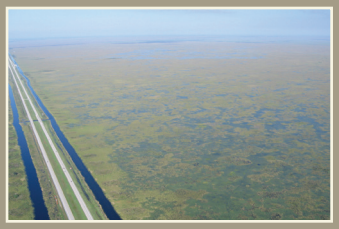
Department-owned Facilities



Alligator Alley

Page 19

- $30.5 million total toll revenue
- 9.2 million total transactions
- SunPass® participation increased to 60.4 percent during the year

Pinellas Bayway System

Page 29

- $4.7 million total toll revenue
- 9.9 million total transactions
- SunPass® participation increased to 64.0 percent during the year

Sunshine Skyway Bridge

Page 41

- $24.8 million total toll revenue
- 21.0 million total transactions
- SunPass® participation increased to 58.0 percent during the year

Wekiva Parkway

Page 51

- $166 thousand total toll revenue
- 223 thousand total transactions
- SunPass® participation was 84.4 percent during the year

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Alligator Alley

2.1 BACKGROUND

Alligator Alley (Everglades Parkway in the original bond documents) was originally constructed as a two-lane, controlled access, 78-mile toll facility connecting the southwestern coastal areas of Collier and Lee Counties (Naples and Fort Myers) to the southeastern coastal areas of Broward and Miami-Dade Counties (Fort Lauderdale and Miami).

During the late 1970's and early 1980's, the Department completed construction of the I-75 corridor on the west coast between Tampa and Naples. Additionally, from 1986 to 1992, the Department widened Alligator Alley to four lanes and made it a limited-access, tolled, interstate facility (I-75) that is part of the Strategic Intermodal System (SIS). The facility was constructed with a mainline plaza located at each end of the facility, and two intermediate toll-free interchanges. The East mainline plaza is located in Broward County near the US 27 interchange, while the West mainline plaza is located in Collier County near the CR 951 interchange. Originally, both mainline plazas had six lanes, and collected tolls in both directions. The two intermediate toll-free interchanges are located at SR 29, the route to Immokalee; and CR 833, serving the Miccosukee Indian Reservation.

At the east end of Alligator Alley the facility is connected to I-595, which is approximately 9.5 miles long and serves primarily commuter traffic traveling to and from work. Construction on I-595 to add three new ground-level reversible express lanes in the median to help alleviate traffic congestion was completed in late March 2014 (FY 2014).

The original toll configuration on Alligator Alley (payment made at the two mainline plazas in both directions) was converted to the one-stop toll configuration in May 1999. Under the one-stop toll configuration, a toll is collected at the West Plaza from vehicles traveling eastbound. The same toll is collected for the westbound traffic at the East plaza. With one-stop tolling, transactions on Alligator Alley decrease, but the total toll incurred to travel on the facility remains the same, thereby not impacting revenues.

The first toll rate increase since the facility opened to traffic in 1969 was implemented in February 2006. Toll rates were further adjusted in June 2012 (FY 2012) as toll indexing was implemented with SunPass®, toll rates are further indexed on each successive July 1. Cash rates have remained unchanged since June 2012 and are scheduled to be adjusted on July 1, 2017 (FY 2018). **Figure 2.1** shows a detailed map of the facility with the most recent toll rates effective July 1, 2016 (FY 2017).

Alligator Alley annual traffic and toll revenue from FY 2006 through FY 2016 are presented in **Table 2.1**. As a result of the toll rate increases from FY 2006 through FY 2016, revenues have increased by 61.0 percent overall while transactions grew by 9.8 percent overall. This equates to an annual average growth rate of 4.9 percent for revenue and 0.9 percent for traffic. During the 10-year period, traffic and revenue were affected by both the toll

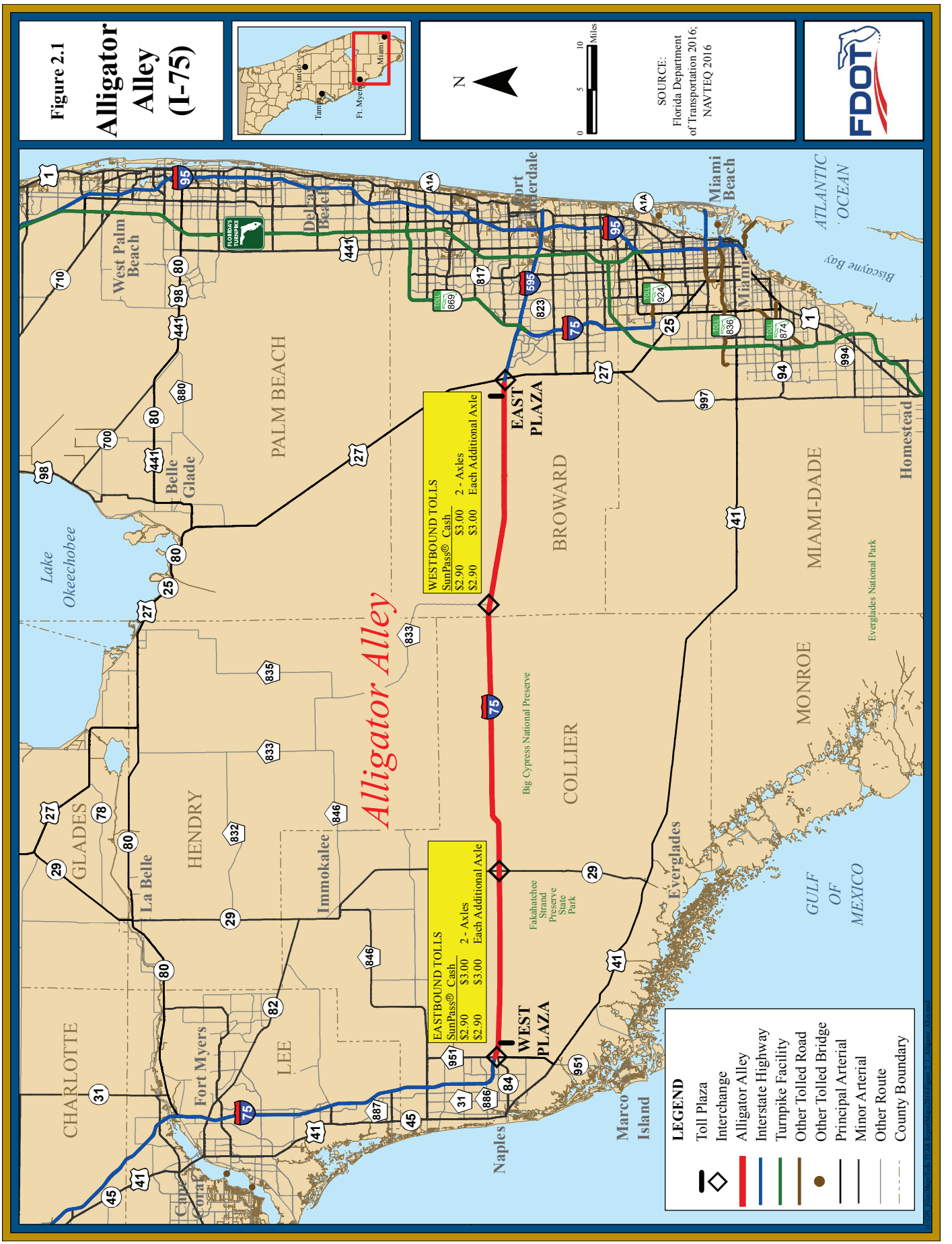


Figure 2.1
Alligator Alley (I-75)
Orlando
Tampa
Ft. Myers
Miami
N
0
5
10
Miles
SOURCE:
Florida Department of Transportation 2016;
NAVTEQ 2016
FDOT
Alligator Alley
WESTBOUND TOLLS
SunPass® Cash
$2.90 $3.00 2 - Axles
$2.90 $3.00 Each Additional Axle
EASTBOUND TOLLS
SunPass® Cash
$2.90 $3.00 2 - Axles
$2.90 $3.00 Each Additional Axle
EAST PLAZA
WEST PLAZA
LEGEND
Toll Plaza
Interchange
Alligator Alley
Interstate Highway
Turnpike Facility
Other Tolled Road
Other Tolled Bridge
Principal Arterial
Minor Arterial
Other Route
County Boundary
PALM BEACH
BROWARD
MIAMI-DADE
COLLIER
LEE
HENDRY
GLADES
CHARLOTTE
MONROE
Lake Okeechobee
Big Cypress National Preserve
Everglades National Park
Fakahatchee Strand Preserve State Park
GULF OF MEXICO
ATLANTIC OCEAN
Biscayne Bay
West Palm Beach
Delray Beach
Fort Lauderdale
Miami Beach
Miami
Homestead
Belle Glade
La Belle
Immokalee
Everglades
Marco Island
Naples
Fort Myers
Cape Coral

Table 2.1
Alligator Alley
Historical Transactions and Revenue Growth
FY 2006 through FY 2016

Fiscal Year	Transactions (000)				Toll Revenue[1] ($000)		Average Toll
	Toll Paying	Non Revenue	Total	Percent Change	Amount	Percent Change	
2006[2]	8,095	253	8,348	-	$18,968	-	$2.272
2007	8,321	45	8,366	0.2%	23,538	24.1%	2.814
2008	7,919	14	7,933	(5.2)	21,962	(6.7)	2.768
2009	7,193	76	7,269	(8.4)	19,384	(11.7)	2.667
2010	7,530	24	7,554	3.9	19,962	3.0	2.643
2011	7,449	22	7,471	(1.1)	19,737	(1.1)	2.642
2012[3]	7,492	32	7,524	0.7	19,647	(0.5)	2.611
2013	7,529	37	7,566	0.6	25,115	27.8	3.319
2014[4]	7,962	38	8,000	5.7	26,755	6.5	3.344
2015[5]	8,471	39	8,510	6.4	28,549	6.7	3.355
2016[6]	9,134	35	9,169	7.7	30,533	6.9	3.330

Source: FDOT Office of the Comptroller and Turnpike Enterprise Finance Office.
Note: The non-revenue class includes authorized vehicles that pass through a toll plaza without incurring a toll (i.e., law enforcement, emergency vehicles) and transactions reported during toll suspensions attributable to hurricanes.
(1) Toll revenue reported net of the SunPass® discount from FY 2002 through FY 2006.
(2) Toll rate increase for cash and SunPass® customers was implemented on February 5, 2006.
(3) Toll rate indexing for both cash and SunPass® customers on June 24, 2012.
(4) Toll rate indexing for SunPass® customers on July 1, 2013.
(5) Toll rate indexing for SunPass® customers on July 1, 2014.
(6) Toll rate indexing for SunPass® customers on July 1, 2015.

Table 2.2
Alligator Alley
Historical Operating and Routine Maintenance Expenses ($000)
FY 2006 through FY 2016

Fiscal Year	Operating Expense	Routine Maintenance Expense	Total O&M Expenses
2006	$2,099	$2,796	$4,895
2007	2,953	3,192	6,145
2008	3,460	2,089	5,549
2009	3,696	3,265	6,961
2010	3,085	3,262	6,347
2011	3,690	3,369	7,059
2012	3,781	3,409	7,190
2013	3,644	3,719	7,363
2014	4,007	4,252	8,259
2015	4,245	4,173	8,418
2016	4,507	4,225	8,732

Source: FDOT Office of the Comptroller.

rate adjustments and the downturn in the economy that was caused by the Great Recession. Transactions and revenues on Alligator Alley increased consistently starting in FY 2013 as economic conditions improved and annual toll rate adjustments were put into effect.

Historical operating and routine maintenance expenses from FY 2006 through FY 2016 are shown in **Table 2.2**. Operating expenses have increased from $2.1 million in FY 2006 to approximately $4.5 million in FY 2016. It should be noted that during the same ten year period, inflation increased at an average annual rate of 1.8 percent. FY 2016 operating expenses increased 6.2 percent ($262 thousand) over FY 2015 operating expenses due to increased toll collection costs resulting from increased traffic growth.

During the same period, routine maintenance expenses increased from $2.8 million to $4.2 million, an average of 4.2 percent per year. Combined, total O&M expenses increased from $4.9 million in FY 2006 to $8.7 million in FY 2016.

FY 2016 routine maintenance expenses increased approximately 1.2 percent from FY 2015 levels. In addition to routine maintenance expenses, renewal and replacement and capital improvement periodic costs totaling $14.9 million were incurred primarily for a guardrail installation project, a fencing project and a rest area project.

Maintenance of Alligator Alley, along with other portions of I-75, has been under private contract since the beginning of FY 2001, with the Department providing oversight through its Asset Management Coordinator. Maintenance activities include rest area preservation, mowing, canal and guardrail system upkeep, litter removal and repairs due to accidents. Road Ranger service is included under

a separate contract, providing roadside assistance to stranded motorists as well as roadway debris removal.

2.2 FY 2016 TRANSACTIONS, REVENUES AND EXPENSES

Monthly transactions and toll revenue on Alligator Alley during FY 2016 are presented in **Table 2.3** and show the East and West mainline plazas, as well as system totals. Total transactions at the East plaza were just over 4.8 million for the year compared to 4.4 million at the West plaza, totaling approximately 9.2 million transactions on the facility for FY 2016. The corresponding revenues were approximately $16.0 million and $14.5 million at the East and West plazas, respectively, for a system-wide total of $30.5 million. The third quarter of FY 2016 (i.e., January through March) was the peak period for travel on the facility. Transactions of 2.5 million and revenues of $8.2 million were realized during that period.

Transactions on Alligator Alley vary by time of day. **Graph 2.1** shows the number of hourly weekday and weekend transactions of a typical week at the mainline plazas during FY 2016. Travel demand on the facility increases during the early morning hours and remains relatively high throughout the midday period, tapering off during the evening hours. For Alligator Alley, there is no clear morning or evening peak periods typical of commuter facilities. Instead, Alligator Alley serves long-distance trips between the southeastern and southwestern coasts of Florida. Due to recreational travel, weekend transactions tend to exceed weekday transactions.

The monthly transaction variation in FY 2016 is analyzed in **Table 2.4**. On average, 25,100 vehicles traveled through the East and West toll plazas each day. The seasonal transaction analysis identifies periods of the year when traffic exceeds or falls below the normal pattern observed on the facility under average conditions. Based on average daily transactions at the East and West plazas, March

Table 2.3
Alligator Alley
Monthly Transactions and Toll Revenue
FY 2016

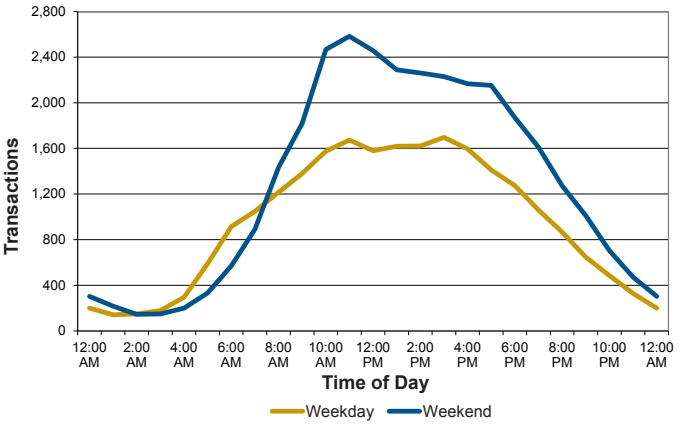
Month	Transactions(000)			Toll Revenue($000)		
	East Plaza	West Plaza	Total	East Plaza	West Plaza	Total
July 2015	397	359	756	$1,329	$1,207	$2,536
August	376	339	715	1,259	1,134	2,393
September	332	300	632	1,130	1,011	2,141
1st Quarter Total	1,105	998	2,103	3,718	3,352	7,070
October	365	327	692	1,231	1,098	2,329
November	402	367	769	1,349	1,216	2,565
December	423	384	807	1,417	1,282	2,699
2nd Quarter Total	1,190	1,078	2,268	3,997	3,596	7,593
January 2016	418	377	795	1,390	1,249	2,639
February	410	374	784	1,368	1,251	2,619
March	460	420	880	1,536	1,394	2,930
3rd Quarter Total	1,288	1,171	2,459	4,294	3,894	8,188
April	410	367	777	1,377	1,222	2,599
May	433	385	818	1,404	1,248	2,652
June	391	353	744	1,286	1,145	2,431
4th Quarter Total	1,234	1,105	2,339	4,067	3,615	7,682
Annual Total	**4,817**	**4,352**	**9,169**	**$16,076**	**$14,457**	**$30,533**

Source: FDOT Office of the Comptroller (Annual Toll Revenue) and Turnpike Enterprise Finance Office.
Note: Transactions represent toll-paying and non-revenue traffic at mainline plazas.

