# **OVERVIEW**

This Annual Report was prepared under contract No. C-8Y59 between the Turnpike Enterprise Finance Office of the Florida Department of Transportation (the Department) and URS Corporation. This report provides the Department with the annual and projected traffic and earnings for the five Department-owned and two Department-operated facilities which also satisfies respective bond resolutions. The reporting period for this Annual Report is FY 2013 (July 1, 2012 through June 30, 2013).

The report includes a comprehensive traffic and revenue analysis on the five toll facilities owned by the Department (i.e., Alligator Alley, Beachline East Expressway, Pinellas Bayway System, Sunshine Skyway Bridge and 95 Express). Florida's Turnpike System is also owned and operated by the Department; however, a separate traffic and revenue letter report is published annually for that extensive system of toll roads. This report also includes a similar analysis on two toll facilities operated under Lease-Purchase Agreements with the Department:

(i.e., Mid-Bay Bridge and Garcon Point Bridge). The Mid-Bay Bridge Authority and the Santa Rosa Bay Bridge Authority own these two facilities.

This comprehensive annual report includes consolidated information and analysis about all seven facilities and provides a centralized resource for traffic, revenue, operating and maintenance expenses, debt service and related liabilities on these facilities, as well as major events that affect them. Specifically, this report serves four main purposes, as shown in **Figure 1.1**.

The FY 2013 Annual Report is divided into four sections. This **Overview** section discusses important issues affecting traffic and revenue; the methodology used in the report for making traffic and revenue projections; revenue sufficiency and historical bond information; and the toll collection methods designed for all seven facilities, including SunPass, the Department's Electronic Toll Collection (ETC) system.

Figure 1.1 To review the overall financial condition of each toll facility and to ascertain whether revenues will be sufficient to meet all financial Purpose 1 requirements of the current fiscal year. To review in detail the traffic and revenue results of the past year Purpose 2 and any significant events that have affected those results. To reconcile the current year's data with the projection for the current year in the previous Annual Report and to modify future Purpose 3 forecasting accordingly (except for 95 Express and Garcon Point Bridge). To provide an updated 10-year projection of traffic, revenue and Purpose 4 expenses (except for 95 Express and Garcon Point Bridge) for use in financial planning for the Department.

The **Department-owned** section contains a review of traffic and revenue on Alligator Alley, Beachline East Expressway, Pinellas Bayway System, Sunshine Skyway Bridge and 95 Express. This section also describes current and planned events for each facility and includes traffic, revenue and expense estimates through FY 2024 for all facilities except 95 Express. The operating and maintenance expenses and the debt service coverage analysis (if applicable) are also included along with other related liabilities.

The **Department-operated** section contains detailed analysis for the Garcon Point Bridge and Mid-Bay Bridge similar to the Department-owned section.

A summary of the traffic, revenue and expense forecasts through FY 2024 for the five facilities, excluding 95 Express and the Garcon Point Bridge, is provided in the **Forecast Summary** section.

Additionally, the report has three appendices. **Appendix A** shows the existing toll schedule and lane configuration at each toll plaza. **Appendix B** shows the annual average daily traffic (AADT) pro-

files for FY 2013 through FY 2024 on all facilities, excluding 95 Express and Garcon Point Bridge. **Appendix C** contains the FY 2014 operating budget for each facility.

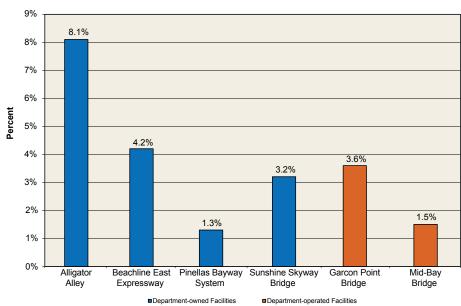
# 1.1 GENERAL CHARACTERISTICS

The traffic characteristics and patterns observed on some of the toll facilities examined in this report differ primarily because of their location and the type of customers they serve. For example, a high percentage of passenger vehicles travel on Pinellas Bayway System, Garcon

Point Bridge and Mid-Bay Bridge, mostly due to these facilities serving recreational areas that attract tourists and local residents. On the other hand, the percentage of trucks on Alligator Alley is relatively high because, as part of I-75, this facility offers a convenient route for truck drivers traveling between the southeastern and southwestern parts of the State. **Graph 1.1** shows the percentage of vehicles with three or more axles by facility (95 Express is not included since the express lanes exclude trucks).

In addition, the toll rate paid by customers to travel the entire length of each facility differs depending on the toll plan for the facility. For example, the \$3.00 non-SunPass toll and \$2.81 SunPass toll required to travel the 78 rural miles on Alligator Alley represents a uniform rate of 3.8 cents per mile for non-SunPass customers and 3.6 cents per mile for SunPass customers, compared to the 13.3 cents per mile required for cash and 8.5 cents per mile for SunPass customers to travel 15 miles on the Pinellas Bayway System. As shown in **Table 1.1**, this per-mile toll rate varies considerably depending on the type of toll facility (i.e., toll road versus toll bridge and urban versus rural) and the conditions under which they were financed.

Graph 1.1
Percent Trucks by Facility
FY 2013



Note: 95 Express is not inlouded since the express lanes exclude trucks.

Table 1.1 Comparative Per Mile Toll Rates

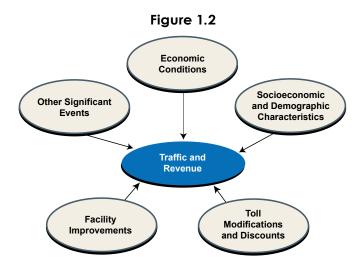
		Length	Passenge as of 7 Toll Rate	7/1/13	Toll Per Mile		
Туре	System	(miles)	Cash	SunPass	Cash	SunPass	
	Alligator Alley	78.0	\$3.00	\$2.81	\$0.038	\$0.036	
	Beachline East Expressway	15.0	0.50	0.26	0.033	0.017	
Department-owned	Pinellas Bayway System <sup>(1)</sup>	15.2	2.00	1.28	0.132	0.084	
Facilities	Sunshine Skyway Bridge <sup>(2)</sup>	17.4	1.25	1.02	0.072	0.059	
	95 Express <sup>(3)</sup> Minimum	7.3	N/A	0.25	N/A	0.034	
	Maximum	7.3	N/A	7.00	N/A	0.959	
Department-	Garcon Point Bridge <sup>(4)</sup>	3.5	3.75	3.75	1.071	1.071	
operated Facilities	Mid-Bay Bridge <sup>(5)</sup>	3.5	3.00	2.00	0.857	0.571	

- (1) Actual one-way toll for two-axle vehicles ranges between \$0.50 and \$1.25, depending on method of payment.
  (2) Two-axle vehicles with SunPass receive a 18.4 percent in-lane discount and no minimum SunPass usage is required.
- (3) 95 Express is an all-electronic toll facility with variable toll rates determined by traffic density. The minimum and
- maximum toll rates were used for comparative purposes for only one direction.

