

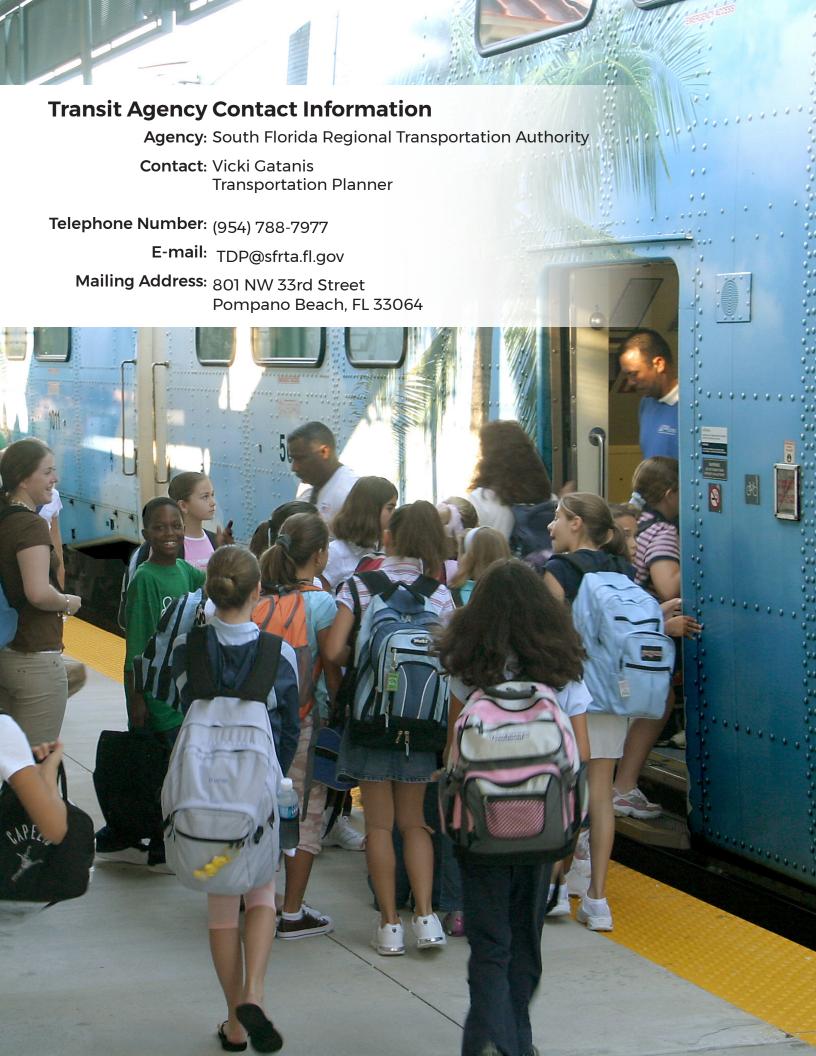
# FY 2019 - 2028 Transit Development Plan Executive Summary



# Section 1 Introduction









# INTRODUCTION

The South Florida Regional Transportation Authority (SFRTA) presents this Transit Development Plan (TDP) Major Update, SFRTA Building Stronger Connections, which meets the requirements of, and has been prepared in accordance with Florida Administrative Code (FAC) Rule 14-73.001. SFRTA will use this plan as a strategic planning and guidance tool, as delineated in Section 341-052, F.S.

The **SFRTA Building Stronger Connections** TDP Major Update seeks to refocus SFRTA's mission to steadily improve the passenger experience and grow ridership while fostering collaborative relationships to promote and develop regional transit.

### **TDP Requirements** 1.1

A TDP serves as the provider's planning, development, and operational guidance document, based on a ten-year planning horizon. The development and adoption of a TDP is required for grant program recipients. The State of Florida Public Transit Block Grant Program was enacted by the Florida Legislature to provide a stable source of state funding for public transportation. The SFRTA is a recipient of funds from this program. A TDP major update is required for grant program recipients every five years and TDP annual updates are required in interim years.

Table ES-1 FAC Rule 14-73.001 Compliance Checklist

	Public Involvement Process
1	Public Involvement Plan (PIP)
1	PIP approved by FDOT
1	Includes description of Public Involvement Process
1	Provide notification to FDOT
1	Provide notification to Regional Workforce Board
	Situation Appraisal
1	Land use
1	State and local transportation plans
1	Other governmental actions and policies
1	Socioeconomic trends
1	Organizational issues
1	Technology
1	10-year annual projections of transit ridership using approved methodology
1	Assessment of whether land uses and urban design patterns support/hinder transit service provision
1	Calculate farebox recovery
	Mission and Goals
1	Provider's vision
1	Provider's mission
1	Provider's goals
1	Provider's objectives

	Alternative Courses of Action
✓	Develop & evaluate alternative strategies and actions
1	Benefits and costs of each alternative
1	Financial alternatives examined
	Implementation Program
<b>&gt;</b>	Ten-year implementation program
1	Maps indicating areas to be served
1	Maps indicating types and levels of service
1	Monitoring program to track performance measures
1	Ten-year financial plan listing operating and capital expenses
1	Capital acquisition or construction schedule
1	Anticipated revenues by source
	Relationship to Other Plans
1	Consistent with Florida Transportation Plan
1	Consistent with local government comprehensive plans
1	Consistent with MPO long range transportation plans
1	Consistent with regional transportation goals and objectives
	Submission
<b>√</b>	Adopted by SFRTA Governing Board
<b>√</b>	Submitted to FDOT by September 1st, 2018
	Official acceptance by FDOT





# **Public Involvement**

The public involvement approach employed various strategies to inform and seek input from stakeholders for the preparation of the TDP Major Update. This effort began with branding the SFRTA TDP Major Update and the development of a project specific website and email address. Activities include the development and implementation of several passenger surveys conducted on-board Tri-Rail trains, Tri-Rail Commuter Connector buses and at select Tri-Rail stations platforms as well as through an ongoing survey posted on the SFRTA TDP website. Other efforts to inform this TDP include outreach activities, email blasts to stakeholders and public agencies, and SFRTA newsletter announcements.

### 1.2.1 **TDP Branding**

To illustrate the overarching theme and vision of the SFRTA TDP Major Update, a new logo and brand name was developed, titled SFRTA: Building Stronger Connections, and referred to as the Stronger Connections Plan.



### 1.2.2 **TDP Website and Email**

A website was developed to accompany the **Building Stronger** Connections Plan at www.TriRailTDP2018.com. This site provides a single access point where citizens can submit their input and feedback, find project-related information, and view previous years TDP documents. The site also includes a survey that in combination with a platform intercept survey, provides public input that helps SFRTA determine future priorities.

Table ES-2 Website Use Metrics

Description of Metric	Count
Total Unique Visitors	927
Total Pageviews	1,403
Total Surveys Submitted	442

Source: SFRTA

An email account was created and hosted by SFRTA at TDP@sfrta.fl.gov, for purposes of providing a portal to receive public input and comments that can be utilized for TDP development. Email inquiries were monitored continuously throughout the TDP development process.

Two articles were published in the OnBoard newsletter related to SFRTA Building Stronger Connections.

- April 2018 Article introducing the SFRTA Building Stronger Connections Transit Development Plan Major Update.
- June 2018 Article providing an update on the preparation of the SFRTA Building Stronger Connections Transit Development Plan Major Update.

### 1.2.3 **Passenger Surveys**

Throughout the preparation of the TDP Major Update, SFRTA conducted surveys to obtain feedback on existing services while seeking input to identify future service needs and improvements. These surveys were completed within the first three months of 2018 and included a Tri-Rail on-board survey, Tri-Rail station platform intercept survey and a Commuter Connector Bus Survey. In addition, a survey instrument was created and integrated onto the TDP Building Stronger Connector webpage and has been active throughout the duration of the TDP.



# Section 2 Existing Conditions and Transit Services









# EXISTING CONDITIONS AND TRANSIT SERVICES

This section establishes the context for SFRTA and transit services it provides to Miami-Dade, Broward, and Palm Beach counties, collectively referred to in this document as South Florida. Before providing a breakdown of existing SFRTA transit services, this analysis provides the background information needed to understand SFRTA's operating environment, including a population profile with demographic analysis, employment profile with commute analysis, land use assessment, and tourism statistics.

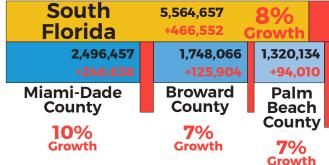
### 2.1 **Population Profile**

Between 2010 and 2017, it is estimated that the population of South Florida grew from nearly 5.6 million to 6 million, a growth of 8.3%. Miami-Dade County saw the greatest growth, at 10%, while both Broward and Palm Beach Counties grew by 7%. Figure ES-1 shows 2010 population numbers and the rate of growth to 2017 for each county.

Existing population density is illustrated in Map ES-1 on page ES2-2. Several municipalities experienced significant population growth during this period. In Miami-Dade County, the population of Doral grew by 40%, and North Bay Village, Homestead, and West Miami each grew by 20-30%. In Broward County, the population of Parkland grew by 31%, and Cooper City grew by 18%. In Palm Beach County, the population of Gulfstream grew by 27%, and Palm Springs grew by 23%.

South 5.564.657

Figure ES-1 South Florida Population Growth



Sources: U.S. Census Bureau, University of Florida Bureau of Economic and Business Research

### 2.1.1 **Demographic and Socioeconomic Analysis**

To help understand the South Florida travel market, an analysis of the various existing socioeconomic categories which make up the population served by Tri-Rail was performed.

# **Transportation Disadvantaged Populations**

Transportation disadvantaged individuals are defined as being either disabled, elderly, children-atrisk, and/or economically disadvantaged. Approximately a third of the population was found to be transportation disadvantaged in all three counties, with Palm Beach having the greatest concentration at 38%.

# **Minority Population**

The majority population in the United States is non-hispanic white, therefore "minority" is determined to be all other categorizations. While Miami-Dade County inverts the usual minority/majority ratio, pockets of minority populations in Broward and Palm Beach Counties tend to be located near Tri-Rail stations, particularly Fort Lauderdale, Pompano Beach, Delray Beach, Boynton Beach, and Mangonia Park.



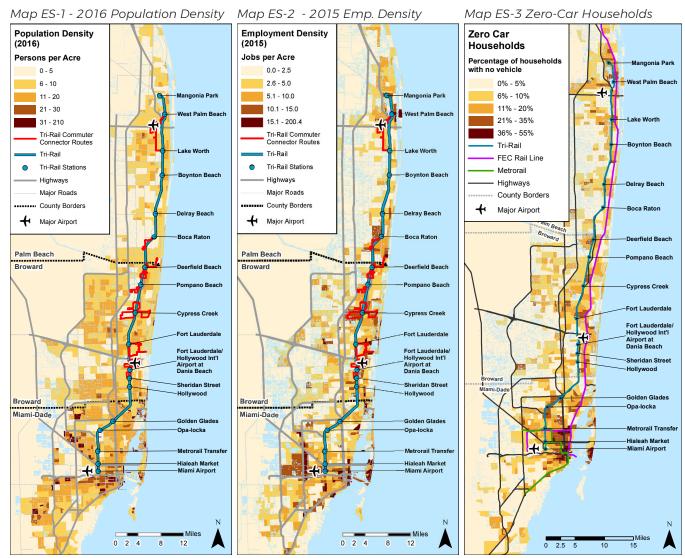


## Income

Low income households, especially those below the poverty level, have a greater need for public transit and use it at a higher rate than other households. While low Income households are spread out in Broward and Palm Beach Counties, Miami-Dade County shows areas of concentration in the City of Miami, Miami Beach, and Hialeah. In total, Miami-Dade contains 19,000 more low income households than Broward and Palm Beach County combined. Average income follows a similar pattern, with Palm Beach County having an average income 24% higher than Miami-Dade and 14% higher than Broward.

# **Household Motor Vehicle Availability**

Household vehicle availability patterns closely follow household income patterns; Miami-Dade County has the most zero-car households at 11 percent, followed by Broward and Palm Beach at eight and seven percent respectively. The distribution of zero-car households is illustrated on map Map ES-3. Notable concentrations of car-free households are apparent in the City of Miami and Miami Beach, as well as the area near the Opa-locka and Golden Glades Tri-Rail stations.



Sources: U.S. Census Bureau, 2016 American Community Survey 5-year estimates, Southeast Florida Regional Planning Model 7





# **Age Distribution**

The age profiles of Miami-Dade and Broward are nearly identical while Palm Beach has 8% greater concentration of seniors over 65, which is reflected in a median age 4-5 years older than the other counties.

### 2.2 **Employment Profile**

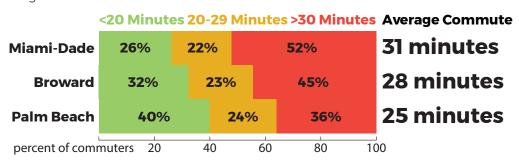
A survey of major industries, major employers, and overall job density was undertaken to help understand the destination side of commuting patterns. Typically, the largest private employers are universities and healthcare systems, while the largest public employers are public school systems. This is reflected in the data for major industries as approximately 20% of people in all three counties are employed in educational services, healthcare, and social assistance.

Data on existing job density is illustrated in Map ES-2. The largest concentrations of employment are seen in Downtown Miami, Downtown Fort Lauderdale, Miami Beach, southern Doral, and along SR-826. Tri-Rail is able to service many of these areas via the connection with the Metrorail in Miami-Dade County.

### 2.2.1 **Commute Analysis**

Table ES-3 contains the mode split for commuters in South Florida. In all three counties, more than 75% of workers drive alone to work. Public transportation is utilized in Miami-Dade by 6% of commuters, approximately twice the rate as Broward and Palm Beach. Census data shows that the proportion of individuals telecommuting has continued to grow with the virtual economy, as commute times have worsened. Figure ES-2 illustrates the distribution and the average travel time to work for commuters in South Florida. Typical commute times are worst in Miami-Dade County, where the average trip takes more than half an hour.

Figure ES-2 Average Travel Time to Work



Source: U.S. Census Bureau, 2016 American Community Survey 5-year estimates

Table ES-3 Journey-to-Work Mode Split

	Mode of Commute												
County	Workers (16 yrs+)	Car, Tru Van (d alon	rove	Car, Tr or Va (carpoo	an É	Pub Transpo		Walk	ed	Other N	/lodes	Worke Hom	
Miami-Dade	1,214,352	931,770	77%	109,613	9%	67,251	6%	27,150	2%	22,442	2%	56,126	5%
Broward	892,638	708,764	79%	83,973	9%	26,485	3%	11,475	1%	18,545	2%	43,396	5%
Palm Beach	626,367	492,621	79%	60,017	10%	12,447	2%	9,305	1%	12,807	2%	39,170	6%

Source: U.S. Census Bureau, 2016 American Community Survey 5-year estimates







Table ES-4 and Table ES-5 summarize data from the U.S. Census 2016 ACS on commuter flows for workers living in the South Florida region.

Table ES-4 shows us the percentage of residents of each county who work outside their county of residence. This analysis reveals that nearly a quarter of all workers living in Broward County leave Broward for work. The rate is approximately half that for Palm Beach County, and just over half again for Miami-Dade, where only 7% of the workforce leaves the county for work.

Table ES-5 shows us the percentage of employees in each county who live outside their county of work. The results of this analysis are far more uniform than Table ES-4, with all results falling within a range of 3%. While Table ES-4 shows us that Broward sends more of its residents to work in other counties, Table ES-5 shows us that Broward also receives more workers from neighboring counties. This can be attributed to the fact that Broward sits between the other counties, while Miami-Dade and Palm Beach Counties are neighbored by the far less populated Monroe and Martin Counties, respectively.

Table ES-4 County of Work for Workers Residing in the SFRTA Service Area

County in which South Florida Residents are Employed							
County	Total Employees Residing in County	Employed in County	Employed Outside of County				
Missai Bada	101/ 750	1,124,210	90,142				
Miami-Dade	1,214,352	93%	7%				
Burrand	002.570	682,667	209,971				
Broward	892,638	76%	24%				
Dalas Barak	626.760	554,042	72,325				
Palm Beach	626,367	88%	12%				

Source: U.S. Census Bureau, 2016 American Community Survey 5-year estimates

Table ES-5 Commuting from Neighboring Counties, SFRTA Service Area

County in which South Florida Employees Reside							
County	Total Employed in County	Reside in County	Reside Outside of County				
Missai Dada	1200120	1,124,210	164,918				
Miami-Dade	1,289,128	87%	13%				
Duantend	012 / CC	682,667	129,799				
Broward	812,466	84%	16%				
	6/6/07	554,042	92,441				
Palm Beach	646,483	86%	14%				

Source: U.S. Census Bureau, 2016 American Community Survey 5-year estimates





### **Land Use Assessment** 2.3

Existing land use data shows us that Residential land use dominates the Tri-Rail corridor, with Industrial, Retail/Office, Recreational, and Public/Semi Public land uses such as parks, canals, and government buildings making up the majority of remaining land. When comparing this composition to the South Florida Urbanized Area as defined by the U.S. Census Bureau, numerous differences emerge. The Tri-Rail corridor is 11 percent less residential than the rest of the region, but is surrounded by a much higher concentration of industrial land (+13 percent), as well as retail/office (+5 percent). This indicates a more balanced corridor for commuting, with 31 percent of the land dedicated to employment oriented land uses and 36 percent for residential.

Future land use maps indicate differing visions for the Tri-Rail corridor in South Florida. In Miami-Dade County the Tri-Rail corridor is largely industrial and low density residential, with commercial land uses on NW 79th Street at the Metrorail Transfer Station. In Broward County, residential land uses are typically low density, and commercial land uses dominate the corridor, especially in the area between the Cypress Creek and Pompano Beach Tri-Rail Stations. The Regional Activity Center designation is unique to Broward County, and three activity centers are located along the Tri-Rail corridor: Hollywood Boulevard, Downtown Fort Lauderdale, and south of Atlantic Boulevard. The Palm Beach County future land use map shows an abundance of mixed-use and high density residential areas located near Tri-Rail stations. Most notably there are large mixed-use districts adjacent to the Boca Raton and Boynton Beach stations, and smaller mixed-use districts, or areas which contain both commercial and high density residential land uses, located around Delray Beach and Lake Worth Stations.

Table ES-6 Land Use Summary for Tri-Rail Corridor (half-mile buffer)

Land Use Category (Tri-County)	Acres Within Buffer Area	Percentage of Total Buffer Area	Percentage of S. Florida (Miami Urbanized Area)
Residential	13,052	36%	47%
Public/Semi-Public	6,189	17%	13%
Industrial	5,597	16%	3%
Retail/Office	4,175	12%	7%
Recreation	2,351	7%	8%
Institutional	1,153	3%	2%
Vacant Nonresidential	1,060	3%	2%
Water	962	3%	3%
Vacant Residential	914	3%	4%
Centrally Assessed	187	1%	<1%
Agricultural	174	<1%	4%
Acreage Not Zoned for Agriculture	11	<1%	1%
Parcels with No Values	8	<1%	3%
Other	1	<1%	1%
TOTAL	35,652	100%	100%

Source: FDOT, Florida Department of Revenue

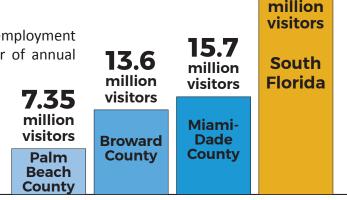
\*Excludes Right of Way



### **Tourism** 2.4

Tourism is one of the largest economic and employment sectors in South Florida, with the total number of annual

visitors exceeding 36 million. Visitors to the Miami area in 2016 increased by 4.8 percent over the previous year, with 15.7 million overnight visitors. These visitors spent \$25.5 billion in direct expenditures, with international visitors accounting for 62% of that total. Broward County had 13.6 million overnight visitors in 2016, who spent approximately \$11.6 billion. Palm Beach County reported \$4.6 billion in direct visitor spending from 7.35 million visitors.



# **Annual Number of Tourists, 2016**

Figure ES-3 - 2016 Tourism

Sources: Greater Miami and the Beaches 2016 Visitor Industry Overview, Broward County 2016 CAFR, Discover the Palm Beaches press release

### 2.5 Existing Tri-Rail Commuter Rail Service

Map ES-4 illustrates SFRTAs existing commuter rail and bus service network. SFRTA operates the Tri-Rail commuter rail service in Miami-Dade, Broward, and Palm Beach counties, along a 72-mile rail corridor on the SFRC, with a total of 18 stations - six (6) in Palm Beach County, seven (7) in Broward County, and five (5) in Miami-Dade County. Free daily parking is available at all stations; Tri-Rail trains also accommodate bicycles, and all stations have bike lockers.

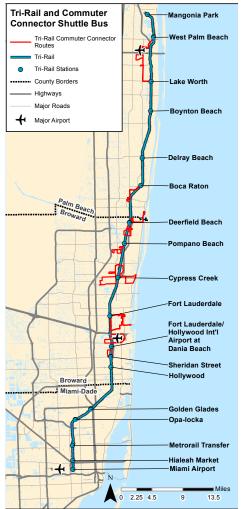
SFRTA operates a commuter bus service (Tri-Rail Commuter Connector) to and from select Tri-Rail stations, with connecting service to numerous South Florida destinations. SFRTA's rail and bus services provide over four million passenger trips to residents and visitors each year.

SFRTA Tri-Rail connects to the three regional international airports, with direct service to the Miami International Airport, and connecting service to both Palm Beach and Fort Lauderdale International Airports via the Tri-Rail Commuter Connector Bus routes.

### 2.5.1 **Operating Schedule**

Weekday service runs from 4:00 AM to 10:35 PM in the southbound direction, and from 4:15 AM to 11:35 PM in the northbound direction. Headways are 20 minutes between 6:00 AM and 7:00 AM in both directions, then 30 minutes between 7:00 AM and 8:00 AM, and 60 minutes in the middle of the day.

Map ES-4 Existing SFRTA Services







PM peak period service resumes at 3:00 PM with headways between 25 and 35 minutes until 6:45 PM, when hourly service resumes until the final departures at 8:40 PM southbound, and 9:40 PM northbound.

Weekend and Holiday service operates hourly from 5:50 AM until 6:50 PM southbound, and from 5:17 AM to 6:17 PM northbound. Tri-Rail operates one northbound and southbound late train run that departs Mangonia Park at 9:00 PM, and from Miami International Airport at 9:42 PM.

### Tri-Rail Ridership 2.5.2

A historical overview of Tri-Rail ridership is presented in Figure ES-4. Over the last several years, annual ridership for the Tri-Rail commuter rail service has exceeded four (4) million riders per year with an average weekday ridership of approximately 14,000 passengers.

5,000,000 4,000,000 3,000,000 2,000,000 1,000,000 2003 2005 2013 2015 1995 2009 1997 1999 2007 1985 2001 2017

Figure ES-4 Tri-Rail Historic Ridership Data

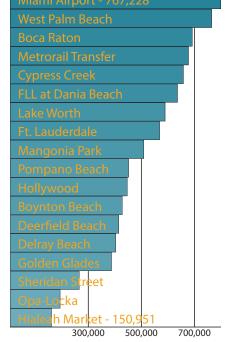
Source: National Transit Database

### **Station Passenger Activity** 2.5.3

Fiscal Year (FY) 18 ridership by Tri-Rail station is depicted in Figure ES-5. Miami Airport station had the highest number of both boardings and alightings in the Tri-Rail system. Hialeah Market station had the lowest number of boardings and alightings.

- July 2017 has had an increase in ridership (boardings and alightings) across all three counties in comparison to July 2016.
- Miami-Dade County has the lowest number of boardings and alightings out of the three counties.
- Broward County has the highest number of boardings, and Palm Beach County has the highest number of alightings in the system.
- March 2017 is the highest ridership month (boardings and alightings) for all three counties with July 2016 being the lowest.

Figure ES-5 Total Station Passenger Activity (Boardings plus Alightings)







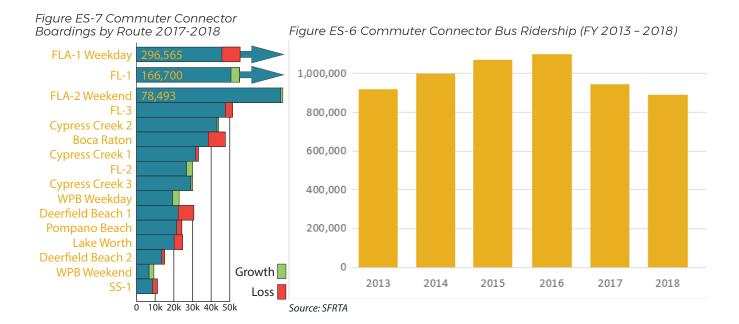
### **Tri-Rail Commuter Connector Bus Service** 2.6

SFRTA operates 14 commuter bus routes, three (3) in Palm Beach County and 11 in Broward County. This service has become an important first/last mile connection and about 25 percent of Tri-Rail passengers ride the commuter buses. SFRTA continues to identify and evaluate new opportunities to provide commuter bus service, implement service modifications, and form new partnerships to enhance system efficiency.

### 2.6.1 Ridership

Annual ridership on the Commuter Connector service is approximately 1 million passengers, as is depicted in Figure 3.5. In Fiscal Year 2013, ridership was over 920,000. Ridership peaked in Fiscal Year 2016 at 1.1 million riders. Ridership in Fiscal Year 2017 has reduced slightly to 945,000, partially attributed to the discontinuation of an Opa-locka route, for which new funding is being sought.

The values in Figure ES-7 depict the number of boardings per Tri-Rail Commuter Connector route, with green segments proportionally representing growth in ridership from 2017 and red representing a loss of ridership. Ridership is highest on the Fort Lauderdale Airport (FLA-1) Route, and the second highest ridership route is the Fort Lauderdale 1 (FL1) Route. Other high ridership routes include the Fort Lauderdale Airport weekend (third highest ridership), Fort Lauderdale 3, and the Cypress Creek 2 Route. The Deerfield Beach 2, and the Lake Worth Routes have the lowest ridership of the Commuter Connectors.







# The SFRTA Five-Year Commuter Bus Service and Financial Plan

SFRTA is responsible for developing a new Five-Year Commuter Bus Service and Financial Plan annually. It is the product of ongoing planning, monitoring, and internal and external coordination efforts to increase productivity of the Tri-Rail Commuter Bus System.

The FY19-FY23 Plan was approved on April 27, 2018. Proposed changes for FY19 –23 included:

- The Opa-locka South route, which had been removed previously due to lack of funding, will be restored for FY19 - 21 with 50 percent of operating costs funded by FDOT District VI under a Transit Corridor Grant, matched with 25 percent funding by the City of Opa-locka, and 25 percent by SFRTA. The route is expected to resume service in Fall 2018.
- Funding for the Downtown Fort Lauderdale routes (FL-2 and FL-3) has been extended through FY21.
- The South Florida Education Partnership Agreement (SFEC), which provided a commuter bus route to the South Florida Education Center in Davie, will expire in FY20.
- The City of Boca Raton and SFRTA signed an agreement in August 2018 to continue funding an additional bus for the Boca Raton Center route (BR-1), for FY19 – 20.
- Planning and implementation of bus stops or upgraded bus stops including Americans with Disabilities Act (ADA) improvements, public outreach requirements, and related.







### SFRTA Efforts and Accomplishments Since the 2017 TDP Update 2.7

### 2.7.1 **System and Facilities Improvements**

- On-Time-Performance (OTP) Significantly Improved: In April 2018, SFRTA achieved 96.2 percent OTP, its highest monthly OTP since January 2001, and well above the SFRTA goal of 90 percent.
- Opa-locka Station Parking Lot Improvements: This project included construction of 44 additional new parking spaces, new sidewalk connections, landscape, lighting and irrigation; new bus circulation and drop-off/pick-up area to increase bus bays, and a new 376-foot canopy over the bus waiting areas.
- Planned Fleet Improvements: The overhaul of five (5) locomotives was approved and scheduled.
- Safety & Security: SFRTA developed a comprehensive safety initiative, including a Trespasser and Suicide Mitigation Program. In conjunction with that program, the agency planned and is implementing a pilot program using drones to identify trespassers and persons who are a threat to themselves or trains.
- South Florida Rail Corridor Capital Improvements Plan: SFRTA is pursuing a federal Consolidated Rail Infrastructure and Safety Improvements (CRISI) Grant to assist with improving the SFRC's State of Good Repair (SGR).
- New Wayfinding Signage and Tri-Rail system line maps: This new signage was developed to incorporate Tri-Rail's new MiamiCentral Station in downtown Miami, on the FEC rail corridor.

### 2.7.2 **New Service and Facilities**

- Tri-Rail MiamiCentral Station and Tri-Rail Downtown Miami Link (TRDML): Tri-Rail service into downtown Miami on the FEC rail corridor is positioned to begin revenue service in 2019, pending Federal Railroad Administration (FRA) approval. A regionally transformational project, the MiamiCentral Station will serve as downtown Miami's local and regional multimodal hub with connections to Brightline's private passenger rail service, Tri-Rail commuter rail service, and Miami-Dade County's extensive transit bus, Metrorail and Metromover system.
- The Iris/Little River Rail Connection: This project provides the rail connection between the SFRC and FEC corridors, enabling Tri-Rail service to the new MiamiCentral Station in downtown Miami.
- Positive Train Control (PTC): PTC is a federally required rail safety technology that automatically stops a train before certain types of accidents can occur. SFRTA achieved project benchmarks to stay on track with the project schedule. Full PTC implementation will follow SFRTA's FRA- approved PTC Implementation Plan but will not exceed December 31, 2020 as required by U.S.C. 20157.
- Major Capacity Improvement: Miami River-Miami Intermodal Center (MR MICCI) Capacity **Improvement:** The purpose of this project is to improve operational efficiencies by providing additional mainline tracks to the southernmost 1.25 miles of the SFRC corridor from just north of Tri-Rail Hialeah Market Station to the Tri-Rail Miami Airport Station at the Miami Intermodal Center.
- Northwood Crossover Rail Link between the SFRC and FEC Corridor in Palm Beach County: The new Northwood connection is part of three proposed, interrelated and independent rail connections between SFRC and FEC. SFRTA completed track and signal connection construction and integration on Northwood's Phase I in FY 2018; FDOT will complete Phase II construction. This crossover is planned to facilitate a proposed future Tri-Rail expansion north to Jupiter as part of the TRCL overall project, and to increase operational capacity. Estimated completion is for early 2019.





Tri-Rail Boca Raton II, Planning for Proposed New Station: SFRTA completed the Boca Raton II Tri-Rail Station Feasibility Study in October 2016, which concluded that opening a second Tri-Rail station in the City of Boca Raton located near Glades Road and Military Trail is feasible. The project is positioned to move forward into the design phase, with 100 percent design anticipated in Fall 2019.

### 2.7.3 **Tri-Rail Commuter Connector Bus Service**

- The Commuter Bus Comprehensive Analysis and Operations Plan: Conducted between June 2017 and June 2018, this study analyzed the merits of a wave-and-ride service as compared to a fixed-stop service to determine which would better serve Tri-Rail riders. Final recommendations for time point/ boarding-alighting locations, an operations plan, and implementation plan were completed in May 2018.
- SFRTA Special Promotion Bus Service: Spring Training Special to Ballpark of the Palm Beaches. Tri-Rail provided this 10-minute free dedicated shuttle bus connection from the Mangonia Park Station to and from the Ballpark of the Palm Beach, providing a springtime "stay and play" amenity for Tri-Rail riders on weekends from February 24 – March 25, 2018.

### 2.7.4 Transit Oriented Development (TOD) Planning:

- SFRTA TOD Policy & Outreach: SFRTA and the region's Regional Planning Councils conducted outreach to local governments and transportation planning agencies to introduce the SFRTA TOD Policy, discuss the agency's interest in advancing TOD, and to develop an ongoing dialog and information exchange of TOD initiatives in the region. SFRTA reconvened with those local governments and agencies in a TOD Policy Regional Debrief forum to report on and discuss the range of TOD initiatives and developments undertaken within the region.
- FTA Pilot Project Grant for TOD Planning activities along the FEC corridor: SFRTA and the region's Regional Planning Councils conducted TOD station-area planning activities around potential station areas located on the TRCL. This work is funded through an FTA TOD Pilot Program planning grant, which provided funding for TOD planning activities that include design charrettes and workshops to develop plans and land development regulations, as well as studies for station-area Housing Equity, Infrastructure Capacity, Bicycle/Pedestrian Access Plans, and a TOD Business Fund approach.

### 2.7.5 **Industry Awards**

The SFRTA continues to receive recognition related to business practices and agency initiatives with multiple departments scoring honors and awards. During FY2018, the SFRTA received the following awards.

- National Procurement Institute-Achievement of Excellence in Procurement
- Florida Association of Public Procurement- Award of Excellence in Public Procurement
- First Place APTA AdWheel Award for "Best Marketing and Communications to Increase Ridership or Sales" for the 2017 promotion of the Ultra Music Festival.
- First Place FPTA Marketing Award for Print Advertising Collateral for "Happy Travelers" campaign
- First Place FPTA Marketing Award for Special Evens for "Ride & Play"
- Government Finance Officers Association Certificate of Achievement for Excellence in Financial Reporting for the Fiscal Year Ended 2017
- Government Finance Officers Association Distinguished Budget Presentation Award for the Fiscal Year beginning July 1, 2017





# **Trend Analysis**

A five-year trend analysis of key transit operator performance measures was conducted to examine Tri-Rail's commuter rail and the Commuter Connector bus services. Table ES-7 contains data for Tri-Rail, and Table ES-8 contains the data for the Commuter Connector.

Table ES-7 Tri-Rail Performance Measures

General Performance Indicators	Change ('12-'16)	Effectiveness Measures	Change ('12-'16)	Efficiency Measures	Change ('12-'16)
Passenger Trips	+6%	Vehicle Miles per Capita	+21.0%	Operating Expenses per Capita	+62%
Passenger Miles	+2%	Passenger Trips per Capita	+5.9%	Operating Expense per Passenger Trip	+53%
Vehicle Miles	+21%	Passenger Trips per Revenue Mile	-13.3%	Operating Expense per Passenger Mile	+59%
Revenue Miles	+22%	Passenger Trips per Vehicle Hour	-16.1%	Operating Expense per Revenue Mile	+33%
Vehicle Hours	+26%	Revenue Miles between Incidents	n/a	Farebox Recovery Ratio	-32%
Route Miles	0%	Revenue Mileage between Road Calls	-41%	Revenue Miles per Vehicle Mile	+1%
Operating Expenses	+62%			Revenue Miles per Vehicle	-34%
Capital Expenses	+183%			Operating Expense Per Revenue Hour	+26%
Operating Revenues	n/a			Revenue Hours Per Total Vehicles	-22%
Total Employees	n/a			Vehicle Miles per Gallon	+172%
Vehicles Available for Maximum Service	+64%			Average Fare	+4%
Fuel Consumption	+30%				

Source: Florida Transit Information System Urban Integrated National Transit Database

Table ES-8 Commuter Connector Performance Measures

General Performance Indicators	Change ('12-'16)	Effectiveness Measures	Change ('12-'16)	Efficiency Measures	Change ('12-'16)
Passenger Trips	+18%	Vehicle Miles per Capita	+7%	Operating Expense Per Capita	-15%
Passenger Miles	+17%	Passenger Trips per Capita	+18%	Operating Expense Per Passenger Trip	-28%
Vehicle Miles	+7%	Passenger Trips per Revenue Mile	+4%	Operating Expense Per Passenger Mile	-28%
Revenue Miles	+13%	Passenger Trips per Vehicle Hour	+20%	Operating Expense Per Revenue Mile	-25%
Vehicle Hours	-9%	Revenue Miles Between Incidents	n/a	Revenue Miles per Vehicle Mile	+5%
Route Miles	+3%	Revenue Mileage between Road Calls	-80%	Revenue Miles per Vehicle	+9%
Operating Expenses	-15%			Vehicle Miles per Gallon	-34%
Operating Revenues					
Total Employees					
Vehicles Available for Maximum Service	+3%				
Fuel Consumption	+63%				

Source: Florida Transit Information System Urban Integrated National Transit Database



# Section 3 Situation Appraisal









# SITUATION APPRAISAL

The Situation Appraisal offers a comprehensive overview of SFRTA's strengths and weaknesses, and identifies barriers and opportunities for future service enhancements. The appraisal also seeks to identify demand for transit through an assessment of the regional transit market, and a ridership forecast analysis.

### 3.1 **SFRTA Operating Services Contract**

SFRTA selected an operating service contractor that initiated service on July 1st 2017. The operating services contract bundled train operations, equipment maintenance, dispatching, and station maintenance services under a single contract with one primary contractor where previously train operations/ maintenance of equipment, dispatch, and station maintenance were procured under separate contracts with multiple contractors for providing operating services. This approach is intended to result in a more accountable process for the provision and maintenance of services for SFRTA while also resulting in operational efficiencies that benefit both the Agency and passengers.

### 3.2 **Plans and Policies**

Federal, State, and regional plans and policies present opportunities for SFRTA to further advance capital and service improvements while strengthening collaborative efforts with partner agencies related to regional transportation issues. An overview of plans and policies at each jurisdictional level was conducted to better understand the context and relationship to SFRTA as an agency and operator of transit services. A detailed table of relevant plans, policies and studies is included in Chapter 5 of the main TDP document.

### 3.2.1 **Policies**

The Fixing America's Surface Transportation (FAST) Act is a five-year \$305 billion transportation authorization bill passed into law in December 2015. The FAST Act provides various funding opportunities for SFRTA to implement various capital improvement projects as well as address preventative maintenance needs.

The **Florida Transportation Plan (FTP)** is a statewide plan that establishes a policy framework at the state, regional and local levels. In 2015 and 2016, the FTP was updated to include three elements:

- 1. The Vision Element: A 50-year planning horizon that assess trends, uncertainties and opportunities that shape the future of the statewide transportation system.
- 2. The Policy Element: A long range transportation plan that defines goals, objectives and strategies for the next 25 years.
- 3. The Implementation Element. Includes short and mid-term actions and performance measures for state, regional and local transportation providers.

The goals and objectives developed for the SFRTA TDP Major Update are consistent and align with the seven (7) goals presented in the Florida Transportation Plan.

The South Florida region is in the process of preparing a 2045 Regional Long Range Transportation Plan (LRTP) that includes a Regional Transit Plan. A primary component of the Regional LRTP is the identification of a regional transit network to enhance regional mobility between employment, residential, educational, and recreational locations. The SFRTA actively participates in the development of the Regional Plan for the integration of Tri-Rail passenger service as part of a regional transit network.





Each County in South Florida is also responsible for producing their own LRTP. An update of the latest LRTP needs to occur every five years to meet federal and state requirements. The Miami-Dade County TPO and Palm Beach County TPA will initiate the preparation of their 2045 LRTP's in 2019, the same year that the Broward County MPO is anticipating approval of its 2045 LRTP.

### 3.3 Regional Transportation Challenges

The South Florida network of managed lanes continues to expand along the I-95 corridor. Construction is currently underway to extend the managed lanes network to northern Broward County with plans to continue the expansion into Palm Beach County. The northern extension of the managed lanes network on I-95 could present direct competition to Tri-Rail service; some commuters may prefer to stay in their vehicles to complete their regional trips or use new direct express bus service.

Brightline runs a private complimentary service to Tri-Rail on a parallel corridor, at a higher price point. The Brightline has fewer station stops to provide a longer haul direct service and therefore is not anticipated to directly compete with Tri-Rail, which serves many more destinations for a travel market that is seeking a shorter distance trip than provided by Brightline. Tri-Rail is working closely with Brightline to establish a Downtown Link at the MiamiCentral Station. When this service is implemented in mid-2019, Tri-Rail will provide service to the three regional Downtowns. Tri-Rail should consider other services to further differentiate from Brightline, including potential expansions north (Jupiter) and south (Doral and Kendall).

To keep up with emerging competition in the regional transportation market, SFRTA continuously seeks to improve regional integration of transit systems. A regional fare integration policy will enable transit riders to use PalmTran, BCT, DTPW and Tri-Rail's services seamlessly, with a single transit pass. The four transit agencies in the region have halted this initiative temporarily, due to the rapid evolution of fare collection technologies. The transit agencies have agreed to continue working towards an integrated fare system and have commenced the procurement of the same.

### 3.4 **Socioeconomic Trends**

The population of south Florida is predicted to rise in most areas, with growth and density concentrated in the City of Miami near the Miami Airport Station and particularly around downtown, near the future site of the MiamiCentral Station.

Employment growth is forecast to remain generally flat in Broward County, with only modest gains of one job per acre. The West Palm Beach and Mangonia Park Tri-Rail stations are anticipated to register employment density growth. In Miami-Dade County, employment density is anticipated to increase near every station. Employment density remains highest near Boca Raton, West Palm Beach, and the Miami Airport Stations.

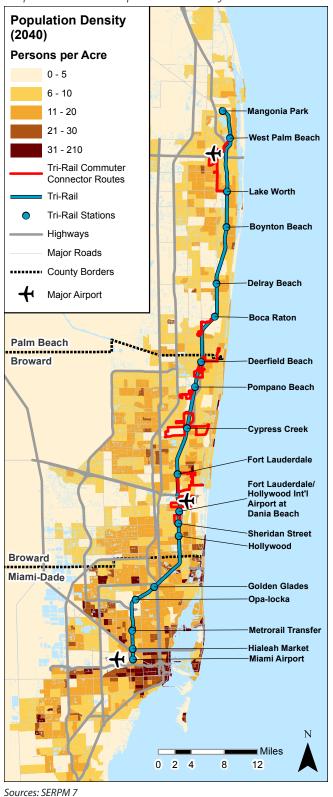
Transit dependent populations were evaluated by counting households with low incomes, zero cars, and individuals over the age of 65. Miami-Dade County registers the highest concentration of transit dependent populations, particularly in areas of high population density. Within the two northern counties, transit propensity is generally higher along the Tri-Rail corridor than it is in the counties overall.

Generally, population, household and employment gains are anticipated to occur within five miles of the Tri-Rail corridor. From the perspective of maximizing service to population and employment centers, Tri-Rail's service corridor is in an ideal, centralized location. Tri-Rail service can be expanded on existing underutilized rail corridors to link to other job centers, including those in Doral and Jupiter.

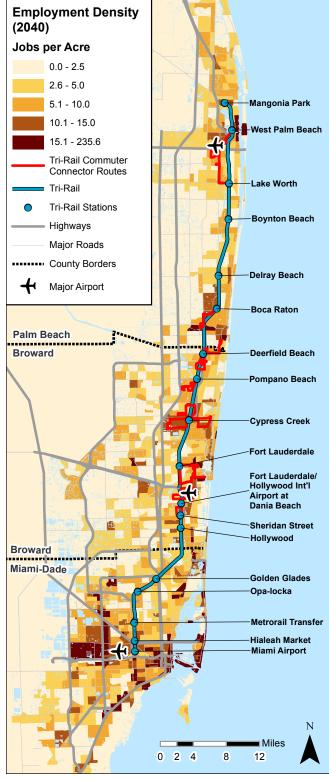




Map ES-5 - 2040 Population Density



Map ES-6 - 2040 Employment Density



Sources: SERPM 7





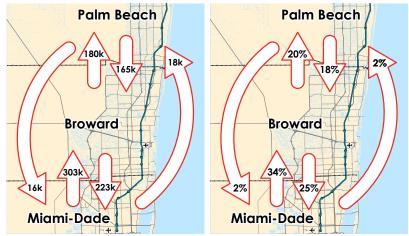
### Travel Patterns and Behavior 3.5

Approximately 96 percent of total intercounty trips (more than 3 million trips per day) were found to be between adjacent counties, underscoring the key role of accessibility in shaping the intercounty travel pattern.

Nearly half of the total intercounty trips occur during the peak travel periods (i.e. 6AM-10AM and 3PM-7PM); trip flows from these periods are illustrated in Figure ES-8 and Figure ES-9.

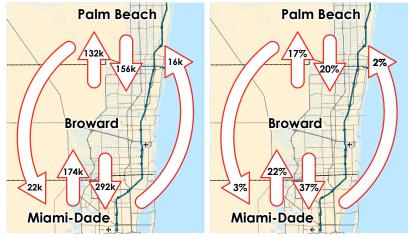
About 60 percent of intercounty trips travel southward during the AM peak, with more than one-third of the trips flowing from Broward to Miami-Dade County. Downtown Fort Lauderdale, Coral Gables, Doral and the City of Miami receive significantly more trips than they export during this period, indicating their importance to the regional economy as major employment centers. The major residential centers for inter-county commuters were found to be adjacent to county lines, specifically Parkland, the Aventura/Sunny Isles Beach area, Hallandale Beach, the area west of

Figure ES-8 AM Trip Flows in Southeast Florida



Source: 2015 StreetLight personal trip data set

Figure ES-9 PM Trip Flows in Southeast Florida



Source: 2015 StreetLight personal trip data set

Boca Raton, and the area of Broward County located between I-595 and Florida's Turnpike.





### **Demand Estimation** 3.6

Regional transportation needs are projected using estimates from travel demand models such as the Southeast Regional Planning Model version 7.0 (SERPM 7), which incorporate socio-economic data such as population and employment, as well as the attributes of the existing and planned transportation networks. This model describes travel demand for both mobility dependent local trips and the regional commuter market.

SERPM 7 was used to estimate ridership for the proposed changes to the Tri-Rail commuter rail line in 2028. Two scenarios were modeled: one for existing conditions using the existing Tri-Rail network and another scenario for the year 2028. Because the official SERPM 7 model is only available for years 2010 (the base) and 2040, the ridership for any other years needs to be approximated using ridership values of years 2010 and 2040. For the future year 2028 scenario, socio-economic

data was developed by interpolating between the 2010 and 2040 data sets.

For purposes of developing Tri-Rail Commuter Connector ridership forecasts an assessment of historical ridership was performed to identify growth rates on a route by route basis as well as identify various ridership trends. For most of the shuttle routes, ridership increased from 2012 to 2015/2016, however over the last two (2) years, ridership has been decreasing.

3.7 **Technology** 

Ride-sharing services such as Lyft and Uber which provide on-demand transportation have become ubiquitous in the South Florida region in recent years. Due to the shortdistance nature of the business model, these shared economy transportation technologies are not direct competitors to Tri-Rail's longdistance commuter rail service. Instead, shared ride, shared bicycle and shared scooter technologies present a potential opportunity for Tri-Rail passengers who need additional last mile options. Tri-Rail should explore potential

Table ES-9 Average Weekday Tri-Rail Passenger Rail Ridership Projections (2019 - 2028)

Year	Tri-Rail Boardings
2019	20,975
2020	21,094
2021	21,211
2022	21,325
2023	21,444
2024	21,559
2025	21,659
2026	21,789
2027	21,821
2028	22,023
Growth	+1,048 (+5%)

Source: SFRPM 7

Table ES-10 Tri-Rail Commuter Bus Routes Ridership Projections (2019 - 2028)

Route	2019	2028	Change (2019-2028)
W. Palm Beach 1 Wkday	24,004	37,238	5%
W. Palm Beach 2 Wkend	9,797	15,198	5%
Lake Worth	19,153	12,071	-5%
Boca Raton	36,492	22,999	-5%
Deerfield Beach 1	21,241	13,387	-5%
Deerfield Beach 2	12,911	8,137	-5%
Pompano Beach	20,511	12,927	-5%
Cypress Creek 1	31,086	25,918	-2%
Cypress Creek 2	43,180	36,001	-2%
Cypress Creek 3	29,533	24,623	-2%
Ft. Lauderdale 1	170,034	203,206	2%
Ft. Lauderdale 2	30,747	36,745	2%
Ft. Lauderdale 3 Wkend	46,763	38,988	-2%
FLA-1 Wkday	290,634	242,315	-2%
FLA-2 Wkend	80,063	95,683	2%
Sheridan Street 1	8,228	5,186	-5%
Total	836,188	774,150	-1%

Source: SFRPM 7

partnerships with the above described companies, and County, and Municipal permitting authorities, to introduce these technologies at and near Tri-Rail stations corridor-wide. Doing so could attract more riders, who are assured of easy transfers to reach their ultimate destinations with minimal wait times.





### 3.8 Survey Summaries

In 2018, SFRTA conducted four (4) surveys to solicit public input on existing services and future planning efforts. This input helps to establish the basis of the goals and objectives of the TDP Major Update as well as to form the premise for identifying various funded and unfunded needs.

The intercept and web surveys document generally broad support for expanded Tri-Rail service. Overall service expansion received 52 percent support on the intercept survey, with 30 percent of intercept survey respondents supporting an expansion to Jupiter. 44 percent of web survey responses also supported this northern extension. Additional service south and west into suburban Miami-Dade County receive moderate support with affirmative responses in the 30th percentile range.

More immediately web and online survey respondents expressed support for increased service frequency. Similar levels of support were expressed for earlier and later train service and more weekend service. Vehicle cleanliness was also cited by respondents – 35 percent of intercept survey responses and 47 percent of online survey respondents asked for cleaner vehicles. The on-board survey question pertaining to vehicle cleanliness echoes this sentiment – on-board restrooms received the lowest overall positivity scores of on the survey.

The Commuter Bus survey registered support for more reliable service – ensuring that the Commuter Buses arrive on time, and real-time tracking.

To address the public's feedback, SFRTA should consider concentrating resources on increasing train frequency and cleanliness. In the longer term, Tri-Rail should evaluate the feasibility of expanding service at both ends of the existing Tri-Rail corridor to serve the suburban populations of West Palm Beach and Miami-Dade counties.



# Section 4 Goals and Objectives



SFRTA was founded in 2003 with the vision of providing greater mobility and transportation choice in South Florida, thereby improving the economic viability and quality of life for local communities, the region and state.

To move toward this vision, a mission statement was issued for SFRTA to coordinate, develop, and implement, in cooperation with government agencies, private enterprise, and citizens, a viable regional transportation system in South Florida that meets the desires and needs of the people.

In pursuit of this mission, a list of goals and objectives for SFRTA is maintained and updated each year in the TDP.





# **GOALS AND OBJECTIVES**

SFRTA developed nine (9) major goals to help guide the organization in achieving its mission. Success is evaluated annually against the following listed objectives, as developed by SFRTA Staff in response to:

- 1. Communication with each department of SFRTA
- 2. Input from the SFRTA Internal Review Committee (IRC) and public outreach efforts, and
- 3. Input from regional stakeholders, including the local workforce board representatives.

# **Goals and Objectives**

# VISION

- Goal 1. Take a leadership role to expand and promote premium regional transit and multimodal mobility.
  - 1.1. Identify opportunities to plan, fund, construct, and operate expansion of the existing Tri-Rail system and Tri-Rail Coastal Link onto the Florida East Coast (FEC) Railway.
  - 1.2. Serve as the coordinating agency for future premium transit projects that cross county lines.
  - 1.3. Work with local governments adjacent to Tri-Rail's service region to investigate transit services that would connect with the existing Tri-Rail system.
  - 1.4. Collaborate with public, private and civic sectors to advance transit-oriented and transit-supportive development initiatives and policies.
  - 1.5. Conduct expanded outreach to groups of potential new transit users.

# **PARTNERSHIPS**

- Goal 2. Develop public and private sector partnerships to promote strategies that support and expand regional transit.
  - 2.1. Strengthen partnerships with the region's local governments, business and civic organizations, and downtown and redevelopment agencies to advance transit.
  - 2.2. Utilize the metropolitan planning process to develop long range plans and work programs that plan for and fund regional transit.
  - 2.3. Build upon Brightline and Florida East Coast Industries (FECI) partnerships for successful freight, passenger rail, and real estate development opportunities along the FEC corridor.
  - 2.4. Continue SFRTA collaboration with the Urban Land Institute (ULI) Southeast Florida/Caribbean Chapter's private sector institutions and development community.
  - 2.5. Pursue joint development opportunities at existing and future Tri-Rail stations.

## SYSTEM PERFORMANCE

- Goal 3. Maximize the performance, reliability, efficiency and capacity of the existing SFRTA/Tri-Rail system.
  - 3.1. Maintain the Tri-Rail system in a State of Good Repair (SGR) that meets state and federal standards.
  - 3.1.1. Meet FTA Transit Asset Management (TAM), Florida Trade Commission (FTC), and FDOT performance measures and standards to maintain State of Good Repair (SGR).
  - 3.1.2. Update the SFRTA Rail Fleet Management Plan (RFMP) as established in the RFMP.
  - 3.2. Achieve and maintain a 90%+ On-Time-Performance (OTP).
  - 3.2.1. Meet or exceed the FTC End-To-End OTP objective of 80%, with a target of 90%+.
  - 3.2.2. Exceed the FTC objective of 41,863 revenue miles between vehicle failures.
  - **3.2.3.** Identify and address factors that create train delays affecting OTP.
  - 3.2.4. Monitor Incident Response times to identify potential improvements.





# **Goals and Objectives**

- 3.2.5. Limit undue train delay by completing timely vegetation cutting and removal, per the FDOT/SFRTA Maintenance-Of-Way (MOW) Agreement.
  - 3.3. Identify strategic capital investments to improve the existing SFRTA/Tri-Rail system.
- 3.3.1. Identify and implement best available technology to improve the reliability of the Tri-Rail System
- 3.3.2. Provide continuing support to FDOT for the Miami River-Miami Intermodal Center Capacity Improvement (MR-MICCI) project, which will improve system capacity and efficiency.
- 3.3.5. Identify, fund, and construct crossovers, sidings, and other needed small track improvements at key locations along the rail corridor.
- **3.3.4.** Regularly evaluate park-and-ride capacity needs.
- 3.4. Conduct feasibility analyses for new stations at strategic locations.
- 3.5. Periodically evaluate Tri-Rail train schedules for opportunities to improve service, provide more frequent service, and/or extend schedules.

# Goal 4. Improve SFRTA's commuter bus service and connecting transit and transportation services.

- 4.1. Ensure SFRTA commuter bus service maintains or exceeds standards set by SFRTA and the Planning Technical Advisory Committee (PTAC), and by FDOT and SFRTA in the JPA funding agreement.
- 4.2. Regularly assess and reevaluate the performance, efficiency and connectivity of commuter bus routes operated or funded by SFRTA.
- 4.2.1. Monitor all commuter bus routes to meet or exceed the 7.0 passenger/hour standard established by SFRTA and the PTAC in 2010.
- 4.2.2. Ensure SFRTA commuter bus service makes and completes all scheduled trips.
- 4.2.3. Ensure SFRTA commuter buses meet all safety and amenity requirements.
- 4.2.4. Maintain any needed emergency commuter bus service at the required level.
  - 4.3. Conduct need and feasibility studies for new SFRTA commuter bus routes.
- 4.4. Coordinate with other transit providers to improve scheduling, frequency and connectivity of transit services.
- 4.5. Work to implement tri-county expansion of Easy Card or an electronic fare system that can integrate with Easy Card.
- 4.6. Work to establish a coordinated, simplified region-wide transfer fare policy
- 4.7. Explore the suitability of an SFRTA program providing discount ride-share services (Lyft/Uber) for access to/from stations.
- 4.8. Collaborate with local governments to connect new and existing local shuttles/circulators and schedules at Tri-**Pail stations**
- 4.9. Collaborate with private and public entities to provide direct connections between Tri-Rail and employment, activity centers, intermodal hubs, and schools.

# Goal 5. Improve the Tri-Rail passenger experience.

- **5.1.** Develop a mobile ticketing app.
- 5.2. Perform regular SFRTA websites upgrades and add multi-modal trip planning/navigation to the Tri-Rail Train Tracker app.
- 5.3. Continually meet/exceed the FTC objective of 1 customer complaint per 5,000 boardings.
- 5.4. Meet and exceed the FTC objective of a 14-day formal response time to customer complaints.
- 5.5. Maintain station and passenger car cleanliness.
- 5.6. Solicit public input on customer satisfaction, expectations and priorities.
- 5.7. Improve pedestrian, bike, vehicular and transit access to stations.





# **Goals and Objectives**

## SAFETY

- Goal 6. Implement safety and security measures, procedures and practices for the Tri-Rail system and facilities that meet state and federal standards.
  - 6.1. Install and operate Positive Train Control (PTC) per federal requirements.
  - **6.2.** Improve highway-rail grade crossing safety.
  - 6.3. Reduce train accidents caused by human factors; improve track safety, and enhance emergency preparedness and response.
  - **6.3.1.** Implement and monitor the performance of SFRTA's safety awareness strategies.
  - 6.3.1.1. Conduct extensive Public Awareness Campaign, addressing range of safety issues, in conjunction with FDOT, via multiple media and community outlets.
  - 6.3.1.2. Implement improved messaging on platform including signage to alert pedestrians near tracks.
  - **6.3.1.3.** With FDOT, develop and distribute safety brochures.
  - 6.3.1.4. Work with and provide data to local law enforcement to apply for FRA grants that fund officers to patrol the rail corridor and right-of-way.
  - 6.3.1.5. Work with local law enforcement on incident responses and the 2-1-1 call service, a live, 24-hour comprehensive crisis support and suicide prevention service.
  - 6.3.1.6. Based on performance analysis, and in conjunction with FDOT, regularly adjust aspects of the Trespasser and Suicide Mitigation Program for efficacy.
    - 6.4. Coordinate with all departments and contractors to implement the Incident Response Plan.
    - 6.5. Implement a pilot program using drones to identify trespassers and persons who are a threat to themselves or trains. The program has the potential to achieve a 15-minute or less response time within 50 feet of the rail corridor, compared to 40-60 minutes currently.

## SUSTAINABLE FUNDING

- Goal 7. Pursue funding opportunities to support both the existing SFRTA/Tri-Rail system and expanded premium transit in the region.
  - 7.1. Together with regional agencies, increase public awareness of funding challenges for sustainable transit and transportation.
  - 7.2. Pursue and secure a stable source for operating funds for existing and future transit services, and for matching funds for state and federal funding programs.
  - 7.3. Increase passenger fare revenue to reach a goal of >22.5% farebox recovery.
  - 7.4. Partner with local and regional agencies to develop and fund local and regional transportation initiatives.
  - 7.5. Continue to secure federal funding grants and awards.
  - 7.6. Participate in state and federal funding programs, including Federal Transit Administration (FTA) CRISI, BUILD, New Starts, Small Starts, Discretionary Programs, TIFIA, State New Starts, SIS, and TRIP.
  - 7.7. Seek private financing or partnerships for major expansion initiatives; work with localities that want to invest in station development costs.

# **ECONOMIC GROWTH AND ENVIRONMENTAL STABILITY**

- Goal 8. Facilitate economic growth and development throughout the region.
  - 8.1. Work with private and public sectors to implement Tri-Rail Coastal Link and to generate transit-oriented development (TOD) around Tri-Rail stations, and along the FEC corridor.
  - 8.2. Pursue and advocate for projects on the SFRC and FEC corridors that will add capacity for freight movement.





# **Goals and Objectives**

- Goal 9. Maximize environmentally sustainable practices for both the current SFRTA/Tri-Rail system and expanded premium services in the region.
  - 9.1. Work with the private and public sectors to attract TOD around existing and future Tri-Rail stations.
  - 9.2. Educate the public on the environmental benefits of regional premium transit.
  - 9.3. Procure new rail power and fleet vehicles that have low emission, hybrid, or alternative fuel characteristics.
  - 9.4. Exceed latest EPA emission standards.



# Section 5 10-Year Plan









## 10-Year Plan

The Ten-Year Implementation Plan provides improvement initiatives — capital projects, service adjustments, and state of good repair projects – that SFRTA intends to adopt over the course of the next ten years. SFRTA continues to focus on improving on-time performance (OTP), providing a clean and attractive system for passenger use, and improving customer convenience, while continuing to assess expansion opportunities.

The first five years of SFRTA's 10-Year Capital Plan originates from the agency's FY 18-19 Capital Budget and the Five-Year Plan for FY 18-23, and can be seen in Table ES-11. The latter years of the Ten-Year Plan can be seen in Table ES-12.

Projects in Table ES-12 are as yet unfunded, but could be advanced into the first five years as funding becomes available.

The largest capital expense anticipated over the next decade will be implementing the Tri-Rail Coastal Link (TRCL) expansion. The TRCL projects listed in Table ES-12 are: TRCL Jupiter Extension, TRCL Palm Beach, TRCL Broward, and the Northeast Corridor, which is the TRCL section located in Miami Dade that has been designated as part of the Miami-Dade TPO's SMART Plan.

It is important to emphasize that this implementation schedule developed by SFRTA, shown in Table ES-12, does not preclude potential advancement or delay any of projects in the SFRTA Building Stronger Connections 10-year Capital Plan. The capital plan may be periodically adjusted in accordance with SFRTA's priorities and funding availability, following formal procedures and final approval by the SFRTA governing Board.





Table ES-11 SFRTA Building Stronger Connections 10-Year Capital Plan - First Five Years

Canibal Francisco	FY 18-19	FY 19-20	FY 20-21	FY 21-22	FY 22-23	FY 23-24	Takal
Capital Expenses	Capital Budget			PROJECTED			Total
Funded Projects							
Rehab Rolling Stock	\$3,911,826	\$1,438,582	-	-	-	-	\$5,350,408
Rail Yard Improvements	-	\$100,000	-	-	-	\$100,000	\$200,000
Station Improvements	-	\$500,000	\$500,000	\$500,000	-	\$500,000	\$2,000,000
Purchase of Rolling Stock	\$500,000	\$10,037,500	\$10,037,500	\$10,337,500	\$10,337,500		\$41,250,000
Project Support/Administration	\$1,200,000	-	\$1,490,442	\$1,200,000	-	\$1,200,000	\$5,090,442
Preventive Maintenance	\$22,784,726	\$22,007,057	\$23,432,057	\$23,283,902	\$23,283,902	\$28,762,262	\$143,553,906
Debt Service-DTML PTC Comm. Loan	\$3,907,381	\$4,495,209	\$4,487,369	\$4,487,369	\$2,190,364	-	\$19,567,692
Debt Service-DTMS AAF Loan	\$17,528,049	-	-	-	-	-	\$17,528,049
Debt Service-SIB Loan for Ops. Ctr.	\$2,872,100	\$4,709,519	\$2,763,250	\$2,500,000	\$878,664	-	\$13,723,533
Transfer to Operating	\$1,896,895	\$1,896,895	\$1,896,895	\$1,896,895	\$1,896,895	\$1,896,895	\$11,381,370
West Palm Beach Parking	-	\$1,000,000	\$1,000,000	\$1,000,000		-	\$3,000,000
Non-Revenue Fleet Vehicles	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	-	\$500,000
New Furniture & Replacement Program	\$100,000	-	\$100,000	-	-	-	\$200,000
Portable Radios	-	-	-	\$62,000	-	-	\$62,000
Computer/Office Equipment/Software	\$300,000	\$300,000	\$150,000	\$150,000	-	-	\$900,000
Passenger Information System	\$1,103,717	\$1,500,000	-	-	-	-	\$2,603,717
Planning and Capital Development	\$1,000,000	\$1,125,000	\$1,000,000	\$1,150,000	\$1,000,000	\$2,200,000	\$7,475,000
Transit Oriented Development (TOD II)	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000	\$1,200,000
Miami River Intermodal Ctr. (MR-MICCI)	\$147,462	-	\$13,601,942	\$13,250,000	-	-	\$26,999,404
Boca II	-	\$4,416,735	\$3,416,735	\$7,979,969	\$7,979,969	-	\$23,793,408
Boca Trolleys	\$1,505,000	-	-	-	-	-	\$1,505,000
Delray Beach Trolleys	-	\$860,000	-	-	-	-	\$860,000
PBIA Station Study	-	-	-	\$250,000	-	-	\$250,000
General Engineering Consultants	\$2,648,155	\$2,800,000	\$2,800,000	\$1,500,000	\$1,500,000	\$1,500,000	\$12,748,155
Heavy Station Maint./Construction	\$500,000	\$500,000	-	\$290,442	-	-	\$1,290,442
Northern Layover Facility	\$1,000,000	\$3,530,000	-	-	-	-	\$4,530,000
Positive Train Control	\$3,189,384	-	-	-	-	-	\$3,189,384
Emergency Flagging Services	-	-	-	-	-	-	\$500,000
Flagging Svcs for Construction Projects	\$2,500,000	\$2,500,000	\$2,500,000	\$2,500,000	\$2,500,000	\$2,500,000	\$15,000,000
Downtown Miami Station	\$7,255,308	-	-	-	-	-	\$7,255,308
Waste Water Treatment Plant	-	\$1,636,000	\$1,500,000	\$612,000	-	-	\$3,748,000
Northwood Crossover	\$602,027	-	-	-	-	-	\$602,027
Grade Crossings and Signals	\$10,569,000	\$12,329,800	\$11,981,924	\$11,993,382	\$12,005,183	-	\$58,879,289
Downtown Miami Link PTC	\$11,077,588	\$3,680,435	-	-	-	-	\$14,758,023
Unfunded Projects							
SFRC Capital Replacement Program	\$17,465,500	\$9,951,688	\$8,734,688	\$8,674,688	\$6,819,688	\$8,573,666	\$60,219,918
MOW Oversight	\$1,800,000	\$1,800,000	\$1,800,000	\$1,800,000	\$1,800,000	\$1,800,000	\$10,800,000
Federal Funds Unallocated	-	-	-	-	-	\$200,000	\$200,000
County Gas Tax Funds Unallocated	-	-	\$10,544	\$625,736	\$3,922,741	\$6,113,105	\$10,672,126
Total Capital Fund by Project:	\$117,664,118	\$93,414,420	\$93,503,346	\$96,343,883	\$76,914,906	\$55,545,928	\$533,386,601





Table ES-12 SFRTA Building Stronger Connections Ten-Year Capital Plan - Second Five Years

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BUILDING STRONGER
CONNECTIONS

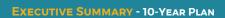
		l									
10-Year Capital Plan	FY 18-19 Capital Budget	FY 19- 20	FY 20-21	FY 21-22	FY 22-23	Unfunded FY 23-24	Unfunded FY 24-25	Unfunded FY 25-26	Unfunded FY 26-27	Unfunded FY 27-28	Total
TRCL Jupiter Extension *	-	-	-	-	-	-	-	\$35,666,667	\$35,666,667	\$35,666,667	\$107,000,000
Tri-Rail Coastal Link (TRCL) Palm Beach**†	-		-		-	ı	1	ı	1	\$158,000,000	\$158,000,000
Tri-Rail Cstl Link (TRCL) (Broward) (1) **	-	,	-	-	-	-	-	-	1	\$322,000,000	\$322,000,000
Northeast Corridor (2) ***	-	-	-	-	-	\$95,000,000	\$95,000,000	-	-	-	\$190,000,000
Commuter Connector Bus Stops / Enhanced Stop	ı		1	ı	1	\$1,321,300	\$1,321,300	1	1	1	\$2,642,600
Commuter Connector Bus/County Stops	-	1	-	-	-	\$64,260	-	-	-	-	\$64,260
Commuter Connector Bus / ADA Compliance	ı		-	-	1	\$20,880	-	-	-	-	\$20,880
Boca II	-	-	-	-	-	\$17,800,000	-		1	-	\$17,800,000
Boca Raton Tri-Rail Station Improvements	-	-	-	-	-	-	_	-	\$8,062,000	-	\$8,062,000
Boca Raton Intermodal Center	-	1	-	-	-	1	_	1	\$17,574,921	-	\$17,574,921
Tri-Rail ExtNorthern CSX to VA Hospital	-	-	-	-	-	-	-	-	\$63,400,000	-	\$63,400,000
Deerfield Bch Tri-Rail Station Improvements	1	1	1	1		1	1	1	1	\$18,063,338	\$18,063,338
Pedestrian Bridge at Golden Glades Station	-		-	-		-	\$4,036,500	-	-	-	\$4,036,500
Dade Tri-Rail Kendall/Homestead Ext. ****			-	-		1	1	1	\$302,737,500	-	\$302,737,500
CSX-Tri-Rail Dolphin Ext. Phase I (E/W) ****	-		1	-		1	1	1	\$150,000,000	-	\$150,000,000
Replacement and New Locomotives			-	-		\$33,000,000	1	1	1	-	\$33,000,000
New Rolling Stock	,	-	ı	1		ı	\$10,000,000	\$10,000,000	\$10,000,000	\$10,000,000	\$40,000,000
Resilience Mitigation / Hurricane Hardening		,	1			ı	1	\$4,665,000	\$4,665,000	-	\$9,330,000
Station Area Pedestrian Plan	,	-	ı	1		ı	\$1,500,000	\$1,500,000	\$1,500,000	\$1,500,000	\$6,000,000
Bike Storage Cars		,	1			ı	\$1,000,000	\$1,000,000	1	-	\$2,000,000
Ludlam Corridor ****						1	1	1	1	\$300,000,000	\$300,000,000
Miami Int'l Airport/Port Miami Ext. ****	-		1	-		1	ı	1	1	\$25,000,000	\$25,000,000
Kendall Link ****						1	1	1	\$150,000	\$175,000,000	\$325,000,000
Okeechobee Link ****		1	1	-		1	ı	1	1	\$325,000,000	\$325,000,000
US-1 Extension ****	1	-	1	1		1	1	1	1	\$500,000,000	\$500,000,000
Federal Funds Unallocated	1	1	1	1		\$200,000	1	ı	1	\$200,000	\$400,000
County Gas Tax Funds Unallocated	-	-	\$10,544	\$625,736	\$3,922,741	\$6,113,105	1	1	1	\$10,672,126	\$21,344,252
Total	\$0	\$0	\$10,544	\$625,736	\$3,922,741	\$122,756,045	\$68,486,300	\$101,831,667	\$581,935,176	\$1,953,038,793	\$2,832,607,002

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<sup>†</sup> Exclusive of TRCL Jupiter Extension

<sup>\*\*</sup>Source: Tri-Rail Coastal Link Study, Preliminary Project Development Report, April 2014; Appendix 4: Capital Cost Methodology and Results.

<sup>\*\*\*</sup> The Northeast Corridor Link Project Tax Increment Financing Analysis \*\*\*\* Source: Miami-Dade County Rail Opportunities report, 2015







# Section 6 Financial Plan







## FINANCIAL PLAN

The Financial section of the Building Stronger Connections TDP Major Update is intended to identify sources and uses of funds allocated for the operation of SFRTA as well as the long-range capital requirements. This section discusses funding levels and any changes in these levels. These funding levels cover a ten-year planning period and address current and projected financial demands.

Population increases have contributed to higher ridership with a tri-county increase of 271,671 (4.7 percent) over the past five years. Fare Revenue also increased by \$1,762,724 over the past five years, for an annual compounded increase of over 2.7 percent. This revenue increase reflects a corresponding increase in ridership over the same period. Increases reflect the improved economic climate in Southeast Florida which has experienced significant new development over the past five years. Reports from the local property appraiser offices in the three counties served by Tri-Rail indicate a substantial increase in taxable values (44 percent in Miami-Dade, 33 percent in Broward and 42 percent in Palm Beach), mostly due to new construction.

Increases in Operating Expenses over the past five years have been influenced primarily by the assumption of Maintenance of Way (MOW) funding requirements, in a joint effort with the SFRTA and the State of Florida. This provision was implemented in 2015, and added significant costs to the annual Operating Budget.

## 6.1 **10-Year Operating Forecast**

## 6.1.1 **Operating Expenses**

Annual Operating Expenses for SFRTA in FY 2018/2019 total \$119.7 million, which is an increase of \$7.5 million (6.7 percent) over the FY 2017/2018 budgeted amount. The most significant increase (28.6 percent over FY 2017/2018 levels) has been in the Train Fuel Contract which has seen a sharp increase after years of a reduction due to introduction of more efficient vehicles. This Operating Expense line item has grown \$2 million in the past year accounting for 26.7 percent of the total budgeted increase. Inclusion of the Positive Train Control (PTC) system has also added approximately \$2.7 million (35.8 percent of the increase) to the annual budget, which had not been previously funded.

A total of \$85.3 million (71.3 percent) of the Operating Expenses are for Operation and Maintenance (O&M) of the trains, rail corridor and passenger stations. These categories represent 18 percent of the increase in Operating Expenses from FY 2017/2018 to FY 2018/2019.

The remainder of the Operating Expenses includes administrative, legal, personnel and community outreach services. These categories represent 12.7 percent of the total budgeted amount and 10 percent of the increase in Operating Expenses for the past year.

## 6.1.2 **Operating Revenues**

Operating Revenue is comprised of Train Revenue (fares) Operating Assistance (contributions from Federal, State and local sources) and Reserves. These sources must be sufficient to cover all Operating Expenses.

