida, known as E-PASS. During that year there were approximately 2,300 E-PASS transponders in use on the System. As of FY 2022 the number has grown to 1.58 million transponders and nearly 1.2 million active E-PASS accounts. As shown in Figure 1-10, the percent of paid in-lane revenues from ETC has grown steadily for the past 10 years from only 75.6 percent in FY 2013 to 95.6 percent in FY 2022. ETC transactions account for over

95 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 staffed toll plaza lanes on all system facilities. This conversion is expected to be completed in FY 2023.

Figure 1-10
CFX System Percent of Paid In-Lane Revenue from Electronic Toll Collection
FY 2013 – FY 2022



Source: Monthly unaudited data provided by CFX

The Customer Loyalty Discount Program introduced in May 2016 provided discounts to frequent users of all facilities for E-PASS transactions. This program is discussed in more detail in Section 1.3.1 of this chapter. CFX also 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 in addition to the $10 activation fee for 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 an 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 a multi-protocol 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.

After a two-year pilot project, CFX also launched the Visitor Toll Pass program, which is a free temporary toll pass for rental car customers traveling through the Orlando International Airport in June 2021. With the pass, rental car customers pay the ETC rates on Florida toll roads with no extra or hidden fees. Approximately 34,000 customers used the program in FY 2022.

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 from continually improved versions of the prior models. 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 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 monthly unaudited data provided by CFX. 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 forecasted by plaza group. Since the historic data includes the effect of vehicle class on T&R, the forecasts of future T&R also include these effects.

Data on unpaid in-lane transactions and revenue also comes from the monthly unaudited data provided by CFX and the 2022 Comprehensive Annual Financial Report (2022 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 2022 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 current T&R forecasts.

Recent paid in-lane transaction data were used to assess the impacts of the four recent weather events (Hurricane Matthew in FY 2017, Hurricane Irma in FY 2018, Hurricane Dorian in FY 2020, and Hurricane Ian in FY 2022). These data were then used to identify growth trends by plaza group with and without the hurricanes. The transaction estimates for FY 2023, the first year in the forecast, were developed from the first half year of actual data extended to the remainder of the year. The estimates for FY 2024 and beyond were adjusted or "trued up" to reflect achievable expectations for the first fiscal year in the new forecast.

Then, near-term and 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 the 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 2021 and FY 2022 and the first six months of FY 2023. 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, as ETC, and a portion will stay. Table 1-10 contains the PBP share of total transactions for FY 2022, FY 2023, and FY 2024.

For FY 2023, the average proportion of the first six months was used to estimate the PBP share for the remaining months in the year. As shown in the table, most of the plaza groups experienced an increase in the share of PBP transactions in FY 2023 with a slight decline in FY 2024. The all-electronic plaza groups (Coronado Main, Marigold Main, and Koa Main) experienced a decline in the PBP share during the first half of FY 2023 due to the significant increase in the PBP toll rate. Over time as the number of PBP customers shrinks, it will be more difficult to collect tolls from those remaining in PBP.

Table 1-10
PBP Share of Total Transactions

Plaza Group		FY 2022	FY 2023	FY 2024
Airport Main	S.R. 528	9.8%	10.7%	10.2%
Beachline Main		9.7%	10.8%	10.0%
Dallas Main		9.8%	10.9%	10.0%
Hiawassee Main	S.R. 408	11.9%	12.7%	13.1%
Pine Hills Main		13.0%	13.5%	13.5%
Conway Main		12.3%	12.5%	12.2%
Dean Main		11.5%	11.9%	11.7%
John Young Main	S.R. 417	12.5%	13.0%	12.6%
Boggy Creek Main		10.9%	11.5%	11.0%
Curry Ford Main		10.4%	10.7%	10.2%
University Main		10.3%	10.6%	10.3%
Forest Lake Main	S.R. 429	11.3%	13.3%	13.2%
Independence Main		10.5%	11.4%	10.9%
Ponkan Main		11.3%	11.9%	11.0%
Mt. Plymouth Main		10.6%	10.9%	9.4%
Coral Hills Main	S.R. 414	11.5%	12.0%	11.1%
Coronado Main	S.R. 453	12.1%	11.2%	10.2%
Marigold Main	S.R. 538	17.2%	16.5%	17.0%
Koa Main		15.6%	13.5%	13.8%

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 four recent hurricanes. This data was then used to identify growth trends by plaza group. The transaction estimates for FY 2023 were developed from the first half year of actual results extended to the remainder of the year. The estimates for FY 2024 and beyond were adjusted or "trued up" to reflect achievable expectations for the first fiscal year in the new forecast. The CFX toll policy was applied in all future years, specifically the indexed toll rate. At the time of preparing the T&R estimates and this report, CDM Smith learned that the net change in CPI during CY 2022 was 8.577 percent. At their June 2023 meeting, the CFX Board decided to forego the net change in CPI and implement the policy floor of 1.5 percent adjustment for FY 2024. Based on assurances from CFX, CDM Smith used this value to index toll rates for FY 2024. CDM Smith used the floor of 1.5 percent per year every year thereafter in the forecast period.

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. These estimates were then compared against the transaction forecasts considering assumed future year toll rates, and appropriate adjustments were applied to make the two methods of estimation consistent.

The effect of the combination of travel demand model, toll rate adjustments, 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 2023 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 2022. 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 by Plaza Group (FY 2022)

Plaza Group		ETC	CASH	PBP
Airport Main	S.R. 528	$1.16	$1.37	$2.30
Beachline Main		$1.05	$1.26	$1.83
Dallas Main		$0.60	$0.76	$0.98
Hiawassee Main	S.R. 408	$0.86	$0.91	$1.56
Pine Hills Main		$1.16	$1.36	$2.15
Conway Main		$1.14	$1.37	$2.18
Dean Main		$0.88	$0.97	$1.64
John Young Main	S.R. 417	$1.24	$1.51	$2.13
Boggy Creek Main		$1.27	$1.61	$2.43
Curry Ford Main		$0.92	$0.99	$1.67
University Main		$0.91	$0.98	$1.64
Forest Lake Main	S.R. 429	$1.32	$1.45	$2.39
Independence Main		$1.21	$1.60	$2.18
Ponkan Main		$0.92	$0.00	$1.66
Mt. Plymouth Main		$0.90	$0.00	$1.56
Coral Hills Main	S.R. 414	$1.14	$1.15	$1.95
Coronado Main	S.R. 453	$0.74	$0.00	$1.34
Marigold Main	S.R. 538	$2.29	$0.00	$4.16
Koa Main		$0.56	$0.00	$1.02

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 current toll rate policy. Toll rate adjustments (indexed tolls) are applied every year based on the floor of 1.5 percent in FY 2023 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 was completed and opened to traffic in FY 2022.

- No local, regional, or national emergency, outside of the 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.

- The impacts of the widening projects in the CFX Work Program have been included in these estimates. None of the potential CFX expansion projects have been included.

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 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 2012 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
2012	Actual	298.1	4.4	302.5	-
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]		390.5	52.8	443.3	1.4%
2022*[I]		469.5	59.9	529.4	19.4%
2023[J]	Forecast	469.4	63.5	532.9	0.7%
2024		511.3	66.6	577.9	8.4%
2025		519.5	68.1	587.6	1.7%
2026		527.2	69.2	596.4	1.5%
2027		535.3	70.1	605.4	1.5%
2028		543.3	70.9	614.2	1.5%
2029		551.2	71.7	622.9	1.4%
2030		559.0	72.1	631.1	1.3%
2031		566.7	73.2	639.9	1.4%
2032		574.2	74.1	648.3	1.3%
2033		581.6	74.7	656.3	1.2%
2034		589.1	75.4	664.5	1.2%
2035		595.8	75.9	671.7	1.1%
2036		602.9	77.0	679.9	1.2%
2037		609.9	77.5	687.4	1.1%
2038		616.6	77.8	694.4	1.0%
2039		623.6	78.5	702.1	1.1%
2040		630.0	79.2	709.2	1.0%
2041		636.4	79.8	716.2	1.0%
2042		642.6	80.4	723.0	0.9%
2043		649.1	80.8	729.9	1.0%
2044		654.9	81.3	736.2	0.9%
2045		660.9	81.8	742.7	0.9%
2046		666.6	82.3	748.9	0.8%
2047		672.1	82.8	754.9	0.8%
2048		677.9	83.2	761.1	0.8%
2049		683.0	83.6	766.6	0.7%
2050		688.1	84.0	772.1	0.7%
2051		693.2	84.5	777.7	0.7%
2052		697.9	84.7	782.6	0.6%

Fiscal Year	Compound Annual Average Growth Rates (CAAGR)		
2012 - 2022	4.6%	29.8%	5.8%
2022 - 2032	2.0%	2.2%	2.0%
2032 - 2042	1.1%	0.8%	1.1%
2042 - 2052	0.8%	0.5%	0.8%

*Indicates systemwide toll rate increase according to Customer First Toll Policy

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. Continued effects of COVID-19 pandemic.

I - Completion of I-4 Ultimate project.

J -Includes impacts from Hurricane Ian toll suspensions in September 2022.

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

Fiscal Year		Paid In-Lane	PBP	Total	Percent Annual Change
2012	Actual	$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]		$415.8	$103.9	$519.7	12.4%
2022*[I]		$511.5	$119.9	$631.4	21.5%
2023[J]		$531.8	$133.6	$665.4	5.4%
2024		$584.3	$141.5	$725.8	9.1%
2025		$602.0	$146.9	$748.9	3.2%
2026		$619.4	$151.1	$770.5	2.9%
2027		$636.7	$154.6	$791.3	2.7%
2028		$654.5	$158.5	$813.0	2.7%
2029		$672.3	$162.4	$834.7	2.7%
2030		$690.4	$166.1	$856.5	2.6%
2031		$707.9	$169.8	$877.7	2.5%
2032		$726.1	$173.9	$900.0	2.5%
2033		$744.4	$177.8	$922.2	2.5%
2034		$762.4	$181.2	$943.6	2.3%
2035		$780.4	$185.1	$965.5	2.3%
2036		$798.4	$188.9	$987.3	2.3%
2037		$817.1	$192.7	$1,009.8	2.3%
2038		$835.3	$196.4	$1,031.7	2.2%
2039		$853.7	$200.0	$1,053.7	2.1%
2040		$872.1	$203.8	$1,075.9	2.1%
2041		$890.4	$207.2	$1,097.6	2.0%
2042		$908.6	$210.9	$1,119.5	2.0%
2043		$926.6	$214.7	$1,141.3	1.9%
2044		$945.0	$218.1	$1,163.1	1.9%
2045		$963.1	$221.7	$1,184.8	1.9%
2046		$980.9	$225.1	$1,206.0	1.8%
2047		$998.7	$228.6	$1,227.3	1.8%
2048		$1,016.3	$232.0	$1,248.3	1.7%
2049		$1,033.8	$235.4	$1,269.2	1.7%
2050		$1,051.2	$238.6	$1,289.8	1.6%
2051		$1,068.4	$241.8	$1,310.2	1.6%
2052		$1,085.4	$244.8	$1,330.2	1.5%

Fiscal Year	Compound Annual Average Growth Rates (CAAGR)		
2012 - 2022	6.7%	38.5%	8.8%
2022 - 2032	3.6%	3.8%	3.6%
2032 - 2042	2.3%	1.9%	2.2%
2042 - 2052	1.8%	1.5%	1.7%

*Indicates systemwide toll rate increase according to Customer First Toll Policy

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. Continued effects of COVID-19 pandemic.

I - Completion of I-4 Ultimate project.

J -Includes impacts from Hurricane Ian toll suspensions in September 2022.

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 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 $617.6 million collected in FY 2022 to $900.0 million in FY 2032, $1,119.5 million in FY 2042 and $1,330.2 million in FY 2052.

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 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 $600.0 million in FY 2022 to estimated amounts of $858.3 million in FY 2032, $1,062.8 million in FY 2042 and $1,257.1 million in FY 2052.

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 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
2012	Actual	$267.9	$4.3	$272.2	$9.6	$262.6	1.0%
2013[A]	Actual	$302.7	$6.3	$309.0	$10.8	$298.2	13.5%
2014	Actual	$322.8	$8.1	$330.9	$11.7	$319.1	7.0%
2015	Actual	$353.1	$11.0	$364.1	$13.2	$350.9	10.0%
2016	Actual	$393.9	$15.7	$409.6	$18.7	$390.9	11.4%
2017	Actual	$418.5	$21.8	$440.3	$16.6	$423.7	8.4%
2018	Actual	$430.8	$27.3	$458.1	$16.3	$441.8	4.3%
2019[B]	Actual	$445.6	$38.0	$483.6	$20.4	$463.2	4.8%
2020	Actual	$407.2	$61.1	$468.3	$16.4	$451.9	-2.4%
2021[C]	Actual	$415.9	$98.8	$514.7	$17.8	$496.9	10.0%
2022[D]	Actual	$518.5	$99.1	$617.6	$17.6	$600.0	20.7%
2023[H]	Forecast	$531.8	$133.6	$665.4	$13.9	$651.5	8.6%
2024[H]	Forecast	$584.3	$141.5	$725.8	$19.4	$706.4	8.4%
2025	Forecast	$602.0	$146.9	$748.9	$32.4	$716.5	1.4%
2026	Forecast	$619.4	$151.1	$770.5	$33.7	$736.8	2.8%
2027	Forecast	$636.7	$154.6	$791.3	$34.9	$756.4	2.7%
2028	Forecast	$654.5	$158.5	$813.0	$36.2	$776.8	2.7%
2029	Forecast	$672.3	$162.4	$834.7	$37.6	$797.1	2.6%
2030	Forecast	$690.4	$166.1	$856.5	$38.9	$817.6	2.6%
2031	Forecast	$707.9	$169.8	$877.7	$40.3	$837.4	2.4%
2032	Forecast	$726.1	$173.9	$900.0	$41.7	$858.3	2.5%
2033	Forecast	$744.4	$177.8	$922.2	$43.1	$879.1	2.4%
2034	Forecast	$762.4	$181.2	$943.6	$44.5	$899.1	2.3%
2035	Forecast	$780.4	$185.1	$965.5	$45.9	$919.6	2.3%
2036	Forecast	$798.4	$188.9	$987.3	$47.4	$939.9	2.2%
2037	Forecast	$817.1	$192.7	$1,009.8	$48.9	$960.9	2.2%
2038	Forecast	$835.3	$196.4	$1,031.7	$50.4	$981.3	2.1%
2039	Forecast	$853.7	$200.0	$1,053.7	$52.0	$1,001.7	2.1%
2040	Forecast	$872.1	$203.8	$1,075.9	$53.5	$1,022.4	2.1%
2041	Forecast	$890.4	$207.2	$1,097.6	$55.1	$1,042.5	2.0%
2042	Forecast	$908.6	$210.9	$1,119.5	$56.7	$1,062.8	1.9%
2043	Forecast	$926.6	$214.7	$1,141.3	$58.3	$1,083.0	1.9%
2044	Forecast	$945.0	$218.1	$1,163.1	$59.9	$1,103.2	1.9%
2045	Forecast	$963.1	$221.7	$1,184.8	$61.5	$1,123.3	1.8%
2046	Forecast	$980.9	$225.1	$1,206.0	$63.1	$1,142.9	1.7%
2047	Forecast	$998.7	$228.6	$1,227.3	$64.8	$1,162.5	1.7%
2048	Forecast	$1,016.3	$232.0	$1,248.3	$66.4	$1,181.9	1.7%
2049	Forecast	$1,033.8	$235.4	$1,269.2	$68.1	$1,201.1	1.6%
2050	Forecast	$1,051.2	$238.6	$1,289.8	$69.8	$1,220.0	1.6%
2051	Forecast	$1,068.4	$241.8	$1,310.2	$71.4	$1,238.8	1.5%
2052	Forecast	$1,085.4	$244.8	$1,330.2	$73.1	$1,257.1	1.5%

Fiscal Year	Compound Annual Average Growth Rate (CAAGR)				
2012 - 2022	6.8%	36.7%	8.5%	6.2%	8.6%
2022 - 2032	3.4%	5.8%	3.8%	9.0%	3.6%
2032 - 2042	2.3%	1.9%	2.2%	3.1%	2.2%
2042 - 2052	1.8%	1.5%	1.7%	2.6%	1.7%

Notes:

A - Systemwide toll rate adjustments.

B - CFX Board adopted "Customer First" toll policy on February 9, 2017, implemented with Systemwide increase of 2.05% on July 1, 2018 (FY 2019). The floor of 1.5% increase was implemented on July 1, 2021 (FY 2022). An increase of 5.08% was implemented on July 1, 2022 (FY 2023). Further adjustments (estimated at 1.5% in FY 2024 and 1.5% for all subsequent years) are included at the beginning of each fiscal year.

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

D - Adjustments 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 2022, PBP revenue was 19.1% of the in-lane revenue; in FY 2023, the PBP revenue is forecasted to be over 25.1% of the in-lane revenue; these long-term forecasts maintain PBP revenue at an average of 23.5% of the in-lane revenue.

G - CFX operates two Discount Programs, which are explained in detail in Chapter 1 of this report. Historical information on the E-PASS discount comes from the 2022 CAFR.

H - Florida Toll Relief Program will effectively reimburse CFX for Customer Loyalty Program discount revenue for 2-Axle Vehicles during January-December 2023, (Second Half of FY 2023 and First Half of FY 2024).

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 levels, growth, and spatial patterns of socioeconomic activity, such as population, housing, employment, retail sales, and tourism. Socioeconomic growth is a major factor determining future toll road use. Other important factors specific to Central Florida include enplanements at Orlando International Airport (OIA), enrollment at the University of Central Florida (UCF) and area attraction attendance. These factors are related to underlying socioeconomic variables. For this reason, it is important to understand socioeconomic conditions where CFX facilities operate. This chapter reviews CFX-relevant socioeconomic factors and comparative data (historical and forecast) for Brevard, Lake, Orange, Osceola, Polk, Seminole and Volusia Counties, and Florida.

2.1 Population

2.1.1 HISTORICAL TRENDS

Historical 1980 to 2021 population trends are shown in **Table 2-1;** corresponding compound average annual growth rates (CAAGR) are in **Table 2-2**. Study area population grew 2.8 times since 1980, from approximately 1.7 million to over 4.6 million in 2021, at 2.5 percent per year. Average annual growth decelerated from 3.8 percent in the 1980s to 2.2 percent between 2000 and 2010, and 1.9 percent since 2010. Since 1980, Osceola County grew fastest in the area by 5.3 percent per year. Brevard, Polk, and Volusia Counties experienced slower relative growth around 2.0 percent per year due to its relatively smaller starting population. Nearly one third of the area's population is in Orange County, with over 1.4 million residents. Florida's population grew from 9.7 million in 1980 to nearly 21.8 million in 2021, or an average increase of 2.0 percent per year. Historically, study area population growth has outpaced Florida over the last four decades.

Table 2-1
Historical Population
1980 – 2021

County	1980	1990	2000	2010	2021
Brevard	272,959	398,978	476,230	543,376	616,628
Lake	104,870	152,104	210,528	297,052	395,804
Orange	470,865	677,491	896,344	1,145,956	1,422,746
Osceola	49,287	107,728	172,493	268,685	403,282
Polk	321,652	405,382	483,924	602,095	753,520
Seminole	179,752	287,529	365,196	422,718	470,093
Volusia	258,762	370,712	443,343	494,593	564,412
Area Total	1,658,147	2,399,924	3,048,058	3,774,475	4,626,485
Florida	9,746,961	12,937,926	15,982,378	18,801,310	21,781,128

Source: U.S. Census Bureau

Table 2-2
Historical Population Growth (CAAGR)
1980 – 2021

County	1980-'90	1990-'00	2000-'10	2010-'21	1980-'21
Brevard	3.9%	1.8%	1.3%	1.2%	2.0%
Lake	3.8%	3.3%	3.5%	2.6%	3.3%
Orange	3.7%	2.8%	2.5%	2.0%	2.7%
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%	1.0%	2.4%
Volusia	3.7%	1.8%	1.1%	1.2%	1.9%
Area Total	3.8%	2.4%	2.2%	1.9%	2.5%
Florida	2.9%	2.1%	1.6%	1.3%	2.0%

Source: U.S. Census Bureau

Table 2-3 contains a summary of the 2013 to 2022 school enrollments within the study area and Florida. Osceola County experienced the relatively fastest growth, at 3.6 percent annually in the last decade, while Brevard and Volusia Counties exhibited almost no change (0.8 percent annually); average study area enrollment grew 1.7 percent. Enrollment growth is not directly comparable to population due to families without school-age children and home-schooling. In 2022, enrollments increased by 3.6 percent over 2021. 2022 enrollments are estimates, as final numbers are not released until the end of the school year in June or July 2023.

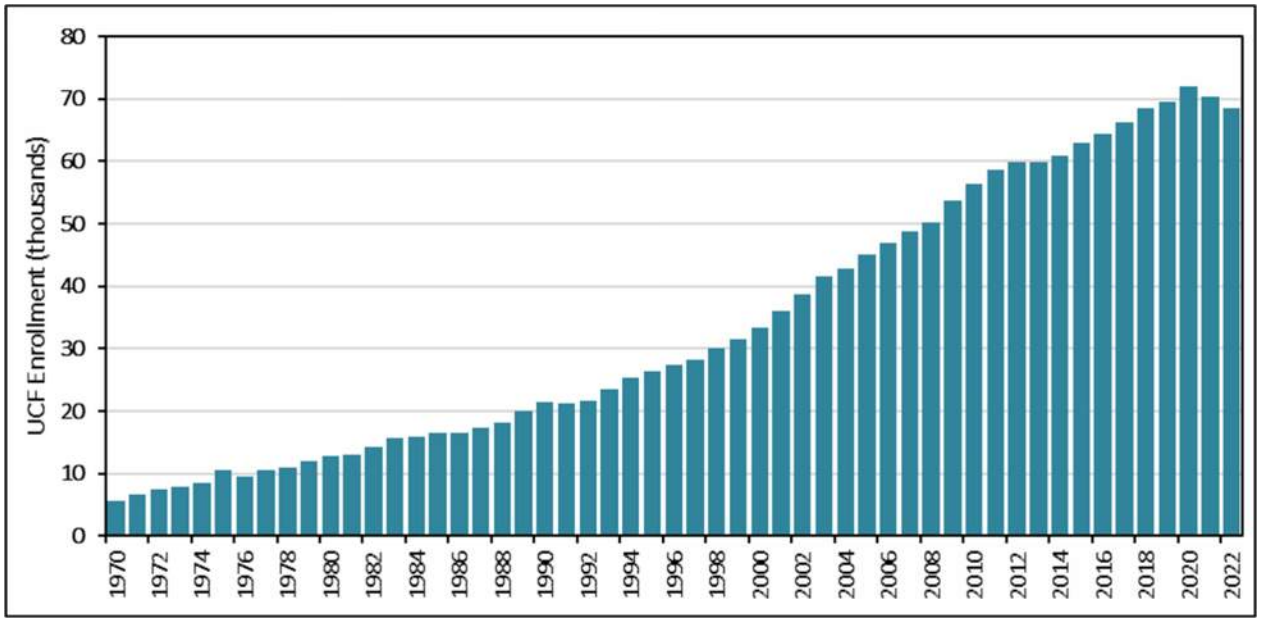
Table 2-3
Historical School Enrollment
2013 – 2022

County	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2013-'22 % Δ	2013-'22 CAAGR
Brevard	70,071	71,119	71,634	72,408	72,467	72,646	73,106	70,214	73,150	75,215	7.3%	0.8%
Lake	40,971	41,322	41,839	41,866	42,643	43,409	44,473	41,835	44,990	48,646	18.7%	1.9%
Orange	185,594	190,380	195,408	198,984	203,950	206,451	207,751	200,495	209,716	214,245	15.4%	1.6%
Osceola	57,239	58,465	61,141	62,561	66,010	67,632	69,378	69,162	73,738	78,633	37.4%	3.6%
Polk	96,144	97,877	99,247	101,051	102,863	104,305	106,782	104,667	111,898	116,027	20.7%	2.1%
Seminole	64,019	65,428	66,236	67,055	67,281	67,247	67,301	64,214	68,711	69,798	9.0%	1.0%
Volusia	60,935	61,351	62,304	62,269	62,132	62,027	62,121	57,758	62,887	65,548	7.6%	0.8%
Area Total	574,973	585,942	597,808	606,194	617,346	623,716	630,911	608,345	645,091	668,113	16.2%	1.7%

Source: Florida Department of Education

UCF opened in 1968 with fewer than 2,000 enrolled students. **Figure 2-1** shows annual enrollment steadily increased as UCF became a large-scale university, with nearly 72,000 students in 2020; however, 2022 enrollment declined to 68,442. This may be due to changes in enrollment trends resulting from the COVID-19 pandemic. Long-term annual growth averaged 4.1 percent from 1980 to 2022, due to the opening of new programs and campus facilities, and to an increase in transfer students. While enrollments are significant, many students only attend part-time, and many attend on-line classes; as such, many students do not travel to the main campus.

Figure 2-1
Historical UCF Enrollment
1970 – 2022



Source: University of Central Florida

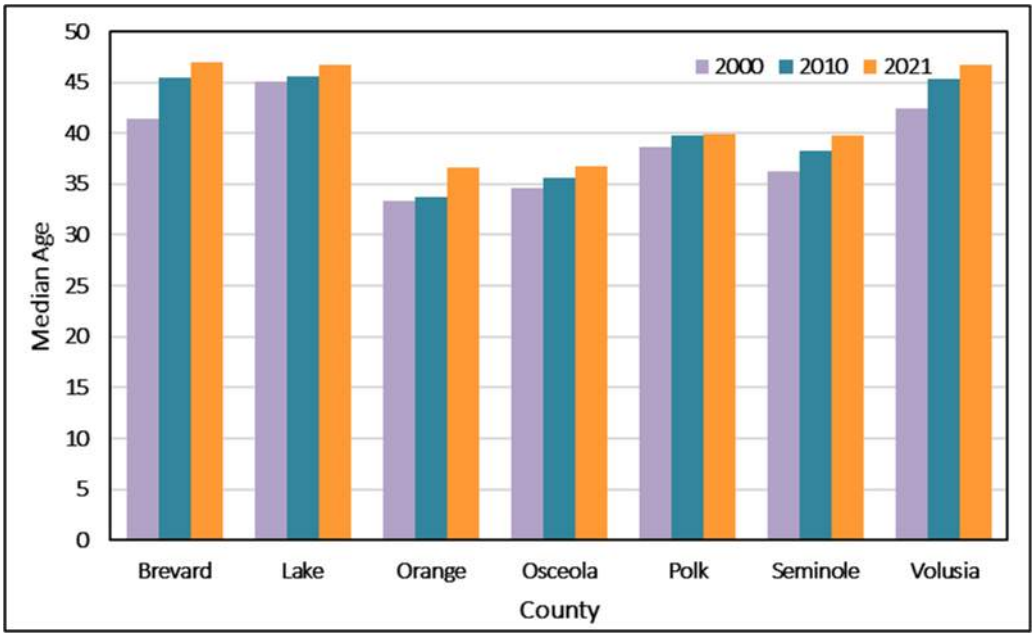
The study area age distributions in 2000, 2010, and 2021 are shown in **Table 2-4**. Most people (58.3 percent in 2021) are working age (20 to 64), who represent commuter and business-related trips; such working age proportions have not changed appreciably since 2000. Study area median ages are shown in **Figure 2-2**. Brevard and Lake Counties have the highest median ages, reflecting some retirement communities; Volusia County also has a relatively older median age. Orange and Osceola Counties have the lowest median age. Median ages have increased in every county since 2000, reflecting a general population aging.

Table 2-4
Historical Population by Age
2000, 2010, 2021

Age	2000 Census		2010 Census		2021 Estimate	
	Population	Percent	Population	Percent	Population	Percent
0-4	184,700	6.1%	221,562	5.9%	238,487	5.2%
5-19	615,697	20.2%	732,041	19.4%	831,897	18.0%
20-24	185,459	6.1%	264,847	7.0%	278,711	6.0%
25-34	405,961	13.3%	473,023	12.5%	629,333	13.6%
35-44	486,110	15.9%	490,323	13.0%	611,122	13.2%
45-54	395,565	13.0%	552,868	14.6%	574,148	12.4%
55-64	289,212	9.5%	453,437	12.0%	604,232	13.1%
65-74	262,234	8.6%	318,580	8.4%	502,019	10.9%
75+	223,120	7.3%	267,794	7.1%	356,536	7.7%
Total	3,048,058	100.0%	3,774,475	100.0%	4,626,485	100.0%

Source: U.S. Census Bureau

Figure 2-2
County Median Age
2000, 2010, 2021



Source: U.S. Census Bureau

2.1.2 PROJECTIONS

The University of Florida's Bureau of Economic and Business Research (BEBR) updates Florida's/counties' population forecasts annually with three scenarios: low, medium, and high. Medium level projections are typically used to develop transportation plans. Table 2-5 summarizes BEBR's 2022 medium forecasts as Compound Annual Average Growth Rates (CAAGRs). Future long-term study area population growth through 2040 averages 1.4 percent per year, slightly higher than the 1.0 percent per year projected for Florida. Osceola County is projected to increase population relatively the fastest, at 2.3 percent per year, while Seminole County is expected to have relatively the lowest growth of 0.8 percent per year. Population growth rates decelerate over time.

Table 2-5
Projected Population Growth (CAAGR)
2020 – 2040

County	2020-'21	2020-'30	2030-'40	2020-'40
Brevard	1.7%	1.1%	0.6%	0.9%
Lake	4.2%	2.4%	1.4%	1.9%
Orange	2.0%	1.8%	1.1%	1.4%
Osceola	4.6%	3.1%	1.6%	2.3%
Polk	3.2%	1.9%	1.1%	1.5%
Seminole	1.4%	1.0%	0.6%	0.8%
Volusia	1.8%	1.1%	0.6%	0.9%
Area Total	2.5%	1.7%	1.0%	1.4%
Florida	1.7%	1.3%	0.8%	1.0%

Source: University of Florida Bureau of Economic and Business Research

2.2 Housing Units

2.2.1 HISTORICAL TRENDS

Housing metrics are another measure used in transportation planning. Table 2-6 summarizes historical study area housing units, which expanded from 0.7 million in 1980 to 1.9 million in 2021. A housing unit is a house, an apartment, a mobile home, a group of rooms, or a single room that is occupied (or if vacant, is intended for occupancy) as separate living quarters, per the U.S. Census. Orange County has the highest housing unit concentration in the area, with over 554,000 in 2021. Corresponding historical housing unit CAAGRs are in Table 2-7. Housing units in the study area grew 2.5 percent per year since 1980, slowing from 4.4 percent per year in the 1980s to 1.0 percent per year since 2010, which is a similar deceleration trend as population. Osceola County experienced relatively fastest growth, averaging 4.6 percent per year; Volusia County was the relative slowest at 1.9 percent annually. Overall, historical study area housing unit growth outpaced Florida's growth, and grew from 16 percent share of statewide housing units in 1980 to 19.9 percent in 2021.

Table 2-6
Historical Housing Units
1980 – 2021

County	1980	1990	2000	2010	2021
Brevard	113,900	185,150	222,072	269,864	286,497
Lake	50,511	75,707	102,829	144,996	173,636
Orange	184,701	282,686	361,349	487,839	554,517
Osceola	23,825	47,959	72,293	128,170	150,567
Polk	134,873	186,225	226,376	281,214	311,599
Seminole	68,154	117,841	147,080	181,307	192,725
Volusia	124,427	180,983	211,938	254,226	270,402
Area Total	700,391	1,076,551	1,343,937	1,747,616	1,939,943
Florida	4,378,867	6,100,250	7,303,108	8,989,580	9,764,897

Source: U.S. Census Bureau

Table 2-7
Historical Housing Units Growth (CAAGR)
1980 – 2021

County	1980-'90	1990-'00	2000-'10	2010-'21	1980-'21
Brevard	5.0%	1.8%	2.0%	0.5%	2.3%
Lake	4.1%	3.1%	3.5%	1.7%	3.1%
Orange	4.3%	2.5%	3.0%	1.2%	2.7%
Osceola	7.2%	4.2%	5.9%	1.5%	4.6%
Polk	3.3%	2.0%	2.2%	0.9%	2.1%
Seminole	5.6%	2.2%	2.1%	0.6%	2.6%
Volusia	3.8%	1.6%	1.8%	0.6%	1.9%
Area Total	4.4%	2.2%	2.7%	1.0%	2.5%
Florida	3.4%	1.8%	2.1%	0.8%	2.0%

Source: U.S. Census Bureau

2.2.2 PROJECTIONS

Table 2-8 summarizes long-term household growth forecasts, published by Woods & Poole[1] (housing units are unavailable; households are used here as a close proxy). Future long-term study area growth is projected to average 1.3 percent per year through 2040. Osceola County is forecasted with relatively the fastest growth, averaging 2.5 percent per year, while Brevard and Volusia counties are expected to have relatively the slowest growth, at 0.7 percent per year.

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

Table 2-8
Projected Household Growth (CAAGR)
2020 – 2040

County	2020-'22	2022-'30	2030-'40	2022-'40
Brevard	1.9%	0.9%	0.5%	0.7%
Lake	3.1%	2.0%	1.6%	1.7%
Orange	0.7%	1.8%	1.3%	1.5%
Osceola	3.8%	2.7%	2.3%	2.5%
Polk	3.8%	1.6%	1.2%	1.3%
Seminole	0.8%	1.3%	0.9%	1.1%
Volusia	2.2%	0.9%	0.5%	0.7%
Area Total	2.0%	1.5%	1.1%	1.3%
Florida	1.7%	1.3%	1.0%	1.1%

Source: Woods & Poole Economics, Inc. 2022

2.3 Employment

2.3.1 HISTORICAL TRENDS

Employment data are shown in Table 2-9 and Table 2-10, indicating the highest concentration of employment in Orange County, representing 42.2 percent of the area. Long-term historical area employment growth averaged 3.0 percent per year since 1980. Growth in the 1980s was 4.7 percent per year, then decelerated between 2000 and 2010 to 1.4 percent per year, with highest growth in Osceola and Lake Counties. Since 2010, growth increased to 3.0 percent per year, with Osceola County averaging the highest growth at 5.5 percent per year. Historically, study area employment growth outpaced Florida by an average of approximately 0.4 percent per year.

Table 2-9
Historical Employment
1980 – 2021

County	1980	1990	2000	2010	2021	'80-'21
Brevard	129,188	202,232	242,259	256,563	323,190	2.3%
Lake	46,281	58,326	86,269	113,201	160,847	3.1%
Orange	291,166	516,943	735,810	822,557	1,154,764	3.4%
Osceola	19,483	43,173	63,735	101,338	175,002	5.5%
Polk	156,846	194,693	234,576	255,704	352,402	2.0%
Seminole	61,621	121,188	186,059	217,211	299,981	3.9%
Volusia	105,796	146,833	177,896	211,634	267,036	2.3%
Area Total	810,381	1,283,388	1,726,604	1,978,208	2,733,222	3.0%
Florida	4,687,521	6,740,289	8,881,279	9,805,154	13,221,011	2.6%

Source: Bureau of Economic Analysis

Table 2-10
Historical Employment Growth (CAAGR)
1980 – 2021

County	1980-'90	1990-'00	2000-'10	2010-'21	1980-'21
Brevard	4.6%	1.8%	0.6%	2.1%	2.3%
Lake	2.3%	4.0%	2.8%	3.2%	3.1%
Orange	5.9%	3.6%	1.1%	3.1%	3.4%
Osceola	8.3%	4.0%	4.7%	5.1%	5.5%
Polk	2.2%	1.9%	0.9%	3.0%	2.0%
Seminole	7.0%	4.4%	1.6%	3.0%	3.9%
Volusia	3.3%	1.9%	1.8%	2.1%	2.3%
Area Total	4.7%	3.0%	1.4%	3.0%	3.0%
Florida	3.7%	2.8%	1.0%	2.8%	2.6%

Source: Bureau of Economic Analysis

2.3.2 PROJECTIONS

Study area employment is projected to grow 1.7 percent per year through 2050, per Table 2-11, similar to statewide forecast growth. Osceola County's employment is forecasted to increase relatively the fastest at 2.9 percent per year, while Brevard and Volusia Counties are forecasted with the relatively slowest growth of 1.0 percent through 2050.

Table 2-11
Projected Employment Growth (CAAGR)
2020 – 2050

County	2020-'22	2022-'30	2030-'40	2040-'50	2022-'50
Brevard	3.2%	1.3%	0.9%	0.8%	1.0%
Lake	4.1%	2.1%	1.8%	1.6%	1.8%
Orange	7.7%	2.4%	1.9%	1.6%	1.9%
Osceola	7.9%	3.3%	2.9%	2.7%	2.9%
Polk	2.4%	1.4%	1.2%	1.0%	1.2%
Seminole	4.7%	2.0%	1.6%	1.4%	1.6%
Volusia	4.0%	1.4%	1.0%	0.8%	1.0%
Area Total	5.6%	2.1%	1.7%	1.5%	1.7%
Florida	4.7%	1.9%	1.5%	1.4%	1.6%

Source: Woods & Poole Economics, Inc., 2022

Table 2-12 shows employment projections by major sector: industrial, commercial, and service industries, with annual future growth averaging 0.7, 1.5, and 1.9 percent through 2050, respectively. Jobs growth in commercial and service sectors reflect Central Florida's tourism industry, while the industrial sector is expected to experience relatively slower growth.

Table 2-12
Projected Sector Employment Growth (CAAGR)
2020 – 2050

Area	2020-'22	2022-'30	2030-'40	2040-'50	2022-'50
Industrial	1.9%	0.8%	0.7%	0.7%	0.7%
Commercial	3.7%	1.8%	1.5%	1.3%	1.5%
Service	6.7%	2.3%	1.8%	1.6%	1.9%

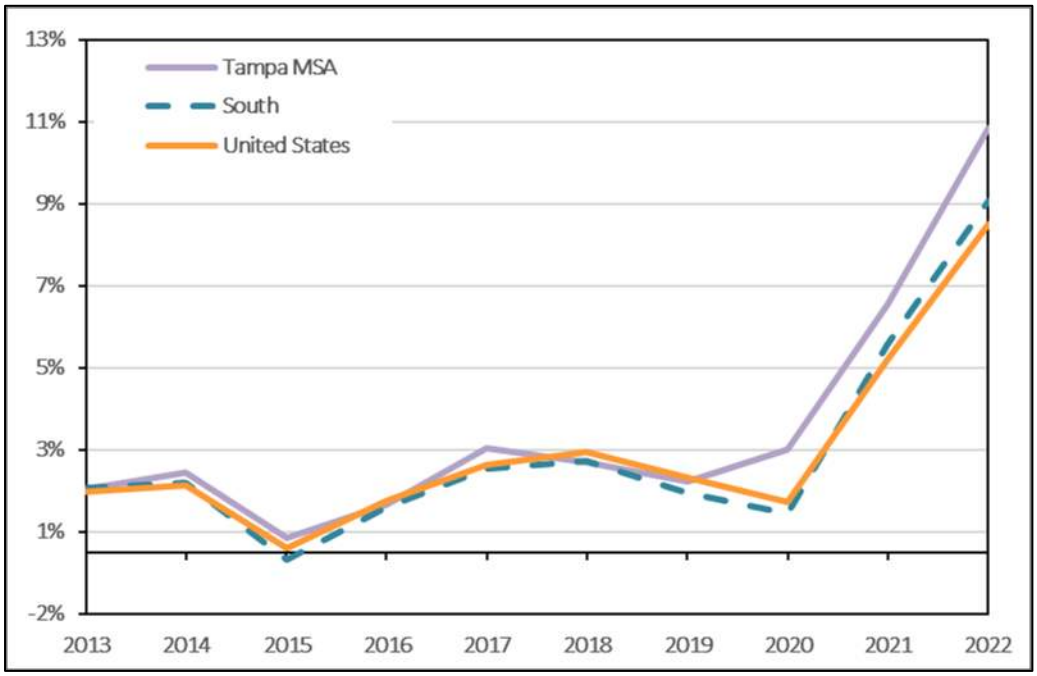
Source: Woods & Poole Economics, Inc., 2022

2.4 Consumer Price Index and Income

2.4.1 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). CPI changes measure inflation. Historical annual inflation rates are shown in **Figure 2-3**. Historical inflation has typically hovered between 2.0 and 3.0 percent per year (except 2015). Inflation increased considerably in 2021, due to various factors: increased fuel costs, spending increases from pent-up demand (after the COVID-19 pandemic), and supply chain constraints. This trend continued in 2022 with additional inflation increases. Aside from national CPI changes, data are also presented for the Tampa MSA (Orlando MSA is not tracked by the BLS) and the South Region (Southeastern U.S. States), which generally trend closely with national price changes. Overall, the change in CPI-U in the South averaged 8.577 percent in 2022, and this figure will be used in the annual indexing of toll rates for FY 2023.

Figure 2-3
Inflation (Annual CPI Change)
2013 – 2022



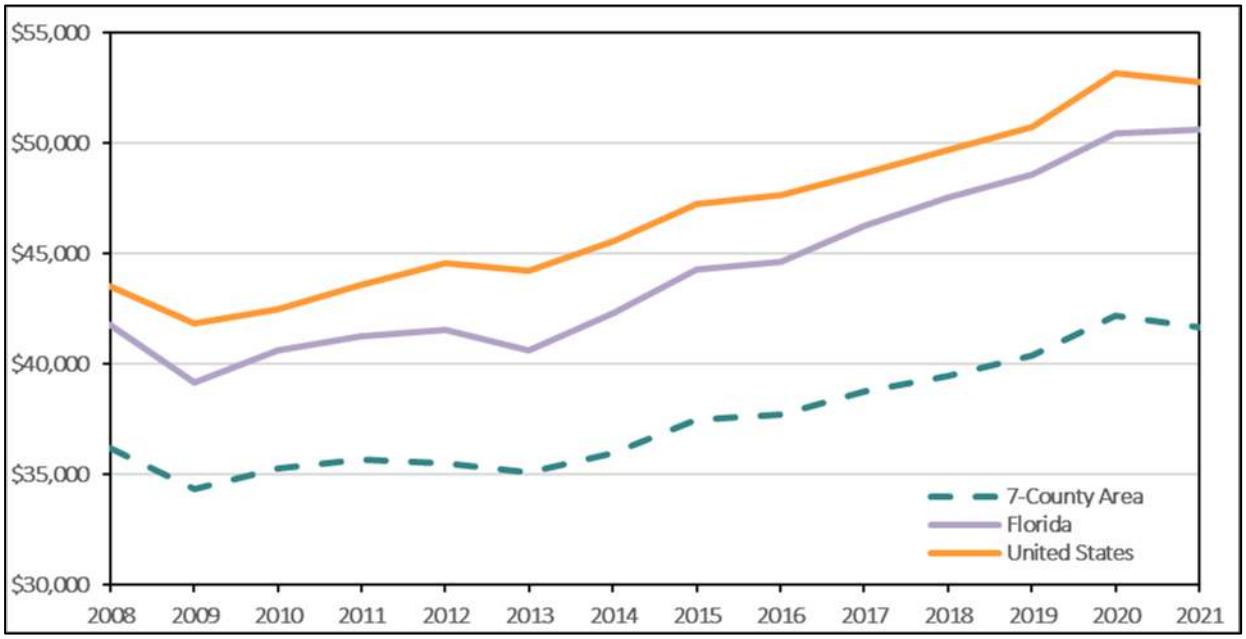
Source: Bureau of Labor Statistics

2.4.2 INCOME

Travel demand is sensitive to, among other things, disposable income, with a propensity to pay tolls in exchange for travel time savings dependent on personal income. Income is a key input in assessing value of time, with a correlative relationship between income and willingness to pay tolls. Real personal income is income adjusted for inflation.

Historical real per capita income trends are shown in **Figure 2-4**. Real personal income per capita for Florida and the study area steadily increased in the preceding decade, by 2.1 and 1.6 percent annually, respectively since 2010, while national income growth averaged 1.9 percent.

Figure 2-4
Real Personal Income Per Capita (2012 Dollars)
2008 – 2021

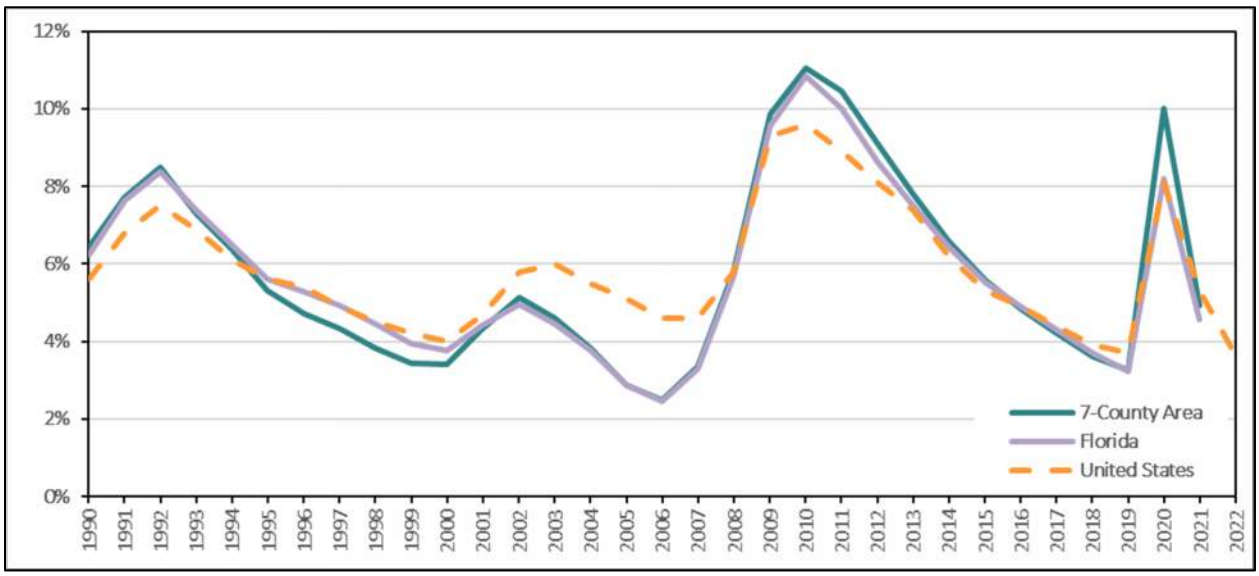


Source: Woods and Poole Economics, Inc., 2022

2.5 Unemployment

Regional unemployment rates historically paralleled Florida closely and were lower than national rates since 1994 excepting during and after the Great Recession (between 2009 and 2015). **Figure 2-5** shows historical unemployment rates, depicting the study area's range from a low of 2.5 percent in 2006 to a high of 11.1 percent in 2010. After years of steadily declining from the peak following the Great Recession (2008-2010), the study area unemployment rate spiked to 10.0 in 2020 and then declined to 4.9 percent in 2021, due to the employment changes experienced in response to the COVID-19 pandemic closures and restrictions. Regional and state unemployment data are currently unavailable for 2022, but the national rate declined to 3.6 percent after 5.3 percent in 2021. Florida's and the study area's unemployment rates have likely also returned close-to pre-pandemic levels.

Figure 2-5
Historical Unemployment Rates
1990 – 2022



Source: Bureau of Labor Statistics

2.6 Regional Tourism

As shown in **Table 2-13**, Orlando hosted a record 75.8 million visitors in 2019, a 1.0 percent increase over the 75.0 million visitors in 2018. Tourism stagnated after the September 11th terrorist attacks, and remained tepid during the Great Recession, but has increased every year since 2011. Tourism declined significantly to only 35.3 million visitors, or by 53.5 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 declined considerably in 2020 to only 1.7 million. In 2021, tourism increased to 59.3 million over 2020, with domestic visitors accounting for 57.2 million and international visitors accounting for 2.1 million. Early numbers for 2022 are promising to reach pre-pandemic levels, with Walt Disney World celebrating its 50th anniversary.

Table 2-13
Orlando Visitors (Millions)
2011 – 2021

Visitors	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2011-'21 CAAGR
Domestic	51.4	52.9	54.4	57.4	60.6	62.3	65.9	68.6	69.3	33.6	57.2	1.1%
International	3.8	4.3	4.9	5.4	5.9	5.7	6.2	6.5	6.5	1.7	2.1	-5.9%
Total	55.2	57.2	59.3	62.8	66.5	68.0	72.0	75.0	75.8	35.3	59.3	0.7%

Source: Visit Orlando

As shown in Table 2-14, the Metro Orlando area hotel occupancy rate was only 41.5 percent in 2020, a significant decrease from 2019 due to the travel restrictions during the COVID-19 pandemic and the overall reduction in tourism. The 2020 average daily room rate was $109.74, which was a 13.6 percent decline compared to 2019. While room rates mostly rebounded in 2021 to $121.40 per night, the occupancy rate, at 57.8 percent is still well below pre-pandemic levels. In 2022, the average daily room rate increased another 23.7 percent to $150.17 with occupancy rates at 72.8 percent, nearly returning to pre-pandemic levels. Most lodging units are concentrated around Walt Disney World, International Drive (near Universal Studios, SeaWorld, and the Orange County Convention Center), and in Kissimmee.

Table 2-14
Metro Orlando Area Lodging
2011 - 2022

Metro Orlando	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Occupancy Rate	68.8%	71.0%	71.9%	77.0%	75.5%	79.3%	77.5%	76.1%	41.5%	57.8%	72.8%
Average Daily Rate	$96.88	$101.53	$107.26	$112.00	$116.00	$121.53	$127.32	$126.95	$109.74	$121.40	$150.17
Room-Night Demand (millions)	29.3	30.1	N/A*	33.0	33.0	34.7	34.5	34.5	15.3	25.8	34.6

*2014 room night demand not available
Source: Visit Orlando

The historical and projected enplanements, or boardings, at the Orlando International Airport (OIA) are shown in Table 2-15 and Table 2-16. OIA enplanements increased over six million from 1990 to 2000, equating to an increase of 69.1 percent. Enplanements totaled 24.1 million in 2019, 64.0 percent above the 2000 total; however, the number almost halved in 2020 during the COVID-19 pandemic, down to under 14.0 million, about the same volumes as in 1999. The United States Department of Transportation Federal Aviation Administration (FAA) forecasts OIA enplanements will rebound to 2019 levels by 2024, with average of future growth of 2.5 percent per year through 2040. Enplanements are an indicator of tourism and economic growth.

Table 2-15
Historical OIA Enplanements
1990 - 2020

	1990	2000	2010	2020
Enplanements	8,683,491	14,683,594	16,651,359	13,985,651

Source: Federal Aviation Administration Terminal Area Forecasts

Table 2-16
Projected OIA Enplanement Growth
2020 – 2040

	2021-'22	2020-'30	2030-'40	2019-'40
Enplanements	19.9%	8.4%	2.5%	2.5%

Source: Federal Aviation Administration Terminal Area Forecasts

Metropolitan Orlando has several of the largest theme parks in the nation, which will continue contributing growth to Central Florida due to new and future attractions.

As shown in Table 2-17, the Magic Kingdom attracts the relatively highest number of visitors of all the area attractions, with 21.0 million in 2019. However, it, along with all other attractions, lost between 60 and 70 percent of annual visitors in 2020 due to COVID-19 pandemic-related closures. In 2021, the Magic Kingdom attracted 12.7 million visitors or an 82.8 percent increase over 2020. Water parks exhibited a similar relative decline in 2020, with Blizzard Beach declining further, by over 84 percent. Typhoon Lagoon was closed in 2020 and into 2021. However, by the end of 2021, Blizzard Beach attracted 1.2 million visitors or an increase of 280.1 over 2020. Declines in 2020 stemmed from both temporary park closures for days-to-months, as well as the aversion effect from the COVID-19 pandemic, with prospective visitors declining or deferring attendance until vaccinations and/or low virus caseloads. Attendance increased at all theme parks in 2021, which is expected to continue into 2022.

Table 2-17
Central Florida Attraction Attendance (Millions)
2013 - 2021

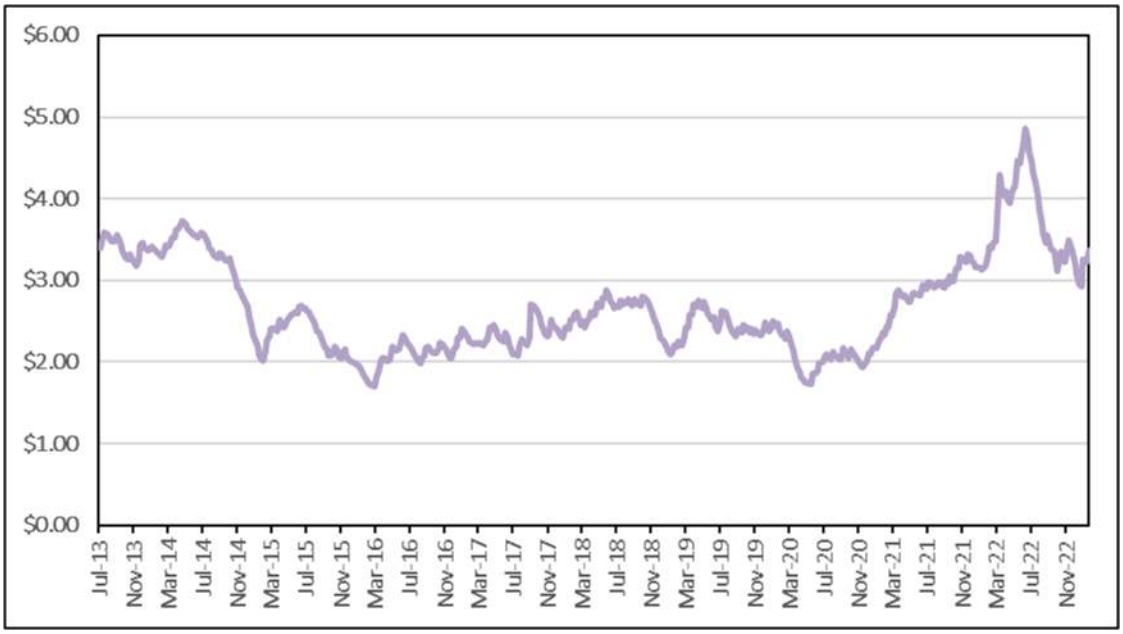
Theme Parks	2014	2015	2016	2017	2018	2019	2020	2021	2020-'21	2014-'21
Disney's Magic Kingdom	19.3	20.5	20.4	20.5	20.9	21.0	6.9	12.7	82.8%	-5.8%
Disney's Epcot Center	11.5	11.8	11.7	12.2	12.4	12.4	4.0	7.8	91.7%	-5.4%
Disney's Animal Kingdom	10.4	10.9	10.8	12.5	13.8	13.9	4.2	7.2	72.7%	-5.1%
Disney's Hollywood Studios	10.3	10.8	10.8	10.7	11.3	11.5	3.7	8.6	133.7%	-2.6%
Islands of Adventure at Universal Orlando	8.1	8.8	9.4	9.5	9.8	10.4	4.0	9.0	124.9%	1.5%
Universal Studios at Universal Orlando	8.3	9.6	10.0	10.2	10.7	10.9	4.1	9.0	119.4%	1.2%
Seaworld Orlando	4.7	4.8	4.4	4.0	4.6	4.6	1.6	3.1	90.9%	-5.9%
Water Parks										
Typhoon Lagoon	2.2	2.3	2.3	2.3	2.3	2.2	Closed	Closed	-	-
Blizzard Beach	2.0	2.1	2.1	1.9	2.0	2.0	0.3	1.2	280.1%	-7.1%
Aquatica	1.6	1.6	1.5	1.4	1.6	1.5	0.5	1.1	117.2%	-4.4%
Volcano Bay (formerly Wet 'n Wild)	1.3	1.3	1.3	Closed	1.7	1.8	0.6	1.7	206.9%	4.0%

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

2.7 Fuel Prices

Figure 2-6 contains an account of weekly retail prices for regular-grade Florida gasoline from July 2013 through early January 2023. 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 declined noticeably. Since March 2016, prices increased slightly to $2.79 at the beginning of October 2018, thereafter, fluctuating around low-$2.00 through the end of December 2020. Due to the closure of several national pipelines, prices increased to over $3.00 by the end of 2021. Additional supply restrictions and speculation resulting from the Ukrainian War drove prices over $4.00 between March 2022 and July 2022. By January 2023, prices had dropped to an average of $3.30 per gallon as national reserves were opened and supplies stabilized.