  Two-axle vehicles with SunPass receive a 50 percent rebate after reaching 30 transactions a month
- (5) Two-axle vehicles receive a \$1.00 in-lane discount and no minimum SunPass usage is required.

# 1.2 FACTORS AFFECTING TRAFFIC AND REVENUE

A number of factors influence the demand for roadway travel, in general, and the use of toll roads in particular. As shown in Figure 1.2, these factors are grouped under five general categories.



# 1.2.1 ECONOMIC CONDITIONS AND SOCIOECONOMIC CHARACTERISTICS

The condition of both the state and national economies affects the growth in traffic on the Departmentowned and Department-operated toll facilities. In FY 2013, the Department-owned and Departmentoperated facilities experienced either a slight growth or a decline in traffic and revenue primarily

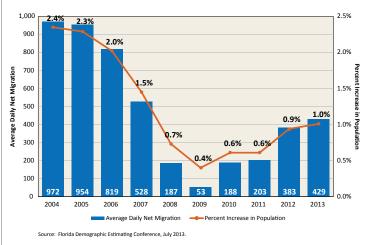
due to the slow economic recovery. It is important to comprehend the changing demographic components and the underlying economic factors that are contributing to this modest growth.

# **Population Growth**

Florida's population is increasing at a diminishing rate; as Graph 1.2 shows, Florida's population, with a growth rate of 0.6 percent in 2011, and increased by 0.3 percent in 2012, and by 0.1 percent in 2013.

Correspondingly, the average daily net migration, which peaked at 972 residents in 2004 and reached its lowest at 53 in 2009, is currently up to 429 in 2013, up slightly from 382 in 2012.

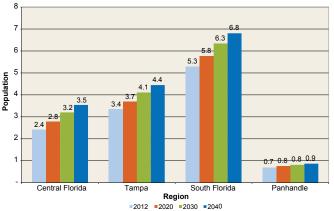
Graph 1.2 Florida Population Trend



According to the latest economic outlook prepared by the Florida Legislature Office of Economic and Demographic Research in August 2013, Florida's population growth rates are forecast to continue strengthening, showing increasing rates over the next few years. These expectations are consistent with the future population forecasts prepared by the Bureau of Economic and Business Research (BEBR) at the University of Florida. According to BEBR, the State's population is currently expected

to reach 21.1 million by 2020. **Graph 1.3** depicts population estimates for all regions served by the Department-owned and Department-operated facilities. South Florida population is expected to increase approximately 500 thousand by 2020, followed by Central Florida with 400 thousand and Tampa with 300 thousand. Affordable housing and the gradual improvement of the economy should have a substantial effect on Florida's population growth over the next several years.

Graph 1.3
Current and Future Population Estimates
Regions Served by Department-owned
and Department-operated Toll Facilities
(In millions)



Source: University of Florida, Bureau of Economic and Business Research 2013.

# Housina

The Great Recession had a negative impact on the housing sector in Florida. However, the housing recovery after the recession continues to show signs of improvement. As **Graph 1.4** demonstrates, after peaking in 2004, the percent change in building permits issued in Florida has declined rapidly with a significant improvement between 2009 and in 2010. The annual number of building permits that peaked at 287 thousand in 2005 stood at only 42 thousand in 2011 (an 85 percent decline from 2005) but has now increased 53 percent over the 2011 levels to almost 65 thousand in 2012. In 2012, Florida real estate markets are starting to show signs of a steady recovery. The sale of existing homes seems to follow a similar pattern with a slight improvement (a lower decrease

Graph 1.4
Year-Over-Year Percent Change: Florida Building
Permits and Existing Home Sales



from the prior year's decrease) beginning in 2008 and continued increases ranging from 31 percent in 2009 to almost 9 percent in 2012. However, the overall recovery is based on the State's labor market, availability of credit markets, and sell off of excess inventory.

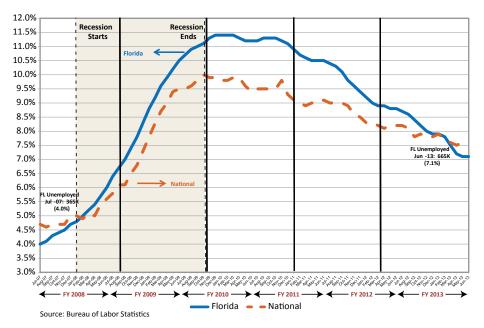
# **Unemployment**

**Graph 1.5** displays the rise in the unemployment rate in Florida along with the national rate since the beginning of FY 2008. Florida, which previously had the lowest unemployment rate in the nation, no longer exceeds the national rate of 7.6 percent as of June 2013. The unemployment rate in Florida as of the same period stands at 7.1 percent, after peaking at 11.4 percent from December 2009 through March 2010. Although the unemployment rate is steadily declining, approximately 665 thousand Floridians were still unemployed as of June 2013.

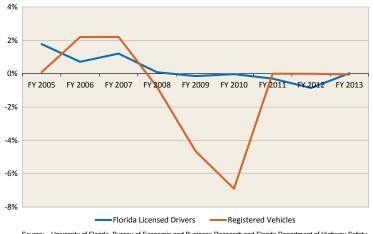
# **Licensed Drivers and Registered Vehicles**

The population growth has a direct impact on the number of driver's licenses issued and vehicles registered in the state. After an increase in drivers and vehicles between 2006 and 2007, the growth rate has continued to remain stagnant or decline

Graph 1.5
Unemployment Rate



Graph 1.6
Year-Over-Year Percentage Change: Florida
Licensed Drivers and Registered Vehicles



Source: University of Florida, Bureau of Economic and Business Research and Florida Department of Highway Safety and Motor Vehicles. in recent years as shown in **Graph 1.6**. In particluar, the rate of vehicles registered has been negatively impacted.

# **Consumer Confidence**

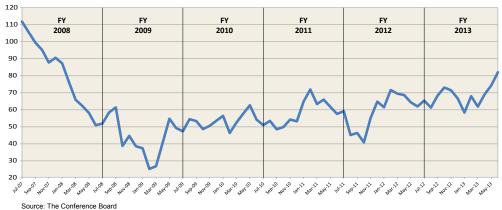
Another important economic gauge is the Consumer Confidence that reflects the general level of optimism consumers have about the economic situation. As **Graph 1.7** demonstrates, since July 2007, the Consumer Confidence Index has declined significantly to levels never seen before, reaching the lowest point in February 2009. Since July 2009, consumer confidence has remained relatively stable, even increasing slightly towards the end of FY 2013 and ending at 82.1 in June 2013.

Lack of confidence inevitably stifles consumer spending. As shown in **Graph 1.8**, Florida's sales and use tax has declined through FY 2010. From FY 2006 through FY 2009, the sales and use tax dropped steeply before increasing sharply through FY 2011, with a further, but small, increase into FY 2013. The sales and use tax ended at \$21.5 billion in FY 2013, which represents an increase of approximately 4.3 percent from FY 2005, and up 5.9 percent from FY 2012. The decreases can be attributed to the decreasing sales of motor vehicles, building materials and other expensive items. However, the increase in FY 2013 is attributed to signs of slow recovery in the economy.