Train Revenue has increased over the past five years by approximately 14 percent reflecting an increase in ridership. The average annual increase in Train Revenue over the past five years was 2.7 percent, which exceeded projections for that period. Train Revenue makes up approximately 11.7 percent of the





total Operating Revenue for SFRTA, which is typical for systems such as Tri-Rail. This percentage has decreased (from 16.3 percent) over the past five years. A shift in funding from other governmental units has occurred over the past five years.

Federal sources accounted for \$27.2 million (26.1 percent) in FY 2017/2018 and decreased slightly to \$26.8 million (22.4 percent) in FY 2018/2019. These funds are provided by Federal Transit Administration (FTA) and Federal Highway Administration (FHWA).

Table FS-13 EV 2018 - 2019 SERTA Operating Expenses

OPERATING EXPENSES	ADOPTED FY 2018-2019
Operating Contract	\$ 21,593,921
Train Maintenance Contract	15,519,452
Station Maintenance Contract	6,750,523
PTC Maintenance	1,022,780
PTC Operations	1,683,200
Feeder Service	7,402,658
Emergency Feeder Service	75,000
Security Contract	7,183,106
Insurance - Liability/Property/Auto	3,603,276
Train Fuel Contract	8,978,125
SFRC Dispatch	1,949,937
Station & Office Utilities	642,123
Corridor Utilities	1,475,148
Revenue Collection	758,000
Corporate & Community Outreach	602,900
Legal Expenses	903,698
Personnel Services	12,422,142
Rail Corridor Maintenance (MOW)	25,842,099
Office Business Expense	1,101,880
Business Travel/Conferences	253,893
Dues & Subscriptions	157,152
General Training & Seminars	189,985
Professional Fees	709,900
Office Rent	32,870
Technical Support	189,500
Electronic Messaging Boards	69,500
Alarm Systems	4,000
Uniforms	\$6,000
Transfer to Capital Program	\$(1,450,000)
TOTAL EXPENSES	\$119,672,768

State sources comprised \$30.6 million (40.6 percent) of the Operating Revenue in FY 2017/2018, which increased to \$55.2 million (46.2 percent) in FY 2018/2019. A portion of this Operating Revenue from the State of Florida is approximately \$13.1 million for MOW. The Florida Department of Transportation (FDOT) also transfers \$15 million from the State Transportation Trust Fund (STTF) to

Table FS-14 FY 2018 - 2019 SFRTA Operating Revenues

Table ES-14 FY 2018 - 2019 SFRTA Op	derating Revenues
OPERATING REVENUES	ADOPTED FY 2018-2019
TRAIN REVENUE	
Train Service Revenue	\$ 14,051,830
Interest Income/ Other Income	\$ 325,000
TOTAL TRAIN REVENUE	\$14,376,830
OPERATING ASSISTANCE	
Statutory Dedicated Funding	\$ 15,000,000
Statutory Operating Assistance	\$ 27,100,000
Statutory Maintenance of Way	\$ 13,124,940
FTA Preventive Maintenance	\$ 22,784,726
FHWA	\$ 4,000,000
City of Boca Raton-Shuttle Service	\$ 176,821
City of Opa Locka-Shuttle Service	\$ 439,290
CSX Reimbursements	\$100,000
Miami-Dade Statutory Operating Assistance	\$ 1,565,000
Broward Statutory Operating Assistance	\$ 1,565,000
Palm Beach Statutory Operating Assistance	\$ 1,565,000
Other Local Funding	\$100,000
Gas Tax Transfer	\$ 1,896,895
SFRTA Reserves	\$ 15,878,266
TOTAL ASSISTANCE	\$105,295,938
TOTAL REVENUE	\$119,672,768

Source: SFRTA 2018 Source: SFRTA 2018





SFRTA for operations, maintenance, and dispatch and an additional amount of no less than \$27.1 million for operating assistance.

Tri-Rail has always been a joint venture of the three counties in Southeast Florida and local entities contributed \$4.9 million (6.5 percent) in FY 2017/2018. These sources accounted for \$7.4 million (6.2 percent) in FY 2018/2019. Funding comes from the three counties (Miami-Dade, Broward and Palm Beach) governments as well as local shuttle service revenue and Gas Tax allocations. The FY 2018/2019 budget includes Revenue from Reserves of \$15.9 million which represents 13.3 percent of the total annual allocation. Reserves did not make up any portion of Operating Revenue in FY 2017/2018.

## 6.1.3 **10-Year Operating Budget**

## **Expenses**

Projections for the future included an estimated overall increase in Operating Expenses of approximately 1.77 percent annually to the existing operation of Tri-Rail. These projections are dependent on steady increases in fuel and maintenance expenses. For the operation and maintenance of the trains, stations and MOW, the estimated increase is two (2) percent annually. Expense categories such as Dispatch, Personnel Costs and Legal Expenses are projected to increase approximately three (3) percent annually. All other categories are expected to remain constant or decline in the future.

The most significant future increase is projected in FY 2023/2024 with the introduction of the Tri-Rail Coastal Link (TRCL) operation. This effort will add approximately \$30 million to the overall operational budget (Figure ES-10).

## Revenue

Future Revenue is also expected to increase at a steady rate (approximately 1.9 percent annually) to match the annual Expenses. However, beginning in FY 2023/2024, there is a projected funding shortfall of approximately \$30.6 million based on the implementation of the TRCL service; funding for this operation has not yet been committed. The State of Florida planned contributions may decrease and reliance on Reserve may increase. Funding sources will also be adjusted over the planning time frame.



Figure ES-10 SFRTA Projected Operating Expenses (FY 2018/2019 - FY 2028/2029)

Source: SFRTA, 2018





Table ES-15 SFRTA Operating Budget and 10-Year Plan (FY 2018-2019 - FY 2028-2029) Expenses

dble E3-13 3FRTA Operating Budget 6		·			· '	
	APPROVED FY 2019	PROJECTED FY 2020	PROJECTED FY 2021	PROJECTED FY 2022	PROJECTED FY 2023	PROJECTED FY 2024
OPERATING EXPENSES						
Operating Contract	21,593,921	22,025,799	22,466,315	22,915,642	23,373,955	23,841,434
Train Maintenance Contract	15,519,452	15,829,841	16,146,438	16,469,367	16,798,754	17,134,729
Station Maintenance Contract	6,750,523	6,885,533	7,023,244	7,163,709	7,306,983	7,453,123
PTC Maintenance	1,022,780	4,091,120	4,172,942	4,256,401	4,341,529	4,428,360
PTC Operations	1,683,200	6,732,800	6,867,456	7,004,805	7,144,901	7,287,799
eeder Service Contract	7,402,658	7,550,711	7,701,725	7,855,760	8,012,875	8,173,133
	7,402,038	7,330,711	75,000	75,000	75,000	75,000
Emergency Feeder Service					7,775,225	
Security Contract	7,183,106	7,326,768	7,473,303	7,622,770		7,930,729
nsurance - Liability/Property/Auto Train Fuel Contract	3,603,276	3,300,000	3,800,000	3,800,000	3,800,000	4,000,000
	8,978,125	9,157,688	9,340,841	9,527,658	9,718,211	9,912,575
FRC Dispatch	1,949,937	2,008,435	2,068,688	2,130,749	2,194,671	2,260,511
tation & Office Utilities	642,123	650,000	650,000	650,000	655,000	655,000
Corridor Utilities	1,475,148	1,500,000	1,500,000	1,500,000	1,550,000	1,550,000
Revenue Collection	758,000	770,000	770,000	770,000	775,000	775,000
orporate & Community Outreach	602,900	605,000	605,000	605,000	610,000	610,000
egal Expenses	903,698	930,809	958,733	987,495	1,017,120	1,047,634
ersonnel Services	12,422,142	12,794,806	13,178,650	13,574,010	13,981,230	14,400,667
OW Maintenance	25,842,099	25,819,892	25,819,892	25,819,892	27,600,000	27,600,000
Office Business Expense	1,101,880	1,110,000	1,143,300	1,177,599	1,212,927	1,249,315
susiness Travel/Conferences	252,918	220,000	220,000	220,000	220,000	220,000
ues & Subscriptions	157,152	150,793	150,793	150,793	150,793	150,793
eneral Training & Seminar	190,960	170,000	170,000	170,000	170,000	173,000
ofessional Fees	709,900	731,197	753,133	775,727	798,999	822,969
fice Rent	32,870	33,000	33,000	33,000	33,000	33,000
chnical Support	189,500	100,000	100,000	100,000	110,000	110,000
ectronic Messaging Boards	69,500	70,000	70,000	70,000	-	-
arm Systems	4,000	4,000	4,000	4,000	4,000	4,000
niforms	6,000	6,000	4,000	6,000	4,000	6,000
ansfer to Capital Program	(1,450,000)	(1,450,000)	(1,575,000)	(1,575,000)	(1,600,000)	(1,600,000)
isting Operating Costs	119,672,768	129,199,193	131,691,456	133,860,376	137,834,174	140,304,771
-Rail Coastal Link Operating Costs	-	-	-	-	-	30,600,000
egrated Operating Costs	\$ 119,672,768	\$ 129,199,193	\$ 131,691,456	\$ 133,860,376	\$ 137,834,174	\$ 170,904,771
ERATING REVENUES						
in Service Revenue	14,051,830	16,262,607	16,506,547	16,754,145	17,005,457	17,260,539
terest Income/Other Income	325,000	325,000	325,000	325,000	325,000	325,000
atutory Dedicated Funding	15,000,000	13,300,000	13,300,000	13,300,000	13,300,000	13,300,000
catutory Operating Assistance	27,100,000	27,100,000	27,100,000	27,100,000	27,100,000	27,100,000
atutory Maintenance of Way	13,124,940	13,124,940	13,124,940	13,124,940	13,124,940	13,124,940
A Planning Grant	-	1,500,000	1,500,000	1,500,000	1,000,000	-
TA Preventive Maintenance	22,784,726	26,806,495	27,342,624	27,889,477	28,447,266	29,016,212
HWA	4,000,000	4,000,000	4,000,000	4,000,000	4,000,000	4,000,000
ty of Boca Raton - Shuttle Service	176,821	172,081	-	-	-	-
ity of Opa Locka - Shuttle Service	439,290	439,290	-	-	-	-
X Reimbursements	100,000	100,000	100,000	100,000	100,000	100,000
iami-Dade Statutory Operating Assistance	1,565,000	1,565,000	1,565,000	1,565,000	1,565,000	1,565,000
oward Statutory Operating Assistance	1,565,000	1,565,000	1,565,000	1,565,000	1,565,000	1,565,000
alm Beach Statutory Operating Assistance	1,565,000	1,565,000	1,565,000	1,565,000	1,565,000	1,565,000
as Tax Transfer	1,896,895	1,896,895	1,896,895	1,896,895	1,896,895	1,896,895
FRTA Reserves	15,878,266	19,376,885	21,700,450	23,074,919	26,739,615	29,386,185
ther Local Funding	100,000	100,000	100,000	100,000	100,000	100,000
Operating Revenues	\$ 119,672,768	\$ 129,199,193	\$ 131,691,456	\$ 133,860,376	\$ 137,834,173	\$ 140,304,771
oastal Link Funding (TBD)			- 101,001,700	- 100,000,070	- 107,004,173	30,600,000
	\$ 119,672,768	\$ 129,199,193	\$ 131,691,456	\$ 133,860,376	\$ 137,834,173	\$ 170,904,771
tal Operating Revenues						

Source: SFRTA 2018





Table ES-10 (Continued) SFRTA Operating Budget and 10-Year Plan (FY 2018-2019 - FY 2028-2029) Expenses

	PROJECTED FY 2025	PROJECTED FY 2026	PROJECTED FY 2027	PROJECTED FY 2028	PROJECTED FY 2029	TOTAL FY 2019- FY 2029
OPERATING EXPENSES						
Operating Contract	24,318,262	24,804,628	25,300,720	25,806,735	26,322,869	262,770,279
Train Maintenance Contract	17,477,424	17,826,972	18,183,512	18,547,182	18,918,125	188,851,795
Station Maintenance Contract	7,602,185	7,754,229	7,909,314	8,067,500	8,228,850	82,145,193
PTC Maintenance	4,516,927	4,607,266	4,699,411	4,793,399	4,889,267	45,819,403
PTC Operations	7,433,555	7,582,226	7,733,871	7,888,548	8,046,319	75,405,482
Feeder Service Contract	8,336,595	8,503,327	8,673,394	8,846,862	9,023,799	90,080,839
Emergency Feeder Service	75,000	75,000	75,000	75,000	75,000	825,000
Security Contract	8,089,344	8,251,131	8,416,154	8,584,477	8,756,166	87,409,173
Insurance - Liability/Property/Auto	4,000,000	4,000,000	4,300,000	4,300,000	4,300,000	43,203,276
Train Fuel Contract	10,110,827	10,313,044	10,519,304	10,729,690	10,944,284	109,252,248
SFRC Dispatch	2,328,327	2,398,177	2,446,140	2,495,063	2,544,964	24,825,662
Station & Office Utilities	655,000	655,000	655,000	655,000	655,000	7,177,123
Corridor Utilities	1,550,000	1,550,000	1,550,000	1,550,000	1,550,000	16,825,148
Revenue Collection	775,000	775,000	780,000	780,000	780,000	8,508,000
Corporate & Community Outreach	610,000	612,000	612,000	612,000	615,000	6,698,900
Legal Expenses	1,079,063	1,111,435	1,133,663	1,156,337	1,179,463	11,505,449
Personnel Services	14,832,687	15,277,668	15,583,221	15,894,886	16,212,783	158,152,751
ROW Maintenance	27,600,000	27,600,000	27,600,000	27,600,000	27,600,000	296,501,775
Office Business Expense	1,286,794	1,325,398	1,351,906	1,378,944	1,406,523	13,744,586
Business Travel/Conferences	220,000	220,000	220,000	220,000	224,400	2,457,318
•						
Dues & Subscriptions	150,793	150,793	153,809	156,885	160,023 173,000	1,683,420
General Training & Seminar	173,000	173,000	173,000	173,000	,	1,908,960
Professional Fees	847,658	873,087	890,549	908,360	926,527	9,038,106
Office Rent	33,000	33,000	33,000	33,000	33,000	362,870
Technical Support	110,000	110,000	110,000	110,000	110,000	1,259,500
Electronic Messaging Boards	-	-	-	-	-	279,500
Alarm Systems	4,000	4,000	4,000	4,000	4,000	44,000
Uniforms	4,000	6,000	4,000	4,000	4,000	54,000
Transfer to Capital Program	(1,600,000)	(1,600,000)	(1,600,000)	(1,600,000)	(1,600,000)	(17,250,000)
 Existing Operating Costs	142,619,441	144,992,380	147,510,967	149,770,867	152,083,364	1,529,539,756
 Tri-Rail Coastal Link Operating Costs Integrated Operating Costs	31,212,000 \$ 173,831,441	31,836,240 \$ 176,828,620	32,472,965 \$ 179,983,932	33,122,424 \$ 182,893,291	33,784,873 \$ 185,868,236	193,028,501 \$ 1,722,568,257
OPERATING REVENUES						
Train Service Revenue	17,519,447	17,782,239	18,048,972	18,319,707	18,594,502	188,105,991
Interest Income/Other Income	325,000	325,000	325,000	325,000	325,000	3,575,000
Statutory Dedicated Funding	13,300,000	13,300,000	13,300,000	13,300,000	13,300,000	148,000,000
Statutory Operating Assistance	27,100,000	27,100,000	27,100,000	27,100,000	27,100,000	298,100,000
Statutory Maintenance of Way	13,124,940	13,124,940	13,124,940	13,124,940	13,124,940	144,374,340
FTA Planning Grant	-	1,000,000	1,000,000	1,000,000	-	8,500,000
FTA Preventive Maintenance	29,596,536	30,188,467	30,792,236	31,408,081	32,036,242	316,308,362
FHWA	4,000,000	4,000,000	4,000,000	4,000,000	4,000,000	44,000,000
City of Boca Raton - Shuttle Service	-	-	-	-	-	348,902
City of Opa Locka - Shuttle Service	-	-	-	-	-	878,580
CSX Reimbursements	100,000	100,000	100,000	100,000	100,000	1,100,000
Miami-Dade Statutory Operating Assistance	1,565,000	1,565,000	1,565,000	1,596,300	1,596,300	17,277,600
Broward Statutory Operating Assistance	1,565,000	1,565,000	1,565,000	1,596,300	1,596,300	17,277,600
Palm Beach Statutory Operating Assistance	1,565,000	1,565,000	1,565,000	1,596,300	1,596,300	17,277,600
Gas Tax Transfer	1,896,895	1,896,895	1,896,895	1,896,895	1,896,895	20,865,845
SFRTA Reserves	30,861,623	31,379,839	33,027,924	34,307,344	36,716,884	302,449,934
Other Local Funding	100,000	100,000	100,000	100,000	100,000	1,100,000
Operating Revenues	\$ 142,619,441	\$ 144,992,379	\$ 147,510,967	\$ 149,770,866	\$ 152,083,364	\$ 1,529,539,756
	31,212,000					193,028,501
Coastal Link Funding (TBD) Total Operating Revenues	\$ 173,831,441	31,836,240 \$ 176,828,619	32,472,965	33,122,424 \$ 182,893,291	33,784,873 \$ 185,868,236	
Course CEPTA 2018	113,031, <del>44</del> 1 ب	\$ 176,828,619	\$ 179,983,932	¥ 102,033,231	÷ 103,000,230	\$ 1,722,568,257

Source: SFRTA 2018





## 6.2 10-Year Capital Plan

## 6.2.1 **Capital Expenses**

Capital Expenses for FY 2018/2019 are projected at \$117.7 million, with the primary allocations as depicted in Figure ES-11.

For the next three years of the ten-year plan (FY 2020/FY 2022), Capital Expenses are projected to range between \$93.4 million to \$96.3 million per year, with the primary allocations as depicted in Figure ES-12.

Beginning in FY 2022/2023, the projection of capital expenses is expected to decrease by approximately \$20 million.

These projections are based on the need for improvements in the system. However, a significant amount of the projects are currently unfunded.

Figure ES-11 FY 2018/2019 Capital Expense Allocations

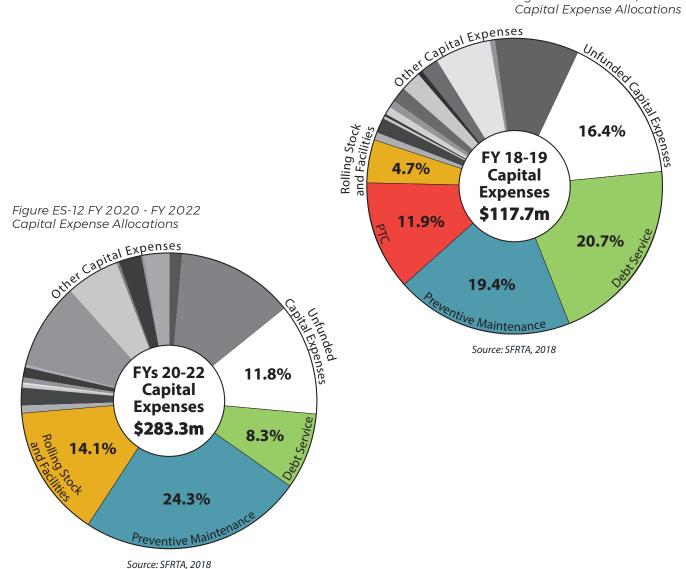






Table ES-16 SFRTA FY 2018-2019 Adopted Budget and Projected Capital Expenses (FY 2019 - FY 2028)

					ī	TV 1/11 TO	14 4 10 0							
CAPITAL EXPENSES	ú	EV 2018-2019	Ğ	EV 2019-2020	FV 20	FIRST FIVE YEAR PLAN	FV 2021-2022	1-2022	2	EV 2022-2023	Ä	EV 2023-2024		TOTAL
	. `	APPROVED	-	PROJECTED	PRC	PROJECTED	PROJE	PROJECTED	- 4	PROJECTED	- 4	PROJECTED		
Funded Projects														
Rehab Rolling Stock	\$	3,911,826	\$	1,438,582									\$	17,829,589
Rail Yard Improvements	\$	-	\$	100,000							\$	100,000	ş	2,553,411
Station Improvements	\$	•	\$	500,000	\$	500,000	Ş	500,000			\$	500,000	ş	3,650,000
Purchase of Rolling Stock	\$	500,000	\$	10,037,500	\$ 1	10,037,500	\$ 10,	10,337,500	\$	10,337,500			Ş	41,250,000
Project Support/Administration	ς.	1,200,000			\$	1,490,442	\$ 1,	1,200,000			\$	1,200,000	\$	12,271,033
Preventive Maintenance	\$	22,784,726	\$	22,007,057	\$ 5	23,432,057	\$ 23,	23,283,902	\$	23,283,902	\$	28,762,262	\$	246,274,087
Debt Service-DTML PTC Commercial Loan	\$	3,907,381	\$	4,495,209	\$	4,487,369	\$ 4,	4,487,369	\$	2,190,364			\$	21,884,940
Debt Service-DTMS All Aboard Florida Loan	\$	17,528,049											\$	17,861,382
Debt Service-SIB Loan for Operations Center	\$	2,872,100	\$	4,709,519	\$	2,763,250	\$ 2,	2,500,000	\$	878,664			ş	20,421,041
Transfer to Operating	❖	1,896,895	\$	1,896,895	\$	1,896,895	\$ 1,	1,896,895	\$	1,896,895	\$	1,896,895	÷	18,472,055
West Palm Beach Parking	\$		\$	1,000,000	\$	1,000,000	\$ 1,	1,000,000					ş	3,000,000
Non-Revenue Fleet Vehicles	\$	100,000	\$	100,000	\$	100,000	\$	100,000	\$	100,000			ş	1,008,292
New Furniture and Replacement Program	\$	100,000			\$	100,000							\$	602,352
Portable Radios	\$	-					\$	62,000					\$	112,000
Computer/Office Equipment/Software	\$	300,000	\$	300,000	\$	150,000	\$	150,000					\$	2,417,674
Passenger Information System	\$	1,103,717	ς.	1,500,000									ş	6,561,342
Planning and Capital Development	\$	1,000,000	\$	1,125,000	\$	1,000,000	\$ 1,	1,150,000	\$	1,000,000	\$	2,200,000	\$	14,800,000
Transit Oriented Development (TOD II)	\$	200,000	\$	200,000	\$	200,000	\$	200,000	\$	200,000	\$	200,000	ş	2,975,000
Miami River Intermodal Center (MR-MICCI)	\$	147,462			\$	13,601,942	\$ 13,	13,250,000					ş	36,700,000
Boca II	\$	•	\$	4,416,735	\$	3,416,735	\$ 7,	7,979,969	\$	7,979,969			ş	25,293,408
Boca Trolleys	\$	1,505,000											ş	1,505,000
Delray Beach Trolleys	\$	1	\$	860,000									ş	860,000
PBIA Station Study	\$	1					\$	250,000					ş	250,000
General Engineering Consultants	\$	2,648,155	\$	2,800,000	\$	2,800,000	\$ 1,	1,500,000	\$	1,500,000	\$	1,500,000	ş	22,870,459
Heavy Station Maintenance/Construction	\$	500,000	\$	500,000			\$	290,442					\$	3,094,224
Northern Layover Facility	ς.	1,000,000	\$	3,530,000									ş	37,145,944
Positive Train Control	\$	3,189,384											ş	52,062,626
Emergency Flagging Services	ς.	•							\$	500,000			ş	1,000,000
Flagging Services for Construction Projects	❖	2,500,000	\$	2,500,000	\$	2,500,000	\$ 2,	2,500,000	\$	2,500,000	\$	2,500,000	ş	20,500,000
Downtown Miami Station	\$	7,255,308											ş	48,902,750
Waste Water Treatment Plant	\$	-	\$	1,636,000	\$	1,500,000	\$	612,000					ş	4,098,000
Northwood Crossover	\$	602,027											\$	6,913,367
Grade Crossings and Signals	\$	10,569,000	\$	12,329,800	\$ 1	11,981,924	\$ 11,	11,993,382	\$	12,005,183			\$	60,629,289
Downtown Miami Link PTC	\$	11,077,588	\$	3,680,435									\$	20,290,000
Unfunded Projects														
SFRC Capital Replacement Program	\$	17,465,500	\$	9,951,688 \$	\$	8,734,688	\$ 8,	8,674,688	\$	6,819,688	\$	8,573,666	\$	60,219,918
MOW Oversight	\$	1,800,000	\$	1,800,000	\$	1,800,000	\$ 1,	1,800,000	\$	1,800,000	\$	1,800,000	\$	10,800,000
Federal Funds Unallocated	\$	-									\$	200,000	\$	200,000
County Gas Tax Funds Unallocated	\$	1			\$	10,544	\$	625,736	\$	3,922,741	\$	6,113,105	Ş	10,672,126
Total Capital Fund allocation by Project:	÷	117,664,118	φ.	93,414,420	\$	93,503,346	\$ 96,	96,343,883	φ.	76,914,906	ş	55,545,928	ş	533,386,601





## 6.2.2 **Capital Revenues**

Capital Revenue is generated from three principal sources, Federal, State and local. In addition, in FY 2018/2019, there is a contribution from CSX toward capital needs. However, these sources do not cover all the capital requirements of the system as planned. There is a line item designated as "Funding to be Determined" that ranges from \$19.2 million to \$25.7 million during the next five years.

Local sources are currently projected to become reduced from 38.6 percent in FY 2018/2019 to 10.4 percent in FY 2022/2023. The local match reduction is attributed to a one-time increase in local funding that was applied to SFRTA's share of the MiamiCentral project. Federal sources of funds for capital are projected to remain constant for the planning period whereas State sources increase from 11.6 percent to 29.1 percent before falling off in FY 2022/2023. Projected capital revenues for the 10-yr planning period are shown in Table ES-17.

## Conclusion 6.3

It is essential to identify and pursue additional funding sources for both operating and capital needs. Operation and maintenance of the existing Tri-Rail and Commuter Bus service is a core agency function and responsibility. SFRTA is committed to working with FDOT and other partners to identify new dedicated revenue source(s) that will cover continued operations for the existing Tri-Rail system and the expansion of TRCL on the FEC Railway.

Planning and implementing future, expanded service will require additional capital and operating funds. The agency continues to explore new funding opportunities and methods, including multiplepartner funding for targeted projects and possibilities for Tax Increment Financing (TIF) for station-area development.

Projections of Operating Expenses for the planning period includes an increase of 7.4 percent for the next Fiscal Year and a modest increase at approximately 1.77 percent thereafter. Historic data reveals that the actual increases have exceeded this number. If the Expenses do increase at a higher rate, the expected shortfall will also increase.

Additional funding sources for Capital Expenses must also be acquired. Throughout the ten-year planning period, the expected shortfall of capital funds ranges from \$20 million to \$25 million during this time frame.





Table ES-17 SFRTA Projected Capital Revenues (FY 2018 - FY 2028)

				FII	RST	FIVE YEAR PLA	١N			
CAPITAL REVENUES	F	Y 2018-2019	F	Y 2019-2020	F	Y 2020-2021	F	Y 2021-2022	F۱	Y 2022-2023
		ADOPTED	F	PROJECTED	- 1	PROJECTED	F	PROJECTED	F	PROJECTED
FTA Section 5307 - Formula Funds	\$	18,560,578	\$	18,560,578	\$	18,560,578	\$	18,560,578	\$	18,560,578
FTA Section 5337 - State of Good Repair	\$	16,101,684	\$	16,101,684	\$	16,101,684	\$	16,101,684	\$	16,101,684
FDOT GMR Funds	\$	-			\$	13,250,000	\$	13,250,000		
FDOT JPA'S	\$	602,027								
FDOT JPA'S-District 6	\$	8,000,000								
FDOT Railroad Reimbursement Flagging	\$	2,500,000	\$	2,500,000	\$	2,500,000	\$	2,500,000	\$	3,000,000
FDOT Railroad Reimbursement Grade Crossing	\$	2,569,000	\$	12,329,800	\$	11,981,924	\$	11,993,382	\$	12,005,183
FDOT Trip Funds	\$	-	\$	3,916,735			\$	250,000		
CSX Contribution	\$	3,189,385								
PBMPO Funds	\$	1,505,000	\$	4,890,000	\$	3,416,735				
PTC Loan	\$	11,077,588	\$	3,680,435						
SEOPW CRA-Debt Service/Bonds	\$	17,528,049								
All Aboard Florida Loan	\$	2,839,569								
Omni CRA	\$	606,567								
City of Miami	\$	1,310,165								
Bayfront Park Trust	\$	40,984								
Miami DDA	\$	205,528								
Miami Dade County	\$	2,252,494								
County Gas Tax	\$	8,010,000	\$	8,010,000	\$	8,010,000	\$	8,010,000	\$	8,010,000
Funding To Be Determined	\$	20,765,500	\$	23,425,188	\$	19,682,425	\$	25,678,239	\$	19,237,461
Total Capital Revenues	\$	117,664,118	\$	93,414,420	\$	93,503,346	\$	96,343,883	\$	76,914,906

				SEC	ONI	FIVE YEAR P	LAN				TOTAL
CAPITAL REVENUES	F١	2023-2024	F	Y 2024-2025	F	/ 2025-2026	F	Y 2026-2027	F۱	2027-2028	FY 2018 -
	F	ROJECTED	F	PROJECTED	F	ROJECTED	-	PROJECTED	P	ROJECTED	FY 2028
FTA Section 5307 - Formula Funds	\$	18,560,578	\$	18,560,578	\$	18,560,578	\$	18,560,578	\$	18,560,578	\$ 185,605,780
FTA Section 5337 - State of Good Repair	\$	16,101,684	\$	16,101,684	\$	16,101,684	\$	16,101,684	\$	16,101,684	\$ 161,016,840
FDOT GMR Funds											\$ 26,500,000
FDOT JPA'S											\$ 602,027
FDOT JPA'S-District 6											\$ 8,000,000
FDOT Railroad Reimbursement Flagging	\$	2,500,000									\$ 15,500,000
FDOT Railroad Reimbursement Grade Crossing											\$ 50,879,289
FDOT Trip Funds											\$ 4,166,735
CSX Contribution											\$ 3,189,385
PBMPO Funds											\$ 9,811,735
PTC Loan											\$ 14,758,023
SEOPW CRA-Debt Service/Bonds											\$ 17,528,049
All Aboard Florida Loan											\$ 2,839,569
Omni CRA											\$ 606,567
City of Miami											\$ 1,310,165
Bayfront Park Trust											\$ 40,984
Miami DDA											\$ 205,528
Miami Dade County											\$ 2,252,494
County Gas Tax	\$	8,010,000	\$	8,010,000	\$	8,010,000	\$	8,010,000	\$	8,010,000	\$ 80,100,000
Funding To Be Determined	\$	10,373,666									\$ 119,162,479
Total Capital Revenues	\$	55,545,928	\$	42,672,262	\$	42,672,262	\$	42,672,262	\$	42,672,262	\$ 704,075,649

Source: SFRTA 2018







## 2018 MAJOR UPDATE



## FY 2019 - 2028 Transit Development Plan





## **Table of Contents**

1	Intro	oduction	
	1.1	TDP Requirements	1-1
	1.2	Organization of TDP Document	1-3
	1.3	Contact Information for the TDP	1-5
2	Base	eline Conditions	
	2.1	Introduction	2-1
	2.2	Description of Service Area	2-1
	2.3	Population Profile	2-2
	2.3.	1 Conclusion	2-6
	2.4	Demographic and Socioeconomic Analysis	2-7
	2.4.	Potential Transportation Disadvantaged Populations	2-7
	2.4.	2 Minority Population	2-7
	2.4.	3 Age Distribution	2-9
	2.4.	4 Income	2-11
	2.4.	5 Household Motor Vehicle Availability	2-11
	2.4.	6 Conclusion	2-13
	2.5	Employment Profile	2-13
	2.5.	1 Labor Force	2-19
	2.5.	2 Means of Travel to Work	2-19
	2.5.	3 Commuting Patterns	2-20
	2.6	Tourism	2-21
	2.7	Trip Generators	2-21
	2.8	Land Use	2-28
	2.8.	1 Conclusion	2-35
3	Eval	uation of Existing Transit Services	
:	3.1	SFRTA Overview and Existing Services	3-1
	3.1.	1 History of SFRTA	3-1
	3.1.	2 SFRTA Existing Transportation Service	3-1
	3.1.	Passenger Fare Policy	3-3
	3.1.	4 Passenger Rail Fleet	3-15
	3.1.	Tri-Rail Commuter Connector Bus Service	3-18
	3.1.	SFRTA Efforts and Accomplishments Since the 2017 Annual TDP Update	3-22
	3.1.	7 Industry Involvement	3-28





		3.1.	8	Existing Transportation Services – Other Providers	3-30
	3.	2	Trer	nd Analysis	3-43
		3.2.	1	Introduction	3-43
		3.2.	2	Commuter Rail Trend Analysis	3-44
		3.2.	3	Commuter Connector Shuttle Bus Service Trend Analysis	3-47
	3.	3	Pee	r Review Analysis	3-50
		3.3.	1	Introduction	3-50
		3.3.	2	Methodology	3-50
		3.3.	3	Peer Review Analysis	3-51
	3.	4	Tri-F	Rail Performance Measures	3-53
		3.4.	1	Performance Measurement Assessment Summary	3-53
		3.4.	2	Reportable Indicators	3-54
		3.4.	3	Transit Asset Management (TAM) - Transit Performance Measures	3-56
4		Pub	lic In	volvement	
	4.	1	Intro	oduction	4-1
	4.	2	Sum	nmary of Public Involvement Activities	4-1
		4.2.	1	TDP Branding	4-1
		4.2.	2	CareerSource Boards	4-3
		4.2.	3	Passenger Surveys	4-4
		4.2.	4	SFRTA Ongoing Outreach Activities	4-6
	4.	3	Pub	lic Involvement Assessment	4-9
		4.3.	1	Assessment of Public Involvement Evaluation Measures	4-9
5		Situ	ation	Appraisal	
	5.	1	Orga	anizational Challenges	5-1
		5.1.	1	SFRTA Operating Services Contract	5-1
		5.1.	2	Intergovernmental Coordination	5-1
	5.	2	Plan	ns and Policies	5-2
		5.2.	1	Plans Review	5-2
		5.2.	2	Federal Policies	5-9
		5.2.	3	State Plans	5-9
		5.2.	4	Regional and Local Transportation Plans	5-10
	5.	.3	Fun	ding Sources	5-10
		5.3.	1	Federal Funding Sources	5-10
		5.3.	2	State Funding Sources	5-12
		5.3.	3	Regional and Local Funding Sources	5-12





į	5.4 Re	gional Transportation Issues	5-13
	5.4.1	Managed Lane Network	5-13
	5.4.2	Regional Fare Integration	5-13
	5.4.3	Brightline Passenger Rail Service	5-13
į	5.5 Lar	nd Use	5-14
	5.5.1	Miami-Dade County	5-15
	5.5.2	Broward County	5-16
	5.5.3	Palm Beach County	5-17
į	5.6 Soc	cioeconomic Trends	5-18
	5.6.1	Transit Demands and Mobility Needs	5-18
	5.6.2	Socioeconomic Trends Summary	5-24
į	5.7 Tra	vel Patterns and Behavior	5-25
	5.7.1	Travel Patterns Summary	5-30
į	5.8 De	mand Estimation	5-33
	5.8.1	10-Year Annual Ridership Projections	5-33
	5.8.2	Tri-Rail Passenger Rail Ridership Estimation for 2028	5-34
	5.8.3	Tri-Rail Commuter Connector Bus Service	5-35
į	5.9 Ted	chnology	5-39
	5.9.1	Shared Economy Technologies	5-39
į	5.10 Pul	blic Involvement	5-40
	5.10.1	Community Stakeholders	5-40
	5.10.2	Survey Result Discussions	5-40
	5.10.3	Tri-Rail Intercept Survey	5-41
	5.10.4	Tri-Rail On-Board Survey	5-41
	5.10.5	Commuter Connector Bus Customer Survey	5-42
	5.10.6	Online Website survey	5-43
6	Goals ar	nd Objectives	
(	6.1 SFF	RTA Goals and Objectives	6-1
7	Ten-yea	r Implementation Plan	
-	7.1 SFF	RTA Adopted Five-Year Capital Plan	7-1
-	7.2 Fur	nded Needs	7-5
	7.2.1	Passenger Rail Capacity Improvements	7-5
	7.2.2	New Tri-Rail Station	7-6
	7.2.3	Five Year Commuter Bus Service Plan	7-9
	721	Trolleys for the Cities of Boca Raton and Delray Reach	7-0





	7.2.5	New Maintenance Facility	7-10
	7.2.6	Passenger Safety	7-11
	7.2.7	State of Good Repair	7-12
7	'.3 Ur	nfunded Needs	7-13
	7.3.1	Service Expansion	7-13
	7.3.2	Commuter Connector Bus Service Improvements	7-24
	7.3.3	Tri-Rail Station Area Improvements	7-25
	7.3.4	State of Good Repair	7-29
	7.3.5	Resilience Mitigation and Hurricane Hardening	7-30
8	Financi	al Plan	
8	3.1 Int	troduction	8-1
8	3.2 10	-Year Operating Forecast	8-1
	8.2.1	Operating Expenses	8-1
	8.2.2	Operating Revenues	8-3
	8.2.3	10-Year Operating Budget	8-4
8	3.3 10	-Year Capital Plan	8-7
	8.3.1	Capital Expenses	8-7
	8.3.2	Capital Revenues	8-9
8	3.4 Cc	nclusion	8-12
8	8.5 Fu	nding and Financing Sources	8-13
	8.5.1	Funding Sources	8-13
	8.5.2	Federal Funding Sources	8-13
	8.5.3	State Funding Sources	8-16
	8.5.4	Local and Regional Funding Sources	8-19
8	3.6 Fir	nancing Sources	8-25
8	3.7 Alt	ternative Project Delivery Strategies	8-27
	8.7.1	Design-Build	8-27
	8.7.2	Design-Build-Operate-Maintain	8-27
	8.7.3	Design-Build-Finance	8-28
	8.7.4	Design-Build-Finance-Operate-Maintain	8-28
	8.7.5	Privatization	8-28
Арр	endix 1:	SFRTA TDP Trend and Peer Analysis	
Арр	endix 2:	SFRTA 2018 Major Update Public Involvement Plan	
Арр	endix 3:	Tri-Rail 2018 TDP Website	
App	endix 4:	SFRTA Newsletters	





Appendix 5: TDP Presentations

Appendix 6: 2018 Intercept Survey

Appendix 7: SFRTA Commuter Bus Survey Summary Report

Appendix 8: 2018 Tri-Rail On-Board Survey Draft

Appendix 9: Fiscal Year 2019 Capital and Operating Budgets

Appendix 10: **Other Resources** 

Tri-Rail Coastal Link Study Website 1.

2. Tri-Rail Coastal Link Study; Preliminary Project Development Report, Appendix 4





## **Table of Figures**

Figure 2-1 SFRTA Service Area	2-2
Figure 2-2: 2016 Population Densities	
Figure 2-3: 2016 Housing Unit Densities	
Figure 2-4: 2016 Housing Unit Densities	
Figure 2-5 Percentage of Population Under Age 18	
Figure 2-6 Percentage of Population Over Age 65	
Figure 2-7 Low Income Household Density	
Figure 2-8 Zero-Car Households	
Figure 2-9: 2015 Employment Densities	2-15
Figure 2-10 Major Trip Generators, Miami-Dade County	2-23
Figure 2-11 Major Trip Generators, Broward County	2-25
Figure 2-12 Major Trip Generators, Palm Beach County	2-27
Figure 2-13 Miami-Dade County Existing Land Use	2-29
Figure 2-14 Miami-Dade County Future Land Use	2-30
Figure 2-15 Broward County Existing Land Use	2-32
Figure 2-16 Broward County Future Land Use	2-32
Figure 2-17 Palm Beach County Existing Land Use	2-33
Figure 2-18 Palm Beach County Future Land Use	
Figure 3-1 SFRTA Existing Services – Commuter Rail and Commuter Connector Bus	3-2
Figure 3-2 Tri-Rail Historic Ridership Data	
Figure 3-3 Boardings by County	3-10
Figure 3-4 Alightings by County	3-10
Figure 3-5 Commuter Connector Bus Ridership (FY 2013 – 2018)	3-19
Figure 3-6 Existing South Florida Transit Services	3-30
Figure 3-7 Palm Tran Official Service Map	3-32
Figure 3-8 Broward County Transit Official Service Map	3-34
Figure 3-9 DTPW Official Service Map	3-36
Figure 3-10 Metrorail System Map	3-37
Figure 3-11 Metromover System Map	3-38
Figure 5-1 Miami-Dade County Land Use Detail	5-15
Figure 5-2 Broward County Land Use Detail	
Figure 5-3 Palm Beach County Land Use Detail	5-17
Figure 5-4 Population Growth (2016-2040)	
Figure 5-5 Population Density (2040)	5-19
Figure 5-6 Household Growth (2016-2040)	
Figure 5-7 Household Density (2040)	5-20
Figure 5-8 Employment Growth (2015-2040)	5-22
Figure 5-9 Employment Density (2040)	
Figure 5-10 Transit Dependence Propensity	
Figure 5-11 AM Trip Flows in Southeast Florida	
Figure 5-12 PM Trip Flows in Southeast Florida	
Figure 5-13 Origin/Destination Balance of Intercounty Trips during AM Peak Periods	
Figure 5-14 Origin/Destination Balance of Intercounty Trips during PM Peak Periods	
Figure 5-15 Cumulative Distribution of Intercounty Trip Length in Southeast Florida	
Figure 5-16 Top Intercounty Trip Flows in Southeast Florida	
Figure 5-17 Top Intercounty Trip Flows Greater than 10-miles in Southeast Florida	5-32





Figure 7-1 MR-MICCI Location Map	7-5
Figure 7-2 Rendering of MiamiCentral Station in Downtown Miami	7-€
Figure 7-3 Boca II Proposed Station Location	7-7
Figure 7-4 PBIA Station Study Area	7-8
Figure 7-5 Shuttle Bus Expenses and Revenues	7-9
Figure 7-6 New Northern Layover Facility	7-10
Figure 7-7 Proposed TRCL vision	7-15
Figure 7-8 Kendall/Homestead Extension	
Figure 7-9 CSX – Tri-Rail Extension	7-18
Figure 7-10 Ludlam Corridor	7-19
Figure 7-11 Kendall Link	7-20
Figure 7-12 Okeechobee Link	7-21
Figure 7-13 US 1 Extension	7-22
Figure 7-14 Miami International Airport/PortMiami Extension	7-23
Figure 7-15 Boca Raton Tri-Rail Station Improvements	7-25
Figure 7-16 Deerfield Beach Trial Station Parking Lot Improvements Conceptual Plan	7-27
Figure 7-17 Rendering of New Pedestrian Bridge at Golden Glades Tri-Rail Station	7-28
Figure 8-1 SFRTA Projected Operating Expenses (FY 2018/2019 – FY 2028/2029)	8-4





## **Table of Tables**

Table 1-1 TDP Major Update Compliance Checklist	1-2
Table 2-1 Population Trends for Counties and Cities	
Table 2-2 Potential Transportation Disadvantaged Population, 2017	
Table 2-3 Minority and Non-Minority Population, 2016	
Table 2-4 Population by Age, 2016	
Table 2-5 Household Income Distribution	
Table 2-6 Motor Vehicle Availability by Household	2-11
Table 2-7 Civilian Workers Age 16 and Older by Industry, 2016	
Table 2-8 Major Public and Private Employers, Miami-Dade County	
Table 2-9 Major Public and Private Employers, Broward County	2-17
Table 2-10 Major Public and Private Employers, Palm Beach County	
Table 2-11 Labor Force Participation	
Table 2-12 Journey-to-Work Mode Split	2-19
Table 2-13 Average Travel Time to Work	2-19
Table 2-14 County of Work for Workers Residing in the SFRTA Service Area	2-20
Table 2-15 Commuting from Neighboring Counties, SFRTA Service Area	2-20
Table 2-16 Major Trip Generators, Miami-Dade County	2-22
Table 2-17 Major Trip Generators, Broward County	2-24
Table 2-18 Major Trip Generators, Palm Beach County	2-26
Table 5-5 Land Use Summary for Tri-Rail Corridor (half-mile buffer)	2-35
Table 3-1 Tri-Rail Zone Fare Structure	
Table 3-2 Weekday Commuter Rail Operating Schedule (Southbound)	3-6
Table 3-3 Weekday Commuter Rail Operating Schedule (Northbound)	3-7
Table 3-4 Weekend/Holiday Commuter Rail Operating Schedule	3-8
Table 3-5 Commuter Rail Boardings by Station	3-9
Table 3-6 Mode of Station Access	3-12
Table 3-7 Trip Purpose from Tri-Rail by Station	
Table 3-8 Tri-Rail Parking Occupancy January/February 2018	3-14
Table 3-9 Tri-Rail Locomotive Fleet	
Table 3-10 Tri-Rail Passenger Coach Fleet	3-16
Table 3-11 Tri-Rail DMU Fleet	
Table 3-12 Commuter Connectors Operating Schedule	
Table 3-13 Commuter Connector Boardings by Route 2012-2018	
Table 3-14 Transportation Disadvantaged Service Providers	
Table 3-15 Intercity Transportation Service Providers and Stations	
Table 3-16 Charter Bus Companies	
Table 3-17 Taxi Service Companies	
Table 3-18 Commuter Rail Performance Review Measures	
Table 3-19 General Performance Indicators	
Table 3-20 Effectiveness Measures	
Table 3-21 Efficiency Measures	
Table 3-22 Commuter Connector General Performance Indicators	
Table 3-23 Commuter Connector Effectiveness Measures	
Table 3-24 Commuter Connector Efficiency Measures	
Table 3-25 Peer Agency Likeness Scores	
Table 3-26 Summary of SFRTA/Tri-Rail Peer Analysis	3-52





Table 3-27 Tri-Rail Performance Measures Overview	3-53
Table 3-28 SFRTA Reportable Indicators	
Table 4-1 Project Website Statistics	4-2
Table 4-2 SFRTA Outreach Activities	4-7
Table 4-3 Assessment of Public Involvement Evaluation Measures	4-10
Table 5-1 List of Relevant Plans, Policies and Studies	5-3
Table 5-2 Federal Funding Source Summary	
Table 5-3 State Funding Sources (Current and Potential)	
Table 5-4 Local and Regional Funding Sources (Current and Potential)	5-12
Table 5-5 Land Use Summary for Tri-Rail Corridor (half-mile buffer)	5-14
Table 5-6 Land Use in Miami-Dade County	5-15
Table 5-7 Land Use in Broward County	5-16
Table 5-8 Land Use in Palm Beach County near Tri-Rail	
Table 5-9 Intercounty Personal Daily Trips in Southeast Florida AM Peak and PM Peak	5-26
Table 5-10 Intercounty OD Flows at Different Distance Thresholds	5-29
Table 5-11 Average Weekday Tri-Rail Passenger Rail Ridership Projections (2019 – 2028)	5-34
Table 5-12 Annual Ridership of SFRTA Commuter Bus Routes	5-35
Table 5-13 SFRTA Commuter Bus Route Average Ridership Growth Over Different Time Horizons	5-36
Table 5-14 Population Growth	5-36
Table 5-15 Employment Growth	5-37
Table 5-16 Tri-Rail Commuter Bus Routes Ridership Projections (2019 – 2028)	5-38
Table 5-17 Needs Identified by Intercept Survey	5-41
Table 5-18 On-Board Survey Station Conditions	5-42
Table 5-19 On-Board Survey Train Conditions	
Table 5-20 On-Board Survey Customer Service	5-42
Table 5-21 Online Survey Responses – Reason for Riding	5-43
Table 5-22 Online Survey Responses – Desired Improvements	5-44
Table 7-1 SFRTA Building Stronger Connections 10-Year Capital Plan - First Five Years	7-2
Table 7-2 SFRTA Building Stronger Connections 10-Year Capital Plan – Second Five Years	
Table 7-3 Proposed Tri-Rail Service Expansion Corridors	7-13
Table 7-4 Summary of Hurricane Hardening Measures	7-30
Table 8-1 FY 2018-2019 SFRTA Operating Expenses	8-2
Table 8-2 SFRTA Operating Revenues	8-3
Table 8-3 SFRTA Funding Sources	
Table 8-4 SFRTA Operating Budget and 10-Year Plan (FY 2018-2019 – FY 2028-2029)	
Table 8-5 Unfunded Capital Expenses	
Table 8-6 SFRTA FY 2018-2019 Adopted Budget and Projected Capital Expenses (FY 2019 – FY 2024)	8-8
Table 8-7 Capital Revenue Sources	
Table 8-8 SFRTA Projected Capital Revenues (FY 2018 – FY 2028)	8-10







## Section 1 Introduction







## INTRODUCTION

The South Florida Regional Transportation Authority (SFRTA) presents this Transit Development Plan (TDP) Major Update, SFRTA Building Stronger Connections, which meets the requirements of, and has been prepared in accordance with Florida Administrative Code (FAC) Rule 14-73.001. SFRTA will use this plan as a strategic planning and guidance tool, as delineated in Section 341-052, F.S.

The SFRTA Building Stronger Connections TDP Major Update seeks to refocus SFRTA's mission to steadily improve the passenger experience and grow ridership while fostering collaborative relationships to promote and develop regional transit.

The TDP documents the agency's vision, goals, and strategies over a ten-year planning horizon and includes achievements for the 2018 fiscal year, July 1, 2017 through June 30, 2018.

## 1.1 **TDP Requirements**

The State of Florida Public Transit Block Grant Program was enacted by the Florida Legislature to provide a stable source of state funding for public transportation. The Block Grant Program requires public transit service providers to develop and adopt a TDP. A TDP major update is required every five years and TDP annual updates are required in interim years. TDP updates must be submitted to the Florida Department of Transportation (FDOT) by September 1st of each year.

TDPs are required for grant program recipients pursuant to Section 341.052, F.S. A TDP serves as the provider's planning, development, and operational guidance document, based on a ten-year planning horizon, covering the year for which funding is sought and the nine subsequent years.

Established guidelines require that a TDP Major Update include specific information and content. Table 1-1 presents a list TDP requirements and serves as checklist to assure these requirements are addressed in the SFRTA Making Stronger Connections TDP Major Update documentation.





## Table 1-1 TDP Major Update Compliance Checklist

TDP Checklist			
	Public Involvement Process	TDP Section	
1	Public Involvement Plan (PIP)	Appendix	
1	PIP approved by FDOT	Appendix	
1	TDP includes description of Public Involvement Process	Section 4	
1	Provide notification to FDOT	Appendix	
1	Provide notification to Regional Workforce Board	Appendix	
	Situation Appraisal		
1	Land use	Section 2	
1	State and local transportation plans	Section 5	
1	Other governmental actions and policies	Section 5	
1	Socioeconomic trends	Section 2	
1	Organizational issues	Section 5	
1	Technology	Section 5	
1	10-year projections of transit ridership using approved methodology	Appendix	
1	Assessment of whether land uses and urban design patterns support transit service provision	Section 5	
1	Calculate farebox recovery	Section 3	
	Mission and Goals		
1	Provider's vision	Section 6	
1	Provider's mission	Section 6	
1	Provider's goals	Section 6	
1	Provider's objectives	Section 6	
	Alternative Courses of Action		
1	Develop and evaluate alternative strategies and actions	Section 7	
1	Benefits and costs of each alternative	Section 7	
1	Financial alternatives examined	Section 8	
	Implementation Program		
1	10-year implementation program	Section 7	
1	Maps indicating areas to be served	Section 7	
1	Maps indicating types and levels of service	Section 7	
1	Monitoring program to track performance measures	Section 3	
1	10-year financial plan listing operating and capital expenses	Section 8	



	TDP Checklist				
1	Capital acquisition or construction schedule	Section 8			
1	Anticipated revenues by source	Section 8			
	Relationship to Other Plans				
1	Consistent with Florida Transportation Plan	Section 5			
1	Consistent with local government comprehensive plans	Section 5			
1	Consistent with MPO long-range transportation plans	Section 5			
1	Consistent with regional transportation goals and objectives	Section 5			
	Submission				
1	Adopted by Governing Board	TBD			
1	Submitted to FDOT by September 1, 2018	TBD			
	Official acceptance by FDOT	TBD			

## **Organization of TDP Document** 1.2

The TDP Major Update is organized according to the sections that present various information that comprises a complete document. A brief overview of each section is presented below.

## Section 1: Introduction

Section 1 provides an overview of the TDP Major Update document and includes specific statutory requirements and a checklist applicable for the completion of a TDP Major Update.

## **Baseline Conditions** Section 2:

The Baseline Conditions section provides an in-depth overview of SFRTA service area characteristics. Existing socio-economic data, land use, population, employment and household densities as well as major trip generators are discussed and illustrated along the 72-mile Tri-Rail passenger service corridor and Commuter Connector bus routes within the Miami-Dade, Broward, and Palm Beach county Tri-Rail service area.

## Section 3: **Evaluation of Existing Transit Services**

Section 3 provides an overview of Tri-Rail's existing passenger rail and Commuter Connector bus services. Historic ridership, ridership trends, fare policy and operating schedule are presented. A trend analysis of SFRTA is also included in this section which provides a five-year assessment of various performance measures for both passenger rail and shuttle bus service. A peer analysis between SFRTA and 11 peer agencies is presented. It assesses the level of performance according to the same performance measures applied in the trend analysis. The section concludes with a list of SFRTA's accomplishments for Fiscal Year 2018.





## Section 4: **Public Involvement**

The public involvement section is based upon the foundation of the FDOT approved Public Involvement Plan (PIP) as prepared for the TDP Major Update. The chapter provides an overview of the numerous activities that contributed to the preparation of the TDP Major Update. Several various outreach techniques employed to obtain input from the traveling public are described. Other stakeholders that were engaged as part of the TDP process are also discussed. This is followed by an assessment of the public outreach efforts to measure performance.

## Section 5: **Situation Appraisal**

The Situation Appraisal section is a comprehensive overview of the environment in which SFRTA operates. The chapter identifies organizational structure. Then, the document assesses plans and policies, at the federal, state, and local levels, to understand how those affect SFRTA. Funding sources, regional transportation structure, land use, socioeconomic trends, travel demand and behavior, demand estimation, technologies, and public involvement are also covered in this section.

## Section 6: **Goals and Objectives**

The TDP Major Update provides an opportunity for an agency to revisit and identify new goals and objectives that align with the Agency's vision. Section 6 presents the goals and objectives that were developed in collaboration with SFRTA staff for the TDP Major Update.

## Section 7: 10-Year Implementation Plan

The 10-Year Implementation Plan provides a look at SFRTA's funded and unfunded capital projects between Fiscal Years 2019 and 2028. Projects included in this ten-year plan are described in detail, with project summaries, images when applicable, and estimated completion years.

## Section 8: **SFRTA Making Stronger Connections Implementation Plan**

This section focuses on the 10-year implementation and financial plan for SFRTA's Making Stronger Connections TDP based on SFRTA's operating and capital program of initiatives and projects. A detailed operating and capital budget is presented for the first five years. The 10-year financial plan includes a cost feasible plan and a needs plan of planned but as yet unfunded project that is presented in the second five-years of the 10-year capital plan to reflect unfunded project needs.





## **Contact Information for the TDP** 1.3

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# Section 2 Baseline Conditions





# **BASELINE CONDITIONS**

#### 2.1 Introduction

This section establishes the context for SFRTA and transit services they provide to Miami-Dade, Broward, and Palm Beach counties, collectively referred to in this document as South Florida. This baseline conditions analysis also provides the background information needed to understand SFRTA's operating environment, including a description of the service area, demographic characteristics of the region, existing land use patterns, future land use plans, and roadway/traffic conditions. Information and data reflect the most recent complete data sets available at the time of the preparation of the **SFRTA** Stronger Connections plan.

#### 2.2 **Description of Service Area**

The SFRTA service area is defined as Miami-Dade, Broward, and Palm Beach counties. However, with legislative action this area may be expanded to include Monroe County by mutual consent of SFRTA and the Boards of County Commissioners representing the proposed expansion area.

Figure 2-1 illustrates SFRTA's existing service area. To better understand the service area conditions and demographic characteristics of these counties and the South Florida region as a whole, a review of pertinent information was conducted as part of the planning process.

The sources for this information documented within this report and include the U.S. Census Bureau American Community Survey (ACS), the Southeast Florida Regional Planning Model 7 (SERPM 7), SFRTA/Tri-Rail, and others as noted.

Figure 2-1 SFRTA Service Area



\*Metrorail is operated by Miami-Dade County Department of Transportation and Public Works

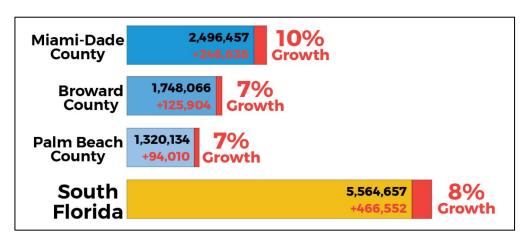


#### **Population Profile** 2.3

Population data was sourced from the U.S. Census as well as the University of Florida Bureau of Economic and Business Research (BEBR).

Table 2-1 shows population numbers and the rate of growth between in 2010 and 2017 for each county as well as their respective municipalities.

Between 2010 and 2017, it is estimated that the population of South Florida grew from nearly 5.6 million to 6 million, a growth of 8.3 percent. Miami-Dade County saw the greatest growth, at 10 percent, while both Broward and Palm Beach Counties grew by 7 percent.



Several municipalities experienced significant population growth during this period. In Miami-Dade County, the population of Doral grew by 40 percent, and North Bay Village, Homestead, and West Miami each grew by 20-30 percent. The population of Sweetwater grew by 59 percent; however this can largely be attributed to multiple annexations between 2010 and 2017. In Broward County, the population of Parkland grew by 31 percent, and Cooper City grew by 18 percent. In Palm Beach County, the population of Gulfstream grew by 27 percent, and Palm Springs grew by 23 percent.

A few municipalities also experienced a decline in population. In Miami-Dade County, El Portal lost 7 percent of its population, while Indian Creek, Medley, and Belle Glade all experienced a decline of less than 2 percent. Briny Breezes also shrank by 30 percent, but with a starting population of 601, this only represents the movement of 179 residents. Unincorporated Broward County registered a population decline of 12 percent, but this can be attributed to annexations by municipalities.

The density of both population and housing units are important measures to understand the nature of the service area being analyzed, as areas of higher residential density usually provide more transit ridership than areas of single family housing, which typically face challenges with first/last mile transportation. Existing population density is illustrated on Figure 2-2. Existing housing unit density is illustrated on Figure 2-3.





**Table 2-1 Population Trends for Counties and Cities** 

Location	2010 Census	2017 Estimate	Population Growth
Miami-Dade County*	2,496,457	2,743,095	10%
Aventura	35,762	37,694	5%
Bal Harbour	2,513	2,924	16%
Bay Harbor Islands	5,628	5,826	4%
Biscayne Park	3,055	3,176	4%
Coral Gables*	46,776	49,808	6%
Cutler Bay	40,286	45,222	12%
Doral*	45,709	64,167	40%
El Portal	2,325	2,153	-7%
Florida City	11,245	13,017	16%
Golden Beach	919	920	0%
Hialeah*	224,667	236,114	5%
Hialeah Gardens	21,744	23,532	8%
Homestead*	60,509	73,627	22%
Indian Creek	86	84	-2%
Key Biscayne	12,344	12,854	4%
Medley	838	832	-1%
Miami*	399,508	467,872	17%
Miami Beach*	87,778	92,588	5%
Miami Gardens*	107,166	113,201	6%
Miami Lakes	29,361	30,586	4%
Miami Shores	10,493	10,761	3%
Miami Springs	13,809	14,217	3%
North Bay Village	7,137	8,973	26%
North Miami*	58,912	63,780	8%
North Miami Beach	41,523	45,437	9%
Opa-locka	15,219	17,745	17%
Palmetto Bay*	23,408	24,138	3%
Pinecrest	18,223	18,467	1%
South Miami	11,657	12,645	8%
Sunny Isles Beach	20,832	22,233	7%
Surfside	5,744	5,814	1%
Sweetwater	13,499	21,508	59%
Virginia Gardens	2,375	2,409	1%
West Miami	5,965	7,182	20%
UNINCORPORATED*	1,109,424	1,191,589	<b>7</b> %

Location	2010 Census	2017 Estimate	Population Growth
<b>Broward County</b>	1,748,066	1,873,970	<b>7</b> %
Coconut Creek	52,909	57,395	8%
Cooper City	28,547	33,758	18%
Coral Springs	121,096	127,381	5%
Dania Beach	29,639	31,473	6%
Davie	91,992	100,689	9%
Deerfield Beach	75,018	78,042	4%
Fort Lauderdale	165,521	179,063	8%
Hallandale Beach	37,113	38,746	4%
Hillsboro Beach	1,875	1,911	2%
Hollywood	140,768	147,212	5%
Lauderdale-By-The-Sea	6,056	6,175	2%
Lauderdale Lakes	32,593	35,094	8%
Lauderhill	66,887	71,178	6%
Lazy Lake	24	26	8%
Lighthouse Point	10,344	10,526	2%
Margate	53,284	57,961	9%
Miramar	122,041	136,246	12%
North Lauderdale	41,023	44,408	8%
Oakland Park	41,363	44,409	7%
Parkland	23,962	31,476	31%
Pembroke Park	6,102	6,368	4%
Pembroke Pines*	154,019	163,103	6%
Plantation	84,955	88,619	4%
Pompano Beach	99,845	109,441	10%
Sea Ranch Lakes	670	692	3%
Southwest Ranches	7,345	7,614	4%
Sunrise	84,439	91,865	9%
Tamarac	60,427	63,910	6%
Weston	65,333	66,609	2%
West Park	14,156	14,912	5%
Wilton Manors	11,632	12,662	9%
UNINCORPORATED*	17,088	15,006	-12%



Table 2 1 (Continued) Population Trends for Counties and Cities

Location	2010 Census	2017 Estimate	Population Growth
Palm Beach County	1,320,134	1,414,144	<b>7</b> %
Atlantis	2,005	2,024	1%
Belle Glade	17,467	17,290	-1%
Boca Raton	84,392	91,797	9%
Boynton Beach	68,217	73,992	8%
Briny Breezes	601	422	-30%
Cloud Lake	135	139	3%
Delray Beach	60,522	65,804	9%
Glen Ridge	219	227	4%
Golf	252	258	2%
Greenacres	37,573	39,770	6%
Gulf Stream	786	1,001	27%
Haverhill	1,873	2,063	10%
Highland Beach	3,539	3,609	2%
Hypoluxo	2,588	2,725	5%
Juno Beach	3,176	3,400	<b>7</b> %
Jupiter	55,156	61,388	11%
Jupiter Inlet Colony	400	407	2%
Lake Clarke Shores	3,376	3,409	1%
Lake Park	8,155	8,784	8%
Lake Worth	34,910	37,946	9%
Lantana	10,423	10,797	4%
Loxahatchee Groves	3,180	3,321	4%
Manalapan	406	421	4%
Mangonia Park	1,888	2,033	8%
North Palm Beach	12,015	12,574	5%
Ocean Ridge	1,786	1,812	1%
Pahokee	5,649	5,889	4%
Palm Beach*	8,161	8,291	2%
P. Beach Gardens*	48,440	52,591	9%
Palm Beach Shores	1,142	1,200	5%
Palm Springs	18,928	23,250	23%

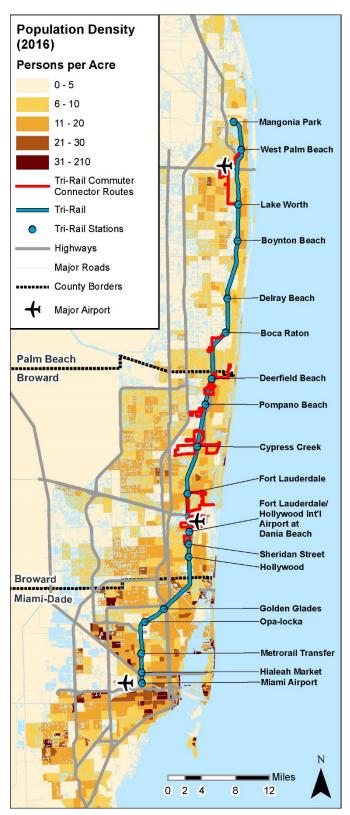
Location	2010 Census	2017 Estimate	Population Growth
Riviera Beach	32,488	35,057	8%
Royal Palm Beach	34,140	37,485	10%
South Bay	4,876	5,215	7%
South Palm Beach*	1,358	1,400	3%
Tequesta	5,629	5,731	2%
Wellington	56,508	61,775	9%
West Palm Beach*	100,343	110,396	10%
UNINCORPORATED*	587,432	618,446	5%

<sup>\*</sup> Includes all Census corrections as of February 11, 2014. Sources: U.S. Census Bureau, University of Florida Bureau of Economic and Business Research



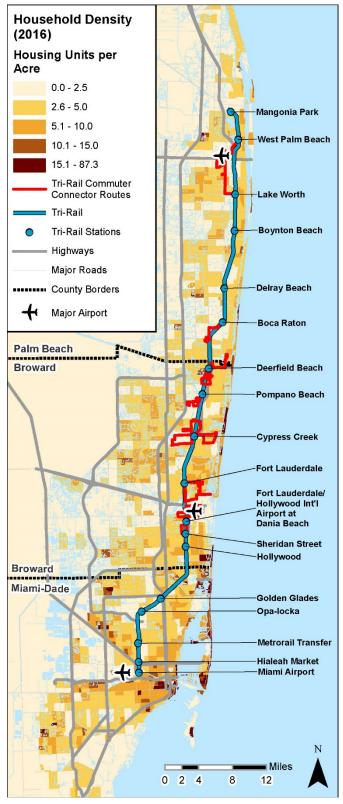


Figure 2-2: 2016 Population Densities



Source: U.S. Census Bureau, 2016 American Community Survey 5-year estimates

Figure 2-3: 2016 Housing Unit Densities



Source: U.S. Census Bureau, 2016 American Community Survey 5-year estimates



## 2.3.1 Conclusion

With the South Florida region developed to its geographic limits, the trend for population growth has become directly tied to an increase in population density. Miami-Dade County has experienced the most population growth in the last seven years, with particularly high concentrations of growth in the City of Miami, which added 68,400 residents. There were also concentrations of growth in Hialeah and Doral to the west, which grew by 11,500 and 18,500 respectively. Homestead experienced similar growth to the south, with 13,000 new residents since 2010. Comparable hot spots of growth in this time are limited in Broward and Palm Beach counties, with the population of West Palm Beach increasing by 10,000 and Fort Lauderdale by 13,500.



#### **Demographic and Socioeconomic Analysis** 2.4

To help understand the South Florida travel market, an analysis of the various existing socioeconomic categories which make up the population served by Tri-Rail was performed.

# 2.4.1 Potential Transportation Disadvantaged Populations

Transportation disadvantaged individuals are defined as being either disabled, elderly, children-at-risk, and/or economically disadvantaged. Data on the transportation disadvantaged population in Miami-Dade, Broward, and Palm Beach Counties were supplied by the 2017 Transportation Disadvantaged Service Plan of each County, and is displayed in Table 2-2. Approximately a third of the population was found to be transportation disadvantaged in all three counties, with Palm Beach having the greatest concentration at 38 percent.

Table 2-2 Potential Transportation Disadvantaged Population, 2017

County	Total Population	TD Population	Percent of Total Population
Miami-Dade	2,693,020	967,575	36%
Broward	1,839,267	589,404	32%
Palm Beach	1,455,377	558,013	38%
Total	5,987,664	2,114,992	35%

Source: Miami-Dade, Broward, and Palm Beach Transportation Disadvantaged Service Plans

# 2.4.2 Minority Population

The majority population in the United States is non-Hispanic white, therefore "minority" is determined to be all other categorizations. Table 2-3 displays the percent of minority populations in each county of the South Florida region according to the U.S. Census 2016 ACS. At 86 percent, Miami-Dade County has the highest percentage of minority population, largely due to the number of individuals who identify as Hispanic ethnicity.

Figure 2-4 illustrates the distribution of minority populations in South Florida by percentage of population. Most of Miami-Dade County is found to have more than 80% minority population, while most of Palm Beach County has less than 40 percent minority population. Except for Boca Raton, all Tri-Rail stations are adjacent to or surrounded by areas of >60 percent minority concentration.

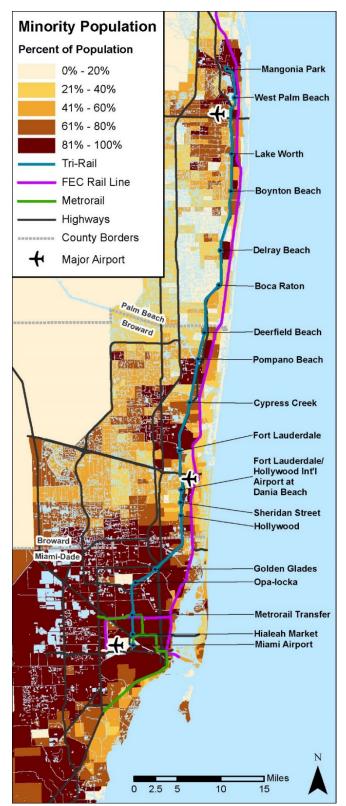
Table 2-3 Minority and Non-Minority Population, 2016

County	Total Population	White Non-Hispanic	Percent Minority
Miami-Dade	2,664,418	385,471	86%
Broward	1,863,780	731,447	61%
Palm Beach	1,398,757	796,265	43%
Total	5,926,955	1,913,183	68%





Figure 2-4: 2016 Housing Unit Densities





# 2.4.3 Age Distribution

Table 2-4 displays the concentrations of minors and seniors in Miami-Dade, Broward, and Palm Beach Counties. While the profiles of Miami-Dade and Broward are nearly identical, Palm Beach has 8 percent greater concentration of seniors, which is reflected in a median age 4-5 years older than the other two counties.

Figure 2-5 illustrates the density of minors, individuals under age 18, who are more likely to use transit due to lack of a motor vehicle, in South Florida.

Figure 2-6 illustrates the density of seniors, individuals over age 65, who are more likely to use transit due to age-related impairments.

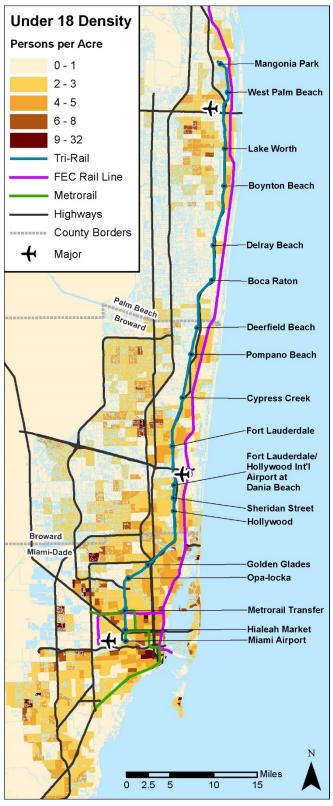
Table 2-4 Population by Age, 2016

County	Population	Minors	(<18)	Adults (18-64)		Adults (18-64) Seniors (>65)			Median Age (Years)
Miami-Dade	2,664,418	548,990	21%	1,709,292	64%	406,136	15%	39.3	
Broward	1,863,780	402,548	22%	1,174,734	63%	286,498	15%	40	
Palm Beach	1,398,757	274,730	20%	805,959	58%	318,068	23%	44.3	



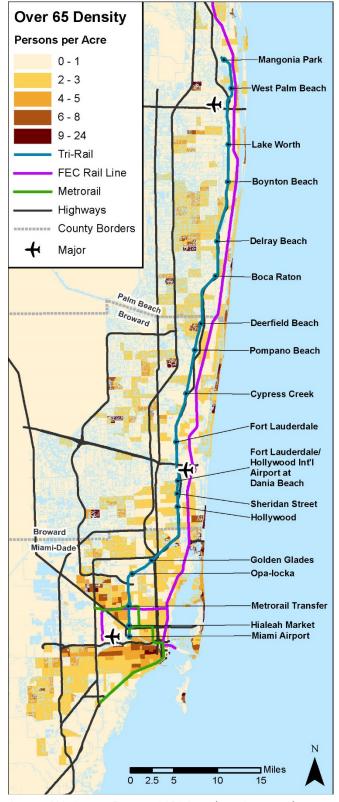


Figure 2-5 Percentage of Population Under Age 18



Source: U.S. Census Bureau, 2016 American Community Survey 5-year estimates

Figure 2-6 Percentage of Population Over Age 65



Source: U.S. Census Bureau, 2016 American Community Survey 5-year estimates



## 2.4.4 Income

Low income households, especially those below the poverty level, have a greater need for public transit and use it at a higher rate than higher income households. This indicates that Miami-Dade County has a higher percentage of households below the poverty level than Broward County, which has a slightly higher rate than Palm Beach County. Average income follows a similar pattern, with Palm Beach County having an average income 24 percent higher than Miami-Dade and 14 percent higher than Broward. The distribution and density of low income households is illustrated in Figure 2-7.

