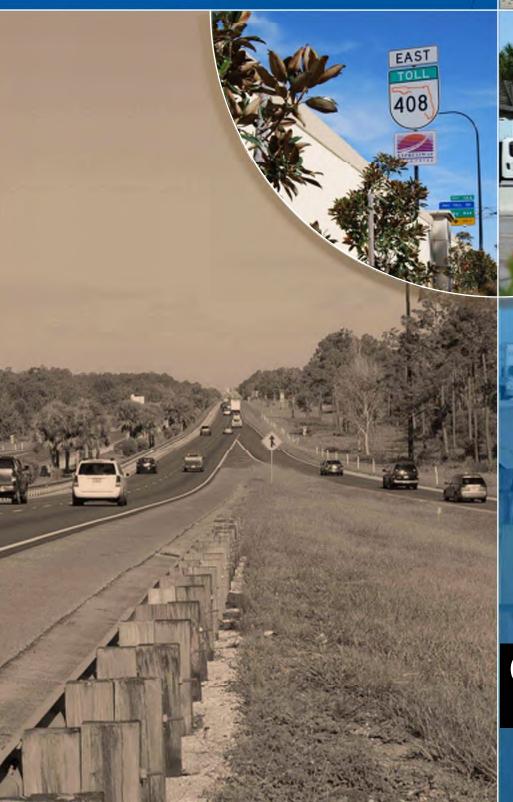
FY 2015
General Traffic and Earnings
Consultant's Annual Report







FLORIDA EXPRESSWAY AUTHORITY

CDM Smith

February 2016

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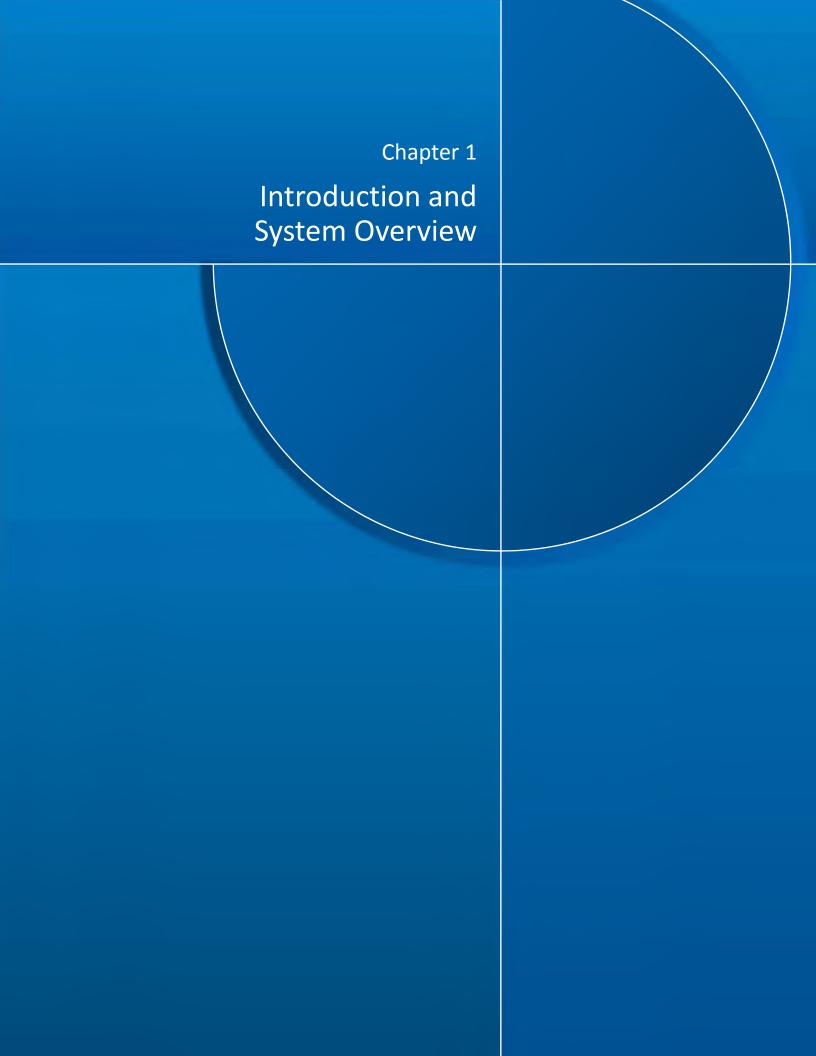
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INTRODUCTION AND SYSTEM OVERVIEW

1.1 Introduction

This Annual Report was prepared for the Central Florida Expressway Authority (CFX). The report contains a summary of the Fiscal Year (FY) 2015 traffic and revenue (T&R) performance characteristics and 30-year forecasts of T&R for the six toll facilities that constitute the CFX System (the "System"). This report also includes a brief discussion of the external factors that influence future T&R. Any changes in sources or methodologies that have occurred since the last report are noted in the text.

The purpose of this report is to describe current T&R trends for the System, to summarize the forecasting methodology used to develop the projections and to provide both a short-term and long-term forecast of T&R for the System. This report contains a description of the historical T&R from FY 1996 through FY 2015, along with projected T&R for FY 2016 through FY 2045. 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 is an overview of the CFX System, a description of the current toll rate schedule, a comparison of CFX toll rates with other toll facilities across the nation, a summary of historical annual transactions and revenue for the System with percentages by facility, System monthly transactions and revenue, System historical E-PASS usage and T&R forecasts for the System.

Chapter 2 contains a presentation of historical trends and current socioeconomic conditions. While economic conditions are always an important driver of T&R performance, the Great Recession from 2007 through 2009 and recent recovery deserve special attention. Florida, particularly the Orlando Metropolitan Area, was amongst the hardest hit in the nation, especially with respect to the real estate market and unemployment. The ongoing recovery and the speed and strength with which it progresses will continue to play a major role in the performance of the CFX toll facilities. Chapters 3 through 8 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 five toll facilities:

- S.R. 528 Martin B. Andersen Beachline Expressway
- S.R. 408 Spessard Lindsay Holland East-West Expressway
- S.R. 417 Central Florida Greeneway
- S.R. 429/S.R. 451 Daniel Webster Western Beltway

• S.R. 414 – John Land Apopka Expressway

A location map of the five 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. S.R. 453 will be a new part of the System, constructed as part of the Wekiva Parkway.

The System as it exists today is the result of many individual projects, constructed over the 51 year period between 1963 and 2014. The first facility was the 23-mile S.R. 528 Beachline Expressway, which opened to traffic in 1967. The facility extends from the S.R. 482/Sand Lake Road/Boggy Creek Road interchange on the west end to S.R. 520 on the eastern end, connecting Orlando to the Space Coast. It has three mainline toll plazas: the Airport Main, the Beachline Main and the Dallas Main, and two pairs of ramp plazas. Florida's Turnpike Enterprise (FTE) owns and operates the western 8 miles of S.R. 528 from Boggy Creek Road to Interstate 4 (I-4) and the eastern end from S.R. 520 to S.R. 407 and U.S. 1 in Brevard County.

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

The next facility was S.R. 417 Central Florida Greeneway, which first opened to traffic in 1988. S.R. 417 is the eastern 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 was S.R. 429 Western Beltway, which as its name suggests is the western beltway around Orlando. S.R. 429 first opened to traffic in 2000. The CFX portion of S.R. 429 extends 23 miles from Seidel Road in west Orange County on the southern end to U.S. 441 in the City of Apopka on the northern end. It has two mainline toll plazas: Forest Lake Main and Independence Main, along with five pairs of ramp plazas. The 2-mile Western Beltway Connector Road (S.R. 451) is the former S.R. 429 connection to U.S. 441 extending from the Apopka Expressway on the southern end to U.S. 441 on the northern end. FTE owns and operates the toll facility on S.R. 429 from Seidel Road to I-4 in Osceola County.

The fifth facility, which opened to traffic in 2009, was the 6-mile S.R. 414 John Land Apopka Expressway. 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 at Coral Hills Main and two pairs of ramp plazas.

LEGEND Existing CFX System Existing FTE System Lake Future CFX System Monroe Future FTE System 453 Other Tolled Expressways (46) 429) 46 Lake County **Orange County** Lake rlando Sanford International Airport Mary Lake Harney 429 Lake Jesup 17 Apopka TOLL 451 414 417 Oviedo Maitland 414 Lake Seminole County 429 Apopka Orange County Winter Park University of Central Florida Ocoee Winter Orlando 50 Garden Orlando **(50)** 408 (520) 429 Universal Orlando Goldenrod Rd. Extension Orange County Convention 528 528 Center Inset Below Or<mark>lan</mark>do International Airport Walt Disney World Resort 429) 417 **Orange County** Osceola County East Lake Inset Tohopekaliga Kissimmee **50** 405 17 92 St. _ Cloud 407 528) 1 Lake Tohopekalig<mark>a</mark> (520) Cocoa 🐒 Atlantic Ocean Osceola Co.

Figure 1-1
Central Florida Expressway System

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/Narcoosee Road southerly to Heintzelman Boulevard, and serves as a reliever to S.R. 15/Narcoosee 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.

CFX System 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 1988 33 S.R. 429 - Daniel Webster Western Beltway 23 2000 6 2009 S.R. 414 - John Land Apopka Expressway S.R. 451 - Western Beltway Connector Road 2 2012 Total 109 **CFX Non-System**

Table 1-1 CFX System Facilities

1.2.1 WEKIVA PARKWAY PROJECT

Goldenrod Road Extension

The Wekiva Parkway will be an extension of the existing S.R. 429 which currently terminates just north of U.S. 441 near Apopka. The new 27-mile facility would ultimately connect to S.R. 417 at I-4 near Sanford, thus completing the beltway around northwest metropolitan Orlando.

2

2003

CFX and the Florida Department of Transportation (FDOT) collaborated on a Project Development and Environment (PD&E) Study for the Wekiva Parkway beginning in January 2005. Approved in May of 2012 by the Federal Highway Administration (FHWA), the PD&E study engaged state and local agencies and community members in developing and evaluating alternatives that meet the region's transportation needs, while also seeking to minimize public and environmental impacts. The FHWA approval allowed the design projects to start moving forward.

While providing alternatives to U.S. 441, S.R. 46 and many local roads in the greater Apopka, Mount Dora and Sanford areas, the Wekiva Parkway provides a much needed connection through the Wekiva River protection areas. The Wekiva Parkway is depicted in **Figure 1-2** with the proposed opening CFX toll rates for E-PASS and video transactions at the mainline gantries. The CFX section of the Wekiva Parkway includes three mainline toll gantries in an open road, all-electronic toll (AET) collection facility, with interchanges at U.S. 441, Kelly Park Road, and S.R. 46 in Lake County.

Previously, T&R from the Wekiva Parkway had not been included in System totals, as it was only a planned project. The two new mainline plazas that will be reported with S.R. 429 are:

- Ponkan Main Plaza, opening July 1, 2017 (FY 2018)
- Mount Plymouth Main Plaza, opening January 1, 2018 (FY 2018)

The other new mainline plaza will be reported with a new facility, S.R. 453,

Coronado Main Plaza, opening January 1, 2018 (FY 2018)

Toll collection on the Wekiva Parkway is planned to be AET, i.e., customers will not be able to pay cash on the roadway as there will be no toll plazas. On the CFX portion of the Wekiva Parkway, customers will either pay with E-PASS/SunPass or by video billing. Video billing customers will pay a higher toll amount (equivalent of the cash toll elsewhere) plus an increment on each transaction designed to cover the entire cost of video billing. Customers on the FDOT portion of the Wekiva Parkway will pay either with E-PASS/SunPass or through TOLL-BY-PLATE, the video tolling system operated by FTE. Future tolls include toll rate increases based on the toll rate indexing policy of each agency (CFX and FDOT).



46) 453 Coronado 429 Main Lake Co. \$0.75 \$0.65 Orange Co. \$0.75 \$1.00 Mt. Plymouth Main **441** Kelly Park Rd. Ponkan \$1.00 \$0.80 Main п Plymouth-Sorrento Rd. **LEGEND** E-Pass Toll Rate \$0.00 (2-axle) Video Toll Rate \$0.00 **Existing CFX System** Future CFX System Future FTE System Ramp Toll Location (441) Barrier Toll Location

Figure 1-2
Wekiva Parkway Facilities and Toll Rates Map

The Wekiva Parkway has been broken into fourteen design sections, allowing for more manageable design and construction projects. The design sections are shown in **Figure 1-3**. The Wekiva Parkway is a partnership project, with a portion being constructed by CFX and FDOT with the FDOT toll portions being operated by FTE. CFX's sections starting from the current terminus near S.R. 429 at U.S. 441, shown in purple, include:

- Section 1A from S.R. 429 to Ponkan Road
- Section 1B from Ponkan Road to North of Kelly Park Road
- Section 2B from North of Kelly Park Road to East of C.R. 437 (Plymouth Sorrento Road) and north to the boundary of Lake County
- Section 2A from East of C.R. 437 to C.R. 435 (Mt. Plymouth Road)
- Section 2C from boundary of Lake County to S.R. 46

The FDOT sections include tolled and non-tolled sections. The mainline sections that will be tolled include sections 4A, 4B, 6, 7A and 8. The non-tolled sections include improvements to existing sections of S.R. 46 on the eastern and western ends of the project and the realignment of C.R. 46A. The FDOT sections, shown in blue and green, include (from west to east):

- Sections 3A and 3B the improvements to S.R. 46 from Round Lake Road to U.S. 441 including improvements to the U.S. 441/S.R. 46 interchange (non-tolled)
- Sections 4A and 4B the construction of S.R. 429 from Mt. Plymouth Road (C.R. 435) to the intersection of C.R. 46A and S.R. 46
- Section 5 the realignment of C.R. 46A
- Section 6 the construction of S.R. 429 from C.R. 46A to east of the Wekiva River Bridge
- Section 7A the construction of S.R. 429 from east of the Wekiva River Bridge to Orange Boulevard (C.R. 431)
- Section 7B the improvement of S.R. 46 from Orange Boulevard to I-4 (non-tolled)
- Section 8 the construction of S.R. 429 from Orange Boulevard to I-4, including the I-4 interchange and improvements along I-4

In spring 2015, CFX secured a \$194 million loan through the U.S. Department of Transportation's Transportation Infrastructure Finance and Innovation Act (TIFIA) program at the historically low interest rate of 1.23 percent, accelerating CFX's Wekiva Parkway construction schedule by up to 18 months. The latest schedule for design and construction activities is shown in **Table 1-2**, with the first sections of the Wekiva Parkway scheduled to open in early 2017. Sections 1A and 1B, from U.S. 441 north to Kelly Park Road, will be the first to open. Construction of these two sections began in the fall of 2015.

For reporting purposes, toll plazas for the CFX sections of the Wekiva Parkway will have corresponding traffic and revenue reported in the respective chapters; Chapter 6 for S.R. 429 Western Beltway and Chapter 8 for S.R. 453.

(8 Orange Co. 429 189 4 To Be Removed Apopka 4 W. Kelly Park Rd. 429 ret Wolf Branch Rd. 4 (B) Lake Ola Mount -Dora **4** LEGEND Orange Co. τακε Co.

Figure 1-3 Wekiva Parkway Design Sections

CENTRAL FLORIDA Wekiva Parkway (SR 429) Schedule* AUTHORITY 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 02 03 04 01 02 03 0 Construction Section 1B - CFX Construction Section 2A - CF Construction Section 2B - CFX Construction Section 2C - CFX Construction Section 3A - FDOT Construction Section 3B - FDOT Construction Section 4A* & 4B* - FDOT Design-Build Section 5 - FDOT Construction Section 6* - FDOT Design-Build Section 7A - FDOT Construction Section 7B - FDOT Construction Section 8* - FDOT Design-Build

Table 1-2
Wekiva Parkway Development Schedule

*Schedule Subject to Change
*For more information, visit www.wekivaparkway.com

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 one-time adjustment occurred on April 5, 2009, in which toll rates at all mainline plazas (except Coral Hills) and most toll ramp locations increased by \$0.25. The purpose of the rate increase was to counterbalance declining System revenues, to stabilize the fiscal integrity of CFX, and to fortify the ability to improve and expand the System in the future. Since then, there were several changes to the tolls collected at main and ramp plazas, including the addition of the Dallas Main plaza and Dallas ramp plazas, the addition of C.R. 437A ramp plazas, and the removal of the Valencia College Lane ramp plazas.

^{*}As of 1/20/2016

Then on July 1, 2012 (the beginning of FY 2013), CFX implemented a rate differential for the first time for cash and electronic customers. Customers who pay tolls with E-Pass now pay a lower toll rate than cash customers. The rate differential encourages electronic participation, thereby helping CFX maintain lower toll collection costs. Also, at this time, CFX implemented the first toll rate adjustment to keep pace with inflation.

The FY 2015 toll rates are presented in **Table 1-3**. The rates shown in this table continue to represent the rates from the FY 2013 toll rate adjustment. The Schofield Road ramps on S.R. 429 opened in FY 2015 and were added to the table. In accordance with CFX's Toll Policy, the next toll rate increase is scheduled for July 1, 2017 (FY 2018).

1.3.1 DISCOUNT PROGRAMS

In 1998, CFX began a frequent-user discount program for customers who utilize E-PASS transponders. The discount program has helped CFX with a Florida Transportation Commission (FTC) performance measure that requires 75 percent of the total transactions to be completed utilizing E-PASS transponders. This performance measure was instituted by the FTC in 2007. The E-PASS discount program offers a five percent rebate to E-PASS customers with 40 or more CFX electronic transactions per month and a ten percent rebate to customers with 80 or more CFX electronic transactions per month. While E-PASS is compatible with SunPass (FDOT/Turnpike) and LeeWay (Lee County) Electronic Toll Collection (ETC) systems, transactions through these systems are not eligible for CFX's discount programs. Only transactions on CFX facilities paid through E-PASS receive this discount.

In the first fiscal year of implementation, the rebates totaled approximately \$0.7 million, or approximately 0.7 percent of the total System revenues. In FY 2015, the discount program has grown to \$13.2 million, or 3.7 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 2015 the E-PASS participation rate reached 81.3 percent, exceeding the 75 percent goal.

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

Beginning February 1, 2016 (FY 2016), CFX will begin a discount program offering rebates to school buses using CFX facilities. A 99.0 percent discount will be 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 discount will only be offered in months when actual toll revenue exceeds the revenue projections by more than 2.0 percent.

Table 1-3 **CFX System Toll Rates, FY 2015**

Electronic Toll Schedule						I	Cash Toll Schedule					
Roadway	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												
Airport Plaza	\$1.09	\$1.64	\$1.91	\$2.46	\$2.46		\$1.25	\$1.75	\$2.00	\$2.50	\$2.50	
Beachline Main Plaza	\$0.87	\$1.71	\$2.00	\$2.55	\$2.55		\$1.00	\$1.75	\$2.00	\$2.75	\$2.75	
International Corporate Park	\$0.59	\$0.59	\$0.59	\$0.59	\$0.59		\$0.75	\$0.75	\$0.75	\$0.75	\$0.75	
Dallas Blvd.	\$0.50	\$0.50	\$0.50	\$0.50	\$0.50		\$0.50	\$0.50	\$0.50	\$0.50	\$0.50	
Dallas Main Plaza ^B	\$0.75	\$1.00	\$1.25	\$1.25	\$1.25		\$1.00	\$1.25	\$1.50	\$1.50	\$1.50	
S.R. 408												
Good Homes Road	\$0.28	\$0.28	\$0.28	\$0.28	\$0.28		\$0.50	\$0.50	\$0.50	\$0.50	\$0.50	
Hiawassee Main Plaza	\$0.82	\$1.64	\$1.91	\$2.46	\$2.46		\$1.00	\$1.75	\$2.00	\$2.50	\$2.50	
Hiawassee Road	\$0.55	\$0.55	\$0.55	\$0.55	\$0.55		\$0.75	\$0.75	\$0.75	\$0.75	\$0.75	
Pine Hills Main Plaza	\$1.09	\$1.64	\$1.91	\$2.46	\$2.46		\$1.25	\$1.75	\$2.00	\$2.50	\$2.50	
Old Winter Garden Road	\$0.82	\$0.82	\$0.82	\$0.82	\$0.82		\$1.00	\$1.00	\$1.00	\$1.00	\$1.00	
John Young Parkway (S.R. 423)	\$0.82	\$0.82	\$0.82	\$0.82	\$0.82		\$1.00	\$1.00	\$1.00	\$1.00	\$1.00	
Orange Blossom Trail	\$0.55	\$0.55	\$0.55	\$0.55	\$0.55		\$0.75	\$0.75	\$0.75	\$0.75	\$0.75	
Mills Avenue	\$0.55	\$0.55	\$0.55	\$0.55	\$0.55		\$0.75	\$0.75	\$0.75	\$0.75	\$0.75	
Bumby Avenue	\$0.55	\$0.55	\$0.55	\$0.55	\$0.55		\$0.75	\$0.75	\$0.75	\$0.75	\$0.75	
Conway Road	\$0.82	\$0.82	\$0.82	\$0.82	\$0.82		\$1.00	\$1.00	\$1.00	\$1.00	\$1.00	
Andes/Semoran Blvd.	\$1.09	\$1.09	\$1.09	\$1.09	\$1.09		\$1.25	\$1.25	\$1.25	\$1.25	\$1.25	
Conway Main Plaza	\$1.09	\$1.64	\$1.91	\$2.46	\$2.46		\$1.25	\$1.75	\$2.00	\$2.50	\$2.50	
Semoran Blvd. (S.R. 436)	\$0.82	\$0.82	\$0.82	\$0.82	\$0.82		\$1.00	\$1.00	\$1.00	\$1.00	\$1.00	
Dean Road	\$0.55	\$0.55	\$0.55	\$0.55	\$0.55		\$0.75	\$0.75	\$0.75	\$0.75	\$0.75	
Dean Main Plaza	\$0.82	\$1.64	\$1.91	\$2.46	\$2.46		\$1.00	\$1.75	\$2.00	\$2.50	\$2.50	
Rouse Road	\$0.55	\$0.55	\$0.55	\$0.55	\$0.55		\$0.75	\$0.75	\$0.75	\$0.75	\$0.75	
S.R. 417												
John Young Main Plaza	\$1.37	\$1.91	\$2.46	\$3.00	\$3.00		\$1.50	\$2.00	\$2.50	\$3.00	\$3.00	
John Young Parkway (S.R. 423)	\$0.82	\$0.82	\$0.82	\$0.82	\$0.82		\$1.00	\$1.00	\$1.00	\$1.00	\$1.00	
Orange Blossom Trail	\$0.55	\$0.55	\$0.55	\$0.55	\$0.55		\$0.75	\$0.75	\$0.75	\$0.75	\$0.75	
Landstar Blvd.	\$0.50	\$0.50	\$0.50	\$0.50	\$0.50		\$0.50	\$0.50	\$0.50	\$0.50	\$0.50	
Boggy Creek Main Plaza	\$1.37	\$1.91	\$2.46	\$3.00	\$3.00		\$1.50	\$2.00	\$2.50	\$3.00	\$3.00	
Boggy Creek Road	\$1.09	\$1.09	\$1.09	\$1.09	\$1.09		\$1.25	\$1.25	\$1.25	\$1.25	\$1.25	
Lake Nona Blvd.	\$0.82	\$0.82	\$0.82	\$0.82	\$0.82		\$1.00	\$1.00	\$1.00	\$1.00	\$1.00	
Narcoossee Road	\$0.82	\$0.82	\$0.82	\$0.82	\$0.82		\$1.00	\$1.00	\$1.00	\$1.00	\$1.00	
Moss Park Road	\$0.55	\$0.55	\$0.55	\$0.55	\$0.55		\$0.75	\$0.75	\$0.75	\$0.75	\$0.75	
Innovation Way	\$0.55	\$0.55	\$0.55	\$0.55	\$0.55		\$0.75	\$0.75	\$0.75	\$0.75	\$0.75	
Lee Vista Blvd.	\$0.55	\$0.55	\$0.55	\$0.55	\$0.55		\$0.75	\$0.75	\$0.75	\$0.75	\$0.75	
Curry Ford Main Plaza	\$0.82	\$1.64	\$1.91	\$2.46	\$2.46		\$1.00	\$1.75	\$2.00	\$2.50	\$2.50	
Curry Ford Road (S.R. 552)	\$0.55	\$0.55	\$0.55	\$0.55	\$0.55		\$0.75	\$0.75	\$0.75	\$0.75	\$0.75	
Colonial Drive (S.R. 50)	\$0.55	\$0.55	\$0.55	\$0.55	\$0.55		\$0.75	\$0.75	\$0.75	\$0.75	\$0.75	
University Main Plaza	\$0.82	\$1.64	\$1.91	\$2.46	\$2.46		\$1.00	\$1.75	\$2.00	\$2.50	\$2.50	
University Blvd.	\$0.55	\$0.55	\$0.55	\$0.55	\$0.55		\$0.75	\$0.75	\$0.75	\$0.75	\$0.75	
S.R. 429												
Schofield Road	\$0.55	\$0.55	\$0.55	\$0.55	\$0.55		\$0.75	\$0.75	\$0.75	\$0.75	\$0.75	
New Independence Parkway	\$0.82	\$0.82	\$0.82	\$0.82	\$0.82		\$1.00	\$1.00	\$1.00	\$1.00	\$1.00	
Independence Main Plaza	\$1.37	\$1.91	\$2.46	\$3.00	\$3.00		\$1.50	\$2.00	\$2.50	\$3.00	\$3.00	
C.R. 535	\$0.55	\$0.55	\$0.55	\$0.55	\$0.55		\$0.75	\$0.75	\$0.75	\$0.75	\$0.75	
S.R. 438	\$0.28	\$0.28	\$0.28	\$0.28	\$0.28	J	\$0.50	\$0.50	\$0.50	\$0.50	\$0.50	
West Road	\$0.82	\$0.82	\$0.82	\$0.82	\$0.82	1	\$1.00	\$1.00	\$1.00	\$1.00	\$1.00	
Forest Lake Main Plaza	\$1.37	\$1.91	\$2.46	\$3.00	\$3.00	J	\$1.50	\$2.00	\$2.50	\$3.00	\$3.00	
C.R. 437A	\$0.55	\$0.55	\$0.55	\$0.55	\$0.55		\$0.75	\$0.75	\$0.75	\$0.75	\$0.75	
S.R. 414												
Coral Hills Main Plaza	\$1.09	\$1.64	\$2.18	\$2.73	\$2.73	1	\$1.25	\$1.75	\$2.25	\$2.75	\$2.75	
Keene Road	\$0.55	\$0.55	\$0.55	\$0.55	\$0.55		\$0.75	\$0.75	\$0.75	\$0.75	\$0.75	
Hiawassee Road Notes:	\$0.28	\$0.28	\$0.28	\$0.28	\$0.28	1	\$0.50	\$0.50	\$0.50	\$0.50	\$0.50	

Notes:

1.3.2 TOLL RATE COMPARISON TO OTHER US TOLL FACILITIES

As shown in Table 1-4, the FY 2015 average toll rates per mile on CFX's five facilities are comparable to the average toll rates on other toll facilities across the United States. Even with the FY 2013 toll rate adjustment, the average toll rates are still comparable to average rates per

A - Includes motorcycles.

B - The toll listed for this plaza includes the toll collected for FDOT, w hich is \$0.25 for transponder transactions or \$0.50 for cash transactions regardless of the number of axles.

mile for other similar toll roads. The average rates per mile for CFX's facilities are between 12.0 and 20.8 cents per mile for cash rates, and 10.7 and 18.2 cents per mile for electronic toll rates. The average cash rate for the CFX System is 15.3 cents per mile and the average electronic toll rate is 13.4 cents per mile.

Table 1-4
Toll Rate Comparison with Other U.S. Toll Facilities

		Initial	Recent			Passenger Cars			
		Opening	Toll	Facility	Length	Toll Rates		Rate-Per-Mile (cents)
	Toll Facility	Year	Increase	Туре	(miles)	Base (Cash/Video)	Electronic	Base (Cash/Video)	Electronic
TX	TX DOT, Grand Parkway	2011	Jan-15	U	22	-	\$4.20	-	19.4
TX	Harris County Toll Road Authority - Westpark Tollway	2004	Sep-13	U	13	-	\$2.90	-	22.3
CA	San Joaquin Hills Corridor (SR 73)	1996	Jul-13	R/U	15	\$6.75	\$6.05	45.0	40.3
СО	Northwest Parkway	2003	Aug-15	U	10	\$4.00	\$3.60	42.1	37.9
CA	Eastern Toll Road (SR 241)	1998	Jul-13	R/U	24	\$9.00	\$6.45	37.5	26.9
VA	Chesapeake Expressway (Route 168)	2001	May-11	R	16	\$6.00	\$6.00	37.5	37.5
FL	Miami Dade Expressway, Gratigny Parkway, SR 924	1992	Jul-13	U	5	\$2.00	\$1.00	37.0	18.5
DE	Delaware Turnpike (I-95)	1963	Oct-07	R/U	11	\$4.00	\$4.00	35.7	35.7
СО	E-470	1991	Jan-15	R/U	47	\$16.95	\$13.50	36.3	28.9
CA	South Bay Expressway	2007	Jun-12	С	10	\$3.50	\$2.75	35.0	27.5
VA	Dulles Greenway	1995	Mar-15	R/U	14	\$6.20	\$6.20	44.3	44.3
MD	Maryland Inter County Connector	2011	Jul-15	Р	18	\$5.78	\$3.86	32.3	21.6
	Miami Dade Expressway, Don Shula Expressway (SR 874)	1971	Jul-13	U	7	\$2.00	\$1.00	28.6	14.3
	Dulles Toll Road	1984	Jan-14	С	13	\$3.50	\$3.50	26.1	26.1
IL	Veterans Memorial Tollway	1989	Jan-12	R/U	30	\$7.60	\$3.80	25.5	12.7
TX	North Texas Tollway Authority - President George Bush TPK	1998	Jul-15	U	40	\$10.21	\$6.80	25.8	17.2
	North Texas Tollway Authority - Sam Rayburn Tollway	2006	Jul-15	U	24	\$6.11	\$4.04	26.0	17.2
	North Texas Tollway Authority - Dallas North Tollway	1968	Jul-15	U	30	\$7.73	\$5.15	25.7	17.1
	Miami Dade Expressway, Airport Expressway, SR 112	1961	Jul-13	U	4	\$1.00	\$0.50	23.8	11.9
	Lee Roy Selmon Crosstown Expressway (SR 618)	1976	Jul-15	U	14	\$3.26	\$2.76	23.3	19.7
_	Miami Dade Expressway Authority - Dolphin Expressway (SR 836)	1965	Jul-13	U	14	\$3.00	\$1.50	21.4	10.7
	CFX S.R. 414 (Apopka Expressway)	2009	Jul-12	R/U	6	\$1.25	\$1.09	20.8	18.2
FL		1973	Jul-12	U	22	\$4.50	\$3.82	20.3	17.3
	Greenville Southern Connector	2001	Jan-12	R/U	16	\$3.00	\$2.70	18.8	16.9
_	Harris County Toll Road Authority - Sam Houston Tollway	1987	Sep-13	U	70	\$14.00	\$12.00	20.0	17.1
	Harris County Toll Road Authority - Hardy Toll Road	1988	Sep-13	U	21	\$3.50	\$3.00	16.6	14.2
	CFX S.R. 417 (Central Florida Greeneway)	1988	Jul-12	R/U	33	\$5.00	\$4.38	15.3	13.4
	CFX System (All Five Facilities)	-	Jul-12	R/U	108	\$16.50	\$14.49	15.3	13.4
_	Florida's Turnpike, Polk Parkway	1998	Jul-15	U	25	\$3.75	\$3.18	15.0	12.7
	Florida's Turnpike, Veterans Expressway	1994	Jul-15	U	15	\$2.25	\$1.85	15.0	12.3
FL		1995	Apr-09	U	12	\$2.00	\$2.00	16.1	16.1
	CFX S.R. 429 (Western Beltway)	2000	Jul-12	R/U	22	\$3.00	\$2.74	13.6	12.5
	Blue Star Turnpike	1950	Jul-09	R	16	\$2.00	\$1.40	12.3	8.6
_	Florida's Turnpike, Beachline West	1973	Jul-15	U	8	\$1.00	\$0.79	12.3	9.7
	CFX S.R. 528 (Beachline Expressway)	1967	Jul-12	R/U	23	\$2.75	\$2.46	12.0	10.7
	New Jersey Turnpike	1951	Jan-12	R/U	118	\$13.85	\$13.85	11.7	11.7
	Tri-State Tollway	1958	Jan-15	U	77	\$9.20	\$4.60	11.9	5.9
_	Pennsylvania Turnpike	1940	Jan-15	R	360	\$46.10	\$32.95	12.8	9.2
FL		2005	Jul-15	R/U	11	\$1.25	\$1.06	11.4	9.6
_	Florida's Turnpike, Sawgrass Expressway	1990	Jul-15	U	23	\$2.64	\$2.12	11.5	9.2
	Reagan Memorial Tollway	1958	Jan-12	С	96	\$10.20	\$5.10	10.6	5.3
	Florida's Turnpike, Homestead Extension	1974	Jul-15	U	47	\$5.02	\$3.10	10.7	8.4
	Jane Addams Memorial Tollway	1958	Jan-12	С	79	\$7.90	\$3.95	10.1	5.0
_	Florida's Turnpike, Suncoast Parkway	2001	Jul-15	U	42	\$3.75	\$3.18	8.9	7.6
	Florida's Turnpike, Ticket System	1957	Jul-15	R	155	\$12.90	\$10.10	8.3	6.5
	Florida's Turnpike, Southern Coin System	1957	Jul-15	U	43	\$3.50	\$2.91	8.1	6.8
DE		1991	Oct-07	R/U	51	\$4.00	\$4.00	7.8	7.8
_	Ohio Turnpike	1954	Jan-15	R	241	\$17.50	\$11.75	7.8	4.9
	West Virginia Turnpike	1954	Aug-09	R	88	\$6.00	\$3.90	6.8	4.4
	Florida's Turnpike, Northern Coin System	1957	Jul-15	U	67	\$4.50	\$4.22	6.7	6.3
	Maine Turnpike	1947	Nov-12	R	109	\$7.00	\$6.45	6.4	5.9
	Indiana Toll Road	1956	Jul-15	R	157	\$10.20	\$4.65	6.5	3.0
	New York State Thruway	1954	Jan-15	R/U	496	\$22.75	\$21.61	4.6	4.4
	Kansas Turnpike	1954	Feb-15	R	236	\$12.00	\$10.20	5.1	4.4
_	Garden State Parkway A	1954	Jan-12	R/U	173	\$8.25	\$8.25	4.8	4.8
	Spaulding Turnpike	1957	Jul-09	R	33	\$1.50	\$1.06	4.5	3.2
	FDOT, Alligator Alley	1969	Jul-14	R	78	\$3.00	\$2.90	3.8	3.7
MA	Massachusetts Turnpike B	1957	Oct-13	С	123	\$7.10	\$7.10	5.8	5.8

R:Rural, U:Urban, C:Commute

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

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

1.3.3 EXTRAORDINARY GROWTH

In FY 2015, toll transactions on CFX facilities have grown at faster rates than have been seen since FY 2007, i.e., prior to the Great Recession. There are several reasons for this extraordinary growth.

The national and local economies have picked up. Citing recent announcement, Moody's Investors Service revised its outlook for the US toll industry to positive from stable, reflecting the stronger-than-expected recovery in 2015 traffic growth. Moody's reported the median toll road traffic growth of 5.7 percent through June 2015 based on 13 rated toll roads, significantly higher than previous forecasts. Furthermore, Moody's expects the median traffic and toll revenue to increase between 5% and 6% in 2015 and 2016, owing to traffic growth and annual toll rate increases. Also, the U.S. Department of Transportation reported in January 2016 that 2015 was a record year for vehicle miles traveled (VMT) with a total of over 3.1 trillion, or 100 billion more miles than 2014, finally catching up with the prior high mark established in calendar year 2007.

The recent low fuel prices and increases in tourism (as evidenced by increases in enplanements at OIA) are other more local reasons for the extraordinary growth of T&R on CFX facilities. Construction activities along Interstate 4 (I-4) may have influenced travel patterns in the Orlando area, resulting in route changes away from I-4 to other facilities.

While all CFX toll facilities grew at a strong pace, some facilities grew faster than others. **Table 1-5** contains a summary of transactions and toll revenue by facility for the last two fiscal years. Recent growth at the System level was fueled by transaction and revenue growth on S.R. 417 and S.R. 429. Transactions and revenue on S.R. 414 also grew at a brisk pace, with transactions increasing by 11.6 percent and toll revenues by 14.3 percent. This facility may still be experiencing ramp up as the newest toll road on the CFX System.