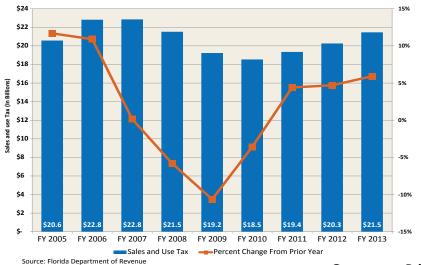
An additional economic indicator is the measure of inflation experienced by consumers for their daily living expenses as expressed by the Consumer Price Index (CPI). A sharp escalation in fuel and food was the primary contributor to the steady rise in the index during mid-2008 as shown in **Graph 1.9**. However, as fuel prices began to decline in fall 2008, the index adjusted accordingly to levels higher than the start of FY 2008. Since the beginning of January 2009, the Consumer Price Index has slowly continued to

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Graph 1.7 Consumer Confidence Index (1985 = 100)



Graph 1.8 Florida Sales and Use Tax



goods and services produced by the State.

Graph 1.10 indicates that the national GDP is contracting at a significantly slower rate. After a decline in the fourth quarter

of 2008, the GDP reached its

manifested in the diminish-

ing growth rate of the Gross

Domestic Product (GDP), a

measure of the total value of

highest point at 3.9 percent in the first quarter of 2010. The modest recovery has begun with the second quarter of 2011 showing an increase of 1.3 percent, while the GDP reached 2.5 percent (annualized) in the second quarter of 2013. This trend is a positive signal that the nation is slowly starting to recover from the Great Recession.

The cost of capital as measured by interest rate is a key factor that governs the

increase and stood at 233 as of June 2013.

The CPI is the basis for toll modifications pursuant to the amendment of Section 338.165, Florida Statues by the 2007 Legislature requiring that the Turnpike Enterprise index toll rates on existing facilities to the annual CPI or similar inflation indicator. Additional details are included in **Section 1.2.2**.

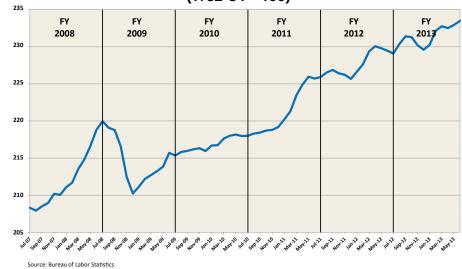
The slowing of the economy is

Graph 1.9

Consumer Price Index - All Urban Consumers

US City Average - All Items

(1982-84 = 100)



Graph 1.10

National GDP: Quarterly Change at

Annualized Rate



economic health of a country. The federal funds rate is often a good predictor of general interest trends in the capital market. The federal funds rate is the interest rate based upon which private depository institutions lend capital at the Federal Reserve to other depository institutions overnight.

**Graph 1.11** depicts the trend of the federal funds rate which is established by the Federal Reserve to

implement its monetary policy and influence the growth of the economy. After reaching a low of one percent in June 2003 and gradually trending upwards to 5.25 percent 3 years later, the rate headed back down again. In response to the growing economic uncertainty brought on by the worsening housing market and tightening credit markets, the Federal Reserve aggressively cut the funds rate along with other fiscal measures to provide liquidity to the market. In fact, in mid-December 2008, the Federal Reserve cut the federal funds rate to a range of zero to

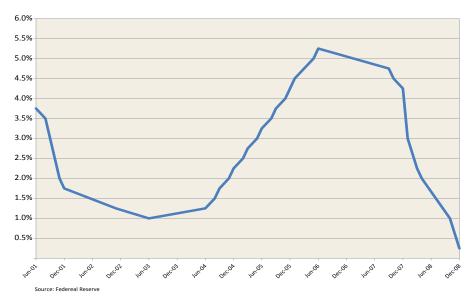
0.25 percent, the lowest level on record. This rate continues to the present time.

# **Employment by Industry**

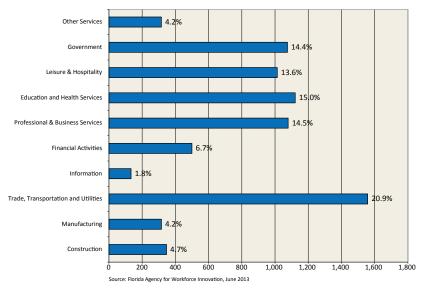
Florida has a diverse industry base, which to some extent, mitigates the impact from the downturn in certain industry sectors. It has a vibrant high-tech industry, and professional and business services industry, complemented by international trade. The implementation of the United States-Dominican Republic-Central America Free Trade Agreement (CAFTA) positions Florida as the primary gateway and business hub for the Caribbean and Latin American nations.

**Graph 1.12** presents the Non-Agriculture Employment in the State by the North American Industry Classification System (NAICS). In 2013, the trade, transportation and utilities industries employed over 1.5 million of the workforce and almost 21 percent of total employment; followed by; education and health services (15.0 percent); professional and business services (14.5 percent); and government (14.4 percent). Unlike last year, the construction sector

Graph 1.11 Federal Funds Rate



Graph 1.12 Non-Agricultural Employment in Florida 2013 (In thousands)



increased over the prior year while the government sector showed a further decline in relation to the preceding year.

From 2005 through 2011, and consistent with the slump in the housing market, the percentage change in labor force in the construction industry saw a dramatic decline, reaching a 23 percent decrease between 2008 and 2009 as illustrated in **Graph 1.13**. FY 2010 decreased 12 percent compared to FY 2009. However, FY 2011 shows

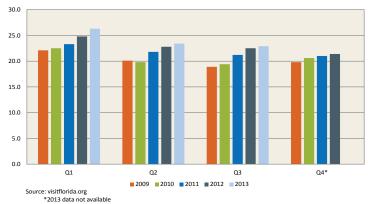
an improvement of 12 percent from the preceding year. From FY 2011 to FY 2012 there was an increase in the construction labor force of 1.8 percent followed by an increase of 1.5 percent from FY 2012 to FY 2013. The increase in the construction sector could be attributed to the decrease in unemployment in the state.

# **Tourism**

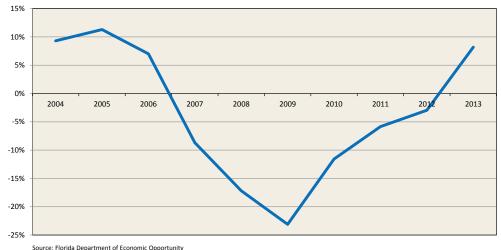
Tourism is a vital component and a key contributor in keeping Florida's economy surging ahead.