Table 2-5 Household Income Distribution

County	Total Households	Average Income	Below Poverty	Level
Miami-Dade	853,624	69,069	174,850	20%
Broward	672,988	75,330	90,998	14%
Palm Beach	538,549	85,839	65,983	12%

Source: U.S. Census Bureau, 2016 American Community Survey 5-year estimates

## 2.4.5 Household Motor Vehicle Availability

Table 2-6 shows the household motor vehicle availability statistics for South Florida. Data from the U.S. Census Bureau 2016 ACS indicates that household vehicle availability patterns closely follow household income patterns; Miami-Dade County has the most zero-vehicle households, followed by Broward and Palm Beach.

Zero-vehicle households are traditionally considered transit dependent as they typically rely upon transit to fulfill their transportation needs. Figure 2-8 illustrates the geographic distribution of zerovehicle households within the South Florida region by census block group.

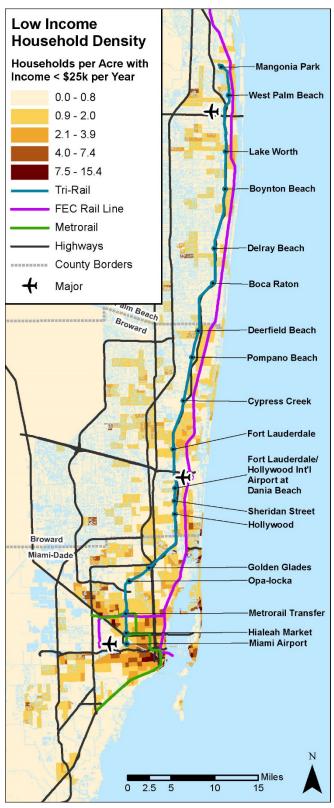
Table 2-6 Motor Vehicle Availability by Household

County	Total Households	Zero-V	Zero-Vehicles		1 Vehicle		3 or More Vehicles
Miami-Dade	853,624	94,105	11%	338,267	40%	297,492	123,760
Broward	672,988	50,475	8%	277,299	41%	251,354	93,860
Palm Beach	538,549	35,735	7%	227,820	42%	206,813	68,181



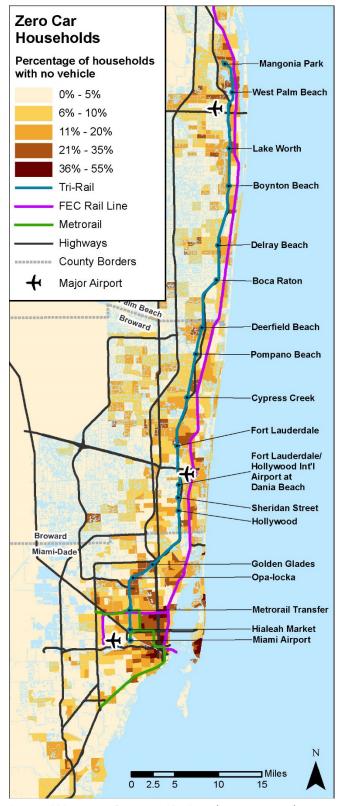


Figure 2-7 Low Income Household Density



Source: U.S. Census Bureau, 2016 American Community Survey 5-year estimates

Figure 2-8 Zero-Car Households



Source: U.S. Census Bureau, 2016 American Community Survey 5-year estimates



## 2.4.6 Conclusion

The Demographic makeup of South Florida is diverse, with more than a third of residents qualifying as transportation disadvantaged. Populations which traditionally use transit at above average rates (minorities, elderly, low-income and zero-car households) tend to be concentrated near the Tri-Rail corridor.

While Miami-Dade County inverts the usual minority/majority ratio, pockets of minority populations in Broward and Palm Beach Counties tend to be located near Tri-Rail stations, particularly Fort Lauderdale, Pompano Beach, Delray Beach, Boynton Beach, and Mangonia Park.

Notable concentrations of zero-car households are apparent in the City of Miami and Miami Beach, as well as the area near the Opa-locka and Golden Glades Tri-Rail stations. Additional, less acute concentrations of zero-car households can be identified east of Florida's Turnpike in Broward County, and near West Palm Beach and Mangonia Park Tri-Rail Stations in Palm Beach County.

Low Income households are spread out in Broward and Palm Beach Counties, but Miami-Dade County shows clear areas of concentration in the City of Miami, Miami Beach, and Hialeah. In total, Miami-Dade contains 19,000 more low income households than Broward and Palm Beach County combined.

#### 2.5 **Employment Profile**

A survey of major industries, major employers, and overall job density was undertaken to help understand the destination side of commuting patterns.

Data for major industries was sourced from the U.S. Census 2016 ACS, and is represented in Table 2-7. The largest individual employers in each county are represented in Tables 2-8 through 2-10, based on data provided by the Miami-Dade Beacon Council, Broward Alliance, and Palm Beach Business Development Board, which each have their own standards for what constitutes a major employer relative to the unique economies of each county. Typically, the largest private employers are universities and healthcare systems, while the largest public employers are school systems. This is reflected in the data for major industries as approximately 20 percent of people in all three counties are employed in educational services, healthcare, and social assistance. Other major industries in South Florida include retail, administration, science, professional management, arts/entertainment, and hospitality.

Data on existing job density is derived from SERPM 7, and is illustrated in Figure 2-9. The largest concentrations of employment are seen in Downtown Miami, Downtown Fort Lauderdale, Miami Beach, southern Doral, and along SR-826 (Palmetto Expressway). Tri-Rail can serve many of these areas via the connection with Miami Dade Transit's Metrorail service in Miami-Dade County.



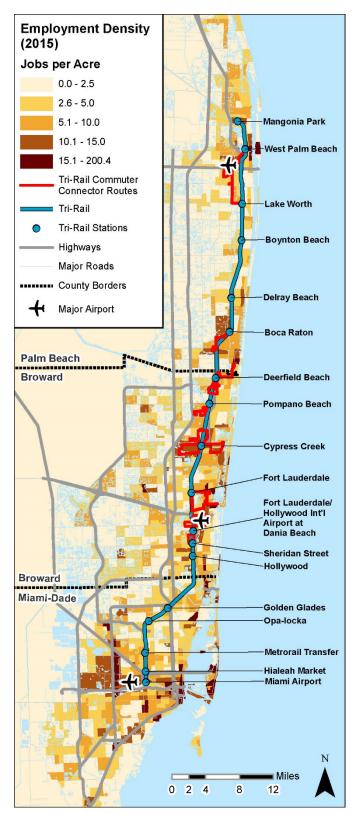
Table 2-7 Civilian Workers Age 16 and Older by Industry, 2016

Industry	Miami-Dade		Brov	vard	Palm	Beach
Agriculture/forestry/fishing/hunting, mining	2,225	0.2%	9,423	0.8%	6,495	1.0%
Construction	57,308	6.3%	88,780	7.2%	46,046	7.2%
Manufacturing	44,023	4.8%	58,400	4.7%	28,006	4.4%
Wholesale trade	33,138	3.6%	50,258	4.1%	16,508	2.6%
Retail Trade	124,996	13.7%	153,083	12.4%	83,460	13.1%
Transportation/warehousing, utilities	49,506	5.4%	91,485	7.4%	25,993	4.1%
Information	21,330	2.3%	25,440	2.1%	12,607	2.0%
Finance/insurance, real estate, rental/leasing	74,147	8.1%	92,857	7.5%	51,546	8.1%
Professional/scientific/management, administrative, waste management services	125,073	13.7%	156,461	12.7%	96,415	15.1%
Educational services/healthcare/social assistance	187,500	20.6%	246,702	20.0%	131,586	20.7%
Arts/entertainment/recreation, accommodation/food services (hospitality)	101,768	11.2%	139,904	11.3%	77,800	12.2%
Other Services (except public administration)	51,400	5.6%	78,375	6.3%	37,732	5.9%
Public administration	38,113	4.2%	43,997	3.6%	22,452	3.5%
Total	1,235,165	100%	910,527	100%	636,646	100%





Figure 2-9: 2015 Employment Densities



Source: Southeast Florida Regional Planning Model 7





# Table 2-8 Major Public and Private Employers, Miami-Dade County

Major Private Employers				
Miami-Dade County	# of Employees			
University of Miami	12,818			
Baptist Health South Florida	11,353			
American Airlines	11,031			
Carnival Cruise Lines	3,500			
Miami Childrens Hospital	3,500			
Mount Sinai Medical Center	3,321			
Florida Power & Light Company	3,011			
Royal Caribbean Int'l/Celebrity Cruises	2,989			
Wells Fargo	2,050			
Bank of America Merrill Lynch	2,000			
Fountainbleau Miami Beach	1,987			
Burger King Corporation	1,885			
Mercy Hospital	1,400			
JP Morgan Chase	1,300			
Eulen America	1,205			
Federal Express	1,161			
AAR Corp Aircraft Services	1,160			
Ryder Integrated Logistics	1,106			
N.C.L. Corporation	1,049			
CitiBank	1,000			
LATAM Airlines/Lan Cargo	900			
United Home Care	810			
Loews Miami Beach Hotel	809			
Ocean Bank	690			
B/E Aerospace	650			
Perry Ellis	650			
Seaboard Marine	646			
Miami Herald Publishing Co.	635			
MasTec, Inc.	605			
Biltmore Hotel	563			
Mandarin Oriental	530			
Intercontinental Miami	503			
SunTrust Bank	500			
Discovery Networks Latin America	490			

Major Public Employers				
Miami-Dade County	# of Employees			
Miami-Dade County Public Schools	33,477			
Miami-Dade County	25,502			
Federal Government	19,200			
Florida State Government	17,100			
Jackson Health System	9,797			
City of Miami	3,997			
Florida International University	3,534			
Homestead AFB	3,250			
Miami VA Healthcare System	2,500			
Miami Dade College	2,390			
City of Miami Beach	1,971			
U.S. Southern Command	1,600			
City of Hialeah	1,578			
City of Coral Gables	730			
City of North Miami Beach	420			

Source: Miami-Dade Beacon Council, 2015



Table 2-9 Major Public and Private Employers, Broward County

Major Private Employers				
Broward County	# of Employees			
Nova Southeastern University	7,102			
AutoNation	4,100			
American Express	3,500			
Spirit Airlines	1,800			
Citrix	1,700			
JM Family Enterprises, Inc.	1,675			
Ultimate Software	1,450			
DHL Express	1,400			
City Furniture	1,349			
Kaplan	1,291			
The Castle Group	1,062			
Point Blank Enterprises	974			
Rick Case Automotive Group	887			
Centene	877			
Sun Sentinel Co.	800			
Zimmerman	650			
Magic Leap	550			
Weatherby Healthcare	457			
Trividia Health	440			
ABB Optical Group	421			
People's Trust Insurance Co.	340			

Major Public Employers				
Broward County	# of Employees			
Broward County School Board	33,864			
Memorial Healthcare System	13,137			
Broward Health	8,219			
Broward County Commission	6,086			
Broward County Sheriff	5,402			
City of Fort Lauderdale	2,749			
Broward College	1,432			
City of Hollywood	1,270			
City of Pembroke Pines	1,141			
City of Miramar	1,084			

Source: Broward Alliance Economic Sourcebook, 2017





# Table 2-10 Major Public and Private Employers, Palm Beach County

Major Private Employers				
Palm Beach County	# of Employees			
Tenet Coastal Division Palm Beach County	6,136			
NextEra Energy, Inc. (FPL)	4,021			
Hospital Corporation of America	3,550			
Boca Raton Regional Hospital	2,800			
Bethesda Health, Inc.	2,200			
Office Depot, Inc.	2,034			
Florida Crystals Corporation	2,000			
The Breakers	2,000			
Jupiter Medical Center	1,907			
Boca Raton Resort & Club	1,376			
Wells Fargo & Company	1,367			
G4S Secure Solutions (USA)	1,341			
Sikorsky	1,206			
Pratt & Whitney	1,000			
Bank of America	1,000			
FirstService Residential	975			
Cheney Brothers	970			
Wellington Regional Medical Center	970			
NCCI	923			
U.S Sugar	900			
Johnson Controls	898			
TBC Corporation	750			
PGA National Resort & Spa	700			
Lynn University	663			
ADT Security Services	600			
Walgreens Distribution	600			
IBM Corporation	600			
Infinity Sales Group, LLC	600			
The Scripps Research Institute	565			
TMS Health	560			
Applied Card Systems	550			
Sugar Cane Growers Cooperative	533			
US Foods	500			
PNC Bank	500			

Major Private Employers				
Palm Beach County	# of Employees			
SBA Communications Corporation	500			
Yurcor	500			
Tropical Shipping USA, LLC	498			
The GEO Group	491			
BIOMET 3i, Inc	471			
Belcan Engineering Group, LLC	458			
Pepsi Cola Bottling Co.	450			
Verio	450			
LexisNexis Risk & Info Analytics	423			
Aerojet Rocketdyne	420			
Power Systems Mfg., LLC	400			
Medical Staffing Network	400			
Blue Green Corp.	400			
Newell Brands - Appliances and Cookware	350			
Pacific Architects and Engineers LLC	350			
SYSCO Food Services	340			
Lockheed Martin Corporation	335			

Major Public Employers					
Palm Beach County	# of Employees				
Palm Beach County School District	21,200				
Palm Beach County Board of County Commissioners	5,928				
Florida Atlantic University 2,761					
Veterans Health Administration	2,468				
City of Boca Raton	1,499				
City of West Palm Beach	1,420				
South Florida Water Mgmt District	1,356				
Palm Beach State College	1,148				
City of Boynton Beach	793				
City of Palm Beach Gardens	496				
Palm Beach Atlantic University	468				
Florida Public Utilities	317				

Source: Palm Beach Business Development Board, 2017



## 2.5.1 Labor Force

Table 2-11 displays the rate of unemployment and labor force participation for the population age 16 and older in South Florida. All three counties have very similar employment rates, while labor force participation is highest in Broward, followed by Miami-Dade and Palm Beach.

Table 2-11 Labor Force Participation

County	Population (Age 16 and Older) Part of Labor Force No				r Force	Percent Unemployed
Miami-Dade	2,178,775	1,351,925	62%	826,850	38%	5.3%
Broward	1,508,322	998,427	66%	509,895	34%	5.8%
Palm Beach	1,156,597	694,060	60%	462,537	40%	4.9%

Source: U.S. Census Bureau, 2016 American Community Survey 5-year estimates

## 2.5.2 Means of Travel to Work

Table 2-12 contains the mode split and Table 2-13 contains the average travel time to work for commuters in South Florida, based on data from the U.S. Census 2016 ACS. In all three counties, more than 75 percent of workers drive alone to work. Public transportation is utilized in Miami-Dade by 6 percent of commuters, approximately twice the rate as Broward and Palm Beach Counties. Census data shows that the proportion of individuals telecommuting has continued to grow with the virtual economy, as commute times have worsened. Typical commute times are worst in Miami-Dade County, where the average trip takes more than half an hour.

Table 2-12 Journey-to-Work Mode Split

County	Workers ( > 16 years)	Car, Truc Van (di alon	rove	Car, Tru Vai (carpo	n <sup>′</sup>	Pub Transpo		Walk	ed	Other N	<b>1</b> odes	Worke Hom	
Miami-Dade	1,214,352	931,770	77%	109,613	9%	67,251	6%	27,150	2%	22,442	2%	56,126	5%
Broward	892,638	708,764	79%	83,973	9%	26,485	3%	11,475	1%	18,545	2%	43,396	5%
Palm Beach	626,367	492,621	79%	60,017	10%	12,447	2%	9,305	1%	12,807	2%	39,170	6%

Source: U.S. Census Bureau, 2016 American Community Survey 5-year estimates

Table 2-13 Average Travel Time to Work

Travel Time	Broward	Miami-Dade	Palm Beach
Less than 20 minutes	32.3%	26.1%	39.8%
20 to 29 minutes	23.1%	21.7%	24.2%
30 or more minutes	44.6%	52.2%	36.0%
Mean travel time to work (minutes)	28	30.6	25.2



# 2.5.3 Commuting Patterns

Table 2-14 and 2-15 summarize data from the U.S. Census 2016 ACS on commuter flows for workers living in the South Florida region.

Table 2-14 shows the percentage of residents of each county who work outside their county of residence. This analysis reveals that nearly a quarter of all workers living in Broward County leave Broward for work. The rate is approximately half that for Palm Beach County, and just over half again for Miami-Dade, where only 7 percent of the workforce leaves the county for work.

Table 2-15 shows the percentage of employees in each county who live outside their county of work. The results of this analysis are far more uniform than Table 2-14, with all results falling within a range of 3 percent. While Table 2-14 shows that Broward sends more of its residents to work in other counties, Table 2-15 shows that Broward also receives more workers from neighboring counties. This can be attributed to the fact that Broward sits between the other counties, while Miami-Dade and Palm Beach Counties are neighbored by the far less populated Monroe and Martin Counties, respectively.

Table 2-14 County of Work for Workers Residing in the SFRTA Service Area

County in which South Florida Residents are Employed						
County	Total Employees Residing in County	Employed in County	Employed Outside of County			
	101/750	1,124,210	90,142			
Miami-Dade	1,214,352	93%	7%			
Downson	002.670	682,667	209,971			
Broward	892,638	76%	24%			
Dalas Basala	606.767	554,042	72,325			
Palm Beach	626,367	88%	12%			

Source: U.S. Census Bureau, 2016 American Community Survey 5-year estimates

Table 2-15 Commuting from Neighboring Counties, SFRTA Service Area

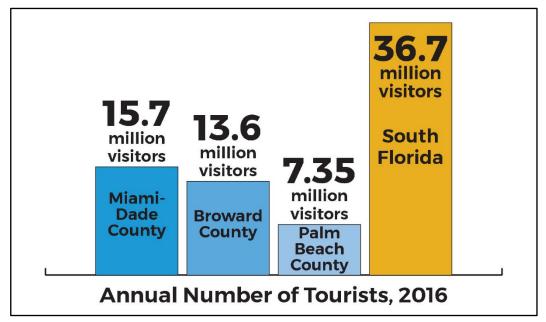
County in which South Florida Employees Reside						
County	Total Employed in County	Reside in County	Reside Outside of County			
Mianai Dada	1200120	1,124,210	164,918			
Miami-Dade	1,289,128	87%	13%			
Duantand	012 / 66	682,667	129,799			
Broward	812,466	84%	16%			
Palm Beach	C/C/07	554,042	92,441			
	646,483	86%	14%			



## **Tourism**

Tourism is the largest economic force in South Florida and one of the largest economic and employment sectors in the region, with the total number of annual tourists exceeding 36 million annual visitors in 2016.

According to the Greater Miami and the Beaches 2016 Visitor Industry Overview, visitors to the Miami area increased by 4.8 percent, with 15.7 million overnight visitors. These visitors spent \$25.5 billion in direct expenditures, with international visitors accounting for 62 percent of that total. Broward County had 13.6 million overnight visitors in 2016, who spent approximately \$11.6 billion according to the Broward County 2016 Comprehensive Annual Financial Report (CAFR). The Palm Beach County 2016 CAFR reported \$4.6 billion in direct visitor spending from the 7.35 million visitors to Palm Beach County.



Sources: Greater Miami and the Beaches 2016 Visitor Industry Overview, Broward County 2016 Comprehensive Annual Financial Report, Discover the Palm Beaches press release

#### 2.7 **Trip Generators**

Major trip generators were sorted into six (6) categories: Civic, Educational, Entertainment, Medical, Mixed-Use, and Shopping.

Table 2-16 lists the major destinations in Miami-Dade County. The location of these destinations are illustrated on Figure 2-10.

Table 2-17 lists the major destinations in Broward County. The location of these destinations are illustrated on Figure 2-11.

Table 2-18 lists the major destinations in Palm Beach County. The location of these destinations are illustrated on Figure 2-12.





# Table 2-16 Major Trip Generators, Miami-Dade County

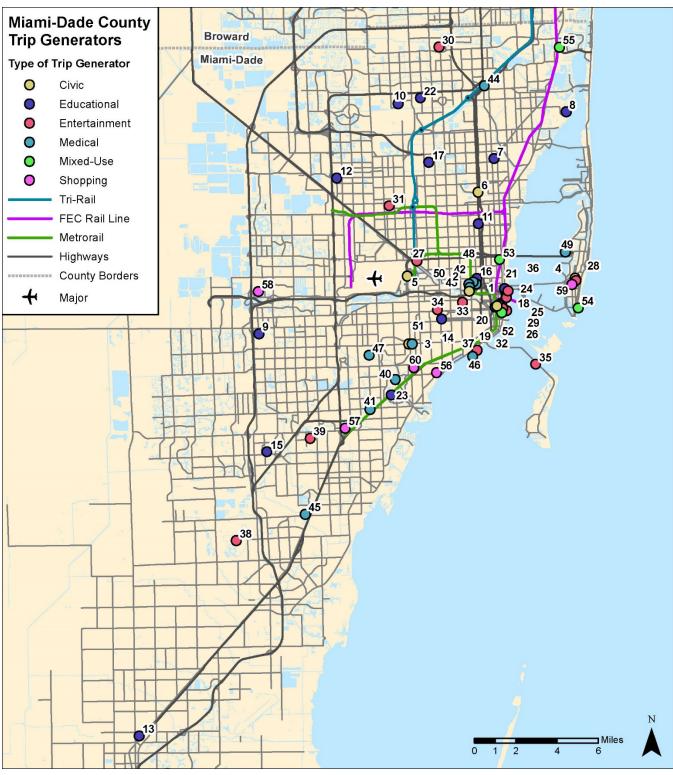
Miami-Dade County				
Trip Generator Type	Map ID#	Destination		
Ï	1	Miami-Dade County Courthouse		
	2	Richard E. Gerstein Justice Building		
	3	Coral Gables City Hall		
Civic	4	Miami Beach Convention Center		
	5	Miami International Airport		
	6	U.S. Immigration and Naturalization Service		
	7	Barry University		
	8	FIU Biscayne Bay Campus		
	9	FIU Modesto A. Maidique Campus		
	10	Florida Memorial University		
	11	MDC Entrepreneurial Education Center Campus		
	12	MDC Hialeah Campus		
	13	MDC Homestead Campus		
	14	MDC InterAmerican Campus		
Educational	nal 15 MDC Kendall Campus			
	16	MDC Medical Center Campus		
	17	MDC North Campus		
	18	MDC Wolfson Campus		
	19	Miami-Dade Main Library		
	20	New World School of the Arts		
	21	The Patricia and Phillip Frost Museum of Science		
	22	St. Thomas University		
	23	University of Miami		
	24	Adrienne Arsht Center for the Performing Arts		
	25	American Airlines Arena		
	26	Bayfront Park / Mayside Marketplace		
Entertainment	27	Casino Miami Jai-Alai		
	28	The Fillmore Miami Beach		
	29	Gusman Center for the Performing Arts		
	30	Hard Rock Stadium		

Miami-Dade County				
Trip Generator Type	Map ID#	Destination		
Entertainment	31	Hialeah Park		
	32	James L. Knight International Center		
	33	Marlins Park		
	34	Miami-Dade County Auditorium		
	35	Miami Seaquarium		
	36	Pérez Art Museum Miami		
	37	Vizcaya Museum & Gardens		
	38	Zoo Miami		
	39	Baptist Hospital		
	40	Doctors Hospital		
	41	South Miami Hospital		
	42	Bascom Palmer Eye Institute		
	43	Jackson Memorial Hospital		
Medical	44	Jackson North Medical Center		
Medical	45	Jackson South Community Hospital		
	46	Mercy Hospital		
	47	Miami Children's Hospital		
	48	Miami VA Hospital		
	49	Mount Sinai Medical Center		
	50	University of Miami Hospital		
Mixed-Use	51	Downtown Coral Gables and Miracle Mile		
	52	Downtown Miami		
	53	Midtown Miami		
	54	South Beach		
	55	Aventura Mall		
	56	CocoWalk		
Shopping	57	Dadeland Mall		
	58	Dolphin Mall		
	59	Lincoln Road Mall		

Source: http://www.tri-rail.com/Destinations/Miami-dadecounty/



Figure 2-10 Major Trip Generators, Miami-Dade County



Source: http://www.tri-rail.com/Destinations/Miami-dade-county/





# Table 2-17 Major Trip Generators, Broward County

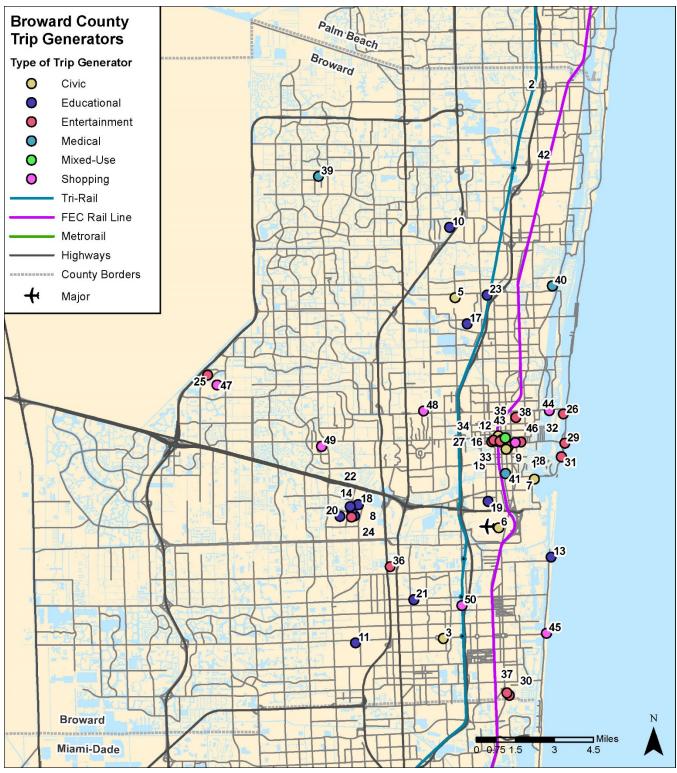
Broward County					
Trip Generator Type	Map ID#	Destination			
Civic	1	Broward County Courthouse			
	2	North Regional Courthouse			
	3	South Regional Courthouse			
	4	Broward County Transit Central Terminal			
	5	Fort Lauderdale Executive Airport			
	6	Fort Lauderdale/Hollywood International Airport			
	7	Greater Fort Lauderdale / Broward County Convention Center			
	8	Broward College Central Campus			
	9	Broward College Downtown Campus			
	10	Broward College North Campus			
	11	Broward College South Campus			
	12	Broward County Main Library			
	13	Florida Atlantic University Dania Beach Campus			
	14	Florida Atlantic University Davie Campus			
Educational	15	Florida Atlantic University Fort Lauderdale Campus			
Educational	16	Fort Lauderdale History Center			
	17	Keiser University			
	18	McFatter Technical College			
	19	Nova Southeastern University East Campus			
	20	Nova Southeastern University Main Campus			
	21	Sheridan Technical College			
	22	UF Fort Lauderdale Research and Education Center			
	23	University of Phoenix - South Florida Campus			
Entertainment	24	Bailey Hall			
	25	BB&T Center			
	26	Bonnet House			

	Broward County				
Trip Generator Type	Map ID#	Destination			
	27	Broward Center for the Performing Arts			
	28	Carrie B. Harbor Tours			
	29	Fort Lauderdale Beach			
	30	Gulfstream Park			
	31	Jungle Queen Boat Tour			
	32	Las Olas Outdoor Gourmet Market			
Entertainment	33	Museum of Art			
	34	Museum of Discovery and Science / IMAX Theater			
	35	Riverwalk			
	36	Seminole Hard Rock Hotel and Casino			
	37	The Village at Gulfstream Park			
	38	War Memorial Auditorium			
	39	Broward Health Coral Springs			
Medical	40	Broward Health Imperial Point			
Medical	41	Broward Health Medical Center			
	42	Broward Health North			
Mixed-Use	43	Downtown Fort Lauderdale			
	44	Galleria Mall at Fort Lauderdale			
	45	Josh's Organic Garden			
Shopping	46	Las Olas Boulevard			
	47	Sawgrass Mills			
	48	Swap Shop			
	49	Westfield Broward			
	50	Yellow Green Farmers Market			

Source: http://www.tri-rail.com/Destinations/Browardcounty/



Figure 2-11 Major Trip Generators, Broward County



Source: http://www.tri-rail.com/Destinations/Broward-county/



Table 2-18 Major Trip Generators, Palm Beach County

	Pal	m Beach County
Trip Generator Type	Map ID#	Destination
	1	Miami-Dade County Courthouse
Civic	2	Richard E. Gerstein Justice Building
	3	Coral Gables City Hall
	4	Miami Beach Convention Center
	5	Miami International Airport
	6	U.S. Immigration and Naturalization Service
	7	Barry University
	8	FIU Biscayne Bay Campus
	9	FIU Modesto A. Maidique Campus
Educational	10	Florida Memorial University
	11	MDC Entrepreneurial Education Center Campus
	12	MDC Hialeah Campus
	13	MDC Homestead Campus
	14	MDC InterAmerican Campus
	15	MDC Kendall Campus
	16	MDC Medical Center Campus
	17	MDC North Campus
	18	MDC Wolfson Campus
Entertainment	19	Miami-Dade Main Library
Entertainment	20	New World School of the Arts
	21	The Patricia and Phillip Frost Museum of Science
	22	St. Thomas University
Medical	23	University of Miami
	24	Adrienne Arsht Center for the Performing Arts
Mixed-Use	25	American Airlines Arena
	26	Bayfront Park / Mayside Marketplace
	27	Casino Miami Jai-Alai
	28	The Fillmore Miami Beach
	29	Gusman Center for the Performing Arts
Shopping	30	Hard Rock Stadium
Shopping	31	Hialeah Park
	32	James L. Knight International Center
	33	Marlins Park
	34	Miami-Dade County Auditorium

Source: http://www.tri- rail.com/Destinations/Palm-Beach-county/



Figure 2-12 Major Trip Generators, Palm Beach County



Source: http://www.tri- rail.com/Destinations/Palm-Beach-county/



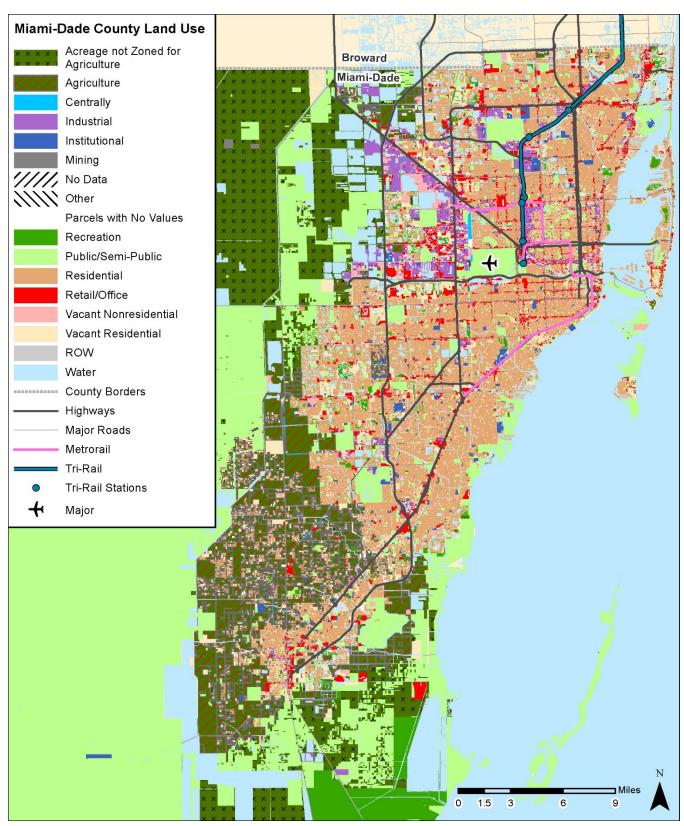
## **Land Use**

Existing and future land use characteristics influence transit service routing as well as the location and scale of transit oriented development. Existing parcel land use data is prepared by the Florida Department of Revenue. FDOT aggregated nearly 100 specific land use classifications into just 15 generalized land use categories, which are used to create Figure 2-13, Figure 2-15, and Figure 2-17. All three counties maintain their own future land use maps with unique category names and definitions, but for the purpose of this study future land use categories have been generalized to maximize legibility in Figure 2-14, Figure 2-16, and Figure 2-18.





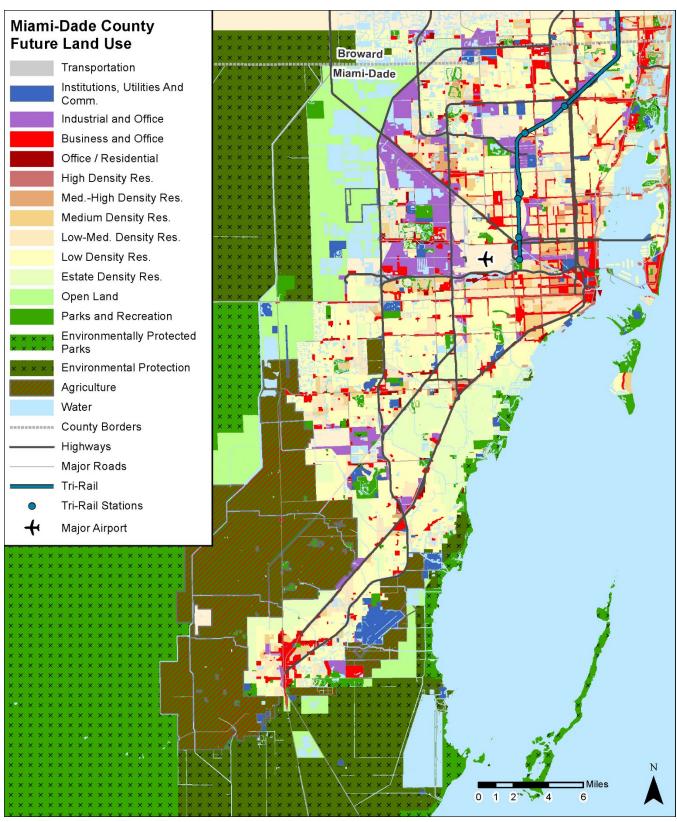
Figure 2-13 Miami-Dade County Existing Land Use



Source: FDOT, Florida Department of Revenue



Figure 2-14 Miami-Dade County Future Land Use

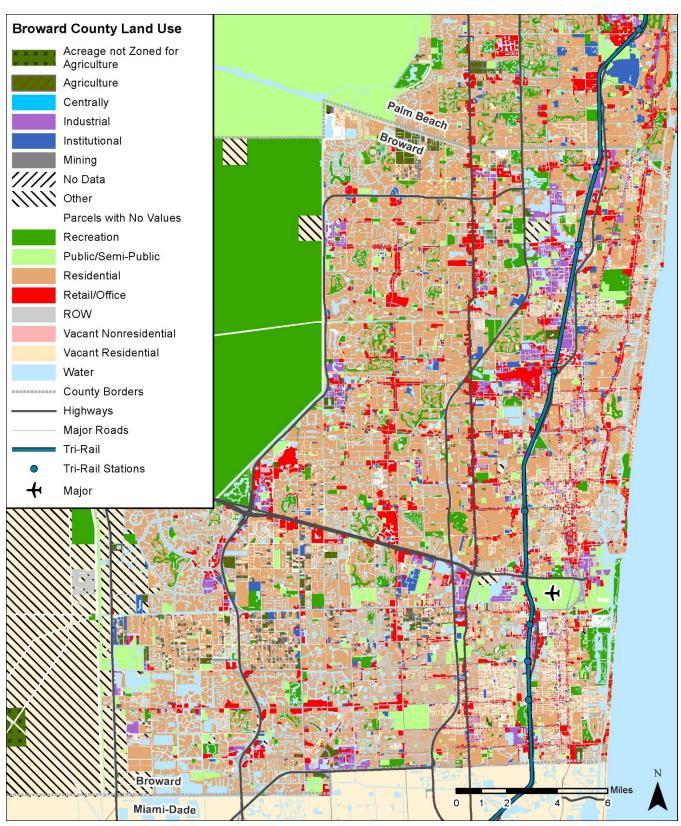


Source: Miami-Dade County GIS





Figure 2-15 Broward County Existing Land Use

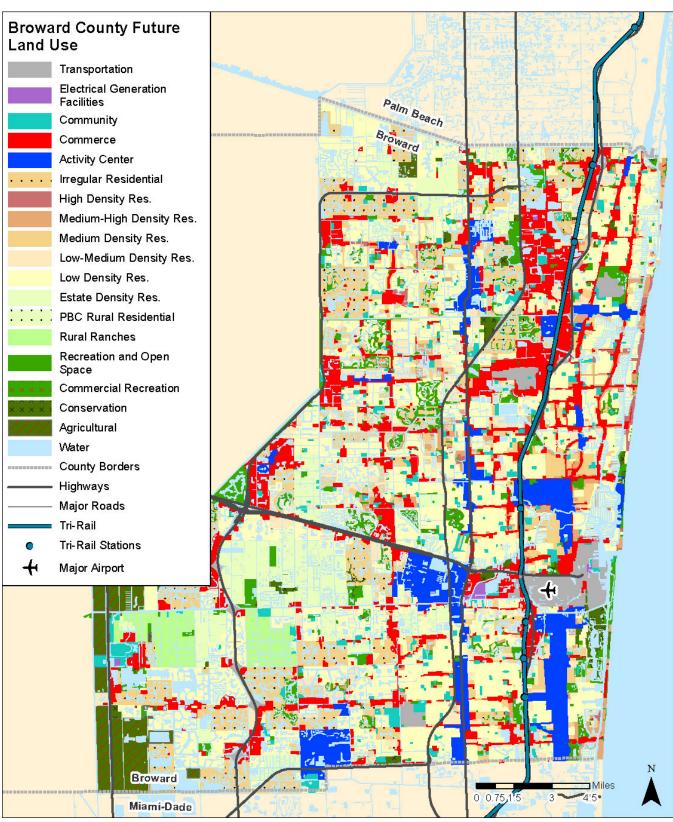


Source: FDOT, Florida Department of Revenue





Figure 2-16 Broward County Future Land Use



Source: Broward County GIS





Figure 2-17 Palm Beach County Existing Land Use

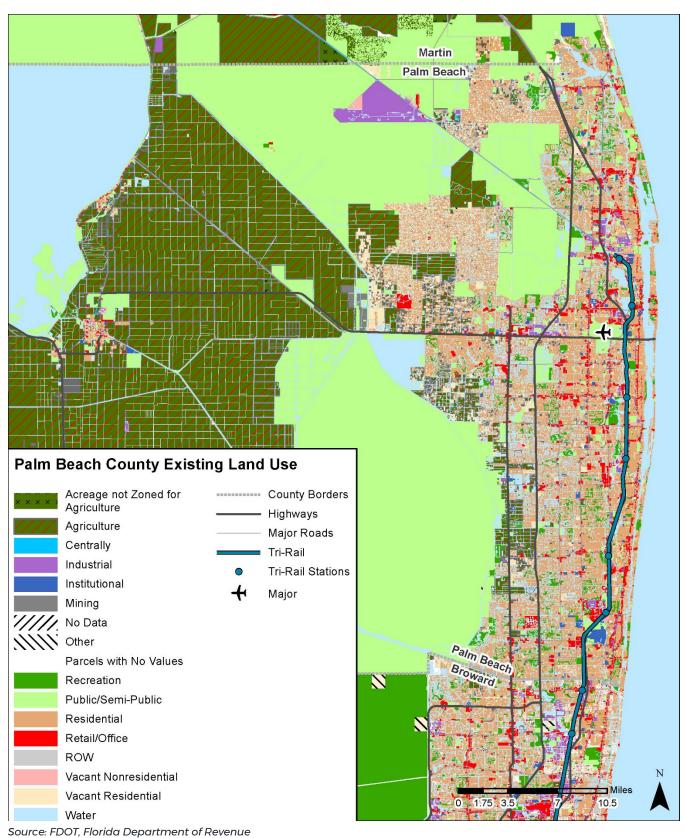
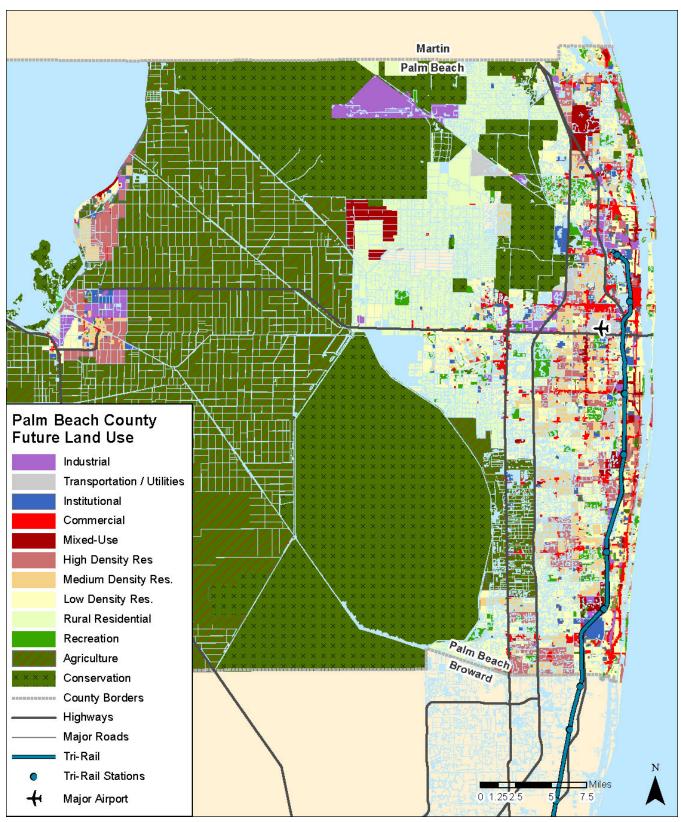




Figure 2-18 Palm Beach County Future Land Use



Source: Palm Beach County GIS



# 2.8.1 Conclusion

Existing land use data shows us that Residential land use dominates the Tri-Rail corridor, with Industrial, Retail/Office, Recreational, and Public/Semi Public land uses such as parks, canals, and government buildings making up most of the remaining land. When comparing this composition to the South Florida Urbanized Area as defined by the Census Bureau, numerous differences emerge. The Tri-Rail corridor is 11 percent less residential than the rest of the region, but is surrounded by a much higher concentration of industrial land use (+13 percent), as well as retail/office (+5 percent). This indicates a more balanced corridor for commuting, with 31 percent of the land dedicated to employment oriented land uses and 36 percent for residential.

Table 2-19 Land Use Summary for Tri-Rail Corridor (half-mile buffer)

Land Use Category (Tri-County)	Acres Within Buffer Area	Percentage of Total Buffer Area	Percentage of South Florida (Miami Urbanized Area)
Residential	13,052	36%	47%
Public/Semi-Public	6,189	17%	13%
Industrial	5,597	16%	3%
Retail/Office	4,175	12%	7%
Recreation	2,351	7%	8%
Institutional	1,153	3%	2%
Vacant Nonresidential	1,060	3%	2%
Water	962	3%	3%
Vacant Residential	914	3%	4%
Centrally Assessed	187	1%	<1%
Agricultural	174	<1%	4%
Acreage Not Zoned for Agriculture	11	<1%	1%
Parcels with No Values	8	<1%	3%
Other	1	<1%	1%
TOTAL	35,652	100%	100%

Source: FDOT, Florida Department of Revenue

Future land use maps indicate differing visions for the Tri-Rail corridor in South Florida. In Miami-Dade County the Tri-Rail corridor is largely industrial and low density residential, with commercial land uses on NW 79th Street at the Metrorail Transfer Station.

In Broward County, residential land uses are typically low density, and commercial land uses dominate the corridor, especially in the area between the Coconut Creek and Pompano Beach Tri-Rail Stations. The Regional Activity Center designation is unique to Broward County, and three activity centers are



<sup>\*</sup>Excludes Right of Way

# **SECTION 2 - BASELINE CONDITIONS**

located along the Tri-Rail corridor: Hollywood Boulevard, Downtown Fort Lauderdale, and south of Atlantic Boulevard. The Palm Beach County future land use map shows an abundance of mixed-use and high density residential areas located near Tri-Rail stations. Most notably there are large mixed-use districts adjacent to the Boca Raton and Boynton Beach stations, and smaller mixed-use districts, or areas which contain both commercial and high density residential land uses, located around Delray Beach and Lake Worth Stations.



# Section 3 Evaluation of Existing Transit Services







# **EVALUATION OF EXISTING TRANSIT SERVICES**

#### 3.1 SFRTA Overview and Existing Services

#### 3.1.1 **History of SFRTA**

The SFRTA is an agency of the State of Florida, created in 2003 by Chapter 343, Florida Statutes (F.S.), as the successor to the Tri-County Commuter Rail Authority (TCRA). Pursuant to Chapter 343, F.S., SFRTA is authorized to own, operate, maintain, and manage a transit system in the tri-county area of Miami-Dade, Broward, and Palm Beach counties. It is further authorized under Chapter 343 to coordinate, develop, and implement a regional transportation system in South Florida. SFRTA and its predecessor have operated the Tri-Rail commuter rail passenger service since 1989.

The TCRA was established in 1989 to provide interim commuter rail service along a 67-mile corridor between the West Palm Beach Station in Palm Beach County and the Hialeah Market Station in Miami-Dade County, following the Florida Department of Transportation's (FDOT) 1988 purchase of the South Florida Rail Corridor (SFRC) from CSX Transportation, Inc. Between 1997 and 1998, Tri-Rail service was extended to the Mangonia Park Station in Palm Beach County and to the Miami Airport Station in Miami-Dade County. FDOT owns the SFRC, on which SFRTA operates the Tri-Rail commuter rail passenger service.

SFRTA conducts its work with a vision to enhance mobility for residents and visitors, and to improve economic viability and quality of life throughout the region.

# 3.1.2 SFRTA Existing Transportation Service

SFRTA operates the Tri-Rail commuter rail service in Miami-Dade, Broward, and Palm Beach counties, along a 72-mile rail corridor on the SFRC, with a total of 18 stations - six (6) in Palm Beach County (Mangonia Park, West Palm Beach, Lake Worth, Boynton Beach, Delray Beach, and Boca Raton), seven (7) in Broward County (Deerfield Beach, Pompano Beach, Cypress Creek, Fort Lauderdale, Fort Lauderdale/Hollywood International Airport at Dania Beach, Sheridan Street, and Hollywood), and five (5) in Miami-Dade County (Golden Glades, Opa-locka, Metrorail Transfer, Hialeah Market, and the Miami Airport Station). Free daily parking is available at all stations; Tri-Rail trains also accommodate bicycles, and all stations have bike lockers.

SFRTA operates a commuter shuttle bus service (Tri-Rail Commuter Connector) to and from select Tri-Rail stations, with connecting service to numerous South Florida destinations. SFRTA's rail and bus services provide over four million passenger trips to residents and visitors each year.

SFRTA Tri-Rail connects to the three regional international airports, with direct service to the Miami International Airport, and connecting service to both Palm Beach and Fort Lauderdale International Airports via the Tri-Rail Commuter Connector Bus routes.

Figure 3-1 illustrates SFRTAs existing commuter rail and bus service network.





Figure 3-1 SFRTA Existing Services – Commuter Rail and Commuter Connector Bus





# 3.1.3 Passenger Fare Policy

The SFRTA fare system consists of six (6) zones. Fares are determined by calculating the number of zones traveled beginning with the Tri-Rail station of origin to the destination Tri-Rail station. For example, a passenger traveling the entire system from end to end beginning at Mangonia Station (origin) would calculate a six (6) zone fare which includes the destination zone as Miami Airport. Monthly passes (including discount monthly pass), weekend, holiday, and certain special event tickets are excluded from the zonal pricing structure.

Tickets are sold at all Tri-Rail stations from Tri-Rail's ticket vending machines (TVMs) and also by Ticket Agents at Tri-Rail's busiest stations. Tickets are not available for purchase onboard the train. There are six (6) classes of Tri-Rail tickets available for purchase which include the following:

- One-way tickets are valid for travel only on the date of purchase and only between the stations selected. The fare for one-way tickets ranges from \$2.50-\$6.90 depending on the number of zones traveled.
- A round-trip ticket is valid for one trip in each direction (within one or more zones) only on the day of purchase only. The fare for round-trip tickets ranges from \$4.40-\$11.55 depending on the number of zones traveled.
- 12-trip tickets are a set of 12 one-way tickets that have no predetermined date of use or time of travel. A 12-trip ticket is limited to the number of zones (stations) indicated on the ticket at the time of purchase. Each of the 12 trips on a 12-trip ticket purchased from an automated ticket machine must be validated for one-way passage prior to boarding. The fare for 12-trip tickets ranges from \$21.25-\$57.50 depending on the number of zones traveled.
- Monthly pass: From the first day of the calendar month to the last day of the calendar month, a customer may ride regularly scheduled Tri-Rail trains for as many trips as desired with a properly dated monthly ticket. Any use of a monthly ticket which is out of date will result in fare evasion penalties. Monthly tickets are good for all zones and include transfers to Metrorail, but are not valid for use on special event trains. The fare for a monthly ticket is \$100.00.
- Regional monthly pass: From the first day of the calendar month to the last day of a calendar month, a customer may ride regularly scheduled Tri-Rail trains and Miami-Dade Transit services for as many trips as desired with a properly dated monthly ticket. The fare for a monthly regional ticket is \$145.00.
- Weekend or holiday daily passes: Tri-Rail offers a discounted flat fare for weekend and holiday travel for travel between all destinations on weekends and holidays only. Transfers from other systems are not applicable to the discounted weekend fare. The fare for a regular Weekend Day Pass is \$5.00 and the discounted Weekend Day Pass is \$2.50.

Customers are provided the flexibility of choice in purchasing ticket type combinations that best meet their transportation needs and personal budgets. Frequent riders find the best value is to purchase the monthly ticket which provides unlimited trips in each month. Passengers seeking the flexibility of a oneway ticket with the added value of a multi-trip ticket find that the 12-trip ticket best meets their needs.





Special train services to certain events are occasionally provided by Tri-Rail throughout the year. Most special event trains have a fare which is different from the regularly published fare; therefore, passengers are expected to select the appropriate special event when purchasing tickets from the TVM's.

#### Discount Fare Policy 3.1.3.1

Discounted fares in the amount of 50 percent off regular single-ride fares are available for children ages 5 - 12, students, senior citizens age 65 and over, persons with disabilities, and Medicare recipients at time of purchase. A person with a disability is defined in the Americans with Disabilities Act of 1990 (ADA). Disabled veterans may ride free using Tri-Rail's Service Connector pass. Eligible veterans may register either on-line or at a Tri-Rail station kiosk. Discounted fare tickets are good only on regularly scheduled Tri-Rail trains. All eligible persons qualified for discount fares may purchase discounted tickets at a Tri-Rail kiosk or at the automated ticket machines at a Tri-Rail station. Proper identification must be presented to onboard security personnel upon request.

Table 3-1 Tri-Rail Zone Fare Structure

No. Of Zones	One Way	Discount One Way	Round Trip	Discount Round Trip	12 Trip	Weekend	Discount Weekend	Monthly	Discount Monthly	Regional Monthly	Discount Regional Monthly
1	\$2.50	\$1.25	\$4.40	\$2.50	\$21.25	\$5.00	\$2.50	\$100.00	\$50.00	\$145.00	\$72.50
2	\$3.75	\$1.90	\$6.25	\$3.75	\$31.25	\$5.00	\$2.50	\$100.00	\$50.00	\$145.00	\$72.50
3	\$5.00	\$2.50	\$8.45	\$5.00	\$41.90	\$5.00	\$2.50	\$100.00	\$50.00	\$145.00	\$72.50
4	\$5.65	\$2.80	\$9.70	\$5.65	\$47.50	\$5.00	\$2.50	\$100.00	\$50.00	\$145.00	\$72.50
5	\$6.25	\$3.15	\$10.65	\$6.25	\$52.50	\$5.00	\$2.50	\$100.00	\$50.00	\$145.00	\$72.50
6	\$6.90	\$3.45	\$11.55	\$6.90	\$57.50	\$5.00	\$2.50	\$100.00	\$50.00	\$145.00	\$72.50

Source: SFRTA 2018

#### 3.1.3.2 Easy Card

The EASY Card is a prepaid card for transit fares where passengers can add a cash value up to \$150 to pay one-way fares, or load the card with Tri-Rail's different fare products including the Monthly, 12-trip or Weekend passes. The EASY Card contains an embedded computer chip that automatically deducts the appropriate fare when users tap the card on any of the validators that are clearly marked and located on all Tri-Rail station platforms. In an effort to create seamless regional travel in South Florida, Tri-Rail has partnered with Miami-Dade Transit to use the EASY Card as the preferred way to pay transit fare. The EASY Card is valid for use on both Tri-Rail and Miami-Dade Transit, including Metrorail and Metrobus.

#### 3.1.3.3 **Employer Discount Program**

Tri-Rail's Employer Discount Program (EDP) offers a 25 percent discount on monthly tickets, monthly regional passes or 12-trip tickets as a benefit program for employees of participating businesses. Employees of participating companies are permitted to purchase one monthly ticket or two 12-trip tickets per month. SFRTA Tri-Rail also offers a Group Discount Program, which offers a discounted rate to groups of 25 or more passengers.





#### Ridership 3.1.3.4

A historical overview of Tri-Rail ridership is presented in Figure 3-2. Over the last several years, annual ridership for the Tri-Rail commuter rail service has exceeded four (4) million riders per year with an average weekday ridership of approximately 14,000 passengers.

5,000,000 4,000,000 3,000,000 2,000,000 1,000,000 2005 2001 1995 1997 2003

Figure 3-2 Tri-Rail Historic Ridership Data

Source: National Transit Database

#### **Operating Schedule** 3.1.3.5

Tables 3-2, 3-3 and 3-4 depict SFRTA's Commuter Rail Operating Schedule for weekdays and weekends, respectively. Weekday service runs from 4:00 AM to 10:35 PM in the southbound direction, and from 4:15 AM to 11:35 PM in the northbound direction. Weekend and Holiday service operates from 5:50 AM to 11:00 PM in the southbound direction, and from 5:17 AM to 11:45 PM in the northbound direction.

Weekday service is most frequent during the peak morning and evening commuting periods. Headways are 20 minutes between 6:00 AM and 7:00 AM in both directions, then 30 minutes between 7:00 AM and 8:00 AM. Headways increase to 60 minutes in the middle of the day. PM peak period service resumes at 3:00 PM with headways between 25 and 35 minutes until 6:45 PM, when hourly service resumes until the final departures at 8:40 PM southbound, and 9:40 PM northbound.

Weekend and holiday service operates hourly from 5:50 AM until 6:50 PM southbound, and from 5:17 AM to 6:17 PM northbound. Tri-Rail operates one northbound and southbound late train run that departs Mangonia Park at 9:00 PM, and from Miami International Airport at 9:42 PM.





Table 3-2 Weekday Commuter Rail Operating Schedule (Southbound)

SOUTH	HBOL	JND .	го м	IAMI	AIRP	ORT	- WE	EKDA	YS A	M		
Train No.	P601	P603	P605	P607	P609	P611	P613	P615	P617	P619	P621	P623
Mangonia Park	4:00	4:40	5:20	6:00	6:20	6:40	7:00	7:30	8:00	9:00	10:00	11:00
West Palm Beach	4:06	4:46	5:26	6:06	6:26	6:46	7:06	7:36	8:06	9:06	10:06	11:06
Lake Worth	4:15	4:56	5:36	6:16	6:36	6:56	7:16	7:46	8:16	9:16	10:16	11:16
Boynton Beach	4:20	5:02	5:42	6:22	6:42	7:02	7:22	7:52	8:22	9:22	10:22	11:22
Delray Beach	4:29	5:11	5:51	6:31	6:51	7:11	7:31	8:01	8:31	9:31	10:31	11:31
Boca Raton	4:35	5:17	5:57	6:37	6:57	7:17	7:37	8:07	8:37	9:37	10:37	11:37
Deerfield Beach	4:42	5:24	6:04	6:44	7:04	7:24	7:44	8:14	8:44	9:44	10:44	11:44
Pompano Beach	4:48	5:30	6:10	6:50	7:10	7:30	7:50	8:20	8:50	9:50	10:50	11:50
Cypress Creek	4:54	5:37	6:17	6:57	7:17	7:37	7:57	8:27	8:57	9:58	10:58	11:58
Fort Lauderdale	5:01	5:45	6:25	7:05	7:25	7:45	8:05	8:35	9:05	10:08	11:08	12:08
Fort Lauderdale Airport 🛪	5:08	5:53	6:33	7:13	7:33	7:53	8:13	8:43	9:13	10:17	11:17	12:17
Sheridan Street	5:12	5:57	6:37	7:17	7:37	7:57	8:17	8:47	9:17	10:21	11:21	12:21
Hollywood	5:16	6:01	6:41	7:21	7:41	8:01	8:21	8:51	9:21	10:26	11:26	12:26
Golden Glades	5:25	6:10	6:50	7:30	7:50	8:10	8:30	9:00	9:30	10:35	11:35	12:35
Opa-locka	5:31	6:16	6:56	7:36	7:56	8:16	8:36	9:06	9:36	10:41	11:41	12:41
Metrorail Transfer	5:38	6:23	7:03	7:43	8:03	8:23	8:43	9:13	9:43	10:48	11:48	12:48
Hialeah Market	5:44	6:29	7:09	7:49	8:09	8:29	8:49	9:19	9:49	10:54	11:54	12:54
Miami Airport 🛪	5:50	6:35	7:15	7:55	8:15	8:35	8:55	9:25	9:55	11:00	12:00	1:00

Train No.	P625	P627	P629	P631	P633	P635	P637	P639	P641	P643	P645	P647	P649
Mangonia Park	12:00	1:00	2:00	3:00	3:30	4:00	4:25	5:00	5:30	6:15	6:45	7:40	8:40
West Palm Beach	12:06	1:06	2:06	3:06	3:36	4:06	4:31	5:06	5:36	6:21	6:51	7:46	8:46
Lake Worth	12:16	1:16	2:16	3:16	3:46	4:16	4:41	5:16	5:46	6:31	7:01	7:56	8:56
Boynton Beach	12:22	1:22	2:22	3:22	3:52	4:22	4:47	5:22	5:52	6:37	7:07	8:02	9:02
Delray Beach	12:31	1:31	2:31	3:31	4:01	4:31	4:56	5:31	6:01	6:46	7:16	8:11	9:11
Boca Raton	12:37	1:37	2:37	3:37	4:07	4:37	5:02	5:37	6:07	6:52	7:22	8:17	9:17
Deerfield Beach	12:44	1:44	2:44	3:44	4:14	4:44	5:09	5:44	6:14	6:59	7:29	8:24	9:24
Pompano Beach	12:50	1:50	2:50	3:50	4:20	4:50	5:15	5:50	6:20	7:05	7:35	8:30	9:30
Cypress Creek	12:58	1:58	2:58	3:58	4:28	4:58	5:23	5:58	6:27	7:12	7:42	8:37	9:37
Fort Lauderdale	1:08	2:08	3:08	4:08	4:38	5:08	5:33	6:08	6:35	7:20	7:50	8:45	9:45
Fort Lauderdale Airport	X 1:17	2:17	3:17	4:17	4:47	5:17	5:42	6:17	6:43	7:28	7:58	8:53	9:53
Sheridan Street	1:21	2:21	3:21	4:21	4:51	5:21	5:46	6:21	6:47	7:32	8:02	8:57	9:57
Hollywood	1:26	2:26	3:26	4:26	4:56	5:26	5:51	6:26	6:51	7:36	8:06	9:01	10:01
Golden Glades	1:35	2:35	3:35	4:35	5:05	5:35	6:00	6:35	7:00	7:45	8:15	9:10	10:10
Opa-locka	1:41	2:41	3:41	4:41	5:11	5:41	6:06	6:41	7:06	7:51	8:21	9:16	10:16
Metrorail Transfer	1:48	2:48	3:48	4:48	5:18	5:48	6:13	6:48	7:13	7:58	8:28	9:23	10:23
Hialeah Market	1:54	2:54	3:56	4:56	5:26	5:56	6:21	6:56	7:19	8:04	8:34	9:29	10:29
Miami Airport X	2:00	3:00	4:02	5:02	5:32	6:02	6:27	7:02	7:25	8:10	8:40	9:35	10:35

Source: SFRTA

L STOP - Train may depart station as much as five (5) minutes ahead of schedule





Table 3-3 Weekday Commuter Rail Operating Schedule (Northbound)

NORTH	BOU	ND T	O MA	NGO	NIA F	PARK	- WE	EKD	AYS A	AM		
Train No.	P600	P602	P604	P606	P608	P610	P612	P614	P616	P618	P620	P622
Miami Airport X	4:15	4:45	5:10	5:35	6:00	6:20	7:00	7:40	8:20	9:20	10:20	11:20
Hialeah Market	4:18	4:48	5:13	5:38	6:03	6:23	7:03	7:43	8:23	9:23	10:23	11:23
Metrorail Transfer	4:23	4:54	5:19	5:49	6:09	6:29	7:09	7:49	8:30	9:30	10:30	11:30
Opa-locka	4:29	5:00	5:25	5:55	6:15	6:35	7:15	7:55	8:36	9:36	10:36	11:36
Golden Glades	4:35	5:06	5:31	6:01	6:21	6:41	7:21	8:01	8:43	9:43	10:43	11:43
Hollywood	4:43	5:15	5:40	6:10	6:30	6:50	7:30	8:10	8:52	9:52	10:52	11:52
Sheridan Street	4:47	5:19	5:44	6:14	6:34	6:54	7:34	8:14	8:56	9:56	10:56	11:56
Fort Lauderdale Airport X	4:51	5:23	5:48	6:18	6:38	6:58	7:38	8:18	9:00	10:00	11:00	12:00
Fort Lauderdale	5:00	5:32	5:57	6:27	6:47	7:07	7:47	8:27	9:09	10:09	11:09	12:09
Cypress Creek	5:06	5:39	6:04	6:34	6:54	7:14	7:54	8:34	9:16	10:16	11:16	12:16
Pompano Beach	5:12	5:45	6:10	6:40	7:00	7:20	8:00	8:40	9:23	10:23	11:23	12:23
Deerfield Beach	5:18	5:51	6:16	6:46	7:06	7:26	8:06	8:46	9:29	10:29	11:29	12:29
Boca Raton	5:25	5:59	6:24	6:54	7:14	7:34	8:14	8:54	9:38	10:38	11:38	12:38
Delray Beach	5:30	6:04	6:29	6:59	7:19	7:39	8:19	8:59	9:44	10:44	11:44	12:44
Boynton Beach	5:38	6:13	6:38	7:08	7:28	7:48	8:28	9:08	9:53	10:53	11:53	12:53
Lake Worth	5:44	6:19	6:44	7:14	7:34	7:54	8:34	9:14	9:59	10:59	11:59	12:59
West Palm Beach X	5:55	6:30	6:55	7:25	7:45	8:05	8:45	9:25	10:10	11:10	12:10	1:10
Mangonia Park	6:05	6:40	7:05	7:35	7:55	8:15	8:55	9:35	10:20	11:20	12:20	1:20

NO	RTHB	OUNI	о то	MAN	GON	IA PA	RK -	WEE	KDAY	S PI	Л		
Train No.	P624	P626	P628	P630	P632	P634	P636	P638	P640	P642	P644	P646	P648
Miami Airport X	12:20	1:20	2:20	3:10	3:50	4:30	4:50	5:20	5:48	6:20	6:50	7:50	9:40
Hialeah Market	12:23	1:23	2:23	3:13	3:53	4:33	4:53	5:23	5:51	6:23	6:53	7:53	9:43
Metrorail Transfer	12:30	1:30	2:30	3:20	4:09	4:39	4:59	5:29	5:57	6:29	6:59	7:59	9:49
Opa-locka	12:36	1:36	2:36	3:26	4:15	4:45	5:05	5:35	6:03	6:35	7:05	8:05	9:55
Golden Glades	12:43	1:43	2:43	3:33	4:21	4:51	5:11	5:41	6:09	6:41	7:11	8:11	10:01
Hollywood	12:52	1:52	2:52	3:42	4:30	5:00	5:20	5:50	6:18	6:50	7:20	8:20	10:10
Sheridan Street	12:56	1:56	2:56	3:46	4:34	5:04	5:24	5:54	6:22	6:54	7:24	8:24	10:14
Fort Lauderdale Airport	X 1:00	2:00	3:00	3:50	4:38	5:08	5:28	5:58	6:26	6:58	7:28	8:28	10:18
Fort Lauderdale	1:09	2:09	3:09	3:59	4:47	5:17	5:37	6:07	6:35	7:07	7:37	8:37	10:27
Cypress Creek	1:16	2:16	3:16	4:06	4:54	5:24	5:44	6:14	6:42	7:14	7:44	8:44	10:34
Pompano Beach	1:23	2:23	3:23	4:13	5:00	5:30	5:50	6:20	6:48	7:20	7:50	8:50	10:40
Deerfield Beach	1:29	2:29	3:29	4:19	5:06	5:36	5:56	6:26	6:54	7:26	7:56	8:56	10:46
Boca Raton	1:38	2:38	3:38	4:28	5:14	5:44	6:04	6:34	7:02	7:34	8:04	9:04	10:54
Delray Beach	1:44	2:44	3:44	4:34	5:19	5:49	6:09	6:39	7:07	7:39	8:09	9:09	10:59
Boynton Beach	1:53	2:53	3:53	4:43	5:28	5:58	6:18	6:48	7:16	7:48	8:18	9:18	11:08
Lake Worth	1:59	2:59	3:59	4:49	5:34	6:04	6:24	6:54	7:22	7:54	8:24	9:24	11:14
West Palm Beach X	2:10	3:10	4:10	5:00	5:45	6:15	6:35	7:05	7:33	8:05	8:35	9:35	11:25
Mangonia Park	2:20	3:20	4:20	5:10	5:55	6:25	6:45	7:15	7:43	8:15	8:45	9:45	11:35

L STOP - Train may depart station as much as five (5) minutes ahead of schedule

Southbound trains board on Track 1 and northbound trains board on Track 2, unless otherwise announced at train station.





Table 3-4 Weekend/Holiday Commuter Rail Operating Schedule

	AM SO	DUTHBO	DUND				PM	SOUTH	BOUND						
Train No.	P661	P663	P665	P667	P669	P671	P673	P675	P677	P679	P681	P683	P685	P687	P689
Mangonia Park	5:50	6:50	7:50	8:50	9:50	10:50	11:50	12:50	1:50	2:50	3:50	4:50	5:50	6:50	9:00
West Palm Beach X	5:58	6:58	7:58	8:58	9:58	10:58	11:58	12:58	1:58	2:58	3:58	4:58	5:58	6:58	9:08
Lake Worth	6:08	7:08	8:08	9:08	10:08	11:08	12:08	1:08	2:08	3:08	4:08	5:08	6:08	7:08	9:18
Boynton Beach	6:14	7:14	8:14	9:14	10:14	11:14	12:14	1:14	2:14	3:14	4:14	5:14	6:14	7:14	9:24
Delray Beach	6:23	7:23	8:23	9:23	10:23	11:23	12:23	1:23	2:23	3:23	4:23	5:23	6:23	7:23	9:33
Boca Raton	6:29	7:29	8:29	9:29	10:29	11:29	12:29	1:29	2:29	3:29	4:29	5:29	6:29	7:29	9:39
Deerfield Beach	6:36	7:36	8:36	9:36	10:36	11:36	12:36	1:36	2:36	3:36	4:36	5:36	6:36	7:36	9:46
Pompano Beach	6:41	7:41	8:41	9:41	10:41	11:41	12:41	1:41	2:41	3:41	4:41	5:41	6:41	7:41	9:51
Cypress Creek	6:48	7:48	8:48	9:48	10:48	11:48	12:48	1:48	2:48	3:48	4:48	5:48	6:48	7:48	9:58
Fort Lauderdale	6:56	7:56	8:56	9:56	10:56	11:56	12:56	1:56	2:56	3:56	4:56	5:56	6:56	7:56	10:06
Fort Lauderdale Airport X	7:03	8:03	9:03	10:03	11:03	12:03	1:03	2:03	3:03	4:03	5:03	6:03	7:03	8:03	10:13
Sheridan Street	7:07	8:07	9:07	10:07	11:07	12:07	1:07	2:07	3:07	4:07	5:07	6:07	7:07	8:07	10:17
Hollywood	7:11	8:11	9:11	10:11	11:11	12:11	1:11	2:11	3:11	4:11	5:11	6:11	7:11	8:11	10:21
Golden Glades	7:20	8:20	9:20	10:20	11:20	12:20	1:20	2:20	3:20	4:20	5:20	6:20	7:20	8:20	10:30
Opa-locka	7:25	8:25	9:25	10:25	11:25	12:25	1:25	2:25	3:25	4:25	5:25	6:25	7:25	8:25	10:35
Metrorail Transfer	7:32	8:32	9:32	10:32	11:32	12:32	1:32	2:32	3:32	4:32	5:32	6:32	7:32	8:32	10:42
Hialeah Market	7:38	8:38	9:38	10:38	11:38	12:38	1:38	2:38	3:38	4:38	5:38	6:38	7:38	8:38	10:48
Miami Airport X	7:50	8:50	9:50	10:50	11:50	12:50	1:50	2:50	3:50	4:50	5:50	6:50	7:50	8:50	11:00

# NORTHBOUND TO MANGONIA PARK - WEEKEND/HOLIDAYS AM/PM

	AM NO	ORTHBO	DUND				PM	NORTH	BOUND	)					
Train No.	P660	P662	P664	P666	P668	P670	P672	P674	P676	P678	P680	P682	P684	P686	P688
Miami Airport X	5:17	6:17	7:17	8:17	9:17	10:17	11:17	12:17	1:17	2:17	3:17	4:17	5:17	6:17	9:42
Hialeah Market	5:20	6:20	7:20	8:20	9:20	10:20	11:20	12:20	1:20	2:20	3:20	4:20	5:20	6:20	9:45
Metrorail Transfer	5:27	6:27	7:27	8:27	9:27	10:27	11:27	12:27	1:27	2:27	3:27	4:27	5:27	6:27	9:52
Opa-locka	5:33	6:33	7:33	8:33	9:33	10:33	11:33	12:33	1:33	2:33	3:33	4:33	5:33	6:33	9:58
Golden Glades	5:39	6:39	7:39	8:39	9:39	10:39	11:39	12:39	1:39	2:39	3:39	4:39	5:39	6:39	10:04
Hollywood	5:49	6:49	7:49	8:49	9:49	10:49	11:49	12:49	1:49	2:49	3:49	4:49	5:49	6:49	10:14
Sheridan Street	5:53	6:53	7:53	8:53	9:53	10:53	11:53	12:53	1:53	2:53	3:53	4:53	5:53	6:53	10:18
Fort Lauderdale Airport X	5:57	6:57	7:57	8:57	9:57	10:57	11:57	12:57	1:57	2:57	3:57	4:57	5:57	6:57	10:22
Fort Lauderdale	6:05	7:05	8:05	9:05	10:05	11:05	12:05	1:05	2:05	3:05	4:05	5:05	6:05	7:05	10:30
Cypress Creek	6:12	7:12	8:12	9:12	10:12	11:12	12:12	1:12	2:12	3:12	4:12	5:12	6:12	7:12	10:37
Pompano Beach	6:19	7:19	8:19	9:19	10:19	11:19	12:19	1:19	2:19	3:19	4:19	5:19	6:19	7:19	10:44
Deerfield Beach	6:25	7:25	8:25	9:25	10:25	11:25	12:25	1:25	2:25	3:25	4:25	5:25	6:25	7:25	10:50
Boca Raton	6:33	7:33	8:33	9:33	10:33	11:33	12:33	1:33	2:33	3:33	4:33	5:33	6:33	7:33	10:58
Delray Beach	6:39	7:39	8:39	9:39	10:39	11:39	12:39	1:39	2:39	3:39	4:39	5:39	6:39	7:39	11:04
Boynton Beach	6:48	7:48	8:48	9:48	10:48	11:48	12:48	1:48	2:48	3:48	4:48	5:48	6:48	7:48	11:13
Lake Worth	6:54	7:54	8:54	9:54	10:54	11:54	12:54	1:54	2:54	3:54	4:54	5:54	6:54	7:54	11:19
West Palm Beach X	7:05	8:05	9:05	10:05	11:05	12:05	1:05	2:05	3:05	4:05	5:05	6:05	7:05	8:05	11:30
Mangonia Park	7:20	8:20	9:20	10:25	11:20	12:20	1:20	2:20	3:20	4:20	5:20	6:20	7:20	8:20	11:45
Mangonia Park	7:20	8:20	9:20	10:25	11:20	12:20	1:20	2:20	3:20	4:20	5:20	6:20	7:20	8:20	11





#### **Station Passenger Activity** 3.1.3.6

Fiscal Year (FY) 18 ridership by Tri-Rail station is depicted in Table 3-5. Miami Airport station had the highest number of both boardings and alightings in the Tri-Rail system. Hialeah Market station had the lowest number of boardings and alightings.