Table 1-5
Recent Transactions and Toll Revenue by Facility

Transactions	S.R. 528	S.R. 408	S.R. 417	S.R. 429	S.R. 414	Total
FY 2014	59.7	129.7	97.2	30.7	9.5	326.8
FY 2015	64.3	138.2	109.3	35.2	10.6	357.6
Growth	7.7%	6.6%	12.4%	14.7%	11.6%	9.4%

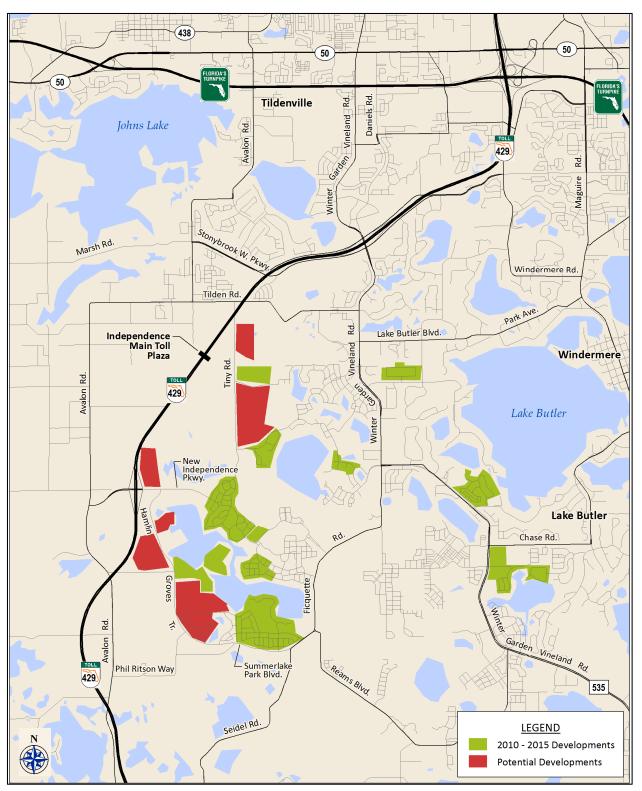
Revenue	S.R. 528	S.R. 408	S.R. 417	S.R. 429	S.R. 414	Total
FY 2014	\$56.30	\$125.20	\$98.30	\$33.50	\$9.10	\$322.50
FY 2015	\$60.40	\$133.00	\$110.40	\$38.90	\$10.40	\$353.10
Growth	7.3%	6.2%	12.3%	16.1%	14.3%	9.6%

During this period, S.R. 417 experienced transaction growth of 12.4 percent and revenue growth of 12.3 percent. Part of this growth can be attributed to a new partial interchange between S.R. 417 and Florida's Turnpike, which opened in January 2015, i.e., the middle of FY 2015. The new ramps are between the Turnpike northbound to S.R. 417 northbound and from southbound S.R. 417 to the southbound Turnpike. Customers in South Orange and Osceola Counties are now able to easily get to the Orlando International Airport and the Medical City complex in the Lake Nona area. The recent land developments in the Medical City area along S.R. 417 represent another reason for the accelerated T&R growth.

S.R. 429 experienced transaction growth of 14.7 percent and revenue growth of 16.1 percent in FY 2015. As shown in **Figure 1-4**, several new residential and commercial developments were recently opened (shown in green), which contributed to the significant growth on S.R. 429. The red areas on the map show potential future developments in the S.R. 429 area. Travel patterns also indicated that customers are using S.R. 429 as an alternative to Interstate 4 (I-4) during construction activities, with some people traveling between Florida's Turnpike and both S.R. 408 and S.R. 414.

All of these effects are expected to positively impact transaction and revenue growth on CFX facilities in the short term, certainly through FY 2016.

Figure 1-4 S.R. 429 (2010 – 2015)



1.4 System Historical Toll Transactions and Revenue

1.4.1 HISTORICAL ANNUAL TOLL TRANSACTIONS AND REVENUE

The annual historical transactions and revenue for the five facilities from FY 1996 to FY 2015 are presented in **Table 1-6**. The annual data is based on the CFX Monthly Statistical Reports and is not reconciled to the Unpaid Toll Notice Allowance Report and the fiscal year end. For these reasons, the information presented in this section may differ slightly from the data presented in the FY 2015 Comprehensive Annual Financial Report (CAFR) and other information in this report. S.R. 408 has the largest number of annual transactions with 138.2 million and the greatest amount of toll revenue with \$133.0 million in FY 2015. In FY 2015 S.R. 417 had 109.3 million transactions and \$110.4 million in toll revenue, and S.R. 528 had 64.3 million transactions and \$60.4 million in toll revenue. With the northern section of S.R. 429 opened in 2000 and the southern section opened in 2006, transactions and revenue have steadily grown on S.R. 429 to 35.2 million transactions and \$38.9 million in toll revenue for FY 2015. Being the newest facility on the CFX System, S.R. 414 has been open to traffic for just six full years and is still experiencing "ramp-up" with 10.6 million transactions and \$10.4 million in toll revenue for FY 2015.

As shown in the table, total System transactions in FY 2015 have increased by 30.8 million transactions or 9.4 percent over FY 2014. All plaza groups experienced growth in transactions in FY 2015 compared to FY 2014. Total System revenues in FY 2015 increased \$30.7 million or 9.5 percent over FY 2014. All plaza groups experienced increases in revenue.

Historical transactions for the CFX System since FY 1996 are displayed in **Figure 1-5**. The green line represents the number of transactions and shows how overall transactions have increased over the last 20 years. The blue bars represent the annual growth (percent change) of transactions. The same information for toll revenues is depicted in **Figure 1-6**. Transaction and toll revenue growth patterns exhibited on the System roughly follow the same growth patterns. This pattern does shift in times of toll rate increases, as shown in the revenue growth in FY 2010 and FY 2013.

Transaction and revenue growth on the System was consistently strong up through FY 2007. Transactions and revenue exhibited double-digit growth from FY 1996 through FY 2000 and in FY 2004. The growth in transactions and revenue fell to below 5 percent in FY 2002, the first time annual growth rates fell below 5 percent since FY 1992. The downturn in growth was primarily due to a national economic slowdown in the first half of FY 2002, accompanied with the national slowdown of travel following the events of September 11, 2001. In FY 2005, System transaction and revenue growth was over 5 percent even though the State of Florida was impacted by four hurricanes that resulted in toll suspensions on all CFX plazas for 21 days in August and September of 2004. Then, in FY 2008 the first signs of the Great Recession appeared with transaction and revenue growth slowing down as the housing and construction industry across the State of Florida slowed down.

Table 1-6 System Totals – Historical Transactions and Toll Revenues FY 1996 – FY 2015

Fiscal Year							Percent				
Ending	S.R. 528	S.R. 408	S.R. 417	S.R. 429	S.R. 414	TOTAL	Change				
TRANSACTIONS (millions)											
1996	22.0	63.4	34.3			119.7					
1997	23.7	70.3	40.3			134.3	12.2%				
1998	25.2	79.4	45.1			149.7	11.5%				
1999	27.3	88.2	50.9			166.4	11.2%				
2000	30.8	97.6	57.9			186.3	12.0%				
2001 ^A	32.4	104.4	62.3	3.5		202.6	8.7%				
2002 ^{B,C}	31.6	110.1	64.9	5.8		212.4	4.8%				
2003	33.7	116.1	71.3	9.5		230.6	8.6%				
2004 ^D	37.5	124.7	79.6	13.8		255.6	10.8%				
2005 ^{E,F}	39.7	127.8	87.2	16.4		271.1	6.1%				
2006 ^G	42.4	135.4	96.2	20.2		294.2	8.5%				
2007 ^H	44.5	138.3	102.4	24.4		309.6	5.2%				
2008 ^{I,J}	44.8	139.0	104.5	26.6		314.9	1.7%				
2009 ^{K,L}	40.7	131.3	94.8	25.1	0.6	292.5	-7.1%				
2010 ^K	40.9	126.0	89.3	25.0	5.3	286.5	-2.1%				
2011	42.5	126.7	90.9	25.9	6.5	292.5	2.1%				
2012 ^M	47.5	126.2	90.7	26.4	7.3	298.1	1.9%				
2013 ^N	57.6	123.5	90.3	27.2	8.3	306.9	3.0%				
2014	59.7	129.7	97.2	30.7	9.5	326.8	6.5%				
2015	64.3	138.2	109.3	35.2	10.6	357.6	9.4%				
		TC	LL REVENUE	S (millions)							
1996	\$19.7	\$41.1	\$21.8			\$82.6					
1997	\$21.2	\$45.5	\$26.4			\$93.1	12.7%				
1998	\$22.6	\$51.3	\$30.0			\$103.9	11.6%				
1999	\$24.6	\$56.6	\$33.4			\$114.6	10.3%				
2000	\$27.7	\$62.3	\$38.3			\$128.3	12.0%				
2001 ^A	\$29.2	\$66.2	\$41.3	\$3.3		\$140.0	9.1%				
2002 B,C	\$28.7	\$69.7	\$42.6	\$5.1		\$146.1	4.4%				
2003	\$30.6	\$73.2	\$46.5	\$7.2		\$157.5	7.8%				
2004 ^D	\$34.3	\$78.7	\$51.6	\$9.2		\$173.8	10.3%				
2005 ^{E,F}	\$36.1	\$80.4	\$56.7	\$10.5		\$183.7	5.7%				
2006 ^G	\$38.4	\$85.1	\$62.6	\$13.5		\$199.6	8.7%				
2007 ^H	\$40.0	\$86.5	\$66.9	\$17.4		\$210.8	5.6%				
2008 ^{I,J}	\$40.1	\$86.1	\$68.5	\$19.0		\$213.7	1.4%				
2009 K,L	\$38.5	\$88.3	\$66.8	\$19.0	\$0.6	\$213.2	-0.2%				
2010 ^K	\$46.6	\$107.7	\$79.0	\$23.5	\$4.2	\$261.0	22.4%				
2011	\$48.4	\$108.3	\$80.1	\$24.4	\$5.1	\$266.3	2.0%				
2012 ^M	\$48.7	\$107.7	\$80.5	\$24.9	\$5.7	\$267.5	0.5%				
2013 ^N	\$54.5	\$119.3	\$91.2	\$29.4	\$7.7	\$302.1	12.9%				
2014	\$56.3	\$125.2	\$98.3	\$33.5	\$9.1	\$322.4	6.7%				
2015 Notes:	\$60.4	\$133.0	\$110.4	\$38.9	\$10.4	\$353.1	9.5%				

- A Forest Lake Plaza on S.R. 429 opened in 2000.
 B C.R. 535 ramps on S.R. 429 opened in 2002.
 C Effects of the events on September 11, 2001.
 D Express lanes opened at University Main plaza.
- E Express lanes opened at Curry Ford and Dean Main plazas.
- F Effects from 2004 hurricane season (4 storms with toll suspensions). M Dallas Main Plaza opened to traffic on March 19, 2012.
- G Express lanes opened at Boggy Creek, John Young Parkway, and Hiawassee Main Plazas.
- H Express lanes opened at Pine Hills main plaza.
 I Express lanes opened at Conway M ain plaza.
 J First effects of national economic recession.
 K Tolls increased Systemwide in April 2009.
 L Coral Hills Plaza opened 2009.

- N Tolls increased Systemwide in July 2012.

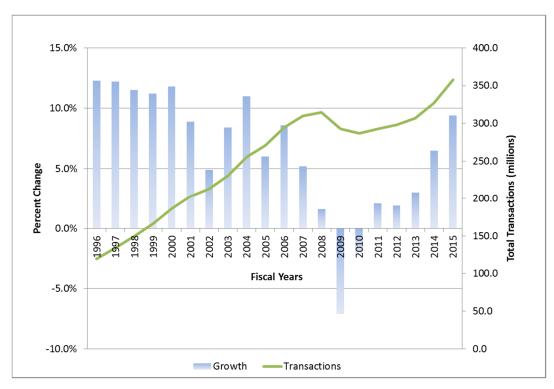
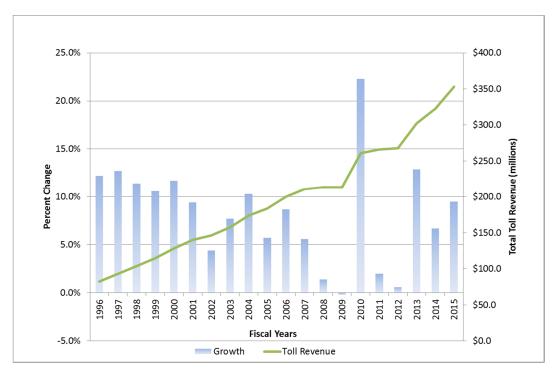


Figure 1-5
CFX System Historical Transactions and Annual Growth





FY 2007 started the trend of four consecutive years of declines in the transaction growth rate on the System. In FY 2009, transactions actually decreased by 7.1 percent, which can be attributed to the economic recession and the Systemwide toll rate increase. Toll revenues only dipped into negative growth in FY 2009. The April 2009 toll rate increase slowed the negative growth in FY 2009 to only -0.2 percent growth. The negative growth would have been worse without the toll rate increase, which included the last three months of FY 2009. The first nine months of FY 2010 were also impacted by the toll rate increase with revenues increasing 22.3 percent in FY 2010, while transactions still experienced a negative 2.1 percent annual growth. Also during FY 2009, transactions were negatively impacted by two days of toll suspensions during Tropical Storm Fay. FY 2011 through FY 2015 has shown stable transaction growth with each year increasing 2 to 9 percent despite the toll rate increase at the beginning of FY 2013. Revenues have climbed to over \$353 million in FY 2015.

1.4.2 Annual Transactions and Toll Revenue by Facility

Figure 1-7 contains a summary of the FY 2015 transactions and toll revenues by facility, both the number and as a percentage of the System. The largest portion of the transactions and revenue were reported on S.R. 408, with 38.6 percent, or 138.2 million of the transactions and 37.7 percent, or \$133.0 million of the revenues. Transactions and revenue on S.R. 417 are both approximately 31 percent of the System, 109.4 million and \$110.4 million, respectively. S.R. 528 comprises 18.0 percent, or 64.3 million of the transactions and 17.1 percent, or \$60.4 million of the revenues. S.R. 429 transactions represent 9.8 percent, or 35.2 million of the System transactions and 11.0 percent, or \$38.9 million of the System revenues. S.R. 414 transactions were reported at 10.6 million or 3.0 percent, while revenues were reported at \$10.4 million or 3.0 percent of the System revenues for FY 2015.

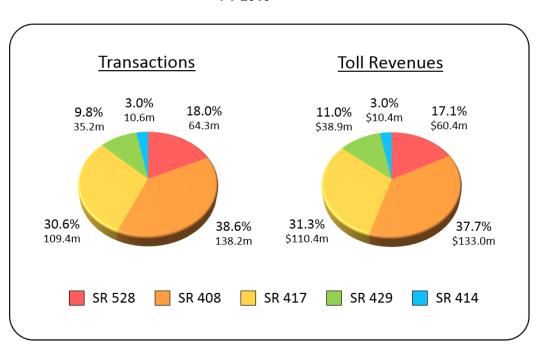


Figure 1-7
CFX System Annual Transactions and Toll Revenues by Facility
FY 2015

1.4.3 MONTHLY TRANSACTION SEASONAL VARIATION

The seasonal variation in transactions is presented in **Table 1-7**. The average number of transactions per day on the System in FY 2015 ranged from a high of 1,074,058 in March 2015 to a low of 906,678 in September of 2014. This data is presented in a graphical format in **Figure 1-8**. Each month's average transactions per day appear as a percentage of the average for the fiscal year. As shown in the figure, March transactions were 9.6 percent above average and September transactions were 7.5 percent below the average. For FY 2015, the transactions were lower than average for the first half of the year and higher than average for the second half of the year. This is a normal pattern for seasonal variation, with the spring months being the peak season, due to an extra number of tourists and seasonal residents in the area. The seasonality varies on different facilities, with the Beachline Expressway having the strongest seasonal variation due to its proximity to the Orlando International Airport (OIA) and the tourist attractions.

Table 1-7
CFX System - Monthly Seasonal Variation in Toll-Paying Traffic
FY 2015

	Number of	Total Toll Paying	Average	Seasonal
Month	Days in Month	Transactions	Transactions Per Day	Factor
July	31	28,387,591	915,729	0.935
August	31	28,308,044	913,163	0.932
September	30	27,200,353	906,678	0.925
October	31	30,013,974	968,193	0.988
November	30	27,358,496	911,950	0.931
December	31	29,600,109	954,842	0.974
January	31	29,479,595	950,955	0.971
February	28	28,889,029	1,031,751	1.053
March	31	33,295,809	1,074,058	1.096
April	30	32,061,343	1,068,711	1.091
May	31	31,941,399	1,030,368	1.052
June	30	31,108,866	1,036,962	1.058
Average		29,803,717	979,848	1.000
Total Year	365	357,644,608		

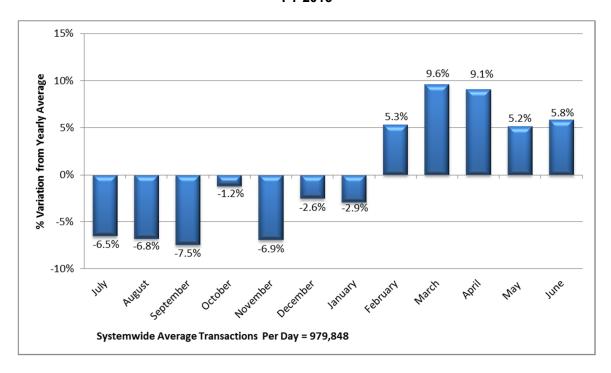


Figure 1-8
CFX System Variation in Transactions Per Day, By Month
FY 2015

1.5 Historical E-PASS Usage (Revenue)

In 1994, CFX introduced its E-PASS electronic toll collection (ETC) program. During that year there were approximately 2,300 E-PASS transponders in use on the System. As of FY 2014 the number has grown to 532,332 transponders and approximately 287,400 active E-PASS accounts. As shown in **Figure 1-9**, revenues collected through E-PASS during FY 2015 account for 81.3 percent of the total System revenues. The percent of toll revenues from E-PASS has grown steadily for the past 10 years, from only 59.9 percent in FY 2006. E-PASS transactions account for over 80% of daily revenue at the University, Curry Ford, Dean, Hiawassee and Forest Lake Mainline plazas. The percentage of revenues collected through E-PASS is over 70 percent at the remainder of the mainline toll plazas. Many customers purchased E-PASS in FY 2015 to take advantage of the lower electronic toll rate. In FY 2013, CFX became interoperable with North Carolina Quick Pass. This means that Quick Pass transponders are accepted on CFX facilities and E-PASS transponders are accepted on the North Carolina Turnpike facilities.

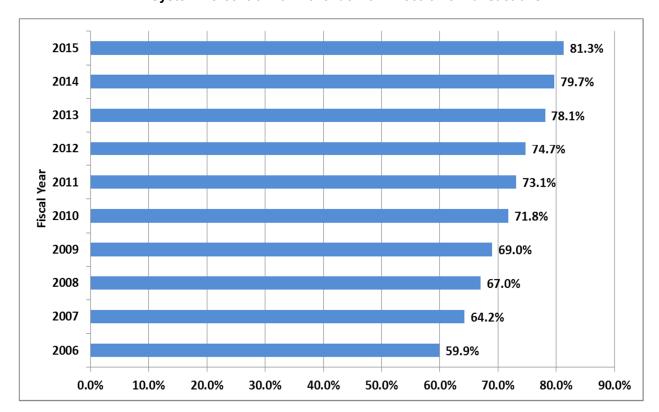


Figure 1-9
CFX System Percent of Toll Revenue from Electronic Transactions

1.6 Forecasting Methodology

The estimates of future annual T&R for the CFX System, contained in this annual report, were derived from a traditional four-step, travel demand model and a T&R model both designed specifically for this purpose. The new travel demand model, known as the CFX Model 2.0, was completed in December 2014 by updating and improving the prior model. At the risk of over simplification, the forecasts of future toll revenue 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.

1.6.1 TRAVEL DEMAND MODEL

In general, the earlier version of the travel demand model was reviewed and updated with information from the recently-released 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 CFX Model 2.0 was calibrated to 2010 conditions, including socioeconomic (SE) data from the US Census and Woods and Poole data in the new OUATS and traditional CFRPM zone systems. The calibration was based on the transportation networks taken from the two operational models. The networks and associated counts were reviewed using 2010 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.

In order to make the model more sensitive to network and tolling considerations, the CFX Model 2.0 was calibrated to match historical traffic counts on mainline and ramp segments on the CFX System. 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 under separate cover. At the conclusion, the CFX Model 2.0 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 for the CFX Model 2.0 in six planning horizon years (2018, 2023, 2028, 2033, 2038 and 2043) corresponding to the planned future year toll rate adjustments. 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 CFX Model 2.0. These include MetroPlan Orlando, Lake-Sumter MPO, Space Coast TPO, River to Sea TPO and Polk County TPO. The future networks also include all network improvements identified in the CFX FY 2016 - 2020 Five-Year Work Plan and related 10-Year Outlook – Planned Alternative, as well as the adopted 2030 Expressway 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.

Two toll conditions were modeled in each of the future years: toll amounts before the planned toll rate adjustments and the toll amounts with the planned toll rate adjustments. In this way, the CFX Model 2.0 provides direct estimates of the effect of the future toll rate adjustments on CFX System traffic.

1.6.2 T&R MODEL

The T&R Model starts with a series of factors that make the base-year traffic forecasts from the CFX Model 2.0 equal to the annual average daily traffic (AADT) at each toll location and another series of factors that adjust the calculated toll revenue to match the actual toll revenue by plaza group. In effect, the T&R Model includes a set of factors so that model predicted transactions in the base year match actual transactions by toll location and model predicted toll revenue match actual toll revenue by plaza group. These factors are applied in all future years. The base-year T&R data used in this process includes the effect of violations in transactions and revenue, which means that the effects of violations are included in the factored forecast results and do not have to be estimated separately. As reported by CFX, revenue recovered from the Unpaid Toll Notices (UTNs) are estimated separately, as are the effect of the discount programs.

The effect of the combination of travel demand model and T&R model is such that the transaction and toll revenue estimates are controlled to match the details in base year values. The growth in transactions and toll revenue are primarily determined by changes from the travel demand model. This includes the effects of changes in the spatial pattern of SE activity, changes in transportation network and changes in toll rate.

1.6.3 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 on the facility are in nominal or future year dollars and are set forth according to
 the toll rate policy adopted by the CFX Board. Toll rate increments (indexed tolls) will be
 applied every fifth year based on net change of a minimum adjustment rate of 3.0 percent
 per year (linear) with calculations beginning in FY 2009.
- Inflation is assumed to be 2.5% annually which includes the adjustment for real income growth.
- 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 2040 Long Range Transportation Plans (LRTP) were reviewed and compared with the OUATS and CFRPM network coding. The majority of the TIP projects were assumed to be built by FY 2018, but some occur later depending on TIP horizon year. The Cost Feasible LRTP projects were reviewed and included in the corresponding future year networks. CFX improvements were assumed and included based on projects identified in the 2030 Master Plan. Details on future projects that impact specific system components are provided in each chapter.
- The complete Wekiva Parkway was included in the CFX Model by the horizon year of 2023. T&R from 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 I-4 Ultimate project was included in the CFX Model by the horizon year of 2023.
- No local, regional or national emergency 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.
- The forecasted traffic is revenue traffic and forecasted revenues are indicated toll revenues. The forecasts include variance due to toll violations as reflected in the T&R model. Allowances for the discount programs and revenue recaptured from Unpaid Toll Notices (UTN) are included separately on a System-wide basis.

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

1.7 System Forecasts

1.7.1 SYSTEM TRANSACTION AND TOLL REVENUE FORECASTS

The total transactions and toll revenue by facility and for the System as a whole are summarized in **Table 1-8** and **Table 1-9**. This information is presented for historical transactions and toll revenue since FY 2000 and estimates in a 30-year forecast. The forecasts were produced by mainline plaza groups, aggregated to and reported by toll facility and then to the CFX System.



Table 1-8
CFX System Transaction Forecast (Millions)

Fiscal	S.R. 528 S.R. 408		. 408	S.R. 417		S.R. 429		S.R. 414		S.R. 453		TOTAL		Percent Annual	
Year	Actual A	Projected	Actual A	Projected	Actual A	Projected	Actual A	Projected	Actual A	Projected	Actual	Projected	Actual A	Projected	Change
2000	30.8		97.6		57.9								186.3		11.9%
2001	32.4		104.4		62.3		3.5						202.6		8.7%
2002 ^B	31.6		110.1		64.9		5.8						212.4		4.8%
2003	33.7		116.1		71.3		9.5						230.6		8.6%
2004	37.5		124.7		79.6		13.8						255.6		10.8%
2005 ^c	39.7		127.8		87.2		16.4						271.1		6.1%
2006	42.4		135.4		96.2		20.2						294.2		8.5%
2007	44.5		138.3		102.4		24.4						309.6		5.2%
2008 D	44.8		139.0		104.5		26.6						314.9		1.7%
2009 ^E	40.7		131.3		94.8		25.1		0.6				292.5		-7.1%
2010	40.9		126.0		89.3		25.0		5.3				286.5		-2.1%
2011	42.5		126.7		90.9		25.9		6.5				292.5		2.1%
2012	47.5		126.2		90.7		26.4		7.3				298.1		1.9%
2013 ^E	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 ^F		54.4		145.7		119.1		38.6		11.6				369.5	3.3%
2017		58.0		152.3		125.9		41.1		12.3				389.6	5.4%
2018 ^{E,G}		56.7		148.5		123.4		43.7		12.4		0.8		385.6	-1.0%
2019		57.6		151.1		126.1		46.6		12.8		1.9		396.0	2.7%
2020		58.4		153.6		128.8		48.7		13.2		2.1		404.9	2.2%
2021		59.3		156.2		131.5		50.8		13.5		2.4		413.7	2.2%
2022		60.2		158.7		134.3		52.9		13.9		2.6		422.6	2.1%
2023 ^E		57.2		149.6		128.2		51.5		13.4		2.9		402.7	-4.7%
2024		58.4		152.8		133.1		53.5		13.7		3.1		414.6	2.9%
2025		59.6		155.9		138.0		55.6		14.0		3.4		426.4	2.9%
2026		60.8		159.0		143.0		57.6		14.3		3.6		438.3	2.8%
2027		62.0		162.1		147.9		59.7		14.7		3.9		450.2	2.7%
2028 ^E		59.1		155.4		143.6		57.2		13.9		3.7		432.9	-3.8%
2029		59.9		157.0		148.2		58.7		14.1		3.8		441.7	2.0%
2030		60.6		158.6		152.7		60.2		14.3		4.0		450.5	2.0%
2031		61.4		160.2		157.3		61.7		14.5		4.2		459.2	1.9%
2032		62.1		161.9		161.9		63.2		14.6		4.4		468.0	1.9%
2033 ^E		58.5		155.5		155.9		61.0		14.1		4.3		449.2	-4.0%
2034		59.3		156.8		159.1		61.9		14.3		4.5		455.8	1.5%
2035		60.1		158.0		162.2		62.8		14.5		4.7		462.5	1.5%
2036		60.9		159.3		165.4		63.7		14.7		5.0		469.1	1.4%
2037 2038 ^E		61.7		160.6		168.6		64.6		14.9		5.2		475.7	1.4%
		58.3		155.2		165.2 168.7		62.4		14.1		5.0		460.3	-3.2%
2039 2040		59.3 60.2		157.0 158.8		172.2		63.3 64.2		14.3 14.5		5.3 5.5		467.8 475.3	1.6% 1.6%
2040		61.1		158.8		172.2 175.7		65.2		14.5 14.7		5.5		475.3 482.9	1.6%
2041		62.0		162.3		175.7		66.1		14.7		6.0		482.9	1.6%
2042 E		59.7		158.4		177.3		65.1		14.3		5.5		480.3	-2.1%
2043		60.6		160.2		180.7		66.1		14.5		5.5		480.3	-2.1% 1.6%
2044		61.5		161.9		184.2		67.0		14.5		5.7		495.3	1.5%
2073		01.5		101.5		104.2		07.0		14.7		5.5		455.5	1.5/0

Fiscal Year	Compound Annual Average Growth Rate (CAAGR)										
2000 - 2008	4.8%	4.5%	7.7%				6.8%				
2008 - 2015	5.3%	-0.1%	0.6%	4.1%			1.8%				
2015 - 2025	-0.8%	1.2%	2.4%	4.7%	2.8%		1.8%				
2025 - 2035	0.1%	0.1%	1.6%	1.2%	0.3%	3.4%	0.8%				
2035 - 2045	0.2%	0.2%	1.3%	0.6%	0.2%	2.3%	0.7%				

Notes:

- A Actual transaction data provided by CFX from Monthly Statistical Reports, which are unaudited.
- B Effects of the events of September 11, 2001.
- C Effects from 2004 hurricane season (4 storms with toll suspensions).
- D First effects of national economic recession.
- E Systemwide toll rate increase.
- $F-Air port\,Main\,Plaza\,closes, new\,ramp\,plazas\,open\,at\,beginning\,of\,FY\,2016.\,Transactions\,for\,tolls\,collected\,at\,the\,Turnpike\,plaza\,not\,included.$
- G-Ponkan Main plaza scheduled to open on July 1, 2017 and Mount Plymouth Main scheduled to open on January 1, 2018 (S.R. 429). Coronado Main plaza scheduled to open on January 1, 2018 (S.R. 453).

Table 1-9
CFX System Toll Revenue Forecast - Before Discounts and UTN Collections (Millions)

Fiscal	S.R	. 528	S.R.	. 408	S.R	. 417	S.R	. 429	S.R	. 414	S.R	. 453	TC	TAL	Percent Annual
Year	Actual A	Projected	Actual A	Projected	Actual A	Projected	Actual A	Projected	Actual A	Projected	Actual	Projected	Actual A	Projected	Change
2000	\$27.7		\$62.3		\$38.3								\$128.3		11.9%
2001	\$29.2		\$66.2		\$41.3		\$3.3						\$140.0		9.1%
2002 ^B	\$28.7		\$69.7		\$42.6		\$5.1						\$146.1		4.4%
2003	\$30.6		\$73.2		\$46.5		\$7.2						\$157.5		7.8%
2004	\$34.3		\$78.7		\$51.6		\$9.2						\$173.8		10.3%
2005 ^C	\$36.1		\$80.4		\$56.7		\$10.5						\$183.7		5.7%
2006	\$38.4		\$85.1		\$62.6		\$13.5						\$199.6		8.7%
2007	\$40.0		\$86.5		\$66.9		\$17.4						\$210.8		5.6%
2008 ^D	\$40.1		\$86.1		\$68.5		\$19.0						\$213.7		1.4%
2009 ^E	\$38.5		\$88.3		\$66.8		\$19.0		\$0.6				\$213.2		-0.2%
2010	\$46.6		\$107.7		\$79.0		\$23.5		\$4.2				\$261.0		22.4%
2011	\$48.4		\$108.3		\$80.1		\$24.4		\$5.1				\$266.3		2.0%
2012	\$48.7		\$107.7		\$80.5		\$24.9		\$5.7				\$267.5		0.5%
2013 ^E	\$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 ^F		\$66.9		\$142.0		\$120.9		\$42.7		\$11.2				\$383.6	8.6%
2017		69.3		149.7		127.7		45.3		11.5				403.4	5.2%
2018 ^{E,G}		75.6		161.4		138.4		51.7		11.9		\$0.5		439.4	8.9%
2019		78.0		163.8		140.8		55.4		12.4		1.2		451.5	2.7%
2020		80.4		166.2		143.2		58.6		12.8		1.4		462.5	2.4%
2021		82.8		168.5		145.6		61.8		13.3		1.6		473.5	2.4%
2022		85.2		170.9		147.9		65.0		13.8		1.8		484.6	2.3%
2023 ^E		90.6		182.6		156.8		71.0		14.7		2.2		518.0	6.9%
2024 2025		91.6 92.5		185.5		161.7		73.2		15.3		2.4		529.7	2.3%
2025		93.4		188.5 191.4		166.5 171.4		75.4 77.7		15.8 16.3		2.6 2.8		541.4 553.1	2.2% 2.2%
2026		94.4		191.4		171.4		79.9		16.5		3.0		564.8	2.2%
2028 ^E		97.9		204.4		186.8		84.2		18.0		3.3		594.6	5.3%
2028		100.4		206.4		192.1		86.0		18.3		3.5		606.7	2.0%
2030		103.0		208.5		197.4		87.8		18.6		3.6		618.8	2.0%
2031		105.5		210.5		202.7		89.6		18.9		3.8		631.0	2.0%
2032		108.0		212.6		208.0		91.3		19.2		3.9		643.1	1.9%
2033 ^E		112.8		221.1		218.6		95.2		20.1		4.2		672.0	4.5%
2034		114.8		223.7		222.7		97.2		20.3		4.5		683.3	1.7%
2035		116.8		226.3		226.9		99.3		20.6		4.7		694.6	1.7%
2036		118.8		228.9		231.1		101.4		20.8		4.9		706.0	1.6%
2037		120.8		231.4		235.3		103.5		21.1		5.1		717.3	1.6%
2038 ^E		124.6		240.6		244.9		108.4		22.0		5.6		746.1	4.0%
2039		126.6		243.8		249.3		110.3		22.2		5.9		758.2	1.6%
2040		128.6		247.0		253.7		112.3		22.5		6.1		770.2	1.6%
2041		130.6		250.2		258.2		114.2		22.7		6.4		782.3	1.6%
2042		132.7		253.4		262.6		116.2		23.0		6.6		794.4	1.5%
2043 ^E		137.3		256.6		273.0		121.1		23.9		6.9		818.9	3.1%
2044		139.3		259.8		277.4		123.0		24.2		7.1		830.9	1.5%
2045		141.4		263.0		281.9		125.0		24.4		7.4		843.0	1.5%

Fiscal Year		Compound Annual Average Growth Rate (CAAGR)								
2000 - 2008	4.7%	4.1%	7.5%				6.6%			
2008 - 2015	6.0%	6.4%	7.1%	10.8%			7.4%			
2015 - 2025	4.4%	3.5%	4.2%	6.8%	4.3%		4.4%			
2025 - 2035	2.4%	1.8%	3.1%	2.8%	2.7%	5.9%	2.5%			
2035 - 2045	1.9%	1.5%	2.2%	2.3%	1.7%	4.7%	2.0%			

Notes:

- A Actual transaction data provided by CFX from Monthly Statistical Reports, which are unaudited.
- B Effects of the events of September 11, 2001.
- C Effects from 2004 hurricane season (4 storms with toll suspensions).
- D First effects of national economic recession.
- E-Systemwide toll rate increase.
- $F-Air port\,Main\,Plaza\,closes, new\,ramp\,plazas\,open\,at\,beginning\,of\,FY\,2016.\,Transactions\,for\,tolls\,collected\,at\,the\,Turnpike\,plaza\,not\,included.$
- G-Ponkan Main plaza scheduled to open on July 1, 2017 and Mount Plymouth Main scheduled to open on January 1, 2018 (S.R. 429). Coronado Main plaza scheduled to open on January 1, 2018 (S.R. 453).

1.7.2 System Available Toll Revenues

The System available toll revenue is defined as indicated revenue plus revenue from UTNs, less the discounts. The calculations are summarized in **Table 1-10**. The total System toll revenue plus the revenue recaptured from UTN's is expected to increase from the actual of \$364.1 million in FY 2015 to \$556.1 million in FY 2025, \$711.2 million in FY 2035 and \$860.1 million in FY 2045.

The System currently experiences a relatively low violation rate. In FY 2015, the unadjusted violations of all System transactions recorded as violations were 3.11 percent. This low violation rate is experienced despite providing open road tolling at all System mainline plazas except S.R. 528 Airport Plaza. The System revenue forecasts assume a violation rate of approximately 2.0 percent.

The System toll revenue forecasts in Table 1-9 do not include any of the recaptured toll revenue from these violations. Historically, the recaptured toll revenue from these violations was relatively minor. However, in recent years, changes in CFX's toll collection policy concerning violators have resulted in an increased recapture rate of the toll revenues. CFX instituted a more convenient method of payment for toll violations using unpaid toll notices (UTN) in June 2009. CFX's toll collection policy was also modified to require all violations be paid in order for a customer to renew their Florida vehicle registration. A document fee of \$3.00 was added to the Unpaid Toll Notice (UTN) in addition to a \$0.10 charge for each photograph (violation) on the monthly UTN. In August 2010, CFX approved a change to the violation threshold for issuance of the unpaid toll notices from three or more violations within a calendar month to two or more violations within a calendar month.

In addition to the System toll revenues, Table 1-10 also shows the additional revenue recaptured from the unpaid toll notices less the discounts during the fiscal year. The resulting total available System revenue can be used by CFX for their operating and maintenance budget and debt service. The total available System toll revenues are projected to increase from the actual \$350.9 million in FY 2015 to estimated amounts of \$529.1 million in FY 2025, \$669.5 million in FY 2035 and \$803.5 million in FY 2045.