Table 2.4
Alligator Alley
Seasonal Transaction Variation
FY 2016

Month	Average Daily Transactions			Seasonal Factor
	East Plaza	West Plaza	Total	
July 2015	12,800	11,600	24,400	0.97
August	12,100	10,900	23,000	0.92
September	11,100	10,000	21,100	0.84
October	11,800	10,600	22,400	0.89
November	13,400	12,200	25,600	1.02
December	13,600	12,400	26,000	1.04
January 2016	13,500	12,200	25,700	1.02
February	14,100	12,900	27,000	1.08
March	14,800	13,500	28,300	1.13
April	13,700	12,200	25,900	1.03
May	14,000	12,400	26,400	1.05
June	13,000	11,800	24,800	0.99
AADT	**13,200**	**11,900**	**25,100**	**1.00**

Graph 2.1
Alligator Alley
Typical Hourly Transactions
FY 2016

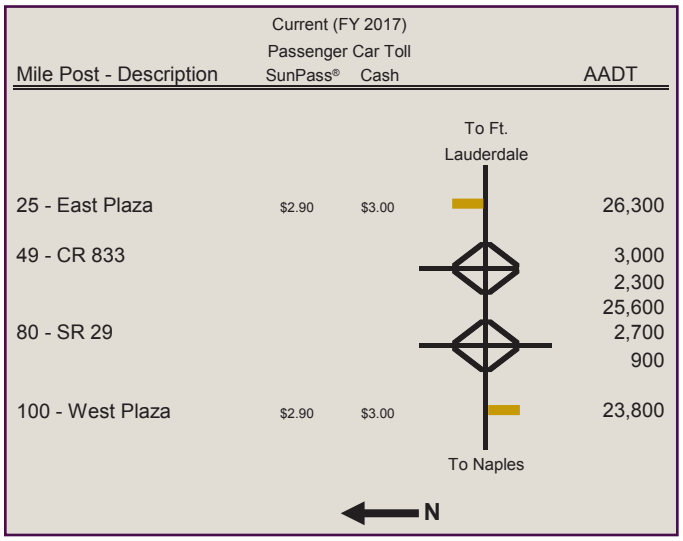


Source: Data obtained from Turnpike Enterprise Finance Office for the 7-day period beginning Monday, June 13, 2016.

was the highest month at 13 percent above the average for the facility, while September was the lowest month at 16 percent below the average. September is typically the lowest month in south Florida due to fewer seasonal residents and tourists at that time of year.

The FY 2016 two-way annual average daily traffic (AADT) profile for the facility is presented in **Figure 2.2**.

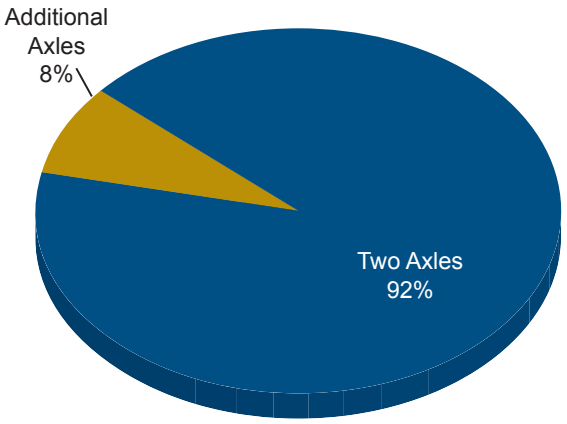
Figure 2.2
Alligator Alley
Two-way AADT Profile
FY 2016



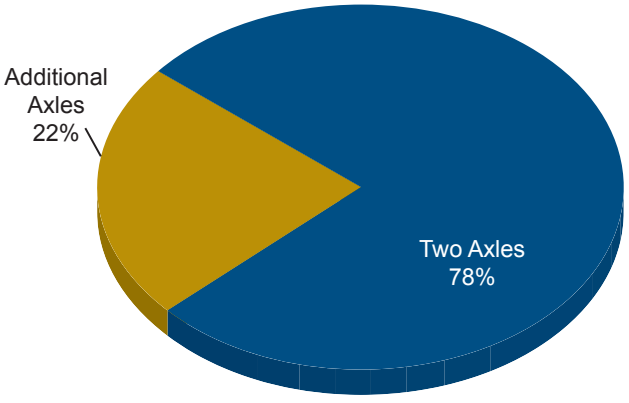
Total two-way traffic volumes at the East mainline location averaged approximately 26,300 vehicles per day. Corresponding volumes at the West plaza averaged 23,800 vehicles per day, with total two-way traffic transactions totaling 50,100 vehicles per day. The East mainline location had approximately 1,250 more transactions per day due to the CR 833 and SR 29 ramps to and from the east having higher volumes than the respective ramps to and from the west.

The "N minus 1" method of toll collection was implemented on Alligator Alley concurrent with one-stop tolling. This method results in a more equitable toll structure for passenger cars relative to trucks.

Graph 2.2
Alligator Alley
Transactions by Axle Class
FY 2016



Revenue Contribution by Axle Class
FY 2016



Graph 2.2 shows the truck transactions and revenue contributions for FY 2016. Since Alligator Alley is part of the interstate highway system, the truck percentages are the greatest of the eight Department-owned and Department-operated toll facilities. Trucks accounted for eight percent of traffic on the facility and 22 percent of the revenue. In terms of actual revenue contributions, two-axle vehicles provided approximately $23.8 million while vehicles with three or more axles provided $6.7 million in revenue for FY 2016.

The Department monitors the cost associated with the collection of tolls from customers by comparing the annual operating expense budget for the facility to the actual performance for the year. **Table 2.5** provides a comparison between the FY 2016 actual and budgeted operating and routine maintenance expenses. Actual operating expenses were 2.2 percent more than the FY 2016 budget primarily due to higher costs associated with increased traffic growth. Actual routine maintenance expenses were approximately 1.3 percent higher than the FY 2016 budget amount.

2.3 SUNPASS®

SunPass® technology was implemented on Alligator Alley beginning in October 1999. The project included the installation of new electronic toll collection equipment at the East and West plazas and allows for future installation of SunPass® equipment and conversion to mixed-use or dedicated lanes, if needed (see **Appendix A** for current lane configurations).

Table 2.6 shows transactions by payment method on Alligator Alley for FY 2016. SunPass® accounted for 60.4 percent of the total transactions in FY 2016, an increase from the 59.6 percent realized in FY 2015. Non-SunPass® transactions constituted the remaining 39.6 percent. Monthly SunPass® percentages ranged from approximately 57 percent to nearly 63 percent during the year.

Table 2.5
Alligator Alley
Operating and Routine Maintenance Expenses ($000)
FY 2016

Type of Expense	Budget	Actual	Over/ (Under)	Variance
Operating	$4,411	$4,507	$96	2.2%
Routine Maintenance	4,172	4,225	53	1.3
Total	**$8,583**	**$8,732**	**$149**	**1.7%**

Source: FDOT Office of the Comptroller, Turnpike Enterprise Finance Office and the FY 2015 Enterprise Toll Operations Traffic Engineer's Annual Report.

SunPass® participation on Alligator Alley is lower than most other Florida toll facilities due to fewer commuters using the facility.

Table 2.7 shows gross toll revenue by payment method. Revenue attributable to SunPass® was approximately $19.8 million, representing 64.7 percent of the total revenue in FY 2016. Monthly SunPass® revenue percentages ranged from 62 to 67 percent during the year.

Table 2.6
Alligator Alley
Transactions by Payment Method
FY 2016

Month	Transactions (000)			Percent SunPass®
	SunPass®	Non-SunPass®	Total	
July 2015	471	285	756	62.3%
August	445	270	715	62.2
September	395	237	632	62.5
October	426	266	692	61.6
November	470	299	769	61.1
December	478	329	807	59.2
January 2016	463	332	795	58.2
February	449	335	784	57.3
March	512	368	880	58.2
April	469	308	777	60.4
May	500	318	818	61.1
June	457	287	744	61.4
Total	**5,535**	**3,634**	**9,169**	
Percentage	**60.4%**	**39.6%**	**100.0%**	

Source: Turnpike Enterprise Finance Office.

Table 2.7
Alligator Alley
Gross Toll Revenue by Payment Method
FY 2016

Month	Gross Toll Revenue ($000)			Percent SunPass®
	SunPass®	Non-SunPass®	Total	
July 2015	$1,667	$870	$2,537	65.7%
August	1,576	816	2,392	65.9
September	1,423	718	2,141	66.5
October	1,531	797	2,328	65.8
November	1,665	900	2,565	64.9
December	1,709	990	2,699	63.3
January 2016	1,654	985	2,639	62.7
February	1,617	1,002	2,619	61.8
March	1,837	1,093	2,930	62.7
April	1,678	920	2,598	64.6
May	1,768	885	2,653	66.6
June	1,630	802	2,432	67.0
Total	**$19,755**	**$10,778**	**$30,533**	
Percentage	**64.7%**	**35.3%**	**100.0%**	

Source: FDOT Office of the Comptroller (Annual Toll Revenue) and Turnpike Enterprise Finance Office.

2.4 NOTEWORTHY EVENTS

In 2007, the Legislature amended Section 338.165, Florida Statutes, to require the Turnpike System and other FDOT-owned facilities to index toll rates on existing toll facilities to the annual Consumer Price Index (CPI) or similar inflation indicator effective as of July 1, 2007. Toll rate adjustments for inflation may be made no more frequently than once a year and must be made no less frequently than once every five years as necessary to accommodate cash toll rate schedules. Toll rates may be adjusted beyond these limits as directed by bond documents, covenants, or governing body authorization or pursuant to Department administrative rule. The Department-operated facilities are not required to index tolls as part of the Statute.

Since the CPI for calendar year 2015 of 0.1 percent did not prompt a minimum of $0.01 increase in the two-axle toll rate, toll rates for SunPass® were not indexed on July 1, 2016 (FY 2017).

A new Memorandum of Agreement (MOA) with the SFWMD was signed on June 30, 2016. The annual excess (after all costs have been paid) is sent to the SFWMD by August 15 of the following fiscal year. The new agreement goes through June 30, 2019 (with the final payment due on August 15, 2019).

2.5 TRAFFIC, REVENUE AND EXPENSE FORECASTS

The ratio between historical traffic growth and population growth was used along with projected population growth as a guideline to estimate future traffic on Alligator Alley. Historical population growth focused on the four counties that have a significant regional impact on Alligator Alley traffic. These counties are Broward, Collier, Lee and Miami-Dade. Since Alligator Alley is part of the interstate system, the statewide population growth was also considered.

From FY 2010 (i.e. post-recession) through FY 2016, the annual compounded traffic growth rate on the Alligator Alley was approximately 3.3 percent, whereas, the historical annual compounded population growth rate for the same period for the four counties was 1.2 percent. According to the latest economic outlook prepared by the Florida Legislature Office of Economic and Demographic Research in July 2016, Florida's population growth is forecast to increase at a compounded growth rate of 1.5 percent over the next five-year period.

Future population estimates have been calculated based on medium projections from the most recent publication by the Bureau of Economic and Business Research (BEBR), College of Business Administration at the University of Florida. The corresponding estimated annual population growth rate through 2020 for the four counties is 1.4 percent, as previously shown in **Table 1.4**. The historical ratio of traffic growth to population growth for the period FY 2010 to FY 2016 was estimated at 2.8 percent. This ratio was applied to projected population growth rates

to obtain a general guideline to estimate future annual traffic growth on the Alligator Alley. Traffic profiles are provided in **Appendix B**.

The traffic and gross toll revenue forecasts for FY 2017 through FY 2027 are shown in **Table 2.8**. The forecast table includes the impact that indexing will have on revenue. Overall, the gross toll revenue forecast in the initial years for this of the eleven-year period is slightly above the forecast presented in the 2015 Annual Report due in large part to FY 2016 actual revenues exceeding last year's projection. However, the reverse is true in the latter years due to a lower annual CPI projection than last year.

Table 2.8
Alligator Alley
Traffic and Gross Toll Revenue Forecasts
FY 2017 through FY 2027

Fiscal Year	Total Traffic (000)	Toll Revenue ($000)			Toll Revenue Comparisons ($000)		
		Revenue with Constant Tolls[1]	Indexing Impact	Gross Toll Revenue	2015 Annual Report Forecast	Variance	
						Amount	Percent
2017	9,460	$31,473	$0	$31,473	$30,539	$934	3.1%
2018	9,737	32,386	1,102	33,488	33,260	228	0.7
2019	10,036	33,260	1,390	34,650	34,462	188	0.5
2020	10,333	34,092	1,702	35,794	35,729	65	0.2
2021	10,604	34,910	2,040	36,950	37,050	(100)	(0.3)
2022	10,866	35,713	2,405	38,118	38,435	(317)	(0.8)
2023	11,095	36,535	3,638	40,173	40,777	(604)	(1.5)
2024	11,352	37,338	4,054	41,392	41,829	(437)	(1.0)
2025	11,610	38,085	4,493	42,578	42,929	(351)	(0.8)
2026	11,869	38,809	4,948	43,757	44,066	(309)	(0.7)
2027	12,097	39,468	5,438	44,906	N/A	N/A	N/A

Note: Total traffic corresponds to the gross toll revenue.
N/A The FY 2015 Traffic Engineer's Annual Report forecast went through FY 2026.
(1) Toll revenue forecast without indexing.

Additionally, there was no impact on traffic as a result of the July 1, 2015 (FY 2016) toll rate indexing. As discussed earlier, there was no indexing of SunPass® toll rates on July 1, 2016 (FY 2017). Transactions in FY 2018 and thereafter are not expected to be impacted by the annual indexing of SunPass® toll rates. Further, the cash toll rate indexing that occurs every five years (FY 2018 and FY 2023) is expected to have minimal impact on traffic. A summary of the economic factors affecting traffic and revenue is included in the Overview chapter of this report. In addition, **Appendix A** includes all the indexed toll rate schedules.

Projected operating and maintenance expenses during the same forecast period are shown in **Table 2.9**. The operating expenses for FY 2017 presented in this table represent the budgeted amount for that fiscal year (see **Appendix C** for a detailed description of the FY 2017 operating expense budget). Subsequent to FY 2017, operating expenses are projected to grow at 2.0 percent annually. The routine maintenance expense forecast is provided by the Office of Project Finance through FY 2022. Subsequent to FY 2022, routine maintenance expenses were increased at 2.0 percent annually.

Periodic maintenance expenses are based on information provided by the Office of Project Finance based on the five-year Work Program and include rest area improvements, fire station operations grant and interchange lighting projects. Total operating and maintenance expenses are projected to decrease from $29.2 million in FY 2017 to $11.6 million in FY 2027 due to the year in which the commitments are programmed and how the commitments are paid out over time.

