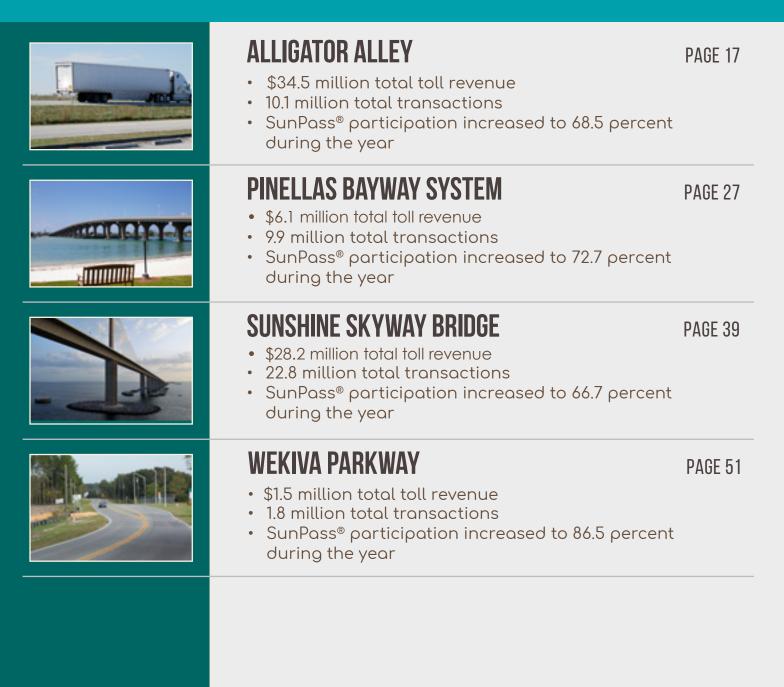
DEPARTMENT-OWNED FACILITIES



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ALLIGATOR ALLEY

2.1 BACKGROUND

Alligator Alley 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. The two intermediate toll-free interchanges are located at SR 29, the route to Immokalee; and CR 833, serving the Miccosukee Indian Reservation.

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. In FY2013 the first full year of toll indexing was implemented. SunPass® toll rates are indexed each year while cash rates are indexed every five years to pace with the rounding of the cash toll rate in quarter increments. **Figure 2.1** shows a detailed map of the facility with the most recent toll rates effective.

Alligator Alley annual traffic and toll revenue from FY 2009 through FY 2019 are presented in **Table 2.1**. For this period, revenues have increased by 78.2 percent overall while transactions grew by 38.7 percent overall. This equates to an annual average growth rate of 5.9 percent for revenue and 3.3 percent for traffic. During the 10-year period, traffic and revenue were affected by the toll rate adjustments. During FY 2018, tolls were suspended for fifteen

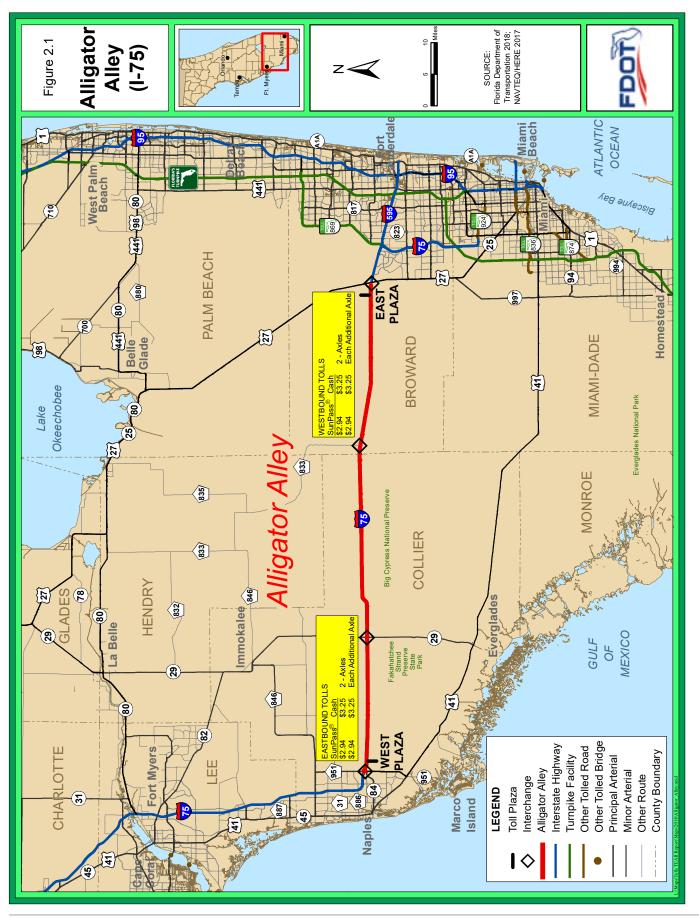
TABLE 2.1 - ALLIGATOR ALLEY
HISTORICAL TRANSACTIONS AND REVENUE GROWTH
FY 2009 THROUGH FY 2019

		Transactio	ns (000)	Toll Rev (\$0			
Fiscal Year	Toll Paying	Non Revenue	Total	Percent Change	Amount	Percent Change	Average Toll
2009	7,193	76	7,269	-	\$19,384	-	\$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	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	7,962	38	8,000	5.7	26,711	6.4	3.339
2015	8,471	39	8,510	6.4	28,535	6.8	3.353
2016	9,134	35	9,169	7.7	30,523	7.0	3.329
2017	9,453	146	9,599	4.7	32,200	5.5	3.355
2018	9,444	289	9,733	1.4	32,845	2.0	3.375
2019	10,054	29	10,083	3.6	34,543	5.2	3.426

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) Per new revenue reporting methodology, starting FY 2014 toll revenue excludes violation and miscellaneous revenues, which are immaterial to toll revenues reported within





days beginning on September 5, 2017, to aid in the evacuation and recovery efforts due to Hurricane Irma. This suspension resulted in an approximate \$1.3 million revenue loss.

Historical operating and routine maintenance expenses from FY 2009 through FY 2019 are shown in **Table 2.2**. Operating expenses have increased from \$3.7 million in FY 2009 to approximately \$5.2 million in FY 2019. FY 2019 operating expenses increased 2.3 percent (\$117 thousand) over FY 2018 operating expenses due to higher toll collection costs resulting from increased traffic growth.

During the same period, routine maintenance expenses increased from \$3.3 million to \$5.2 million. Combined, total O&M expenses increased from \$7.0 million in FY 2009 to \$10.4 million in FY 2019.

In addition to routine maintenance expenses, renewal and replacement and capital improvement periodic costs totaling \$6.8 million were incurred primarily for a safety project, fencing, parking facility, toll system replacement, rest area mitigation and resurfacing.

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.

TABLE 2.2 - ALLIGATOR ALLEY HISTORICAL OPERATING AND ROUTINE MAINTENANCE EXPENSES FY 2009 THROUGH FY 2019

Fiscal Year	Operating Expense ⁽¹⁾ (\$000)	Routine Maintenance Expense (\$000)	Total O&M Expenses (\$000)
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
2017	4,910	3,672	8,582
2018	5,063	4,910	9,973
2019	5,180	5,236	10,416

Source: FDOT Office of the Comptroller.

(1) Operating Expense restated from FY 2014 through FY 2017.

2.2 FY 2019 TRANSACTIONS, REVENUES AND EXPENSES

Monthly transactions and toll revenue on Alligator Alley during FY 2019 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 5.3 million for the year compared to 4.8 million at the West plaza, totaling approximately 10.1 million transactions on the facility for FY 2019. The corresponding revenues were approximately \$18.3 million and \$16.2 million at the East and West plazas, respectively, for a systemwide total of \$34.5 million. The third quarter of FY 2019 (i.e., January through March) was the peak period for travel on the facility.

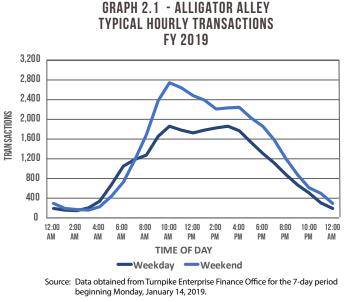
	Tran	sactions	(000)	Toll	Revenue(\$	000)
Month	East Plaza	West Plaza	Total	East Plaza	West Plaza	Total
July 2018	454	411	865	\$1,536	\$1,393	\$2,929
August	428	381	809	1,399	1,309	2,708
September	389	343	732	1,345	1,172	2,517
1st Quarter Total	1,271	1,135	2,406	4,280	3,874	8,154
October	408	358	766	1,435	1,243	2,678
November	450	403	853	1,564	1,379	2,943
December	468	415	883	1,598	1,403	3,001
2nd Quarter Total	1,326	1,176	2,502	4,597	4,025	8,622
January 2019	443	395	838	1,540	1,354	2,894
February	432	387	819	1,491	1,324	2,815
March	510	460	970	1,751	1,558	3,309
3rd Quarter Total	1,385	1,242	2,627	4,782	4,236	9,018
April	446	399	845	1,572	1,385	2,957
May	463	417	880	1,605	1,425	3,030
June	437	386	823	1,475	1,287	2,762
4th Quarter Total	1,346	1,202	2,548	4,652	4,097	8,749
Annual Total	5,328	4,755	10,083	\$18,311	\$16,232	\$34,543

TABLE 2.3 - ALLIGATOR ALLEY Monthly transactions and toll revenue Fy 2019

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.

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 2019. 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 seasonal transaction variation in FY 2019 is analyzed in **Table 2.4**. On average, 27,600 vehicles traveled through the East and West toll plazas each day. The seasonal



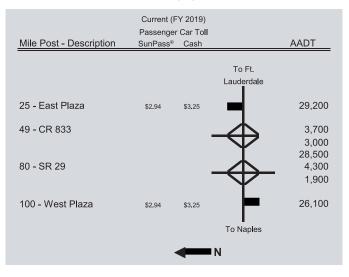
transaction analysis identifies periods of the year when traffic exceeds or falls below the normal pattern observed on the facility under average conditions. Based on average daily transactions at the East and West plazas, March was the highest month at 13 percent above the average for the facility, while September was the lowest month at 12 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.