Table 3-5 Commuter Rail Boardings by Station

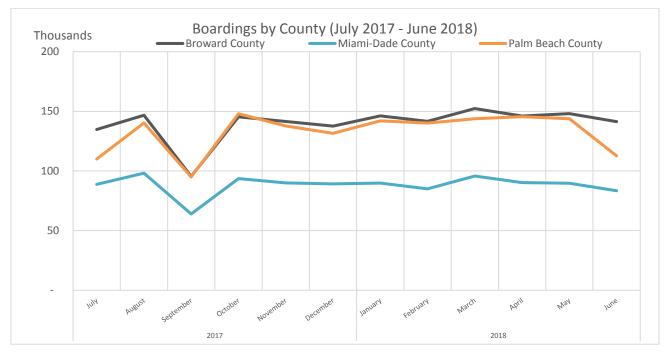
No.	Total Boardings by Stat (Highest to Lowest) - F		No.	Total Alightings by Sta (Highest to Lowest - F	
1	Miami Airport	360,400	1	Miami Airport	406,828
2	Metrorail Transfer	342,917	2	West Palm Beach	391,833
3	West Palm Beach	341,943	3	Boca Raton	332,848
4	Boca Raton	330,611	4	Cypress Creek	312,656
5	FLL at Dania Beach	320,811	5	Metrorail Transfer	306,501
6	Cypress Creek	318,333	6	Lake Worth	289,501
7	Lake Worth	274,783	7	FLL at Dania Beach	288,579
8	Ft. Lauderdale	271,387	8	Ft. Lauderdale	273,097
9	Mangonia Park	235,364	9	Mangonia Park	251,149
10	Hollywood	219,798	10	Pompano Beach	211,891
11	Pompano Beach	219,652	11	Hollywood	206,810
12	Boynton Beach	212,919	12	Boynton Beach	195,726
13	Deerfield Beach	201,067	13	Deerfield Beach	194,489
14	Delray Beach	194,957	14	Delray Beach	189,841
15	Golden Glades	187,428	15	Golden Glades	181,818
16	Sheridan Street	126,331	16	Sheridan Street	125,610
17	Opa-Locka	90,381	17	Opa-Locka	91,901
18	Hialeah Market	76,459	18	Hialeah Market	74,492

- July 2017 has had an increase in ridership (boardings and alightings) across all three counties in comparison to July 2016.
- Miami-Dade County has the lowest number of boardings and alightings out of the three counties.
- Broward County has the highest number of boardings, and Palm Beach County has the highest number of alightings in the system.
- March 2017 is the highest ridership month (boardings and alightings) for all three counties with July 2016 being the lowest.



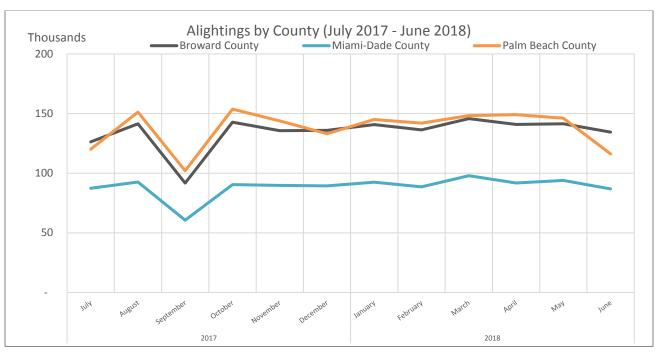


Figure 3-3 Boardings by County



Source: SFRTA

Figure 3-4 Alightings by County







#### On Board Travel Survey Results 3.1.3.7

SFRA conducted an on-board travel survey that sought to assess travel patterns, and socio-economic characteristics of Tri-Rail riders, and measure passenger satisfaction of with Tri-Rail service and facilities. Survey questions covered a range of topics, including specific origin-destination data, ridership behaviors (fare type, frequency of service usage, ingress and egress mode), and socioeconomic questions, including race, income, and household income.

The On-Board Survey was administered over the course of a single day in January 2018. A total of 3,366 responses were collected, which was calculated by the survey team to represent 41 percent of Tri-Rail's ridership on that day. Overall, the survey found that the stations with the most passenger activity were Boca Raton, West Palm Beach, and Cypress Creek. Stations with the largest number of origindestination interrelationships were also identified - Fort Lauderdale at Dania Beach to Miami Airport saw the most trips, followed by Boca Raton to West Palm Beach, and West Palm Beach to Boca Raton.

The survey also developed the profile of a typical Tri-Rail user. Based upon the responses to the survey, the typical rider is a 25-34-year-old Hispanic male who is employed full-time, earns less than \$50,000 per year, and uses Tri-Rail by choice (they had the option to drive to work), and uses Tri-Rail five days a week.

Table 3-6 depicts how Tri-Rail riders access the train stations. The top three stations per mode are featured in red text. Overall, Park-and-Ride and Kiss-and-Ride are the overall most common mode types for accessing the stations. Pompano Beach, Opa-locka, and the Miami Airport station are the most frequently walked to stations, while Mangonia Park, Hollywood, and Miami Airport stations see the greatest rideshare access. Deerfield, Hollywood, and Opa-locka see the most cyclists. The Golden Glades has more Tri-Rail riders begin their trips by other transit modes than any other station in the system; at 29 percent, its transit mode share is more than double the next closest stations, West Palm Beach and Lake Worth, both of which have a 12 percent transit mode share. The Commuter Connector has a 36 percent mode share at the Fort Lauderdale International Airport at Dania Beach station, a fourfold larger mode share than the second highest, Fort Lauderdale.

Table 3-7 summarizes findings from the On-Board about where passengers go after completing their Tri-Rail trip. Work and Home are the most common responses overall for the entire dataset, however other selections depict a more nuanced picture of the network. One of the least common answers, shopping, nevertheless is most frequently selected for the Hollywood Station, with seven percent of all Hollywood passengers selecting this option. Social/Recreational was most commonly selected by Fort Lauderdale passengers, with 10 percent of riders, followed by the Metrorail Transfer and Hialeah stations with seven percent each. 61 percent of FLL passengers, and 49 percent of Miami Airport passengers selected the airport as their destination. Hollywood falls to a distant third place with four percent of passengers selecting that as their choice. Boca Raton saw 38 percent of passengers selecting college/university as their destination. Opa-locka, with 14 percent, and Lake Worth with seven percent rounded out the top three for this final destination selection.





**Table 3-6 Mode of Station Access** 

Station	Walking	Taxi	Rideshare	School Bus	Metrorail	Bike	Transit Bus	Tri-Rail Shuttle/ Commuter Bus	Drove and Parked	Dropped Off	Other
Mangonia Park	7%	2%	15%	0%	0%	2%	5%	1%	32%	35%	0%
West Palm Beach	15%	1%	9%	1%	0%	6%	12%	3%	30%	22%	1%
Lake Worth	9%	2%	11%	2%	0%	8%	12%	3%	27%	25%	0%
Boynton Beach	8%	1%	9%	0%	0%	4%	4%	1%	40%	34%	0%
Delray Beach	8%	4%	10%	1%	0%	3%	6%	0%	30%	37%	1%
Boca Raton	6%	1%	9%	4%	0%	3%	12%	4%	25%	37%	1%
Deerfield Beach	10%	0%	11%	0%	0%	10%	2%	4%	40%	23%	1%
Pompano Beach	16%	3%	3%	1%	0%	6%	11%	0%	34%	27%	0%
Cypress Creek	5%	2%	10%	0%	0%	5%	10%	5%	36%	27%	1%
Ft. Lauderdale	6%	1%	11%	1%	0%	4%	6%	9%	36%	27%	0%
FLL at Dania Beach	5%	2%	7%	0%	0%	2%	7%	36%	30%	11%	1%
Sheridan Street	9%	0%	6%	0%	0%	7%	10%	1%	55%	11%	1%
Hollywood	14%	2%	15%	0%	0%	12%	11%	1%	29%	17%	0%
Golden Glades	9%	4%	13%	1%	0%	1%	29%	1%	20%	21%	1%
Opa-Locka	21%	0%	9%	0%	0%	12%	7%	3%	26%	22%	0%
Metrorail Transfer	10%	0%	9%	1%	36%	3%	11%	3%	13%	14%	1%
Hialeah Market	10%	2%	12%	2%	3%	7%	7%	0%	38%	16%	3%
Miami Airport	18%	1%	14%	0%	11%	1%	9%	2%	22%	11%	11%

Source: On-Board Survey Responses; Responses in red indicate the top three stations for each particular mode.





Table 3-7 Trip Purpose from Tri-Rail by Station

Station	Work	Home	Shopping	Social/ Recreational	Airport	School (K- 12)	College/ University	Other
Mangonia Park	23%	23%	0%	1%	1%	40%	1%	10%
West Palm Beach	40%	17%	1%	5%	3%	23%	5%	6%
Lake Worth	42%	29%	2%	5%	0%	<b>7</b> %	<b>7</b> %	6%
Boynton Beach	50%	33%	4%	6%	2%	0%	0%	4%
Delray Beach	52%	25%	1%	6%	1%	1%	0%	13%
Boca Raton	46%	8%	0%	2%	1%	2%	38%	3%
Deerfield Beach	55%	32%	1%	5%	0%	5%	0%	2%
Pompano Beach	56%	30%	1%	5%	1%	0%	2%	5%
Cypress Creek	68%	18%	1%	4%	1%	1%	2%	4%
Ft. Lauderdale	48%	29%	1%	10%	0%	1%	3%	8%
FLL at Dania Beach	22%	8%	1%	2%	61%	1%	4%	2%
Sheridan Street	70%	19%	2%	6%	0%	0%	0%	4%
Hollywood	40%	34%	<b>7</b> %	4%	4%	0%	1%	9%
Golden Glades	41%	32%	5%	3%	0%	3%	6%	10%
Opa-Locka	44%	19%	2%	5%	0%	2%	14%	14%
Metrorail Transfer	54%	13%	4%	<b>7</b> %	0%	0%	7%	15%
Hialeah Market	67%	14%	2%	<b>7</b> %	0%	2%	2%	5%
Miami Airport	37%	6%	1%	3%	49%	0%	2%	3%

Source: On-Board Survey Responses; Responses in red indicate the top three stations for each particular mode.





#### Park and Ride Inventory and Utilization 3.1.3.8

Table 3-8 depicts the parking occupancy at Tri-Rail stations. The parking inventory was conducted at the beginning of 2018. The stations with the highest observed parking usage by percentage of spaces occupied are: Metrorail Transfer, Delray Beach, and Hollywood stations, each exceeding 90 percent capacity. On the other hand, Cypress Creek (21 percent), Deerfield Beach (35 percent), Pompano Beach (38 percent) and Lake Worth (42 percent) had the lowest occupancy rates.

Sheridan Street possesses the largest capacity, offering 851 parking spaces, followed by Golden Glades with 591, and Pompano Beach with 504. Metrorail Transfer has the smallest lot at 42 parking spaces, followed by Hialeah (79), and Hollywood (113).

Table 3-8 Tri-Rail Parking Occupancy January/February 2018

Tri-Rail Station	Parking Spaces (Count)	Number of Spaces Occupied	Occupancy %	
Mangonia Park	256	172	67	
West Palm Beach	202	180	89	
Lake Worth	301	127	42	
Boynton Beach	314	161	51	
Delray Beach	119	112	94	
Boca Raton	158	122	77	
Deerfield Beach	231	81	35	
Pompano Beach 504		193	38	
Cypress Creek	press Creek 336		21	
Ft. Lauderdale	:. Lauderdale 305		67	
FLL at Dania Beach	443	203	46	
Sheridan Street	neridan Street 851		45	
Hollywood	113	104	92	
Golden Glades	200	170	76	
Opa-locka	116	61	53	
Metrorail Transfer	42	40	95	
Hialeah Market	79	52	66	
Miami Airport	229	122	53	





# 3.1.4 Passenger Rail Fleet

The Tri-Rail Commuter Rail fleet is comprised of 26 locomotives, 50 passenger coaches, and six (6) Diesel Multiple Unit (DMU) Vehicles.

Table 3-9 Tri-Rail Locomotive Fleet

Locomotives In Service						
Number	Туре	Year	Manufacturer			
812	EMD GP49 PH-3	1980	Mid-America Car			
813	EMD GP49 PH-3	1980	Mid-America Car			
814	EMD GP49 PH-3	1980	Mid-America Car			
815	EMD GP49 PH-3	1980	Mid-America Car			
816	EMD GP49 PH-3	1980	Mid-America Car			
817	EMD GP49 PH-3	1980	Mid-America Car			
818	BL 36PH	2013	Brookville			
819	BL 36PH	2013	Brookville			
820	BL 36PH	2013	Brookville			
821	BL 36PH	2013	Brookville			
822	BL 36PH	2013	Brookville			
823	BL 36PH	2013	Brookville			
824	BL 36PH	2013	Brookville			
825	BL 36PH	2013	Brookville			
826	BL 36PH	2013	Brookville			
827	BL 36PH	2013	Brookville			
828	BL 36PH	2013	Brookville			
829	BL 36PH	2013	Brookville			

Locomotives Out of Service						
Number	Туре	Year	Manufacturer			
802	MK F40 PHL	1988	MK (Morrison-Knudsen)			
807	MK F40PHM-2C	1992	MK (Morrison-Knudsen)			
808	MK F40PHM-2C	1992	MK (Morrison-Knudsen)			
809	MK F40PHM-2C	1992	MK (Morrison-Knudsen)			
810	EMD F40PHR	1981	MK (Morrison-Knudsen)			
811	EMD F40PHR	1981	MK (Morrison-Knudsen)			
813	EMD GP49 PH-3	1980	Mid-America Car			
814	EMD GP49 PH-3	1980	Mid-America Car			





#### **Passenger Coaches** 3.1.4.1

SFRTA maintains two types of passenger cars in service: cab cars and coaches. The cab car is used to operate the train in a push mode, controlling the locomotive in the rear of the train. The passenger car fleet is comprised of Bombardier and Hyundai-Rotem vehicles.

Tri-Rail's first bike car was added to the regular fleet in July 2016, to accommodate increasing numbers of passengers boarding the train with bicycles. To achieve this, half the seats were removed from the lower level from 10 passenger coaches. This created space for 14 bicycle racks to be installed onboard the coach. These bicycle cars are useful to meet the increased demand in on-board bicycle facilities.

Table 3-10 Tri-Rail Passenger Coach Fleet

Number	Туре	Year	Manufacturer
1002	UTDC/Bombardier	1987	Bombardier
1003	UTDC/Bombardier	1987	Bombardier
1004	UTDC/Bombardier	1987	Bombardier
1005	UTDC/Bombardier	1987	Bombardier
1006	UTDC/Bombardier	1987	Bombardier
1007	UTDC/Bombardier	1987	Bombardier
1008	UTDC/Bombardier	1987	Bombardier
1010	UTDC/Bombardier	1987	Bombardier
1011	UTDC/Bombardier	1987	Bombardier
1012	UTDC/Bombardier	1987	Bombardier
1013	Bombardier	1990	Bombardier
1014	Bombardier	1990	Bombardier
1015	Bombardier	1990	Bombardier
1101	Hyundai-Rotem	2011	Hyundai-Rotem

Number	Туре	Year	Manufacturer	
1102	Hyundai-Rotem	2011	Hyundai-Rotem	
1103	Hyundai-Rotem	2011	Hyundai-Rotem	
1104	Hyundai-Rotem	2011	Hyundai-Rotem	
1105	Hyundai-Rotem	2011	Hyundai-Rotem	
1106	Hyundai-Rotem	2011	Hyundai-Rotem	
1107	Hyundai-Rotem	2011	Hyundai-Rotem	
1108	Hyundai-Rotem	2011	Hyundai-Rotem	
1109	Hyundai-Rotem	2011	Hyundai-Rotem	
1110	Hyundai-Rotem	2011	Hyundai-Rotem	
1111	Hyundai-Rotem	2011	Hyundai-Rotem	
1112	Hyundai-Rotem	2011	Hyundai-Rotem	
1113	Hyundai-Rotem	2011	Hyundai-Rotem	
1114	Hyundai-Rotem	2011	Hyundai-Rotem	





#### Diesel Multiple Units (DMUs) 3.1.4.2

The FDOT DMUs were manufactured by Colorado Railcar between 2005 and 2006. FDOT's original intention was for the DMUs to be a part of the SunRail commuter rail line in Orlando, however the project changed approach and employed locomotive-hauled coaches, rendering the DMUs surplus from SunRail's perspective. Further, Colorado Railcar has gone out of business. This has left the DMUs with a deficiency in available parts and equipment for repairs and maintenance. Also, the workforce supply to perform such work is unavailable. Lastly, the DMUs have reached the end of their useful life. As such, these cars are now pending retirement.

Table 3-11 Tri-Rail DMU Fleet

Number	Туре	Year
703	DMU	2005
704	DMU	2006
7005	DMU	2006
7006	DMU	2006
7001	DMU/Trailer	2005
7002	DMU/Trailer	2006





# 3.1.5 Tri-Rail Commuter Connector Bus Service

SFRTA operates fourteen (14) commuter bus routes, three (3) in Palm Beach County and eleven (11) in Broward County. This service has become an important first/last mile connection and about 25 percent of Tri-Rail passengers ride the commuter buses. SFRTA continues to identify and evaluate new opportunities to provide commuter bus service, implement service modifications, and form new partnerships to enhance system efficiency.

#### The SFRTA Five-Year Commuter Bus Service and Financial Plan 3.1.5.1

SFRTA is responsible for developing a new Five-Year Commuter Bus Service and Financial Plan annually. It is the product of ongoing planning, monitoring, and internal and external coordination efforts to increase productivity of the Tri-Rail Commuter Bus System.

The FY19-FY23 Plan was approved on April 27, 2018. Proposed changes for FY19 –23 included:

- The Opa-locka South route, which had been removed previously due to lack of funding, will be restored for FY19 - 21 with 50 percent of operating costs funded by FDOT District VI under a Transit Corridor Grant, matched with 25 percent funding by the City of Opa-locka, and 25 percent by SFRTA. The route is expected to resume service in Fall 2018.
- Funding for the Downtown Fort Lauderdale routes (FL-2 and FL-3) has been extended through FY21.
- The South Florida Education Partnership Agreement (SFEC), which provided a commuter bus route to the South Florida Education Center in Davie, will expire in FY20.
- The City of Boca Raton and SFRTA signed an agreement in August 2018 to continue funding an additional bus for the Boca Raton Center route (BR-1), for FY19 – 20.
- Stop or upgraded stop including Americans with Disabilities Act (ADA) improvements), public outreach requirements, and related.







#### Ridership 3.1.5.2

Annual ridership on the Commuter Connector bus service is approximately 1 million passengers, as is depicted in Figure 3.5. In FY13, ridership was over 920,000. Ridership peaked in FY16 at 1.1 million riders. The decrease in ridership between 2016 and 2017 to a substantial degree reflects the loss of the Opa-locka route, which lost funding during that period and was discounted. It had been a high-ridership route.

1,200,000 1,000,000 800,000 600,000 400,000 200,000 0 2013 2014 2015 2016 2017 2018

Figure 3-5 Commuter Connector Bus Ridership (FY 2013 – 2018)





#### **Operating Schedule** 3.1.5.3

Table 3-12 depicts the operating schedules for the Tri-Rail Commuter Connector routes, along with their ridership for FY17 and FY18. SFRTA aligns Commuter Connector routes with Tri-Rail train departures and arrivals to ensure commuters can make the transfers.

Table 3-12 Commuter Connectors Operating Schedule

Tri-Rail Station	Commuter Connector Route	FY17 Ridership	FY18 Ridership	Start Time	End Time	Peak Only Service?	Weekend Service?
West Palm Beach	West Palm Beach Weekday (WPB1)	19,447	22,861	5:35	9:15	No	No
West Palm Beach	West Palm Beach Weekend (WPB1)	6,752	9,330	5:40	8:35	No	Yes
Lake Worth	Lake Worth (LKWI)	24,785	20,161	5:25	6:45	Yes	No
Boca Raton	Boca Raton (BR1)	47,564	38,413	5:50	7:25	Yes	No
Deerfield Beach	Deerfield Beach 1 (DB1)	30,737	22,359	5:20	7:25	Yes	No
Deerfield Beach	Deerfield Beach 2 (DB2)	15,111	13,591	5:30	7:45	Yes	No
Pompano Beach	Pompano Beach (PB1)	24,308	21,591	4:55	7:45	Yes	No
Cypress Creek	Cypress Creek 1 (CC1)	33,197	31,720	5:11	7:20	Yes	No
Cypress Creek	Cypress Creek 2 (CC2)	43,126	44,061	5:11	7:20	Yes	No
Cypress Creek	Cypress Creek 3 (CC3)	29,199	30,136	5:11	7:20	Yes	No
Fort Lauderdale	Fort Lauderdale 1 (FL1)	162,177	166,700	5:15	10:45	No	No
Fort Lauderdale	Fort Lauderdale 2 (FL2)	26,811	30,144	6:05	7:15	No	No
Fort Lauderdale	Fort Lauderdale 3 (FL3) Weekend	51,488	47,717	5:20	11:00	No	Yes
FLL at Dania Beach	FLA-1 Weekday (Airport)	306,317	296,565	4:20	11:05	No	No
FLL at Dania Beach	FLA-1 Weekend (Airport)	77,303	78,493	5:30	10:50	No	Yes
Sheridan Street	Sheridan Street (SSI)	11,207	8,661	6:00	7:10	Yes	No
Opa-locka	Opa-locka South (OPAS)	25,042	n/a	n/a	n/a	n/a	n/a

<sup>\*</sup> The Opa-locka South service was discontinued in October 2016





#### **Station Passenger Activity** 3.1.5.4

The values in Table 3-13 depict the number of boardings per Tri-Rail Commuter Connector route. Ridership is highest on the Fort Lauderdale Airport (FLA-1) Route that connects to the Fort Lauderdale International Airport Tri-Rail station. The second highest ridership route is the Fort Lauderdale 1 (FL1) Route. Other high ridership routes include the Fort Lauderdale Airport weekend (third highest ridership), Fort Lauderdale 3, and the Cypress Creek 2 Route. The Deerfield Beach 2, and the Lake Worth Routes have the lowest ridership of the Commuter Connectors.

Table 3-13 Commuter Connector Boardings by Route 2012-2018

Route	2012	2013	2014	2015	2016	2017	2018
WPB Weekday					13,400	19,447	22,861
WPB Weekend					5,491	6,752	9,330
Lake Worth	18,664	29,758	33,203	31,620	31,400	24,785	20,161
Boca Raton	26,579	28,778	30,757	41,345	57,320	47,564	38,413
Deerfield Beach 1	32,193	27,378	33,169	42,120	41,984	30,737	22,359
Deerfield Beach 2	23,667	21,380	29,998	28,752	26,535	15,111	13,591
Pompano Beach	21,809	24,381	26,378	25,949	29,223	24,308	21,591
Cypress Creek 1	29,718	33,450	38,179	41,824	37,897	33,197	31,720
Cypress Creek 2	52,274	55,028	52,262	51,206	45,966	43,126	44,061
Cypress Creek 3	34,271	36,387	38,420	43,181	43,674	29,199	30,136
FL-1	95,548	117,714	131,292	155,618	179,380	162,177	166,700
FL-2	23,533	26,420	32,738	39,035	36,241	26,811	30,144
FL-3	16,820	25,118	50,787	51,377	52,394	51,488	47,717
FLA-1 Weekday	286,075	302,796	293,254	299,400	303,364	306,317	296,565
FLA-2 Weekend	44,488	42,384	66,255	73,135	72,501	77,303	78,493
SS-1	17,936	15,573	15,858	16,030	16,203	11,207	8,661



# 3.1.6 SFRTA Efforts and Accomplishments Since the 2017 Annual TDP Update

An overview of efforts successfully accomplished by SFRTA over the past fiscal year are provided on the following pages.

#### System and Facilities Improvements 3.1.6.1

On-Time-Performance (OTP) Significantly Improved. In April 2018, SFRTA achieved 96.2 percent OTP, its highest monthly OTP since January 2001, and well above the SFRTA goal of 90 percent. FY 2018 OTP was also improved broadly over FY 2017 OTP. Factors contributing to the FY 2018 improvement include:

- Track improvements and regulatory updates allowed speed restrictions on certain corridor sections to be lifted allowing trains to travel at maximum authorized speeds for conditions.
- Operations efficiencies and improved general fleet conditions implemented via a new services contract contributed to improving response times to corridor issues and mechanical repair turn-around time.

Opa-locka Station Parking Lot Improvements: This project included construction of 44 additional new parking spaces, new sidewalk connections, landscape, lighting and irrigation; new bus circulation and drop-off/pick-up area to increase bus bays, and a new 376-foot canopy over the bus waiting areas.

**Planned Fleet Improvements:** The overhaul of five (5) locomotives was approved and scheduled. Overhauled locomotives are capable of a minimum of 12 years of reliable service, averaging 80,000 miles of service each year, without need of major overhaul. Seat replacement was scheduled and implementation commenced for coach and cab cars.

Railroad-Highway Crossing Construction and Traffic Control Device Installation: Needed gradecrossing and signal improvements on the South Florida Rail Corridor (SFRC) were identified, and scheduled and funded for comprehensive improvements.

SFRTA is responsible for the maintenance of approximately 170 railroad-highway/at-grade crossings along the SFRC. Continuous vehicular traffic through the at-grade crossings causes surface conditions to deteriorate, increasing the risk of damage to vehicles and the SFRC infrastructure. This five-year contract encompasses track, roadway and signals work, and traffic control device installation for railroad-highway crossing construction.

Safety & Security: SFRTA developed a comprehensive safety initiative with strategies intended to improve track safety and to enhance emergency preparedness and response. It encompasses a Trespasser and Suicide Mitigation Program that has the potential to reduce train accidents caused by human factors; in conjunction with that program, the agency planned and is implementing a pilot program using drones to identify trespassers and persons who are a threat to themselves or trains. This initiative has the potential to achieve a 15-minute or less response time within 50 feet of the rail corridor, compared to the current 40-60 minute response time.

Corridor-Wide Inspection of All Pedestrian Bridges: Inspection was conducted to develop a schedule of improvements.



## SECTION 3 - EVALUATION OF EXISTING TRANSIT SERVICES



South Florida Rail Corridor Capital Improvements Plan: SFRTA is pursuing a federal Consolidated Rail Infrastructure and Safety Improvements (CRISI) Grant to assist with improving the SFRC's State of Good Repair (SGR). These improvements are projected to further improve OTP, general corridor resilience and maintenance-of-way conditions.

New Wayfinding Signage and Tri-Rail system line maps: These were developed to incorporate Tri-Rail's new MiamiCentral Station in downtown Miami, on the FEC rail corridor.

#### 3.1.6.2 **New Service and Facilities**

Tri-Rail MiamiCentral Station and Tri-Rail Downtown Miami Link (TRDML): Tri-Rail service into downtown Miami on the FEC rail corridor is positioned to begin revenue service in 2019, pending Federal Railroad Administration (FRA) approval of the Positive Train Control (PTC) safety plan for service on the FEC. A regionally transformational project, the MiamiCentral Station will serve as downtown Miami's local and regional multimodal hub with connections to Brightline's private passenger rail service, Tri-Rail commuter rail service, and Miami-Dade County's Metrobus, Metrorail and Metromover transit service.

SFRTA has desired and planned for decades to expand Tri-Rail service onto the FEC; TRDML fulfils SFRTA's initial goal by establishing SFRTA's first Tri-Rail Coastal Link (TRCL) station, extending service from SFRTA's northernmost station in Palm Beach County on the SFRC to its newest station in Miami-Dade County, on the FEC.

On April 26, 2018, the Miami-Dade Transportation Planning Organization (TPO) unanimously approved Resolution #14-18 endorsing the identification and implementation of demonstration projects that advance elements of the Strategic Miami Area Rapid Transit (SMART) Plan. SMART Plan demonstration project eligibility is categorized as follows: 1) new routes with connectivity to the SMART Plan; 2) new stations with connectivity to the SMART Plan; and 3) new transit facilities with connectivity to the SMART Plan that advance elements of the SMART Plan and increase service to the traveling public. The Midtown/Design District Demonstration Station was identified through this process.

The Midtown/Design District Demonstration Station, proposed to be sited near the intersection of 36th Street and Interstate-195, would be the second Tri-Rail station on the Tri-Rail Downtown Miami Link (TRDML) connection from the South Florida Rail Corridor (SFRC) to the Florida East Coast (FEC) rail corridor into the Miami-Central Station. This project has been recommended for approval by the TPO Transportation and Mobility Committee (May 22, 2018) and Fiscal Priorities Committee (June 4, 2018) and received final approval by the Miami-Dade TPO Governing Board on June 21, 2018.

SFRTA staff is coordinating with the Miami-Dade TPO, Florida Department of Transportation (FDOT) District 4, and Miami-Dade Department of Transportation and Public Works (DTPW) staff on the environmental clearance, cost estimates, and design elements of the project. SFRTA has agreed to lead the environmental analysis and to operation the service.

The Iris/Little River Rail Connection: This rail link between the SFRC and the FEC corridor was completed. This project provides the rail connection between the SFRC and FEC rail corridors enabling Tri-Rail to connect its current service on the SFRC to the new Tri-Rail MiamiCentral Station in downtown Miami





on the FEC rail corridor.

Positive Train Control (PTC): SFRTA is making progress to complete the installation of PTC equipment along the South Florida Rail Corridor (SFRC). SFRTA intends to meet all statutory requirements required for an alternative schedule and sequence as defined in 49 U.S.C. 20157. Full PTC implementation will follow SFRTA's FRA-approved PTC Implementation Plan but will not exceed December 31, 2020 as required by U.S.C. 20157. PTC is a federally required rail safety technology that automatically stops a train before certain types of accidents can occur. PTC prevents: train-to-train collisions; over-speed derailments; incursions into roadway work zones within the right-of-way; and movement of a train trough a rail switch left in the wrong position. PTC required for all commuter rail passenger transportation systems by December 2018. [Reference: U.S. Code Title 49 Subchapter 20157 (49 U.S.C. 20157).]

When SFRTA opens its MiamiCentral Station on the Florida East Coast Rail (FECR) corridor, projected for 2019, Tri-Rail trains will be required to have a PTC system compatible with the host corridor's system. This necessitates SFRTA to dual-equip the Tri-Rail fleet. One on-board system will be used on the SFRC and one that is compatible with FECR.

PTC technology, its installation, operation, and maintenance is intricate, costly and to varying degrees integrates into every function of the agency. The PTC project has also driven the need to replace Tri-Rail's current dispatch system and change its operating rules.

Major Capacity Improvement: Miami River-Miami Intermodal Center (MR MICCI) Capacity **Improvement:** The purpose of this project is to provide additional mainline tracks to the southernmost 1.25 miles of the SFRC corridor from just north of Tri-Rail Hialeah Market Station, Milepost 1035.96, to the Tri-Rail Miami Airport Station, Milepost 1037.4, at the Miami Intermodal Center. This will address a corridor capacity deficiency that impacts travel time and schedule adherence. Without this project, these adverse impacts would be compounded by the addition of Amtrak's anticipated service expansion along this segment and into the Miami Intermodal Center.

In early 2018, SFRTA completed the National Environmental Policy Act (NEPA) phase of this project, securing the required environmental agreements and approvals to advance this project and transfer it to FDOT for final design, right-of-way, and eventual construction. The FTA issued its Finding of No Significant Impact (FONSI), and a Memorandum of Agreement was executed between FTA, the State Historic Preservation Office (SHPO), FDOT and SFRTA, documenting important historic resources mitigation commitments. The SFRTA Project team continues coordination with FDOT to progress to subsequent project phases.

Northwood Crossover Rail Link between the SFRC and FEC Corridor in Palm Beach County: The new Northwood connection is part of three proposed, interrelated and independent rail connections between SFRC and FEC. SFRTA completed track and signal connection construction and integration on Northwood's Phase I in FY 2018; FDOT will complete Phase II construction. This crossover is planned to facilitate a proposed future Tri-Rail expansion north to Jupiter as part of the TRCL overall project, and to increase operational capacity. Estimated completion is for early 2019.







Tri-Rail Boca Raton II, Planning for Proposed New Station: SFRTA completed the Boca Raton II Tri-Rail Station Feasibility Study in October 2016, which concluded that opening a second Tri-Rail station in the City of Boca Raton located near Glades Road and Military Trail is feasible. The study included: a review of possible site locations; operational costs, impacts to existing Tri-Rail services and operations; and a benefit-cost analysis. Throughout the process, SFRTA coordinated with partner agencies, including FDOT, Palm Beach MPO, and the City of Boca Raton.

A Planning Development and Environment (PD&E) study commenced in May 2017 to identify station location alternatives that would meet the project objectives in an environmentally responsible, socially acceptable and cost feasible manner, consistent with public and agency input. In June 2018, the FTA issued a categorical exclusion determination confirming the project has no potential impact to historic resources, thereby concluding the PD&E environmental analysis phase. The project is positioned to move forward into the design phase, with 100 percent design anticipated in Fall 2019. Partial funding has been identified, and SFRTA will identify construction funding for future development. The proposed station is consistent with the following partner plans and initiatives: the City of Boca Raton Multi-Modal Transportation District, and the Palm Beach MPO's 2040 Long Range Transportation Plan (LRTP) Cost Feasible element; and is listed in the FDOT-approved State Rail Plan Investment Element as a Strategic Intermodal System (SIS) priority.





#### Tri-Rail Commuter Connector Bus Service 3.1.6.3

SFRTA operates 14 commuter bus routes, three (3) in Palm Beach County and 11 in Broward County. This service has become an important "first-mile/last mile" and about 25 percent of Tri-Rail passengers ride the commuter buses. SFRTA continues to identify and evaluate new opportunities to provide commuter bus service, implement service modifications, and form new partnerships to enhance system efficiency.

The SFRTA Five-Year Commuter Bus Service and Financial Plan: SFRTA is responsible for developing a new Five-Year Commuter Bus Service and Financial Plan annually. It is the product of ongoing planning, monitoring, and internal and external coordination efforts to increase productivity of the Tri-Rail Commuter Bus System.

The FY 2019 – FY 2023 Plan was approved on April 27, 2018. Proposed changes for FY 2019 – 2023 included:

- The Opa-locka South route, which had been removed previously due to lack of funding, will be restored for FY 2019 - 2021 with 50 percent of operating costs funded by FDOT District VI under a Transit Corridor Grant, matched with 25 percent funding by the City of Opa-locka, and 25 percent by SFRTA. The route will resume service on September 1, 2018.
- Funding for the Downtown Fort Lauderdale routes (FL-2 and FL-3) has been extended through FY 2021.
- The South Florida Education Partnership Agreement (SFEC), which provided a commuter bus route to the South Florida Education Center in Davie, will expire in FY 2020.
- The City of Boca Raton and SFRTA signed an agreement in August 2018 to continue funding an additional bus for the Boca Raton Center route (BR-1), for FY 2019 - 2021.

The Commuter Bus Comprehensive Analysis and Operations Plan: The SFRTA Commuter Bus service has grown in usage, service demand, and service cost. The purpose of this study was to conduct a comprehensive evaluation of SFRTA commuter bus operations and policies to ensure the bus system is operating in the most efficient and customer friendly manner. Conducted between June 2017 and June 2018, it evaluated all policies, operations, and compliance with federal, state, and local laws and regulations; completed a comprehensive Commuter Bus operational analysis and recommendations; developed a time point/boarding-alighting location inventory, a Commuter Bus service operations plan, and an implementation plan. The study analyzed the merits of a wave-and-ride service as compared to a fixed-stop service to determine which would better serve Tri-Rail riders.

Final recommendations, an operations plan, and implementation plan were completed in June 2018, and the project will be presented to the SFRTA Board at its September 2018 meeting. The analysis included the following:

Identification of policies, operational requirements and/or regulatory areas where improvements could be made in service delivery, customer service, efficiency, service standards, and/or regulatory; preparation of a comprehensive report of existing SFRTA commuter bus operations with initial recommendations.



## ECTION 3 - EVALUATION OF EXISTING TRANSIT SERVICES



- Recommendations, based on the analysis and findings, for time point/boarding alighting locations as well as improvements needed to ensure compliance, together with corresponding planning level cost estimates.
- A Commuter Bus Service Operations Plan with detailed, comprehensive guidance and recommendations on: how SFRTA operates its commuter bus service; evaluates new and existing routes; service standards; starts, stops and/or modifies routes; public notification requirements; evaluates efficiency of routes; and meets applicable federal, state and local laws and guidelines.
- An Implementation Plan and schedule for the study recommendations, capital cost estimates for time point/boarding-alighting location improvements (basic stop, enhanced stop or upgraded stop including Americans with Disabilities Act (ADA) improvements), public outreach requirements, and related.

Commuter Bus Trend Analysis: This report presents the SFRTA Tri-Rail ridership trend by county and station.

SFRTA Special Promotion Bus Service, Spring Training Special to Ballpark of the Palm Beaches: Weekends, from February 24 – March 25, 2018, Tri-Rail provided this 10-minute free dedicated shuttle bus connection from the Mangonia Park Station to and from the Ballpark of the Palm Beach, providing a springtime "stay and play" amenity for Tri-Rail riders.

# Commuter Bus Customer Survey

Between March 14, 2018 – March 22, 2018, the SFRTA Planning and Capital Development Department conducted an on-board commuter bus transit survey. The survey included questions about trip characteristics, transit amenities, and customer satisfaction. 240 surveys were received during the surveying period. The full survey findings are presented in detail in the SFRTA Commuter Bus Survey Summary Report, and is included in the Appendices.

The survey was conducted by the SFRTA Planning and Capital Development staff. Surveys were administered as on-board intercept surveys only. Surveyors boarded the buses and approached riders with surveys and pencils. A total of 240 surveys were received during the surveying period. The survey included questions about trip characteristics, transit amenities, and customer satisfaction. Detailed findings and charts from the survey are presented in the survey report.

#### 3.1.6.4 Transit Oriented Development (TOD) Planning:

SFRTA TOD Policy & Outreach: SFRTA staff conducted outreach to local governments and transportation planning agencies that have Tri-Rail Stations located on the SFRC, to introduce the SFRTA TOD Policy and discuss the agency's interest in advancing TOD, and to develop an ongoing dialog and information exchange of TOD initiatives in the region. Following the outreach meeting series, SFRTA reconvened with those local governments and agencies in a TOD Policy Regional Debrief forum to report on and discuss the range of TOD initiatives and developments undertaken within the region to advance local and regional TOD.



FTA Pilot Project Grant for TOD: Planning activities along the FEC corridor: SFRTA and the region's Regional Planning Councils conducted TOD station-area planning activities around potential station areas located on the TRCL. This work is funded through an FTA TOD Pilot Program planning grant, which provided funding for TOD planning activities that include design charrettes and workshops to develop plans and land development regulations, as well as studies for station-area Housing Equity, Infrastructure Capacity, Bicycle/Pedestrian Access Plans, and a TOD Business Fund approach.

# 3.1.7 Industry Involvement

SFRTA remains a strong participant and contributor with transportation industry organizations and stakeholders on national, regional and local levels. An overview of SFRTA's efforts within the industry is provided.

SFRTA participates as a partner/sponsor/member of relevant groups in the transportation industry, including the Urban Land Institute, the Conference of Minority Transportation Officials (COMTO), the Women's Transportation Seminar (WTS) organization, as well as with regional transportation summits and related collaborative events.

# American Public Transportation Association

The American Public Transportation Association (APTA) is the leading force in the advancement of public transportation in America. As members of APTA for more than two decades, SFRTA staff has been especially active in the areas of governance, legislative affairs, PTC, planning, and marketing and communications.

# **Conference of Minority Transportation Officials**

SFRTA participates as a partner/sponsor/member of relevant groups in the transportation industry, including the Urban Land Institute, the Conference of Minority Transportation Officials (COMTO), the Women's Transportation Seminar (WTS) organization, as well as with regional transportation summits and related collaborative events.

#### Rail~Volution Conference

Rail~Volution is a national organization that focuses on building livable communities through activities that coordinate land use and transit. SFRTA is a Partner Organization and participates on the National Steering Committee responsible for planning and organizing the annual Rail~Volution conference.

#### 3.1.7.1 Industry Awards

The SFRTA continues to receive statewide and national recognition related to business practices and agency initiatives with multiple departments scoring honors and awards. During FY2018, the SFRTA received the following awards.

# Procurement Department

National Procurement Institute-Achievement of Excellence in Procurement





Florida Association of Public Procurement- Award of Excellence in Public Procurement

# Community Outreach / Marketing

- First Place APTA AdWheel Award for "Best Marketing and Communications to Increase Ridership or Sales" for the 2017 promotion of the Ultra Music Festival.
- First Place FPTA Marketing Award for Print Advertising Collateral for "Happy Travelers" campaign
- First Place FPTA Marketing Award for Special Evens for "Ride & Play"

# Finance Department

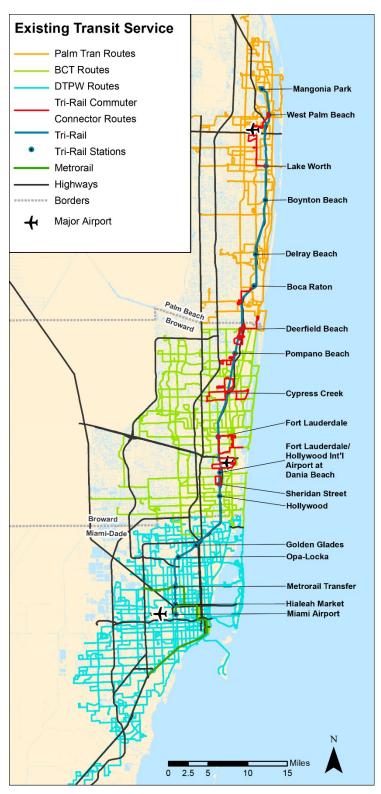
- Government Finance Officers Association Certificate of Achievement for Excellence in Financial Reporting for the Fiscal Year Ended 2017
- Government Finance Officers Association Distinguished Budget Presentation Award for the Fiscal Year beginning July 1, 2017





# 3.1.8 Existing Transportation Services - Other Providers

Figure 3-6 Existing South Florida Transit Services



The existing public transit services within the Tri-Rail service area operate in Miami-Dade, Broward and Palm Beach Counties.

The three major local transit operators that connect to the Tri-Rail system are operated by Palm Tran in Palm Beach County, Broward County Transit (BCT) in Broward County, and the Miami-Dade Department of Transportation and Public Works (DTPW) in Miami-Dade County, as depicted in Figure Existing South Florida ServicesFigure 3-6. Individual municipalities operate municipal circulators which connect to the Tri-rail system at numerous stations as well.

These services are individually explored in this section to provide a more complete picture of the multimodal service offered by local connecting transit agencies.





#### Palm Tran 3.1.8.1

Palm Tran provides both fixed-route bus service and on-demand paratransit service in Palm Beach County. Fixed-route bus service includes 34 routes as well as the BOLT Limited-stop express service, with numerous major transfer locations. Palm Tran Connection is Palm Beach County's shared-ride, door-todoor paratransit service for disabled residents and visitors.

# Palm Tran Fixed-Route Service

Palm Tran's route structure features three (3) main "trunk" lines (Routes 1, 2, and 3) supported by major east-west corridors connecting western suburbs to a consecutive string of coastal downtowns. Major east-west routes include Routes 31, 43, 46, 62, and 91, with limited-stop service along route 40 serving western communities along Lake Okeechobee such as Belle Glade. The main hub for connections is at the West Palm Beach Intermodal Center, with other major transfer locations at Wellington Mall, West Palm Beach VA Medical Center, Boca Town Center Mall, Gardens Mall, and six Tri-Rail stations in the County.

Palm Tran provides connections to Broward County Transit (BCT) at Camino Real and Sandalfoot Plaza, as well as serving a northeast section of Broward County along Hillsboro Boulevard in Deerfield Beach where it provides connections with BCT Routes 10 and 48. Transfers to its northern neighbor system, Marty/Martin County Transit, are available at Gardens Mall in Palm Beach Gardens. During weekday morning and afternoon peak times, Palm Tran offers the BOLT limited stop service along route 1, traveling north to the Intermodal Transit Center and south to Camino Real. The BOLT charges standard fares, and has only 12 stops northbound and 12 stops southbound.

# Palm Tran Connection Paratransit Service

Palm Tran Connection provides paratransit in Palm Beach County under three programs: The Americans with Disabilities Act (ADA) Program, the Transportation Disadvantaged (TD) Program, and the Division of Senior Services (DOSS).

The ADA Program serves a core area bounded by Florida's Turnpike to the west, Donald Ross Road to the north, and the Broward County line to the south, as well as any location within 3/4-mile of a bus route. The TD provides service outside of the ADA core area, serving the entire county during the same hours and days as Palm Tran fixed-route bus service. TD service is sponsored by the State of Florida Transportation Disadvantaged Trust Fund.

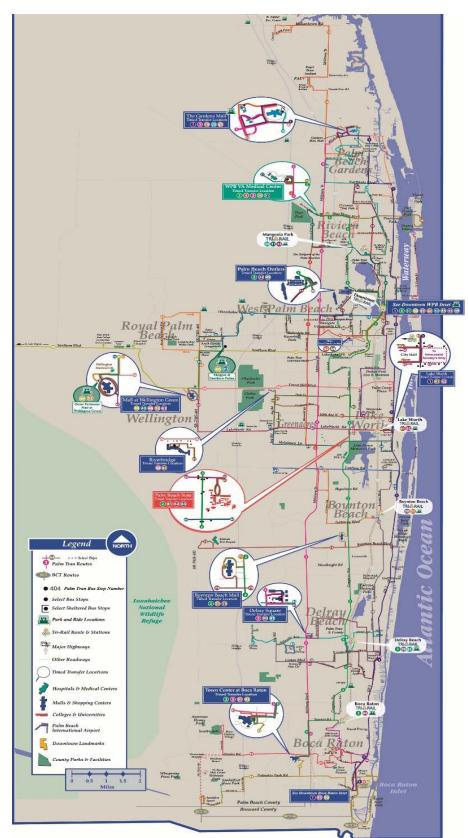
The Division of Senior Services (DOSS) Program serves individuals age 60 and older, per the eligibility guidelines established by the Older Americans Act. Service is available Monday through Friday from 8am to 5pm. Free trips are provided at specified times to approved senior centers and meal sites, with other trips being provided at a one-way fare of \$3.50 through the ADA program.

Palm Tran Connection provides a complete service including eligibility validation, trip scheduling, preparation of vehicle manifests, customer relations, and performance monitoring of transportation providers First Transit, Maruti, and MV Transportation. In most cases, Palm Tran Connection fares are \$3.50 per one-way trip, cash-only. In FY 2017 Palm Tran Connection provided more than 883,000 trips. This represents a 1.3 percent decline from FY 2016





Figure 3-7 Palm Tran Official Service Map







### **Broward County Transit** 3.1.8.2

Broward County Transit (BCT) operates a robust traditional fixed-route bus service as well as nine (9) limited stop express bus routes. BCT also coordinates a community bus service and provides paratransit service. In total, BCT transported passengers for 163.6 million miles on 33.4 million trips in 2016 according to the National Transit Database 2016 Agency Profile.

### **BCT Fixed-Route Service**

BCT buses provide service to 410 of the 1,200 square miles of Broward County along 35 routes, using a total of 273 buses. The BCT system provides major connections at seven (7) Tri-Rail stations and four (4) transfer terminals: Broward Central Terminal (downtown Fort Lauderdale), West Regional Terminal (Plantation), Lauderhill Mall Transfer Facility (Lauderhill) and Northeast Transit Center (Pompano Beach).

One-way standard fare costs \$2.00, day passes cost \$5.00, weekly passes cost \$20.00, and monthly passes cost \$70.00. Reduced prices are available for qualifying riders (Seniors, Youth, Disabled / Medicare).

There are two primary express bus services, the Breeze and the 95/595-Express. The Breeze serves limited stops at major intersections only, with headways of 20 minutes all day on State Road 7/US 441 and US 1, and 30 minutes during morning and afternoon peak travel hours on University Drive. The 95/595-Express travels along the managed lane network on I-95, I-595, and/or Florida's Turnpike to downtown Miami on weekdays during morning and afternoon peak travel hours. Nine free park-andride sites are available for commuters seeking to utilize these express bus services. A one-way express bus fare costs \$2.65, and a 31-day unlimited pass costs \$95. Reduced prices are available for qualifying riders (Seniors, Youth, Disabled / Medicare).

### Community Bus Service

A Community Bus acts as a first/last mile link which travels through residential areas to extend the reach of traditional fixed-route transit service. BCT is the major coordinator and funding source for a Community Bus System which operates 47 routes in 19 municipalities with 78 vehicles. All Community Buses are wheelchair accessible and equipped with bike racks. Most Community Bus services are free, with only five municipalities charging a fare.

### **TOPS! Paratransit Service**

The free paratransit service offered in Broward County is named "TOPS!", short for Transportation Options. This service is for persons with physical, cognitive, emotional, visual, or other disabilities that functionally prevent them from using BCT fixed-route bus service. Service is available during BCT's fixed-route service time, and trips must be scheduled in advance through an automated phone system. Each TOPS! trip costs \$3.50, but any eligible TOPS! rider may ride BCT fixed-route buses for free. Travel time is roughly similar to a fixed-route bus making the same trip, including transfers and walking time.





Figure 3-8 Broward County Transit Official Service Map







### Miami-Dade County Dept. of Transportation and Public Works (DTPW) 3.1.8.3

DTPW operates a multi-modal transit system that integrates four (4) different modes: bus (Metrobus), heavy rail (Metrorail), automated people-mover (Metromover), and demand-response service (Special Transportation Services or STS). In 2017 there were an average of 285,000 weekday boardings on the DTPW system, the 14th largest transit system in the United States by unlinked trips and miles, serving an area of 306 square miles and a population of 2.7 million.

### **Metrobus Fixed-Route Service**

Metrobus operates a fleet of 781 buses along DTPW's 79 routes, with 16 additional contracted routes served by 43 buses. Metrobus operates seven (7) days a week, 24 hours per day. DTPW's Metrobus service includes 55 local routes and 16 circulators, as well as three (3) types of enhanced bus service: limited-stop, express, and BRT (Bus Rapid Transit).

Limited-stop service only serves designated high ridership bus stops along a route. MAX routes serve stops at major transfer points or approximately every one-half mile to one mile along a route.

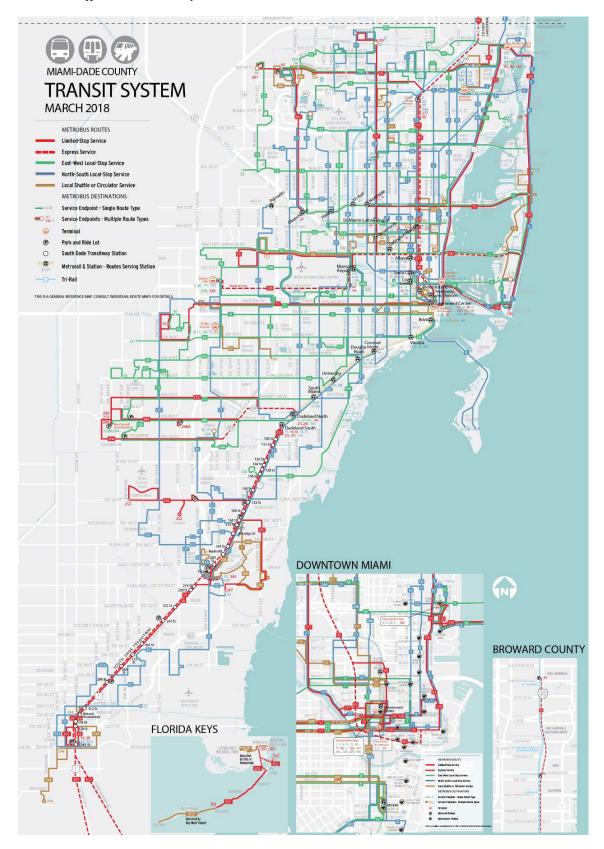
Express routes connect distant hubs such as park-and-ride lots or shopping centers with direct service to designated activity centers such as the Miami Central Business District (CBD). These routes usually operate along a freeway or major arterial road, such as the 95-Express which operates within the express lanes of I-95 and I-595.

Bus Rapid Transit is the idea of bringing rail-style service to specialized buses operating on enhanced or independent roadways. Miami's first BRT service was initiated in June 2016, when the former "South Miami-Dade Busway" was rebranded as the "South Dade Transitway." The Transitway is a 19.8-mile two-lane, at-grade dedicated BRT corridor for DTPW bus service which runs parallel to U.S. 1 from SW 344th Street in South Miami-Dade to the Dadeland South Metrorail Station at approximately SW 92nd Street. Full size and articulated buses serve 30 stations and six park-and-ride lots along the Transitway.





Figure 3-9 DTPW Official Service Map







### Metrorail

Figure 3-10 Metrorail System Map



Metrorail is Miami-Dade County's 24.8-mile, 23 stop elevated heavy rail line. The system has transfer points to Tri-Rail commuter rail service, DTPW Metromover system, and the South Miami-Dade Transitway. DTPW is currently in the process of updating the Metrorail fleet, with initial vehicles being delivered in 2017 and deliveries expected to continue on an ongoing basis for multiple years.

Daily passenger service starts at approximately 5:00 AM from the terminal stations, with the final trips arriving between midnight and 1:00 AM.

The legacy Green Line runs from Palmetto Station to Dadeland South Station, with the Orange Line spur servicing the Miami Intermodal Center (MIC) at Miami International Airport.

The Orange Line provides direct service between the MIC and Dadeland South Station every 15 minutes during peak hours. The Green Line operates at 15-minute headways during the morning and afternoon peak travel times between the Palmetto Station and Dadeland South Station. Both lines provide premium transit service with a combined headway of 7.5 to 8 minutes during the peak morning and afternoon travel times from Dadeland South Station to the Earlington Heights Station.





### Metromover

Figure 3-11 Metromover System Map



The Metromover is DTPW's elevated Automated People Mover (APM) service in downtown Miami-Dade, operating seven (7) days a week between 5:00 a.m. and 12:00 a.m. with service frequency as often as every 90 seconds during peak periods in the central business district. The Metromover serves 21 stations arranged along a central loop with stations shared by two additional loops which branch to the north and south.

- Central Inner/Downtown Loop Serving Government Center, the Knight Center, Miami Dade College, and Bayfront Park
- North Omni Loop Serving the Inner Loop as well as Museum Park and the Adrienne Arsht Center
- South Brickell Loop Serving the Inner Loop as well as the area south of the Miami River

Figure 3-11 illustrates the DTPW Metromover system map as of December 2017.

### STS Paratransit Service

Special Transportation Services (STS) is the shared-ride, door-to-door paratransit service offered in Miami-Dade County for certified individuals with disabilities. STS operates 24 hours a day, seven (7) days a week, and is privately contracted through Transportation America (TA). As of December 2017, a total of 31,224 eligible clients are enrolled in the STS program, served by 386 vehicles.





### Other Service Providers 3.1.8.4

Transportation services in the South Florida region are offered by many organizations supplementing county transit departments. Table 3-14 lists transportation disadvantaged (TD) service providers. Table 3-15 lists intercity transportation service providers and the stations they currently operate. Table 3-16 lists charter bus companies with significant operations in South Florida, and Table 3-17 lists licensed taxi service companies by county.

# Table 3-14 Transportation Disadvantaged Service Providers

# **Miami-Dade County**

- Association for the Development of the Exceptional
- AMF Church
- •Allapattah Community Action, Inc.
- •Association for Retarded Citizens, South Florida, Inc. (Adult and Children Programs)
- •Better Way of Miami, Inc.
- •Boringuen Health Care Center, Inc.
- •Camillus House, Inc.
- •Chapman Partnership
- •Citrus Health Network. Inc.
- CMB Visions
- •Coalition of Florida Farmworker Organizations, Inc.
- •Community Action Agency Foundation
- Community Habilitation Center, Inc.
- •Concept Health Systems, Inc. (aka Concept House)
- •Dave and Mary Alper Jewish Community Center
- •DEEDCO Gardens, Inc.
- •Douglas Gardens Community Mental Health Center of Miami Beach, Inc.
- •Empowering 4 Tomorrow, Inc.
- •Easter Seals South Florida, Inc.
- •Family Resource Center of South Florida, Inc.
- •Fellowship House (Psychosocial Rehabilitation Center, Inc.)
- •Florida PACE Centers. Inc.
- •Friendship Circle
- •Fresh Start of Miami-Dade, Inc.
- •Goodwill Industries of South Florida, Inc
- Hialeah Housing Authority
- •Hialeah-Miami Springs Rotary Charitable Foundation, Inc./City of Miami Springs
- •Jesse Trice Community Health Center, Inc.

- •Jewish Community Health Center, Inc.
- Kiilvs Kids
- •Little Havana Activities and Nutrition Center of Dade County, Inc.
- •MACtown, Inc.
- •Maison de St. Joseph, Inc.
- •Miami Beach Community Health Center
- •Miami Behavioral Health Center
- •Miami Bridge Youth and Family Services, Inc.
- •Miami Cerebral Palsy Residential Services, Inc. (aka One Hope United)
- •Miami Jewish Health Systems, Inc.
- •Miami Lighthouse for the Blind (aka Florida Association of Workers for the Blind, Inc.)
- •Michael-Ann Russell Jewish Community Center
- •North Miami Foundation for Senior Citizens' Services. Inc.
- •Plaza Health Network (aka Hebrew Homes Health Network)
- •Regis House, Inc.
- •Southwest Social Services Program, Inc.
- •Spectrum Programs, Inc.
- Sunrise Community, Inc.
- •Sunrise Opportunities, Inc.
- •The Historic Mount Zion Missionary Baptist Church
- •The Learning Experience School
- •The Village South, Inc.
- •United Cerebral Palsy Association of Miami, Inc. (Hope Center)
- •University of Miami, Mailman Center for Child Development (Debbie School) (aka Debbie Institute)
- •University of Miami, Perinatal Care



**ACT Providers & Coordination Contractors Non-Reimbursed** 



# **Broward County Coordination Contractors Non-Reimbursed Transportation:**

- Agency for Community Treatment Services
- Archways
- •BARC Housing
- •Broward Children's Center
- •Cerebral Palsy Adult Home
- •City of Lauderhill
- •City of North Lauderdale
- •City of Pembroke Pines, SWFP
- •City of Tamarac Senior Center
- •Douglas Gardens North
- •Gulf Coast Jewish Family and Community Services Center
- •Henderson Behavioral Health
- Sunrise Community
- Woodhouse

# **TOPS! Transportation Providers:**

- •First Transit
- •Transportation America

# **Transportation:**

- ARC Broward
- •Ann Storck Center
- •City of Deerfield Beach, NEFP
- •City of Margate, NWFP
- •City of Miramar, MSSC
- •Lucanus Development Center
- •United Cerebral Palsy of Broward County / United **Community Options**

### **Palm Beach County**

- •MV Transportation, Inc.
- •First Transit, Inc.
- •Maruti Fleet & Management, LLC
- •Federation Transportation
- Seagull Industries

Source: Miami-Dade County, Broward County, and Palm Beach County Transportation Disadvantaged Plans

### Brightline 3.1.8.5

The Brightline is a new private inter-city express rail service operated by All Aboard Florida, a wholly owned subsidiary of Florida East Coast Industries (FECI). The Brightline currently operates between Miami, Fort Lauderdale, and West Palm Beach with a planned extension to the Orlando International Airport Intermodal Terminal, which is currently under construction. Service began in January 2018.

Table 3-15 Intercity Transportation Service Providers and Stations

Greyhoun	d Stations	Amtrak Stations	Brightline Stations
Belle Glade	Hollywood	West Palm Beach	Downtown West Palm Beach
Jupiter	North Miami Beach	Delray beach	Downtown Fort Lauderdale
West Palm Beach	Miami	Deerfield Beach	Downtown Miami
Boynton Beach	Miami International Airport	Fort Lauderdale	
Boca Raton		Hollywood	
Fort Lauderdale		Miami	

Source: Greyhound.com, Amtrak.com, Gobrightline.com





# **Table 3-16 Charter Bus Companies**

Charter Bus Companies							
US Coachways	USA Bus Charter	Premier Bus Charters, Inc	Davis Tours				
Academy	Miami Coach & Tours	Unique Charters	Gold Coach				
Gogo Charters	Travel by Bus! LLC	Southern Bus Lines	Palm Beach Tours and Transportation				
Florida Charter Bus Company	FloridaTours.com	Ace Tours	Bus One LLC				
MCA Transportation	Florida Sunshine Shuttle	Perugini Transportation Services	Hector Tours				





# Table 3-17 Taxi Service Companies

Miami-Dad	e County	Broward County	Palm Beach County *
AAA Taxi	Miami Dade Taxi	A.S.A.P	A & A Admiral Airport Limousine & Taxi Service, Inc
Airport Taxi	Miami Springs Taxi	Advance United Taxi	A1A Tri-State Taxi
American Taxi	Ocean Taxicab, LLC	Amazing Taxi	AAA Palm Beach Taxi, Inc.
Best Yellow Taxi Service	Peace & Love Taxi	Ambassador Taxi Service	Aaron's Taxi Cab
Central Cab	Rickenbacker Taxi	American Taxi Cab Corp	All Rides Taxi MAS Inc.
Century Cab	Soho Cab.com, Inc	Aunaka Express Taxi	Ara Limousine & Taxi LLC
Checker Cab, Inc.	South Beach Taxi	Broward Airport Taxi	Besley's Taxi Services & More, LLC
Coral Cab	South Dade Airport Taxi	D.M. Taxi	Center Yellow Taxi, Inc.
Countywide Taxi, Inc.	Springs Cab	Dial A Cab	Colombia's Taxi, Inc.
Crandon Taxi of Key Biscayne	Sunny Isles Tropical Taxi	Excelsior	Discover Taxi, LLC
Crown Taxi, Inc.	Super Nice Cab Corp. d/b/a Transportation America	Express Taxi of Broward	East Coast Taxi LLC
Deco Taxi	Super Yellow Cab	Friendly Checker	Express Taxi & Limousine, Inc.
Diamond Cab Radio Services, Inc.	Taxi Cruise, Inc	Globe Taxi	Florida Yellow Taxi LLC
Doral Taxi	Taxi Miami	Green Taxi	Global Taxi. LLC
Eastern Taxi	Taxi System Airport	Intercity Taxi	Guatemex Taxi, LLC
Flamingo Taxi	Taxi Yellow Cab, Inc	Kazwel Taxi	Hello Yellow Taxi
Florida Gypsy Cab, LLC	Taxicab App	Lauderdale Taxi	Hope Taxi and Limo, Inc.
Hikeit, LLC	Transportation Sunshine	NONO Super Cab	Jesus Taxi
Miami-Dade County		Broward County	Palm Beach County *
Homestead Yellow Taxi	USA Taxi, Inc.	Prestige Cab	Jose's Taxi Service LLC
Hurricane Taxi	Yellow Cab	Public Service	Lucca Taxi Transportation, LLC
Kendall Yellow Taxi		Real Alliance	Maria's Taxi Services
Key Biscayne Taxi and Limo		Taxi To Go	Metro Taxi of Florida, LLC
Metro Taxi		USA Executive	N3 Triumph Taxi
Miami Beach Taxi, Inc		Yellow Cab	Paizano Taxi Corp.

Source: Miamidade.gov, Broward.org, Discover.pbcgov.org



<sup>\*</sup> A search of Licensed Vehicle for Hire Companies on discover.pbcgov.org returned 583 results, a limited selection of which is listed here



# **Trend Analysis**

This trend analysis provides an overview of various performance metrics for SFRTA's transit operations. In addition to SFRTA's commuter rail service, this analysis assesses the agency's commuter shuttle bus service otherwise known as the Commuter Connector.

# 3.2.1 Introduction

A five-year trend analysis of key transit operator performance measures was conducted to examine Tri-Rail's commuter rail and commuter bus services. This analysis relies on SFRTA's National Transit Database (NTD) data for the period between 2012 and 2016, which is the latest year that data is most currently available. Three (3) performance measure categories are evaluated in this analysis:

- General Performance Indicators the quantity of service supply, passenger and fare generation, and resource input
- Effectiveness Measures the extent to which the service is effectively provided
- Efficiency Measures the extent to which cost efficiency is achieved

Table 3-18 lists the measures used in the performance trend analysis conducted for Tri-Rail.

Table 3-18 Commuter Rail Performance Review Measures

Commuter Rai	Commuter Rail Performance Evaluation Indicators and Measures								
General Performance Indicators	Effectiveness Measures	Efficiency Measures							
Passenger Trips	Vehicle Miles per Capita	Operating Expenses per Capita							
Passenger Miles	Passenger Trips per Capita	Operating Expenses per Passenger Trip							
Vehicle Miles	Passenger Trips per Revenue Mile	Operating Expenses per Passenger Mile							
Revenue Miles	Passenger Trips per Vehicle Hour	Operating Expenses per Revenue Mile							
Vehicle Hours	Revenue Miles between Incidents	Farebox Recovery Ratio							
Route Miles	Revenue Mileage between Road Calls	Revenue Miles per Vehicle Mile							
Operating Expenses		Revenue Miles per Vehicle							
Capital Expenses		Revenue hours per employee							
Operating Revenues		Passenger Trips per Employee							
Total Employees		Vehicle Miles per Gallon							
Vehicles Available for Maximum Service		Average Fare							
Fuel Consumption									





# 3.2.2 Commuter Rail Trend Analysis

### 3.2.2.1 General Performance Indicators (GPI)

General Performance Indicators (GPIs) are used to gauge SFRTA's overall operating system performance. Table 3-19 depicts summaries of various GPI measures. A comprehensive review of GPIs is available in the Appendix.

Operating expenses have increased significantly, from over \$55 million in 2012 to nearly \$90 million in 2016 – an increase of 62 percent. This increase is attributable to the fact that on March 29, 2015, SFRTA began providing SFRC dispatch and Maintenance of Way (MOW) on the SFRC. MOW service costs and revenues support all users of the SFRC corridor, including CSXT freight movements as well as Amtrak. Including these additional MOW costs in the SFRTA farebox calculation skews SFRTA's recovery ratio downward. To allow a meaningful year-to-year comparisons, SFRTA prepares a calculation to show the ratio with the additional MOW costs, and one without the additional MOW costs.

- Passenger trips increased between 2012 and 2016, reaching a peak in 2014 of 4.4 million riders per year. In 2016, 4.2 million riders took Tri-Rail, a 6 percent increase from 2011.
- Passenger miles grew slightly from 2012 to 2016, increasing 2 percent.
- Vehicle miles, revenue miles, and revenue hours have increased in concert with one another, growing between 21 and 26 percent.
- Route Miles have remained unchanged (142). This number will increase once service to Downtown Miami commences in Fiscal Year 2019.
- Operating expenses have increased significantly, from over \$55 million to nearly \$90 million between 2012 and 2016 – an increase of 62 percent.
- SFRTA's available fleet for maximum service increased from 50 vehicles to 82, an increase of 82 percent.

Table 3-19 General Performance Indicators

Performance Indicators	2012	2013	2014	2015	2016	% Change (2012-2016)
Passenger Trips	4,005,967	4,201,040	4,400,977	4,292,705	4,241,486	6%
Passenger Miles	115,414,171	116,122,404	119,670,196	118,049,114	117,303,700	2%
Vehicle Miles	3,065,000	3,258,002	3,519,025	3,608,199	3,708,779	21%
Revenue Miles	2,944,042	3,164,457	3,422,858	3,505,483	3,595,531	22%
Vehicle Hours	110,074	115,695	128,853	132,465	138,923	26%
Route Miles	142	142	142	142	142	0%
Operating Expenses	\$55,588,137	\$58,051,892	\$64,520,103	\$76,373,773	\$89,987,616	62%
Capital Expenses	\$25,131,466	\$25,863,200	\$28,794,171	\$34,108,844	\$71,142,799	183%
Operating Revenues	n/a	n/a	n/a	n/a	n/a	n/a
Total Employees	n/a	n/a	n/a	n/a	n/a	n/a
Vehicles Available for Max. Service	50	50	82	82	82	64%
Fuel Consumption	2,597,728	2,699,567	n/a	3,162,496	3,371,055	30%





### Effectiveness Measures 3.2.2.2

Effectiveness measures evaluate how effective SFRTA's services are. Effectiveness measures are evaluated under two general categories – service consumption (how many trips per capita, per revenue mile and revenue hour), and quality of service (number of system failures, and revenue miles between road calls). A comprehensive review of Effectiveness Measures is available in the Appendix.

A summary of Effectiveness Measures is presented in Table 3-20.

- Vehicle miles per capita increased from 0.56 to 0.67, a 21 percent increase.
- Passenger trips per capita increased 5.9 percent from 0.73 to 0.77.
- Passenger trips per revenue mile decreased slightly from 1.36 to 1.18, a 13.3 drop.
- Passenger trips per vehicle hour reduced from 36 to 30.5, a drop of 16.1 percent.
- Revenue miles between road calls fell from over 117,000 to over 69,000 between 2012 and 2016, a 41 percent reduction.

# **Table 3-20 Effectiveness Measures**

Effectiveness Measures	2012	2013	2014	2015	2016	% Change 2012 - 2016
Vehicle Miles per Capita	0.56	0.59	0.64	0.66	0.67	21.0%
Passenger Trips per Capita	0.73	0.76	0.80	0.78	0.77	5.9%
Passenger Trips per Revenue Mile	1.36	1.33	1.29	1.22	1.18	-13.3%
Passenger Trips per Vehicle Hour	36.4	36.3	34.2	32.4	30.5	-16.1%
Revenue Miles between Incidents	n/a	n/a	n/a	n/a	n/a	n/a
Revenue Mileage between Road calls	117,762	87,902	106,964	53,113	69,145	-41%

### **Efficiency Measures** 3.2.2.3

Efficiency measures evaluate SFRTA's efficiency in providing transit service. These can be summarized into broader categories, including cost efficiency (including operating expense per capita, per peak vehicles and per revenue hour), operating ratios (for instance, a farebox recovery ratio), and energy utilization (vehicle miles per gallon). A comprehensive review of Efficiency Measures is available in the Appendix.

A summary of Tri-Rail's performance on efficiency measures is summarized in Table 3-21.

- Per capita and per passenger operating expenses increased by 62 percent and 53 percent, respectively from 2012 to 2016. Adjusted to 2012 dollars, the increases are 55 percent and 47 percent.
- Operating expense per passenger mile increased 59 percent, from 48 cents to 77 cents.
- Operating Expense per Revenue Mile increased from \$18.88 to \$25.03, a 33 percent increase. Adjusted for inflation to 2012 dollars, this corresponds to a 27 percent increase.