2.6 REVENUE SUFFICIENCY

A timeline of Alligator Alley bond issues

Table 2.9
Alligator Alley
Projected Operating and Maintenance Expenses
($000)
FY 2017 through FY 2027

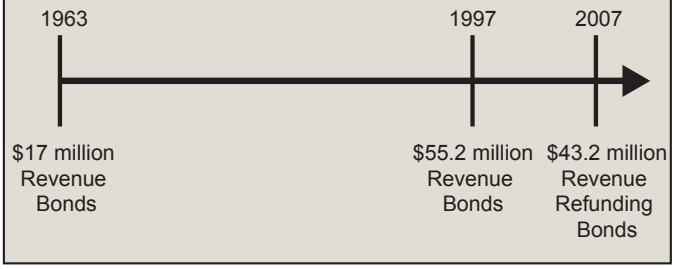
Fiscal Year	Operating Expense	Routine Maintenance Expense	Total Operating & Routine Maintenance Expenses	Periodic Maintenance Expense[1]	Total O&M Expenses
2017	$4,639	$4,137	$8,776	$20,425	$29,201
2018	4,732	4,044	8,776	17,071	25,847
2019	4,827	4,044	8,871	7,450	16,321
2020	4,924	4,044	8,968	3,673	12,641
2021	5,022	4,044	9,066	1,955	11,021
2022	5,122	3,424	8,546	1,994	10,540
2023	5,224	3,492	8,716	2,034	10,750
2024	5,328	3,562	8,890	2,075	10,965
2025	5,435	3,634	9,069	2,116	11,185
2026	5,544	3,706	9,250	2,158	11,408
2027	5,655	3,780	9,435	2,202	11,637

Note: Operating expenses are based on the budget developed by Turnpike Enterprise Finance Office for FY 2017.
(1) Periodic maintenance expenses include installation of guardrails and cable barrier, rest area construction and other Department-funded R&R and improvements in the 5-year Work Program and are reported on a cash basis. Periodic maintenance expenses beyond FY 2021 have not been fully programmed. However, a minimal level of preservation (excluding extraordinary expenses) has been estimated based on FY 2021 expenses increased at 2.0 percent annually.

is shown in **Figure 2.3**. As of June 30, 2016, bonds in the principal amount of $28.7 million remain outstanding from the 2007 Series. Each year, an amount of principal and accrued interest (annual debt service) on the outstanding bonds becomes due and payable. As a test of the ability of a facility to repay the annual debt service, a "coverage" calculation is performed. In accordance with the 2007 Series Bond Resolution, gross revenues are first required to provide 100 percent of the administrative, operating and routine maintenance expenses. The amount of revenues remaining (net revenues) is then available for the payment of debt service. Both renewal and replacement and other expenses funded by the Department (including rest area, recreational access and Collier County Fire Station grant) are not included in the operating and routine maintenance expenses for debt service calculations. The Bond Resolution requires that net revenues be at least 120 percent (1.2 times) of the annual debt service.

Table 2.10 provides a forecast of the sufficiency of Alligator Alley to meet annual debt service requirements through FY 2026. Generally, revenues used for debt service analysis on the facility include gross toll revenue and other income derived from (or in connection with) the operation of Alligator Alley. However, a conservative approach was taken for this analysis and only gross toll revenue was used in the calculation of net revenue (i.e., gross toll revenue less operating and routine maintenance expenses). As shown in the table, Alligator Alley significantly exceeds the 1.2 minimum debt service coverage requirement.

Figure 2.3
Alligator Alley Bond Issues



Note: A list of projects funded by each bond issue is included in **Table 1.5** of this report.

As indicated in **Figure 2.4**, revenues remaining after the fulfillment of the annual debt service requirement are used next to fund renewal and replacements.

The excess revenues remaining after all of these obligations have been determined and met are transferred to the South Florida Water Management District (SFWMD) to fund environmental projects designed to restore the Florida Everglades from the effects of the construction of Alligator Alley in accordance with Section 338.26, Florida Statutes.

In keeping with the intent of the statute, on June 30,

Table 2.10
Alligator Alley
Net Toll Revenue Forecast and Debt Service Coverage ($000)
FY 2016 through FY 2027

Fiscal Year	Gross Toll Revenue	Operating & Routine Maintenance Expenses[1]	Net Toll Revenue[2]	Debt Service[3]	
				Payment	Coverage Ratio
2016	$30,533	$8,732	$21,801	$3,449	6.3
2017	31,473	8,776	22,697	3,448	6.6
2018	33,488	8,776	24,712	3,452	7.2
2019	34,650	8,871	25,779	3,451	7.5
2020	35,794	8,968	26,826	3,450	7.8
2021	36,950	9,066	27,884	3,453	8.1
2022	38,118	8,546	29,572	3,450	8.6
2023	40,173	8,716	31,457	3,452	9.1
2024	41,392	8,890	32,502	3,446	9.4
2025	42,578	9,069	33,509	3,450	9.7
2026	43,757	9,250	34,507	3,446	10.0
2027	44,906	9,435	35,471	3,449	10.3

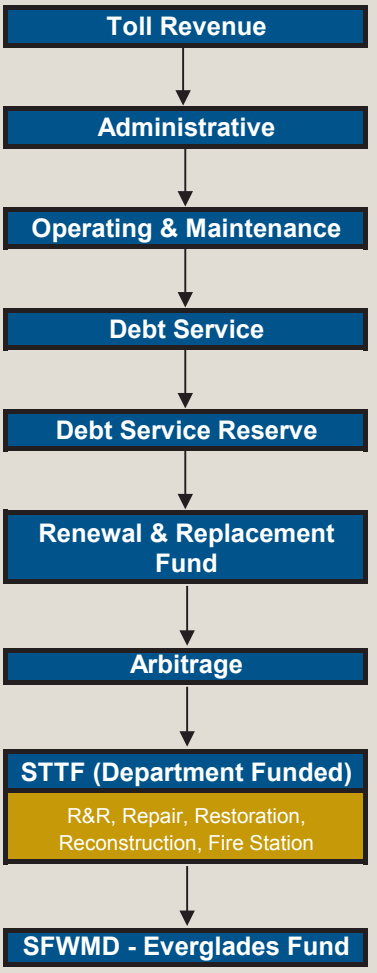
(1) Periodic maintenance includes rest area improvements, fire station operations grant and interchange lighting projects; however, these expenses are not included in the operating and routine maintenance expenses as bond resolutions exclude these expenses when calculating net revenue.
(2) Does not include investment income and operating revenues available for debt service.
(3) Annual debt service is obtained from the State Board of Administration Annual Report for the year ended June 30, 2016.

1997, the Department signed a MOA with the SFWMD regarding the transfer of the excess toll revenues to the SFWMD. This agreement provides the transfer to be made annually and limits the transfer amount to the annual Legislative appropriation. Furthermore, the agreement provides for the total transfers made by the Department not to exceed $63.6 million by FY 2016. The agreement also requires that prior to its expiration, the agreement shall be renegotiated.

In FY 2016, $7.1 million of excess revenue was transferred to the SFWMD. The Department transferred $63.6 million to the SFWMD in accordance with the 1997 MOA.

A new MOA with SFWMD was signed in June 2016 and goes through June 2019.

Figure 2.4
Flow of Funds
Series 2007
Alligator Alley Revenue Bonds



PINELLAS BAYWAY SYSTEM

3.1 BACKGROUND

The Pinellas Bayway System consists of a series of causeways and bridges providing a connection between St. Petersburg Beach, Fort DeSoto Park and I-275. The system is approximately 15.2 miles in length and includes 1.3 miles of bridges. **Figure 3.1** shows a map of the facility with the most recent toll rates.

The east-west section of the facility (SR 682) provides a connection between I-275 (via 54th Avenue) on the east and Gulf Boulevard (SR 699) on the west. This section crosses the Bayway Isles and Isle Del Sol. The north-south section of the facility (SR 679) extends from Isle Del Sol through Tierra Verde to Mullet Key and Fort DeSoto Park. The facility was opened to traffic in December 1962.

There are three mainline toll plazas on the Pinellas Bayway System. Tolls at the first plaza, located at the northeast end of the facility on the mainland near Eckerd College, are collected for westbound travel only. The second plaza is located on the northwest end of the facility in St. Petersburg Beach, near the intersection with Gulf Boulevard (SR 699). Tolls at this plaza are collected for eastbound travel only. Finally, tolls at the third mainline plaza, located on Tierra Verde, are collected for southbound travel only. No tolls are collected on the Pinellas Bayway System for the return trip from the south end of the facility.

In June 2012 (FY 2012), toll rate indexing was implemented on the Pinellas Bayway System, as mandated by the Florida Legislature. At the same time, the method used to calculate toll rates for three or more axle vehicles was changed from a per-axle basis to "N minus 1" to be consistent with the methodology used on other department facilities and the Turnpike System. Toll rates for two-axle vehicles at each of the plazas on SR 682 were adjusted from $0.50 to $0.75 for cash customers with an additional $0.75 per axle for vehicles with three or more axles. Tolls at the southern mainline plaza on SR 679 were adjusted from $0.35 to $0.50 for cash customers with an additional $0.50 per axle for vehicles with three or more axles. The SunPass® toll rates were set $0.25 less than the adjusted cash rate. The toll rates for both cash and SunPass® were the same on the Pinellas Bayway System prior to the toll indexing. With the FY 2012 indexing, cash rates changed, while the SunPass® rates at each of the plazas on SR 682 remained unchanged and the SunPass® rate at the SR 679 plaza actually

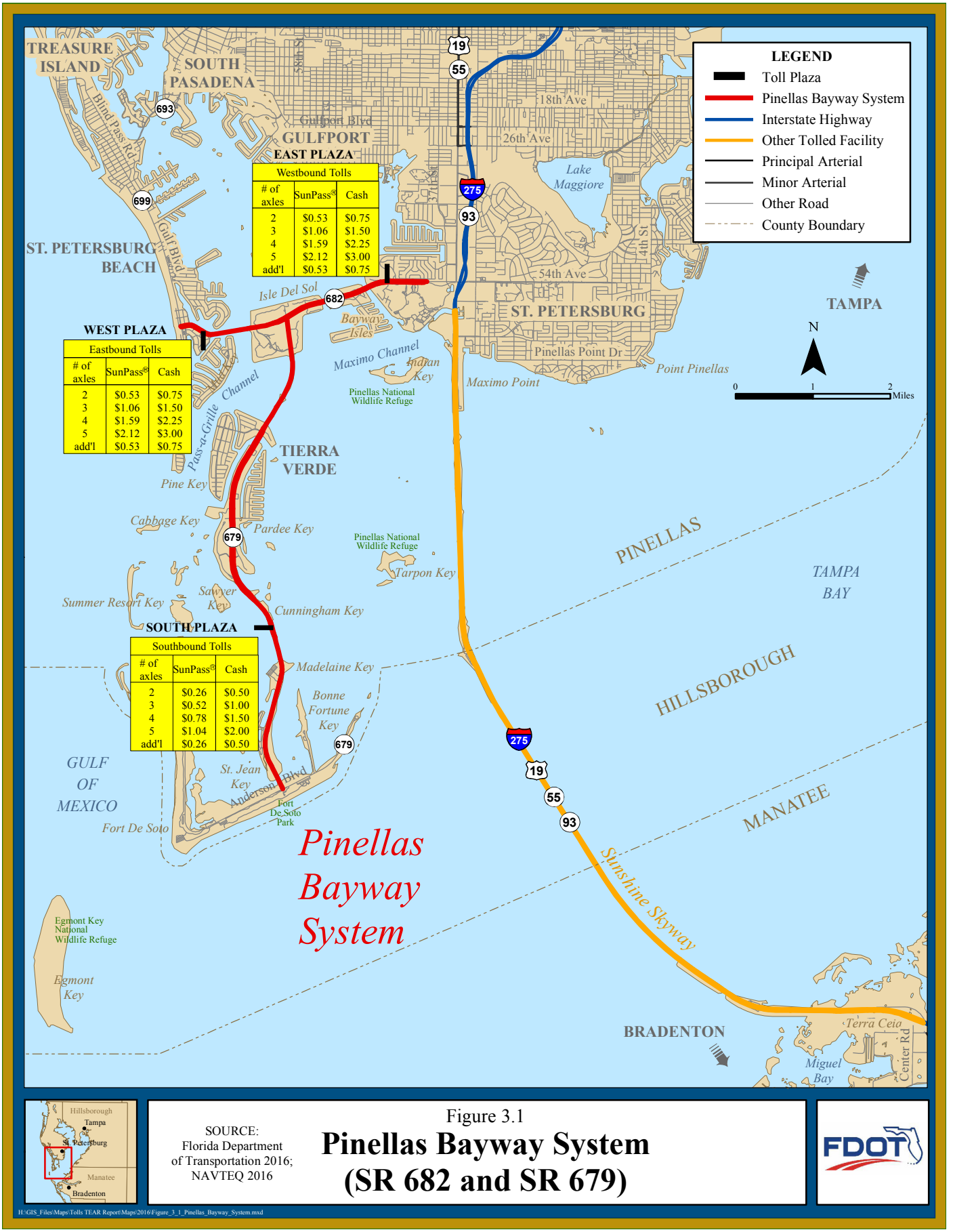


Figure 3.1

SOURCE: Florida Department of Transportation 2016; NAVTEQ 2016

Pinellas Bayway System (SR 682 and SR 679)

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Table 3.1
Pinellas Bayway System
Historical Transactions and Revenue Growth
FY 2006 through FY 2016

Fiscal Year	Transactions (000)				Toll Revenue[1] ($000)		Average Toll
	Toll Paying	Non Revenue	Total	Percent Change	Amount	Percent Change	
2006	9,921	21	9,942	-	$3,732	-	$0.375
2007	9,769	26	9,795	(1.5%)	3,711	(0.6%)	0.379
2008	9,649	30	9,679	(1.2)	3,656	(1.5)	0.378
2009	9,290	37	9,327	(3.6)	3,535	(3.3)	0.379
2010	9,142	26	9,168	(1.7)	3,510	(0.7)	0.383
2011	9,195	30	9,225	0.6	3,605	2.7	0.391
2012	9,098	37	9,135	(1.0)	3,535	(1.9)	0.387
2013	8,557	41	8,598	(5.9)	4,035	14.1	0.469
2014	8,779	38	8,817	2.5	4,113	1.9	0.466
2015	9,547	39	9,586	8.7	4,489	9.1	0.468
2016	9,835	40	9,875	3.0	4,657	3.7	0.472

Source: FDOT Office of the Comptroller and Turnpike Enterprise Finance Office.
Note: The non-revenue class includes authorized vehicles that pass through a toll plaza without incurring a toll (i.e., law enforcement, emergency vehicles) and transactions reported during toll suspensions attributable to hurricanes.
(1) Toll revenue reported net of the SunPass® discount since FY 2000.

decreased from $0.35 to $0.25. This is due to the $0.25 toll differential compared to the adjusted cash rate.

Annual transactions and revenue for the facility from FY 2006 through FY 2016 are presented in **Table 3.1**. Total transactions remained almost the same, decreasing from approximately 9.94 million in FY 2006 to 9.88 million in FY 2016, an overall decrease of 0.7 percent. During the same period, revenues increased from $3.7 million in FY 2006 to $4.7 in FY 2016, an overall increase of 24.8 percent, or 2.2 percent per year compounded. During this 10-year period, traffic and revenue declined from FY 2007 through FY 2010 due to the economic recession. Starting in FY 2011 traffic and revenue began to increase annually as the economy began to slowly recover following the recession. However, beginning in FY 2012 and lasting through FY 2014, transactions decreased as a result of various detours related to the SR 682 bridge replacement project, as well as continued weakness in the economy. It should be noted that revenues did increase in FY 2013 as a result of the first full year of the higher cash tolls after the toll rate indexing. Transactions increased in FY 2014 due to the partial opening of two lanes of the SR 682 bridge replacement. The further growth in transactions in FY 2015 was a result of the completion of the SR 682 bridge replacement project, as well as the strengthening economic recovery.