TABLE 2.4 - ALLIGATOR ALLEY Seasonal transaction variation Fy 2019

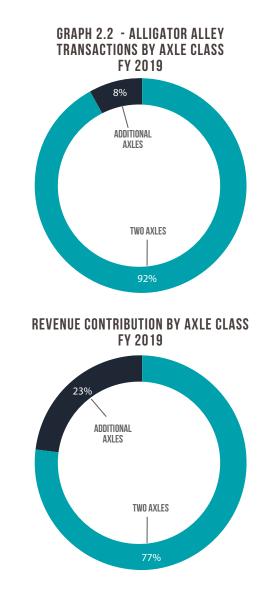
	Average Daily Transactions					
Month	East Plaza	West Plaza	Total	Seasonal Factor		
July 2018	14,600	13,300	27,900	1.01		
August	13,800	12,300	26,100	0.95		
September	13,000	11,400	24,400	0.88		
October	13,200	11,600	24,800	0.90		
November	15,000	13,400	28,400	1.03		
December	15,100	13,400	28,500	1.03		
January 2019	14,300	12,700	27,000	0.98		
February	15,400	13,800	29,200	1.06		
March	16,500	14,800	31,300	1.13		
April	14,900	13,300	28,200	1.02		
May	14,900	13,500	28,400	1.03		
June	14,600	12,900	27,500	1.00		
AADT	14,600	13,000	27,600	1.00		

The FY 2019 two-way annual average daily traffic (AADT) profile for the facility is presented in **Figure 2.2**. Total two-way traffic volumes at the East mainline location averaged approximately 29,200 vehicles per day. Corresponding volumes at the West plaza averaged 26,100 vehicles per day. The East mainline location had slightly 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.

FIGURE 2.2 - ALLIGATOR ALLEY TWO-WAY AADT PROFILE FY 2019



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 shows the truck transactions and revenue contributions for FY 2019. Since Alligator Alley is part of the interstate highway system, the truck percentages are the greatest of the Department-owned and Departmentten operated toll facilities. Trucks accounted for eight percent of traffic on the facility and 23 percent of the revenue. In terms of actual contributions. two-axle vehicles revenue provided approximately \$26.6 million while



vehicles with three or more axles provided \$7.9 million in revenue for FY 2019.

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 2019 actual and budgeted operating and routine maintenance expenses. Actual operating expenses were 1.0 percent more than the FY 2019 budget, while actual routine maintenance expenses were 5.3 percent lower. Overall, actual operating and maintenance expenses were within 2.3 percent of the budget.

TABLE 2.5 - ALLIGATOR ALLEY OPERATING AND ROUTINE MAINTENANCE EXPENSES FY 2019

Type of Expense	Budget (\$000)	Actual (\$000)	Over/ (Under) (\$000)	Variance
Operating	\$5,129	\$5,180	\$51	1.0%
Routine Maintenance	5,527	5,236	(291)	(5.3)
Total	\$10,656	\$10,416	(\$240)	(2.3%)

Source: FDOT Office of the Comptroller, Turnpike Enterprise Finance Office and the FY 2018 Enterprise Toll Operations Traffic Engineer's Annual Report.

2.3 SUNPASS[®]

SunPass® technology was implemented on Alligator Alley beginning in October 1999 (see Appendix A for current lane configurations). Table 2.6 shows transactions by payment method on Alligator Alley for FY 2019. SunPass® accounted for 68.5 percent of the total transactions in FY 2019, an increase from the 66.6 percent realized in FY 2018. Non-SunPass® transactions constituted the remainina 31.5 percent. Monthly SunPass® percentages ranged from approximately 63 percent to over 72 percent during the year. 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 paymentmethod. Revenue attributable to SunPass®was approximately \$24.4 million, representing70.5 percent of the total revenue in FY 2019.Monthly SunPass® revenue percentages rangedfrom 68 to 73 percent during the year.

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) from the prior calendar year. Toll rate adjustments for inflation may be made no more frequently than once a year (i.e., SunPass® toll rates) and must be made no less frequently

TABLE 2.6 - ALLIGATOR ALLEY TRANSACTIONS BY PAYMENT METHOD FY 2019

	Tra			
Month	SunPass®	Non- SunPass®	Total	Percent SunPass®
July 2018	612	253	865	70.8%
August	575	234	809	71.1
September	525	207	732	71.7
October	547	219	766	71.4
November	605	248	853	70.9
December	606	277	883	68.6
January 2019	575	263	838	68.6
February	556	263	819	67.9
March	649	321	970	66.9
April	558	287	845	66.0
May	578	302	880	65.7
June	517	306	823	62.8
Total	6,903	3,180	10,083	
Percentage	68.5%	31.5%	100.0%	

Source: Turnpike Enterprise Finance Office.

TABLE 2.7 - ALLIGATOR ALLEY GROSS TOLL REVENUE BY PAYMENT METHOD FY 2019

	Gross			
Month	SunPass®	Non- SunPass®	Total	Percent SunPass®
July 2018	\$2,100	\$829	\$2,929	71.7%
August	1,935	773	2,708	71.5
September	1,826	691	2,517	72.5
October	1,948	730	2,678	72.7
November	2,108	835	2,943	71.6
December	2,078	923	3,001	69.2
January 2019	2,027	867	2,894	70.0
February	1,953	862	2,815	69.4
March	2,261	1,048	3,309	68.3
April	2,044	913	2,957	69.1
May	2,132	898	3,030	70.4
June	1,955	807	2,762	70.8
Total	\$24,367	\$10,176	\$34,543	
Percentage	70.5%	29.5%	100.0%	

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

than once every five years (i.e., cash toll rates) 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.

For FY 2018, CPI of 1.3 percent prompts a \$0.04 increase at the east and west toll plazas for two-axle toll rates for SunPass® customers. Furthermore, cash toll rates, last increased in 2012, experienced the fifth-year CPI increase (6.6 percent for prior 5-year period rounded to the quarter) of \$0.25 for two-axle vehicles. For FY 2019, SunPass® toll rates were held constant (i.e., no application of CPI) until after satisfactory delivery of the new Centralized Customer Service System.

2.5 TRAFFIC, REVENUE AND EXPENSE FORECASTS

The ratio between historical traffic growth and population growth is used along with projected population growth а guideline to estimate as 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 2019, 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 1.3 percent.

Future population estimates have been calculated based

medium projections from on 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 2030 for the four counties is 1.2 percent, as previously shown in Table 1.3. The historical ratio of traffic growth to population growth for the period FY 2010 to FY 2019 was estimated at 2.8. 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 2020 through FY 2030 are shown in **Table 2.8**. The forecast table includes the impact that indexing will have on revenue. Overall, the gross toll revenue forecast is lower than the forecast presented in the 2018 Annual Report due to FY 2019 actual revenues being less than

TABLE 2.8 - ALLIGATOR ALLEY TRAFFIC AND GROSS TOLL REVENUE FORECASTS FY 2020 THROUGH FY 2030

		Toll	Revenue (\$	000)	Toll Reve	nue Comp (\$000)	arisons
		Revenue			2018	Varia	ance
Fiscal Year	Total Traffic (000)	with Constant Tolls ⁽¹⁾	Indexing Impact	Gross Toll Revenue	Annual Report Forecast	Amount	Percent
2020	10,345	\$35,374	0	\$35,374	\$36,449	(\$1,075)	(2.9)
2021	10,573	36,192	\$345	36,537	37,592	(1,055)	(2.8)
2022	10,784	36,916	755	37,671	38,705	(1,034)	(2.7)
2023	11,000	37,654	1,933	39,587	40,628	(1,041)	(2.6)
2024	11,198	38,332	2,390	40,722	41,739	(1,017)	(2.4)
2025	11,388	38,984	2,877	41,861	42,840	(979)	(2.3)
2026	11,570	39,607	3,393	43,000	43,929	(929)	(2.1)
2027	11,744	40,202	3,923	44,125	45,019	(894)	(2.0)
2028	11,920	40,805	5,967	46,772	46,921	(149)	(0.3)
2029	12,087	41,376	6,535	47,911	48,022	(111)	(0.2)
2030	12,244	41,914	7,151	49,065	N/A	N/A	N/A

Note: Total traffic corresponds to the gross toll revenue.

N/A The FY 2018 Traffic Engineer's Annual Report forecast went through FY 2029.(1) Toll revenue forecast without indexing.

last year's projection. Further, FY 2020 revenues are impacted by a \$0.3 million revenue reduction prompted by the 4-day toll suspension starting on September 1, 2019 due to Hurricane Dorian. After satisfactory delivery of the new Centralized Customer Service System, the forecast assumes toll rate indexing every year beginning in FY 2021 for SunPass customers and every five years (FY 2023 and FY 2028) for cash customers. Transactions in FY 2020 and thereafter are not expected to be impacted by the annual indexing of toll rates. 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 tall rate schedules.

Projected operating and maintenance (1) expenses during the same forecast period rep are shown in **Table 2.9**. The operating expenses for FY 2020 presented in this table represent the budgeted amount for that fiscal year (see **Appendix C** for a detailed description of the FY 2020 operating expense budget). Subsequent to FY 2020, operating expenses (after accounting for fixed costs) are projected to increase generally at 2.5 percent each year. The routine maintenance expense forecast is provided by the Office of Project Finance through FY 2025. Subsequent to FY 2025, routine maintenance expenses are increased at 2.5 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, safety project, and lighting projects. Total operating and maintenance expenses are projected to increase from \$16.4 million in FY 2020 to \$18.9 million in FY 2030 due to the year in which the commitments are programmed

TABLE 2.9 - ALLIGATOR ALLEY PROJECTED OPERATING AND MAINTENANCE EXPENSES FY 2020 THROUGH FY 2030

Fiscal Year	Operating Expense (\$000)	Routine Maintenance Expense (\$000)	Total Operating & Routine Maintenance Expenses (\$000)	Periodic Maintenance Expense ⁽¹⁾ (\$000)	Total O&M Expenses (\$000)
2020	\$5,196	\$6,962	\$12,158	\$4,254	\$16,412
2021	5,391	7,136	12,527	8,084	20,611
2022	5,488	7,315	12,803	29,241	42,044
2023	5,588	7,498	13,086	65,262	78,348
2024	5,690	7,685	13,375	24,417	37,792
2025	5,795	7,877	13,672	24,929	38,601
2026	5,902	8,074	13,976	7,873	21,849
2027	6,012	8,275	14,287	3,389	17,676
2028	6,125	8,483	14,608	3,474	18,082
2029	6,241	8,695	14,936	3,561	18,497
2030	6,360	8,912	15,272	3,650	18,922

Note: Operating expenses are based on the budget developed by Turnpike Enterprise Finance Office for FY 2020.

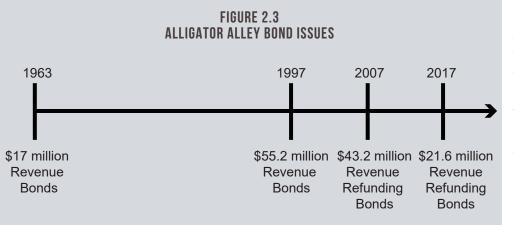
(1) Periodic maintenance expenses include installation of guardrails and cable barrier, rest area construction and other Department-funded R&R and improvements in the 5-year Work Program and are reported on a cash basis. FY 2022 through FY 2025 include resurfacing of the entire roadway. Periodic maintenance expenses beyond FY 2025 are estimated based on normal levels without resurfacing.

and how the commitments are paid out over time.

REVENUE SUFFICIENCY

A timeline of Alligator Alley bond issues is shown in **Figure 2.3**. As of July 1, 2019, bonds in the principal amount of \$18.1 million are outstanding from the 2017A 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 Bond





Note: A list of projects funded by each bond issue is included in Table 1.4 of this report.