- Tri-Rail's farebox recovery ratio declined from 21 percent to 15 percent. [SFRTA began providing SFRC maintenance of way Maintenance of Way (MOW) SFRC. MOW services costs and revenues support all users of the SFRC corridor, including CSXT freight movements as well as Amtrak, and are not limited strictly to Tri-Rail's operations. Including these additional MOW costs in the SFRTA farebox calculation skews SFRTA's recovery ratio downward. To allow a meaningful year-to-year comparisons, SFRTA prepares a calculation to show the ratio with the additional MOW costs, and one without the additional MOW costs.]
- Revenue miles per vehicle fell from 58,881 to 43,848, a 34 percent reduction
- The average SFRTA fare increased from \$2.98 to \$3.09, an increase of 4 percent. Fares have remained unchanged since 2009, thus this could suggest an increase in trip length (more zones traveled), or an increase in the that pay full fare.
- Vehicle miles per gallon increased from 0.4 to 1.1 between 2012 and 2016.

### **Table 3-21 Efficiency Measures**

Efficiency Measures	2012	2013	2014	2015	2016	% Change 2016 - 2012
Operating Expense Per Capita	\$10.10	\$10.55	\$11.73	\$13.88	\$16.35	62%
Operating Expense Per Capita (2012 \$)	\$10.10	\$10.34	\$11.37	\$13.46	\$15.70	55%
Operating Expense Per Passenger Trip	\$13.88	\$13.82	\$14.66	\$17.79	\$21.22	53%
Operating Expense Per Passenger Trip (2012 \$)	\$13.88	\$13.54	\$14.22	\$17.26	\$20.37	47%
Operating Expense Per Passenger Mile	\$0.48	\$0.50	\$0.54	\$0.65	\$0.77	59%
Operating Expense Per Passenger Mile (2012 \$)	\$0.48	\$0.49	\$0.52	\$0.63	\$0.74	53%
Operating Expense Per Revenue Mile	\$18.88	\$18.35	\$18.85	\$21.79	\$25.03	33%
Operating Expense Per Revenue Mile (2012 \$)	\$18.88	\$17.98	\$18.28	\$21.13	\$24.03	27%
Operating Expense Per Revenue Hour	\$571.91	\$566.35	\$566.39	\$647.71	\$721.81	26%
Revenue Miles Per Vehicle Mile	0.96	0.97	0.97	0.97	0.97	1%
Revenue Miles Per Vehicle	58,881				43,848	-34%
Revenue Hours Per Total Vehicles	1,943.96	2,050.02	1,389.21	1,437.98	1,520.35	-22%
Vehicle Miles Per Gallon	0.40	1.21	n/a	1.14	1.10	172%
Farebox Recovery (%)	21%	21%	20%	17%	15%	-32%
Average Fare	\$2.98	\$2.87	\$2.91	\$2.98	\$3.09	4%





# 3.2.3 Commuter Connector Shuttle Bus Service Trend Analysis

### General Performance Indicators 3.2.3.1

General Performance Indicators (GPIs) are used to gauge SFRTA's Commuter Connector bus system performance. GPI measures include total passenger trips, vehicle miles, vehicle hours, and fuel consumption. The GPIs for SFRTA's Commuter Connector bus service are described in Table 3-22. A comprehensive overview of the shuttle bus GPIs is available in the Appendix.

- Passenger trips on SFRTA's Commuter Connector buses increased from 936,000 to over 1.1 million an increase of 18 percent.
- Passenger miles grew at a similar rate, from 3.6 million to 4.2 million, a total growth of 17 percent.
- Vehicle miles increased seven percent, from 978,612 to 1.05 million.
- Revenue miles increased 13 percent from 745,000 to 841,000.
- Vehicle hours declined 9 percent, from 85,800 to 77,790.
- Route miles increased by five miles, from 167 to 172.
- Operating expenses have been reduced from \$3.28 million to \$2.78 million, a 15 percent reduction.
- Fuel consumption has increased from 161,000 gallons to 263,000 gallons, a 63 percent increase.

**Table 3-22 Commuter Connector General Performance Indicators** 

Performance Indicators	2012	2013	2014	2015	2016	% Change 2012 - 2016
Passenger Trips	935,919	921,631	1,001,058	1,071,014	1,100,336	18%
Passenger Miles	3,673,894	3,617,807	3,900,333	4,173,398	4,283,650	17%
Vehicle Miles	978,612	877,240	920,765	986,766	1,051,280	7%
Revenue Miles	745,205	731,956	765,611	774,866	841,967	13%
Vehicle Hours	85,852	67,879	70,989	72,885	77,790	-9%
Route Miles	167	164	164	164	172	3%
Operating Expenses	\$3,288,804	\$3,012,062	\$3,747,214	\$3,321,264	\$2,780,180	-15%
Operating Revenues	n/a	n/a	n/a	n/a	n/a	
Total Employees	n/a	n/a	n/a	n/a	n/a	
Vehicles Available for Maximum Service	29	26	26	28	30	3%
Fuel Consumption	161,012	130,931	149,421	166,281	263,226	63%





### **Effectiveness Measures** 3.2.3.2

Effectiveness measures are evaluated under two general categories – service consumption (how many trips per capita, per revenue mile and revenue hour), and quality of service (number of system failures, and revenue miles between failures). Table 3-23 depicts a summary of SFRTA's Commuter Bus Effectiveness Measures. A comprehensive overview of the Shuttle Bus Effectiveness Measures is available in the Appendix.

- Commuter Bus Vehicle Miles per Capita increased 7 percent from 0.15 to 0.18
- Passenger Trips per Capita increased from 0.17 to 0.2, an 18 percent change.
- Passenger Trips per Vehicle Hour grew 20 percent from 13.5 to 16.2.
- Revenue Miles Between Road Calls dropped significantly from 74,000 to 15,000, an 80 percent drop.

**Table 3-23 Commuter Connector Effectiveness Measures** 

Performance Indicators	2012	2013	2014	2015	2016	% Change 2016 - 2012
Vehicle Miles per Capita	0.15	0.18	0.16	0.17	0.18	7%
Passenger Trips per Capita	0.17	0.17	0.18	0.19	0.20	18%
Passenger Trips per Revenue Mile	1.26	1.26	1.31	1.38	1.31	4%
Passenger Trips per Vehicle Hour	13.5	16.0	16.4	17.2	16.2	20%
Revenue Miles between Incidents	n/a	n/a	n/a	n/a	n/a	n/a
Revenue Mileage between Road calls	74,520.50	30,498.17	29,446.58	16,143.04	15,035.13	-80%







### **Efficiency Measures** 3.2.3.3

Efficiency measures evaluate SFRTA's efficiency in providing transit service. These can be summarized into broader categories, including cost efficiency (including operating expense per capita, per peak vehicles and per revenue hour), and energy utilization (vehicle miles per gallon). Efficiency Measures for the Commuter Bus are summarized in Table 3-24. A comprehensive overview of the Shuttle Bus Commuter Connector Efficiency Measures is available in the Appendix.

# Passenger trips on SFRTA's free station

- Operating expenses per capita, per passenger trip, per passenger mile, and per revenue mile have all decreased significantly.
- Operating Expenses per Capita have decreased 15 percent from 60 cents to 51 cents.
- Operating Expenses per Passenger Trip were reduced from \$3.51 to \$2.53, a 28 percent reduction
- Operating Expenses per Passenger Mile came down 28 percent from 90 cents a mile to 65
- Operating Expenses per Passenger Mile came down 25 percent from \$4.41 to \$3.50, a 25 percent drop
- Revenue Miles per Vehicle Miles increased 5 percent from 0.76 to 0.8.
- Revenue Miles per Vehicle increased 9 percent, to just over 28,000.
- Vehicle Miles per Gallon has decreased 33 percent, from 6 to 4 vehicle miles per gallon.

Table 3-24 Commuter Connector Efficiency Measures

Performance Indicators	2012	2013	2014	2015	2016	% Change 2012 - 2016
Operating Expense Per Capita	\$0.60	\$0.55	\$0.68	\$0.60	\$0.51	-15%
Operating Expense Per Capita (2012 \$)	\$0.60	\$0.54	\$0.66	\$0.58	\$0.48	-19%
Operating Expense Per Passenger Trip	\$3.51	\$3.27	\$3.74	\$3.10	\$2.53	-28%
Operating Expense Per Passenger Trip (2012 \$)	\$3.51	\$3.20	\$3.63	\$3.01	\$2.43	-31%
Operating Expense Per Passenger Mile	\$0.90	\$0.83	\$0.96	\$0.80	\$0.65	-28%
Operating Expense Per Passenger Mile (2012 \$)	\$0.90	\$0.82	\$0.93	\$0.77	\$0.62	-30%
Operating Expense Per Revenue Mile	\$4.41	\$4.12	\$4.89	\$4.29	\$3.30	-25%
Operating Expense Per Revenue Mile (2012 \$)	\$4.41	\$4.03	\$4.75	\$4.16	\$3.17	-28%
Revenue Miles per Vehicle Mile	0.76	0.83	0.83	0.79	0.80	5%
Revenue Miles per Vehicle	25,697	28,152	29,447	27,674	28,066	9%
Vehicle Miles per Gallon	6.1	6.7	6.2	5.9	4.0	-34%





# **Peer Review Analysis**

# 3.3.1 Introduction

A peer review analysis is an opportunity for SFRTA to compare Tri-Rail's performance to that of other commuter rail systems. For this review, 11 transit agencies were selected based on their similarities to SFRTA. The peers were identified using FDOT's Florida Transit Information System (FTIS) database, which categorizes peer agencies based on several factors, such as urban area population, revenue miles, and operating costs for purposes of determining a total likeness score. The likeness score evaluates these factors in comparison to SFRTA which has a score set at zero. A peer agency's comparability can be determined by its likeness score – the closer that score is to zero, the more comparable that peer agency is to SFRTA. These scores are presented in Table 3-25.

# 3.3.2 Methodology

SFRTA's previous TDP peer reviews typically analyzed ten agencies with similar characteristics to that of Tri-Rail's passenger service. The ten peers are identified as follows (the names and abbreviations in the parentheses are how the peers are identified in the subsequent graphs):

- Connecticut Department of Transportation (CDOT), Newington, CT
- Maryland Transit Administration (MTA), Baltimore, MD
- Virginia Railway Express (VRE), Alexandria, VA
- Central Puget Sound Regional Transit Authority (Puget Sound), Seattle, WA
- Northern Indiana Commuter Transportation District (NICTD), Chesterton, IN
- Dallas Area Rapid Transit (DART), Dallas, TX
- Rio Metro Regional Transit District (Rio Metro RTD), Albuquerque, NM
- Utah Transit Authority (UTA), Salt Lake City, UT
- North County Transit District (NCTD), Oceanside, CA
- Caltrain (Caltrain), San Carlos, CA

It was determined to include an additional commuter rail peer for purposes of this analysis: Metro Transit. Metro Transit operates the Northstar Line, a commuter rail line in the Minneapolis metropolitan area.

A table of the peer agencies and their respective likeness score in comparison to SFRTA is provided on Although Southeastern Pennsylvania Transportation Authority (SEPTA) and the next page. Massachusetts Bay Transportation Authority (MBTA) have a slightly lower likeness score than Metro Transit, it was determined that Metro Transit is more suitable as a peer for analysis given the commuter rail system size.





# 3.3.3 Peer Review Analysis

Table 3-26 summarizes some of the peer review measures provided in the subsequent pages of this peer review analysis. The complete analysis is provided in the Appendix.

Table 3-25 Peer Agency Likeness Scores

NTDID	Agency Name	Location	State	Total Likeness Score
4077	South Florida Regional Transportation Authority	Pompano Beach	FL	0
3073	Virginia Railway Express	Alexandria	VA	0.32
9134	Peninsula Corridor Joint Powers Board dba: Caltrain	San Carlos	CA	0.44
9030	North County Transit District	Oceanside	CA	0.48
40	Central Puget Sound Regional Transit Authority	Seattle	WA	0.62
5104	Northern Indiana Commuter Transportation District	Chesterton	IN	0.66
6111	Rio Metro Regional Transit District	Albuquerque	NM	0.96
3034	Maryland Transit Administration	Baltimore	MD	1.06
6056	Dallas Area Rapid Transit	Dallas	TX	1.2
1102	Connecticut Department of Transportation	Newington	СТ	1.23
8001	Utah Transit Authority	Salt Lake City	UT	1.43
5027	Metro Transit	Minneapolis	MN	1.86
9182	Altamont Corridor Express	Stockton	CA	1.99

Source: Florida Transit Information System Urban Integrated National Transit Database





Table 3-26 Summary of SFRTA/Tri-Rail Peer Analysis

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Performance Measure Metric	What is Measured?	Tri-Rail Rank Out of 12	Peer Median	Top Peer Performer	Least Peer Performer
Track Miles	Distance; Geographical Coverage	8 <sup>th</sup> (142)	159	MTA (400)	DART (72)
Annual Train Miles	Miles of Operational Service	5 <sup>th</sup> (3,708,779)	2,410,848	Caltrain (7,375,609)	Metro (550,196)
Annual Passenger Trips	Ridership	6 <sup>th</sup> (4,241,486)	3,872,783	Caltrain (18,355,641)	Metro (711,167)
Passenger Miles Traveled	Ridership; Passenger Trip Length	5 <sup>th</sup> (117,303,700)	109,861,464	Caltrain (488,208,148)	Metro (17,608,093)
Route Miles	Distance; Geographical Coverage	8 <sup>th</sup> (142)	159	MTA (400)	DART (72)
Vehicle Revenue Miles	Miles Traveled by Fleet	5 <sup>th</sup> (3,595,531)	2,056,299	Caltrain (7,215,731)	Metro (538,172)
Total Operating Cost	Extent of Service; Cost Efficiency	3 <sup>rd</sup> (\$89,987,616)	\$44,823,124	MTA (\$139,558,116)	Metro (\$16,677,279)
Vehicle Revenue Hours	Extent of Service	4 <sup>th</sup> (124,669)	65,473	Caltrain (204,318)	Metro (13,643)
Stations	Extent of Service	5 <sup>th</sup> (18)	15	MTA (42)	Metro (7)
Average Trip Length (miles)	Passenger Travel Patterns	6 <sup>th</sup> (27.7)	27.6	RTD (44.8)	DART (19.6)
Operating Cost per Revenue Hour	Cost Efficiency	7 <sup>th</sup> (721.8123)	\$735.55	UTA (\$289.71)	Metro (\$1,222.41)
Operating Cost per Passenger Trip	Cost Efficiency; Productivity	4 <sup>th</sup> (21.2161)	\$14.65	Caltrain (\$6.11)	CDOT (\$37.70)
Passenger Trips Per Revenue Hour	Cost Efficiency; Productivity	8 <sup>th</sup> (34)	43	Caltrain (90)	CDOT (21)
Annual Boardings per Station	Productivity	4 <sup>th</sup> (235,638)	209,389	Caltrain (573,614)	Rio Metro RTD (63,313)

Overall, SFRTA's rankings out of the twelve total agencies evaluated ranges from third to eighth. SFRTA has the third highest operating costs of the peers evaluated; it is ranked fourth in vehicle revenue hours, operating cost per passenger trip, and annual boardings per station. SFRTA is ranked eighth in track miles, and passenger trips per revenue hour.





# **Tri-Rail Performance Measures**

Performance measures for Tri-Rail were developed based upon feedback from SFRTA, taking into consideration goals set by individual departments within the organization. Continued measurement of Tri-Rail's performance is important to ensure the agency's objectives are attained. The Tri-Rail Performance assessment uses data from NTD, SFRTA Monthly Operations Reports, and other Tri-Rail internal data sources.

# 3.4.1 Performance Measurement Assessment Summary

These performance measures are described in Table 3-27 with a status assessment of SFRTA's achievement of its stated objective. The performance measures in this table are reported annually to Florida's Transportation Commission (FTC).

Table 3-27 Tri-Rail Performance Measures Overview

Performance Measures	Objective	2016	Status
Unlinked Passenger Trips Per Revenue Hour (Passenger trips divided by revenue hours)	> 39.3	34	•
Operating Expense Per Revenue Mile (Operating expenses divided by revenue miles)	< \$21.16	\$25.07	•
Operating Expense Per Passenger Trip (Operating expenses divided by annual ridership)	< \$17.64	\$21.25	•
Operating Expense Per Passenger Mile (Operating expenses divided by passenger miles)	< \$0.53	\$0.77	•
Farebox Recovery Ratio (Passenger fares divided by operating expenses)	> 22.5%	14.60%	•
Revenue Miles Between Major Incidents (Revenue miles divided by FRA reportable incidents for rail)	0	0	<b>A</b>
Revenue Miles Between Failures  (Revenue miles divided by revenue vehicle system failures. A failure is classified as the breakdown of either a major or minor element of the revenue vehicle's mechanical system)		69,145	<b>A</b>
Revenue Miles versus Vehicle Miles (Revenue miles divided by vehicle miles)	> 0.93	0.97	<b>A</b>
Customer Service (Average time from complaint to response)	14 days	10	<b>A</b>
Customer complaints divided by boardings	< 2 per 5,000 boardings	1.2	•
On-time Performance % trips end to end on time < 6 minutes late	> 80%	83.50%	<b>A</b>

Source: SFRTA ▲ Ahead of Target ▼ Behind Target



# 3.4.2 Reportable Indicators

A list of indicators based upon data obtained from SFRTA and the National Transit Database is provided below. Table 3-28 SFRTA Reportable Indicators

Reportable Indicators	2016
Operating Expense Per Capita (Potential Customer)	\$16.38
(Annual operating budget divided by the service area population)	·
Average Headway (minutes)	29.5
(Average time for train to complete its portion of total route miles one time)	
Service Area Population	5,502,379
(Approximation of overall market size)	, ,
Service Area Population Density	1,238
(Persons per square mile based on service area population and size)	.,
Operating Expense	\$90,135,130
(Spending on operations, including administration, maintenance, and operation of service vehicles)	<b>4</b> 2 3,13 3,13 3
Operating Revenue	\$13,562,478
(Revenue generated through the operation of the transit authority)	ψ15,562,176
Total Annual Revenue Miles	3,595,531
(Vehicle miles operated in active service (available to pick up revenue passengers))	3,333,331
Total Annual Revenue Hours	124,669
(Vehicle hours operated in active service)	124,003
Vehicle Miles Between Failures	
(Vehicle miles divided by revenue vehicle system failures. A failure is classified as the breakdown of either	71,323
a major or minor element of the revenue vehicle's mechanical system)	
Total Revenue Vehicles	50
(Vehicles available to meet annual maximum service requirements)	
Operating Expense Per Revenue Hour	\$723.00
(Cost of operating an hour of revenue service)	ψ, 25.00
Peak Vehicles	42
(Vehicles operated to meet annual maximum (peak) service requirements)	-12
Ratio of Revenue Vehicles to Peak Vehicles (spare ratio)	
Revenue vehicles, including spares, out-of-service vehicles, and vehicles in/awaiting maintenance, divided	16%
by the number of vehicles operated in maximum service)	
Annual Passenger Trips	4,241,486
(Passenger boardings on transit vehicles)	,= : -, -5 5
Average Trip Length	27.7
(Average length of passenger trip in miles, generally derived through sampling)	27.7
Annual Passenger Miles	117,277,088
(Passenger trips multiplied by average trip length)	117,277,000
Weekday Span of Service (hours)	19.5
Hours of transit service on a representative weekday from first service to last service for all modes)	13.3





# SECTION 3 - EVALUATION OF EXISTING TRANSIT SERVICES

Reportable Indicators	2016	
Average Fare	\$3.09	
(Passenger fare revenues divided by passenger trips)	¥	
Passenger Trips Per Revenue Mile	1.18	
(Passenger trips divided by revenue miles)	1.10	
Passenger Trips Per Revenue Hour	34	
(Passenger trips divided by revenue hours)	54	
Passenger Trips Per Capita	0.77	
(Passenger trips divided by service area population)	0.77	
Average Years Since Last Rebuild	14.2	
Locomotives (9)	14.2	
Coaches (12)	15.2	
Unrestricted Cash Balance - Financial Indicator	\$18,344,503	
(End of year cash balance from financial statement)	\$10,544,505	
Weekday Ridership	17.00/	
(Average ridership on weekdays)	13,894	
Capital Commitment to System Preservation and System Expansion	020/	
(% of capital spent on system preservation)	82%	
(% of capital spent on system expansion)	18%	
Intermodal Connectivity	18	
(Intermodal transfer points available through Tri-Rail)	10	

Source: SFRTA, National Transit Database.



# 3.4.3 Transit Asset Management (TAM) - Transit Performance Measures

SFRTA initiated the preparation of a TAM procedure in FY 2017 - FY 2018 to comply with the requirement of MAP-21, which established new asset management and safety requirements for transit providers. The TAM System (49 USC 5326) requires that the "state of good repair" of the agency's equipment, rolling stock, infrastructure and facilities be monitored using a Performance Measurement (PM) program. A PM program is a strategic approach to connect investment and policy decisions to achieve safety, mobility and system performance goals. PMs are quantitative criteria used to evaluate progress towards those goals. PM targets are the benchmarks against which collected data is gauged.

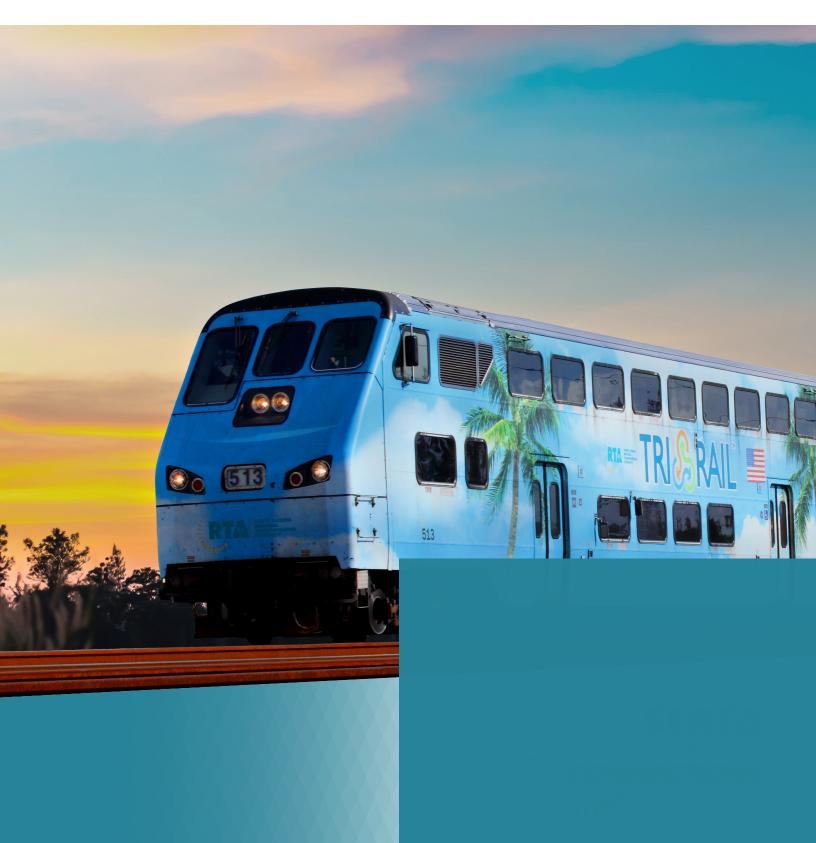
The TAM rule sets required PMs for the following assets:

- Equipment (non-revenue service vehicles): The PM for non-revenue, support-service and maintenance vehicles equipment is the percentage of those vehicles that have either met or exceeded their useful life benchmark (ULB).
- Rolling stock: The PM for rolling stock is the percentage of revenue vehicles within a particular asset class that have either met or exceeded their ULB.
- Infrastructure: The PM for rail fixed-guideway, track, signals, and systems is the percentage of track segments with performance restrictions.
- Facilities: The PM for facilities is the percentage of facilities within an asset class, rated below condition 3 on the Transit Economic Requirements Model (TERM) scale.

SFRTA is expected to complete their TAM system by the end of the 2018 calendar year. This effort will also establish a set of federally required performance measures which will enable SFRTA to regularly assess the state of good repair of each of the asset classes as identified by the TAMs Rule. These performance measures will be presented and evaluated in future TDP's.



# Section 4 Public Involvement



# PUBLIC INVOLVEMENT

### Introduction 4.1

A Public Involvement Plan (PIP) was developed for the TDP Major Update to identify opportunities for public participation and facilitate consensus building for the SFRTA Building Stronger Connections TDP visioning document. Information gathered from the public, stakeholder agencies/organizations, and other interested parties has been used to help identify and assess community perceptions of SFRTA service, as well as to identify issues and opportunities for SFRTA to consider during the development of the TDP.

Performance measures were also developed to gauge the effectiveness of SFRTA's public involvement efforts regarding the TDP preparation as identified in the PIP. The PIP was reviewed and approved by FDOT per Rule 14.73.001, on March 22, 2018.

The SFRTA Building Stronger Connections PIP is provided in the Appendix for reference.

### 4.2 **Summary of Public Involvement Activities**

The public involvement approach employed various strategies to inform and seek input from stakeholders for the preparation of the TDP Major Update. This effort began with branding the SFRTA TDP Major Update and the development of a project specific website and email address. Other activities included the development and implementation of several passenger surveys conducted onboard Tri-Rail trains, Tri-Rail Commuter Connector buses, and at select Tri-Rail stations platforms, as well as through an ongoing survey posted on the SFRTA TDP website. Other efforts to inform this TDP included outreach activities, email blasts to stakeholders and public agencies, and SFRTA newsletter announcements. An overview of each of the public involvement activities is discussed in the following sections.

### 4.2.1 **TDP Branding**

To illustrate the overarching theme and vision of the SFRTA TDP Major Update, a new logo and brand name was developed. Titled SFRTA: Building Stronger Connections, and referred to as the Stronger

Connections Plan, SFRTA's TDP Major Update looks forward to improving existing services and facilities as well as building infrastructure that expands service to new areas, encourages new transit oriented development, and better connects people and local transit agencies across the region. The future of transit in South Florida is represented in the idea of building and





connecting a stronger regional transit service for South Florida's residents, facilitated through strong partnerships with both government agencies and private sector business and industry. accompanying logo visually signifies that a document was created as a part of the forward-looking **Stronger Connections Plan.** 

### TDP Website 4.2.1.1

A website was developed to accompany the SFRTA Building Stronger Connections Plan (www.TriRailTDP2018.com). This site provides a single access point where citizens can submit their input and feedback, find project-related information, and view previous years TDP documents. The site also includes a survey that in combination with a platform intercept survey, provides public input that helps SFRTA determine future priorities.

71% of users accessed the website directly; 16% followed links from social media, and the remaining traffic accessed the site through other sources such as a link on the SFRTA website. This indicates that non-digital forms of outreach were successful in driving traffic to the website.

The following table summarizes the analytics for the website, including total unique visitors, total number of page views, number of standalone questions/comments submitted, and number of surveys submitted on the site as of July 13, 2018.

Table 4-1 Project Website Statistics

Description of Metric	Count
Total Unique Visitors	927
Total Pageviews	1,403
Total Surveys Submitted	442

### TDP Email / contact 4.2.1.2

An email account has been created for purposes of providing a portal to receive public input and comments that can be utilized for TDP development. The email address that is being hosted by SFRTA is TDP@sfrta.fl.gov. Email inquiries are being continuously tracked and responses provided.

In March 2018, a public input request was disseminated by SFRTA through their extensive database of over 14,693 contacts.



### Newsletters 4.2.1.3

SFRTA's OnBoard Newsletters are distributed on a regular basis on the SFRTA and Tri-Rail websites, and via SFRTA's extensive stakeholder database. To date, two articles have been published in the OnBoard newsletter related to SFRTA Building Stronger Connections.

- April 2018 Article introducing the SFRTA Building Stronger Connections TDP Major Update.
- June 2018 Article providing an update on the preparation of the SFRTA Building Stronger **Connections** TDP Major Update.

In partnership with planning organizations throughout the South Florida Region - Palm Beach Transportation Planning Agency, Broward Metropolitan Planning Organization and the Miami-Dade Transportation Planning Organization, announcements of SFRTA's efforts to prepare the Building Stronger Connections TDP Major Update have been posted electronically on agency newsletters to inform and notify the community of the project website for purposes to complete the online survey as well as provide public input.

### Stakeholder Database 4.2.1.4

A component of the public outreach plan is to create a stakeholder database for the TDP Major Update to communicate with and obtain feedback from stakeholder agencies/organizations and the public through the project website and email campaigns. To reach out to as many individuals as possible, a stakeholder database was utilized and maintained throughout the project. Specifically, the database consists of existing customer databases such as the Employer Discount Program (EDP) email list, EASY Card registrants list, SFRTA's Customer Service VIP list, and the SFRTA OnBoard newsletter email list.

### 4.2.2 **CareerSource Boards**

The three South Florida workforce boards, CareerSource Palm Beach County, CareerSource Broward County and CareerSource South Florida (Miami-Dade and Monroe Counties) were identified as stakeholders for purposes of providing input to assist with TDP development. As required by Section 341.052, F.S.

SFRTA notified each of the three CareerSource Boards informing them that the preparation of the Building Stronger Connections TDP Major Update has commenced and requested a coordination meeting with each respective Executive Director. In May 2018, meetings were held with the leadership of Palm Beach County and Broward County CareerSource Boards; the Miami-Dade Board was notified but elected not to request a meeting.

These meetings resulted in an overall understanding of the importance of reliable transit in relation to employment. Each organization offered to partner with the SFRTA to achieve mutual goals. Public



involvement outreach activities were discussed and SFRTA subsequently conducted on-site activities at the Broward and Palm Beach agencies.

### 4.2.3 **Passenger Surveys**

Throughout the preparation of the TDP Major Update, SFRTA has conducted surveys to obtain feedback on existing services while seeking input to identify future service needs and improvements. These surveys were completed within the first three months of 2018 and included a Tri-Rail on-board survey, Tri-Rail station platform intercept survey and a Commuter Connector Bus Survey. In addition, a survey instrument was created and integrated onto the TDP Making Stronger Connector webpage and has been active throughout the duration of the TDP. An overview of each survey that provided input and information for the TDP development is presented below.

### 4.2.3.1 Platform Intercept Survey

As input to the SFRTA's Major TDP, intercept surveys of Tri-Rail passengers were conducted on platforms of the Tri-Rail stations representing the highest daily ridership. For the Weekday service, six (6) stations were selected, and three (3) stations were surveyed representing Weekend service. These stations serve as a representative sample of the ridership of the entire Tri-Rail system. The purpose of these intercept surveys (i.e., platform interviews) was to inquire about Tri-Rail passenger's satisfaction, needs, and issues. A total of 1,254 surveys were completed during the process (1,113 Weekday and 141 Weekend).

### Survey Instrument

The survey instrument was developed in a joint effort with SFRTA staff and the Consultant to derive pertinent information regarding the motivations of passenger riders and the desire for improvements to the system. Input was asked based upon two questions: 1. Why do you use Tri-Rail? and 2. What Improvements would you like to see on Tri-Rail? Surveys were prepared and available to passengers in English, Spanish and French Creole.

### **Survey Dates**

The intercept/platform surveys were conducted over the course of three (3) days in early 2018. Weekday service days comprised two of the three survey days with surveys collected on Thursday, March 1, 2018 and Tuesday, March 6, 2018. One weekend survey day was selected and intercept surveys were collected on Saturday March 3, 2018.



### On-Board Survey 4.2.3.2

The Tri-Rail On-Board Survey was conducted system-wide on January 17, 2018. The On-Board Survey included three main areas of data collection on the day of implementation: on-board passenger counts of boardings and alightings at each Tri-Rail station; parking utilization counts at each Tri-Rail station; and a paper survey questionnaire offered to passengers, which asked about various travel patterns, socioeconomic characteristics, and opinions about Tri-Rail service. The goal of this effort was to have every Tri-Rail passenger complete a survey questionnaire for every trip completed during the survey collection period, identified as every train between 4:00 am and 2:00 pm. A total of 3,366 surveys were completed during the On-Board Passenger Survey. The On-Board Survey Executive Summary is referenced in Section 3, and also provided in the Appendix.

# Survey Instrument

The on-board survey was designed as a self-administered questionnaire consisting primarily of selfcoded questions. The survey was administered in English, Spanish, and French Creole. Questions on the survey were organized into four categories: travel pattern (origin, destination, and purpose), mode of station access and egress, passenger demographics (age, income, household size, employment status, and vehicle availability), and customer satisfaction (including length of time the rider has used Tri-Rail).

# **Survey Dates**

The on-board survey was conducted on January 17, 2018.

### 4.2.3.3 Commuter Connector Bus Customer Survey

A customer survey was administered by SFRTA on the Commuter Connector bus system to collect information from existing passengers. All 14 Commuter Connector routes were surveyed during the month of March 2018. The results of this survey were reviewed and utilized to inform the preparation of this TDP Major Update. The purpose of the survey was to identify travel behavior of Commuter Connector passengers while also seeking to understand the types of improvements and amenities desired by the existing passenger base. A total of 240 surveys were collected.

# Survey Instrument

The on-board survey was designed as a self-administered questionnaire consisting primarily of selfcoded questions. The survey was administered in English, Spanish, and French Creole. Survey questions sought to collect information on trip type, understand why a passenger uses the Commuter Connector service; frequency of use, fare type purchased on Tri-Rail, passenger needs/improvements as well as determine a preference between maintaining "wave and ride" service versus a fixed stop service.



# **Survey Dates**

The survey was conducted between March 14<sup>th</sup> and March 22<sup>nd</sup> of 2018. Thirteen routes were surveyed on weekdays during the morning peak travel periods while one route that operates on weekends only (FL3) collected survey information on Saturday.

### **TDP Online Survey** 4.2.3.4

An online survey was created and posted on the TDP's Building Stronger Connections website (https://www.trirailtdp2018.com/input/). This survey instrument is similar to the passenger intercept surveys but was formatted to be posted and completed entirely online. The survey remained active until July 13, 2018.

Survey results will continue to be reviewed and utilized to inform the preparation of the TDP Major Update. To date, a total of 442 surveys have been completed.

# 4.2.4 SFRTA Ongoing Outreach Activities

SFRTA staff routinely attends community events that provide opportunities for public outreach throughout the tri-county region. These events include job fairs, Chamber of Commerce meetings, regional transportation and project-specific events, and other outreach events.

The input gathered from these events has informed and been integrated into the TDP process, as appropriate.



# **Table 4-2 SFRTA Outreach Activities**

Community Events	Date
Four Seasons Hotel Benefit Fair	July 2017
Pompano Beach Health and Financial Wellness Fair	July 2017
Transit Information Days	July 2017
Future of Downtown Miami's Urban Core	July 2017
City of Miami Beach Health Fair	August 2017
EDP Transportation Days	August 2017
Live.Ride.Share	August 2017
Greater Boca Raton Chamber of Commerce	August 2017
Overtown Folk Life Friday	September 2017
St. Matthews Senior Group	September 2017
Veteran's EXPO	September 2017
McFatter Technical College	October 2017
Pembroke Pines Veteran EXPO	October 2017
Senior Easy Cards	October 2017
Barry University Health Fair	November 2017
McFatter Student Appreciation Day	November 2017
Miami Book Fair	November 2017
Office Depot Health Fair	November 2017
Greater Fort Lauderdale Chamber of Commerce	November 2017
Boca II Outreach	December 2017
Let's Go Walking	December 2017
Miami Airport Union Meeting	December 2017
Royal Caribbean	December2017
Senior EXPO	December 2017
WGI Networking Breakfast	December 2017
BallPark of the Palm Beaches	January 2018
Miami Dade County CITT Transportation Summit	January 2018
FAU Events	January 2018
Franklin Academy	January 2018



# Table 4-2 SFRTA Outreach Activities (continued)

Community Events	Date
Miami Beach Ciclovia	January 2018
Rail Fun Day	January 2018
Villa Madonna Senior Housing	January 2018
Ballpark of the Palm Beaches	February 2018
Claim your Future Showcase	February 2018
Coral Glades High School	February 2018
FAU iCommute Off Campus Housing Fair	February 2018
Miami-Dade TPO Transportation Fair	February 2018
Palm Beach Atlantic University	February 2018
Safe Streets Summit	February 2018
Lynn University Sustainability Fair	February 2018
Miami Chamber of Commerce	February 2018
Bike to Work	March 2018
B'nai Senior Residence	March 2018
City of West Palm Beach Benefits Fair	March 2018
FDOT EXPO	March 2018
McFatter Student Appreciation	March 2018
North Miami Beach Ciclovia	March 2018
Shoes for Crews	March 2018
880 First and last Mile Workshop	April 2018
CITI Bank Latin America	April 2018
Let's Go Biking	April 2018
FAU Student Orientation	April 2018



### **Presentation Boards** 4.2.4.1

Presentation boards were prepared for display at the Tri-Rail station platforms during the intercept surveys to provide information on the TDP process and public involvement opportunities and to advertise the project website. The display boards have also been used to provide information about the TDP Update at other ongoing outreach activities.

### **Public Involvement Assessment** 4.3

### 4.3.1 **Assessment of Public Involvement Evaluation Measures**

The PIP developed specifically for this TDP Major Update established evaluation measures to assess the effectiveness of the various public involvement strategies. In the following table the specific goals, measures, and targets are presented to include an assessment of whether a target was achieved.

The data that informs this assessment will be included in the September 1, 2018 submittal for FDOT's review.



Table 4-3 Assessment of Public Involvement Evaluation Measures

Public Involvement Goal	Strategy	Measure	Target	Assessment
Goal 1: Early and	Provide opportunities	Catalog the number of	Greater than 1,000	Number of
Consistent	for active participation	interactions throughout	interactions	interactions (as of 6-18-
Involvement	in the project. Active	the project.		18)
Involve passengers, the	participation occurs	Interactions are defined		• 440 Online Surveys
public, and	when a participant	as input received		completed
stakeholders early and	provides input.	through face-to-face		• 1,254 Platform
regularly throughout	Examples include face-	communication with a		Surveys, face-to-face
the project.	to-face communication	TDP team member,		• 3,366 On-Board
	with a TDP team	completion of a TDP		Surveys (face-to-face)
	member, completion of	survey, emailing a		• 110 emails to TDP
	a TDP survey, emailing a	question, etc.		team
	question to the TDP			• 22,560 social media
	team, etc.			followers
	Provide opportunities	Catalog the amount of	Greater than 5,000	Number of
	for passive participation	passive participation	opportunities provided	participants who
	in the project. Passive	throughout the project.	to participate	passively participate
	participation is defined			(e.g., number of people
	as one-way			who received the
	communication from			email, number of
	the TDP Team to the			people viewing the
	participant. Examples			website, etc.)
	include posting			• 14,693 (Email blast,
	material on a website,			stakeholder lists)
	sending an email, etc.			• 2 newsletters
				• 22,560 social media
				followers



# Table 4-3 Assessment of Public Involvement Evaluation Measures (continued)

Public Involvement Goal	Strategy	Measure	Target	Assessment
Goal 2: Opportunity Provide all SFRTA/Tri- Rail passengers, citizens, and stakeholders with the opportunity to participate throughout the project, including persons with disabilities, older adults, or those who	Provide multiple opportunities for input so that if a person cannot attend an event, he/she can still provide input via the website. In addition to obtaining printed material in all public libraries.  Provide opportunity for	Establish project- specific email address so participants can submit comments and questions any time.  Provide materials in	Maintenance of a project-specific email address throughout the duration of the project. Review comments and questions received  Greater than 12% of	Project website and email activated and maintained since March 2018.
have limited English proficiency (LEP).	Limited English Proficiency individuals to participate	English, Spanish and Creole upon request	returned surveys are alternative language surveys	request for translation services  • Survey materials were provided in English, Spanish, and Creole.
	Provide opportunity for persons with disabilities to participate	Ensure in-person events are held at locations accessible by at least one transit route and are ADA accessible	100% of all events are held at locations accessible by at least one transit route and are ADA accessible	Target achieved.



# Table 4-3 Assessment of Public Involvement Evaluation Measures (continued)

Public Involvement Goal	Strategy	Measure	Target	Assessment
Goal 3: Information and Communication Provide all citizens and interested stakeholder agency groups with	Provide information in accessible format	Provide printed copies of materials when requested by those who do not have access to the internet.	Zero individuals not provided printed copies when requested	Zero to date.
clear, timely, and accurate information relating to the project as it progresses.	Provide regular updates on the TDP's progress	Update the TDP website on a regular basis	Update the TDP website more than once per month	Website has been updated monthly
	Provide opportunities for the public to ask questions	Establish means for the public to submit questions via email and in person	Greater than 90% of questions responded to.	Responses provided to email questions and comments, and also forwarded to SFRTA departments for and Customer Service to address specific inquiries.



# Section 5 Situation Appraisal





# SITUATION APPRAISAL

The Situation Appraisal offers a comprehensive overview of SFRTA's strengths and weaknesses, and identifies barriers and opportunities for future service enhancements. The appraisal also seeks to identify demand for transit through an assessment of the regional transit market, and a ridership forecast analysis. The analysis begins with a Plans Review, which provides a comprehensive snapshot of the regulatory framework that governs Tri-Rail's operational and planning universe. Following the plans review, a comprehensive appraisal of the agency's challenges and opportunities. The following elements are explored in detail in this chapter:

- Organizational Issues
- Plans and Policies
- **Funding Sources**
- **Regional Transportation Issues**
- Land Use
- Socioeconomic Trends
- Travel Patterns and Behavior
- Public Involvement
- Technology

# 5.1 **Organizational Challenges**

# 5.1.1 **SFRTA Operating Services Contract**

SFRTA selected an operating service contractor that initiated service on July 1st 2017. The operating services contract bundled train operations, equipment maintenance, dispatching, and station maintenance services under a single contract wih one primary contractor where previously train operations/maintenance of equipment, dispatch, and station maintenance were procured under separate contracts with multiple contractors for providing operating services.

*Implications*: The commencement of the operating services contract seeks to provide a more accountable process for the provision and maintenance of services for SFRTA while also resulting in operational efficiencies that benefit both the Agency and passengers. This is aligned with the goals of this TDP Major Update for purposes of focusing on the improvement of passenger service and striving for Tri-Rail to become a premier mobility services option.

# 5.1.2 **Intergovernmental Coordination**

SFRTA actively participates and contributes to transit planning studies throughout the Southeast Florida region. Current efforts involve collaboration with stakeholders to advance the implementation of transit improvement initiatives within the region. SFRTA has organized the Planning Transportation Advisory Committee (PTAC), which is a forum of representatives from state, regional and local agencies with





jurisdiction in Palm Beach, Broward and Miami-Dade counties.

SFRTA's leadership and role as a facilitator on regional transportation issues is consistent with this TDP Major Update branded as Building Stronger Connections, to approach mobility challenges through collaborative partnerships across the region with the goal of building a stronger regional transit system.

Implications: SFRTA's collaborative partnerships have resulted in the advancement of the Downtown Miami Link (DTML) that will provide a direct connection for Tri-Rail passenger service to the new Downtown MiamiCentral station that is also the terminus for Brightline passenger rail service. Currently, SFRTA is collaborating with Miami-Dade County stakeholders to bring future passenger rail service to the Northeast Corridor, a portion of the Florida East Coast (FEC) rail corridor that extends from the downtown MiamiCentral Station north to Aventura. A station location has been tentatively identified for a site generally within the area of Midtown Miami and the Design District.

### 5.2 Plans and Policies

Federal, State and regional plans and policies present opportunities for SFRTA to further advance capital and service improvements while strengthening collaborative efforts with partner agencies related to regional transportation issues. An overview of policies at each jurisdictional level is identified to better understand the context and relationship to SFRTA as an agency and operator of transit services.

### **Plans Review** 5.2.1

The preparation of the **SFRTA Building Stronger Connections** TDP Major Update requires a situation appraisal to analyze the context in which SFRTA operates. To provide a foundation for this appraisal, a review was conducted of applicable plans, programs, policies and studies which may be relevant for SFRTA's future planning and operational efforts. This assessment covers federal, state, regional, county and local policies and planning related documents to develop a complete understanding of the regulatory landscape in which SFRTA operates.

# Plans Review Summary 5.2.1.1

Table 5-1 organizes the reviewed document by jurisdictional relevance. Starting broadly with federal policies and programs, then narrowing down to local regulations, this table also identifies the frequency with which these plans are updated, the responsible agencies, and describes the document with an explanation of its specific relevance and influence to SFRTA operations and funding.

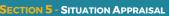




Table 5-1 List of Relevant Plans, Policies and Studies

Plan / Policy / Study Reviewed	Most Recent Update / Timeframe	Responsible / Partner Agencies	Overview	Key Considerations for the Situation Appraisal
Federal				
Fixing America's Surface Transportation (FAST) Act	December, 2015 (through FY 2020)	U.S. DOT	Congress establishes the funding for FTA programs through authorizing legislation that amends U.S.C. Title 49, Subtitle III, Chapter 53. The \$305 billion, five-year bill is funded without increasing transportation user fees. Instead, funds were generated through changes to passport rules, Federal Reserve Bank dividends, and privatized tax collection.  The law made changes and reforms to many Federal transportation programs, including streamlining the approval processes for new transportation projects and providing new safety tools.  Overall, the FAST Act largely maintains current program structures and funding shares between highways and transit.	<ul> <li>Transit Oriented Development (TOD) expenses are eligible for funding under highway and rail credit programs such as the Railroad Rehabilitation and Improvement Financing (RRIF) program.</li> <li>Funding for FTA's State of Good Repair program has been increased for rail from \$2.1 billion to \$2.5 billion per year.</li> <li>The Transportation Alternatives Program was replaced with a set-aside of funds under the Surface Transportation Block Grant Program, which are still designated for transportation alternative projects and programs.</li> <li>While the FAST Act reduced funding to the TIFIA program, it also reduced the minimum qualifying project size for TIFIA, provided funding to cover the loan evaluation costs typically borne by the borrower, and provided flexibility to States to use Federal formula dollars to cover credit subsidy costs.</li> <li>Created the National Surface Transportation and Innovative Finance Bureau to provide assistance and communicate best practices to project sponsors looking to take advantage of USDOT credit programs.</li> </ul>
Rail Safety Improvement Act of 2008 (RSIA) Positive Train Control (PTC), Positive Train Control Enforcement and Implementation Act of 2015 (PTCEI Act)	October 29, 2015	U.S. DOT, FRA	The PTCEI Act extended the original statutory deadline for implementing PTC systems to atleast December 31, 2018. The law also authorizes the Secretary of Transportation, and FRA by delegation, to provide, on a railroad-by-railroad basis, up to a two-year, additional extension if the railroad can demonstrate to the satisfaction of the Secretary that it has fulfilled statutory prerequisites, including: Installed all PTC hardware by December 31, 2018; Acquired all spectrum necessary for implementation of the PTC system by December 31, 2018; Completed employee training required under FRA's PTC regulations, for other railroads or entities that are not Class I railroads or Amtrak, initiated RSD on at least one territory required to have PTC-governed operations, or met any other criteria established by the Secretary; Included in its revised PTC implementation plan an alternative schedule and sequence for implementing PTC as soon as practicable; and Certified to the Secretary in writing that it will be in full compliance with the requirements of 49 U.S.C. § 20157 on or before the date in the alternative schedule and sequence, subject to FRA approval.	<ul> <li>SFRTA operates and maintains the South Florida Rail Corridor (SFRC) which is a Class I railroad that hosts provides both intercity passenger (Amtrak), commuter (Tri-Rail), service and freight service (CSX). SFRTA is required to install implement PTC by December 2018, and comply with all statutory requirements for an alternative schedule and sequence applicable to commuter railroads, and have full PTC implementation on the SFRC by December 2020.</li> </ul>
Clean Air Act	1990	U.S. Environmental Protection Agency (EPA)	Determine the National Ambient Air Quality Standards (NAAQS) for six pollutants: Carbon Monoxide, Sulfur Dioxide, Nitrogen Dioxide, Lead, Ozone, and Particulate Matter.	Enhanced transit options reduce travel by single-occupant vehicles, helping South Florida counties remain classified as attainment areas.
Partnership for Sustainable Communities (DOT Livability Initiative and Federal Sustainable Communities Program)	Partnership formed 2009	U.S. DOT, FTA, HUD, and EPA	Interagency partnership to align programs and leverage mutually beneficial efforts. Aims to improve overall livability by providing improved access to affordable housing, better transportation choices, and lower transportation costs, all while protecting the environment.	The US DOT and FTA support several transportation policies and initiatives intended to help communities improve livability by encouraging TOD and enhanced mobility options.

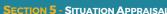




35	
V	SECTION 5 - SITUATIO

Plan / Policy / Study Reviewed	Most Recent Update / Timeframe	Responsible / Partner Agencies	Overview	Key Considerations for the Situation Appraisal
Title VI and Environmental Justice (EJ) Circulars	EJ Circular, effective August 15, 2012 Title VI Circular, effective October 1, 2012	U.S. DOT, FTA	The Title VI Circular was revised to remove the EJ component so that a new EJ Circular could be created, helping to better understand the distinctions between Title VI and EJ. The EJ Circular issued by FTA provides recipients of FTA financial assistance with guidance for incorporating EJ principles into FTA-funded plans, projects, and activities.	<ul> <li>SFRTA is required to submit Title VI programs every three years as a transit provider operating 50 or more fixed route vehicles in peak service and located in an urbanized area of more than 200,000 persons.</li> <li>SFRTA also is required to evaluate service and fare equity changes or monitor transit service for Title VI impacts.</li> <li>SFRTA's public involvement plan should incorporate outreach designed to encourage meaningful participation from members of the EJ population.</li> </ul>
State				
Florida Transportation Plan (FTP)	December, 2015	FDOT	The FTP is a statewide plan guiding the vision for Florida's transportation future over the next 50 years and defining goals, objectives, and strategies for Florida's transportation future over the next 25 years.	<ul> <li>The FTP defines a series of related goals, objectives, and strategies that provide guidance to regional transportation agencies on new and innovative approaches by all modes to meet the needs of today as well as the future.</li> </ul>
State of Florida Transportation Disadvantaged Five/Twenty-Year Plan	April, 2005	Florida Commission for the Transportation Disadvantaged (CTD)	This plan provides a framework for the growth of Florida's Transportation Disadvantaged program. It includes discussion of the mission and vision for the CTD, a summary of issues impacting the commission and the services provided, a summary of progress towards implementing the actions identified in the Commission's 1997 plan, a summary of goals and strategic objectives, and a multi-year implementation schedule.	<ul> <li>Short-term strategic vision includes developing and field-testing a model community transportation system for persons who are Transportation Disadvantaged.</li> <li>Long-range strategic vision includes developing a universal cost-effective transportation system with a uniform funding system and services that are designed and implemented regionally throughout the State.</li> </ul>
FDOT Five-Year Work Program	FY 2018-2022	FDOT	The Five-Year Work Program is a project-specific list of transportation activities and improvements developed in cooperation with MPOs and local transportation agencies, updated on a yearly basis.	<ul> <li>Work Program Projects include: a new Tri-Rail Station at PBI Airport in 2022, ROW purchase and capacity improvements at the MIC, and a study for a new station located in the area between Glades Road and Palmetto Park Road.</li> </ul>
Transit-Oriented Development (TOD) Guidelines	January, 2013	FDOT	The TOD Guidelines provide general parameters and strategies to local governments and agencies who want to promote and implement sustainable development that supports transit. The guidelines are voluntary and are intended to be used in partnership with FDOT to assist in managing congestion on state roadways, especially on the Strategic Intermodal System (SIS).	Local governments may use the TOD Guidelines as a tool in developing policies and tools to support development around Tri-Rail stations.
State Oversight Safety Plan	Due April 15, 2019	Undetermined	The State Safety Oversight (SSO) program is an FTA funded program to ensure the highest level of safety on rail transit systems. By April 15, 2019, each state with a rail transit system must be federally certified for compliance with the SSO Program. FTA provides federal funds through the SSO Formula Grant Program for states to develop and carry out SSO Programs. If a state fails to obtain certification for its SSO Program by the deadline, FTA cannot obligate any funds to public transportation agencies throughout that state until certification is achieved.	This is a state level study which should be led by a state level agency such as FDOT, but will require major involvement by regional transit agencies such as SFRTA.
FDOT Context Classification	August, 2017	FDOT	In 2014, the Florida Department of Transportation (FDOT) adopted a policy calling for the planning, design, construction and operation of a context-sensitive system of Complete Streets to serve users of all ages and abilities. To support this policy, FDOT created a context classification system to describe land use patterns throughout the state. This context classification recognizes the need to support all users within a complete network of streets, per each street's existing and desired future context and transportation characteristics.	<ul> <li>Pedestrian and bicycle, as well as automobile access to transit is a key SFRTA focus. Context classification is intended to address inclusion of all appropriate modes for all uses and to serve all users The classification of a roadway will inform FDOT's planning, PD&amp;E, design, construction, and maintenance approach for the roadway. Any TOD planned around a Tri-Rail station may be influenced by the classifications of the surrounding roads, and construction of the development may change the context classification of adjacent roadways as well.</li> </ul>
Regional				





36	
<b>Y</b>	SECTION 5 - SITUATION APPRA

Plan / Policy / Study Reviewed	Most Recent Update / Timeframe	Responsible / Partner Agencies	Overview	Key Considerations for the Situation Appraisal
	NEPA (environmental) phase in progress	FDOT, FTA with support from: SFRTA, SEFTC, SFRPC, TCRPC, Palm Beach TPA, Palm Tran, Broward MPO, BCT, Miami-Dade TPO, DTPW	The TRCL Study proposes reintroducing passenger rail service to the historic downtowns of South Florida by expanding Tri-Rail service onto the Florida East Coast Railway (FEC) corridor between downtown Miami and Jupiter. TRCL will generate an extensive range of benefits that go beyond the direct impacts of any individual project, including spurring economic development, creating jobs, improving regional access and mobility, and providing opportunities for transit-oriented development.	Success will result in major changes and expansion of Tri-Rail service. SFRTA has been identified as the FTA Project Sponsor and designated federal grant recipient, as well as the lead agency for the project Financial Plan, Engineering, Design, Construction, and Operations Phases.
2040 Southeast Florida Regional Transportation Plan (RTP)	October, 2015	Southeast Florida Transportation Council (SEFTC)	The RTP identifies the most significant transportation investments needed to meet growing travel demands throughout the Southeast Florida region (Broward, Miami-Dade, Palm Beach Counties). The horizon year of 2040 is chosen to provide time for agencies to assemble funds and complete the technical work required to design and construct the selected improvements. Elements of the RTP include Estimates of Growth over the next 25 years, goals for accommodating this growth, regional multi-modal options, public engagement, regionally significant investments, and funding.	<ul> <li>The 2040 RTP includes funded and unfunded public transportation priorities, including several that affect SFRTA service. Highlights include: <ul> <li>A new Tri-Rail station in Boca Raton;</li> <li>Tri-Rail Coastal Link, which will connect downtown Miami and other coastal downtowns to the Tri-Rail system;</li> <li>General funding and support for Tri-Rail; and,</li> <li>Improvements for SFRTA Commuter Connector service and park-and-ride lots.</li> </ul> </li> </ul>
Assessment of Mobile Fare Payment Technology for Future Deployment in Florida	March, 2016	FDOT	Phase I of a two-part research study to evaluate the efficacy of deploying a mobile phone fare payment system at a transit agency in Florida. FDOT selected StarMetro as the pilot agency. The goal of Phase I was to provide FDOT with a framework for the implementation of a future mobile payment pilot with a Florida transit agency. Phase II will deploy and evaluate the pilot at StarMetro.	<ul> <li>A successful pilot program would provide a framework for transit agencies across the state (including SFRTA) to adopt a mobile fare payment technology.</li> <li>A shared fare payment technology could bring south Florida one step closer to fare integration across agencies.</li> </ul>
95 Express Managed Lanes (Phase 3)	Phases 3A-1, 3A-2, and 3B-1 are currently under construction. 3B2 is scheduled for construction in 2020. Phase 3C is scheduled for construction in 2019.	FDOT	Phase 3 of the 95 Express continues the express lanes 29 miles north from Stirling Road in Broward County to Linton Boulevard in Palm Beach County. This is intended to improve mobility, relieve congestion, provide additional travel options, enhance transit services, accommodate future growth and development in the region, enhance emergency evacuation, and improve system connectivity between key limited access facilities in South Florida.	The 95 Express bus operated by DTPW and BCT provides Express Bus service from Broward County to Downtown Miami within current express lanes. Phase 3A has completed construction south of Broward Boulevard. The 95 Express lanes north of Broward Boulevard will allow the 95 Express bus service to continue traveling at higher average travel speeds via uninterrupted express lanes to new termini such as downtown Fort Lauderdale.
Palmetto Express Lanes	Under Construction	FDOT	FDOT District Six is implementing express lanes on 25 miles of roadway along SR 826/Palmetto Expressway from US 1/SR 5/S. Dixie Highway to west of NW 17 Avenue in Miami-Dade County. Construction of express lanes is ongoing along the Palmetto Expressway from West Flagler Street to just north of NW 154 Street/Miami Lakes Drive, and along I-75 from SR 826/Palmetto Expressway to NW 170 Street in Miami-Dade County. This project is approximately 13 miles in length and will also provide continuity to the I-75 Express Lanes project by FDOT District Four, from NW 170 Street in Miami-Dade County to I-595 in Broward County	When completed, this project will increase mobility for Tri-Rail riders at the Golden Glades station, which is located at the terminus of the Palmetto Express.
SFRTA Commuter Bus Comprehensive Analysis & Operations Plan	In Progress, completion expected August, 2018	SFRTA	SFRTA's commuter bus service is an important first and last mile connection to passengers. The Commuter Bus Comprehensive Analysis and Operations Plan will evaluate all policies, operations and compliance with all applicable federal, state, and local laws and regulations. The five tasks associated with the study are:  1) Comprehensive Commuter Bus Operational Analysis and Recommendations  2) Develop Time Point/Boarding Alighting Location Inventory and Planning Level Cost Estimates  3) Develop a Commuter Bus Service Operations Plan  4) Implementation Plan  5) Agency Coordination/Progress Meetings	SFRTA currently operates 14 commuter bus routes, three (3) of which are in Palm Beach County and 11 in Broward County. Miami-Dade County has their own bus, rail, and circulator system shuttles that connects withservice the Miami-Dade County Tri-Rail stations.







Plan / Policy / Study Reviewed	Most Recent Update / Timeframe	Responsible / Partner Agencies	Overview	Key Considerations for the Situation Appraisal
Seven50 Regional Plan	January, 2014	Southeast Florida Regional Partnership (Indian River, St. Lucie, Martin, Palm Beach, Broward, Miami-Dade and Monroe Counties) as well as SFRPC and TCRCP	The South Florida Regional Partnership was a voluntary, broad-based collaboration of more than 200 public, private, and civic stakeholders from the Southeast Florida region. The plan was devised through a series of public summits, workshops, online outreach, and high-impact studies to identify a blueprint for growing the Southeast Florida region into a prosperous and desirable place for the next 50 years and beyond.	This plan identifies a need to develop and maintain a multimodal, interconnected trade and transportation systems to support a globally competitive economy and focus on improvement.
Regional Climate Action Plan (RCAP 2.0)	December, 2017	Southeast Florida Regional Climate Change Compact (Palm Beach, Broward, Miami-Dade, and Monroe Counties)	The Regional Climate Action Plan (RCAP) is a guiding tool for coordinated climate action in Southeast Florida to build climate resilience. The plan identifies vulnerabilities, prioritized actions, and integrated policy initiatives to create a path forward for the region. The RCAP is a framework for concerted regional action rather than a set of directives for specific projects or programs at the local level, recognizing that decisions on the timing and approach are best determined by each local government. The first RCAP was designed with a five-year horizon the intent to update the document every five years. RCAP 2.0 reflects the lessons learned and actions taken in the first five years of implementation.	The RCAP provides a set of recommendations, guidelines for implementation, and shared best practices for entities such as SFRTA to act in-line with the regional agenda.
South Florida TOD Study (SFTOD)	In Progress,	SFRTA, SFRPC, TCRPC, FTA	This study is a Federal Transit Authority (FTA) funded effort to undertake TOD planning work along the FEC corridor in Miami-Dade, Broward, and Palm Beach Counties. The \$1.25 million grant was awarded at the end of 2015 and the work will be completed by 2019. The goal of the FTA TOD Planning Pilot Program is to leverage FTA investments by funding planning activities along future transit corridors. The SFTOD Study will undertake: station area planning with partner municipalities; an affordable housing study; station area bicycle and pedestrian planning; corridor wide water and wastewater analysis; and a study to develop a regional TOD Business Fund. Plan.	Station -area planning activites that range from station design charrettes to TOD code workshops are underway in seven municipalities with in the Tri-County area. Infrastrucure planning studies
Assessment of Mobile Fare Payment Technology for Future Deployment in Florida	March, 2016	FDOT	selected StarMetro as the pilot agency. The goal of Phase I was to provide	A successful pilot program would provide a framework for transit agencies across the state (including SFRTA) to adopt a mobile fare payment technology. A shared fare payment technology could bring south Florida one step closer to fare integration across agencies.
County				
Central Broward Transit (CBT) Study (Central Broward East-West Transit Study)	January, 2016	FDOT, Broward County	The CBT Phase 1 Project connects the Sawgrass mills mall with downtown Fort Lauderdale and terminates at the Fort Lauderdale Tri-Rail Station. This service would follow much of the same route as the now cancelled Wave Streetcar project. This will make important transit connections between downtown Fort Lauderdale, the Convention Center, Port Everglades, and the Fort Lauderdale-Hollywood International Airport. This project includes a technical evaluation of the proposed construction and operation of the modern streetcar service that will be located mostly within the City of Fort Lauderdale.	New transit service proposed which would serve Fort Lauderdale and Fort Lauderdale-Hollywood International Airport Tri-Rail Stations.
Palm Tran TDP	November, 2017	Palm Tran	The 2018-2027 Palm Tran Transit Development Plan (TDP), is first minor update after a Major Update was completed for 2017. This document includes a review of transit planning and policy documents, a documentation of study area conditions and demographic characteristics, and evaluation of existing Palm Tran services, a summary of market research and public involvement efforts, the development of a situation appraisal and needs assessment, and the preparation of a ten-year transit development plan.	Palm Tran serves six Tri-Rail stations including the northern terminus at Mangonia Park station. Palm Tran identifies regional partner coordination with agencies such as SFRTA one of the key planning activities taking place in the following years. In the TDP Palm Tran objective 3.3 is to improve the integration of Palm Tran service in a multimodal mobility system, and part of strategy 3.3.1 is to integrate service with SFRTA by reducing average scheduled transfer times.





36_	
`	SECTION 5 - SITUATION APPRAI

Plan / Policy / Study Reviewed	Most Recent Update / Timeframe	Responsible / Partner Agencies	Overview	Key Considerations for the Situation Appraisal
Broward County Transit TDP (BCT Connected)	December, 2017	ВСТ	BCT Connected is the strategic guide for public transportation in Broward County. The Major Update to the TDP was adopted in 2013 with a 10-year horizon, and this serves as the fourth minor update. This most recent update will identify achievements within the past fiscal year (2017), identify future plans and services for the upcoming fiscal year (2018) and provide recommendations for the new tenth year (2027).	BCT serves seven Tri-Rail stations. The TDP capital plan includes a project titled "Mobile Ticketing/Regional Interoperable Fare" with the goal of improving interoperability with services such as Tri-Rail. The TDP also identifies planned access improvements at the Cypress Creek Tri-Rail station.
Miami Dade County Department of Transportation and Public Works (DTPW) TDP (MDTIOAhead))	August, 2017	DTPW, formerly Miami-	MDTIOAhead serves as DTPW's strategic guide for public transportation in Miami-Dade County over the course of the next ten years. This is the fourth minor update to the TDP since the 2014 Major Update. 10Ahead presents the operational and capital improvements needed to ensure DTPW can provide quality transit service. This document includes a summary of DTPW's facilities and services in Chapter 2; describes the past year's civic engagement efforts in Chapter 3; assesses the agency's performance in 2016 in Chapter 4; identifies DTPW's 2017 implementation plan in Chapter 5; explores short-term plans (2018-2027) in Chapter 6 and longer term plans (2028 and Beyond) in Chapter 7; and Chapter 8 explores the Transit agency's finances.	<ul> <li>DTPW serves five Tri-Rail stations including the southern terminus at the Miami Intermodal Center (MIC). Tri-Rail Stations are served by Metrorail as well as Metrobus routes 7, 22, 32, 36, 37, 42, 57, 77, 105 E, 110 J, 112 L, 132, 133, 135, 150 (Miami Beach Airport Flyer), 238, 246, 277 (NW 27th Ave MAX), 297 27th Avenue Orange Max, and the 95 Express.</li> <li>TDP projects include the IRIS connection which will allow for the Tri-Rail Downtown Miami Link project to proceed. Also, identifies improvements to the Golden Glades Intermodal Terminal as a funded project, and a potential westward extension of Tri-Rail Service from the Miami Airport as part of the 2028 and Beyond Transit Vision Plan.</li> </ul>
Miami-Dade TPO SMART Plan	March, 2018	Miami-Dade TPO, FDOT	The Strategic Miami Area Rapid Transit (SMART) Plan is an infrastructure program of projects that will significantly improve transportation mobility in Miami-Dade County and the South Florida region. The SMART Plan will provide a world-class transit system that will promote economic growth and job creation, as well as increase the region's international competitiveness. The SMART Plan will expand transit options in Miami-Dade County along six (6) critical rapid transit corridors as well as nine (9) Bus Express Rapid Transit (BERT) corridors.	One of the six SMART Corridors, the Northeast Corridor, is Miami-Dade County's portion of the Tri-Rail Coastal Link (TRCL) project, a protion of the Florida East Coast (FEC) rail corridor extending from downtown Miami to Aventura. TRCL proposes to reintroduceg passenger rail service along an 85-mile stretch of the (FEC corridor between downtown Miami and Jupiter. The Northeast Corridor project includes land use and vision planingencompassed in the the TPO's corridor inventory report, and, FDOT's PD&E study
Palm Beach County Comprehensive Plan	December, 2017	Palm Beach County Department of Planning, Zoning & Building	The Palm Beach County Comprehensive Plan was first adopted in 1980 to provide the framework, mechanism and standards for land use changes. The basic concept of the Plan was to permit development at urban densities in those areas where urban services could be provided efficiently and economically, and to prevent urban density development in areas which were not planned for extension of urban services. The Goals, Objectives and Policies presented in the Plan Elements reflect the directives of the citizenry and the Board of County of Commissioners. These directives are to redirect growth to the east and encourage redevelopment of coastal communities, to provide orderly growth in an economical manner, and to implement growth management strategies which allow flexibility and a diversity of lifestyles.	One of the major directives of the plan is to encourage growth in the eastern portion of the county, where Tri-Rail is located. Numerous policies indicate Palm Tran's commitment to improve service to Tri-Rail stations, incentivize transit supportive development, and encourage transit ridership. Examples include making special allowances in the Unified Land Development Code (ULDC) for projects which promote public transportation, and exploring the construction of additional Park-and-Ride lots at Tri-Rail Stations.
BrowardNext 2.0 (Broward County Comprehensive Plan)	Transmittal expected June, 2018	and Development	This document is currently undergoing a major update, with public transmittal expected in June 2018. This section will be completed when the document is made available.	This section will be completed when the document is made available.
Miami-Dade County Comprehensive Development Master Plan (CDMP)	July, 2017	Miami-Dade County Department of Regulatory and Economic Resources	The CDMP establishes the objectives and policies of the Miami-Dade County government towards development, as well as broad parameters for government to do detailed land use planning and programming of infrastructure/services. This document establishes a growth policy that encourages development in a contiguous pattern centered around a network of high-intensity urban centers which are well-connected by transportation facilities in locations which optimize the efficiency of public service delivery.	The CDMP incentivizes development that promotes public transportation or is located near (within one-quarter or one-half mile of) a transit station. The CDMP also identifies rapid transit corridors on the Land Use Planning map, and states that major consideration will be given to opportunities for joint development and/or redevelopment of station sites along these corridors. The East-West Corridor will each bring more transit riders to the southern terminus of the Tri-Rail system, the Miami Intermodal Center (MIC).



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# 5.2.2 Federal Policies

# Fixing America's Surface Transportation (FAST) Act 5.2.2.1

The Fixing America's Surface Transportation (FAST) Act is a five-year, \$305 billion transportation authorization bill passed into law in December 2015. The authorization details the federal government's surface transportation policy for a multiyear period, and specifies the maximum amount of authorized funding for specific programs. Its key provisions include the authorization of \$2.3 billion annually for the Federal Transit Administration (FTA)'s Capital Investment Grant (CIG) program, which includes the New Starts, Core Capacity, and Small Starts categories of grants. Another \$1.5 billion over five (5) years will be authorized for a national discretionary program for replacing, rehabilitating, purchasing, or leasing bus related facilities. The bill also includes \$2.2 billion over five (5) years for three new discretionary grant programs for intercity passenger rail and an additional flexibility for federal direct lending programs.

Implications: The FAST Act provides various funding opportunities for SFRTA to implement various capital improvement projects as well as address preventative maintenance needs. The FAST Act further places emphasis on SFRTA to continue to identify various capital improvement projects and consistent with identified service improvement needs. SFRTA continues to be successful in pursuing discretionary grant funds related to preventative maintenance as well as capital improvements that benefit the entire Tri-Rail service area.

# 5.2.3 **State Plans**

### Florida Transportation Plan 5.2.3.1

The Florida Transportation Plan (FTP)is a statewide plan that establishes a policy framework at the state, regional and local levels. In 2015 and 2016, the FTP was updated to include three elements:

- 1.) The Vision Element: A 50-year planning horizon that assess trends, uncertainties and opportunities that shape the future of the statewide transportation system.
- 2.) The Policy Element: A long range transportation plan that defines goals, objectives and strategies for the next 25 years.
- 3.) The Implementation Element. Includes short and mid-term actions and performance measures for state, regional and local transportation providers.

*Implications*: As a regional partner, SFRTA strives to increase safety and security, improve the efficiency and reliability of travel and provide a transportation choice that meets the needs of the traveling public all of which form the tenets of the FTP. Furthermore, the goals and objectives developed for the SFRTA TDP Major Update are consistent and align with the seven (7) goals presented in the Florida Transportation Plan.



# 5.2.4 Regional and Local Transportation Plans

A review of several local and regional planning documents was performed to assess the level of impact that proposed and programmed project initiatives would have on Tri-Rail services. Furthermore, these documents were reviewed to ensure that the FY 2019 - 2028 TDP Major Update is consistent with corresponding transit capital and operational improvement projects for the Tri-Rail service area.

### 2045 Regional Long Range Transportation Plan 5.2.4.1

The South Florida region is in the process of preparing a 2045 Regional Long Range Transportation Plan (LRTP) that includes a Regional Transit Plan. A primary component of the Regional LRTP is the identification of a regional transit network to enhance regional mobility between employment, residential, educational, and recreational locations. The Regional Transit Plan is based upon an assessment of the region's travel markets and travel demand for services throughout the southeast Florida region. The objective of the Regional Transit Plan is to identify and prioritize capital improvement projects that address regional travel demand to include the identification of Tri-Rail improvements such as service expansion and multimodal connectivity.

The SFRTA actively participates in the development of the Regional Plan for the integration of Tri-Rail passenger service as part of a regional transit network. SFRTA is represented on the Regional Transportation Technical Advisory Committee to assure that the development of the 2045 Regional LRTP is aligned with SFRTA's policy and project initiatives. At the time of this writing, the proposed transportation improvements and prioritization of transit projects were not available. The 2045 Regional Transportation Plan is anticipated to be completed in 2019.

# 5.2.4.2 2045 Broward Long Range Transportation Plan

The Broward County Metropolitan Planning Organization is in the process of updating the 2040 LRTP to the year 2045. An update of the latest LRTP needs to occur every five years to meet federal and state requirements. The 2045 LRTP is anticipated to be completed and approved by the MPO Governing Board in 2019. At the time of this writing, the proposed transportation improvements and prioritization of transit projects were not available.

Miami-Dade and Palm Beach Counties will initiate the preparation of their 2045 LRTP's in 2019. SFRTA participates in the development of LRTP's since the Tri-Rail service area encompasses all three counties. SFRTA collaborates with the respective Metropolitan and Transportation Planning Organizations to ensure that regional commuters are represented in the long-range planning process.