Historical operating and routine maintenance expenses from FY 2006 through FY 2016 are presented in **Table 3.2**. As indicated, operating expenses have decreased from $2.0 million in FY 2006 to $1.9 million in FY 2016, an overall change of –5.5 percent or, –0.6 percent per year on an annual compounded basis. During the same period, routine maintenance expenses increased from $650 thousand to $764 thousand.

Table 3.2
Pinellas Bayway System
Historical Operating and Routine Maintenance Expenses ($000)
FY 2006 through FY 2016

Fiscal Year	Operating Expense	Routine Maintenance Expense	Total O&M Expenses
2006	$2,000	$650	$2,650
2007	2,146	484	2,630
2008	2,083	473	2,556
2009	2,122	588	2,710
2010	1,840	723	2,563
2011	1,802	747	2,549
2012	1,806	695	2,501
2013	1,720	739	2,459
2014	1,576	748	2,324
2015	1,799	811	2,610
2016	1,891	764	2,655

Source: FDOT Office of the Comptroller.

Combined, total O&M expenses remained fairly level increasing slightly from $2.650 million in FY 2006 to $2.655 million in FY 2016.

Since January 2003, maintenance of the Pinellas Bayway System has been performed under a private Asset Maintenance Contract. The current contract includes expenses for movable bridge maintenance for the two drawbridges, as well as maintenance and inspection of all other bridges on the Pinellas Bayway System. FY 2016, operating expenses increased 5.1 percent ($92 thousand) over FY 2015 operating expenses due to increased toll collection costs resulting from increased traffic growth. In addition, starting in FY 2016, the revenue from the sale of SunPass® transponders is no longer offset against the cost of the transponders in the calculation of total operating costs thus; the operating costs for FY 2016 appear higher than the operating costs for FY 2015 (and prior fiscal years). FY 2016 routine maintenance expenses decreased by 5.8 percent over FY 2015 due to pavement striping work done in 2015. In addition to operating and routine maintenance expenses, renewal and replacement and capital improvement (periodic) costs totaling $521 thousand were incurred during FY 2016 primarily due to toll system replacement.

3.2 FY 2016 TRANSACTIONS AND TOLL REVENUES

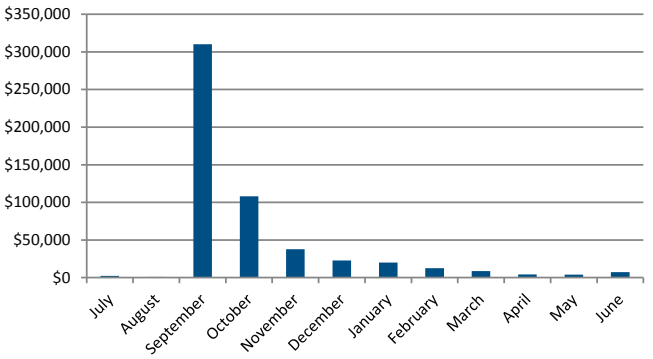
Monthly transactions and toll revenue on the Pinellas Bayway System during FY 2016 are presented in **Table 3.3**. Typically, the first quarter (i.e., July through September) generates more revenue compared to the remaining three quarters due to revenues from the general public annual passes (which represent a large percent of the available types of passes) being recorded in September when the passes are primarily sold. The results indicate that the first quarter generated approximately $1.3 million in revenues compared to the $1.1 million (average) generated in each of the remaining three quarters. **Graph 3.1** shows the monthly distribution of pass sales.

Table 3.3
Pinellas Bayway System
Monthly Transactions and Toll Revenue
FY 2016

Month	Transactions (000)	Toll Revenue ($000)
July 2015	793	$341
August	753	316
September	696	592
1st Quarter Total	2,242	1,249
October	774	456
November	754	341
December	782	336
2nd Quarter Total	2,310	1,133
January 2016	775	323
February	827	345
March	1,019	439
3rd Quarter Total	2,621	1,107
April	950	406
May	942	411
June	810	351
4th Quarter Total	2,702	1,168
Annual Total	**9,875**	**$4,657**

Source: FDOT Office of the Comptroller (Annual Toll Revenue) and Turnpike Enterprise Finance Office.
Note: Transactions represent toll-paying and non-revenue traffic at the mainline plazas.

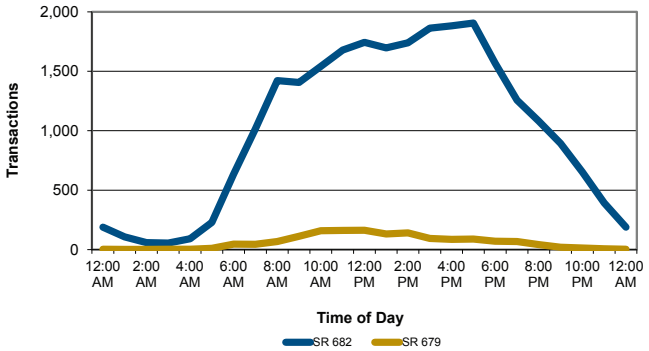
Graph 3.1
Pinellas Bayway System
Monthly Pass Sales Distribution
FY 2016



Note: Includes General Public and Bayway Isle passes.

Graph 3.2 shows the number of hourly transactions on weekdays of a typical week during FY 2016 separated between the main east-west traffic on SR 682 and traffic on SR 679 traveling to Fort DeSoto Park. The majority of the transactions occur at the two plazas on SR 682, with a much smaller percentage occurring at the plaza on SR 679. As indicated, the travel demand on the facility quickly builds during the early morning hours and remains steady throughout the midday hours. Typical weekday traffic volumes peak in the early evening hours and quickly subside after 6:00 p.m., showing that the Pinellas Bayway System serves both commuter traffic and traffic related to the recreational beach activity in the area.

Graph 3.2
Pinellas Bayway System
Typical Hourly Weekday Transactions
FY 2016



Source: Data obtained from Turnpike Enterprise Finance Office for the 5-day period beginning Monday, June 13, 2016.

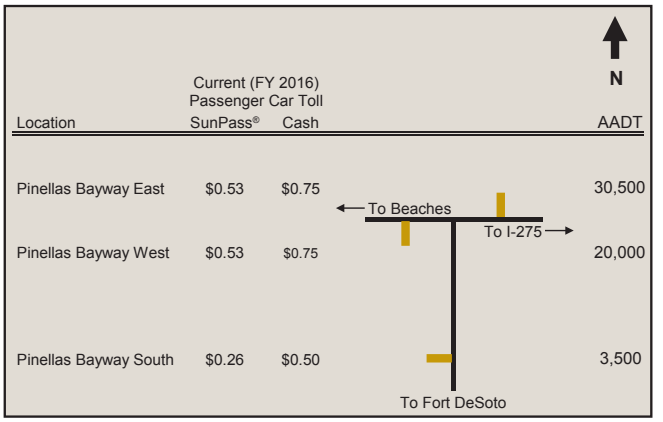
Table 3.4
Pinellas Bayway System
Seasonal Transaction Variation
FY 2016

Month	Average Daily Transactions	Seasonal Factor
July 2015	25,600	0.95
August	24,300	0.90
September	23,200	0.86
October	25,000	0.93
November	25,100	0.93
December	25,200	0.93
January 2016	25,000	0.93
February	28,500	1.06
March	32,900	1.22
April	31,700	1.17
May	30,400	1.13
June	27,000	1.00
AADT	**27,000**	**1.00**

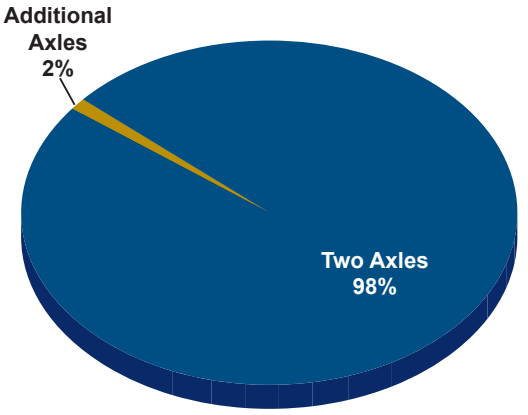
The monthly transaction variation in FY 2016 is illustrated in **Table 3.4**. Annual average daily traffic (AADT) on the Pinellas Bayway System for FY 2016 was approximately 27,000. The peak season occurred from February through May, with March traffic exceeding the average by 22 percent. This transaction level is expected during this period due to tourists and seasonal residents. September transactions are 14 percent below the yearly average as a result of fewer tourists and seasonal residents in the area.

The FY 2016 two-way AADT profile for the facility is presented in **Figure 3.2**. The AADT at the East, West and South plazas during FY 2016 was 30,500, 20,000 and 3,400, respectively. The East Plaza experiences the highest traffic volumes, while the number of drivers traveling to Fort DeSoto Park through the South Plaza is the lowest of the three plazas. The sum of the two-way volumes for

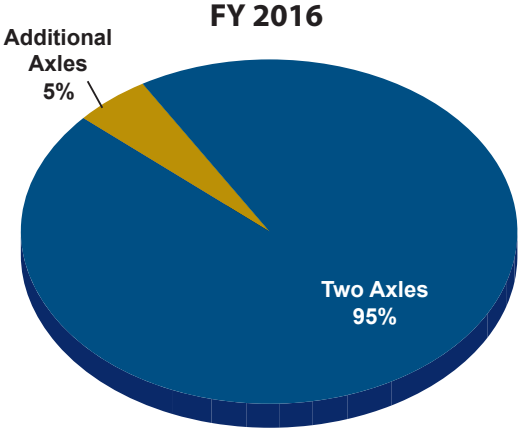
Figure 3.2
Pinellas Bayway System
Two-way AADT Profile
FY 2016



Graph 3.3
Pinellas Bayway System
Transactions by Axle Class
FY 2016



Revenue Contribution by Axle Class
FY 2016

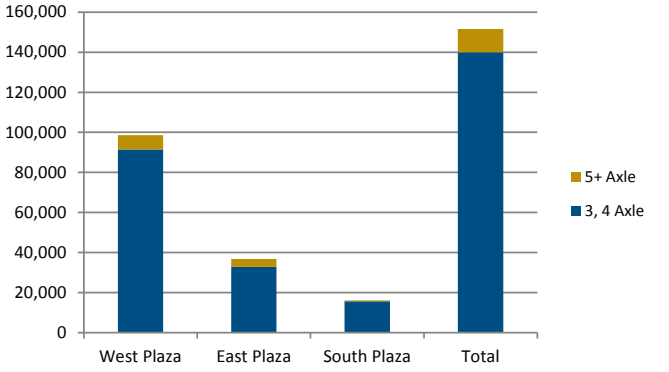


the three tolled locations shown in the figure (54,000) is double that of the one-way volume shown in **Table 3.4** (27,000). Paying-transactions averaged 26,900 per day and the total two-way traffic volumes for the three locations averaged 53,900 vehicles per day.

The traffic and revenue contributions from trucks on the Pinellas Bayway System are shown in **Graph 3.3**. For FY 2016, trucks accounted for approximately 2 percent of the traffic on the facility and 5 percent of the revenue. In terms of annual revenue contributions, vehicles with three or more axles accounted for approximately $234 thousand while two-axle vehicles comprised the remaining $4.4 million.

Graph 3.4 shows multi-axle vehicle transactions by plaza. As shown, the west plaza had the highest amount of truck traffic in FY 2016. As indicated, the majority of multi-axle vehicles on the Pinellas Bayway System are 3 and 4 axles. This is due to a large percentage of customers using the facility for recreational activities such as boating.

Graph 3.4
Pinellas Bayway System
Multi-Axle Vehicle Transactions by Plaza
FY 2016



3.3 SUNPASS®

Travel on the Pinellas Bayway System has become more convenient since the implementation of SunPass® on June 6, 2000. During the conversion to SunPass®, electronic toll

Table 3.5
Pinellas Bayway System
SunPass® Transactions (000)
by Payment Method
FY 2016

Month	General Public Pass	Bayway Isle Pass	Regular SunPass®	Total
July 2015	189	10	284	483
August	193	11	280	484
September	196	11	259	466
October	184	13	292	489
November	206	14	274	494
December	218	15	277	510
January 2016	233	16	267	516
February	235	16	287	538
March	261	17	355	633
April	240	15	343	598
May	215	14	364	593
June	196	12	311	519
Total	**2,566**	**164**	**3,593**	**6,323**
Percentage	**40.6%**	**2.6%**	**56.8%**	**100.0%**

Source: Turnpike Enterprise Finance Office.

collection equipment was installed at each of the three toll plazas. While one lane at the East Plaza was converted to a dedicated SunPass® lane, all other lanes were retrofitted with SunPass® equipment and are designated as mixed-use lanes, accommodating both cash and SunPass® transactions (see **Appendix A** for the lane configuration).

SunPass® offers Bayway Isle residents a $15 annual pass (which was authorized at the time of the original construction of the facility) for unlimited passage through the East Plaza. Passes can be purchased in person with proof of residency at the East Plaza and expire at the end of the fiscal year. Likewise, the general public may purchase an annual pass for unlimited usage of the Pinellas Bayway System for $50. The General Public annual pass, which was authorized in 1985 pursuant to legislation, is sold in September of each year and expires on the first day of October of the following year. In FY 2016, there were approximately 10,900 General Public and 700 Bayway Isle passes sold.

In FY 2016, approximately 2.7 million transactions or 43 percent of all SunPass® transactions on the Pinellas Bayway System were attributable to pass usage. **Table 3.5** shows monthly SunPass® transactions by payment method.

Correspondingly, annual pass sales accounted for $539 thousand (net of refunds) or 22 percent of total SunPass® revenue. With an average toll of $0.20 for pass transactions (overall, for the three toll plazas combined), the annual pass program provided a combined savings of approximately $896 thousand to pass holders.

For those SunPass® customers who do not participate in the Bayway Isle or General Public pass programs, a standard 10 percent discount is offered when a threshold of 40 transactions per month is reached. Transactions for SunPass® customers with multi-axle vehicles on the Sunshine Skyway Bridge also count toward this minimum threshold. The FY 2016 total for the discount program was approximately $21,000.

Table 3.6 shows transactions by payment method on the facility. SunPass® transactions represented approximately 64 percent of total transactions in FY 2016. Monthly SunPass® participation percentages ranged from approximately 61 percent to 67 percent during the year. In general, SunPass® participation is highest during off season months as a result of fewer tourists and seasonal residents, indicating that more commuters using SunPass® travel on the facility during this time.

Table 3.7 shows gross toll revenue by payment method. SunPass® accounted for 53 percent of the total revenue in FY 2016. Monthly revenues are influenced by annual pass sales. As previously mentioned, General Public annual passes are primarily sold in September and October, and as a result, approximately 75 percent of revenue for

Table 3.6
Pinellas Bayway System
Transactions by Payment Method
FY 2016

Month	Transactions (000)			Percent SunPass®
	SunPass®	Non-SunPass®	Total	
July 2015	483	310	793	60.9%
August	484	269	753	64.3
September	466	230	696	67.0
October	489	285	774	63.2
November	494	260	754	65.5
December	510	272	782	65.2
January 2016	516	259	775	66.6
February	538	289	827	65.1
March	633	386	1,019	62.1
April	598	352	950	62.9
May	593	349	942	63.0
June	519	291	810	64.1
Total	**6,323**	**3,552**	**9,875**	
Percentage	**64.0%**	**36.0%**	**100.0%**	

Source: Turnpike Enterprise Finance Office.
Note: General Public and Bayway Isle passes are included in the SunPass® Program. Cash transactions represent toll-paying and non-revenue transactions.