Table 1-10
CFX System Toll Revenues Available (Millions)

	System Toll	Revenue Recaptured	Total System	Discount	System Revenues	Percent Annual
Fiscal Year	Revenues	from UTN ^c	Toll Revenues	Programs D	Available	Change
2000 ^B	\$128.1		\$128.1	\$2.6	\$125.5	11.7%
2001 ^B	140.1		140.1	3.2	136.9	9.1%
2002 ^B	146.2		146.2	3.9	142.3	3.9%
2003 ^B	157.5		157.5	4.2	153.3	7.7%
2004 ^B	173.7		173.7	4.9	168.8	10.1%
2005 ^B	183.6		183.6	5.9	177.7	5.3%
2006 ^B	199.7		199.7	6.7	193.0	8.6%
2007 ^B	210.8		210.8	7.35	203.5	5.4%
2008 ^B	213.8		213.8	7.9	205.9	1.2%
2009 A,B	213.2		213.8	6.8	206.4	0.2%
2010	262.0	1.1	263.1	\$9.4	253.6	22.9%
2010	262.0	3.0	269.5	\$9.4 9.5	260.0	2.5%
2012	267.9	4.3	272.2	9.6	262.6	1.0%
2012 A	302.7	6.3	309.0	10.8	298.2	13.5%
2013	322.8	8.1	330.9	11.7	319.1	7.0%
2015	353.1	11.0	364.1	13.2	350.9	10.0%
2016	383.6	11.5	395.1	21.0	374.1	6.6%
2017	403.4	12.0	415.4	23.3	392.1	4.8%
2018 ^A	439.4	12.9	452.3	26.5	425.8	8.6%
2019	451.5	13.1	464.6	28.0	436.6	2.5%
2020	462.5	13.3	475.8	29.4	446.4	2.2%
2021	473.5	13.5	487.0	30.8	456.2	2.2%
2022	484.6	13.6	498.2	22.7	475.5	4.2%
2023 ^A	518.0	14.4	532.4	24.9	507.5	6.7%
2024	529.7	14.6	544.3	25.9	518.4	2.1%
2025	541.4	14.7	556.1	27.0	529.1	2.1%
2026	553.1	14.8	567.9	28.2	539.7	2.0%
2027	564.8	15.0	579.8	29.3	550.5	2.0%
2028 ^A	594.6	15.6	610.2	31.5	578.7	5.1%
2029	606.7	15.7	622.4	32.8	589.6	1.9%
2030	618.8	15.8	634.6	34.0	600.6	1.9%
2031	631.0	15.9	646.9	35.3	611.6	1.8%
2032	643.1	16.0	659.1	36.6	622.5	1.8%
2033 ^A	672.0	16.5	688.5	39.0	649.5	4.3%
2034 2035	683.3 694.6	16.5 16.6	699.8 711.2	40.3 41.7	659.5 669.5	1.5% 1.5%
2035	706.0	16.6	711.2 722.6	41.7	679.5	1.5%
2037	717.3	16.7	734.0	44.5	689.5	1.5%
2038 ^A	746.1	17.1	763.2	47.1	716.1	3.9%
2039	758.2	17.1	775.3	48.6	726.7	1.5%
2040	770.2	17.1	787.3	50.2	737.1	1.4%
2041	782.3	17.2	799.5	51.7	747.8	1.5%
2042	794.4	17.2	811.6	53.3	758.3	1.4%
2043 ^A	818.9	17.4	836.3	55.0	781.3	3.0%
2044	830.9	17.1	848.0	55.8	792.2	1.4%
2045	843.0	17.1	860.1	56.6	803.5	1.4%

Fiscal Year		Compound Annual Average Growth Rate (CAAGR)					
2000 - 2008	6.6%		6.6%		6.4%		
2008 - 2015	7.4%		7.9%	7.7%	7.9%		
2015 - 2025	4.4%	3.0%	4.3%	7.4%	4.2%		
2025 - 2035	2.5%	1.2%	2.5%	4.4%	2.4%		
2035 - 2045	2.0%	0.3%	1.9%	3.1%	1.8%		

Notes:

A - Systemwide toll rate increase.

B - Actual FY system toll revenues provided by the Authority and are audited. System toll revenues will not equal the sum of the system plaza group revenues presented in Table 1-9 due to recovered revenues from toll violations and account adjustments. These adjustments occur periodically thorughout the FY but are not tied to the collected revenue at a particular plaza group. Since FY 2010 the recovered revenues have been reported separately.

C - Unpaid Toll Notice. The revenue recaptured from the UTNs comprised 2.1 percent and 2.5 percent of the System Revenues less E-PASS discount in FY 2013 and FY 2014, respectively. From FY 2015 through FY 2044, the estimated revenue recaptured from the UTNs is assumed to comprise 2.4 percent declining to 1.94 percent of the System Toll Revenues Less the E-PASS Discount. Historical information comes from the 2014 CAFR.

D - Discount Programs. The E-PASS Discount Program, created to increase ETC participation, provides a 5% discount to customers with at least 40 transactions in a month and a 10 percent discount to customers with at least 80 transactions per month. The I-4 Ultimate Commuter Discount Program, instituted for a six-year period beginning in FY 2016, will provide an additional 5 percent discount to customers with 20 or more transactions per month on the CFX "beltway" facilities (SR 417, SR 429 and SR 414). This discount will only be offered during months when actual total revenue exceeds the current revenue projections by more than 2.0 percent. Historical information on the E-PASS discount comes from the 2014 CAFR. The Regional School Bus Discount Program, scheduled to begin February 1, 2016, will provide a 99 percent discount to school buses in Orange, Brevard, Lake, Osceola, Polk, Seminole and Volusia Counties transporting students on official school business on CFX facilities. This discount will only be offered during months when actual total revenue exceeds the current revenue projections by more than 2.0 percent.

Source - System Toll Revenue - CAFR "Average Toll Rate" Table that reports Toll revenue before e-pass discount.

1.7.3 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 OIA. The existing Goldenrod Road is a four-lane state-maintained facility that currently terminates at Narcoosee Road. The Goldenrod Road Extension continues the roadway south from the current terminus at Narcoosee 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. South of the existing terminal building, Heintzelman Boulevard interchanges with the Airport South Access Road. Heintzelman Boulevard is not currently signed for use by the general public, and serves as an access road for airport employees. Construction of the Goldenrod Road Extension began in January 2001, and was opened to traffic in March 2003. This project was jointly funded by CFX, Orange County, the City of Orlando, GOAA and private developers, with CFX serving as the lead agency on the project. The Goldenrod Road Extension is tolled at one location. A mainline plaza, with a toll of \$0.50 is located north of the interchange with S.R. 528. Revenues generated by the toll on the Goldenrod Road Extension are not included as part of CFX's System revenues. Revenues generated by this non-System roadway are not pledged as part of the System revenues available for debt service. Such revenues will be used to repay funds used by the partners for the construction of the roadway as well as the continued operations and maintenance expenses. According to the agreements between the project's partners, once toll revenues have paid for project costs (including toll operations and maintenance), the toll plaza will be removed and the City of Orlando will assume ownership of the roadway.



1.8 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.

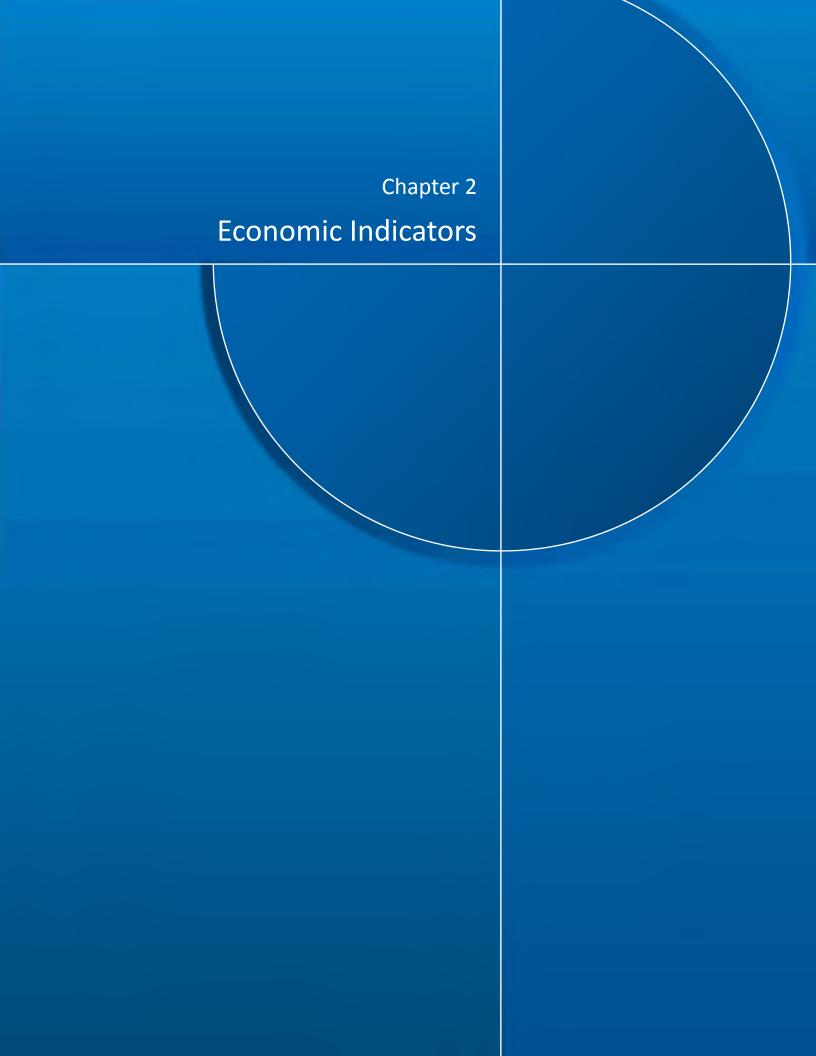
CDM Smith made qualitative judgments related to several key variables in the development and analysis of the traffic and revenue estimates that must be considered as a whole; therefore, selecting portions of any individual result without consideration of the intent of the whole may create a misleading 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. Future developments 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.

CENTRAL FLORIDA EXPRESSWAY AUTHORITY	FY 2015 GENERAL TRAFFIC AND EARNINGS CONSULTANT'S ANNUAL REPORT
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ECONOMIC INDICATORS

Regional travel demand is driven by the levels, growth rates and location of socioeconomic activity, such population, housing and employment. Economic activity is also reflected in measures of retail sales, tourism and the housing market. Socioeconomic growth is a major factor in determining future utilization of toll roads and bridges. Other important growth factors specific to the Central Florida area include enplanement activity at the Orlando International Airport (OIA), enrollment statistics at the University of Central Florida (UCF) and area



attraction attendance. These factors can all be fundamentally traced to underlying socioeconomic variables, so it is important to understand the socioeconomic conditions in which the CFX facilities have operated. This chapter contains a review of the socioeconomic factors relevant to CFX and comparative data (historical and forecast) for the counties within the study area and the State of Florida.

2.1 Population

2.1.1 HISTORICAL TRENDS

The historical population trend for the seven counties in the study area as well as for the State of Florida from 1980 through 2014 is included in **Table 2-1**. The corresponding population compound average annual growth rates (CAAGR) for the same years are included in **Table 2-2**. As shown, the population in the study area has more than doubled since 1980 from approximately 1.7 million to over 4.0 million in 2014, or equivalent to a growth rate of 2.6 percent per year. Over the years, the long-term historical population growth has decelerated from 3.8 percent per year in the 1980s to 2.2 percent per year between 2000 and 2010. Since 1980, Osceola County has been the fastest growing county in the study area, with average growth of 5.6 percent per year. Polk and Volusia Counties have experienced the slowest relative growth of 2.0 percent per year from 1980 to 2014. Nearly one third of the total study area population is located in Orange County, which is home to over 1.2 million residents. The State's total population has grown from 9.7 million in 1980 to 19.9 million in 2014, or an increase of 2.1 percent per year on average. The State of Florida is still recovering from the recent recession, but is expected to return to normal levels of growth over the next several years. Historically, population growth in the study area has outpaced the State of Florida over the last three decades.

Table 2-1
Population – Historical Trend
1980 – 2014

Area	1980	1990	2000	2010	2014
Brevard County	272,959	398,978	476,230	543,376	556,885
Lake County	104,870	152,104	210,527	297,052	315,690
Orange County	470,865	677,491	896,344	1,145,956	1,253,001
Osceola County	49,287	107,728	172,493	268,685	310,211
Polk County	321,652	405,382	483,924	602,095	634,638
Seminole County	179,752	287,521	365,199	422,718	442,516
Volusia County	258,762	370,737	443,343	494,593	507,531
Area Total	1,658,147	2,399,941	3,048,060	3,774,475	4,020,472
Florida (Statewide)	9,746,959	12,938,071	15,982,378	18,801,310	19,893,297

Source: U.S. Census Bureau

Table 2-2 Population – Historical Growth Rates (CAAGR) 1980 – 2014

Area	1980 - 1990	1990 - 2000	2000 - 2010	2010 - 2014	1980 - 2014	
Brevard County	3.9%	1.8%	1.3%	0.6%	2.1%	
Lake County	3.8%	3.3%	3.5%	1.5%	3.3%	
Orange County	3.7%	2.8%	2.5%	2.3%	2.9%	
Osceola County	8.1%	4.8%	4.5%	3.7%	5.6%	
Polk County	2.3%	1.8%	2.2%	1.3%	2.0%	
Seminole County	4.8%	2.4%	1.5%	1.2%	2.7%	
Volusia County	3.7%	1.8%	1.1%	0.6%	2.0%	
Area Total	3.8%	2.4%	2.2%	1.6%	2.6%	
Florida (Statewide)	2.9%	2.1%	1.6%	1.4%	2.1%	

Source: U.S. Census Bureau

Regional school population and enrollment are additional indicators of activity in Central Florida. **Table 2-3** summarizes the school population by year and by county in the study area, including the total percent change and CAAGR by county and total area. As shown, school population in Osceola County has experienced the most overall growth since 2005 at an average pace of 2.0 percent annually. School population has declined in Brevard, Seminole and Volusia Counties between 0.4 percent, 0.2 percent, and 0.7 percent per year, respectively over the nine year period. Overall, school population in the study area has grown 0.6 percent per year on average since 2005. These numbers are not directly comparable to total population due to the number of families in the study area without school-age children.

Table 2-3
Historical School Population by County
2005 – 2014

											2005 - 2014	2005 - 2014
County	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Total %	CAAGR
Brevard	75,160	74,791	74,364	73,076	72,402	71,866	71,786	71,217	71,224	72,285	-3.8%	-0.4%
Lake	38,052	39,566	40,708	40,996	41,099	41,110	41,315	41,478	41,801	42,152	10.8%	1.1%
Orange	175,307	175,155	174,033	172,028	173,021	175,986	179,989	183,021	187,092	191,648	9.3%	1.0%
Osceola	49,779	51,881	52,752	51,955	52,142	53,466	54,776	56,369	58,147	59,320	19.2%	2.0%
Polk	89,483	92,873	94,165	94,716	94,577	95,178	96,034	96,943	97,971	99,723	11.4%	1.2%
Seminole	67,473	66,349	65,390	64,933	64,460	64,228	64,335	64,368	64,831	66,134	-2.0%	-0.2%
Volusia	65,599	65,867	64,570	63,065	62,329	61,559	61,524	61,054	61,226	61,777	-5.8%	-0.7%
Area Total	560,853	566,482	565,982	560,769	560,030	563,393	569,759	574,450	582,292	593,039	5.7%	0.6%

Source: Florida Department of Education

UCF opened in 1968 with less than 2,000 enrolled students. As shown in **Table 2-4**, annual enrollment has continued to increase over the years to become a large-scale university with over 63 thousand students in 2015. In fact, long-term annual growth has averaged 4.7 percent per year from 1980 to 2015. This growth was due to opening of new programs, campus facilities and the increasing number of transfer students. Annual enrollment is expected to increase by 1.2 percent per year through 2040. While the enrollment numbers are significant, many students only attend part-time. Part-time students typically attend classes on-line and do not travel to the main campus in Orlando. The increasing popularity of on-line classes and on-line degrees may have an impact on CFX facilities.

Table 2-4 Historical UCF Enrollment 1980 – 2015

	Levels						
Area	1980	1990	2000	2010	2015		
UCF Enrollment	12,820	21,376	33,453	56,337	63,373		

Source: UCF

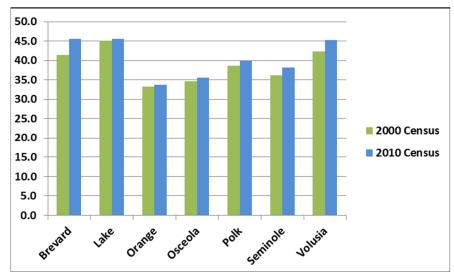
The age distribution comparison of the study area for 2000 and 2010 is shown in **Table 2-5**. A majority of the 2010 population (59 percent) is made up of the working age group, ages 20 to 64, who typically make the majority of commuter and business-related trips. The 2000 population data reflects the same overall age group trends. The median ages for the study area counties in years 2010 and 2000 are shown in **Figure 2-1**. Lake County has the highest median age in both years reflecting the presence of the retirement communities located there. Brevard and Volusia Counties both have had significant increases in median ages. All counties had higher median age in 2010 than in 2000.

Table 2-5
Historical Population by Age 2010 vs. 2000

	2010 Ce	nsus	2000 Cen	sus
Age Group	Total	Percent	Total	Percent
0-4	221,562	5.9%	184,700	6.1%
5-19	732,041	19.4%	615,697	20.2%
20-24	264,847	7.0%	185,459	6.1%
25-34	473,023	12.5%	405,961	13.3%
35-44	490,323	13.0%	486,110	15.9%
45-54	552,868	14.6%	395,565	13.0%
55-64	453,437	12.0%	289,212	9.5%
65-74	318,580	8.4%	262,234	8.6%
75+	267,794	7.1%	223,120	7.3%
Total Study Area Population	3,774,475	100.0%	3,048,058	100.0%

Source: U.S. Census Bureau

Figure 2-1 Median Age by County 2010 vs. 2000



Source: U.S. Census Bureau

2.1.2 PROJECTIONS

The University of Florida's Bureau of Economic and Business Research (BEBR) annually prepares forecasts of population within Florida. These population forecasts are presented as three scenarios: low, medium, and high projections. Medium-level BEBR population projections are typically used as a base point in the development of county-wide control totals. **Table 2-6** summarizes the recently released 2015 BEBR medium forecasts. Future long-term population growth for the study area is projected to average 1.4 percent per year, which is higher than the



1.1 percent per year projected growth for the State of Florida. Over the forecast period from 2014 through 2040, Osceola County is projected to experience the fastest population growth rate of 2.4 percent per year. Volusia County is expected to have the lowest growth rate of only 0.6 percent per year through the forecast period.

Table 2-6
Population – Projected Growth Rates (CAAGR)
2014 – 2040

	Compound /	Compound Average Annual Growth Rate (Percent)							
Area	2014 - 2020	2020 - 2030	2030 - 2040	2014 - 2040					
Brevard County	0.9%	0.8%	0.6%	0.7%					
Lake County	2.4%	2.0%	1.4%	1.8%					
Orange County	2.3%	1.7%	1.2%	1.6%					
Osceola County	3.4%	2.5%	1.7%	2.4%					
Polk County	1.8%	1.5%	1.1%	1.4%					
Seminole County	1.3%	1.0%	0.7%	1.0%					
Volusia County	0.8%	0.7%	0.5%	0.6%					
Area Total	1.8%	1.5%	1.0%	1.4%					
Florida (Statewide)	1.4%	1.2%	0.9%	1.1%					

Source: BEBR 2015 – Population Studies, Vol. 48, Bulletin 171; and CDM Smith calculations

2.2 Housing Units

2.2.1 HISTORICAL TRENDS

The number of housing units is another key measure used in the travel demand models. As indicated in **Table 2-7**, the number of housing units in the study area has expanded over two and a half times from 700 thousand in 1980 to nearly 1.8 million in 2014. Orange County has the largest concentration of housing units in the seven-county study area with over 508 thousand in 2014. The corresponding CAAGRs are shown in **Table 2-8** for the same years. Long-term, the number of housing units grew from 1980 to 2014 by an average of 2.8 percent per year. Historical housing unit growth slowed down from 4.4 percent per year in the 1980s to 2.1 percent per year from 2000 to 2014. This is the same trend seen in long-term population growth rates. Osceola County has experienced the most growth in housing units with an average of 5.2 percent per year while Volusia County has been the slowest with only 2.1 percent annual growth between 1980 and 2014. Overall, the study area historical housing unit growth has outpaced the State of Florida.

Table 2-7
Housing Units – Historical Trend
1980 – 2014

	Levels							
Area	1980	1990	2000	2014				
Brevard County	113,900	185,150	222,072	272,283				
Lake County	50,511	75,707	102,829	146,708				
Orange County	184,701	282,686	361,349	508,097				
Osceola County	23,825	47,959	72,293	133,989				
Polk County	134,873	186,225	226,376	282,748				
Seminole County	68,154	117,841	147,080	185,900				
Volusia County	124,427	180,983	211,938	256,104				
Area Total	700,391	1,076,551	1,343,937	1,785,829				
Florida (Statewide)	4,378,867	6,100,250	7,303,108	9,144,650				

Source: U.S. Census Bureau

Table 2-8 Housing Units – Historical Growth Rates (CAAGR) 1980 – 2014

	Compound Average Annual Growth Rate (Percent)								
Area	1980 - '90	1990 - '00	2000 - '14	1980 - 2014					
Brevard County	5.0%	1.8%	1.5%	2.6%					
Lake County	4.1%	3.1%	2.6%	3.2%					
Orange County	4.3%	2.5%	2.5%	3.0%					
Osceola County	7.2%	4.2%	4.5%	5.2%					
Polk County	3.3%	2.0%	1.6%	2.2%					
Seminole County	5.6%	2.2%	1.7%	3.0%					
Volusia County	3.8%	1.6%	1.4%	2.1%					
Area Total	4.4%	2.2%	2.1%	2.8%					
Florida (Statewide)	3.4%	1.8%	1.6%	2.2%					

Source: U.S. Census Bureau

2.2.2 PROJECTIONS

Table 2-9 summarizes the long-term housing growth forecasts as published by Moody's Analytics for 2014 through 2040. Future long-term housing growth for the study area is projected to average 1.5 percent per year through 2040. Orange and Seminole Counties are forecasted to experience the most growth in housing units with an average rate of 1.6 percent per year while Lake and Polk Counties are expected to have the slowest growth of 1.3 percent per year. The Moody's forecasts for housing units presented here are not consistent with the BEBR population forecasts for some counties. The BEBR forecasts were used in the development of the future year single-family and multi-family housing unit control totals.

Table 2-9
Housing Units – Projected Growth Rates (CAAGR)
2014 – 2040

	Compound Average Annual Growth Rate (Percent)								
Area	2014 - 2020	2020 - 2030	2030 - 2040	2014 - 2040					
Brevard County	1.5%	1.7%	1.4%	1.5%					
Lake County	1.2%	1.4%	1.3%	1.3%					
Orange County	1.6%	1.8%	1.4%	1.6%					
Osceola County	1.5%	1.6%	1.4%	1.5%					
Polk County	1.2%	1.4%	1.3%	1.3%					
Seminole County	1.6%	1.8%	1.5%	1.6%					
Volusia County	1.5%	1.7%	1.4%	1.5%					
Area Total	1.5%	1.7%	1.4%	1.5%					

Source: Moody's Analytics, December 2015

2.3 Employment

2.3.1 HISTORICAL TRENDS

The employment numbers presented below in **Table 2-10** and **Table 2-11** are from the BEA. Orange County dominates the regional employment base with approximately 43.0 percent of the seven-county total. Table 2-11 presents the CAAGR for the counties in the study area and also for the State of Florida. Long-term employment growth in the study area averaged 2.9 percent per year. This growth was strong between 1980 and 1990 with an area growth of 4.7 percent per year, but decelerated between 2000 and 2010 to only 1.3 percent per year, with strongest growth rates in Osceola and Lake Counties. Since 2010 employment growth has increased to 3.4 percent per year, with Lake, Orange and Osceola Counties averaging over 4.5 percent per year. Historically, the study area employment base growth outpaced the State of Florida by an average of approximately 0.4 percent per year.

Table 2-10
Total Employment – Historical Trend
1980 – 2014

Area	1980	1990	2000	2010	2014
Brevard County	129,188	202,232	243,415	262,161	270,517
Lake County	46,281	58,326	86,724	117,118	129,619
Orange County	291,166	516,943	737,821	819,601	940,472
Osceola County	19,483	43,173	63,938	93,183	109,184
Polk County	156,846	194,693	235,518	255,722	272,117
Seminole County	61,621	121,188	186,969	217,867	236,775
Volusia County	105,796	146,833	178,519	197,711	210,193
Area Total	810,381	1,283,388	1,732,904	1,963,687	2,168,877
Florida (Statewide)	4,687,521	6,740,289	8,918,234	9,877,353	10,911,330

Source: Bureau of Economic Analysis

Table 2-11
Total Employment – Historical Growth Rates (CAAGR)
1980 – 2014

Area	1980 - 1990	1990 - 2000	2000 - 2010	2010 - 2014	1980 - 2014
Brevard County	4.6%	1.9%	0.7%	1.1%	2.2%
Lake County	2.3%	4.0%	3.1%	3.4%	3.1%
Orange County	5.9%	3.6%	1.1%	4.7%	3.5%
Osceola County	8.3%	4.0%	3.8%	5.4%	5.2%
Polk County	2.2%	1.9%	0.8%	2.1%	1.6%
Seminole County	7.0%	4.4%	1.5%	2.8%	4.0%
Volusia County	3.3%	2.0%	1.0%	2.1%	2.0%
Area Total	4.7%	3.0%	1.3%	3.4%	2.9%
Florida (Statewide)	3.7%	2.8%	1.0%	2.5%	2.5%

Source: Bureau of Economic Analysis

2.3.2 PROJECTIONS

Employment in the study area is projected to grow by an average of 1.6 percent per year through 2040 as shown in **Table 2-12**, which on average is about the same as the projected statewide annual growth rate. Osceola County's total employment is forecasted to increase the fastest at 2.3 percent per year while Brevard County is forecasted with the slowest annual growth of only 1.0 percent through 2040.

Table 2-12
Total Employment – Projected Growth Rates (CAAGR)
2014 – 2040

	Compound Average Annual Growth Rate (Percent)								
Area	2014 - 2020	2020 - 2030	2030 - 2040	2014 - 2040					
Brevard County	1.3%	1.1%	0.8%	1.0%					
Lake County	2.3%	2.0%	1.7%	2.0%					
Orange County	2.0%	1.7%	1.5%	1.7%					
Osceola County	2.5%	2.3%	2.1%	2.3%					
Polk County	1.6%	1.4%	1.2%	1.4%					
Seminole County	2.0%	1.8%	1.5%	1.7%					
Volusia County	1.4%	1.2%	1.0%	1.2%					
Area Total	1.9%	1.6%	1.4%	1.6%					
Florida (Statewide)	1.8%	1.6%	1.3%	1.5%					

Source: Woods & Poole Economics, Inc.¹, 2015; and CDM Smith calculations

Table 2-13 shows the employment projections by major sector (industrial, commercial and service industries). Future long-term employment growth for the study area is projected to average 1.2 percent per year for the industrial sector, 1.5 percent per year for the commercial sector and 1.6 percent per year for the service sector through 2040. The growth in jobs in the commercial and service sectors reflects the strength of the Central Florida tourism industry. The industrial sector is expected to experience slower short and long-term growth.

Table 2-13
Employment by Sector – Projected Growth Rates (CAAGR)
2014 – 2040

	Compound Average Annual Growth Rate (Percent)									
Area	2014 - 2020	2020 - 2030	2030 - 2040	2014 - 2040						
Area Industrial Employment	1.7%	1.2%	0.8%	1.2%						
Area Commercial Employment	1.9%	1.5%	1.4%	1.5%						
Area Service Employment	1.9%	1.7%	1.4%	1.6%						

Source: Woods & Poole Economics, Inc.¹, 2015; and CDM Smith calculations

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

2.4 Consumer Price Index and Income

2.4.1 Consumer Price Index

The Consumer Price Index (CPI) is used to measure the change in the cost of an average basket of goods and services compared to a fixed base period. The historical change in the CPI for the United States for 2005 through 2014 is shown in Figure 2-2. The relatively sharp increase in CPI in 2007 can be attributed to the high increases in the cost of gasoline prices during the second half of the year. In 2008, the CPI declined for the first time since 1954 due to the start of the severe economic recession. Since 2009, the CPI has increased every year including a 0.8 percent change in 2014 over the prior year. Other indices reported are for the Tampa MSA (note that Orlando MSA is not separately tracked by the BLS) and the South Region (Southeastern U.S. States). CPI for the Tampa MSA showed a 5.2 percent change in 2007, which was over a percentage point higher than the increases at the national and the South region geographies. The South trends mirror the trend for the U.S. since 2005.

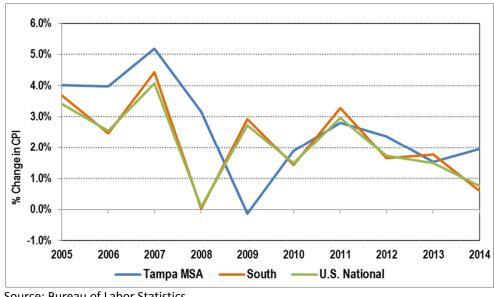


Figure 2-2 Change in Consumer Price Index (CPI)

Source: Bureau of Labor Statistics

2.4.2 INCOME

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

The historical per capita income trend since 2000 for the U.S., Florida, and the seven-county study area are shown in **Figure 2-3**. The levels of real personal income per capita for Florida and the seven-county study area are still below their respective pre-recession levels as of 2013 – the last year of historical data. The core counties of the region – Orange County and Seminole County have observed very slight increases in the personal per capita income in the period from 2000 through 2011, with CAGRs of only about 0.4 percent per year. These are the prime counties responsible for generating traffic on the CFX System. The levels of real personal income per capita for the U.S. has now exceeded the levels seen before the recession.

\$43,000 \$39,000 \$35,000 \$31,000 \$29,000 \$25,000 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 United States Florida 7-County Model Area

Figure 2-3
Total Real Personal Income Per Capita: 2000 - 2013
(2009 Dollars)

2.5 Unemployment

The unemployment rate in the study area had been traditionally lower than in other parts of the State and lower than the national rates since 1994. However, in 2008 the study area had an unemployment rate of 6.2 percent, which was higher than the United States rate for the first time in fifteen years. Between 2009 and 2012, the unemployment rate in the study area exceeded the unemployment rates in both Florida and the United States. Figure 2-4 shows the historical unemployment rates for the study area, Florida and the United States from 1990 through 2014. The study area's unemployment rate has ranged from a low of 3.2 percent in 2006 to a high of 11.4 percent in 2010. In 2014 the study area unemployment rate decreased again to an average of 6.3 percent, but is still slightly higher than the national average. The study area's unemployment rate has historically been quite close to the Florida average, which also had an unemployment rate of 6.3 percent in 2014.

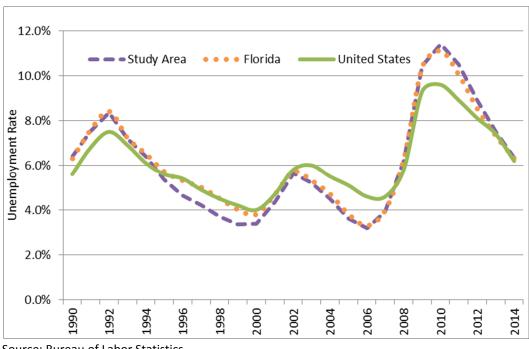


Figure 2-4 **Historical Unemployment Rate Comparison** 1990 - 2014

Source: Bureau of Labor Statistics

2.6 Regional Tourism

As shown in **Table 2-14**, Orlando hosted a record 62.7 million visitors in 2014, which was an increase of 5.9 percent increase over the 59.2 million visitors in 2013. Year 2010 was the first year that the total number of visitors to Orlando topped 50 million. Tourism had stagnated after the September 11th terrorist attacks, but 2010 and 2011 both showed strong increases of 10.5 percent and 7.2 percent per year, respectively. Approximately 5.3 million visitors in 2014 were from other countries.

Table 2-14
Tourism – Orlando Visitors (Millions)
2005 – 2014

Visitor Type	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2005- 2014 CAAGR
Domestic	46.6	45.1	45.9	45.5	43.3	47.8	51.4	52.9	54.4	57.4	2.3%
International	2.7	2.7	2.8	3.3	3.3	3.7	3.8	4.3	4.8	5.3	7.9%
Total	49.3	47.8	48.7	48.9	46.6	51.5	55.2	57.2	59.2	62.7	2.7%

Source: Visit Orlando Market Research & Insights – D.K. Shifflet & Associates; U.S. Department of Commerce, Office of Travel and Tourism Industries

In 2014, the Metro Orlando area hotel occupancy rate was 71.9 percent, an increase of 0.9 percent over 2013. This data is shown in **Table 2-15**. The majority of these lodging units are concentrated around Walt Disney World, International Drive (near Universal Studios, SeaWorld, and the Orange County Convention Center), and in the Kissimmee area. Average annual data and room night demand data are unavailable for 2014 at this time.

Table 2-15 Metro Orlando Area Lodging 2004 – 2014

Metro Orlando	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Occupancy Rate	70.9%	70.8%	67.7%	67.9%	65.8%	59.5%	63.9%	67.6%	68.8%	71.0%	71.9%*
Average Daily Rate	\$86.80	\$92.00	\$101.65	\$105.84	\$105.83	\$93.34	\$90.76	\$94.11	\$96.88	\$101.53	N/A
Number of Rooms	112,981	111,564	112,156	111,348	111,551	114,109	115,199	115,413	117,396	116,499	118,118
Room Night Demand (in millions)	29.1	29.0	27.5	27.6	26.9	24.3	26.7	28.5	29.3	30.1	N/A

 $^{^{}st}$ Rate as of August 2015. 2014 average annual data were unavailable at the time of the report preparation.

Source: Visit Orlando Market Research & Insights.

The historical and projected enplanements for OIA are shown in **Table 2-16** and **Table 2-17**. The Orlando International Airport (OIA) saw an increase of over 6 million enplanements from 1990 to 2000, an increase of over 69 percent. Enplanements totaled 17.9 million for 2014, 21.6 percent above the 2000 total. Since 1990, total enplanements at OIA have more than doubled at 3.0 percent per year. The United States Department of Transportation Federal Aviation Administration (U.S. DOT FAA) has projected that OIA enplanements will grow by an average of 2.4 percent per year through 2040. Enplanements are an indicator of tourism and economic growth.

Table 2-16 Historical OIA Enplanements 1990 – 2014

	Levels							
Area	1990	1990 2000 2010 2014						
OIA Enplanements	8,683,491	14,683,594	16,651,359	17,857,393				

Source: U.S. DOT FAA TAF and GOAA

Table 2-17
Projected OIA Enplanements
2015 - 2040

	Compound Average Annual Growth Rate (Percent)								
Area	2015 - 2020 2020 - 2030 2030 - 2040 2015 - 204								
OIA Enplanements	3.2%	2.3%	2.1%	2.4%					

Source: U.S. DOT FAA TAF; and CDM Smith calculations

Metropolitan Orlando is home to seven of the ten largest theme parks in the nation, which will

continue to contribute to the growth in Central Florida. This growth is due to new and future attractions these theme parks have planned to attract tourists to the area. Universal Studios at Universal Orlando recently opened another Harry Potter themed attraction, Diagon Alley, in the summer of 2014. Downtown Disney is also being transformed with new shopping, dining and entertainment choices to be opened in phases with final completion in 2016.



As shown in **Table 2-18**, the Magic Kingdom attracted an estimated 19.3 million visitors in 2014, which had the highest attendance of all Orlando-area theme parks. Universal Studios at Universal Orlando had the highest growth in 2014 with a 36.7 percent increase in attendance compared to 2011.

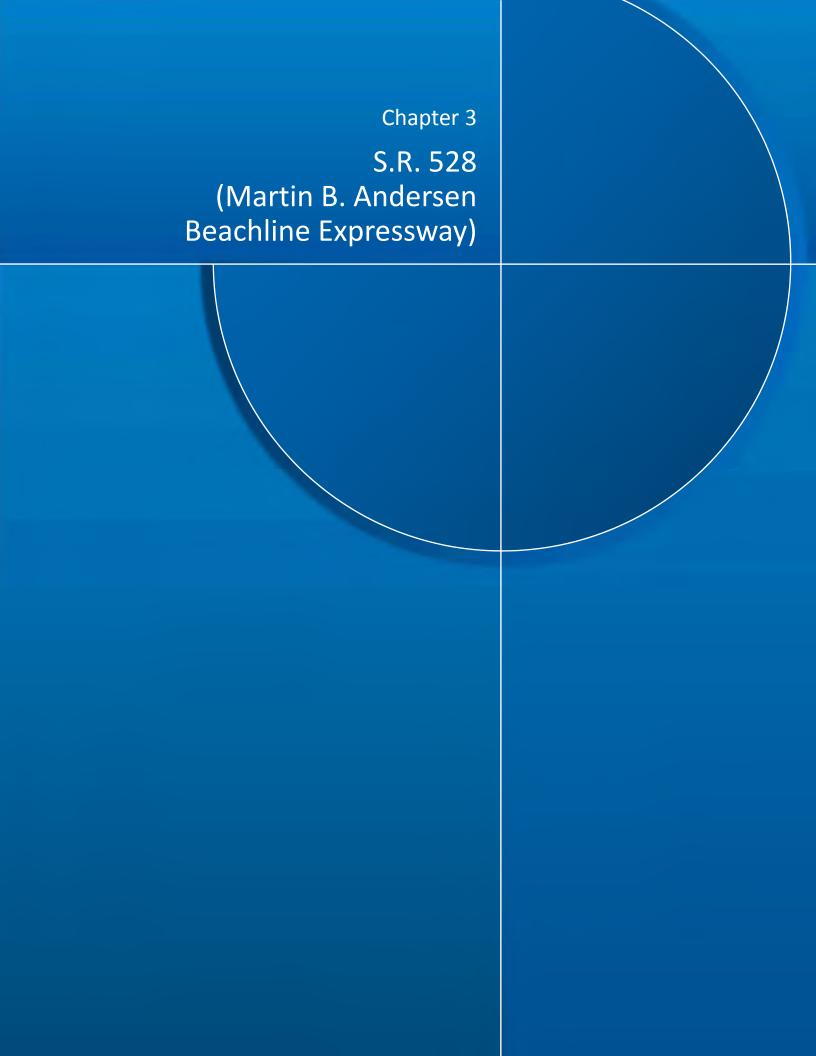
Table 2-18 Central Florida Attraction Attendance 2011- 2014 (Millions)

Theme Parks	2011	2014	Growth
Disney's Magic Kingdom	17.1	19.3	12.8%
Disney's Epcot Center	10.8	11.5	5.8%
Disney's Animal Kingdom	9.8	10.4	6.3%
Disney's Hollywood Studios	9.7	10.3	6.3%
Islands of Adventure at Universal Orlando	7.7	8.1	6.1%
Universal Studios at Universal Orlando	6.0	8.3	36.7%
Seaworld Orlando	5.2	4.7	-10.0%
Water Parks	2011	2014	Growth
Typhoon Lagoon	2.1	2.2	6.2%
Blizzard Beach	1.9	2.0	6.1%
Aquatica	1.5	1.6	4.6%
Wet 'n Wild	1.2	1.3	5.0%

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

Note: All figures are estimates.