Figure 2-6
Florida Gasoline Prices (Regular Grade/Gallon)
June 2013 – January 2023



Source: U.S. Energy Information Administration

CHAPTER 3

S.R.528
| MARTIN B. ANDERSEN BEACHLINE EXPRESSWAY

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

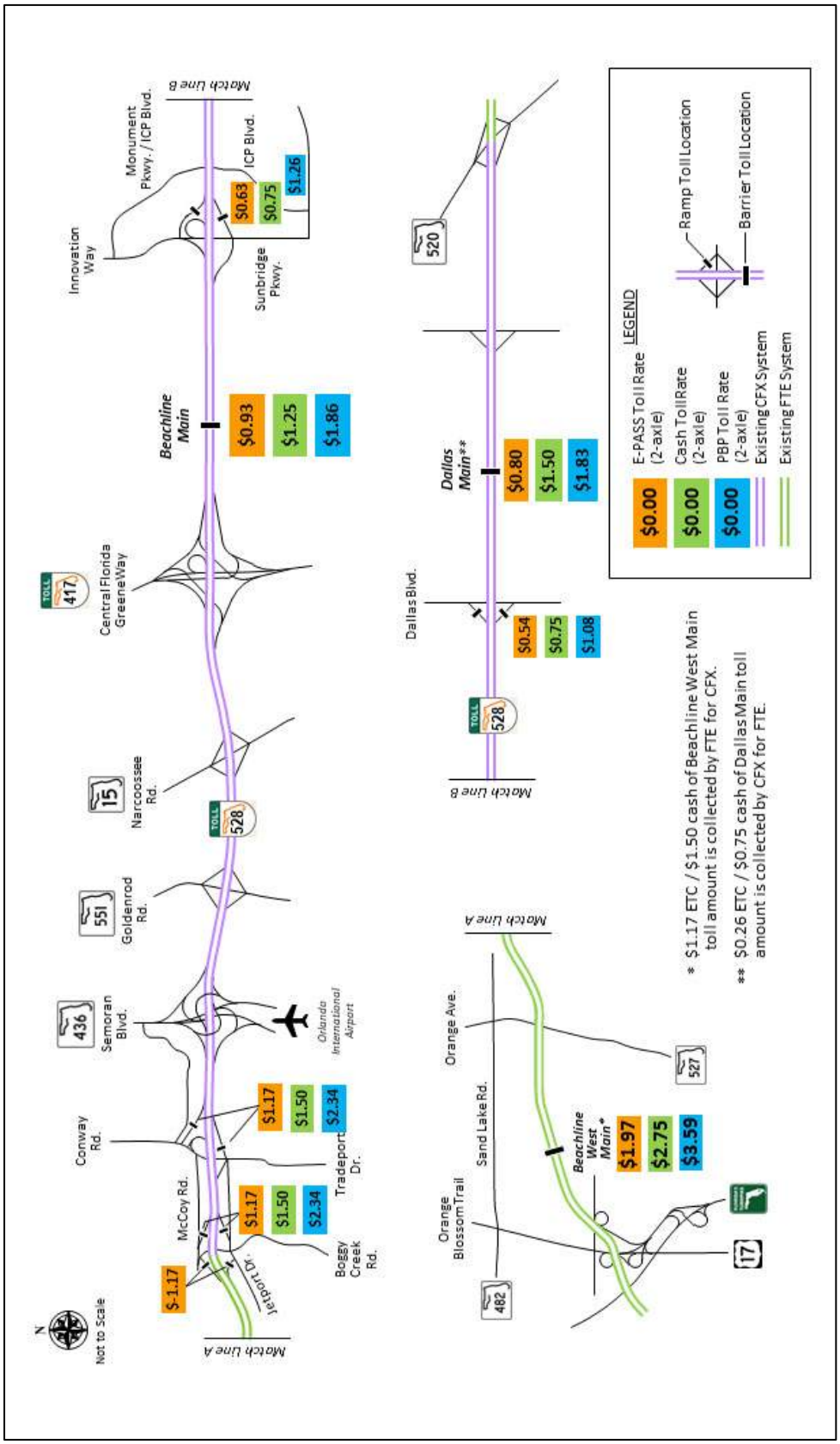
3.1 Facility Description

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. Portions of the Beachline Expressway are 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 2022 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 an 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 main 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 FY 2022 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. During FY 2022, CFX collected $0.26 per ETC transaction and $0.75 per cash transaction from customers driving 2-axle vehicles 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 2023.

Starting in November 2014, CFX began the 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 CFX 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. During FY 2022, ETC customers with 2-axle vehicles pay a combined toll of $1.97 at the Beachline West Main Plaza; $0.80 represents the FTE toll amount and $1.17 represents the CFX toll amount. With the combined toll structure, ETC customers using the Boggy Creek Road interchange are eligible for a $1.17 rebate when entering S.R. 528 westbound at Boggy Creek Road and passing through the Beachline West Plaza, and 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 for CFX 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 accommodate the development of the Innovation Way corridor, and to accommodate the Brightline train. 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 late 2020, CFX began construction on capacity improvements (1 additional lane in each direction) between Conway Road and Goldenrod Road with significant modification to the S.R. 436/Orlando International Airport interchange. This signature project will improve safety and

traffic flow in this interchange, which carries more than 50,000 vehicles per day. The interchange and capacity improvements were opened to traffic in fall of 2022.

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 the two. Total revenue is the sum of paid in-lane revenue and the revenue collected through the PBP process, estimated as an accrued amount. The following section includes a breakdown of transactions and 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 on S.R. 528 at the Beachline Main, Airport Main and Dallas Main plaza groups from FY 2012 to FY 2022 is 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 this reason, the information presented in this section may differ slightly from the data presented in the FY 2022 Comprehensive Annual Financial Report (CAFR) and other information in this report.

In FY 2012, the Dallas Main plaza opened to traffic to improve 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 toll previously collected on behalf of FDOT at the Beachline Main plaza was also shifted to the Dallas Main plaza. The Dallas Main plaza, which opened in March 2012, collected $2.2 million in revenues, and reported 4.3 million transactions during its first three months of operation in FY 2012.

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 systemwide toll rate adjustment that went into effect on July 1, 2012 (FY 2013). The Beachline Main plaza group experienced an increase of 1.8 percent in transactions and decrease of 15.8 percent in 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 adjustment. In FY 2013, transactions at the Dallas Main plaza increased by 237.2 percent and revenues increased by 243.9 percent compared to FY 2012. The reason for the huge growth rate is that the first year of toll collection at this new plaza (FY 2012) was for only four months.

In FY 2016, all plaza groups on S.R. 528 experienced growth in paid in-lane transactions and revenues compared to FY 2015. As a leap year, 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, because of the mainline plaza removal. Transactions at the FTE Beachline West Main Plaza are included as part of the Airport Main plaza group.

Table 3-1
S.R. 528 Plaza Groups – Historical Paid In-Lane Transactions and Revenue
FY 2012 – FY 2022

Fiscal Year	Airport Main	Beachline Main	Dallas Main	TOTAL	Airport Main	Beachline Main	Dallas Main	TOTAL
	TRANSACTIONS (millions)				PERCENT CHANGE			
2012 [A]	26.8	16.4	4.3	47.5	-	-	-	-
2013 [A,B]	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 [C]	32.6	20.9	18.0	71.5	13.2%	10.0%	9.8%	11.4%
2017 [D]	36.6	21.7	18.5	76.8	12.3%	3.8%	2.8%	7.4%
2018 [E]	36.8	21.6	18.3	76.7	0.5%	-0.5%	-1.1%	-0.1%
2019 [*]	36.8	22.0	18.3	77.1	0.0%	1.9%	0.0%	0.5%
2020 [*,F]	31.9	19.6	16.5	68.0	-13.3%	-10.9%	-9.8%	-11.8%
2021 [*,G]	28.7	18.4	15.7	62.8	-10.0%	-6.1%	-4.8%	-7.6%
2022 [*]	38.2	22.0	18.9	79.1	33.1%	19.6%	20.4%	26.0%
	TOLL REVENUES (millions)				PERCENT CHANGE			
2012 [A]	$27.5	$19.0	$2.2	$48.7	-	-	-	-
2013 [A,B]	$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 [C]	$37.3	$20.0	$9.4	$66.7	11.0%	9.9%	9.3%	10.4%
2017 [D]	$41.4	$20.7	$9.7	$71.8	11.0%	3.5%	3.2%	7.6%
2018 [E]	$41.6	$20.6	$9.6	$71.8	0.5%	-0.5%	-1.0%	0.0%
2019 [*]	$42.0	$21.3	$10.5	$73.8	1.0%	3.4%	9.4%	2.8%
2020 [*,F]	$36.6	$20.2	$9.6	$66.4	-12.9%	-5.2%	-8.6%	-10.0%
2021 [*,G]	$33.7	$19.3	$9.4	$62.4	-7.9%	-4.5%	-2.1%	-6.0%
2022 [*]	$45.0	$23.3	$11.6	$79.9	33.5%	20.7%	23.4%	28.0%

*Indicates systemwide toll rate increase according to Customer First Toll Policy

Notes:

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

B - Systemwide toll rate increase in July 2012. Implementation of cash and electronic toll rate differential.

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

D - Effects from Hurricane Matthew in October 2016.

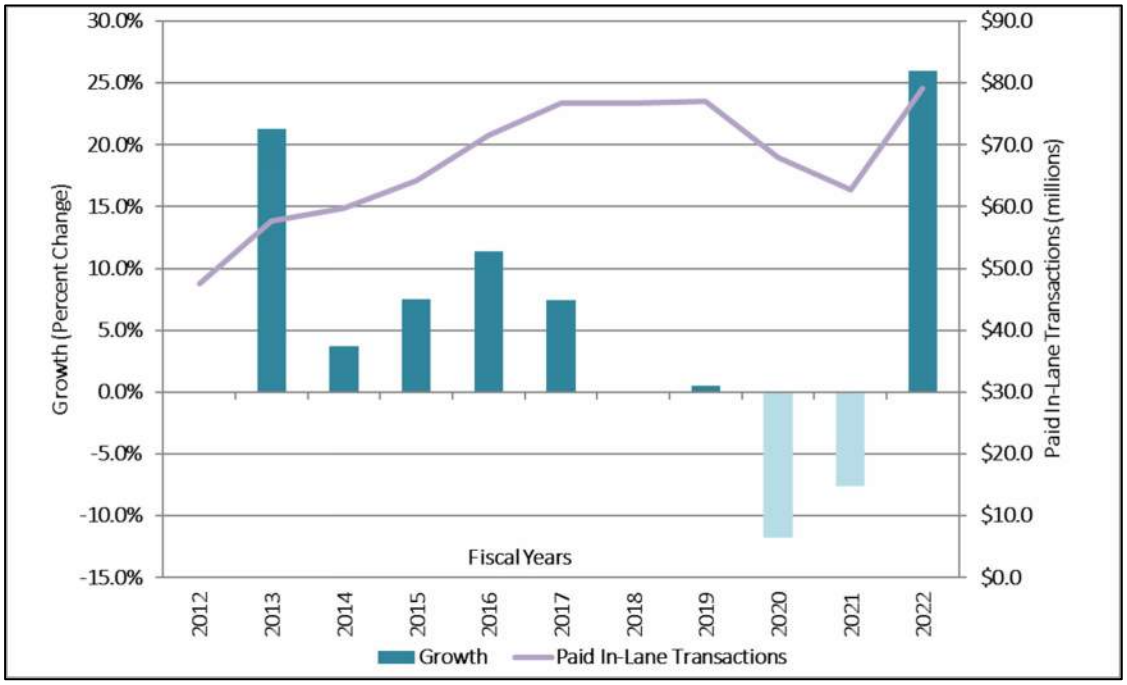
E - Effects from Hurricane Irma in September 2017.

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

G - Continued effects of COVID-19 pandemic.

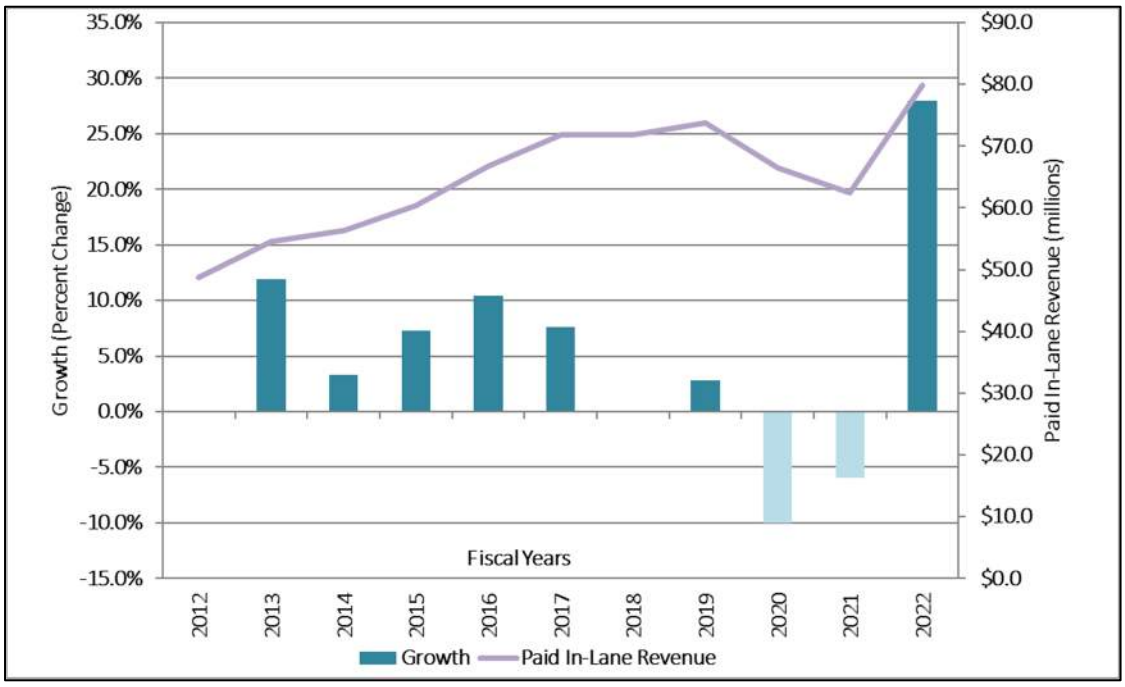
In October 2016 (FY 2017), Hurricane Matthew tracked parallel to the Florida coast as a Category 3 storm with winds up to 130 miles per hour. Tolls were suspended on the CFX System beginning at 8:00 p.m. on October 5, 2016 through early on October 10, 2016. The toll suspension resulted in a loss of approximately 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. Due to toll suspensions, S.R. 528 experienced no growth in total transactions and revenues in FY 2018.

Figure 3-2
S.R. 528 Historical Paid In-Lane Transactions and Annual Growth
FY 2012 – FY 2022



Source: Monthly unaudited data provided by CFX

Figure 3-3
S.R. 528 Historical Paid In-Lane Revenue and Annual Growth
FY 2012 – FY 2022



Source: Monthly unaudited data provided by CFX

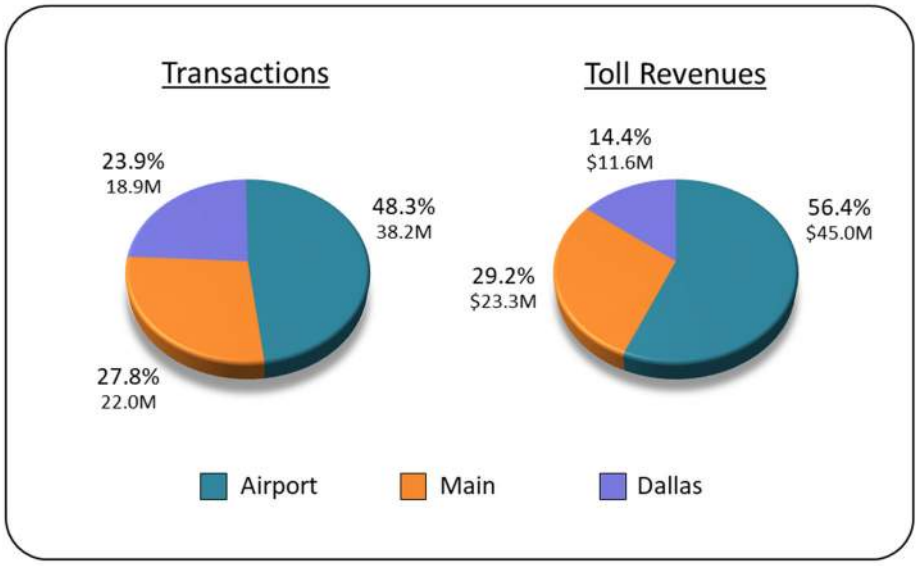
In FY 2019, S.R. 528 total paid in-lane transactions increased by 0.5 percent and paid in-lane revenues increased by 2.8 percent compared to FY 2018. The slower growth in FY 2019 can be attributed to customers choosing to pay via the PBP program.

In FY 2020 and FY 2021, all S.R. 528 plaza groups experienced a decline in paid in-lane transactions and revenues, despite the FY 2020 and FY 2021 toll rate adjustments. The declines in both transactions and revenues can primarily be attributed to the continued negative impacts of the COVID-19 pandemic. Because the fiscal year begins in July, FY 2020 only included four months of the impacts of the COVID-19 pandemic. Thus, although April 2020 (FY 2020) contained the deepest impacts of the COVID-19 pandemic, the total annual impacts were greater in FY 2021, which included a full year of travel reductions and the initial recovery. It should also be noted that In FY 2020, September 2019 transactions and revenues were also negatively impacted by toll suspensions during Hurricane Dorian. Tolls were suspended on CFX toll facilities beginning on September 1, 2019 through September 5, 2019 resulting in a transaction loss of approximately 0.9 million and a toll revenue loss of $0.9 million on S.R. 528.

In FY 2022, all S.R. 528 plaza groups experienced a significant increase in paid in-lane transactions and revenues. The increases in both transactions and revenue reflects the recovery from the negative impacts of the COVID-19 pandemic and the return of tourism to the Central Florida attractions. The FY 2022 toll rate adjustment was another factor in the increase in revenue.

The share by plaza group of total S.R. 528 paid in-lane transactions and toll revenues during FY 2022 are shown in Figure 3-4. The Airport Main plaza group represented 38.2 million transactions or 48.3 percent of total S.R. 528 transactions. The Beachline Main plaza group carried 22.0 million or 27.8 percent of total transactions on the facility. Finally, the Dallas Main plaza group represented 18.9 million or 23.9 percent of the total transactions in FY 2022.

Figure 3-4
S.R. 528 Paid In-Lane Transactions and Revenue by Plaza Group
FY 2022



Source: Monthly unaudited data provided by CFX

The annual amounts and shares of paid in-lane revenues differ from those reported for annual paid in-lane transactions because of differences in the toll rates. As shown, the Airport Main plaza group represented $45.0 million in revenues or 56.4 percent of total revenues. The Beachline Main plaza group carried $23.3 million or 29.2 percent of revenues on the facility. Finally, because of the lower toll, the Dallas Main plaza group represented $11.6 million, or 14.4 percent of total transactions in FY 2022.

3.2.2 ANNUAL PBP TRANSACTION AND REVENUE TRENDS

A history of annual PBP transactions and revenue on S.R. 528 from FY 2012 to FY 2022 is 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 2012 – FY 2022

Fiscal Year	Transactions (millions)	Percent Change	Toll Revenues (millions)	Percent Change
2012	0.7		$0.6	
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%
2021	7.9	11.3%	$14.4	82.3%
2022	8.6	8.9%	$15.9	10.4%

Source: Monthly unaudited data provided by CFX

PBP transactions have increased from 0.7 million in FY 2012 to 8.6 million in FY 2022, while PBP revenues have increased from $0.6 million to $15.9 million over the same period. In FY 2022, PBP transactions increased 8.9 percent and PBP revenues increased 10.4 percent over FY 2021. As shown in the table, the rate of growth in PBP transactions is recently trending downward. During the early part of the COVID-19 pandemic, cash toll collection was suspended for several months. For this reason, PBP transactions and revenue increased year-over-year in FY 2020 and in FY 2021. The significant increase in PBP revenues in FY 2021 can also be attributed to the new PBP toll rate adopted by the CFX Board that went into effect on July 1, 2020 (FY 2021). At that time, the PBP toll rate at all toll locations was increased to twice the ETC toll rate, reflecting the cost to collect PBP tolls. Because of the new PBP toll rate, it was anticipated that going forward a portion of customers paying via PBP will switch to ETC to avoid the higher toll rate. However, recent trends do not reflect this result. This may be due to customer travel frequency and/or the convenience of PBP compared to establishing a transponder account. Overall, the recent increase in customer preference for PBP has contributed to a smaller share of paid in-lane transactions and revenue.

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. Considering the average number of 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 each month.

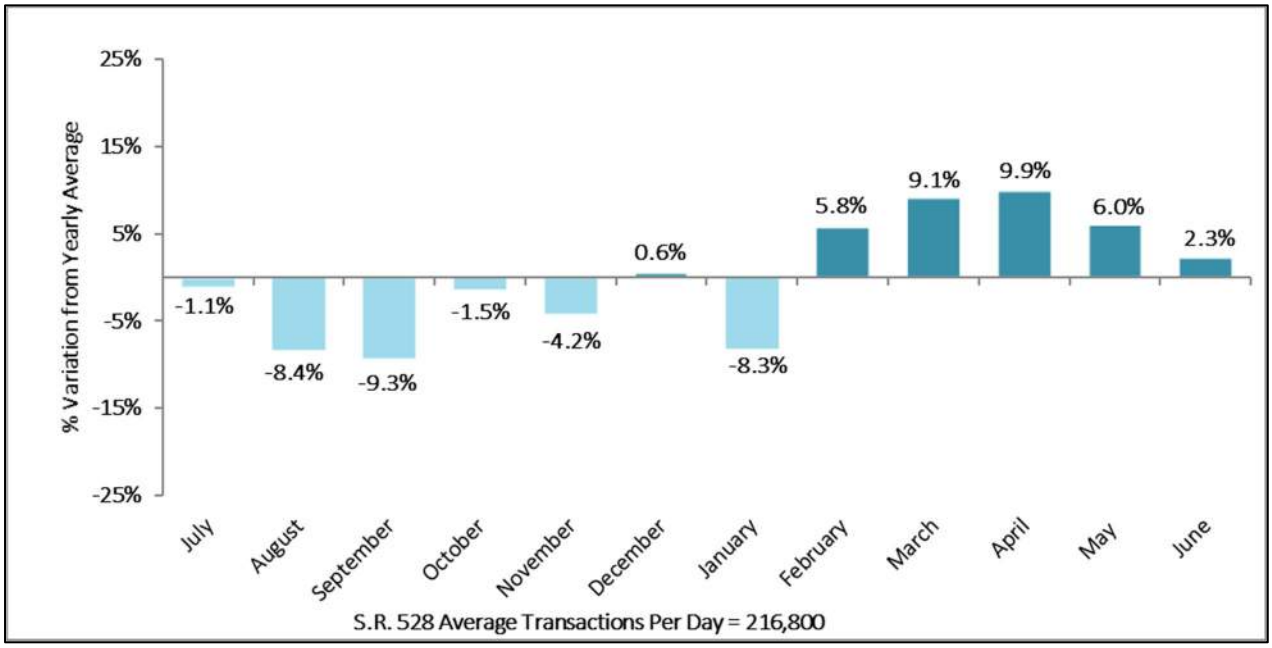
Average transactions per day in FY 2022 on S.R. 528 ranged from a low of approximately 196,600 in September 2021 to a high of 238,200 in April 2022. March and April are typically the months with the highest average number of transactions per day due to the large number of tourists and seasonal residents in the area during the spring. These data are presented in a graphical format in Figure 3-5. The transactions for each month appear as a percentage of the average for the fiscal year. April paid in-lane transactions were 9.9 percent above average and September paid in-lane transactions were 9.3 percent below average for the facility. It is also important to note that there was a slight decline in January and February transactions due in part to a surge in COVID infections from the Omicron variant after the 2021 holiday season.

Table 3-3
S.R. 528 – Monthly Seasonal Variation in Paid In-Lane Transactions
FY 2022

Month	Number of Days in Month	Paid In-Lane Transactions	Average Transactions/Day	Seasonal Factor
July	31	6,642,386	214,300	0.988
August	31	6,155,815	198,600	0.916
September	30	5,896,923	196,600	0.907
October	31	6,619,603	213,500	0.985
November	30	6,224,121	207,500	0.957
December	31	6,757,771	218,000	1.006
January	31	6,160,219	198,700	0.917
February	28	6,418,871	229,200	1.057
March	31	7,329,248	236,400	1.090
April	30	7,144,914	238,200	1.099
May	31	7,118,119	229,600	1.059
June	30	6,646,744	221,600	1.022
Average		*6,592,895*	*216,800*	*1.000*
Total Year	365	79,114,734		

Source: Monthly unaudited data provided by CFX

Figure 3-5
S.R. 528 Variation in Paid In-Lane Transactions Per Day, by Month
FY 2022



Source: Monthly unaudited data provided by CFX

3.2.4 TRANSACTIONS BY VEHICLE CLASS

The distribution of transactions at each of the S.R. 528 plaza groups by vehicle class (number of axles) for FY 2022 is shown in Table 3-4. Overall, 92.3 percent of all transactions on S.R. 528 were made by 2-axle vehicles, with minor variation among the two plaza groups. The next most frequent vehicle class was the five or more axles classification, which accounted for 4.3 percent of all transactions on the facility. Three-axle vehicles, which include delivery and service vehicles, accounted for 2.0 percent. Four-axle vehicles represented the smallest category with only 1.4 percent of facility transactions.

Table 3-4
S.R. 528 Percent of Total Transactions by Vehicle Class
FY 2022

Vehicle Class	Beachline Main	Dallas Main	S.R. 528 Total
2-Axle	92.8%	91.7%	92.3%
3-Axle	2.0%	2.0%	2.0%
4-Axle	1.4%	1.4%	1.4%
5 or More Axles	3.8%	4.9%	4.3%
Total	**100.0%**	**100.0%**	**100.0%**

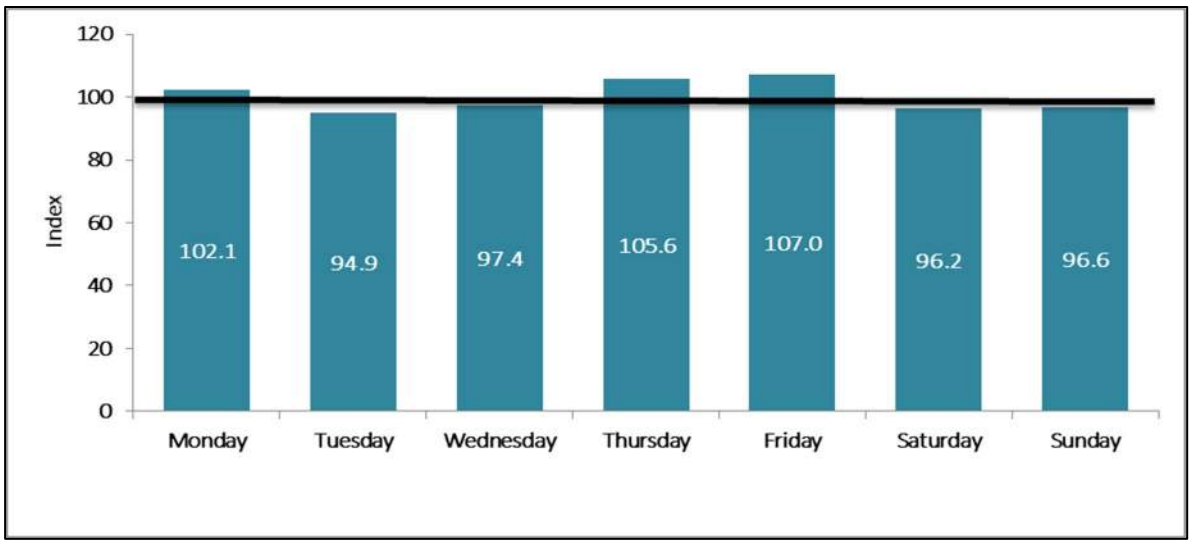
Source: Unaudited lane transaction data – May 2022

3.2.5 DAY-OF-WEEK TRANSACTION VARIATION

Figure 3-6 contains a comparison of transactions by day of week in FY 2022. These data are 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 indicates a day that has a 20 percent greater volume than the average. As was done in prior years, the data used for this analysis were for a typical week in May 2022. The data include transactions at mainline plazas only (no ramps).

FY 2022 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 107.0 (7.0 percent higher than the average day), and volumes on Monday through Thursday ranged from index values of 94.9 to 105.6. Saturday and Sunday volumes were similar with index values of 96.2 and 96.6, respectively. The steady volumes on Saturdays and Sundays can be attributed to tourism and beach-related travel using S.R. 528.

Figure 3-6
S.R. 528 Variation in Transactions, by Day of Week
FY 2022



Source: Unaudited lane transaction data – May 2022

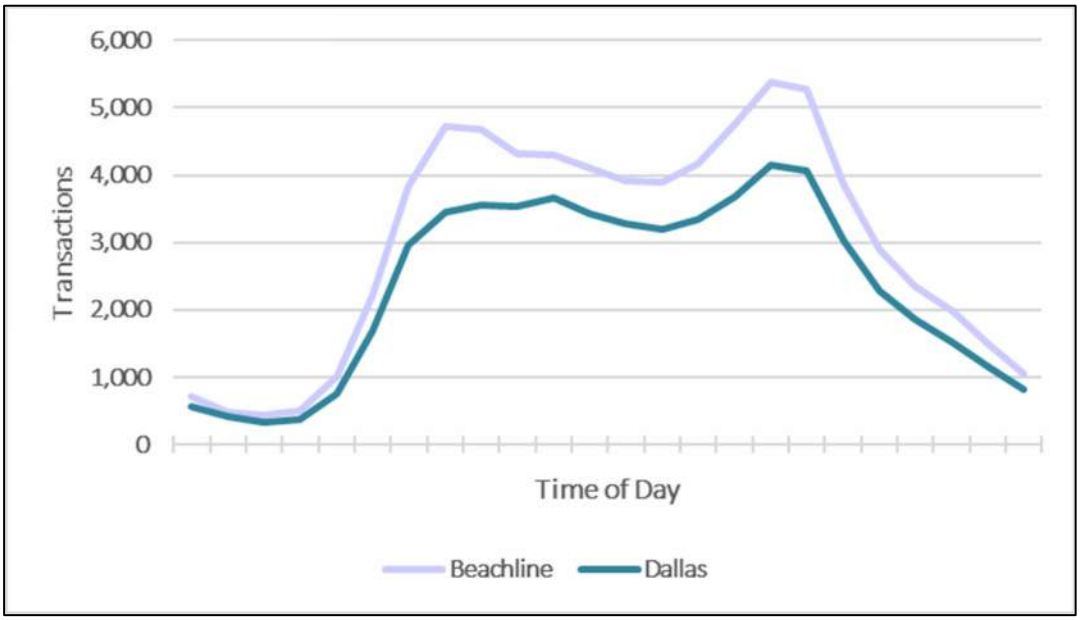
3.2.6 HOURLY TRAFFIC DISTRIBUTION

The hourly distribution of traffic volumes includes information on the usage characteristics of the facility. The hourly distributions represent counts taken during a typical week at the mainline toll plazas during the month of May. The typical weekday hourly distribution is shown in Figure 3-7 and the hourly distribution on weekend days 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 experienced slightly higher peak volumes in the evening hours than in the morning hours. The highest peak hour volumes during the week

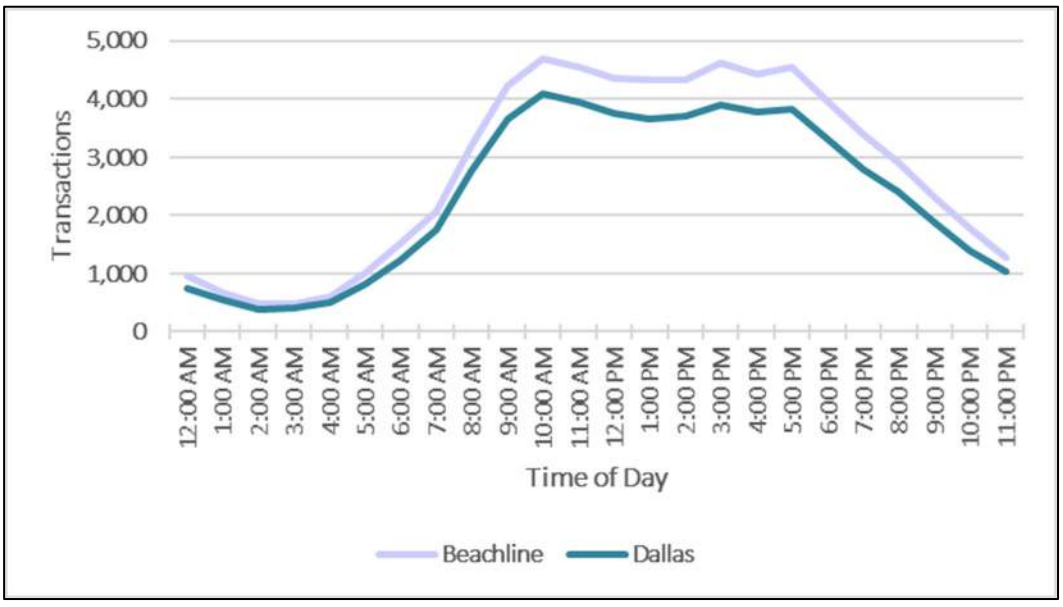
were 5,400 per hour beginning at 4:00 p.m. at the Beachline mainline plaza and 4,200 per hour beginning at 4:00 p.m. at the Dallas mainline plaza. On weekends, there is a clear peak between 10:00 a.m. and 11:00 a.m. and another peak in the afternoon at 5:00 p.m. reflecting traffic heading to and returning from the beach for the day.

Figure 3-7
S.R. 528 Hourly Two-Way Traffic Variation (Weekday)
FY 2022 (May)



Source: Unaudited lane traffic data – May 2022

Figure 3-8
S.R. 528 Hourly Two-Way Traffic Variation (Weekend)
FY 2022 (May)



Source: Unaudited lane traffic data – May 2022

3.2.7 TRANSACTIONS AND REVENUE BY PAYMENT TYPE

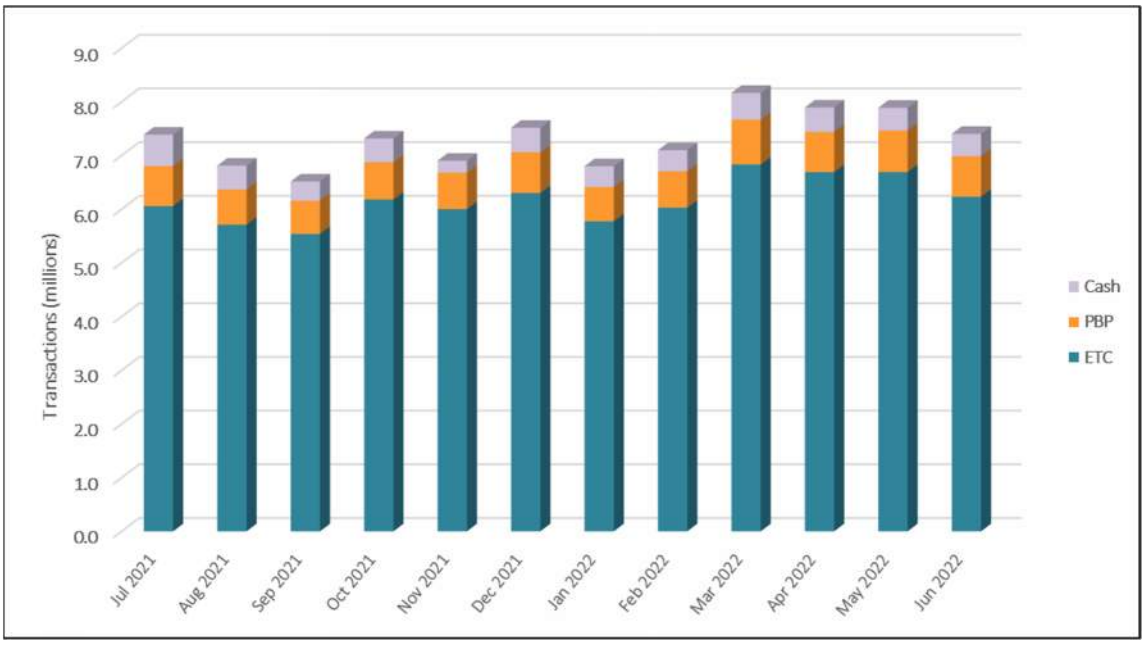
The distributions of transactions and revenue by payment type and plaza group during FY 2022 are presented in Figure 3-9 and Figure 3-10. Customers pay tolls in one of three ways: cash, ETC, and PBP. As defined in Chapter 1 of this report, paid in-lane transactions and revenue include cash and ETC payments 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 a FY 2022 accrual rate of 52 percent of all unpaid in-lane transactions in July and August 2021, then dropped down to 50 percent for the remainder of the year. This means that the PBP transactions and revenue shown here are estimates of the levels that will eventually pay tolls through the PBP process. 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 3-9, ETC transactions on S.R. 528 ranged from a low of 5.5 million in September 2021 to a high of 6.8 million in March 2022. Overall, ETC accounted for 84.4 percent of total transactions on the facility. The PBP transactions ranged from a low of 0.6 million to a high of over 0.8 million. Overall, PBP accounted for 9.8 percent of total transactions on the facility. Cash transactions ranged from a low of approximately 0.2 million to a high of 0.6 million. Overall, cash accounted for 5.8 percent of total transactions on the facility, which is the highest percentage of cash payment on the system.

As shown in Figure 3-10, the share of toll revenues by payment type is comparable to the share of transactions, recognizing the differences in the toll paid by payment method. ETC revenue on S.R. 528 ranged from a low of $5.5 million in September 2021 to a high of $6.9 million in March 2022. Overall, ETC accounted for 77.1 percent of total revenue on the facility. The PBP revenue ranged from a low of $1.1 million to a high of $1.5 million. Overall, PBP accounted for 16.6 percent of total revenue on the facility. Cash revenue ranged from a low of $0.4 million to a high of nearly $0.7 million. Overall, cash accounted for 6.3 percent of total revenue on the facility, again the highest cash payment percentage on the system.

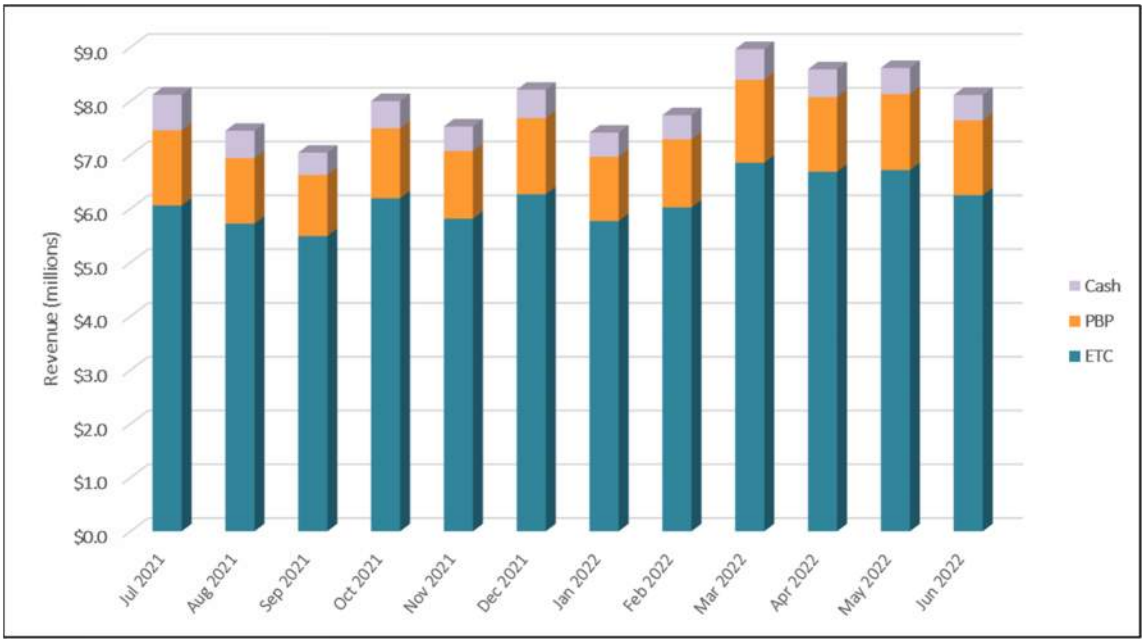
The differences in revenue performance by payment method is explained by differences in the toll rates. ETC customers pay the preferred toll rate; cash customers pay at least 10 percent higher rate than ETC rate; and PBP customers pay twice the ETC rate.

Figure 3-9
S.R. 528 Transactions by Payment Type
FY 2022



Source: Monthly unaudited transaction data provided by CFX

Figure 3-10
S.R. 528 Revenue by Payment Type
FY 2022



Source: Monthly unaudited toll revenue data provided by CFX

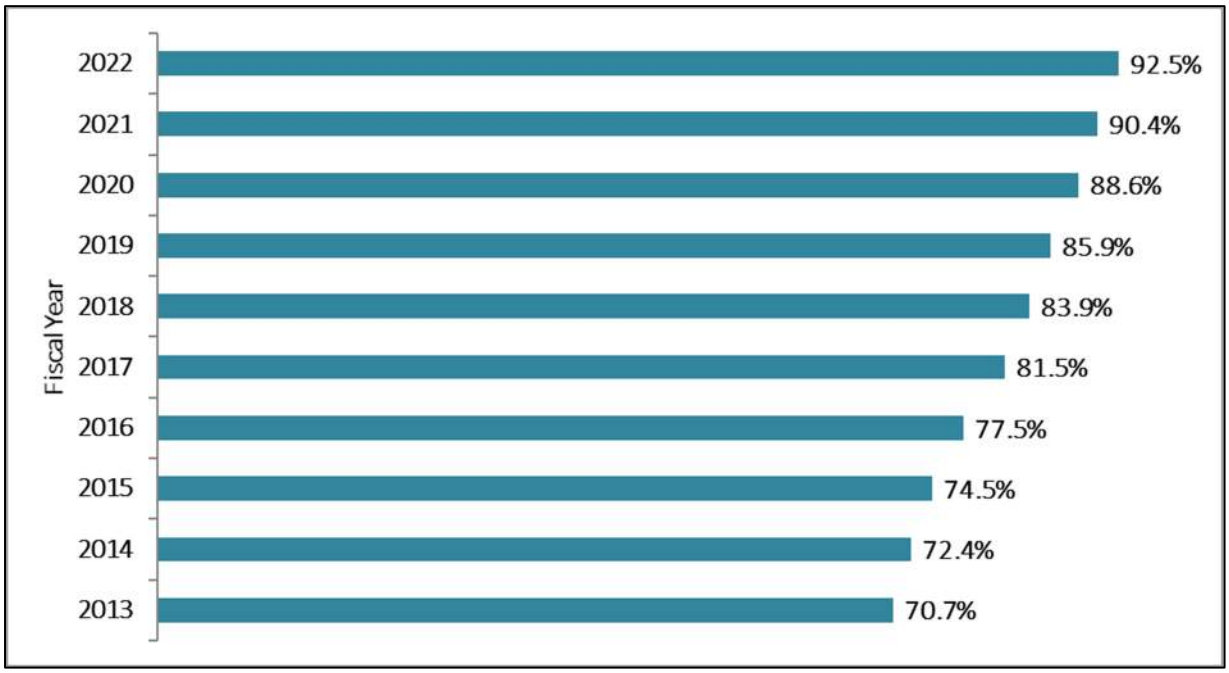
3.3 ETC Usage

The shares of paid in-lane revenues generated from ETC over the past ten fiscal years on S.R. 528 are shown in **Figure 3-11**. Cash payments are the other source of paid in-lane revenues. PBP revenues are excluded. The proportion of ETC toll revenues collected by CFX has steadily increased on the facility. In FY 2013, ETC revenues on S.R. 528 represented 70.7 percent of total paid in-lane revenues on the facility. In FY 2022, ETC revenues were 92.5 percent. 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 considerable 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.

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 staffed, mainline toll plaza lanes. This conversion is expected to be completed in FY 2023.

In June 2021, CFX also launched the Visitor Toll Pass program, which is a free temporary toll pass for rental car customers traveling through the Orlando International Airport. With the pass, rental car customers pay the ETC rates on Florida toll roads with no extra or hidden fees.

Figure 3-11
S.R. 528 Percent of Paid In-Lane Revenue from Electronic Toll Collection
FY 2013 – FY 2022



Source: Monthly unaudited data provided by CFX

3.4 Forecasted Transactions and Toll Revenues

The forecasts of T&R are based on several assumptions about the future, including assumptions about future toll rates. Based on the CFX "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 with a floor of 1.5 percent. At the time of preparing the T&R estimates and this report, CDM Smith learned that the net change in CPI during CY 2022 was 8.577 percent. At their June 2023 meeting, the CFX Board decided to forego the net change in CPI and implement the policy floor of 1.5 percent adjustment for FY 2024. Based on assurances from CFX, CDM Smith used this value to index toll rates for FY 2024. 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 3-5**, 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. 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 positively impact the traffic and revenue growth on S.R. 528 throughout the forecast horizon.

Table 3-5
S.R. 528 - Key Transportation Improvements

Facility	From	To	Year	Jurisdiction	Improvement
Interstate 4	SR 434	Kirkman Road	2025	FDOT	Widen to 10 Lanes
Central Florida Parkway	International Drive	SR 423 (John Young Parkway)	2025	Orange County	Widen to 6 Lanes
Destination Parkway	Universal Boulevard	John Young Parkway	2025	Orange County	Widen to 6 Lanes
International Drive	Hawaiian Court	SR 482	2025	Orange County	Widen to 6 Lanes
SR 15 (Narcoossee Road)	SR 528 (BeachLine Expressway)	Lee Vista Boulevard	2025	City of Orlando/FDOT	Widen to 6 Lanes
SR 482/Sand Lake Road	Turkey Lake Road	W. of John Young Parkway	2025	FDOT	Widen to 6-lanes
SR 528	SR 417	Innovation Parkway	2025	CFX	Widen to 6-lanes
SR 528	SR 436	SR 417	2025	CFX	Widen to 8-lanes
Kirkman Road Extension	SR 528 (BeachLine Expressway)	Sand Lake Road	2025	Orange County	New 4 lane Highway
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 Drive	SR 482	Kirkman Road	2035	Orange County	Widen to 6 Lanes
Universal Boulevard	SR 482	Pointe Plaza Avenue	2035	Orange County	Widen to 6 Lanes
Nova Rd (CR 532)	Deer Park Rd	Orange County Line	2045	Osceola County	Widen to 4 Lanes
Nova Road	Alligator Lake Rd	US 192	2045	Osceola County	Widen to 4 Lanes
International Drive South	Westwood Boulevard	Hawaiian Court	2045	Orange County	Widen to 6 Lanes
US 192	Nova Road	Pine Grove Rd	2045	FDOT	Widen to 6-lanes
SR 528	Innovation Parkway	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 3-6 and Table 3-7. The tables are divided into paid in-lane and PBP transactions and revenue. The paid in-lane transactions and revenue include ETC and cash collection. PBP is only reported as a total on the facility. 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 by 2.6 percent per year through FY 2032 and then at lower rates through the end of the forecast period because of the impact of continued toll rate adjustments. PBP transactions are forecasted to increase by an average of 2.8 percent per year through FY 2032 and then decrease through the forecast period. Total transactions on S.R. 528 are projected to increase during the forecast period from the actual of 87.7 million in FY 2022 to 133.1 million in FY 2052. The paid in-lane revenues on S.R. 528 are projected to increase over the forecast period, from the FY 2022 actual of $79.9 million to $174.2 million in FY 2052. PBP revenues are projected to increase from $15.9 million in FY 2022 to $34.3 million in FY 2052. Total revenues on S.R. 528 are projected to increase during the forecast period from the actual $95.8 million in FY 2022 to $208.5 million in FY 2052. Total transactions are forecasted to increase an average of 2.6 percent per year from FY 2022 to FY 2032. Total revenues during the same period are forecasted to increase an average of 4.2 percent per year. Total transactions and revenues are forecasted to increase at an average of 1.0 and 2.1 percent per year from FY 2032 to FY 2042, and 0.6 and 1.6 percent per year from FY 2042 to FY 2052, respectively.

Table 3-6
S.R. 528 Plaza Groups – Transaction Projections (Millions)
FY 2023 – FY 2052

Fiscal Year		Airport Main	Beachline Main	Dallas Main	Paid In-Lane	PBP	Total	Percent Annual Change
2012[A]	Actual	26.8	16.4	4.3	47.5	0.7	48.2	-
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[C]		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]		28.7	18.4	15.7	62.8	7.9	70.7	-5.9%
2022*[I]		38.2	22.0	18.9	79.1	8.6	87.7	24.0%
2023[J]	Forecast	40.5	22.3	19.2	82.0	9.9	91.9	4.8%
2024		44.9	24.7	21.0	90.6	10.1	100.7	9.6%
2025		45.8	25.3	21.5	92.6	10.4	103.0	2.3%
2026		46.5	25.7	21.8	94.0	10.6	104.6	1.6%
2027		47.3	26.1	22.2	95.6	10.8	106.4	1.7%
2028		48.0	26.5	22.5	97.0	10.8	107.8	1.3%
2029		48.7	26.8	22.8	98.3	11.0	109.3	1.4%
2030		49.4	27.2	23.1	99.7	11.0	110.7	1.3%
2031		50.0	27.5	23.4	100.9	11.2	112.1	1.3%
2032		50.7	27.9	23.7	102.3	11.3	113.6	1.3%
2033		51.3	28.2	24.0	103.5	11.4	114.9	1.1%
2034		51.9	28.5	24.3	104.7	11.5	116.2	1.1%
2035		52.4	28.8	24.6	105.8	11.6	117.4	1.0%
2036		53.0	29.1	24.8	106.9	11.8	118.7	1.1%
2037		53.5	29.4	25.1	108.0	11.8	119.8	0.9%
2038		54.1	29.7	25.3	109.1	11.8	120.9	0.9%
2039		54.6	30.0	25.6	110.2	11.9	122.1	1.0%
2040		55.1	30.2	25.8	111.1	12.0	123.1	0.8%
2041		55.6	30.5	26.0	112.1	12.2	124.3	1.0%
2042		56.1	30.7	26.2	113.0	12.2	125.2	0.7%
2043		56.6	31.0	26.4	114.0	12.2	126.2	0.8%
2044		57.0	31.2	26.6	114.8	12.3	127.1	0.7%
2045		57.5	31.4	26.8	115.7	12.3	128.0	0.7%
2046		57.9	31.6	27.0	116.5	12.3	128.8	0.6%
2047		58.3	31.7	27.1	117.1	12.4	129.5	0.5%
2048		58.7	31.9	27.3	117.9	12.5	130.4	0.7%
2049		59.1	32.1	27.4	118.6	12.5	131.1	0.5%
2050		59.5	32.2	27.5	119.2	12.6	131.8	0.5%
2051		59.9	32.3	27.6	119.8	12.6	132.4	0.5%
2052		60.2	32.5	27.7	120.4	12.7	133.1	0.5%

Fiscal Year	Compound Annual Average Growth Rate (CAAGR)					
2012 - 2022	3.6%	3.0%	16.0%	5.2%	28.5%	6.2%
2022 - 2032	2.9%	2.4%	2.3%	2.6%	2.8%	2.6%
2032 - 2042	1.0%	1.0%	1.0%	1.0%	0.8%	1.0%
2042 - 2052	0.7%	0.6%	0.6%	0.6%	0.4%	0.6%

*Indicates systemwide toll rate increase according to Customer First Toll Policy

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. Continued effects of COVID-19 pandemic.

I - Completion of I-4 Ultimate project.

J - Includes impacts from Hurricane Ian toll suspensions in September 2022.

Table 3-7
S.R. 528 Plaza Groups – Toll Revenue Projections (Millions)
FY 2023 – FY 2052

Fiscal Year		Airport Main	Beachline Main	Dallas Main	Paid In-Lane	PBP	Total	Percent Annual Change
2012[A]	Actual	$27.5	$19.0	$2.2	$48.7	$0.6	$49.3	-
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[C]		$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]		$33.7	$19.3	$9.4	$62.4	$14.4	$76.8	3.4%
2022*[I]		$45.0	$23.3	$11.6	$79.9	$15.9	$95.8	24.7%
2023[J]	Forecast	$48.8	$24.7	$12.2	$85.7	$19.3	$105.0	9.6%
2024		$54.8	$27.6	$13.6	$96.0	$20.1	$116.1	10.6%
2025		$56.7	$28.7	$14.1	$99.5	$20.9	$120.4	3.7%
2026		$58.4	$29.5	$14.5	$102.4	$21.6	$124.0	3.0%
2027		$60.0	$30.3	$14.9	$105.2	$22.2	$127.4	2.7%
2028		$61.7	$31.1	$15.4	$108.2	$22.7	$130.9	2.7%
2029		$63.4	$32.0	$15.8	$111.2	$23.3	$134.5	2.8%
2030		$65.1	$32.8	$16.2	$114.1	$23.9	$138.0	2.6%
2031		$66.7	$33.6	$16.6	$116.9	$24.3	$141.2	2.3%
2032		$68.4	$34.4	$17.1	$119.9	$24.9	$144.8	2.5%
2033		$70.0	$35.3	$17.5	$122.8	$25.5	$148.3	2.4%
2034		$71.7	$36.1	$17.9	$125.7	$25.9	$151.6	2.2%
2035		$73.3	$36.9	$18.3	$128.5	$26.4	$154.9	2.2%
2036		$74.9	$37.7	$18.7	$131.3	$27.1	$158.4	2.3%
2037		$76.6	$38.6	$19.2	$134.4	$27.5	$161.9	2.2%
2038		$78.2	$39.4	$19.6	$137.2	$28.0	$165.2	2.0%
2039		$79.8	$40.2	$20.0	$140.0	$28.5	$168.5	2.0%
2040		$81.5	$41.0	$20.4	$142.9	$29.0	$171.9	2.0%
2041		$83.1	$41.8	$20.8	$145.7	$29.5	$175.2	1.9%
2042		$84.7	$42.5	$21.1	$148.3	$29.9	$178.2	1.7%
2043		$86.3	$43.3	$21.5	$151.1	$30.5	$181.6	1.9%
2044		$88.0	$44.0	$21.9	$153.9	$30.9	$184.8	1.8%
2045		$89.6	$44.7	$22.2	$156.5	$31.4	$187.9	1.7%
2046		$91.1	$45.5	$22.6	$159.2	$31.8	$191.0	1.6%
2047		$92.6	$46.2	$22.9	$161.7	$32.3	$194.0	1.6%
2048		$94.2	$46.9	$23.3	$164.4	$32.7	$197.1	1.6%
2049		$95.7	$47.5	$23.6	$166.8	$33.2	$200.0	1.5%
2050		$97.2	$48.2	$23.9	$169.3	$33.5	$202.8	1.4%
2051		$98.7	$48.8	$24.3	$171.8	$34.0	$205.8	1.5%
2052		$100.1	$49.5	$24.6	$174.2	$34.3	$208.5	1.3%

Fiscal Year	Compound Annual Average Growth Rate (CAAGR)					
2012 - 2022	5.0%	2.1%	18.1%	5.1%	38.8%	6.9%
2022 - 2032	4.3%	4.0%	4.0%	4.1%	4.6%	4.2%
2032 - 2042	2.2%	2.1%	2.1%	2.1%	1.8%	2.1%
2042 - 2052	1.7%	1.5%	1.5%	1.6%	1.4%	1.6%

*Indicates systemwide toll rate increase according to Customer First Toll Policy

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. Continued effects of COVID-19 pandemic.

I - Completion of I-4 Ultimate project.

J - Includes impacts from Hurricane Ian toll suspensions in September 2022.

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CHAPTER 4

S.R. 408
| SPESSARD L. HOLLAND EAST-WEST EXPRESSWAY

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

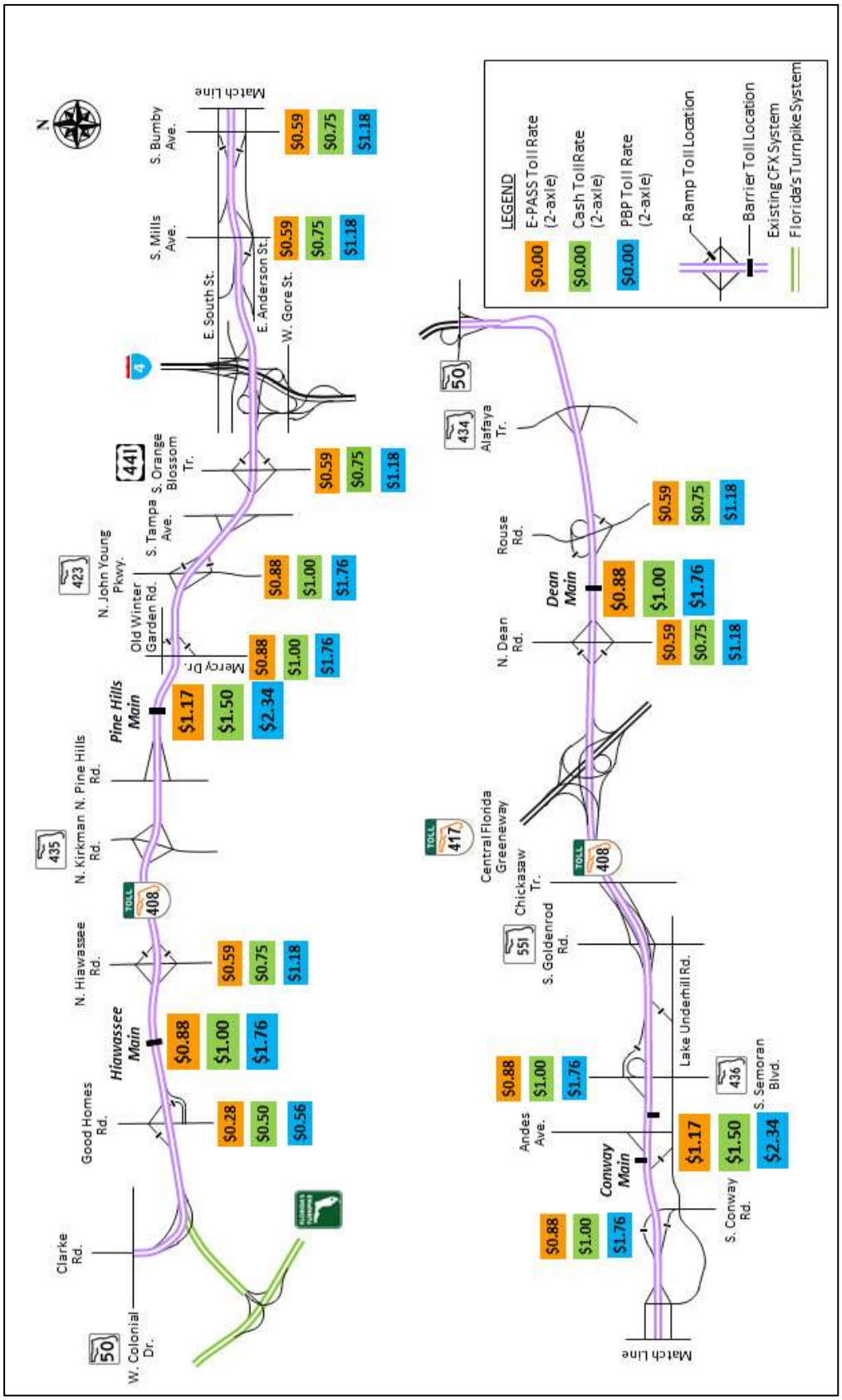
4.1 Facility Description

S.R. 408, also known as the Spessard L. 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 2022 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 the 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 S.R. 408 westward from its original western terminus at S.R. 50 near Hiawassee Road five miles to an interchange with Florida's Turnpike. 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 FY 2022 Toll Rates



CFX has maintained and improved capacity on S.R. 408 over the years through a series of programmed widenings and resurfacing efforts. 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 around Valencia College Lane and Econlockhatchee Trail. Then, in March 2013, CFX completed the widening of S.R. 408 between Oxalis Avenue and S.R. 417 as well as the reconfiguration of the S.R. 408/S.R. 417 systems interchange.