Table 3.7
Pinellas Bayway System
Gross Toll Revenue by Payment Method
FY 2016

Month	Gross Toll Revenue ($000)			Percent SunPass®
	SunPass®	Non-SunPass®	Total	
July 2015	$151	$190	$341	44.3%
August	148	168	316	46.8
September[1]	446	146	592	75.3
October	281	175	456	61.6
November	182	159	341	53.4
December	169	167	336	50.3
January 2016	161	162	323	49.8
February	163	182	345	47.2
March	195	244	439	44.4
April	184	222	406	45.3
May	193	218	411	47.0
June[2]	170	181	351	48.4
Total	**$2,443**	**$2,214**	**$4,657**	
Percentage	**52.5%**	**47.5%**	**100.0%**	

Source: FDOT Office of the Comptroller (Annual Toll Revenue) and Turnpike Enterprise Finance Office.
Note: General Public and Bayway Isle passes are included in the SunPass® program.
(1) General Public passes are sold in September.
(2) Bayway Isle passes are sold in June.

the month of September is attributable to SunPass®. After November, sales drop significantly and the SunPass® contribution was 50 percent or lower for all months other than September, October and November. The contribution to revenue from the Bayway Isle annual pass, with yearly renewal in June, is negligible.

3.4 NOTEWORTHY EVENTS

In June 2016 Tropical Storm Colin struck the Tampa Bay area. While the Bayway remained open, a manual lane was closed at 12:30 PM and traffic at the South Plaza saw reduced levels. It is estimated that, due to the storm, the toll revenue impact was negligible.

3.5 FY 2016 EXPENSES AND LIABILITIES

A comparison between actual and budgeted operating and routine maintenance expenses for FY 2016 is presented in **Table 3.8**. Actual operating expenses were 10.2 percent higher than the FY 2016 budget due to increased toll collection costs resulting from increased traffic growth. Actual routine maintenance expenses were lower than the FY 2016 budget by 9.7 percent, or $82 thousand due to the implementation of a new Asset Management Contract. Overall, FY 2016 actual operating and routine maintenance

Table 3.8
Pinellas Bayway System
Operating and Routine Maintenance Expenses ($000)
FY 2016

Type of Expense	Budget	Actual	Over/ (Under)	Variance
Operating	$1,716	$1,891	$175	10.2%
Routine Maintenance	846	764	(82)	(9.7)
Total	**$2,562**	**$2,655**	**$93**	**3.6%**

Source: FDOT Office of the Comptroller, Turnpike Enterprise Finance Office and the FY 2015 Enterprise Toll Operations Traffic Engineer's Annual Report.

expenses were approximately 3.6 percent, or $93 thousand, higher than the FY 2016 budget.

An analysis of the FY 2016 long-term liability on the facility is presented in **Table 3.9**. During FY 2016, approximately $514 thousand of capital improvement (periodic) expenses were incurred.

Table 3.9
Pinellas Bayway System
Long-Term Liability ($000)
FY 2016

Transaction		Amount
Balance, beginning of year		$42,173
Maintenance Additions	Periodic (Capitalized District)	514
Balance, end of year		$42,687

Source: FDOT Office of the Comptroller.

3.6 TRAFFIC, REVENUE AND EXPENSE FORECASTS

Historically population growth in Pinellas County has had a significant impact on the facility. The ratio between historical traffic growth and population growth was used along with projected population growth to estimate future traffic growth on the Pinellas Bayway System.

According to the latest economic outlook prepared by the Florida Legislature Office of Economic and Demographic Research in August 2016, Florida's population growth is forecast to increase at an average annual growth rate of 1.5 percent over the next five-year period.

Future population estimates have been calculated based on medium projections from the most recent publication by the Bureau of Economic and Business Research (BEBR), College of Business Administration at the University of Florida. The corresponding estimated annual population growth rate through 2020 for Pinellas County is 0.2 percent, previously shown in **Table 1.4**. The historical ratio of traffic growth to population growth was applied to projected population growth rates to obtain a general guideline to estimate future annual traffic growth on the Pinellas Bayway System. Traffic profiles are provided in **Appendix B**, showing two-way AADT on each segment of the system, for FY 2016 through FY 2027.

The traffic and gross toll revenue forecasts for FY 2017 through FY 2027 are shown in **Table 3.10**. The forecast table includes the revenue impact from toll indexing. The current gross toll revenue forecast is slightly higher than the forecast presented in the 2015 Annual Report due to FY 2016 actual revenue exceeding last

Table 3.10
Pinellas Bayway
Traffic and Gross Toll Revenue Forecasts
FY 2017 through FY 2027

Fiscal Year	Total Traffic (000)	Toll Revenue ($000)				Toll Revenue Comparisons ($000)		
		Revenue with Constant Tolls[1]	Indexing Impact	SunPass® Discount Impact	Gross Toll Revenue	2015 Annual Report Forecast	Variance	
							Amount	Percent
2017	10,025	$4,743	$0	($22)	$4,721	$4,691	$30	0.6%
2018	10,129	4,805	689	(23)	5,471	5,357	114	2.1
2019	10,261	4,863	700	(24)	5,539	5,397	142	2.6
2020	10,378	4,912	711	(24)	5,599	5,437	162	3.0
2021	10,473	4,958	726	(25)	5,659	5,483	176	3.2
2022	10,571	5,003	745	(26)	5,722	5,540	182	3.3
2023	10,656	5,043	919	(27)	5,935	5,795	140	2.4
2024	10,732	5,078	951	(28)	6,001	5,852	149	2.5
2025	10,792	5,116	971	(29)	6,058	5,911	147	2.5
2026	10,860	5,145	1,004	(29)	6,120	5,973	147	2.5
2027	10,913	5,176	1,031	(30)	6,177	N/A	N/A	N/A

Note: Total traffic corresponds to the gross toll revenue.
N/A The FY 2015 Traffic Engineer's Annual Report forecast went through FY 2026.
(1) Toll revenue forecast without indexing.

year's projection. Since the CPI for calendar year 2015 of 0.1 percent did not prompt a minimum of $0.01 increase in the two-axle toll rate, toll rates for SunPass® were not indexed on July 1, 2016 (FY 2017). Traffic in FY 2018 and thereafter are not expected to be impacted by the annual indexing of SunPass® toll rates. Further, the cash toll rate indexing that occurs every 5 years (FY 2018 and FY 2023) is expected to have minimal impact on traffic. A summary of the economic factors affecting traffic and revenue is included in the Overview chapter of this report. In addition, **Appendix A** includes future indexed toll rate schedules.

Projected operating and maintenance expenses during the same forecast period are shown in **Table 3.11**. **Appendix C** contains a detailed description of the FY 2017 operating expense budget. Subsequent to FY 2017, operating expenses are projected to grow at 2.0 percent annually. The routine maintenance expense forecast is provided by the Department's Office of Project Finance through FY 2022. Subsequent to FY 2022, routine maintenance expenses were increased at 2.0 percent annually.

Table 3.11
Pinellas Bayway System
Projected Operating and Maintenance Expenses ($000)
FY 2017 through FY 2027

Fiscal Year	Operating Expense	Maintenance Expenses		Total O&M Expenses
		Routine	Periodic(1)	
2017	$1,913	$925	$988	$3,826
2018	1,951	852	541	3,344
2019	1,990	866	233	3,089
2020	2,030	880	101	3,011
2021	2,071	798	82	2,951
2022	2,112	925	84	3,121
2023	2,154	944	85	3,183
2024	2,197	962	87	3,246
2025	2,241	982	89	3,312
2026	2,286	1,001	91	3,378
2027	2,332	1,021	92	3,445

Note: Operating expenses are based on the budget developed by Turnpike Enterprise Finance Office for FY 2017.
(1) Periodic maintenance expenses include expenditures for toll plaza renovations, SunPass dedicated lane extension at the East plaza and various other improvements as part of the 5-year Work Program and are reported on a cash basis. Periodic maintenanceexpenses beyond FY 2021 have not been fully programmed, however, a minimum level of preservation (excluding extraordinary expenses such as resurfacing, etc.) has been estimated based on FY 2021 expenses increased at 2.0 percent annually.

Periodic maintenance expenses are based on information provided by the Office of Project Finance for the 5-year Work Program. Total operating and periodic and routine maintenance expenses are projected to decrease from $3.8 million in FY 2017 to $3.4 million in FY 2027.

3.7 RESERVE CONSTRUCTION ACCOUNT

Pursuant to legislation passed in 1985 (Chapter 85-364, Laws of Florida) and revised in 1995 (Chapter 95-382, Laws of Florida) and 2014 (Chapter 14-223, Laws of Florida), toll collection on the Pinellas Bayway System has continued since the retirement of all outstanding bonds. Beginning July 1, 2014, net revenues are defined as toll revenues less operating and maintenance expenses. Tolls collected were designated by the legislation for certain improvement projects: Phase I construction, Phase II construction and the Blind Pass Road widening. A description and status of each improvement project is shown in **Table 3.12**.

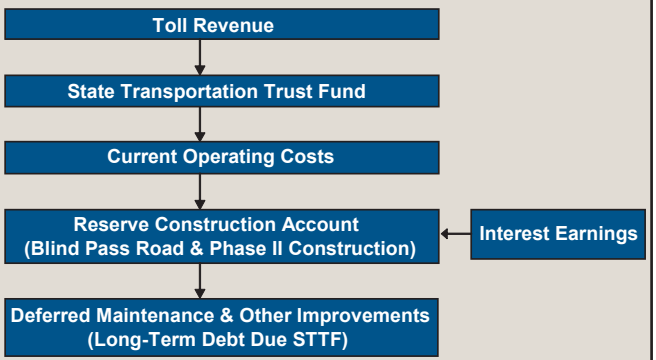
Table 3.12
Pinellas Bayway System
Improvement Projects

Project	Description	Status
Phase I Construction	Improvements consist of widening the Pinellas Bayway to four lanes from the eastern toll booth to State Road 679.	Complete (November 1991)
Phase II[1] Construction	Improvements consist of widening the Pinellas Bayway to four lanes from State Road 679 west to Gulf Boulevard, including necessary approaches, bridges and avenues of access.	Partially Complete (October 2014)
Blind Pass Road Construction	Improvements consist of widening the Blind Pass Road, State Road 699, to four lanes from 75th Avenue north to the approach of the Blind Pass Bridge, including necessary right-of-way acquisition along said portion of Blind Pass Road, and intersection improvements at 75th Avenue and Blind Pass Road.	Complete (October 2003)

(1) Bridge Structure E has not yet been replaced and is programmed for FY 2018.

As indicated in **Figure 3.3**, the Phase II and Blind Pass Road projects were funded by a reserve construction account established by the Department to accumulate toll revenues after the payment of operating expenses. During FY 1995, the Department established an escrow account with the Department of Financial Services, Division of Treasury, to maintain and invest the reserve construction account. All interest earnings accumulate in this account and assist in funding the projects.

Figure 3.3
Flow of Funds
Pinellas Bayway System



A summary of the activity in the reserve account during FY 2016 is shown in **Table 3.13**. Additions to the reserve account primarily consist of excess net toll revenues (toll revenues less operating and maintenance expenses) and interest earnings on the account. Reductions are reimbursements to the State Transportation Trust Fund related to costs incurred in the prior fiscal year for Phase II construction project.

Construction of Structure E of the Pinellas Bayway System is programmed to begin in FY 2018. The construction will deplete the escrow account and will add to the Bayway's debt that is due to the STTF for those expenditures.

Table 3.13
Pinellas Bayway System
Analysis of Reserve Construction Account ($000)
FY 2016

Transaction	Amount
Balance, beginning of year	$10,037
Additions	2,320
Reductions[1]	(4,000)
Balance, end of year	$8,357

Source: FDOT Office of the Comptroller (reported on a cash basis).
(1) As used here, reductions represent prior year costs for Phase II Construction project.

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SUNSHINE SKYWAY BRIDGE

4.1 BACKGROUND

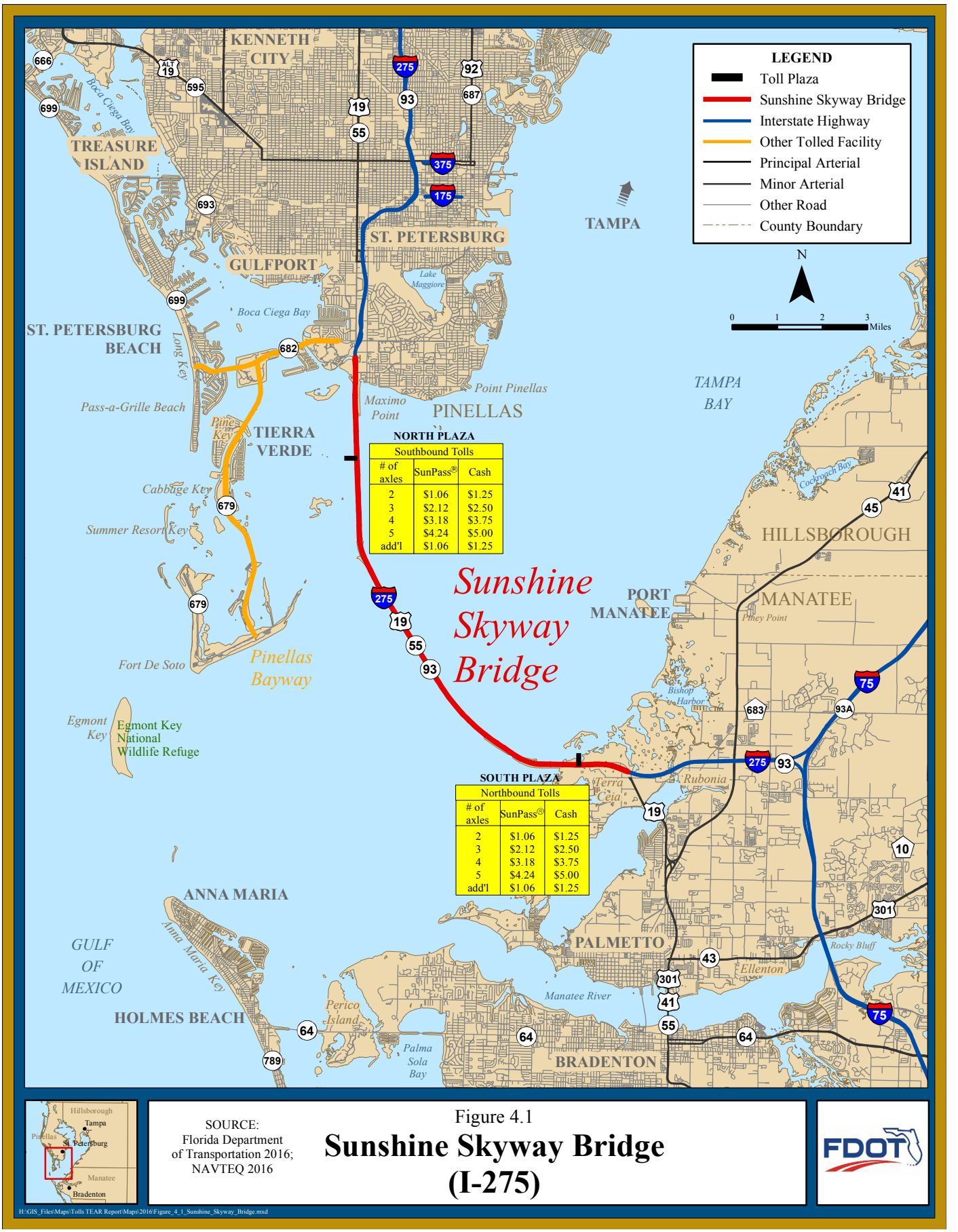
The original Sunshine Skyway Bridge opened in 1954 and was constructed as a two-lane toll project crossing Tampa Bay from US 19 at Maximo Point in Pinellas County to US 41, north of Palmetto in Manatee County. The facility was 15.1 miles in length and consisted of 10.2 miles of embankment and five bridges having a combined length of 4.9 miles. The facility underwent an expansion project to add two additional lanes on the existing causeways, an additional two-lane trestle bridge and a high-level bridge parallel to the existing main bridge span that opened in 1970.