Resolution, net revenues mean the revenues remaining after deductions of administrative expenses and the cost of operation and maintenance. Net revenues shall be sufficient in each fiscal year to pay at least 120 percent (1.2 times) of the annual debt service requirements.

Table 2.10 provides a forecast of the debt service coverage of Alligator Alley to meet annual debt service requirements through FY 2030. As shown in the table, Alligator Alley significantly exceeds the 1.2 minimum debt service coverage requirement.

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, 1997, the Department signed a

Memorandum of Agreement ("MOA") with the SFWMD regarding the transfer of the excess toll revenues to the SFWMD. The agreement required for the total annual transfers made by the Department not to exceed \$63.6 million by FY 2016. The department met this requirement and a new MOA with

SFWMD was signed in June 2016 and goes through June 2019. In March 2019, a new MOA with SFWMD was signed to extend the term through August 15, 2029. In FY 2019, \$5.2 million of excess revenues were transferred to SFWMD.

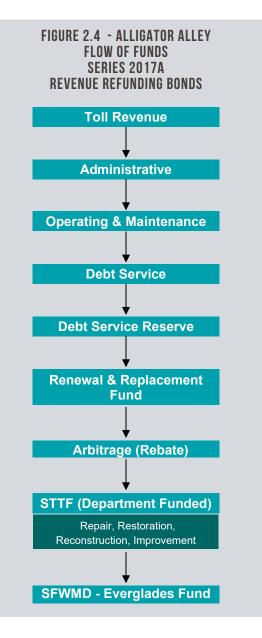
TABLE 2.10 - ALLIGATOR ALLEY Net Toll Revenue Forecast and Debt Service Coverage Fy 2019 Through Fy 2030

		Operating		Debt Se	ervice ⁽³⁾
Fiscal Year	Gross Toll Revenue (\$000)	& Routine Maintenance Expenses ⁽¹⁾ (\$000)	Net Toll Revenue ⁽²⁾ (\$000)	Payment (\$000)	Coverage Ratio
2019	\$34,543	\$10,416	\$24,127	\$2,799	8.6
2020	35,374	12,158	23,216	2,799	8.3
2021	36,537	12,527	24,010	2,799	8.6
2022	37,671	12,803	24,868	2,794	8.9
2023	39,587	13,086	26,501	2,795	9.5
2024	40,722	13,375	27,347	2,795	9.8
2025	41,861	13,672	28,189	2,795	10.1
2026	43,000	13,976	29,024	2,790	10.4
2027	44,125	14,287	29,838	2,793	10.7
2028	46,772	14,608	32,164	-	-
2029	47,911	14,936	32,975	-	-
2030	49,065	15,272	33,793	-	-

(1) Periodic maintenance 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 Offical Statement for the 2017A 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 Key to 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 collected College, for are 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 Finally, travel only. tolls third mainline at the located Tierro plaza, on are collected for Verde. southbound travel only.

Annual transactions and revenue for the facility from FY 2009 through FY 2019 are presented in **Table 3.1**. Total transactions increased from approximately 9.3 million in FY 2009 to 9.9 million



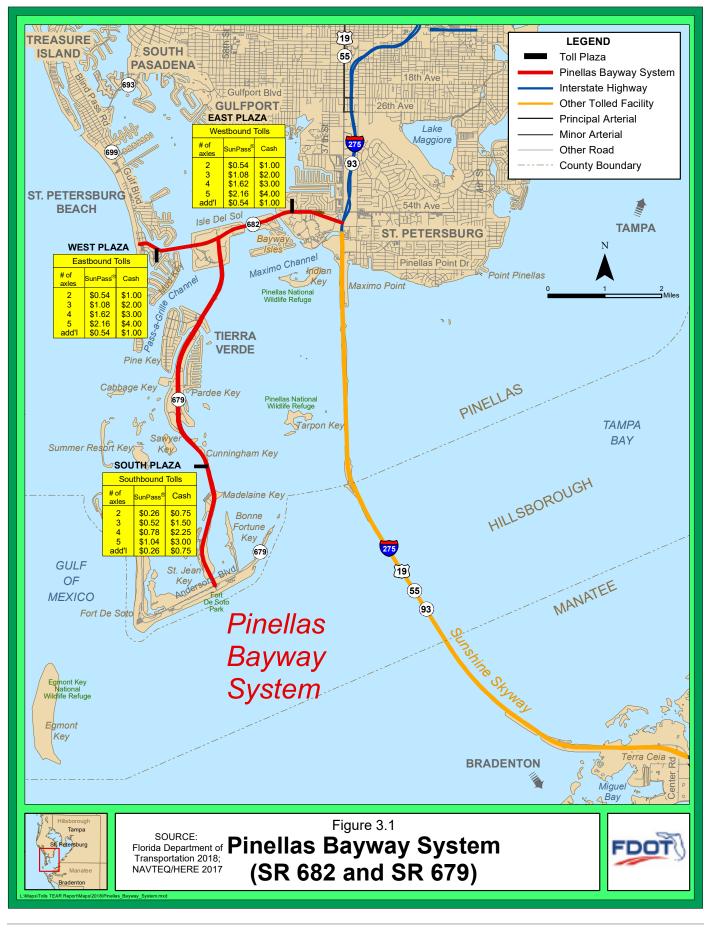
TABLE 3.1 - PINELLAS BAYWAY SYSTEM HISTORICAL TRANSACTIONS AND REVENUE GROWTH FY 2009 THROUGH FY 2019

		Transactio	ons (000)		venue ⁽¹⁾ 00)		
Fiscal Year	Toll Paying	Non Revenue	Total	Percent Change	Amount	Percent Change	Average Toll
2009	9,290	37	9,327	-	\$3,535	-	\$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	4,111	1.9	0.466
2015	9,547	39	9,586	8.7	4,487	9.1	0.468
2016	9,835	40	9,875	3.0	4,656	3.8	0.471
2017	10,007	39	10,046	1.7	4,755	2.1	0.473
2018	9,605	294	9,899	(1.5)	5,100	7.3	0.515
2019	9,910	36	9,946	0.5	6,091	19.4	0.612

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. Higher non revenue transactions in FY 2018 due to toll suspension during Hurricane Irma.
Toll revenue reported net of the SunPass discount since FY 2000. Per new revenue methodology, starting FY 2014 toll revenues exclude violation and miscellaneous revenue, which are immaterial to toll revenues reported within.



in FY 2019, an overall increase of 6.6 percent. During the same period, revenues increased from \$3.5 million in FY 2009 to \$6.1 in FY 2019. During this 10-year period, traffic and revenue declined from FY 2009 through FY 2010 due to the economic recession. Starting in FY 2011 traffic and revenue began to increase annually as economy began to slowly recover the following the recession. Beginning in FY 2012 and lasting through FY 2013, transactions decreased as a result of various detours related to the SR 682 bridge replacement project, as well as the FY 2013 toll rate increase. However, revenues increased sharply in FY 2013 as a result of this toll rate increase (see Section 3.4) . Since then, the growth in transactions is the result of the completion of the SR 682 bridge replacement project and the toll rate indexing for SunPass® and cash customers in FY 2018. During FY 2018, tolls were suspended for fifteen days beginning on September 5, 2017, to aid in the evacuation and recovery efforts due to Hurricane Irma. This suspension resulted in a \$0.2 million revenue loss. FY 2019 revenue includes total pass sales of \$1.3 million, an increase of \$776 thousand compared to a historical annual sale of \$550 thousand. This increase in pass sales is attributed to the launch of a revamped SunPass® website design that prompted customers from outside the region to inadvertently purchase General Public passes. The website layout has since been revised and the monthly pass sales have returned to normal volumes.

Historical operating and routine maintenance expenses from FY 2009 through FY 2019 are presented in **Table 3.2**. As indicated, operating expenses have increased slightly since 2009. During the same period, routine maintenance expenses increased from \$588 thousand to \$856 thousand. Combined, total O&M expenses remained fairly level increasing slightly from

Fiscal Year	Operating Expense (\$000)	Routine Maintenance Expense ⁽¹⁾ (\$000)	Total O&M Expenses (\$000)
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
2017	2,058	883	2,941
2018	2,167	977	3,144
2019	2,332	856	3,188

TABLE 3.2 - PINELLAS BAYWAY SYSTEM HISTORICAL OPERATING AND ROUTINE MAINTENANCE EXPENSES FY 2009 THROUGH FY 2019

Source: FDOT Office of the Comptroller.

(1) Operating expense restated from FY 2014 through FY 2017.

\$2.7 million in FY 2009 to \$3.2 million in FY 2019.

Maintenance of the Pinellas Bayway System is performed under a private Asset Maintenance Contract. The current contract includes expenses for movable bridae maintenance for the one drawbridge, as well as maintenance and inspection of all other bridges on the Pinellas Bayway System. In addition to operating and routine maintenance expenses, renewal and replacement and capital improvement (periodic) costs totaling \$23.1 million were incurred during FY 2019 primarily due to toll system replacement, resurfacing and bridge repairs.

3.2 FY 2019 TRANSACTIONS AND TOLL REVENUES

Monthly transactions and toll revenue on the Pinellas Bayway System during FY 2019 are presented in **Table 3.3**. The first quarter typically generates more revenue compared to the remainingthree quarters due to revenue sfrom the

TABLE 3.3 - PINELLAS BAYWAY SYSTEM Monthly transactions and toll revenue Fy 2019

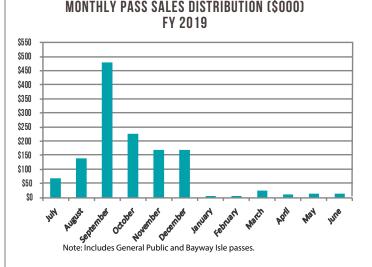
Month	Transactions (000)	Toll Revenue (\$000)
July 2018	883	506
August	790	533
September	660	788
1st Quarter Total	2,333	1,827
October	728	564
November	728	504
December	739	507
2nd Quarter Total	2,195	1,575
January 2019	818	431
February	872	365
March	1,052	543
3rd Quarter Total	2,742	1,339
April	946	472
May	913	462
June	817	416
4th Quarter Total	2,676	1,350
Annual Total	9,946	\$6,091

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.

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. **Graph 3.1** shows the monthly distribution of pass sales.

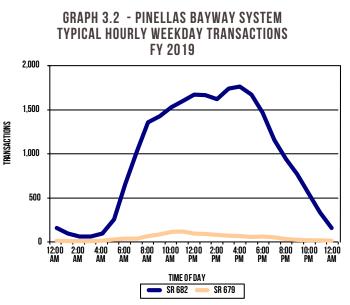
Graph 3.2 shows the number of hourly transactions on weekdays of a typical week during FY 2019 separated between the main east-west traffic on SR 682 and traffic on SR 679 traveling to Fort DeSoto Park. The majority of the transactions occur at the two plazas on SR 682, with a much smaller percentage 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



GRAPH 3.1 - PINELLAS BAYWAY SYSTEM

related to the recreational beach activity in the area.