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.

CFX completed the widening of S.R. 408 from Good Homes Road to east of Hiawassee Road in July 2018. 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. Most recently, CFX completed the widening of S.R. 408 from east of S.R. 417 to east of Alafaya Trail in FY 2020. 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.

As a part of a partnership project, FDOT completed the reconstruction of the I-4/S.R. 408 interchange with the I-4 Ultimate project in the Spring of 2022. The reconstruction improves 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, the reconstruction of the S.R. 408 travel lanes over I-4 to include three lanes in each direction, and a reconstructed off ramp to Orange Avenue.

In a partnership with the City of Orlando, CFX is currently designing improvements to the S.R. 408/Tampa Avenue interchange near Camping World Stadium. The planned improvements include completing the Tampa Avenue interchange to include ramps to and from the east on S.R. 408. The project will also relocate the U. S. 441 ramps to and from the west, which will be braided with the new Tampa Avenue ramps to avoid weaving issues. Additionally, the project provides improved traffic flow and pedestrian safety at Tampa Avenue for events at Camping World Stadium. Design is expected to be completed by early 2023.

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 the two. Total revenue is the sum of paid in-lane revenue and the revenue collected through the PBP process, estimated as an accrued amount. The following section includes a breakdown of transactions and revenues by paid in-lane and PBP.

4.2.1 ANNUAL PAID IN-LANE TRANSACTION AND REVENUE TRENDS

A history of annual paid in-lane transactions on S.R. 408 at the Hiawassee Main, Pine Hills Main, Conway Main, and Dean Main plaza groups from FY 2012 to FY 2022 is presented in the top half of Table 4-1. Annual paid in-lane revenues are also summarized and totaled in the bottom half of the table. The S.R. 408 annual paid in-lane transaction and revenue trends including annual growth are also presented visually in Figure 4-2 and Figure 4-3. 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 2022 Comprehensive Annual Financial Report (CAFR) and other information in this report.

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, transactions and revenues increased at all four plaza groups. The increase in transactions in FY 2014 was the expected recovery from the FY 2013 decline that resulted from the toll rate adjustment.

In FY 2015, paid in-lane transactions and revenues increased over FY 2014 at all four plaza groups. The same trend continued in FY 2016, with transactions increasing by 5.8 percent and revenues increasing by 5.3 percent. This increase in transactions and revenues can be partially attributed to customers diverting to S.R. 429/S.R. 408 as an alternative route to downtown Orlando during the I-4 construction.

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. Hurricane Matthew resulted in a lower year-over-year growth rates for FY 2017 of 1.0 percent and 0.7 percent in paid in-lane transactions and revenue, respectively, as compared to the growth rates achieved in prior years. However, given the severity of Hurricane Irma and the resulting toll suspensions in September 2017, paid in-lane transactions on S.R. 408 decreased by approximately 2.5 million, or 1.7 percent, in FY 2018 compared to FY 2017. FY 2018 paid in-lane revenues decreased by $2.7 million, or 1.9 percent compared to FY 2017 (which had already exhibited reduced growth compared to prior years, as previously noted). The impacts of these storms to S.R. 408 may have been more severe than on other CFX Expressways due to the mix of trip types (i.e.., more commuters) served by the expressway.

Table 4-1
S.R. 408 Plaza Groups – Historical Paid In-Lane Transactions and Revenue
FY 2012 – FY 2022

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				
2012	23.1	28.4	50.1	24.6	126.2	-	-	-	-	-
2013 [A]	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 [B]	29.6	34.2	56.4	27.5	147.7	3.5%	1.5%	0.0%	0.0%	1.0%
2018 [C]	29.8	34.2	54.6	26.6	145.2	0.7%	0.0%	-3.2%	-3.3%	-1.7%
2019 *	29.8	33.6	52.4	25.3	141.1	0.0%	-1.8%	-4.0%	-4.9%	-2.8%
2020 *,D	26.6	30.1	46.2	21.8	124.7	-10.7%	-10.4%	-11.8%	-13.8%	-11.6%
2021 *,E	27.1	31.4	50.3	22.1	130.9	1.9%	4.3%	8.9%	1.4%	5.0%
2022 *	32.4	37.3	59.9	26.2	155.8	19.6%	18.8%	19.1%	18.6%	19.0%
	TOLL REVENUES (millions)					PERCENT CHANGE				
2012	$16.0	$26.7	$47.2	$17.8	$107.7	-	-	-	-	-
2013 [A]	$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 [B]	$23.3	$36.1	$59.1	$22.5	$141.0	3.1%	1.7%	-0.5%	-0.4%	0.6%
2018 [C]	$23.5	$36.0	$57.1	$21.7	$138.3	0.9%	-0.3%	-3.4%	-3.6%	-1.9%
2019 *	$24.1	$36.0	$55.5	$21.0	$136.6	2.6%	0.0%	-2.8%	-3.2%	-1.2%
2020 *,D	$22.1	$32.7	$50.1	$18.4	$123.3	-8.3%	-9.2%	-9.7%	-12.4%	-9.7%
2021 *,E	$22.9	$35.3	$56.4	$19.2	$133.8	3.6%	8.0%	12.6%	4.3%	8.5%
2022 *	$27.9	$43.0	$68.9	$23.2	$163.0	21.8%	21.8%	22.2%	20.8%	21.8%

*Indicates systemwide toll rate increase according to Customer First Toll Policy

Notes:

A - Systemwide toll rate increase in July 2013.

B - Effects from Hurricane Matthew in October 2016.

C - Effects from Hurricane Irma in September 2017.

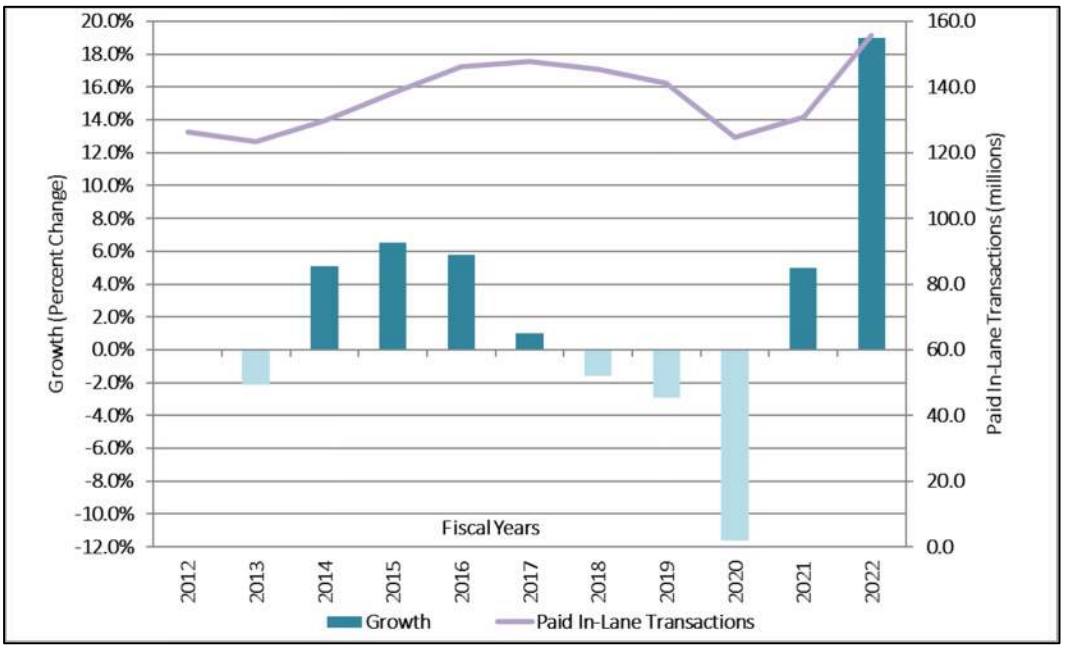
D - Effects from Hurricane Dorian in September 2019 and first effects of COVID-19 pandemic began in March 2020.

E - Continued effects of COVID-19 pandemic.

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. The performance of paid in-lane transactions and revenues in FY 2019 can be attributed in part to the near doubling of customers utilizing the PBP program, an increase of 7.4 million transactions. This change in the share of paid in-lane transactions in FY 2019 is likely due to the shift of SunPass® transaction processing to the state's Centralized Customer Service System (CCSS) that year. S.R. 408 may have been more affected by this than other CFX expressways because of its regional connectivity (to Downtown Orlando and points east and west) and its direct connection to Florida's Turnpike. It should be noted that the Hiawassee Main plaza group did not experience the same reductions in paid in-lane transactions and revenue, possibly due to the completed widening of S.R. 408 in that area in FY 2019.

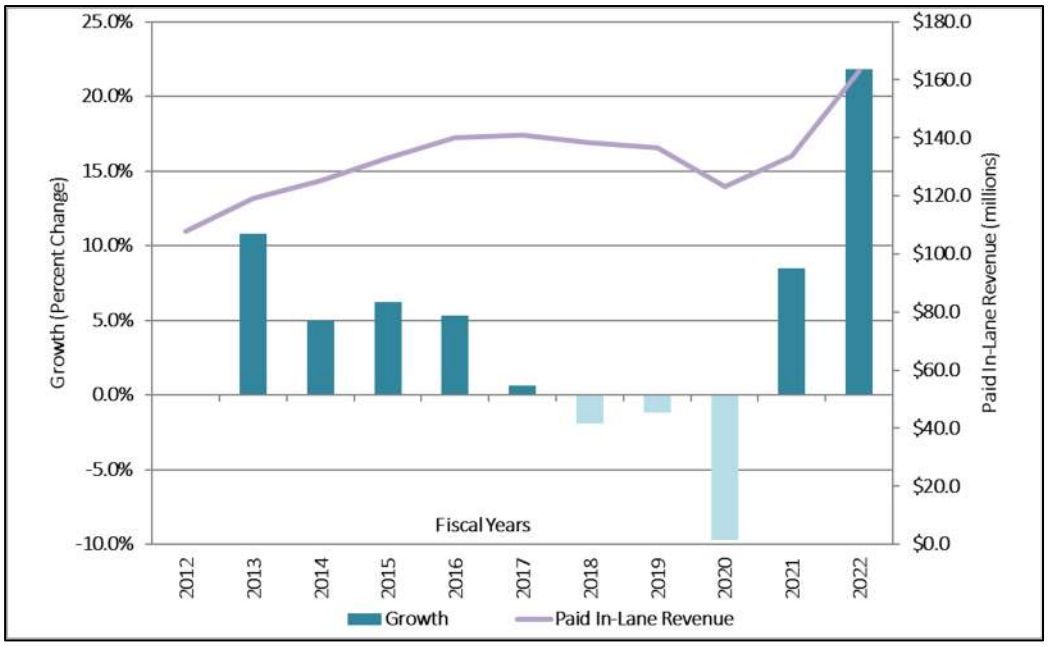
In FY 2020, all S.R. 408 plaza groups experienced a decline in paid in-lane transactions and revenues, despite the FY 2020 toll rate adjustment. The declines in both transactions and revenues can primarily be attributed to the negative impacts of the COVID-19 pandemic. Because the fiscal

Figure 4-2
S.R. 408 Historical Paid In-Lane Transactions and Annual Growth
FY 2012 – FY 2022



Source: Monthly unaudited data provided by CFX

Figure 4-3
S.R. 408 Historical Paid In-Lane Revenue and Annual Growth
FY 2012 – FY 2022



Source: Monthly unaudited data provided by CFX

year begins in July, FY 2020 only included four months of the impacts of the COVID-19 pandemic. Thus, although April 2020 (FY 2020) contained the deepest impacts of the COVID-19 pandemic, additional impacts also occurred during the early months of FY 2021, which included a full year of travel reductions and the initial recovery. Out of the four plaza groups, the Dean Main plaza group was affected the most by COVID-19, due to its proximity to the University of Central Florida campus. It should also be noted that in FY 2020, September 2019 transactions and revenues were also negatively impacted by toll suspensions during Hurricane Dorian. Tolls were suspended on CFX toll facilities beginning on September 1, 2019 through September 5, 2019 resulting in a transaction loss of approximately 1.7 million and a toll revenue loss of $1.7 million on S.R. 408.

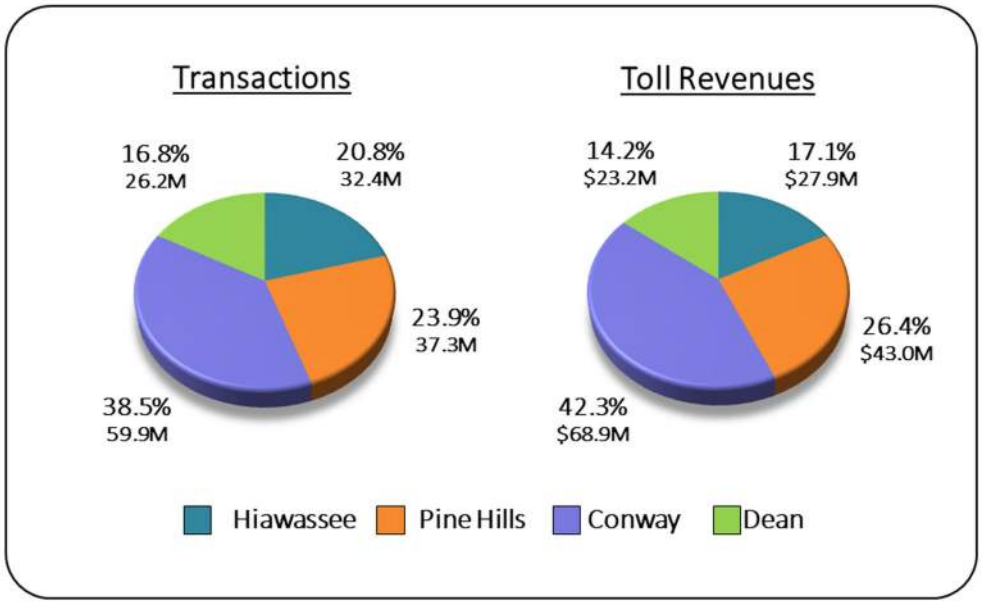
All S.R. 408 plaza groups experienced an increase in paid in-lane transactions and revenues in FY 2021. Although FY 2021 included some recovery from the COVID-19 Pandemic, the increases in paid in-lane transactions and revenues on S.R. 408 can likely be attributed to the programmed widening on the eastern end of the expressway (and the end of construction activities there) as well as the FY 2021 toll rate adjustment. The largest increase was experienced at the Conway Main plaza group with an increase of 8.9 percent in transactions and 12.6 percent in revenues.

In FY 2022, all S.R. 408 plaza groups experienced a significant increase in paid in-lane transactions and revenues. The increases in both transactions and revenue reflects the recovery from the negative impacts of the COVID-19 pandemic. The FY 2022 toll rate adjustment was another factor in the increase in revenue.

The share by plaza group of total S.R. 408 paid in-lane transactions and toll revenues during FY 2022 are presented in Figure 4-4. The largest portion of the transactions during FY 2022 were reported at the Conway Main plaza group, with 59.9 million or 38.5 percent. The Pine Hills Main, Hiawassee Main, and Dean Main plaza groups reported 37.3, 32.4 and 26.2 million transactions respectfully and each contributed between 16.8 and 23.9 percent of the total transactions for FY 2022.

The annual totals and shares of paid in-lane toll revenues are similar to the results reported for annual paid in-lane transactions. As shown, the Conway Main plaza group represented $68.9 million in toll revenues or 42.3 percent of the total. The Pine Hills Main plaza group represented $43.0 million or 26.4 percent of the total revenues on the facility. The Hiawassee Main plaza group represented $27.9 million, or 17.1 percent and the Dean Main plaza group represented $23.2 million or 14.2 percent of the total. 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.

Figure 4-4
S.R. 408 Paid In-Lane Transactions and Revenue by Plaza Group
FY 2022



Source: Monthly unaudited data provided by CFX

4.2.2 ANNUAL PBP TRANSACTION AND REVENUE TRENDS

A history of annual PBP transactions and toll revenues on S.R. 408 from FY 2012 to FY 2022 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 2012 – FY 2022

Fiscal Year	Transactions (millions)	Percent Change	Toll Revenues (millions)	Percent Change
2012	1.8	-	$2.4	-
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%
2021	19.4	10.2%	$37.2	92.7%
2022	21.8	12.4%	$42.7	14.8%

Source: Monthly unaudited data provided by CFX

PBP transactions have increased from 1.8 million in FY 2012 to 21.8 million in FY 2022, while PBP revenues have increased from $2.4 million to $42.7 million over the same period. This increase may have been supported, in part, by the switch of SunPass® processing to CCSS in FY 2019, as previously noted. In FY 2022, PBP transactions increased 12.4 percent and PBP revenues increased 14.8 percent over FY 2021. During the early part of COVID-19 pandemic, cash toll collection was suspended for several months. For this reason, PBP transactions and revenue increased year-over-year in FY 2020 and in FY 2021. The significant increase in PBP revenues in FY 2021 can also be attributed to the new PBP toll rate adopted by the CFX Board that went into effect on July 1, 2020 (FY 2021). At that time, the PBP toll rate at all toll locations was increased to twice the ETC toll rate, reflecting the cost to collect PBP tolls. Because of the new PBP toll rate, it was anticipated that going forward a portion of customers paying via PBP will switch to ETC to avoid the higher toll rate. However, recent trends do not reflect this result. This may be due to customer travel frequency and/or the convenience of PBP compared to establishing a transponder account. Overall, the recent increase in customer preference for PBP has contributed to a smaller share of paid in-lane transactions and revenue.

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. Considering the average number of 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 each month.

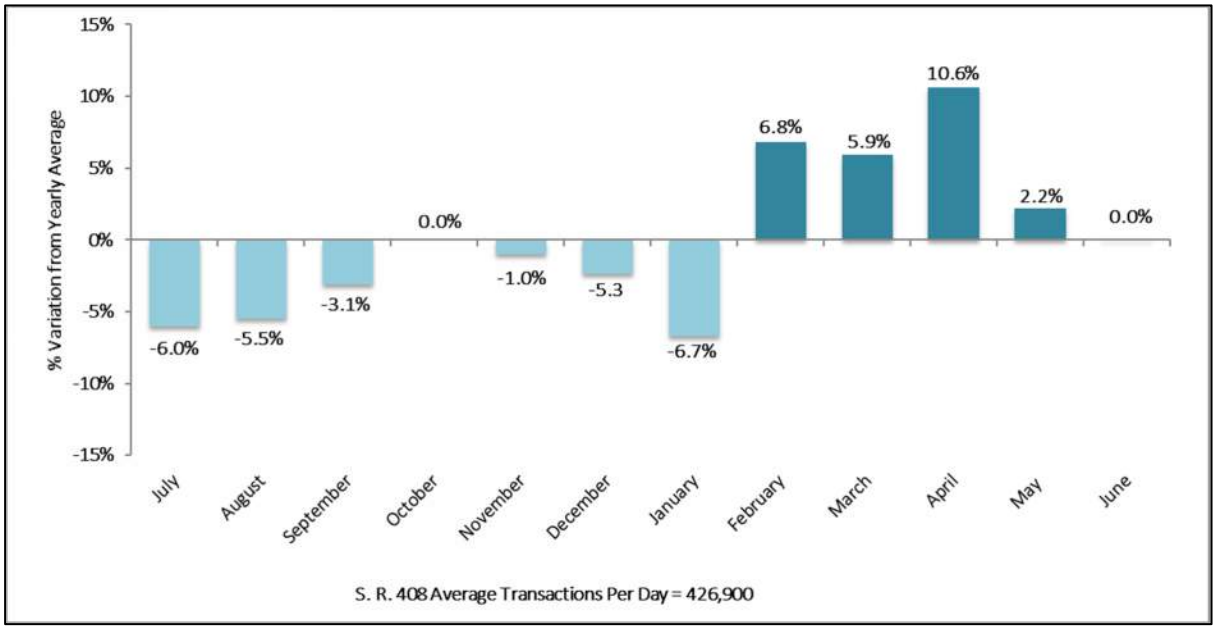
The average number of transactions per day in FY 2022 on S.R. 408 ranged from a low of 398,200 in January 2022 to a high of 472,100 in April 2022. These data are presented in a graphical format in Figure 4-5. The paid in-lane transactions for each month appear as a percentage of the average for the fiscal year. As shown in the figure, January transactions were 6.7 percent below average and April transactions were 10.6 percent above average for the facility. It is also important to note that there was a slight decline in January and February transactions due in part to a surge in COVID infections from the Omicron variant after the 2021 holiday season.

Table 4-3
S.R. 408 – Monthly Seasonal Variation in Paid In-Lane Transactions
FY 2022

Month	Number of Days in Month	Paid In-Lane Transactions	Average Transactions/Day	Seasonal Factor
July	31	12,434,096	401,100	0.940
August	31	12,509,140	403,500	0.945
September	30	12,409,621	413,600	0.969
October	31	13,234,021	426,900	1.000
November	30	12,676,694	422,600	0.990
December	31	12,924,666	416,900	0.977
January	31	12,345,827	398,200	0.933
February	28	12,765,013	455,900	1.068
March	31	14,022,971	452,300	1.059
April	30	14,163,576	472,100	1.106
May	31	13,528,836	436,400	1.022
June	30	12,813,036	427,100	1.000
Average		*12,985,625*	*426,900*	*1.000*
Total Year	365	155,827,497		

Source: Monthly unaudited data provided by CFX

Figure 4-5
S.R. 408 Variation in Paid In-Lane Transactions per Day, by Month
FY 2022



Source: Monthly unaudited data provided by CFX

4.2.4 TRANSACTIONS BY VEHICLE CLASS

The distribution of mainline transactions at each of the S.R. 408 plaza groups by vehicle class (number of axles) for FY 2022 is shown in **Table 4-4**. Overall, 96.8 percent of all mainline transactions on S.R. 408 were made by 2-axle vehicles, with minor variation among the plaza groups. The next most frequent vehicle class was the 3-axle, which accounted for 1.3 percent of all mainline transactions on the facility. Five or more axles accounted for 1.0 percent. Four-axle vehicles represented the smallest category with only 0.9 percent of mainline transactions.

Table 4-4
S.R. 408 Percent of Total Transactions by Vehicle Class
FY 2022

Vehicle Class	Hiawassee Main	Pine Hills Main	Conway Main	Dean Main	S.R. 408 Total
2-Axle	95.7%	96.1%	97.4%	97.9%	96.8%
3-Axle	1.6%	1.6%	1.2%	1.0%	1.3%
4-Axle	1.3%	1.0%	0.7%	0.6%	0.9%
5 or More Axles	1.4%	1.3%	0.7%	0.5%	1.0%
Total	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**

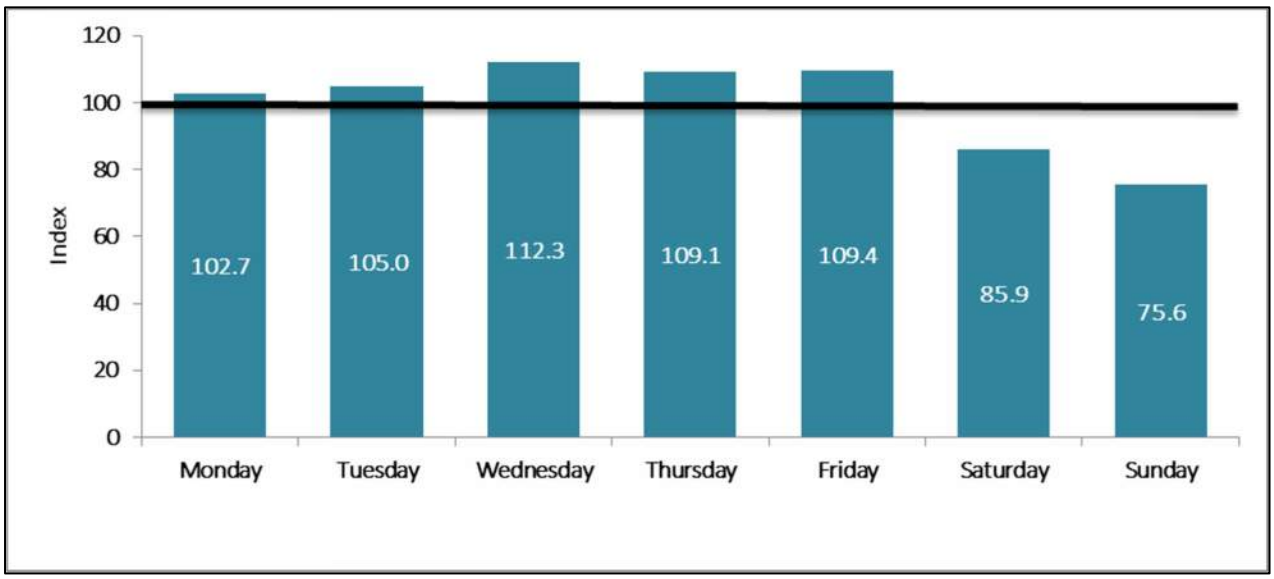
Source: Unaudited lane transaction data – May 2022

4.2.5 DAY-OF-WEEK TRANSACTION VARIATION

Figure 4-6 contains a comparison of transactions by day of week in FY 2022. These data are 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 indicates a day that has a 20 percent greater volume than the average. As was done in prior years, the data used for this analysis were for a typical week in May 2022. The data include transactions at mainline plazas only (no ramps).

During FY 2022, transactions on S.R. 408 fluctuated over the course of the five-day work week. Transactions were highest on Wednesdays, with an index value of 112.3 (12.3 percent higher than the average day), volumes on the remaining weekdays ranged from index values of 102.7 to 109.4. This is consistent with prior year trends. Transactions decline significantly on Saturdays and Sundays, which have index values of 85.9 and 75.6, or 14.1 and 24.4 percent lower than the average day, also consistent with prior results.

Figure 4-6
S.R. 408 Variation in Transactions, by Day of Week
FY 2022



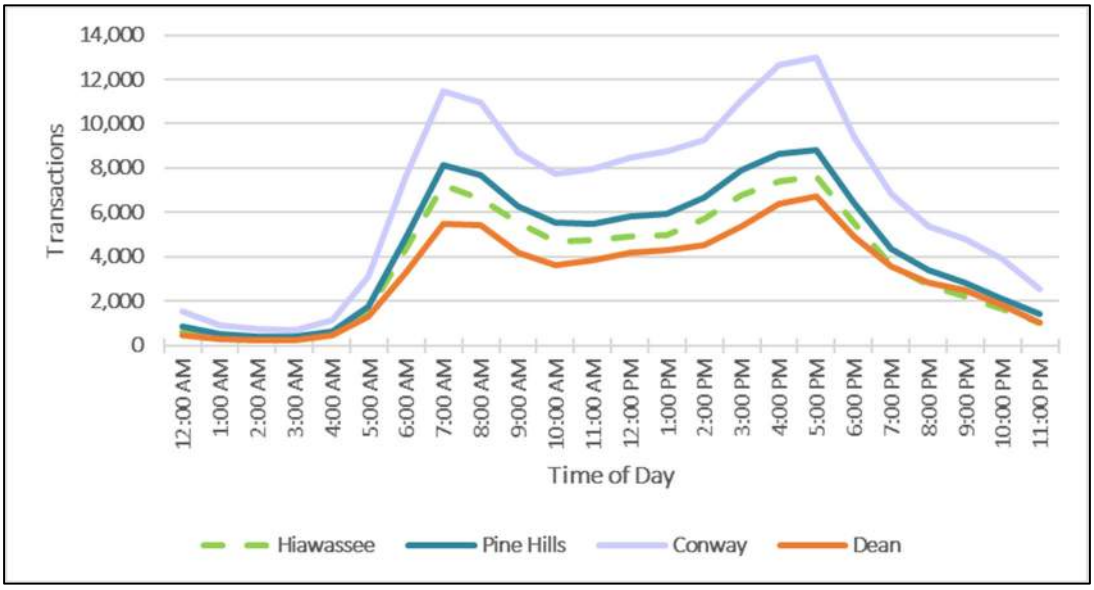
Source: Unaudited lane transaction data – May 2022

4.2.6 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 toll plazas in the month of May. The typical weekday hourly distribution is shown in **Figure 4-7** and the hourly distribution on weekend days is shown in **Figure 4-8**. The figures contain the sum of traffic volumes in both directions.

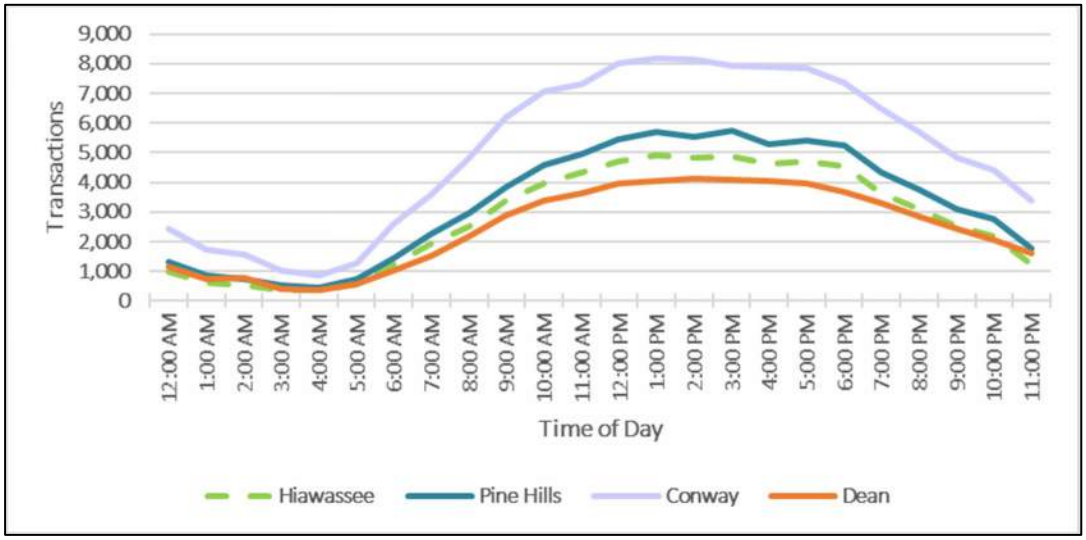
The four mainline locations on S.R. 408 exhibit similar hourly traffic patterns. On weekdays, travel demand at all four locations is bimodal, with both morning and evening peak hours. Traffic volumes in the evening peak hours at all four mainline plazas are higher than in the morning peak hours. The highest peak hour volumes during the week were 13,000 per hour at the Conway mainline plaza, 8,800 per hour at the Pine Hills mainline plaza, 7,600 per hour at the Hiawassee mainline plaza and 6,700 per hour at the Dean mainline plaza. These volumes all occurred during the 5:00 p.m. hour. 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. On weekends, traffic builds up during the day and peaks in the early afternoon.

Figure 4-7
S.R. 408 Hourly Two-Way Traffic Variation (Weekday)
FY 2022 (May)



Source: Unaudited lane traffic data – May 2022

Figure 4-8
S.R. 408 Hourly Two-Way Traffic Variation (Weekend)
FY 2022 (May)



Source: Unaudited lane traffic data – May 2022

4.2.7 TRANSACTIONS AND REVENUE BY PAYMENT TYPE

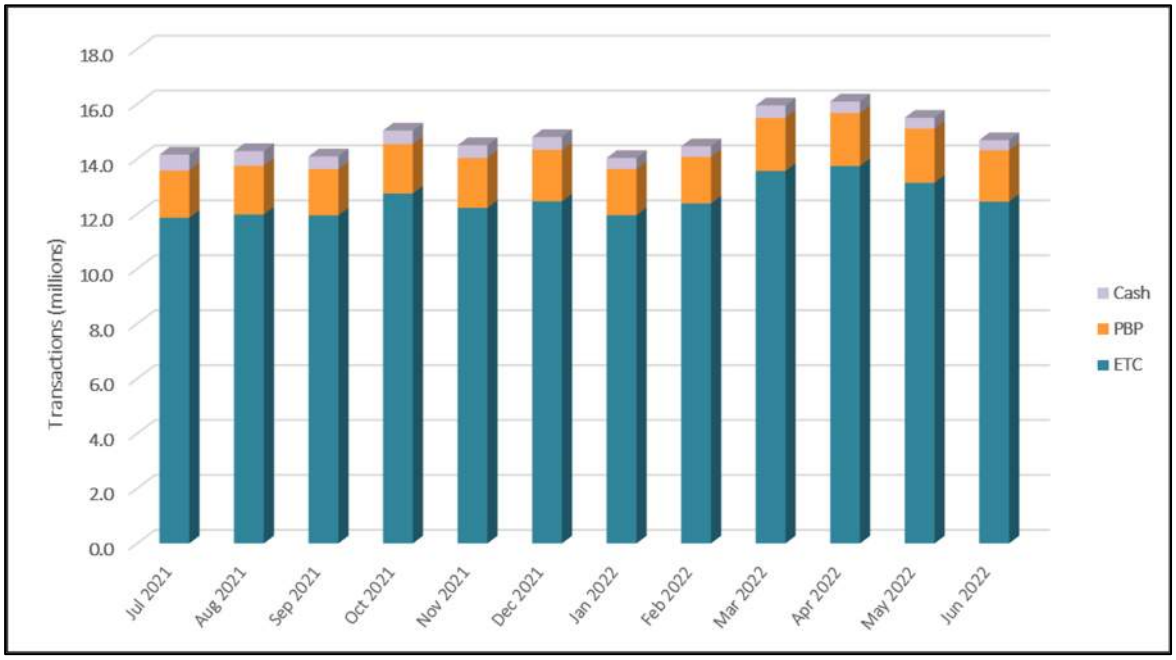
The distributions of transactions and revenue by payment type by plaza group during FY 2022 are presented in Figure 4-9 and Figure 4-10. Customers pay tolls in one of three ways: cash, ETC, and PBP. As defined in Chapter 1 of this report, paid in-lane transactions and revenue include cash and ETC payments 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 a FY 2022 accrual rate of 52 percent of all unpaid in-lane transactions in July and August 2021, then dropped down to 50 percent for the remainder of the year. This means that the PBP transactions and revenue shown here are estimates of the levels that will eventually pay tolls through the PBP process. 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 4-9, ETC transactions on S.R. 408 ranged from a low of 11.9 million in July 2021 to a high of 13.7 million in April 2022. Overall, ETC accounted for 84.7 percent of total transactions on the facility. The PBP transactions ranged from a low of 1.7 million to a high of over 2.0 million. Overall, PBP accounted for 12.2 percent of total transactions on the facility. Cash transactions ranged from a low of approximately 0.4 million to a high of 0.6 million. Overall, cash accounted for 3.1 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, recognizing the differences in the toll paid by payment method. ETC revenue on S.R. 408 ranged from a low of $12.3 million in September 2021 to a high of $14.3 million in April 2022. Overall, ETC accounted for 76.0 percent of total revenue on the facility. The PBP revenue ranged from a low of $3.3 million to a high of $3.9 million. Overall, PBP accounted for 20.8 percent of total revenue on the facility. Cash revenue ranged from a low of $0.5 million to a high of over $0.7 million. Overall, cash accounted for 3.2 percent of total revenue on the facility.

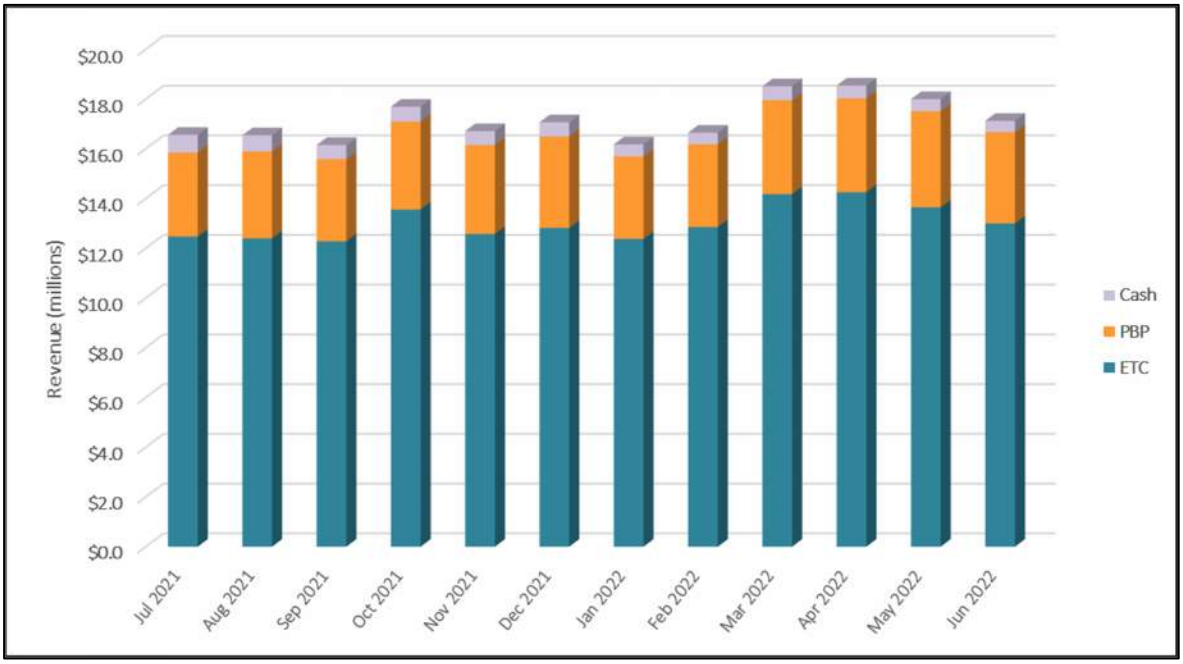
The differences in revenue performance by payment method is explained by differences in the toll rates. ETC customers pay the preferred toll rate; cash customers pay at least 10 percent higher rate than ETC rate; and PBP customers pay twice the ETC rate.

Figure 4-9
S.R. 408 Percent of Transactions by Payment Type
FY 2022



Source: Monthly unaudited transaction data provided by CFX

Figure 4-10
S.R. 408 Percent of Revenue by Payment Type
FY 2022



Source: Monthly unaudited toll revenue data provided by CFX

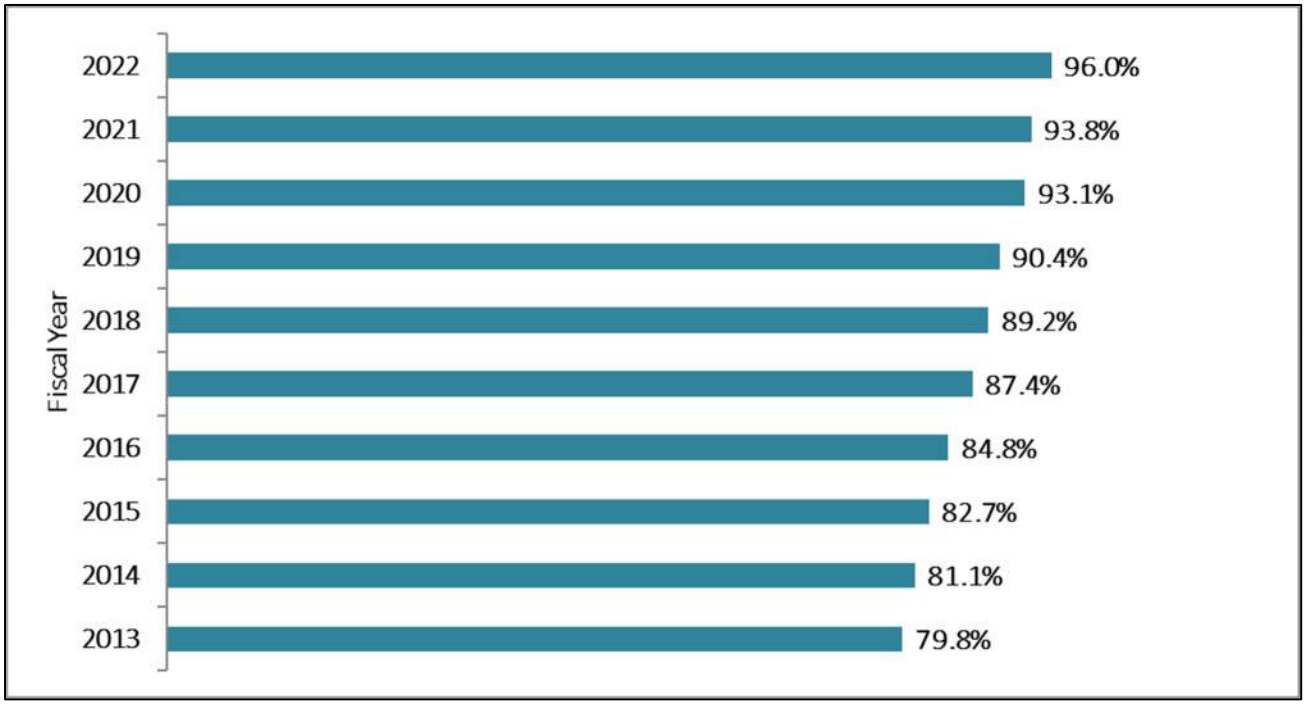
4.3 ETC Usage

The shares of paid in-lane revenues generated from ETC over the past ten fiscal years on S.R. 408 are shown in **Figure 4-11**. Cash payments are the other source of paid in-lane revenues. PBP revenues are excluded. The share of paid in-lane toll revenue collected through ETC has steadily increased on the facility. In FY 2013, ETC revenues totaled 79.8 percent of total paid in-lane revenues on the facility. By the end of FY 2022, ETC revenues reached 96.0 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.

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 staffed, mainline toll plaza lanes. This conversion is expected to be completed in FY 2023.

In June 2021, CFX also launched the Visitor Toll Pass program, which is a free temporary toll pass for rental car customers traveling through the Orlando International Airport. With the pass, rental car customers pay the ETC rates on Florida toll roads with no extra or hidden fees.

Figure 4-11
S.R. 408 Percent of Paid In-Lane Revenue from Electronic Toll Collection
FY 2013 – FY 2022



Source: Monthly unaudited data provided by CFX

4.4 Forecasted Transactions and Toll Revenues

The forecasts of T&R are based on several assumptions about the future, including assumptions about future toll rates. Based on the CFX "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 with a floor of 1.5 percent. At the time of preparing the T&R estimates and this report, CDM Smith learned that the net change in CPI during CY 2022 was 8.577 percent. At their June 2023 meeting, the CFX Board decided to forego the net change in CPI and implement the policy floor of 1.5 percent adjustment for FY 2024. Based on assurances from CFX, CDM Smith used this value to index toll rates for FY 2024. 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 4-5**, 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 were areas of congestion.

Table 4-5
S.R. 408 - Key Transportation Improvements

Facility	From	To	Year	Jurisdiction	Improvement
Interstate 4	SR 434	Kirkman Road	2025	FDOT	Widen to 10 lanes
SR 408	SR 417	Alafaya Trail	2025	CFX	Widen to 6-lanes
SR 408	Hiawassee Road	Clark Road	2025	CFX	Widen to 6-lanes
SR 423 (John Young Parkway)	SR 50 (Colonial Drive)	Shader Road	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
Hiawassee Road	SR 50	Silver Star Road	2035	Orange County	Widen to 6 Lanes
SR 50	East of Old Cheney Hwy	SR 520	2035	FDOT	Widen to 6-lanes
Lake Underhill Road	Econlockhatchee Trail	Rouse Road	2035	Orange County	Widen to 4-lanes
Lake Underhill Road	Chickasaw Trail	Econlockhatchee Trail	2045	Orange County	Widen to 4-lanes
Econlockhatchee Trail	Lake Underhill Road	Curry Ford Road	2045	Orange County	Widen to 4-lanes
SR 408 East Extension	Challenger Parkway	SR 50	2045	CFX	New 4-lane expressway
Florida's Turnpike	Minneola	Orange/Lake County Line	2025	FDOT	Widen to 8 lanes
Florida's Turnpike	US 27	Minneola	2025	FDOT	Widen to 8 lanes
SR 50	CR 565 (Villa City)	CR 565A (Montevista)	2035	FDOT	Widen to 4-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 445 Extension	CFX Connector	Hartwood Mash	2045	Lake County	Widen to 4-lanes
CR 33	SR 50	Simon Brown Rd	2045	Lake County	Widen to 4-lanes

The major improvements to S.R. 50 and feeder road improvements, including John Young Parkway, Hiawassee Road, and East S.R. 50, will positively impact the traffic and revenue growth on S.R. 408 throughout the forecast horizon.

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 **4-6** and **4-7**. The tables are divided into paid in-lane and PBP transactions and revenue. The paid in-Lane transactions and revenue include ETC and cash collection. PBP is only reported as a total on the facility.

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 by 1.3 percent per year through FY 2032 and then lower rates through the end of the forecast period because of the impact of continued toll rate adjustments. PBP transactions are forecasted to increase by 1.5 percent through 2032 and then increase at a slow pace through the remainder of the forecast period. Total transactions are expected to grow by 1.4 percent per year through FY 2032, 0.7 percent per year from FY 2032 to FY 2042, and 0.4 percent per year from FY 2042 to FY 2052. The paid in-lane revenues on S.R. 408 are projected to increase significantly over the forecast period, from the FY 2022 actual of $163.0 million to $297.1 million in FY 2052. PBP revenues are projected to increase from $42.7 million in FY 2022 to $75.6 million in FY 2052. Total revenues are expected to grow from $205.7 million in FY 2022 to $372.7 million in FY 2052. S.R. 408 total revenues are forecasted to increase an average of 2.9 percent per year through FY 2032, 1.8 percent per year from FY 2032 to FY 2042, and 1.3 percent per year from FY 2042 to FY 2052.

Table 4-6
S.R. 408 Plaza Groups – Transaction Projections (Millions)
FY 2023 – FY 2052

Fiscal Year		Hiawassee Main	Pine Hills Main	Conway Main	Dean Main	Paid In-Lane	PBP	Total	Percent Annual Change
2012	Actual	23.1	28.4	50.1	24.6	126.2	1.8	128.0	-
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]		27.1	31.4	50.3	22.1	130.9	19.4	150.3	5.6%
2022*[G]		32.4	37.3	59.9	26.2	155.8	21.8	177.6	18.2%
2023[H]	Forecast	32.1	36.9	59.3	26.0	154.3	22.4	176.7	-0.5%
2024		34.4	39.2	62.2	28.5	164.3	23.8	188.1	6.5%
2025		34.9	39.6	62.4	28.9	165.8	24.1	189.9	1.0%
2026		35.4	40.2	62.8	29.1	167.5	24.4	191.9	1.1%
2027		35.9	40.7	63.3	29.3	169.2	24.5	193.7	0.9%
2028		36.4	41.3	63.8	29.6	171.1	24.8	195.9	1.1%
2029		36.9	41.8	64.3	29.8	172.8	24.9	197.7	0.9%
2030		37.4	42.3	64.8	30.0	174.5	25.0	199.5	0.9%
2031		37.9	42.8	65.2	30.3	176.2	25.3	201.5	1.0%
2032		38.3	43.3	65.7	30.5	177.8	25.4	203.2	0.8%
2033		38.7	43.7	66.1	30.8	179.3	25.5	204.8	0.8%
2034		39.1	44.1	66.5	31.1	180.8	25.7	206.5	0.8%
2035		39.5	44.5	66.9	31.3	182.2	25.8	208.0	0.7%
2036		39.8	44.8	67.3	31.6	183.5	26.0	209.5	0.7%
2037		40.2	45.1	67.7	31.9	184.9	26.1	211.0	0.7%
2038		40.5	45.5	68.0	32.1	186.1	26.1	212.2	0.6%
2039		40.9	45.8	68.4	32.4	187.5	26.2	213.7	0.7%
2040		41.2	46.1	68.7	32.6	188.6	26.4	215.0	0.6%
2041		41.5	46.3	69.0	32.9	189.7	26.4	216.1	0.5%
2042		41.8	46.6	69.2	33.1	190.7	26.5	217.2	0.5%
2043		42.1	46.8	69.5	33.4	191.8	26.5	218.3	0.5%
2044		42.4	47.1	69.7	33.6	192.8	26.6	219.4	0.5%
2045		42.7	47.3	69.9	33.8	193.7	26.7	220.4	0.5%
2046		43.0	47.4	70.1	34.0	194.5	26.8	221.3	0.4%
2047		43.2	47.6	70.3	34.3	195.4	26.9	222.3	0.5%
2048		43.5	47.8	70.5	34.5	196.3	26.8	223.1	0.4%
2049		43.7	47.9	70.6	34.7	196.9	26.8	223.7	0.3%
2050		43.9	48.0	70.7	34.9	197.5	26.7	224.2	0.2%
2051		44.1	48.1	70.8	35.0	198.0	26.7	224.7	0.2%
2052		44.4	48.1	70.8	35.2	198.5	26.7	225.2	0.2%

Fiscal Year	Compound Annual Average Growth Rate (CAAGR)						
2012 - 2022	3.4%	2.8%	1.8%	0.6%	2.1%	28.3%	3.3%
2022 - 2032	1.7%	1.5%	0.9%	1.5%	1.3%	1.5%	1.4%
2032 - 2042	0.9%	0.7%	0.5%	0.8%	0.7%	0.4%	0.7%
2042 - 2052	0.6%	0.3%	0.2%	0.6%	0.4%	0.1%	0.4%

*Indicates systemwide toll rate increase according to Customer First Toll Policy

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. Continued effects of COVID-19 pandemic.

G - Completion of I-4 Ultimate project.

H - Includes impacts from Hurricane Ian toll suspensions in September 2022.

Table 4-7
S.R. 408 Plaza Groups – Toll Revenue Projections (Millions)
FY 2023 – FY 2052

Fiscal Year		Hiawassee Main	Pine Hills Main	Conway Main	Dean Main	Paid In-Lane	PBP	Total	Percent Change
2012	Actual	$16.0	$26.7	$47.2	$17.8	$107.7	$2.4	$110.1	-
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]		$22.9	$35.3	$56.4	$19.2	$133.8	$37.2	$171.0	19.9%
2022*[G]		$27.9	$43.0	$68.9	$23.2	$163.0	$42.7	$205.7	20.3%
2023[H]	Forecast	$28.8	$44.6	$71.3	$24.1	$168.8	$46.3	$215.1	4.6%
2024		$31.1	$47.9	$75.7	$26.5	$181.2	$49.1	$230.3	7.1%
2025		$32.0	$49.1	$77.0	$27.3	$185.4	$50.7	$236.1	2.5%
2026		$32.9	$50.5	$78.6	$27.9	$189.9	$51.8	$241.7	2.4%
2027		$33.8	$51.8	$80.3	$28.4	$194.3	$52.8	$247.1	2.2%
2028		$34.8	$53.2	$81.9	$29.0	$198.9	$54.0	$252.9	2.3%
2029		$35.7	$54.5	$83.5	$29.6	$203.3	$55.1	$258.4	2.2%
2030		$36.6	$55.9	$85.2	$30.2	$207.9	$56.1	$264.0	2.2%
2031		$37.5	$57.2	$86.8	$30.8	$212.3	$57.1	$269.4	2.0%
2032		$38.4	$58.5	$88.4	$31.4	$216.7	$58.4	$275.1	2.1%
2033		$39.2	$59.8	$90.1	$32.1	$221.2	$59.4	$280.6	2.0%
2034		$40.1	$61.0	$91.7	$32.7	$225.5	$60.3	$285.8	1.9%
2035		$41.0	$62.2	$93.3	$33.4	$229.9	$61.4	$291.3	1.9%
2036		$41.8	$63.4	$95.0	$34.0	$234.2	$62.3	$296.5	1.8%
2037		$42.7	$64.7	$96.6	$34.7	$238.7	$63.4	$302.1	1.9%
2038		$43.5	$65.8	$98.2	$35.4	$242.9	$64.3	$307.2	1.7%
2039		$44.4	$67.0	$99.7	$36.1	$247.2	$65.2	$312.4	1.7%
2040		$45.2	$68.2	$101.3	$36.7	$251.4	$66.2	$317.6	1.7%
2041		$46.1	$69.3	$102.8	$37.4	$255.6	$67.0	$322.6	1.6%
2042		$46.9	$70.5	$104.3	$38.1	$259.8	$67.9	$327.7	1.6%
2043		$47.8	$71.6	$105.8	$38.7	$263.9	$68.8	$332.7	1.5%
2044		$48.6	$72.7	$107.3	$39.4	$268.0	$69.7	$337.7	1.5%
2045		$49.4	$73.7	$108.8	$40.1	$272.0	$70.5	$342.5	1.4%
2046		$50.2	$74.7	$110.1	$40.7	$275.7	$71.4	$347.1	1.3%
2047		$51.0	$75.7	$111.4	$41.4	$279.5	$72.1	$351.6	1.3%
2048		$51.8	$76.6	$112.7	$42.1	$283.2	$72.9	$356.1	1.3%
2049		$52.5	$77.6	$114.0	$42.7	$286.8	$73.5	$360.3	1.2%
2050		$53.3	$78.5	$115.2	$43.4	$290.4	$74.4	$364.8	1.2%
2051		$54.0	$79.3	$116.4	$44.0	$293.7	$75.0	$368.7	1.1%
2052		$54.8	$80.1	$117.6	$44.6	$297.1	$75.6	$372.7	1.1%

Fiscal Year	Compound Annual Average Growth Rate (CAAGR)						
2012 - 2022	5.7%	4.9%	3.9%	2.7%	4.2%	33.4%	6.4%
2022 - 2032	3.2%	3.1%	2.5%	3.1%	2.9%	3.2%	2.9%
2032 - 2042	2.0%	1.9%	1.7%	2.0%	1.8%	1.5%	1.8%
2042 - 2052	1.6%	1.3%	1.2%	1.6%	1.4%	1.1%	1.3%

*Indicates systemwide toll rate increase according to Customer First Toll Policy

Notes:

Actual revenue 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. Continued effects of COVID-19 pandemic.

G - Completion of I-4 Ultimate project.

H - Includes impacts from Hurricane Ian toll suspensions in September 2022.