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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 the Brevard County coastal area near the Atlantic Ocean. The Beachline Expressway is owned, maintained and operated 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 International Corporate Park (ICP) 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 of S.R. 528 including the FY 2014 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 route from Orlando 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 is a six-lane, limited-access expressway with frontage roads extending from an interchange with Boggy Creek Road to the Airport interchange. S.R. 528 remained the only limited-access route into OIA until the south access road at Boggy Creek Road and John Young Parkway sections of S.R. 417 opened in July 1993.

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

Матсһ Line Barrier Toll Location **Existing CFX System Existing FTE System** Ramp Toll Location E-PASS Toll Rate (2-axle) Monument Pkwy. / ICP Blvd. Cash Toll Rate (2-axle) LEGEND \$0.59 \$0.75 Innovation Way Beachline Main \$0.87 \$1.00 520 417)
Central Florida
GreenWay Narcossee Rd. TOLL 528 Dallas Main \$0.75 \$1.00 Goldenrod Rd. 55. Semoran Blvd. Dallas Blvd. \$1.09 \$1.25 \$0.50 \$0.50 Conway Rd. Tradeport Dr. Sand Lake Rd. / McCoy Rd. TOLL 528 482 Маtch Line

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

In May 2010, a roadway connection called 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. Previously, traffic on Innovation Way wanting to go south or west had no choice but to access S.R. 417 at the Curry Ford Road interchange and head south. The opening of this connection resulted in traffic diversion from the S.R. 417 Curry Ford plaza group to the S.R. 528 Beachline Main plaza. 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.

Starting in FY 2013, S.R. 528 was the center of discussions for creation of a super corridor with intercity passenger rail service, known as All Aboard Florida (AAF), future utility needs, future expansion of S.R. 528, and possibly commuter rail. These discussions culminated in the execution of a contract for sale and purchase of rail line easements between CFX and AAF over existing CFX property and newly acquired properties. CFX has purchased all property for the corridor. Regarding the Contract for Sale and Purchase of property owned by Suburban Land Reserve or Farmland Reserve, Inc., the Contract contains a number of conditions precedent with an outer closing date of December 31, 2015. One of the conditions precedent is an agreement on the modification and construction of the S.R. 528/Innovation Way interchange with programming in the FY 2016 – 2020 Five-Year Work Program.

Starting in November 2014, CFX began removal of the Airport Main Plaza. The removal is due to several factors including on-going concerns that S.R. 528 customers heading west from the Orlando International Airport encounter two mainline toll plazas, one being CFX's Airport Main Plaza and the other being FTE's Beachline West Main Plaza. In addition, the Airport Main Plaza is close in proximity to the S.R. 436 exit which causes operational issues for E-Pass customers having to weave across cash lanes to reach the exit. It was determined that an open road tolling plaza would not be a feasible option with the existing right-of-way at the same location. After all options were considered, CFX and FTE agreed that the best solution is to consolidate toll collection at the Beachline West Main Plaza. Beginning in January 2016, the CFX toll will be collected at the FTE plaza, and new ramp plazas will be installed at the Conway Road and Boggy Creek Road Interchanges with tolls collected to and from the east. In addition, ETC customers who use the ramps to and from the west at Boggy Creek Road will receive a rebate for the CFX toll amount as it is collected at the Beachline West Main Plaza. The revised toll plan, shown in Figure 3-2, will begin once the project is complete.

- Barrier Toll Location Existing CFX System **Existing FTE System** Ramp Toll Location E-PASS Toll Rebate (2-axle) E-PASS Toll Rate (2-axle) Cash Toll Rate LEGEND (2-axle) Semoran Blvd. \$0.00 Frontage Rd \$0.82 \$1.09 Conway Rd. Tradeport Dr. McCoy Rd. Boggy Creek Rd. -\$1.09 Orange Ave. 527 Sand Lake Rd. Beachline West Main \$1.86 \$2.25 Orange Blossom Trail [1]

Figure 3-2 S.R. 528 Future Toll Plan (FY 2016)

3.2 Historical Transactions and Toll Revenues

3.2.1 ANNUAL TRANSACTION AND TOLL REVENUE TRENDS

S.R. 528 annual historical transactions at the Beachline Main, Airport Main and Dallas Main plaza groups from FY 1996 to FY 2015 are presented in the top half of **Table 3-1**. Annual historical toll revenues are also summarized and totaled in the bottom half of the table. The S.R. 528 annual transaction and toll revenue trends including annual growth are also presented visually in **Figure 3-3** and **Figure 3-4**. As shown, total transactions on S.R. 528 in FY 2015 increased by 4.5 million, or 7.5 percent, over FY 2014. Toll revenues increased by \$4.1 million, or 7.3 percent, during the same period. Facility transactions and toll revenues have increased annually over the past twenty years with the exception of FY 2002 and FY 2009. Annual transaction and toll revenue trends by plaza group are also presented in the table.

Over the past twenty years there have been two prior annual decreases in transactions and revenues on S.R. 528. The FY 2002 decrease in transactions of 4.0 percent at the Airport Main plaza group was caused by the reduction of tourism travel in Florida as a result of the September 11th terrorist attack. Revenues also declined at this plaza group by 3.2 percent. The impact at the Beachline Main plaza group was less with no growth during the year.

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

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

Transactions continued to decline on the Airport Main plaza group in FY 2010 by 0.8 percent due to the continued impacts of the economic recession and the toll rate increase. In FY 2010, revenues on the Airport Main and Beachline Main plaza groups increased significantly due to the additional revenue collected from the Systemwide toll rate increase. The toll rate increase

impacted growth during the first nine months of the fiscal year. Transactions and revenue at the Beachline Main plaza group had a slightly higher growth rate than the Airport Main plaza group, caused by the opening of the Monument Parkway connection between Innovation Way and S.R. 528/International Corporate Park interchange, which provided alternative access in this area of east Orange County.



Table 3-1 S.R. 528 Plaza Groups – Historical Transactions and Toll Revenues FY 1996 – FY 2015

Fiscal Year	Airport Main	Beachline Main	Dallas Main	TOTAL	Airport Main	Beachline Main	Dallas Main	TOTAL
	TF	RANSACTIO	NS (millions	5)		PERCENT	CHANGE	
1996	13.2	8.8		22.0				
1997	14.5	9.2		23.7	9.8%	4.5%		7.7%
1998	15.4	9.8		25.2	6.2%	6.5%		6.3%
1999	16.7	10.6		27.3	8.4%	8.2%		8.3%
2000	18.9	11.9		30.8	13.2%	12.3%		12.8%
2001	19.8	12.6		32.4	4.8%	5.9%		5.2%
2002 ^A	19.0	12.6		31.6	-4.0%	0.0%		-2.5%
2003	20.0	13.7		33.7	5.3%	8.7%		6.6%
2004	22.6	14.9		37.5	13.0%	8.8%		11.3%
2005 ^B	24.6	15.1		39.7	8.8%	1.3%		5.9%
2006	26.5	15.9		42.4	7.7%	5.3%		6.8%
2007	27.8	16.7		44.5	4.9%	5.0%		5.0%
2008 ^C	28.2	16.6		44.8	1.4%	-0.6%		0.7%
2009 ^D	25.6	15.1		40.7	-9.2%	-9.0%		-9.2%
2010 ^E	25.4	15.5		40.9	-0.8%	2.6%		0.5%
2011	26.2	16.3		42.5	3.1%	5.2%		3.9%
2012 ^F	26.8	16.4	4.3	47.5	2.3%	0.6%		11.8%
2013 ^{F,G}	26.4	16.7	14.5	57.6	-1.4%	1.8%	237.2%	21.3%
2014	27.0	17.6	15.1	59.7	2.3%	5.4%	4.1%	3.6%
2015	28.8	19.0	16.4	64.2	6.7%	8.0%	8.6%	7.5%
	TC	DLL REVENU	JES (million	s)		PERCENT	CHANGE	
1996	\$10.3	\$9.4		\$19.7				
1997	\$11.4	\$9.8		\$21.2	10.7%	4.3%		7.6%
1998	\$12.1	\$10.5		\$22.6	6.1%	7.1%		6.6%
1999	\$13.1	\$11.5		\$24.6	8.3%	9.5%		8.8%
2000	\$14.8	\$12.9		\$27.7	13.0%	12.2%		12.6%
2001	\$15.5	\$13.7		\$29.2	4.7%	6.2%		5.4%
2002 ^A	\$15.0	\$13.7		\$28.7	-3.2%	0.0%		-1.7%
2003	\$15.7	\$14.9		\$30.6	4.7%	8.8%		6.6%
2004	\$17.9	\$16.4		\$34.3	14.0%	10.1%		12.1%
2005 ^B	\$19.4	\$16.7		\$36.1	8.4%	1.8%		5.2%
2006	\$20.9	\$17.5		\$38.4	7.7%	4.8%		6.4%
2007	\$21.8	\$18.2		\$40.0	4.3%	4.0%		4.2%
2008 ^C	\$22.1	\$18.0		\$40.1	1.4%	-1.1%		0.3%
2009 ^D	\$21.6	\$16.9		\$38.5	-2.3%			-4.0%
2010 ^E	\$26.2	\$20.4		\$46.6	21.3%	20.7%		21.0%
2011	\$27.0	\$21.4	C C C	\$48.4	3.1%			3.9%
2012 ^F	\$27.5	\$19.0	\$2.2	\$48.7	1.9%	-11.2%		0.6%
2013 ^{F,G}	\$30.9	\$16.0	\$7.6	\$54.5	12.4%	-15.8%	243.9%	11.8%
2014	\$31.6	\$16.8	\$7.9	\$56.3	2.3%	5.1%	4.4%	3.4%
2015	\$33.6	\$18.2	\$8.6	\$60.4	6.3%	8.3%	8.9%	7.3%

Notes:

- $\mbox{\ensuremath{A}}$ Effects of the events on September 11, 2001.
- B Effects from 2004 hurricane season (4 storms with toll suspensions).
- C First effects of national economic recession.
- D Systemwide toll rate increase in April 2009. Beachline Main plaza converted to open road tolling in July of 2009.
- $\ensuremath{\mathsf{E}}\xspace$ Monument Parkw ay connection to ICP ramps opened to traffic.
- $F-Dallas\ Main\ Plaza\ opened\ to\ traffic\ on\ March\ 19,\ 2012.\ Beachline\ Main\ plaza\ toll\ reduced\ from\ \$1.50\ to\ \$0.75.$
- G Systemwide toll rate increase in July 2013. Implementation of cash and electronic toll rate differential.

Figure 3-3
S.R. 528 Historical Transactions and Annual Growth
FY 1996 – FY 2015

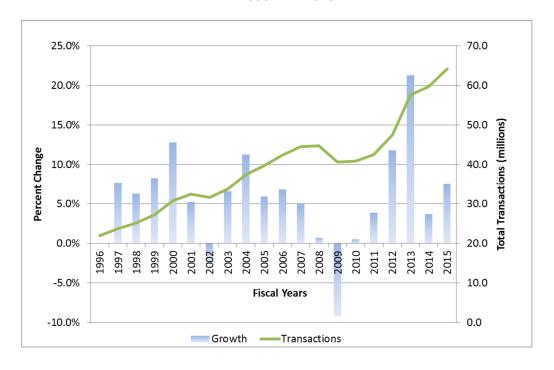
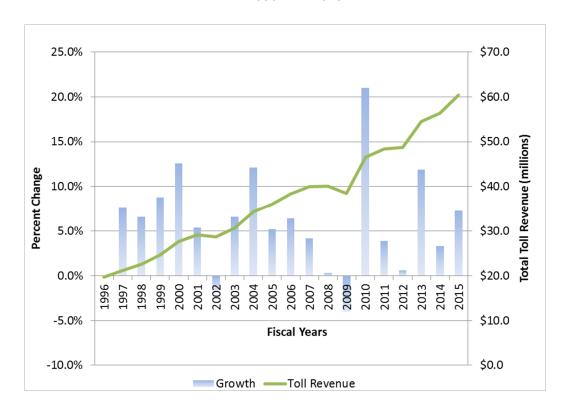


Figure 3-4 S.R. 528 Historical Toll Revenue and Annual Growth FY 1996 – FY 2015



In FY 2011 and FY 2012, transactions at both the Airport Main and Beachline Main plaza group increased compared to the prior year. In FY 2012, the Dallas Main plaza opened to traffic to create toll equity for customers on S.R. 528 by collecting the toll at two locations. At this time, tolls for 2-axle vehicles at the Beachline Main plaza were reduced from \$1.50 to \$0.75. The decrease in tolls resulted in a revenue decline of 11.2 percent on the Beachline Main plaza group compared to the prior year. Revenues also declined in FY 2013 due to the decrease in tolls. The toll previously collected on behalf of FDOT at the Beachline Main plaza also shifted to the Dallas Main plaza. The Dallas Main plaza, which opened in March 2012, collected \$2.2 million in revenues and reported 4.3 million transactions during its first three months of operation in FY 2012. Overall, S.R. 528 transactions would have been relatively flat in FY 2012 compared to FY 2011 without the additional transactions from this new plaza.

In FY 2013, transactions at the Airport Main plaza group declined by 1.4 percent, while revenues increased by 12.4 percent over FY 2012. This was expected due to the recent systemwide toll rate increase that went into effect on July 1, 2012 (FY 2013). The Beachline Main plaza group experienced an increase of 1.8 percent in traffic 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 increase. 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. This can be attributed to the first full year of toll collection at this new plaza.

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

In FY 2015, all plaza groups experienced significant growth over FY 2014. The Airport Main plaza group transactions increased by 6.7 percent, Beachline Main plaza group transactions increased by 8.0 percent and Dallas Main plaza group transactions increased by 8.6 percent over FY 2014. Over the same period, the Airport Main plaza toll revenues increased by 6.3 percent, Beachline Main plaza group toll revenues increased by 8.3 percent and Dallas Main plaza group toll revenues increased by 8.9 percent over FY 2014.

The transactions and toll revenues by plaza group and as a percentage of total S.R. 528 transactions and toll revenues for FY 2015 are shown in **Figure 3-5**. The Airport Main plaza group represented 28.8 million transactions or 44.9 percent of total S.R. 528 transactions. The Beachline Main plaza group carried 19.0 million or 29.6 percent of total transactions on the facility. Finally, the Dallas Main plaza group represented 16.4 million or 25.5 percent of total S.R. 528 transactions in FY 2015.

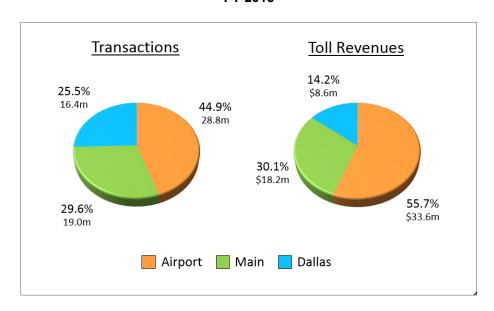


Figure 3-5
S.R. 528 Transactions and Toll Revenues by Plaza Group
FY 2015

The annual totals and percentages for toll revenues differ from those reported for annual transactions because of differences in toll rates. As shown, the Airport Main plaza group represented \$33.6 million in toll revenues or 55.7 percent of total S.R. 528 toll revenues. The Beachline Main plaza group carried \$18.2 million or 30.1 percent of toll revenues on the facility. Finally, because of the lower toll, the Dallas Main plaza group represented \$8.6 million or 14.2 percent of total S.R. 528 transactions in FY 2015.

3.2.2 Monthly Transaction Seasonal Variation

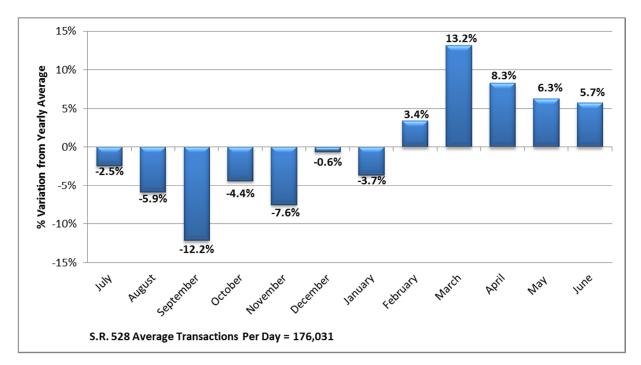
In **Table 3-2**, monthly total traffic volumes are normalized to average number of transactions per day in each month. Using average number of transactions per day allows for an easy comparison of the variations in relative travel demand over the year. The pattern of seasonal usage changes slightly from year to year, based on the number of weekdays in a given month.

As presented in Table 3-2, average transactions per day in FY 2015 on S.R. 528 ranged from a high of 199,237 in March 2015 to a low of 154,615 in September 2014. March is typically the month with the highest average number of transactions per day due to a large number of tourists in the area during the Spring. Historically, September has been the month with the lowest average number of transactions per day. This data is presented in a graphical format in **Figure 3-6**. The transactions for each month appear as a percentage of the average for the fiscal year. March transactions were 13.2 percent above average and September transactions were 12.2 percent below average for the facility. The increase in transactions during the Spring and early Summer months is due to the tourists in the area.

Table 3-2 S.R. 528 – Monthly Seasonal Variation in Toll-Paying Traffic FY 2015

Month	Number of Days in Month	Total Toll Paying Transactions	Average Transactions/day	Seasonal Factor
July	31	5,320,976	171,644	0.975
August	31	5,133,940	165,611	0.941
September	30	4,638,456	154,615	0.878
October	31	5,217,424	168,304	0.956
November	30	4,881,349	162,712	0.924
December	31	5,423,040	174,937	0.994
January	31	5,257,683	169,603	0.963
February	28	5,098,015	182,072	1.034
March	31	6,176,347	199,237	1.132
April	30	5,720,756	190,692	1.083
May	31	5,800,161	187,102	1.063
June	30	5,583,206	186,107	1.057
Average		5,354,279	176,031	1.000
Total Year	365	64,251,353		

Figure 3-6 S.R. 528 Variation in Transactions Per Day, By Month FY 2015



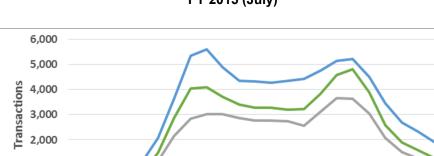
9:00 PM

Dallas Main

3.2.3 DAILY TRAFFIC DISTRIBUTION

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

The three mainline locations on S.R. 528 exhibit similar hourly traffic patterns. On weekdays, demand for travel at all three locations is bimodal, with both morning and evening peak hours. Traffic volumes in the morning peak hours at the Airport mainline plaza are higher than in the evening peak hours. The Beachline and Dallas mainline plazas experience higher peak volumes in the evening hours than in the morning hours. The highest peak hour volumes during the week were 5,600 per hour beginning at 8:00 A.M. at the Airport mainline plaza, 4,800 per hour beginning at 5:00 P.M. at the Beachline mainline plaza and 3,600 per hour beginning at 4:00 P.M. at the Dallas mainline plaza. On weekends, there is no clear morning or evening peak periods, indicating that many customers use the facility for non-work trip purposes.



9:00 AM

11:00 AM

Beachline Main

Time of Day

12:00 PM 12:00 PM 22:00 PM 43:00 PM 53:00 PM 63:00 PM 73:00 PM 83:00 PM 83:00 PM

10:00 AM

Figure 3-7 S.R. 528 Daily Traffic Variation (Weekday) FY 2015 (July)

1,000

1:00 AM

2:00 AM 3:00 AM 4:00 AM

Airport Main

5:00 AM

6:00 AM 7:00 AM 8:00 AM

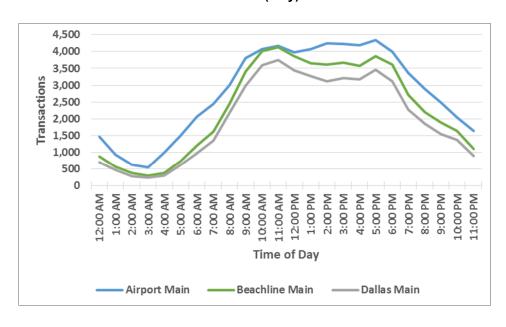


Figure 3-8 S.R. 528 Daily Traffic Variation (Weekend) FY 2015 (July)

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 2015 is shown in **Table 3-3**. Overall, 98.4 percent of all transactions on S.R. 528 were made by 2-axle vehicles, with little variation among the three plaza groups. The next most frequent vehicle class was the 3-axle classification, which typically includes delivery and service vehicles. These vehicles accounted for 0.9 percent of all transactions on the facility. Four-axle vehicles represented the smallest category with only 0.2 percent of facility transactions. Trucks with five or more axles represented 0.5 percent of total transactions.

Table 3-3 S.R. 528 Percent of Total Transactions By Vehicle Class FY 2015

Vehicle Class	ss Airport Main Beachline Main		Dallas Main	S.R. 528 Total	
2-Axle	98.5%	98.4%	98.3%	98.4%	
3-Axle	0.9%	0.9%	0.8%	0.9%	
4-Axle	0.2%	0.2%	0.3%	0.2%	
5 or More Axles	0.4%	0.5%	0.6%	0.5%	
Total	100.0%	100.0%	100.0%	100.0%	

Source: Unaudited lane transaction data - January 2015

3.3 E-PASS Usage

The percent of revenues generated from electronic transactions over the past ten fiscal years on S.R. 528 are shown in **Figure 3-9**. The proportion of toll revenues collected by E-PASS has steadily increased on the facility. In FY 2006, E-PASS revenues represented 52.3 percent of total revenues on the facility. In FY 2015, E-PASS revenues reached 74.5 percent. S.R. 528 has the lowest E-PASS usage of all CFX toll facilities due to the high volume of tourists using the expressway. The usage of E-PASS is expected to increase as customers shift from cash to E-PASS to take advantage of the lower ETC toll rate and the convenience of paying tolls electronically.

2015 74.5% 2014 72.4% 2013 70.7% 2012 69.6% Fiscal 7010 Teg 7010 66.9% 64.0% 2009 60.3% 2008 58.1% 2007 56.1% 2006 52.3% 0.0% 10.0% 20.0% 30.0% 40.0% 50.0% 60.0% 70.0% 80.0%

Figure 3-9
S.R. 528 Percent of Toll Revenue from Electronic Transactions
FY 2006 – FY 2015

Source: CFX Statistical Report June 2015

3.4 Forecasted Transactions and Toll Revenues

The removal of the Airport Main toll plaza and changes in toll plan in FY 2016 will result in a noticeable reduction in the number of transactions but have a positive impact on toll revenues. The assumed completion of All Aboard Florida intercity passenger rail service in FY 2017 has a minor impact on S.R. 528 T&R forecasts. AAF's Brightline Train will operate between Orlando International Airport and three stations in South Florida (West Palm Beach, Fort Lauderdale and Miami).

Future transportation improvements that could influence the T&R forecasts for S.R. 528 include the projects listed in **Table 3-4**, assumed completed in each model horizon year. Facility improvements, such as the widening from S.R. 417 Curry Ford Road to Lake Underhill Road, positively impact the T&R growth on S.R. 528 in the near term.

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

Facility	From	То	Model Horizon Year	Jurisdiction	Improvement
S.R. 417/Greeneway	Curry Ford Rd.	Lake Underhill Rd.	2018	CFX	Widen 4-6 lanes
Innovation Way Interchange			2018	CFX	Modified Interchange
S.R. 528/Beachline Expressway	Airport Plaza		2018	CFX	Plaza Demolition
S.R. 528/Beachline Expressway	1-4	Florida's Turnpike	2023	Turnpike	Widen 4-8 lanes
S.R. 528/Beachline Expressway	Florida's Turnpike	MP 8.421	2023	Turnpike	Widen 6-8 lanes
Conway Road	McCoy Road	Judge Road	2043	Orange County	Widen 4-6 lanes
Conway Road	Judge Road	Hoffner Avenue	2033	Orange County	Widen 4-6 lanes
Hoffner Ave.	Lee Vista Blvd.	Conway Road	2033	Orange County	Widen 2-4 lanes
Sand Lake Road	John Young Parkway	Turkey Lake Road	2033	Orange County	Widen 4-6 lanes
Central Florida Parkway	International Drive	John Young Parkway	2023	Orange County	Widen 4-6 lanes
International Drive	Hawaiian Court	SR 482 (Sand Lake Rd.)	2023	Orange County	Widen 4-6 lanes
Interstate 4	Kirkman Road	North of SR 434	2028	FDOT	Ultimate Managed Lanes
SR 528	I-95	Port Canaveral	2043	FDOT	Widen 4-6 lanes
Interstate 4	Kirkman Road	US 27	2043	FDOT	BtU South Managed Lanes

Historical and projected transactions and toll revenues for each of the S.R. 528 plaza groups and for all of S.R. 528 are summarized in **Table 3-5** and **Table 3-6**. The forecasts assume toll rate indexing at 3% per year, implemented every fifth year. Due to the toll rate adjustments every fifth year, there are noticeable decreases in transactions and increases in revenues.

Because of changes at Airport Plaza, total transactions on S.R. 528 are projected to decrease during the forecast period from the actual of 64.2 million in FY 2015 to 61.5 million in FY 2045. During the FY 2016 through FY 2045 forecast period, S.R. 528 is expected to be the third-largest contributor to total revenues of the five existing expressways. Total revenues on S.R. 528 are projected to increase during the forecast period from the actual \$60.4 million in FY 2015 to \$141.4 million in FY 2045. Transactions are forecasted to decrease an average of 0.7 percent per year from FY 2015 to FY 2025 due to the closing of the Airport Main plaza and opening of the new ramp plazas in FY 2016. Tolls will be collected for CFX at the Turnpike plaza upon closing of the Airport Main plaza, however the associated transactions are not included in the forecast. Revenues during the same period are forecasted to increase an average of 4.4 percent per year. Transactions and revenues are forecasted to increase at an average of 0.1 and 2.4 percent per year from FY 2025 to FY 2035, and 0.2 and 1.9 percent per year from FY 2035 to FY 2045, respectively.

Table 3-5 S.R. 528 Plaza Groups – Transaction Projections (Millions) FY 2016 – FY 2045

Fiscal	Airpoi	rt Main	Beachli	ne Main	Dallas	s Main	то	TAL	Percent Annual
Year	Actual A	Projected	Change						
2000	18.9	Trojecteu	11.9	riojecteu		Trojecteu	30.8	Trojecteu	11.7%
2001	19.8		12.6				32.4		5.2%
2002 ^B	19.0		12.6				31.6		-2.5%
2003	20.0		13.7				33.7		6.6%
2004	22.6		14.9				37.5		11.3%
2005 ^C	24.6		15.1				39.7		5.9%
2006	26.5		15.9				42.4		6.8%
2007	27.8		16.7				44.5		5.0%
2008 D	28.2		16.6				44.8		0.7%
2009 ^E	25.6		15.1				40.7		-9.2%
2010	25.4		15.5				40.9		0.5%
2011	26.2		16.3				42.5		3.9%
2012 ^F	26.8		16.4		4.3		47.5		11.8%
2013 ^{F,E}	26.4		16.7		14.5		57.6		21.3%
2014	27.0		17.6		15.1		59.7		3.6%
2015	28.8		19.0		16.4		64.2		7.5%
2016 ^G		16.5		20.3		17.7		54.4	-15.2%
2017		18.6		20.9		18.4		58.0	6.5%
2018 ^E		18.5		20.2		18.0		56.7	-2.2%
2019		18.7		20.5		18.4		57.6	1.5%
2020		18.9		20.9		18.7		58.4	1.5%
2021		19.1		21.2		19.1		59.3	1.5%
2022		19.2		21.5		19.4		60.2	1.5%
2023 ^E		18.0		20.5		18.6		57.2	-5.0%
2024		18.5		21.0		18.9		58.4	2.1%
2025		19.0		21.4		19.2		59.6	2.1%
2026		19.5		21.8		19.5		60.8	2.0%
2027		19.9		22.2		19.8		62.0	2.0%
2028 ^E		19.3		20.8		19.0		59.1	-4.6%
2029		19.3		21.3		19.3		59.9	1.3%
2030		19.2		21.9		19.6		60.6	1.2%
2031		19.2		22.4		19.8		61.4	1.2%
2032 2033 ^E		19.1		22.9		20.1		62.1	1.2%
		17.6		21.8		19.0		58.5	-5.9%
2034 2035		17.8 17.9		22.2 22.5		19.4 19.7		59.3 60.1	1.4% 1.4%
2035		17.9		22.5		20.0		60.1	1.4%
2037		18.2		23.2		20.3		61.7	1.3%
2038 ^E		17.3		21.8		19.3		58.3	-5.5%
2039		17.5		22.3		19.5		59.3	1.6%
2040		17.8		22.7		19.7		60.2	1.6%
2041		18.0		23.1		19.9		61.1	1.5%
2042		18.3		23.6		20.1		62.0	1.5%
2043 ^E		17.2		23.0		19.4		59.7	-3.8%
2044		17.5		23.5		19.6		60.6	1.5%
2045		17.7		23.9		19.9		61.5	1.5%

Fiscal Year		Compound Annual Average Growth Rate (CAAGR)							
2000 - 2008	5.1%	4.2%		4.8%					
2008 - 2015	0.3%	1.9%		5.3%					
2015 - 2025	-4.1%	1.2%	1.6%	-0.7%					
2025 - 2035	-0.6%	0.5%	0.2%	0.1%					
2035 - 2045	-0.1%	0.6%	0.1%	0.2%					

Notes

- A Actual revenue data provided by CFX from Monthly Statistical Reports.
- $\ensuremath{\mathsf{B}}$ Effects of the events on September 11, 2001.
- C Effects from 2004 hurricane season (4 storms with toll suspensions).
- D First effects of national economic recession.
- E Systemwide toll rate increase.
- $\mbox{\ensuremath{\mbox{\sf F}}}$ Dallas Main plaza opened to traffic on March 19, 2012.
- $\mbox{\bf G}$ Airport Main Plaza closes, new $\mbox{\bf ramp}$ plazas open in early 2016.

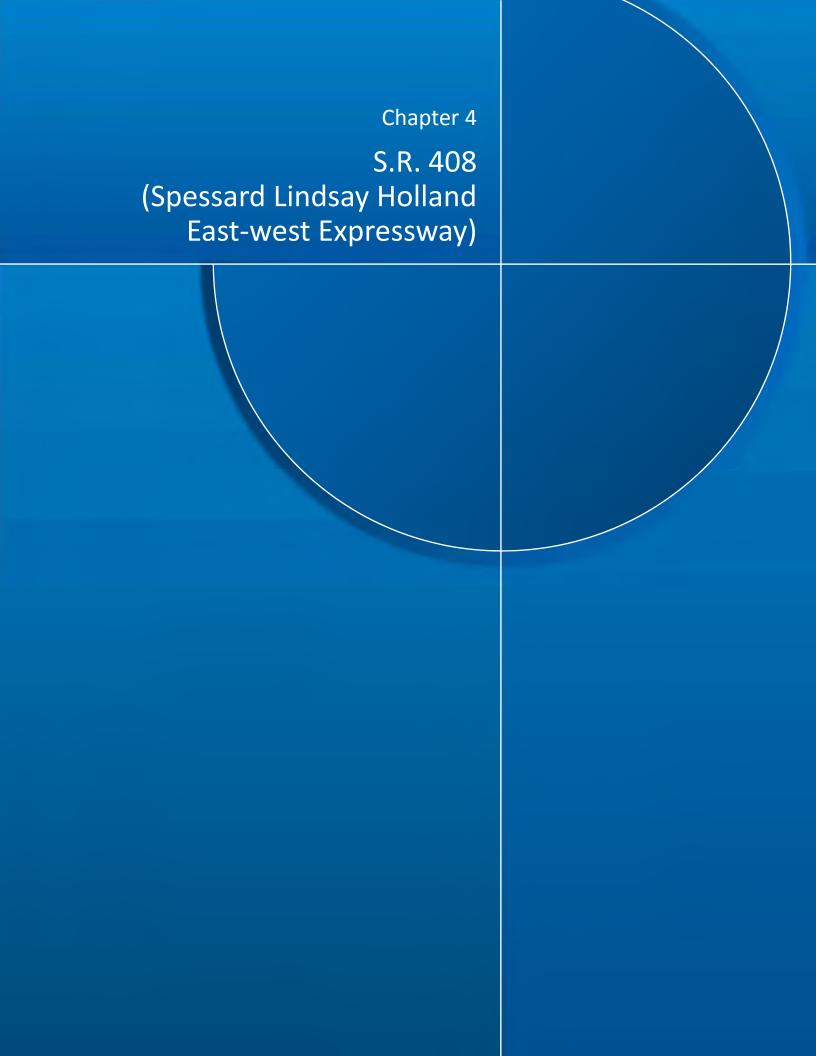
Table 3-6 S.R. 528 Plaza Groups – Toll Revenue Projections (Millions) FY 2016 – FY 2045

Fiscal	Airno	t Main	Reachli	ne Main	Dallas	Main	то	TAL	Percent
Year	Actual A	Projected	Annual Change						
2000	\$14.8	Trojecteu	\$12.9	Trojecteu	7100001	Trojecteu	\$27.7	Trojecteu	11.7%
2001	15.5		13.7				29.2		5.4%
2002 ^B	15.0		13.7				28.7		-1.7%
2003	15.7		14.9				30.6		6.6%
2004	17.9		16.4				34.3		12.1%
2005 ^c	19.4		16.7				36.1		5.2%
2006	20.9		17.5				38.4		6.4%
2007	21.8		18.2				40.0		4.2%
2008 D	22.1		18.0				40.1		0.3%
2009 ^E	21.6		16.9				38.5		-4.0%
2010	26.2		20.4				46.6		21.0%
2011	27.0		21.4				48.4		3.9%
2012 ^F	27.5		19.0		\$2.2		48.7		0.6%
2013 ^{F,E}	30.9		16.0		7.6		54.5		11.9%
2014	31.6		16.8		7.9		56.3		3.3%
2015	33.6		18.2		8.6		60.4		7.3%
2016 ^G		\$38.3		\$19.3		\$9.3		\$66.9	10.7%
2017		40.0		19.6		9.7		69.3	3.6%
2018 ^E		42.6		21.5		11.5		75.6	9.1%
2019		44.4		21.8		11.7		78.0	3.2%
2020		46.2		22.2		12.0		80.4	3.1%
2021		48.1		22.5		12.2		82.8	3.0%
2022		49.9		22.9		12.4		85.2	2.9%
2023 ^E		53.8		23.9		12.9		90.6	6.4%
2024		54.0		24.4		13.1		91.6	1.0%
2025		54.3		24.9		13.3		92.5	1.0%
2026		54.5		25.4		13.5		93.4	1.0%
2027		54.7		25.9		13.8		94.4	1.0%
2028 ^E		56.4		27.2		14.2		97.9	3.7%
2029		58.1		27.9		14.4		100.4	2.6%
2030 2031		59.7 61.4		28.6 29.3		14.6 14.9		103.0 105.5	2.5% 2.5%
2032		63.0		30.0		15.1		103.3	2.4%
2033 ^E		65.7		30.7		16.4		112.8	4.4%
2034		67.0		31.2		16.7		114.8	1.8%
2035		68.2		31.7		17.0		116.8	1.7%
2036		69.4		32.2		17.3		118.8	1.7%
2037		70.6		32.6		17.6		120.8	1.7%
2038 ^E		73.1		33.8		17.7		124.6	3.1%
2039		74.8		34.0		17.8		126.6	1.6%
2040		76.5		34.1		18.0		128.6	1.6%
2041		78.3		34.2		18.2		130.6	1.6%
2042		80.0		34.3		18.3		132.7	1.5%
2043 ^E		82.4		36.2		18.7		137.3	3.5%
2044		84.2		36.3		18.9		139.3	1.5%
2045		85.9		36.4		19.1		141.4	1.4%

Fiscal Year		Compound Annual Average Growth Rate (CAAGR)								
2000 - 2008	5.1%	4.3%		4.7%						
2008 - 2015	6.2%	0.2%		6.0%						
2015 - 2025	4.9%	3.2%	4.5%	4.4%						
2025 - 2035	2.3%	2.4%	2.4%	2.4%						
2035 - 2045	2.3%	1.4%	1.2%	1.9%						

Notes:

- A Actual revenue data provided by CFX from Monthly Statistical Reports.
- B Effects of the events on September 11, 2001.
- C Effects from 2004 hurricane season (4 storms with toll suspensions).
- D First effects of national economic recession.
- E Systemwide toll rate increase.
- F Dallas Main plaza opened to traffic on March 19, 2012.
- G Airport Main Plaza closes, new ramp plazas open in early 2016.



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

4.1 Facility Description

S.R. 408, also known as the Spessard Lindsay Holland East-West Expressway, is a 22-mile expressway that serves the 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 2015 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 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 west of Dean Road. This included the Holland West Main plaza (relocated and renamed Pine Hills in 2006) and Holland East Main plaza (reconstructed and renamed Conway in 2008).

CFX completed a major expansion project in 1989 that extended S.R. 408 six miles eastward from its existing terminus near S.R. 551 to a new interchange with S.R. 50, east of 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 completed another expansion that extended the S.R. 408 westward five miles from its original western terminus to an interchange with Florida's Turnpike. A new connection with S.R. 50 was provided west of Good Homes Road at Clarke Road. This expansion included interchanges at Hiawassee Road, Good Homes Road and S.R. 50/Clarke Road. The Hiawassee Mainline plaza was added and located between Hiawassee Road and Good Homes Road. S.R. 408 currently extends from Florida's Turnpike on the west to S.R. 50 (east of S.R. 434) on the east.