The monthly transaction variation in FY 2019 is illustrated in **Table 3.4**. Annual average daily traffic (AADT) on the Pinellas Bayway System for FY 2019 was approximately 27,300. The peak season occurred from February through April. This transaction level is expected during this period due to tourists and seasonal residents. September transactions are below the yearly average as a result of fewer tourists and seasonal residents in the area.



Source: Data obtained from Turnpike Enterprise Finance Office for the 5-day period beginning Monday, June 10, 2019.

The FY 2019 two-way AADT profile for the facility is presented in Figure 3.2. The AADT at the East, West and South plazas during FY 2019 was 31,100, 20,000 and 3,300, 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. Due to one-way tolling at each plaza, the sum of the two-way AADT volumes for the three tolled locations shown in the figure (54,400) is double that of the oneway transaction volume shown in Table 3.4. The traffic and revenue contributions from trucks on the Pinellas Bayway System are shown in Graph 3.3. For FY 2019, 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 \$290 thousand while two-axle vehicles comprised the remaining \$5.8 million.

Graph 3.4 shows multi-axle vehicle transactions by plaza. As shown, the east plaza had the highest volume of truck traffic in FY 2019. As

TABLE 3.4 - PINELLAS BAYWAY SYSTEM Seasonal transaction variation Fy 2019

Month	Average Daily Transactions	Seasonal Factor
July 2018	28,500	1.04
August	25,500	0.93
September	22,000	0.81
October	23,500	0.86
November	24,300	0.89
December	23,800	0.87
January 2019	26,400	0.97
February	31,100	1.14
March	33,900	1.24
April	31,500	1.15
May	29,500	1.08
June	27,200	1.00
AADT	27,300	1.00

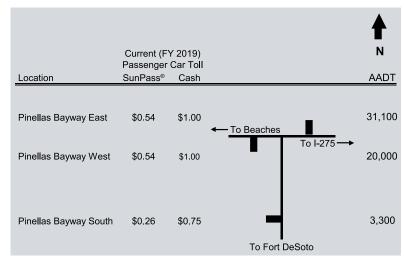


indicated, the majority of multi-axle vehicles on the Pinellas Bayway System are 3 and 4 axles. This is due to a large percentage of customers using the facility for recreational activities such as boating.

3.3 SUNPASS®

Travel on the Pinellas Bayway System has become more convenient since the

FIGURE 3.2 - PINELLAS BAYWAY SYSTEM Two-way aadt profile Fy 2019



implementation of SunPass[®]. SunPass® offers Bayway Isle residents Ο \$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 2019, there were approximately 26,300 General Public and 820 Bayway Isle passes sold.

In FY 2019, approximately 2.7 million transactions or 38 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 \$1.3 million (net of refunds) or 36 percent of total SunPass® revenue. With an average toll of \$0.20 for pass transactions (overall, for the three toll plazas combined and pass sales adjusted for nonrecurring high volume pass sales in FY 2019 as described in Section 3.1), the annual pass program provided a combined savings of approximately \$880 to pass holders.

Table 3.6 shows transactions by payment method on the facility. SunPass® transactions represented approximately 73 percent of total transactions in FY 2019. Monthly SunPass® participation percentages ranged from approximately 69 percent to 77 percent during the year. In general, SunPass® participation is the highest during off season months as a result of fewer tourists and seasonal residents, indicating that more commuters using SunPass®

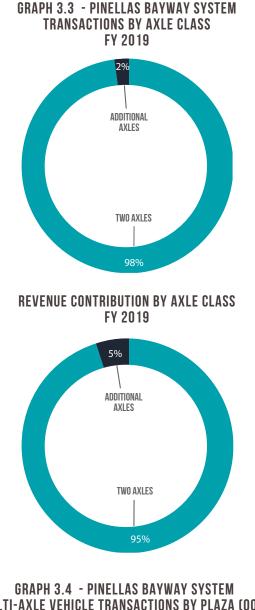






TABLE 3.5 - PINELLAS BAYWAY SYSTEM SUNPASS® TRANSACTIONS BY PAYMENT METHOD FY 2019

	Tra			
Month	General Public Pass	Bayway Isle Pass	Regular SunPass®	Total
July 2018	188	9	428	625
August	194	10	377	581
September	190	10	307	507
October	199	12	337	548
November	210	13	327	550
December	214	13	327	554
January 2019	244	14	357	615
February	239	14	387	640
March	263	15	462	740
April	245	14	408	667
May	221	12	405	638
June	195	11	358	564
Total	2,602	147	4,480	7,229
Percentage	36.0%	2.0%	62.0%	100.0%

Source: Turnpike Enterprise Finance Office.

travel on the facility during this time.

Table 3.7 shows gross toll revenue by payment method. SunPass® accounted for 60 percent of the total revenue in FY 2019. 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 81 percent of revenue for the month of September is attributable to SunPass®. After October, sales drop significantly. The contribution to revenue from the Bayway Isle annual pass, with yearly renewal in June, is negligible.

3.4 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) from the prior calendar year. Toll rate adjustments for inflation may be made no

	Tra			
Month	SunPass®	Non- SunPass®	Total	Percent SunPass®
July 2018	625	258	883	70.8%
August	581	209	790	73.5
September	507	153	660	76.8
October	548	180	728	75.3
November	550	178	728	75.5
December	554	185	739	75.0
January 2019	615	203	818	75.2
February	640	232	872	73.4
March	740	312	1,052	70.3
April	667	279	946	70.5
May	638	275	913	69.9
June	564	253	817	69.0
Total	7,229	2,717	9,946	
Percentage	72.7%	27.3%	100.0%	

TABLE 3.6 - PINELLAS BAYWAY SYSTEM TRANSACTIONS BY PAYMENT METHOD FY 2019

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.

more frequently than once a year (i.e., SunPass® toll rates) and must be made no less frequently than once every five years (i.e., cash toll rates) 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.

FY 2013 was the first full year of toll rate indexing 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. Since then, SunPass® toll rates were indexed annually while cash toll rates were indexed every five years to pace with the rounding of the cash toll in quarter increments. For FY 2018, CPI of 1.3 percent prompted \$0.01 increase for

TABLE 3.7 - PINELLAS BAYWAY SYSTEM GROSS TOLL REVENUE BY PAYMENT METHOD FY 2019

	Gross ⁻			
Month	SunPass®	Non- SunPass®	Total	Percent SunPass®
July 2018	\$268	\$238	\$506	53.0%
August	335	198	533	62.9
September ⁽¹⁾	642	146	788	81.5
October	405	159	564	71.8
November	341	163	504	67.7
December	336	171	507	66.3
January 2019	244	187	431	56.6
February	151	214	365	41.4
March	264	279	543	48.6
April	223	249	472	47.2
Мау	228	234	462	49.4
June ⁽²⁾	207	209	416	49.8
Total	\$3,644	\$2,447	\$6,091	
Percentage	59.8%	40.2%	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.

General Public passes are sold in September.
Bayway Isle passes are sold in June.

two-axle SunPass® customers at the east and west plazas located on SR 682 (CPI was not large enough to increase the \$0.26 SunPass® toll rate at the south plaza). For two-axle cash vehicles, the toll increased by \$0.25 at each of the three mainline plazas. For FY 2019, SunPass® toll rates were held constant (i.e., no application of CPI) until after satisfactory delivery of the new centralized customer service system.

3.5 FY 2019 EXPENSES AND LIABILITIES

A comparison between actual and budgeted operating and routine maintenance expenses for FY 2019 is presented in **Table 3.8**. Actual operating expenses were 2.1 percent higher than the FY 2019 budget. Actual routine maintenance expenses were lower than the FY 2019 budget by 6.7 percent. Overall, FY 2019 actual operating and routine maintenance expenses were approximately 0.4 percent, or \$13 thousand, less than the FY 2019 budget.

TABLE 3.8 - PINELLAS BAYWAY SYSTEM OPERATING AND ROUTINE MAINTENANCE EXPENSES FY 2019

Type of Expense	Budget (\$000)	Actual (\$000)	Over/ (Under) (\$000)	Variance
Operating	\$2,284	\$2,332	\$48	2.1%
Routine Maintenance	917	856	(61)	(6.7)
Total	\$3,201	\$3,188	(\$13)	(0.4%)

Source: FDOT Office of the Comptroller, Turnpike Enterprise Finance Office and the FY 2018 Enterprise Toll Operations Traffic Engineer's Annual Report.

At the end of FY 2019, the Pinellas Bayway System has a \$634 thousand liability with the State Transportation Trust Fund (STTF) for operating and routine maintenance expenses awaiting reimbursement from Pinellas Bayway revenues.

An analysis of the FY 2019 long-term liability on the facility is presented in **Table 3.9**. During FY 2019, approximately \$23.1 million of capital improvement (periodic) expenditures were incurred.

TABLE 3.9 - PINELLAS BAYWAY SYSTEM Long-term liability Fy 2019

Transaction	Amount (\$000)
Balance, beginning of year	\$44,686
Periodic Maintenance Additions	23,071
Reductions	(15)
Balance, end of year	\$67,742

Source: FDOT Office of the Comptroller.

3.6 TRAFFIC, REVENUE AND EXPENSE FORECASTS

Historically, population growth in Pinellas County has had an 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 Bureau of Economic and Business Research (BEBR), College of Liberal Arts and Sciences at University of Florida, Florida's population growth is forecast to increase at a compounded annual growth rate of 1.3 percent from the current year through 2030.

Future population estimates have been calculated based on medium projections from the most recent publication by the BEBR. The corresponding estimated annual population growth rate through 2030 for Pinellas County is 0.5 percent. 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 2019 through FY 2030.

The traffic and gross toll revenue forecasts for FY 2020 through FY 2030 are shown in Table 3.10. After satisfactory delivery of the new centralized customer service system, the forecasts assume toll indexing every year beginning in FY 2021 for SunPass[®] customers and every five years (FY 2023 and FY 2028) for cash customers. The current gross toll revenue forecast is similar to the forecast presented in the 2018 Annual Report. Traffic in FY 2020 and thereafter are not expected to be impacted by the annual indexing of SunPass® or cash toll rates. A summary of the economic factors affecting traffic and revenue is included in the Overview chapter of this report. In addition,

		Toll Revenue (\$000)			Toll Rev	enue Compa (\$000)	arisons
Fiscal Year	Total Traffic (000)	Revenue with Constant Tolls ⁽¹⁾	Indexing Impact	Gross Toll Revenue	2018 Annual Report Forecast	Varia Amount	nce Percent
2020	9,968	\$5,382	0	\$5,382	\$5,416	(\$34)	(0.6%)
2021	10,127	5,473	\$62	5,535	5,569	(34)	(0.6)
2022	10,289	5,561	119	5,680	5,717	(37)	(0.6)
2023	10,454	5,650	497	6,147	6,192	(45)	(0.7)
2024	10,600	5,729	563	6,292	6,330	(38)	(0.6)
2025	10,727	5,798	631	6,429	6,458	(29)	(0.4)
2026	10,834	5,856	699	6,555	6,576	(21)	(0.3)
2027	10,942	5,914	765	6,679	6,690	(11)	(0.2)
2028	11,051	5,973	1,156	7,129	7,144	(15)	(0.2)
2029	11,150	6,027	1,235	7,262	7,274	(12)	(0.2)
2030	11,250	6,081	1,317	7,398	N/A	N/A	N/A

TABLE 3.10 - PINELLAS BAYWAY SYSTEM TRAFFIC AND GROSS TOLL REVENUE FORECASTS FY 2020 THROUGH FY 2030

Note: Total traffic corresponds to the gross toll revenue.