CHAPTER 5

S.R. 417

| CENTRAL FLORIDA GREENEWAY

S.R. 417 (CENTRAL FLORIDA GREENEWAY)

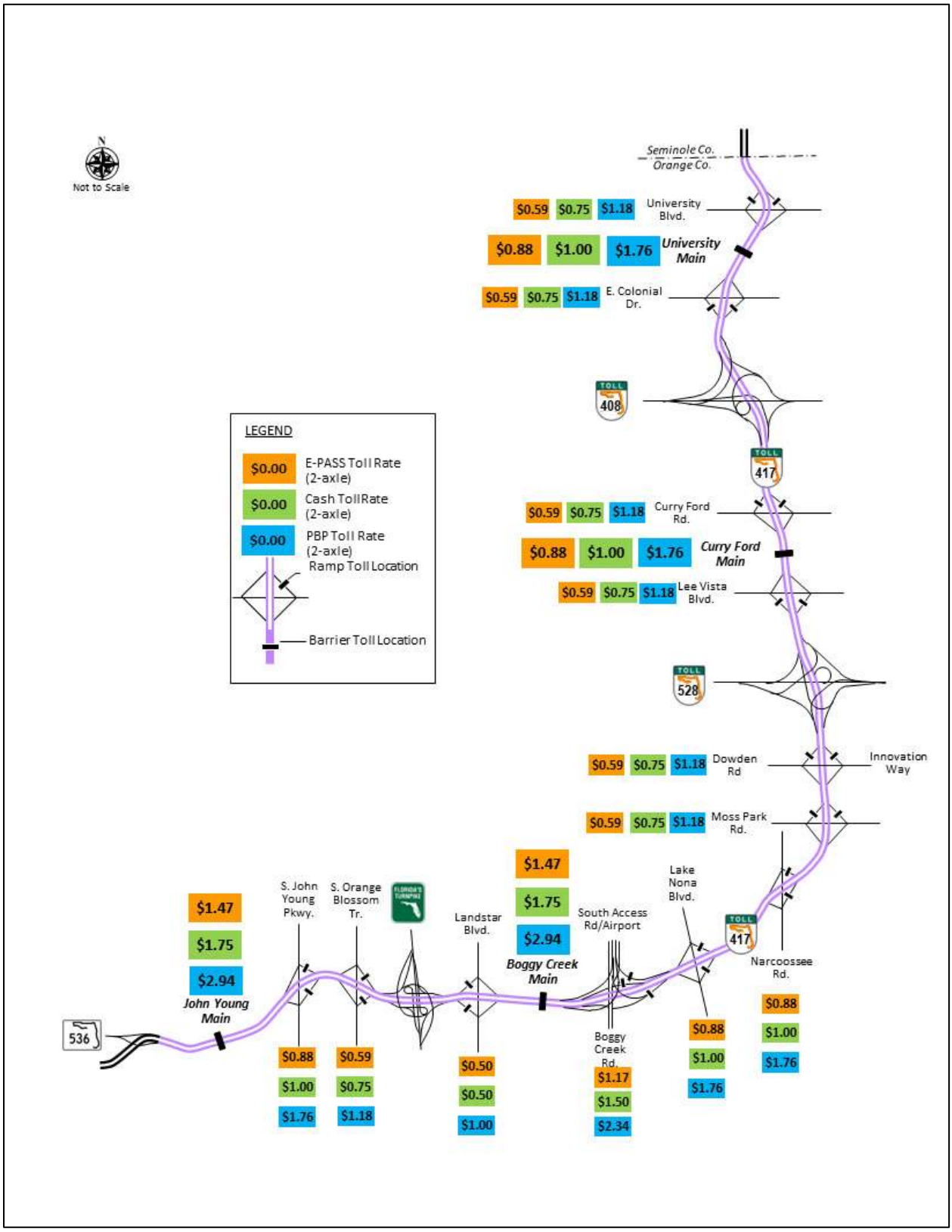
5.1 Facility Description

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, 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 Interstate 4 (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 2022 CFX toll rates for the mainline and ramp toll plazas is shown in Figure 5-1.

The first section of S.R. 417 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 FY 2022 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 this interchange improvement project, the 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 for 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 I-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 recently opened the remaining three ramps in May 2021 to complete the system-to-system interchange and provide full access between these two major expressways in South Orlando.

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 the reconstruction of several ramps in the S.R. 417/S.R. 408 interchange in the fall of 2017. Phase One of the project was the widening of S.R. 417 from four to six lanes between Berry Dease Road and S.R. 408. 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 the elimination of one cash lane in each direction at the University Main Plaza and replacement with an Open Road Tolling (ORT) lane, for a total of three ORT lanes (dedicated ETC lanes) in each direction. This improvement was also completed in 2020.

Starting in FY 2020, CFX has initiated 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 Part-Time Shoulder Use (PTSU) for a potential 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 began in February 2021 and is scheduled to be completed by the spring of 2024.

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 the two. Total revenue is the sum of paid in-lane revenue and the revenue collected through the PBP process, estimated as an accrued amount. The following section includes a breakdown of transactions and 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 2012 to FY 2022 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 2022 Comprehensive Annual Financial Report (CAFR) and other information in this report.

In FY 2013, the University Main plaza group was the only plaza group 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 revenues. Overall, S.R. 417 paid in-lane transactions and revenues increased by 7.6 percent and 7.8 percent over FY 2013, respectively. FY 2015 and FY 2016 experienced double-digit growth in both transactions and revenues, representing a period of extraordinary recovery and growth following the Great Recession. This was fueled, in part, by the widening and interchange improvements completed at this time. In FY 2017, transactions and revenues increased by 8.4 percent and 8.8 percent, respectively, compared to FY 2016. The continued growth at the Boggy Creek Main, John Young Main and Curry Ford Main plaza groups can be attributed to the Medical City and Lake Nona developments along 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. Despite the severity of these storms, the negative transactions and revenue impacts were largely offset by the significant growth in the S.R. 417 corridor. In FY 2018, all plaza groups experienced growth, with total paid in-lane transactions and revenues increasing by 5.6 percent and 5.7 percent, respectively.

Table 5-1
S.R. 417 Plaza Groups – Historical Paid In-Lane Transactions and Revenue
FY 2012 – FY 2022

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				
2012 [A]	20.6	18.8	23.1	28.2	90.7	-	-	-	-	-
2013 [B]	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 [C]	34.8	34.6	34.2	34.5	138.1	13.7%	11.6%	5.2%	3.6%	8.4%
2018 [D]	37.2	38.1	35.8	34.8	145.9	6.9%	10.1%	4.7%	0.9%	5.6%
2019*	36.9	39.3	35.4	33.9	145.5	-0.8%	3.1%	-1.1%	-2.6%	-0.3%
2020*,[E]	30.7	34.2	31.8	29.2	125.9	-16.8%	-13.0%	-10.2%	-13.9%	-13.5%
2021*,[F]	29.1	34.0	30.6	28.7	122.4	-5.2%	-0.6%	-3.8%	-1.7%	-2.8%
2022*	36.2	40.9	36.2	33.4	146.7	24.4%	20.3%	18.3%	16.4%	19.9%
	TOLL REVENUE (millions)					PERCENT CHANGE				
2012 [A]	$22.1	$20.8	$17.3	$20.3	$80.5	-	-	-	-	-
2013 [B]	$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 [C]	$40.4	$42.0	$29.1	$28.9	$140.4	12.5%	11.4%	5.4%	4.0%	8.8%
2018 [D]	$43.0	$45.7	$30.5	$29.2	$148.4	6.4%	8.8%	4.8%	1.0%	5.7%
2019*	$44.3	$48.6	$30.7	$29.0	$152.6	3.0%	6.3%	0.7%	-0.7%	2.8%
2020*,[E]	$37.1	$42.6	$28.6	$25.6	$133.9	-16.3%	-12.3%	-6.8%	-11.7%	-12.3%
2021*,[F]	$34.9	$42.5	$27.9	$25.9	$131.2	-5.9%	-0.2%	-2.4%	1.2%	-2.0%
2022*	$45.4	$52.4	$33.4	$30.4	$161.6	22.4%	23.0%	16.8%	18.8%	20.7%

*Indicates systemwide toll rate increase according to Customer First Toll Policy

Notes:

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

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

C - Effects from Hurricane Matthew in October 2016.

D - Effects from Hurricane Irma in September 2017.

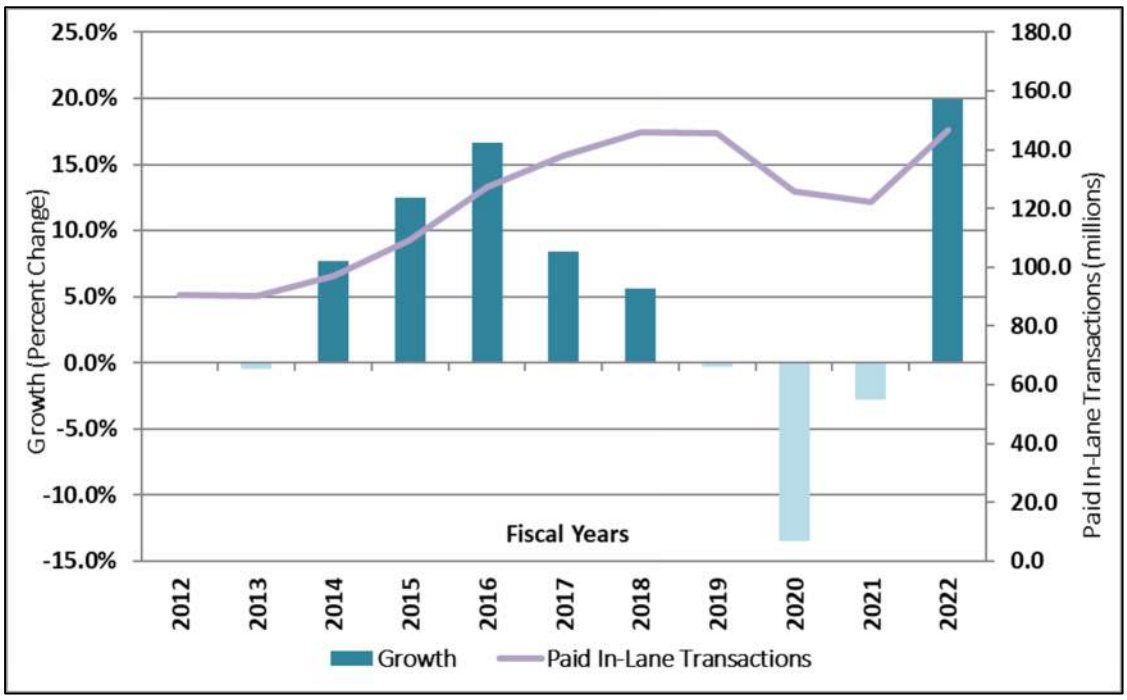
E - Effects from Hurricane Dorian in September 2019 and first effects of COVID-19 pandemic began in March 2020.

F- Continued effects of COVID-19 pandemic.

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 transactions of 3.1 percent in FY 2019. Paid in-lane revenues increased at all plaza groups except University Main, which decreased by 0.7 percent compared to FY 2018. The slower growth in transactions and revenues in FY 2019 can be attributed in part to the more than doubling of customers utilizing the PBP program, an increase of 8.1 million transactions. This change in the share of paid in-lane transactions in FY 2019 is likely due to the shift of SunPass® transaction processing to the state's Centralized Customer Service System (CCSS) that year.

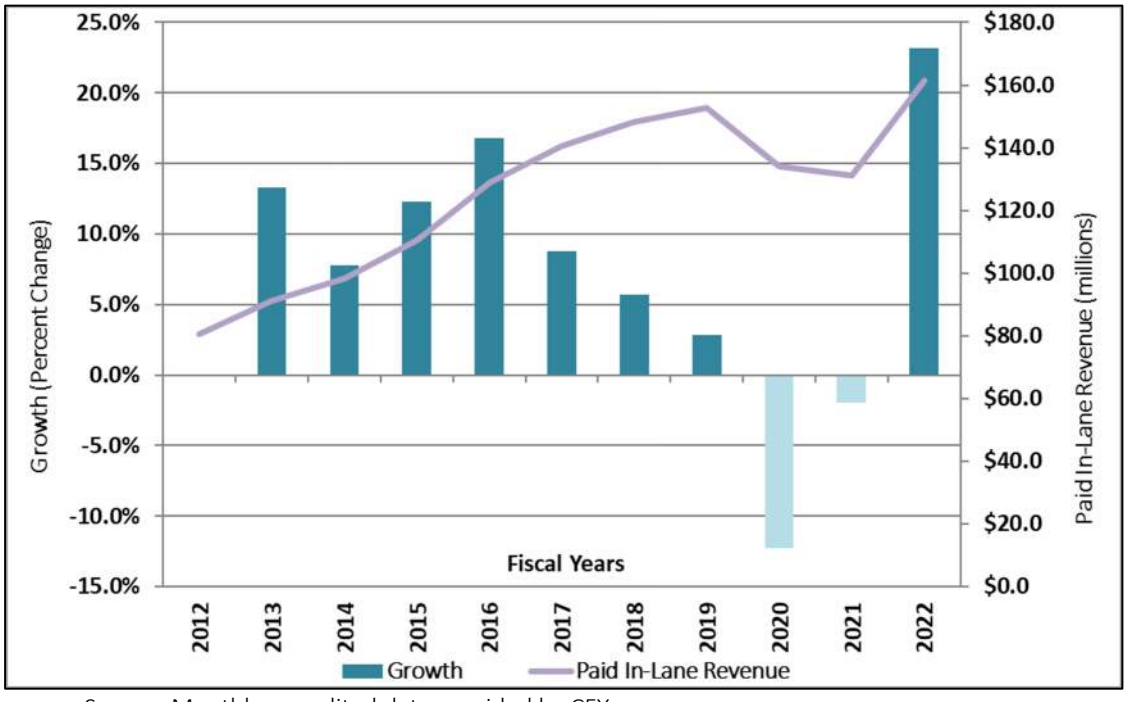
In FY 2020 and FY 2021, all S.R. 417 plaza groups experienced a decline in paid in-lane transactions and revenues, despite the FY 2020 and FY 2021 toll rate adjustments. The declines in both transactions and revenues can primarily be attributed to the negative impacts of COVID-19 pandemic. Because the fiscal year begins in July, FY 2020 only included four months of the impacts of the COVID-19 pandemic. Thus, although April 2020 (FY 2020) contained the deepest impacts of the COVID-19 pandemic, additional impacts also occurred during the early months of FY 2021, which included a full year of travel reductions and the initial recovery.

Figure 5-2
S.R. 417 Historical Paid In-Lane Transactions and Annual Growth
FY 2012 – FY 2022



Source: Monthly unaudited data provided by CFX

Figure 5-3
S.R. 417 Historical Paid In-Lane Revenue and Annual Growth
FY 2012 – FY 2022



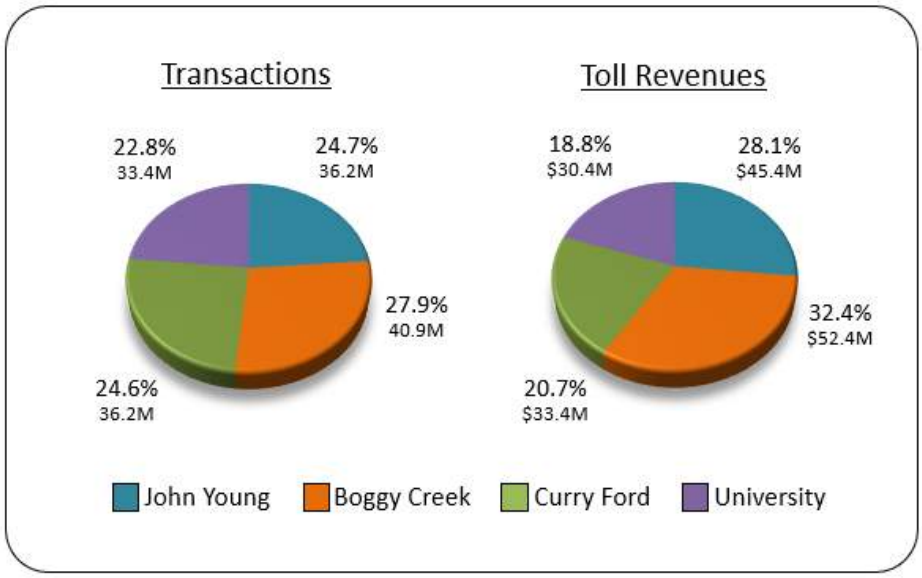
Source: Monthly unaudited data provided by CFX

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. It should also be noted that in FY 2020, September 2019 transactions and revenues were also negatively impacted by toll suspensions during Hurricane Dorian. Tolls were suspended on CFX toll facilities beginning on September 1, 2019 through September 5, 2019 resulting in a transaction loss of approximately 1.7 million and a toll revenue loss of $1.8 million on S.R. 417.

In FY 2022, all S.R. 417 plaza groups experienced a significant increase in paid in-lane transactions and revenues. The increases in both transactions and revenue reflects the recovery from the negative impacts of the COVID-19 pandemic. The FY 2022 toll rate adjustment was another factor in the increase in revenue.

The share by plaza group of total S.R. 417 paid in-lane transactions and toll revenues during FY 2022 are presented in Figure 5-4. As shown, the Boggy Creek Main plaza group represented 40.9 million transactions or 27.9 percent of total transactions. The John Young Main plaza group had the second highest number of transactions at 36.2 million or 24.7 percent. The Curry Ford Main and University Main plaza groups followed close behind with 36.2 and 33.4 million transactions, respectively. In years prior to FY 2016, the John Young Main plaza group consistently had more transactions than Boggy Creek Main. However, the Boggy Creek Main plaza group has surpassed John Young Main for the past several years. It is important to note that the Boggy Creek plaza group has more supporting ramp toll locations, some with high toll rates. Curry Ford plaza group transactions have surpassed University Main plaza group transactions for the past several years.

Figure 5-4
S.R. 417 Paid In-Lane Transactions and Revenue by Plaza Group
FY 2022



Source: Monthly unaudited data provided by CFX

The annual totals and shares of 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 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 revenues of $52.4 million or 32.4 percent of total revenues. The University Main plaza group represented the lowest amount of revenues with $30.4 million or 18.8 percent of total 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 2012 to FY 2022 is 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 2012 – FY 2022

Fiscal Year	Transactions (millions)	Percent Change	Toll Revenues (millions)	Percent Change
2012	1.3		$1.2	
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%
2021	15.8	2.6%	$30.9	64.4%
2022	18.2	15.2%	$36.4	17.8%

Source: Monthly unaudited data provided by CFX

PBP transactions have increased from 1.3 million in FY 2012 to 18.2 million in FY 2022, while PBP revenues have increased from $1.2 million to $36.4 million over the same period. This increase may have been supported, in part, by the switch of SunPass® processing to CCSS in FY 2019, as previously noted. In FY 2022, PBP transactions increased 15.2 percent and PBP revenues increased 17.8 percent over FY 2021. The significant increase in PBP revenues in FY 2021 can be attributed to the new PBP toll rate adopted by the CFX Board that went into effect on July 1, 2020 (FY 2021). At that time, the PBP toll rate at all toll locations was increased to twice the ETC toll rate, reflecting the cost to collect PBP tolls. Because of the new PBP toll rate, it was anticipated that going forward a portion of customers paying via PBP will switch to ETC to avoid the higher toll rate. However, recent trends do not reflect this result. This may be due to customer travel frequency and/or the convenience of PBP compared to establishing a transponder account. Overall, the recent increase

in customer preference for PBP has contributed to a smaller share of paid in-lane transactions and revenue.

5.2.3 MONTHLY PAID IN-LANE TRANSACTION SEASONAL VARIATION

In Table 5-3, monthly paid in-lane transactions are normalized to the average number of paid in-lane transactions per day. Considering 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 each month.

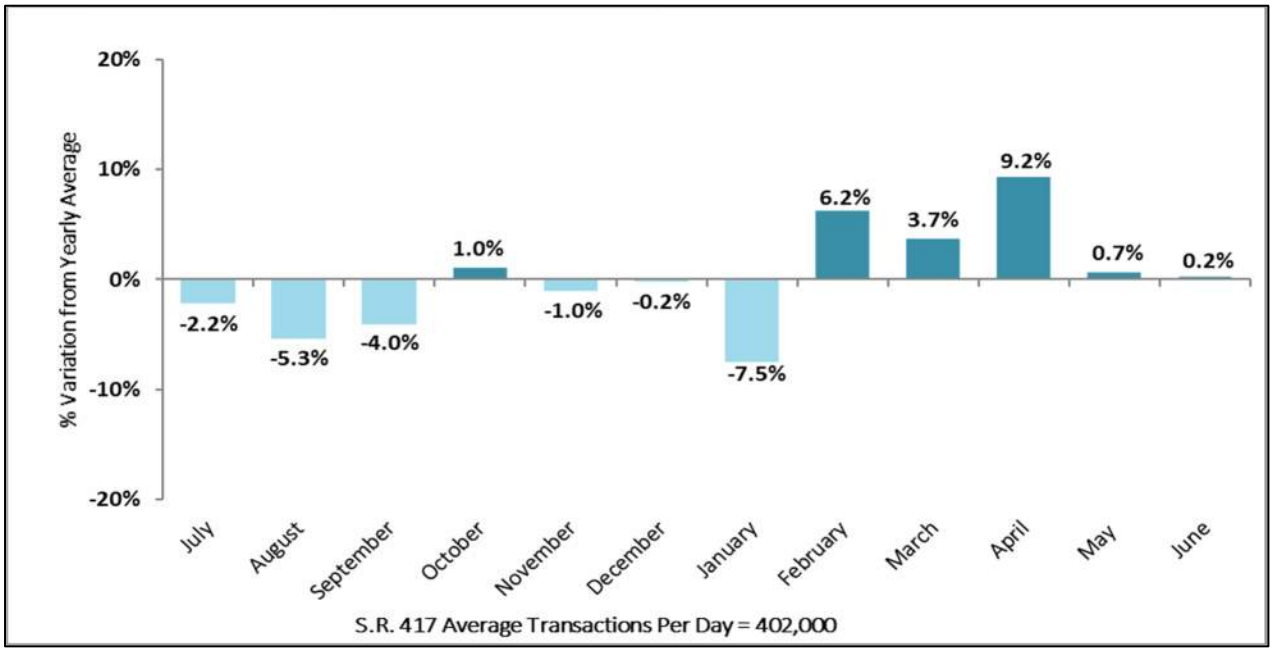
Average number of paid in-lane transactions per day in FY 2022 on S.R. 417 ranged from a low of 372,000 in January 2022 to a high of 438,900 in April 2022. These data are presented in a graphical format in Figure 5-5. The paid in-lane transactions for each month appear as a percentage of the average for the fiscal year. April paid in-lane transactions were 9.2 percent above average and January paid in-lane transactions were 7.5 percent below average for the facility. It is also important to note that there was a slight decline in January and February transactions due in part to a surge in COVID infections from the Omicron variant after the 2021 holiday season.

Table 5-3
S.R. 417 – Monthly Seasonal Variation in Paid In-Lane Transactions
FY 2022

Month	Number of Days in Month	Paid In-Lane Transactions	Average Transactions/Day	Seasonal Factor
July	31	12,191,120	393,300	0.978
August	31	11,802,070	380,700	0.947
September	30	11,575,520	385,900	0.960
October	31	12,589,347	406,100	1.010
November	30	11,938,924	398,000	0.990
December	31	12,440,181	401,300	0.998
January	31	11,533,114	372,000	0.925
February	28	11,949,815	426,800	1.062
March	31	12,922,709	416,900	1.037
April	30	13,166,961	438,900	1.092
May	31	12,544,408	404,700	1.007
June	30	12,083,547	402,800	1.002
Average		*12,228,143*	*402,000*	*1.000*
Total Year	365	146,737,716		

Source: Monthly unaudited data provided by CFX

Figure 5-5
S.R. 417 Variation in Paid In-Lane Transactions Per Day, by Month
FY 2022



Source: Monthly unaudited data provided by CFX

5.2.4 TRANSACTIONS BY VEHICLE CLASS

The distribution of mainline transactions at each of the S.R. 417 plaza groups by vehicle class (number of axles) for FY 2022 is shown in Table 5-4. Overall, 94.7 percent of all mainline transactions on S.R. 417 were made by 2-axle vehicles, with minor variation among the two plaza groups. The next most frequent vehicle class was the 3-axle classification, which accounted for 2.2 percent of all mainline transactions on the facility. Five or more-axle vehicles accounted for 1.8 percent. Four-axle vehicles represented the smallest category with only 1.3 percent of mainline transactions.

Table 5-4
S.R. 417 Percent of Total Transactions by Vehicle Class
FY 2022

Vehicle Class	John Young Main	Boggy Creek Main	Curry Ford Main	University Main	S.R. 417 Total
2-Axle	92.0%	94.8%	95.4%	96.0%	94.7%
3-Axle	3.7%	2.5%	1.8%	1.3%	2.2%
4-Axle	1.8%	1.2%	1.0%	1.2%	1.3%
5 or More Axles	2.5%	1.5%	1.8%	1.5%	1.8%
Total	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**

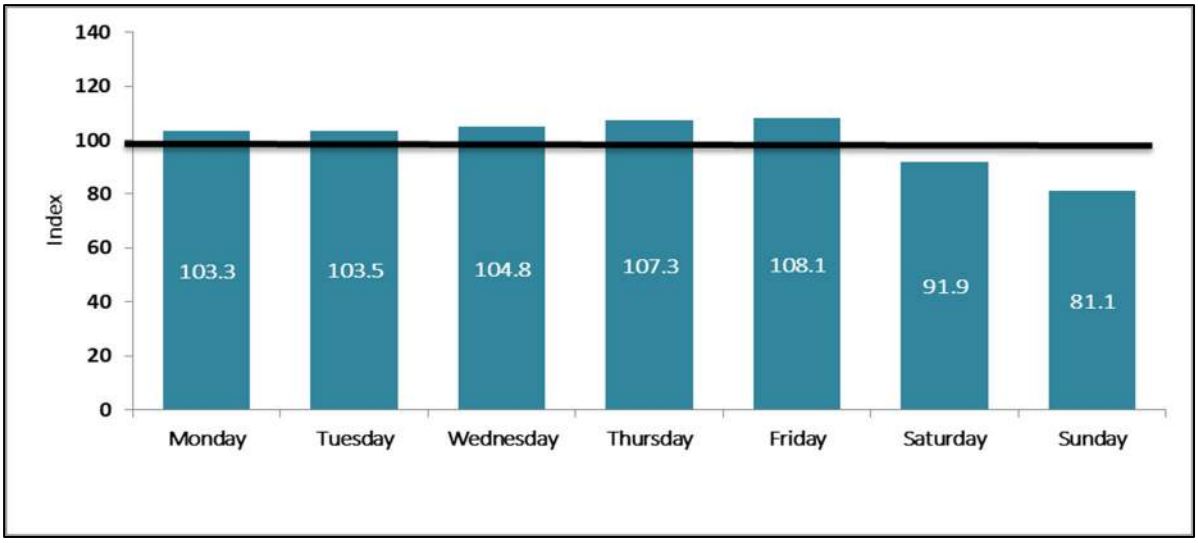
Source: Unaudited lane transaction data – May 2022

5.2.5 DAY-OF-WEEK TRANSACTION VARIATION

Figure 5-6 contains a comparison of transactions by day of week in FY 2022. These data are 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 indicates a day that has a 20 percent greater volume than the average. As was done in prior years, the data used for this analysis were for a typical week in May 2022. The data include 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 108.1 (8.1 percent higher than the average day). Volumes on Monday through Thursday ranged from index values of 103.3 to 107.3. Saturday volumes were closer to early weekday volumes with an index value of 91.9, showing that S.R. 417 is used more frequently for non-home-based work trips. Transactions decline significantly on Sundays, which have an index value of 81.1, or 18.9 percent lower than the average day.

Figure 5-6
S.R. 417 Variation in Transactions, by Day of Week
FY 2022



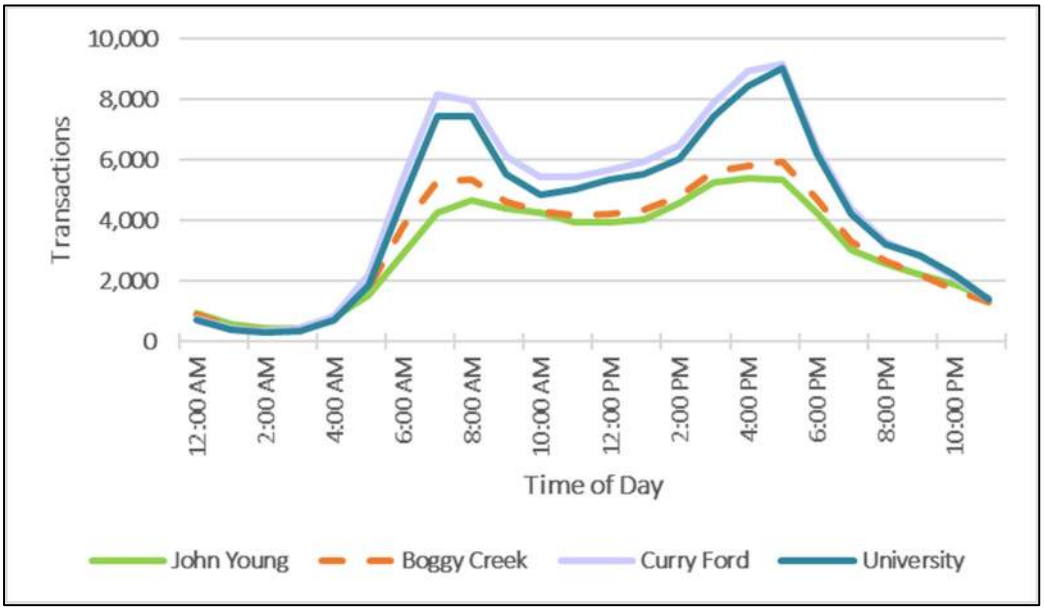
Source: Unaudited lane transaction data – May 2022

5.2.6 HOURLY TRAFFIC DISTRIBUTION

The hourly distribution of traffic volumes 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 May. The typical weekday hourly distribution is shown in Figure 5-7 and the hourly distribution on weekend days is shown in Figure 5-8. The figures contain the sum of traffic volumes in both directions.

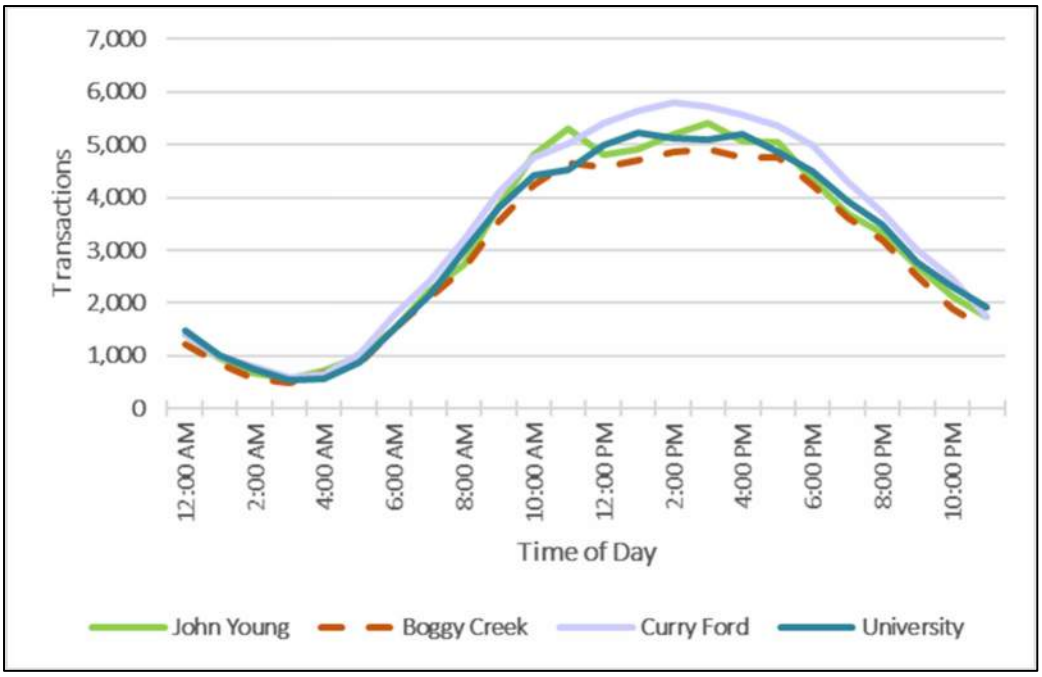
The four mainline locations on S.R. 417 exhibit similar hourly traffic patterns. On weekdays, travel demand at all four locations is bimodal, with both morning and evening peak hours. Traffic volumes are higher in the evening peak hours than in the morning peak hours at all four mainline plazas.

Figure 5-7
S.R. 417 Hourly Two-Way Traffic Variation (Weekday)
FY 2022 (May)



Source: Unaudited lane traffic data – May 2022

Figure 5-8
S.R. 417 Hourly Two-Way Traffic Variation (Weekend)
FY 2022 (May)



Source: Unaudited lane traffic data – May 2022

The highest peak hour volumes during the week were 9,200 per hour beginning at 5:00 p.m. at the Curry Ford mainline plaza, 9,000 per hour beginning at 5:00 p.m. at the University mainline plaza, 6,000 per hour beginning at 5:00 p.m. at the Boggy Creek mainline plaza and 5,400 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, since they include only mainline transactions as compared to the John Young Parkway and Boggy Creek Mainline plazas groups. The University and Curry Ford mainline plazas serve a relatively higher portion of trips in peak hours. Again, this data is for mainline plaza transactions, which is why these plazas are much higher than John Young Parkway and Boggy Creek Mainline plazas.

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.

5.2.7 TRANSACTIONS AND REVENUE BY PAYMENT TYPE

The distributions of transactions and revenue by payment type by plaza group during FY 2022 are 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 a FY 2022 accrual rate of 52 percent of all unpaid in-lane transactions in July and August 2021, then dropped down to 50 percent for the remainder of the year. This means that the PBP transactions and revenue shown here are estimates of the levels that will eventually pay tolls through the PBP process. 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.

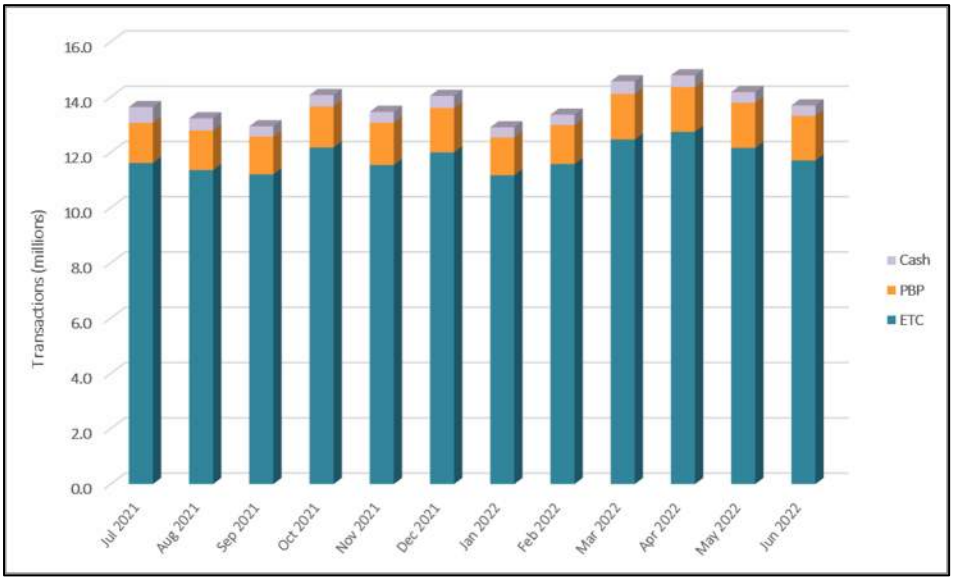
As shown in Figure 5-9, ETC transactions on S.R. 417 ranged from a low of 11.2 million in January 2022 to a high of 12.7 million in April 2022. Overall, ETC accounted for 85.9 percent of total transactions on the facility. The PBP transactions ranged from a low of 1.4 million to a high of over 1.6 million. Overall, PBP accounted for 11.0 percent of total transactions on the facility. Cash transactions ranged from a low of approximately 0.4 million to a high of 0.6 million. Overall, cash accounted for 3.1 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 of transactions, recognizing the differences in the toll paid by payment method. ETC revenue on S.R. 417 ranged from a low of $12.0 million in September 2021 to a high of $13.9 million in April 2022. Overall, ETC accounted for 78.3 percent of total revenue on the facility. The PBP revenue ranged from a low of $2.7 million to a high of $3.3 million. Overall, PBP accounted for 18.4 percent of total

revenue on the facility. Cash revenue ranged from a low of $0.5 million to a high of nearly $0.8 million. Overall, cash accounted for 3.3 percent of total revenue on the facility.

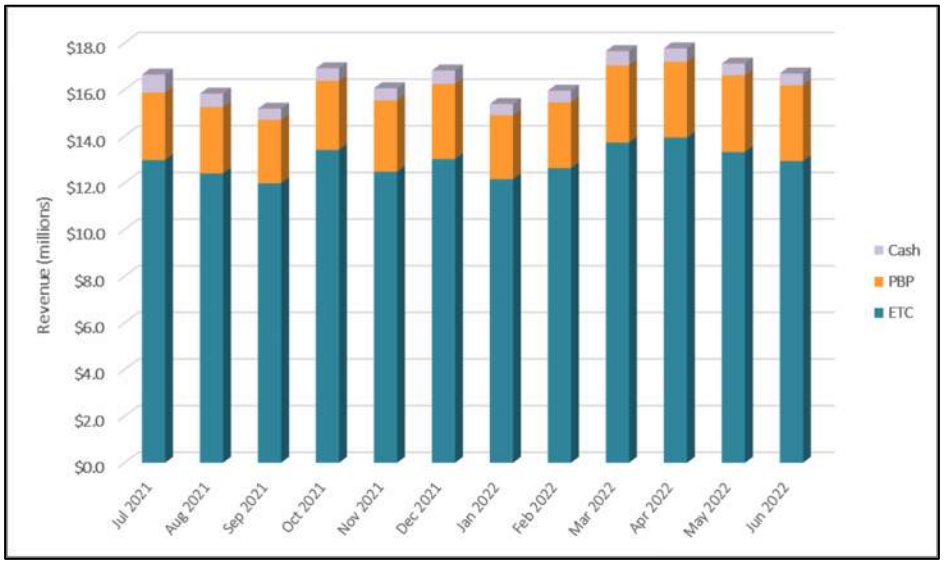
The differences in revenue performance by payment method are explained by differences in the toll rates. ETC customers pay the preferred toll rate; cash customers pay at least 10 percent higher rate than ETC rate; and PBP customers pay twice the ETC rate.

Figure 5-9
S.R. 417 Percent of Transactions by Payment Type
FY 2022



Source: Monthly unaudited data provided by CFX

Figure 5-10
S.R. 417 Percent of Revenue by Payment Type
FY 2022



Source: Monthly unaudited data provided by CFX

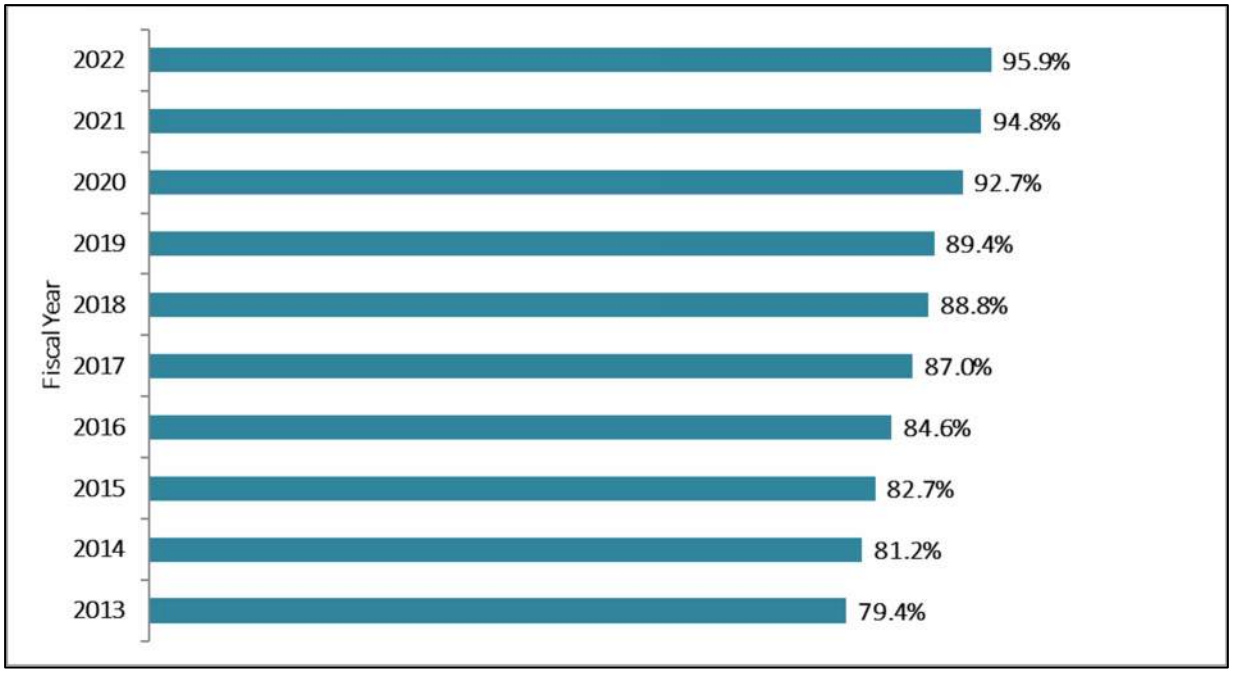
5.3 ETC Usage

The shares of paid in-lane revenues generated from ETC over the past ten fiscal years on S.R. 417 are shown in **Figure 5-11**. Cash payments are the other source of paid in-lane revenues. PBP revenues are excluded. Over this time, ETC revenues have steadily increased on the facility. In FY 2013, ETC revenues totaled 79.4 percent of total paid in-lane revenues on the facility. In FY 2022, ETC revenues reached 95.9 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.

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). 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 staffed, mainline toll plazas. This is expected to be completed in FY 2023.

In June 2021, CFX also launched the Visitor Toll Pass program, which is a free temporary toll pass for rental car customers traveling through the Orlando International Airport. With the pass, rental car customers pay the ETC rates on Florida toll roads with no extra or hidden fees.

Figure 5-11
S.R. 417 Percent of Paid In-Lane Revenue from Electronic Toll Collection
FY 2013 – FY 2022



Source: Monthly unaudited data provided by CFX

5.4 Forecasted Transactions and Toll Revenues

The forecasts of T&R are based on several assumptions about the future, including assumptions about future toll rates. Based on the CFX "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 with a floor of 1.5 percent. At the time of preparing the T&R estimates and this report, CDM Smith learned that the net change in CPI during CY 2022 was 8.577 percent. At their June 2023 meeting, the CFX Board decided to forego the net change in CPI and implement the policy floor of 1.5 percent adjustment for FY 2024. Based on assurances from CFX, CDM Smith used this value to index toll rates for FY 2024. 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 5-5, assumed completed in each model horizon year. The S.R. 417 widening program from International Drive to S.R. 528 will contribute to positive traffic and revenue growth starting in 2025 as these segments of S.R. 417 are programmed to be widened in the next three years. Feeder road improvements, on local roads such as Boggy Creek Road, Innovation Way, Lake Nona Boulevard, and Narcoossee Road also positively impact the forecasted T&R growth on S.R. 417 through 2025. 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 and Northeast Connector Expressway, Phase 1, will have impacts on the long-term forecast.

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

Facility	From	To	Year	Jurisdiction	Improvement
Interstate 4	SR 434	Kirkman Road	2025	FDOT	Widen to 10 lanes
Jeff Fuqua Boulevard	.13 miles South of Boggy Creek Road	Heintzelman Boulevard	2025	Orange County	Widen to 4 Lanes
Boggy Creek Road	Orange Co Line	SR 417	2025	Orange County	Widen to 4-lanes
Boggy Creek Road	SR 417	Wetherbee Road	2025	Orange County	Widen to 4-lanes
SR 15 (Narcoossee Road)	SR 528 (BeachLine Expressway)	Lee Vista Boulevard	2025	Orange County/FDOT	Widen to 6 Lanes
SR 417	International Drive	Boggy Creek Road	2025	CFX	Widen to 6-lanes
SR 417	Boggy Creek Road	SR 528	2025	CFX	Widen to 6-lanes
SR 417	Aloma Avenue	SR 434	2035	FDOT	Widen to 8 lanes
SR 46	Mellonville Rd	SR 415	2025	FDOT	Widen to 4-lanes
SR 417/Seminole Exp	Aloma Avenue	SR 434	2025	FDOT	Widen to 8-lanes
Wekiva Parkway/S.R. 429	Mount Plymouth Road	Interstate 4	2025	FDOT	New 4 lane expressway
Apopka-Vineland Road (SR 535)	US 192	SR 536	2035	FDOT	Widen to 6 Lanes
Innovation Way/Dowden Rd	SR 417	SR 528	2035	Orange County	New 4-lane Road
Orange Avenue	Town Center Blvd	Osceola County Line	2035	Orange County/FDOT	Widen to 4-lanes
Narcoossee Rd	US 192	Orange County Line	2035	Osceola County	Widen to 6 Lanes
Osceola Parkway Ext/SR 534	Boggy Creek Road	Narcoossee Road	2035	CFX	New 4-lane Expressway
US 441 (SR 500)	SR 44	N of SR 46	2035	FDOT	Widen to 6-lanes
SR 417/Seminole Exp	SR 434	Lake Mary Blvd	2035	FDOT	Widen to 8-lanes
Lake Underhill Road	Econlockhatchee Trail	Rouse Road	2035	Orange County	Widen to 4-lanes
Lake Underhill Road	Chickasaw Trail	Econlockhatchee Trail	2045	Orange County	Widen to 4-lanes
Econlockhatchee Trail	Lake Underhill Road	Curry Ford Road	2045	Orange County	Widen to 4-lanes
SR 417/Seminole Exp	Lake Mary Blvd	I-4	2045	FDOT	Widen to 8-lanes
Osceola Parkway Ext/SR 534	Narcoossee Road	Cyrils Road	2045	CFX	New 4-lane Expressway
NE Connector/SR 534	Cyrils Road	Nova Road	2045	CFX	New 4-lane Expressway
SR 408 East Extension	Challenger Parkway	SR 50	2045	CFX	New 4-lane expressway

Transaction and toll revenue projections for each toll plaza group and for all of S.R. 417 are summarized in Table 5-6 and Table 5-7. The tables are divided into paid in-lane transactions and revenue and PBP transactions and revenue. The paid in-lane transactions and revenue include ETC and cash collection. PBP is only reported as a total on the facility.

The paid in-lane transactions on S.R. 417 are expected to grow by 2.1 percent per year through FY 2032 and then lower rates through the end of the forecast period because of the impact of continued toll rate adjustments. PBP transactions are forecasted to increase by an average of 2.1 percent per year through FY 2032 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 164.9 million in FY 2022 to 250.7 million in FY 2052. The paid in-lane revenues on S.R. 417 are projected to increase significantly over the forecast period, from the FY 2022 actual of $161.6 million to $360.1 million in FY 2052. PBP revenues are projected to increase from $36.4 million in FY 2022 to $77.0 million in FY 2052. Total revenues on S.R. 417 are projected to increase during the forecast period from the actual $198.0 million in FY 2022 to $437.1 million in FY 2052. Total transactions and revenues are forecasted to increase an average of 2.1 and 3.7 percent per year through FY 2032, 1.2 and 2.4 percent per year from FY 2032 to FY 2042, and 1.0 and 2.0 percent per year from FY 2042 to FY 2052, respectively.

Table 5-6
S.R. 417 Plaza Groups – Transaction Projections (Millions)
FY 2023 – FY 2052

Fiscal Year		John Young Main	Boggy Creek Main	Curry Ford Main	University Main	Paid In-Lane	PBP	Total	Percent Annual Change
2012[A]	Actual	20.6	18.8	23.1	28.2	90.7	1.3	92.0	-
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]		29.1	34.0	30.6	28.7	122.4	15.8	138.2	-2.2%
2022*[H]		36.2	40.9	36.2	33.4	146.7	18.2	164.9	19.3%
2023[I]	Forecast	37.8	40.5	35.9	31.8	146.0	19.1	165.1	0.1%
2024		41.2	44.5	40.2	34.7	160.6	20.0	180.6	9.4%
2025		41.8	45.0	41.3	34.9	163.0	20.4	183.4	1.6%
2026		42.5	45.7	42.1	35.1	165.4	20.6	186.0	1.4%
2027		43.3	46.5	42.9	35.2	167.9	20.9	188.8	1.5%
2028		44.0	47.3	43.7	35.4	170.4	21.3	191.7	1.5%
2029		44.7	48.0	44.5	35.6	172.8	21.5	194.3	1.4%
2030		45.5	48.8	45.3	35.7	175.3	21.7	197.0	1.4%
2031		46.2	49.6	46.1	35.8	177.7	22.0	199.7	1.4%
2032		46.9	50.3	46.9	35.9	180.0	22.3	202.3	1.3%
2033		47.7	51.1	47.7	36.0	182.5	22.5	205.0	1.3%
2034		48.4	51.9	48.5	36.1	184.9	22.6	207.5	1.2%
2035		49.1	52.6	49.3	36.2	187.2	22.9	210.1	1.3%
2036		49.8	53.4	50.1	36.2	189.5	23.2	212.7	1.2%
2037		50.6	54.1	50.9	36.3	191.9	23.4	215.3	1.2%
2038		51.3	54.9	51.7	36.4	194.3	23.5	217.8	1.2%
2039		52.0	55.6	52.5	36.4	196.5	23.7	220.2	1.1%
2040		52.7	56.4	53.2	36.5	198.8	24.0	222.8	1.2%
2041		53.4	57.1	54.0	36.5	201.0	24.1	225.1	1.0%
2042		54.1	57.8	54.8	36.6	203.3	24.4	227.7	1.2%
2043		54.8	58.6	55.6	36.6	205.6	24.6	230.2	1.1%
2044		55.4	59.3	56.3	36.7	207.7	24.7	232.4	1.0%
2045		56.1	60.0	57.1	36.7	209.9	25.0	234.9	1.1%
2046		56.8	60.7	57.8	36.7	212.0	25.3	237.3	1.0%
2047		57.4	61.4	58.6	36.8	214.2	25.3	239.5	0.9%
2048		58.1	62.1	59.3	36.8	216.3	25.6	241.9	1.0%
2049		58.7	62.8	60.0	36.9	218.4	25.7	244.1	0.9%
2050		59.4	63.5	60.7	36.9	220.5	25.9	246.4	0.9%
2051		60.0	64.2	61.4	36.9	222.5	26.2	248.7	0.9%
2052		60.6	64.9	62.1	36.9	224.5	26.2	250.7	0.8%

Fiscal Year	Compound Annual Average Growth Rate (CAAGR)						
2012 - 2022	5.8%	8.1%	4.6%	1.7%	4.9%	30.2%	6.0%
2022 - 2032	2.6%	2.1%	2.6%	0.7%	2.1%	2.1%	2.1%
2032 - 2042	1.4%	1.4%	1.6%	0.2%	1.2%	0.9%	1.2%
2042 - 2052	1.1%	1.2%	1.3%	0.1%	1.0%	0.7%	1.0%

*Indicates systemwide toll rate increase according to Customer First Toll Policy

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. Continued effects of COVID-19 pandemic.

H - Completion of I-4 Ultimate project.

I - Includes impacts from Hurricane Ian toll suspensions in September 2022.

Table 5-7
S.R. 417 Plaza Groups – Toll Revenue Projections (Millions)
FY 2023 – FY 2052

Fiscal Year		John Young Main	Boggy Creek Main	Curry Ford Main	University Main	Paid In-Lane	PBP	Total	Percent Annual Change
2012[A]	Actual	$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]		$34.9	$42.5	$27.9	$25.9	$131.2	$30.9	$162.1	6.2%
2022*[H]		$45.4	$52.4	$33.4	$30.4	$161.6	$36.4	$198.0	22.1%
2023[I]	Forecast	$49.7	$54.2	$34.4	$30.3	$168.6	$40.2	$208.8	5.5%
2024		$54.7	$60.0	$38.9	$33.2	$186.8	$42.6	$229.4	9.9%
2025		$56.3	$61.6	$40.5	$33.9	$192.3	$44.2	$236.5	3.1%
2026		$58.1	$63.4	$41.9	$34.6	$198.0	$45.4	$243.4	2.9%
2027		$59.9	$65.3	$43.2	$35.2	$203.6	$46.5	$250.1	2.8%
2028		$61.7	$67.3	$44.6	$35.8	$209.4	$47.7	$257.1	2.8%
2029		$63.5	$69.3	$46.0	$36.5	$215.3	$48.9	$264.2	2.8%
2030		$65.4	$71.3	$47.4	$37.1	$221.2	$50.1	$271.3	2.7%
2031		$67.2	$73.3	$48.8	$37.6	$226.9	$51.3	$278.2	2.5%
2032		$69.1	$75.3	$50.3	$38.2	$232.9	$52.5	$285.4	2.6%
2033		$71.1	$77.4	$51.8	$38.8	$239.1	$53.7	$292.8	2.6%
2034		$73.0	$79.5	$53.3	$39.4	$245.2	$54.9	$300.1	2.5%
2035		$75.0	$81.6	$54.8	$39.9	$251.3	$56.1	$307.4	2.4%
2036		$77.0	$83.7	$56.3	$40.4	$257.4	$57.5	$314.9	2.4%
2037		$79.0	$85.8	$57.9	$41.0	$263.7	$58.6	$322.3	2.3%
2038		$81.0	$88.0	$59.4	$41.5	$269.9	$59.9	$329.8	2.3%
2039		$83.0	$90.2	$61.0	$42.1	$276.3	$61.0	$337.3	2.3%
2040		$85.0	$92.4	$62.6	$42.6	$282.6	$62.3	$344.9	2.3%
2041		$87.0	$94.7	$64.2	$43.1	$289.0	$63.6	$352.6	2.2%
2042		$89.1	$96.9	$65.9	$43.6	$295.5	$64.8	$360.3	2.2%
2043		$91.1	$99.1	$67.4	$44.1	$301.7	$66.1	$367.8	2.1%
2044		$93.2	$101.3	$69.0	$44.6	$308.1	$67.2	$375.3	2.0%
2045		$95.3	$103.6	$70.6	$45.1	$314.6	$68.5	$383.1	2.1%
2046		$97.4	$105.8	$72.3	$45.6	$321.1	$69.7	$390.8	2.0%
2047		$99.5	$108.1	$73.9	$46.1	$327.6	$71.1	$398.7	2.0%
2048		$101.6	$110.4	$75.5	$46.5	$334.0	$72.2	$406.2	1.9%
2049		$103.7	$112.7	$77.2	$47.0	$340.6	$73.5	$414.1	1.9%
2050		$105.8	$115.0	$78.8	$47.5	$347.1	$74.7	$421.8	1.9%
2051		$107.9	$117.3	$80.5	$48.0	$353.7	$75.8	$429.5	1.8%
2052		$109.9	$119.6	$82.1	$48.5	$360.1	$77.0	$437.1	1.8%

Fiscal Year	Compound Annual Average Growth Rate (CAAGR)						
2012 - 2022	7.5%	9.7%	6.8%	4.1%	7.2%	40.7%	9.3%
2022 - 2032	4.3%	3.7%	4.2%	2.3%	3.7%	3.7%	3.7%
2032 - 2042	2.6%	2.6%	2.7%	1.3%	2.4%	2.1%	2.4%
2042 - 2052	2.1%	2.1%	2.2%	1.1%	2.0%	1.7%	2.0%

*Indicates systemwide toll rate increase according to Customer First Toll Policy

Notes:

Actual revenue 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. Continued effects of COVID-19 pandemic.

H - Completion of I-4 Ultimate project.

I - Includes impacts from Hurricane Ian toll suspensions in September 2022.

CHAPTER 6

S.R. 429

| DANIEL WEBSTER WESTERN BELTWAY

S.R. 429 (DANIEL WEBSTER WESTERN BELTWAY AND WEKIVA PARKWAY)

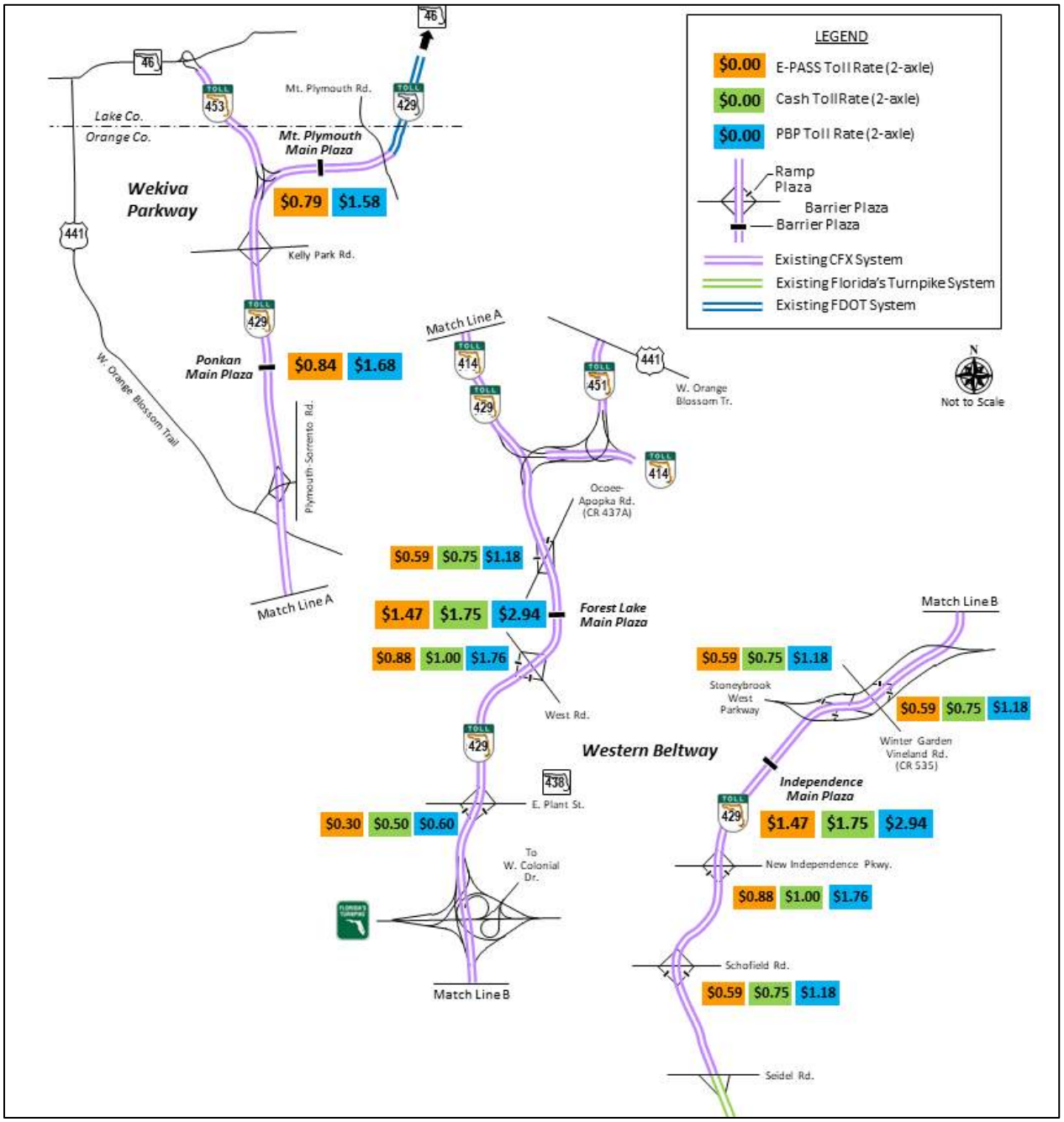
6.1 Facility Description

S.R. 429, also known as the Daniel Webster Western Beltway/Wekiva Parkway, 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, Stoneybrook West Parkway 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 2022 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. This segment provided a direct connection 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 Phase II of S.R. 414, the Apopka Expressway, 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 new Plymouth Sorrento Road. The new connection of S.R. 414 and S.R. 429 required that approximately one mile of the then current S.R. 429 roadway be removed and 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.