# **Funding Sources** 5.3

# **Federal Funding Sources** 5.3.1

Under the FAST Act, funding is authorized under various federal funding programs which generally fall under two programs, formula and discretionary grants. Formula based grants are distributed to urbanized areas based upon formula amounts of funding, formula funds are distributed by formula to





states and metropolitan areas to fund transit investments. FTA formula funds are distributed to designated recipients in urbanized areas based on route miles, revenue vehicle miles, and population.

Discretionary Grants are typically awarded based upon a competitive grant selection process whereas a project or improvement will need to be justified through an evaluation according to set criteria as well as the amount of federal funding requested. Table 5-2 identifies a range of federal funding sources currently available for transit operations and capital expenses which SFRTA may pursue as a way of leveraging state and local sources being considered.

Table 5-2 Federal Funding Source Summary

Funding Option	Funding Source	Funding Availability	Eligibility Requirements
Section 5337 State of Good Repair Grants	FTA <sup>1</sup>	\$400 million apportioned in FY 2018 Omnibus Spending Bill	Capital projects that maintain existing high intensity fixed guideway (97% of funding) and high intensity motorbus (3% of funding).
Section 5307 Urbanized Area Formula Grants	FTA <sup>1</sup>	\$150 million apportioned in FY 2018 Omnibus Spending Bill	Capital funding for new projects; operating (preventive maintenance and ADA <sup>3</sup> ) and maintenance expenses for existing services.
Section 5339 Bus & Bus Facilities Program	FTA <sup>1</sup>	\$400 million apportioned in FY 2018 Omnibus Spending Bill	Capital funding for new projects to replace, rehabilitate and purchase buses and related equipment and to construct bus-related facilities.
Consolidated Rail Infrastructure and Safety Improvement (CRISI) Grants Program	FTA	\$593 million apportioned in FY 2018 Omnibus Spending Bill	Funding for improving passenger and freight rail systems in order to achieve safety, efficiency, and reliability benefits.
Surface Transportation Block Grants	FTA¹/ FHWA²	\$11.67 billion apportioned for FY 2018, \$590 million to Florida	Capital projects including highway, bridges, tunnels, and transit; maintenance expenses for existing services.
Capital Investment Grants (New Starts, Small Starts, and Core Capacity)	FTA <sup>1</sup>	\$2.6 billion apportioned in FY 2018 Omnibus Spending Bill	Capital projects for fixed guideway investments such as new and expanded rapid rail, commuter rail, light rail, streetcar, bus rapid transit, and ferry. CIG includes three categories New Starts, Small Starts, and Core Capacity projects.
Better Utilizing Investments to Leverage Development (BUILD) Grant Program	USDOT <sup>3</sup>	\$1.5 billion approved by Omnibus Spending Bill (FY 2018)	Capital projects that have a significant impact on the nation, a region, or a metropolitan area including road, rail, transit, port and intermodal improvements.
Infrastructure for Rebuilding America (INFRA) Grant Program	USDOT <sup>3</sup>	\$950 million apportioned for FY 2018	Capital projects: provides funding for freight and highway projects that have a significant impact on the national or region
Congestion Mitigation and Air Quality Improvement Program	FTA <sup>1</sup> / FHWA <sup>2</sup>	\$2.4 billion apportioned for FY 2018, \$14 million to Florida	Projects that contribute to the attainment or maintenance of National Ambient Air Quality Standards, and in reducing air pollution including projects that address highway congestion or provide new transit alternatives to congested highways.

<sup>&</sup>lt;sup>1</sup> FTA - Federal Transit Administration

<sup>&</sup>lt;sup>3</sup> USDOT – United States Department of Transportation



<sup>&</sup>lt;sup>2</sup> FHWA – Federal Highway Administration

# 5.3.2 State Funding Sources

There are several well-established and stable revenue sources from the State. The following sources are funded through FDOT, as indicated in the table below, some of which are currently a funding source, and where others are a potential funding source for SFRTA as identified.

Table 5-3 State Funding Sources (Current and Potential)

Table 3 3 State Fallaning Sources (current and Fotential)						
Funding Option	Funding Source	Funding Status				
Maintenance of Way MOW) Operating Assistance	FDOT	Incoming funding source <sup>1</sup>				
Service Development Program	FDOT	Incoming funding source <sup>1</sup>				
Operating Assistance and Dedicated Funding	FDOT	Incoming funding source <sup>1</sup>				
FHWA Pass-Through Funds	FDOT	Incoming funding source <sup>1</sup>				
Transportation Regional Incentive Program (TRIP)	FDOT	Incoming funding source <sup>1</sup>				
Public Transit Block Grant Program	FDOT	Incoming funding source <sup>1</sup>				
New Starts Transit Program	FDOT	Potential funding source				
Transit Corridor Program	FDOT	Potential funding source				
Commuter Assistance Program	FDOT	Potential funding source				
Intermodal Development Program	FDOT	Potential funding source				
County Incentive Grant Program (CIGP)	FDOT	Potential funding source				

# 5.3.3 Regional and Local Funding Sources

SFRTA also receives funding through various local and regional sources available to SFRTA. These sources are presented in the following table.

Table 5-4 Local and Regional Funding Sources (Current and Potential)

Funding Option	Funding Source	Funding Status		
City of Boca Raton Shuttle Service	Other Local Counties	Incoming funding source <sup>2</sup>		
City of Opa-locka Shuttle Service	Other Local Counties	Incoming funding source <sup>3</sup>		
County Operating Assistance	Other Local Counties	Incoming funding source <sup>2</sup>		
Other Local Funding	Other Local Counties	Incoming funding source <sup>2</sup>		
Gas Tax and SFRTA Reserves	SFRTA	Incoming funding source <sup>2</sup>		
Interest Income / Other Income	SFRTA	Incoming funding source <sup>2</sup>		

<sup>&</sup>lt;sup>1</sup> South Florida Regional Transportation Authority FY 2017 - FY 2018 Budget (http://www.sfrta.fl.gov/docs/planning/TDP/FINAL-FDOT-Transmittal-Draft-TDP-20170.pdf)

<sup>&</sup>lt;sup>3</sup> South Florida Regional Transportation Authority FY 2017 – FY 2018 Budget (http://www.sfrta.fl.gov/docs/planning/TDP/FINAL-FDOT-Transmittal-Draft-TDP-20170.pdf)



<sup>&</sup>lt;sup>2</sup> South Florida Regional Transportation Authority FY 2017 – FY 2018 Budget (http://www.sfrta.fl.gov/docs/planning/TDP/FINAL-FDOT-Transmittal-Draft-TDP-20170.pdf)



Implications: SFRTA will continue to receive Federal formula funds as distributed by the U.S. DOT to the urbanized area. SFRTA will also pursue federal funding sources for eligible projects through the U.S. DOT discretionary grant process. SFRTA has had demonstrated success in obtaining discretionary grant funding for the implementation of capital improvement projects, recently the Agency was awarded a federal grant to assist with the implementation of PTC grant as well as a planning grant related to the development of TOD plans throughout the Florida East Coast railroad corridor.

While SFRTA receives a stable source of funds for the operation and maintenance of the Tri-Rail system from State and local sources, non-traditional sources of funding will continue to be assessed. These types of sources to offset state and local funding assistance may include the examination of various strategies such as advertising revenues, passenger fares, etc. A section of the financial chapter of this document identifies and discusses various types of funding sources.

# 5.4 **Regional Transportation Issues**

### 5.4.1 **Managed Lane Network**

The South Florida network of managed lanes continues to expand along the I-95 corridor. Express lanes now extend from Downtown Miami to Downtown Fort Lauderdale. Currently construction is underway to extend the managed lanes network to northern Broward County with plans to continue the expansion into Palm Beach County. Further efforts are underway on other limited access facilities in South Florida, including the Turnpike and the Palmetto Expressway.

Implication: The northern extension of the managed lanes network on I-95 could present direct competition to Tri-Rail service; some commuters may prefer to stay in their vehicles to complete their regional trips or use new direct express bus service.

# 5.4.2 Regional Fare Integration

A regional fare integration policy will enable transit riders to use PalmTran, BCT, DTPW and Tri-Rail's services seamlessly, with a single transit pass. The four transit agencies in the region have halted this initiative temporarily, due to the rapid evolution of fare collection technologies. It was felt that the proposed smart card system would become obsolete too quickly. Thus, two transit agencies are not currently integrated (PalmTran and BCT). The transit agencies have agreed to continue working towards an integrated fare system and have commenced the procurement of the same.

*Implication:* The implementation of a fully integrated fare collection system can potentially enhance regional mobility and connectivity between the four transit agencies. This passenger convenience measure should be implemented as soon as practicable.

# 5.4.3 **Brightline Passenger Rail Service**

Brightline, a private rail service on the FEC corridor, commenced passenger service between the region's three major Downtowns - West Palm Beach, Fort Lauderdale and Miami in May 2018. An endto-end trip takes approximately 80 minutes. Brightline is planning a second phase to their service, which will ultimately link South Florida to the Orlando metropolitan area. With just three total stops





on the line, Brightline's service is distinct from Tri-Rail's. Brightline operates further to the east, serving downtowns, and charges higher fares. Fares cost between \$10 and \$30 for one-way trips. Monthly passes are planned, but prices have not yet been announced.

Implications: Brightline offers a complimentary service on a parallel corridor at a higher price point, with fewer station stops to provide a longer haul direct service and therefore is not anticipated to directly compete with Tri-Rail which serves many more destinations for a travel market that is seeking a shorter distance trip than provided by Brightline. Tri-Rail is working closely with Brightline to establish a Downtown Link at the MiamiCentral Station. When this service is implemented in mid-2019, Tri-Rail will also provide service to the three regional Downtowns. Tri-Rail should consider other services to further differentiate from Brightline, including potential expansions north (Jupiter) and south (Doral and Kendall).

### 5.5 **Land Use**

While county governments typically maintain their own existing land use map, local variation in regulations and the definition of terms make it difficult to compare land use patterns across county lines. However, FDOT maintains a map database utilizing land use categories that are consistent statewide. Using this dataset, an analysis was performed to better understand the context in which Tri-Rail currently operates. A half mile buffer was drawn around the Tri-Rail corridor, and land use data was clipped to the area within this buffer. Table 5-5 shows a breakdown of land uses within a half mile to the Tri-Rail corridor.

Table 5-5 Land Use Summary for Tri-Rail Corridor (half-mile buffer)

Land Use Category (Tri-County)	Area (Acres)	Percent of Area
Residential	13,052	37%
Public/Semi-Public	6,189	17%
Industrial	5,597	16%
Retail/Office	4,175	12%
Recreation	2,351	<b>7</b> %
Institutional	1,153	3%
Vacant Nonresidential	1,060	3%
Water	962	3%
Vacant Residential	914	3%
Centrally Assessed	187	1%
Acreage Not Zoned For Agriculture	11	0%
Mining	1	0%
TOTAL	35,652	100%

Source: FDOT, Florida Department of Revenue





# Miami-Dade County 5.5.1

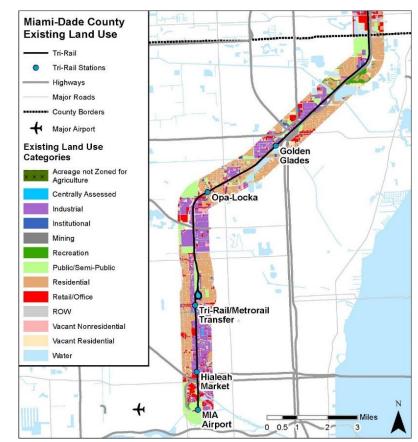
Land use along the 15.8 miles of Tri-Rail corridor in Miami-Dade county county is well balanced, with one-third of the area dedicated to residential land use, a third for business (industrial and retail/office) and a third for ancillary land use categories (such as public/semi-public, recreation, vacant parcels and water bodies). A closer examination of these categories reveals a number of unique qualities. The section of corridor within Miami-Dade has the highest density of industrial land use at 26%, but the lowest concentration of retail/office land use at just 8%. A complete list of land use categories and their acreages are located in Table 5-6.

Table 5-6 Land Use in Miami-Dade County

Daae County		
Land Use Category (Miami-Dade)	Area (Acres)	Percent of Area
Residential	2,587	33%
Industrial	2,034	26%
Public/Semi-Public	1,300	17%
Retail/Office	661	8%
Vacant Residential	324	4%
Vacant Nonresidential	298	4%
Recreation	247	3%
Water	128	2%
Institutional	110	1%
Centrally Assessed	82	1%
Acreage Not Zoned For Agriculture	11	0%
Mining	1	0%
TOTAL	7,783	100%

Source: FDOT, Florida Department of Revenue

Figure 5-1 Miami-Dade County Land Use Detail



Source: FDOT, Florida Department of Revenue





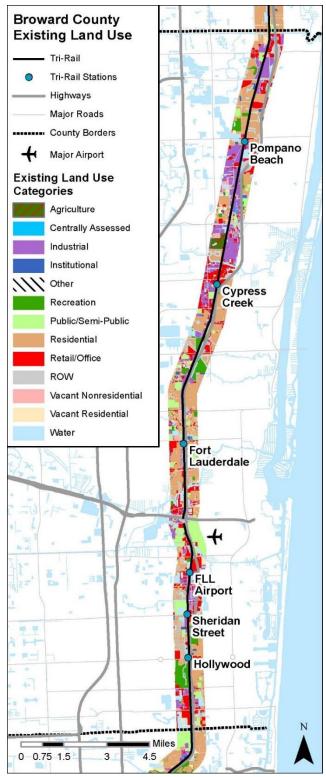
# 5.5.2 **Broward County**

Land use along the 24.7 miles of Tri-Rail corridor in Broward county shows similar high-level land use patterns as Miami-Dade, with roughly a third of the area dedicated to residential land use, a third for business (industrial and retail/office land uses), and a third for other supportive land uses. Exact figures are located in Table 5-7, while overall patterns are illustrated in Figure 5-2.

Table 5-7 Land Use in Broward County

Land Use Category (Broward)	Area (Acres)	Percent of Area
Residential	4,161	34%
Industrial	2,296	19%
Retail/Office	1,914	16%
Public/Semi-Public	1,312	11%
Recreation	844	7%
Water	522	4%
Vacant Residential	337	3%
Vacant Nonresidential	262	2%
Institutional	234	2%
Agricultural	159	1%
Centrally Assessed	29	0%
Other	8	0%
TOTAL	12,079	100%

Figure 5-2 Broward County Land Use Detail



Source: FDOT, Florida Department of Revenue





# 5.5.3 Palm Beach County

Land use along the 31.6 miles of Tri-Rail corridor in Palm Beach county is dominated by residential and public/semi-public land uses such as parks and government facilities, as illustrated in Figure 5-3.

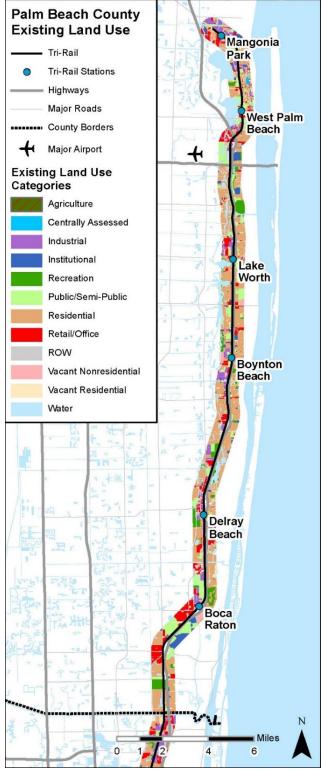
Retail/office, industrial, recreational and institutional land uses make up the rest of the half mile buffer area around the Tri-Rail Corridor, with each accounting for between 5%-10% of the land. Vacant parcels and water bodies are spread throughout the area, totaling 6% of the buffer area.

Table 5-8 Land Use in Palm Beach County near Tri-Rail

Land Use Category (Palm Beach)	Area (Acres)	Percent of Area
Residential	6,304	39%
Public/Semi-Public	3,577	22%
Retail/Office	1,601	10%
Industrial	1,267	8%
Recreation	1,260	8%
Institutional	809	5%
Vacant Nonresidential	499	3%
Water	312	2%
Vacant Residential	253	2%
Centrally Assessed	75	0%
Agricultural	15	0%
TOTAL	15,971	100%

Source: FDOT, Florida Department of Revenue

Figure 5-3 Palm Beach County Land Use Detail



Source: FDOT, Florida Department of Revenu



*Implications*: The land uses adjacent to the Tri-Rail corridor can potentially be redeveloped to be more transit-sustaining. Overall, the share of vacant land within each of the three counties is low; however, underdeveloped land that includes single family and low-level commercial and industrial developments adjacent to the corridors present opportunities for redevelopment into land uses that could expand Tri-Rail's mission objectives of providing regional transportation solutions. Multi-family housing projects, transit-oriented development, and other uses would be good uses of the land near the rail corridor. Tri-Rail should strive to work with the municipalities and counties to seek solutions to improve opportunities for transforming the land along the corridor.

### 5.6 Socioeconomic Trends

### 5.6.1 **Transit Demands and Mobility Needs**

By identifying the transit market and analyzing travel patterns in the region, an understanding can be reached that helps SFRTA determine how it can improve mobility in South Florida. While multiple initiatives and programs are already in place to improve existing services, and expand service to new areas, additional rider input helps identify focus areas for future efforts.

### 5.6.1.1 Future Population and Employment Density

The South Florida region is expected to see significant population growth in the next 20 years. Figure 5-4 shows that already densely populated areas are predicted to undergo the greatest population growth between now and 2040. Miami-Dade County is predicted to grow significantly more than Broward or Palm Beach Counties, especially the City of Miami, Miami Beach, Aventura/Sunny Isles Beach, and Doral.

Figure 5-6 shows that in 2040, because of this growth the most densely populated areas will remain in Miami-Dade County, in the noted growth areas as well as already highly populated areas like west Kendall, Hialeah, Hialeah Gardens, and Miami Gardens. and 5-7 show that household growth closely follows the patterns of population growth.

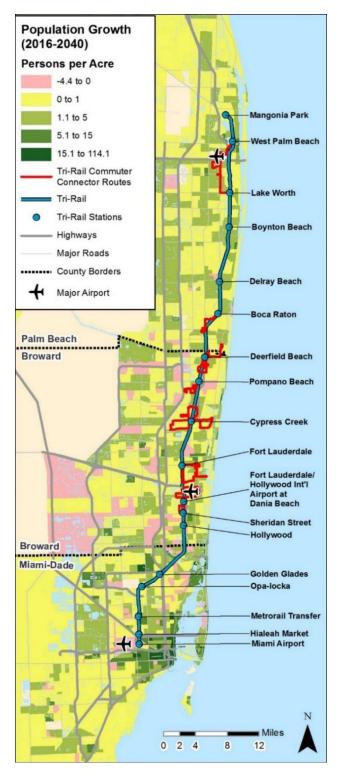
Figure 5-8 illustrates the projected employment growth until 2040, and Figure 5-9 shows the resultant employment density.

The highest concentrations of existing and future employment densities in the region are also in Miami-Dade County, specifically in downtown Miami and around the Miami International Airport, with some increases in Palm Beach county. These areas all qualify as transit-supportive in terms of very high population and employment densities. Broward County registers relatively flat employment growth between 2016 and 2040.



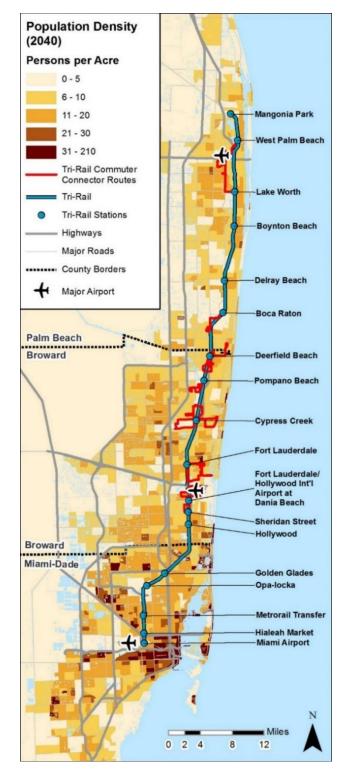


Figure 5-4 Population Growth (2016-2040)



Source: U.S. Census Bureau, 2016 American Community Survey 5-year estimates

Figure 5-5 Population Density (2040)

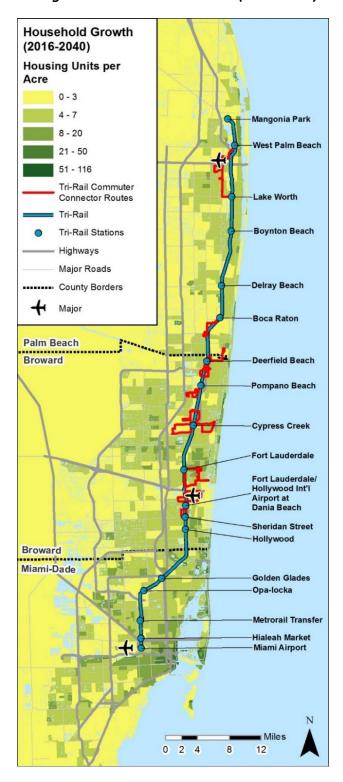


Source: SERPM 7



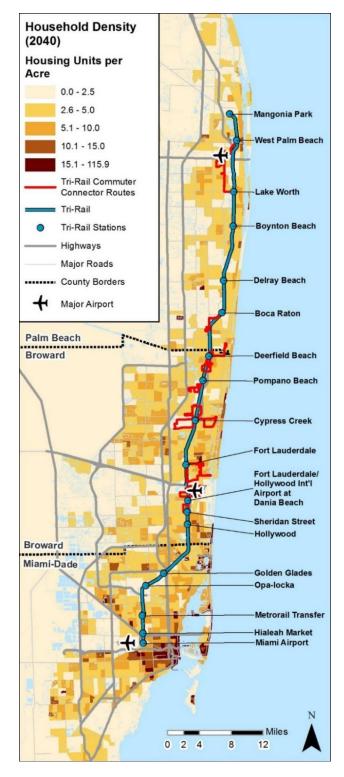


Figure 5-6 Household Growth (2016-2040)



Source: U.S. Census Bureau, 2016 American Community Survey 5-year estimates

Figure 5-7 Household Density (2040)

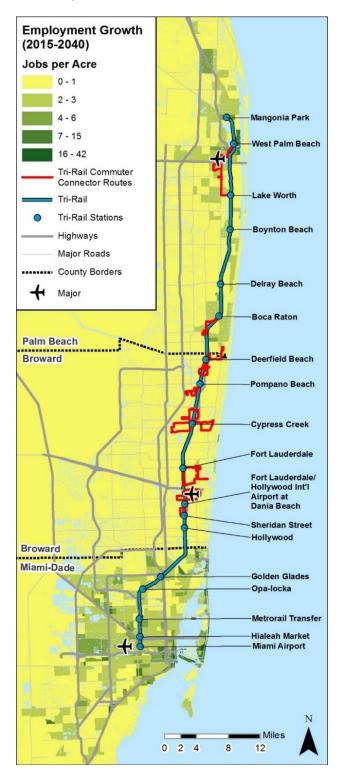


Source: SERPM 7



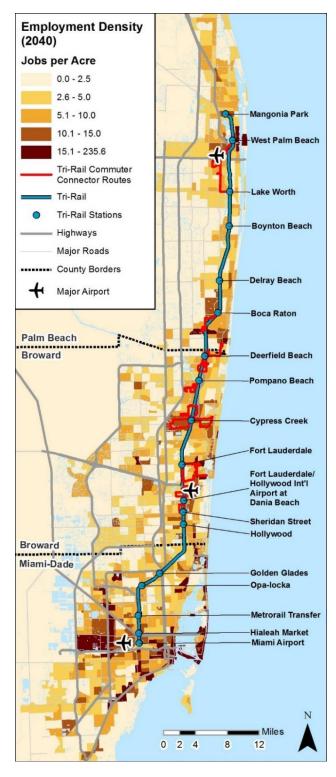


Figure 5-8 Employment Growth (2015-2040)



Source: U.S. Census Bureau, 2016 American Community Survey 5-year estimates

Figure 5-9 Employment Density (2040)



Source: SERPM 7



## 5.6.1.2 Transit Dependence Propensity Analysis

To develop a more complete understanding of the needs of the population SFRTA serves, an analysis of transit dependent populations was performed. This analysis considered four (4) demographic classifications which have historically corresponded with transit dependence. Those classifications are:

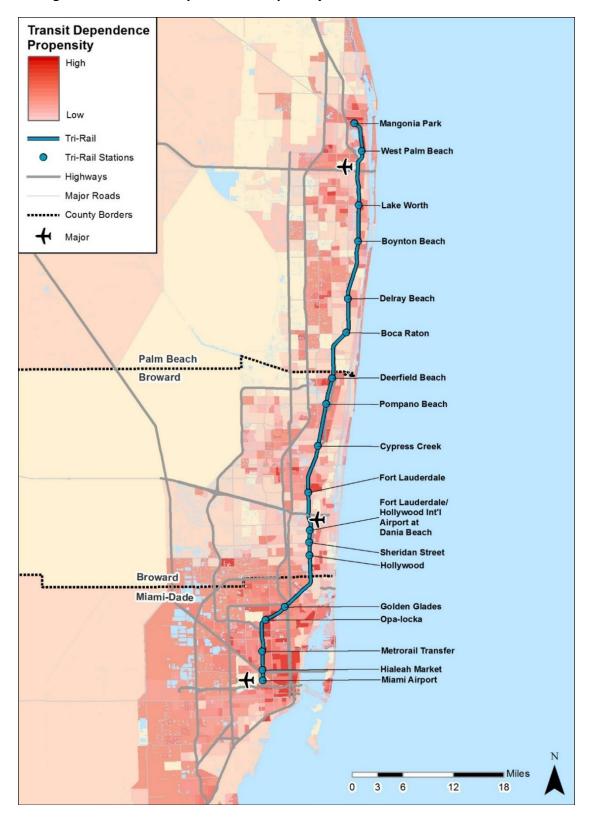
- Low Income Households (under \$25,000per year)
- Zero-Car Households
- Aged over 65 years
- Minority (any ethnicity that is not white, non-Hispanic)

These measures were individually weighted and overlaid to create Figure 5-10, which serves as an identification of populations with a propensity for using transit in the South Florida region. Each measure is individually explored in further depth in the following sections.





Figure 5-10 Transit Dependence Propensity



Source: U.S. Census Bureau, 2016 American Community Survey 5-year estimates



# 5.6.2 **Socioeconomic Trends Summary**

Population, household, and employment growth from 2016 to 2040 was documented in Figure 5-4 through Figure 5-9. These maps show net increases and densities in 2040.

While the population is generally predicted to rise across most parts of south Florida, a net loss of population is anticipated in parts of western Broward County. Additional net population loss is anticipated in parts of northeast Miami-Dade County and northwest Palm Beach County. Overall population growth and density are concentrated in the City of Miami near the Miami Airport Station and particularly around downtown, near the future site of the MiamiCentral Station.

Household growth generally mirrors population growth; however, no net household losses are anticipated. Modest growth is anticipated near station sites that serve the three major downtowns of the region – West Palm Beach, Fort Lauderdale, and Miami. The Hollywood station area also reflects an increase in population growth. The greatest household densities in 2040 are still anticipated to be concentrated around the urban cores of the downtowns.

Employment growth is forecast to remain generally flat in Broward County, with only modest gains of one job per acre throughout the county. The West Palm Beach and Mangonia Park Tri-Rail stations are anticipated to register employment density growth. In Miami-Dade County, employment density is anticipated to increase at each transit station site by 2040. Employment density remains highest near Boca Raton, West Palm Beach, and the Miami Airport Stations.

Transit dependence for the South Florida area was evaluated, to identify where pockets of individuals who rely on transit more than the overall population reside. Figure 5-10 depicts the findings of this analysis, which looks at households with low incomes, zero cars, and individuals over the age of 65. Miami-Dade County registers the highest concentration of transit dependent populations, with much of the county's population centers showing a higher propensity than Palm Beach or Broward. Within the two northern counties, transit propensity is generally higher along the Tri-Rail corridor than it is in the counties overall.

Implications: Generally, population, household and employment gains are anticipated to occur within five miles of the Tri-Rail corridor. From the perspective of maximizing service to population and employment centers, Tri-Rail's service corridor is in an ideal, centralized location. Tri-Rail service can be expanded on existing underutilized rail corridors to link to other job centers, including those in Doral and Jupiter.





### 5.7 **Travel Patterns and Behavior**

Figure 5-11 AM Trip Flows in Southeast Florida

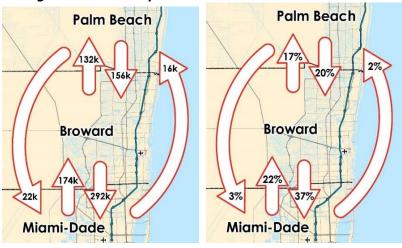
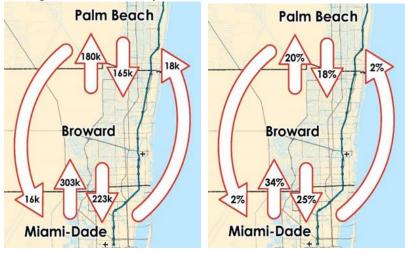


Figure 5-12 PM Trip Flows in Southeast Florida



This section explores the intercounty travel pattern in Southeast Florida, using the 2015 StreetLight personal trip data set.

Table 5-9 shows average weekday origin-destination trips between Miami-Dade, Broward, and Palm Beach Counties. Approximately 96 percent of intercounty trips are between adjacent counties, underscoring the key role of accessibility in shaping the intercounty travel pattern. Table 5-9 also shows the intercounty origin-destination flows during the peak travel hours (i.e. 6AM-10AM and 3PM-7PM).

This information is mapped on Figures 5-11 and 5-12. Nearly half of the total intercounty trips occur during the peak travel periods. About 60 percent of trips travel southward in the AM peak and vice versa in the PM peak. More than one-third of the intercounty trips or during the AM peak flow from Broward County to Miami-Dade County. This travel flow is reversed in the northward direction between Miami-Dade and Broward Counties during the PM peak.

A detailed analysis in which origins and destinations are grouped into travel districts is illustrated in Figures 5-13 and 5-14, which show the origin/destination balance for these districts during the AM and PM peak periods, respectively. The largest producers of AM origins and PM destinations (commuter residential districts) were found to be adjacent to county lines, specifically Parkland, Aventura/Sunny Isles Beach, Hallandale Beach, the area west of Boca Raton, and the area of Broward County located between I-595 and Florida's Turnpike.

The largest producers of PM origins and AM destinations (inter-county commuter employment districts) were found to be downtown Fort Lauderdale, downtown West Palm Beach, western Boca Raton, Commercial Boulevard in Broward County, and Miami-Dade County in general, particularly Downtown Miami, the Doral Warehouse District, and the area south of Miami International Airport including downtown Coral Gables and the Blue Lagoon office area.



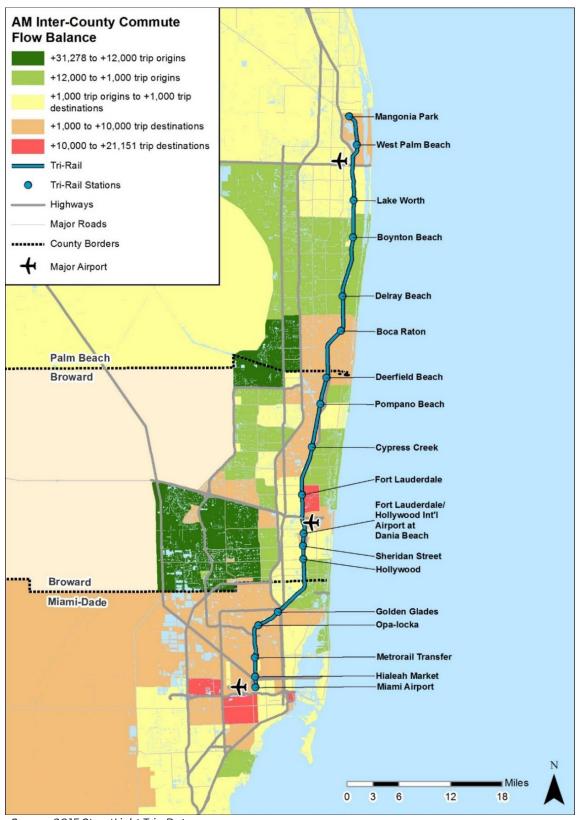
Table 5-9 Intercounty Personal Daily Trips in Southeast Florida AM Peak and PM Peak

Origin	Destination	Total Trips	Percent of Intercounty Trips	AM Peak	Percent of Intercounty Trips	PM Peak	Percent of Intercounty Trips
Broward	Miami-Dade	942,174	30%	292,015	37%	223,078	25%
Broward	Palm Beach	574,591	18%	131,703	17%	179,524	20%
Miami-Dade	Broward	921,601	29%	173,993	22%	303,449	34%
Miami-Dade	Palm Beach	71,250	2%	15,600	2%	17,752	2%
Palm Beach	Broward	576,464	18%	155,547	20%	164,682	18%
Palm Beach	Miami-Dade	73,770	2%	21,750	3%	16,173	2%
	Total	3,159,850	100%	790,608	100%	904,658	100%

Source: 2015 StreetLight personal trip data set



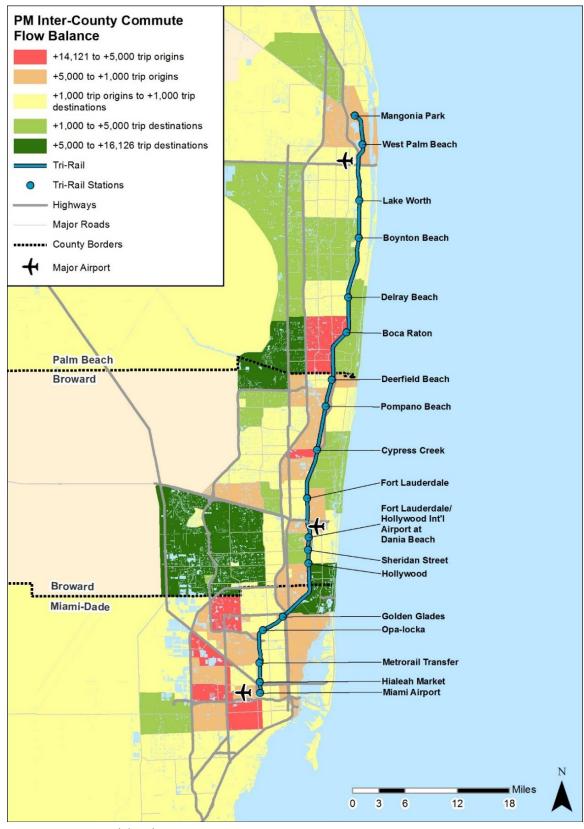
Figure 5-13 Origin/Destination Balance of Intercounty Trips during AM Peak Periods



Source 2015 StreetLight Trip Data



Figure 5-14 Origin/Destination Balance of Intercounty Trips during PM Peak Periods



Source: 2015 StreetLight Trip Data





Figure 5-15 depicts the cumulative distribution of intercounty trip length. The length of trip has been defined as the straight distance between centroids. About 37 percent of trips are less than 10 miles, a sign for presence of significant number of short intercounty trips that both trip ends are near the county border lines.

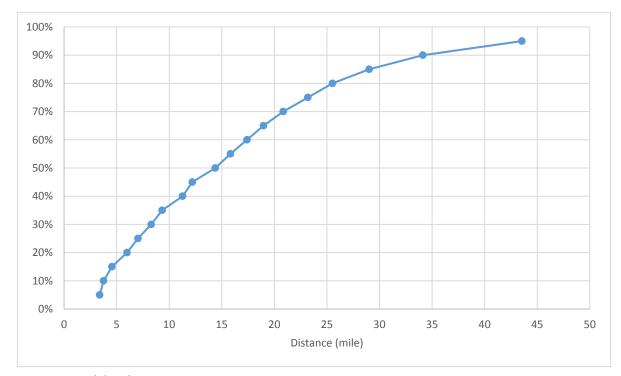


Figure 5-15 Cumulative Distribution of Intercounty Trip Length in Southeast Florida

Source: 2015 StreetLight Trip Data

Table 5-10 illustrates the impact of a distance threshold on intercounty travel patterns by comparing the top flows of intercounty trips where different minimum distance thresholds are used. About half of the trips are less than 15 miles and near one-third of the trips between counties are less than 10 miles.

Table 5-10 Intercounty OD Flows at Different Distance Thresholds

Origin	Destination	All Trips	%	Trips >5mile	%	Trips >10m	%	Trips >15m	%
Broward	Miami-Dade	942,174	30%	777,699	25%	610,933	19%	450,203	14%
Broward	Palm Beach	574,591	18%	494,027	16%	331,146	10%	239,610	8%
Miami-Dade	Broward	921,601	29%	756,617	24%	595,741	19%	430,940	14%
Miami-Dade	Palm Beach	71,250	2%	71,250	2%	71,250	2%	71,250	2%
Palm Beach	Broward	576,464	18%	488,116	15%	330,227	10%	240,091	8%
Palm Beach	Miami-Dade	73,770	2%	73,770	2%	73,770	2%	73,770	2%
	Total	3,159,850	100%	2,661,479	84%	2,013,067	64%	1,505,864	48%

Source: 2015 StreetLight Trip Data





Figure 5-16 Illustrates the distribution of inter-county trip flows according to travel districts. Districts bordering other counties show the strongest connection, particularly between Hollywood/Hallandale Beach in Broward and Aventura/Sunny Isles in Miami-Dade.

Figure 5-17 illustrates the distribution of trip flows with a minimum distance threshold of 10 miles, to highlight trips between non-adjacent districts. Here, we see strong trip flows in residential districts like Boca Raton, Aventura/Sunny Isles, and Weston as well as employment districts like Downtown Miami, Downtown Fort Lauderdale, and southern Doral.

### 5.7.1 **Travel Patterns Summary**

More trips are registered between Broward and Miami-Dade during the AM peak, and Miami-Dade and Broward in the PM peak.





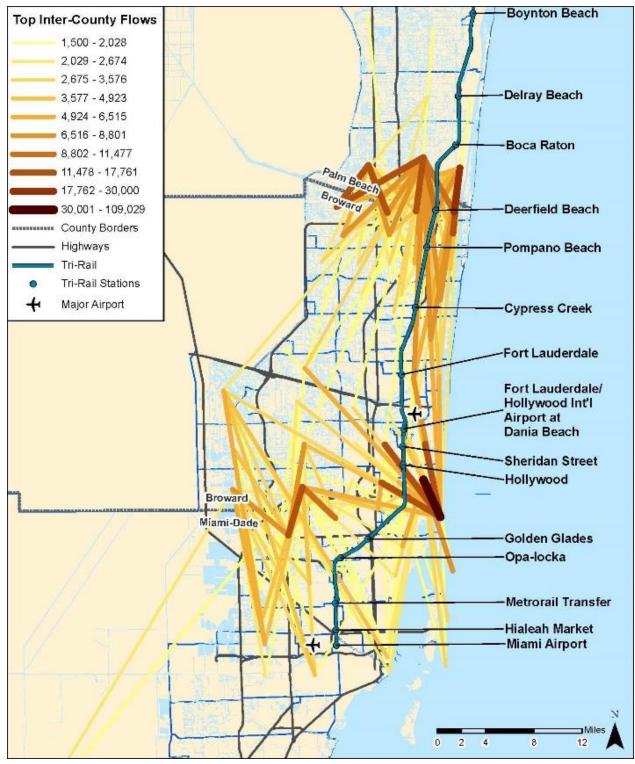


Figure 5-13 and Figure 5-14 register which parts of South Florida receive or emit more total trips in the AM and PM peak periods. Overall, Fort Lauderdale, Coral Gables, and Downtown Miami have the highest net gain of trips relative to trip exports within the South Florida region in the AM peak period. That is, these areas receive significantly more trips than they export. Figure 5-16 and Figure 5-17 depict intercounty trip flows in the AM and PM peak periods. These demonstrate that in the AM and PM peaks, the greatest trip exchanges are between Broward and Miami-Dade (292,000 Broward to Miami and 174,000 Miami to Broward in the AM and 303,000 Miami to Broward and 223,000 Broward to Miami in the PM.),

Implications: As a regional transportation provider, Tri-Rail should pay special attention to the intercounty travel patterns. Identifying specific origins and destinations for inter-county trips is useful information that can and should guide potential Tri-Rail expansion plans. Establishing new service and enhancing existing service could be determined by where demand is anticipated to be greatest in the coming years.



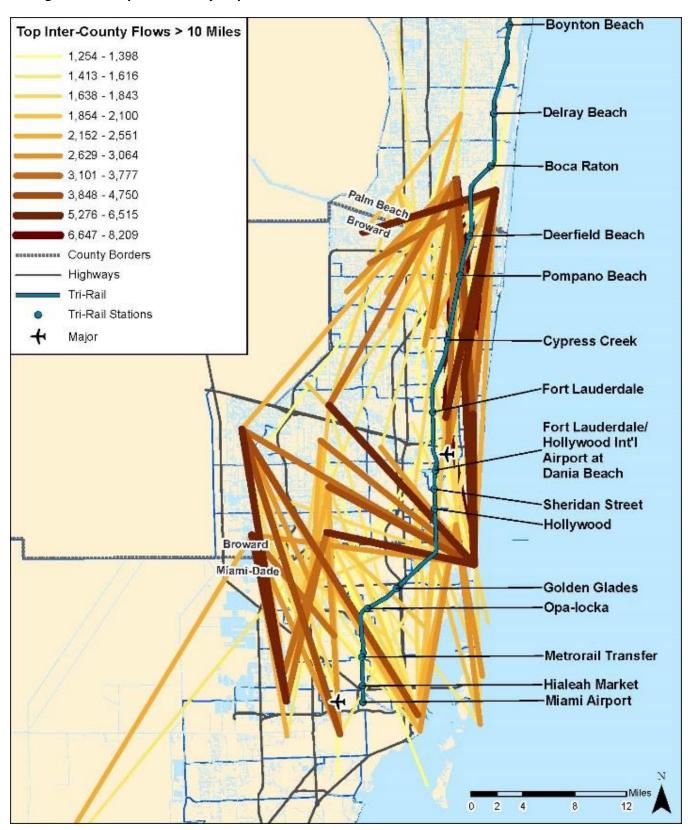
Figure 5-16 Top Intercounty Trip Flows in Southeast Florida



Source: 2015 StreetLight Trip Data



Figure 5-17 Top Intercounty Trip Flows Greater than 10-miles in Southeast Florida



Source: 2015 StreetLight Trip Data



#### **Demand Estimation** 5.8

Ridership Forecasts were prepared for this TDP update for Tri-Rail Commuter Rail service and Commuter Bus Service. The Tri-Rail commuter rail service ridership forecasts were obtained from the Florida Department of Transportation's (FDOT) current approved travel forecasting tool, the Southeast Regional Planning Model (SERPM), version 7.0. and SERPM is a comprehensive transportation demand modeling tool that is capable of estimating stop level transit boarding data for individual routes. The use of the SERPM model was approved by FDOT District 4 in response to a request submitted December 2017. Commuter Connector bus service projections were developed based upon historical ridership in consideration of population and employment growth projections for the next 10-years.

#### 5.8.1 **10-Year Annual Ridership Projections**

Regional transportation needs are projected using estimates from travel demand models which incorporate socio-economic data such as population and employment, as well as the attributes of the existing and planned transportation networks. As a means of forecasting these transportation needs, the SERPM 7.0 model was applied for multi-modal planning analysis and long-range transit planning. This model, which includes Miami-Dade, Broward, and Palm Beach counties, describes travel demand for both mobility dependent local trips, as well as for the regional commuter market.

The primary input to the SERPM 7.0 model, as with any other travel demand model, is the socioeconomic data. This data, which is developed by each individual County's Metropolitan Planning Organization (MPO), defines where people live and work and thus sets the basis of the region's travel patterns. The next most important inputs to the model are the highway and transit networks. These networks provide a realistic representation of the region's roadways and transit routes.





# 5.8.2 Tri-Rail Passenger Rail Ridership Estimation for 2028

As part of this TDP Major Update, SERPM 7, the regional planning travel demand model for Southeast Florida, was used to estimate ridership for the proposed changes applied to the Tri-Rail commuter rail line in 2028. Two scenarios were modeled: one for existing conditions using the existing Tri-Rail network and another scenario for the year 2028. Because the official SERPM 7 model is only available for years 2010 (the base) and 2040, the ridership for any other years needs to be approximated using ridership values of years 2010 and 2040. For the future year 2028 scenario, socio-economic data was developed by interpolating between the 2010 and 2040 data sets. The linear interpolation method was used to estimate the ridership for any years between 2010 and 2040:

$$Ridership_n = Ridership_{2010} + (Ridership_{2040} - Ridership_{2010}) \times \left(\frac{n-2010}{2040-2010}\right)$$
 (Eq. 1)

Where n is the target year and Ridership Refers to the Tri-Rail ridership for year n.

Therefore, the following steps were taken to estimate the ridership for year 2028:

The proposed changes to the Tri-Rail system were applied to both 2010 and 2040 SERPM7 model,

Then, the official models were run to obtain the [Ridership] 2010 and [Ridership] 2040 values in the equation.

Finally, [Ridership] 2010 and [Ridership] 2040were plugged in Equation 1 to estimate the ridership for 2028.

The 2017 Base scenario is based on the 2010 SERPM 7.0 model's socio-economic data and transit network. In this scenario, the transit network route data was updated to current 2017 conditions. Passenger rail service for this scenario were based on the 2017 network with an additional Tri-Rail Station (Boca Raton II) and service extension to Downtown Miami added.

Table 5-11 Average Weekday Tri-Rail Passenger Rail Ridership Projections (2019 – 2028)

Year	Tri-Rail Boardings
2019	20,975
2020	21,094
2021	21,211
2022	21,325
2023	21,444
2024	21,559
2025	21,659
2026	21,789
2027	21,821
2028	22,023

Source: SERPM 7



# 5.8.3 Tri-Rail Commuter Connector Bus Service

For purposes of developing Tri-Rail Commuter Connector ridership forecasts an assessment of historical ridership was performed to identify growth rates on a route by route basis as well as identify various ridership trends. Table 5-12 shows the annual ridership of SFRTA commuter bus routes from 2012 through 2018. For most of the shuttle routes, ridership increased from 2012 to 2015/2016, however over the last two (2) years, ridership has been decreasing.

Table 5-12 Annual Ridership of SFRTA Commuter Bus Routes

		,						
	2012	2013	2014	2015	2016	2017	2018	Sparkline
W. Palm Beach 1 Wkday	-	-	-	-	-	19,447	22,861	-
W. Palm Beach 1 Wkend	-	-	-	-	-	6,752	9,330	-
Lake Worth	18,664	29,758	33,203	31,620	31,400	24,785	20,161	
Boca Raton	26,579	28,778	30,757	41,345	57,320	47,564	38,413	
Deerfield Beach 1	32,193	27,378	33,169	42,120	41,984	30,737	22,359	<b>✓</b>
Deerfield Beach 2	23,667	21,380	29,998	28,752	26,535	15,111	13,591	~
Pompano Beach	21,809	24,381	26,378	25,949	29,223	24,308	21,591	
Cypress Creek 1	29,718	33,450	38,179	41,824	37,897	33,197	31,720	
Cypress Creek 2	52,274	55,028	52,262	51,206	45,966	43,126	44,061	
Cypress Creek 3	34,271	36,387	38,420	43,181	43,674	29,199	30,136	
Ft. Lauderdale 1	95,548	117,714	131,292	155,618	179,380	162,177	166,700	
Ft. Lauderdale 2	23,533	26,420	32,738	39,035	36,241	26,811	30,144	<u> </u>
Ft. Lauderdale 3 Wkend	16,820	25,118	50,787	51,377	52,394	51,488	47,717	
FLA-1 Wkday	286,075	302,796	293,254	299,400	303,364	306,317	296,565	<u></u>
FLA-2 Wkend	44,488	42,384	66,255	73,135	72,501	77,303	78,493	
Sheridan Street 1	17,936	15,573	15,858	16,030	16,203	11,207	8,661	
Total	723,575	786,545	872,550	940,592	974,082	883,330	882,503	

Source: SFRTA, 2018

To better understand the ridership fluctuations in Table 5-12, the average annual growth rates over different time horizons have been calculated in Table 5-12. Over the last three (3) years, data shows that the ridership for all routes, except FLA-2, and WPB 1 weekday and weekend have declined. The ridership of almost half of the routes has dropped at least 17 percent each year since 2016. However, looking at the annual ridership changes over a seven-year period provides a positive figure of ridership trend for most of the routes. Overall, when looking at total Tri-Rail Commuter Connector ridership on an annual basis, there was an increase in ridership annually from 2012 through 2016 by three percent.



Table 5-13 SFRTA Commuter Bus Route Average Ridership Growth Over Different Time Horizons

Commuter Bus Route	3-year	5-year	7-year
W. Palm Beach 1	NA	NA	NA
W. Palm Beach 2	NA	NA	NA
Lake Worth	-20%	-11%	4%
Boca Raton	-18%	9%	9%
Deerfield Beach 1	-27%	- <b>7</b> %	-4%
Deerfield Beach 2	-27%	-16%	-6%
Pompano Beach	-14%	-4%	0%
Cypress Creek 1	-8%	-4%	2%
Cypress Creek 2	-2%	-4%	-3%
Cypress Creek 3	-15%	-4%	-1%
Ft. Lauderdale 1	-3%	<b>7</b> %	10%
Ft. Lauderdale 2	- <b>7</b> %	0%	6%
Ft. Lauderdale 3	-5%	-1%	24%
FLA-1 Wkday	-1%	0%	1%
FLA-2 Wkend	4%	4%	12%
Sheridan Street 1	-27%	-13%	-10%
All*	-7%	0%	3%

<sup>\*</sup> Excluding W Palm Beach Routes 1 & 2

Another key factor to consider for forecasting ridership is the population growth, as the higher population means higher demand for transportation. Table 5-14 shows that the population in Southeast Florida is expected to grow by about 1.2% annually over the next ten years.

**Table 5-14 Population Growth** 

Area	2017	2020	2025	2030
Broward County	1,873,970	1,943,800	2,045,800	2,126,900
Miami-Dade County	2,743,095	2,872,800	3,062,600	3,215,100
Palm Beach County	1,414,144	1,473,000	1,559,600	1,636,400
Southeast Region	6,031,209	6,289,600	6,668,000	6,978,400
Florida	20,484,142	21,526,500	23,061,900	24,357,000

Source: Bureau of Economic and Business Research (BEBR)



Table 5-15 Employment Growth

Area	2017	2020	2025	2030
Broward County	895,694	930,500	991,600	1,056,600
Miami-Dade County	1,259,755	1,307,000	1,389,700	1,479,000
Palm Beach County	678,955	709,200	762,700	817,300
Southeast Region	2,834,404	2,946,700	3,144,000	3,352,900
Florida	9,316,220	9,696,900	10,366,200	11,067,500

Source: Florida Department of Opportunity

Related to forecasting ridership, it should be noted that the factors mentioned above are not the only determining factors. A better understanding of the current situation can lead to a more precise forecast. Looking only at the factors discussed above, coupled with expected increasing ridership on the Tri-Rail system, the forecasts for the commuter bus routes over the next ten years are presented in Table 5-16. For most routes, a constant decline over the next ten years is forecasted as an extrapolation of the considerable decrease in recent years.





Table 5-16 Tri-Rail Commuter Bus Routes Ridership Projections (2019 – 2028)

Route	Change	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
W. Palm Beach 1 Wkday	5%	24,004	25,204	26,464	27,788	29,177	30,636	32,168	33,776	35,465	37,238
W. Palm Beach 2 Wkend	5%	9,797	10,286	10,801	11,341	11,908	12,503	13,128	13,785	14,474	15,198
Lake Worth	-5%	19,153	18,195	17,286	16,421	15,600	14,820	14,079	13,375	12,706	12,071
Boca Raton	-5%	36,492	34,668	32,934	31,288	29,723	28,237	26,825	25,484	24,210	22,999
Deerfield Beach 1	-5%	21,241	20,179	19,170	18,212	17,301	16,436	15,614	14,833	14,092	13,387
Deerfield Beach 2	-5%	12,911	12,266	11,653	11,070	10,516	9,991	9,491	9,017	8,566	8,137
Pompano Beach	-5%	20,511	19,486	18,512	17,586	16,707	15,871	15,078	14,324	13,608	12,927
Cypress Creek 1	-2%	31,086	30,464	29,855	29,258	28,672	28,099	27,537	26,986	26,446	25,918
Cypress Creek 2	-2%	43,180	42,316	41,470	40,640	39,828	39,031	38,250	37,485	36,736	36,001
Cypress Creek 3	-2%	29,533	28,943	28,364	27,796	27,241	26,696	26,162	25,639	25,126	24,623
Ft. Lauderdale 1	2%	170,034	173,435	176,903	180,441	184,050	187,731	191,486	195,316	199,222	203,206
Ft. Lauderdale 2	2%	30,747	31,362	31,989	32,629	33,281	33,947	34,626	35,319	36,025	36,745
Ft. Lauderdale 3 Wkend	-2%	46,763	45,827	44,911	44,013	43,132	42,270	41,424	40,596	39,784	38,988
FLA-1 Wkday	-2%	290,634	284,821	279,125	273,542	268,071	262,710	257,456	252,307	247,260	242,315
FLA-2 Wkend	2%	80,063	81,664	83,297	84,963	86,663	88,396	90,164	91,967	93,806	95,683
Sheridan Street 1	-5%	8,228	7,817	7,426	7,054	6,702	6,367	6,048	5,746	5,459	5,186
Total	-1%	836,188	827,098	818,592	810,653	803,268	796,420	790,097	784,286	778,974	774,150



#### 5.9 **Technology**

The public outreach efforts of this TDP, (presented in greater detail in Section 5.10), sought input from Tri-Rail passengers to identify desired improvements. Three technology-related enhancements were identified through the surveys:

- Introduce a mobile ticketing alternative for fare collections
- Improve on-board and platform announcement systems
- Bring electric car charging stations to Tri-Rail Park-and-Ride facilities

# **Implications:**

SFRTA should proactively look to implement innovative ideas to improve passenger convenience and comfort on the Tri-Rail network. Furthermore, SFRTA should consider issuing Requests for Information to in turn establish a plan for introducing the above-identified passenger amenities and enhancements.

#### **Shared Economy Technologies** 5.9.1

# **Ride-hailing Services**

Ride-hailing services provide on-demand transportation services. Services such as Uber and Lyft have become ubiquitous in the South Florida region in recent years. These companies have established network drivers available for hire for short or long-haul trips. The apps provide flexibility to enable passengers to either share their ride for a discounted rate, or pay a slightly higher rate for a private trip. The emergence of the ride-hailing industry has had a serious impact on the more established taxi cab industry. Using smart phone apps, passengers can request rides for prices that are competitive with taxi fares. Early research on the impacts of ride-hailing services on transit usage suggest that the emergent technology has impacts to transit use, with results noting that transit ridership declines when ride-hailing emerges as an alternative.

# Bike-share/Dockless Scooters

In recent years, bicycle sharing programs have proliferated throughout the South Florida region. This technology come in two distinct styles - docked and dockless. Skybike in West Palm Beach, BCycle's AvMed Rides in Broward County, and Citibike, available in Miami and Miami Beach, all offer docked bicycle programs. In each of these systems, users borrow a bicycle from one of dozens of docking locations, pays by the minute for the use of the bicycle and returns it to another docking location at the end of the rental.

More recently, dockless bicycle and scooter sharing has emerged. These new technologies work much in the same way as their docked counterparts, however, riders can pick up and drop off their rentals freely, without having to seek out docking stations. A control panel on the bicycles serve as the docking interface, and the remaining controls are conducted using a smart phone application. Ofo (South



Miami), and Limebike, available throughout unincorporated Miami-Dade County, are two companies offering dockless bicycle programs

Most recently joining the shared economy have been dockless scooters. Operating the same way as dockless bicycles, battery powered scooters charge riders a fee for unlocking the scooter, then a small fee per minute of usage. Two shared electric scooter companies, Limebike and Bird, have made forays into the South Florida market, but have faced regulatory scrutiny from local municipalities. Bird has temporarily removed its scooters from streets pending an agreement with the City of Miami.

*Implications*: Due to the short-distance nature of the business model, the shared economy transportation technologies that have emerged are not direct competitors to Tri-Rail's long-distance commuter rail service. Instead, shared ride, shared bicycle and shared scooter technologies present a potential opportunity for Tri-Rail passengers who need additional last mile options upon completing their commutes on Tri-Rail. Tri-Rail should explore potential partnerships with the above described companies, and County, and Municipal permitting authorities, to introduce these technologies at and near Tri-Rail stations corridor-wide. Doing so could attract more riders, who are assured of easy transfers to reach their ultimate destinations with minimal wait times.

# 5.10 Public Involvement

# 5.10.1 **Community Stakeholders**

SFRTA undertakes outreach efforts to engage local stakeholders and the public for purposes of providing educational information, promoting transit, rider safety and awareness while also obtaining feedback on Tri-Rail's passenger services and future plans. Throughout SFRTA, outreach efforts are viewed as an ongoing effort to improve the perception of public transportation as well as educating the public on regional transit necessary service adjustments.

SFRTA organizes regional and local events to promote Tri-Rail while also distributing brochures, maps and other materials. The SFRTA also maintains an extensive list of community, civic, and other stakeholder organizations that are contacted by SFRTA related to specific promotional events and to obtain input on existing or planned service improvements. Public stakeholders can also contact call (1.800.TRI.RAIL) for customer service assistance.

# 5.10.2 Survey Result Discussions

In 2018, SFRTA conducted four (4) surveys to solicit public input on existing services as well as for future planning efforts, and in support of the preparation of this TDP Major Update. An overview of these surveys was provided in Section 4 and additional detail can be referenced in the Appendix of this document. For purposes of the situation appraisal, a summary of results from each of these surveys is provided to establish the input and feedback received from the traveling public. This input helps to establish the basis of the goals and objectives of the TDP Major Update as well as to form the premise for identifying various funded and unfunded needs, as presented in the subsequent chapter of this document.



# 5.10.3 **Tri-Rail Intercept Survey**

The Intercept survey was conducted on Tri-Rail platforms in early March 2018 during am and pm peak periods as well as on a Saturday. Over 1,200 surveys were collected on three different survey dates. The survey asked two questions: – "Why do you use Tri-Rail?", and "What improvements would you like to see on Tri-Rail?" Riders were also asked for their origin and destination.

The two most selected answers to "Why do you use Tri-Rail?" were to save money and to avoid traffic congestion. These were selected by 51 and 49 percent of respondents, respectively. Ten percent of respondents said they took Tri-Rail because of comfort, because it is subsidized, and because of environmental considerations. Respondents could select all options that applied, therefore the percentages do not add up to 100.

The second question was separated into short-term (one - two years), medium-term (three - five years), and long-term (six - 10 years) categories. The most popular responses are summarized as follows:

Table 5-17 Needs Identified by Intercept Survey

Short-Term (1-2 Years)	Mid-Term (3-5 Years)	Long-Term (6-10 years)
Frequent Trains - 36%	Expand north to Jupiter - 30%	No answer - 43%
Cleanliness - 35%	No answer - 30%	Expand rail service - 39%
Mobile Ticketing - 35%	Improve shuttle service - 24%	Not Specified - 52%
Earlier/later trains - 32%		Martin County - 21%
Improved On-Time Performance - 29%		Homestead - 16%
		Expand to FEC Corridor - 24%
		Upgrade Parking lots - 13%

Source: Intercept Survey, based on 1,254 responses. More than one response was permitted by the survey document.

# 5.10.4 Tri-Rail On-Board Survey

The On-Board survey was conducted to identify travel patterns, socioeconomic characteristics, and opinions of Tri-Rail users. The survey was conducted on January 17, 2018 between the hours of 4:00 AM and 3:00 PM. 3,366 survey responses were collected over the course of the day. Overall, 60 percent of respondents rated Tri-Rail service and facilities as being "very good" or "good, marking an increase in favorability of seven (7) percent from the previously administered on-board survey, conducted in 2013.

Respondents were asked to rate several aspects of Tri-Rail service. Topics included station announcements, cleanliness and security; ticket vending machines, train cleanliness, parking availability, and the overall experience, ranging from customer service to the on-board restrooms.

Passengers rated most aspects of Tri-Rail Service as Good or Very Good, as summarized in Table 5-18, Table 5-19, and Table 5-20. The responses are notably positive, with only two criteria – Inside Train Cleanliness and on-board restrooms – receiving more than 20 percent ratings of poor or very poor. Riders are most positive about on-board train crews, air-conditioning, and safety/security on-board, receiving 77, 75, and 74 percent, respectively.



Table 5-18 On-Board Survey Station Conditions

	Station Conditions							
Rating	Station Announcements	Station Cleanliness	Station Security Safety	Parking Availability	Ticket vending machines			
Very Good/Good	62%	59%	66%	72%	60%			
Okay	24%	26%	23%	16%	25%			
Very Poor/Poor	13%	14%	9%	6%	11%			

Source: On-Board Survey

Table 5-19 On-Board Survey Train Conditions

Rating		Train Conditions										
	Outside Cleanliness	Inside Cleanliness	On-board Restrooms	On-Board Announcements	Air Conditioning	Safety/Security On-Board	On-Board Experience					
Very Good/Good	55%	51%	36%	72%	75%	74%	73%					
Okay	26%	28%	21%	20%	19%	19%	21%					
Very Poor/Poor	17%	20%	32%	7%	5%	5%	4%					

Source: On-Board Survey

Table 5-20 On-Board Survey Customer Service

	Customer Service							
Rating	Station Staff	On-Board Train Crew	Telephone Customer Service	Train on Time	Phone App	Website		
Very Good/Good	70%	77%	54%	60%	61%	62%		
Okay	19%	16%	18%	24%	19%	20%		
Very Poor/Poor	7%	4%	9%	14%	6%	5%		

Source: On-Board Survey

# 5.10.5 Commuter Connector Bus Customer Survey

The Commuter ConnectorBus Customer Survey was conducted over nine ten (910) days in March 2018. Surveys were distributed to riders during the AM peak period on all of SFRTA's 14 Commuter Connector bus routes: thirteen routes were surveyed on weekdays during the morning peak travel periods and one weekend-only route, FL3, collected survey information on Saturday.. In total, 240 surveys responses were received. Seven (7) questions on the survey covered topics on trip characteristics, and solicitations for suggested improvements to the Commuter Bus service.

Two questions touch upon patrons' desired improvements to the Commuter Bus service: Question six (6) asks what type of transit amenities patrons would like to see – bus shelters and benches (42 percent and 27 percent, respectively) were the most commonly selected options. In question seven (7), SFRTA asked patrons to select what they considered to be the three most important improvements to the



commuter connector bus service.

The top improvement options selected by survey participants are as follows:

- Buses arriving on time at your bus pick-up/drop-off location
- Real time tracking (Tri-Rail Tracker) information for bus timeliness
- More frequent bus service
- Need for Tri-Rail signage at you bus pick-up/drop-off location

# 5.10.6 Online Website survey

The online survey was open for more than three months from Monday, March 26, 2018, to Friday, July 13. During this period 442 respondents completed the survey, which was designed with the same questions as those administered in the intercept survey. 96% of respondents are currently Tri-Rail users, while only 30% indicated that they use the Commuter Connector bus. The major reason riders gave for using Tri-Rail is due to traffic congestion (73%), while value, saving time / money, and convenience were also strongly indicated, as illustrated in Table 5-21.

Respondents were asked to choose which improvements they would like to see in the short term, medium term, and long-term, selecting as many improvements as they like for each category. The responses, summarized in Table 5-22, generally mirror those obtained during the intercept survey.

Table 5-21 Online Survey Responses – Reason for Riding

Why do you use TriRail and / or the Commuter Bus	% of total Survey Takers
Traffic congestion	73%
Save money	53%
Accessible / convenient	43%
Good Value	41%
Save time	29%
Subsidized by work	19%
Operates on time	19%
Environmental Concerns	18%
Connecting transit service stations	15%
Comfortable passenger cars	13%
Do not own a car / no driver's license	11%
Clean Stations / passenger cars	10%
Other	8%

Source: TriRailTDP2018.com Online Survey. More than one response was permitted by the survey document.



Table 5-22 Online Survey Responses – Desired Improvements

Short-Term (1-2 Years)		Mid-Term (3-5 Years)		Long-Term (6-10 years)		
More Frequent Service	50%	Expand service on the FEC corridor between Ft. Lauderdale and Miami	46%	Expand Service on the FEC corridor between W. Palm Beach / Ft. Lauderdale	48%	
Mobile Ticketing App	48%	Expand north to Jupiter	46%	Expand rail service to Martin County	43%	
Improve Cleanliness	48%	Additional/new Tri-Rail station(s)	39%	Expand rail service South Homestead	37%	
Earlier/later Trains	45%	Improve Tri-Rail Shuttle / Commuter Bus route connections	34%	Expand rail service West to Doral	36%	
More weekend service	37%	Encourage transit supportive development at Tri-Rail Station	31%	Expand rail service South to Kendall	34%	
Improve announcement system	32%					
Develop discount ride-share service (Uber/Lyft) to/from stations	32%					
Improve on-time performance	31%					
Improve Commuter Connector bus routes	29%					

Source: TriRailTDP2018.com Online Survey. More than one response was permitted by the survey document

Implications: The intercept and web surveys document generally broad support for expanded Tri-Rail service. Overall service expansion received 52 percent support on the intercept survey, with 30 percent of intercept survey respondents supporting an expansion to Jupiter. 44 percent of web survey responses also supported this northern extension. Additional service south and west into suburban Miami-Dade County receive moderate support with affirmative responses in the 30<sup>th</sup> percentile range.

More immediately web and online survey respondents expressed support for increased service frequency. Similar levels of support were expressed for earlier and later train service and more weekend service. Vehicle cleanliness was also cited by respondents – 35 percent of intercept survey responses and 47 percent of online survey respondents asked for cleaner vehicles. The on-board survey question pertaining to vehicle cleanliness echoes this sentiment - on-board restrooms received the lowest overall positivity scores of on the survey.

The Commuter Bus survey registered support for more reliable service – ensuring that the Commuter Buses arrive on time, and real-time tracking.

To address the public's feedback, SFRTA should consider concentrating resources on increasing train frequency and cleanliness. In the longer term, Tri-Rail should evaluate the feasibility of expanding service at both ends of the existing Tri-Rail corridor to serve the suburban populations of West Palm Beach and Miami-Dade counties.



# Section 6 Goals and Objectives



# **GOALS AND OBJECTIVES**

SFRTA was founded in 2003 with the vision of providing greater mobility and transportation choice in South Florida, thereby improving the economic viability and quality of life for local communities, the region and state. To move toward this vision, a mission statement was issued for SFRTA to coordinate, develop and implement, in cooperation with government agencies, private enterprise and citizens, a viable regional transportation system in South Florida that meets the desires and needs of the people. In pursuit of this mission, a list of goals and objectives for SFRTA is maintained and updated each year in the TDP.

#### **SFRTA Goals and Objectives** 61

SFRTA developed nine (9) major goals to help guide the organization in achieving its mission. Success is to be measured according to 71 objectives, as developed by SFRTA staff in response to (1) communication with each department of SFRTA, (2) input from the SFRTA TDP Internal Review Committee (IRC) and public outreach efforts, and (3) input from regional stakeholders, including the local workforce board representatives.

# **Goals and Objectives**

# VISION

Goal 1. Take a leadership role to expand and promote premium regional transit and multi-modal mobility.

- Identify opportunities to plan, fund, construct, and operate expansion of the existing Tri-Rail system and Tri-Rail Coastal Link onto the Florida East Coast (FEC) Railway.
- 1.2. Serve as the coordinating agency for future premium transit projects that cross county lines.
- 1.3. Work with local governments adjacent to Tri-Rail's service region to investigate transit services that would connect with the existing Tri-Rail system.
- 1.4. Collaborate with public, private and civic sectors to advance transit-oriented and transit-supportive development initiatives and policies.
- 1.5. Conduct expanded outreach to groups of potential new transit users.

# **PARTNERSHIPS**

Goal 2. Develop public and private sector partnerships to promote strategies that support and expand regional transit.

- 2.1. Strengthen partnerships with the region's local governments, business and civic organizations, and downtown and redevelopment agencies to advance transit.
- 2.2. Utilize the metropolitan planning process to develop long range plans and work programs that plan for and fund regional
- 2.3. Build upon Brightline and Florida East Coast Industries (FECI) partnerships for successful freight, passenger rail, and real estate development opportunities along the FEC corridor.
- 2.4. Continue SFRTA collaboration with the Urban Land Institute (ULI) Southeast Florida/Caribbean Chapter's private sector institutions and development community.



# **Goals and Objectives**

2.5. Pursue joint development opportunities at existing and future Tri-Rail stations.

# SYSTEM PERFORMANCE

#### Goal 3. Maximize the performance, reliability, efficiency and capacity of the existing SFRTA/Tri-Rail system.

- 3.1. Maintain the Tri-Rail system in a State of Good Repair (SGR) that meets state and federal standards.
  - 3.1.1. Meet FTA Transit Asset Management (TAM), Florida Trade Commission (FTC), and FDOT performance measures and standards to maintain State of Good Repair (SGR).
  - 3.1.2. Update the SFRTA Rail Fleet Management Plan (RFMP) as established in the RFMP.
- 3.2. Achieve and maintain a 90%+ On-Time-Performance (OTP).
  - 3.2.1. Meet or exceed the FTC End-To-End OTP objective of 80%, with a target of 90%+.
  - 3.2.2. Exceed the FTC objective of 41,863 revenue miles between vehicle failures.
  - 3.2.3. Identify and address factors that create train delays affecting OTP.
  - 3.2.4. Monitor Incident Response times to identify potential improvements.
  - 3.2.5. Limit undue train delay by completing timely vegetation cutting and removal, per the FDOT/SFRTA Maintenance-Of-Way (MOW) Agreement.
- 3.3. Identify strategic capital investments to improve the existing SFRTA/Tri-Rail system.
  - 3.3.1. Identify and implement best available technology to improve the reliability of the Tri-Rail System
  - 3.3.2. Provide continuing support to FDOT for the Miami River-Miami Intermodal Center Capacity Improvement (MR-MICCI) project, which will improve system capacity and efficiency.
  - 3.3.3. Identify, fund, and construct crossovers, sidings, and other needed small track improvements at key locations along the rail corridor.
  - 3.3.4. Regularly evaluate park-and-ride capacity needs.
- 3.4. Conduct feasibility analyses for new stations at strategic locations.
- 3.5. Periodically evaluate Tri-Rail train schedules for opportunities to improve service, provide more frequent service, and/or extend schedules.

#### Goal 4. Improve SFRTA's commuter bus service and connecting transit and transportation services.

- 4.1. Ensure SFRTA commuter bus service maintains or exceeds standards set by SFRTA and the Planning Technical Advisory Committee (PTAC), and by FDOT and SFRTA in the JPA funding agreement.
- 4.2. Regularly assess and reevaluate the performance, efficiency and connectivity of commuter bus routes operated or funded by SFRTA.
  - 4.2.1. Monitor all commuter bus routes to meet or exceed the 7.0 passenger/hour standard established by SFRTA and the PTAC in 2010.
  - 4.2.2. Ensure SFRTA commuter bus service makes and completes all scheduled trips.
  - 4.2.3. Ensure SFRTA commuter buses meet all safety and amenity requirements.
  - 4.2.4. Maintain any needed emergency commuter bus service at the required level.





# **Goals and Objectives**

- 4.3. Conduct need and feasibility studies for new SFRTA commuter bus routes.
- 4.4. Coordinate with other transit providers to improve scheduling, frequency and connectivity of transit services.
- 4.5. Work to implement tri-county expansion of Easy Card or an electronic fare system that can integrate with Easy Card.
- 4.6. Work to establish a coordinated, simplified region-wide transfer fare policy
- 4.7. Explore the suitability of an SFRTA program providing discount ride-share services (Lyft/Uber) for access to/from stations
- 4.8. Collaborate with local governments to connect new and existing local shuttles/circulators and schedules at Tri-Rail stations.
- 4.9. Collaborate with private and public entities to provide direct connections between Tri-Rail and employment, activity centers, intermodal hubs, and schools.