**Graph 1.14** shows the number of visitors by quarter over the past four years through the

Graph 1.14
Florida Tourists (In Millions)



Graph 1.13 Year-Over-Year Percent Change in Construction Labor Force



third quarter of 2013. In 2013, the number of visitors reached the highest level seen since 2009. In fact, the state is on track to possibly reach 100 million visitors in 2013. Considering the extent of the global economic downturn, Florida's tourism industry is doing relatively well. This is in part due to a sharp rise in in-State travel by Florida residents choosing to stay close to home and opting for cheaper vacations.

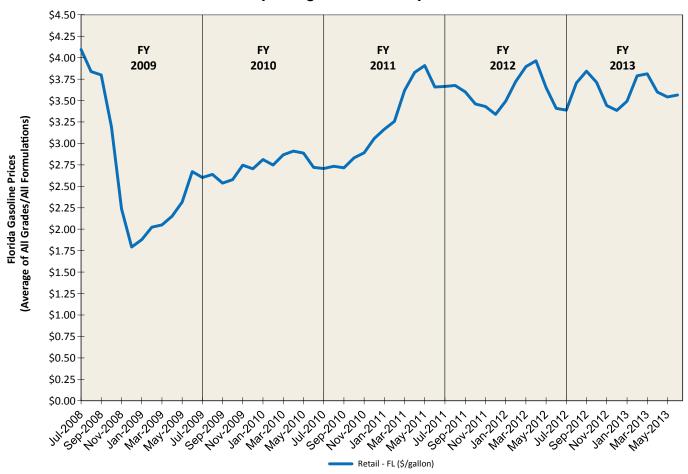
# **Fuel Prices**

Graph 1.15 portrays the historical trend of gas prices in Florida (average of all grades). In FY 2008, the Florida gas price escalated from \$3.00 per gallon to over \$4.00 per gallon. However, starting in early fall 2008, Florida gas prices fell rapidly reaching \$1.80 per gallon in December 2008. During FY 2011, fuel prices continued a general upward trend to \$3.66 per gallon by June 2011. In the Spring of FY 2012 fuel prices showed a decline, ending the fiscal year at \$3.41 per gallon. Since then, fuel prices have shown a slow and steady increase, peaking in September 2012 at \$3.84 per gallon, but ending the most recent fiscal year (FY 2013) at \$3.57 per gallon.

The dramatic slowdown in the economic activities

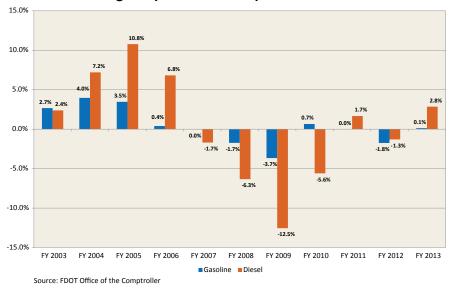
and volatility in fuel prices are contributing to a significant decline in the highway fuel consumption rate in the State. As illustrated in Graph 1.16, the percentage decline of fuel consumption, particularly diesel, from FY 2007 to FY 2010 signifies the impact of the economic recession. In FY 2011, diesel and motor fuel (gasoline and gasohol) consumption remained virtually unchanged from the preceding vear. In FY 2012 there were further decreases in fuel consumption with diesel decreasing 1.3 percent and motor fuel consumption decreasing 1.8 percent. In FY 2013 fuel consumption increased overall, with diesel consumption increasing 2.8 percent and motor fuel consumption increasing 0.1 percent. The small increase in fuel consumption can be contributed to the rise in employment in the state.

Graph 1.15
Florida Gasoline Prices
(Average of All Grades)



Source: Energy Information Administration, U.S. Department of Energy

Graph 1.16
Year-Over-Year Percentage Change:
Highway Fuel Consumption in Florida



# 1.2.2 TOLL MODIFICATIONS AND DISCOUNTS

**Table 1.2** provides a historical overview of the changes in toll rates and/or toll structure for the seven facilities. Modifications made to the toll rate on a facility will either encourage additional customers to use the toll road (in the case of a toll discount) or discourage existing customers (in the case of a toll increase). Subsequently, toll revenues are affected by this change. The term elasticity is typically used to indicate the relationship between traffic and toll rate changes. The elasticity factor usually depends on the type of parallel competing highways, their level of congestion and driver characteristics. Historically, all of the facilities, excluding 95 Express, have undergone toll rate increases or modifications.

On June 24, 2012 all Department-owned facilities except the 95 Express lanes increased tolls pursuant to the amendment of Section 338.165, Florida Statutes, by the 2007 Legislature to require that the Turnpike System and other FDOT-owned facilities index toll rates on existing toll facilities to the annual Consumer Price Index (CPI) or similar inflation indicator. Toll rate adjustments for inflation may be made no more frequently than once a year and must be made no less frequently than once every five years

as necessary to accommodate cash toll rate schedules. As such, SunPass rates are to be adjusted annually based on the year-over-year change in CPI and rounded to the nearest penny, while cash rates will be adjusted once every five years and rounded to the next quarter. A detailed description of the indexing methodology used to calculate the toll rate increase is included in the **Executive Summary** chapter of this report.

Accordingly, on July 1, 2013 (FY 2014), SunPass toll rates were adjusted by 2.1 percent and rounded to the penny. Cash rates remained unchanged since they were increased last year. The

observation of the SunPass only toll rate increase through September 2013 shows a modest growth on all of the Department-owned facilities (excluding 95 Express as it was not part of the indexing). The relatively small increase in tolls compared to the preceding fiscal year did not appear to divert traffic from the facilities.

To partially mitigate the revenue shortfall on the Garcon Point Bridge, the Santa Rosa Bay Bridge Authority adopted a schedule of periodic toll increases every three years. Tolls on the bridge were increased on July 1, 2001 (FY 2002), on July 1, 2004 (FY 2005), July 1, 2007 (FY 2008), and January 5, 2011