N/A The FY 2018 Traffic Engineer's Annual Report forecast went through FY 2029.

(1) Toll revenue forecast without indexing.

Appendix A includes current 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 2020 operating expense budget. Subsequent to FY 2020, operating expenses are projected to grow at 2.5 percent annually. The routine maintenance expense forecast is provided



by the Department's Office of Project Finance through FY 2025. Subsequent to FY 2025, routine maintenance expenses were increased at 2.5 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 increase from \$3.7 million in FY 2020 to \$4.2 million in FY 2030

TABLE 3.11 - PINELLAS BAYWAY SYSTEM Projected operating and Maintenance expenses Fy 2020 Through Fy 2030

Fiscal	Operating Expense	Maintenance Expenses (\$000)		Total O&M Expenses	
Year	(\$000)	Routine	Periodic ⁽¹⁾	(\$000)	
2020	\$2,326	\$918	\$451	\$3,695	
2021	2,384	941	325	3,650	
2022	2,444	965	441	3,850	
2023	2,505	989	4,980	8,474	
2024	2,568	1,013	3,265	6,846	
2025	2,632	1,039	421	4,092	
2026	2,698	1,065	52	3,815	
2027	2,765	1,091	52	3,908	
2028	2,834	1,119	52	4,005	
2029	2,905	1,147	52	4,104	
2030	2,978	1,176	52	4,206	

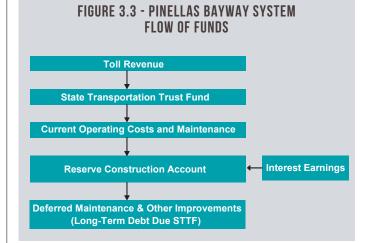
Note: Operating expenses are based on the budget developed byTurnpike Enterprise Finance Office for FY 2019.

 Periodic maintenance expenses are for various improvements as part of the 5-year Work Program and are reported on a cash basis. Periodic maintenance expenses beyond FY 2024 have not been fully programmed. However, a minimum level of preservation (excluding extraordinary expenses such as resurfacing, etc.) has been estimated based on FY 2024 expenses.

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**.

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, maintain and invest to the reserve construction account. All interest earnings accumulate in this account and assist in funding the projects.



A summary of the activity in the reserve account during FY 2019 is shown in **Table 3.13**. Additions to the reserve account generally 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

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
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 replacement commenced in December 2018.

TABLE 3.13 - PINELLAS BAYWAY SYSTEM ANALYSIS OF RESERVE CONSTRUCTION ACCOUNT FY 2019

Transaction	Amount (\$000)
Balance, beginning of year	\$11,961
Additions	3,269
Reductions	0
Balance, end of year	\$15,230

Source: FDOT Office of the Comptroller (reported on a cash basis).

incurred in the prior fiscal year for the Phase II construction project.

Construction of Structure E of the Pinellas Bayway System began in FY 2019. The construction will eventually deplete the escrow account and add to the Bayway's debt that is due to the STTF for those expenditures.



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SUNSHINE SKYWAY BRIDGE



A new LED lighting program adds aesthetic value and enhances safety with the illumination on the underside of this iconic bridge.

4.1 BACKGROUND

The original Sunshine Skyway Bridge opened in 1954 and was constructed as a two-lane toll facility 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 highlevel 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. 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.

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.

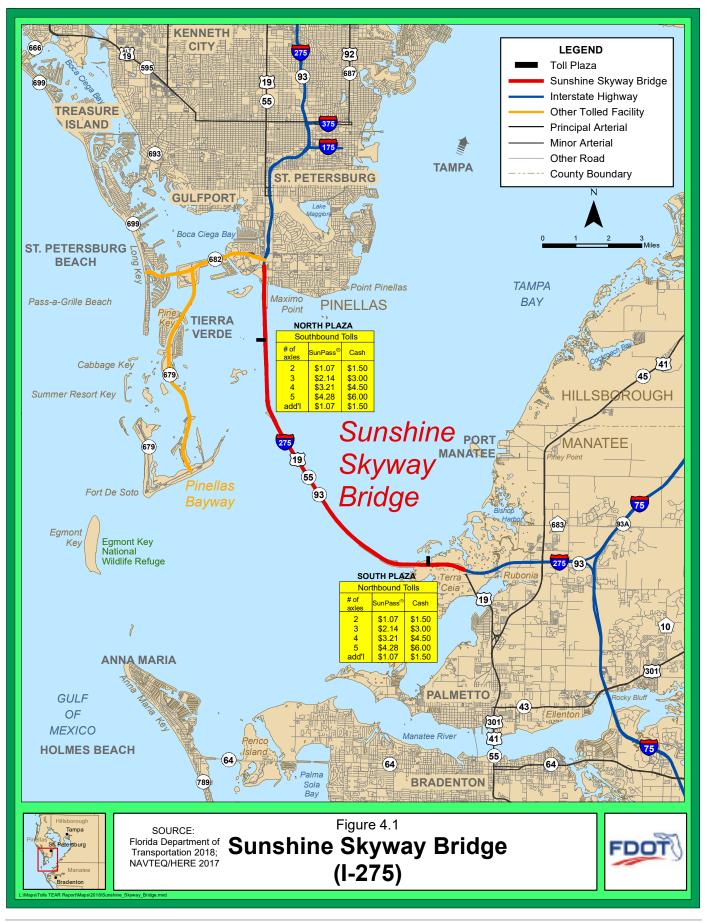


TABLE 4.1 - SUNSHINE SKYWAY BRIDGE HISTORICAL TRANSACTIONS AND REVENUE GROWTH FY 2009 THROUGH FY 2019

		Transacti	ons (000	Toll Revenue ⁽¹⁾ (\$000)			
Fiscal Year	Toll Paying	Non Revenue	Total	Percent Change	Amount	Percent Change	Average Toll
2009	17,607	32	17,639	-	\$16,212	-	\$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	22,630	4.2	1.180
2015	20,233	59	20,292	5.8	23,978	6.0	1.182
2016	20,985	61	21,046	3.7	24,801	3.4	1.178
2017	21,517	64	21,581	2.5	25,524	2.9	1.183
2018 (2)	21,568	670	22,238	3.0	26,675	4.5	1.200
2019	22,751	75	22,826	2.6	28,231	5.8	1.237

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.

 Toll revenue reported net of the SunPass discount. Per new revenue reporting methodology, starting FY 2014 toll revenue excludes violation and miscellaneous revenues.
Higher non-revenue transactions due to toll suspension during Hurricane Irma.

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. The first full year of toll rate indexing was implemented in FY 2013 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.

Historically, traffic and revenue on the Sunshine Skyway Bridge have increased gradually over the years. In FY 2019, total transactions increased to 22.8 million, while toll revenues increased to approximately \$28.2 million. Annual transactions and revenue for the facility from FY 2009 through

TABLE 4.2SUNSHINE SKYWAY BRIDGEHISTORICAL OPERATING AND ROUTINEMAINTENANCE EXPENSESFY 2009 THROUGH FY 2019

Fiscal Year	Operating Expense ⁽¹⁾ (\$000)	Routine Maintenance Expense (\$000)	Total O&M Expenses (\$000)
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	4,754	1,651	6,405
2015	4,959	2,365	7,324
2016	4,695	2,325	7,020
2017	5,291	3,932	9,223
2018	4,870	2,677	7,547
2019	5,639	3,117	8,756

Source: FDOT Office of the Comptroller.

(1) Operating expense restated from FY 2014 through FY 2017.

FY 2019 are presented in **Table 4.1**. Revenues have increased as a result of the start of toll rate indexing in FY 2013. Compared to FY 2018, FY 2019 transactions and revenue increased by 2.6 percent and 5.8 percent, respectively. This growth in traffic can be attributed to sustained economic growth through new jobs, continuous wage growth, reduction in unemployment, increases in consumer spending and a record number of Florida visitors in CY 2018 and the first three quarters of CY 2019.

Historical operating and routine maintenance expenses from FY 2009 through FY 2019 are presented in **Table 4.2**. Annual operating expenses have approximated \$5 million during the 10-year period. FY 2019 operating expenses increased by \$769 thousand from FY 2018. During the same period, routine maintenance expenses increased by \$440 thousand primarily due to the biennial bridge inspection.

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 addition to operating and routine maintenance expenses, \$24.3 million for renewal and replacement, toll system improvements, lighting, bridge painting, bridge repairs, and other off-system improvements were incurred during FY 2019.

4.2 FY 2019 TRANSACTIONS AND TOLL REVENUES

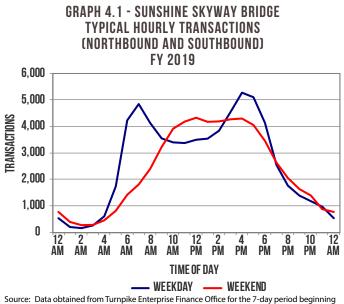
Monthly transactions and toll revenue on the Sunshine Skyway Bridge during FY 2019 are presented in **Table 4.3** for the north and south mainline plazas. There were approximately 11.6 million transactions at the north plaza and 11.2 million transactions at the south plaza, for a total of nearly 23 million transactions during FY 2019. The corresponding annual revenue was \$14.4 million at the north plaza and \$13.9 million at

TABLE 4.3 - SUNSHINE SKYWAY BRIDGE Monthly transactions and toll revenue FY 2019

	Transactions (000)		Toll R	levenue (\$	000)	
Month	North Plaza	South Plaza	Total	North Plaza	South Plaza	Total
July 2018	954	917	1,871	\$1,186	\$1,143	\$2,329
August	941	916	1,857	1,165	1,133	2,298
September	850	826	1,676	1,045	1,017	2,062
1st Quarter Total	2,745	2,659	5,404	3,396	3,293	6,689
October	928	901	1,829	1,145	1,109	2,254
November	950	925	1,875	1,176	1,138	2,314
December	936	904	1,840	1,158	1,110	2,268
2nd Quarter Total	2,814	2,730	5,544	3,479	3,357	6,836
January 2019	979	950	1,929	1,213	1,170	2,383
February	986	941	1,927	1,231	1,160	2,391
March	1,123	1,077	2,200	1,398	1,344	2,742
3rd Quarter Total	3,088	2,968	6,056	3,842	3,674	7,516
April	1,012	985	1,997	1,258	1,232	2,490
May	1,000	971	1,971	1,235	1,201	2,436
June	936	918	1,854	1,143	1,121	2,264
4th Quarter Total	2,948	2,874	5,822	3,636	3,554	7,190
Annual Total	11,595	11,231	22,826	\$14,353	\$13,878	\$28,231

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.

the south plaza, for a total of approximately \$28 million during FY 2019. Maintaining a historical trend, the third quarter experienced the largest amount of transactions in FY 2019, with March being the busiest month.



ource: Data obtained from Turnpike Enterprise Finance Office for the 7-day period beginning Monday, November 5, 2018

> Graph 4.1 shows the number of hourly weekday and weekend transactions of a typical week during FY 2019 for both northbound and southbound traffic combined. The weekday traffic on the facility has a morning peak from 6:00 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 11:00 a.m. to 5:00 p.m., traffic levels are slightly more than 4 thousand vehicles per hour. On weekends, there is no clear morning or evening peak periods indicating that a large number of noncommuters use the facility (e.g. interstate travel influence).