# Goal 5. Improve the Tri-Rail passenger experience.

- 5.1. Develop a mobile ticketing app.
- 5.2. Perform regular SFRTA websites upgrades and add multi-modal trip planning/navigation to the Tri-Rail Train Tracker app.
- 5.3. Continually meet/exceed the FTC objective of 1 customer complaint per 5,000 boardings.
- 5.4. Meet and exceed the FTC objective of a 14-day formal response time to customer complaints.
- 5.5. Maintain station and passenger car cleanliness.
- 5.6. Solicit public input on customer satisfaction, expectations and priorities.
- 5.7. Improve pedestrian, bike, vehicular and transit access to stations.

#### SAFETY

# Goal 6. Implement safety and security measures, procedures and practices for the Tri-Rail system and facilities that meet state and federal standards.

- 6.1. Install and operate Positive Train Control (PTC) per federal requirements.
- 6.2. Improve highway-rail grade crossing safety.
- 6.3. Reduce train accidents caused by human factors; improve track safety, and enhance emergency preparedness and response.
  - 6.3.1. Implement and monitor the performance of SFRTA's safety awareness strategies.
    - 6.3.1.1. Conduct extensive Public Awareness Campaign, addressing range of safety issues, in conjunction with FDOT, via multiple media and community outlets.
    - 6.3.1.2. Implement improved messaging on platform including signage to alert pedestrians near tracks.
    - 6.3.1.3. With FDOT, develop and distribute safety brochures.
    - 6.3.1.4. Work with and provide data to local law enforcement to apply for FRA grants that fund officers to patrol the rail corridor and right-of-way.
    - 6.3.1.5. Work with local law enforcement on incident responses and the 2-1-1 call service, a live, 24-hour comprehensive crisis support and suicide prevention service.
    - 6.3.1.6. Based on performance analysis, and in conjunction with FDOT, regularly adjust aspects of the Trespasser and Suicide Mitigation Program for efficacy.



# **Goals and Objectives**

- Coordinate with all departments and contractors to implement the Incident Response Plan.
- Implement a pilot program using drones to identify trespassers and persons who are a threat to themselves or trains. The program has the potential to achieve a 15-minute or less response time within 50 feet of the rail corridor, compared to 40-60 minutes currently.

# SUSTAINABLE FUNDING

# Goal 7. Pursue funding opportunities to support both the existing SFRTA/Tri-Rail system and expanded premium transit in the region.

- 7.1. Together with regional agencies, increase public awareness of funding challenges for sustainable transit and transportation.
- 7.2. Pursue and secure a stable source for operating funds for existing and future transit services, and for matching funds for state and federal funding programs.
- 7.3. Increase passenger fare revenue to reach a goal of >22.5% farebox recovery.
- Partner with local and regional agencies to develop and fund local and regional transportation initiatives.
- 7.5. Continue to secure federal funding grants and awards.
- 7.6. Participate in state and federal funding programs, including Federal Transit Administration (FTA) CRISI, BUILD, New Starts, Small Starts, Discretionary Programs, TIFIA, State New Starts, SIS, and TRIP.
- 7.7. Seek private financing or partnerships for major expansion initiatives; work with localities that want to invest in station development costs.

# **ECONOMIC GROWTH and ENVIRONMENTAL SUSTAINABILITY**

# Goal 8. Facilitate economic growth and development throughout the region.

- 8.1. Work with private and public sectors to implement Tri-Rail Coastal Link and to generate transit-oriented development (TOD) around Tri-Rail stations, and along the FEC corridor.
- 8.2. Pursue and advocate for projects on the SFRC and FEC corridors that will add capacity for freight movement.

# Goal 9. Maximize environmentally sustainable practices for both the current SFRTA/Tri-Rail system and expanded premium services in the region.

- 9.1. Work with the private and public sectors to attract TOD around existing and future Tri-Rail stations.
- Educate the public on the environmental benefits of regional premium transit.
- 9.3 Procure new rail power and fleet vehicles that have low emission, hybrid, or alternative fuel characteristics.
- 9.4. Exceed latest EPA emission standards.



# Section 7 10-Year Plan





# TEN-YEAR IMPLEMENTATION PLAN

This section presents the various improvement projects proposed for SFRTA over the TDP Major Update planning horizon of FY 2019- 2028. The Ten-Year Implementation Plan has been developed through an assessment of the existing operating environment coupled with input received from the public involvement process, survey results, peer and trend analysis and the outcome of the situation appraisal.

This process informed the Ten-Year Implementation Plan which includes improvement initiatives that consist of capital projects, service adjustments, and state of good repair (SGR) projects. SFRTA continues to focus on improving on-time performance (OTP), providing a clean and attractive system for passenger use, and improving customer convenience, while continuing to assess expansion opportunities.

#### **SFRTA Adopted Five-Year Capital Plan** 7.1

SFRTA annually prepares and adopts a Five-Year Capital Plan. For the purposes of the SFRTA Building Stronger Connections plan, the Capital Budget has been expanded into a Capital Program. The first five years of the Capital Program originates directly from the SFRTA's FY 2018-2019 Capital Budget and the Five-Year Plan for FY 2018 to FY 2023. Table 7-1 depicts the first five years of SFRTA's Capital Plan.

The latter years (FY 2024 to FY 2028) contain projects anticipated to receive funding together with a list of additional projects identified as priorities by SFRTA. Projects in this second five years are unfunded, but could be advanced into the first five years should additional funding become available. The capital plan may be periodically adjusted in accordance with SFRTA's priorities and funding availability, following formal procedures and final approval by the SFRTA governing Board. Table 7-2 shows the programmed and planned capital expenses for the second five years of SFRTA's Building Stronger Connections plan.





# Table 7-1 SFRTA Building Stronger Connections 10-Year Capital Plan - First Five Years

Capital Expenses	FY 2018- 2019	FY 2019- 2020	FY 2020- 2021	FY 2021- 2022	FY 2022- 2023	FY 2023- 2024	Total
	Cap. Budget	Projected	Projected	Projected	Projected	Projected	
Funded Projects							
Rehab Rolling Stock	\$3,911,826	\$1,438,582	-	-	-	-	\$5,350,408
Rail Yard Improvements	-	\$100,000	-	-	-	\$100,000	\$200,000
Station Improvements	-	\$500,000	\$500,000	\$500,000	-	\$500,000	\$2,000,000
Purchase of Rolling Stock	\$500,000	\$10,037,500	\$10,037,500	\$10,337,500	\$10,337,500		\$41,250,000
Project Support/Administration	\$1,200,000	-	\$1,490,442	\$1,200,000	-	\$1,200,000	\$5,090,442
Preventive Maintenance	\$22,784,726	\$22,007,057	\$23,432,057	\$23,283,902	\$23,283,902	\$28,762,262	\$143,553,906
Debt Service-DTML PTC Commercial Loan	\$3,907,381	\$4,495,209	\$4,487,369	\$4,487,369	\$2,190,364	-	\$19,567,692
Debt Service-DTMS All Aboard Florida Loan	\$17,528,049	-	-	-	-	-	\$17,528,049
Debt Service-SIB Loan for Operations Center	\$2,872,100	\$4,709,519	\$2,763,250	\$2,500,000	\$878,664	-	\$13,723,533
Transfer to Operating	\$1,896,895	\$1,896,895	\$1,896,895	\$1,896,895	\$1,896,895	\$1,896,895	\$11,381,370
West Palm Beach Parking	-	\$1,000,000	\$1,000,000	\$1,000,000		-	\$3,000,000
Non-Revenue Fleet Vehicles	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	-	\$500,000
New Furniture and Replacement Program	\$100,000	-	\$100,000	-	-	-	\$200,000
Portable Radios	-	-	-	\$62,000	-	-	\$62,000
Computer/Office Equipment/Software	\$300,000	\$300,000	\$150,000	\$150,000	-	-	\$900,000
Passenger Information System	\$1,103,717	\$1,500,000	-	-	-	-	\$2,603,717
Planning and Capital Development	\$1,000,000	\$1,125,000	\$1,000,000	\$1,150,000	\$1,000,000	\$2,200,000	\$7,475,000
Transit Oriented Development (TOD II)	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000	\$1,200,000
Miami River Intermodal Center (MR-MICCI)	\$147,462	-	\$13,601,942	\$13,250,000	-	-	\$26,999,404
Boca II	-	\$4,416,735	\$3,416,735	\$7,979,969	\$7,979,969	-	\$23,793,408
Boca Trolleys	\$1,505,000	-	-	-	-	-	\$1,505,000
Delray Beach Trolleys	-	\$860,000	-	-	-	-	\$860,000
PBIA Station Study	-	-	-	\$250,000	-	-	\$250,000
General Engineering Consultants	\$2,648,155	\$2,800,000	\$2,800,000	\$1,500,000	\$1,500,000	\$1,500,000	\$12,748,155
Heavy Station Maintenance/Construction	\$500,000	\$500,000	-	\$290,442	-	-	\$1,290,442
Northern Layover Facility	\$1,000,000	\$3,530,000	-	-	-	-	\$4,530,000
Positive Train Control	\$3,189,384	-	-	-	-	-	\$3,189,384
Emergency Flagging Services	-	-	-	-	-	-	\$500,000
Flagging Services for Construction Projects	\$2,500,000	\$2,500,000	\$2,500,000	\$2,500,000	\$2,500,000	\$2,500,000	\$15,000,000
Downtown Miami Station	\$7,255,308	-	-	-	-	-	\$7,255,308
Waste Water Treatment Plant	-	\$1,636,000	\$1,500,000	\$612,000	-	-	\$3,748,000
Northwood Crossover	\$602,027	-				-	\$602,027
Grade Crossings and Signals	\$10,569,000	\$12,329,800	\$11,981,924	\$11,993,382	\$12,005,183	-	\$58,879,289
Downtown Miami Link PTC	\$11,077,588	\$3,680,435	-	-	-	-	\$14,758,023
Unfunded Projects							
SFRC Capital Replacement Program	\$17,465,500	\$9,951,688	\$8,734,688	\$8,674,688	\$6,819,688	\$8,573,666	\$60,219,918
MOW Oversight	\$1,800,000	\$1,800,000	\$1,800,000	\$1,800,000	\$1,800,000	\$1,800,000	\$10,800,000
Federal Funds Unallocated	-	-	-	-	-	\$200,000	\$200,000
County Gas Tax Funds Unallocated	-	-	\$10,544	\$625,736	\$3,922,741	\$6,113,105	\$10,672,126
Total Capital Fund allocation by Project:	\$117,664,118	\$93,414,420	\$93,503,346	\$96,343,883	\$76,914,906	\$55,545,928	\$533,386,601



In addition to identifying funded projects, SFRTA prepares a list of unfunded needs for the agency over the next ten years. Table 7-2 identifies the unfunded needs within SFRTA's 10-year operating budget. These projects have future funding tentatively assigned starting in Fiscal Year 2023. Several of the projects identified here are also identified as unfunded needs in the Long-Range Transportation Plan documents prepared by the regional transportation planning organizations. These cross-referenced projects are color coded according to the co-sponsoring entity.

Table 7-2 SFRTA Building Stronger Connections 10-Year Capital Plan – Second Five Years

10 YEAR CAPITAL PLAN	FY 2018-2019 CAPITAL BUDGET	FY 2019- 2020	FY 2020-2021	FY 2021-2022	FY 2022-2023	Unfunded FY 2023-2024	Unfunded FY 2024-2025	Unfunded FY 2025-2026	Unfunded FY 2026-2027	Unfunded 2027-2028	TOTAL
TRCL Jupiter Extension *	-	-	-	-	-	-	-	\$35,666,667	\$35,666,667	\$35,666,667	\$107,000,000
Tri-Rail Coastal Link (TRCL) Palm Beach** †										\$158,000,000	\$158,000,000
Tri-Rail Coastal Link (TRCL) (Broward) (1) **	-	-	-	-	-	-	-	-	-	\$322,000,000	\$322,000,000
Northeast Corridor (2) ***	-	-	-	-	-	\$95,000,000	\$95,000,000	-	-	-	\$190,000,000
Commuter Connector Bus Stops / Enhanced Stop	-	-	-	-	-	\$1,321,300	\$1,321,300	-	-	-	\$2,642,600
Commuter Connector Bus / County Stops	-	-	-	-	-	\$64,260	-	-	-	-	\$64,260
Commuter Connector Bus / ADA Compliance	-	-	-	-	-	\$20,880	-	-	-	-	\$20,880
Boca II	-	-	-	-	-	\$17,800,000	-	-	-	-	\$17,800,000
Boca Raton Tri-Rail Station Improvements	-	-	-	-	-	-	-	-	\$8,062,000	-	\$8,062,000
Boca Raton Intermodal Center	-	-	-	-	-	-	-	-	\$17,574,921	-	\$17,574,921
Tri-Rail Extension-Northern CSX to VA Hospital	-	-	-	-	-	-	-	-	\$63,400,000	-	\$63,400,000
Deerfield Beach Tri-Rail Station Improvements	-	-	-	-	-	-	-	-	-	\$18,063,338	\$18,063,338
Pedestrian Bridge at Golden Glades Station	-	-	-	-	-	-	\$4,036,500	-	-	-	\$4,036,500
Dade Tri-Rail Kendall/Homestead Extension ****	-	-	-	-	-	-	-	-	\$302,737,500	-	\$302,737,500
CSX-Tri-Rail Dolphin Extension Phase I (E/W) ****	-	-	-	-	-	-	-	-	\$150,000,000	-	\$150,000,000
Replacement and New Locomotives	-	-	-	-	-	\$33,000,000	-	-	-	-	\$33,000,000
New Rolling Stock	-	-	-	-	-	-	\$10,000,000	\$10,000,000	\$10,000,000	\$10,000,000	\$40,000,000
Resilience mitigation / Hurricane Hardening	-	-	-	-	-	-	-	\$4,665,000	\$4,665,000	-	\$9,330,000
Station Area Pedestrian Plan	-	-	-	-	-	-	\$1,500,000	\$1,500,000	\$1,500,000	\$1,500,000	\$6,000,000
Bike Storage Cars	-	-	-	-	-	-	\$1,000,000	\$1,000,000	-	-	\$2,000,000
Ludlam Corridor ****	-	-	-	-	-	-	-	-	-	\$300,000,000	\$300,000,000
Miami Int'l Airport/Port Miami Extension ****	-	-	-	-	-	-	-	-	-	\$25,000,000	\$25,000,000
Kendall Link ****		-	-	-	-	-	-	-	\$150,000	\$175,000,000	\$325,000,000
Okeechobee Link ****	-	-	-	-	-	-	-	-	-	\$325,000,000	\$325,000,000
US-1 Extension ****	-	-	-	-	-	-	-	-	-	\$500,000,000	\$500,000,000
Federal Funds Unallocated	-	-	-	-	-	\$200,000	-	-	-	\$200,000	\$400,000
County Gas Tax Funds Unallocated	-	-	\$10,544	\$625,736	\$3,922,741	\$6,113,105	-	-	-	\$10,672,126	\$21,344,252
Total	\$0	\$0	\$10,544	\$625,736	\$3,922,741	\$122,756,045	\$68,486,300	\$101,831,667	\$581,935,176	\$1,953,038,793	\$2,832,607,002

Color Key
Broward LRTP
Palm Beach LRTP
Miami-Dade LRTP
Miami-Dade SMART Plan
All three counties

\* Source: Palm Beach TPA

\*\*Source: Tri-Rail Coastal Link Study, Preliminary Project Development Report, April 2014; Appendix 4: Capital Cost Methodology and Results.

† Exclusive of TRCL Jupiter Extension

\*\*\* The Northeast Corridor Link Project Tax Increment Financing Analysis

\*\*\*\* Source: Miami-Dade County Rail Opportunities report, 2015





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#### 7.2 **Funded Needs**

Below is an overview of the various types of capital improvement projects that have been identified and funded to maintain and improve existing service and operations.

# **Passenger Rail Capacity Improvements**

# Miami River Miami Intermodal Center Capacity Improvement Project

The Miami River – Miami Intermodal Center Capacity Improvement (MR-MICCI) project will provide an additional mainline track within the South Florida Rail Corridor (SFRC) from just north of the Hialeah Market Tri-Rail Station (Milepost 1035.96) to the Tri-Rail Miami Airport Station (Milepost 1037.21) located within the Miami Intermodal Center (MIC). The additional mainline track will address an existing capacity deficiency along the system that negatively impacts travel time and schedule adherence.

The project also includes replacement of the existing bascule bridge over the Miami River with a new fixed double track bridge to be installed slightly to the west of the existing bridge.

Improvements will also be made to the existing Hialeah Market Tri-Rail Station, including construction

**Project Summary** 

**S**TATUS **FUNDED** 

**TOTAL ESTIMATED COST** \$36.7M

**IMPLEMENTATION YEAR** FY 2021 - 2022

LOCATION

SOUTH FLORIDA RAIL CORRIDOR MIAMI-DADE COUNTY

Figure 7-1 MR-MICCI Location Map



of a new 400-foot center platform passenger boarding area to the east of the existing track with a continuous canopy and at-grade pedestrian crossing.

The project is consistent with the Miami-Dade Transportation Planning Organization's (TPO) 2040 Long Range Transportation Plan (LRTP). The project was included in the Miami-Dade TPO's Transportation Improvement Program (TIP) and the FDOT's State Transportation Improvement Program (STIP).

SFRTA received FDOT right-of-way acquisition funding and key approvals for elements of the PD&E study required to advance the project.





# 7.2.2 New Tri-Rail Station

# **Downtown MiamiCentral Station**

SFRTA, in coordination with multiple partners, is extending Tri-Rail commuter rail service to provide new direct service from Tri-Rail's northernmost station at Mangonia Park in Palm Beach County to its southernmost station in Miami Dade County at the Brightline MiamiCentral Station in Downtown Miami. The construction includes MiamiCentral Station, which serves as Downtown Miami's multimodal hub, providing connections to Brightline, Tri-Rail, the existing Miami-Dade County bus system, Metrorail, Metromover, and the Miami Trolley circulator system.

The 9.05-mile extension, known as Tri-Rail Downtown Miami Link (TRDML), will provide a new one-seat ride passenger service link from the SFRC at Tri-Rail Metrorail Transfer Station to the Florida East Coast (FEC) railway corridor, into Downtown Miami.

# **Project Summary**

**STATUS** 

**FUNDED** 

**TOTAL ESTIMATED COST** \$48.9M

**IMPLEMENTATION YEAR** FY 2018 - 2019

LOCATION

DOWNTOWN MIAMI MIAMI-DADE COUNTY

TRDML will provide a cost effective and strategic transit solution for Miami-Dade County. The new service leverages Brightline's privately-owned and operated express train service and station investment with the USDOT TIGER grant funding for the SFRC connections to the FEC railway corridor; quiet zone funds provided by the Miami-Dade Transportation Planning Organization (TPO); and the region's previous investment in the Tri-Rail system. The key to this leveraging is a local investment of \$70 million by public partners for incremental construction costs for the MiamiCentral Station, to accommodate Tri-Rail trains and new rail infrastructure to support the extension into Downtown Miami.

Tri-Rail commuter rail service into MiamiCentral is expected to begin in mid-2019.

Figure 7-2 Rendering of MiamiCentral Station in Downtown Miami







# **Boca II Tri-Rail Station**

In October 2016, SFRTA finalized a feasibility study that determined that a second Tri-Rail station in Boca Raton could be supported. The study included: a review of possible station site locations; operational costs and impacts to existing Tri-Rail services and operations; and a benefit-cost analysis. No fatal flaws or issues were identified with adding a new station, provisionally referred to as Boca II Tri-Rail station. SFRTA staff has also maintained ongoing coordination with partner agencies, including FDOT, Palm Beach MPO, and the City of Boca Raton to bring this project to fruition.

The Boca II station will be built near Glades Road, and is included in the Cost Feasible component of the Palm Beach

MPO's 2040 Long Range Transportation Plan (LRTP). It is also included in the State Rail Plan Investment Element and was approved by FDOT's District Four as a Strategic Intermodal System (SIS)

Figure 7-3 Boca II Proposed Station Location



# **Project Summary**

**STATUS** 

**FUNDED** 

**TOTAL ESTIMATED COST** \$23.8M

**IMPLEMENTATION YEAR** 

LOCATION

**BOCA RATON** 

FY 2022 - 2023

PALM BEACH COUNTY

priority. A new station at this location is consistent with the City of Boca Raton's Multi-Modal **Transportation District** 

The second phase of this effort is the Planning Development and Environment (PD&E) study. The proposed schedule has construction programed in FY 2022 and FY 2023.





# **Palm Beach International Airport Station Study**

Improved Tri-Rail access to/from the Palm Beach International Airport (PBIA) is one of the most frequent requests from Tri-Rail passengers and the Palm Beach County business community. In 2011, SFRTA completed a preliminary analysis for a new PBIA Tri-Rail station, which identified the area immediately north of Southern Boulevard (SR 80) as the most feasible and attractive option. This proposed location meets SFRTA's spacing criteria for the existing Tri-Rail system, as the site is more than two miles south of the West Palm Beach Station and north of the Lake Worth Station. Further study is needed determine the feasibility of locating a new Tri-Rail station at PBIA.

A new PBIA Tri-Rail station is included in the Desires Plan, or unfunded component, of the Palm Beach Transportation Planning Agency (TPA)

access to and from adjacent SIS facilities such as PBIA, SR 80, and I-95.

# **Project Summary**

**STATUS FUNDED** 

**TOTAL ESTIMATED COST** \$250K

**IMPLEMENTATION YEAR** FY 2021 - 2022

LOCATION **PBIA** 

PALM BEACH COUNTY



2040 LRTP. A new station is anticipated to be designated as a new Strategic Intermodal Systems (SIS) Passenger Terminal, serving as a key regional infrastructure link providing improved premium transit





# Five Year Commuter Bus Service Plan

Roughly 25 percent of Tri-Rail passengers are also utilizing the Commuter Bus service. These routes are providing critical last-mile connections that directly feed riders into the Tri-Rail system. 14 routes are operated by a contractor on Tri-Rail's behalf. These routes are funded through a variety of sources, which include state and local matching contributions.

SFRTA has established a budget for the Commuter Bus Service for the next five years. These estimates are presented in Figure 7-5. The figure represents an assumption that funding for some routes has currently not been identified. Within the next five years, SFRTA anticipates a few changes including continued funding of an additional bus on the Boca Center Route and the reinstatement of the Opalocka South Route.

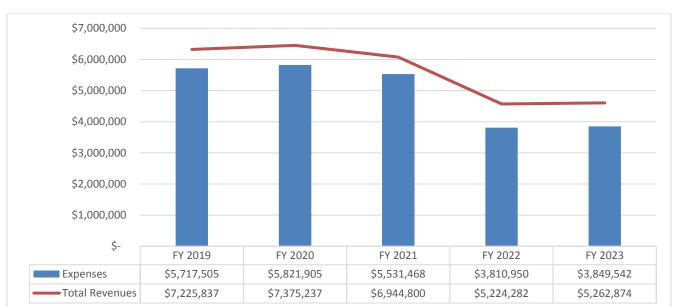


Figure 7-5 Shuttle Bus Expenses and Revenues

Source: SFRTA Five Year Bus Service and Financial Plan

# 7.2.4 Trolleys for the Cities of Boca Raton and Delray Beach

Funds have been programmed in the Palm Beach Transportation Plan (TIP) for trolleys for the City of Boca Raton. SFRTA will act as the pass-through agency for drawing down federal transit funds.

Boca Trolleys: \$15,505,000 has been programmed to purchase seven (7) new trolleys to support new trolley service from the Tri-Rail Station to downtown Boca.

Delray Beach Trolleys: \$860,000 has been programmed for the purchase/replacement of four (4) vehicles for the existing Delray Beach trolley service from the Tri-Rail Station to Atlantic Ave./A1A.





# 7.2.5 **New Maintenance Facility**

# **Northern Layover and Light Maintenance Facility**

This project is a layover and light maintenance facility that accommodates and stores up to ten five-car train sets (one locomotive and five passenger cars each). The southern end of the facility features a crew building, two service and inspection tracks with associated service and maintenance equipment, and a train wash. The northern end of the facility includes a four-train storage area with walkways and service roads.

The Northern Layover and Light Maintenance Facility (NLMF) is located in Palm Beach County along the SFRC between mileposts 964.9 in the north end and 965.9 on the south end. The Project site is mostly within the SFRC right-of-way that crosses under Congress Avenue and I-95 south of Dr. Martin Luther King, Jr. Boulevard and north of 45th Street,

# **Project Summary**

**S**TATUS

**FUNDED** 

**TOTAL ESTIMATED PROJECT COST** \$37.1M

**IMPLEMENTATION YEAR** FY 2019 - 2020

LOCATION

SOUTH FLORIDA RAIL CORRIDOR PALM BEACH COUNTY

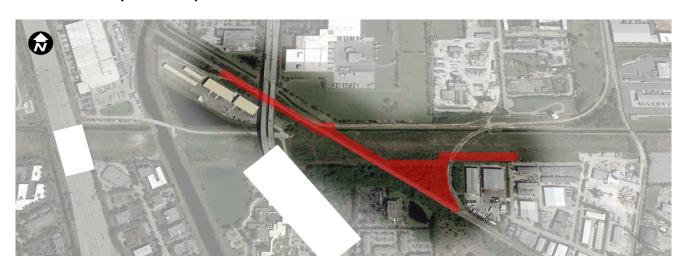
falling within the jurisdictions of the Town of Mangonia Park, the City of Riviera Beach and the City of West Palm Beach. Although there are no proposed grade crossings within the project site, a private grade crossing is proposed on an existing wye spur track that provides access to the facility from Dexter Way in the Town of Mangonia Park.

An approximately 7,680 square foot building for maintenance and operating staff, which includes office, training, communications, and break space.

Roughly 24,000 linear feet of new track, including a relocated mainline section adjacent to the facility. The new facility will provide midday and overnight train storage for up to ten train consists (one locomotive and five passenger cars).

Service and Inspection elements include: service and inspection pits, fueling stations, and traction sanding stations.

Figure 7-6 New Northern Layover Facility







# 7.2.6 **Passenger Safety**

# **Positive Train Control**

In 2008, pursuant to the Rail Safety Improvement Act ("RSIA") Congress required Class I Railroads such as the SFRC to fully implement Positive Train Control (PTC) by December 31, 2015. PTC uses communication-based/processor-based train control technology that provides a system capable of reliably and functionally preventing train-to-train collisions, over speed derailments, incursions into established work zone limits, and the movement of a train through a main line switch in the wrong position.

In late 2015, pursuant to the Positive Train Control Enforcement and Implementation Act of 2015 (PTCEI Act),

# **Project Summary**

**STATUS** 

**FUNDED** 

**TOTAL ESTIMATED COST** \$3.2M

**IMPLEMENTATION YEAR** FY 2018 - 2019

**LOCATION** 

SOUTH FLORIDA RAIL CORRIDOR

Congress extended the deadline by at least three years to December 31, 2018, with the possibility for two additional years if certain requirements are met. As a host railroad along the SFRC, SFRTA is required to implement an interoperable PTC system on the main lines of SFRC to comply with Federal requirements. The Interoperable Electronic Train Management System (I-ETMS) system was chosen as SFRTA's PTC platform due to the interoperability requirements with tenants along the corridor, i.e. CSXT freight service, and Amtrak intercity passenger service. SFRTA will procure, install, and commission all major segments required for a complete I-ETMS solution which includes the following:

Wayside Segment consists of those signaling appliances located in the field whose status impacts PTC on-board system operations, along with any wayside interface units used to monitor and report their status. Such appliances include interlocking controllers, signal controllers, switch circuit controllers, track circuits, track/route hazard detectors, train defect detectors, or other field devices. These segment components may exist in either signaled or non-signaled parts of the SFRC. Estimated to be complete and tested by August 30, 2018.

Communications Segment consists of hardware and software components that interface with and provide connectivity between the PTC System Segments. It also consists of one or more private and commercial communication networks, and its functions allow PTC data traffic to be routed amongst them. Estimated to be complete and tested by October 30, 2018.

Back Office Segment is comprised of one or more back office server(s) (BOS) and associated applications, such as railroad dispatch, and interfaces with other railroad back offices, Locomotive, Wayside and Communications Segments. This segment serves as a conduit for information conveyed to the Locomotive Segment where the system's vitality resides. Estimated to be complete and tested by August 30, 2018.

Locomotive Segment refers to a set of independent on-board hardware, software, and devices that interface with locomotive control equipment including air brakes, communication devices, train line, a train management computer, a cab display unit, a locomotive ID module, a GPS receiver, and a brake cut-out switch. Estimated to be complete and tested ready to support revenue service testing by December 31, 2018.





# 7.2.7 State of Good Repair

# SFRC Capital Replacement Program

SFRTA is pursuing a federal Consolidated Rail Infrastructure and Safety Improvements (CRISI) Grant to assist with improving the SFRC's State of Good Repair (SGR). These improvements are projected to further improve OTP, general corridor resilience and maintenance-of-way conditions.

SFRTA's Engineering and Construction Department has developed a state of good repair capital improvement projects plan for the SFRC. Investment into these capital projects will increase the safety, operational performance and efficiencies for Tri-Rail, Amtrak and freight movement throughout the SFRC. The capital program is currently unfunded however funding options are being evaluated now. Program project elements to be replaced or renovated include:

- Rail
- Ties
- **Switches**
- Rail lubricators
- Defect detectors
- Rail matting
- Signal improvements

# **Project Summary**

**STATUS** 

UNFUNDED

**TOTAL ESTIMATED COST** \$60.2

**IMPLEMENTATION YEAR** FY 2018 - 2019 THROUGH FY 2023 - FY 2034

LOCATION

SOUTH FLORIDA RAIL CORRIDOR





#### 7.3 **Unfunded Needs**

#### 7.3.1 **Service Expansion**

Opportunities for service expansion on existing railroad corridors have been identified in both Palm Beach and Miami-Dade Counties. Several of these expansion projects would occur on the SFRC, where Tri-Rail currently operates passenger rail services. Other opportunities exist on corridors that are under the ownership of other railroad entities, such as CSXT and Florida East Coast. In those cases, SFRTA would need to also obtain access rights to operate on the rail corridor owned by others. For the purposes of the TDP major update, a profile of each rail extension is described below. Table 7-3 provides a concise summary of the proposed regional expansions.

SFRTA has identified these corridors based upon input from public outreach efforts and through interest expressed by community stakeholders. The project specific information presented in each of the profiles in some cases represent preliminary data and estimated cost information for planning purposes. Additional study and technical analysis would be required for the advancement and implementation of any one of these corridors as identified in the TDP Major Update.

The preliminary programming of these service expansion corridors was conducted in a systematic and regional approach and represents SFRTA's response to input received to provide expanded passenger rail services throughout the Tri-county region.

Table 7-3 Proposed Tri-Rail Service Expansion Corridors

Corridor	Ownership	Implementation Year	Estimated Cost	
TRCL- Jupiter Extension	FEC	FY 2026-27	\$107 million	
TRCL - Palm Beach	FEC	FY 2027-28	\$158 million	
TRCL - Broward Extension	FEC	FY 2023-26	\$322 million	
Northeast Corridor	FEC	FY 2023-26	\$190 million	
Tri-Rail Extension Northern CSX to VA Hospital	CSX	FY 2026-27	\$63.4 million	
Kendall/Homestead Extension	CSX	FY 2026-27	\$302.7 million	
Tri-Rail Dolphin Extension	CSX	FY 2026-27	\$150 million	
Ludlam Corridor	FEC	FY 2027-28	\$300 million	
Kendall Link	FDOT/CSX	FY 2027-28	\$325 million	
Okeechobee Link	FEC/FDOT	FY 2027-28	\$325 million	
US-1 Extension	Miami-Dade County	FY 2027-28	\$500 million	
Miami International Airport/Port Miami Extension	FEC/SFRTA	FY 2027-28	\$25 million	

Sources: See Table 7-2



# TRCL Jupiter Extension

The project is an approximate 10-mile extension of existing Tri-Rail commuter rail service from the West Palm Beach Tri-Rail Station north to Jupiter. Four new stations would be constructed on the Florida East Coast (FEC) Railway corridor which would connect with the SFRC via the Northwood connection in West Palm Beach.

This new extension would provide service to an increasing population of Jupiter and other communities in Palm Beach County. The project is included in the Palm Beach TPA's 2040 LRTP Cost Feasible Plan as being partially funded.

## TRCL Palm Beach

Tri-Rail Coastal link between Broward County and Palm Beach County, exclusive of the Jupiter extension. This corridor will include up to five station sites.

## **TRCL Broward**

TRCL Broward is the proposed Broward section of the overall TRCL project corridor. TRCL will provide a premium transit option on the FEC corridor, expanding regional mobility, reducing vehicle miles traveled, decreasing travel times, and providing expanding opportunities for transit-oriented development at the proposed station sites.

#### **Northeast Corridor**

The Northeast Corridor is the name the Miami Dade TPO has given the Miami-Dade section for the overall TRCL. Within the Northeast Corridor, five stations are planned to be located between the southernmost station at the downtown MiamiCentral Station, and a City of Aventura station.

# **Project Summary**

STATUS

**PARTIALLY FUNDED** 

**TOTAL ESTIMATED COST** \$107M

**IMPLEMENTATION YEAR** FY 2026 - 2027

**LOCATION** 

JUPITER

PALM BEACH COUNTY

# **Project Summary**

**STATUS** 

UNFUNDED

**TOTAL ESTIMATED COST** \$158M

**IMPLEMENTATION YEAR** FY 2023 - 2026

LOCATION

FEC LINE - PALM BEACH COUNTY

# **Project Summary**

**STATUS** 

UNFUNDED

**TOTAL ESTIMATED COST** \$322M

**IMPLEMENTATION YEAR** FY 2023 - 2026

LOCATION

FEC LINE - BROWARD COUNTY

# **Project Summary**

**S**TATUS

UNFUNDED

**TOTAL ESTIMATED COST** \$190M

**IMPLEMENTATION YEAR** FY 2023 - 2026

LOCATION

FEC LINE - MIAMI-DADE COUNTY





Figure 7-7 Proposed TRCL vision





# Tri-Rail Extension: Northern CSX to VA Hospital

This project would extend Tri-Rail service three (3) miles northwest from its current terminus at the Mangonia Park Tri-Rail station to a new station at the West Palm Beach Veterans Administration (V.A.) Medical Center, which is in the City of Riviera Beach. The extension would occur on CSX rail tracks in the SR 710 corridor and provide a direct rail connection to one of Palm Beach County's largest employer.

This extension would replace an existing Tri-Rail shuttle service currently running between the Mangonia Park Tri Rail station and the V.A. Medical Center. These shuttles run from 5:45 AM until 6:45 PM, stopping at every shuttle stop approximately every fifteen minutes.

#### **Project Summary**

**S**TATUS

UNFUNDED

**TOTAL ESTIMATED COST** \$63.4M

**IMPLEMENTATION YEAR** FY 2026 - 2027

LOCATION

WEST PALM BEACH VA HOSPITAL PALM BEACH COUNTY





## **Kendall/Homestead Extension**

The Kendall/Homestead area experienced massive growth recent decades. Severe roadway congestion plagues the area, with residents enduring long commutes to the region's major employment centers. This situation causes financial hardship for commuters and negatively impacts the residents' quality of life.

The Kendall/Homestead Extension provides a needed new travel option by connecting to the Miami Intermodal Center and other premium transit services.

This new service would utilize existing rail rights of way (some of which are already in state ownership) for costeffective commuter rail service.

Figure 7-8 Kendall/Homestead Extension

# **Project Summary**

in

**S**TATUS

UNFUNDED

**TOTAL ESTIMATED COST** \$302.7M

**CORRIDOR LENGTH** 

**IMPLEMENTATION YEAR** FY 2026 - 2027

**LOCATION** 

KENDALL

MIAMI-DADE COUNTY







# **CSX - Tri-Rail Dolphin Extension**

The Dolphin Expressway (SR 836) is the heaviest traveled east- west highway in South Florida, connecting major employment centers, shopping destinations, educational facilities, and large western residential areas. Frequent congestion and travel delays are experienced on SR 836. Fortunately, an existing rail corridor runs immediately parallel to the Dolphin Expressway and connects with the Miami Intermodal Center (MIC) at the Miami International Airport, allowing for the development of a much-needed transit alternative.

The Dolphin/East-West Extension would utilize commuter rail vehicles to provide a new mobility option between western Miami-Dade County and the MIC. Travelers could then connect to the Orange Line Metrorail service to reach Downtown Miami and the Civic Center/Health District.

#### **Project Summary**

**STATUS** 

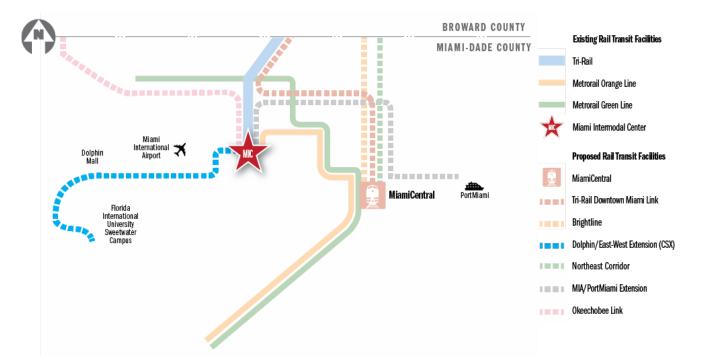
UNFUNDED

**TOTAL ESTIMATED COST** \$150M

**IMPLEMENTATION YEAR** FY 2026 - 2027

LOCATION MIAMI-DADE COUNTY

Figure 7-9 CSX - Tri-Rail Extension







#### **Ludlam Corridor**

The Ludlam Corridor is an inactive railroad corridor owned by the Florida East Coast (FEC) railway that links two of the region's busiest activity centers - Miami International Airport (MIA) and Dadeland. The corridor also connects to the South Florida Rail Corridor and the MIC. This could allow for a potentially quick, easy, and attractive extension of light rail service.

Light rail or DMU service could share the corridor with the new bicycle and pedestrian trail desired by the community. Analysis by the Miami-Dade TPO has demonstrated that both a trail and transit can effectively fit in the corridor, which is generally 100 feet in width

## **Project Summary**

**S**TATUS

UNFUNDED

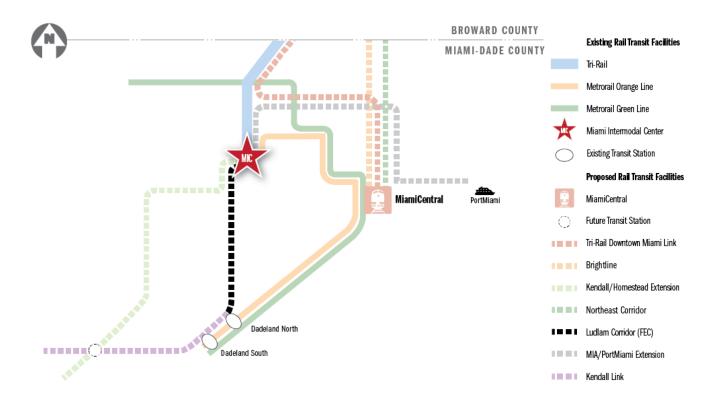
**TOTAL ESTIMATED COST** \$300M

**IMPLEMENTATION YEAR** FY 2027-2028

**LOCATION** 

**FEC RAILROAD** MIAMI-DADE COUNTY

Figure 7-10 Ludlam Corridor







#### **Kendall Link**

New premium transit services are needed to provide relief from Kendall's severe traffic congestion. The Kendall Link, a new light rail or DMU service along Kendall Drive, can be an effective solution to the area's mobility challenges.

The Kendall Link would extend west along the Kendall Drive corridor from Dadeland, connecting to existing Metrorail service and serving the Dadeland area, Baptist Hospital and numerous residential communities.

Cost-effective, phased implementation could occur by extending first to the Don Shula Expressway (SR 874) and CSX corridor, then later past Florida's Turnpike. Connections are also envisioned with transit service on the Kendall/Homestead Extension and Ludlam Corridor

# **Project Summary**

**STATUS** 

UNFUNDED

**TOTAL ESTIMATED COST** \$325M

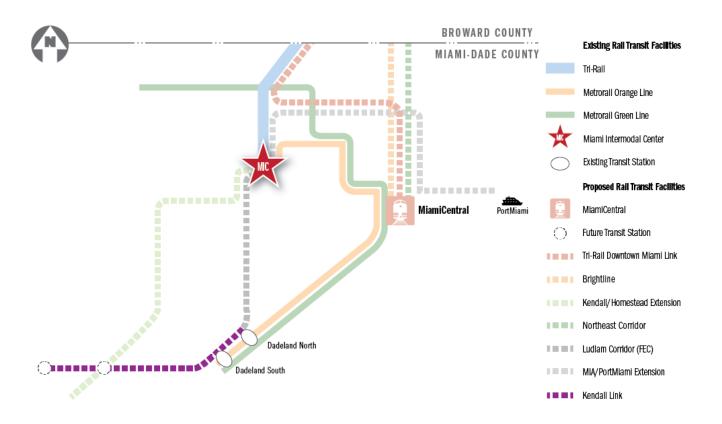
**IMPLEMENTATION YEAR** FY 2027 - 2028

LOCATION

KENDALL

MIAMI-DADE COUNTY

Figure 7-11 Kendall Link







#### Okeechobee Link

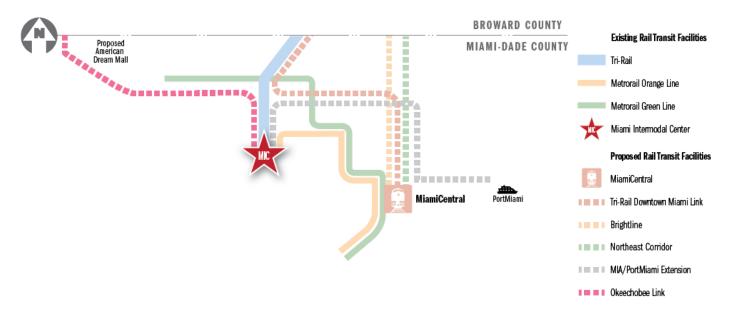
Developer Triple Five has announced plans to construct a new entertainment destination in Northwest Miami-Dade County: American Dream Miami. This mega mall is planned be the largest mall in the United States with stores, a theme park, an indoor ski slope, and a sea lion habitat. It is estimated that the megamall will cost \$4 billion to complete and create 25,000 construction jobs, and thousands of permanent jobs.

The proposed American Dream mall is planned to be built Miami Lakes, at the intersection of the Florida Turnpike and 75.

Project Summary	
Status Unfunded	to
TOTAL ESTIMATED COST \$325M	
IMPLEMENTATION YEAR FY 2027 - 2028	
<b>LOCATION</b> MIAMI-DADE COUNTY	in I-

The Okeechobee Link would connect the mall to the Miami Intermodal Center at Miami International Airport, serving the travel and tourism market, and east and southward to downtown Miami's transit hub via both the Tri-rail and Miami Dade transit services.

Figure 7-12 Okeechobee Link







#### **US 1 Extension**

The South Dade Busway, which was built on the former FEC Railway right-of-way, was designed to allow for potential future bus and/or rail expansion. The population of southern Miami-Dade County continues to grow, along with public desire for new premium transit options that are not part of highway expansion projects

The US-1 Extension would bring new rail service from the Dadeland area to Homestead and Kendall.

#### Figure 7-13 US 1 Extension

# **Project Summary**

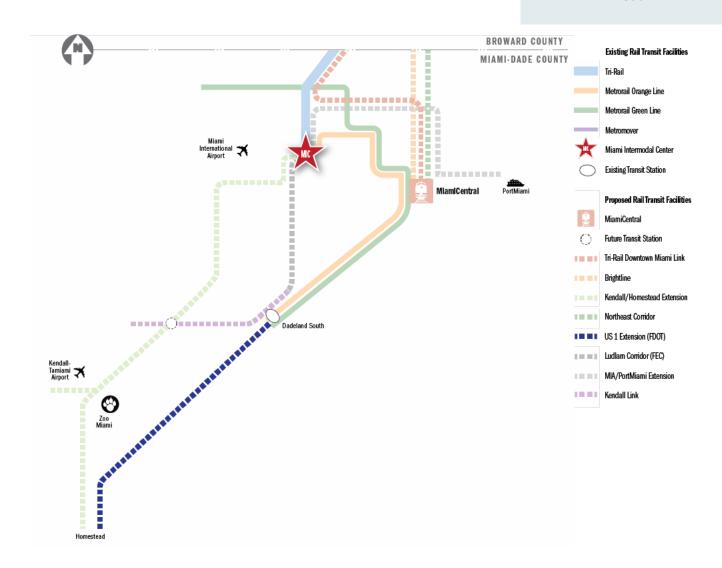
**STATUS** 

UNFUNDED

**TOTAL ESTIMATED COST** \$500M

**IMPLEMENTATION YEAR** FY 2027 - 2028

**LOCATION US 1 CORRIDOR** MIAMI-DADE COUNTY







# Miami International Airport/Port Miami Extension

This concept would provide strategic Tri-Rail service during high travel demand periods (usually weekends) between the MIC at Miami International Airport (MIA) and PortMiami.

Using the new MIC Central Station, South Florida Rail Corridor, and Florida East Coast Railway tracks, the service would provide a new congestion free route to cruise ship departure and arrivals at PortMiami. This off-peak service would result in minimal new infrastructure being required.

## **Project Summary**

**S**TATUS

UNFUNDED

**TOTAL ESTIMATED COST** \$25M

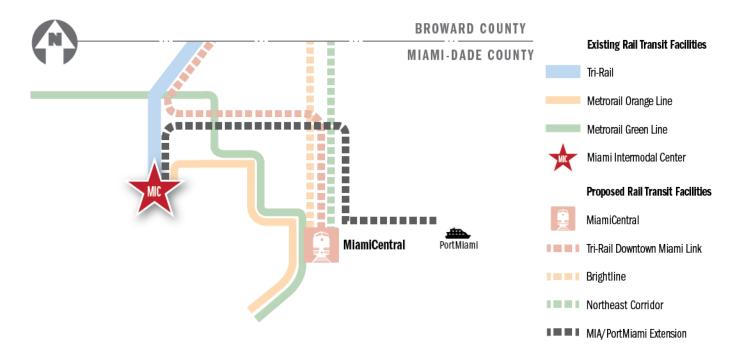
**IMPLEMENTATION YEAR** FY 2027 - 2028

**LOCATION** 

**PORTMIAMI** 

MIAMI-DADE COUNTY

Figure 7-14 Miami International Airport/PortMiami Extension







# 7.3.2 Commuter Connector Bus Service Improvements

In 2018, SFRTA conducted a study titled the Commuter Bus Comprehensive Analysis and Operations Plan. This study served as an assessment to identify measures that SFRTA can take to improve the agency's Commuter Connector Bus system. SFRTA runs 14 commuter bus routes through a contract with Keolis Transportation of America, a private company that handles the operations and maintenance aspect of the service. These routes serve the surrounding communities near Tri-Rail stations in Palm Beach and Broward Counties, which provide critical first/last mile service, linking commuters to the Tri-Rail system. The Commuter Bus Comprehensive Analysis and Operations Plan focuses on four key areas:

Evaluation of commuter bus operations, procedures, and performance standards A review of local, state, and federal laws, including the 1990 Americans with Disabilities Act (ADA) An inventory of boarding/alighting locations to identify candidate sites for permanent stops Development of an operations plan

#### Commuter Connector Bus Stops - Enhanced Stops, County 7.3.2.1 **Stops and ADA Compliance**

Today, the commuter connector bus service operates as a flag-down service, with no formal stop locations identified. The study's proposed Operations Plan has recommended converting to a fixed stop service. As part of the above analysis, an inventory of boarding alighting locations was expanded into a comprehensive list of candidate transits top locations.

Potential stop locations for each of SFRTA's 14 commuter bus routes were identified. In total, 215 stops were identified as a part of the analysis, 60 percent of the stops could be shared with already existing PalmTran and BCT stops; 40 in Palm Beach County and 90 in Broward County.

Cost estimates were developed for basic stops, upgraded stops, and enhanced stops, with prices ranging between \$3,800, and \$36,200. SFRTA estimates that \$372,000 is required to bring all identified stop locations into line with the minimum basic stop requirements, which include a concrete pad and sign and post, ensuring that the stops will be ADA compliant.

# **Project Summaries**

#### **S**TATUS

UNFUNDED

**TOTAL ESTIMATED COST** ENHANCED STOPS \$2.6M COUNTY STOPS \$64K ADA COMPLIANCE \$20K

**IMPLEMENTATION YEAR** FY 2023-2024 2024-2025

**LOCATIONS** 

**BROWARD COUNTY** PALM BEACH COUNTY





# 7.3.3 **Tri-Rail Station Area Improvements**

# **Boca Raton Tri-Rail Station improvements**

The Boca Raton Station at Yamato Road is one of Tri-Rail's top three highest ridership stations. Parking supply must rise to meet this demand. SFRTA owns land immediately northwest of the station which has generated strong developer interest, and may be the site of a joint Transit Oriented Development (TOD) in the future. The improvements targeted for this station area are:

Designating locations for drop-off/pick-ups by restriping/extending fire lane

Correcting signage for entering/exiting motorists from Congress Avenue and Yamato Road

Adding shelters (6), benches (8), bicycle racks (4) and bicycle lockers (6)

## **Project Summary**

**S**TATUS

UNFUNDED

**TOTAL ESTIMATED COST** \$8.1M

**IMPLEMENTATION YEAR** FY 2026 - 2027

LOCATION

**BOCA RATON TRI-RAIL STATION** PALM BEACH COUNTY

Providing a total of 570 spaces at station. Spaces may be provided as part of joint development project and/or in separate parking garage

Improving circulation elements as shown in conceptual plan

Figure 7-15 Boca Raton Tri-Rail Station Improvements







#### **Boca Raton Intermodal Center**

The Boca Raton Intermodal Center would entail the construction of a new intermodal facility. It is conceptualized to include the construction of a new 300 parking space deck and to incorporate circulation areas to support additional Palm Tran buses and SFRTA commuter connection buses. It is intended to improve connections between Tri-Rail and the numerous new transit routes that are anticipated to arise as a part of the Boca Raton Multi-modal Transportation District.

# **Project Summary**

**STATUS** 

UNFUNDED

**TOTAL ESTIMATED COST** \$24M

**IMPLEMENTATION YEAR** FY 2025-2026

LOCATION

**CURRENT OR FUTURE BOCA RATON TRI-RAIL STATION** 





# **Deerfield Beach Tri-Rail Station Parking Lot Improvements**

The Deerfield Beach Station is in Broward County on the south side of West Hillsboro Boulevard, directly between the Regional Courthouse and a large vacant parcel, which is currently being developed as a Transit Oriented Development (TOD). The following improvements to the Tri-Rail station area are planned:

Improved signage from Hillsboro Boulevard

Adding shelters (24), benches (16), bicycle racks (8) and any additional needed bicycle lockers.

Adding parking spaces, as need is evaluated following TDO project completion east of the station.

Improving sidewalk and circulation elements as proposed in conceptual plan

# **Project Summary**

**S**TATUS

UNFUNDED

**TOTAL ESTIMATED COST** \$18.06 M

**IMPLEMENTATION YEAR** FY 2026 - 2027

LOCATION

WEST HILLSBOROUGH BOULEVARD **BROWARD COUNTY** 

Potential construction of a crossing bridge (pedestrian / bicycle overpass) to facilitate safe movement at the south end of the platforms

Figure 7-16 Deerfield Beach Trial Station Parking Lot Improvements Conceptual Plan







# Pedestrian Bridge at Golden Glades Tri-Rail Station

The Golden Glades Tri-Rail station is located adjacent to the Golden Glades interchange where I-95, the Palmetto Expressway, Florida's Turnpike, State Route 7 and State Route 9 all converge. Primary access for this area is by car or bus, although sidewalks do exist to the south giving pedestrian access to a multi-family residential area. The area surrounding the Golden Glades Tri-Rail Station does not have a strong street grid network, and in the 2018 SFRTA Onboard Survey, Golden Glades Tri-Rail Station was near the bottom for pedestrian mode share in comparison to the other Tri-Rail stations.

Station area land uses include transportation, industrial, commercial, and residential. Areas to the north and west of the station are mainly industrial and commercial, while residential uses are located to the

south. However, there is no pedestrian access to the Golden Glades Tri-Rail station from the adjacent

industrial and commercial employment areas.

# **Project Summary**

**STATUS** 

UNFUNDED

**TOTAL ESTIMATED COST** \$4.04M

**IMPLEMENTATION YEAR** FY 2023 - 2024

LOCATION

GOLDEN GLADES INTERCHANGE MIAMI-DADE COUNTY

This project proposes access through the addition of a pedestrian overpass which would connect the Golden Glades Intermodal Center (Tri-Rail, Miami-Dade Transit, Broward County Transit Services) to the business park and planned parking garage West of the SFRC.

Figure 7-17 Rendering of New Pedestrian Bridge at Golden Glades Tri-Rail Station







# 7.3.4 State of Good Repair

# **New Rolling Stock**

SFRTA has undertaken several initiatives to assess and monitor rolling stock needs and state of good repair, and to plan and budget and identify funding for purchase and replacement on an established schedule.



# **Project Summary**

**S**TATUS

UNFUNDED

**TOTAL ESTIMATED COST** \$33M

**IMPLEMENTATION YEAR** FY 2023 - 2024

LOCATION SFRC

# **Replacement and New Locomotives**



# **Project Summary**

**S**TATUS

UNFUNDED

**TOTAL ESTIMATED COST** \$102.9M

**IMPLEMENTATION YEAR** FY 2026 - 2027

**LOCATION** 

**SFRC** 





# 7.3.5 Resilience Mitigation and Hurricane Hardening

Following recent impacts of Hurricane Irma in September 2017, SFRTA desires to be proactive in taking advance steps that may avoid or mitigate the impacts of a hurricane or other natural event on the SFRC, maintenance of way, and SFRTA's comprehensive operations systems. SFRTA's efforts on these fronts are summarized in Table 7-4.

# **Project Summary**

**STATUS** 

UNFUNDED

**TOTAL ESTIMATED COST** \$19.3M

**IMPLEMENTATION YEAR** FY 2026-2027

LOCATION SFRC

**Table 7-4 Summary of Hurricane Hardening Measures** 

Item	Description	Cost
MIC escalators	The current design of the escalator at the Miami Intermodal Center exposes them to driving rain presenting a safety issue to the patrons, been increased under hurricane conditions (4 escalators)	\$2,150,000
Back Up Phone System	Duplicate Phone System in Remote location. 2 Cisco Business Edition 7000 H-M4 cisco software license, 30 Volt Phones, 2 AT&T 10 mgb circuits	\$275,000
Northern Layover Design- Build	Facilities has been scaled back due to lack of estimated construction cost. To construct layover facility to provide for intended purpose which would support operations and maintenance for future disaster event	\$10,000,000
Drainage	Currently three stations have severe drainage issues that present great hazards on our patrons due to the location and severity of the ponds especially with hurricanes	\$172,500
Lighting deficiencies	Currently there are some stations with insufficient emergency lighting that in the event of disaster, we couldn't provide sufficient visibility to first responder	\$287,500
Structural column at Hialeah Yard	There is one column that is very close to its condemning limit weakening the overall structure of the Train maintenance shop	\$17,250
Elevator enclosure at Pompano Beach Station Garage	A solid enclosure will prevent wind-driven rain from entering the elevator shaft	\$300,000
Canopies base structure Phase A	The base of some of the structural columns at Mangonia Park stations are badly rusted with severe section loss that will present a big risk under hurricane conditions	\$287,500
Canopies base structure Phase B	As a precaution the remaining structural base columns at Mangonia Park station could be improved	\$172,500
Gutters at canopies	The current condition of the gutters is such that the rust and the hanging connections are getting weaker creating a big hazard in high storms	\$575,000





## **SECTION 7 - TEN-YEAR IMPLEMENTATION PLAN**

ltem	Description	Cost
Facade of the stairs to the pedestrian bridges	The exterior facade of the stairs building have dangerous internal voids that minimize the adherence power with the risk of falling apart on high winds	\$69,000
Stairs decorative screens	As a precaution, the current design of these screens could be hardened to provide a better structural support and prevent future issues	\$2,704,800
Canopy decorative screens	The current condition of these screens is such that the rust is creating gaps on the face of the screen minimizing the structural frame with a risk of been flying objects under heavy winds	\$2,318,400
Engineering Design, Contingency and 3rd Party Management	Provide the necessary design, inspection, and management of hardening projects is already considered in the individual line items above	\$-
	TOTAL	\$19,329,450



# Section 8 Financial Plan





# **FINANCIAL PLAN**

#### 8.1 Introduction

The Financial section of the Building Stronger Connections TDP Major Update is intended to identify sources and uses of funds allocated for the operation of SFRTA as well as the long-range capital requirements. This section discusses the funding levels and any changes in these levels. These funding levels cover a ten-year planning period designed to address the current and projected financial demands. Also included is a section that describes possible funding sources for future capital needs of the Tri-Rail system.

Fare Revenue increased by \$1,762,724 over the past five years, for an annual compounded increase of over 2.7 percent. This revenue increase reflects a corresponding increase in ridership over the same period. Increases reflect the improved economic climate in Southeast Florida which has experience significant new development over the past five years. Reports from the local Property Appraiser Offices in the three counties served by Tri-Rail indicate a substantial increase in Taxable Values (44 percent in Miami-Dade, 33 percent in Broward and 42 percent in Palm Beach), mostly occurring due to new construction.

Population increases have also contributed to the higher ridership with a tri-county increase of 271,671 (4.7 percent) over the past five years.

Future expansion of the system is projected through the commitment of SFRTA to the Tri-Rail Coastal Link extension of service to the Florida East Coast (FEC) rail corridor. The proposed financial plan is included in these financial projections.

Increases in Operating Expenses over the past five years have been influenced primarily by the assumption of the Maintenance of Way (MOW) funding requirements, in a joint effort with the SFRTA and the State of Florida. This provision, which was implemented in 2015, added significant costs to the annual Operating Budget.

#### **10-Year Operating Forecast** 8.2

# **8.2.1** Operating Expenses

Annual Operating Expenses for SFRTA in FY 2018/2019 total \$119.7 million, which is an increase of \$7.5 million (6.7 percent) over the FY 2017/2018 budgeted amount. The most significant increase (28.6 percent over FY 2017/2018 levels) has been in the Train Fuel Contract which has seen a sharp increase after years of a reduction due to introduction of more efficient vehicles. This Operating Expense line item has grown \$2 million in the past year accounting for 26.7 percent of the total budgeted increase. Inclusion of the Positive Train Control (PTC) system has also added approximately \$2.7 million (35.8 percent of the increase) to the annual budget, which had not been previously funded.

A total of \$85.3 million (71.3 percent) of the Operating Expenses are for Operation and Maintenance of the trains, rail corridor and passenger stations. These categories represent 18 percent of the increase in Operating Expenses from FY 2017/2018 to FY 2018/2019.





The remainder of the Operating Expenses includes Administrative, Legal, Personnel and Community Outreach services. These categories represent 12.7 percent of the total budgeted amount and 10 percent of the increase in Operating Expenses for the past year.

Table 8-1 FY 2018-2019 SFRTA Operating Expenses

OPERATING EXPENSES	ADOPTED FY 2018-2019
Operating Contract	\$ 21,593,921
Train Maintenance Contract	15,519,452
Station Maintenance Contract	6,750,523
PTC Maintenance	1,022,780
PTC Operations	1,683,200
Feeder Service	7,402,658
Emergency Feeder Service	75,000
Security Contract	7,183,106
Insurance - Liability/Property/Auto	3,603,276
Train Fuel Contract	8,978,125
SFRC Dispatch	1,949,937
Station & Office Utilities	642,123
Corridor Utilities	1,475,148
Revenue Collection	758,000
Corporate & Community Outreach	602,900
Legal Expenses	903,698
Personnel Services	12,422,142
Rail Corridor Maintenance (MOW)	25,842,099
Office Business Expense	1,101,880
Business Travel/Conferences	253,893
Dues & Subscriptions	157,152
General Training & Seminars	189,985
Professional Fees	709,900
Office Rent	32,870
Technical Support	189,500
Electronic Messaging Boards	69,500
Alarm Systems	4,000
Uniforms	\$6,000
Transfer to Capital Program	\$(1,450,000)
TOTAL EXPENSES	\$119,672,768

Source: SFRTA Operating Budget and 10-Year Plan (FY 2018-2019 - FY 2028-2029





# **8.2.2** Operating Revenues

Operating Revenue is comprised of Train Revenue (Fares) Operating Assistance (contributions from Federal, State and local sources) and Reserves. These sources must be sufficient to cover all Operating Expenses.

Fare Revenue has increased over the past five years by approximately 14 percent reflecting an increase in ridership. The average annual increase in Fare Revenue over the past five years was 2.7 percent, which exceeded projections for that period. Train Revenue makes up approximately 11.7 percent of the total Operating Revenue for SFRTA, which is typical for systems such as Tri-Rail. This percentage has decreased (from 16.3) percent) over the past five years. A shift in funding from other governmental units has occurred over the past five years.

Federal sources accounted for \$27.2 million (26.1 percent) in FY 2017/2018 and decreased slightly to \$26.8 million (22.4 percent) in FY 2018/2019. These funds are provided by Federal Transit Administration (FTA) and Federal Highway Administration (FHWA).

State sources comprised \$30.6 million (40.6 percent) of the Operating Revenue in FY 2017/2018, which increased to \$55.2 million (46.2 percent) in FY 2018/2019. A portion of this Operating Revenue from the State of Florida is approximately \$13.1 million for MOW. The Florida Department of Transportation (FDOT) also transfers \$15 million from the State Transportation Trust Fund (STTF) to SFRTA for operations, maintenance, and dispatch and additional amount of no less than \$27.1 million for operating assistance.

Table 8-2 SFRTA Operating Revenues

OPERATING REVENUES	ADOPTED
	FY 2018-2019
TRAIN REVENUE	
Train Service Revenue	\$ 14,051,830
Interest Income/ Other Income	\$ 325,000
TOTAL TRAIN REVENUE	\$ 14,376,830
OPERATING ASSISTANCE	
Statutory Dedicated Funding	\$15,000,000
Statutory Operating Assistance	\$ 27,100,000
Statutory Maintenance of Way	\$ 13,124,940
FTA Preventive Maintenance	\$ 22,784,726
FHWA	\$4,000,000
City of Boca Raton-Shuttle Service	\$ 176,821
City of Opa Locka-Shuttle Service	\$ 439,290
CSX Reimbursements	\$100,000
Miami-Dade Statutory Operating Assistance	\$ 1,565,000
Broward Statutory Operating Assistance	\$ 1,565,000
Palm Beach Statutory Operating Assistance	\$ 1,565,000
Other Local Funding	\$100,000
Gas Tax Transfer	\$ 1,896,895
SFRTA Reserves	\$15,878,266
Total Assistance	\$105,295,938
Total Revenue	\$119,672,768

Source: SFRTA Operating Budget and 10-Year Plan (FY 2018-2019 - FY 2028-2029

Tri-Rail has always been a joint venture of the three counties in Southeast Florida and local entities contributed \$4.9 million (6.5 percent) in FY 2017/2018. These sources accounted for \$7.4 million (6.2 percent) in FY 2018/2019. Funding comes from the three counties (Miami-Dade, Broward and Palm Beach) governments as well as local shuttle service revenue and Gas Tax allocations. The FY 2018/2019 budget includes Revenue from Reserves of \$15.9 million which represents 13.3 percent of the total annual allocation. Reserves did not make up any portion of Operating Revenue in FY 2017/2018.



# 8.2.3 10-Year Operating Budget

#### 8.2.3.1 **Expenses**

Projections for the future included an estimated overall increase in Operating Expenses of approximately 1.77 percent annually to the existing operation of Tri-Rail. These projections are dependent on steady increases in fuel and maintenance expenses. For the operation and maintenance of the trains, stations and MOW, the estimated increase is two (2) percent annually. Expense categories such as Dispatch, Personnel Costs and Legal Expenses are projected to increase approximately three (3) percent annually. All other categories are expected to remain constant or decline in the future.

The most significant future increase is projected in FY 2023/2024 with the introduction of the Tri-Rail Coastal Link (TRCL) operation. This effort will add approximately \$30 million to the overall operational budget (Figure 8-1).

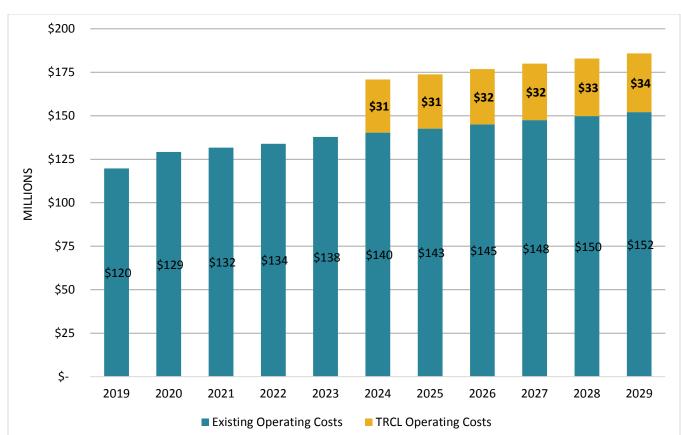


Figure 8-1 SFRTA Projected Operating Expenses (FY 2018/2019 – FY 2028/2029)

Source: SFRTA Operating Budget and 10-Year Plan (FY 2018-2019 - FY 2028-2029





#### Revenue 8.2.3.2

Future Revenue is also expected to increase at a steady rate (approximately 1.9 percent annually) to match the annual Expenses. However, beginning in FY 2023/2024, there is a projected funding shortfall of approximately \$30.6 million based on the implementation of the TRCL service; funding for this operation has not yet been determined. Error! Reference source not found. illustrates the breakdown of funding sources.

Funding sources will also be altered over the planning time frame. The State of Florida planned contributions are currently projected to decrease and reliance on Reserve may continue to increase. The Fiscal year 2018-2019 budget can be found at www.sfrta.fl.gov/budgets.aspx. The source of funds (as a percentage) for operations for the current year, FY 2023/2024 (5 years forward) and FY 2028/2029 (end of the ten-year period) are as follows:

Table 8-3 SFRTA Funding Sources

Source	FY 2018-2019	FY 2023-2024	FY 2028-2029
Fares	11.7%	12.3%	12.2%
State Sources	46.1%	46.1% 37.5%	
Federal Sources	22.4%	24.6%	23.7%
Local Sources	6.5%	5.0%	4.7%
Reserves	13.3%	21.6%	24.2%

Source: SFRTA Operating Budget and 10-Year Plan (FY 2018-2019 - FY 2028-2029





Table 8-4 SFRTA Operating Budget and 10-Year Plan (FY 2018-2019 – FY 2028-2029)

	APPROVED	PROJECTED	PROJECTED	PROJECTED	PROJECTED	PROJECTED	PROJECTED	PROJECTED	PROJECTED	PROJECTED	PROJECTED	TOTAL FY 2019-
	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2029
OPERATING EXPENSES												
Operating Contract	21,593,921	22,025,799	22,466,315	22,915,642	23,373,955	23,841,434	24,318,262	24,804,628	25,300,720	25,806,735	26,322,869	262,770,279
Train Maintenance Contract	15,519,452	15,829,841	16,146,438	16,469,367	16,798,754	17,134,729	17,477,424	17,826,972	18,183,512	18,547,182	18,918,125	188,851,795
Station Maintenance Contract	6,750,523	6,885,533	7,023,244	7,163,709	7,306,983	7,453,123	7,602,185	7,754,229	7,909,314	8,067,500	8,228,850	82,145,193
PTC Maintenance	1,022,780	4,091,120	4,172,942	4,256,401	4,341,529	4,428,360	4,516,927	4,607,266	4,699,411	4,793,399	4,889,267	45,819,403
PTC Operations	1,683,200	6,732,800	6,867,456	7,004,805	7,144,901	7,287,799	7,433,555	7,582,226	7,733,871	7,888,548	8,046,319	75,405,482
Feeder Service Contract	7,402,658	7,550,711	7,701,725	7,855,760	8,012,875	8,173,133	8,336,595	8,503,327	8,673,394	8,846,862	9,023,799	90,080,839
Emergency Feeder Service	75,000	75,000	75,000	75,000	75,000	75,000	75,000	75,000	75,000	75,000	75,000	825,000
Security Contract	7,183,106	7,326,768	7,473,303	7,622,770	7,775,225	7,930,729	8,089,344	8,251,131	8,416,154	8,584,477	8,756,166	87,409,173
Insurance - Liability/Property/Auto	3,603,276	3,300,000	3,800,000	3,800,000	3,800,000	4,000,000	4,000,000	4,000,000	4,300,000	4,300,000	4,300,000	43,203,276
Train Fuel Contract	8,978,125	9,157,688	9,340,841	9,527,658	9,718,211	9,912,575	10,110,827	10,313,044	10,519,304	10,729,690	10,944,284	109,252,248
SFRC Dispatch	1,949,937	2,008,435	2,068,688	2,130,749	2,194,671	2,260,511	2,328,327	2,398,177	2,446,140	2,495,063	2,544,964	24,825,662
Station & Office Utilities	642,123	650,000	650,000	650,000	655,000	655,000	655,000	655,000	655,000	655,000	655,000	7,177,123
Corridor Utilities	1,475,148	1,500,000	1,500,000	1,500,000	1,550,000	1,550,000	1,550,000	1,550,000	1,550,000	1,550,000	1,550,000	16,825,148
Revenue Collection	758,000	770,000	770,000	770,000	775,000	775,000	775,000	775,000	780,000	780,000	780,000	8,508,000
Corporate & Community Outreach	602,900	605,000	605,000	605,000	610,000	610,000	610,000	612,000	612,000	612,000	615,000	6,698,900
Legal Expenses	903,698	930,809	958,733	987,495	1,017,120	1,047,634	1,079,063	1,111,435	1,133,663	1,156,337	1,179,463	11,505,449
Personnel Services	12,422,142	12,794,806	13,178,650	13,574,010	13,981,230	14,400,667	14,832,687	15,277,668	15,583,221	15,894,886	16,212,783	158,152,751
ROW Maintenance	25,842,099	25,819,892	25,819,892	25,819,892	27,600,000	27,600,000	27,600,000	27,600,000	27,600,000	27,600,000	27,600,000	296,501,775
Office Business Expense	1,101,880	1,110,000	1,143,300	1,177,599	1,212,927	1,249,315	1,286,794	1,325,398	1,351,906	1,378,944	1,406,523	13,744,586
Business Travel/Conferences	252,918	220,000	220,000	220,000	220,000	220,000	220,000	220,000	220,000	220,000	224,400	2,457,318
Dues & Subscriptions	157,152	150,793	150,793	150,793	150,793	150,793	150,793	150,793	153,809	156,885	160,023	1,683,420
General Training & Seminar	190,960	170,000	170,000	170,000	170,000	173,000	173,000	173,000	173,000	173,000	173,000	1,908,960
Professional Fees	709,900	731,197	753,133	775,727	798,999	822,969	847,658	873,087	890,549	908,360	926,527	9,038,106
Office Rent	32,870	33,000	33,000	33,000	33,000	33,000	33,000	33,000	33,000	33,000	33,000	362,870
Technical Support	189,500	100,000	100,000	100,000	110,000	110,000	110,000	110,000	110,000	110,000	110,000	1,259,500
Electronic Messaging Boards	69,500	70,000	70,000	70,000	-	-	· -	-	-	-	· -	279,500
Alarm Systems	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	44,000
Uniforms	6,000	6,000	4,000	6,000	4,000	6,000	4,000	6,000	4,000	4,000	4,000	54,000
Transfer to Capital Program	(1,450,000)	(1,450,000)	(1,575,000)	(1,575,000)	(1,600,000)	(1,600,000)	(1,600,000)	(1,600,000)	(1,600,000)	(1,600,000)	(1,600,000)	(17,250,000
Existing Operating Costs	119,672,768	129,199,193	131,691,456	133,860,376	137,834,174	140,304,771	142,619,441	144,992,380	147,510,967	149,770,867	152,083,364	1,529,539,75
Tri-Rail Coastal Link Operating Costs	-	-	-	-	-	30,600,000	31,212,000	31,836,240	32,472,965	33,122,424	33,784,873	193,028,50
	\$ 119,672,768	\$ 129,199,193 \$	131,691,456 \$	133,860,376 \$	137,834,174 \$	170,904,771 \$		176,828,620 \$	179,983,932 \$	182,893,291 \$	185,868,236 \$	1,722,568,25
OPERATING REVENUES				· · · · · · · · · · · · · · · · · · ·								
Train Service Revenue	14,051,830	16,262,607	16,506,547	16,754,145	17,005,457	17,260,539	17,519,447	17,782,239	18,048,972	18,319,707	18,594,502	188,105,991
Interest Income/Other Income	325,000	325,000	325,000	325,000	325,000	325,000	325,000	325,000	325,000	325,000	325,000	3,575,000
Statutory Dedicated Funding	15,000,000	13,300,000	13,300,000	13,300,000	13,300,000	13,300,000	13,300,000	13,300,000	13,300,000	13,300,000	13,300,000	148,000,000
Statutory Operating Assistance	27,100,000	27,100,000	27,100,000	27,100,000	27,100,000	27,100,000	27,100,000	27,100,000	27,100,000	27,100,000	27,100,000	298,100,000
Statutory Maintenance of Way	13,124,940	13,124,940	13,124,940	13,124,940	13,124,940	13,124,940	13,124,940	13,124,940	13,124,940	13,124,940	13,124,940	144,374,340
FTA Planning Grant	-	1,500,000	1,500,000	1,500,000	1,000,000	-		1,000,000	1,000,000	1,000,000	13,124,540	8,500,000
FTA Preventive Maintenance	- 22,784,726	26,806,495	27,342,624	27,889,477	28,447,266	- 29,016,212	29,596,536	30,188,467	30,792,236	31,408,081	32,036,242	316,308,362
FHWA	4,000,000	4,000,000	4,000,000	4,000,000	4,000,000	4,000,000	4,000,000	4,000,000	4,000,000	4,000,000	4,000,000	44,000,000
City of Boca Raton - Shuttle Service	4,000,000 176,821	172,081	4,000,000	4,000,000	4,000,000	4,000,000	4,000,000	4,000,000	4,000,000	4,000,000	4,000,000	348,902
City of Opa Locka - Shuttle Service	439,290	439,290		-		-	-		-	-		878,580
•	•		- 100 000		100.000			- 100.000	100 000		- 100.000	•
CSX Reimbursements  Miami Dado Statutory Operating Assistance	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	1,100,000
Miami-Dade Statutory Operating Assistance	1,565,000	1,565,000	1,565,000	1,565,000	1,565,000	1,565,000	1,565,000	1,565,000	1,565,000	1,596,300	1,596,300	17,277,600
Broward Statutory Operating Assistance	1,565,000	1,565,000	1,565,000	1,565,000	1,565,000	1,565,000	1,565,000	1,565,000	1,565,000	1,596,300	1,596,300	17,277,600
Palm Beach Statutory Operating Assistance	1,565,000	1,565,000	1,565,000	1,565,000	1,565,000	1,565,000	1,565,000	1,565,000	1,565,000	1,596,300	1,596,300	17,277,600
Gas Tax Transfer	1,896,895	1,896,895	1,896,895	1,896,895	1,896,895	1,896,895	1,896,895	1,896,895	1,896,895	1,896,895	1,896,895	20,865,845
SFRTA Reserves	15,878,266	19,376,885	21,700,450	23,074,919	26,739,615	29,386,185	30,861,623	31,379,839	33,027,924	34,307,344	36,716,884	302,449,934
Other Local Funding	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	1,100,000
Operating Revenues	\$ 119,672,768 \$	129,199,193 \$	131,691,456 \$	133,860,376 \$	137,834,173 \$	140,304,771 \$	142,619,441 \$	144,992,379 \$	147,510,967 \$	149,770,866 \$	152,083,364 \$	1,529,539,756
Coastal Link Funding (TBD)	<u>-</u>	-	-	-		30,600,000	31,212,000	31,836,240	32,472,965	33,122,424 182,893,291 \$	33,784,873 185,868,236 \$	193,028,501 1,722,568,257
Total Operating Revenues	\$ 119,672,768 \$	129,199,193 \$	434 CO4 4EC Ć	133,860,376 \$	137,834,173 \$	170,904,771 \$	173,831,441 \$	176,828,619 \$	179,983,932 \$			

Source: SFRTA Operating Budged FY 2018-2019





# **10-Year Capital Plan**

# 8.3.1 Capital Expenses

Capital Expenses for FY 2018/2019 are projected at \$117.7 million, with the primary allocations for the following areas:

- Debt Service (20.7 percent)
- Preventive Maintenance (19.4 percent)
- Positive Train Control (11.9 percent)
- Rolling Stock and facilities (4.7 percent)

For the next three years of the ten-year Plan, Capital Expenses are projected to range between \$93.4 million to \$96.3 million (FY 2020/FY 2022). The primary purposes of these expenses are as follows:

- Preventive Maintenance (23.6 percent)
- Rolling Stock and Facilities (17.8 percent)
- Debt Service (9.9 percent)

Beginning in FY 2022/2023, the projection of capital expenses is expected to decrease by approximately \$20 million.