Table 1.2 Historical Toll Rate Modifications by Facility

Facility	Opening Year (Opening Toll Rate)	Date of Conversion	Type of Adjustment	System Increase	Multi-axle Rate Adjustment	
		05/99	Toll conversion (split plazas with one-way tolls)	\$0.00	Conversion to N-1	
		02/06	Toll rate increase	0.50 SunPass 1.00 Cash	Remained N-1	
Alligator Alley (1)	1969 (\$1.50) 06/12		Toll rate increase	0.75 SunPass 0.50 Cash	Remained N-1	
		07/13	Toll rate increase for SunPass	0.00 Cash 0.06 SunPass	Remained N-1	
		07/96	Toll rate increase (\$0.20 to \$0.25)	0.05	Conversion to N-1	
Beachline East Expressway (2)	1974 (\$0.20)	06/12	Toll rate increase for cash	0.00 SunPass 0.25 Cash	Remained N-1	
		07/13	Toll rate increase for SunPass	0.00 Cash 0.01 SunPass	Remained N-1	
Pinellas Bayway System		07/81	Toll rate increase (\$0.20 to \$0.30)	0.10	Remained per-axle	
		10/86	Toll rate increase (\$0.30 to \$0.50)	0.20	Remained per-axle	
East and West Plazas	1962 (\$0.20)	06/12	Toll rate increase for cash (\$0.50 to \$0.75)	0.00 SunPass 0.25 Cash	Conversion to N-1	
		07/13	Toll rate increase for SunPass	0.00 Cash 0.01 SunPass	Remained N-1	
Central Plaza	1962 (\$0.10)	09/86	Plaza removed	-	-	
South Plaza	1962 (\$0.35)	06/12	Toll rate decrease (\$0.35 to \$0.25) Toll rate increase (\$0.35 to \$0.50)	(0.10) SunPass 0.15 Cash	Conversion to N-1	
30uiii Fiaza		07/13	Toll rate increase for SunPass	0.00 Cash 0.01 SunPass	Remained N-1	
		12/58	Toll rate decrease (\$1.75 to \$1.00 for two-axle passenger vehicles)	(0.75)	Remained per-axle	
		04/66	Toll rate decrease (\$1.00 to \$0.50 for two-axle passenger vehicles)	(0.50)	Remained per-axle	
		07/82	Toll rate increase (\$0.50 to \$1.00 for two-axle passenger vehicles)	0.50	Remained per-axle	
Sunshine Skyway Bridge <sup>(3)</sup>	1954 (\$1.75)	06/12	Toll rate increase	0.25 SunPass 0.25 Cash	Conversion to N-1	
		07/13	Toll rate increase for SunPass	0.00 Cash	Remained N-1	
				0.02 SunPass		
95 Express <sup>(4)</sup>	2008	N/A	N/A	N/A	N/A	
Garcon Point Bridge	1999 (\$2.00)	07/01	Toll rate increase (\$2.00 to \$2.50)	0.50	Remained N-1	
Carson Find Bridge	(\$2.00)	07/04	Toll rate increase (\$2.50 to \$3.00)	0.50	Remained N-1	
		07/07	Toll rate increase (\$3.00 to \$3.50)	0.50	Remained N-1	
		01/11	Toll rate increase (\$3.50 to \$3.75)	0.25	Remained N-1	
Mid-Bay Bridge <sup>(5)</sup>	1993 (\$2.00)	10/04	Toll rate increase (\$2.00 to \$2.50)	0.50	Remained N-1	
		06/10	Toll rate increase (\$2.50 to \$3.00)	0.50	Remained N-1	

(FY 2011). Other recent toll rate increases include the FY 2010 increase on the Mid-Bay Bridge. These increases were for both SunPass and cash customers.

A comparison of toll increases to increases in the

cost of living, as measured by the CPI, shows that inflation has far outpaced toll rate increases on the Department-owned facilities except 95 Express. Table 1.3 illustrates this impact, showing each facility with its opening year toll rate factored by the CPI

FY 2013 Annual Report

<sup>(1)</sup> The west toll plaza opened in 1966, whereas the east toll plaza opened in 1966 when the facility was fully completed. Two-way tolling of \$0.75 each way at the east and west plazas changed to one-way tolling of \$1.50 at the east plaza (westbound) and \$1.50 at the west plaza (eastbound) in May 1999.

(2) Subsequent to an amendment to an agreement on May 8, 1998 between the Department and OOCEA (Orlando-Orange County Expressway Authority), tolls are now collected at the OOCEA ballas Mainline Plaza as a surcharge above the OOCEA toll.

(3) In 1958, the rate for motorcycles increased from \$0.50 to \$1.00 concurrent with the decrease for two-axle and three or more axle vehicles. In the 1966 toll rate revision, the rate for motorcycles was reduced back to \$0.50. In the 1982 revision, it increased to \$1.00 for the second time. Current two-axle SunPass toll rate reflects an immediate in-lane 25 percent discount off the \$1.00 two-axle cash toll rate.

(6) Actual toll rate based on traffic density, 95 Express is an all-electronic toll facility designed for 2-axle vehicles only.

(6) Current two-axle SunPass toll rate reflects an immediate in-lane \$1.00 discount off the \$3.00 two-axle toll rate.

Table 1.3 **Toll Rate Illustration** Actual Toll Rates versus Toll Rates Adjusted for Inflation **Department-owned Toll Facilities** 

Facility	Opening Year	Opening Year Toll Rate	Opening Year CPI	Method of Payment	2013 Toll <sup>(1)</sup>	2013 CPI	2013 Toll Adjusted for Inflation
				SunPass	\$2.81		
Alligator Alley	1969	\$1.50	36.7	Cash	3.00	233.5	\$9.54
				SunPass	0.26		
Beachline East Expressway	1974	0.20	49.3	Cash	0.50	233.5	0.95
				SunPass	0.51		
Pinellas Bayway System (2)	1962	0.20	30.2	Cash	0.75	233.5	1.55
				SunPass	1.02		
Sunshine Skyway Bridge (3)	1966	0.50	32.4	Cash	1.25	233.5	3.60
95 Express <sup>(4)</sup>	2009	0.25	213.1	SunPass	0.25	233.5	0.27

Source: U.S. Bureau of Labor Statistics

Notes: The Consumer Price Index (CPI) is for All Urban Consumers - US City Average - Not Seasonally Adjusted, Base: 1982-84 = 100

As of June 2013. Toll rates effective July 1, 2013.

One-way, full-length, two-axie toll. For illustrative purposes on the Pinellas Bayway System, the toll to travel the facility from St. Petersburg to St. Petersburg Beach (SR 682) is used. Other system rates exist depending on destination. Opening year for the Sunshine Skyway Bridge was 1954. For illustrative purposes, 1966 was used because it represents the lowest toll rate on the facility. Two toll rate decreases occurred from 1954 to 1966, reducing the toll rate from \$1.75 to \$0.50. (3)

95 Express is an all-electronic toll facility with variable toll rates determined by traffic density. The minimum toll rate is used for comparative purposes for only one direction

to 2013. For example, if tolls for a passenger car trip on Alligator Alley were increased at the same rate as the CPI since the opening of the facility, the original \$1.50 toll would be \$9.54. Likewise, for the other Department-owned facilities, current toll rates would be significantly higher if increased at the same rate as the CPI.

# 1.2.3 FACILITY IMPROVEMENTS

In general, improvements to toll facilities, as well as improvements to other competing and adjacent roadways, will have an impact on toll road traffic and revenue. Normally, traffic will divert onto the toll facility when improvements are made to the facility, and will divert away when improvements are made to the neighboring competing facilities. These improvements include future widening needs, new and modified interchanges, rest areas and improvements to access roads. Toll facility widening reduces the level of congestion and provides improved travel conditions. New or modified interchanges and improvements to access roads leading to the toll facilities enhance accessibility to the toll roads. In this report, both current and future improvements were considered in the development of traffic and revenue projections. The Alligator Alley, Pinellas

Bayway, Mid-Bay Bridge and 95 Express are the only facilities with improvements currently planned.