Figure 6-1
S.R. 429 Facilities and FY 2022 Toll Rates

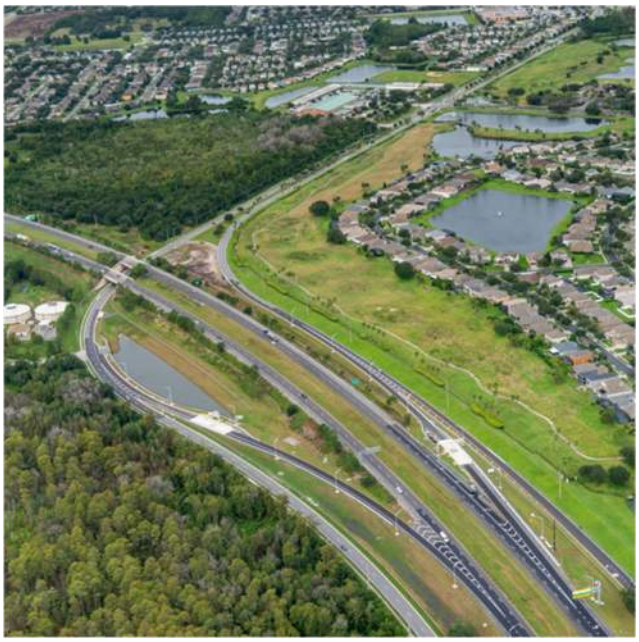


S.R. 429 serves as an alternative route to I-4 and provides a direct connection from Florida's Turnpike to Walt Disney World and Tampa for travelers from the northern and western portions of the Orlando urban area. In May 2015, CFX opened the new full interchange between S.R. 429 and Schofield Road to provide additional access to this rapidly growing area of western 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. Originally documented in the 1983 *Year 2000 Long Range Expressway Plan*, the Wekiva Parkway – then known as the Western Bypass and later as the Western Beltway, Part B, fully opened to traffic on April 1, 2018. CFX's 9 miles of the Wekiva Parkway add 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 then 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 tolls 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's 18-mile portion of Wekiva Parkway is still under construction and is, expected to fully open in 2023.

In addition to construction of the facility itself, CFX has maintained and improved capacity on S.R. 429 over the years through a series of programmed widenings and resurfacing efforts. Between 2016 and 2018, CFX completed the series of improvements at the S.R. 429/Winter Garden Vineland Road (C.R. 535) interchange in west Orange County. These projects included extending the southbound S.R. 429 off ramp to C.R. 535/Stoneybrook West Parkway, resurfacing one-half mile of southbound S.R. 429 near the interchange, widening the northbound entrance ramp from C.R. 535/Winter Garden Vineland Road to S.R. 429.

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 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.



In October 2020, CFX completed construction of a new set of ramps to S.R. 429 at Stoneybrook West Parkway. The new ramps provide access to and from the north, complementing the existing ramps at C.R. 535 and providing 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.

CFX has programmed a significant widening program on S.R. 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 have been divided into three segments; from Tilden Road to Florida's Turnpike; From Florida's Turnpike to West Road; and from West Road to S.R. 414, to minimize the impact to motorists. Construction on all segments began in January 2022 and is scheduled to be complete by mid-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 the PBP process, estimated as an accrued amount. The following section includes a breakdown of transactions and revenues by paid in-lane and PBP.

6.2.1 ANNUAL PAID IN-LANE TRANSACTION AND REVENUE TRENDS

The history of the annual paid in-lane transactions for the Forest Lake Main, Independence Main, Ponkan Main and Mt. Plymouth Main plaza groups from FY 2012 to FY 2022 is 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 this reason, the information presented in this section may differ slightly from the data presented in the FY 2022 Comprehensive Annual Financial Report (CAFR) and other information in this report.

In FY 2013, paid in-lane transactions increased 3.2 percent and toll revenues increased 18.1 percent compared to FY 2012. The small transaction growth and significant increase in revenue growth can be attributed to the toll rate adjustment that occurred in FY 2013. 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 six-year period of extraordinary growth after the Great Recession that did not end until the COVID-19 pandemic in FY 2020. This growth is likely the result of facility ramp-up, following the opening of various segments, and local development. From FY 2015 to FY 2019, S.R. 429 experienced double-digit annual growth in both paid in-lane transactions and revenues. Over the six-year period, paid in-lane transactions and revenue nearly doubled.

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. The negative impacts of these storms were largely offset by the significant growth experienced on the S.R. 429 during this period.

Table 6-1
S.R. 429 Plaza Groups – Historical Paid In-Lane Transactions and Revenue
FY 2012 – FY 2022

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				
2012	13.6	12.8			26.4					
2013[A]	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[B]	23.4	22.1			45.5	9.3%	11.6%			10.4%
2018[C,D]	24.4	23.9	3.0	0.4	51.7	4.3%	8.1%			13.6%
2019[*]	25.7	25.5	4.9	1.5	57.6	5.3%	6.7%	63.3%	275.0%	11.4%
2020[*,E]	23.8	22.7	4.8	1.4	52.7	-7.4%	-11.0%	-2.0%	-6.7%	-8.5%
2021[*,F]	24.5	22.8	5.4	1.4	54.1	2.9%	0.4%	12.5%	0.0%	2.7%
2022*	27.6	27.8	6.8	1.8	64.0	12.7%	21.9%	25.9%	28.6%	18.3%
	TOLL REVENUE (millions)					PERCENT CHANGE				
2012	$14.2	$10.7			$24.9					
2013[A]	$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[B]	$28.4	$23.3			$51.7	9.7%	15.9%			12.4%
2018[C,D]	$29.6	$25.8	$2.6	$0.3	$58.3	4.2%	10.7%			12.8%
2019[*]	$32.1	$29.1	$4.2	$1.3	$66.7	8.4%	12.8%	61.5%	333.3%	14.4%
2020[*,E]	$30.4	$26.6	$4.3	$1.2	$62.5	-5.3%	-8.6%	2.4%	-7.7%	-6.3%
2021[*,F]	$31.7	$27.1	$4.9	$1.2	$64.9	4.3%	1.9%	14.0%	0.0%	3.8%
2022*	$36.5	$34.2	$6.2	$1.6	$78.5	15.1%	26.2%	26.5%	33.3%	21.0%

*Indicates systemwide toll rate increase according to Customer First Toll Policy

Notes:

A - Systemwide toll rate increase in July 2012. Implementation of cash and electronic toll rate differential.

B - Effects from Hurricane Matthew in October 2016.

C - Ponkan Main plaza opened on July 28, 2017. Mt. Plymouth Main plaza opened on April 1, 2018.

D - Effects from Hurricane Irma in September 2017.

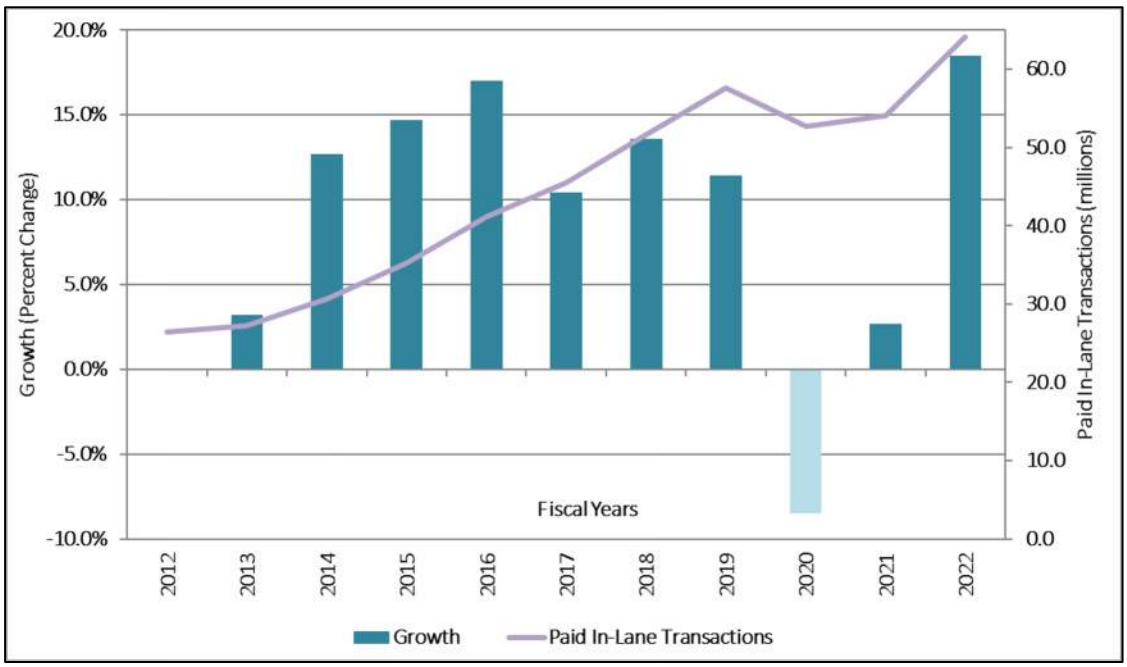
E - Effects from Hurricane Dorian in September 2019 and first effects of COVID-19 pandemic began in March 2020.

F - Continued effects of COVID-19 pandemic.

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. While other CFX expressways experienced some reductions in paid in-lane transactions potentially due to the shift of SunPass® transaction processing to the state's CCSS that year, the high growth on S.R. 429 largely offset any transaction shifts to PBP. It should be noted that S.R. 429 PBP transactions more than doubled in FY 2019, from 1.9 million during the prior year to 5.0 million.

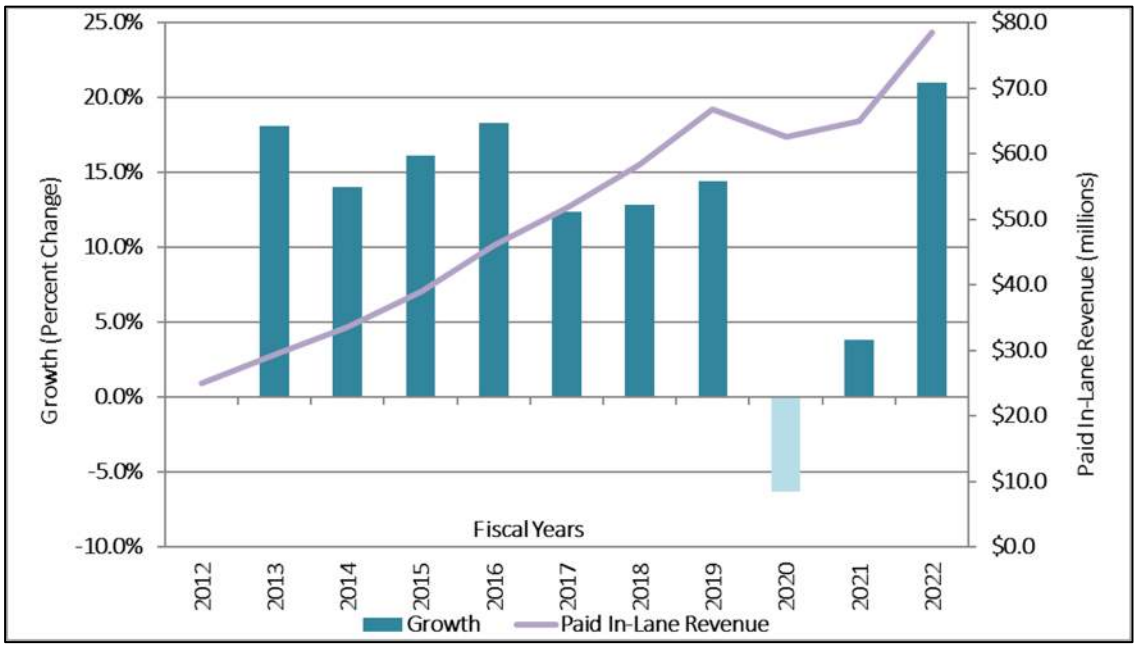
In FY 2020, all S.R. 429 plaza groups experienced a decline in paid in-lane transactions and revenues, despite the FY 2020 toll rate adjustment. The declines in both paid in-lane transactions and revenues can be attributed to the negative impacts of the COVID-19 pandemic. Because the fiscal year begins in July, FY 2020 only included four months of the impacts of the COVID-19 pandemic. Thus, although April 2020 (FY 2020) contained the deepest impacts of the COVID-19 pandemic, additional impacts also occurred during the early months of FY 2021, which included a full year of travel reductions and the initial recovery.

Figure 6-2
S.R. 429 Historical Paid In-Lane Transactions and Annual Growth
FY 2012 – FY 2022



Source: Monthly unaudited data provided by CFX

Figure 6-3
S.R. 429 Historical Paid In-Lane Revenue and Annual Growth
FY 2012 – FY 2022



Source: Monthly unaudited data provided by CFX

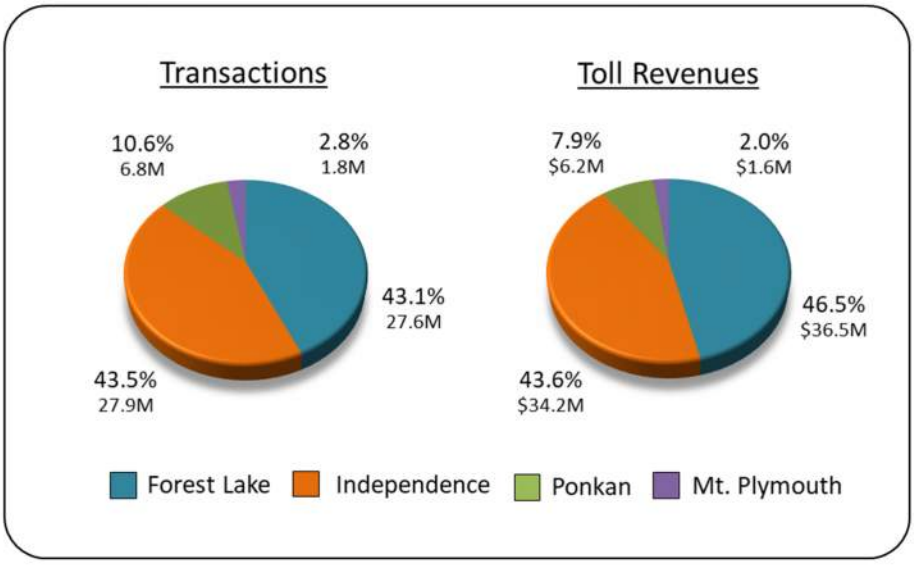
September 2019 transactions and revenues were also negatively impacted by toll suspensions during Hurricane Dorian. Tolls were suspended on CFX toll facilities beginning on September 1, 2019 through September 5, 2019 resulting in a transaction loss of approximately 0.8 million and a toll revenue loss of $1.0 million on S.R. 429.

All S.R. 429 plaza groups experienced an increase in paid in-lane transactions and revenues in FY 2021. This increase can be attributed to the year-over-year recovery from the worst of the COVID-19 pandemic (i.e., April 2020) and the FY 2021 toll rate adjustment. The largest increase was experienced at the Ponkan Main plaza group with an increase of 12.5 percent in transactions and 14.0 percent in revenues, which is likely the result of continued ramp-up.

In FY 2022, all S.R. 429 plaza groups experienced a significant increase in paid in-lane transactions and revenues. The increases in both transactions and revenue reflects the recovery from the negative impacts of the COVID-19 pandemic, as well as continued growth along the corridor. The FY 2022 toll rate adjustment was another factor in the increase in revenue.

The share by plaza group of total S.R. 429 paid in-lane transactions and toll revenues during FY 2022 are presented in **Figure 6-4**. The Independence Main plaza group represented the largest number of transactions on S.R. 429 with 27.9 million transactions, or 43.5 percent of total facility transactions. This is the first year that Independence Main has surpassed the Forest Lake Main plaza group, which recorded 27.6 million transactions or 43.1 percent. The Ponkan Main plaza represented 6.8 million transactions, or 10.6 percent, and the Mt. Plymouth Main plaza carried the remaining 1.8 million transactions, or 2.8 percent.

Figure 6-4
S.R. 429 Paid In-Lane Transactions and Revenue by Plaza Group
FY 2022



Source: CFX Statistical Report June 2022

The annual totals and shares of paid in-lane toll revenues are similar to the results reported for annual paid in-lane transactions. The Forest Lake Main plaza group still had the highest share of revenue, representing $36.5 million in toll revenues or 46.5 percent of the total. Independence Main plaza group represented $34.2 million, or 43.6 percent of total revenue on the facility. The Ponkan Main plaza represented $6.2 million or 7.9 percent of the total, and the Mt. Plymouth Main plaza carried the remaining $1.6 million, or 2.0 percent of total toll revenues on the facility.

6.2.2 ANNUAL PBP TRANSACTION AND REVENUE TRENDS

A history of annual PBP transactions and toll revenues on S.R. 429 from FY 2012 to FY 2022 is 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 2012 – FY 2022

Fiscal Year	Transactions (millions)	Percent Change	Toll Revenues (millions)	Percent Change
2012	0.4		$0.3	
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%
2021	6.6	10.0%	$14.3	66.3%
2022	7.9	19.7%	$17.3	21.0%

Source: Unaudited data provided by CFX

PBP transactions have increased from 0.4 million in FY 2012 to 7.9 million in FY 2022, while PBP revenues have increased from $0.3 million to $17.3 million over the same period. In FY 2022, PBP transactions increased 19.7 percent and PBP revenues increased 21.0 percent over FY 2021. In 2019, PBP transactions and increased 150.0 percent, and PBP revenues increased 176.0 percent over 2018, which reflects the SunPass Conversion of their back office to CCSS that caused many customers to switch to PBP. During the early part of the COVID-19 pandemic, cash toll collection was suspended for several months. For this reason, PBP transactions and revenue increased year-over-year in FY 2020 and in FY 2021. The significant increase in PBP revenues in FY 2021 can also be attributed to the new PBP toll rate adopted by the CFX Board that went into effect on July 1, 2020 (FY 2021). At that time, the PBP toll rate at all toll locations was increased to twice the ETC toll rate, reflecting the cost to collect PBP tolls. Because of the new PBP toll rate, it was anticipated that going forward a portion of customers paying via PBP will switch to ETC to avoid the higher toll rate. However, recent trends do not reflect this result. This may be due to customer travel

frequency and/or the convenience of PBP compared to establishing a transponder account. Overall, the recent increase in customer preference for PBP has contributed to a smaller share of paid in-lane transactions and revenue.

6.2.3 MONTHLY PAID IN-LANE TRANSACTION SEASONAL VARIATION

In Table 6-3, monthly paid in-lane transactions are normalized to the average number of paid in-lane transactions per day. Considering the average number of 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.

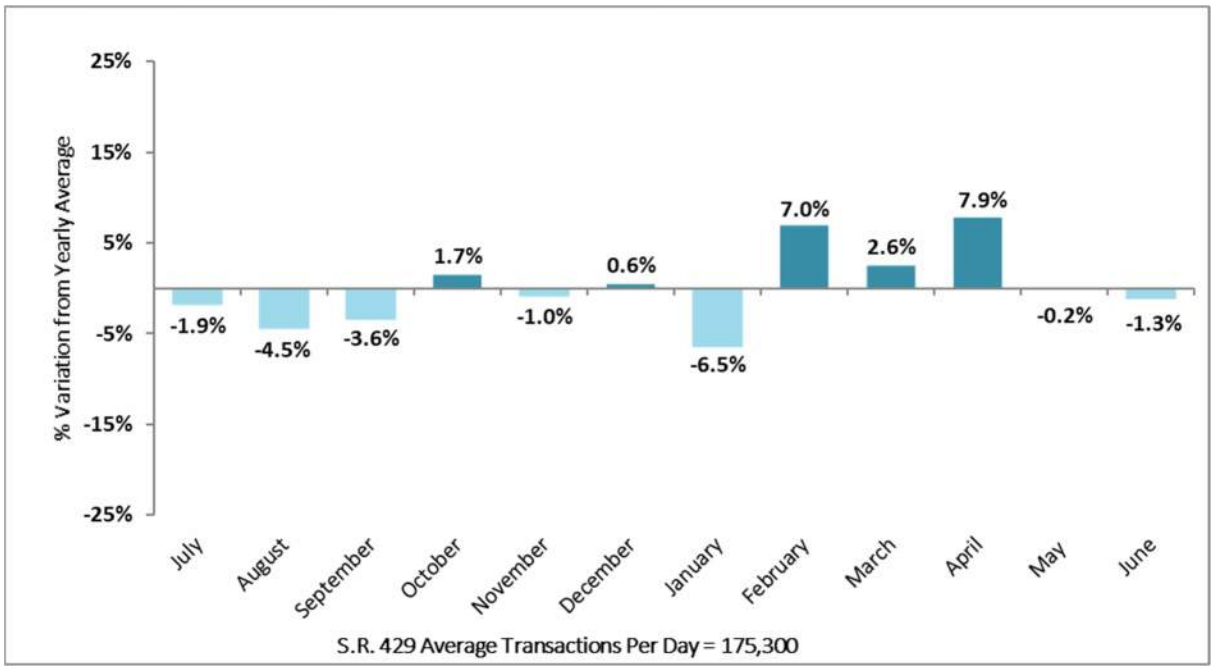
Average transactions per day in FY 2022 on S.R. 429 ranged from a low of approximately 163,900 in January 2022 to a high of 189,200 in April 2022. March and April are typically the months with the highest average number of transactions per day due to the large number of tourists and seasonal residents in the area during the spring. These data are presented in a graphical format in Figure 6-5. The transactions for each month appear as a percentage of the average for the fiscal year. April paid in-lane transactions were 7.9 percent above average and January paid in-lane transactions were 6.5 percent below average for the facility. The decline in January was due in part to a surge in COVID infections from the Omicron variant after the 2021 holiday season, which also impacted February transactions.

Table 6-3
S.R. 429 – Monthly Seasonal Variation in Paid In-Lane Transactions
FY 2022

Month	Number of Days in Month	Paid In-Lane Transactions	Average Transactions/Day	Seasonal Factor
July	31	5,329,995	171,900	0.981
August	31	5,189,092	167,400	0.955
September	30	5,070,850	169,000	0.964
October	31	5,523,801	178,200	1.017
November	30	5,209,332	173,600	0.990
December	31	5,466,529	176,300	1.006
January	31	5,082,217	163,900	0.935
February	28	5,253,059	187,600	1.070
March	31	5,577,042	179,900	1.026
April	30	5,676,208	189,200	1.079
May	31	5,424,528	175,000	0.998
June	30	5,191,376	173,000	0.987
Average		*5,332,836*	*175,300*	*1.000*
Total Year	365	63,994,029		

Source: CFX Statistical Report June 2022

Figure 6-5
S.R. 429 Variation in Paid In-Lane Transactions Per Day, by Month
FY 2022



Source: CFX Statistical Report June 2022

6.2.4 TRANSACTIONS BY VEHICLE CLASS

The distribution of mainline transactions at each of the S.R. 429 plaza groups by vehicle class (number of axles) for FY 2022 is shown in **Table 6-4**. Overall, 92.1 percent of all mainline transactions on S.R. 429 were made by 2-axle vehicles, with minor variation among the two plaza groups. Thus, S.R. 429 represents the CFX Expressway with the greatest share of 3-or-more-axle vehicles, which may be due to a number of warehouses and other commercial facilities along the corridor. The next most frequent vehicle class was the 3-axle classification, which accounted for 2.1 percent of all mainline transactions on the facility. Five or more-axle vehicles accounted for 3.4 percent. Four-axle vehicles represented the smallest category with only 2.3 percent of mainline transactions.

Table 6-4
S.R. 429 Percent of Total Transactions by Vehicle Class
FY 2022

Vehicle Class	Forest Lake Main	Independence Main	Ponkan Main	Mt. Plymouth Main	S.R. 429 Total
2-Axle	91.9%	92.2%	93.4%	89.0%	92.1%
3-Axle	2.1%	2.0%	2.4%	3.8%	2.1%
4-Axle	2.7%	2.0%	2.0%	3.2%	2.3%
5 or More Axles	3.3%	3.8%	2.2%	4.0%	3.4%
Total	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**

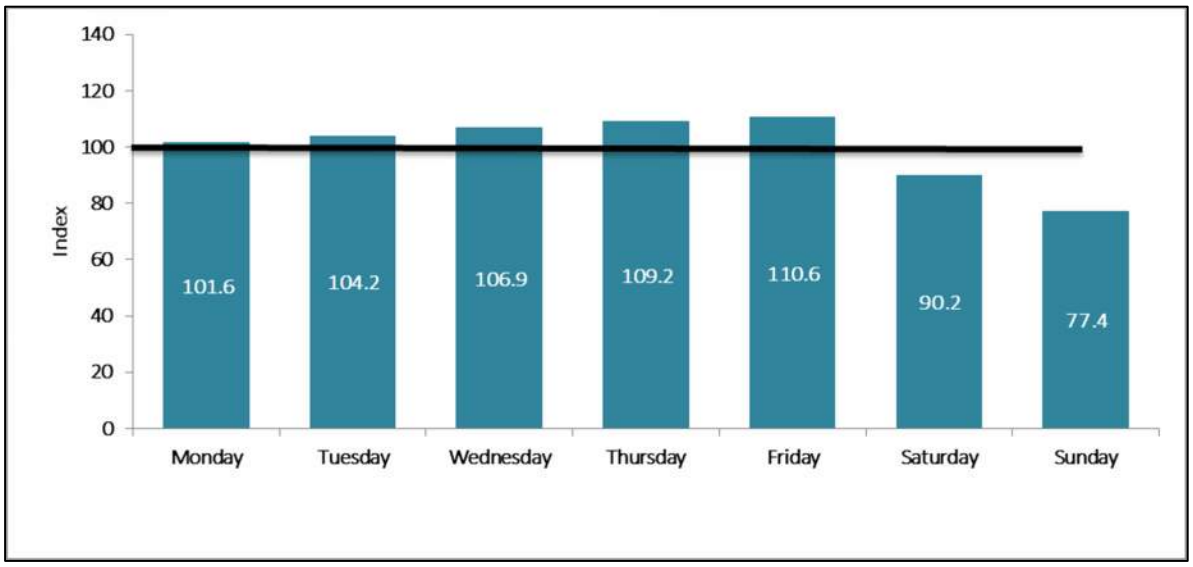
Source: Unaudited lane transaction data – May 2022

6.2.5 DAY-OF-WEEK TRANSACTION VARIATION

Figure 6-6 contains a comparison of transactions by day of week in FY 2022. These data are 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 indicates a day that has a 20 percent greater volume than the average. As was done in prior years, the data used for this analysis were for a typical week in May 2022. The data include transactions at mainline plazas only (no ramps).

FY 2022 weekday transactions on S.R. 429 fluctuated over the course of the five-day work week. Transactions were highest on Fridays, with an index value of 110.6 (10.6 percent higher than the average day), and volumes on Monday through Thursday ranged from index values of 101.6 to 109.2. Saturday and Sunday volumes were lower with index values of 90.2 and 77.4, respectively.

Figure 6-6
S.R. 429 Variation in Transactions, by Day of Week
FY 2022



Source: Unaudited lane transaction data – May 2022

6.2.6 HOURLY TRAFFIC DISTRIBUTION

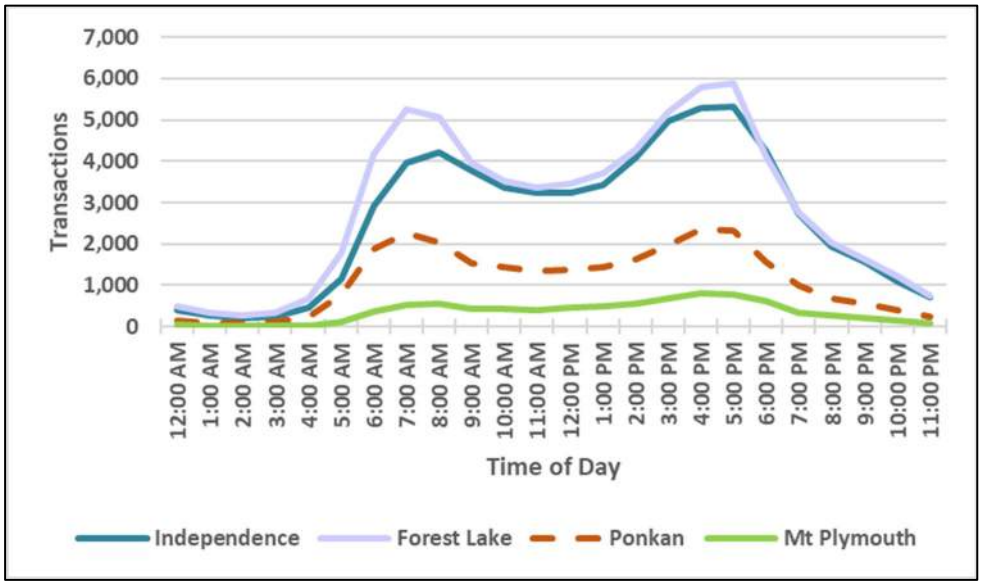
The hourly distribution of traffic volumes includes information on the usage characteristics of travel on the facility. The hourly distributions represent counts taken during a typical week at the mainline plazas in the month of May. The typical weekday hourly distribution is shown in Figure 6-7 and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

The four mainline 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 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 5,900 per hour beginning at 5:00 p.m. at the Forest Lake mainline plaza, 5,300 per hour beginning at 5:00 p.m. at the Independence

mainline plaza, 800 per hour beginning at 4:00 p.m. at the Mt. Plymouth mainline plaza. The Forest Lake and Independence mainline plazas serve a relatively higher portion of trips in peak hours.

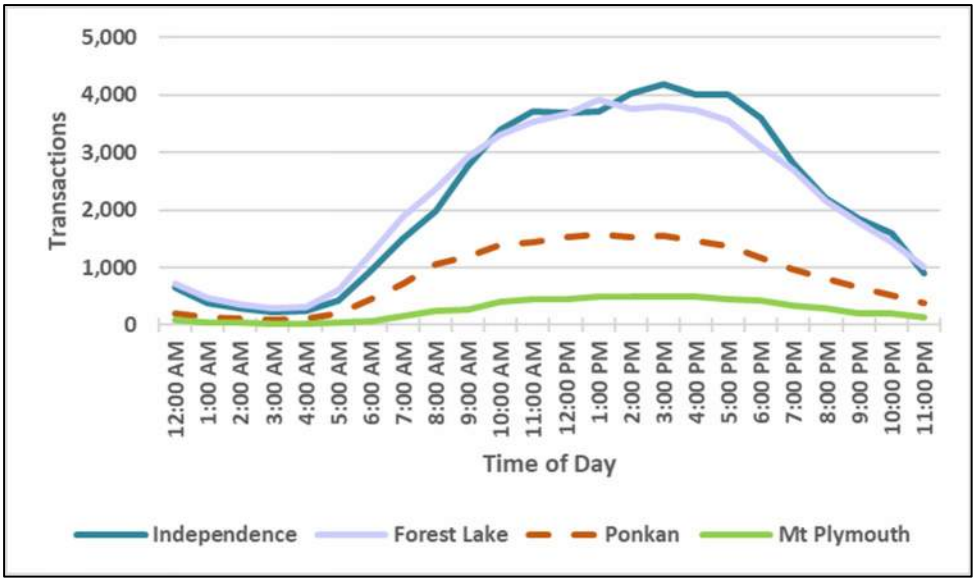
On weekends, the volumes are lower and the distributions are unimodal, with no clear morning or evening peak periods, indicating that many customers use the facility for non-work trip purposes.

Figure 6-7
S.R. 429 Hourly Two-Way Traffic Variation (Weekday)
FY 2022 (May)



Source: Unaudited lane traffic data – May 2022

Figure 6-8
S.R. 429 Hourly Two-Way Traffic Variation (Weekend)
FY 2022 (May)



Source: Unaudited lane traffic data – May 2022

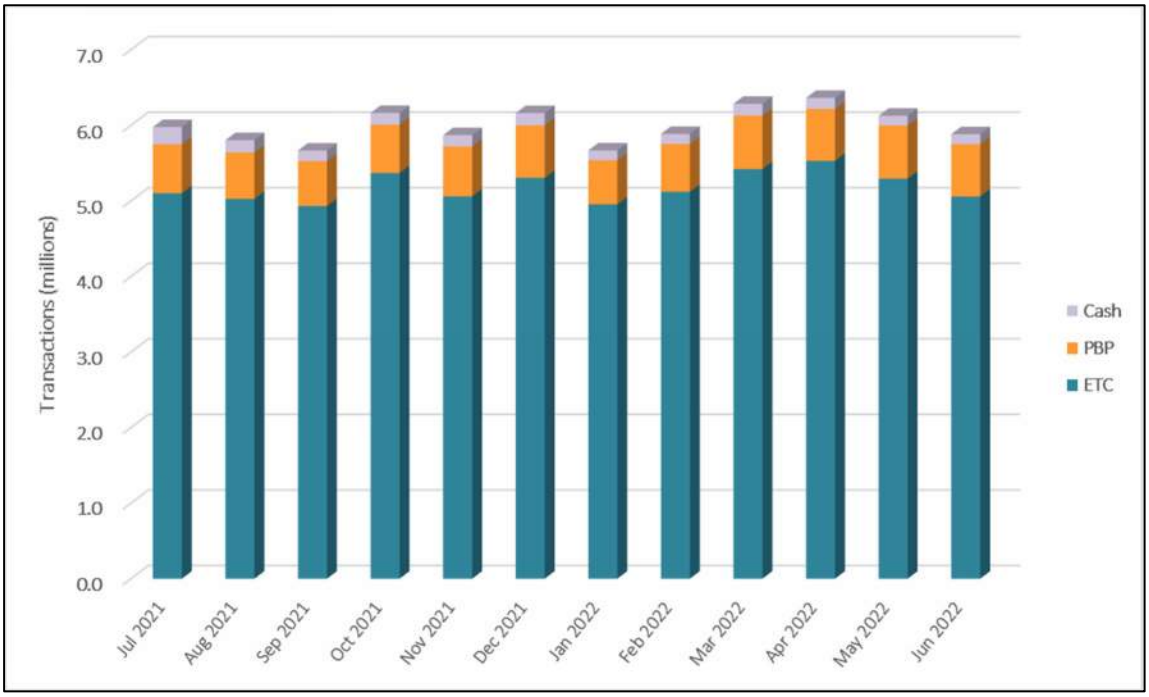
6.2.7 TRANSACTIONS AND REVENUE BY PAYMENT TYPE

The distributions of transactions and revenue by payment type by plaza group during FY 2022 are presented in Figure 6-9 and Figure 6-10. 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 a FY 2022 accrual rate of 52 percent of all unpaid in-lane transactions in July and August 2021, then dropped down to 50 percent for the remainder of the year. This means that the PBP transactions and revenue shown here are estimates of the levels that will eventually pay tolls through the PBP process. 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 6-9, ETC transactions on S.R. 429 ranged from a low of 4.9 million in September 2021 to a high of 5.5 million in April 2022. Overall, ETC accounted for 86.5 percent of total transactions on the facility. The PBP transactions ranged from a low of 0.6 million to a high of over 0.7 million. Overall, PBP accounted for 10.9 percent of total transactions on the facility. Cash transactions ranged from a low of approximately 0.1 million to a high of 0.2 million. Overall, cash accounted for 2.6 percent of total transactions on the facility.

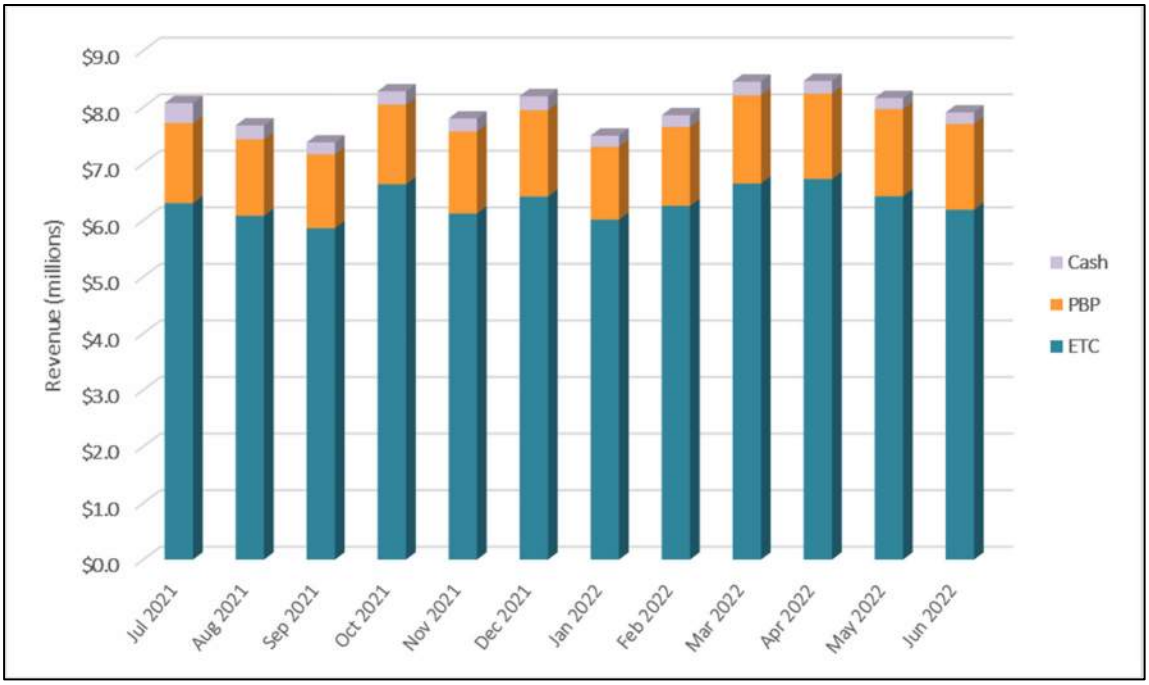
As shown in Figure 6-10, the share of toll revenues by payment type is comparable to the share of transactions, recognizing the differences in the toll paid by payment method. ETC revenue on S.R. 429 ranged from a low of $5.9 million in September 2021 to a high of $6.7 million in April 2022. Overall, ETC accounted for 79.0 percent of total revenue on the facility. The PBP revenue ranged from a low of $1.3 million to a high of $1.6 million. Overall, PBP accounted for 18.1 percent of total revenue on the facility. Cash revenue ranged from a low of $0.2 million to a high of nearly $0.4 million. Overall, cash accounted for 2.9 percent of total revenue on the facility.

Figure 6-9
S.R. 429 Percent of Transactions by Payment Type
FY 2022



Source: Unaudited transaction data provided by CFX

Figure 6-10
S.R. 429 Percent of Revenue by Payment Type
FY 2022



Source: Unaudited toll revenue data provided by CFX

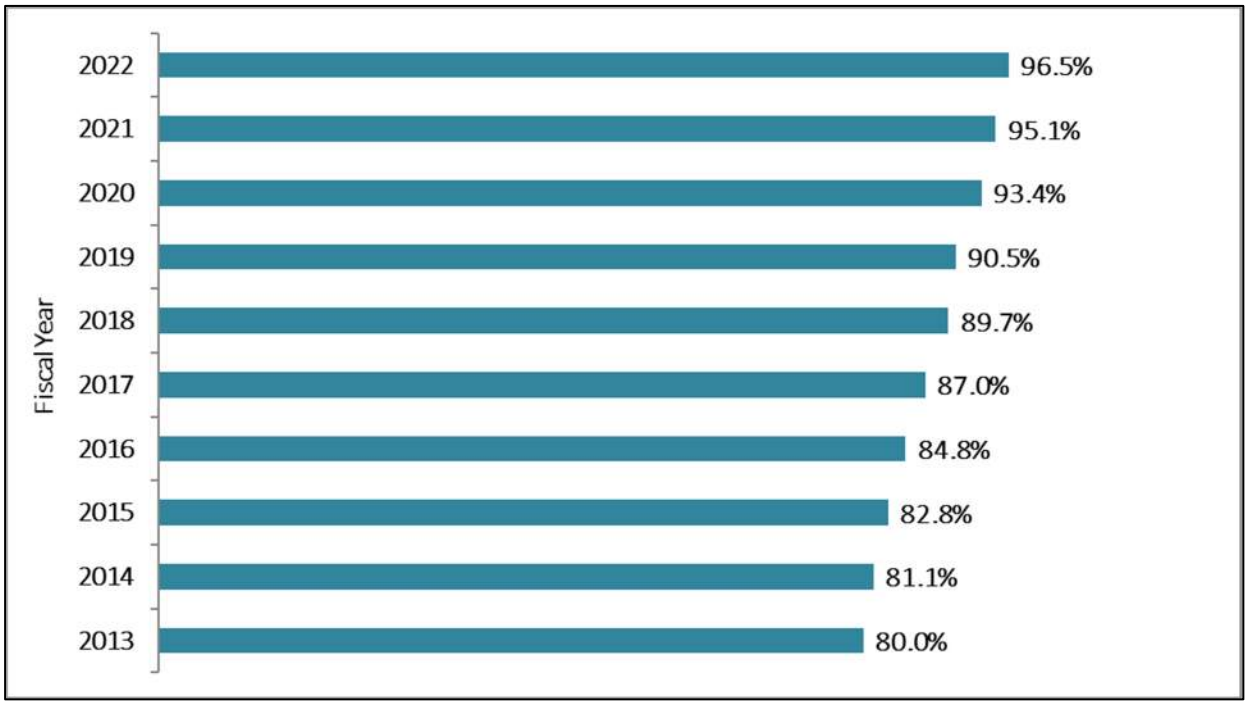
6.3 ETC Usage

The shares of paid in-lane revenues collected from ETC over the past ten fiscal years on S.R. 429 are shown in **Figure 6-11**. Cash payments are the other source of paid in-lane revenues. PBP revenues are not included in these results. Over this time, ETC revenues have steadily increased on the facility. In FY 2013, ETC revenues totaled 80.0 percent of total paid in-lane revenues. By the end of FY 2022, ETC revenues reached 96.5 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. Also, two plaza groups are AET and cash collection is not allowed.

Beginning on 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). The program was expanded to S.R. 429 at the Forest Lake mainline plaza to assist customers with the opening of the Wekiva Parkway as an AET facility. Due to the success of the Reload program, the CFX Board approved the expansion of the Reload Lane capabilities to all staffed, mainline toll plaza lanes. This conversion is expected to be completed in FY 2023.

In June 2021, CFX also launched the Visitor Toll Pass program, which is a free temporary toll pass for rental car customers traveling through the Orlando International Airport. With the pass, rental car customers pay the ETC rates on Florida toll roads with no extra or hidden fees.

Figure 6-11
S.R. 429 Percent of Paid In-Lane Revenue from Electronic Toll Collection
FY 2013 – FY 2022



Source: CFX Statistical Report June 2022

6.4 Forecasted Transactions and Toll Revenues

The forecasts of T&R are based on several assumptions about the future, including assumptions about future toll rates. Based on the CFX "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 with a floor of 1.5 percent. At the time of preparing the T&R estimates and this report, CDM Smith learned that the net change in CPI during CY 2022 was 8.577 percent. At their June 2023 meeting, the CFX Board decided to forego the net change in CPI and implement the policy floor of 1.5 percent adjustment for FY 2024. Based on assurances from CFX, CDM Smith used this value to index toll rates for FY 2024. 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 6-5. 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. 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 Connector, between S.R. 429 and U.S. 27. Planned improvements to the local street system including Plant Street, Plymouth-Sorrento Road, and Avalon Road, serve as feeder roads to S.R. 429 and positively impact T&R in the long-term forecasts.

Transaction and toll revenue forecasts for S.R. 429 are summarized in Table 6-6 and Table 6-7. The tables are divided into paid in-lane transactions and revenue and PBP transactions and revenue. The paid in-lane transactions and revenue include ETC and cash collection. PBP is only reported as a total on the facility.

The paid in-lane transactions on S.R. 429 are expected to grow by 2.7 percent per year through FY 2032 and then lower rates through the end of the forecast period because of the impact of continued toll rate adjustments. PBP transactions are forecasted to increase an average of 3.3 percent per year through FY 2032 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 71.9 million in FY 2022 to 129.2 million in FY 2052. Because FY 2021 T&R was still in recovery from the COVID-19 pandemic, higher growth rates are anticipated in the short-term forecasts with growth rates decreasing over the forecast period. The paid in-lane revenues on S.R. 429 are projected to increase over the forecast period, from the FY 2022 actual of $78.5 million to $193.9 million in FY 2052. PBP revenues are projected to increase from $17.3 million in FY 2022 to $43.8 million in FY 2052. Total revenues are projected to increase over the forecast period from the actual of $95.8 million in FY 2022 to $237.7 million in FY 2052. Total transactions and revenues are forecasted to increase by an average of 1.8 and 2.8 percent per year from FY 2032 to FY 2042, and 1.4 and 2.3 percent per year from FY 2042 to FY 2052, respectively.

Table 6-5
S.R. 429 - Key Transportation Improvements

Facility	From	To	Year	Jurisdiction	Improvement
Interstate 4	SR 434	Kirkman Road	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 Parkway	Mount Plymouth Road	Interstate 4	2025	FDOT	New 4 lane expressway
Florida's Turnpike	Minneola	Orange/Lake County Line	2025	FDOT	Widen to 8 lanes
Florida's Turnpike	US 27	Minneola	2025	FDOT	Widen to 8 lanes
Poinciana Parkway (SR 538)	Cypress Parkway	Kinney Harmon Road	2025	CFX	Widen to 4-lanes
Poinciana Parkway Ext. (SR 538)	Kinney Harmon Road	Osceola Polk Line Rd (CR 532)	2025	CFX	New 4-lane Expressway
Lake Orange Connector (SR 516)	US 27	SR 429	2025	CFX	New 4 lane expressway
Osceola Polk Line Rd (CR 532)	US 17/92	Lake Wilson Road	2025	Osceola Co/CFX	Widen to 4-lanes
SR 429	Schofield Road	CR 535	2035	CFX	Widen to 6-Lanes
Interstate 4	SR 429	Osceola Polk Line Rd (CR 532)	2035	FDOT	Auxiliary Lanes
Old Lake Wilson Road	Osceola Polk Line Rd (CR 532)	Sinclair Road	2035	Osceola County	Widen to 4-lanes
Ocoee-Apopka Road	Silver Star Road	Clarcona-Ocoee Road	2035	Orange County	Widen to 4 Lanes
SR 414 Expressway Extension	US 441	SR 434/Forest City Road	2035	FDOT/CFX	New 4-lane expressway
Plant Street (SR 438)	9th Street	West Crown Point Rd	2045	FDOT	Widen to 4-lanes
Plymouth Sorrento Road	US 441	Orange County Line	2045	Orange County	Widen to 6-lanes
Ponkan Road	Plymouth Sorrento Road	CR 437	2045	Orange County	Widen to 6-lanes
Sadler Road	US 441	Mt Plymouth Road	2045	Orange County	Widen to 6-lanes
US 441 (SR 500)	SR 44	N of SR 46	2035	FDOT	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
Round Lake Rd Ext. (A)	Wolf Branch Rd	SR 44	2045	Lake County	Widen to 4-lanes
CR 437 Realignment	Oak Tree Dr	SR 46	2045	Lake County	Widen to 2-lanes
Avalon Road (CR 545)	New Independence Pkwy	Tilden Road	2045	Orange County	Widen to 4 Lanes
Avalon Road (CR 545)	Porter Road	New Independence Pkwy	2045	Orange County	Widen to 4 Lanes
Avalon Road (CR 545)	Hartzog Road	Seidel Road	2045	Orange County	Widen to 4 Lanes
Avalon Road (CR 545)	US 192	Hartzog Road	2045	Orange County	Widen to 6 Lanes
New Independence Pkwy	Lake County Line	SR 429	2045	Orange County	New/Widen 4 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 445 Extension	CFX Connector	Hartwood Mash	2045	Lake County	Widen to 4-lanes
CR 33	SR 50	Simon Brown Rd	2045	Lake County	Widen to 4-lanes
SR 50	Hernando/Sumter County Line	SR 33/CR 33	2045	FDOT	Widen to 4-lanes.
Schofield Rd	US 27	SR 429	2045	Lake County	Widen to 4 lanes

Table 6-6
S.R. 429 Plaza Groups – Transaction Projections (Millions)
FY 2023 – FY 2052

Fiscal Year		Forest Lake Main	Independence Main	Ponkan Main	Mount Plymouth Main	Paid In-Lane	PBP	Total	Percent Annual Change
2012	Actual	13.6	12.8			26.4	0.4	26.8	-
2013[A]	Actual	14.2	13.0			27.2	0.5	27.7	3.4%
2014	Actual	16.1	14.6			30.7	0.6	31.3	13.0%
2015	Actual	18.3	16.9			35.2	0.9	36.1	15.4%
2016	Actual	21.4	19.8			41.2	1.3	42.5	17.6%
2017[B]	Actual	23.4	22.1			45.5	1.6	47.1	10.9%
2018[C,D]	Actual	24.4	23.9	3.0	0.4	51.7	2.0	53.7	14.0%
2019*[E]	Actual	25.7	25.5	4.9	1.5	57.6	5.0	62.6	16.6%
2020*[F]	Actual	23.8	22.7	4.8	1.4	52.7	6.0	58.7	-6.2%
2021*[G]	Actual	24.5	22.8	5.4	1.4	54.1	6.6	60.7	3.4%
2022*[H]	Actual	27.6	27.8	6.8	1.8	64.0	7.9	71.9	18.5%
2023[I]	Forecast	25.0	27.4	8.0	3.2	63.6	8.8	72.4	0.7%
2024	Forecast	27.5	29.1	8.9	4.3	69.8	9.3	79.1	9.3%
2025	Forecast	28.2	29.4	9.0	4.8	71.4	9.5	80.9	2.3%
2026	Forecast	28.7	30.0	9.3	5.0	73.0	9.8	82.8	2.3%
2027	Forecast	29.1	30.7	9.6	5.3	74.7	10.1	84.8	2.4%
2028	Forecast	29.6	31.4	10.0	5.5	76.5	10.1	86.6	2.1%
2029	Forecast	30.1	32.1	10.3	5.8	78.3	10.4	88.7	2.4%
2030	Forecast	30.6	32.8	10.6	6.0	80.0	10.5	90.5	2.0%
2031	Forecast	31.0	33.5	11.0	6.3	81.8	10.6	92.4	2.1%
2032	Forecast	31.5	34.2	11.3	6.5	83.5	10.9	94.4	2.2%
2033	Forecast	31.9	34.8	11.7	6.7	85.1	11.1	96.2	1.9%
2034	Forecast	32.4	35.5	12.0	7.0	86.9	11.4	98.3	2.2%
2035	Forecast	32.8	36.1	12.3	7.2	88.4	11.4	99.8	1.5%
2036	Forecast	33.3	36.8	12.7	7.4	90.2	11.7	101.9	2.1%
2037	Forecast	33.7	37.4	13.0	7.6	91.7	11.8	103.5	1.6%
2038	Forecast	34.2	38.0	13.4	7.8	93.4	12.0	105.4	1.8%
2039	Forecast	34.6	38.7	13.8	8.1	95.2	12.2	107.4	1.9%
2040	Forecast	35.0	39.3	14.1	8.3	96.7	12.3	109.0	1.5%
2041	Forecast	35.5	39.8	14.5	8.5	98.3	12.5	110.8	1.7%
2042	Forecast	35.9	40.4	14.9	8.7	99.9	12.7	112.6	1.6%
2043	Forecast	36.3	41.0	15.3	9.0	101.6	12.8	114.4	1.6%
2044	Forecast	36.8	41.5	15.6	9.2	103.1	13.0	116.1	1.5%
2045	Forecast	37.2	42.0	16.0	9.4	104.6	13.1	117.7	1.4%
2046	Forecast	37.6	42.5	16.4	9.7	106.2	13.2	119.4	1.4%
2047	Forecast	38.0	43.0	16.8	9.9	107.7	13.5	121.2	1.5%
2048	Forecast	38.4	43.5	17.2	10.2	109.3	13.5	122.8	1.3%
2049	Forecast	38.8	43.9	17.6	10.4	110.7	13.7	124.4	1.3%
2050	Forecast	39.2	44.4	18.0	10.6	112.2	13.8	126.0	1.3%
2051	Forecast	39.6	44.8	18.4	10.9	113.7	14.0	127.7	1.3%
2052	Forecast	40.0	45.2	18.8	11.1	115.1	14.1	129.2	1.2%

Fiscal Year	Compound Annual Average Growth Rate (CAAGR)						
2012 - 2022	7.3%	8.1%			9.3%	34.8%	10.4%
2022 - 2032	1.3%	2.1%	5.2%	13.7%	2.7%	3.3%	2.8%
2032 - 2042	1.3%	1.7%	2.8%	3.0%	1.8%	1.5%	1.8%
2042 - 2052	1.1%	1.1%	2.4%	2.5%	1.4%	1.1%	1.4%

*Indicates systemwide toll rate increase according to Customer First Toll Policy

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. Continued effects of COVID-19 pandemic.

H - Completion of I-4 Ultimate project.

I - Includes impacts from Hurricane Ian toll suspensions in September 2022.

Table 6-7
S.R. 429 Plaza Groups – Toll Revenue Projections (Millions)
FY 2023 – FY 2052

Fiscal Year		Forest Lake Main	Independence Main	Ponkan Main	Mount Plymouth Main	Paid In-Lane	PBP	Total	Percent Annual Change
2012	Actual	$14.2	$10.7			$24.9	$0.3	$25.2	-
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]		$31.7	$27.1	$4.9	$1.2	$64.9	$14.3	$79.2	11.4%
2022*[H]		$36.5	$34.2	$6.2	$1.6	$78.5	$17.3	$95.8	21.0%
2023[I]	Forecast	$34.2	$35.2	$7.7	$3.0	$80.1	$20.1	$100.2	4.6%
2024		$37.9	$37.8	$8.6	$4.0	$88.3	$21.4	$109.7	9.5%
2025		$39.4	$38.7	$8.8	$4.6	$91.5	$22.4	$113.9	3.8%
2026		$40.6	$40.0	$9.3	$4.9	$94.8	$23.3	$118.1	3.7%
2027		$41.8	$41.5	$9.7	$5.2	$98.2	$24.0	$122.2	3.5%
2028		$43.0	$42.9	$10.2	$5.5	$101.6	$24.7	$126.3	3.4%
2029		$44.2	$44.4	$10.6	$5.8	$105.0	$25.5	$130.5	3.3%
2030		$45.5	$45.9	$11.1	$6.1	$108.6	$26.2	$134.8	3.3%
2031		$46.7	$47.5	$11.6	$6.4	$112.2	$27.0	$139.2	3.3%
2032		$48.0	$49.0	$12.1	$6.8	$115.9	$27.8	$143.7	3.2%
2033		$49.2	$50.6	$12.6	$7.1	$119.5	$28.6	$148.1	3.1%
2034		$50.5	$52.1	$13.2	$7.4	$123.2	$29.4	$152.6	3.0%
2035		$51.8	$53.7	$13.7	$7.7	$126.9	$30.2	$157.1	2.9%
2036		$53.1	$55.3	$14.3	$8.0	$130.7	$30.9	$161.6	2.9%
2037		$54.4	$56.9	$14.8	$8.4	$134.5	$31.8	$166.3	2.9%
2038		$55.7	$58.5	$15.4	$8.7	$138.3	$32.6	$170.9	2.8%
2039		$57.1	$60.1	$16.0	$9.0	$142.2	$33.4	$175.6	2.8%
2040		$58.4	$61.7	$16.6	$9.4	$146.1	$34.2	$180.3	2.7%
2041		$59.8	$63.3	$17.2	$9.8	$150.1	$34.9	$185.0	2.6%
2042		$61.1	$64.9	$17.9	$10.1	$154.0	$35.8	$189.8	2.6%
2043		$62.5	$66.4	$18.5	$10.5	$157.9	$36.7	$194.6	2.5%
2044		$63.9	$68.0	$19.2	$10.9	$162.0	$37.4	$199.4	2.5%
2045		$65.3	$69.6	$19.8	$11.3	$166.0	$38.3	$204.3	2.5%
2046		$66.7	$71.1	$20.5	$11.7	$170.0	$39.0	$209.0	2.3%
2047		$68.1	$72.6	$21.2	$12.1	$174.0	$39.8	$213.8	2.3%
2048		$69.5	$74.1	$21.9	$12.5	$178.0	$40.7	$218.7	2.3%
2049		$70.8	$75.6	$22.6	$12.9	$181.9	$41.5	$223.4	2.1%
2050		$72.2	$77.0	$23.4	$13.3	$185.9	$42.2	$228.1	2.1%
2051		$73.6	$78.4	$24.1	$13.8	$189.9	$43.0	$232.9	2.1%
2052		$75.0	$79.8	$24.9	$14.2	$193.9	$43.8	$237.7	2.1%

Fiscal Year	Compound Annual Average Growth Rate (CAAGR)						
2012 - 2022	9.9%	12.3%			12.2%	50.0%	14.3%
2022 - 2032	2.8%	3.7%	6.9%	15.6%	4.0%	4.9%	4.1%
2032 - 2042	2.4%	2.9%	4.0%	4.0%	2.9%	2.6%	2.8%
2042 - 2052	2.1%	2.1%	3.4%	3.5%	2.3%	2.0%	2.3%

*Indicates systemwide toll rate increase according to Customer First Toll Policy

Notes:

Actual revenue 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. Continued effects of COVID-19 pandemic.