Over the years, several accidents occurred, involving maritime shipping freighters traversing the channel between Tampa Bay and the Gulf of Mexico. These accidents were attributed, in part, to the positioning of the piers of the high-level structure over the navigation channel. On May 9, 1980, a freighter collided with one of the piers of the main span structure carrying the southbound roadway, causing a section of the center span to collapse into Tampa Bay. In order to maximize safe vehicular and maritime passage in the area, the Department constructed the new Sunshine Skyway Bridge as a single four-lane high-level structure, east of the original bridge, providing greater horizontal clearances between the main piers and an increased vertical height. The new 17.4-mile bridge opened to traffic in 1987 with one mainline plaza located at each end of the facility. The new bridge consists of 13.3 miles of embankment and causeway, which makes the actual bridge approximately 4.1 miles in length. The cost to replace the bridge was approximately $232 million. Funds to replace the bridge were provided from various sources including insurance recoveries, federal emergency relief and interstate funds, state funds and a $36 million bond issue in 1984. In

honor of former Florida Governor Bob Graham, who spearheaded the state-of-the-art design of the new bridge, the Sunshine Skyway Bridge was designated the Bob Graham Sunshine Skyway Bridge effective July 1, 2005 (FY 2006) with the signing of House Bill 385.

Tolls at the northern plaza in Pinellas County are collected in the southbound direction only, while tolls at the southern plaza in Manatee County are collected in the northbound direction. In June 2012 (FY 2012) toll rate indexing was implemented for all customers on the Sunshine Skyway Bridge, as mandated by the Florida Legislature. At the same time, the method used to calculate toll rates for three or more axle vehicles was changed from a per-axle basis to "N minus 1" to be consistent with the methodology used on other Department facilities and the Turnpike System. SunPass® customers with three or more axle vehicles continue to receive a 10 percent discount after a threshold of 40 monthly transactions is reached.

The bridge is part of the Strategic Intermodal System (SIS), designated as I-275, and is managed and operated by the Department. The Department provides for toll collection and maintenance of the facility, but may assign or contract these operations to a third party. **Figure 4.1** shows a detailed map of the facility, with the most recent toll rates.



SOURCE:
Florida Department of Transportation 2016; NAVTEQ 2016

Figure 4.1

Sunshine Skyway Bridge (I-275)

H:\GIS_Files\Maps\Tolls TEAR Report\Maps\2016\Figure_4_1_Sunshine_Skyway_Bridge.mxd

Historically, traffic and revenue on the Sunshine Skyway Bridge have increased over the years. In FY 2006, total transactions were approximately 18.7 million, and toll revenues were approximately $17.8 million. In FY 2016, total transactions increased to 21.0 million, while toll revenues increased to approximately $24.8 million. Annual transactions and revenue for the facility from FY 2006 through FY 2016 are presented in **Table 4.1**. As with other facilities in the state, traffic and revenue both declined during the economic recession but have since rebounded as the economy has recovered. Revenues have also increased as a result of the start of toll rate indexing in June 2012 (FY 2012). Compared to FY 2015, FY 2016 transactions and revenue increased by 3.7 percent and 3.4 percent, respectively. This growth in traffic can be attributed to the continuing economic recovery and the resulting notable decline in the unemployment rate in Florida, as well as a record number of Florida visitors in 2015.

Table 4.1
Sunshine Skyway Bridge
Historical Transactions and Revenue Growth
FY 2006 through FY 2016

Fiscal Year	Transactions (000)				Toll Revenue[1] ($000)		Average Toll
	Toll Paying	Non Revenue	Total	Percent Change	Amount	Percent Change	
2006	18,694	30	18,724	-	$17,798	-	$0.951
2007	18,748	12	18,760	0.2%	17,758	(0.2%)	0.947
2008	18,192	15	18,207	(2.9)	17,025	(4.1)	0.935
2009	17,607	32	17,639	(3.1)	16,212	(4.8)	0.919
2010	17,764	22	17,786	0.8	16,310	0.6	0.917
2011	17,974	31	18,005	1.2	16,427	0.7	0.912
2012	18,102	48	18,150	0.8	16,555	0.8	0.912
2013	18,439	63	18,502	1.9	21,722	31.2	1.174
2014	19,131	48	19,179	3.7	22,679	4.4	1.182
2015	20,233	59	20,292	5.8	23,995	5.8	1.182
2016	20,985	61	21,046	3.7	24,809	3.4	1.179

Source: FDOT Office of the Comptroller and Turnpike Enterprise Finance Office.
Note: The non-revenue class includes authorized vehicles that pass through a toll plaza without incurring a toll (i.e., law enforcement, emergency vehicles) and transactions reported during toll suspensions attributable to hurricanes.
(1) Toll revenue reported net of the SunPass® discount since FY 2001.

Historical operating and routine maintenance expenses from FY 2006 through FY 2016 are presented in **Table 4.2**. Operating expenses have increased from $3.9 million in FY 2006 to $4.7 million in FY 2016, or 20.8 percent. The significant increase in operating expenses in excess of $5.3 million in FY 2007 was due to an increase in insurance costs after the FY 2006 hurricane season. FY 2016 operating expenses decreased $191 thousand, or 3.9 percent, from FY 2015. This decrease is primarily related to a large decrease in the insurance premium (for similar coverage) for the Skyway. During the same period, routine maintenance expenses increased from $879 thousand to $2.3 million.

Inspection and maintenance of the Sunshine Skyway Bridge is performed under a private Asset Maintenance Contract with the Department providing oversight through its Asset Management Coordinator. In FY 2016, routine maintenance expenses decreased 1.6 percent from FY 2015 levels.

Table 4.2
Sunshine Skyway Bridge
Historical Operating and Routine Maintenance Expenses ($000)
FY 2006 through FY 2016

Fiscal Year	Operating Expense	Routine Maintenance Expense	Total O&M Expenses
2006	$3,879	$879	$4,758
2007	5,340	1,686	7,026
2008	5,185	1,582	6,767
2009	5,129	2,165	7,294
2010	4,793	1,575	6,368
2011	5,074	2,475	7,549
2012	4,930	1,770	6,700
2013	4,672	2,325	6,997
2014	4,749	1,651	6,400
2015	4,875	2,365	7,240
2016	4,684	2,326	7,010

Source: FDOT Office of the Comptroller.

4.2 FY 2016 TRANSACTIONS AND TOLL REVENUES

Monthly transactions and toll revenue on the Sunshine Skyway Bridge during FY 2016 are presented in **Table 4.3** for the north and south mainline plazas. There were approximately 10.6 million transactions at the north plaza and 10.4 million transactions at the south plaza, for a total of 21 million transactions during FY 2016. The corresponding annual revenue was $12.6 million at the north plaza and $12.2 million at the south plaza, for a total of approximately $24.8 million during FY 2016. The third quarter experienced the largest amount of transactions and revenue in FY 2016, with March being the busiest month.

Graph 4.1 shows the number of hourly weekday and weekend transactions of a typical week during FY 2016 for both northbound and southbound traffic combined. The weekday traffic on the facility has a morning peak from 7:00 a.m. to 9:00 a.m. and an evening peak from 3:00 p.m. to 6:00 p.m., reflecting the presence of commuters on the facility. During weekends from 9:00 a.m. to 3:00 p.m. traffic levels are over 3,300 vehicles per hour. On weekends, there is no clear morning or evening peak periods indicating that a large number of non-commuters use the facility (e.g. interstate travel influence).

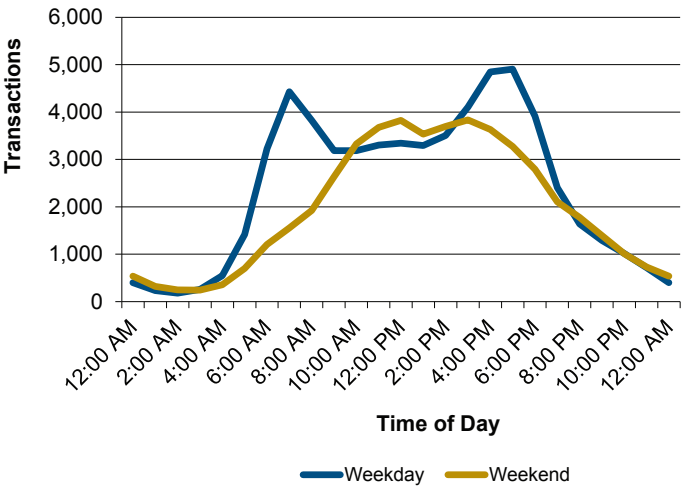
The FY 2016 monthly transaction variation is analyzed in **Table 4.4**. Annual average daily transactions (AADT) on the Sunshine Skyway Bridge for FY 2016 was 57,500. The peak season occurred from February through April, with March being the highest month at 13 percent above average for the facility. This is due to tourists and seasonal residents. August and September were the lowest months at 8 percent below average. Historically, the month of September has the fewest transactions.

Table 4.3
Sunshine Skyway Bridge
Monthly Transactions and Toll Revenue
FY 2016

Month	Transactions (000)			Toll Revenue ($000)		
	North Plaza	South Plaza	Total	North Plaza	South Plaza	Total
July 2015	847	840	1,687	$1,003	$996	$1,999
August	826	816	1,642	977	960	1,937
September	795	786	1,581	943	918	1,861
1st Quarter Total	2,468	2,442	4,910	2,923	2,874	5,797
October	878	863	1,741	1,042	1,010	2,052
November	858	844	1,702	1,017	988	2,005
December	918	886	1,804	1,090	1,039	2,129
2nd Quarter Total	2,654	2,593	5,247	3,149	3,037	6,186
January 2016	879	842	1,721	1,033	985	2,018
February	928	896	1,824	1,104	1,042	2,146
March	1,016	995	2,011	1,215	1,163	2,378
3rd Quarter Total	2,823	2,733	5,556	3,352	3,190	6,542
April	939	920	1,859	1,114	1,091	2,205
May	915	897	1,812	1,083	1,047	2,130
June	840	822	1,662	986	963	1,949
4th Quarter Total	2,694	2,639	5,333	3,183	3,101	6,284
Annual Total	**10,639**	**10,407**	**21,046**	**$12,607**	**$12,202**	**$24,809**

Source: FDOT Office of the Comptroller (Annual Toll Revenue) and Turnpike Enterprise Finance Office.
Note: Transactions represent toll-paying and non-revenue traffic at mainline plazas.

Graph 4.1
Sunshine Skyway Bridge
Typical Hourly Transactions
FY 2016

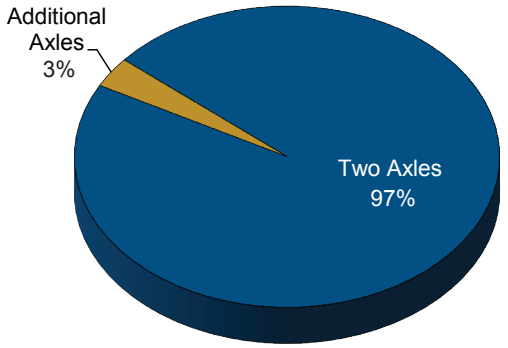


Source: Data obtained from Turnpike Enterprise Finance Office for the 7-day period beginning Monday, January 4, 2016

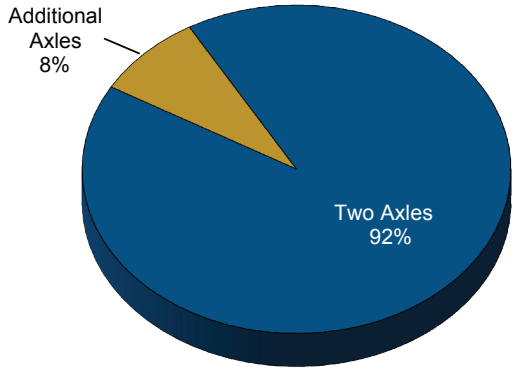
Table 4.4
Sunshine Skyway Bridge
Seasonal Transaction Variation
FY 2016

Month	Average Daily Transactions			Seasonal Factor
	North Plaza	South Plaza	Total	
July 2015	27,300	27,100	54,400	0.95
August	26,600	26,300	52,900	0.92
September	26,500	26,200	52,700	0.92
October	28,300	27,800	56,100	0.98
November	28,600	28,100	56,700	0.99
December	29,600	28,600	58,200	1.01
January 2016	28,400	27,200	55,600	0.97
February	32,000	30,900	62,900	1.09
March	32,800	32,100	64,900	1.13
April	31,300	30,700	62,000	1.08
May	29,500	28,900	58,400	1.02
June	28,000	27,400	55,400	0.96
AADT	**29,100**	**28,400**	**57,500**	**1.00**

Graph 4.2
Sunshine Skyway Bridge
Transactions by Axle Class
FY 2016



Revenue Contribution by Axle Class
FY 2016



The traffic and revenue contributions from trucks on the Sunshine Skyway Bridge are shown in **Graph 4.2**. For FY 2016, trucks accounted for 3 percent of the traffic on the facility but accounted for 8 percent of the total revenue. In terms of actual revenue contributions, vehicles with three or more axles provided approximately $2.1 million, while two-axle vehicles comprised the remaining $22.7 million.

4.3 SUNPASS®

SunPass® was installed at the north and south plazas on the Sunshine Skyway Bridge in August of 2000 (FY 2001). SunPass® implementation included the conversion of three of the six toll lanes at each of the plazas to SunPass®. Currently, there is a dedicated SunPass® lane at each plaza and two mixed-use lanes, serving both cash and SunPass® users. The remaining three lanes at each plaza are currently manned but will be able to accommodate future conversion to mixed-use or dedicated SunPass® lanes if needed (see **Appendix A** for the lane configurations).

Drivers of two-axle vehicles with a SunPass® transponder pay $0.19 less than cash drivers. As stated before, SunPass® customers with three or more axle vehicles receive a 10 percent retroactive discount when they reach a threshold of 40 monthly toll payments. The nearby Pinellas Bayway System also participates in the discount program. SunPass® discounts on the Sunshine Skyway Bridge totaled $24.5 thousand in FY 2016.

Table 4.5 shows the percentage of transactions by payment method on the Sunshine Skyway Bridge. Non-SunPass® transactions amounted to approximately 8.8 million, or 42 percent of all transactions; whereas, SunPass® transactions totaled nearly 12.2 million, or 58 percent of all transactions on the facility. Over the course of FY 2016, the monthly SunPass® transaction percentage ranged from approximately 55 to 61 percent.