Match Line **Existing CFX System** Barrier Toll Location **Existing FTE System** Ramp Toll Location E-PASS Toll Rate (2-axle) S. Bumby Ave. Cash Toll Rate LEGEND \$0.55 \$0.75 (2-axle) S. Mills Ave. \$0.00 \$0.55 \$0.75 E. Anderson St. Gore St. Alafaya S. Orange Blossom 44 [44] \$0.55 \$0.75 S. Tampa Rouse Rd. 423 N. John Young Pkwy. Dean Main \$0.82 \$1.00 Old Winter Garden Rd. N. Dean Rd. \$0.55 \$0.75 Mercy Dr. Pine Hills Main \$1.09 \$1.25 N. Pine Hills Tout 417) Central Florida Greeneway N. Kirkman 435 Rd. 551 Chickasaw 408 . Goldenrod Rd. N. Hiawassee **\$0.55 \$0.75** Hiawassee Main \$0.82 \$1.00 \$0.82 \$1.00 436 S. Semoran Blvd. ake Underhill Rd. Good Homes \$0.28 \$0.50 Conway Main \$1.09 \$1.25 S. Conway Rd. \$0.82 \$1.00 Clarke Rd. W. Colonia Dr. Match Line

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

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

In FY 2011, the widening of S.R. 408 began between Oxalis Avenue and S.R. 417 as well as the reconfiguration of the S.R. 408/S.R. 417 systems interchange. This widening was completed in March 2013. 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 also included new ramps at Chickasaw Trail for travel to and from downtown Orlando. In January 2013, a new frontage road was completed to improve access to and from downtown Orlando for the communities in the area of Valencia College Lane and Econlockhatchee Trail.

4.2 Historical Transactions and Toll Revenues

4.2.1 ANNUAL TRANSACTION AND TOLL REVENUE TRENDS

A comprehensive historical record of facility transactions and toll revenues on S.R. 408 at the Hiawassee Main, Pine Hills Main, Conway Main and Dean Main plaza groups from FY 1996 to FY 2015 is presented in **Table 4-1**. The facility data and annual growth are also presented visually in **Figures 4-2** and **4-3**. As shown, total transactions on S.R. 408 in FY 2015 increased by approximately 8.5 million, or 6.6 percent, compared to FY 2014. FY 2015 total toll revenues increased by \$7.8 million, or 6.2 percent compared to FY 2014. Annual transaction and toll revenue trends by plaza group are also presented in the table.

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

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

Table 4-1
S.R. 408 Plaza Groups – Historical Transactions and Toll Revenues
FY 1996 – FY 2015

Fiscal	Hiawassee	Pine Hills	Conway	Dean		Hiawassee	Pine Hills	Conway	Dean	
Year	Main	Main	Main	Main	TOTAL	Main	Main	Main	Main	TOTAL
		TRANSA	CTIONS (mi	llions)			PERC	CENT CHAN	GE	
1996	8.4	15.6	30.4	9.0	63.4					
1997	10.0	17.5	32.6	10.2	70.3	19.0%	12.2%	7.2%	13.3%	10.9%
1998	11.8	20.2	35.5	11.9	79.4	18.0%	15.4%	8.9%	16.7%	12.9%
1999	13.7	22.5	38.2	13.8	88.2	16.1%	11.4%	7.6%	16.0%	11.1%
2000	15.5	24.4	41.0	16.7	97.6	13.1%	8.4%	7.3%	21.0%	10.7%
2001	17.1	25.7	42.5	19.1	104.4	10.3%	5.3%	3.7%	14.4%	7.0%
2002 ^A	18.7	26.7	43.8	20.9	110.1	9.4%	3.9%	3.1%	9.4%	5.5%
2003	20.2	28.0	45.5	22.4	116.1	8.0%	4.9%	3.9%	7.2%	5.4%
2004	22.0	29.9	48.5	24.3	124.7	8.9%	6.8%	6.6%	8.5%	7.4%
2005 ^B	22.7	30.8	49.1	25.2	127.8	3.2%	3.0%	1.2%	3.7%	2.5%
2006 ^c	24.1	32.2	51.8	27.3	135.4	6.2%	4.5%	5.5%	8.3%	5.9%
2007 D	25.7	32.5	51.9	28.2	138.3	6.6%	0.9%	0.2%	3.3%	2.1%
2008 ^E	27.2	33.7	50.7	27.4	139.0	5.8%	3.7%	-2.3%	-2.8%	0.5%
2009 ^F	25.2	30.9	49.3	25.9	131.3	-7.4%	-8.3%	-2.8%	-5.5%	-5.5%
2010 ^F	23.3	28.4	49.0	25.3	126.0	-7.5%	-8.1%	-0.6%	-2.3%	-4.0%
2011	23.2	28.4	50.0	25.1	126.7	-0.4%	0.0%	2.0%	-0.8%	0.6%
2012	23.1	28.4	50.1	24.6	126.2	-0.4%	0.0%	0.2%	-2.0%	-0.4%
2013 ^F	22.5	27.6	48.9	24.5	123.5	-2.5%	-3.0%	-2.3%	-0.5%	-2.1%
2014	24.1	29.2	51.1	25.3	129.7	7.1%	5.8%	4.5%	3.3%	5.0%
2015	26.4	31.6	53.9	26.3	138.2	9.5%	8.2%	5.5%	4.0%	6.6%
		TOLL REV	/ENUES (mi	llions)			PERC	CENT CHAN	GE	
1996	\$3.9	\$11.6	\$21.6	\$4.0	\$41.1					
1997	\$4.7	\$13.0	\$23.2	\$4.6	\$45.5	20.5%	12.1%	7.4%	15.0%	10.7%
1998	\$5.6	\$14.8	\$25.4	\$5.5	\$51.3	19.1%	13.8%	9.5%	19.6%	12.7%
1999	\$6.5	\$16.4	\$27.3	\$6.4	\$56.6	16.1%	10.8%	7.5%	16.4%	10.3%
2000	\$7.4	\$17.8	\$29.3	\$7.8	\$62.3	13.8%	8.5%	7.3%	21.9%	10.1%
2001	\$8.2	\$18.7	\$30.4	\$8.9	\$66.2	10.8%	5.1%	3.8%	14.1%	6.3%
2002 ^A	\$9.1	\$19.5	\$31.3	\$9.8	\$69.7	11.0%	4.3%	3.0%	10.1%	5.3%
2003 2004	\$9.9 \$10.8	\$20.3 \$21.8	\$32.5 \$34.7	\$10.5 \$11.4	\$73.2 \$78.7	8.8% 9.1%	4.1% 7.4%	3.8% 6.8%	7.1% 8.6%	5.0% 7.5%
2004 B					•					
	\$11.2	\$22.5	\$35.0	\$11.7	\$80.4	3.7%	3.2%	0.9%	2.6%	2.2%
2006 ^c	\$11.8	\$23.6	\$36.9	\$12.8	\$85.1	5.4%	4.9%	5.4%	9.4%	5.8%
2007 D	\$12.7	\$23.5	\$37.0	\$13.3	\$86.5	7.6%	-0.4%	0.3%	3.9%	1.6%
2008 ^E	\$13.0	\$24.0	\$36.1	\$13.0	\$86.1	2.4%	2.1%	-2.4%	-2.3%	-0.5%
2009 ^F	\$13.3	\$23.7	\$37.6	\$13.7	\$88.3	2.3%	-1.3%	4.2%	5.4%	2.6%
2010 ^F	\$16.4	\$26.8	\$46.1	\$18.4	\$107.7	23.3%	13.1%	22.6%	34.3%	22.0%
2011	\$16.2	\$26.8	\$47.1	\$18.2	\$108.3	-1.2%	0.0%	2.2%	-1.1%	0.6%
2012	\$16.0	\$26.7	\$47.2	\$17.8	\$107.7	-1.2%	-0.4%	0.2%	-2.2%	-0.6%
2013 ^F	\$18.0	\$29.3	\$51.9	\$20.1	\$119.3	12.4%	9.6%	10.0%	13.2%	10.8%
2014	\$19.2	\$31.0	\$54.2	\$20.8	\$125.2	6.7%	5.9%	4.4%	3.3%	4.9%
2015	\$21.0	\$33.4	\$56.9	\$21.7	\$133.0	9.4%	7.7%	5.0%	4.3%	6.2%

Notes:

- A Effects of the events on September 11, 2001.
- B Effects from 2004 hurricane season (4 storms with toll suspensions).
- C Mills Avenue on-ramp to westbound S.R. 408 permanently closed. Dean Main plaza converted to open road tolling in August 2005.
- D Holland West plaza relocated to Pine Hills plaza on November 10, 2006. Hiaw assee and Pine Hills Main plazas converted to open road tolling in FY 2006.
- E First effects of national economic recession.
- F Systemwide toll rate increase. Conway Main plaza converted to open road tolling in Nov 2008.

Figure 4-2 S.R. 408 Historical Transactions and Annual Growth FY 1996 – FY 2015

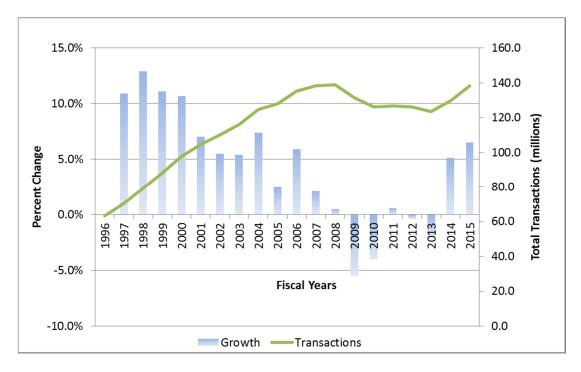
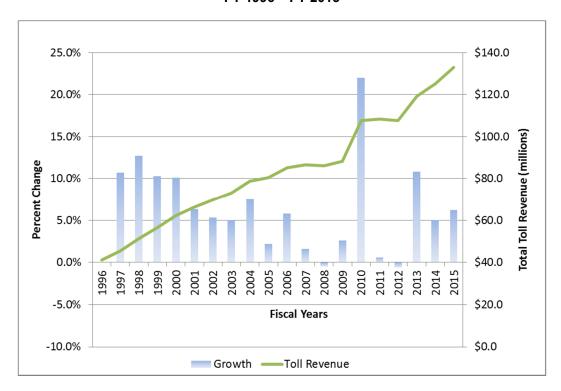


Figure 4-3 S.R. 408 Historical Toll Revenue and Annual Growth FY 1996 – FY 2015



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

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

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

In FY 2015, transactions and toll revenues increased over FY 2014 at all four plaza groups. The Hiawassee Main plaza group experienced the largest increase in both transactions and toll revenues.

The transactions and toll revenues by plaza groups and as a percentage of total S.R. 408 transactions and toll revenues for FY 2015 are presented in **Figure 4-4**. The largest portion of the transactions on S.R. 408 during FY 2015 were reported at the Conway Main plaza group, with 53.9 million or 39.0 percent. The Pine Hills Main, Hiawassee Main, and Dean Main plaza groups reported 31.6, 26.4 and 26.3 million transactions and each contributed approximately 20 percent of total S.R. 408 transactions for FY 2015.

The annual totals and percentages for toll revenues are similar to the trends reported for annual transactions. As shown, the Conway Main plaza group represented \$56.9 million in toll revenues or 42.8 percent of total S.R. 408 toll revenues. The Pine Hills Main plaza group represented \$33.4 million or 25.1 percent of total revenues on the facility. The Dean Main plaza group was the next highest with \$21.7 million or 16.3 percent of the total and the Hiawassee Main plaza group represented \$21.0 million or 15.8 percent in FY 2015. Tolls are lower at the Dean and Hiawassee mainline toll plazas.

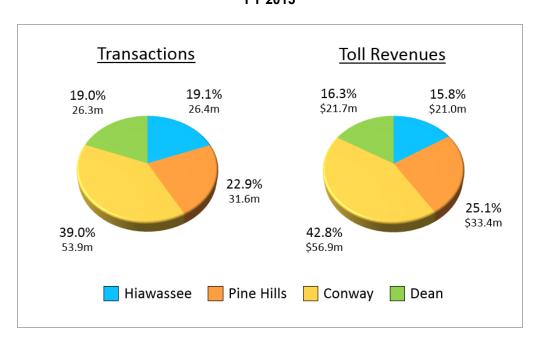


Figure 4-4
S.R. 408 Transactions and Toll Revenues by Plaza Group
FY 2015

4.2.2 Monthly Transaction Seasonal Variation

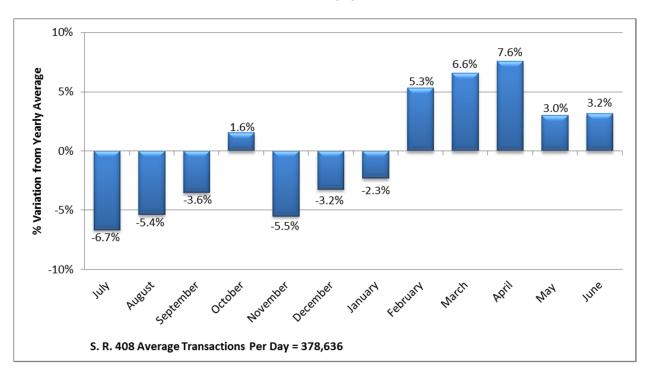
In **Table 4-2**, monthly total traffic volumes are normalized to the average number of transactions per day in each month. Using average number of transactions per day allows for an easy comparison of the variations in relative travel demand over the year. The seasonal pattern of usage changes slightly from year to year based on the number of weekdays in a given month.

The average number of transactions per day in FY 2015 on S.R. 408 ranged from a high of 407,342 in April 2015 to a low of 353,342 in July 2014. Historically, the winter months (December and January) have been the months with the lowest average number of transactions per day. This data is presented in a graphical format in **Figure 4-5**. The transactions for each month appear as a percentage of the average for the fiscal year. As shown in the figure, April transactions were 7.6 percent above average and July transactions were 6.7 percent below average for the facility. S.R. 408 volumes do not fluctuate as much as other facilities due to the usage of the highway as a commuter facility with a lower level of use by tourists. Transactions only deviate 5 to 7 percent from the annual average.

Table 4-2 S.R. 408 – Monthly Seasonal Variation in Toll-Paying Traffic FY 2015

Month	Number of Days in Month	Total Toll Paying Transactions	Average Transactions/day	Seasonal Factor
July	31	10,953,603	353,342	0.933
August	31	11,104,208	358,200	0.946
September	30	10,954,740	365,158	0.964
October	31	11,920,891	384,545	1.016
November	30	10,731,901	357,730	0.945
December	31	11,356,679	366,344	0.968
January	31	11,468,538	369,953	0.977
February	28	11,167,661	398,845	1.053
March	31	12,508,718	403,507	1.066
April	30	12,220,247	407,342	1.076
May	31	12,094,421	390,143	1.030
June	30	11,720,668	390,689	1.032
Average		11,516,856	378,636	1.000
Total Year	365	138,202,275		

Figure 4-5 S.R. 408 Variation in Transactions per Day, by Month FY 2015



4.2.3 DAILY TRAFFIC DISTRIBUTION

The daily distribution of traffic includes information on the usage characteristics of travel on the facility. The daily distributions represent counts taken during a typical week at the mainline plazas in the month of July. The typical weekday distribution is shown in **Figure 4-6** and the weekend distribution is shown in **Figure 4-7**. 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, demand for travel 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 11,500 per hour beginning at 5:00 P.M. at the Conway mainline plaza, 7,700 per hour beginning at 5:00 P.M. at the Pine Hills mainline plaza, 6,500 per hour beginning at 5:00 P.M. at the Dean mainline plaza and 6,000 per hour beginning at 5:00 P.M. at the Hiawassee mainline plaza. On weekends, there is no clear morning or evening peak periods, indicating that many customers use the facility for non-work trip purposes.

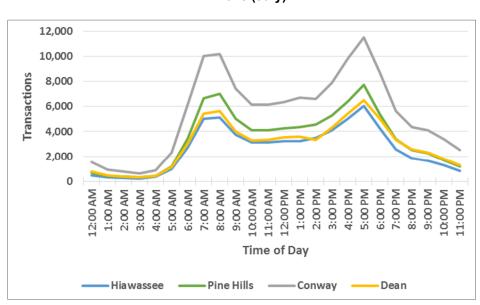


Figure 4-6 S.R. 408 Daily Traffic Variation (Weekday) FY 2015 (July)

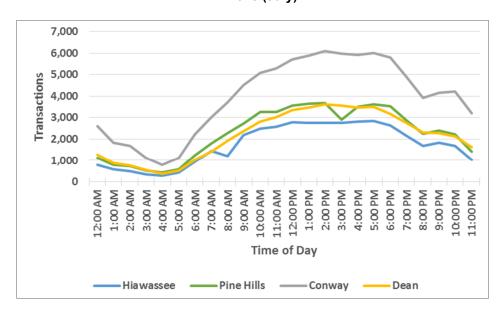


Figure 4-7 S.R. 408 Daily Traffic Variation (Weekend) FY 2015 (July)

4.2.4 Transactions By Vehicle Class

The distribution of transactions at each of the S.R. 408 plaza groups by vehicle class (number of axles) for FY 2015 is presented in **Table 4-3**. Overall, 99.1 percent of all transactions on S.R. 408 were made by 2-axle passenger vehicles, with little variation among the four plaza groups. Otherwise the next most frequent vehicle class was the 3-axle classification, which typically includes delivery and service vehicles. These vehicles accounted for 0.6 percent of all transactions on the facility. Four-axle vehicles and trucks with five or more axles represented the smallest categories with only 0.1 and 0.2 percent of facility transactions.

Table 4-3 S.R. 408 Percent of Total Transactions by Vehicle Class FY 2015

Vehicle Class	Hiawassee Main	Pine Hills Main	Conway Main	Dean Main	S.R. 408 Total
2-Axle	98.7%	98.8%	99.3%	99.4%	99.1%
3-Axle	0.8%	0.8%	0.4%	0.4%	0.6%
4-Axle	0.1%	0.1%	0.1%	0.1%	0.1%
5 or More Axles	0.4%	0.3%	0.2%	0.1%	0.2%
Total	100.0%	100.0%	100.0%	100.0%	100.0%

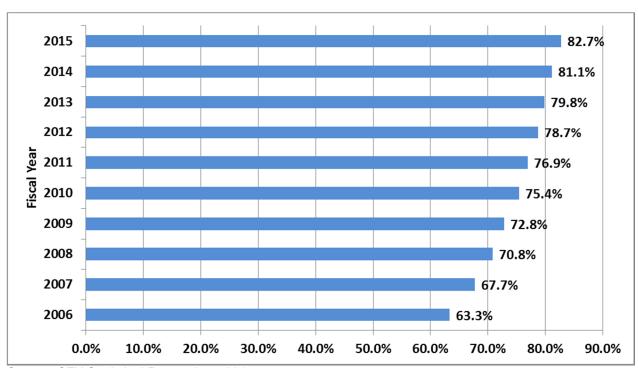
Source: Unaudited lane transaction data - January 2015

4.3 E-PASS Usage

The percent of revenues generated from electronic transactions over the past ten fiscal years on S.R. 408 is shown in **Figure 4-8**. The share of toll revenue collected through E-PASS has steadily increased on the facility since. In FY 2006, E-PASS revenues totaled 63.3 percent of total revenues on the facility. By the end of FY 2015, E-PASS revenues reached 82.7 percent. The usage of E-PASS is expected to increase as customers shift from cash to E-PASS to take advantage of the lower toll rate and convenience of paying tolls electronically.



Figure 4-8
S.R. 408 Percent of Toll Revenue from Electronic Transactions
FY 2006 – FY 2015



Source: CFX Statistical Report June 2015

4.4 Forecasted Transactions and Toll Revenues

Future transportation improvements that influence the T&R forecasts for S.R. 408 include the projects listed in **Table 4-4**, assumed completed in each model horizon year.

Even with major improvements to competing facilities, such as S.R. 50 in east and west Orange County, and Lake Underhill Road, growth rates in the near term are above 1.6% per year. System improvements, such as the S.R. 408 widening from S.R. 417 to Alafaya Trail, through the Hiawassee Road Interchange, and S.R. 417 widening from S.R. 408 to Curry Ford Road, as well as feeder road improvements, such as Alafaya Trail and John Young Parkway, positively impact the T&R growth on S.R. 408 throughout the forecast horizon.

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

Facility	From	То	Model Horizon Year	Jurisdiction	Improvement
S.R. 417/Greeneway	Curry Ford	SR 408	2018	CFX	Widen 4-6 lanes
Lake Underhill Road	Goldenrod Road	Chickasaw Trail	2018	Orange County	Widen 2-4 lanes
S.R. 50	Dean Road	E. Old Cheney Hwy	2018	FDOT	Widen 4-6 lanes
S.R. 50	E Ramps of Florida's Turnpike	Avalon Road	2018	FDOT	Widen 4-6 lanes
S.R. 50	SR 429/Western Expressway	E of West Oaks Mall	2018	FDOT	Widen 4-6 lanes
S.R. 50	Lake/Orange Co. Line	Tubb St.	2018	FDOT	Widen 4-6 lanes
SR 408	@SR 417		2018	CFX	Interchange Modification
Alafaya Trail	Mark Twain Blvd.	Innovation Way	2018	Orange County	Widen 2-4 lanes
John Young Parkway	SR 50	Shader Rd.	2023	Orange County	Widen 4-6 lanes
S.R. 408/East-West Expressway	S.R. 417	Alafaya Trail	2023	CFX	Widen 4-6 lanes
S.R. 408/East-West Expressway	Good Homes	Hiawassee	2023	CFX	Widen 4-6 lanes
Interstate 4	at S.R. 408		2028	FDOT	Ultimate Interchange Improvement
Interstate 4	Kirkman Rd.	North of S.R. 434	2028	FDOT	Managed Lanes Ultimate
US 441	SR 50	John Young Parkway	2028	Orange County	Widen 4-6 Lanes
Alafaya Trail	Huckleberry Finn Drive	Lake Underhill Road	2033	Orange County	Widen 4-6 Lanes
Interstate 4	Kirkman Road	US 27	2043**	FDOT	BtU South Managed Lanes

Historical and projected transactions and toll revenues for each of the S.R. 408 plaza groups and for all of S.R. 408 are shown in Tables **4-5** and **4-6**. The forecasts assume toll rate indexing at 3% per year, implemented every fifth year. Due to the toll rate adjustments every fifth year, there are decreases in transactions and increases in revenues.

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 only moderate impacts to S.R. 408 T&R forecasts. The growth rates for the remainder of the forecast period are also moderate but steady. Transactions on S.R. 408 are expected to grow 1.2 percent per year through FY 2025 and then lower rates through the end of the forecast period because of the impact of toll rate adjustments. Total revenues on S.R. 408 are projected to increase significantly over the forecast period, from the FY 2015 actual of \$133.0 million to \$263.0 million in FY 2045. Currently the largest contributor to System revenue, S.R. 408 revenues are forecasted to increase an average of 3.5 percent per year through FY 2025, 1.8 percent per year from FY 2025 to FY 2035, and 1.5 percent per year from FY 2035 to FY 2045.

Table 4-5 S.R. 408 Plaza Groups – Transaction Projections (Millions) FY 2016 – FY 2045

	Hiawass	see Main	Pine Hi	lls Main	Conwa	ıy Main	Dean	Main	то	TAL	Percent Annual
Fiscal Year	Actual A	Projected	Change								
2000	15.5		24.4		41.0		16.7		97.6		11.7%
2001	17.1		25.7		42.5		19.1		104.4		7.0%
2002 B	18.7		26.7		43.8		20.9		110.1		5.5%
2003	20.2		28.0		45.5		22.4		116.1		5.4%
2004	22.0		29.9		48.5		24.3		124.7		7.4%
2005 ^c	22.7		30.8		49.1		25.2		127.8		2.5%
2006 D	24.1		32.2		51.8		27.3		135.4		5.9%
2007 ^E	25.7		32.5		51.9		28.2		138.3		2.1%
2008 ^F	27.2		33.7		50.7		27.4		139.0		0.5%
2009 ^G	25.2		30.9		49.3		25.9		131.3		-5.5%
2010	23.3		28.4		49.0		25.3		126.0		-4.0%
2011	23.2		28.4		50.0		25.1		126.7		0.6%
2012	23.1		28.4		50.1		24.6		126.2		-0.4%
2013 ^G	22.5		27.6		48.9		24.5		123.5		-2.1%
2014	24.1		29.2		51.1		25.3		129.7		5.0%
2015	26.4		31.6		53.9		26.3		138.2		6.6%
2016		28.3		33.6		56.4		27.5		145.7	5.5%
2017		29.9		35.3		58.5		28.6		152.3	4.5%
2018 ^G		28.7		34.3		57.4		28.2		148.5	-2.5%
2019		29.4		35.1		58.1		28.6		151.1	1.7%
2020		30.0		35.9		58.8		28.9		153.6	1.7%
2021		30.7		36.6		59.5		29.3		156.2	1.7%
2022		31.4		37.4		60.2		29.7		158.7	1.6%
2023 ^G		29.0		34.4		57.6		28.7		149.6	-5.7%
2024		29.6		35.0		58.7		29.4		152.8	2.1%
2025		30.2		35.6		59.9		30.2		155.9	2.0%
2026		30.8		36.1		61.1		31.0		159.0	2.0%
2027		31.4		36.7		62.3		31.8		162.1	2.0%
2028 ^G		30.3		36.1		59.5		29.4		155.4	-4.2%
2029 2030		30.6		36.3		60.2		29.9		157.0	1.0%
2030		30.9 31.2		36.4 36.6		60.8 61.4		30.5 31.0		158.6 160.2	1.0% 1.0%
2031		31.5		36.7		62.1		31.5		161.9	1.0%
2033 ^G		30.5		36.2		59.3		29.4		155.5	-4.0%
2033		30.5		36.4		59.3 59.9		29.4		156.8	-4.0% 0.8%
2035		30.6		36.6		60.4		30.4		158.0	0.8%
2036		30.7		36.8		61.0		30.9		159.3	0.8%
2037		30.8		36.9		61.5		31.4		160.6	0.8%
2038 ^G		30.2		36.9		58.5		29.6		155.2	-3.4%
2039		30.4		37.2		59.3		30.1		157.0	1.1%
2040		30.5		37.5		60.2		30.6		158.8	1.1%
2041		30.7		37.8		61.0		31.1		160.5	1.1%
2042		30.9		38.1		61.8		31.5		162.3	1.1%
2043 ^G		31.1		37.9		59.8		29.6		158.4	-2.4%
2044		31.3		38.2		60.7		30.0		160.2	1.1%
2045		31.5		38.5		61.5		30.5		161.9	1.1%

Fiscal Year	Compound Annual Average Growth Rate (CAAGR)							
2000 - 2008	7.3%	4.1%	2.7%	6.4%	4.5%			
2008 - 2015	-0.4%	-0.9%	0.9%	-0.6%	-0.1%			
2015 - 2025	1.4%	1.2%	1.1%	1.4%	1.2%			
2025 - 2035	0.1%	0.3%	0.1%	0.0%	0.1%			
2035 - 2045	0.3%	0.5%	0.2%	0.0%	0.2%			

Notes

- A Actual transaction data provided by CFX from Monthly Statistical Reports.
- B Effects of the events on September 11, 2001.
- C Effects from 2004 hurricane season (4 storms with toll suspensions).
- D Mills Avenue on-ramp to w estbound S.R. 408 permanently closed.
- E- Holland West plaza was relocated and named Pine Hills plaza on November 10, 2006.
- F First effects of national economic recession.
- G Systemwide toll rate increase.

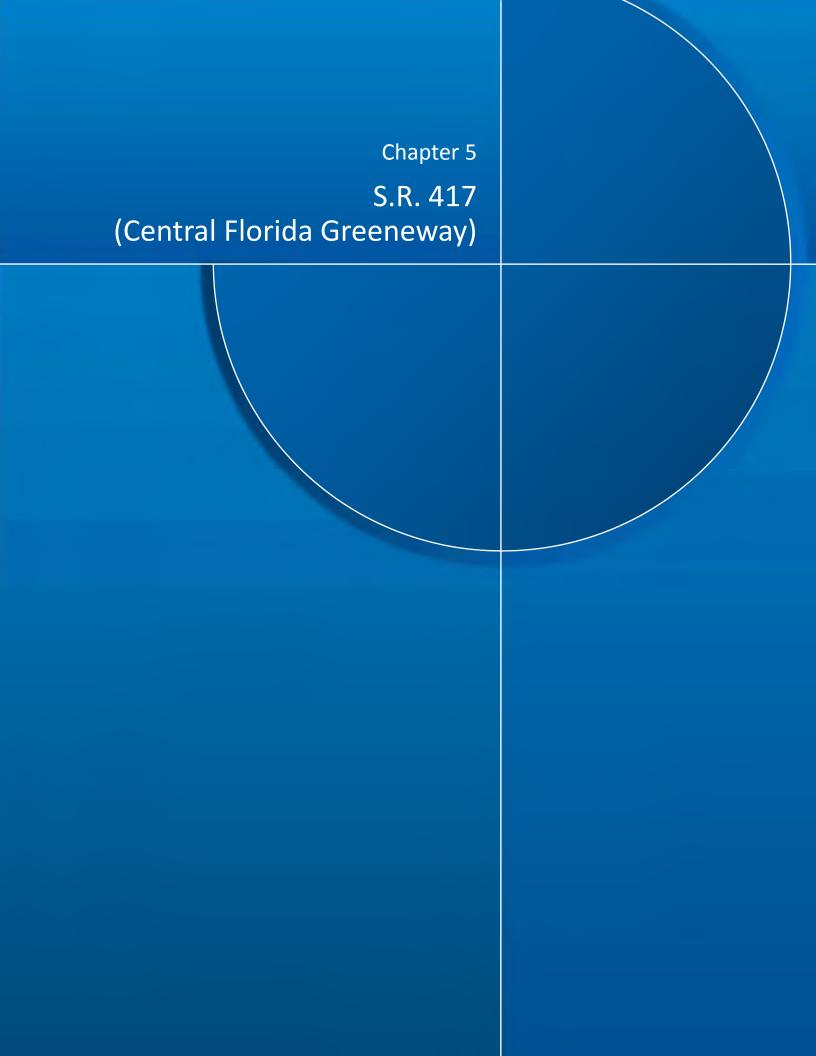
Table 4-6 S.R. 408 Plaza Groups – Toll Revenue Projections (Millions) FY 2016 – FY 2045

Fiscal	Hiawass	Hiawassee Main		Pine Hills Main		y Main	Dean	Main	то	TAL	Percent Annual
Year	Actual A	Projected	Actual A	Projected	Actual A	Projected	Actual A	Projected	Actual A	Projected	Change
2000	\$7.4	.,	\$17.8	,	\$29.3	.,	\$7.8	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	\$62.3	.,	11.7%
2001	8.2		18.7		30.4		8.9		66.2		6.3%
2002 ^B	9.1		19.5		31.3		9.8		69.7		5.3%
2003	9.9		20.3		32.5		10.5		73.2		5.0%
2004	10.8		21.8		34.7		11.4		78.7		7.5%
2005 ^c	11.2		22.5		35.0		11.7		80.4		2.2%
2006 D	11.8		23.6		36.9		12.8		85.1		5.8%
2007 ^E	12.7		23.5		37.0		13.3		86.5		1.6%
2008 ^F	13.0		24.0		36.1		13.0		86.1		-0.5%
2009 ^G	13.3		23.7		37.6		13.7		88.3		2.6%
2010	16.4		26.8		46.1		18.4		107.7		22.0%
2011	16.2		26.8		47.1		18.2		108.3		0.6%
2012	16.0		26.7		47.2		17.8		107.7		-0.6%
2013 ^G	18.0		29.3		51.9		20.1		119.3		10.8%
2014	19.2		31.0		54.2		20.8		125.2		4.9%
2015	21.0		33.4		56.9		21.7		133.0		6.2%
2016		\$22.8		\$36.0		\$60.3		\$22.9		\$142.0	6.8%
2017		24.4		38.1		63.2		24.0		149.7	5.4%
2018 ^G		25.7		40.9		68.7		26.2		161.4	7.8%
2019		26.3		41.7		69.4		26.4		163.8	1.5%
2020		27.0		42.6		70.0		26.6		166.2	1.4%
2021		27.6		43.4		70.7		26.7		168.5	1.4%
2022		28.3		44.3		71.4		26.9		170.9	1.4%
2023 ^G		29.5		46.4		77.4		29.2		182.6	6.8%
2024 2025		29.9 30.4		46.7 47.0		78.6 79.8		30.3 31.3		185.5 188.5	1.6% 1.6%
2025		30.4		47.0 47.3		79.8 81.0		32.3		191.4	1.6%
2027		31.4		47.5		82.1		33.3		194.4	1.5%
2028 ^G		32.6		51.0		87.1		33.7		204.4	5.2%
2029		33.0		51.0		87.1		34.3		204.4	1.0%
2030		33.5		51.3		88.8		34.9		208.5	1.0%
2031		34.0		51.5		89.6		35.5		210.5	1.0%
2032		34.5		51.6		90.4		36.1		212.6	1.0%
2033 ^G		36.2		54.3		93.6		36.9		221.1	4.0%
2034		36.5		55.0		94.5		37.6		223.7	1.2%
2035		36.8		55.7		95.5		38.3		226.3	1.2%
2036		37.1		56.4		96.4		39.0		228.9	1.1%
2037		37.3		57.1		97.4		39.7		231.4	1.1%
2038 ^G		38.8		61.2		100.8		39.8		240.6	4.0%
2039		39.1		61.9		102.2		40.5		243.8	1.3%
2040		39.5		62.6		103.7		41.3		247.0	1.3%
2041		39.8		63.2		105.1		42.0		250.2	1.3%
2042		40.1		63.9		106.5		42.8		253.4	1.3%
2043 ^G		40.1		64.7		109.2		42.6		256.6	1.3%
2044		40.4		65.4		110.7		43.4		259.8	1.2%
2045		40.7		66.1		112.1		44.1		263.0	1.2%

Fiscal Year		Compound Annual Average Growth Rate (CAAGR)							
2000 - 2008	7.3%	3.8%	2.6%	6.6%	4.1%				
2008 - 2015	7.1%	4.8%	6.7%	7.6%	6.4%				
2015 - 2025	3.8%	3.5%	3.4%	3.7%	3.5%				
2025 - 2035	1.9%	1.7%	1.8%	2.0%	1.8%				
2035 - 2045	1.0%	1.7%	1.6%	1.4%	1.5%				

Notes:

- A Actual revenue data provided by CFX from Monthly Statistical Reports.
- B Effects of the events on September 11, 2001.
- C Effects from 2004 hurricane season (4 storms with toll suspensions).
- $\mbox{D}\mbox{ Mills}$ Avenue on-ramp to w estbound S.R. 408 permanently closed.
- E- Holland West plaza was relocated and named Pine Hills plaza on November 10, 2006.
- F First effects of national economic recession.
- G Systemwide toll rate increase.



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 beltway around Orlando and provides a connection from 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 (33 miles) extending east and north from International Drive to the Orange-Seminole County line. FTE extended S.R. 417 north and west from the Orange-Seminole County line to I-4. FTE also extended S.R. 417 in a westerly direction from International Drive to provide a connection to I-4 in the vicinity of the attractions. A map of CFX's portion of S.R. 417

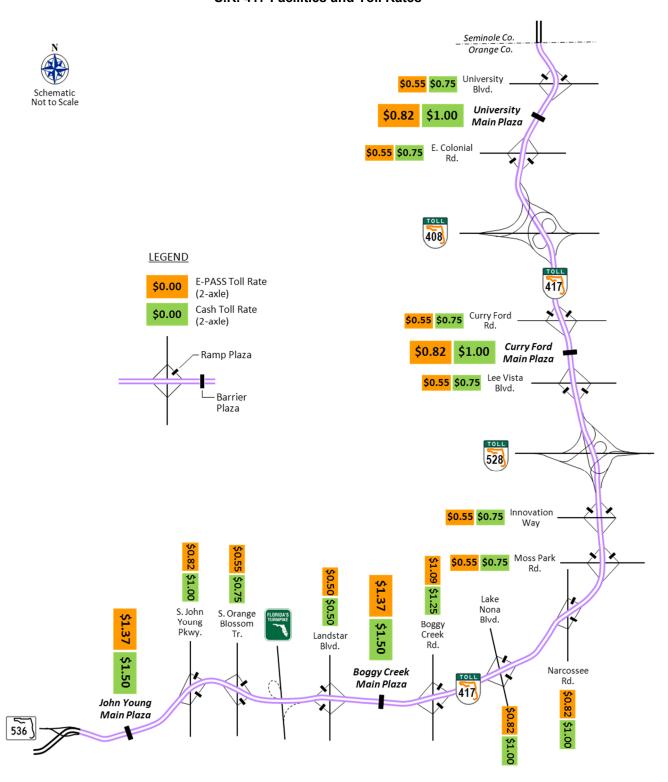


including the FY 2015 CFX toll rates for the mainline and ramp toll plazas is shown in Figure 5-1.

The first section of S.R. 417 to be constructed by CFX was from S.R. 408 to the Orange-Seminole County line including the University Mainline plaza. This section opened to traffic in December 1988 and toll collection began at the plaza in January 1989. The University Main plaza group included interchanges at S.R. 408, Valencia College Lane, S.R. 50 and University Boulevard. The next section extended from S.R. 528 to S.R. 408, 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 Boggy Creek and John Young Mainline plaza sections of S.R. 417, extending from International Drive to S.R. 528 and 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 express lanes. CFX chose this plaza for the first conversion due to its heavy traffic and extensive E-PASS usage. Conversions followed at the Curry Ford Mainline plaza in July 2005 and the Boggy Creek and John Young Mainline plazas in March 2007.

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



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

In addition to completed projects, CFX also has an interchange improvement at S.R. 417/Boggy Creek Road currently underway. This \$71 million improvement, which started in February 2013, will provide better access to and from OIA for customers in South Orange and Osceola Counties.