H - Completion of I-4 Ultimate project.

I - Includes impacts from Hurricane Ian toll suspensions in September 2022.

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CHAPTER 7

S.R. 414

| JOHN LAND APOPKA EXPRESSWAY

S.R. 414 (JOHN LAND APOPKA EXPRESSWAY)

7.1 Facility Description

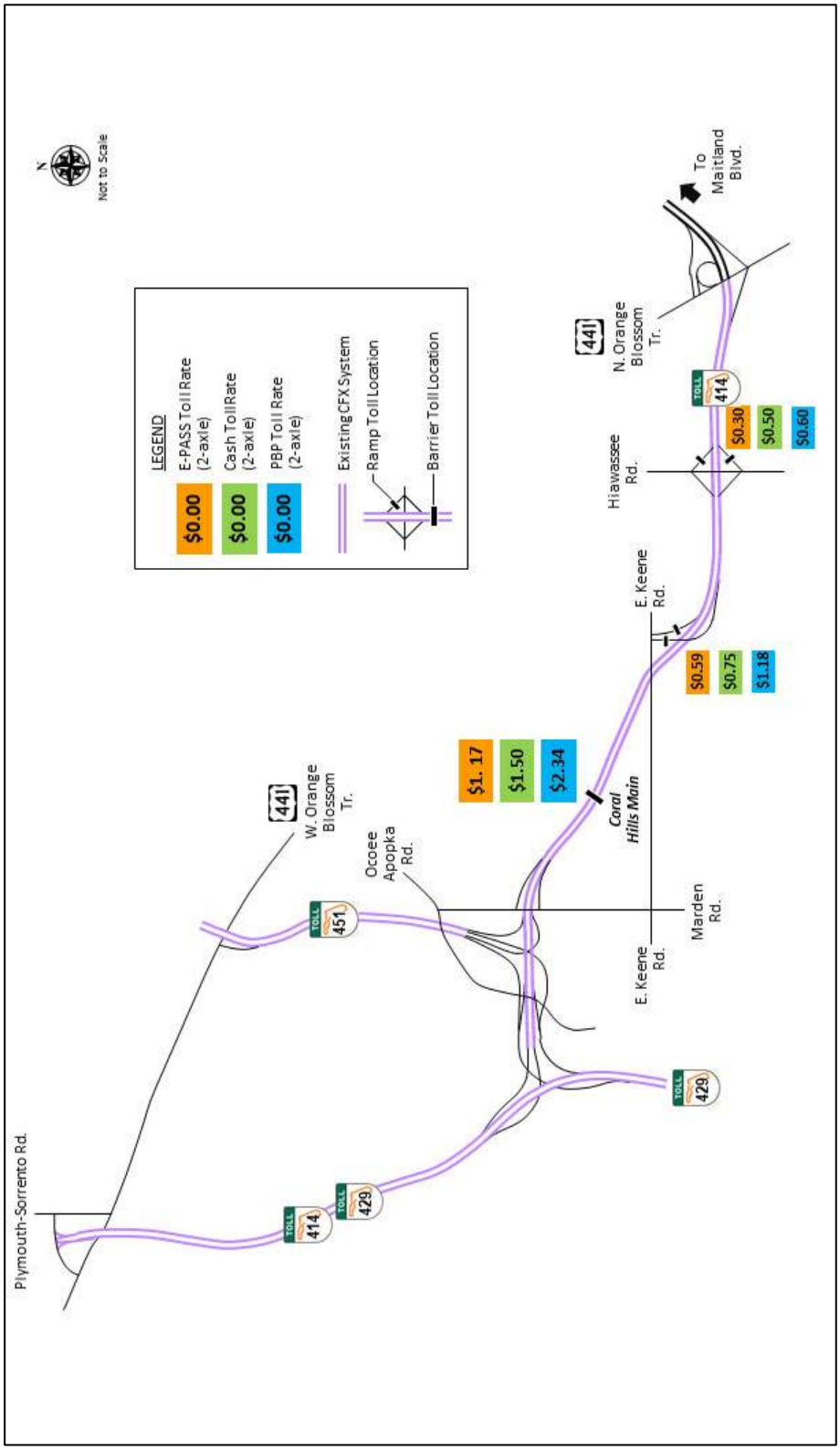
S.R. 414, also known as the John Land Apopka Expressway, is a 9-mile expressway that extends east from S.R. 429 to Maitland Boulevard east of U.S. 441 (N. Orange Blossom Trail). Three of these miles are part of a dual route with S.R. 429. This expressway provides improved access between S.R. 429, I-4, and employment centers such as Maitland Center office park. When constructed in 2019, S.R. 414 provided congestion relief 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. Tolling on 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 2022 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 to accommodate the new Wekiva Parkway. This interchange, completed in October 2012, improved 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 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 allowed 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 allowed 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 FY 2022 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 transactions and revenues by paid in-lane and PBP.

7.2.1 ANNUAL PAID IN-LANE TRANSACTION AND REVENUE TRENDS

The annual paid in-lane transactions for the Coral Hills Main plaza group through FY 2022 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 2022 Comprehensive Annual Financial Report (CAFR) and other information in this report.

The facility has been open for 13 years with the first full year of operation in FY 2010. Toll rates were not increased at the Coral Hills Main plaza in FY 2009 since the road was not fully opened until after the toll adjustment went into effect, however tolls did increase during the FY 2013, FY 2019, FY 2020, 2021 and FY 2022 Systemwide toll rate adjustment.

After opening in FY 2012, FY 2013 began a four-year period of extraordinary growth after the Great Recession. This growth is likely the result of facility ramp-up and local development. From FY 2012 to FY 2016, S.R. 414 experienced double-digit annual growth in both paid in-lane transactions and revenues. Over the four-year period, paid in-lane transactions increased by over 65 percent, while revenues more than doubled.

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. The negative impacts of these storms were largely offset by the significant growth experienced on the S.R. 414 during this period.

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 transactions and revenues in FY 2019 can be attributed in part to the increase in customers utilizing the PBP program and the shift of SunPass® transaction processing to the state's CCSS. It should be noted that S.R. 429 PBP transactions nearly doubled in FY 2019, from 0.7 million to 1.3 million.

Table 7-1
S.R. 414 Plaza Group – Historical Paid In-Lane Transactions and Revenue
FY 2012 – FY 2022

Fiscal Year	Coral Hills Main	
	TRANSACTIONS (millions)	PERCENT CHANGE
2012	7.3	
2013 [A]	8.3	13.1%
2014	9.5	14.5%
2015	10.6	11.6%
2016	12.0	13.2%
2017 [B]	12.8	6.7%
2018 [C]	13.4	4.7%
2019 [*]	13.9	3.7%
2020 [*,D]	13.1	-5.8%
2021 [*,E]	13.4	2.3%
2022*	15.2	13.4%
	TOLL REVENUE (millions)	PERCENT CHANGE
2012	$5.7	
2013 [A]	$7.7	35.4%
2014	$9.1	18.2%
2015	$10.4	14.3%
2016	$12.0	15.4%
2017 [B]	$13.0	8.3%
2018 [C]	$13.8	6.2%
2019 [*]	$14.6	5.8%
2020 [*,D]	$14.1	-3.4%
2021 [*,E]	$14.8	1.4%
2022*	$17.3	16.9%

*Indicates systemwide toll rate increase according to Customer First Toll Policy

Notes:

A - 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.

B - Effects from Hurricane Matthew in October 2016. Marden Rd. interchange opened in June 2017.

C - Effects from Hurricane Irma in September 2017.

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

E - Continued effects of COVID-19 pandemic.

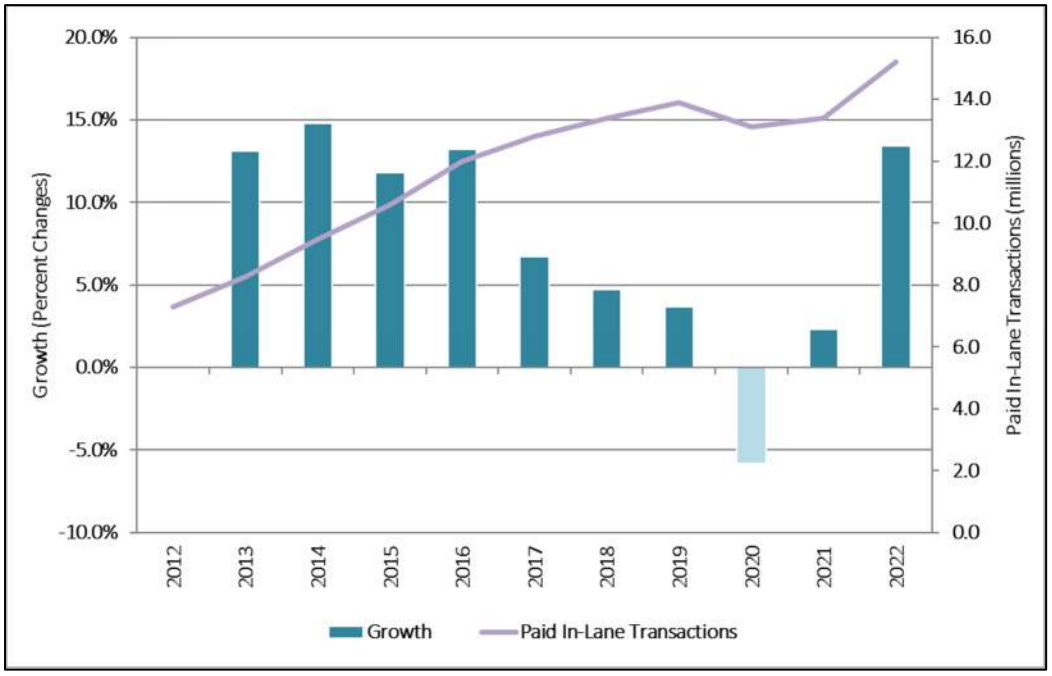
FY 2020 total paid in-lane transactions on S.R. 414 decreased by 0.8 million, or 5.8 percent, compared to FY 2019. Paid in-lane revenues experienced a decline of 3.4 percent during the same period. FY 2020 transactions and revenues were negatively impacted by the effects of the COVID-19 pandemic beginning in March 2020. Because the fiscal year begins in July, FY 2020 only included four months of the impacts of the COVID-19 pandemic. Thus, although April 2020 (FY 2020) contained the deepest impacts of the COVID-19 pandemic, additional impacts also occurred during the early months of FY 2021, which included a full year of travel reductions and the initial recovery. 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 transactions and revenues in

FY 2020 can also be attributed to an increase in customers utilizing the PBP program. September 2019 transactions and revenues were also negatively impacted by toll suspensions during Hurricane Dorian. Tolls were suspended on CFX toll facilities beginning on September 1, 2019 through September 5, 2019 resulting in a transaction loss of approximately 0.2 million and a toll revenue loss of $0.2 million on S.R. 414.

FY 2021 paid in-lane transactions increased by 0.3 million, or 2.3 percent, compared to FY 2020. Paid in-lane revenues experienced an increase of 5.0 percent during the same period. FY 2021 transactions and revenues were negatively impacted by the on-going recovery from the COVID-19 pandemic and the FY 2021 toll rate adjustment.

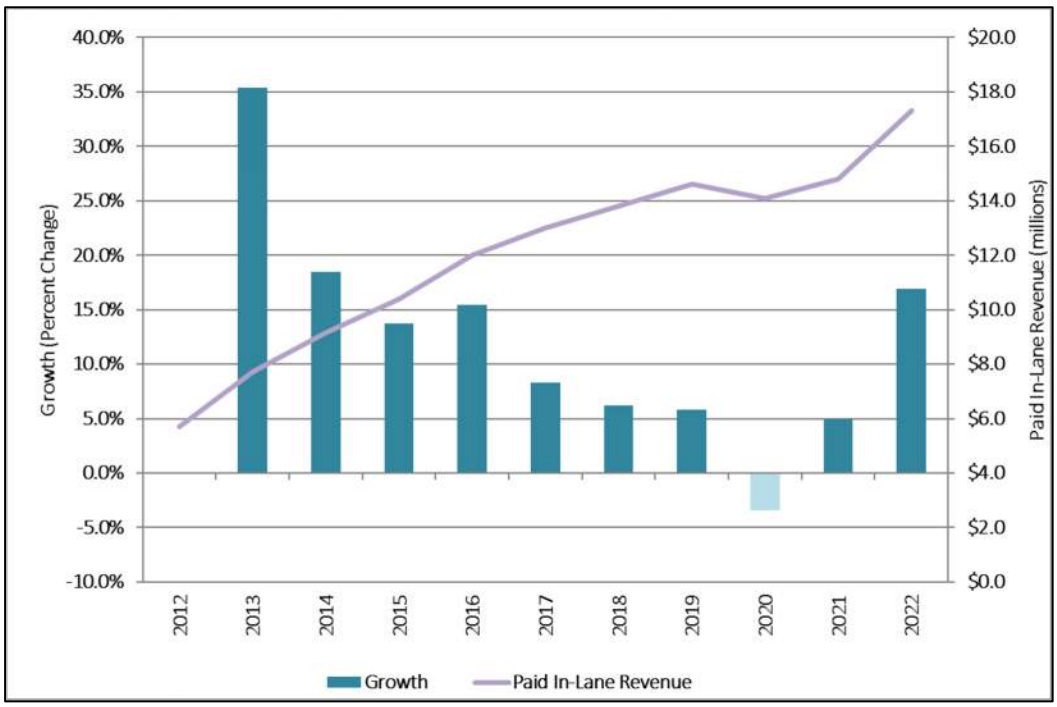
FY 2022 paid in-lane transactions increased by 1.8 million, or 13.4 percent, compared to FY 2021. Paid in-lane revenues experienced an increase of 16.9 percent during the same period. The increases in both transactions and revenue reflects the general recovery from the negative impacts of the COVID-19 pandemic. The FY 2022 toll rate adjustment was another factor in the increase in revenue.

Figure 7-2
S.R. 414 Historical Paid In-Lane Transactions and Annual Growth
FY 2012 – FY 2022



Source: Monthly unaudited data provided by CFX

Figure 7-3
S.R. 414 Historical Paid In-Lane Revenue and Annual Growth
FY 2012 – FY 2022



Source: Monthly unaudited data provided by CFX

7.2.2 ANNUAL PBP TRANSACTION AND REVENUE TRENDS

A history of annual PBP transactions and toll revenues on S.R. 414 from FY 2012 to FY 2022 is presented in Table 3-2. PBP transactions and toll revenues are recorded by toll location and accrued monthly by plaza group, however Table 7-2 shows the annual totals for S.R. 414 as reported at year end.

PBP transactions have increased from 0.1 million in FY 2012 to 2.0 million in FY 2022, while PBP revenues have increased from $0.1 million to $3.8 million over the same period. This increase may have been supported, in part, by the switch of SunPass® processing to CCSS in FY 2019, as previously noted. In FY 2022, PBP transactions increased 15.3 percent and PBP revenues increased 15.2 percent over FY 2021. During the early part of the COVID-19 pandemic, cash toll collection was suspended for several months. For this reason, PBP transactions and revenue increased year-over-year in FY 2020 and in FY 2021. The significant increase in PBP revenues in FY 2021 can also be attributed to the new PBP toll rate adopted by the CFX Board that went into effect on July 1, 2020 (FY 2021). At that time, the PBP toll rate at all toll locations was increased to twice the ETC toll rate, reflecting the cost to collect PBP tolls. Because of the new PBP toll rate, it was anticipated that going forward a portion of customers paying via PBP will switch to ETC to avoid the higher toll rate. However, recent trends do not reflect this result. This may be due to customer travel frequency and/or the convenience of PBP compared to establishing a transponder account. Overall, the recent increase in customer preference for PBP has contributed to a smaller share of paid in-lane transactions and revenue.

Table 7-2
S.R. 414 – Historical PBP Transactions and Revenue
FY 2012 – FY 2022

Fiscal Year	Transactions (millions)	Percent Change	Toll Revenues (millions)	Percent Change
2012	0.1		$0.1	
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%
2021	1.7	6.2%	$3.3	73.7%
2022	2.0	15.3%	$3.8	15.2%

Source: Monthly unaudited data provided by CFX

7.2.3 MONTHLY PAID IN-LANE TRANSACTION SEASONAL VARIATION

In Table 7-3, monthly paid in-lane transactions are normalized to the average number of paid in-lane transactions per day. Considering 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 pattern of seasonal usage changes slightly from year to year, based on the number of weekdays in each month.

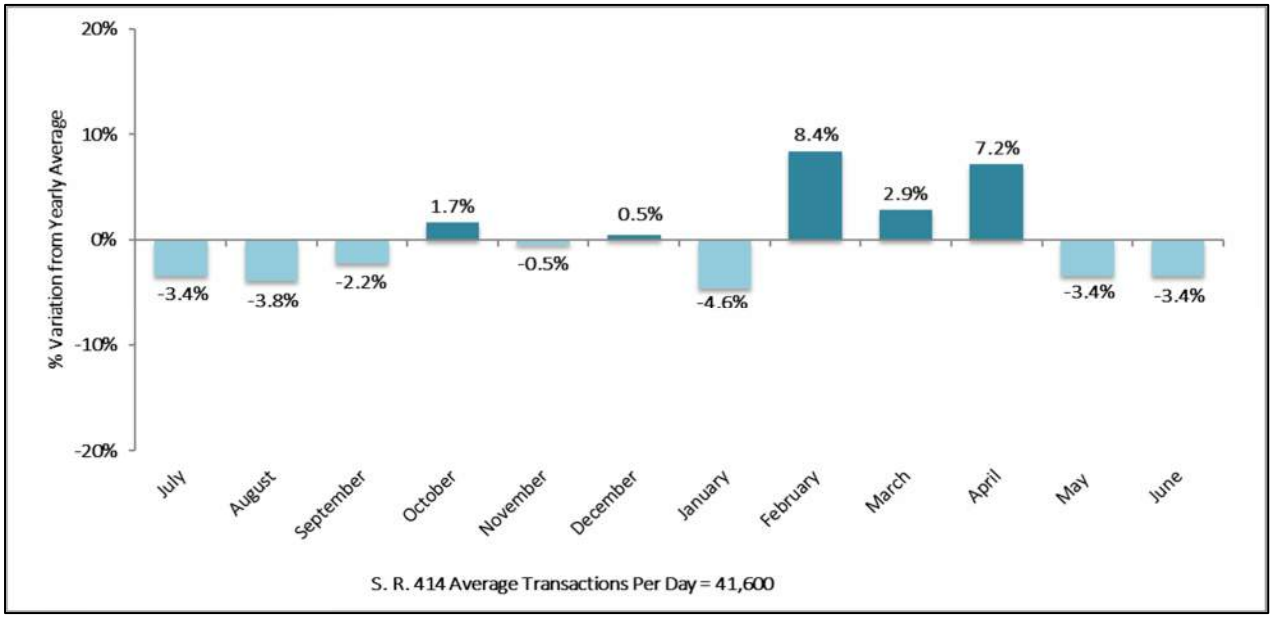
Average number of paid in-lane transactions per day in FY 2022 on S.R. 414 ranged from a low of 39,700 in January 2022 to a high of 45,100 in February 2022. These data are presented in a graphical format in **Figure 7-5**. The paid in-lane transactions for each month appear as a percentage of the average for the fiscal year. February paid in-lane transactions were 8.4 percent above average and January paid in-lane transactions were 4.6 percent below average for the facility. The decline in January was due in part to a surge in COVID infections from the Omicron variant after the 2021 holiday season.

Table 7-3
S.R. 414 – Monthly Seasonal Variation in Paid In-Lane Transactions
FY 2022

Month	Number of Days in Month	Paid In-Lane Transactions	Average Transactions/Day	Seasonal Factor
July	31	1,247,501	40,200	0.966
August	31	1,240,761	40,000	0.962
September	30	1,222,071	40,700	0.978
October	31	1,312,840	42,300	1.017
November	30	1,243,162	41,400	0.995
December	31	1,295,143	41,800	1.005
January	31	1,231,881	39,700	0.954
February	28	1,264,104	45,100	1.084
March	31	1,325,791	42,800	1.029
April	30	1,337,445	44,600	1.072
May	31	1,245,027	40,200	0.966
June	30	1,206,721	40,200	0.966
Average		*1,264,371*	*41,600*	*1.000*
Total Year	365	15,172,447		

Source: Monthly unaudited data provided by CFX

Figure 7-4
S.R. 414 Variation in Paid In-Lane Transactions Per Day, by Month
FY 2022



Source: Monthly unaudited data provided by CFX

7.2.4 TRANSACTIONS BY VEHICLE CLASS

The distribution of mainline transactions at the Coral Hills main plaza group by vehicle class (number of axles) for FY 2022 is shown in **Table 7-4**. Overall, 93.3 percent of all mainline transactions on S.R. 414 were made by 2-axle vehicles, with minor variation among the two plaza groups. The next most frequent vehicle class was the 3-axle classification, which accounted for 2.5 percent of all mainline transactions on the facility. Five or more-axle vehicles accounted for 2.4 percent. Four-axle vehicles represented the smallest category with only 1.8 percent of mainline transactions.

Table 7-4
S.R. 414 Percent of Total Transactions by Vehicle Class
FY 2022

Vehicle Class	Coral Hills Main	S.R. 414 Total
2-Axle	93.3%	93.3%
3-Axle	2.5%	2.5%
4-Axle	1.8%	1.8%
5 or More Axles	2.4%	2.4%
Total	**100.0%**	**100.0%**

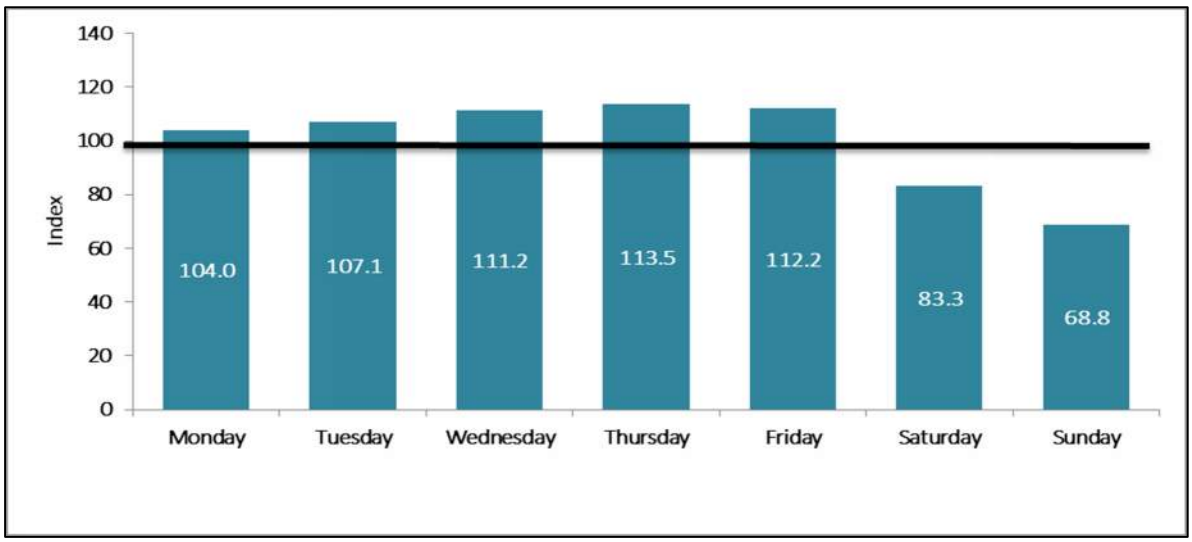
Source: Unaudited lane transaction data – May 2022

7.2.5 DAY-OF-WEEK TRANSACTION VARIATION

Figure 7-5 contains a comparison of transactions by day of week for FY 2022. These data are 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 indicates a day that has a 20 percent greater volume than the average. As was done in prior years, the data used for this analysis were for a typical week in May 2022. The data include transactions at mainline plazas only (no ramps).

As shown, weekday transactions on S.R. 414 increase over the course of the week. FY 2022 transactions were highest on Thursdays, with an index value of 113.5 (13.5 percent higher than the average day), volumes on Fridays had an index value of 112.2, and volumes on Monday through Wednesday ranged from index values of 104.0 to 111.2. Transactions decline significantly on Saturdays and Sundays, which have index values of 83.3 and 68.8, or 16.7 and 31.2 percent lower than the average day also consistent with prior results. 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 2022



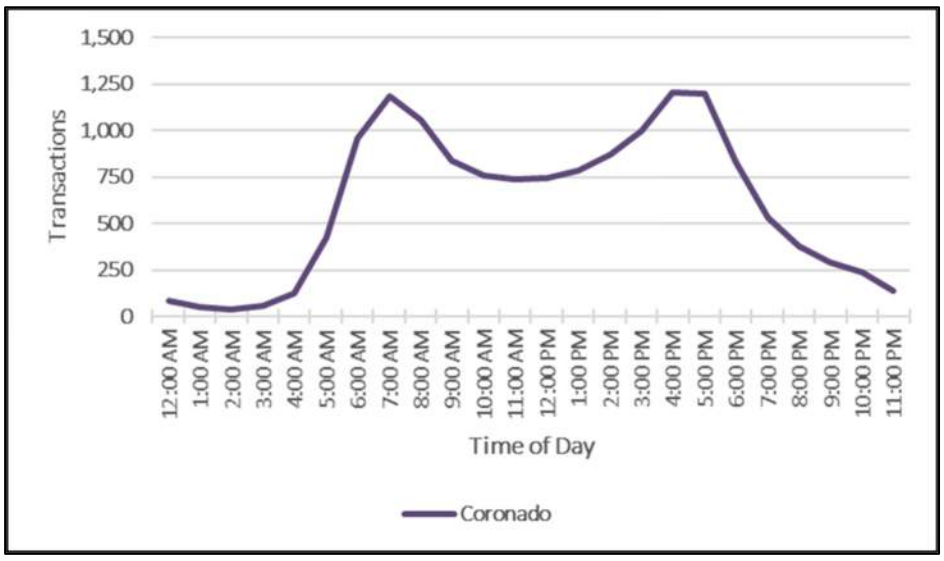
Source: Unaudited lane transaction data – May 2022

7.2.6 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 plaza in the month of May. The typical weekday hourly distribution is shown in Figure 7-6 and the weekend hourly distribution is shown in Figure 7-7. The figures contain the sum of traffic volumes in both directions.

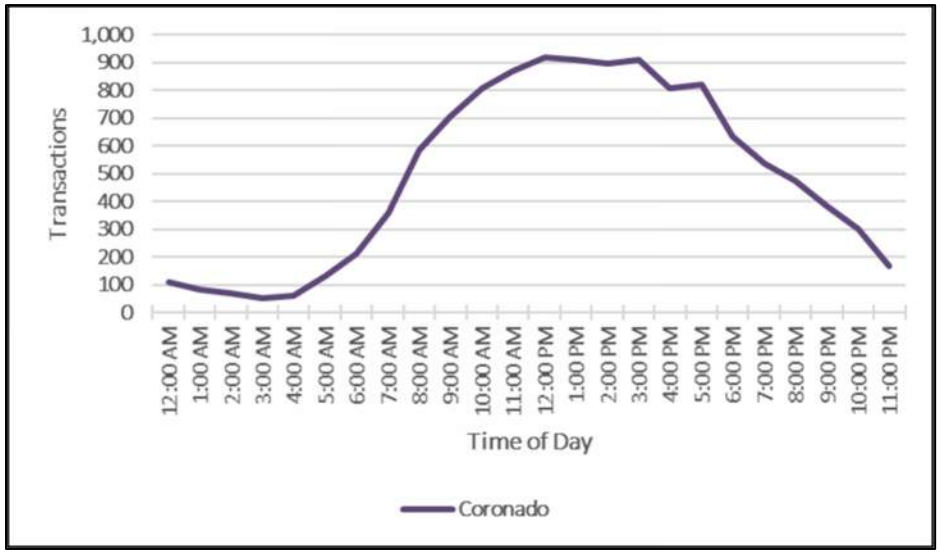
On weekdays, travel demand at the Coral Hills plaza is bimodal, with both morning and evening peak hours, typical of a commuter facility. Traffic volumes in the evening peak hours are only slightly higher than in the morning peak hours. The highest peak hour volumes during the week were 3,800 per hour 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 Two-Way Traffic Variation (Weekday)
FY 2022 (May)



Source: Unaudited lane traffic data – May 2022

Figure 7-7
S.R. 414 Hourly Two-Way Traffic Variation (Weekend)
FY 2022 (May)



Source: Unaudited lane traffic data – May 2022

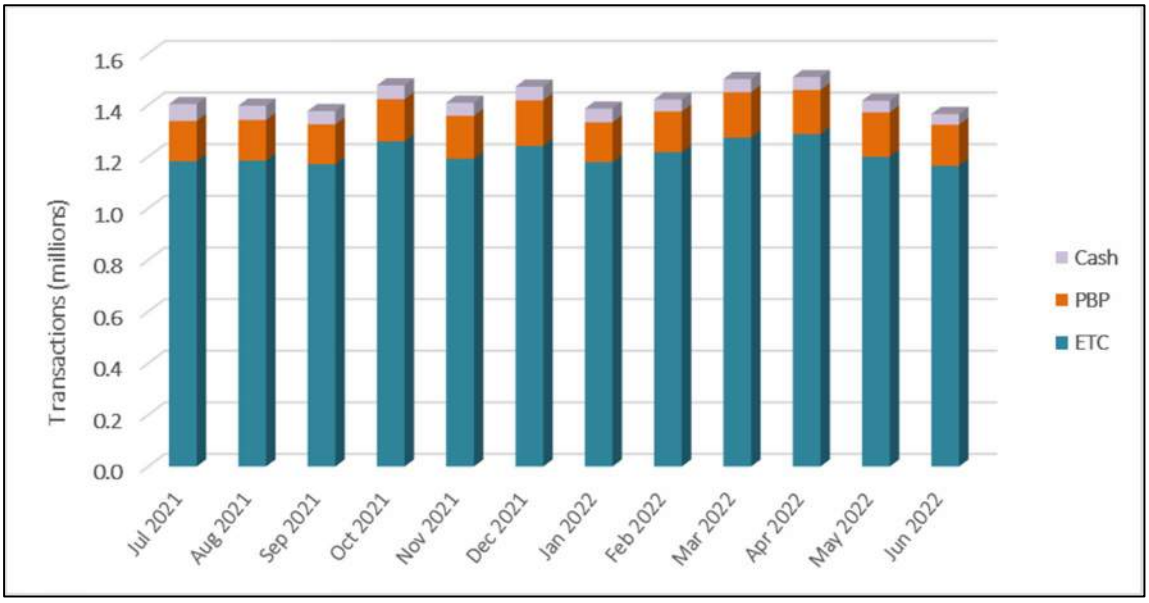
7.2.7 TRANSACTIONS AND REVENUE BY PAYMENT TYPE

The distributions of transactions and revenue by payment type by plaza group during FY 2022 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 a FY 2022 accrual rate of 52 percent of all unpaid in-lane transactions in July and August 2021, then dropped down to 50 percent for the remainder of the year. This means that the PBP transactions and revenue shown here are estimates of the levels that will eventually pay tolls through the PBP process. 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 7-8, ETC transactions on S.R. 414 ranged from a low of 1.2 million in June 2022 to a high of 1.3 million in April 2022. Overall, ETC accounted for 84.9 percent of total transactions on the facility. The PBP transactions ranged from a low of 0.1 million to a high of over 0.2 million. Overall, PBP accounted for 11.5 percent of total transactions on the facility. Cash transactions ranged from a low of approximately 0.04 million to a high of 0.07 million. Overall, cash accounted for 3.6 percent of total transactions on the facility.

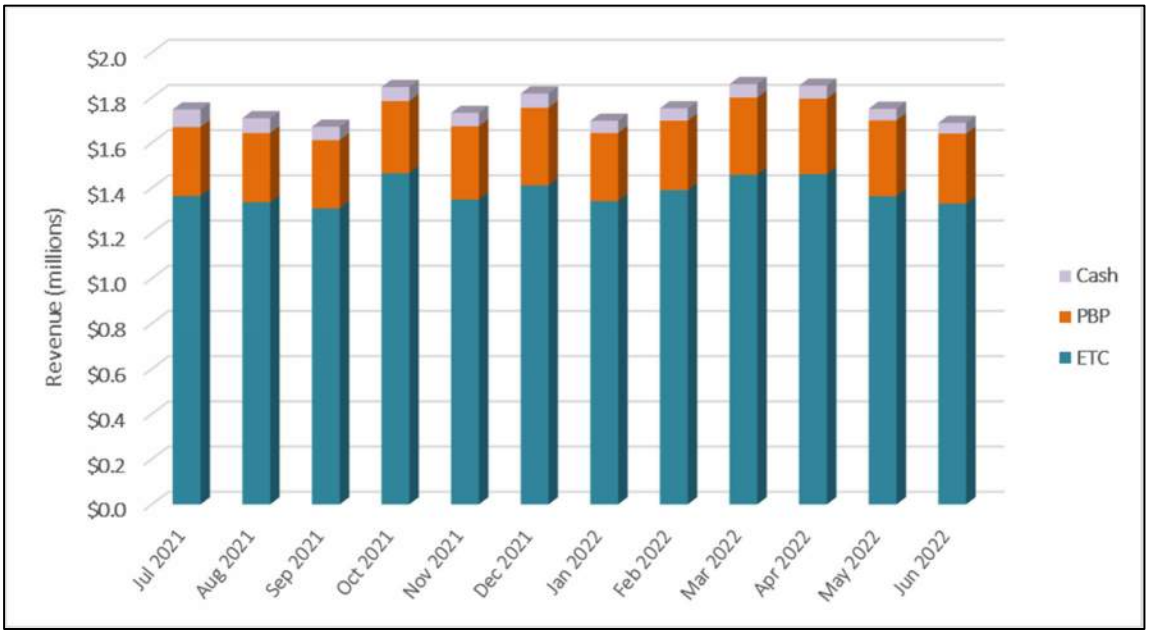
As shown in Figure 7-9, the share of toll revenues by payment type is comparable to the share of transactions, recognizing the differences in the toll paid by payment method. ETC revenue on S.R. 414 ranged from a low of $1.3 million in September 2021 to a high of $1.5 million in October 2021. Overall, ETC accounted for 78.5 percent of total revenue on the facility. The PBP revenue ranged from a low of $0.3 million to a high of $0.4 million. Overall, PBP accounted for 18.1 percent of total revenue on the facility. Cash revenue ranged from a low of $0.05 million to a high of nearly $0.08 million. Overall, cash accounted for 3.4 percent of total revenue on the facility.

Figure 7-8
S.R. 414 Percent of Transactions by Payment Type
FY 2022



Source: Monthly unaudited data provided by CFX

Figure 7-9
S.R. 414 Percent of Revenue by Payment Type
FY 2022



Source: Monthly unaudited data provided by CFX

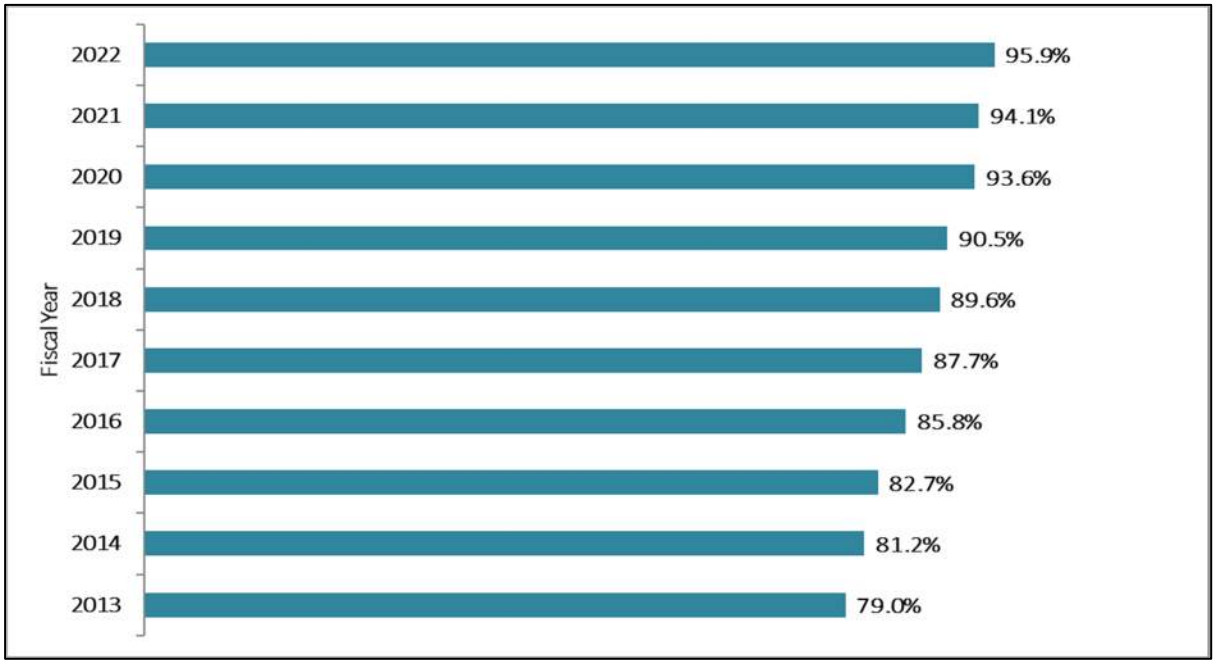
7.3 ETC Usage

The shares of paid in-lane revenues generated from ETC over the past ten fiscal years on S.R. 414 are shown in Figure 7-10. Cash payments are the other source of paid in-lane revenues. PBP revenues are not included in these results. Over this time, ETC revenues have steadily increased on the facility. In FY 2013, ETC revenues totaled 79.0 percent of total paid in-lane revenues on the facility. By the end of FY 2022, ETC revenues reached 95.9 percent. 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 expected to increase as customers shift from cash to ETC to take advantage of the lower ETC rate.

Beginning on 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 the Reload program, the CFX Board approved the expansion of the Reload Lane capabilities to all staffed, mainline toll plaza lanes. This conversion is expected to be completed in FY 2023.

In June 2021, CFX also launched the Visitor Toll Pass program, which is a free temporary toll pass for rental car customers traveling through the Orlando International Airport. With the pass, rental car customers pay the ETC rates on Florida toll roads with no extra or hidden fees.

Figure 7-10
S.R. 414 Percent of Paid In-Lane Revenue from Electronic Toll Collection
FY 2013 – FY 2022



Source: Monthly unaudited data provided by CFX

7.4 Forecasted Transactions and Toll Revenues

The forecasts of T&R are based on several assumptions about the future, including assumptions about future toll rates. Based on the CFX "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 with a floor of 1.5 percent. At the time of preparing the T&R estimates and this report, CDM Smith learned that the net change in CPI during CY 2022 was 8.577 percent. At their June 2023 meeting, the CFX Board decided to forego the net change in CPI and implement the policy floor of 1.5 percent adjustment for FY 2024. Based on assurances from CFX, CDM Smith used this value to index toll rates for FY 2024. 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 7-5, 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. Other improvements in the area that may negatively impact revenue include the All American Boulevard Realignment and the Kennedy Boulevard Improvement, which provides much needed east-west connectivity and capacity. The impacts from the planned S.R. 414 Expressway Extension are not included in these forecasts.

Table 7-5
S.R. 414 - Key Transportation Improvements

Facility	From	To	Year	Jurisdiction	Improvement
Interstate 4	SR 434	Kirkman Road	2025	FDOT	Widen to 10 lanes
SR 434/Forest City Road	Edgewater Drive	Orange County Line	2025	FDOT	Widen to 6-lanes
SR 414/Maitland Blvd	Interstate 4	Maitland Avenue	2025	FDOT	Widen to 6-lanes
All American Blvd Realign	Clarcona Road	Kennedy Blvd	2025	Orange Co	New 4-lane Road
Kennedy Blvd	Wymore Road	Forest City Road (SR 434)	2025	Orange Co	Widen to 4-lanes
SR 414 Direct Connect	US 441	SR 434/Forest City Road	2025	FDOT/CFX	New 4-lane expressway
Ocoee-Apopka Road	Silver Star Road	Clarcona-Ocoee Road	2035	Orange County	Widen to 4 Lanes
SR 434	SR 436	Montgomery Road	2035	FDOT	Widen to 6-lanes
Pine Hills Road Ext	Beggs Road	US 441	2035	Orange Co	New 4-lane road
Edgewater Dr	Clarcona Road	Pine Hills Road	2035	Orange Co	Widen to 4-lanes

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

The paid in-lane transactions on S.R. 414 are expected to grow by 1.5 percent per year through FY 2032 and then at lower rates through the end of the forecast period. PBP transactions are forecasted to grow by an average of 1.0 percent per year through FY 2032, 0.9 percent per year through 2042, and then grow by 0.4 percent per year through the forecast period. Total transactions on S.R. 414 are projected to increase during the forecast period from the actual of 17.2 million in FY 2022 to 24.0 million in FY 2052. The paid in-lane revenues on S.R. 414 are projected to increase over the forecast period, from the FY 2022 actual of $17.3 million to $35.0 million in FY 2052. PBP revenues are projected to increase from $3.8 million in FY 2022 to $7.1 million in FY 2052. Total revenues on S.R. 414 are projected to increase during the forecast period from the actual $21.1 million in FY 2022 to $42.1 million in FY 2052. Total transactions and revenues are forecasted to increase an average of 1.4 and 3.0 percent per year through FY 2032, 1.2 and 2.3 percent per year from FY 2032 to FY 2042, and 0.7 and 1.7 percent per year from FY 2042 to FY 2052, respectively.

Table 7-6
S.R. 414 Plaza Group – Transaction Projections (Millions)
FY 2023 – FY 2052

Fiscal Year		Coral Hills Main	Paid In-Lane	PBP	Total	Percent Annual Change
2012	Actual	7.3	7.3	0.1	7.4	-
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]		13.4	13.4	1.7	15.1	2.7%
2022*[H]		15.2	15.2	2.0	17.2	13.9%
2023[I]	Forecast	14.0	14.0	1.9	15.9	-7.6%
2024		15.4	15.4	1.9	17.3	8.8%
2025		15.7	15.7	2.0	17.7	2.3%
2026		16.0	16.0	2.0	18.0	1.7%
2027		16.3	16.3	2.0	18.3	1.7%
2028		16.5	16.5	2.1	18.6	1.6%
2029		16.8	16.8	2.1	18.9	1.6%
2030		17.1	17.1	2.1	19.2	1.6%
2031		17.3	17.3	2.1	19.4	1.0%
2032		17.6	17.6	2.2	19.8	2.1%
2033		17.9	17.9	2.2	20.1	1.5%
2034		18.1	18.1	2.2	20.3	1.0%
2035		18.3	18.3	2.2	20.5	1.0%
2036		18.6	18.6	2.3	20.9	2.0%
2037		18.8	18.8	2.3	21.1	1.0%
2038		19.0	19.0	2.3	21.3	0.9%
2039		19.2	19.2	2.3	21.5	0.9%
2040		19.5	19.5	2.3	21.8	1.4%
2041		19.7	19.7	2.4	22.1	1.4%
2042		19.9	19.9	2.4	22.3	0.9%
2043		20.1	20.1	2.4	22.5	0.9%
2044		20.2	20.2	2.4	22.6	0.4%
2045		20.4	20.4	2.4	22.8	0.9%
2046		20.6	20.6	2.4	23.0	0.9%
2047		20.8	20.8	2.4	23.2	0.9%
2048		20.9	20.9	2.5	23.4	0.9%
2049		21.1	21.1	2.5	23.6	0.9%
2050		21.2	21.2	2.5	23.7	0.4%
2051		21.4	21.4	2.5	23.9	0.8%
2052		21.5	21.5	2.5	24.0	0.4%

Fiscal Year	Compound Annual Average Growth Rate (CAAGR)			
2012 - 2022	7.6%	7.6%	34.9%	8.8%
2022 - 2032	1.5%	1.5%	1.0%	1.4%
2032 - 2042	1.2%	1.2%	0.9%	1.2%
2042 - 2052	0.8%	0.8%	0.4%	0.7%

*Indicates systemwide toll rate increase according to Customer First Toll Policy

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.

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. Continued effects of COVID-19 pandemic.

H - Completion of I-4 Ultimate project.

I - Includes impacts from Hurricane Ian toll suspensions in September 2022.

Table 7-7
S.R. 414 Plaza Group – Toll Revenue Projections (Millions)
FY 2023 – FY 2052

Fiscal Year		Coral Hills Main	Paid In-Lane	PBP	Total	Percent Annual Change
2012	Actual	$5.7	$5.7	$0.1	$5.8	-
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]		$14.8	$14.8	$3.3	$18.1	13.1%
2022*[H]		$17.3	$17.3	$3.8	$21.1	16.6%
2023[I]	Forecast	$16.5	$16.5	$3.9	$20.4	-3.3%
2024		$18.4	$18.4	$4.0	$22.4	9.8%
2025		$19.0	$19.0	$4.1	$23.1	3.1%
2026		$19.6	$19.6	$4.3	$23.9	3.5%
2027		$20.2	$20.2	$4.4	$24.6	2.9%
2028		$20.8	$20.8	$4.5	$25.3	2.8%
2029		$21.4	$21.4	$4.6	$26.0	2.8%
2030		$22.0	$22.0	$4.7	$26.7	2.7%
2031		$22.6	$22.6	$4.9	$27.5	3.0%
2032		$23.3	$23.3	$5.0	$28.3	2.9%
2033		$23.9	$23.9	$5.1	$29.0	2.5%
2034		$24.5	$24.5	$5.2	$29.7	2.4%
2035		$25.1	$25.1	$5.3	$30.4	2.4%
2036		$25.7	$25.7	$5.4	$31.1	2.3%
2037		$26.3	$26.3	$5.6	$31.9	2.6%
2038		$27.0	$27.0	$5.7	$32.7	2.5%
2039		$27.6	$27.6	$5.8	$33.4	2.1%
2040		$28.2	$28.2	$5.9	$34.1	2.1%
2041		$28.8	$28.8	$6.0	$34.8	2.1%
2042		$29.4	$29.4	$6.1	$35.5	2.0%
2043		$30.0	$30.0	$6.2	$36.2	2.0%
2044		$30.6	$30.6	$6.3	$36.9	1.9%
2045		$31.1	$31.1	$6.4	$37.5	1.6%
2046		$31.7	$31.7	$6.5	$38.2	1.9%
2047		$32.3	$32.3	$6.6	$38.9	1.8%
2048		$32.8	$32.8	$6.7	$39.5	1.5%
2049		$33.4	$33.4	$6.8	$40.2	1.8%
2050		$33.9	$33.9	$6.9	$40.8	1.5%
2051		$34.5	$34.5	$7.0	$41.5	1.7%
2052		$35.0	$35.0	$7.1	$42.1	1.4%

Fiscal Year	Compound Annual Average Growth Rate (CAAGR)			
2012 - 2022	11.7%	11.7%	43.9%	13.8%
2022 - 2032	3.0%	3.0%	2.8%	3.0%
2032 - 2042	2.4%	2.4%	2.0%	2.3%
2042 - 2052	1.8%	1.8%	1.5%	1.7%

*Indicates systemwide toll rate increase according to Customer First Toll Policy

Notes:

Actual revenue 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. Continued effects of COVID-19 pandemic.

H - Completion of I-4 Ultimate project.

I - Includes impacts from Hurricane Ian toll suspensions in September 2022.

CHAPTER 8

S.R. 453

S.R. 453

8.1 Facility Description

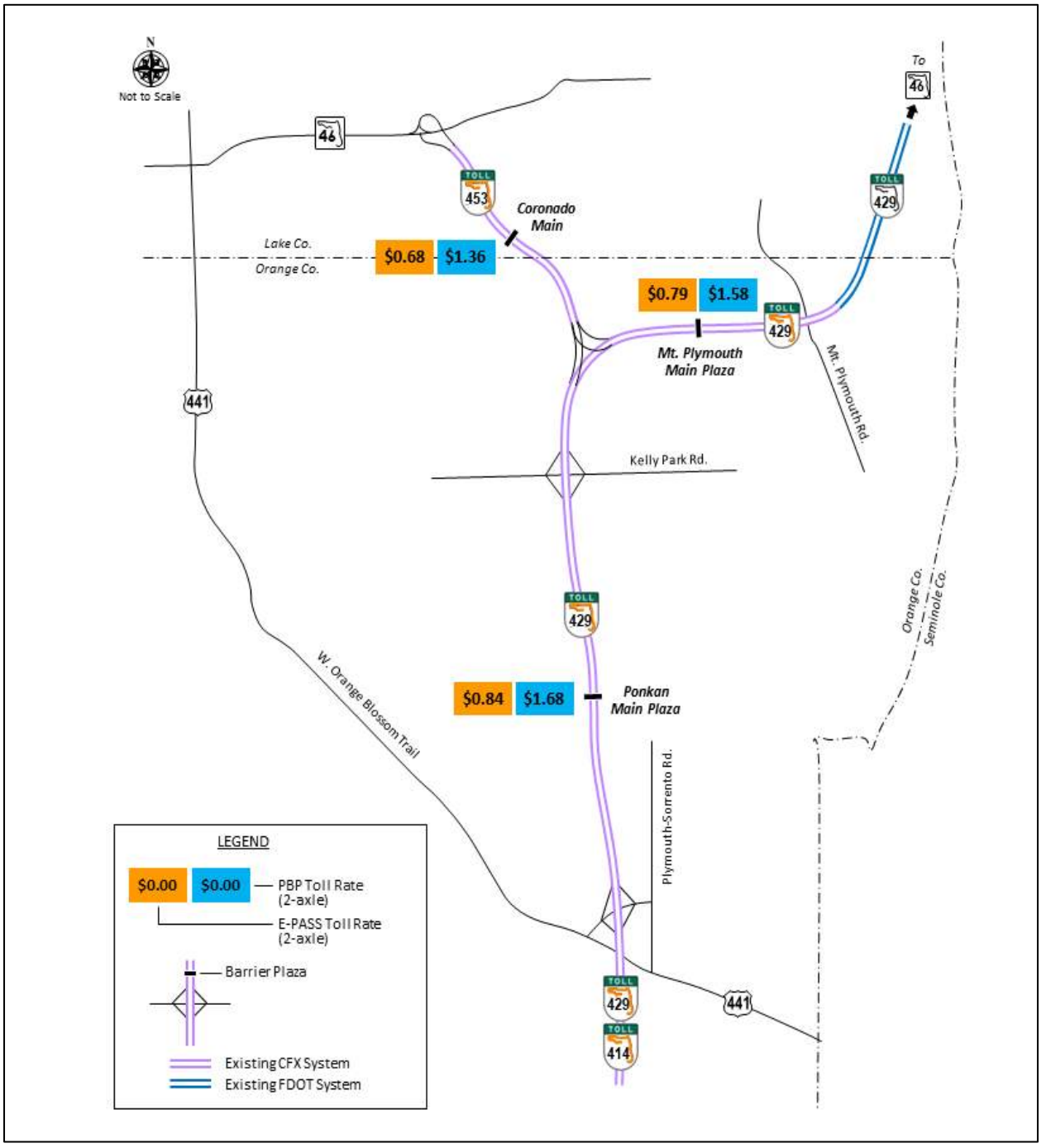
S.R. 453 is a 2.0-mile portion of the CFX System locally known as the Wekiva Parkway, which is a new 27-mile expressway that extends S.R. 429 into northwest Orange, northeast Lake, and west Seminole counties. From a CFX vision in the *Year 2000 Long Range Expressway Plan*, completed in 1983, the CFX portion of the Wekiva Parkway is completed, 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 2023. 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) with no associated ramp plazas. A map that includes the CFX portion of the Wekiva Parkway (S.R. 453) with the FY 2022 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," that runs 2.2 miles from the Wekiva Parkway, across the Lake County Line to connect to S.R. 46.

Similar to the Wekiva Parkway, toll collection on S.R. 453 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 S.R. 453, just like 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 twice the ETC rate per transaction and is designed to cover the administrative cost of video billing.

Figure 8-1
S.R. 453 Facilities and FY 2022 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) or unpaid in-lane (PBP and non-revenue). Total transactions are the sum of the two. 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 transactions and revenues by paid in-lane and PBP.

8.2.1 ANNUAL PAID IN-LANE TRANSACTION AND REVENUE TRENDS

A history of the annual paid in-lane transactions for the Coronado Main plaza group through FY 2022 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 2022 Comprehensive Annual Financial Report (CAFR) and other information in this report.

Table 8-1
S.R. 453 Plaza Group – Historical Paid In-Lane Transactions and Revenue
FY 2018 – FY 2022

Fiscal Year	Coronado Main	
	TRANSACTIONS (millions)	PERCENT CHANGE
2018[A]	0.5	
2019	2.2	340.0%
2020*[,B]	2.3	4.5%
2021*[,C]	3.0	30.4%
2022*	3.9	30.0%
	TOLL REVENUE (millions)	PERCENT CHANGE
2018[A]	$0.3	
2019	$1.3	333.3%
2020*[,B]	$1.6	23.1%
2021*[,C]	$2.1	31.3%
2022*	$2.9	38.1%

*Indicates systemwide toll rate increase according to Customer First Toll Policy

Notes:

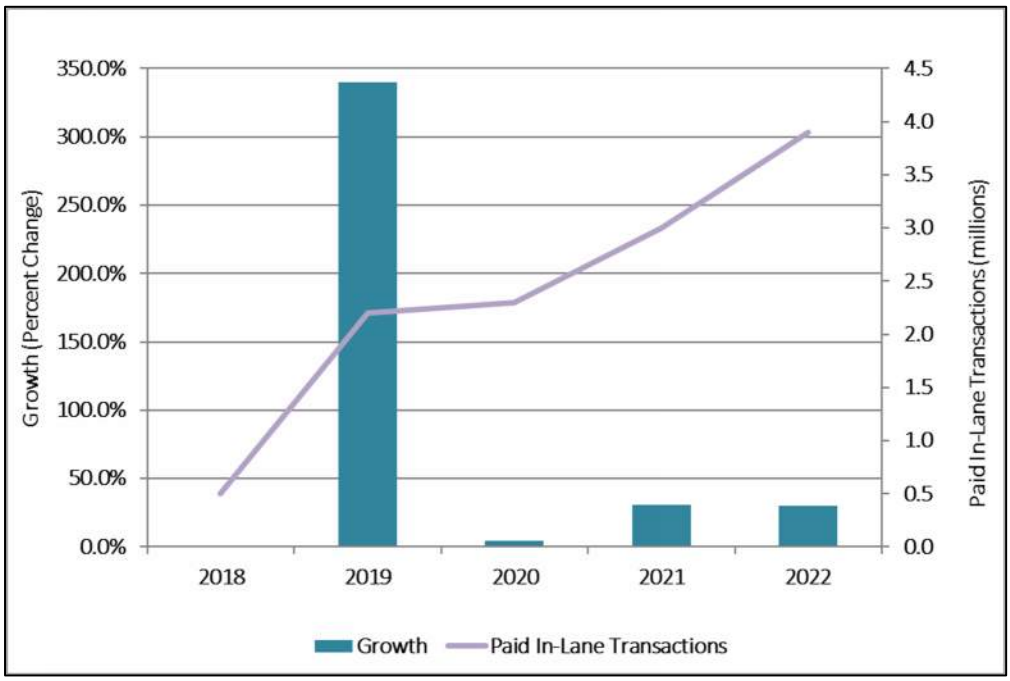
A - Coronado Main plaza opened on April 1, 2018.

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

C - Continued effects of COVID-19 pandemic.