#### **OTHER SIGNIFICANT** 1.2.4 **EVENTS**

In the course of time, certain unforeseen events occur that affect the traffic and revenue performance on toll facilities. Although these events may be short in duration, as with hurricanes and tropical storms, transactions and revenue impacts may be material. The noteworthy events range from

maintenance and ancillary improvements to major capacity improvements, and toll rate increases. Each section of the report addresses these events in more detail.

# 1.3 Forecasting Methodology

Traffic forecasts are needed to identify roadway improvements, plan for new projects and generate toll revenue forecasts. Revenue forecasts are needed to verify future debt service coverage on outstanding bonds and to assist the Department in the development of its Finance Plan and Work Program.

Estimates on older, more established toll facilities owned or operated by the Department have been quite reliable because traffic patterns are typically known and a significant amount of historical traffic and revenue data are already available. With little uncertainty regarding land use and motorist travel patterns, these forecasts are developed based on actual traffic and revenue performance, adjusted for population growth and future known events such as toll rate changes and roadway improvements.

On the other hand, in the development of revenue



forecasts for new toll facilities uncertainty exists concerning future land use, ramp-up and changes in population patterns. Consequently, forecasts on these and other similar facilities have a higher degree of variability than forecasts for more established toll facilities. This variability has justified the need for the development of traffic and revenue adjustment factors that are now considered in the estimation of future projections. The traffic factors include rampup, roadway peaking and land use lag factors. The revenue factors include traffic mix and non-revenue vehicle factors.

The general forecasting procedure used in this report includes a comparison between historical traffic growth on the toll facility and the historical growth in population for counties that have an impact on the travel patterns of the facility. By applying the ratio between historical traffic and population growth to estimated annual population growth through 2024, an average annual traffic growth rate is obtained. This estimated growth rate is used as a general guideline in forecasting traffic growth on the facility. Gross revenue forecasts are obtained from projected traffic and average toll estimates for the facility. Both traffic and revenue forecasts are then adjusted for future events, network changes, development impacts and current economic trends. Historical traffic and revenue data from FY 2003 through FY 2013

was used during the forecasting process. In addition, the forecast also includes additional revenues generated from the indexing of tolls. **Table 1.4** shows the historical and projected population growth rates for the related counties around the facilities owned or operated by the Department. These growth rates have been calculated using medium population projections from the most recent publication by the Bureau of Economic and Business Research (BEBR), College of Business Administration at the University of Florida.

Operating and maintenance expense forecasts are based on historical information provided by the Department's Office of the Comptroller and Project Finance Office. The Project Finance Office is located within the Office of the Comptroller. Maintenance expenses include routine and periodic expenses. Routine maintenance expenses are expected to recur annually, and require funding to preserve the system and extend the life of the facility. Periodic maintenance items are usually large, expensive repairs that do not recur on an annual basis. Operating and routine maintenance expenses are deducted from gross toll revenues to obtain net revenues. Generally, the resulting net revenue from each facility, plus any interest earnings from invested funds, is available for the payment of annual debt service.

# 1.4 REVENUE SUFFICIENCY

Construction of the facilities and significant improvements are typically financed by the issuance of bonds. **Table 1.5** presents a historical summary of bond issues and a description of how the bond proceeds were utilized for the six toll facilities (95 Express not included). All revenue bonds are guaranteed by the toll revenues of the facility and are not a general obligation of the State of Florida. In order to measure the revenue sufficiency of each facility to meet future debt requirements, debt service coverage is computed representing the ratio of annual net revenues to the annual debt service requirement.

Table 1.4 Historical and Projected Populations for Related Counties

				Historical Population (000)							Forecasts 00)
System	Facility	County	1990 <sup>(1)</sup>	2000 <sup>(2)</sup>	Annual Percent Change <sup>(3)</sup>	2010 <sup>(4)</sup>	Annual Percent Change <sup>(5)</sup>	2012 <sup>(6)</sup>	Annual Percent Change <sup>(7)</sup>	2020 <sup>(6)</sup>	Annual Percent Change <sup>(8)</sup>
		Broward	1,256	1,623	2.6%	1,748	0.7%	1,771	0.7%	1,851	0.6%
		Collier	152	251	5.1	322	2.5	330	1.2	383	1.9
	Alligator Alley	Lee	335	441	2.8	619	3.4	638	1.5	774	2.4
		Miami-Dade	1,937	2,254	1.5	2,496	1.0	2,551	1.1	2,761	1.0
		SUBTOTAL	3,680	4,569	2.2	5,185	1.3	5,290	2.0	5,769	1.1
		Brevard	399	476	1.8	543	1.3	546	0.2	590	1.0
	Beachline East	Orange	677	896	2.8	1,146	2.5	1,176	1.3	1,372	1.9
	Expressway	Osceola	108	172	4.8	269	4.6	281	2.2	357	3.0
		Seminole	288	365	2.4	423	1.5	428	0.6	465	1.0
Department-		SUBTOTAL	1,472	1,909	2.6	2,381	2.2	2,431	1.0	2,784	1.7
owned	Pinellas Bayway	Pinellas	852	921	0.8	917	0.0	920	0.2	922	0.0
Facilities	System	SUBTOTAL	852	921	0.8	917	0.0	920	0.2	922	0.0
		Hillsborough	834	999	1.8	1,229	2.1	1,256	1.1	1,433	1.7
		Manatee	212	264	2.2	323	2.0	330	1.1	375	1.6
	Sunshine Skyway	Pasco	281	345	2.1	465	3.0	469	0.4	550	2.0
	Bridge	Pinellas	852	921	0.8	917	0.0	920	0.2	922	0.0
		Sarasota	278	326	1.6	379	1.5	384	0.6	422	1.2
		SUBTOTAL	2,457	2,855	1.5	3,313	1.5	3,359	0.7	3,702	1.2
		Miami-Dade	1,937	2,254	1.5	2,496	1.0	2,551	1.1	2,761	1.0
	95 Express	Broward	1,256	1,623	2.6	1,748	0.7	1,771	0.7	1,851	0.6
		SUBTOTAL	3,193	3,877	2.0	4,244	0.9	4,322	0.9	4,612	8.0
	TOTAL (9)		7,609	9,333	2.1	10,879	1.5	11,080	0.9	12,254	1.3
		Okaloosa	144	170	1.7	181	0.6	187	1.7	198	0.7
	Mid-Bay Bridge	Walton	28	41	3.9	55	3.0	57	1.8	68	2.3
Department-		SUBTOTAL	172	211	2.1	236	1.1	244	1.7	266	1.1
operated	Garcon Point	Escambia	263	294	1.1	298	0.1	300	0.3	307	0.3
Facilities	Bridge	Santa Rosa	82	118	3.7	151	2.5	155	1.4	179	1.8
		SUBTOTAL	345	412	1.8	449	0.9	455	0.7	486	8.0
	TOTAL		517	623	1.9	685	1.0	699	1.0	752	0.9
FLORIDA TO	ΓAL		12,938	15,983	2.1%	18,801	1.6	19,074	0.7	21,141	1.3%

- 1990 Census data
- 2000 Census data
- Compounded annual growth between 1990 and 2000.
- 2010 Census data.
- Compounded annual growth between 2000 and 2010.
- University of Florida, Bureau of Economic and Business Research (BEBR) 2013.
- Annual growth from 2010 to 2012. Compounded annual growth between 2012 and 2020.
- Pinellas, Miami-Dade, and Broward Counties were only included once in the totals.