> The FY 2019 monthly transaction variation is analyzed in **Table 4.4**. Annual average daily transactions (AADT) on the Sunshine

FY 2019							
	Average	e Daily Trans	actions				
Month	North Plaza	South Plaza	Total	Seasonal Factor			
July 2018	30,800	29,600	60,400	0.96			
August	30,400	29,500	59,900	0.96			
September	28,300	27,500	55,800	0.89			
October	29,900	29,100	59,000	0.94			
November	31,700	30,800	62,500	1.00			
December	30,200	29,200	59,400	0.95			
January 2019	31,600	30,600	62,200	0.99			
February	35,200	33,600	68,800	1.10			
March	36,200	34,700	70,900	1.13			
April	33,700	32,900	66,600	1.06			
May	32,300	31,400	63,700	1.02			
June	31,200	30,600	61,800	0.99			
AADT	31,800	30,800	62,600	1.00			

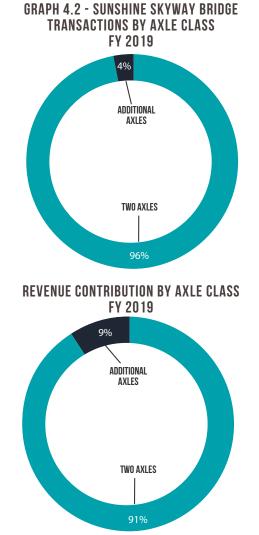
TABLE 4.4 - SUNSHINE SKYWAY BRIDGE SEASONAL TRANSACTION VARIATION FY 2019

Skyway Bridge for FY 2019 was 62,600. 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. Historically, the month of September has the fewest transactions.

The traffic and revenue contributions from trucks on the Sunshine Skyway Bridge are shown in **Graph 4.2**. For FY 2019, trucks accounted for 4 percent of the traffic on the facility but accounted for 9 percent of the total revenue. In terms of actual revenue contributions, vehicles with three or more axles provided approximately \$2.5 million, while two-axle vehicles comprised the remaining \$25.7 million.

4.3 SUNPASS[®]

There are two dedicated SunPass® lanes and four mixed-use lanes at each toll plaza, serving both cash and SunPass® users. Drivers of two-axle vehicles with a SunPass® transponder pay \$0.43 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. Transactions on the nearby Pinellas Bayway System also count towards this discount program. SunPass® discounts on the Sunshine Skyway Bridge totaled \$23 thousand in FY 2019.

Table 4.5 shows the percentage of transactions by payment method on the Sunshine Skyway Bridge. Non-SunPass® transactions amounted to 7.6 million, or 33 percent of all transactions; whereas, SunPass® transactions totaled 15.2 million, or 67 percent of all transactions on the facility. Over the course of FY 2019, the monthly SunPass® transaction percentage ranged from approximately 64 to 70 percent.

TABLE 4.5 - SUNSHINE SKYWAY BRIDGE TRANSACTIONS BY PAYMENT METHOD FY 2019

	Tra			
Month	SunPass®	Non- SunPass®	Total	Percent SunPass®
July 2018	1,262	609	1,871	67.5%
August	1,280	577	1,857	68.9
September	1,167	509	1,676	69.6
October	1,269	560	1,829	69.4
November	1,272	603	1,875	67.8
December	1,216	624	1,840	66.1
January 2019	1,298	631	1,929	67.3
February	1,269	658	1,927	65.9
March	1,417	783	2,200	64.4
April	1,304	693	1,997	65.3
May	1,286	685	1,971	65.2
June	1,182	672	1,854	63.8
Total	15,222	7,604	22,826	
Percentage	66.7%	33.3%	100.0%	

Source: Turnpike Enterprise Finance Office.

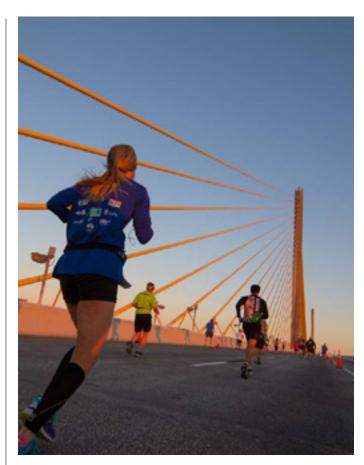
Note: Non-SunPass transactions represent toll-paying and non-revenue transactions.

Table 4.6 shows the gross toll revenue by paymentmethod. Revenue attributable to SunPass®was approximately \$17.2 million, representing

TABLE 4.6 - SUNSHINE SKYWAY BRIDGE GROSS TOLL REVENUE BY PAYMENT METHOD FY 2019

	Gross 7			
Month	SunPass®	Non- SunPass®	Total	Percent SunPass®
July 2018	\$1,422	\$907	\$2,329	61.1%
August	1,437	861	2,298	62.5
September	1,301	761	2,062	63.1
October	1,426	828	2,254	63.3
November	1,415	899	2,314	61.1
December	1,345	923	2,268	59.3
January 2019	1,448	935	2,383	60.8
February	1,410	981	2,391	59.0
March	1,589	1,153	2,742	58.0
April	1,496	994	2,490	60.1
May	1,491	945	2,436	61.2
June	1,391	873	2,264	61.4
Total	17,171	11,060	28,231	
Percentage	60.8%	39.2%	100.0%	

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



To ensure safety, northbound lanes were closed on the bridge for nearly 7 hours starting early Sunday morning on March 3, 2019 for the second annual 10K run organized by the Armed Forces Families Foundation, resulting in forfeited revenue of approximately \$9 thousand.

approximately 61 percent of the total system revenue in FY 2019. Toll revenue is reported net of the SunPass® discount. Non SunPass® constituted the remaining 39 percent of revenue. Monthly SunPass® revenue percentages ranged from 58 to approximately 63 percent during the year.

4.4 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) from the prior calendar year. Toll rate adjustments for inflation may be made no more frequently than once a year (i.e., SunPass® toll rates) and must be made no less frequently than once every five years (i.e., cash toll rates) 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.

For FY 2018, CPI of 1.3 percent prompted a \$0.01 increase at the north and south toll plazas for two-axle toll rates for SunPass® customers. Furthermore, cash toll rates, last increased in FY 2013, experienced the fifth-year CPI increase (6.6 percent for prior 5-year period rounded to the quarter) of \$0.25 for two-axle vehicles. For FY 2019, SunPass toll rates were held constant (i.e., no application of CPI) until after satisfactory delivery of the new Centralized Customer Service System.

4.5 FY 2019 EXPENSES AND LIABILITIES

A comparison between actual and budgeted operating and routine maintenance expenses for FY 2019 is shown in **Table 4.7**. Actual FY 2019 operating and routine maintenance expenses were \$581 thousand higher than the FY 2019 budget.

TABLE 4.7 - SUNSHINE SKYWAY BRIDGE OPERATING AND ROUTINE MAINTENANCE EXPENSE FY 2019

Type of Expense	Budget (\$000)	Actual (\$000)	Over/ (Under) (\$000)	Variance
Operating	\$5,157	\$5,639	\$482	9.3%
Routine Maintenance	3,018	3,117	99	3.3
Total	\$8,175	\$8,756	\$581	7.1%

Source: FDOT Office of the Comptroller, Turnpike Enterprise Finance Office and the FY 2018 Enterprise Toll Operations Traffic Engineer's Annual Report.

At the end of FY 2019, the Sunshine Skyway has a \$1,487 thousand liability with the State Transportation Trust Fund (STTF) for operating and routine maintenance expenses awaiting reimbursement from Sunshine Skyway revenues.

The Sunshine Skyway Bridge also has two long-term liabilities due to the Department. First are expenditures for improvements or new projects on the Sunshine Skyway Bridge. An analysis of the FY 2019 liability for facility costs is presented in **Table 4.8**, which shows the STTF advances for facility costs.

TABLE 4.8 - SUNSHINE SKYWAY BRIDGE STTF ADVANCES FOR FACILITY COSTS FY 2019

Transaction	Amount (\$000)
Balance, beginning of year	\$7,545
Additions ⁽¹⁾	13,893
Reductions ⁽²⁾	(18,972)
Reclassification	1,016
Balance, end of year	\$3,482

Source: FDOT Office of the Comptroller.

(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 include the Rightof-Way purchases related to the Gateway Expressway, SR 70, Howard Frankland Bridge and reconstruction of the Skyway rest areas. These costs are initially funded by the STTF and are being reimbursed by bond proceeds and excess revenue after operating and maintenance (O&M)

TABLE 4.9 - SUNSHINE SKYWAY BRIDGE Deferred Sttf Advances for off-system Improvements Fy 2019

Transaction	Amount (\$000)
Balance, beginning of year	\$6,910
Additions	10,391
Reductions	(6,561)
Reclassification	(1,016)
Balance, end of year	\$9,724

Source: FDOT Office of the Comptroller.

⁽¹⁾ Additions represent costs incurred in the FY being reported.

expenses and facility costs and future revenue bonds.

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 2009 to FY 2019, the annual compounded traffic growth rate on the Sunshine Skyway Bridge was approximately 2.6 percent. The historical annual compounded population growth rate for the same period for the five counties was 1.4 percent. 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 2030 for the five counties is 1.3 percent. As a guideline, 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 1.4 percent per year.