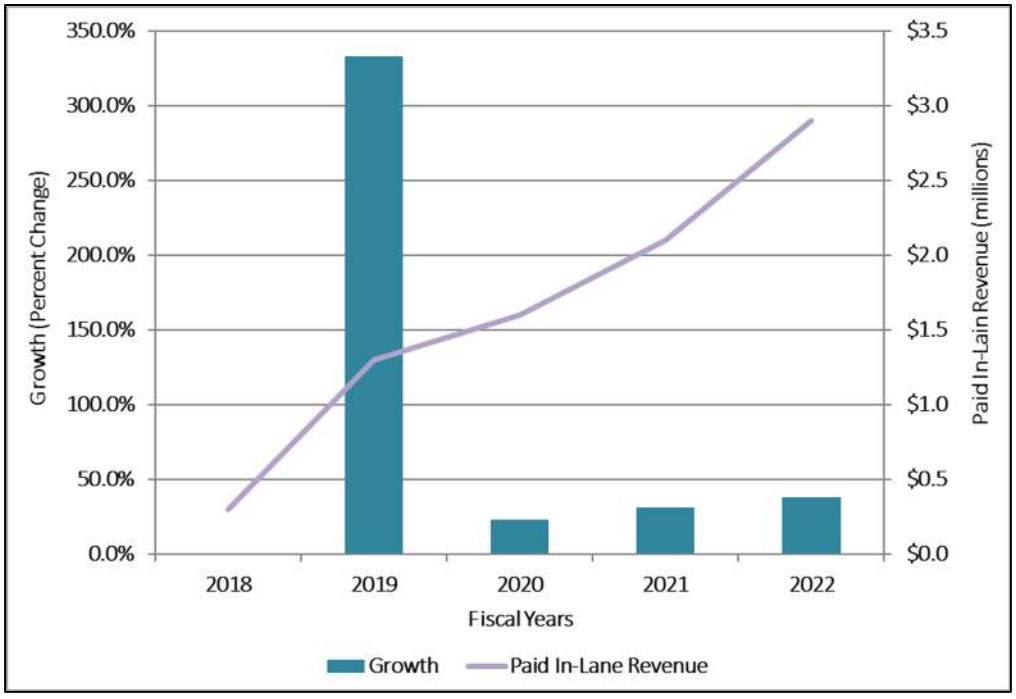
S.R. 453 opened on April 1, 2018 (FY 2018), for a total of three months in FY 2018. FY 2019 was the first full year of toll collection. Total paid in-lane transactions on S.R. 453 at the Coronado Main plaza in FY 2019 were 2.2 million and paid in-lane toll revenues during the same period were $1.3 million.

Figure 8-2
S.R. 453 Historical Paid In-Lane Transactions and Annual Growth
FY 2018 – FY 2022



Source: Monthly unaudited data provided by CFX

Figure 8-3
S.R. 453 Historical Paid In-Lane Revenue and Annual Growth
FY 2018 – FY 2022



Source: Monthly unaudited data provided by CFX

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, which can be attributed to the toll rate adjustment. This growth in FY 2020 occurred despite the negative impacts of the COVID-19 pandemic beginning in March 2020. This is likely due to ramp-up on the recently opened facility. Additionally, because the fiscal year begins in July, FY 2020 only included four months of the impacts of the COVID-19 pandemic. Thus, although April 2020 (FY 2020) contained the deepest impacts of the COVID-19 pandemic, additional impacts also occurred during the early months of FY 2021, which included a full year of travel reductions and the initial recovery. In FY 2020, September 2019 transactions and revenues were also negatively impacted by toll suspensions during Hurricane Dorian. Tolls were suspended on CFX toll facilities beginning on September 1, 2019 through September 5, 2019 resulting in a transaction loss of approximately 0.3 million and a toll revenue loss of $0.2 million on S.R. 453.

FY 2021 paid in-lane transactions increased by 0.7 million, or 30.4 percent, compared to FY 2020. Again, despite the impacts of the COVID-19 pandemic, continued facility ramp-up served to bolster year-over-year growth. Paid in-lane revenues experienced an increase of $0.5 million or 31.3 percent during the same period.

FY 2022 paid in-lane transactions increased by 0.9 million, or 30.0 percent, compared to FY 2021. Paid in-lane revenues experienced an increase of $0.8 million or 38.1 percent during the same period. The increases in both transactions and revenue reflects the recovery from the negative impacts of the COVID-19 pandemic, as well as continued facility ramp-up and corridor growth. The FY 2022 toll rate adjustment was another factor in the increase in revenue.

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 2022 is presented in Table 8-2. PBP transactions and toll revenues are recorded and accrued monthly, 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 2022

Fiscal Year	Transactions (millions)	Percent Change	Toll Revenues (millions)	Percent Change
2018	0.0		$0.0	
2019	0.2	0.0%	$0.2	0.0%
2020	0.3	50.0%	$0.3	50.0%
2021	0.4	33.3%	$0.6	100.0%
2022	0.5	25.0%	$0.7	16.7%

Source: Monthly unaudited data provided by CFX

PBP transactions have increased to 0.5 million in FY 2022, while PBP revenues have increased to $0.7 million over the same period. During the early part of the COVID-19 pandemic, cash toll collection was suspended for several months. For this reason, PBP transactions and revenue

increased year-over-year in FY 2020 and in FY 2021. The significant increase in PBP revenues in FY 2021 can also be attributed to the new PBP toll rate adopted by the CFX Board that went into effect on July 1, 2020 (FY 2021). At that time, the PBP toll rate at all toll locations was increased to twice the ETC toll rate, reflecting the cost to collect PBP tolls. Because of the new PBP toll rate, it was anticipated that going forward a portion of customers paying via PBP will switch to ETC to avoid the higher toll rate. However, recent systemwide trends do not reflect this result. This may be due to customer travel frequency and/or the convenience of PBP compared to establishing a transponder account. Overall, the recent increase in customer preference for PBP has contributed to a smaller share of paid in-lane transactions and revenue.

8.2.3 MONTHLY PAID IN-LANE TRANSACTION SEASONAL VARIATION

In Table 8-3, monthly paid in-lane transactions are normalized to the average number of paid in-lane transactions per day. Considering 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 pattern of seasonal usage changes slightly from year to year, based on the number of weekdays in each month.

Table 8-3
S.R. 453 – Monthly Seasonal Variation in Paid In-Lane Transactions
FY 2022

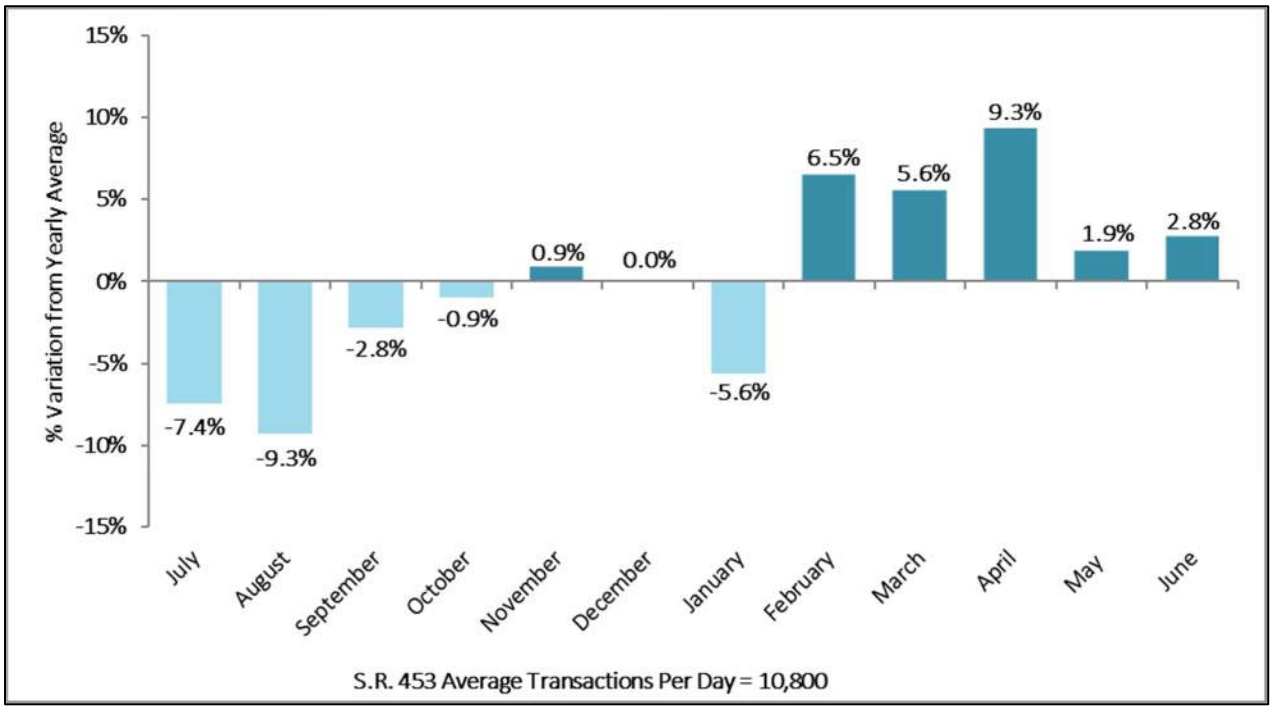
Month	Number of Days in Month	Paid In-Lane Transactions	Average Transactions/Day	Seasonal Factor
July	31	311,215	10,000	0.926
August	31	302,474	9,800	0.907
September	30	315,115	10,500	0.972
October	31	331,854	10,700	0.991
November	30	327,069	10,900	1.009
December	31	335,352	10,800	1.000
January	31	315,739	10,200	0.944
February	28	321,386	11,500	1.065
March	31	353,515	11,400	1.056
April	30	353,858	11,800	1.093
May	31	341,290	11,000	1.019
June	30	331,512	11,100	1.028
Average		*1,313,460*	*10,800*	*1.000*
Total Year	365	3,940,379		

Source: Monthly unaudited data provided by CFX

Average number of paid in-lane transactions per day in FY 2022 on S.R. 453 ranged from a low of 9,800 in August 2021 to a high of 11,800 in April 2022. These data are 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. April paid in-lane transactions were 9.3 percent above average and August paid in-lane transactions were 9.3 percent below average for the

facility. It is also important to note that there was a slight decline in January and February transactions due in part to a surge in COVID infections from the Omicron variant after the 2021 holiday season.

Figure 8-4
S.R. 453 Variation in Paid In-Lane Transactions Per Day, by Month
FY 2022



Source: Monthly unaudited data provided by CFX

8.2.4 TRANSACTIONS BY VEHICLE CLASS

The distribution of mainline transactions on S.R. 453 by vehicle class (number of axles) for FY 2022 is shown in Table 8-4. Overall, 94.1 percent of all mainline transactions on S.R. 453 were made by 2-axle vehicles. The next most frequent vehicle class was the 3-axle classification, which accounted for 2.4 percent of all transactions on the facility. Five or more-axle vehicles accounted for 1.8 percent. Four-axle vehicles represented the smallest category with only 1.7 percent of facility transactions.

Table 8-4
S.R. 453 Percent of Total Transactions by Vehicle Class
FY 2022

Vehicle Class	Coronado Main	S.R. 453 Total
2-Axle	94.1%	94.1%
3-Axle	2.4%	2.4%
4-Axle	1.7%	1.7%
5 or More Axles	1.8%	1.8%
Total	**100.0%**	**100.0%**

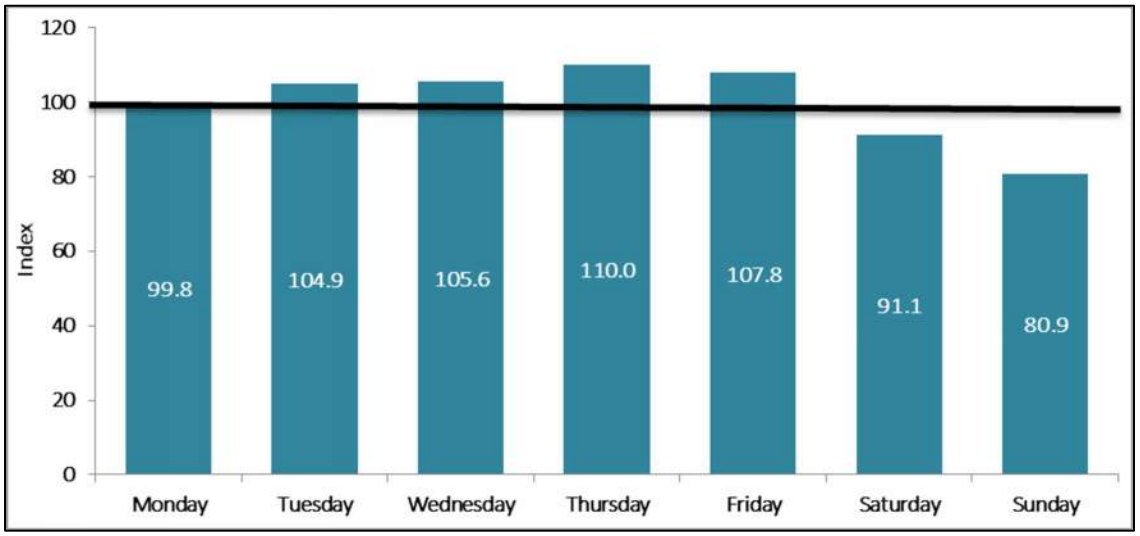
Source: Unaudited lane transaction data – May 2022

8.2.5 DAY-OF-WEEK TRANSACTION VARIATION

Figure 8-5 contains a comparison of transactions by day of the week for FY 2022. These data are 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 indicates a day that has a 20 percent greater volume than the average. As was done in prior years, the data used for this analysis were for a typical week in May 2022. The data include transactions at mainline plazas only (no ramps).

As shown, daily transactions on S.R. 453 fluctuated over the course of the week. Transactions were highest on Thursdays, with an index value of 110.0 (10.0 percent higher than the average day). Volumes on the remaining weekdays ranged from index values of 99.8 to 107.8. Saturday volumes were closer to early weekday volumes with an index value of 91.1. Transactions decline significantly on Sundays, with an index value of 80.9, or 19.1 percent lower than the average day.

Figure 8-5
S.R. 453 Variation in Transactions, by Day of Week
FY 2022



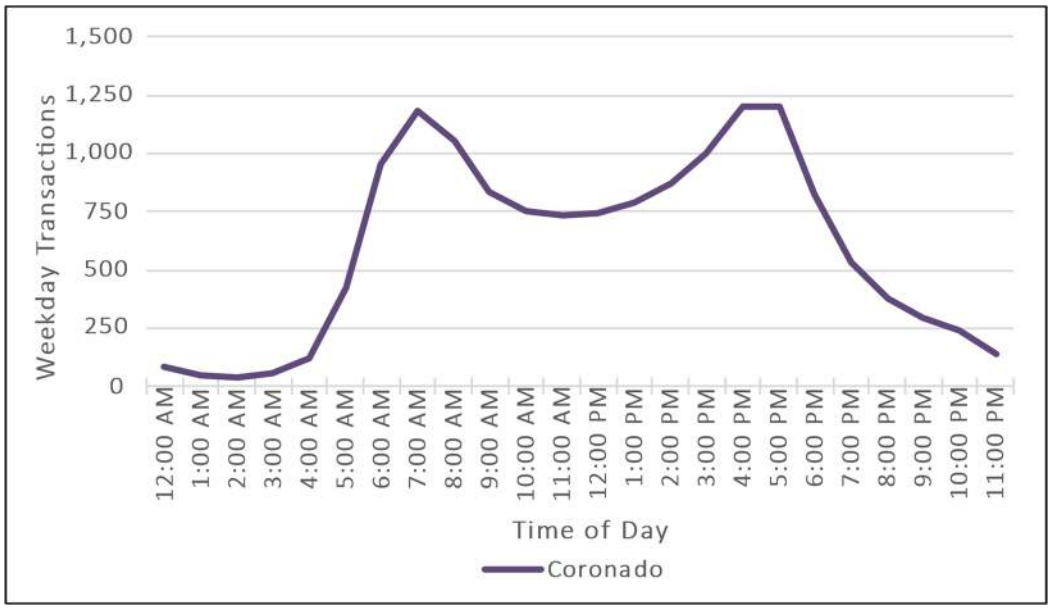
Source: Unaudited lane transaction data – May 2022

8.2.6 HOURLY TRAFFIC DISTRIBUTION

The hourly distribution of traffic volumes 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 May. The typical weekday hourly distribution is shown in Figure 8-6 and the hourly distribution on weekend days is shown in Figure 8-7. The figures contain the sum of traffic volumes in both directions.

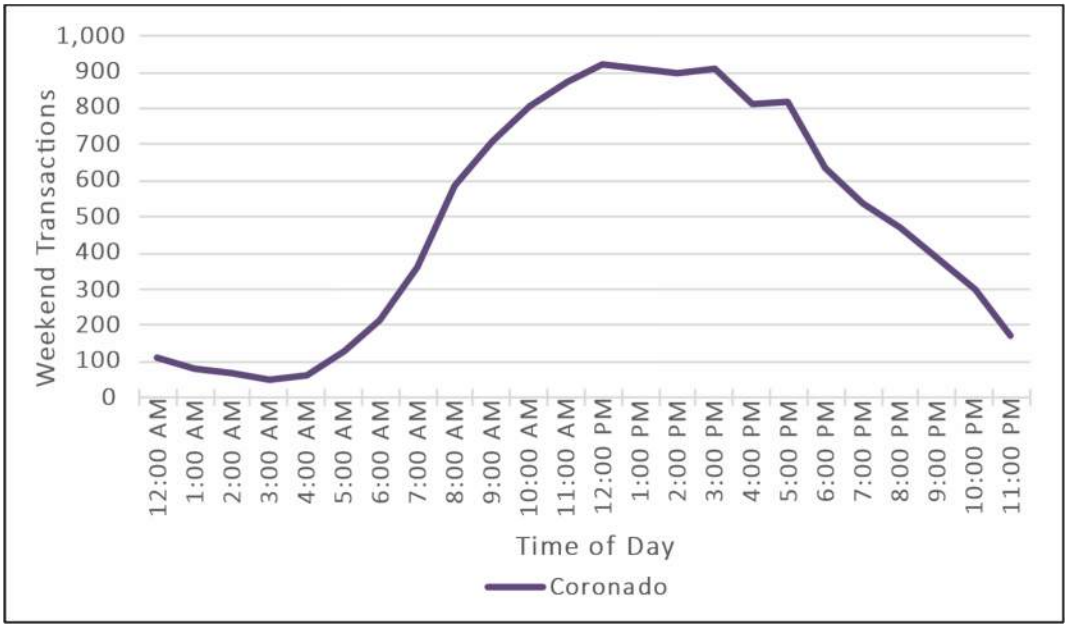
On weekdays on S.R. 453, demand for travel is bimodal, with both morning and evening peak hours. The Coronado mainline plaza experienced slightly higher peak hour volumes in the evening than in the morning, but the peak volumes in morning and evening are very close indicating a commuter-type pattern. The highest peak hour volumes during the week were 1,200 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 Two-Way Traffic Variation (Weekday)
FY 2022 (May)



Source: Unaudited lane traffic data – May 2022

Figure 8-7
S.R. 453 Hourly Two-Way Traffic Variation (Weekend)
FY 2022 (May)



Source: Unaudited lane traffic data – May 2022

8.2.7 TRANSACTIONS AND REVENUE BY PAYMENT TYPE

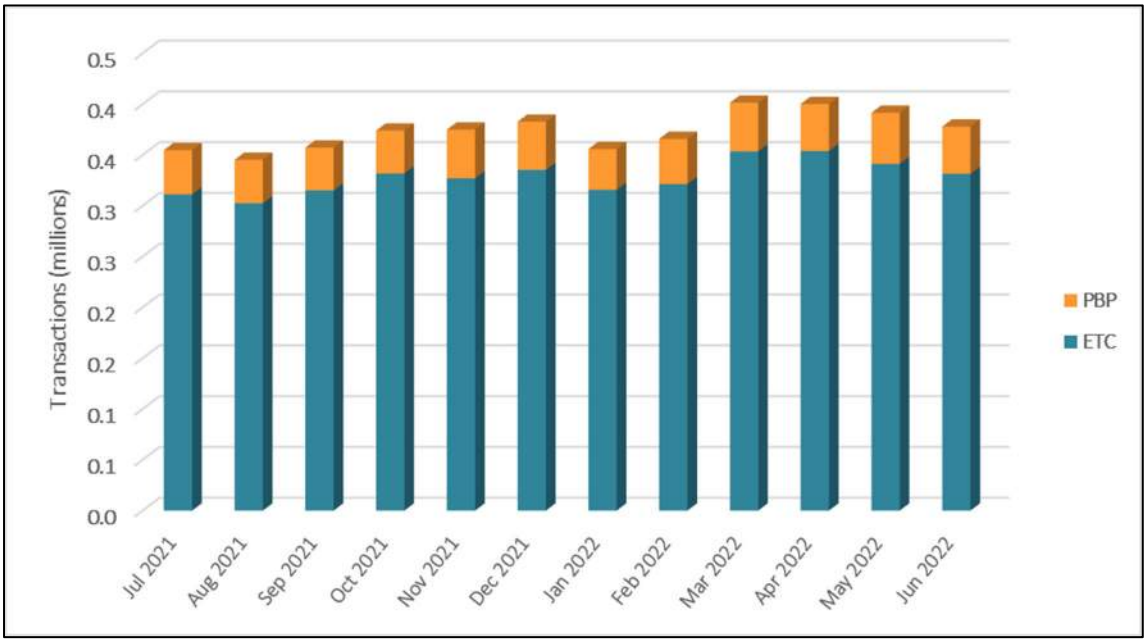
The distributions of transactions and revenue by payment type during FY 2022 are presented in Figure 8-8 and Figure 8-9. Payment types on S.R. 453 can be classified in one of two ways: ETC and PBP. The Coronado Main plaza is an AET facility, so there is no cash collection. PBP transactions and revenues are estimated monthly based on a FY 2022 accrual rate of 52 percent of all unpaid in-lane transactions in July and August 2021, then dropped down to 50 percent for the remainder of the year. This means that the PBP transactions and revenue shown here are estimates of the levels that will eventually pay tolls through the PBP process. 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, ETC transactions on S.R. 453 ranged from a low of 0.3 million in August 2021 to a high of nearly 0.4 million in April 2022. Overall, ETC accounted for 87.9 percent of total transactions on the facility. PBP accounted for the remaining 12.1 percent of total transactions on the facility.

As shown in Figure 8-9, the share of toll revenues by payment type is comparable to the share of transactions, recognizing the differences in the toll paid by payment method. ETC revenue on S.R. 453 ranged from a low of $0.2 million in August 2021 to a high of $0.3 million in March 2022. Overall, ETC accounted for 80.0 percent of total revenue on the facility. The PBP revenue accounted for the remaining 20.0 percent of total revenue on the facility.

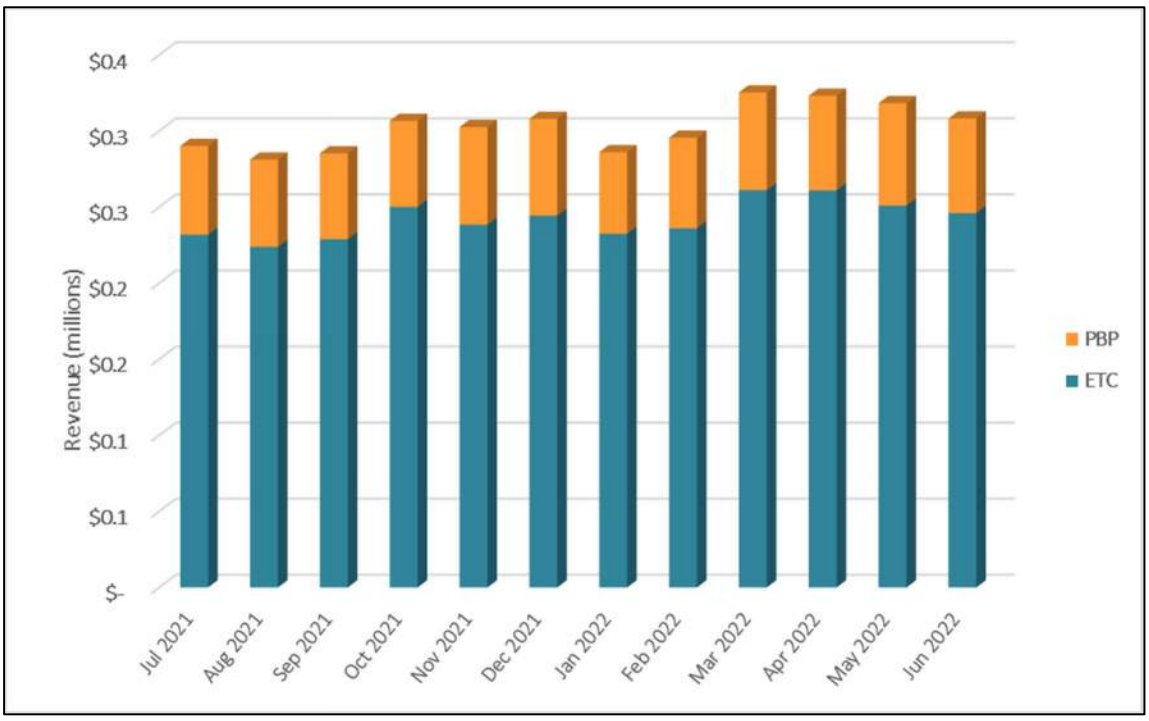
The differences in revenue performance by payment method is explained by differences in the toll rates. ETC customers pay the preferred toll rate; and PBP customers pay twice the ETC rate.

Figure 8-8
S.R. 453 Percent of Transactions by Payment Type
FY 2022



Source: Monthly unaudited data provided by CFX

Figure 8-9
S.R. 453 Percent of Revenue by Payment Type
FY 2022



Source: Monthly unaudited data provided by CFX

8.3 Forecasted Transactions and Toll Revenues

The forecasts of T&R are based on several assumptions about the future, including assumptions about future toll rates. Based on the CFX "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 with a floor of 1.5 percent. At the time of preparing the T&R estimates and this report, CDM Smith learned that the net change in CPI during CY 2022 was 8.577 percent. At their June 2023 meeting, the CFX Board decided to forego the net change in CPI and implement the policy floor of 1.5 percent adjustment for FY 2024. Based on assurances from CFX, CDM Smith used this value to index toll rates for FY 2024. 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 8-5, 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 Ocoee-Apopka Road, Plant Street Sadler Road, and Ponkan 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. In

general, improvements that provide additional connectivity to S.R. 429 from the south and east will inherently benefit S.R. 453 as well.

Table 8-5
S.R. 453 - Key Transportation Improvements

Facility	From	To	Year	Jurisdiction	Improvement
Interstate 4	SR 434	Kirkman Road	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 Parkway	Mount Plymouth Road	Interstate 4	2025	FDOT	New 4 lane expressway
Florida's Turnpike	Minneola	Orange/Lake County Line	2025	FDOT	Widen to 8 lanes
Florida's Turnpike	US 27	Minneola	2025	FDOT	Widen to 8 lanes
Poinciana Parkway (SR 538)	Cypress Parkway	Kinney Harmon Road	2025	CFX	Widen to 4-lanes
Poinciana Parkway Ext. (SR 538)	Kinney Harmon Road	Osceola Polk Line Rd (CR 532)	2025	CFX	New 4-lane Expressway
Lake/Orange County Connector (SR 516)	US 27	SR 429	2025	CFX	New 4 lane expressway
Osceola Polk Line Rd (CR 532)	US 17/92	Lake Wilson Road	2025	Osceola County/CFX	Widen to 4-lanes
SR 429	Schofield Road	CR 535	2035	CFX	Widen to 6-Lanes
Interstate 4	SR 429	Osceola Polk Line Rd (CR 532)	2035	FDOT	Auxiliary Lanes
Old Lake Wilson Road	Osceola Polk Line Rd (CR 532)	Sinclair Road	2035	Osceola County	Widen to 4-lanes
Ocoee-Apopka Road	Silver Star Road	Clarcona-Ocoee Road	2035	Orange County	Widen to 4 Lanes
SR 414 Expressway Extension	US 441	SR 434/Forest City Road	2035	FDOT/CFX	New 4-lane expressway
Plant Street (SR 438)	9th Street	West Crown Point Rd	2045	FDOT	Widen to 4-lanes
Plymouth Sorrento Road	US 441	Orange County Line	2045	Orange County	Widen to 6-lanes
Ponkan Road	Plymouth Sorrento Road	CR 437	2045	Orange County	Widen to 6-lanes
Sadler Road	US 441	Mt Plymouth Road	2045	Orange County	Widen to 6-lanes
US 441 (SR 500)	SR 44	N of SR 46	2035	FDOT	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
Round Lake Rd Ext. (A)	Wolf Branch Rd	SR 44	2045	Lake County	Widen to 4-lanes
CR 437 Realignment	Oak Tree Dr	SR 46	2045	Lake County	Widen to 2-lanes
Avalon Road (CR 545)	New Independence Pkwy	Tilden Road	2045	Orange County	Widen to 4 Lanes
Avalon Road (CR 545)	Porter Road	New Independence Pkwy	2045	Orange County	Widen to 4 Lanes
Avalon Road (CR 545)	Hartzog Road	Seidel Road	2045	Orange County	Widen to 4 Lanes
Avalon Road (CR 545)	US 192	Hartzog Road	2045	Orange County	Widen to 6 Lanes
New Independence Pkwy	Lake County Line	SR 429	2045	Orange County	New/Widen 4 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 445 Extension	CFX Connector	Hartwood Mash	2045	Lake County	Widen to 4-lanes
CR 33	SR 50	Simon Brown Rd	2045	Lake County	Widen to 4-lanes
SR 50	Hernando/Sumter County Line	SR 33/CR 33	2045	FDOT	Widen to 4-lanes.
Schofield Rd	US 27	SR 429	2045	Lake County	Widen to 4 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 8-6 and Table 8-7. 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 an option.

The paid in-lane transactions on S.R. 453 are expected to grow by 5.7 percent per year through FY 2032 and then by lower rates through the end of the forecast period because of the impact of continued toll rate adjustments. PBP transactions are forecasted to increase 4.8 percent per year through FY 2032, 1.2 percent per year through FY 2042, and then 2.0 percent through the forecast period. Total transactions on S.R. 453 are projected to increase during the forecast period from the actual of 4.4 million in FY 2022 to 11.2 million in FY 2052. During the FY 2023 through FY 2052 forecast period, S.R. 453 total transactions are expected to increase by an average of 5.6 percent per year from FY 2022 to FY 2032 (due to ramp-up), 2.3 percent per year from FY 2032 to FY 2042 and 1.7 percent per year from FY 2042 to FY 2052. The paid in-lane revenues on S.R. 453 are

projected to increase over the forecast period, from the FY 2022 actual of $2.9 million to $10.6 million in FY 2052. PBP revenues are projected to increase from $0.7 million in FY 2022 to $2.1 million in FY 2052. Total revenue on S.R. 453 is projected to increase from the actual of $3.6 million in FY 2022 to $12.7 million in FY 2052. Total revenue is expected to increase by an average of 7.0 percent per year from FY 2022 to FY 2032 (again due to ramp-up), 3.4 percent per year from FY 2032 to FY 2042 and 2.5 percent per year from FY 2042 to FY 2052.

Table 8-6
S.R. 453 Plaza Group – Transaction Projections (Millions)
FY 2023 – FY 2052

Fiscal Year		Coronado Main	Paid In-Lane	PBP	Total	Percent Annual Change
2012	Actual					
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		3.0	3.0	0.4	3.4	30.8%
2022*E		3.9	3.9	0.5	4.4	29.4%
2023F	Forecast	5.0	5.0	0.6	5.6	27.3%
2024		5.6	5.6	0.6	6.2	10.7%
2025		5.8	5.8	0.7	6.5	4.8%
2026		5.9	5.9	0.7	6.6	1.5%
2027		6.1	6.1	0.7	6.8	3.0%
2028		6.2	6.2	0.7	6.9	1.5%
2029		6.4	6.4	0.7	7.1	2.9%
2030		6.5	6.5	0.7	7.2	1.4%
2031		6.7	6.7	0.8	7.5	4.2%
2032		6.8	6.8	0.8	7.6	1.3%
2033		7.0	7.0	0.8	7.8	2.6%
2034		7.2	7.2	0.8	8.0	2.6%
2035		7.4	7.4	0.8	8.2	2.5%
2036		7.6	7.6	0.8	8.4	2.4%
2037		7.8	7.8	0.9	8.7	3.6%
2038		7.9	7.9	0.9	8.8	1.1%
2039		8.1	8.1	0.9	9.0	2.3%
2040		8.3	8.3	0.9	9.2	2.2%
2041		8.5	8.5	0.9	9.4	2.2%
2042		8.6	8.6	0.9	9.5	1.1%
2043		8.8	8.8	1.0	9.8	3.2%
2044		9.0	9.0	1.0	10.0	2.0%
2045		9.1	9.1	1.0	10.1	1.0%
2046		9.3	9.3	1.0	10.3	2.0%
2047		9.4	9.4	1.0	10.4	1.0%
2048		9.6	9.6	1.0	10.6	1.9%
2049		9.7	9.7	1.0	10.7	0.9%
2050		9.8	9.8	1.1	10.9	1.9%
2051		10.0	10.0	1.1	11.1	1.8%
2052		10.1	10.1	1.1	11.2	0.9%

Fiscal Year	Compound Annual Average Growth Rate (CAAGR)			
2018 - 2022	67.1%	67.1%		72.2%
2022 - 2032	5.7%	5.7%	4.8%	5.6%
2032 - 2042	2.4%	2.4%	1.2%	2.3%
2042 - 2052	1.6%	1.6%	2.0%	1.7%

*Indicates systemwide toll rate increase according to Customer First Toll Policy

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. Continued effects of COVID-19 pandemic.

E - Completion of I-4 Ultimate project.

F - Includes impacts from Hurricane Ian toll suspensions in September 2022.

Table 8-7
S.R. 453 Plaza Group – Toll Revenue Projections (Millions)
FY 2023 – FY 2052

Fiscal Year		Coronado Main	Paid In-Lane	PBP	Total	Percent Annual Change
2012	Actual					
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		$2.1	$2.1	$0.6	$2.7	42.1%
2022*E		$2.9	$2.9	$0.7	$3.6	33.3%
2023F	Forecast	$3.8	$3.8	$0.9	$4.7	30.6%
2024		$4.3	$4.3	$0.9	$5.2	10.6%
2025		$4.5	$4.5	$1.0	$5.5	5.8%
2026		$4.7	$4.7	$1.0	$5.7	3.6%
2027		$4.9	$4.9	$1.0	$5.9	3.5%
2028		$5.1	$5.1	$1.1	$6.2	5.1%
2029		$5.3	$5.3	$1.1	$6.4	3.2%
2030		$5.5	$5.5	$1.1	$6.6	3.1%
2031		$5.7	$5.7	$1.2	$6.9	4.5%
2032		$5.9	$5.9	$1.2	$7.1	2.9%
2033		$6.1	$6.1	$1.3	$7.4	4.2%
2034		$6.3	$6.3	$1.3	$7.6	2.7%
2035		$6.5	$6.5	$1.4	$7.9	3.9%
2036		$6.8	$6.8	$1.4	$8.2	3.8%
2037		$7.0	$7.0	$1.4	$8.4	2.4%
2038		$7.3	$7.3	$1.5	$8.8	4.8%
2039		$7.5	$7.5	$1.5	$9.0	2.3%
2040		$7.8	$7.8	$1.6	$9.4	4.4%
2041		$8.0	$8.0	$1.6	$9.6	2.1%
2042		$8.2	$8.2	$1.7	$9.9	3.1%
2043		$8.5	$8.5	$1.7	$10.2	3.0%
2044		$8.7	$8.7	$1.8	$10.5	2.9%
2045		$9.0	$9.0	$1.8	$10.8	2.9%
2046		$9.2	$9.2	$1.9	$11.1	2.8%
2047		$9.5	$9.5	$1.9	$11.4	2.7%
2048		$9.7	$9.7	$1.9	$11.6	1.8%
2049		$10.0	$10.0	$2.0	$12.0	3.4%
2050		$10.2	$10.2	$2.0	$12.2	1.7%
2051		$10.4	$10.4	$2.1	$12.5	2.5%
2052		$10.6	$10.6	$2.1	$12.7	1.6%

Fiscal Year	Compound Annual Average Growth Rate (CAAGR)			
2018 - 2022	76.3%	76.3%		86.1%
2022 - 2032	7.4%	7.4%	5.5%	7.0%
2032 - 2042	3.3%	3.3%	3.5%	3.4%
2042 - 2052	2.6%	2.6%	2.1%	2.5%

*Indicates systemwide toll rate increase according to Customer First Toll Policy

Notes:

Actual revenue 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. Continued effects of COVID-19 pandemic.

E - Completion of I-4 Ultimate project.

F - Includes impacts from Hurricane Ian toll suspensions in September 2022.

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CHAPTER 9

S.R. 538
| POINCIANA PARKWAY

S.R. 538 (POINCIANA PARKWAY)

9.1 Facility Description

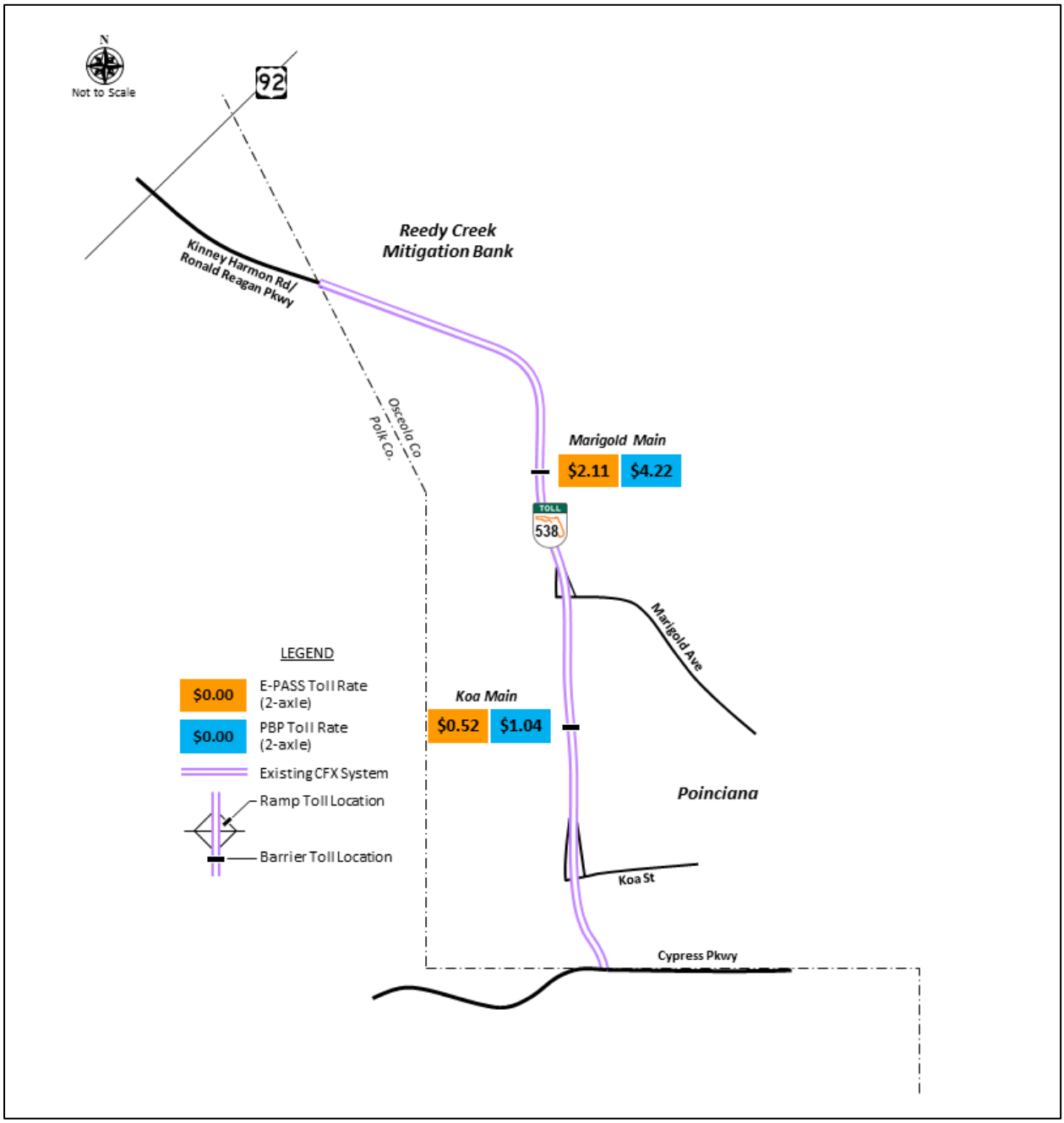
The Poinciana Parkway is a is a 7.2 mile-long, two-lane, two-way, limited access toll road extending from the Cypress Parkway in Poinciana north to an intersection with U.S. 17/92 near the Polk-Osceola County line. The Poinciana Parkway was developed by the Osceola County Expressway Authority (OCX) and 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 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 on 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. Cash payments are not accepted. A map of S.R. 538 including the FY 2022 CFX toll rates for the two mainline toll plazas is shown in Figure 9-1.

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 percent per year, according to the CFX Customer First Toll Policy.

The forecast considered the transactions and revenues collected since starting revenue 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.

Figure 9-1
S.R. 538 Facilities and FY 2022 Toll Rates



In June 2020, CFX began design on the Poinciana Parkway Extension, which has been separated into two segments. The improvements will improve traffic flow and operations. The first 1.9-mile segment includes the design of the new four-lane expressway from Kinney Harmon Road/Ronald Reagan Parkway to south of U.S. 17/92. The second 1.2-mile segment includes the design of the new four-lane expressway from south of US 17/92 to C.R. 532. Design also includes a diverging diamond interchange at U.S. 17/92, tolled ramps at C.R. 532, and bridges over the CSX railroad, Old Tampa Highway, and U.S. 17/92. Design for both segments is expected to be completed in 2023.

In February 2021, CFX began widening the existing section of S.R. 538 to add two lanes to create a divided four lane expressway from Ronald Reagan Parkway to Cypress Parkway. This 7-mile widening will improve traffic flow and operations in the area. The project includes four proposed sound walls; re-aligning the intersection with Cypress Parkway at Solivita Boulevard; building a second bridge over the Reedy Creek Mitigation Bank; building new bridges at Marigold Avenue and Koa Street; and two new ramps to and from the south at the existing interchange with Marigold Avenue. The project is expected to be completed by mid-2023.

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) 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 the two. The following section includes a breakdown of transactions and revenues by paid in-lane and PBP.

9.2.1 ANNUAL PAID IN-LANE TRANSACTION AND REVENUE TRENDS

A history of annual paid in-lane transactions at the Marigold Main and Koa Main plaza groups from FY 2020 to FY 2022 is presented in the top half of Table 9-1. 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 9-2 and Figure 9-3. 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 2022 Comprehensive Annual Financial Report (CAFR) and other information in this report.

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 2021 were 3.9 million and paid in-lane toll revenues during the same period were $6.6 million. FY 2020 transactions and revenues were negatively impacted by the effects of the COVID-19 pandemic beginning in March 2020. Because the fiscal year begins in July, FY 2020 only included four months of the impacts of the COVID-19 pandemic. Thus, although April 2020 (FY 2020) contained the deepest impacts of the COVID-19 pandemic, additional impacts also occurred during the early months of FY 2021, which included a full year of travel reductions and the initial recovery. In FY 2020, September 2019 transactions and revenues were also negatively impacted by toll suspensions during Hurricane Dorian. Tolls were suspended on CFX toll facilities beginning on September 1, 2019 through September 5, 2019 resulting in a transaction loss of approximately 0.3 million and a toll revenue loss of $0.6 million on S.R. 538.

Table 9-1
S.R. 538 Plaza Groups – Historical Paid In-Lane Transactions and Revenue
FY 2020 – FY 2022

Fiscal Year	Marigold Main[A]	Koa Main[A]	TOTAL	Marigold Main	Koa Main	TOTAL
	TRANSACTIONS (millions)			PERCENT CHANGE		
2020[A,B]	1.2	0.5	1.7			
2021*[,C]	2.7	1.2	3.9	125.0%	140.0%	129.4%
2022*	3.3	1.5	4.8	22.2%	25.0%	23.1%
	TOLL REVENUE (millions)			PERCENT CHANGE		
2020[A,B]	$2.5	$0.3	$2.8			
2021*[,C]	$5.9	$0.7	$6.6	136.0%	133.3%	135.7%
2022*	$7.5	$0.8	$8.3	27.1%	20.7%	26.4%

*Indicates systemwide toll rate increase according to Customer First Toll Policy

Notes:

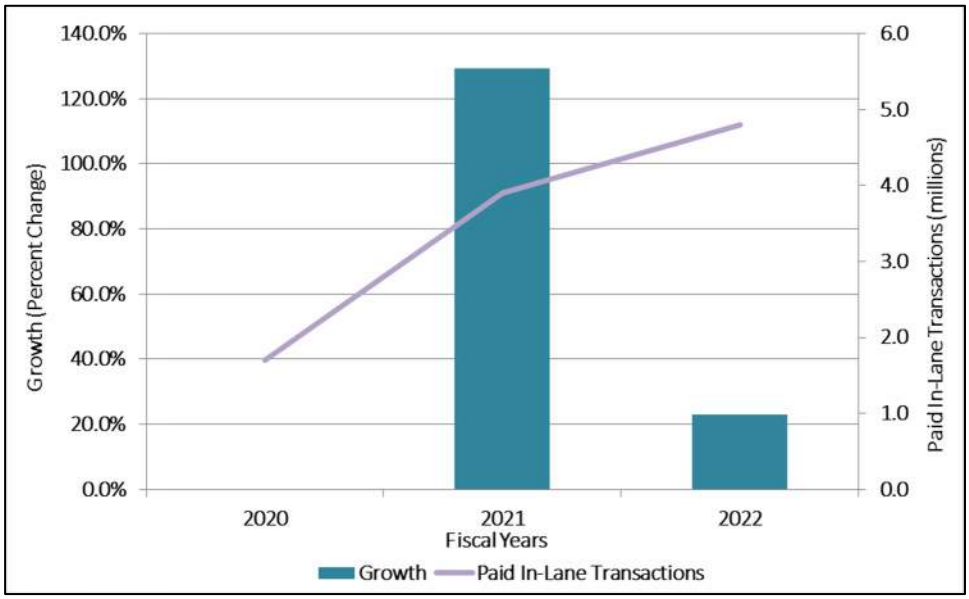
A - Acquired by CFX in December 2019 (FY 2020).

B - First effects of COVID-19 pandemic began in March 2020.

C - Continued effects of COVID-19 pandemic.

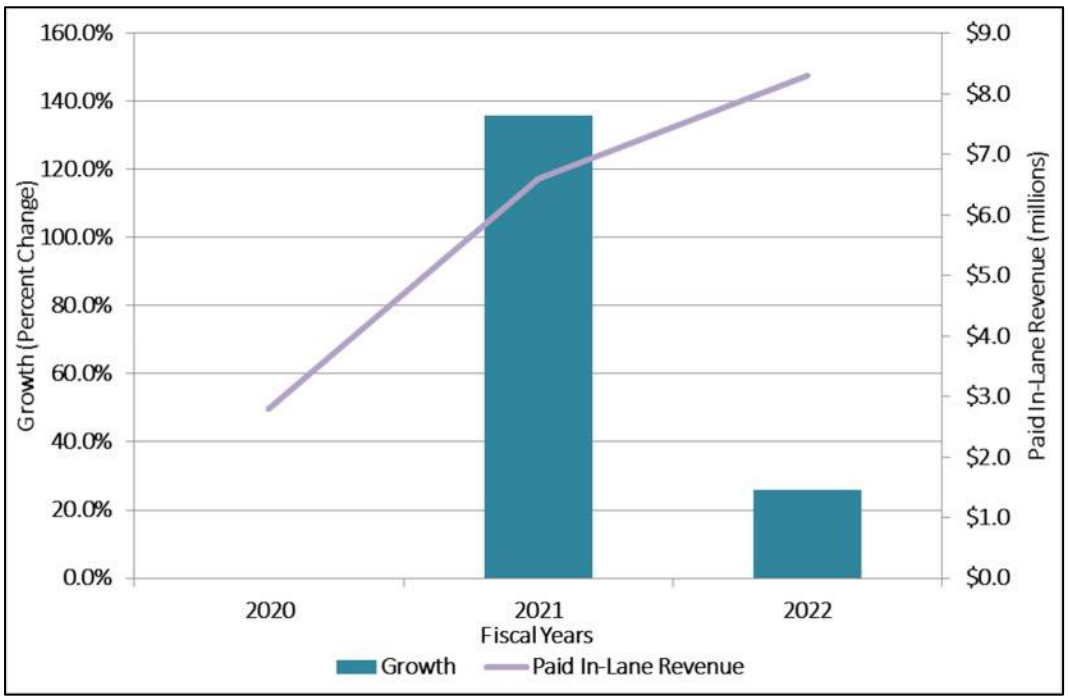
FY 2022 paid in-lane transactions increased by 0.9 million, or 23.1 percent, compared to FY 2021. Paid in-lane revenues experienced an increase of 26.4 percent during the same period. The increases in both transactions and revenue reflects the recovery from the negative impacts of the COVID-19 pandemic. The FY 2022 toll rate adjustment was another factor in the increase in revenue.

Figure 9-2
S.R. 538 Historical Paid In-Lane Transactions and Annual Growth
FY 2020 – FY 2022



Source: Monthly unaudited data provided by CFX

Figure 9-3
S.R. 538 Historical Paid In-Lane Revenue and Annual Growth
FY 2020 – FY 2022

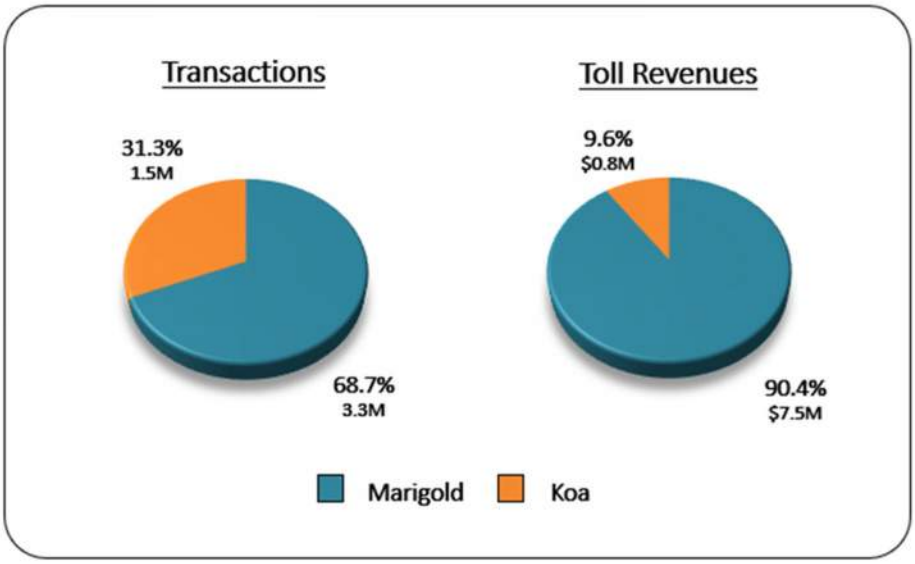


Source: Monthly unaudited data provided by CFX

The share by plaza group of total S.R. 538 paid in-lane transactions and toll revenues during FY 2022 are presented in Figure 9-4. As shown, the Marigold Main plaza group represented 3.3 million paid in-lane transactions or 68.7 percent of total FY 2022 paid in-lane transactions. Koa Main plaza group represented 1.5 million or 31.3 percent of the total on the facility.

The annual totals and shares of paid in-lane toll revenues are similar to the results reported for annual paid in-lane transactions. The Marigold Main plaza group represented $7.5 million in paid in-lane toll revenues or 90.4 percent of total paid in-lane toll revenues. Koa Main plaza group represented $0.8 million, or 9.6 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 $2.11 compared to the $0.52 toll at the Koa Main plaza group.

Figure 9-4
S.R. 538 Paid In-Lane Transactions and Revenue by Plaza Group
FY 2022



Source: Monthly unaudited data provided by CFX

9.2.2 ANNUAL PBP TRANSACTION AND REVENUE TRENDS

PBP transactions and toll revenues on S.R. 538 for FY 2020 through FY 2022 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 – FY 2022

Fiscal Year	Transactions (millions)	Percent Change	Toll Revenues (millions)	Percent Change
2020	0.6		$1.0	
2021	1.0	66.7%	$3.2	220.0%
2022	0.9	-10.0%	$3.1	-3.1%

Source: Monthly unaudited data provided by CFX

PBP transactions have increased from 0.6 million in 2020 to 0.9 million in FY 2022, while PBP revenues have increased from $1.0 million to $3.1 million over the same period. As shown in the table, the rate of growth in PBP transactions may be slowing. The significant increase in PBP revenues in FY 2021 can be attributed to the new PBP toll rate adopted by the CFX Board that went into effect on July 1, 2020 (FY 2021). At that time, the PBP toll rate at all toll locations was increased to twice the ETC toll rate, reflecting the cost to collect PBP tolls. Because of the new PBP toll rate, it was anticipated that going forward a portion of customers paying via PBP will switch to ETC to avoid the higher toll rate, and this year shows no growth in PBP transactions. The short-

term trend shows a declining PBP participation with 33.5% of transactions in FY 2020 decreasing to 23.3% of the transactions in 2022.

9.2.3 MONTHLY PAID IN-LANE TRANSACTION VARIATION

In Table 9-3, monthly paid in-lane transactions are normalized to the average number of paid in-lane transactions per day. Considering the average number of 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.

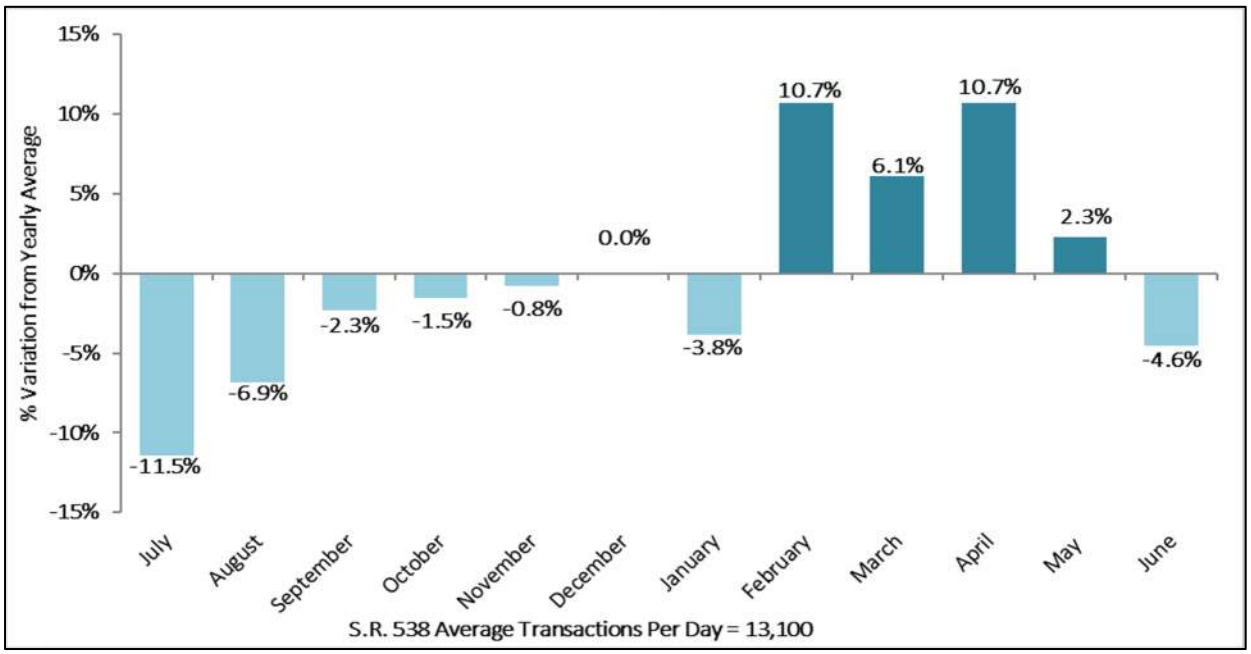
As presented, average paid in-lane transactions per day in FY 2022 on S.R. 538 ranged from a low of 11,600 in July 2021 to a high of 14,500 in February and April 2022. Like other CFX facilities, peak season is typically during spring months as there are more tourists in the area (possibly snowbirds) during the second half of the fiscal year. These data are presented in a graphical format in Figure 9-5. Each month's average paid in-lane transactions per day appear as a percentage of the average for the fiscal year. February and April paid in-lane transactions were 10.7 percent above average and July paid in-lane transactions were 11.5 percent below average for the facility. It is also important to note that there was a slight decline in January and February transactions due in part to a surge in COVID infections from the Omicron variant after the 2021 holiday season.