For example, a debt service coverage ratio of 2.0 indicates that for every \$1 of debt service, \$2 of net revenue is available to satisfy the debt service. Net revenues are generally defined as gross revenue less operating and maintenance (O&M) expenses. Annual payments of bond principal and interest represent the annual debt service requirement. Each section of the report addresses debt service coverage in more detail (if applicable).

Alligator Alley, Garcon Point Bridge and Mid-Bay Bridge are the only facilities with outstanding bonds. It should be noted that in April 2013, Standard and Poor's (S&P) upgraded the Alligator Alley bond rating to AA- from a rating of A+. This is a significant rating increase as Alligator Alley is only the second toll facility in the state to have this high of a rating.

# 1.5 TOLL COLLECTION METHODOLOGY

Table 1.6 provides an inventory of the existing toll collection plans on the facilities. The main toll collection method used on toll facilities owned or operated by the Department consists of the coin (or barrier) system that offers both manual and automatic lanes for toll

Table 1.5 **History of Bond Issues** 

Facility	Bonds Outstanding as of June 30, 2013 (\$000)	Underlying Bond Rating <sup>(1)</sup>	Date of Issuance	Amount (\$000)	Use of Funds
		AA- (S&P)	1963	\$17,000	Fund construction of the facility
Alligator Alley	\$34,145	A1 (Moody's) A+ (Fitch)	1997	55,230	Fund SunPass installation, SR 29 improvements, toll plaza reconstruction and rest areas
			2007A	43,175	Refund the outstanding Series 1997 issue
Beachline East Expressway	N/A	N/A	1968	10,000	Fund the design and construction of the facility
Pinellas Bayway System	N/A	N/A	1960	16,800	Fund construction of the facility
Fillelias Bayway System	IN/A	IN/A	1965	21,050	Refund Series 1960 issue
			1951	21,250	Fund construction of original single span bridge
			1966	23,500	Refund Series 1951 issue and expand the facility
Sunshine Skyway Bridge	N/A	N/A	1984	36,000	Fund replacement of the original Sunshine Skyway Bridge with the new single four-lane high-level structure
			1986	35,165	Refund the outstanding Series 1984 issue
			1991	33,000	Advance refund outstanding Series 1984 and Series
			2001	17,555	1986 issues     Refund the outstanding Series 1991 issue
Garcon Point Bridge	\$116,800	D (S&P) Withdrawn (Moody's) Withdrawn (Fitch)	1996	94,994	Finance construction of the two-lane facility
		Withdrawn (Fitch)	1991A	30,790	Finance acquisition and construction of the two-lane
					facility Finance acquisition and construction of the two-lane
	\$260,223	BBB- (S&P) BBB (Fitch)	1991B	25,100	facility
			1993A	57,210	To achieve a crossover refunding of the Series 1991A Bonds and all of the Series 1991B Bonds
			1993D	29,040	To provide funds necessary to advance refund the Series 1991A Bonds
Mid-Bay Bridge <sup>(2)</sup>			1997A	12,978	Finance a portion of the costs of renovation, improvement and expansion of the toll plaza; reimburse the County for certain Interlocal Agreement Payments
			1997B	2,910	Fund certain debt restructuring costs including exchanging certain Series 1991B, Series 1993A and Series 1993D bonds
			2004A	21,700	Refund certain of the Authority's outstanding bonds including unexchanged Series 1993 Bonds outstanding and Series 1997A Bonds
			2004B	11,525	Finance a portion of the costs of the design and construction of the north approach capacity improvement and toll plaza expansion
			2007A	25,525	Finance a portion of the costs of the design and construction of Phase 1 and Phase 2 of the Connector project and the widening of SR 20
			2007B	23,665	Finance a portion of the costs of the design and construction of Phase 1 and Phase 2 of the Connector project and the widening of SR 20
			2008A	34,900	Refund the outstanding series 2004A and 2004B issues
			2011A	143,950	Finance a portion of the costs of the design and construction of Phase 2 and Phase 3 of the Connector project and the resurfacing of Range Road
			2011B	10,725	Refund the outstanding series 1993A and 1993D issues and defeasing certain maturities of the 1997A Bonds

Source: Official Statements.

Note: No bonds were issued for the construction of 95 Express. This project was partially funded by an Urban Partnership Agreement (UPA) with FHWA.

(1) Current Bond Ratings from Fitch, Inc; Moody's Investor Services and Standard and Poor's (S&P) Rating Services.

(2) Bonds outstanding for Mid-Bay Bridge are reported as of June 30, 2012. S&P rating is for Series 2011A and Series 2011B. Fitch rating is for Series 2011B.

payment. The coin system method of toll collection requires the customer to stop at each toll plaza to pay the cash toll. In addition to cash, SunPass is available on all facilities. 95 Express is a SunPass-only facility designed for only 2-axle vehicles. A detailed description of the toll collection method used on this facility is discussed in the 95 Express chapter of this report.

With respect to multi-axle vehicles, toll collection plans up until the June 24, 2012 toll rate adjustment included both the "per-axle" and "N minus 1" methods. Tolls on Alligator Alley for vehicles with three or more axles are now calculated by multiplying the toll for two-axle vehicles by the number of axles (N) minus one (also known as the "N minus 1"

# Table 1.6 Toll Collection Plan Comparisons FY 2013

Туре	System	Multi-axle Rate Adustment	Method of Toll Payment	Current Toll Discounts
	Alligator Alley <sup>(1)</sup>	N minus 1	Cash; SunPass	6% (SunPass)
Department	Beachline East Expressway <sup>(2)</sup>	N minus 1	Cash; SunPass/E-Pass	48% (SunPass)
Department- owned	Pinellas Bayway System (East & West Plazas) <sup>(3)</sup>	N minus 1	Cash; SunPass	Annual Unlimited Pass, 32% (SunPass)
Facilities	Pinellas Bayway System (South plaza)(3)			Annual Unlimited Pass, 48% (SunPass)
	Sunshine Skyway Bridge <sup>(4)</sup>	N minus 1	Cash; SunPass	18% (SunPass)
	95 Express <sup>(5)</sup>	N/A	SunPass	None
Department-	Garcon Point Bridge <sup>(6)</sup>	N minus 1	Cash; SunPass	50% (SunPass, 2-axle vehicles only)
operated Facilities	Mid-Bay Bridge <sup>(7)</sup>	N minus 1	Cash; SunPass	33% (SunPass, 2-axle vehicles only)