The traffic and gross toll revenue forecasts for FY 2020 through FY 2030 are shown in **Table 4.10**. The gross toll revenue during the forecast period are similar to the forecast presented in the 2018 Annual Report. After satisfactory delivery of the new Centralized Customer Service System, the forecasts assume toll rate indexing every year beginning in FY 2021 for SunPass customers

FY 2020 THROUGH FY 2030									
			Toll Revenue (\$000)			Toll Revenue Comparisons (\$000)			
Fiscal Year	Total Traffic (000)	Revenue with Constant Tolls ⁽¹⁾	Indexing Impact	SunPass® Discount Impact	Gross Toll Revenue	2018 Annual Report Forecast	Varia Amount	ance Percent	
2020	23,397	\$29,107	0	(\$26)	\$29,081	\$29,771	(\$690)	(2.3%)	
2021	23,935	29,797	\$405	(28)	30,174	30,759	(585)	(1.9)	
2022	24,414	30,393	740	(29)	31,104	31,665	(561)	(1.8)	
2023	24,853	30,940	2,466	(30)	33,376	33,932	(556)	(1.6)	
2024	25,251	31,436	2,828	(32)	34,232	34,780	(548)	(1.6)	
2025	25,605	31,876	3,230	(33)	35,073	35,558	(485)	(1.4)	
2026	25,912	32,259	3,625	(34)	35,850	36,310	(460)	(1.3)	
2027	26,171	32,581	4,048	(35)	36,594	37,007	(413)	(1.1)	
2028	26,433	32,907	5,769	(36)	38,640	39,068	(428)	(1.1)	
2029	26,697	33,237	6,238	(37)	39,438	39,813	(375)	(0.9)	
2030	26,964	33,569	6,723	(38)	40,254	N/A	N/A	N/A	

TABLE 4.10 - SUNSHINE SKYWAY BRIDGE TRAFFIC AND GROSS TOLL REVENUE FORECASTS FY 2020 THROUGH FY 2030

Note: Total traffic corresponds to the adjusted gross toll revenue.

N/A The FY 2018 Traffic Engineer's Annual Report forecast went through FY 2029.

(1) Toll revenue forecast without indexing.

and every five years (FY 2023 and FY 2028) for cash customers.

The projected operating and maintenance expenses for FY 2020 through FY 2030 are shown in **Table 4.11**. The operating expenses in FY 2020 represent the budget amount for that fiscal year. Subsequent to FY 2020, operating expenses are projected to grow at 2.5 percent annually to account for inflation.

The routine maintenance expense forecast is provided by the Department's Office of Project Finance through FY 2025. Subsequent to FY 2025, routine maintenance expenses have been increased 2.5 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.

4.7 REVENUE SUFFICIENCY

A timeline of Sunshine Skyway bond issues is shown in **Figure 4.2**. In May 2019, bonds in the principal amount of \$86.6 million were issued (Series 2019A Sunshine Skyway Revenue Bonds). 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 needed transportation projects located in Manatee, Hillsborough and Pinellas Counties and mentioned in **Section 4.5**..

Each year, an amount of principal and accrued interest on the outstanding bonds becomes due and payable. This amount is known as the annual debt service. As a test of the ability of

Fiscal Year	Operating Expense (\$000)	Routine Maintenance Expense (\$000)	Total Operating & Routine Maintenance Expenses (\$000)	Periodic Maintenance Expense ⁽¹⁾ (\$000)	Total O&M Expenses (\$000)			
2020	\$4,843	\$2,623	\$7,466	\$2,131	\$9,597			
2021	4,964	3,269	8,233	8,395	16,628			
2022	5,088	2,688	7,776	10,604	18,380			
2023	5,215	3,351	8,566	8,785	17,351			
2024	5,345	2,756	8,101	10,879	18,980			
2025	5,479	3,435	8,914	8,924	17,838			
2026	5,616	2,825	8,441	6,045	14,486			
2027	5,756	3,520	9,276	4,993	14,269			
2028	5,900	2,896	8,796	4,691	13,487			
2029	6,048	3,608	9,656	4,661	14,317			
2030	6,199	2,968	9,167	4,778	13,945			

TABLE 4.11 - SUNSHINE SKYWAY BRIDGE Projected operating and maintenance expenses Fy 2020 through fy 2030

Note: Operating expenses are based on the budget developed by Turnpike Enterprise Finance Office for FY 2020.

 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.

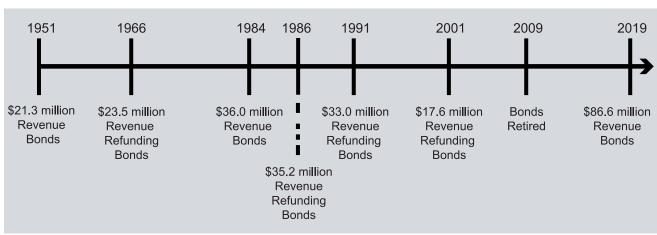
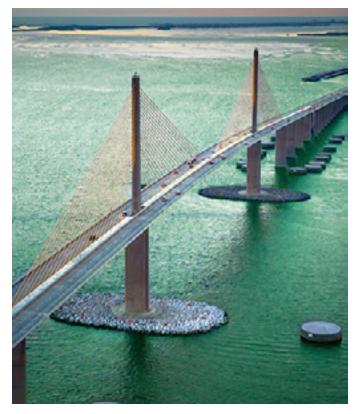


FIGURE 4.2 SUNSHINE SKYWAY BOND ISSUES

a facility to repay the annual debt service, a "coverage" calculation is performed. As shown in **Figure 4.3** and in accordance with the 2019A Series Bond Resolution, net revenues mean the revenues remaining after deductions of administrative expenses and the cost of operation and maintenance. Net revenues shall be sufficient in each fiscal year to pay at least 120 percent (1.2 times) of the annual debt service requirements.



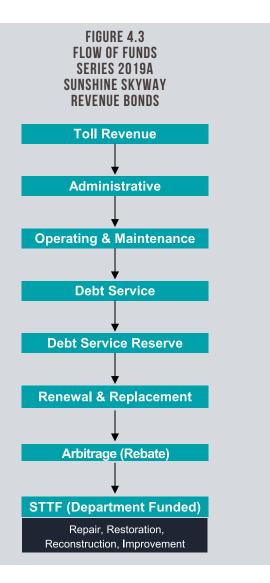


Table 4.12 provides a forecast of the debt service coverage of Sunshine Skyway to meet annual debt service requirements through FY 2030. As shown in the table, Sunshine Skyway significantly exceeds the 1.2 minimum debt service coverage requirement.

TABLE 4.12 - SUNSHINE SKYWAY BRIDGE NET TOLL REVENUE FORECAST AND DEBT SERVICE COVERAGE FY 2020 THROUGH FY 2030

		Toll Operating		Debt Se	ervice ⁽³⁾
Fiscal Year	Gross Toll Revenue (\$000)	& Routine Maintenance Expenses ⁽¹⁾ (\$000)	Net Toll Revenue ⁽²⁾ (\$000)	Payment (\$000)	Coverage Ratio
2020	\$29,081	\$7,466	\$21,615	\$6,871	3.1
2021	30,174	8,233	21,941	6,873	3.2
2022	31,104	7,776	23,328	6,872	3.4
2023	33,376	8,566	24,810	6,873	3.6
2024	34,232	8,101	26,131	6,871	3.8
2025	35,073	8,914	26,159	6,871	3.8
2026	35,850	8,441	27,409	6,872	4.0
2027	36,594	9,276	27,318	6,874	4.0
2028	38,640	8,796	29,844	6,872	4.3
2029	39,438	9,656	29,782	6,874	4.3
2030	40,254	9,167	31,087	6,870	4.5

(1) Periodic maintenance 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 Offical Statement for the 2019A Bonds.

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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, completes 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, development of the Parkway the 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 the Parkway opens in phases, 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. Customers can pay with SunPass®, or use a license plate photo/billing option (TOLL-BY-PLATE®) at a higher rate. In keeping with Florida state law, toll rates can increase each year, indexed to the Consumer Price Index.

Table 5.1 lists the individual sections of theWekiva Parkway and includes the ownership,start and end points, length, constructionstart dates, and scheduled opening dates.On January 20, 2016, FDOT opened the firstsection of the Wekiva Parkway, sections 4A and4B, that extend from County Road 435 (MountPlymouth Road) near Haas Road in OrangeCounty to SR 46 east of Camp Challenge Road

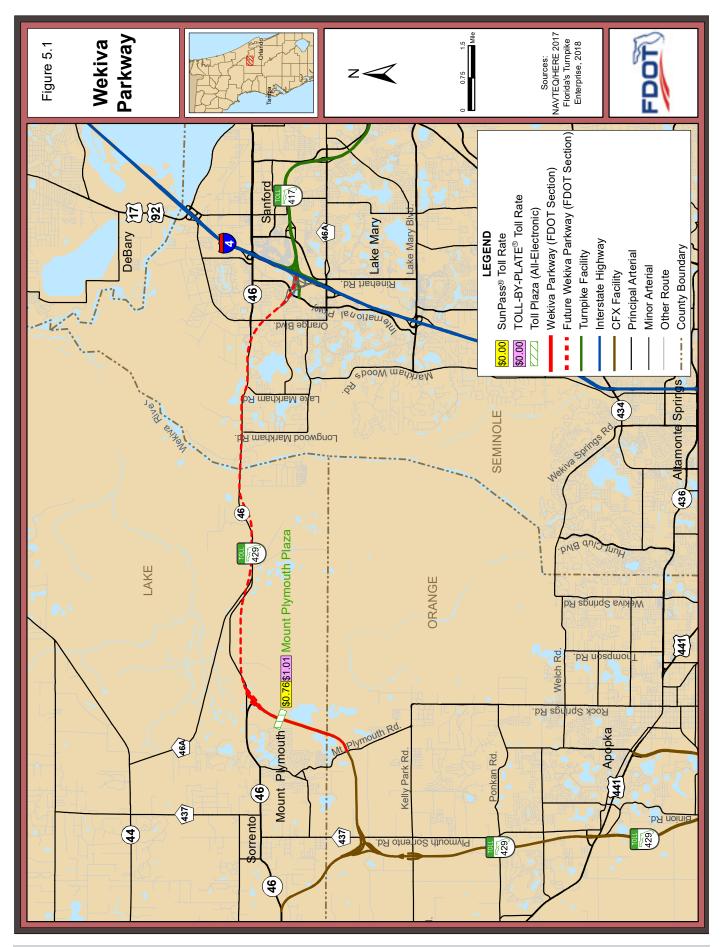


TABLE 5.1 - WEKIVA PARKWAY Facility project descriptions

Owner	Section	Project Limit		Construction Start Date	Scheduled Opening Date
	1A	A US 441 to Ponkan Road		Third Quarter, 2015	July 27, 2017
	1B	Ponkan Road to New Kelly Park Road Interchange	2.38	Third Quarter, 2015	July 27, 2017
CFX	2A	Kelly Park Road Interchange to CR 435/Mt. Plymouth Road	2.90	Third Quarter, 2016	March 31, 2018
	2B	Systems Interchange (Haas Road-Ondich Road)	0.78	First Quarter, 2016	March 31, 2018
	2C	Round Lake Road to Lake County-Orange County Line	1.40	Second Quarter, 2016	March 31, 2018
	3A SR 46 from Vista View Lane to Round Lake Road		1.40	Third Quarter, 2017	Second Quarter, 2020
	3B	SR 46 from US 441 to Vista View Lane (US 441 flyover interchange)	0.00	Third Quarter, 2017	Second Quarter, 2020
	4A CR 435/Mount Plymouth Road to the Lake County Line		3.14	Fourth Quarter, 2012	January 20, 2016
	4B	4B Orange County Line to Old McDonald Road			
FDOT	5	CR 46A Realignment from Arundel Way to SR 46	2.50	Second Quarter, 2017	Fourth Quarter, 2019
	6	Old McDonald Road to Wekiva Park Road	5.50	Fourth Quarter, 2017	First Quarter, 2021
	7A	Wekiva Park Drive to Orange Boulevard	3.53	Second Quarter, 2018	Second Quarter, 2022
	7B SR 46 from Center Road to I-4 8 Orange Boulevard to Rinehart Road		1.87	Third Quarter, 2019	Fourth Quarter, 2021
			2.63	Fourth Quarter, 2018	Fourth Quarter, 2022

Source: www.wekivaparkway.com

in Lake County. Upon opening, the toll was \$0.75 for those with SunPass® or \$1.00 via the TOLL-BY-PLATE® program, plus \$2.50 per invoice in administrative fees. In FY 2018 (October 29, 2017), tolls were indexed to \$0.76 for SunPass® and \$1.01 for TOLL-BY-PLATE® customers. For FY 2019, toll rates were held constant (i.e., no application of CPI) until after satisfactory delivery of the centralized customer service system.