Table 4.5
Sunshine Skyway Bridge
Transactions by Payment Method
FY 2016

Month	Transactions (000)			Percent SunPass®
	SunPass®	Non-SunPass®	Total	
July 2015	977	710	1,687	57.9%
August	969	673	1,642	59.0
September	957	624	1,581	60.5
October	1,030	711	1,741	59.2
November	982	720	1,702	57.7
December	1,029	775	1,804	57.0
January 2016	981	740	1,721	57.0
February	1,024	800	1,824	56.1
March	1,110	901	2,011	55.2
April	1,075	784	1,859	57.8
May	1,077	735	1,812	59.4
June	999	663	1,662	60.1
Total	**12,210**	**8,836**	**21,046**	
Percentage	**58.0%**	**42.0%**	**100.0%**	

Source: Turnpike Enterprise Finance Office.
Note: Non-SunPass® transactions represent cash and non-revenue transactions

Table 4.6
Sunshine Skyway Bridge
Gross Toll Revenue by Payment Method
FY 2016

Month	Gross Toll Revenue ($000)			Percent SunPass®
	SunPass®	Non-SunPass®	Total	
July 2015	$1,122	$877	$1,999	56.1%
August	1,111	826	1,937	57.4
September	1,095	766	1,861	58.8
October	1,180	872	2,052	57.5
November	1,120	885	2,005	55.9
December	1,176	953	2,129	55.2
January 2016	1,115	903	2,018	55.3
February	1,164	982	2,146	54.2
March	1,267	1,111	2,378	53.3
April	1,243	962	2,205	56.4
May	1,243	887	2,130	58.4
June	1,154	795	1,949	59.2
Total	**13,990**	**10,819**	**24,809**	
Percentage	**56.4%**	**43.6%**	**100.0%**	

Source: FDOT Office of the Comptroller (Annual Toll Revenue) and Turnpike Enterprise Finance Office.

Table 4.6 shows the gross toll revenue by payment method. Revenue attributable to SunPass® was approximately $14.0 million, representing approximately 56 percent of the total system revenue in FY 2016. Toll revenue is reported net of the SunPass® discount. Non-SunPass® constituted the remaining 43.6 percent ($10.8 million) of revenue. Monthly SunPass® revenue percentages ranged from 53 to approximately 59 percent during the year.

4.4 NOTEWORTHY EVENTS

On January 17, 2016 the Sunshine Skyway Bridge was closed for 3-1/2 hours due to high winds with no estimated revenue losses attributable to this event. On both March 15 and March 17, 2016 the Sunshine Skyway Bridge was closed due to heavy fog conditions. Closures lasted for approximately 8 hours on March 15 and 6-1/2 hours on March 17. These two events resulted in a total combined estimated revenue loss of $66,000. The Sunshine Skyway Bridge was also closed for 25 hours June 6 through June 7, 2016 due to the passage of Tropical Storm Colin through the Tampa Bay area. This closure resulted in an estimated revenue loss of $72,300.

4.5 FY 2016 EXPENSES AND LIABILITIES

A comparison between actual and budgeted operating and routine maintenance expenses for FY 2016 is shown in **Table 4.7**.

Actual FY 2016 operating expenses were 2.3 percent, or $110 thousand, lower than the FY 2016 operating budget. This variance is primarily due to the decrease in the insurance premiums. Routine maintenance expenses were approximately 8.5 percent, or $217 thousand, lower than the FY 2016 budget amount primarily due to the timing of a new contract. Overall, actual FY 2016 operating and routine maintenance expenses were 4.5 percent, or $327 thousand lower than the budget.

Table 4.7
Sunshine Skyway Bridge
Operating and Routine Maintenance Expenses ($000)
FY 2016

Type of Expense	Budget	Actual	Over/ (Under)	Variance
Operating	$4,794	$4,684	($110)	(2.3%)
Routine Maintenance	2,543	2,326	(217)	(8.5)
Total	**$7,337**	**$7,010**	**($327)**	**(4.5%)**

Source: FDOT Office of the Comptroller, Turnpike Enterprise Finance Office and the FY 2015 Enterprise Toll Operations Traffic Engineer's Annual Report.

The Sunshine Skyway Bridge has two liabilities due to the Department. First are expenditures for improvements or new projects on the Sunshine Skyway Bridge. An analysis of the FY 2016 liability for facility costs is presented in **Table 4.8**, which shows the State Transportation Trust Fund (STTF) advances for facility costs.

Table 4.8
Sunshine Skyway Bridge
STTF Advances for Facility Costs ($000)
FY 2016

Transaction	Amount
Balance, beginning of year	$12,511
Additions[1]	9,506
Reductions[2]	(12,511)
Balance, end of year	$9,506

Source: FDOT Office of the Comptroller.
(1) Additions represent costs incurred in the FY being reported.
(2) Reductions represent costs from prior FY that were reimbursed in the FY being reported.

The second liability is for off-system improvements and is presented in **Table 4.9**. Off-system capital projects, including the Right-of-Way purchases related to the Gateway Expressway and the proposed Tampa Bay Express, and reconstruction of the Skyway rest areas. These costs are initially funded by the STTF and are being reimbursed by excess revenue after operating and maintenance (O&M) expenses and facility costs. Pursuant to **Section 338.165** (4), Florida Statutes, the Department is authorized to issue bonds backed by Sunshine Skyway Bridge toll revenues to help fund these needed transportation projects located in Manatee, Hillsborough and Pinellas Counties. Subject to change, the Department plans to issue bonds in FY 2019 backed by Sunshine Skyway Bridge revenue.

Table 4.9
Sunshine Skyway Bridge
Deferred STTF Advances for Off-System Improvements ($000)
FY 2016

Transaction	Amount
Balance, beginning of year	$22,848
Additions	715
Reductions	(5,633)
Balance, end of year	$17,930

Source: FDOT Office of the Comptroller.

4.6 TRAFFIC, REVENUE AND EXPENSE FORECASTS

The ratio between historical traffic growth and population growth was used along with projected population growth to estimate future traffic on the Sunshine Skyway Bridge. Population growth in Hillsborough, Manatee, Pasco, Pinellas and Sarasota counties has had a significant impact on the facility. Since the facility is part of the Strategic Intermodal System, the statewide growth in population was also considered.

From FY 2006 to FY 2016, the annual compounded traffic growth rate on the Sunshine Skyway Bridge was approximately 1.2 percent. The historical annual compounded population growth rate for the same period for the five counties was also 0.9 percent. This trend continued in FY 2016 with traffic increase exceeding population growth, due in part to the strengthening economy. According to the latest economic outlook prepared by the Florida Legislature Office of Economic and Demographic Research in August 2016, Florida's population growth is forecast to increase at a compounded growth rate of 1.5 percent over the next five-year period.

Table 4.10
Sunshine Skyway Bridge
Traffic and Gross Toll Revenue Forecasts
FY 2017 through FY 2027

Fiscal Year	Total Traffic (000)	Toll Revenue ($000)				Toll Revenue Comparisons ($000)		
		Revenue with Constant Tolls[1]	Indexing Impact	SunPass® Discount Impact ($000)	Gross Toll Revenue	2015 Annual Report Forecast	Variance	
							Amount	Percent
2017	21,569	$25,426	$0	($26)	$25,400	$25,329	$71	0.3%
2018	22,029	26,011	1,899	(28)	27,882	27,713	169	0.6
2019	22,550	26,533	2,072	(30)	28,575	28,422	153	0.5
2020	23,067	27,038	2,267	(32)	29,273	29,161	112	0.4
2021	23,568	27,498	2,515	(34)	29,979	29,926	53	0.2
2022	24,083	27,966	2,782	(35)	30,713	30,722	(9)	(0.0)
2023	24,487	28,442	3,760	(37)	32,165	32,569	(404)	(1.2)
2024	24,891	28,926	4,057	(38)	32,945	33,440	(495)	(1.5)
2025	25,320	29,389	4,370	(40)	33,719	34,382	(663)	(1.9)
2026	25,718	29,833	4,701	(42)	34,492	35,418	(926)	(2.6)
2027	26,124	30,281	5,052	(44)	35,289	N/A	N/A	N/A

Note: Total traffic corresponds to the adjusted gross toll revenue. N/A The FY 2015 Traffic Engineer's Annual Report forecast went through FY 2026.
(1) Toll revenue forecast without indexing.

Future population estimates have been calculated based on medium projections from the most recent publication by the Bureau of Economic and Business Research (BEBR), College of Business Administration at the University of Florida. The corresponding estimated annual population growth rate through 2020 for the five counties is 1.5 percent, previously shown in **Table 1.4**. The historical ratio of traffic growth to population growth was applied to projected population growth rates to estimate future annual traffic growth on the Sunshine Skyway Bridge. For the ten-year forecast period, traffic is estimated to grow at approximately 1.9 percent per year. Traffic profiles are provided in **Appendix B**, showing two-way AADT on the facility for FY 2016 through FY 2027.

The traffic and gross toll revenue forecasts for FY 2017 through FY 2027 are shown in **Table 4.10**. The gross toll revenue during the first half of the forecast period is slightly higher than the forecast presented in the 2015 Annual Report due in large part to FY 2016 actual revenues exceeding last year's projection. However, the reverse is true in the second half of the forecast period due to lower annual CPI projection than last year.

Additionally, there was negligible impact on traffic as a result of the July 1, 2015 (FY 2016) toll rate indexing. Since the CPI for calendar year 2015 of 0.1 percent did not prompt a minimum of $0.01 increase in the two-axle toll rate, toll rates for SunPass® were not indexed on July 1, 2016 (FY 2017). Transactions in FY 2018 and thereafter are not expected to be impacted by the annual indexing of SunPass® toll rates. Further, the cash toll rate indexing that occurs every 5 years (FY 2018 and FY 2023) is expected to have minimal impact on traffic. **Appendix A** includes future indexed toll rate schedules.

The projected operating and maintenance expenses for FY 2017 through FY 2027 are shown in **Table 4.11**. The operating expenses in FY 2017 represent the budget amount for that fiscal year (see **Appendix C** for a detailed description of the FY 2016 operating

Table 4.11
Sunshine Skyway Bridge
Projected Operating and Maintenance Expenses ($000)
FY 2017 through FY 2027

Fiscal Year	Operating Expense	Routine Maintenance Expense	Total Operating & Routine Maintenance Expenses	Periodic Maintenance Expense(1)	Total O&M Expenses
2017	$4,649	$3,195	$7,844	$6,118	$13,962
2018	4,742	2,458	7,200	12,411	19,611
2019	4,837	3,112	7,949	8,276	16,225
2020	4,934	2,489	7,423	6,885	14,308
2021	5,033	3,161	8,194	5,056	13,250
2022	5,134	2,305	7,439	5,157	12,596
2023	5,237	3,224	8,461	5,260	13,721
2024	5,342	2,351	7,693	5,365	13,058
2025	5,449	3,289	8,738	5,473	14,211
2026	5,558	2,398	7,956	5,582	13,538
2027	5,669	3,354	9,023	5,694	14,717

Note: Operating expenses are based on the budget developed by Turnpike Enterprise Finance Office for FY 2016.
(1) Periodic maintenance expenses include bridge repairs, bridge painting, Florida Highway Patrol services and other Department-funded improvements included in the 5-year Work Program and are reported on a cash basis. Periodic maintenance expenses beyond FY 2021 have not been fully programmed, however, a minimal level of preservation (excluding extraordinary expenses such as major bridge repairs) has been estimated based on FY 2021 expenses increased at 2.0 percent annually.

expense budget). Subsequent to FY 2017, operating expenses are projected to grow at 2.0 percent annually to account for inflation.

The routine maintenance expense forecast is provided by the Department's Office of Project Finance through FY 2022. Subsequent to FY 2022, routine maintenance expenses have been increased 2.0 percent annually.

Periodic maintenance expenses were provided by the Department's Office of Project Finance and are based on estimated expenditures for projects included in the Work Program and include bridge repairs, bridge painting and fishing pier repairs.

Net revenues are currently being used to reimburse the Department, first for system related costs, and then non-system related costs (long term debt).

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WEKIVA PARKWAY

5.1 BACKGROUND

The Wekiva Parkway (SR 429) will be a 25-mile toll road that, upon its full opening, complete the beltway around Central Florida. The Parkway was authorized in 2004 by the Wekiva Parkway and Protection Act (Chapter 369, Part III, F.S.) and is being developed jointly by the Florida Department of Transportation (FDOT) and the Central Florida Expressway Authority (CFX) with FDOT responsible for the portions in Lake and Seminole counties. In addition to completing Central Florida's beltway, the Wekiva Parkway will provide travel alternatives. The Parkway also will relieve SR 46, US 441 and other area roads of traffic congestion resulting from intensifying growth and travel between Orange, Lake and Seminole Counties. It is also expected to improve safety and reduce vehicle crash fatalities, particularly on SR 46.

As part of the Parkway's enabling legislation, the development of the Parkway has environmental protections for the Wekiva River Basin, including the setting aside of more than 3,400 acres of land for conservation and numerous wildlife bridges, along with elevating the highway to reduce vehicle/wildlife interactions. Included as a part of the legislation, and to be incorporated into the overall project, are non-toll road improvement projects which include widening of existing roads in the corridor, the addition of parallel service roads and the construction of a multi-use trail.

As noted above, the Parkway is being developed jointly by FDOT and the CFX. When the Parkway opens, Florida's Turnpike Enterprise will operate the FDOT sections.

Figure 5.1 depicts the proposed location of the project within the major roadway network in the area. The project directly connects on the southwest with SR Toll 429 (Western Beltway) at Orange Blossom Trail (U.S. 441) in Orange County and on the east with SR Toll 417 (Seminole Expressway) at Interstate 4 in Seminole County. It also includes a "spur" on the western end, forming a "Y" junction with the Parkway and extending northwestward to a connection with SR 46 east of Mount Dora.

The FDOT portion, extending from the Mount Plymouth area on the west to the Sanford area on the east, is planned to have four all-electronic tolling points. A full-length trip on the Department's section will cost $2.25 for SunPass® customers when the project is fully opened. For non-SunPass® vehicles, a license plate photo/billing option (TOLL-BY-PLATE®) will be available for a higher rate ($3.00, plus $2.50 per invoice in administrative fees). In keeping with Florida state law, toll rates increase each year, indexed to the Consumer Price Index. **Table 5.1** lists the individual sections of the Wekiva Parkway and includes the ownership, start and end points, length,