- (1) All vehicles with SunPass receive an 6 percent discount (immediate) and no minimum SunPass usage is required.
- (2) E-Pass is the electronic toll collection system utilized by the OOCEA since 1995. By January 2001, SunPass was integrated on all OOCEA facilities thereby providing two fully inter-operable toll collection systems.
- (3) SunPass includes the annual unlimited passes (\$15 Bayway Isles pass and \$50 General Public pass) for qualified vehicles. All other SunPass usage qualifies for a standard percentage discount as noted above.
- (4) All vehicles with SunPass receive a 18 percent discount (immediate) and no minimum SunPass usage is required.
- (5) 95 Express is an all-electronic toll facility designed for 2-axle vehicles only. Qualified vehicles (i.e., HOV 3+, hybrids, buses and motorcycles) can use the facility toll-free.
- (6) A SunPass discount of 50 percent occurs after the 30th transaction of each month for two-axle vehicles (retroactive). SunPass discounts are not available to multi-axle vehicles.
- (7) Two-axle vehicles with SunPass receive a 33 percent discount (immediate) with no minimum SunPass usage required. SunPass discounts are not available to multi-axle vehicles

method). This method is also used on the Beachline East Expressway, Garcon Point Bridge and Mid-Bay Bridge. In addition, it is used on many sections of Florida's Turnpike and on toll facilities owned by other Florida expressway authorities. The "N minus 1" toll structure is designed to enhance toll simplification, revenue productivity and accountability over the per-axle method.

Tolls for multi-axle vehicles on the Sunshine Skyway Bridge and the east and west mainline plazas on the Pinellas Bayway System had been calculated by multiplying the per-axle toll by the number of axles (also known as the "per-axle" method). A modified per-axle method was used on the southern mainline plaza of the Pinellas Bayway System to calculate the tolls for three-or-more axle vehicles. These two facilities have now been converted to the "N minus 1" method of toll collection along with the implementation of indexing on June 24, 2012.

# 1.6 THE SUNPASS SYSTEM

The SunPass electronic toll collection system provides customers who use the technology with

non-stop travel through the toll plazas. It operates at travel speeds under 30 miles per hour for dedicated SunPass lanes in a conventional toll plaza and up to the posted speed limit in a SunPass express lane. The statewide implementation of SunPass provides a convenient method of toll payment anywhere in the State of Florida.

During FY 2013, the Department issued another record high of 1.1 million transponders. With average sales of 91 thousand transponders per month, the total number of SunPass transponders issued reached nearly 8.6 million by the end of FY 2013. Customers can establish their SunPass prepaid account and purchase a transponder online at www.sunpass.com or by calling 1-888-TOLL-FLA. They can also mail or fax their application to the customer service center in Boca Raton. In addition, transponders are sold at numerous locations throughout Florida, including the SunPass Service Center in Boca Raton; the South Broward, Palm Beach and Miami Regional Toll Offices; Turnpike service plazas and the respective SunPass outlets on each of the toll facilities. Retail sales locations include CVS Pharmacies.

Publix supermarkets, AAA, Navarro and Sedano's.

In July 2008 (FY 2009), the Turnpike Enterprise introduced a less expensive version of the current transponder known as the SunPass Mini. The SunPass Mini is a sticker tag the size of a credit card which is permanently affixed on the windshield of the customer's vehicle. This new form of SunPass can be used on all toll roads in the State of Florida, which is helping to boost SunPass participation.

In March 2012 (FY 2012), the Turnpike Enterprise upgraded their portable SunPass transponder to a more compact technology with a smaller transponder known as the SunPass Slim. The SunPass Slim transponder is just under 1-inch wide, uses 40 percent less surface area than the current version, contains no batteries and can be transferred between customer's vehicles. As with the SunPass Mini, the SunPass Slim can be used on all toll roads in the State of Florida.

In order to provide added convenience to SunPass customers who have not chosen to automatically replenish low account balances, the Turnpike is offering replenishments through kiosks at 4,500 locations statewide. A list of kiosk locations is available online at <a href="https://www.sunpass.com">www.sunpass.com</a>. During FY 2013, the Turnpike continued to expand this program by adding new vendors and increasing the number of available stores. In August 2013 (FY 2014) the Turnpike launched a new vending machine program which allows SunPass Mini transponders to be purchased in vending machines at three Official Florida Welcome

Centers and at an Interstate 4 rest area. This program is another convenient method of putting SunPass in the hands of travelers.

In general, commuters and frequent users appreciate the value of SunPass more than occasional users. For this reason, Department-owned and Department-operated facilities with a high percentage of commuters typically

have higher levels of SunPass participation. **Table 1.7** provides a listing of SunPass implementation dates for Department-owned and Department-operated



Table 1.7
SunPass Implementation Dates
with FY 2013 Participation Rates

Туре	System	SunPass Implementation Date	FY 2013 SunPass Participation Rates <sup>(1)</sup>
	Alligator Alley	October 16, 1999	56.0%
Department-	Beachline East Expressway	January 26, 2001	61.9
owned	Pinellas Bayway System	June 6, 2000	61.7
Facilities	Sunshine Skyway Bridge	August 19, 2000	51.8
	I-95 Express	December 5, 2008	92.8
Department- operated	Garcon Point Bridge	May 14, 1999	38.5
Facilities	Mid-Bay Bridge	May 25,1999	64.1

(1) Based on transactions

facilities, as well as the SunPass participation rates for FY 2013.

As previously noted in **Table 1.6**, certain facilities offer specialized discounts under the SunPass program. The annual discount program specific to the Pinellas Bayway System provides drivers with a free transponder with the purchase of an annual pass and allows them unlimited passage on the system (or parts of the system) for that year. Bayway Isles residents pay \$15 annually for passage through the east plaza and commuters pay \$50 annually for the General Public pass, good at all three plazas on the system.

On the Sunshine Skyway and Mid-Bay Bridges, two-axle vehicles with SunPass receive discounts of 18 percent and 33 percent, respectively. For both facilities, no minimum trip threshold is required and the driver receives an immediate discount when traveling on the facility. Similarly, SunPass customers receive inlane discounts of 6 percent on Alligator Alley and 48 percent on the Beachline East. On the Garcon Point Bridge, a 50 percent retroactive discount is provided

to SunPass users of passenger vehicles after 30 transactions are reached on this facility in a month. For all SunPass users on Pinellas Bayway System (excluding annual pass holders) and SunPass users with three-ormore axle vehicles on the Sunshine Skyway Bridge, a 10 percent retroactive discount is given to customers who reach a threshold of 40 monthly transactions. 95 Express does not offer discounts. **Graph 1.17** summarizes SunPass transactions and revenues for FY 2013 for each facility.

The SunPass Violation Enforcement System (VES) is designed to minimize SunPass violations and reduce toll evasion. The system allows the Department to monitor the flow of traffic by using video cameras mounted in the SunPass lanes and to capture a license plate image of violating vehicles. Toll violations in the SunPass lanes can occur for several different reasons, including a non-SunPass customer without a transponder, malfunctioning of the transponder or transponders that have insufficient balances.