5.2 FY 2019 TRANSACTIONS, REVENUES AND EXPENSES

As shown in **Table 5.2**, there were 1.8 million transactions in FY 2019 and toll revenues amounting to over \$1.5 million, resulting in an average toll of \$0.88 per vehicle.

The monthly transaction variation for FY 2019 is analyzed in **Table 5.3**. On average, nearly 5 thousand vehicles traveled through the toll plaza each day. Over the course of the year, the average daily traffic (ADT) has been generally increasing due to ramp up and completion of CFX section of this facility in March 2018.

TABLE 5.2 - WEKIVA PARKWAY Monthly transactions and toll revenue Fy 2019

	ransactions				
Month	Toll Paying	Non Revenue	Total	Total Revenue ⁽¹⁾	Average Toll
FY 2016 ⁽²⁾	220,536	2,278	222,814	\$165,952	\$0.745
FY 2017	725,142	11,136	736,278	\$587,966	\$0.799
FY 2018	1,056,664	42,414	1,099,078	\$877,726	\$0.799
FY 2019:					
July 2018	133,729	1,124	134,853	\$117,431	
August	139,434	1,088	140,522	122,600	
September	125,302	1,115	126,417	110,513	
October	141,646	1,139	142,785	125,805	
November	140,531	1,088	141,619	123,652	
December	136,953	1,105	138,058	120,314	
January 2019	148,625	1,150	149,775	133,648	
February	145,247	1,175	146,422	129,490	
March	167,970	1,198	169,168	148,399	
April	157,421	1,026	158,447	139,932	
May	161,463	1,036	162,499	141,550	
June	147,911	868	148,779	125,295	
Total	1,746,232	13,112	1,759,344	\$1,538,629	\$0.875

Source: FDOT Office of the Comptroller and Turnpike Enterprise Finance Office. (1) Per new revenue reporting methodology, starting FY 2016 toll revenues exclude violation and

miscellaneous revenues, which are immaterial to toll revenues reported within.

⁽²⁾ FY 2016 represents a partial year opening on January 20, 2016.

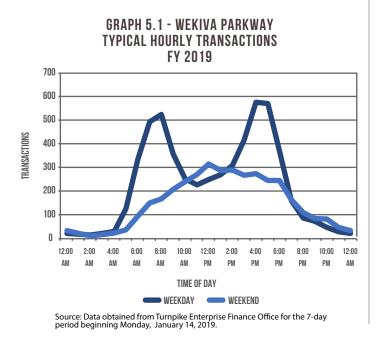
Note: The non-revenue class includes authorized vehicles that pass through a toll plaza without incurring a toll (i.e., law enforcement, emergency vehicles) and transactions reported during toll suspensions attributable to hurricanes. Higher non revenue transactions in September due to toll suspension during Hurricane Irma.

TABLE 5.3 - WEKIVA PARKWAY Seasonal transaction variation Fy 2019

	Average Daily Transactions			
Month	Northbound Lanes	Southbound Lanes	Total	Seasonal Factor*
July 2018	2,400	1,900	4,300	0.90
August	2,500	2,000	4,500	0.94
September	2,300	1,900	4,200	0.88
October	2,500	2,100	4,600	0.96
November	2,600	2,100	4,700	0.98
December	2,400	2,000	4,400	0.92
January 2019	2,600	2,200	4,800	1.00
February	2,800	2,400	5,200	1.08
March	3,000	2,500	5,500	1.15
April	2,900	2,400	5,300	1.10
May	2,900	2,400	5,300	1.10
June	2,700	2,200	4,900	1.02
AADT	2,600	2,200	4,800	1.00

Source: FDOT Office of the Comptroller and Turnpike Enterprise Finance Office. * Seasonal factors impacted by ramp up during early years after opening.

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 mainline plazas during FY 2019. Weekday travel demand on the facility peaks from 7:00 to 8:00 AM and again between 5:00 and 6:00 PM. 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 5.2 shows the truck transactions and revenue contributions for FY 2019. Trucks (3+ axle vehicles) accounted for 12 percent of traffic on the facility and 28 percent of the revenue. In terms of actual revenue contributions, two-axle vehicles provided approximately \$1.1 million while vehicles with three or more axles provided \$0.4 million in revenue for FY 2019.



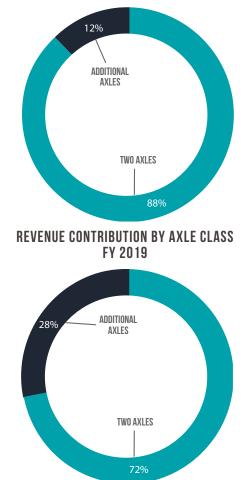


Table 5.4 shows the operating and routine maintenance expenses in FY 2019 with a comparison between the FY 2019 actual and budgeted operating and routine maintenance expenses. For FY 2019, operating and routine maintenance expenses amounted to \$478 thousand, which exceeds forecast by \$189 thousand. The increase is primarily due to the continuing ramp-up of maintenance expenses as this new facility experiences increasing volumes of traffic.

TABLE 5.4 - WEKIVA PARKWAY Operating and routine maintenance Expenses fy 2019

Type of Expense	Budget (\$000)	Actual (\$000)	Over/ (Under) (\$000)
Operating	\$277	\$317	\$40
Routine Maintenance	12	161	149
Total	\$289	\$478	\$189

Source: FDOT Office of the Comptroller, Turnpike Enterprise Finance Office and the FY 2018 Enterprise Toll Operations Traffic Engineer's Annual Report.

Maintenance of Wekiva Parkway, is under private asset maintenance 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 2016.

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 2019. SunPass® accounted for 87 percent of the total transactions in FY 2019.

Table 5.6 shows gross toll revenue by paymentmethod.Revenue attributable to SunPass®

TABLE 5.5 - WEKIVA PARKWAY TRANSACTIONS BY PAYMENT METHOD FY 2019

		Transactions		
Month	SunPass®	Non- SunPass®	Total	Percent SunPass®
July 2018	119,068	15,785	134,853	88.3%
August	125,392	15,130	140,522	89.2
September	113,430	12,987	126,417	89.7
October	127,068	15,717	142,785	89.0
November	124,136	17,483	141,619	87.7
December	119,157	18,901	138,058	86.3
January 2019	131,297	18,478	149,775	87.7
February	127,904	18,518	146,422	87.4
March	145,225	23,943	169,168	85.8
April	134,085	24,362	158,447	84.6
May	134,679	27,820	162,499	82.9
June	119,829	28,950	148,779	80.5
Total	1,521,270	238,074	1,759,344	
Percentage	86.5%	13.5%	100.0%	

Source: Turnpike Enterprise Finance Office.

TABLE 5.6 - WEKIVA PARKWAY GROSS TOLL REVENUE BY PAYMENT METHOD FY 2019

	Gro	ss Toll Rever	nue	
Month	SunPass®	Non- SunPass®	Total	Percent SunPass®
July 2018	\$106,561	\$10,870	\$117,431	90.7%
August	112,152	10,448	122,600	91.5
September	101,382	9,131	110,513	91.7
October	114,784	11,021	125,805	91.2
November	111,010	12,642	123,652	89.8
December	106,256	14,058	120,314	88.3
January 2019	120,226	13,422	133,648	90.0
February	116,565	12,925	129,490	90.0
March	132,228	16,171	148,399	89.1
April	124,955	14,977	139,932	89.3
May	127,347	14,203	141,550	90.0
June	116,182	9,113	125,295	92.7
Total	\$1,389,648	\$148,981	\$1,538,629	
Percentage	90.3%	9.7%	100.0%	

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

was approximately \$1.4 million, representing 90 percent of the total revenue in FY 2019.

5.4 FORECASTS

Wekiva Parkway traffic and revenue forecasts, as provided by the Office of Toll Finance, for FY 2020 through FY 2030 are shown in **Appendix D**. Projected operating and maintenance expenses during this forecast period are shown in **Table 5.7**. The operating expenses for FY 2020 presented in this table represent the budgeted amount for that fiscal year (see **Appendix C** for a detailed description of the FY 2020 operating expense budget).

The routine maintenance expense forecast is provided by the Department's office of Project Finance through FY 2025 and recognize the increasing levels of routine maintenance as the facility fully opens to traffic. For FY 2025 and beyond, routine maintenance expenses were increased at approximately 2.5 percent annually.

Given that the Parkway is a new facility, periodic maintenance is not yet a budgeted cost. Such costs, however, will be programmed when a need is determined.

TABLE 5.7 - WEKIVA PARKWAY Projected operating and maintenance Expenses Fy 2020 Through Fy 2030

Fiscal Year	Operating Expense (\$000)	Routine Maintenance Expense (\$000)	Total Operating & Routine Maintenance Expenses (\$000)
2020	\$259	\$352	\$611
2021	493	608	1,101
2022	1,214	920	2,134
2023	2,203	1,111	3,314
2024	2,885	1,181	4,066
2025	3,087	1,211	4,298
2026	3,221	1,241	4,462
2027	3,361	1,272	4,633
2028	3,507	1,304	4,811
2029	3,658	1,336	4,994
2030	3,816	1,369	5,185

Note: FY 2020 Operating expenses developed by Turnpike Enterprise Finance Office. Beginning FY 2021, Operating expense forecast based on transaction growth and 2.5 percent annual inflation.