5.2 Historical Transactions and Toll Revenues

5.2.1 ANNUAL TRANSACTION AND TOLL REVENUE TRENDS

S.R. 417 annual historical transactions at the John Young Main, Boggy Creek Main, Curry Ford Main and University Main plaza groups from FY 1996 to FY 2015 are presented in the top half of **Table 5-1**. Annual historical 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 5-2** and **Figure 5-3**. Annual transaction and toll revenue trends by plaza group are presented in the table.

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

FY 2010 transactions continued to decline at all four plaza groups as a result of the economic downturn and the toll rate increase, which impacted the first nine months of the fiscal year. However, toll revenues increased significantly at all plaza groups due to the higher toll rates. The University Main plaza group reported the largest increase on S.R. 417 in revenues of 29.1 percent, or \$4.6 million and Curry Ford Main plaza group's revenue increased by 27.3 percent, or \$3.8 million.

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

In FY 2013, University Main plaza group was the only one that experienced a decline in transactions, a decrease of 7.0 percent as compared to FY 2012. All other plaza groups experienced an increase in transactions although this was the July 2012 toll rate increase. Revenues at all plaza groups increased in FY 2013.

Table 5-1
S.R. 417 Plaza Groups – Historical Transactions and Toll Revenues
FY 1996 – FY 2015

Fiscal	John Young	Boggy Creek	Curry Ford	University		John Young	Boggy Creek	Curry Ford	University		
Year	Main	Main	Main	Main	TOTAL	Main	Main	Main	Main	TOTAL	
			CTIONS (mil			PERCENT CHANGE					
1996	7.4	5.6	7.6	13.7	34.3						
1997	9.0	7.1	9.0	15.2	40.3	21.6%	26.8%	18.4%	10.9%	17.5%	
1998	10.4	8.0	10.1	16.6	45.1	15.6%	12.7%	12.2%	9.2%	11.9%	
1999	11.6	8.9	11.7	18.7	50.9	11.5%	11.3%	15.8%	12.7%	12.9%	
2000	13.4	10.1	13.6	20.8	57.9	15.5%	13.5%	16.2%	11.2%	13.8%	
2001	14.5	10.8	14.8	22.2	62.3	8.2%	6.9%	8.8%	6.7%	7.6%	
2002 ^A	14.5	11.0	15.7	23.7	64.9	0.0%	1.9%	6.1%	6.8%	4.2%	
2003	15.7	12.3	17.9	25.4	71.3	8.3%	11.8%	14.0%	7.2%	9.9%	
2004 ^B	17.1	13.5	20.4	28.6	79.6	8.9%	9.8%	14.0%	12.6%	11.6%	
2005 ^c	18.9	15.2	22.9	30.2	87.2	10.5%	12.6%	12.3%	5.6%	9.5%	
2006 D	20.8	17.3	25.7	32.4	96.2	10.1%	13.8%	12.2%	7.3%	10.3%	
2007 ^E	22.3	19.1	27.5	33.5	102.4	7.2%	10.4%	7.0%	3.4%	6.4%	
2008	23.6	20.3	27.6	33.0	104.5	5.8%	6.3%	0.4%	-1.5%	2.1%	
2009 ^F	21.5	18.4	24.9	30.0	94.8	-8.9%	-9.4%	-9.8%	-9.1%	-9.3%	
2010 ^F	19.6	17.5	23.6	28.6	89.3	-8.8%	-4.9%	-5.2%	-4.7%	-5.8%	
2011	20.1	18.6	23.2	29.0	90.9	2.6%	6.3%	-1.7%	1.4%	1.8%	
2012 ^G	20.6	18.8	23.1	28.2	90.7	2.5%	1.1%	-0.4%	-2.8%	-0.2%	
2013 ^H	21.0	19.7	23.4	26.2	90.3	1.8%	4.6%	1.3%	-7.0%	-0.5%	
2014	22.6	21.9	25.2	27.5	97.2	7.6%	11.2%	7.7%	5.0%	7.6%	
2015	25.7	25.3	28.3	30.0	109.3	13.7%	15.5%	12.3%	9.1%	12.4%	
		TOLL REV	VENUE (mill	ions)		PERCENT CHANGE					
1996	\$6.3	\$5.5	\$3.9	\$6.1	\$21.8						
1997	\$7.8	\$7.0	\$4.7	\$6.9	\$26.4	23.8%	27.3%	20.5%	13.1%	21.1%	
1998	\$9.1	\$7.9	\$5.3	\$7.7	\$30.0	16.7%	12.9%	12.8%	11.6%	13.6%	
1999	\$10.0	\$8.7	\$6.1	\$8.6	\$33.4	9.9%	10.1%	15.1%	11.7%	11.3%	
2000	\$11.6	\$9.9	\$7.1	\$9.7	\$38.3	16.0%	13.8%	16.4%	12.8%	14.7%	
2001	\$12.7	\$10.6	\$7.7	\$10.3	\$41.3	9.5%	7.1%	8.5%	6.2%	7.8%	
2002 ^A	\$12.7	\$10.8	\$8.1	\$11.0	\$42.6	0.0%	1.9%	5.2%	6.8%	3.1%	
2003	\$13.6	\$12.0	\$9.2	\$11.7	\$46.5	7.1%	11.1%	13.6%	6.4%	9.2%	
2004 ^B	\$14.6	\$13.1	\$10.5	\$13.4	\$51.6	7.4%	9.2%	14.1%	14.5%	11.0%	
2005 ^c	\$16.0	\$14.7	\$11.7	\$14.3	\$56.7	9.6%	12.2%	11.4%	6.7%	9.9%	
2006 ^D	\$17.4	\$16.6	\$13.2	\$15.4	\$62.6	8.7%	12.9%	12.8%	7.7%	10.4%	
2007 ^E	\$18.7	\$18.2	\$14.0	\$16.0	\$66.9	7.5%	9.6%	6.1%	3.9%	6.9%	
2008	\$19.7	\$19.2	\$13.9	\$15.7	\$68.5	5.3%	5.5%	-0.7%	-1.9%	2.4%	
2009 ^F	\$19.0	\$18.1	\$13.9	\$15.8	\$66.8	-3.6%	-5.7%	0.0%	0.6%	-2.5%	
2010 ^F	\$21.0	\$19.9	\$17.7	\$20.4	\$79.0	10.5%	9.9%	27.3%	29.1%	18.3%	
2011	\$21.6	\$20.6	\$17.3	\$20.6	\$80.1	2.9%	3.5%	-2.3%	1.0%	1.4%	
2012 ^G	\$22.1	\$20.8	\$17.3	\$20.3	\$80.5	2.3%	1.0%	0.0%	-1.5%	0.5%	
2013 ^H	\$25.3	\$24.3	\$19.8	\$21.8	\$91.2	14.3%	16.9%	14.5%	7.5%	13.3%	
2014	\$27.2	\$26.9	\$21.3	\$22.9	\$98.3	7.7%	10.7%	7.5%	5.0%	7.8%	
2015 Notes:	\$30.6	\$30.8	\$24.0	\$25.0	\$110.4	12.5%	14.5%	12.7%	9.2%	12.3%	

Notes:

- A Effects of the events on September 11, 2001.
- B University Main plaza converted to open road tolling plaza in July 2003.
- $\mbox{C}\mbox{-}\mbox{Effects}$ from 2004 hurricane season (4 storms with toll suspensions).
- D Curry Ford Main plaza converted to open road tolling plaza in July 2005.
- E-Boggy Creek Main and John Young Main plazas converted to open road tolling plazas in March 2007.
- F Systemw ide toll rate increase in April 2009.
- G Widening of S.R. 417 between S.R. 408 and S.R. 528. Valencia College Lane ramps closed.
- $\hbox{H-Systemw ide toll rate increase in July 2013. Implementation of cash and electronic toll rate differential.}$

Figure 5-2 S.R. 417 Historical Transactions and Annual Growth FY 1996 – FY 2015

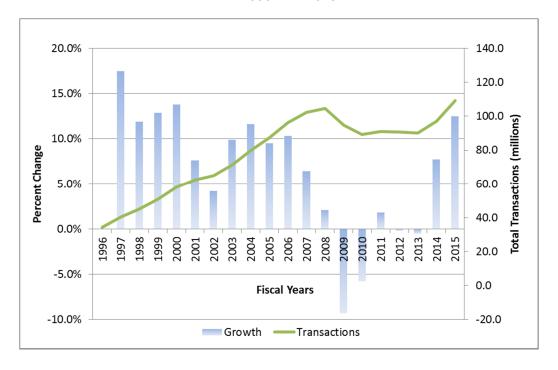
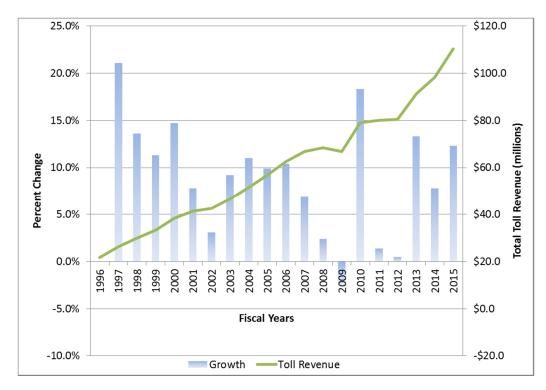


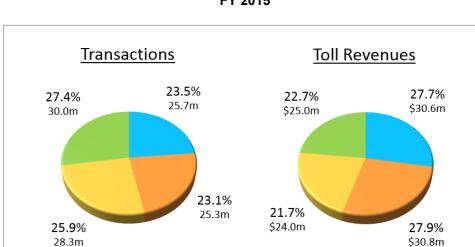
Figure 5-3 S.R. 417 Historical Toll Revenue and Annual Growth FY 1996 – FY 2015



In FY 2014, all plaza groups experienced growth in transactions and toll revenues. Overall, S.R. 417 transactions increased 7.6 percent and toll revenues increased 7.8 percent over FY 2013. The growth trend continued in FY 2015 at all plaza groups. Transactions increased 12.4 percent and toll revenues increased 12.3 percent compared to FY 2014. Boggy Creek Main, John Young Main and Curry Ford Main plaza groups' continued transaction and revenue growth can be attributed to Medical City and Lake Nona developments along these sections of S.R. 417, as well as the opening of the partial interchange at Florida's Turnpike.

The transactions and toll revenues by plaza group and as a percentage of total S.R. 417 transactions and toll revenues for FY 2015 are presented in **Figure 5-4**. As shown, the University Main plaza group represented 30.0 million transactions or 27.4 percent of total S.R. 417 transactions. The Curry Ford Main plaza group had the second highest amount of transactions at 28.3 million or 25.9 percent. The John Young Main and Boggy Creek Main plaza groups followed with 25.7 and 25.3 million transactions, respectively.

The annual totals and percentages for toll revenues are also presented below. The John Young Main and Boggy Creek Main plaza groups had the highest amounts of revenue despite the lower transaction totals. This is due to the fact that these two plaza groups have longer distances between mainline plazas resulting in higher toll amounts. The Boggy Creek Main plaza group reported the highest revenues of \$30.8 million or 27.9 percent of total S.R. 417 revenues. The Curry Ford Main plaza group represented the lowest amount of revenues on S.R. 417 with \$24.0 million or 21.7 percent of total revenues.



Boggy Creek Curry Ford

University

Figure 5-4
S.R. 417 Transactions and Toll Revenues by Plaza Group
FY 2015

John Young

5.2.2 MONTHLY TRANSACTION SEASONAL VARIATION

In **Table 5-2**, monthly total traffic volumes are normalized to average number of transactions per day in each month. Using 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 will change from year to year based on the number of weekdays in a given month.

Average number of transactions per day in FY 2015 on S.R. 417 ranged from a high of 333,128 in March 2015 to a low of 271,971 in September 2014. Historically, the winter months have been the months with the lowest average number of transactions per day. This data is presented in a graphical format in **Figure 5-5**. The transactions for each month appear as a percentage of the average for the fiscal year. March transactions were 11.2 percent above average and September transactions were 9.2 percent below average for the facility. The S.R. 417 transactions remained flat and below the average for the first two quarters of FY 2015 through January. February through June the transactions were above average for the facility.

Table 5-2 S.R. 417 – Monthly Seasonal Variation in Toll-Paying Traffic FY 2015

Month	Number of Days in Month	Total Toll Paying Transactions	Average Transactions/day	Seasonal Factor
July	31	8,543,204	275,587	0.920
August	31	8,515,596	274,697	0.917
September	30	8,159,130	271,971	0.908
October	31	9,072,249	292,653	0.977
November	30	8,256,124	275,204	0.919
December	31	8,992,686	290,087	0.968
January	31	8,970,880	289,383	0.966
February	28	8,919,702	318,561	1.063
March	31	10,326,965	333,128	1.112
April	30	9,972,285	332,410	1.110
May	31	9,913,688	319,796	1.067
June	30	9,707,482	323,583	1.080
Average		9,112,499	299, 589	1.000
Total Year	365	109,349,991		

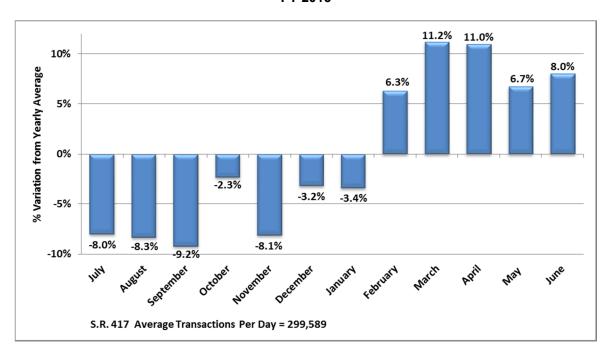


Figure 5-5
S.R. 417 Variation in Transactions Per Day, By Month
FY 2015

5.2.3 DAILY TRAFFIC DISTRIBUTION

The daily distribution of traffic includes information on the usage characteristics of travel on the facility. The daily distributions represent counts taken during a typical week at the mainline plazas in the month of July. The typical weekday distribution is shown in **Figure 5-6** and the weekend distribution is shown in **Figure 5-7**. 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, demand for travel 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 8,400 per hour beginning at 5:00 P.M. at the University mainline plaza, 8,200 per hour beginning at 5:00 P.M. at the Curry Ford mainline plaza, and 5,300 per hour beginning at 5:00 P.M. at both the Boggy Creek and John Young mainline plazas. The University and Curry Ford mainline plazas serve a relatively higher portion of trips in peak hours. On weekends, there is no clear morning or evening peak periods, indicating that many customers use the facility for non-work trip purposes.

Figure 5-6 S.R. 417 Daily Traffic Variation (Weekday) FY 2015 (July)

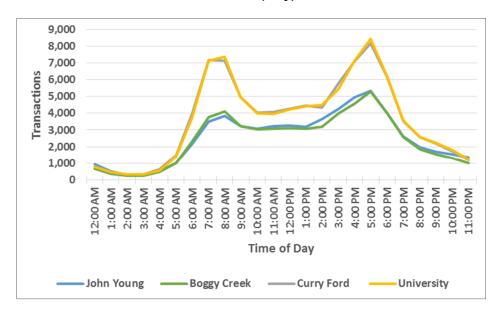
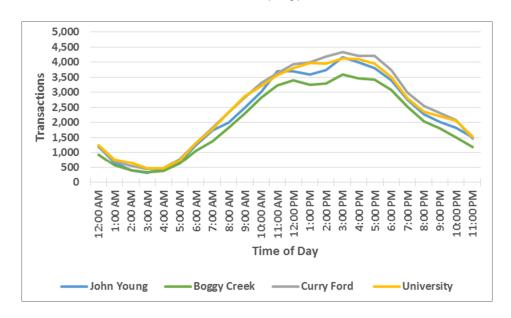


Figure 5-7 S.R. 417 Daily Traffic Variation (Weekend) FY 2015 (July)



5.2.4 Transactions By Vehicle Class

The distribution of transactions at each of the S.R. 417 plaza groups by vehicle class (number of axles) for FY 2015 is presented in Table 5-3. Facility-wide, 98.8 percent of all transactions were made by 2-axle passenger vehicles, with little variation among the three plaza groups. The next most frequent was vehicle class 3-axle the classification, which typically includes delivery and service vehicles. These vehicles accounted for 0.8 percent of all transactions on the facility. Four-axle



vehicles represented the smallest category with only 0.1 percent of facility transactions. Trucks with five or more axles represented 0.3 percent of total transactions.

Table 5-3
S.R. 417 Percent of Total Transactions by Vehicle Class
FY 2015

Vehicle Class	John Young Main	Boggy Creek Main	Curry Ford Main	University Main	S.R. 417 Total
2-Axle	98.7%	98.8%	98.5%	99.1%	98.8%
3-Axle	0.8%	0.9%	0.9%	0.6%	0.8%
4-Axle	0.2%	0.1%	0.2%	0.1%	0.1%
5 or More Axles	0.3%	0.2%	0.4%	0.2%	0.3%
Total	100.0%	100.0%	100.0%	100.0%	100.0%

Source: Unaudited lane transaction data – January 2015

5.3 E-PASS Usage

The percent of revenues generated from electronic transactions over the past ten fiscal years on S.R. 417 is shown in **Figure 5-8**. Over this time, E-PASS revenues have steadily increased on the facility. In FY 2006, E-PASS revenues totaled 62.5 percent of total revenues on the facility. In FY 2015, E-PASS revenues reached 82.7 percent. E-PASS usage is expected to increase as customers shift from cash to E-PASS to take advantage of the lower ETC toll rate and the convenience of paying tolls electronically.

2015 82.7% 2014 81.2% 2013 79.4% 2012 78.3% Year 2011 76.4% Fiscal 2010 75.0% 2009 71.8% 2008 69.3% 2007 66.9% 2006 62.5% 0.0% 10.0% 20.0% 30.0% 40.0% 50.0% 60.0% 70.0% 80.0% 90.0%

Figure 5-8
S.R. 417 Percent of Toll Revenue from Electronic Transactions
FY 2006 – FY 2015

Source: CFX Statistical Report June 2015

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5.4 Forecasted Transactions and Toll Revenues

Future transportation improvements that influence the T&R forecasts for S.R. 417 include the projects listed in **Table 5-4**, assumed completed in each model horizon year. In the near term, major improvements to S.R. 417 (including the widening from S.R. 408 to Curry Ford Road) contribute greatly to the growth in transactions and revenue. Even with improvements to competing facilities, such as Econlockhatchee Trail, growth rates are expected to remain high on S.R. 417. Growth rates remain above 2.1% per year through 2022 due to additional system improvements on S.R. 417 between Econlockhatchee Trail and the Seminole County Line and modifications to the interchange with Boggy Creek Rd.

Facility From То **Model Horizon Year** Jurisdiction Improvement S.R. 417/Greeneway **Curry Ford** S.R. 408 2018 Widen 4-6 lanes S.R. 417/Greeneway At Florida's Turnpike 2018 CFX New Partial Interchange Osceola County Boggy Creek Road Osceola Pkwy E Boggy Creek Road 2018 Widen 2-4 lanes 2018 Widen 2-4 lanes Boggy Creek Road Orange County Line Narcoossee Rd. Osceola County Econlockhatchee Trail SR 408 S.R. 50 2018 Widen 2-4 lanes **Orange County** SR 536 Apopka Vineland Rd. Osceola County Line 2023 **Orange County** Widen 4-6 lanes Apopka Vineland Rd. SR 536 Interstate 4 2023 **Orange County** Widen 6-8 lanes S.R. 417/Greeneway SR 434 Widen 4-6 lanes Aloma Ave 2028 Turnpike Landstar Boulevard SR 417 2028 Widen 4-6 lanes Osceola County Line **Orange County** International Drive South Osceola County Line S.R. 535/Vineland Road 2028 Orange County Widen 6-8 lanes Osceola Parkway Interstate 4 S.R. 417/ Greenway 2028 Osceola County Widen 6-8 lanes Osceola Parkway (toll) S.R. 417/Greeneway John Young Parkway 2028 Osceola County Widen 4-6 lanes Osceola County Osceola Parkway John Young Parkway U.S. 441/Orange Blossom Trail 2028 Widen 6-8 lanes Boggy Creek Road/C.R. 530 Widen 4-6 lanes Osceola Parkway Orange County Line 2033 Osceola County Boggy Creek Road/C.R. 530 Orange County Line Narcoossee Road 2033 Osceola County Widen 2-4 lanes Tuskawilla Road Red Bug Lake Rd Eagle Blvd 2043 Seminole County Widen 4-6 lanes Tuskawilla Road Eagle Blvd Lake Dr 2043 Seminole County Widen 4-6 lanes Interstate 4 Kirkman Road **US 27** 2043 **FDOT** BtU South Managed Lanes

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

Transaction and toll revenue projections for each toll plaza group and for all of S.R. 417 are summarized in **Table 5-5** and **Table 5-6**. The forecasts assume toll rate indexing at 3% per year, implemented every fifth year. Due to the toll rate adjustments every fifth year, there are decreases in transactions and increases in revenues.

Feeder road improvements, such as Landstar Boulevard, also positively impact the forecasted T&R growth on S.R. 417 through 2028. The growth rates for the remainder of the forecast period are moderate and steady. Continued investment and growth in the Medical City area and Lee Vista DRI area lead to positive transaction and revenue growth on S.R. 417.

Total transactions on S.R. 417 are projected to increase during the forecast period from the actual of 109.3 million in FY 2015 to 184.2 million in FY 2045. Total revenues on S.R. 417 are projected to increase during the forecast period from the actual \$110.4 million in FY 2015 to \$281.9 million in FY 2045. Transactions and revenues are forecasted to increase an average of 2.4 and 6.5 percent per year through FY 2025, 1.6 and 3.3 percent per year from FY 2025 to FY 2035, and 1.3 and 2.5 percent per year from FY 2035 to FY 2045, respectively.

Table 5-5 S.R. 417 Plaza Groups – Transaction Projections (Millions) FY 2016 – FY 2045

Fiscal	John You	ıng Main	Boggy Cr	eek Main	Curry Fo	ord Main	Univers	ity Main	то	TAL	Percent Annual
Year	Actual A	Projected	Change								
2000	13.4	Í	10.1		13.6	·	20.8	•	57.9	•	11.7%
2001	14.5		10.8		14.8		22.2		62.3		7.6%
2002 ^B	14.5		11.0		15.7		23.7		64.9		4.2%
2003	15.7		12.3		17.9		25.4		71.3		9.9%
2004	17.1		13.5		20.4		28.6		79.6		11.6%
2005 ^c	18.9		15.2		22.9		30.2		87.2		9.5%
2006	20.8		17.3		25.7		32.4		96.2		10.3%
2007	22.3		19.1		27.5		33.5		102.4		6.4%
2008	23.6		20.3		27.6		33.0		104.5		2.1%
2009 D	21.5		18.4		24.9		30.0		94.8		-9.3%
2010 D	19.6		17.5		23.6		28.6		89.3		-5.8%
2011	20.1		18.6		23.2		29.0		90.9		1.8%
2012 ^E	20.6		18.8		23.1		28.2		90.7		-0.2%
2013 ^D	21.0		19.7		23.4		26.2		90.3		-0.4%
2014	22.6		21.9		25.2		27.5		97.2		7.6%
2015	25.7		25.3		28.3		30.0		109.3		12.4%
2016		28.3		27.5		30.7		32.5		119.1	9.0%
2017		30.1		28.9		32.5		34.3		125.9	5.7%
2018 ^D		29.0		28.5		32.3		33.5		123.4	-2.0%
2019		29.6		29.3		33.0		34.1		126.1	2.2%
2020		30.2		30.2		33.7		34.8		128.8	2.2%
2021		30.8		31.0		34.3		35.4		131.5	2.1%
2022		31.4		31.8		35.0		36.1		134.3	2.1%
2023 D		29.7		31.2		33.2		34.1		128.2	-4.5%
2024		30.4		33.5		34.5		34.7		133.1	3.8%
2025		31.1		35.9		35.8		35.3		138.0	3.7%
2026		31.8		38.2		37.0		35.9		143.0	3.6%
2027		32.5		40.5		38.3		36.6		147.9	3.4%
2028 ^D		31.7		39.9		37.2		34.8		143.6	-2.9%
2029		32.1		42.3		38.5		35.3		148.2	3.2%
2030		32.4		44.7		39.7		35.9		152.7	3.1%
2031		32.7		47.2		41.0		36.4		157.3	3.0%
2032		33.1		49.6		42.3		36.9		161.9	2.9%
2033 ^D		31.8		47.9		41.8		34.4		155.9	-3.7%
2034		31.9		49.4		42.9		34.9		159.1	2.0%
2035		32.0		50.8		44.0		35.4		162.2	2.0%
2036		32.1		52.3		45.1		36.0		165.4	2.0%
2037 2038 ^D		32.2		53.7		46.2		36.5		168.6	1.9%
		31.8		52.0		47.1		34.3		165.2	-2.0%
2039		31.9		53.5		48.5		34.8		168.7	2.1%
2040 2041		32.0 32.2		54.9 56.4		49.9 51.4		35.3 35.7		172.2 175.7	2.1% 2.0%
2041		32.2		55.4 57.9		51.4 52.8		35.7 36.2		175.7	2.0%
2042 D		31.9		56.7		54.3		34.4		177.3	-1.1%
2043		31.9		56.7		54.3 55.7		34.4 34.9		177.3	-1.1% 2.0%
2044		32.1		59.6		55.7 57.1		35.3		184.2	1.9%
2043		32.2		J3.0		37.1		33.3		104.2	1.370

Fiscal Year		Compound Annual Average Growth Rate (CAAGR)								
2000 - 2008	7.3%	9.1%	9.2%	5.9%	7.7%					
2008 - 2015	1.2%	3.2%	0.4%	-1.4%	0.6%					
2015 - 2025	1.9%	3.6%	2.4%	1.6%	2.4%					
2025 - 2035	0.3%	3.5%	2.1%	0.0%	1.6%					
2035 - 2045	0.1%	1.6%	2.6%	0.0%	1.3%					

- A Actual transaction data provided by CFX from Monthly Statistical Report.
- B Effects of the events on September 11, 2011.
- \mbox{C} Effects from 2004 hurricane season (4 storms w ith toll suspensions).
- D Systemwide toll rate increase.
- E Widening of S.R. 417 between S.R. 408 and S.R. 528. Valencia College Lane ramps closed.

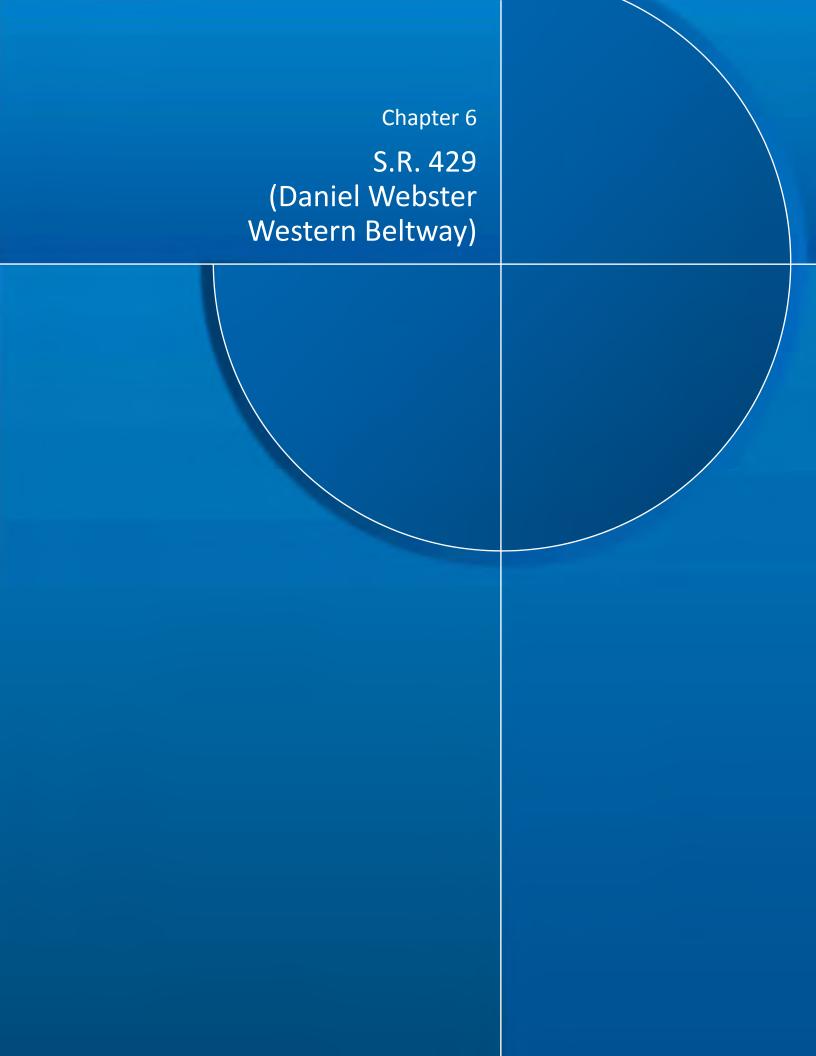
Table 5-6 S.R. 417 Plaza Groups – Toll Revenue Projections (Millions) FY 2016 – FY 2045

Fiscal	John Yo	ung Main	Boggy Cr	eek Main	Curry Fo	ord Main	Univers	ity Main	то	TAL	Percent Annual
Year	Actual A	Projected	Change								
2000	\$11.6		\$9.9		\$7.1		\$9.7		\$38.3		11.7%
2001	12.7		10.6		7.7		10.3		41.3		7.8%
2002 ^B	12.7		10.8		8.1		11.0		42.6		3.1%
2003	13.6		12.0		9.2		11.7		46.5		9.2%
2004	14.6		13.1		10.5		13.4		51.6		11.0%
2005 ^C	16.0		14.7		11.7		14.3		56.7		9.9%
2006	17.4		16.6		13.2		15.4		62.6		10.4%
2007	18.7		18.2		14.0		16.0		66.9		6.9%
2008	19.7		19.2		13.9		15.7		68.5		2.4%
2009 D	19.0		18.1		13.9		15.8		66.8		-2.5%
2010	21.0		19.9		17.7		20.4		79.0		18.3%
2011	21.6		20.6		17.3		20.6		80.1		1.4%
2012 ^E	22.1		20.8		17.3		20.3		80.5		0.5%
2013 D	25.3		24.3		19.8		21.8		91.2		13.3%
2014	27.2		26.9		21.3		22.9		98.3		7.8%
2015	30.6		30.8		24.0		25.0		110.4		12.3%
2016		\$32.9		\$33.8		\$26.5		\$27.7		\$120.9	9.5%
2017		34.2		35.6		28.2		29.7		127.7	5.6%
2018 ^D		36.6		39.1		30.7		32.0		138.4	8.4%
2019		37.2		39.8		31.3		32.5		140.8	1.7%
2020		37.7		40.6		31.9		33.0		143.2	1.7%
2021		38.2		41.3		32.5		33.5		145.6	1.7%
2022 2023 ^D		38.7		42.0		33.2		34.1		147.9	1.6%
2023		39.9		44.9		35.7		36.4		156.8	6.0%
2024		40.5 41.0		47.3 49.8		36.9 38.2		37.0 37.5		161.7 166.5	3.1% 3.0%
2025		41.6		52.3		39.4		38.1		171.4	2.9%
2027		42.1		54.8		40.6		38.7		176.2	2.8%
2028 ^D		44.9		59.3		42.7		39.9		186.8	6.0%
2029		45.3		62.3		44.0		40.5		192.1	2.8%
2030		45.8		65.2		45.3		41.1		197.4	2.8%
2031		46.3		68.2		46.5		41.7		202.7	2.7%
2032		46.7		71.1		47.8		42.3		208.0	2.6%
2033 D		49.0		74.5		51.4		43.7		218.6	5.1%
2034		49.4		76.4		52.6		44.3		222.7	1.9%
2035		49.8		78.3		53.8		45.0		226.9	1.9%
2036		50.2		80.3		55.0		45.6		231.1	1.8%
2037		50.6		82.2		56.3		46.3		235.3	1.8%
2038 ^D		53.6		85.0		59.8		46.4		244.9	4.1%
2039		54.0		87.1		61.3		47.0		249.3	1.8%
2040		54.3		89.1		62.8		47.5		253.7	1.8%
2041		54.7		91.1		64.3		48.1		258.2	1.8%
2042		55.0		93.1		65.8		48.6		262.6	1.7%
2043 ^D		57.5		96.0		70.5		49.0		273.0	3.9%
2044		57.8		98.0		72.0		49.6		277.4	1.6%
2045		58.2		100.0		73.5		50.2		281.9	1.6%

Fiscal Year		Compound Annual Average Growth Rate (CAAGR)								
2000 - 2008	6.8%	8.6%	8.8%	6.2%	7.5%					
2008 - 2015	5.5%	5.8%	7.4%	6.5%	6.2%					
2015 - 2025	5.6%	7.1%	7.0%	6.3%	6.5%					
2025 - 2035	2.0%	4.9%	3.6%	2.2%	3.3%					
2035 - 2045	1.7%	3.2%	3.3%	1.5%	2.5%					

- A Actual revenue data provided by CFX from Monthly Statistical Report.
- $\mbox{\ensuremath{B}}$ Effects of the events on September 11, 2011.
- C Effects from 2004 hurricane season (4 storms with toll suspensions).
- D Systemwide toll rate increase.
- E Widening of S.R. 417 between S.R. 408 and S.R. 528. Valencia College Lane ramps closed.

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S.R. 429 (DANIEL WEBSTER WESTERN BELTWAY)

6.1 Facility Description

S.R. 429, also known as the Daniel Webster Western Beltway, is a 34-mile expressway that extends east 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 23-mile portion of S.R. 429 from Seidel Road to U.S. 441 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 two mainline toll plazas: the Independence Main Plaza and the Forest Lake Main Plaza. Ramp toll plazas associated with the Independence Main plaza group are located at New Independence Parkway, Winter Garden Vineland Road and Schofield Road interchanges. Ramp toll plazas associated with the



Forest Lake Main plaza group are located at the East Plant Street (S.R. 438), the West Road and the Ocoee-Apopka Road interchanges. A map of CFX's portion of S.R. 429 including the FY 2015 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 E-PASS customers, providing a direct route from the Turnpike to Apopka and much needed access to West Orange County. The next segment, a 4.5 mile segment of S.R. 429, Part C, opened to traffic in December 2002 and connected to Winter Garden Vineland Road. CFX's segment from Winter Garden Vineland to Seidel Road was opened to traffic in December of 2005, in conjunction with FTE's first segment from Seidel Road to U.S. 192. FTE opened its segment of S.R. 429 Part C in December of 2006.

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

LEGEND \$0.00 \$0.00 Video Toll Rate 46 (2-axle) TOLL TOLL E-Pass Toll Rate 429 453 Lake Co. Ramp Mt. Plymouth Orange Co. Plaza Main Plaza Barrier Plaza Mt. Plymouth Rd. \$0.75 \$1.00 **Existing CFX System** Future CFX System 441 Kelly Park Rd. (Future Interchange) Existing Florida's Turnpike System Match Line A = = = Future Florida's Turnpike System 11 429 414 451 W. Orange Blossom Tr. TOLL Ponkan \$0.80 \$1.00 429 Main Plaza 414 Ocoee Apopka Rd. (CR 437A) \$0.55 \$0.75 Match Line B Forest Lake \$1.37 \$1.50 Main Plaza Match Line A \$0.82 \$1.00 Stoneybrook West — Parkway \$0.55 \$0.75 Winter Garden Vineland Rd. (CR 535) \$1.50 West Rd. 429 Independence Main Plaza 438 (Planned) 429 E. Plant St. \$0.28 \$0.50 New Independence Pkwy. To W. Colonial \$0.82 \$1.00 Schofield Rd. \$0.55 \$0.75 Match Line B Seidel Rd.

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

The extension of S.R. 429, locally known as the Wekiva Parkway, will be a 27-mile expressway that extends S.R. 429 into northwest Orange, southeast Lake, and east Seminole counties. From a CFX vision in the *Year 2000 Long Range Expressway Plan*, completed in 1983, the Wekiva Parkway – then known as the Western Bypass and later as the Western Beltway, Part B, is under design. CFX started construction of its first segments in January of 2015. This long-awaited expressway will complete the Western Beltway around the Orlando metropolitan region. The project will also add two additional plaza groups to S.R. 429 along the CFX-controlled section: the Ponkan Main Plaza, about 3.2 miles north of the current S.R. 429 terminus which is scheduled to open July 1, 2017 (FY 2018); and the Mt. Plymouth Main Plaza, about 3.6 miles from the Ponkan Main Plaza which is set to open January 1, 2018 (FY 2018). The Wekiva Parkway also includes construction of S.R. 453, discussed in Chapter 8. Detailed information about the Wekiva Parkway is included in Chapter 1 of this report.

6.2 Historical Transactions and Toll Revenues

6.2.1 ANNUAL TRANSACTION AND TOLL REVENUE TRENDS

S.R. 429 annual historical transactions for the Forest Lake Main and the Independence Main plaza groups from opening to FY 2015 are presented in the top half of **Table 6-1**. Annual historical toll revenues are also summarized and totaled in the bottom half of the table. In FY 2015, S. R. 429 transactions increased by 14.7 percent over FY 2014 and revenues increased by 16.1 percent.

Since its opening, S.R. 429 had only two years of negative growth in transactions, which occurred in FY 2009 and FY 2010 as a result of the recession and the toll rate increase in April 2009. Revenues, on the other hand, have never had a year of negative growth, except for FY 2009 where revenues had a year of no growth. That year, Forest Lake Main plaza group had negative growth of 4.2 percent, but Independence Main plaza group had positive growth of 7.0 percent. Much of the fluctuations in FY 2009 and FY 2010 can be attributed to the slowdown in the economy and the FY 2009 toll rate increase. The toll rate increase impacted transactions during the last three months of FY 2009 and the first nine months of FY 2010. With the toll rate increase, revenues in FY 2010 recovered with a growth of 23.7 percent, or \$4.5 million for the facility, while transactions only decreased by 0.4 percent.