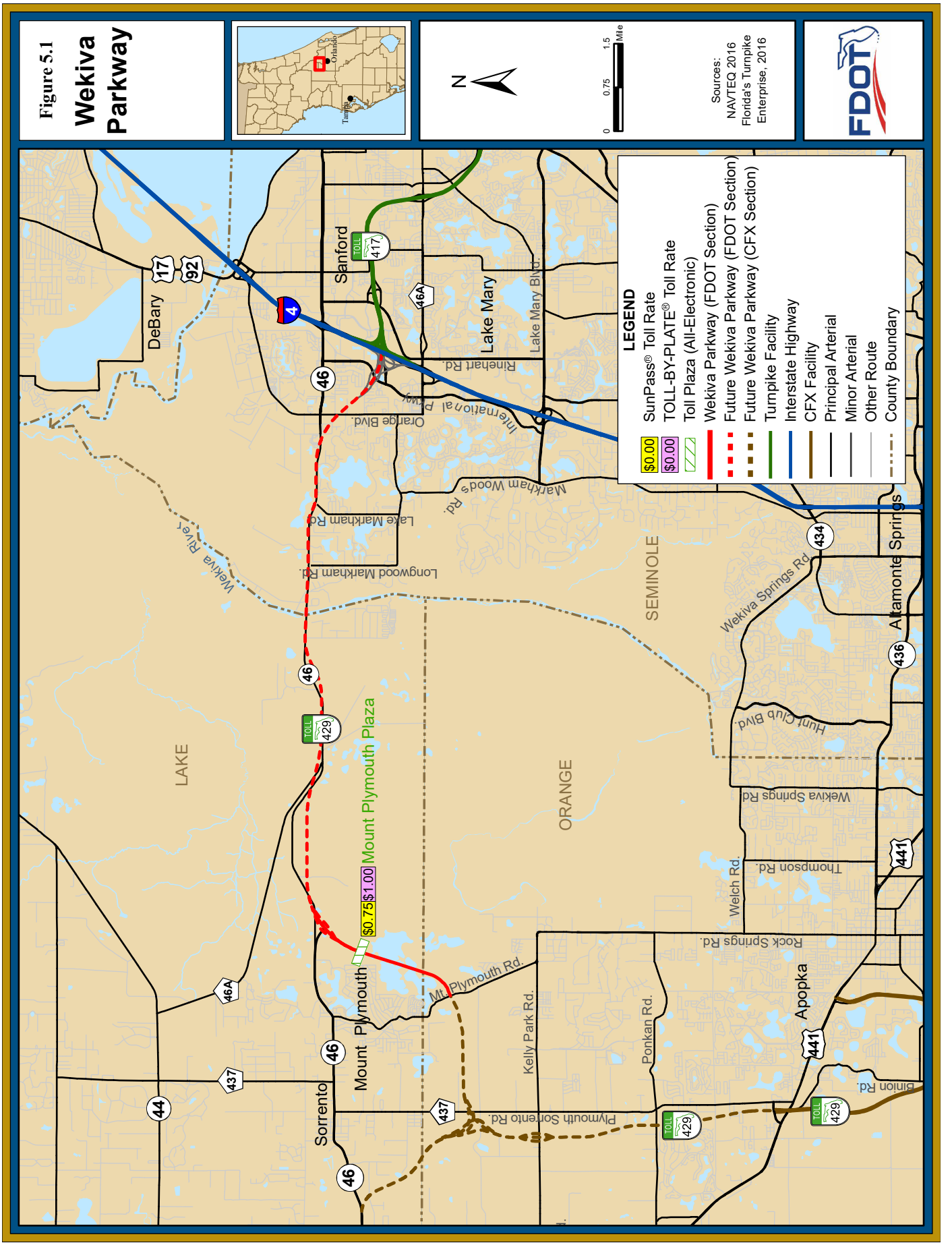


Figure 5.1
Wekiva Parkway
Orlando
Tampa
N
0
0.75
1.5
Mile
Sources:
NAVTEQ 2016
Florida's Turnpike
Enterprise, 2016
FDOT
LEGEND
SunPass® Toll Rate
TOLL-BY-PLATE® Toll Rate
Toll Plaza (All-Electronic)
Wekiva Parkway (FDOT Section)
Future Wekiva Parkway (FDOT Section)
Future Wekiva Parkway (CFX Section)
Turnpike Facility
Interstate Highway
CFX Facility
Principal Arterial
Minor Arterial
Other Route
County Boundary
$0.00
$0.00
$0.75
$1.00
Mount Plymouth Plaza
DeBary
Sanford
Lake Mary
Lake Mary Blvd.
Rinehart Rd.
International Pkwy.
Orange Blvd.
Markham Woods Rd.
Lake Markham Rd.
Longwood Markham Rd.
Wekiva River
SEMINOLE
ORANGE
LAKE
Wekiva Springs Rd.
Altamonte Springs
Hunt Club Blvd.
Thompson Rd.
Welch Rd.
Rock Springs Rd.
Apopka
Binion Rd.
Ponkan Rd.
Kelly Park Rd.
Mt. Plymouth Rd.
Mount Plymouth
Sorrento
Plymouth Sorrento Rd.
17
92
4
46
46A
434
436
441
44
437
429
417

Table 5.1
Wekiva Parkway
Facility Project Descriptions

Owner	Section	Project Limit	Length (miles)	Construction Start Date	Scheduled Opening Date
CFX	1A	US 441 to Ponkan Road	2.13	June, 2015	Second Quarter, 2017
	1B	Ponkan Road to New Kelly Park Road Interchange	2.38	August, 2015	Second Quarter, 2017
	2A	Kelly Park Road Interchange to CR 435/Mt. Plymouth Road	2.90	August, 2016	First Quarter, 2018
	2B	Systems Interchange (Haas Road-Ondich Road)	0.78	January, 2016	First Quarter, 2018
	2C	Round Lake Road to Lake County-Orange County Line	1.40	May, 2016	First Quarter, 2018
FDOT	3A	SR 46 from Vista View Lane to Round Lake Road	1.40	2017	Third Quarter, 2019
	3B	SR 46 from US 441 to Vista View Lane (US 441 flyover interchange)	0.00	2017	Third Quarter, 2019
	4A	CR 435/Mount Plymouth Road to the Lake County Line	3.14	N/A	January 20, 2016
	4B	Orange County Line to Old McDonald Road			
	5	CR 46A Realignment from Arundel Way to SR 46	2.50	2017	Third Quarter, 2019
	6	Old McDonald Road to Wekiva Park Road	5.50	2017	Second Quarter, 2020
	7A	Wekiva Park Drive to Orange Boulevard	3.53	Late 2017 - Early 2018	Second Quarter, 2020
	7B	SR 46 from Center Road to I-4	1.87	2018	Fourth Quarter, 2020
	8	Orange Boulevard to Rinehart Road	2.63	2018	Fourth Quarter, 2021

Source: *www.wekivaparkway.com*

construction start dates, and scheduled opening dates.

On January 20, 2016, FDOT opened the first section of the Wekiva Parkway. Sections 4A and 4B extend from County Road 435 (Mount Plymouth Road) near Haas Road in Orange County to SR 46 east of Camp Challenge Road in Lake County. The toll is $0.75 for those with SunPass® or $1.00 via the TOLL-BY-PLATE® program, plus $2.50 per invoice in administrative fees.

5.2 FY 2016 TRANSACTIONS, REVENUES AND EXPENSES

As shown in **Table 5.2**, there were nearly 223 thousand transactions in FY 2016 and toll revenues amounting to nearly $166 thousand, resulting in an average toll of $0.752 per vehicle.

The monthly transaction variation for the six-month opening period in FY 2016 is analyzed in **Table 5.3**. On average, 1,367 vehicles traveled through the toll plaza each day. As also shown in the table, the average daily traffic (ADT) has been steadily increasing each month that the facility has been opened due to ramp up.

Transactions on Wekiva Parkway also vary by time of day. **Graph 5.1** shows the number of hourly weekday and weekend transactions of a typical week at the

Table 5.2
Wekiva Parkway
Monthly Transactions and Toll Revenue
FY 2016

Month	Transactions			Total Revenue	Average Toll
	Toll Paying	Non Revenue	Total		
January 2016[1]	13,144	170	13,314	$9,522	$0.715
February	33,939	391	34,330	24,496	0.714
March	39,758	389	40,147	30,122	0.750
April	40,040	441	40,481	31,318	0.774
May	44,686	451	45,137	34,101	0.755
June	48,969	436	49,405	36,395	0.737
Total	**220,536**	**2,278**	**222,814**	**$165,954**	**$0.744**

Source: FDOT Office of the Comptroller and Turnpike Enterprise Finance Office.
Note: The non-revenue class includes authorized vehicles that pass through a toll plaza without incurring a toll (i.e., law enforcement, emergency vehicles) and transactions reported during toll suspensions attributable to hurricanes.
(1) The facility opened on January 20, 2016.

Table 5.3
Wekiva Parkway
Seasonal Transaction Variation
FY 2016

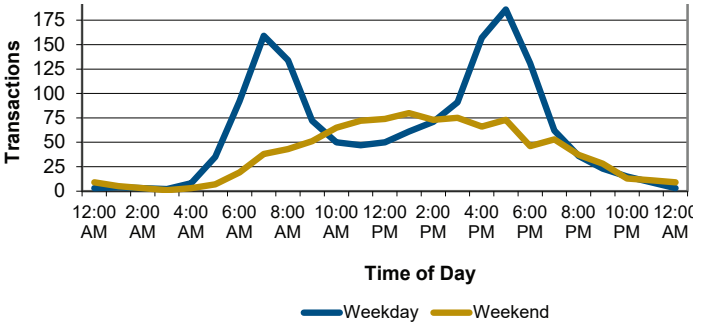
Month	Average Daily Transactions			Seasonal Factor
	Northbound Lanes	Southbound Lanes	Total	
January 2016[1]	500	600	1,100	0.79
February	600	600	1,200	0.86
March	700	600	1,300	0.93
April	700	700	1,400	1.00
May	700	700	1,400	1.00
June	900	800	1,700	1.21
AADT[2]	**700**	**700**	**1,400**	**1.00**

Source: FDOT Office of the Comptroller and Turnpike Enterprise Finance Office.
(1) The facility opened on January 20, 2016.
(2) Based on 163 days of operation.

mainline plazas during FY 2016. Weekday travel demand on the facility peaks from 7:00 to 8:00 AM with an average of 159 vehicles and again between 5:00 and 6:00 PM, with an average of 186 vehicles. Weekend traffic remains relatively flat throughout the day indicating that this facility is primarily used as a commuting route on weekdays.

The "N minus 1" method of toll collection is used on the Wekiva Parkway. This method results in a more equitable toll structure for passenger cars relative to trucks.

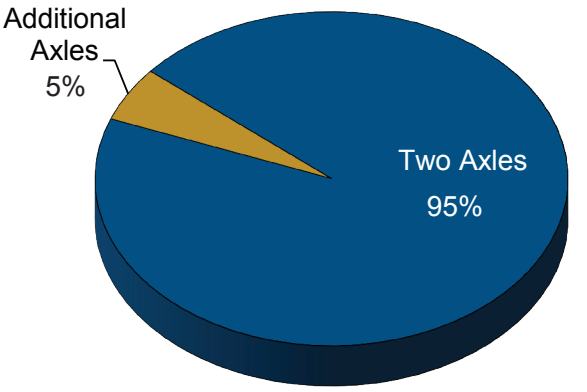
Graph 5.1
Wekiva Parkway
Typical Hourly Transactions
FY 2016



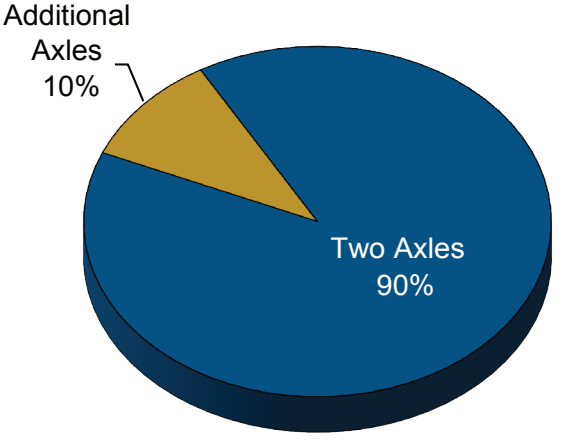
Source: Data obtained from Turnpike Enterprise Finance Office for the 7-day period beginning Monday, April 11, 2016.

Graph 5.2 shows the truck transactions and revenue

Graph 5.2
Wekiva Parkway
Transactions by Axle Class
FY 2016



Revenue Contribution by Axle Class
FY 2016



contributions for FY 2016. Trucks (3+ axle vehicles) accounted for 5 percent of traffic on the facility and 10 percent of the revenue. In terms of actual revenue contributions, two-axle vehicles provided approximately $149 thousand while vehicles with three or more axles provided $17 thousand in revenue for FY 2016.

Table 5.4 shows the operating and routine maintenance expenses in FY 2016 along with a comparison between the FY 2016 actual and budgeted operating and routine maintenance expenses. For FY 2016, operating and routine

maintenance expenses amounted to $62 thousand. Maintenance of Wekiva Parkway, is under private contract, with the Department providing oversight through its Asset Management Coordinator. Maintenance activities include litter removal and repairs due to accidents. Road Ranger service is not currently provided on the 3-mile portion that opened in January 2016.

The Department monitors the cost associated with the collection of tolls from customers by comparing the annual operating expense budget for the facility to the actual performance for the year. Actual operating expenses were 62.9 percent, or $105 thousand less than the FY 2016 budget primarily due to the facility opening later than originally anticipated.

Table 5.4
Wekiva Parkway
Operating and Routine Maintenance Expenses ($000)
FY 2016

Type of Expense	Budget	Actual	Over/ (Under)	Variance
Operating	$167	$62	($105)	(62.9%)
Routine Maintenance	-	-	0	N/A
Total	$167	$62	($105)	(62.9%)

Source: FDOT Office of the Comptroller and Turnpike Enterprise Finance Office.

5.3 SUNPASS®

SunPass® technology is used exclusively on Wekiva Parkway (see **Appendix A** for current lane configurations). Under the current toll rate structure, SunPass® customers pay less than non-SunPass® customers (TOLL-BY-PLATE®).

Table 5.5 shows transactions by payment method on Wekiva Parkway for FY 2016. SunPass® accounted for 84 percent of the total transactions in FY 2016. TOLL-BY-PLATE® transactions constituted the remaining 16 percent.

Table 5.5
Wekiva Parkway
Transactions by Payment Method
FY 2016

Month	Transactions			Percent SunPass®
	SunPass®	Non-SunPass®	Total	
January 2016[1]	11,118	2,196	13,314	83.5
February	28,817	5,513	34,330	83.9
March	34,216	5,931	40,147	85.2
April	34,606	5,875	40,481	85.5
May	38,196	6,941	45,137	84.6
June	41,094	8,311	49,405	83.2
Total	**188,047**	**34,767**	**222,814**	
Percentage	**84.4%**	**15.6%**	**100.0%**	

Source: Turnpike Enterprise Finance Office.
(1) The facility opened on January 20, 2016.

Table 5.6 shows gross toll revenue by payment method. Revenue attributable to SunPass® was approximately $148,300, representing 89 percent of the total revenue in FY 2016. TOLL-BY-PLATE® constituted the remaining 11 percent of revenue ($17,600). Monthly SunPass® revenue percentages ranged from 87 to 91 percent during the short time the facility has been open.

5.4 FORECASTS

Table 5.6
Wekiva Parkway
Gross Toll Revenue by Payment Method
FY 2016

Month	Gross Toll Revenue			Percent SunPass®
	SunPass®	Non-SunPass®	Total	
January 2016[1]	$8,306	$1,216	$9,522	87.2
February	21,461	3,035	24,496	87.6
March	26,863	3,259	30,122	89.2
April	27,997	3,321	31,318	89.4
May	30,647	3,454	34,101	89.9
June	33,032	3,363	36,395	90.8
Total	**$148,306**	**$17,648**	**$165,954**	
Percentage	**89.4%**	**10.6%**	**100.0%**	

Source: FDOT Office of the Comptroller (Annual Toll Revenue) and Turnpike Enterprise Finance Office
(1) The facility opened on January 20, 2016.

Table 5.7
Wekiva Parkway
Projected Operating and Maintenance Expenses ($000)
FY 2017 through FY 2027

Fiscal Year	Operating Expense	Routine Maintenance Expense	Total Operating & Routine Maintenance Expenses	Periodic Maintenance Expense	Total O&M Expenses
2017	$231	$1	$232	$0	$232
2018	236	0	236	0	236
2019	241	0	241	0	241
2020	246	0	246	0	246
2021	251	0	251	0	251
2022	256	0	256	0	256
2023	261	0	261	0	261
2024	266	0	266	0	266
2025	271	0	271	0	271
2026	276	0	276	0	276
2027	282	0	282	0	282

Note: Operating expenses are based on the budget developed by Turnpike Enterprise Finance Office for FY 2017.

Wekiva Parkway traffic and revenue forecasts, as provided by the Office of Toll Finance, for FY 2017 – FY 2027 are shown in **Appendix D**. Projected operating and maintenance expenses during the FY 2017 – FY 2027 forecast period are shown in **Table 5.7**. The operating expenses for FY 2017 presented in this table represent the budgeted amount for that fiscal year (see **Appendix C** for a detailed description of the FY 2017 operating expense budget).

Future (long-term) routine and periodic maintenance costs have not yet been programmed.