Table 9-3
S.R. 538 – Monthly Seasonal Variation in Paid In-Lane Transactions
FY 2022

Month	Number of Days in Month	Paid In-Lane Transactions	Average Transactions/Day	Seasonal Factor
July	31	360,631	11,600	0.885
August	31	377,542	12,200	0.931
September	30	382,712	12,800	0.977
October	31	400,518	12,900	0.985
November	30	389,488	13,000	0.992
December	31	406,661	13,100	1.000
January	31	389,753	12,600	0.962
February	28	407,166	14,500	1.107
March	31	429,527	13,900	1.061
April	30	434,687	14,500	1.107
May	31	415,617	13,400	1.023
June	30	373,506	12,500	0.954
Average		*397,317*	*13,100*	*1.000*
Total Year	365	4,767,808		

Source: Monthly unaudited data provided by CFX

Figure 9-5
S.R. 538 Variation in Paid In-Lane Transactions Per Day, by Month
FY 2022



Source: Monthly unaudited data provided by CFX

9.2.4 TRANSACTIONS BY VEHICLE CLASS

The distribution of mainline transactions at each of the S.R. 538 plaza groups by vehicle class (number of axles) for FY 2022 is shown in Table 9-4. Overall, 95.3 percent of all transactions on S.R. 538 were made by 2-axle vehicles, with minor variation among the two plaza groups. The next most frequent vehicle class was the 3-axle classification, which accounted for 3.1 percent of all transactions on the facility. Four-axle vehicles accounted for 0.9 percent. Five or more-axle vehicles represented the smallest category with only 0.7 percent of facility transactions. The low percentages in 4-or-more-axle vehicles are likely due to the local nature of trips on S.R. 538, with heavy trucks using alternate routes.

Table 9-4
S.R. 538 Percent of Total Transactions by Vehicle Class
FY 2022

Vehicle Class	Marigold Main	Koa Main	S.R. 538 Total
2-Axle	95.8%	94.3%	95.3%
3-Axle	2.7%	4.0%	3.1%
4-Axle	0.8%	0.8%	0.9%
5 or More Axles	0.7%	0.9%	0.7%
Total	**100.0%**	**100.0%**	**100.0%**

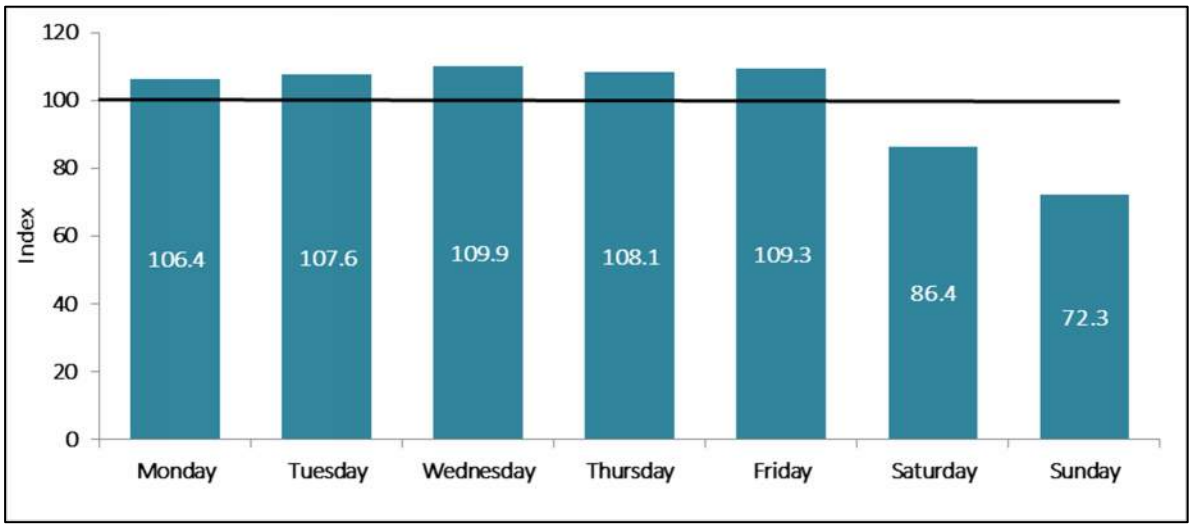
Source: Unaudited lane transaction data – May 2022

9.2.5 DAY-OF-WEEK TRANSACTION VARIATION

Figure 9-6 contains a comparison of transactions by day of the week for FY 2022. These data are 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 indicates a day that has a 20 percent greater volume than the average. As was done in prior years, the data used for this analysis was for a typical week in May 2022. The data includes transactions at mainline plazas only (no ramps).

FY 2022 weekday transactions on S.R. 538 fluctuated slightly over the course of the five-day work week, between values of 106.4 and 190.9. Transactions were highest on Wednesdays, with an index value of 109.9 (9.9 percent higher than the average day). Saturday and Sunday volumes were much lower with index values of 86.4 and 72.3, respectively.

Figure 9-6
S.R. 538 Variation in Transactions, by Day of Week
FY 2022



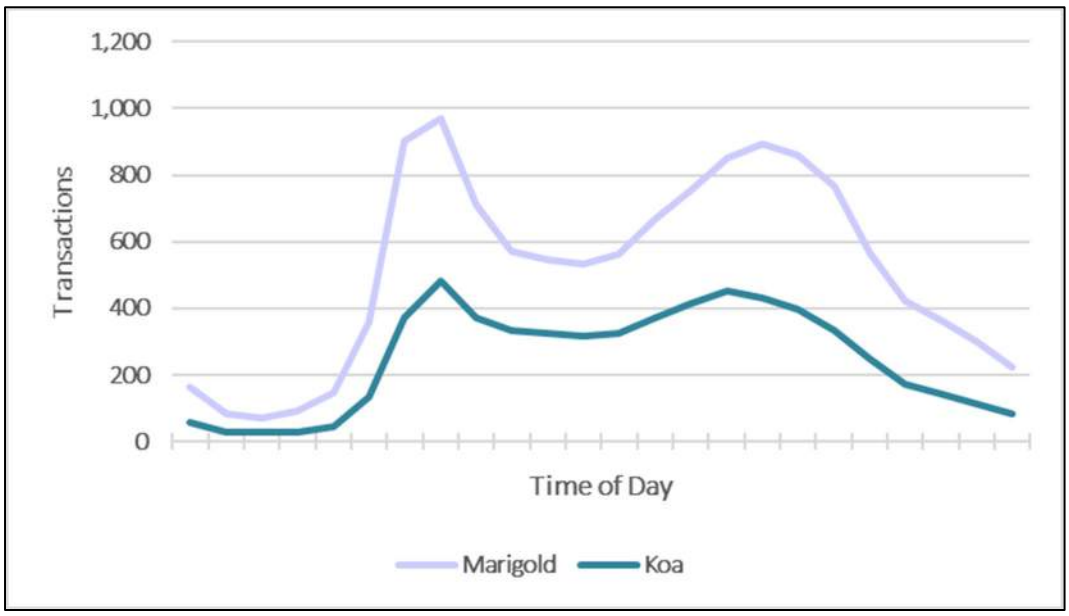
Source: Unaudited lane transaction data – May 2022

9.2.6 HOURLY TRAFFIC DISTRIBUTION

The hourly distribution of traffic volumes includes information on the usage characteristics of the facility. The hourly distributions represent counts taken during a typical week at the mainline toll plazas during the month of May. The typical weekday hourly distribution is shown in Figure 9-7 and the hourly distribution on weekend days is shown in Figure 9-8. The figures contain the sum of traffic volumes in both directions.

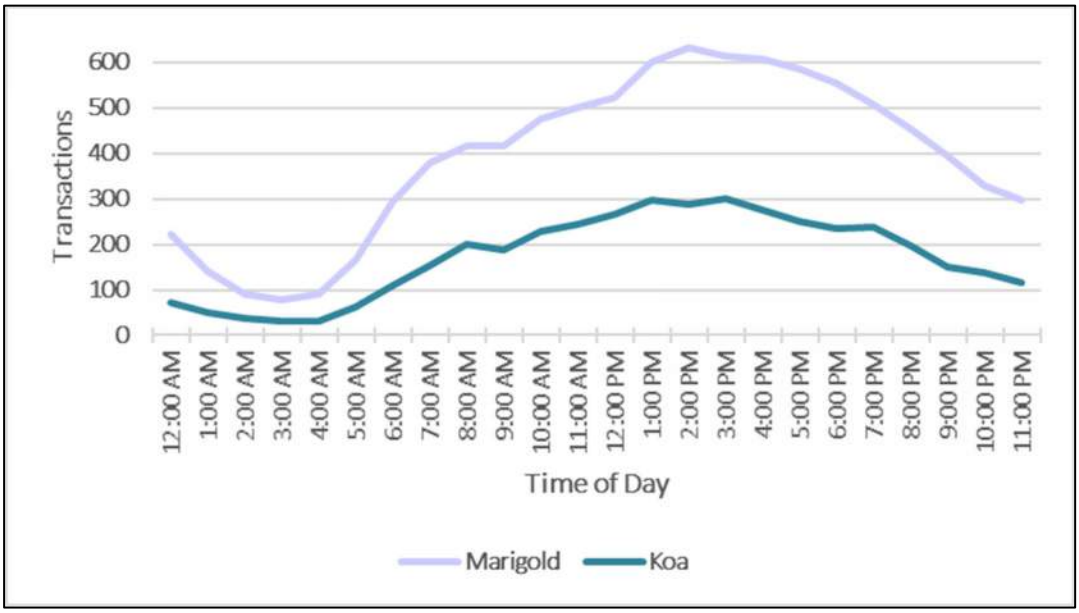
The two mainline toll plaza locations on S.R. 538 exhibit similar hourly traffic patterns. On weekdays, travel demand at both locations is bimodal, with both a two-hour morning peak and a three- to four-hour evening peak. The highest peak hour volumes during the week were 970 per hour beginning at 7:00 a.m. at the Marigold mainline plaza and 480 per hour beginning at 7:00 a.m. at the Koa mainline plaza. On weekends, traffic builds all day with a peak of 630 vehicles per hour at 2:00 p.m. at the Marigold mainline plaza and 300 per hour at 3:00 p.m. at the Koa mainline plaza.

Figure 9-7
S.R. 538 Hourly Two-Way Traffic Variation (Weekday)
FY 2022 (May)



Source: Unaudited lane traffic data – May 2022

Figure 9-8
S.R. 538 Hourly Two-Way Traffic Variation (Weekend)
FY 2022 (May)



Source: Unaudited lane traffic data – May 2022

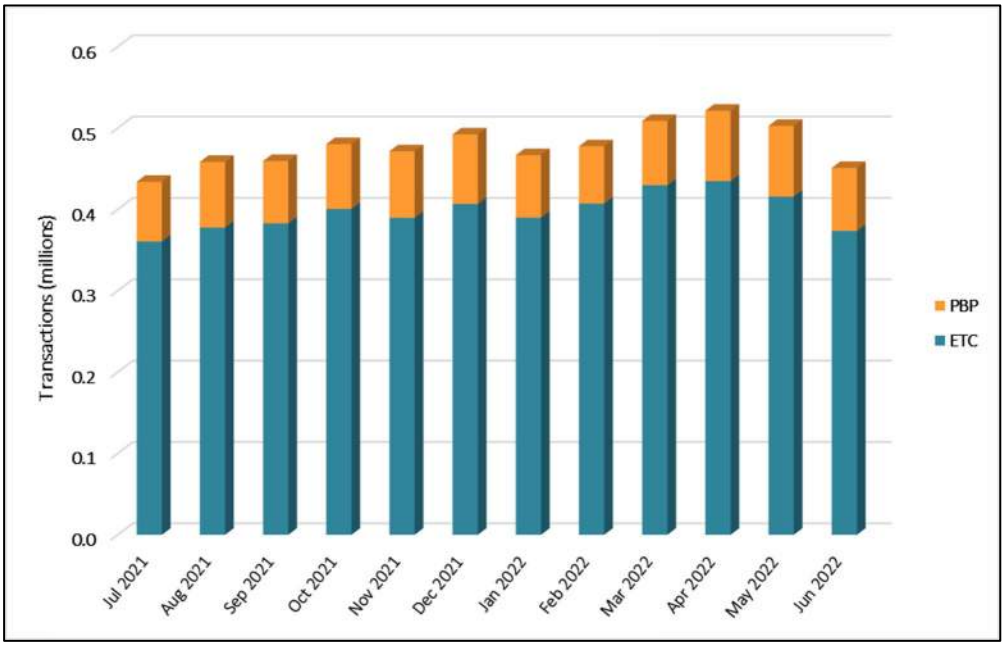
9.2.7 TRANSACTIONS AND REVENUE BY PAYMENT TYPE

The distributions of transactions and revenue by payment type during FY 2022 are presented in Figure 9-9 and Figure 9-10. 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 a FY 2022 accrual rate of 52 percent of all unpaid in-lane transactions in July and August 2021, then dropped down to 50 percent for the remainder of the year. This means that the PBP transactions and revenue shown here are estimates of the levels that will eventually pay tolls through the PBP process. 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 9-9, ETC transactions on S.R. 538 ranged from a low of 0.03 million in July 2021 to a high of 0.04 million in March of 2022. Overall, ETC accounted for 83.3 percent of total transactions on the facility. PBP transactions accounted for the remaining 16.7 percent of total transactions on the facility.

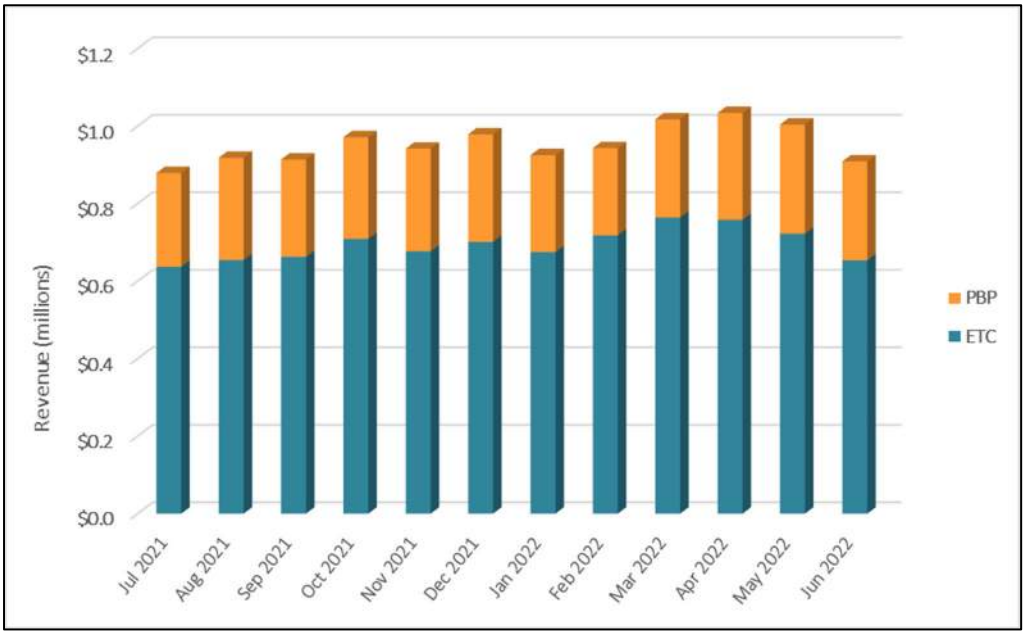
As shown in Figure 9-10, the share of toll revenues by payment type is comparable to the share of transactions, recognizing the differences in the toll paid by payment method. ETC revenue on S.R. 538 ranged from a low of $0.06 million in July 2021 to a high of $0.08 million in March 2022. Overall, ETC accounted for 72.9 percent of total revenue on the facility. The PBP revenue ranged from a low of $0.02 million to a high of $0.3 million. Overall, PBP accounted for 27.1 percent of total revenue on the facility.

Figure 9-9
S.R. 538 Percent of Transactions by Payment Type
FY 2022



Source: Monthly unaudited data provided by CFX

Figure 9-10
S.R. 538 Percent of Revenue by Payment Type
FY 2022



Source: Monthly unaudited data provided by CFX

9.3 *Forecasted Transactions and Toll Revenues*

The forecasts of T&R are based on several assumptions about the future, including assumptions about future toll rates. Based on the CFX "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 with a floor of 1.5 percent. At the time of preparing the T&R estimates and this report, CDM Smith learned that the net change in CPI during CY 2022 was 8.577 percent. At their June 2023 meeting, the CFX Board decided to forego the net change in CPI and implement the policy floor of 1.5 percent adjustment for FY 2024. Based on assurances from CFX, CDM Smith used this value to index toll rates for FY 2024. 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 9-5, 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 (C.R. 532), Poinciana Boulevard, Old Lake Wilson Road, U.S. 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. Generally, improvements that provide additional connectivity in this area of Osceola County will inherently benefit S.R. 538 as well.

Table 9-5
S.R. 538 - Key Transportation Improvements

Facility	From	To	Year	Jurisdiction	Improvement
Interstate 4	SR 434	Kirkman Road	2025	FDOT	Widen to 10 lanes
Interstate 4	Interchange @ Osceola Polk Line Rd (CR 532)		2025	Osceola County/FDOT	Interchange Imp
Osceola Polk Line Rd (CR 532)	US 17/92	Lake Wilson Road	2025	Osceola County/CFX	Widen to 4-lanes
Poinciana Parkway (SR 538)	Cypress Parkway	Kinney Harmon Road	2025	CFX	Widen to 4-lanes
Poinciana Parkway Ext. (SR 538)	Kinney Harmon Road	Osceola Polk Line Rd (CR 532)	2025	CFX	New 4-lane Expressway
Poinciana Blvd	Pleasant Hill Road	Crescent Lakes Blvd	2025	Osceola County	Widen to 4-lanes
US 17-92	Poinciana Blvd	Ham Brown Road/CR 535	2025	FDOT	Widen to 4-lanes
John Young Parkway	US 192	Portage Road	2025	FDOT	Widen to 6-lanes
SR 429	I-4	Seidel Road	2035	FDOT	Widen to 8-lanes
Poinciana Parkway Ext. (SR 538)	Osceola Polk Line Rd (CR 532)	I-4	2035	FDOT	New 4-lane Expressway
Old Lake Wilson Road	Osceola Polk Line Rd (CR 532)	Sinclair Road	2035	Osceola County	Widen to 4-lanes
Interstate 4	SR 429	Osceola Polk Line Rd (CR 532)	2035	FDOT	Auxiliary Lanes
Apopka-Vineland Road (SR 535)	US 192	SR 536	2035	FDOT	Widen to 6 Lanes
John Young Parkway/US 17-92	Intersection @ Pleasant Hill Road		2035	FDOT	Intersection Imp
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 9-6 and Table 9-7. The tables are divided into paid in-lane transactions and revenue and PBP transactions and revenue. Paid in-lane transactions and revenue include only ETC as cash collection is not possible.

The paid in-lane transactions on S.R. 538 are expected to grow by 2.6 percent per year through FY 2032, 1.5 percent per year through FY 2042, and then 0.8 percent per year through the end of the forecast period because of the impact of toll rate adjustments. PBP transactions are forecasted to increase by 2.9 percent per year through FY 2032, increase by 0.8 percent per year through FY 2042, then increase by 0.7 percent through FY 2052. Total transactions on S.R. 538 are projected to increase during the forecast period from the actual of 5.7 million in FY 2022 to 9.2 million in FY 2052. During the FY 2022 through FY 2052 forecast period, S.R. 538 total transactions are expected to increase an average of 2.6 percent per year from FY 2022 to FY 2032 (due to ramp-up and improvements), 1.4 percent per year from FY 2032 to FY 2042 and 0.8 percent per year from FY 2042 to FY 2052. The paid in-lane revenues on S.R. 538 are projected to increase over the forecast period, from the FY 2022 actual of $8.3 million to $14.5 million in FY 2052. PBP revenues are projected to increase from $3.1 million in FY 2022 to $4.9 million in FY 2052. Total revenue on S.R. 538 is projected to increase from the actual of $11.4 million in FY 2022 to $19.4 million in FY 2052. Total revenue is expected to increase an average of 3.2 percent per year from FY 2022 to FY 2032 (again due to ramp-up and improvements), 1.5 percent per year from FY 2032 to FY 2042 and 0.7 percent per year from FY 2042 to FY 2052.

Table 9-6
S.R. 538 Plaza Groups – Transaction Projections (Millions)
FY 2023 – FY 2052

Fiscal Year		Marigold Main	Koa Main	Paid In-Lane	PBP	Total	Percent Annual Change
2012	Actual						
2013							
2014							
2015							
2016							
2017							
2018							
2019							
2020[A,B]		1.2	0.5	1.7	0.6	2.3	
2021[*C]		2.7	1.2	3.9	1.0	4.9	113.0%
2022[*D]		3.3	1.5	4.8	0.9	5.7	16.3%
2023[E]	Forecast	3.1	1.4	4.5	0.8	5.3	-7.0%
2024		3.5	1.5	5.0	0.9	5.9	11.3%
2025		3.6	1.6	5.2	1.0	6.2	5.1%
2026		3.7	1.7	5.4	1.1	6.5	4.8%
2027		3.8	1.7	5.5	1.1	6.6	1.5%
2028		3.9	1.7	5.6	1.1	6.7	1.5%
2029		4.0	1.8	5.8	1.1	6.9	3.0%
2030		4.1	1.8	5.9	1.1	7.0	1.4%
2031		4.2	1.9	6.1	1.2	7.3	4.3%
2032		4.3	1.9	6.2	1.2	7.4	1.4%
2033		4.4	1.9	6.3	1.2	7.5	1.4%
2034		4.5	2.0	6.5	1.2	7.7	2.7%
2035		4.5	2.0	6.5	1.2	7.7	0.0%
2036		4.6	2.0	6.6	1.2	7.8	1.3%
2037		4.7	2.1	6.8	1.2	8.0	2.6%
2038		4.7	2.1	6.8	1.2	8.0	0.0%
2039		4.8	2.1	6.9	1.3	8.2	2.5%
2040		4.9	2.1	7.0	1.3	8.3	1.2%
2041		4.9	2.2	7.1	1.3	8.4	1.2%
2042		5.0	2.2	7.2	1.3	8.5	1.2%
2043		5.0	2.2	7.2	1.3	8.5	0.0%
2044		5.1	2.2	7.3	1.3	8.6	1.2%
2045		5.2	2.3	7.5	1.3	8.8	2.3%
2046		5.2	2.3	7.5	1.3	8.8	0.0%
2047		5.2	2.3	7.5	1.3	8.8	0.0%
2048		5.3	2.3	7.6	1.3	8.9	1.1%
2049		5.3	2.3	7.6	1.4	9.0	1.1%
2050		5.4	2.3	7.7	1.4	9.1	1.1%
2051		5.4	2.4	7.8	1.4	9.2	1.1%
2052		5.4	2.4	7.8	1.4	9.2	0.0%

Fiscal Year	Compound Annual Average Growth Rate (CAAGR)				
2022 - 2032	2.7%	2.4%	2.6%	2.9%	2.6%
2032 - 2042	1.5%	1.5%	1.5%	0.8%	1.4%
2042 - 2052	0.8%	0.9%	0.8%	0.7%	0.8%

*Indicates systemwide toll rate increase according to Customer First Toll Policy

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. Continued effects of COVID-19 pandemic.

D - Completion of I-4 Ultimate project.

E - Includes impacts from Hurricane Ian toll suspensions in September 2022.

Table 9-7
S.R. 538 Plaza Groups – Toll Revenue Projections (Millions)
FY 2023 – FY 2052

Fiscal Year		Marigold Main	Koa Main	Paid In-Lane	PBP	Total	Percent Annual Change
2012	Actual						
2013							
2014							
2015							
2016							
2017							
2018							
2019							
2020[A,B]		$2.5	$0.3	$2.8	$1.0	$3.8	
2021[*C]		$5.9	$0.7	$6.6	$3.2	$9.8	157.9%
2022[*D]		$7.5	$0.8	$8.3	$3.1	$11.4	16.3%
2023[E]	Forecast	$7.5	$0.8	$8.3	$2.9	$11.2	-1.8%
2024		$8.4	$0.9	$9.3	$3.4	$12.7	13.4%
2025		$8.8	$1.0	$9.8	$3.6	$13.4	5.5%
2026		$9.0	$1.0	$10.0	$3.7	$13.7	2.2%
2027		$9.3	$1.0	$10.3	$3.7	$14.0	2.2%
2028		$9.5	$1.0	$10.5	$3.8	$14.3	2.1%
2029		$9.7	$1.1	$10.8	$3.9	$14.7	2.8%
2030		$10.0	$1.1	$11.1	$4.0	$15.1	2.7%
2031		$10.2	$1.1	$11.3	$4.0	$15.3	1.3%
2032		$10.4	$1.1	$11.5	$4.1	$15.6	2.0%
2033		$10.6	$1.2	$11.8	$4.2	$16.0	2.6%
2034		$10.8	$1.2	$12.0	$4.2	$16.2	1.3%
2035		$11.0	$1.2	$12.2	$4.3	$16.5	1.9%
2036		$11.1	$1.2	$12.3	$4.3	$16.6	0.6%
2037		$11.3	$1.2	$12.5	$4.4	$16.9	1.8%
2038		$11.5	$1.2	$12.7	$4.4	$17.1	1.2%
2039		$11.6	$1.3	$12.9	$4.6	$17.5	2.3%
2040		$11.8	$1.3	$13.1	$4.6	$17.7	1.1%
2041		$11.9	$1.3	$13.2	$4.6	$17.8	0.6%
2042		$12.1	$1.3	$13.4	$4.7	$18.1	1.7%
2043		$12.2	$1.3	$13.5	$4.7	$18.2	0.6%
2044		$12.4	$1.3	$13.7	$4.8	$18.5	1.6%
2045		$12.5	$1.4	$13.9	$4.8	$18.7	1.1%
2046		$12.6	$1.4	$14.0	$4.8	$18.8	0.5%
2047		$12.7	$1.4	$14.1	$4.8	$18.9	0.5%
2048		$12.8	$1.4	$14.2	$4.9	$19.1	1.1%
2049		$12.9	$1.4	$14.3	$4.9	$19.2	0.5%
2050		$13.0	$1.4	$14.4	$4.9	$19.3	0.5%
2051		$13.0	$1.4	$14.4	$4.9	$19.3	0.0%
2052		$13.1	$1.4	$14.5	$4.9	$19.4	0.5%

Fiscal Year	Compound Annual Average Growth Rate (CAAGR)				
2022 - 2032	3.3%	3.2%	3.3%	2.8%	3.2%
2032 - 2042	1.5%	1.7%	1.5%	1.4%	1.5%
2042 - 2052	0.8%	0.7%	0.8%	0.4%	0.7%

*Indicates systemwide toll rate increase according to Customer First Toll Policy

Notes:

Actual revenue 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. Continued effects of COVID-19 pandemic.

D - Completion of I-4 Ultimate project.

E - Includes impacts from Hurricane Ian toll suspensions in September 2022.

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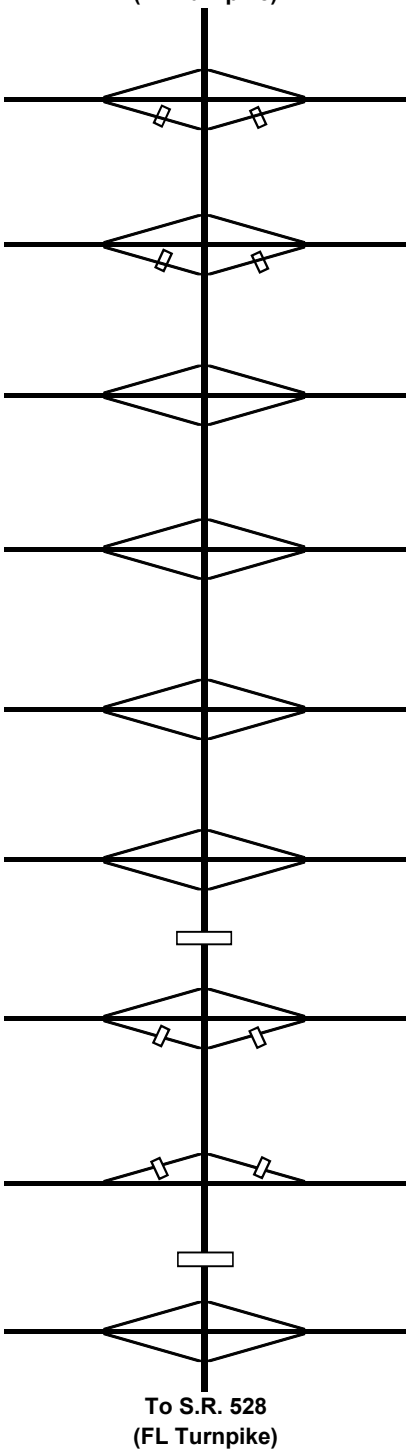
APPENDIX A

TRAFFIC PROFILES
FY 2022 - FY 2052

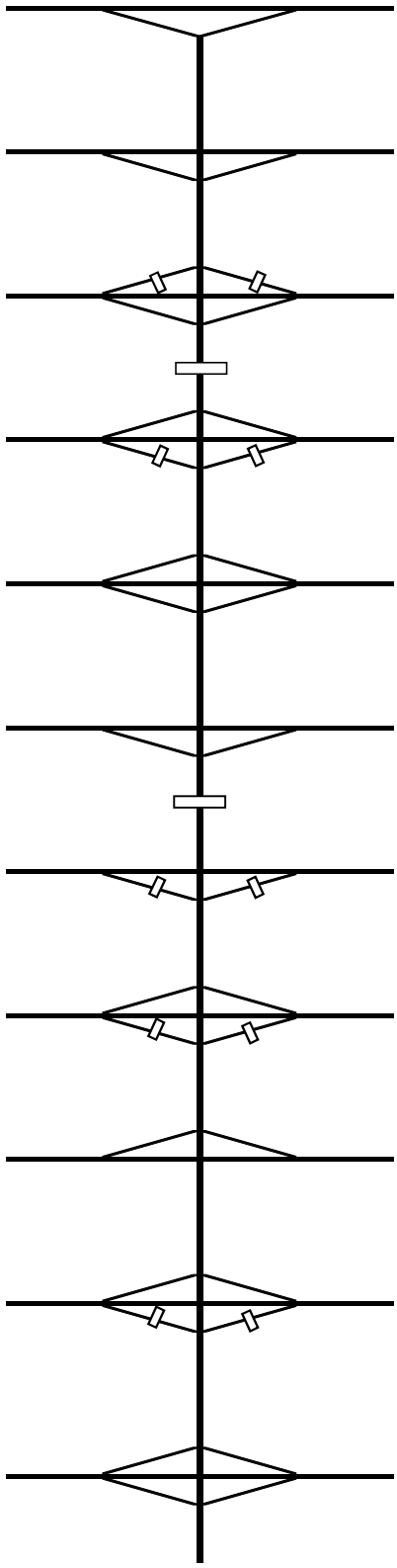
S.R. 528 - Two-Way Daily Revenue Traffic (AWDT)



Cross Street	FY 2022	FY 2032	FY 2042	FY 2052
To S.R. 528 (FL Turnpike)				
	88,700	**110,400**	**133,500**	**149,400**
Boggy Creek Road	7,100	8,800	9,900	10,900
	17,800	21,500	24,900	27,500
	99,400	**123,100**	**148,500**	**166,000**
Tradeport Drive /	8,200	10,100	11,500	12,800
Conway Road	8,800	11,000	12,400	13,600
	100,000	**124,000**	**149,400**	**166,800**
Semoran Boulevard	40,900	50,600	57,600	63,300
	31,600	39,500	44,500	48,900
	90,700	**112,900**	**136,300**	**152,400**
Goldenrod Road	7,400	9,000	10,300	11,400
	6,800	8,400	9,500	10,500
	90,100	**112,300**	**135,500**	**151,500**
Narcoossee Road	25,900	31,500	35,600	39,900
	6,900	8,500	9,600	10,600
	71,100	**89,300**	**109,500**	**122,200**
S.R. 417	34,500	43,100	53,200	59,200
	31,300	39,400	48,200	53,800
Beachline Main	**67,900**	**85,600**	**104,500**	**116,800**
Innovation Way	9,900	12,800	15,800	17,000
	2,100	2,700	3,200	3,600
	60,100	**75,500**	**91,900**	**103,400**
Dallas Boulevard	5,900	7,700	9,500	10,600
Dallas Main	**54,200**	**67,800**	**82,400**	**92,800**
S.R. 520	7,600	10,500	11,900	13,000
	2,400	3,000	3,600	4,100
To S.R. 528 (FL Turnpike)	**49,000**	**60,300**	**74,100**	**83,900**

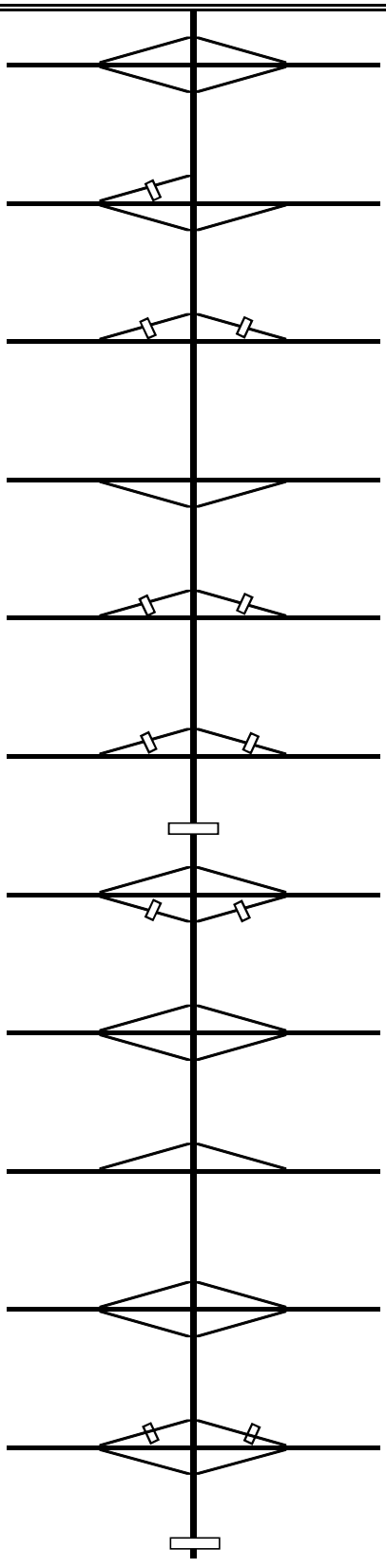
Note: Two-Way Daily Revenue Traffic is a balanced traffic profile of existing and forecasted revenue generating traffic on System facilities, which excludes non-revenue traffic and non-accrued Pay-by-Plate traffic. This profile should not be used for design traffic purposes.

S.R. 408 - Two-Way Daily Revenue Traffic (AWDT)



Cross Street	FY 2022	FY 2032	FY 2042	FY 2052
Turnpike Spur				
	83,200	107,800	119,000	128,400
	83,200	**107,800**	**119,000**	**128,400**
S.R. 50 West				
	10,700	12,600	13,700	14,600
	93,900	**120,400**	**132,700**	**143,000**
Good Homes	11,800	13,900	15,200	16,100
Road	11,300	13,300	14,600	15,400
Hiawassee Main	**93,400**	**119,800**	**132,100**	**142,300**
Hiawassee Road	8,100	10,400	11,500	12,300
	13,100	15,400	16,800	17,800
	98,400	**124,800**	**137,400**	**147,800**
Kirkman Road	10,600	12,600	13,700	14,500
	10,600	12,800	14,300	14,700
	98,400	**125,000**	**138,000**	**148,000**
Pine Hills Road				
	9,100	10,000	10,900	11,800
Pine Hills Main	**107,500**	**135,000**	**148,900**	**159,800**
Old Winter				
Garden Rd	7,400	8,200	8,800	9,200
	114,900	**143,200**	**157,700**	**169,000**
John Young	8,700	9,900	10,600	10,900
Parkway	11,000	13,000	13,900	14,300
	117,200	**146,300**	**161,000**	**172,400**
Tampa Avenue	4,900	5,800	6,400	6,800
	112,300	**140,500**	**154,600**	**165,600**
Orange Blossom	9,600	10,700	11,400	12,000
Trail	13,300	14,000	14,400	14,700
	116,000	**143,800**	**157,600**	**168,300**
Interstate-4	43,300	55,800	66,400	75,700
	93,200	107,500	119,100	130,600
	165,900	**195,500**	**210,300**	**223,200**

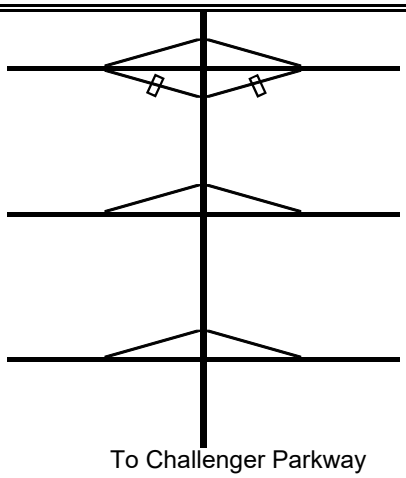
S.R. 408 - Two-Way Daily Revenue Traffic (AWDT)



Cross Street	FY 2022	FY 2032	FY 2042	FY 2052
Orange Avenue/	11,700	13,700	14,800	15,700
Rosalind Avenue	16,900	19,200	20,700	21,900
	171,100	**201,000**	**216,200**	**229,400**
Mills Avenue	2,800	3,200	3,400	3,500
	9,700	10,900	11,600	11,900
	178,000	**208,700**	**224,400**	**237,800**
Bumby Avenue	19,400	23,100	24,300	24,800
	158,600	**185,600**	**200,100**	**213,000**
Crystal Lake Drive	18,000	21,300	22,900	24,400
	176,600	**206,900**	**223,000**	**237,400**
Conway Road	15,700	17,500	19,000	20,500
	160,900	**189,400**	**204,000**	**216,900**
Andes Avenue	16,200	19,500	21,400	23,300
Conway Main	**144,700**	**169,900**	**182,600**	**193,600**
Semoran Boulevard/	14,700	17,500	18,800	19,900
Yucatan Drive	11,300	13,400	14,200	14,500
	141,300	**165,800**	**178,000**	**188,200**
Goldenrod Road	12,400	14,600	15,800	16,700
	12,000	14,000	15,100	16,100
	140,900	**165,200**	**177,300**	**187,600**
Chickasaw Trail	11,700	13,700	14,800	15,600
	129,200	**151,500**	**162,500**	**172,000**
S.R. 417	67,900	75,500	80,500	84,900
	20,800	24,400	27,500	29,200
	82,100	**100,400**	**109,500**	**116,300**
Dean Road	12,500	14,600	16,500	18,000
	2,000	2,300	2,600	2,900
Dean Main	**71,600**	**88,100**	**95,600**	**101,200**

S.R. 408 - Two-Way Daily Revenue Traffic (AWDT)

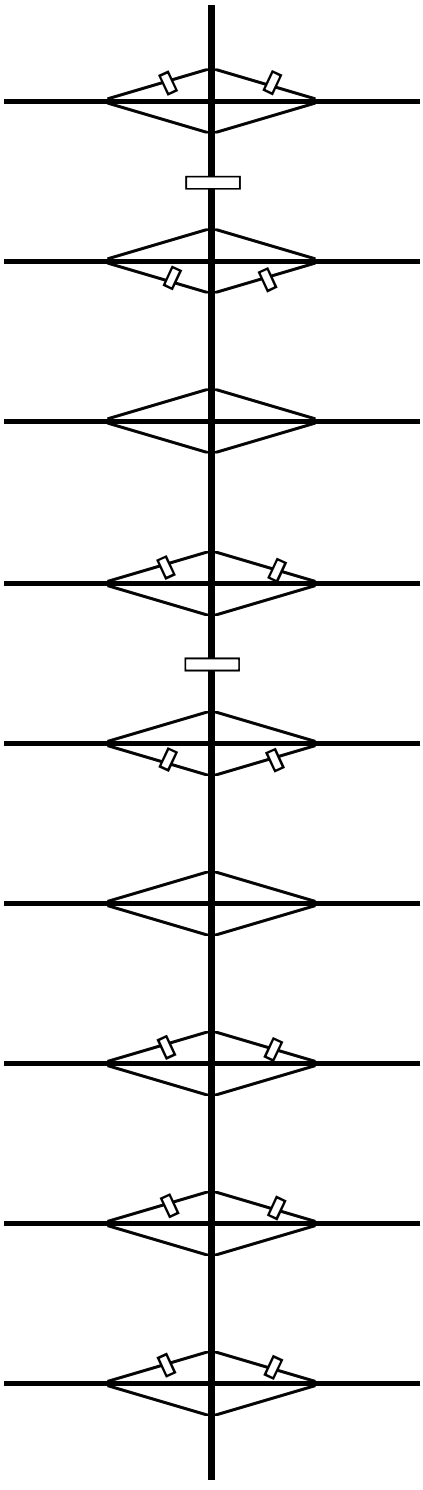
Cross Street	FY 2022	FY 2032	FY 2042	FY 2052
Rouse Road	8,200	10,000	11,400	12,000
	1,100	1,200	1,300	1,400
	64,500	**79,300**	**85,500**	**90,600**
Alafaya Trail	26,700	32,460	35,700	38,900
	37,800	**46,840**	**49,800**	**51,700**
S.R. 50	27,200	35,200	37,100	37,900
	10,600	11,640	12,700	13,800



To Challenger 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 non-accrued Pay-by-Plate traffic. This profile should not be used for design traffic purposes.

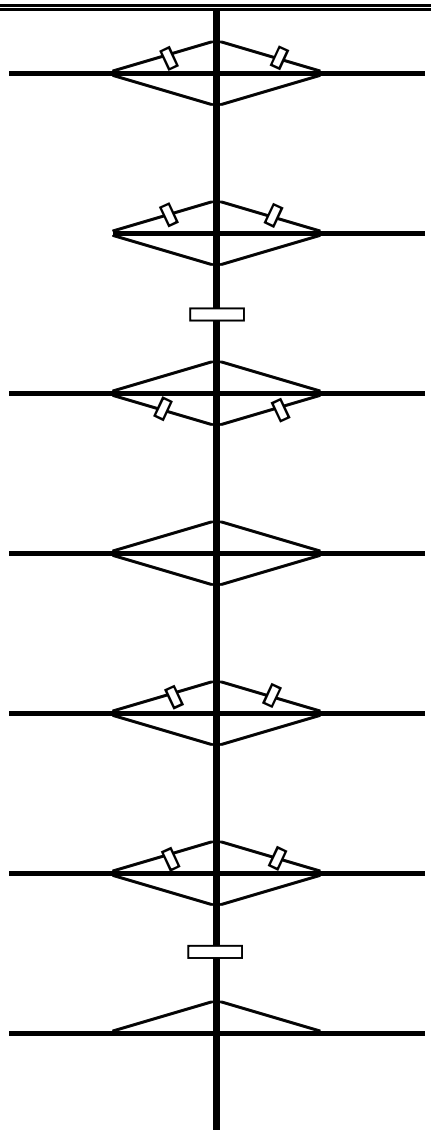
S.R. 417 - Two-Way Daily Revenue Traffic (AWDT)



Cross Street	FY 2022	FY 2032	FY 2042	FY 2052
	69,250	**87,200**	**108,700**	**123,450**
University Boulevard	6,900	7,600	8,100	8,400
	30,500	33,600	35,800	37,300
University Main	**92,850**	**113,200**	**136,400**	**152,350**
S.R. 50	6,700	7,400	7,800	8,100
	9,700	10,300	10,600	10,700
	95,850	**116,100**	**139,200**	**154,950**
S.R. 408	42,000	46,000	49,000	51,000
	46,700	53,900	59,000	63,100
	100,550	**124,000**	**149,200**	**167,050**
Curry Ford Road	9,750	12,600	15,200	18,100
	12,600	16,600	20,000	22,200
Curry Ford Main	**103,400**	**128,000**	**154,000**	**171,150**
Lee Vista Boulevard	6,900	8,900	11,000	12,800
	9,800	12,700	15,000	17,400
	106,300	**131,800**	**158,000**	**175,750**
S.R. 528	41,650	51,150	62,100	69,325
	24,150	31,350	39,300	43,675
	88,800	**112,000**	**135,200**	**150,100**
Innovation Way/	8,500	10,100	11,500	12,800
Dowden Road	3,300	4,500	5,200	5,900
	83,600	**106,400**	**128,900**	**143,200**
Moss Park Road	9,000	10,600	12,200	13,800
	3,500	4,800	6,100	6,800
	78,100	**100,600**	**122,800**	**136,200**
Narcoossee Road	21,900	24,600	27,500	30,400
	12,600	16,700	20,900	23,100
	68,800	**92,700**	**116,200**	**128,900**

S.R. 417 - Two-Way Daily Revenue Traffic (AWDT)

Cross Street	FY 2022	FY 2032	FY 2042	FY 2052
Lake Nona Road	10,500	18,200	21,900	25,600
	7,200	13,800	17,400	20,900
	65,500	**88,300**	**111,700**	**124,200**
Boggy Creek Road	14,200	16,800	19,100	21,400
/Airport Access Road	22,000	31,600	43,100	49,700
Boggy Creek Main	**73,300**	**103,100**	**135,700**	**152,500**
Landstar Boulevard	8,700	10,300	11,700	13,100
	21,700	26,400	31,300	35,500
	86,300	**119,200**	**155,300**	**174,900**
Florida's Turnpike	35,900	49,700	68,100	75,900
	24,200	33,400	42,000	47,600
	74,600	**102,900**	**129,200**	**146,600**
Orange Blossom	11,800	15,100	17,300	19,300
Trail	10,700	14,100	16,100	18,000
	73,500	**101,900**	**128,000**	**145,300**
John Young	14,000	18,300	22,700	25,400
Parkway	10,500	14,800	18,600	21,200
John Young Main	**70,000**	**98,400**	**123,900**	**141,100**
World Center Drive	22,400	31,500	39,700	45,200
	47,600	**66,900**	**84,200**	**95,900**

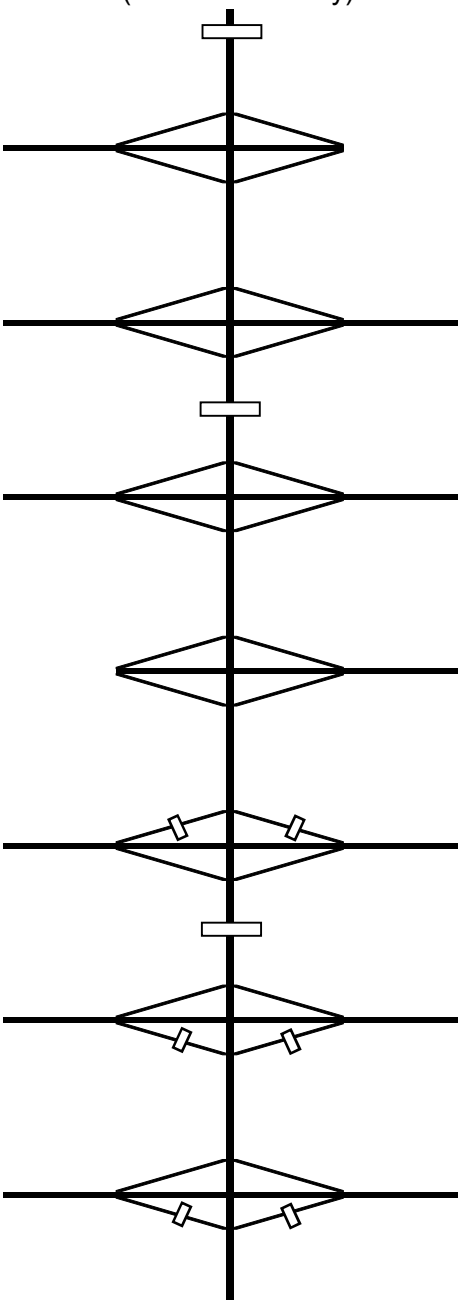


To Turnpike S.R. 417

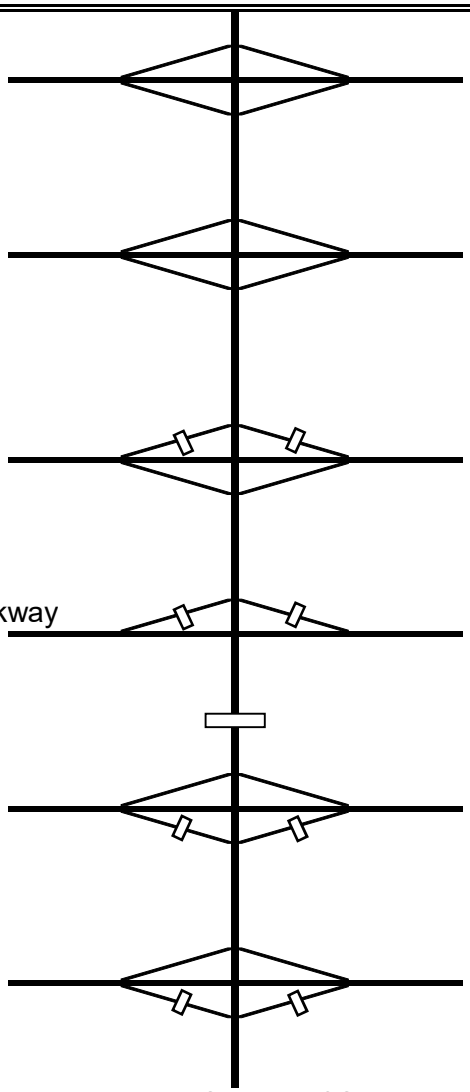
Note: Two-Way Daily Revenue Traffic is a balanced traffic profile of existing and forecasted revenue generating traffic on System facilities, which excludes non-revenue traffic and non-accrued Pay-by-Plate traffic. This profile should not be used for design traffic purposes.

S.R. 429 - Two-Way Daily Revenue Traffic (AWDT)

Cross Street	FY 2022	FY 2032	FY 2042	FY 2052
To FDOT Section of S.R. 429 (Wekiva Parkway)				
Mount Plymouth Main	**6,100**	**21,800**	**29,100**	**36,700**
S.R. 453	900	1,500	1,900	2,200
	12,400	21,500	26,900	31,400
	17,600	**41,800**	**54,100**	**65,900**
Kelly Park Road	1,600	3,300	4,900	6,000
	7,300	10,700	15,500	20,400
Ponkan Main	**23,300**	**49,200**	**64,700**	**80,300**
U.S. 441	1,000	4,800	6,400	7,900
	17,200	20,900	24,700	28,400
	39,500	**65,300**	**83,000**	**100,800**
S.R. 414	12,300	24,000	29,400	35,000
	32,700	39,900	46,000	51,700
	59,900	**81,200**	**99,600**	**117,500**
C.R. 437A/	2,400	8,600	9,600	10,400
Ocoee Apopka Rd	5,500	8,700	11,900	15,300
Forest Lake Main	**63,000**	**81,300**	**101,900**	**122,400**
West Road	3,000	3,500	3,900	4,300
	14,000	16,100	18,300	20,300
	74,000	**93,900**	**116,300**	**138,400**
S.R. 438/	5,800	6,700	7,700	8,500
Plant Street	12,000	13,800	15,700	17,400
	80,200	**101,000**	**124,300**	**147,300**



S.R. 429 - Two-Way Daily Revenue Traffic (AWDT)



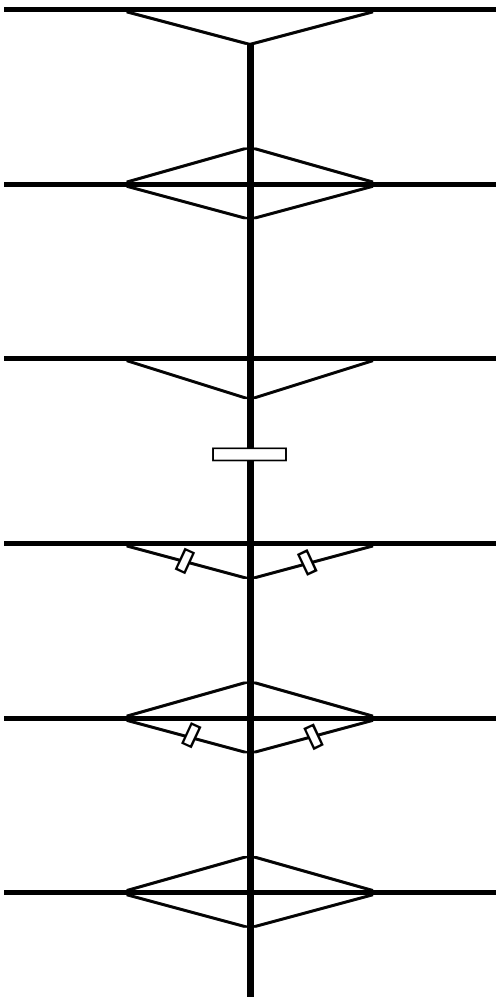
Cross Street	FY 2022	FY 2032	FY 2042	FY 2052
S.R. 50	9,000	11,300	13,900	16,600
	7,200	9,000	11,100	13,200
	78,400	**98,700**	**121,500**	**143,900**
Florida's Turnpike	42,200	55,000	70,900	84,400
	37,900	54,900	72,700	85,500
	74,100	**98,600**	**123,300**	**145,000**
C.R. 535	21,000	25,900	31,000	34,700
	7,000	8,900	10,700	11,700
	60,100	**81,600**	**103,000**	**122,000**
Stoneybrook West Parkway	8,500	10,500	12,500	14,100
Independence Main	**51,600**	**71,100**	**90,500**	**107,900**
New Independence Parkway	12,600	16,400	19,400	22,100
	3,300	4,300	5,100	5,800
	42,300	**59,000**	**76,200**	**91,600**
Schofield Road	7,900	9,600	11,400	13,200
	900	1,100	1,300	1,500
	35,300	**50,500**	**66,100**	**79,900**

To Turnpike Section of SR 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 non-accrued Pay-by-Plate traffic. This profile should not be used for design traffic purposes.

S.R. 414 - Two-Way Daily Revenue Traffic (AWDT)

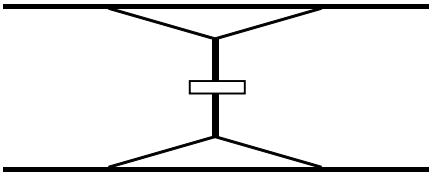
Cross Street	FY 2022	FY 2032	FY 2042	FY 2052
S.R. 429				
	45,000	63,900	75,400	86,700
	45,000	**63,900**	**75,400**	**86,700**
U.S. 441 via S.R. 451	11,300	16,800	20,000	22,900
	4,300	6,700	9,700	13,300
	38,000	**53,800**	**65,100**	**77,100**
Marden Road				
	3,100	4,400	5,900	7,400
Coral Hills Main	**41,100**	**58,200**	**71,000**	**84,500**
C.R. 435/Keene Road				
	4,900	6,500	8,200	9,500
	46,000	**64,700**	**79,200**	**94,000**
Hiawassee Road	6,700	7,600	8,500	9,500
	5,000	5,700	6,400	7,100
	44,300	**62,800**	**77,100**	**91,600**
U.S. 441	7,500	10,200	13,100	15,600
	12,600	14,300	16,100	17,800
	49,400	**66,900**	**80,100**	**93,800**



To Maitland Blvd.

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 non-accrued Pay-by-Plate traffic. This profile should not be used for design traffic purposes.

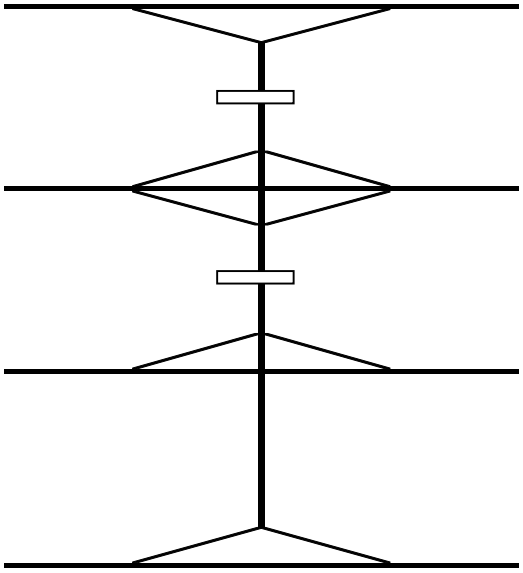
S.R. 453 - Two-Way Daily Revenue Traffic (AWDT)

Cross Street		FY 2022	FY 2032	FY 2042	FY 2052
S.R. 46/Mt. Dora		13,300	23,000	28,800	33,600
Coronado Main		**13,300**	**23,000**	**28,800**	**33,600**
S.R. 429		13,300	23,000	28,800	33,600

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 non-accrued Pay-by-Plate traffic. This profile should not be used for design traffic purposes.

S.R. 538 - Two-Way Daily Revenue Traffic (AWDT)

Cross Street	FY 2022	FY 2032	FY 2042	FY 2052
U.S. 17-92				
	13,600	20,800	29,200	37,400
Marigold Main	**13,600**	**20,800**	**29,200**	**37,400**
Marigold Avenue	6,900	11,400	15,900	20,700
	-	1,800	2,300	2,800
Koa Main	**6,700**	**11,200**	**15,600**	**19,500**
Koa Street	1,700	2,500	3,200	3,900
	5,000	**8,700**	**12,400**	**15,600**
Cypress Parkway	5,000	8,700	12,400	15,600



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 non-accrued Pay-by-Plate traffic. This profile should not be used for design traffic purposes.

CENTRAL FLORIDA EXPRESSWAY AUTHORITY

CDM Smith