Table 6-1
S.R. 429 Plaza Groups – Historical Transactions and Toll Revenues
FY 2001 – FY 2015

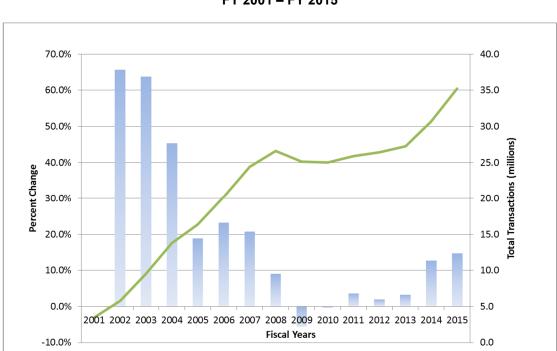
Fiscal	Forest Lake	Independence		Forest Lake	Independence			
Year	Main ^A	Main	TOTAL	Main ^A	Main	TOTAL		
	TRAN	SACTIONS (milli	ons)	PERCENT CHANGE				
2001	3.5		3.5					
2002 ^B	5.8		5.8	65.7%		65.7%		
2003 ^c	8.0	1.5	9.5	37.9%		63.8%		
2004	9.5	4.3	13.8	18.8%	186.7%	45.3%		
2005 D	10.8	5.6	16.4	13.7%	30.2%	18.8%		
2006 ^E	12.8	7.4	20.2	18.5%	32.1%	23.2%		
2007 ^F	14.1	10.3	24.4	10.2%	39.2%	20.8%		
2008 ^G	14.2	12.4	26.6	0.7%	20.4%	9.0%		
2009 ^H	12.9	12.2	25.1	-9.2%	-1.6%	-5.6%		
2010	13.0	12.0	25.0	0.8%	-1.6%	-0.4%		
2011	13.4	12.5	25.9	3.1%	4.2%	3.6%		
2012	13.6	12.8	26.4	1.5%	2.4%	1.9%		
2013	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%		
		REVENUE (millio		PE	RCENT CHANGE			
2001	\$3.3		\$3.3					
2002 ^B	\$5.1		\$5.1	54.5%		54.5%		
2003 ^c	\$6.8	\$0.4	\$7.2	33.3%		41.2%		
2004	\$8.1	\$1.1	\$9.2	19.1%	175.0%	27.8%		
2005 D	\$9.1	\$1.4	\$10.5	12.3%	27.3%	14.1%		
2006 ^E	\$10.7	\$2.8	\$13.5	17.6%	100.0%	28.6%		
2007 ^F	\$11.8	\$5.6	\$17.4	10.3%	100.0%	28.9%		
2008 ^G	\$11.9	\$7.1	\$19.0	0.8%	26.8%	9.2%		
2009 ^H	\$11.4	\$7.6	\$19.0	-4.2%	7.0%	0.0%		
2010	\$13.7	\$9.8	\$23.5	20.2%	28.9%	23.7%		
2011	\$14.1	\$10.3	\$24.4	2.9%	5.1%	3.8%		
2012	\$14.2	\$10.7	\$24.9	0.7%	3.9%	2.0%		
2013	\$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%		

- A Opened to traffic on July 8, 2000. Toll collection began one w eek after facility opened to traffic.
- B Interchange ramps to/from existing S.R. 429 at Florida's Turnpike opened in November 2001.
- C Interchange ramps to/from C.R. 535 opened in December 2002.
- D Effects from 2004 hurricane season (4 storms with toll suspensions).
- E Independence Main plaza opened in December 2005. FTE opened section to U.S. 192.
- F FTE opened section from U.S. 192 to I-4 in December 2006.
- G First effects of national economic recession.
- H Systemwide toll rate increase in April 2009.
- I Systemwide toll rate increase in July 2012. Implementation of cash and electronic toll rate differential.

In FY 2012, the growth in transactions and revenue at Independence Main plaza group outpaced those at Forest Lake Main plaza group, with transaction growth at 2.4 percent and revenue growth at 3.9 percent for the Independence Main plaza group. Forest Lake Main plaza group had a slower growth year with only a 1.5 percent increase in transactions and a 0.7 percent increase in revenue. This changed again in FY 2013 with Forest Lake Main transactions increasing by 4.7 percent to Independence Main's increase of 1.6 percent over FY 2012. Annual revenue growth was also higher at Forest Lake Main plaza group than at Independence Main plaza group with 20.6 percent and 14.6 percent respectively.

In FY 2014, transactions at the Forest Lake Main plaza group increased by 13.4 percent and toll revenues increased by 13.8 percent. Transactions during the same period at the Independence Main plaza group by 12.3 percent and toll revenues increased by 14.1 percent. In FY 2015, transactions at the Forest Lake Main plaza group and Independence Main plaza group increased by 13.7 percent and 15.8 percent, respectively, over FY 2014. During the same period, toll revenues at the Forest Lake Main plaza group and Independence Main plaza group increased by 13.3 percent and 20.0 percent.

The facility data and annual growth are also presented visually in **Figure 6-2** and **Figure 6-3**. As shown, transactions and revenue have increased rapidly between FY 2001 and FY 2009, with ramp-up growth rates in the first three years. The economic downturn is also represented with a dip in the annual transactions and revenue, but it also shows that over the last four years the facility has recovered and continues to grow. In Figure 6-3, the total toll revenue chart has the distinct step-up pattern as expected of toll rate increases.



Transactions

Growth

Figure 6-2 S.R. 429 Historical Transactions and Annual Growth FY 2001 – FY 2015

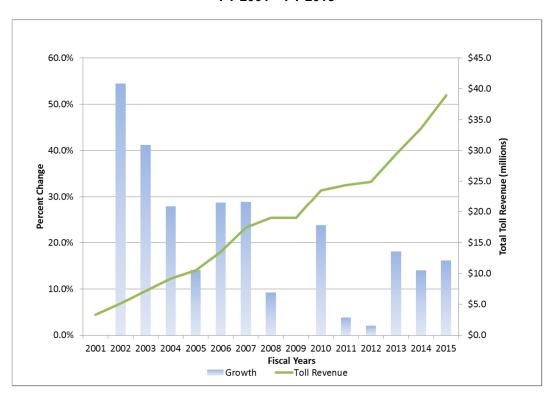


Figure 6-3
S.R. 429 Historical Toll Revenue and Annual Growth
FY 2001 – FY 2015

The transactions and toll revenues by plaza group and as a percentage of total S.R. 429 transactions and toll revenues for FY 2015 are presented in **Figure 6-4**. As shown, the Forest Lake Main plaza group represented 18.3 million transactions or 51.9 percent of total S.R. 429 transactions. Independence Main plaza group carried the remaining 16.9 million or 48.1 percent of total transactions on the facility.

The annual totals and percentages for toll revenues are similar to the trends reported for annual transactions. Having more ramp toll plazas and a higher mainline toll rate, the Forest Lake Main plaza group represented \$22.1 million in toll revenues or 56.8 percent of total S.R. 429 toll revenues. Independence Main plaza group carried the remaining \$16.8 million or 43.2 percent of total revenue on the facility.

Transactions

48.1%
16.9m
51.9%
18.3m
Forest Lake Independence

Figure 6-4
S.R. 429 Transactions and Toll Revenues by Plaza Group
FY 2015

6.2.2 MONTHLY TRANSACTION SEASONAL VARIATION

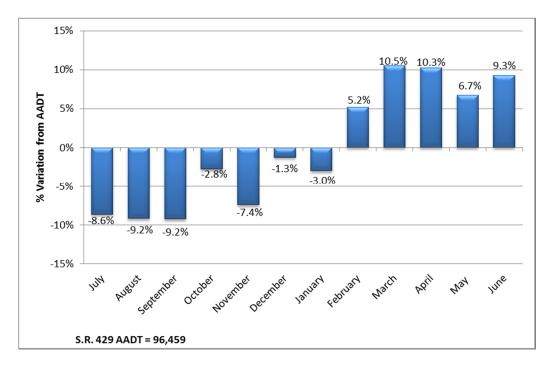
As presented in **Table 6-2**, average transactions per day in FY 2015 on S.R. 429 ranged from a high of 106,634 in March 2015 to a low of 87,559 in September of 2014. Historically, September has been the month with the lowest average transactions per day. This data is presented in a graphical format in **Figure 6-5**. Each month's average daily transactions appear as a percentage of the average for the fiscal year. Transactions in March were 10.5 percent above average and transactions in September were 9.2 percent below average for the facility. For FY 2015, the transactions were lower than average for the first half of the FY and higher than average for the second half of the FY. This is a normal pattern for seasonal variation, with the spring months being the peak season, due to an extra number of tourists in the area. The seasonal pattern of usage will change slightly from year to year based on the number of weekdays in a given month.



Table 6-2 S.R. 429 – Monthly Seasonal Variation in Toll-Paying Traffic FY 2015

Month	Number of Days in Month	Total Toll Paying Transactions	Average Transactions/day	Seasonal Factor
July	31	2,731,726	88,120	0.914
August	31	2,716,468	87,628	0.908
September	30	2,626,780	87,559	0.908
October	31	2,907,589	93,793	0.972
November	30	2,679,647	89,322	0.926
December	31	2,952,677	95,248	0.987
January	31	2,901,307	93,591	0.970
February	28	2,841,070	101,467	1.052
March	31	3,305,651	106,634	1.105
April	30	3,190,663	106,355	1.103
May	31	3,191,133	102,940	1.067
June	30	3,162,669	105,422	1.093
Average		2,933,948	96,459	1.000
Total Year	365	35,207,380		

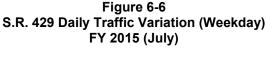
Figure 6-5 S.R. 429 Variation in Transactions Per Day, By Month FY 2015

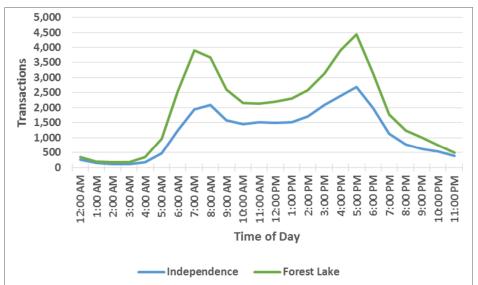


6.2.3 DAILY TRAFFIC DISTRIBUTION

The daily distribution of traffic includes information on the usage characteristics of travel on the facility. The daily distributions represent counts taken during a typical week at the mainline plazas in the month of July. The typical weekday distribution is shown in **Figure 6-6** and the weekend distribution is shown in **Figure 6-7**. 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, demand for travel at all both locations is bimodal, with both morning and evening peak hours. Traffic volumes in the evening peak hours at both mainline plazas are higher than in the morning peak hours. The highest peak hour volumes during the week were 2,700 per hour beginning at 5:00 P.M. at the Independence mainline plaza and 4,400 per hour beginning at 5:00 P.M. at the Forest Lake mainline plaza. On weekends, there is no clear morning or evening peak periods, indicating that many customers use the facility for non-work trip purposes.





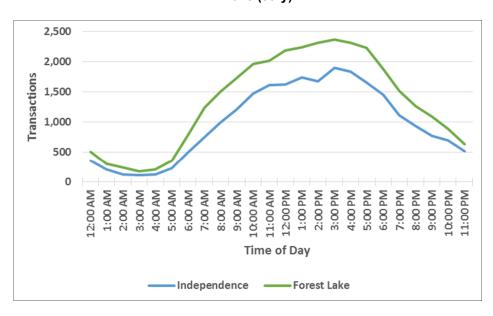


Figure 6-7 S.R. 429 Daily Traffic Variation (Weekend) FY 2015 (July)

6.2.4 Transactions By Vehicle Class

The distribution of transactions at each of the S.R. 429 plaza groups by vehicle class (number of axles) for FY 2015 is shown in **Table 6-3**. Overall, 97.9 percent of all transactions on S.R. 429 were made by 2-axle passenger vehicles, with little variation among the two plaza groups. The next most frequent vehicle class was the 3-axle classification, which typically includes delivery and service vehicles. These vehicles accounted for 1.4 percent of all transactions on the facility. Fouraxle vehicles represented the smallest category with only 0.3 percent of facility transactions. Trucks with five or more axles represented 0.4 percent of total transactions.

Table 6-3 S.R. 429 Percent of Total Transactions by Vehicle Class FY 2015

Vehicle Class	Forest Lake Main	Independence Main	S.R. 429 Total
2-Axle	98.0%	97.8%	97.9%
3-Axle	1.4%	1.4%	1.4%
4-Axle	0.2%	0.3%	0.3%
5 or More Axles	0.4%	0.5%	0.4%
Total	100.0%	100.0%	100.0%

6.3 E-PASS Usage

The percent of revenues collected as electronic transactions over the past ten fiscal years on S.R. 429 are shown in **Figure 6-8**. Over this time, E-PASS revenues have steadily increased on the facility. In FY 2006, E-PASS revenues totaled 65.9 percent of total revenues. By the end of FY 2015, E-PASS revenues reached 82.8 percent. The usage of E-PASS is expected to increase as customers shift from cash to E-PASS to take advantage of the lower ETC rate and the convenience of paying tolls electronically.

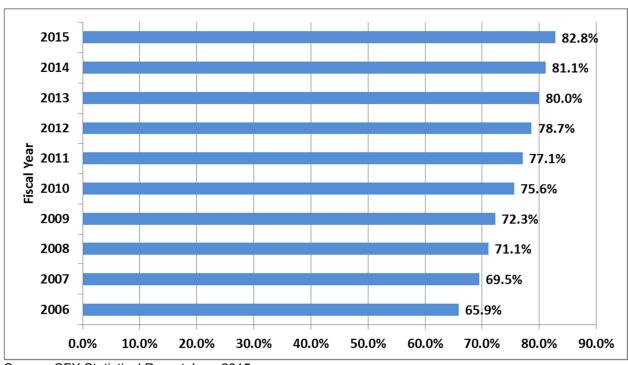


Figure 6-8
S.R. 429 Percent of Toll Revenue from Electronic Transactions
FY 2006 – FY 2015

Source: CFX Statistical Report June 2015

6.4 Forecasted Transactions and Toll Revenues

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

Several important growth areas in the Orlando metropolitan areas are along S.R. 429. Developments in Horizon West in SW Orange County slowed down during the recession, but housing construction activity has picked back up again. Roadway improvements in this area include the 4-lane widening projects to county roads including Avalon Road (C.R. 545), Roberson Road, Warrior Road, Tilden Road, and Windermere Road. Avalon Road is a competing facility, but the other facilities serve as feeder roads and positively impact T&R in the near term. The new

Facility From То **Model Horizon Year** Jurisdiction Improvement S.R. 451/U.S. 441 U.S. 441 Vick Road 2018 CFX Intersection Improvements Avalon Road/C.R. 545 Tilden Road S.R. 50/Colonial Drive 2023 Orange County Widen 2-4 lanes Avalon Road/C.R. 545 U.S. 192 Tilden Road 2023 Orange County Widen 2-4 lanes McCormick Road Ocoee-Apopka Road Ingram Road 2023 Orange County Widen 2-4 lanes Binion Road 2023 Widen 2-4 lanes West Road Orange County Ocoee-Apopka Road Ocoee-Apopka Road Fullers Cross Road West Road 2023 Orange County Widen 4-6 lanes Plymouth-Sorrento Road/ C.R. 437 Kelly Park Road U.S. 441/Orange Blossom Trail 2023 Orange County Widen 2-4 lanes 2023 Widen 2-4 lanes Roberson Road Windermere Road Maguire Road Orange County S.R. 429/Western Beltway Schofield Road 2023 New Interchange Winter Garden-Vineland Road 2023 Orange County Widen 2-4 lanes 2023 Widen 2-4 lanes Warrior Road Windermere Road West Windermere Road East Orange County Windemere Road Marshall Farms Road Warrior Road 2023 Orange County Widen 2-4 lanes Windermere Road/Tomyn Road Roberson Road Maguire Road 2023 Orange County Widen 2-4 lanes Ocoee-Apopka Road 2028 Widen 2-4 lanes Rinion Road Lust Road Orange County Ocoee-Apopka Road Binion Road Bradshaw Road 2028 Orange County Widen 2-4 lanes Rock Springs Road/Park Avenue - Apopka U.S. 441/Orange Blossom Trail Welch Road 2028 Widen 4-6 lanes Orange County Avalon Road 2028 Widen 2-4 lanes Seidel Road Lake Hancock Road Orange County 2033 Widen 4-6 lanes Clarcona-Ocoee Road West Road Adair Street Orange County Mt. Plymouth Road Kelly Park Road Lake County Line 2033 Orange County Widen 2-4 lanes Orange County Widen 4-6 lanes S.R. 438/Silver Star Road Fullers Cross Road 2033 Ocoee-Apopka Road Interstate 4 BtU South Managed Lanes

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

interchange at Schofield Road will also contribute positively to the T&R forecasts. Growth in SW Orange County is reflected in the T&R forecast for the Independence Main Plaza Group.

CFX System improvements including the Apopka Expressway and S.R. 414/S.R. 429 interchange and the Ocoee-Apopka Road Interchange reconstructions have improved access and the potential for growth in NW Orange County. The growth potential is also demonstrated by the planned improvements to the local street system. Many facilities including Ocoee-Apopka Road, Clarcona-Ocoee Road, Plymouth-Sorrento Road, Rock Springs Road and Binion Road, serve as feeder roads to S.R. 429 and positively impact T&R in the near term and long term forecasts. The construction of the Wekiva Parkway is also a positive sign for the growth potential along S.R. 429 including the opening of the Ponkan Main Plaza and Mount Plymouth Main Plaza, as reflected in the transaction and revenue forecasts.

Transaction and toll revenue forecasts for S.R. 429 are summarized in **Table 6-5** and **Table 6-6**. The forecasts assume toll rate indexing at 3 percent per year, implemented every fifth year. Due to the toll rate adjustments every fifth year, there are decreases in transactions and increases in revenues. Two plazas will be added as part of the Wekiva Parkway project.

Total transactions on S.R. 429 are projected to increase during the forecast period from the actual of 35.2 million in FY 2015 to 67.0 million in FY 2045. Total revenues are projected to increase over the forecast period from the actual of \$38.9 million in FY 2015 to \$125.0 million in FY 2045. Of this increase, a total of \$2.3 million in FY 2018 increasing to \$19.3 million in FY 2045 is expected to be collected on the two Wekiva Parkway toll plazas. Overall revenues are forecasted to increase an average of 6.8 percent per year through FY 2025, 2.8 percent per year from FY 2025 to FY 2035, and 2.3 percent per year from FY 2035 to FY 2045.

Table 6-5 S.R. 429 Plaza Groups – Transaction Projections (Millions) FY 2016 – FY 2045

	Forest L	ake Main	Independ	ence Main	Ponka	n Main	Mount Ply	mouth Main	то	TAL	Percent Annual
Fiscal Year	Actual A	Projected	Actual A	Projected	Actual A	Projected	Actual A	Projected	Actual A	Projected	Change
2001 ^B	3.5								3.5		
2002 ^C	5.8								5.8		65.7%
2003 D	8.0		1.5						9.5		63.8%
2004	9.5		4.3						13.8		45.3%
2005 ^E	10.8		5.6						16.4		18.8%
2006 ^F	12.8		7.4						20.2		23.2%
2007	14.1		10.3						24.4		20.8%
2008 ^G	14.2		12.4						26.6		9.0%
2009 ^H	12.9		12.2						25.1		-5.6%
2010	13.0		12.0						25.0		-0.4%
2011	13.4		12.5						25.9		3.6%
2012	13.6		12.8						26.4		1.9%
2013 ^H	14.2		13.0						27.2		3.0%
2014	16.1		14.6						30.7		12.9%
2015	18.3		16.9						35.2		14.7%
2016		20.4		18.2						38.6	9.7%
2017		22.1		19.0						41.1	6.5%
2018 ^{H,I}		21.1		19.6		2.3		0.8		43.7	6.4%
2019		21.8		20.3		2.7		1.8		46.6	6.6%
2020		22.6		21.1		3.1		1.9		48.7	4.5%
2021		23.3		21.9		3.5		2.1		50.8	4.3%
2022		24.1		22.6		4.0		2.3		52.9	4.1%
2023 ^H		23.7		21.3		4.0		2.5		51.5	-2.8%
2024 2025		24.4 25.1		22.1 22.8		4.4 4.8		2.7 2.9		53.5 55.6	4.0% 3.8%
2025		25.1		23.6		4.8 5.2		3.1		55.6 57.6	3.7%
2027		26.5		24.3		5.6		3.2		59.7	3.6%
2028 ^H		25.2		23.2		5.7		3.0		57.2	-4.2%
2029		25.9		23.6		6.0		3.2		58.7	2.6%
2030		26.5		24.0		6.3		3.4		60.2	2.6%
2031		27.1		24.4		6.6		3.5		61.7	2.5%
2032		27.7		24.9		6.9		3.7		63.2	2.5%
2033 ^H		26.5		24.6		6.4		3.5		61.0	-3.5%
2034		26.8		24.7		6.8		3.6		61.9	1.5%
2035		27.2		24.8		7.1		3.8		62.8	1.5%
2036		27.5		24.9		7.4		3.9		63.7	1.4%
2037		27.9		24.9		7.8		4.0		64.6	1.4%
2038 ^H		26.2		24.9		7.3		4.0		62.4	-3.5%
2039 2040		26.6 27.1		25.1 25.2		7.5 7.7		4.1 4.2		63.3 64.2	1.5% 1.5%
2040		27.1		25.2 25.3		7.7 8.0		4.2 4.4		65.2	1.5%
2041		27.9		25.5		8.2		4.4		66.1	1.4%
2043 ^H		26.9		25.5		8.1		4.6		65.1	-1.5%
2043		27.3		25.6		8.3		4.8		66.1	1.4%
2045		27.7		25.8		8.6		4.9		67.0	1.4%

Fiscal Year						
2001 - 2008	22.1%	52.6%			33.6%	
2008 - 2015	3.7%	4.5%	N/A	N/A	4.1%	
2015 - 2025	3.2%	3.0%	N/A	N/A	4.7%	
2025 - 2035	0.8%	0.8%	4.0%	2.7%	1.2%	
2035 - 2045	0.2%	0.4%	1.9%	2.7%	0.6%	

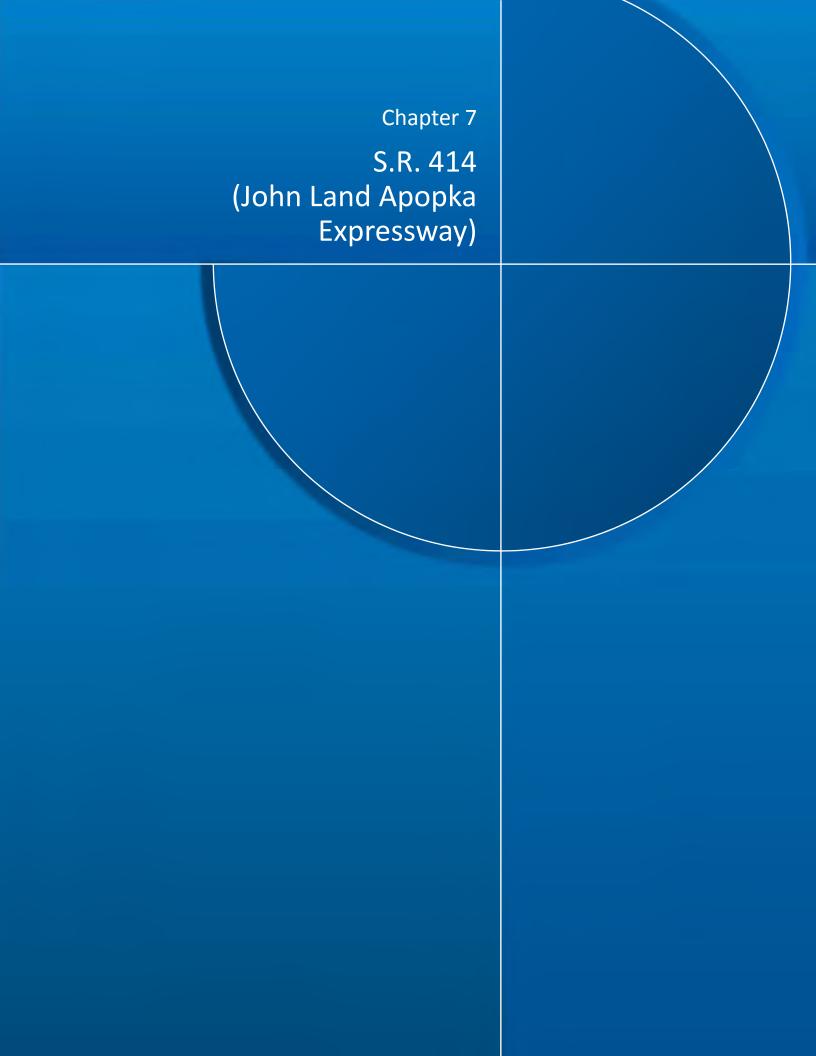
- A Actual transaction data provided by CFX from Monthly Statistical Reports.
- B Forest Lake Main plaza opened to traffic on July 8, 2000. Toll collection began one week after facility opened to traffic.
- C Interchange ramps to/from existing S.R. 429 at Florida's Turnpike opened in November 2001.
- D Interchange ramps to/from C.R. 535 opened in December 2002.
- E Effects from 2004 hurricane season (4 storms with toll suspensions).
- $\mbox{\bf F}$ Independence Main plaza opened in December 2005.
- G First effects of national recession
- H Systemwide toll rate increase.
- I Ponkan Main plaza scheduled to open on July 1, 2017 and Mount Plymouth Main scheduled to open on January 1, 2018.

Table 6-6 S.R. 429 Plaza Groups – Toll Revenue Projections (Millions) FY 2016 – FY 2045

	Forest L	ake Main	Independ	ence Main	Ponka	n Main	Mount Ply	mouth Main	то	TAL	Percent Annual
Fiscal Year	Actual A	Projected	Actual A	Projected	Actual A	Projected	Actual A	Projected	Actual A	Projected	Change
2001 ^B	\$3.3								\$3.3		
2002 ^c	5.1								5.1		54.5%
2003 D	6.8		\$0.4						7.2		41.2%
2004	8.1		1.1						9.2		27.8%
2005 ^E	9.1		1.4						10.5		14.1%
2006 ^F	10.7		2.8						13.5		28.6%
2007	11.8		5.6						17.4		28.9%
2008 ^G	11.9		7.1						19.0		9.2%
2009 ^H	11.4		7.6						19.0		0.0%
2010	13.7		9.8						23.5		23.7%
2011	14.1		10.3						24.4		3.8%
2012	14.2		10.7						24.9		2.0%
2013 ^H	17.1		12.3						29.4		18.1%
2014	19.5		14.0						33.5		13.9%
2015	22.1	¢24.0	16.8	ć47.0					38.9	642.7	16.1%
2016 2017		\$24.9 27.0		\$17.8 18.3						\$42.7 45.3	9.7% 6.2%
2017		28.7		20.7		\$1.8		\$0.5		51.7	14.0%
2019		30.1		21.9		\$2.2		1.2		55.4	7.2%
2020		31.6		23.0		2.6		1.4		58.6	5.8%
2021		33.1		24.2		3.0		\$1.5		61.8	5.5%
2022		34.5		25.3		3.4		1.7		65.0	5.2%
2023 ^H		37.9		27.1		3.9		2.2		71.0	9.2%
2024		38.8		27.8		4.3		2.3		73.2	3.2%
2025		39.7		28.6		4.7		2.5		75.4	3.1%
2026		40.6		29.3		5.1		2.7		77.7	3.0%
2027		41.6		30.0		5.5		2.8		79.9	2.9%
2028 ^H		43.4		31.6		6.3		2.9		84.2	5.4%
2029		44.5		31.8		6.7		3.1		86.0	2.1%
2030 2031		45.6 46.7		31.9 32.1		7.0 7.3		3.2 3.4		87.8 89.6	2.1% 2.0%
2031		47.9		32.3		7.5		3.5		91.3	2.0%
2033 ^H		49.2		34.3		7.8		3.8		95.2	4.2%
2034		50.3		34.7		8.2		3.9		97.2	2.2%
2035		51.4		35.2		8.6		4.1		99.3	2.2%
2036		52.5		35.6		9.0		4.2		101.4	2.1%
2037		53.6		36.1		9.4		4.4		103.5	2.1%
2038 ^H		54.4		39.4		9.9		4.7		108.4	4.7%
2039		55.6		39.7		10.2		4.8		110.3	1.8%
2040		56.8		39.9		10.5		5.0		112.3	1.8%
2041		58.0		40.1		10.9		5.2		114.2	1.7%
2042		59.2		40.4		11.2		5.3		116.2	1.7%
2043 ^H		59.8		43.0		12.3		5.9		121.1	4.3%
2044		61.0		43.3		12.7		6.1		123.0	1.6%
2045		62.2		43.5		13.0		6.3		125.0	1.6%

Fiscal Year						
2001 - 2008	20.1%	77.8%			28.4%	
2008 - 2015	9.2%	13.1%	N/A	N/A	10.8%	
2015 - 2025	6.0%	5.4%	N/A	N/A	6.8%	
2025 - 2035	2.6%	2.1%	6.3%	5.1%	2.8%	
2035 - 2045	1.9%	2.1%	4.2%	4.4%	2.3%	

- A Actual revenue data provided by CFX from Monthly Statistical Reports.
- B Forest Lake Main plaza opened to traffic on July 8, 2000. Toll collection began one week after facility opened to traffic.
- C Interchange ramps to/from existing S.R. 429 at Florida's Turnpike opened in November 2001.
- D Interchange ramps to/from C.R. 535 opened in December 2002.
- E Effects from 2004 hurricane season (4 storms with toll suspensions).
- F Independence Main plaza opened in December 2005.
- G First effects of national recession.
- H Systemwide toll rate increase.
- I Ponkan Main plaza scheduled to open on July 1, 2017 and Mount Plymouth Main scheduled to open on January 1, 2018.



S.R. 414 (JOHN LAND APOPKA EXPRESSWAY)

7.1 Facility Description

S.R. 414, also known as the John Land Apopka Expressway, is a 6-mile expressway that extends east from S.R. 429 to Maitland Boulevard at U.S. 441. This long-awaited expressway improved access between S.R. 429, I-4 and employment centers such as Maitland Center. While relieving congestion on U.S. 441 and many local roads in the greater Apopka area, it was the first new, major east-west corridor built in Central Florida in many years. S.R. 414 includes one mainline toll plaza, Coral Hills Main plaza. The plaza group has two interchange ramp toll plazas at the Keene Road and the Hiawassee Road interchanges. All three toll locations are included in the Coral Hills Main plaza group. Other existing interchanges include S.R. 429 and U.S. 441/Orange Blossom Trail. A map of S.R. 414 including the FY 2015 CFX toll rates for the mainline and ramp toll plazas is shown in **Figure 7-1**.



CFX began construction on the first phase 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 all 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. The new interchange, which was completed in October 2012, helps improve traffic flow between S.R. 429 and S.R. 414, accommodates future growth in west Orange

County and provides improved access to I-4 and the attractions. The new extension of S.R. 429/S.R. 414 to U.S. 441 near Plymouth Sorrento Road opened in January 2013. The new expressway features sections with up to six travel lanes (three in each direction) and a new connector road to allow 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 re-designated S.R. 451.



N. Orange Blossom Existing CFX System - Barrier Toll Location Ramp Toll Location E-PASS Toll Rate (2-axle) Cash Toll Rate (2-axle) TOLL 414 LEGEND Hiawassee \$0.28 \$0.50 \$0.00 \$0.55 \$0.75 Coral Hills Main W. Orange Blossom Tr. E. Keene Rd. \$1.25 \$1.09 TOLL 451 TOLE 429 Sorrento Rd. Plymouth-414 414 429

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

7.2 Historical Transactions and Toll Revenues

7.2.1 ANNUAL TRANSACTION AND TOLL REVENUE TRENDS

S.R. 414 annual historical transactions for the Coral Hills Main plaza group from FY 2009 to FY 2015 are presented in the top half of **Table 7-1**. Annual historical 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 7-2** and **Figure 7-3**. Total transactions on S.R. 414 in FY 2015 increased by 1.1 million transactions, or 11.6 percent, over FY 2014. Toll revenues increased by \$1.3 million, or 14.3 percent, in FY 2015. Traffic and revenue are still ramping-up. The facility has only been open for a few years with the first full year of operation in FY 2010. There was no toll rate increase at the Coral Hills Main plaza in FY 2009 since the road was not fully opened until after the toll increase went into effect, however tolls did increase during the FY 2013 Systemwide toll rate increase. This facility is expected to continue experiencing growth due to the recent opening of the northwest extension and S.R. 429/S.R. 414 systems interchange in FY 2013.

Table 7-1
S.R. 414 Plaza Groups – Historical Transactions and Toll Revenues
FY 2009 – FY 2015

Fiscal Year	Coral Hills Main		
	TRANSACTIONS (millions)	PERCENT CHANGE	
2009 ^A	0.6		
2010	5.3	783.3%	
2011	6.5	22.6%	
2012	7.3	12.3%	
2013 ^B	8.3	13.1%	
2014	9.5	14.5%	
2015	10.6	11.6%	
	TOLL REVENUE (millions)	PERCENT CHANGE	
2009 ^A	\$0.6		
2010	\$4.2	600.0%	
2011	\$5.1	21.4%	
2012	\$5.7	11.8%	
2013 ^B	\$7.7	35.4%	
2014	\$9.1	18.2%	
2015	\$10.4	14.3%	

- A Opened to electronic traffic on February 14, 2009 and all traffic on May 15, 2009.
- B Systemwide toll rate increase in July 2013. Implementation of cash and electronic toll rate differential. Extension of S.R. 414 to U.S. 441 opens in January 2013.

Figure 7-2 S.R. 414 Historical Transactions and Annual Growth FY 2009 – FY 2015

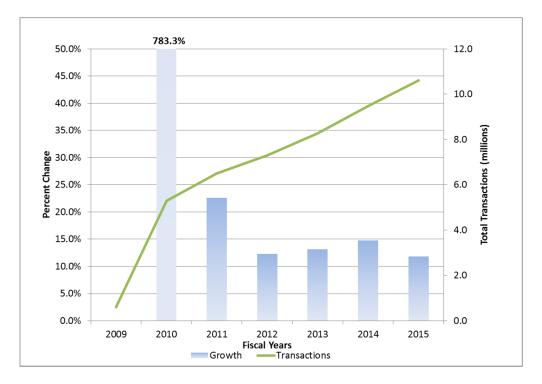
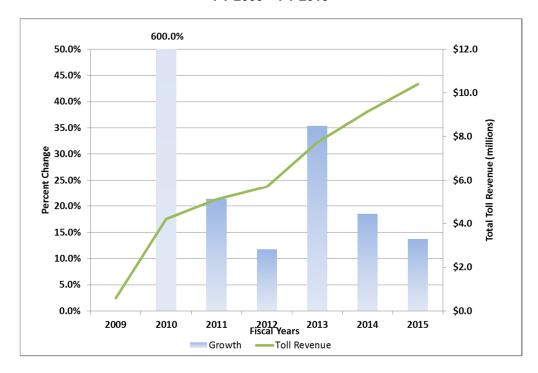


Figure 7-3 S.R. 414 Historical Toll Revenue and Annual Growth FY 2009 – FY 2015



7.2.2 MONTHLY TRANSACTION SEASONAL VARIATION

As presented in **Table 7-2**, average transactions per day in FY 2015 on S.R. 414 ranged from a high of 31,913 in April 2015 to a low of 26,983 in November of 2014. It is difficult to determine a seasonal traffic pattern on this facility since it is still experiencing significant growth as a result of the facility only being open for a few years. Also, more tourists in the area during the second half of the fiscal year could also be the reason for higher number of transactions per day during those months. This data is presented in a graphical format in **Figure 7-4**. Each month's average transactions per day appear as a percentage of the average for the fiscal year. April transactions were 9.5 percent above average and November transactions were 7.4 percent below average for the facility. These numbers reflect a combination of continued growth and seasonal variation.

Table 7-2 S.R. 414 – Monthly Seasonal Variation in Toll-Paying Traffic FY 2015

Month	Number of Days in Month	Total Toll Paying Transactions	Average Transactions/day	Seasonal Factor
July	31	838,082	27,035	0.928
August	31	837,832	27,027	0.928
September	30	821,247	27,375	0.940
October	31	895,821	28,897	0.992
November	30	809,475	26,983	0.926
December	31	875,027	28,227	0.969
January	31	881,187	28,425	0.976
February	28	862,581	30,806	1.057
March	31	978,128	31,553	1.083
April	30	957,392	31,913	1.095
May	31	941,996	30,387	1.043
June	30	934,841	31,161	1.070
Average		886,134	29,133	1.000
Total Year	365	10,633,609		

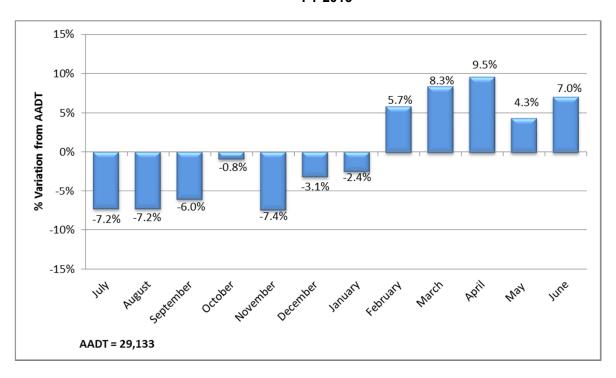


Figure 7-4
S.R. 414 Variation in Transactions Per Day, by Month
FY 2015

7.2.3 DAILY TRAFFIC DISTRIBUTION

The daily distribution of traffic includes information on the usage characteristics of travel on the facility. The daily distributions represent counts taken during a typical week at the mainline plaza in the month of July. The typical weekday distribution is shown in **Figure 7-5** and the weekend distribution is shown in **Figure 7-6**. The figures contain the sum of traffic volumes in both directions.

On weekdays, demand for travel at the Coral Hills plaza is bimodal, with both morning and evening peak hours. Traffic volumes in the evening peak hours at are higher than in the morning peak hours. The highest peak hour volumes during the week were 2,900 per hour beginning at 5:00 P.M. On weekends, there is no clear morning or evening peak periods, indicating that many customers use the facility for non-work trip purposes.

Figure 7-5 S.R. 414 Daily Traffic Variation (Weekday) FY 2015 (July)

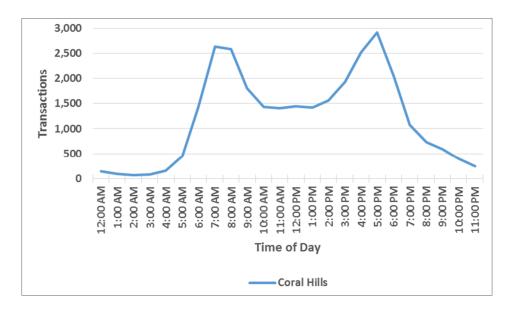
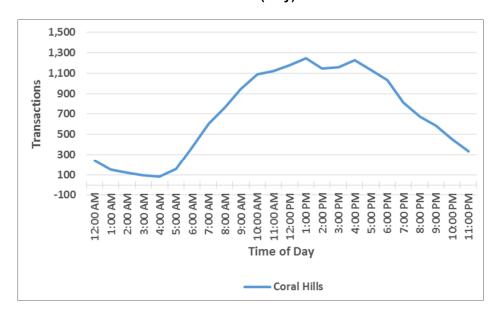


Figure 7-6 S.R. 414 Daily Traffic Variation (Weekend) FY 2015 (July)



7.2.4 TRANSACTIONS BY VEHICLE CLASS

The distribution of transactions at the Coral Hills Main plaza group by vehicle class (number of axles) for FY 2015 is presented in **Table 7-3**. Overall, 98.2 percent of all transactions were made by 2-axle passenger vehicles. The next most frequent vehicle class was the 3-axle classification, which typically includes delivery and service vehicles. These vehicles accounted for 1.3 percent of all transactions. Four-axle vehicles and trucks with five or more axles represented the smallest categories with only 0.2 and 0.3 percent of transactions.

Table 7-3
S.R. 414 Percent of Total Transactions by Vehicle Class
FY 2015

Vehicle Class	Coral Hills Main	S.R. 414 Total
2-Axle	98.2%	98.2%
3-Axle	1.3%	1.3%
4-Axle	0.2%	0.2%
5 or More Axles	0.3%	0.3%
Total	100.0%	100.0%

Source: Unaudited lane transaction data – January 2015



7.3 E-PASS Usage

The percent of revenues generated from electronic transactions over the past six fiscal years on S.R. 414 is shown in **Figure 7-7**. E-PASS revenues were the highest during FY 2009. This was an anomaly since the facility opened to electronic customers only until May 2009. By the end of FY 2015, E-PASS revenues reached 82.7 percent. The usage of E-PASS is expected to increase as customers shift from cash to E-PASS to take advantage of the toll rate differential between cash and electronic payment methods.

2015 82.7% 2014 81.2% 2013 79.0% Fiscal Year 2012 78.7% 2011 77.3% 2010 76.9% 2009 84.7% 10.0% 20.0% 30.0% 60.0% 0.0% 40.0% 50.0% 70.0% 80.0% 90.0%

Figure 7-7
S.R. 414 Percent of Toll Revenue from Electronic Transactions
FY 2009 – FY 2015

Source: CFX Statistical Report June 2015

7.4 Forecasted Transactions and Toll Revenues

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

In addition to the Wekiva Parkway, the intersection improvements at S.R. 451 and U.S. 441 are important to T&R estimates in the early years. This feeder road improvement, completed in 2013, extends Vick Road to U.S 441 and the interchange with S.R. 451, to provide a direct connection onto the expressway system.

Facility From То **Horizon Year** Jurisdiction Improvement US 441 S.R. 451/U.S. 441 Vick Road 2018 CFX Intersection Improvements 2023 Orange County Clarke Road Hiawassee Road Widen 4-6 lanes Clarcona - Ocoee Road Clarcona-Ocoee Road 2023 Widen 4-6 lanes Clarcona Road Keene Street Orange County McCormick Road Ocoee-Apopka Road 2023 Orange County Widen 2-4 lanes Ingram Road Ocoee-Apopka Road 2023 **Orange County** Widen 2-4 lanes 2023 Widen 4-6 lanes Ocoee-Apopka Road Fullers Cross Road West Road Orange County Plymouth-Sorrento Road/C.R. 437 Kelly Park Road U.S. 441/Orange Blossom Trail 2023 Orange County Widen 2-4 lanes Widen 2-4 lanes Roberson Road Windermere Road Maguire Road 2023 Orange County Binion Road Ocoee-Apopka Road Lust Road 2028 Orange County Widen 2-4 lanes Ocoee-Apopka Road Binion Road Bradshaw Road 2028 Orange County Widen 2-4 lanes Rock Springs Road/Park Avenue - Apopka U.S. 441/Orange Blossom Trail Welch Road 2028 Orange County Widen 4-6 lanes Hiawassee Road Clarcona-Ocoee Road Apopka Boulevard 2028 Orange County Widen 4-6 lanes Pine Hills Road 2028 Widen 4-6 lanes Clarcona-Ocoee Road Beggs Road Orange County Clarcona-Ocoee Road West Road Adair Street 2033 Orange County Widen 4-6 lanes Ocoee-Apopka Road S.R. 438/Silver Star Road Fullers Cross Road 2033 Orange County Widen 4-6 lanes Welch Road Semoran Boulevard Orange County

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

Recent CFX System improvements including the Apopka Expressway extension and S.R. 414/S.R. 429 interchange re-construction have improved the potential for growth in NW Orange County and S.R. 414. The growth potential is also demonstrated by the planned improvements to the local street system. Many facilities including Hiawassee Road, Pine Hills Road, Clarcona Road, Ocoee-Apopka Road, Clarcona-Ocoee Road, Plymouth-Sorrento Road, Rock Springs Road and Binion Road, serve as feeder roads to S.R. 414 and positively impact T&R in the near term and long term forecasts. The future construction of the Wekiva Parkway is also a positive sign for the growth potential along S.R. 414.

Historical and projected transactions and toll revenues for S.R. 414 are summarized in **Table 7-5** and **Table 7-6**. The forecasts assume toll rate indexing at 3 percent per year, implemented every fifth year. Due to the toll rate adjustments every fifth year, there are noticeable decreases in transactions and increases in revenues.

Total transactions on S.R. 414 are projected to increase during the forecast period from the actual of 10.6 million in FY 2015 to 14.7 million in FY 2045. Total revenues on S.R. 414 are projected to increase during the forecast period from the actual \$10.4 million in FY 2014 to \$24.4 million in FY 2045. S.R. 414 is expected to be the smallest contributor to total revenues of the five existing

expressways. Transactions and revenues are forecasted to increase an average of 2.8 and 4.3 percent per year through FY 2025, 0.3 and 2.7 percent per year from FY 2025 to FY 2035, and 0.2 and 1.7 percent per year from FY 2035 to FY 2045, respectively.

Table 7-5 S.R. 414 Plaza Groups – Transaction Projections (Millions) FY 2016 – FY 2045

	Coral Hills Main		Percent
Fiscal Veer	Actual ^A Projected		Annual
Fiscal Year		Projected	Change
2009 ^B	0.6		
2010	5.3		783.3%
2011	6.5		22.6%
2012	7.3		12.3%
2013 ^c	8.3		13.7%
2014	9.5		14.5%
2015	10.6		11.6%
2016		11.6	9.6%
2017		12.3	6.0%
2018 ^{C, D}		12.4	1.0%
2019		12.8	2.9%
2020		13.2	2.8%
2021		13.5	2.7%
2022		13.9	2.6%
2023 ^c		13.4	-3.7%
2024		13.7	2.4%
2025		14.0	2.4%
2026		14.3	2.3%
2027		14.7	2.3%
2028 ^c		13.9	-4.9%
2029		14.1	1.3%
2030		14.3	1.2%
2031		14.5	1.2%
2032		14.6	1.2%
2033 ^c		14.1	-3.6%
2034		14.3	1.4%
2035		14.5	1.4%
2036		14.7	1.4%
2037		14.9	1.3%
2038 ^c		14.1	-5.6%
2039		14.3	1.5%
2040		14.5	1.4%
2041		14.7	1.4%
2042		14.9	1.4%
2043 ^c		14.3	-3.7%
2044		14.5	1.4%
2045		14.7	1.4%
2073		14.7	1.4/0

Fiscal Year		
2009 - 2015	61.4%	
2015 - 2025	2.8%	
2025 - 2035	0.3%	
2035 - 2045	0.2%	

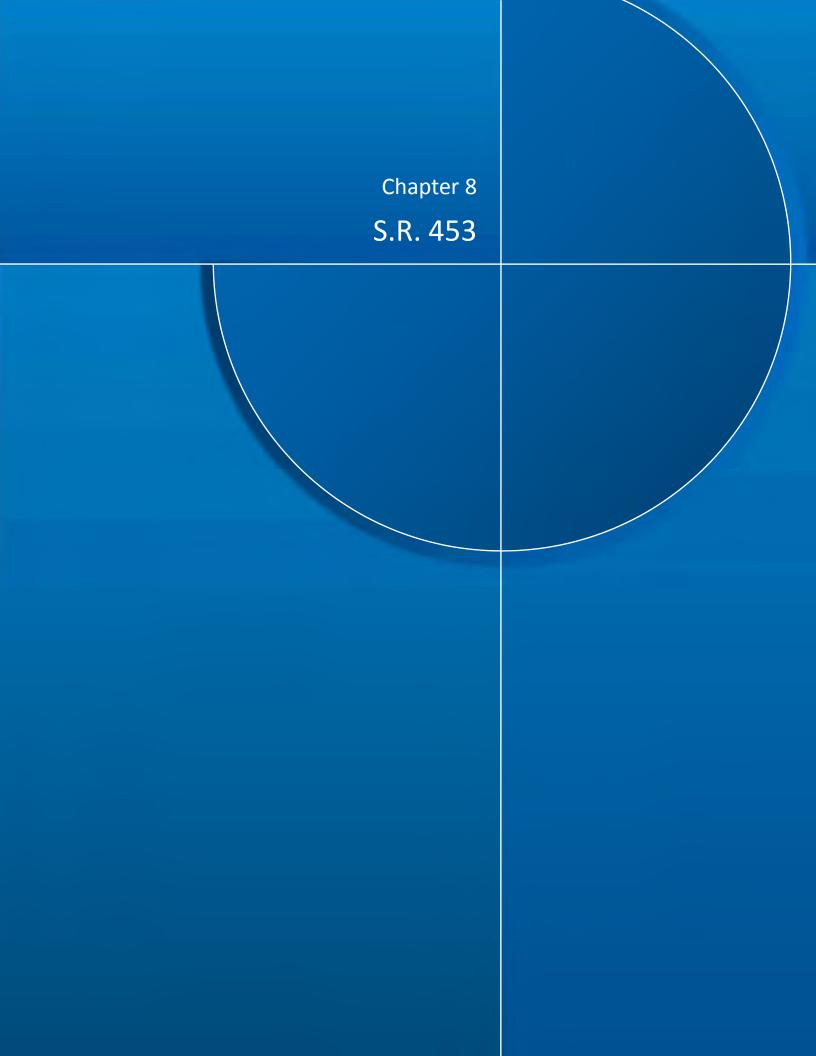
- A Actual transaction data provided by CFX from Monthly Statistical Reports.
- B Opened to electronic traffic on February 14, 2009 and to all traffic on May 15, 2009.
- C Systemwide toll rate increase.

Table 7-6 S.R. 414 Plaza Groups – Toll Revenue Projections (Millions) FY 2016 – FY 2045

	Coral Hills Main		Percent Annual
Fiscal Year	Actual A	Projected	Change
2009 ^B	\$0.6	,	
2010	4.2		600.0%
2011	5.1		21.4%
2012	5.7		11.8%
2013 ^c	7.7		35.1%
2014	9.1		18.2%
2015	10.4		14.3%
2016		\$11.2	7.5%
2017		11.5	2.8%
2018 C,D		11.9	3.5%
2019		12.4	4.0%
2020		12.8	3.9%
2021		13.3	3.7%
2022		13.8	3.6%
2023 ^c		14.7	6.8%
2024		15.3	3.6%
2025		15.8	3.5%
2026		16.3	3.4%
2027		16.9	3.3%
2028 ^c		18.0	6.5%
2029		18.3	1.8%
2030		18.6	1.7%
2031		18.9	1.7%
2032		19.2	1.7%
2033 ^c		20.1	4.4%
2034		20.3	1.3%
2035		20.6	1.2%
2036		20.8	1.2%
2037		21.1	1.2%
2038 ^c		22.0	4.2%
2039		22.2	1.1%
2040		22.5	1.1%
2041		22.7	1.1%
2042		23.0	1.1%
2043 ^c		23.9	4.2%
2044		24.2	1.0%
2045		24.4	1.0%

Fiscal Year		
2009 - 2015	60.9%	
2015 - 2025	4.3%	
2025 - 2035	2.7%	
2035 - 2045	1.7%	

- A Actual revenue data provided by CFX from Monthly Statistical Reports.
- B Opened to electronic traffic on February 14, 2009 and to all traffic on May 15, 2009.
- C Systemwide toll rate increase.
- D Wekiva Parkway opening in FY 2018.



S.R. 453

8.1 Facility Description

S.R. 453 is a portion of the project locally known as the Wekiva Parkway, which will be a new 27-mile expressway that extends S.R. 429 into northwest Orange, southeast Lake, and east Seminole counties. From a CFX vision in the *Year 2000 Long Range Expressway Plan*, completed in 1983, the Wekiva Parkway, is under construction. This long-awaited expressway will complete the Western Beltway around the Orlando metropolitan region. S.R. 453 will provide 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 is scheduled to open on January 1, 2018 (FY 2018). A map of the future S.R. 453 including the proposed opening toll rates for the plaza is shown in **Figure 8-1**.

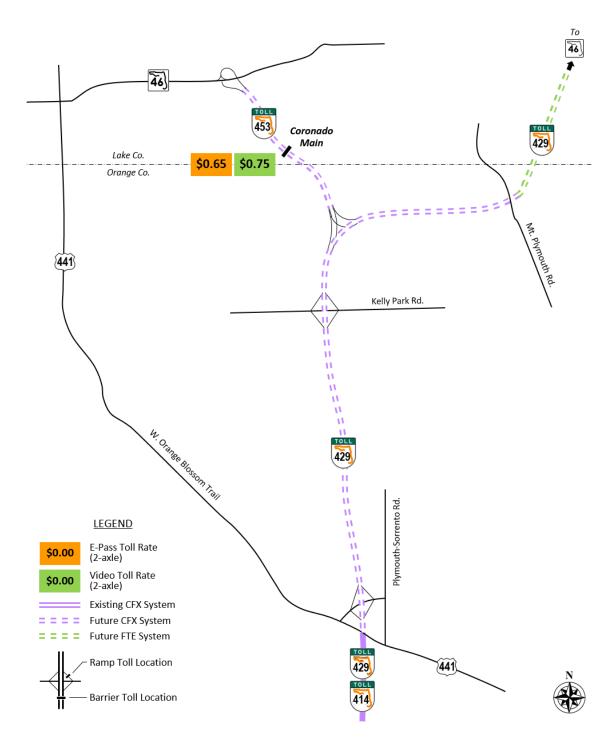


S.R. 453 will be a spur off of the planned extension of S.R. 429 which currently terminates just north of U.S. 441 near Apopka. The new 27-mile facility would ultimately connect to S.R. 417 at I-4 near Sanford, thus completing the beltway around northwest metropolitan Orlando. S.R. 453 will run about 2.2 miles from the planned Wekiva Parkway, across the Lake County Line to S.R. 46.

Toll collection on the Wekiva Parkway will utilize the all-electronic toll (AET) collection system, i.e., customers will not be able to pay cash on the roadway as there will be no toll plazas. On the CFX portion of the Wekiva Parkway, customers will either pay with E-PASS/SunPass or by video billing. Video billing customers will pay a higher toll amount (equivalent of the cash toll elsewhere) plus an increment on each transaction designed to cover the entire cost of video billing. Future tolls include toll rate increases based on the toll rate indexing policy of each agency (CFX and FDOT). A detailed description of the entire Wekiva Parkway project is included in Chapter 1 of this report.



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



SR 44

8.2 Forecasted Transactions and Toll Revenues

Orange Avenue

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 8-1**, assumed to be completed in each model horizon year.

Facility From То **Horizon Year** Jurisidction Improvement S.R. 451/U.S. 441 U.S. 441 Vick Road 2018 **CFX** Intersection Upgrade U.S. 441 Round Lake Road SR 46 2018 Lake County Widen 2 to 4 Lanes Plymouth-Sorrento Road/C.R. 437 Kelly Park Road U.S. 441 2023 **Orange County** Widen 2 to 4 Lanes SR 500/U.S. 441 S.R. 46 Perkins Street 2023 **Lake County** Widen 4 to 6 Lanes Ocoee-Apopka Road Lust Road Binion Road 2028 **Orange County** Widen 2 to 4 Lanes Welch Road Rock Springs Road/Park Avenue U.S. 441 2028 **Orange County** Widen 4 to 6 Lanes Kelly Park Road Lake County Line 2033 **Orange County** Widen 2 to 4 Lanes Mt. Plymouth Road Wolf Branch Road Lake County Round Lake Road SR 44 2038 New 4 Lane Road Round Lake Road SR 44 SR 46 2038 Lake County Widen 2 to 4 Lanes

Table 8-1 S.R. 453 - Key Transportation Improvements

A majority of the planned improvements provide a needed upgrade to the transportation system to NW Orange County. These projects improve connectivity and capacity needs that will link this part of Orange County to S.R. 429. Many facilities including Kelly Park Road, Rock Springs Road, Sadler Road and Round Lake Road, serve as feeder roads to S.R. 429 and positively impact T&R in the near term and long term forecasts. Virtually any improvement which provides additional connectivity to S.R. 429 from the south and east will inherently benefit S.R. 453 as well. The construction of the Wekiva Parkway may also delay the need to improve some of the parallel facilities such as Plymouth—Sorrento Road, Round Lake Road and Rock Springs Road.

US 441

2038

Lake County

Widen 2 to 4 Lanes

Projected transactions and toll revenues for S.R. 453 are summarized in **Table 8-2** and **Table 8-3**. The Coronado Main plaza is scheduled to open on January 1, 2018 (FY 2018). The forecasts assume toll rate indexing at 3 percent per year, implemented every fifth year starting in FY 2023. It also assumes the current construction schedule included in Chapter 1 of this report.

The forecasts expect that total transactions start at 0.8 million in FY 2018, and increase to 2.1 million in FY 2020, given the partial opening and system "ramp-up." Total revenues on S.R. 453 are projected to start at \$0.5 million in FY 2018 and increase to \$1.4 million in FY 2020. During the FY 2018 through FY 2045 forecast period, S.R. 453 traffic is expected to increase an average of 22.7 percent per year from FY 2018 to FY 2025 (due to ramp-up), 3.4 percent per year from FY 2025 to FY 2035 and 2.3 percent per year from FY 2035 to FY 2045. Revenue is expected to increase an average of 26.5 percent per year from FY 2018 to FY 2025 (again due to ramp-up), 5.9 percent per year from FY 2025 to FY 2035 and 4.7 percent per year from FY 2035 to FY 2045.

Table 8-2 S.R. 453 Plaza Group – Transaction Projections (Millions) FY 2018 – FY 2045

	Corona	do Main	Percent Annual
Fiscal Year	Actual	Projected	Change
2018 ^A		0.8	
2019		1.9	131.6%
2020		2.1	13.7%
2021		2.4	12.0%
2022		2.6	10.7%
2023 ^B		2.9	9.0%
2024		3.1	8.9%
2025		3.4	8.2%
2026		3.6	7.5%
2027		3.9	7.0%
2028 ^B		3.7	-5.6%
2029		3.8	4.7%
2030		4.0	4.5%
2031		4.2	4.3%
2032		4.4	4.1%
2033 ^B		4.3	-1.6%
2034		4.5	5.3%
2035		4.7	5.0%
2036		5.0	4.8%
2037		5.2	4.5%
2038 ^B		5.0	-2.7%
2039		5.3	4.5%
2040		5.5	4.3%
2041		5.7	4.1%
2042		6.0	4.0%
2043 ^B		5.5	-7.8%
2044		5.7	4.1%
2045		5.9	4.0%

Fiscal Year		
2018 -2025	22.7%	
2025 - 2035	3.4%	
2035 - 2045	2.3%	

Notes:

- A Coronado Main scheduled to open on January 1, 2018 (FY 2018).
- B Systemwide toll rate increase.

Table 8-3 S.R. 453 Plaza Group – Toll Revenue Projections (Millions) FY 2018 – FY 2045

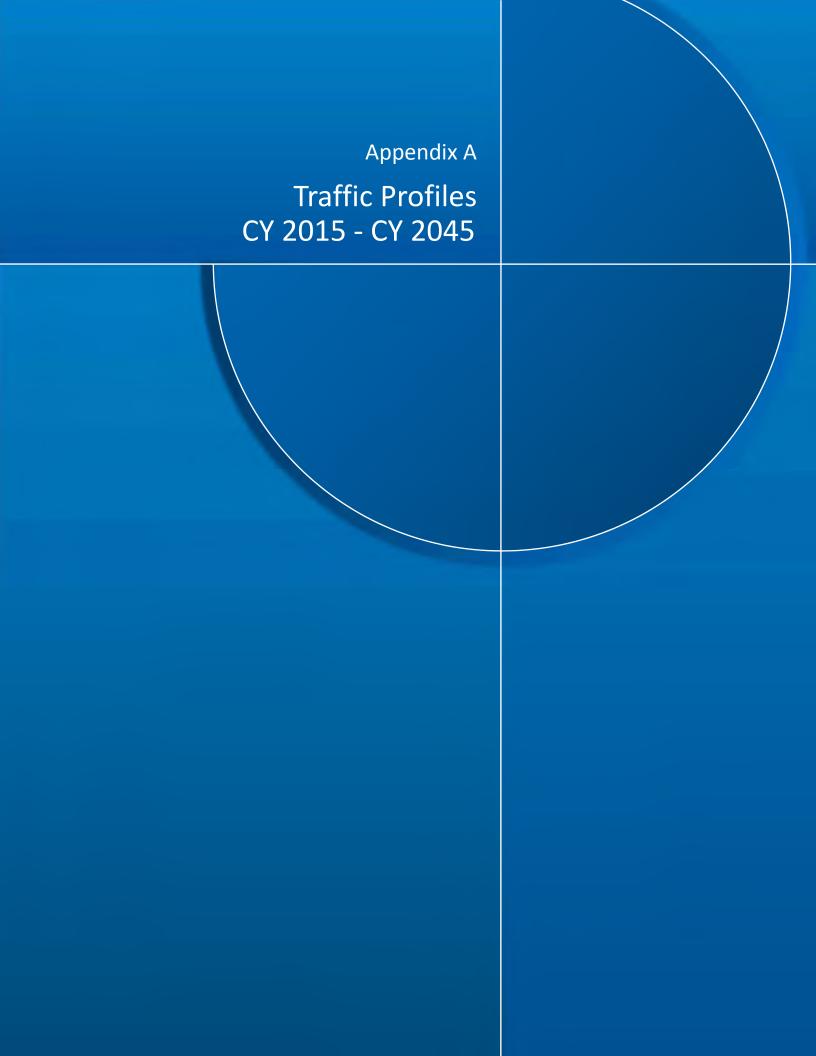
	Corona	do Main	Percent Annual
Fiscal Year	Actual	Projected	Change
2018 ^A		\$0.5	
2019		1.2	139.1%
2020		1.4	16.4%
2021		1.6	14.1%
2022		1.8	12.3%
2023 ^B		2.2	23.5%
2024		2.4	8.9%
2025		2.6	8.2%
2026		2.8	7.5%
2027		3.0	7.0%
2028 ^B		3.3	9.5%
2029		3.5	4.7%
2030		3.6	4.5%
2031		3.8	4.3%
2032		3.9	4.1%
2033 ^B		4.2	7.4%
2034		4.5	5.3%
2035		4.7	5.0%
2036		4.9	4.8%
2037		5.1	4.5%
2038 ^B		5.6	9.6%
2039		5.9	4.5%
2040		6.1	4.3%
2041		6.4	4.1%
2042		6.6	4.0%
2043 ^B		6.9	3.8%
2044		7.1	3.7%
2045		7.4	3.5%

Fiscal Year		
2018 -2025	26.5%	
2025 - 2035	5.9%	
2035 - 2045	4.7%	

Notes:

- A Coronado Main scheduled to open on January 1, 2018 (FY 2018).
- B Systemwide toll rate increase.

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S.R. 528 - Two-Way Average Daily Traffic (From T&R Estimates)

Cross Street

,800 -,000 ,800 ,700 ,800 ,300 ,500 ,100 ,200 ,000	72,900 - 26,500 99,400 14,600 4,400 89,200 37,200 27,100 79,100 6,000	69,900 - 26,500 96,400 13,800 4,400 87,000 37,200 28,600 78,400	70,700 - 26,500 97,200 13,700 4,400 87,900 37,200 29,100 79,800
,000 ,800 ,700 ,800 ,900 ,300 ,500 ,100 ,200 ,000	26,500 99,400 14,600 4,400 89,200 37,200 27,100 79,100 6,000	26,500 96,400 13,800 4,400 87,000 37,200 28,600 78,400	26,500 97,200 13,700 4,400 87,900 37,200 29,100
,,800 ,,700 ,,800 ,,900 ,,500 ,,100 ,,200 ,,000	99,400 14,600 4,400 89,200 37,200 27,100 79,100 6,000	96,400 13,800 4,400 87,000 37,200 28,600 78,400	97,200 13,700 4,400 87,900 37,200 29,100
,,800 ,,700 ,,800 ,,900 ,,500 ,,100 ,,200 ,,000	99,400 14,600 4,400 89,200 37,200 27,100 79,100 6,000	96,400 13,800 4,400 87,000 37,200 28,600 78,400	97,200 13,700 4,400 87,900 37,200 29,100
,700 ,800 , 900 ,300 ,500 , 100 ,200 ,000	14,600 4,400 89,200 37,200 27,100 79,100 6,000	13,800 4,400 87,000 37,200 28,600 78,400	13,700 4,400 87,900 37,200 29,100
,300 ,500 , 100 ,200 ,000	89,200 37,200 27,100 79,100 6,000	87,000 37,200 28,600 78,400	87,900 37,200 29,100
,300 ,500 , 100 ,200 ,000	37,200 27,100 79,100 6,000	37,200 28,600 78,400	37,200 29,100
,200 ,000	6,000	•	79.800
,000		0.000	,
	6,900	6,000 8,400	6,000 8,900
,900	80,000	80,800	82,700
,200 ,400	24,300 8,400	24,300 10,400	24,300 10,900
,100	64,100	66,900	69,300
,700 ,000	28,900 23,700	30,500 25,000	32,500 26,600
,400	58,900	61,400	63,400
,700 ,500	8,700 1,700	9,200 1,800	9,800 2,000
,200	51,900	54,000	55,600
,200	5,000	5,200 -	5,300
,000	46,900	48,800	50,300
,600	8,900	10,500	10,800
,400	38,000	38,300	39,500
1	5,200 4,200 - 1,000 7,600 3,400	1,000 46,900 7,600 8,900	4,200 5,000 5,200 - - - 1,000 46,900 48,800 7,600 8,900 10,500 - -

Notes:

Airport Mainline Plaza to be removed in 2016 and merged with Turpike Mainline Plaza west of Boggy Creek Rd. New ramp plazas to be installed in 2016.

S.R. 408 - Two-Way Average Daily Traffic (From T&R Estimates)

Cross Street					
		FY 2015	FY 2025	FY 2035	FY 2045
Turnpike Spur					
		44,800	51,300	52,200	53,700
		44,800	51,300	52,200	53,700
S.R. 50 West			-	-	-
		7,900	9,000	9,100	9,300
		52,700	60,300	61,300	63,000
Good Homes		6,400	7,300	7,400	7,600
Road		8,200	9,400	9,500	9,800
Hiawassee Main		54,500	62,400	63,400	65,200
Hiawassee Road		4,900	6,100	6,200	6,400
	\sim	6,700	7,700	7,800	8,000
		56,300	64,000	65,000	66,800
Kirkman Road	$\langle \cdot \rangle$	5,900 9,400	7,100 10,600	7,300 11,400	7,700 12,000
			ŕ		
5: 5		59,800	67,500	69,100	71,100
Pine Hills Road		4,200	- 4,700	- 4,800	5,000
Dina Hilla Main					
Pine Hills Main		64,000	72,200	73,900	76,100
Old Winter Garden Rd	\sim	3,900	- 4,400	- 4,500	- 4,700
Curucii ita		67,900	76,600	78,400	80,800
John Vouna		•	•	,	
John Young Parkway	$\langle \rangle$	6,000 9,000	6,800 10,100	7,500 10,400	8,400 10,900
· unway	\sim	70,900	79,900	81,300	83,300
Tampa Avanua			•		
Tampa Avenue		2,100	2,600	3,200	3,900 -
		68,800	77,300	78,100	79,400
Orange Blossom		4,700	5,300	6,000	6,800
Trail	X X	7,500	8,400	8,500	8,900
		71,600	80,400	80,600	81,500
Interstate-4		16,500	18,600	18,800	19,100
		59,700	67,200	67,800	69,000
		114,800	129,000	129,600	131,400
Orange Avenue/		10,500	11,700	11,800	12,000
Rosalind Avenue		16,900	18,800	19,000	19,300

S.R. 408 - Two-Way Average Daily Traffic (From T&R Estimates)

	121,200	136,100	136,800	138,700
Mills Avenue	1,200	1,300	1,300	1,300
	7,600	8,400	8,500	8,600
	127,600	143,200	144,000	146,000
Bumby Avenue/	11,300	12,600	12,700	12,900
Crystal Lake Drive	10,200	11,300	11,400	11,600
	126,500	141,900	142,700	144,700
Conway Road	10,800	12,000	12,100	12,300
	445 700	-	-	-
Vanda Bria	115,700	129,900	130,600	132,400
Yucatan Drive	9,700	10,800	10,900	11,100
Conway Main	106,000	119,100	119,700	121,300
Semoran Boulevard	12,100	13,400	13,500	13,700
	9,400	10,400	10,500	10,700
	103,300	116,100	116,700	118,300
Goldenrod Road	14,300	15,900	16,000	16,300
	9,300	10,300	10,400	10,600
	98,300	110,500	111,100	112,600
Chickasaw Trail	8,500 -	9,400 -	9,500 -	9,700 -
	89,800	101,100	101,600	102,900
S.R. 417	45,500	50,600	51,000	51,900
	16,500	18,300	18,500	18,800
	60,800	68,800	69,100	69,800
Dean Road	8,300	9,500	9,500	9,500
Doon Main	2,600	3,000	3,000	3,000
Dean Main	55,100	62,300 9,300	62,600	63,300
Rouse Road	8,100 900	9,300 1,000	9,300 1,000	9,300 1,000
Ť	47,900	54,000	54,300	55,000
Alafaya Trail	18,200	20,900	21,000	21,100
		-		
	29,700	33,100	33,300	33,900
S.R. 50	20,000	23,000	23,100	23,200
V	9,700	10,100	10,200	10,700
To Challenger Parkway				

S.R. 417 - Two-Way Average Daily Traffic (From T&R Estimates)

Cross	Street
-------	--------

Cross Street		FY 2015	FY 2025	FY 2035	FY 2045
	To S.R. 417 (FL Turnpike)				
		54,800	61,100	70,600	78,300
University Boulevard		6,200	7,300	7,400	7,500
University Main		18,300	21,600	21,700	21,800
University Main S.R. 50	$\overline{\mathbf{x}}$	66,900 _ 5,000	75,400	84,900 5,700	92,600
3.K. 50		5,000 6,600	5,600 7,800	8,900	5,800 10,000
	Ť	68,500	77,600	88,100	96,800
S.R. 408		_ 34,300	35,600	35,900	36,100
		27,700	33,300	33,600	34,600
		61,900	75,300	85,800	95,300
Curry Ford Road		7,100	9,000	13,100	16,200
		10,500	13,300	18,400	22,700
Curry Ford Main		65,300	79,600	91,100	101,800
Lee Vista Boulevard		4,700 2,900	6,000 3,700	9,400 6,600	11,600 8,200
		63,500	77,300	88,300	98,400
S.R. 528		_ 33,900	38,200	41,300	43,900
J.N. 320		12,800	14,400	14,200	15,200
		42,400	53,500	61,200	69,700
Dowden Road			3,800	5,800	8,700
		1,100	2,000	2,900	4,200
		41,400	51,700	58,300	65,200
Moss Park Road		5,400	8,500	12,500	18,200
		1,600	2,700	3,900	5,600
	^	37,600	45,900	49,700	52,600
Narcoossee Road		8,200 6,600	12,500 9,800	18,200 13,900	26,200 19,700
	Y	36,000	43,200	45,400	46,100
Lake Nona Road	\$ 2	3,200	5,400	8,100	11,900
		4,400	6,700	9,500	13,500
		37,200	44,500	46,800	47,700
Boggy Creek Road	8 12	6,000	9,100	13,300	19,300
		14,000	20,300	28,800	40,800
Boggy Creek Main		45,200	55,700	62,300	69,200

S.R. 417 - Two-Way Average Daily Traffic (From T&R Estimates)

(FIOIII TAR ESIIIIales)	_				
Landstar Boulevard		6,100 10,600	8,900 12,900	11,200 13,300	12,600 13,700
		49,700	59,700	64,400	70,300
Florida's Turnpike		4,600 -	8,100 1,000	9,400 1,100	9,700 1,200
		45,100	52,600	56,100	61,800
Orange Blossom Trail		6,200 8,900	7,500 11,800	8,800 12,200	11,100 12,600
		47,800	56,900	59,500	63,300
John Young Parkway		8,400 9,100	10,200 12,000	11,500 12,400	13,900 12,800
John Young Main		48,500	58,700	60,400	62,200
International Drive		22,800	27,600	28,400	29,300
		25,700	31,100	32,000	32,900
	To S.R. 417 (FL Turnpike)				

^{*}S.R. 417 full interchange with Florida's Turnpike is scheduled to open in 2017.

S.R. 429 - Two-Way Average Daily Traffic (From T&R Estimates)

Cross Street

To EDOT Section	of S.D. 420			
To FDOT Section (Wekiva Pa				
*Mount Plymouth Main	3	7,800	10,300	13,500
*S.R. 453 Coronado Main (To S.R. 46/Mt. Dora)		3,400 9,300 5,900	4,800 13,100 8,300	6,100 16,600 10,500
		10,300	13,800	17,900
Kelly Park Road		2,700 5,500	3,300 8,900	4,600 10,200
*Ponkan Main]	13,100	19,400	23,500
U.S. 441		1,100 28,800	2,300 27,800	6,600 26,800
1	26,400	40,800	44,900	43,700
S.R. 414	10,800 19,300	13,400 20,500	14,100 21,100	13,500 22,300
	34,900	47,900	51,900	52,500
C.R. 437A	1,200 2,700	1,700 3,800	1,900 4,200	2,000 4,300
Forest Lake Main	36,400	50,000	54,200	54,800
West Road	1,400 6,100	2,000 8,400	2,200 9,200	2,300 9,300
	41,100	56,400	61,200	61,800
S.R. 438/ Plant Street	3,200 6,700	4,200 9,200	4,600 10,000	4,700 10,200
	44,600	61,400	66,600	67,300
S.R. 50	6,200 3,600	9,300 4,600	9,900 5,000	10,100 5,300
	42,000	56,700	61,700	62,500
Florida's Turnpike	25,400 24,000	34,300 32,400	37,300 35,200	38,000 37,600
. 1	40,600	54,800	59,600	62,100
C.R. 535	22,000 4,200	29,700 5,700	32,300 6,200	33,700 6,500
Independence Main	22,800	30,800	33,500	34,900
New Independence	3,500	4,800	5,300	5,600

FY 2015

FY 2025

FY 2035

FY 2045

S.R. 429 - Two-Way Average Daily Traffic

(From T&R Estimates) **Parkway** 1,600 2,200 2,400 2,500 20,900 28,200 30,600 31,800 **Schofield Road** 400 4,800 5,300 5,600 400 2,200 2,400 2,500 28,700 20,900 25,600 27,700 To S.R. 429 (FL Turnpike)

^{*} Ponkan Main opening date of July 1, 2017 (FY 2018). Mount Plymouth Main and Coronado Main opening date of January 1, 2018 (FY 2018).

S.R. 414 - Two-Way Average Daily Traffic (From T&R Estimates)

Cross Street

		FY 2015	FY 2025	FY 2035	FY 2045
S.R. 429					
		30,100	33,900	35,200	35,800
		30,100	33,900	35,200	35,800
US 441 via SR 451		10,000 1,800	11,300 2,000	11,700 2,100	11,900 2,100
Coral Hills Main		21,900	24,600	25,600	26,000
Keene Road / C.R. 435		3,600	4,100	4,200	4,300
	ľ	25,500	28,700	29,800	30,300
Hiawassee Road		4,000 3,900	4,500 4,400	4,700 4,600	4,800 4,700
		25,400	28,600	29,700	30,200
U.S. 441		3,500 10,200	3,900 11,500	4,000 11,900	4,100 12,100
		32,100	36,200	37,600	38,200
	▼ To Maitland Blvd.				