These projections are based on the need for improvements in the system. However, a significant amount of the projects are currently unfunded. The Unfunded amount for the first five years of the Plan are as follows:

**Table 8-5 Unfunded Capital Expenses** 

Fiscal Year	Amount
2018/2019	\$19.2 million
2019/2020	\$11.8 million
2020/2021	\$10.5 million
2021/2022	\$10.5 million
2022/2023	\$12.5 million

Source: SFRTA Capital Budget and 10-Year Plan (FY 2018-2019 - FY 2028-2029



Table 8-6 SFRTA FY 2018-2019 Adopted Budget and Projected Capital Expenses (FY 2019 – FY 2024)

				FIRST FIVE YEAR PLAN	AR PLAN					
CAPITAL EXPENSES	FY 2018-2019	FY 2019-2020	H	FY 2020-2021	FY 2021-2022	FY 2022-2023	FY 2023-2024	FY 2024-2028		TOTAL
	APPROVED	PROJECTED	_	PROJECTED	PROJECTED	PROJECTED	PROJECTED	PROJECTED		
Funded Projects				•						
Rehab Rolling Stock	\$ 3,911,826	\$ 1,438,582	582						\$	17,829,589
Rail Yard Improvements	- \$	\$ 100,000	000				\$ 100,000	00	Ş	2,553,411
Station Improvements	- \$	\$ 500,000	\$ 000	200,000	\$ 500,000		\$ 500,000	00	Ş	3,650,000
Purchase of Rolling Stock	\$ 200,000	\$ 10,037,500	\$ 009	10,037,500	\$ 10,337,500	\$ 10,337,500			\$	41,250,000
Project Support/Administration	\$ 1,200,000		\$	1,490,442	\$ 1,200,000		\$ 1,200,000	8	❖	12,271,033
Preventive Maintenance	\$ 22,784,726	\$ 22,007,057	\$ 250	23,432,057	\$ 23,283,902	\$ 23,283,902		52	\$	246,274,087
Debt Service-DTML PTC Commercial Loan	\$ 3,907,381	\$ 4,495,209	\$ 602	4,487,369	\$ 4,487,369	\$ 2,190,364			÷	21,884,940
Debt Service-DTMS All Aboard Florida Loan	\$ 17,528,049								w	17,861,382
Debt Service-SIB Loan for Operations Center	\$ 2,872,100	\$ 4,709,519	519 \$	2,763,250	\$ 2,500,000	\$ 878,664			Ş	20,421,041
Transfer to Operating	\$ 1,896,895		\$ \$68	1,896,895	\$ 1,896,895	\$ 1,896,895	\$ 1,896,895	35	s	18,472,055
West Palm Beach Parking	- \$	\$ 1,000,000	\$ 000	1,000,000	\$ 1,000,000				Ş	3,000,000
Non-Revenue Fleet Vehicles	\$ 100,000	\$ 100,000	\$ 000	100,000	\$ 100,000	\$ 100,000			ş	1,008,292
New Furniture and Replacement Program	\$ 100,000		\$	100,000					Ş	602,352
Portable Radios	- \$				\$ 62,000				Ş	112,000
Computer/Office Equipment/Software	300,000	\$ 300,000	\$ 000	150,000	\$ 150,000				s	2,417,674
Passenger Information System	\$ 1,103,717	\$ 1,500,000	000						₩	6,561,342
Planning and Capital Development	1,000,000	\$ 1,125,000	\$ 000	1,000,000	\$ 1,150,000	1,000,000		00	\$	14,800,000
Transit Oriented Development (TOD II)	\$ 200,000	\$ 200,000	\$ 000	200,000	\$ 200,000	\$ 200,000	\$ 200,000	00	s	2,975,000
Miami River Intermodal Center (MR-MICCI)	\$ 147,462		\$	13,601,942	\$ 13,250,000				ş	36,700,000
Boca II	- \$	\$ 4,416,735	735 \$	3,416,735	\$ 7,979,969	\$ 7,979,969			\$	25,293,408
Boca Trolleys	\$ 1,505,000								s	1,505,000
Delray Beach Trolleys	- \$	\$ 860,000	000						s	860,000
PBIA Station Study	- \$				\$ 250,000				\$	250,000
General Engineering Consultants	\$ 2,648,155	\$ 2,800,000	\$ 000	2,800,000	\$ 1,500,000	\$ 1,500,000	\$ 1,500,000	00	s	22,870,459
Heavy Station Maintenance/Construction	\$ 500,000	\$ 500,000	000		\$ 290,442				\$	3,094,224
Northern Layover Facility	\$ 1,000,000	\$ 3,530,000	000						\$	37,145,944
Positive Train Control	\$ 3,189,384								\$	52,062,626
Emergency Flagging Services	٠ \$					\$ 500,000			₩.	1,000,000
Flagging Services for Construction Projects	\$ 2,500,000	\$ 2,500,000	<u>٠</u>	2,500,000	\$ 2,500,000	\$ 2,500,000	\$ 2,500,000	8	s	20,500,000
Downtown Miami Station	\$ 7,255,308								s	48,902,750
Waste Water Treatment Plant	٠ ډ	\$ 1,636,000	\$ 000	1,500,000	\$ 612,000				s	4,098,000
Northwood Crossover	\$ 602,027								٠s	6,913,367
Grade Crossings and Signals	\$ 10,569,000	\$ 12,329,800	800 \$	11,981,924	\$ 11,993,382	\$ 12,005,183			\$	60,629,289
Downtown Miami Link PTC	\$ 11,077,588	\$ 3,680,435	435						❖	20,290,000
Unfunded Projects										
SFRC Capital Replacement Program	\$ 17,465,500	\$ 9,951,688	\$ 889	8,734,688	\$ 8,674,688	\$ 6,819,688	\$ 8,573,666	99	\$	60,219,918
MOW Oversight	\$ 1,800,000	\$ 1,800,000	\$ 000	1,800,000	\$ 1,800,000	\$ 1,800,000	\$ 1,800,000	00	❖	10,800,000
Federal Funds Unallocated	· \$						\$ 200,000	00	÷	200,000
County Gas Tax Funds Unallocated	٠ \$		ş	10,544	\$ 625,736	\$ 3,922,741	\$ 6,113,105	35	Ş	10,672,126
Total Capital Fund allocation by Project:	\$ 117,664,118	\$ 93,414,420	\$ 0Zt	93,503,346	\$ 96,343,883	\$ 76,914,906	\$ 55,545,928	- \$ 8	\$	533,386,601

Source: SFRTA Capital Budget and 10-Year Plan (FY 2018-2019 - FY 2028-2029)





# 8.3.2 Capital Revenues

Capital Revenue is generated from three principal sources, Federal, State and Local. In addition, in FY 2018/2019, there is a contribution from CSX toward capital needs. However, these sources do not cover all the capital requirements of the system as planned. There is a line item designated as "Funding to be Determined" that ranges from \$19.2 million to \$25.7 million during the next five years.

The percentage of contribution for the total Capital Revenue from the various revenue sources over the five-year time frame are presented in Table 8-7Error! Reference source not found.. Local sources are currently projected to become reduced from 38.6 percent in FY 2018/2019 to 10.4 percent in FY 2022/2023. The local match reduction is attributed to a one-time increase in local funding that was applied to SFRTA's share of the MiamiCentral project. Federal sources of funds for capital are projected to remain constant for the planning period whereas State sources increase from 11.6 percent to 29.1 percent before falling off in FY 2022/2023Projected capital revenues for the 10-yr planning period are shown in Table 8-8.

Table 8-7 Capital Revenue Sources

Fiscal Year	Federal	State	Local	Undetermined	CSX
2018/2019	29.5%	11.6%	38.6%	17.6%	2.7%
2019/2020	37.1%	20.1%	17.7%	25.1%	0.0%
2020/2021	37.1%	29.7%	12.2%	21.0%	0.0%
2021/2022	36.0%	29.1%	8.3%	26.6%	0.0%
2022/2023	45.1%	19.5%	10.4%	15.0%	0.0%

Source: SFRTA Capital Budget and 10-Year Plan (FY 2018-2019 - FY 2028-2029)





Table 8-8 SFRTA Projected Capital Revenues (FY 2018 – FY 2028)

	FIRST FIVE YEAR PLAN																					
CAPITAL REVENUES		FY 2018-2019 ADOPTED		FY 2019-2020 PROJECTED		FY 2020-2021 PROJECTED		FY 2021-2022 PROJECTED		FY 2022-2023 PROJECTED		FY 2023-2024 PROJECTED		FY 2024-2025 PROJECTED		FY 2025-2026 PROJECTED		FY 2026-2027 PROJECTED		FY 2027-2028 PROJECTED		TOTAL 2018 - FY 2028
																						2018 - F1 2028
FTA Section 5307 - Formula Funds	\$	18,560,578	\$	18,560,578	\$	18,560,578	\$	18,560,578	\$	18,560,578	\$	18,560,578	\$	18,560,578	\$	18,560,578	\$	18,560,578	\$	18,560,578	\$	185,605,780
FTA Section 5337 - State of Good Repair	\$	16,101,684	\$	16,101,684	\$	16,101,684	\$	16,101,684	\$	16,101,684	\$	16,101,684	\$	16,101,684	\$	16,101,684	\$	16,101,684	\$	16,101,684	\$	161,016,840
FDOT GMR Funds	\$	-			\$	13,250,000	\$	13,250,000													\$	26,500,000
FDOT JPA'S	\$	602,027																			\$	602,027
FDOT JPA'S-District 6	\$	8,000,000																			\$	8,000,000
FDOT Railroad Reimbursement Flagging	\$	2,500,000	\$	2,500,000	\$	2,500,000	\$	2,500,000	\$	3,000,000	\$	2,500,000									\$	15,500,000
FDOT Railroad Reimbursement Grade Crossing	\$	2,569,000	\$	12,329,800	\$	11,981,924	\$	11,993,382	\$	12,005,183											\$	50,879,289
FDOT Trip Funds	\$	-	\$	3,916,735			\$	250,000													\$	4,166,735
CSX Contribution	\$	3,189,385																			\$	3,189,385
PBMPO Funds	\$	1,505,000	\$	4,890,000	\$	3,416,735															\$	9,811,735
PTC Loan	\$	11,077,588	\$	3,680,435																	\$	14,758,023
SEOPW CRA-Debt Service/Bonds	\$	17,528,049																			\$	17,528,049
All Aboard Florida Loan	\$	2,839,569																			\$	2,839,569
Omni CRA	\$	606,567																			\$	606,567
City of Miami	\$	1,310,165																			\$	1,310,165
Bayfront Park Trust	\$	40,984																			\$	40,984
Miami DDA	\$	205,528																			\$	205,528
Miami Dade County	\$	2,252,494																			\$	2,252,494
County Gas Tax	\$	8,010,000	\$	8,010,000	\$	8,010,000	\$	8,010,000	\$	8,010,000	\$	8,010,000	\$	8,010,000	\$	8,010,000	\$	8,010,000	\$	8,010,000	\$	80,100,000
Funding To Be Determined	\$	20,765,500	\$	23,425,188	\$	19,682,425	\$	25,678,239	\$	19,237,461	\$	10,373,666									\$	119,162,479
Total Capital Revenues	\$	117,664,118	\$	93,414,420	\$	93,503,346	\$	96,343,883	\$	76,914,906	\$	55,545,928	\$	42,672,262	\$	42,672,262	\$	42,672,262	\$	42,672,262	\$	704,075,649

Source: SFRTA Capital Budget and 10-Year Plan (FY 2018-2019 - FY 2028-2029)





An analysis of potential future funding sources has been completed (included in the subsequent section) to identify options for SFRTA to address future needs. These sources should be explored to measure the potential for acquisition of the funding and to access necessary Capital revenue. Sources include:

#### **Federal**

- State of Good Repair Grants
- Urbanized Area Formula Grants
- Bus & Bus Facilities Program
- Surface Transportation Block Grants
- Capital Investment Grants (New Starts, Small Starts, and Core Capacity)
- Better Utilizing Investments to Leverage Development (BUILD) Grant Program
- Infrastructure for Rebuilding America (INFRA) Grant Program
- Congestion Mitigation and Air Quality Improvement Program

#### State

- New Starts Transit Programs
- Transit Corridor Program
- Commuter Assistance Program
- Intermodal Development Program
- County Incentive Grant Program (CIGP)
- Transportation Regional Incentive Program (TRIP)

#### Local

- Property taxes
- Contract or Purchase of Service Revenues
- Lease Revenues
- Vehicle Fees
- Advertising
- Concessions
- Employer/Payroll Taxes
- Rental car Fees
- Vehicle Lease Taxes and Fees
- Parking Fees
- Realty Transfer Taxes/Mortgage Recording Fees
- Corporate Franchise Taxes
- Room or Occupancy Taxes
- Utility Fees
- Donations
- Joint Development
- Impact Fees/Exactions
- Special Assessment
- Tax Increment Finance (TIF)



# Conclusion

It is essential to identify and pursue additional funding sources for both operating and capital needs. Operation and maintenance of the existing Tri-Rail and Commuter Bus service is a core agency function and responsibility. SFRTA is committed to working with FDOT and other partners to identify new dedicated revenue source(s) that will cover continued operations for the existing Tri-Rail system and the expansion of TRCL on the FEC Railway.

Planning and implementing future, expanded service will require additional capital and operating funds. The agency continues to explore new funding opportunities and methods, including multiplepartner funding for targeted projects and possibilities for Tax Increment Financing (TIF) for station-area development.

Projections of Operating Expenses for the planning period includes an increase of 7.4 percent for the next Fiscal Year and a modest increase at approximately 1.77 percent thereafter. Historic data reveals that the actual increases have exceeded this number. If the Expenses do increase at a higher rate, the expected shortfall will also increase.

Additional funding sources for Capital Expenses must also be acquired. Throughout the ten-year planning period, the expected shortfall of capital funds ranges from \$20 million to \$25 million during this time frame.





# **Funding and Financing Sources**

# **8.5.1** Funding Sources

This section evaluates both the current and potential funding sources available to SFRTA to fund transit capital project costs, to fund operation and maintenance (O&M) costs; and to improve SFRTA's transit services within Broward, Miami-Dade and Palm Beach Counties.

While maintaining the existing funding sources for transit services is critical, the ability to both improve existing service and expand bus and rail service coverage relies heavily on additional funding. Specifically, leveraging additional federal and state funding to provide new routes or expand existing route coverage often requires significant local matching funds.

The objective of developing funding and financing options is to provide SFRTA with a menu of options to consider as part of its discussions of financial strategies for improving and maintaining SFRTA systems. Funding options include potential revenue sources (taxes, fees, passenger revenue, grants) that can be used to pay for capital or O&M costs. Financing options, addressed in Section 8.6, in contrast, allow SFRTA to borrow funds required to pay for certain projects, by leveraging revenue sources available to the project through the issuance of debt. Financing allows project sponsors to address near-term project funding needs by borrowing against revenue anticipated to be collected in the future.

The following three sub-sections – Federal, State, and Local & Regional Funding Sources – illustrate the funding options available to SFRTA.

# **8.5.2** Federal Funding Sources

This section outlines the existing federal funding sources available to cover certain costs of the agency's existing and planned new services. The majority of federal funding sources identified below are most commonly used to cover capital costs. Identifying O&M funding is often difficult because the cash flow must be recurring and growing annually to match inflation (and potentially service growth).

#### Federal Updates:

The \$1.3 trillion omnibus spending bill passed on March 23, 2018 with major provisions for federal transportation grant and financing programs. This bill approved an additional \$7.8 billion for US Department of Transportation (USDOT) infrastructure programs compared to FY 2017 funding levels.

#### Fixing America's Surface Transportation (FAST) Act

The Fixing America's Surface Transportation (FAST) Act is a 5-year, \$305 billion transportation authorization bill passed into law in December 2015. The authorization details the federal government's surface transportation policy for a multiyear period, and specifies the maximum amount of authorized funding for specific programs. Actual funding amounts each fiscal year are subject to annual appropriations bills. The bill invests \$61 billion in public transportation, creates new discretionary programs, and amends existing programs.



The FAST Act is the first long-term bill in 10 years. Its key provisions include the authorization of \$2.3 billion annually for the FTA's Capital Investment Grant (CIG) program, which includes the New Starts, Core Capacity, and Small Starts categories of grants. Another \$1.5 billion over five years will be authorized for a national discretionary program for replacing, rehabilitating, purchasing, or leasing bus related facilities. The bill also includes \$2.2 billion over five years for three new discretionary grant programs for intercity passenger rail and an additional flexibility for federal direct lending programs.

#### 8.5.2.2 Federal Formula Grants

FTA formula funds are distributed by formula to states and metropolitan areas to fund transit investments. In urbanized areas, transit formula funds can cover capital costs, but cannot be used to cover O&M costs, except for preventive maintenance costs. FTA formula funds are distributed to designated recipients in urbanized areas based on route miles, revenue vehicle miles, and population. These include the following three programs:

- Section 5307 Urbanized Area Formula Program: This program makes federal resources available to urbanized areas for transit capital assistance and for transportation-related planning. An urbanized area is an incorporated area with a population of 50,000 or more that is designated as such by the U.S. Census Bureau.
- Section 5337 State of Good Repair (SGR) Program: This program provides capital assistance for maintenance, replacement, and rehabilitation projects of high-intensity fixed guideway and bus systems to help transit agencies maintain assets in a state of good repair. Additionally, SGR grants are eligible for developing and implementing Transit Asset Management plans.
- Section 5339 Bus & Bus Facilities Program: This program provides funding to states and transit agencies to replace, rehabilitate and purchase buses and related equipment and to construct busrelated facilities. In addition to the formula allocation, this program includes two discretionary components: The Bus and Bus Facilities Discretionary Program and the Low or No Emissions Bus Discretionary Program. Funding is provided through formula allocations and competitive grants. A sub-program, the Low- or No-Emission Vehicle Program, provides competitive grants for bus and bus facility projects that support low and zero-emission vehicles. The allocation of such funds is based on asset age and condition. Funds support capital costs but cannot be used to cover O&M costs.
- Surface Transportation Program Funds. Surface Transportation Program (STP) funds are apportioned by FHWA, but are referred to as "flexible" because they may be used for an array of eligible projects, including transit. Aside from its highway uses, the STP program can be applied to the capital cost of any public transportation project to preserve and improve the conditions and performance of surface transportation. STP funds are distributed directly to states, which may request those funds be transferred to FTA for an eligible public transportation project. The STP will distribute \$590 million in FY 2018 to Florida.
- Congestion Mitigation and Air Quality Improvement Program (CMAQ): FHWA's CMAQ program funds are distributed to air quality maintenance or non-attainment areas (regions that do not meet the National Ambient Air Quality Standards for one or more of the six criteria pollutants and/or lead, as defined in the federal Clean Air Act) using a formula based on an area's population by





county and the severity of its pollutant standard exceedance within a non-attainment or maintenance area. Funds are available to transportation projects and programs for the purpose of reducing congestion and improving air quality. CMAQ funding can be used for the capital costs of transit projects and up to five (5) years of the operating costs of new transit service. CMAQ funds are awarded to the state and the state distributes money to the cities and counties. The South Florida region is currently in attainment.

#### 8.5.2.3 Federal Discretionary Grants

The federal government awards discretionary grants to states and other eligible recipients through competitive application processes. Unlike formula grants, there is no set allotment for a given geographic area and individual projects compete against other projects nationwide.

Capital Investment Grants (CIG), administered by the FTA under Section 5309 of U.S. Code Title 49, provides federal grants to major transit capital investments. There are three categories of eligible projects, New Starts, Small Starts, and Core Capacity as described below. These programs typically allow for a federal share of up to 80 percent of the project capital cost and require a local match for the remaining 20 percent.

FTA New Starts. The New Starts category of funding is one of FTA's primary capital funding programs for new or extended fixed guideway and corridor-based bus systems across the country, including rapid rail, light rail, commuter rail, bus rapid transit (BRT), and ferries. Eligible New Starts projects request funding greater than \$100 million and/or have a total project cost greater than or equal to \$300 million. Eligible expenses include capital costs but not O&M costs.

This source can be used to fund a new fixed guideway minimum operable segment or extension to existing fixed guideway system that qualify according to the program's rigorous financial and project justification criteria.

The new omnibus bill appropriated more than \$1.5 billion for the New Starts Program.

FTA Core Capacity. The Core Capacity funding category was created by Congress in 2012 as a new type of eligible funding within the FTA's CIG program. These funds support substantial corridorbased investments in an existing fixed-guideway system. However, the system must be in a corridor where transit service is at or over capacity or will be over capacity in five years. The project must also lead to an increase in the capacity by 10 percent. Similar to the New Starts funding category, eligible uses of Core Capacity funds are capital costs but not O&M costs.

One Core Capacity project has been awarded a grant and six other projects are presently in the grants pipeline, none of which are in Florida.

The new omnibus bill appropriated almost \$716 million for the Core Capacity Program. Of the total Core Capacity funding, \$200 million is dedicated to existing full-funding grant agreements (FFGAs) and \$516 million is available for new FFGAs.



FTA Small Starts. Small Starts is another category of funding within FTA's CIG program. To be eligible for Small Starts projects must have a total capital cost less than \$300 million and request less than \$100 million in Small Starts funding. This funding option can be used for new fixed guideway systems and extensions and BRT. The Small Starts funding option also can cover capital costs but cannot be used to cover O&M costs. Corridor-based BRT systems that represent a substantial investment in a defined corridor, including the following features, may qualify for Small Starts funding: defined stations, traffic signal priority for transit, or short headway bi-directional services for a substantial part of weekdays and weekend days.

The new omnibus bill appropriated more than \$401 million for the Small Starts Program.

#### Other Discretionary Programs

- BUILD Grants. On April 20, 2018, the administration released a Notice of Funding Opportunity (NOFO), which officially rebranded the TIGER grant program as the Better Utilizing Investments to Leverage Development (BUILD) grant program. The BUILD program is a highly competitive USDOT grant program which supports the capital costs of road, rail, transit, and port projects that have a significant impact on the nation, a region, or a metropolitan area. The FY 2018 omnibus spending bill provides significant funding, \$1.5 billion, triple the amount appropriated for the TIGER program in FY 2017. The maximum award per project is \$25 million, and total awarded amounts per state cannot exceed \$150 million.
- INFRA Grants. The Infrastructure for Rebuilding America (INFRA) grant program (previously referred to as FASTLANE) was authorized as the Nationally Significant Freight and Highway Projects program by the USDOT's Build America Bureau. This program provides funding for freight and highway projects that have a significant impact on the national or region. The FAST Act apportioned \$900 million for FY 2018, \$950 million for FY 2019, and \$1.0 billion for FY 2020.

# **8.5.3** State Funding Sources

There are several well-established and stable state revenue sources currently used by not only SFRTA, but other transit providers in Florida to include Palm Tran, Broward County Transit (BCT), and the Miami-Dade Department of Transportation and Public Works (DTPW). The following state funding sources are funded through FDOT, as indicated in the table directly below, some of which are currently a funding source, and where others are a potential funding source for SFRTA.

#### 8.5.3.1 Florida Department of Transportation (FDOT) Sources

- Maintenance of Way (MOW) Operating Assistance: SFRTA and FDOT entered into an Operating Agreement June 13, 2013 to formalize SFRTA's responsibilities in assuming management, operation, maintenance and dispatch of all rail operations along the corridor. Currently FDOT contributes \$13.1 million and the SFRTA contributes \$1.9 million.
- Operating Assistance and Dedicated Funding: Subsequent to SFRTA assuming responsibility for maintaining and dispatching the South Florida Regional Corridor (SFRC) on March 29, 2015, the associated Florida Statute changed the State Transportation Trust Fund (STTF) annual funding allocation to Tri-Rail. FDOT must now annually transfer \$15 million from the STTF to SFRTA for





operations, maintenance, and dispatch and an additional amount of no less than \$27.1 million for operating assistance (\$42.1 million total annual funding).

- Service Development Program: The FDOT Service Development Program is a state grant funding program that funds pilot projects that could include new or innovative techniques to improve/expand transit services, marketing, maintenance, or technology. It may fund up to 50 percent of non-federal share of costs of projects that are local in scope and up to 100 percent of O&M costs of the transit service for projects that are regionally significant, spanning various counties, and/or connecting regions. This program can cover capital or O&M costs. An example is SunRail feeder bus service. Support provided by this program cannot extend beyond seven years for any single project.
- FHWA Pass-Through Funds: SFRTA receives FHWA funds as a pass-through from FDOT. SFRTA has received these funds since its inception in 1989 as part of a traffic mitigation project. Fiscal year 2018/2019 FHWA assistance will remain at \$4.0 million.

### 8.5.3.2 Transportation Regional Incentive Program (TRIP)

The Transportation Regional Incentive Program funds regionally significant transportation facilities linked to growth management that include transit projects. It may fund up to 50 percent of project costs, or up to 50 percent of the non-federal share of project costs for public transportation facility projects. The program covers capital costs but cannot be used to cover O&M costs. Based on SFRTA's FY 2018/FY 2019 budget, \$3.9 million in TRIP funds are projected for FY 2019/FY 2020.

### 8.5.3.3 Public Transit Block Grant Program

The Public Transit Block Grant Program provides funding that may be used by states and localities for a wide range of projects to preserve and improve the conditions and performance of surface transportation, including highway, transit, intercity bus, bicycle and pedestrian projects. This program can cover capital costs and can be used to cover O&M costs. These grants may be used to fund up to 50 percent of the non-federal share of transit project capital costs and up to 50 percent of eligible operating costs (net costs).

For SFRTA, revenue received under the Transit Block Grant program is issued under a Joint-Participation Agreement (JPA) with FDOT. Based on SFRTA's budget, \$602,000 funds were appropriated for FY 2018/2019.

### New Starts Transit Program (NSTP) 8.5.3.4

The Florida New Starts Transit Program is a funding program that provides transit agencies with up to a dollar-for-dollar match of the local (non-federal) share of project costs for transit fixed-guideway projects and facilities that qualify under the FTA New Starts Program. These State grants are for new investments in rail transit and BRT projects. They aim to help leverage local funds to secure FTA New Starts grants, and can provide state funding up to 50 percent of the non-federal share. This program covers capital costs but cannot be used to cover O&M costs. Costs that are eligible to be covered by these grants include final design, right-of-way, construction, and equipment.



### Transit Corridor Program 8.5.3.5

The Transit Corridor program is a state grants funding program that supports new transit services to alleviate congestion or other mobility issues within a corridor. It may fund up to 50 percent of the nonfederal share of costs of projects that are local in scope and up to 100 percent of transit corridor projects that are statewide in scope. Projects that are locally or regionally significant may be funded and supplemented for an unspecified time. The agency must demonstrate that the project will relieve congestion and improve capacity of a corridor by increasing people carrying capacity through use/movement of high occupancy vehicles. This program can cover capital costs as well as O&M costs.

### 8.5.3.6 Commuter Assistance Program

The Commuter Assistance Program funds projects that encourage and promote public-private partnerships (P3s) serving individuals for:

- Carpools/vanpools/bus pools
- Express bus service
- Subscription transit service
- Group taxi services
- Heavy and light rail
- Other systems designed to increase vehicle occupancy

The program may fund up to 50 percent of non-federal share of costs of projects that are local in scope and up to 100 percent of transit capital, intercity bus service, or commuter assistance projects. The program covers both capital and O&M costs.

This grant focuses on the promotion of services that transport employees to work. A demonstration project is possible with this grant only if it is a specialized innovative approach to commuter assistance and of statewide or regional impact. Promotion examples including logging a carpool commute to compete for gas cards or prizes, subsidizing the first month of vanpools to encourage passengers to try it, paying for taxis for emergency rides home or driver reimbursements if a person rides with someone else, and payments for an initial ticket to ride the bus or train to encourage passengers to ride transit.

### Intermodal Development Program 8.5.3.7

The Intermodal Development Program funds major capital investments in: Fixed guideway transportation systems; access to seaports, airports, and other terminals; Construction of intermodal or multimodal terminals. The program covers capital costs but cannot be used to cover O&M costs.





### County Incentive Grant Program 8.5.3.8

The County Incentive Grant Program (CIGP) provides grants to counties to fund improvements to transportation facilities (including transit) that are located on the State Highway System or that relieve traffic congestion on the State Highway System. By statute, the program covers 50 percent of project capital costs but cannot be used to cover O&M costs.

Eligible projects may include resurfacing and paving dirt local unpaved roads as long as the statutory requirement is clearly met. For example, if an application is received for CIGP funds to pave a dirt road, the justification must indicate how paving the dirt road would relieve congestion on the SHS.

Each eligible project must be consistent to the maximum extent feasible with the Florida Transportation Plan, Metropolitan Planning Organization Plan where applicable, and any appropriate local government comprehensive plan. Counties may submit projects that are not in the Metropolitan Planning Organization Long Range Transportation Plan or local government comprehensive plan; however, if selected, the projects must be amended into these plans within six months and supporting documentation should be provided to the FDOT.

# **8.5.4** Local and Regional Funding Sources

This section covers various local and regional funding sources available to SFRTA. The funding categories and a majority of the sources summarized are based on the information from 2009 TCRP Report 129: Local and Regional Funding Mechanisms for Public Transportation, published by the Transportation Research Board (TRB).

### County/City Funding Sources 8.5.4.1

General fund and other local revenues from municipalities and counties are often critical to expanding local transit services; however, this local revenue is often difficult to come by as many services and projects compete for these limited funds. Local funding must be fair and equitable in areas where multiple jurisdictions contribute to a public transportation system. Additionally, as new routes or expanded services are requested by local jurisdictions, those that receive benefit should be encouraged to contribute a fair and reasonable share of the local match needed to implement the services. Establishing a funding allocation process that is based on the benefit of the services received and potential ridership demand should be developed to assist in this process.

# Other County/City Funding Sources:

**County Assistance**: In June 2003, Governor Jeb Bush signed legislation requiring the three counties in the SFRTA service area to contribute \$2.67 million each in capital funding to the SFRTA. To date, SFRTA has used approximately \$73 million to fund various capital projects including new locomotives and railcars, a new station and administrative building. Any remaining funds will be used as leverage for future state and federal capital projects.



- Palm Beach Transportation Planning Agency (PBTPA): The PBTPA is one of three planning organizations designated for the Miami Urbanized Area (UZA) and, in that capacity, is responsible for coordinating the transportation planning activities for all of Palm Beach County within both incorporated and unincorporated areas. The Unified Planning Work Program (UPWP) for the PBTPA identifies transportation planning activities to be undertaken for a two-year period following the State of Florida fiscal year from July 1st through June 30th. Based on SFRTA's FY 2018/FY 2019 budget, \$4.9 million of funds are projected for FY 2019/FY 2020 and \$3.4 million of funds are projected for FY 2020/FY 2021.
- City of Boca Raton Shuttle Service: SFRTA has a contract with the city of Boca Raton to provide feeder bus connections to and from the Boca Raton Tri-Rail station. SFRTA will be reimbursed \$172,081 for these services.
- City of Opa Locka Shuttle Service: SFRTA has a contract with the city of Opa Locka to provide feeder bus connections to and from the Opa Locka Tri-Rail station. SFRTA will be reimbursed \$172,081 for these services.
- Other Local Funding: Other Local Funding consists of funds provided for feeder services by a private firm totaling \$100,000 for a dedicated feeder bus route. In addition, CSX will reimburse the Agency for costs associated with derailments at the maintenance yard, which is currently budgeted at \$100,000.

### Gas Tax and SFRTA Reserves 8.5.4.2

SFRTA will be utilizing \$1,896,895 of additional county gas tax funds pursuant to F.S. 343.58 to offset the cost of corridor maintenance. SFRTA budgeted \$15,878,266 in reserve funds in fiscal year 2018/2019.

### Interest Income / Other Income<sup>1</sup> 8.5.4.3

Interest income includes interest from over-night bank investments, investments in the Local Government Surplus Fund Trust Fund and other investments as allowed under Florida Statute 218.415. Other Income includes revenue from vending machines located at SFRTA stations, fare evasion fines and internet sales of SFRTA merchandise. For fiscal year 2018/2019, estimated Interest Income/Other Income is \$325,000.

### **Property Taxes** 8.5.4.4

One of the main revenue sources for local governments is property (ad valorem) taxes on land and building values. Property taxes are fairly unrestricted in their use. Property tax revenue is often used by special districts and authorities, including transit authorities, and other local public services, like police and sanitation.



<sup>1</sup> http://www.sfrta.fl.gov/docs/planning/TDP/FINAL-FDOT-Transmittal-Draft-TDP-20170.pdf



### Contract or Purchase-of-Service Revenues 8.5.4.5

Contract or purchase-of-service revenues are based on levels of service and rates established by a transit agency. Transit systems that provide contract services in addition to their regularly scheduled services, like paratransit services, typically receive the funds directly. Municipal government, individual businesses and industries, health and social service agencies, and educational institutions may purchase transit services.

### Lease Revenues 8.5.4.6

Lease revenues are generated through the leasing of transit agency facilities, including a rail or bus terminal, a station, transfer, or parking facilities. Transit agencies with fixed rights-of-way, like rail or bus rapid transit, can also lease sections of the right-of-way to private companies, like telecommunications companies. Lease terms, rates, and length are negotiated by the parties involved.

### 8.5.4.7 Vehicle Fees

Vehicle fees charged to vehicle owners and operators vary by state. The fees are based on the value, weight, or age of the vehicle and include fees for the issuance of titles, licenses, registration, or inspection fees. Local governments, through a local option, might have the authority to collect vehicle fees. The revenues generated from vehicle fees are typically dedicated to cover the administration and enforcement of the program, as well as general transportation needs. In rare instances are revenues from this program dedicated directly to fund public transportation.

### 8.5.4.8 Advertising

A transit agency can receive income from advertisements on vehicles, station and shelter facilities, tickets, schedules, and maps, for example. This also provides the opportunity to establish community partnerships. Advertising can be done through print and electronic media, and might serve as "sponsorship" programs that fund vehicles, services, or events. Advertising revenue can be generated from both short- and long-term contracts.

### Concessions 8.5.4.9

Transit agencies with available space in terminals and station facilities may enter into concession agreements with commercial and retail businesses. Concessions might include food stands, sales shops, vending machines, ATMs, etc. Revenues can be received directly or as contributions to capital improvement projects.

### Employer/Payroll Taxes 8.5.4.10

Payroll taxes support transit by imposing taxes directly on an employer for the amount paid for services performed within the transit district. Employer taxes are typically received quarterly and administered by a state agency on behalf of the transit agency. Enabling legislation, along with associated regulations and guidelines, define the specific types of wages and payments to which the tax is applied and identifies any types of organizations that may be exempt from contributing under this program.



### Rental Car Fees

Florida imposes a rental car surcharge of \$2.00 per day on car rentals or leases for first 30 days of term and \$1.00 per use on car-sharing services for less than 24 hours. This surcharge is primarily deposited in the State Transportation Trust Fund to implement the FDOT annual work program. Revenues from the surcharge dropped noticeably in 2009 due to economic downturn, but have recovered and are anticipated to provide \$138 million in revenue in FY 2018/2019.

The Rental Car Surcharge is an existing funding option that is applied as a per-day, per-use, or percentage-based surcharge on rental car purchases or leases. These can fluctuate with economic conditions, however can provide reliable revenue streams if the economy remains strong. This option can be used to cover capital and O&M costs.

### Vehicle Lease Taxes and Fees 8.5.4.11

Vehicle lease taxes and fees are charged when vehicles are purchased or leased. The amount of fees collected can differ depending on the program and can be collected by the dealer, leasing company, or state where the transaction takes place.

### Parking Fees 8.5.4.12

Transit agencies receive parking revenue collected at parking facilities owned by the agency. In addition, fees collected at public parking facilities have been used as a source of revenue for public transportation. SFRTA maintains park-and-ride lots at each of its 18 existing stations for a total of 5,190 parking spaces throughout the Tri-Rail system.

### Realty Transfer Taxes/Mortgage Recording Fees 8.5.4.13

A "real estate transfer tax" is a tax imposed on the sales of certain classes of residential, commercial, or industrial properties. Revenue generated by these fees increase with the sale amount of the property being sold or transferred. The tax might be paid by either the buyer or seller depending on the state. Rates also vary by state, with some states directing the revenues to the state's general fund, while other states give local governments the authority to collect and keep the revenues. Revenue collected under these programs are often used to fund needs such as land conservation, parks and open space and, in some instances, public transportation.

### Corporate Franchise Taxes 8.5.4.14

A franchise tax is a tax collected on the taxable assets of a for-profit business or firm. The tax is typically paid in advance of doing business within the state and is often targeted to specific industries and economic activities. Revenues from the tax may be deposited in various restricted and unrestricted state funds.





### Room or Occupancy Taxes 8.5.4.15

Room or occupancy taxes are applied to the cost of lodging at hotels, motels, and similar facilities. Rates may vary depending on the facility type, location, or rental period. Revenues can be collected by the state or, where permitted, by local agencies. These tax revenues are often used to promote tourism or construct/operate tourism-related facilities.

### **Utility Fees** 8.5.4.16

Utility fees encompass taxes on a wide range of public services and utility businesses. Revenues are typically allocated to the jurisdiction's general fund or public works facilities. The tax is often put in place in lieu of a business and occupation tax or sales tax.

### **Donations** 8.5.4.17

Support for public transportation may be available through private contributions and donations to transit agencies with the expectation that net benefits will accrue over time as the value of the private development appreciates. Donations can be made in the form of land, infrastructure, or monetary contributions.

### Joint Development 8.5.4.18

Joint developments provide opportunities for new funding streams for public transportation. These revenues are generated from the value transit brings to businesses, developers, and property owners, and vice versa.

This revenue may come in the form of Transit Improvement Districts, lease payments, revenue sharing, cost-sharing for providing services to the developments. The revenue generated can be used in part or in entirety to support SFRTA transit services and facilities.

### Impact Fees/Exactions 8.5.4.19

New development brings higher demand for additional public facilities and services, including additional transportation capacity and, particularly in urban areas, for expanded transit services. Impact fees are frequently charged to generate revenues needed to provide the necessary transportation capacity improvements necessitated by the development. Although, the use of impact fee revenue to support public transportation is not yet widespread, impact fees to fund transit capital needs are becoming more common in Florida.

# 8.5.4.20 Special Assessment

Special Assessment is an existing local funding option that aims to obtain funds through the application of additional tax in specified investment districts. This funding option can cover capital costs and can be used to cover O&M costs.



These additional taxes may generate significant sums for investment, depending on the rate and district size. However, this requires the agreement of local property owners to establish the district and contribute to the cost of transportation infrastructure improvements. The property owners will then benefit through economic development and improved property values. This option often includes financing where payments are not due until after the improvement is completed.

For example, the Alternatives Analysis Study for the expansion of the downtown Orlando LYMMO circulator system considered a special assessment district as a funding source, and potential revenues were calculated to fund the new East-West (Grapefruit) Line. However, it ultimately did not move forward.

### Sponsorship & Naming Rights 8.5.4.21

Sponsorship and naming rights is another local funding option that can cover capital costs and can be used to cover O&M costs. This is a form of advertising where a private entity sponsors a transit service, line, station, or another asset. It is widely implemented with sports stadiums/arenas and can provide a significant revenue source during initial stages of construction and operation. However, this form of funding requires strong public and political project support and is more difficult to secure later in the life of the asset.

### **Air Rights** 8.5.4.22

Air rights are also a local funding option that can cover capital costs and can be used to cover O&M costs. In such an option, a public transportation provider sells or leases development rights above the project site. The revenue should exceed the cost of developing above the project. Thus, the developer is incentivized to purchase and develop above the transit investment.

### **Developer Contributions** 8.5.4.23

Developers often provide in-kind or monetary contributions to facilitate construction of projects that may result in a positive impact on property values. This is often negotiated to reflect the benefit the developer derives from the project. The project sponsors often request contributions early, allowing sponsors to better leverage other sources. These may be applied to fill the gaps in funding for both capital and operating costs.





# **Financing Sources**

As mentioned in the beginning of this section, financing options allow SFRTA to borrow funds required to pay for certain projects, by leveraging revenue sources available to the project through the issuance of debt. Financing allows project sponsors to address near-term project funding needs by borrowing against funds anticipated to be available in the future. The following financing sources available to SFRTA are detailed below.

### Tax Increment Financing (TIF) 8.6.1.1

Tax Increment Financing (TIF) can cover capital costs, however it generally is not used to cover O&M costs. This form of funding allows the capture of incremental changes in property, sales, or other taxes above a set threshold in a specified investment district. This includes the capture of increased property values and economic growth created by investments over time. The revenue is small initially, but grows over time. This method requires bonding to apply toward capital costs and is often applied for 20 to 30 years.

### Transportation Infrastructure Finance and Innovation Act (TIFIA) 8.6.1.2

The TIFIA program provides federal credit assistance in the form of direct loans, loan guarantees, and standby lines of credit to finance surface transportation projects of national and regional significance. TIFIA leverages federal funds by attracting private and non-federal investment to projects that critically improve the nation's surface transportation program. The TIFIA program provides flexible repayment terms and potentially more favorable interest rates than can be found in private capital markets with the same revenue stream. TIFIA financing enables the applicant to receive more favorable interest rates for the project's share of non-federal borrowing due to lowered investment risk.

TIFIA can help advance qualified, large-scale projects that otherwise might be delayed or deferred because of size, complexity, or uncertainty over the timing of revenues. Many surface transportation projects (i.e., highway, transit, railroad, intermodal freight, and port access) are eligible for assistance. Each dollar of federal funding applied to TIFIA (as the subsidy amount) can provide approximately \$10 in credit assistance and leverages approximately \$30 in transportation infrastructure investment.

Up to 50 percent of the capital cost of an eligible project may be financed through TIFIA, although in practice USDOT lends no more than 33 percent of costs to a single project. The combined share of TIFIA proceeds and other federal funding for a given project may not exceed 80 percent of the total project cost. To date, TIFIA has financed 16 transit projects. In some cases, projects have combined TIFIA financing and funding from FTA's New Starts program making project financing more manageable by providing up-front grant funding to cover a share of project costs, and low-cost federal loans to leverage each project's local match.



TIFIA extends loan rates effectively equivalent to the prevailing 30-year U.S. Treasury Bond rate at financial close plus one basis point. The program permits repayment over a term of up to 35 years after a project's substantial completion, and gives borrowers the flexibility to defer principal and capitalize interest payments for up to 5 years. Principal payments may be structured to ramp up with projected growth in revenues pledged to service TIFIA debt. SFRTA, if it applies for a TIFIA loan, will pledge revenues to service the debt: a key assumption is that revenues pledged are stable enough to make debt service payments on a full and timely basis. The structure of the debt with pledged revenues must meet a credit-rating threshold of being rated at least investment (Baa3/BBB-) grade by two rating agencies. Projects must meet all federal funding eligibility requirements (including NEPA, Buy America, Davis-Bacon, and others). Loans may be prepaid in whole or in part at any time without penalty.

TIFIA is flexible and cost-effective. The limited pool of financial capacity and the cap on the percentage of TIFIA financing by project are the program's biggest disadvantages.

### Taxable Bonds 8.6.1.3

Taxable bonds, or private bonds, are issued by private entities to finance capital investments. The interest income from private bonds is not eligible for tax exemptions. The private bond issuer is responsible for paying bonds back and assumes all financial risk. Taxable bonds are the highest cost traditional financing option, but provide added flexibility and a broader debt market.

### Short-Term Financing 8.6.1.4

Short-term financing options include revenue anticipation notes, construction financing, and commercial paper. These options are summarized below.

- Revenue Anticipation Notes. Revenue anticipation notes are a form of short-term borrowing against the expected receipt of near-term proceeds (e.g., taxes, fees, grants, bonds, or TIFIA/RRIF loans). Revenue anticipation notes can be used to fill small gaps between project needs and receipt of dedicated revenues, grants, or long-term financing. Debt typically matures in less than one year. Notes are issued by state governments, local governments, and transit agencies. SFRTA could use Revenue Anticipation Notes to facilitate the financing of the project.
- Commercial Paper. Commercial paper is an interest-only debt instrument with maturities of 270 days or less. This type of issuance is interest-only until maturity, followed by a balloon payment of the principal. Commercial paper requires a letter of credit and active day-to-day management. Eligible entities for tax-exempt debt may also issue tax-exempt commercial paper with a lower interest rate. Commercial paper can also be backed with a guarantee to reduce rates. Commercial paper could be available as an additional tool to SFRTA if it were to issue debt on capital markets.





# **Alternative Project Delivery Strategies**

The organizational strategy used to design, implement and operate or manage elements of a project may have implications for the financing analysis. There is a wide range of delivery and financing methods that will allow for different levels of control, risk and responsibility allocation between SFRTA (or another sponsor/public entity) and private partners, and funding and financing strategies. Identifying a procurement strategy from the range of alternatives for a given project requires first a clear identification of policy goals, procurement goals, project risks, and sponsor resources and risk preferences, all of which then need to be matched with the specific risk allocation provided under various delivery options. The goal of the delivery strategy is to meet policy and procurement objectives and generate cost and schedule efficiencies by allocating project risks to the parties best able to manage them.

Private sector participation in the physical delivery of a project ranges from a traditional, fully segmented approach such as Design-Bid-Build (DBB), requiring a first procurement for a full design followed by the procurement of construction services, to a fully integrated method requiring a true partnership with the private sector and combining infrastructure and services such as Design-Build-Operate-Maintain (DBOM).

This section provides further information on the range of public and private project delivery methods with varying degree of integration among design, construction, operation, maintenance, and financing activities.

# 8.7.1 Design-Build

Design-Build (DB) is a project delivery method that combines two, usually separate services into a single contract. With DB procurements, the owner retains a consultant to develop a conceptual design and then executes a single, fixed-fee contract for both architectural/engineering services and construction based on the conceptual design. The design-builder assumes responsibility for the majority of the design work and all construction activities, together with certain risks associated with providing these services (e.g. cost overrun, schedule delay, and liability for incomplete design) for a fixed fee. DB procurement is generally recognized for delivering cost savings and schedule acceleration when compared with traditional Design-Bid-Build (DBB) procurement, as a result of the integration of and continuous communication between designers and builders and the tailoring of the design to the contractor's means and methods.

# 8.7.2 Design-Build-Operate-Maintain

The Design-Build-Operate-Maintain (DBOM) model is an integrated delivery method that combines the design and construction responsibilities of DB procurements with performance-based O&M contracting for a specified period of time (usually 15 to 30 years), thereby transferring risks associated with design, construction and long-term operations and incentivizing the private partner to implement best practices in asset management over the duration of the contract. DBOM provides not only all the advantages of a DB contract but also greater incentives for on-time delivery (as the private partner's payments generally start with revenue operations), life-cycle cost optimization and system and service





quality (through the use of performance-based O&M contract requirements and operator input during the design), and improves budget visibility for the public owner.

The DBOM model (as well as DBFOM, which includes financing into the P3 scope, as discussed below) is particularly attractive for transit projects where the concessionaire often includes rolling stock and systems manufacturers as well as an operator, thereby facilitating systems integration.

# 8.7.3 Design-Build-Finance

Design-Build-Finance (DBF) allows for private capital to kick-start project development and construction in advance of when public funds would be available. In simple terms, the winning contractor agrees to provide all or some of the construction financing and to be paid back either through milestone or completion payments made from public funds. These arrangements are typically short-term, repaid at construction completion or extending only a few years later. DBFs only transfer some of the design and construction risk (similar to DB) and do not involve any transfer of operating or maintenance risks to the private partner and therefore produce limited efficiencies beyond those that can be achieved in a DB procurement. A DBF arrangement is a DB procurement with short-term gap financing.

# 8.7.4 Design-Build-Finance-Operate-Maintain

The Design-Build-Finance-Operate-Maintain (DBFOM) model offers an integrated delivery method that combines the design and construction responsibilities of DB procurements with performance-based O&M contracting, and private-sector financing for a fixed and usually long period of time (usually 25 to 35 years). In exchange the private partner may have the right to collect the revenue from the project and/or is compensated through a payment for services based on performance specifications for the duration of the contract, called an "availability payment."

Compared to DBOM, DBFOM procurement comes with the additional oversight of equity and debt providers who will diligently review the project documentation and oversee the delivery of project assets and services to ensure the security of the revenue stream that will be used to repay their funds. In nearly all cases, the public agency sponsoring the project retains full ownership over the project assets throughout the concession period, although tax ownership can be (and usually is) transferred to allow for tax depreciation. Projects delivered through DBFOM (as well as DBOM) need to be sufficiently large (generally greater than \$200 million) to attract private capital, justify the transaction costs, and generate competition to attract large contractors with the necessary expertise.

# 8.7.5 Privatization

Under a privatization scheme (also known as Build-Own-Operate model), a private company is granted or sold the right to develop, finance, design, build, own, operate, and maintain a transportation project. The private sector partner owns the project outright and retains the operating revenue risk and all the surplus operating revenue in perpetuity, corresponding to a full privatization. While this approach is more common in the water and telecommunication sectors, it has also been used historically to develop transportation infrastructure (e.g. freight railroad).



# **Appendix**







# **Appendix Table of Contents**

Appendix 1: SFRTA TDP Trend and Peer Analysis

Appendix 2: SFRTA 2018 Major Update Public Involvement Plan

Appendix 3: Tri-Rail 2018 TDP Website

Appendix 4: SFRTA Newsletters
Appendix 5: PTAC Presentations

Appendix 6: 2018 Intercept Survey

Appendix 7: SFRTA Commuter Bus Survey Summary Report

Appendix 8: 2018 Tri-Rail On-Board Survey Draft

Appendix 9: Fiscal Year 2019 Capital and Operating Budgets

Appendix 10: Other Resources

1. Tri-Rail Coastal Link Study Website

2. Tri-Rail Coastal Link Study; Preliminary Project Development Report, Appendix 4



# Appendix 1 SFRTA TDP Trend and Peer Analysis





# **Table of Contents**

1	Tren	nd Analysis of Existing Transit Service	1
	1.1	Commuter Rail	1
	1.1.	1 General Performance Indicators (GPI)	2
	1.1.2	2 Effectiveness Measures	3
	1.1.3	3 Efficiency Measures	
	1.1.4	4 General Performance Indicators (GPI)	6
	1.1.	5 Effectiveness Measures	12
	1.1.0	6 Efficiency Measures	15
	1.2	Commuter Bus Analysis	20
	1.2.	1 General Performance Indicators	20
	1.2.2	2 Effectiveness Measures	21
	1.2.3	3 Efficiency Measures	22
	1.2.4	4 General Performance Indicators – Charts	24
	1.2.	5 Effectiveness Measures – Charts	28
	1.2.0	6 Efficiency Measures – Charts	31
2	Peei	r Review Analysis	35
	2.1	Introduction	35
	2.2	General Performance Indicators (GPI)	38
	2.2.	1 Passenger Trips	38
	2.2.2	2 Passenger Miles	39
	2.2.3	3 Vehicle Miles	40
	2.2.4	4 Revenue Miles	41
	2.2.	5 Vehicle Revenue Hours	42
	2.2.6	6 Route Miles	43
	2.2.	7 Operating Expenses	44
	2.2.8	8 Vehicles Available for Maximum Service	45
	2.2.9	9 Fuel Consumption	46
	2.3	Effectiveness Measures	47
	2.3.	1 Vehicle Miles Per Capita	47
	2.3.2	2 Passenger Trips Per Capita	48
	2.3.3	3 Passenger Trips Per Revenue Mile	49
	2.3.4	4 Passenger Trips Per Revenue Hour	50



2.3.5 Revenue Mileage Between Failures	51
2.4 Efficiency Measures	52
2.4.1 Operating Expenses Per Capita	52
2.4.2 Operating Expenses Per Passenger Trip	53
	54
	55
•	56
	56
2.4.7 Revenue Miles Per Vehicle	58
2.4.8 Vehicle Miles Per Gallon	59
2.4.9 Average Fare	60
List of Tables	
Table 1 Commuter Rail Performance Review Measures	
Table 2: General Performance Indicators	
Table 3: Effectiveness Measures Table 4: Efficiency Measures	
Table 5: General Performance Indicators	
Table 6: Commuter Bus Effectiveness Measures	
Table 7: Commuter Bus Efficiency Measures	
Table 8: Peer Agency Likeness Scores	
Table 9: Summary of SFRTA/Tri-Rail Peer Analysis	
List of Figures	
Figure 1: Rail Passenger Trips	F
Figure 2: Passenger Miles	
Figure 3: Vehicle Miles	
Figure 4: Revenue Miles	
Figure 5: Vehicle Hours	
Figure 6: Route Miles	
Figure 7: Total Operating Expense	
Figure 8: Total Capital Expense	
Figure 9: Passenger Fare Revenues	
Figure 10: Vehicles Available for Maximum Service	
Figure 11: Total Gallons Consumed	
Figure 12: Vehicle Miles Per Capita	
Figure 13: Passenger Trips Per Capita	
Figure 14: Passenger Trips Per Revenue Mile	
Figure 15: Passenger Trips Per Vehicle Hour	
Figure 16: Passenger Trips Per Revenue Hour	14



Figure 17:	Revenue Miles Between Failures	14
Figure 18:	Operating Expense Per Capita	15
Figure 19:	Operating Expense Per Passenger Trip	15
Figure 20:	Operating Expense Per Passenger Mile	16
Figure 21:	Operating Expense Per Revenue Mile	16
Figure 22:	Farebox Recovery Ratio	17
Figure 23:	Revenue Miles Per Vehicle Mile	17
Figure 24:	Revenue Miles Per Total Vehicles	18
Figure 25:	Vehicle Miles Per Gallon	18
Figure 26:	Average Fare	19
Figure 27 F	Passenger Trips	24
Figure 28:	Passenger Miles	24
Figure 29:	Vehicle Miles	25
Figure 30:	Revenue Miles	25
Figure 31:	Vehicle Hours	26
Figure 32:	Route Miles	26
Figure 33:	Total Operating Expenses	27
Figure 34:	Vehicles Available for Maximum Service	27
Figure 35:	Total Gallons Consumed	28
Figure 36:	Vehicle Miles Per Capita	28
Figure 37:	Passenger Trips Per Capita	29
Figure 38:	Passenger Trips Per Revenue Mile	29
Figure 39:	Passenger Trips Per Revenue Hour	30
Figure 40:	Revenue Miles Between Failures	30
Figure 41:	Operating Expense Per Capita	31
_	Operating Expense Per Passenger Trip	
Figure 43:	Operating Expense Per Passenger Mile	32
Figure 44:	Operating Expense Per Revenue Mile	32
Figure 45:	Revenue Miles Per Vehicle Mile	33
Figure 46:	Revenue Miles Per Total Vehicles	33
Figure 47:	Vehicle Miles Per Gallon	34
Figure 48:	Passenger Trips	38
Figure 49:	Passenger Miles	39
Figure 50:	Vehicle Miles	40
Figure 51:	Revenue Miles	41
	Vehicle Revenue Hours	
Figure 53:	Route Miles	43
Figure 54:	Total Operating Expense	44
_	Vehicles Available for Maximum Service	
•	Total Gallons Consumed	
J	Vehicle Miles Per Capita	
•	Passenger Trips Per Capita	
-	Passenger Trips Per Revenue Mile	
_	Passenger Trips Per Revenue Hour	
-	Revenue Mileage Between Failures	
J	Operating Expenses Per Capita	52



Figure 63:	Operating Expenses Per Passenger Trip	53
•	Operating Expenses Per Passenger Mile	
Figure 65:	Operating Expenses Per Revenue Mile	55
Figure 66:	Farebox Recovery	56
-	Revenue Miles Per Vehicle Mile	
Figure 68:	Revenue Miles Per Vehicle	58
•	Vehicle Miles Per Gallon	
•	Average Fare	



# 1 TREND ANALYSIS OF EXISTING TRANSIT SERVICE

This trend analysis provides an overview of various performance metrics for SFRTA's transit operations. In addition to SFRTA's Commuter Rail Service, this analysis assesses the agency's Commuter Bus service otherwise known as the Commuter Connection.

# 1.1 Commuter Rail

A five-year trend analysis of key transit operator performance measures was conducted to examine Tri-Rail's commuter rail and commuter bus services. This analysis relies on SFRTA's National Transit Database (NTD) data for the period between 2012 and 2016, which is the latest year that data is most currently available. Three (3) performance measure categories are evaluated in this analysis:

- **General Performance Indicators** the quantity of service supply, passenger and fare generation, and resource input
- Effectiveness Measures the extent to which the service is effectively provided
- Efficiency Measures the extent to which cost efficiency is achieved

Table 1 lists the measures used in the performance trend analysis conducted for Tri-Rail.

Table 1 Commuter Rail Performance Review Measures

Commuter Rail Performance Evaluation Indicators and Measures							
General Performance Indicators	Effectiveness Measures	Efficiency Measures					
Passenger Trips	Vehicle Miles per Capita	Operating Expenses per Capita					
Passenger Miles	Passenger Trips per Capita	Operating Expenses per Passenger Trip					
Vehicle Miles	Passenger Trips per Revenue Mile	Operating Expenses per Passenger Mile					
Revenue Miles	Passenger Trips per Vehicle Hour	Operating Expenses per Revenue Mile					
Vehicle Hours	Revenue Miles between Incidents	Farebox Recovery Ratio					
Route Miles	Revenue Mileage between Road Calls	Revenue Miles per Vehicle Mile					
Operating Expenses		Revenue Miles per Vehicle					
Capital Expenses		Revenue hours per employee					
Operating Revenues		Passenger Trips per Employee					
Total Employees		Vehicle Miles per Gallon					
Vehicles Available for Maximum Service		Average Fare					
Fuel Consumption							



# 1.1.1 General Performance Indicators (GPI)

General Performance Indicators (GPIs) are used to gauge SFRTA's overall operating system performance. Table 2 depicts summaries of various GPI measures.

- Passenger trips increased between 2012 and 2016, reaching a peak in 2014 of 4.4 million riders per year. In 2016, 4.2 million riders took trips on Tri-Rail, a 6 percent increase from 2011.
- Passenger miles grew slightly from 2012 to 2016, increasing 2 percent.
- Vehicle miles, revenue miles, and revenue hours have increased in concert with one another, growing between 21 and 26 percent.
- Route Miles have remained unchanged (142). This number will increase once service to Downtown Miami commences in Fiscal Year 2019.
- Operating expenses have increased significantly, from over \$55 million to nearly \$90 million between 2012 and 2016 an increase of 62 percent.
- SFRTA's available fleet for maximum service increased from 50 vehicles to 82, an increase of 82 percent.

**Table 2: General Performance Indicators** 

Performance Indicator	2012	2013	2014	2015	2016	% Change (2012 - 2016)
Passenger Trips	4,005,967	4,201,040	4,400,977	4,292,705	4,241,486	6%
Passenger Miles	115,414,171	116,122,404	119,670,196	118,049,114	117,303,700	2%
Vehicle Miles	3,065,000	3,258,002	3,519,025	3,608,199	3,708,779	21%
Revenue Miles	2,944,042	3,164,457	3,422,858	3,505,483	3,595,531	22%
Vehicle Hours	110,074	115,695	128,853	132,465	138,923	26%
Route Miles	142	142	142	142	142	0%
Operating Expenses	\$55,588,137	\$58,051,892	\$64,520,103	\$76,373,773	\$89,987,616	62%
Capital Expenses	\$25,131,466	\$25,863,200	\$28,794,171	\$34,108,844	\$71,142,799	183%
Operating Revenues	n/a	n/a	n/a	n/a	n/a	n/a
Total Employees	n/a	n/a	n/a	n/a	n/a	n/a
Vehicles Available for Maximum Service	50	50	82	82	82	64%



Performance Indicator	2012	2013	2014	2015	2016	% Change (2012 - 2016)
Fuel Consumption	2,597,728	2,699,567	n/a	3,162,496	3,371,055	30%

### 1.1.2 Effectiveness Measures

Effectiveness measures evaluate how effective SFRTA's services are. Effectiveness measures are evaluated under two general categories – service consumption (how many trips per capita, per revenue mile and revenue hour), and quality of service (number of system failures, and revenue miles between failures).

A summary of Effectiveness Measures is presented in Table 3.

- Vehicle miles per capita increased from 0.56 to 0.67, a 21 percent increase.
- Passenger trips per capita increased 5.9 percent from 0.73 to 0.77.
- Passenger trips per revenue mile decreased slightly from 1.36 to 1.18, a 13.3 percent drop.
- Passenger trips per vehicle hour reduced from 36 to 30.5, a drop of 16.1 percent.
- Revenue miles between road calls fell from over 117,000 to over 69,000 between 2012 and 2016, a 41 percent reduction.

Table 3: Effectiveness Measures

	2012	2013	2014	2015	2016	% Change 2012 - 2016
Vehicle Miles per Capita	0.56	0.59	0.64	0.66	0.67	21.0%
Passenger Trips per Capita	0.73	0.76	0.80	0.78	0.77	5.9%
Passenger Trips per Revenue Mile	1.36	1.33	1.29	1.22	1.18	-13.3%
Passenger Trips per Vehicle Hour	36.4	36.3	34.2	32.4	30.5	-16.1%
Revenue Miles between Incidents	n/a	n/a	n/a	n/a	n/a	n/a
Revenue Mileage between Road calls	117,762	87,902	106,964	53,113	69,145	-41%



# 1.1.3 Efficiency Measures

Efficiency measures evaluate SFRTA's efficiency in providing transit service. These can be summarized into broader categories, including cost efficiency (including operating expense per capita, per peak vehicles and per revenue hour), operating ratios (for instance, a farebox recovery ratio), and energy utilization (vehicle miles per gallon).

A summary of Tri-Rail's performance on efficiency measures is summarized in Table 4.

- Per capita and per passenger operating expenses increased by 62 percent and 53 percent, respectively from 2012 to 2016. Adjusted to 2012 dollars, the increases are 55 percent and 47 percent.
- Operating expense per passenger mile increased 59 percent, from 48 cents to 77 cents.
- Operating Expense per Revenue Mile increased from \$18.88 to \$25.03, a 33 percent increase. Adjusted for inflation to 2012 dollars, this corresponds to a 27 percent increase.
- Tri-Rail's farebox recovery ratio declined from 21 percent to 15 percent.
- Revenue miles per vehicle fell from 58,881 to 43,848, a 34 percent reduction
- The average SRTA fare increased from \$2.98 to \$3.09, an increase of 4 percent. Fares have remained unchanged since 2009, thus this could suggest an increase in trip length (more zones traveled), or an increase in the share of riders that pay full fare.
- Vehicle miles per gallon increased from 0.4 to 1.1 between 2012 and 2016.



Table 4: Efficiency Measures

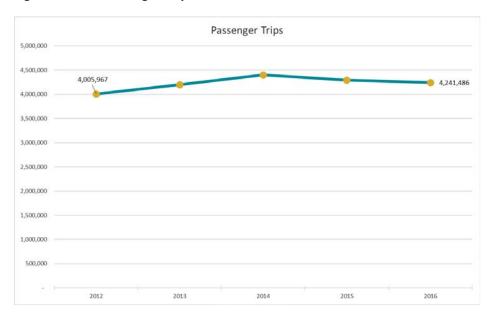
EFFICIENCY MEASURES	2012	2013	2014	2015	2016	% Change 2016 - 2012
Operating Expense Per Capita	\$10.10	\$10.55	\$11.73	\$13.88	\$16.35	62%
Operating Expense Per Capita (2012 \$)	\$10.10	\$10.34	\$11.37	\$13.46	\$15.70	55%
Operating Expense Per Passenger Trip	\$13.88	\$13.82	\$14.66	\$17.79	\$21.22	53%
Operating Expense Per Passenger Trip (2012 \$)	\$13.88	\$13.54	\$14.22	\$17.26	\$20.37	47%
Operating Expense Per Passenger Mile	\$0.48	\$0.50	\$0.54	\$0.65	\$0.77	59%
Operating Expense Per Passenger Mile (2012 \$)	\$0.48	\$0.49	\$0.52	\$0.63	\$0.74	53%
Operating Expense Per Revenue Mile	\$18.88	\$18.35	\$18.85	\$21.79	\$25.03	33%
Operating Expense Per Revenue Mile (2012 \$)	\$18.88	\$17.98	\$18.28	\$21.13	\$24.03	27%
Operating Expense Per Revenue Hour	\$571.91	\$566.35	\$566.39	\$647.71	\$721.81	26%
Revenue Miles Per Vehicle Mile	0.96	0.97	0.97	0.97	0.97	1%
Revenue Miles Per Vehicle	58,881				43,848	-34%
Revenue Hours Per Total Vehicles	1,943.96	2,050.02	1,389.21	1,437.98	1,520.35	-22%
Vehicle Miles Per Gallon	0.40	1.21	n/a	1.14	1.10	172%
Farebox Recovery (%)	21%	21%	20%	17%	15%	-32%
Average Fare	\$2.98	\$2.87	\$2.91	\$2.98	\$3.09	4%



# 1.1.4 General Performance Indicators (GPI)

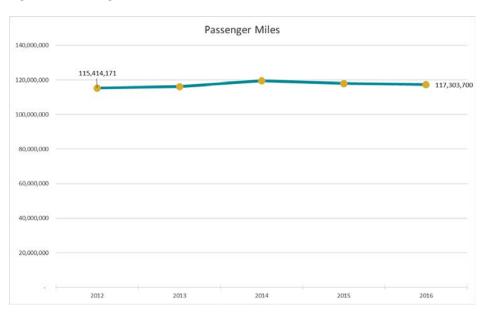
# 1.1.4.1 Passenger trips

Figure 1: Rail Passenger Trips



# 1.1.4.2 Passenger miles

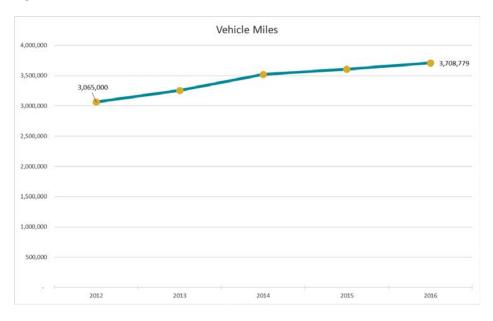
Figure 2: Passenger Miles





# 1.1.4.3 Vehicle Miles

Figure 3: Vehicle Miles



# 1.1.4.4 Revenue Miles

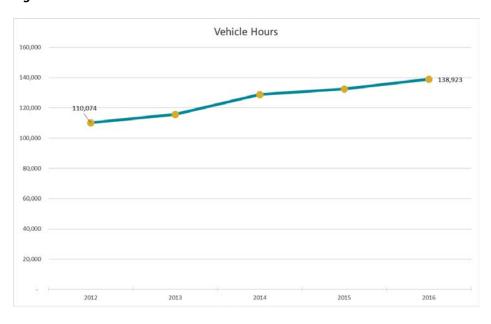
Figure 4: Revenue Miles





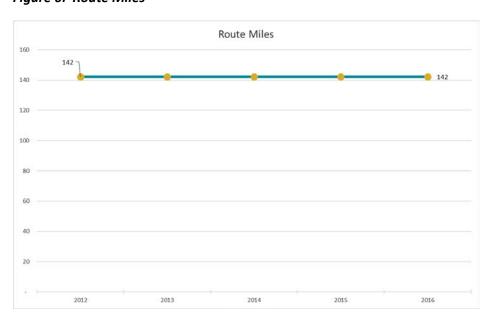
# 1.1.4.5 Vehicle Hours

Figure 5: Vehicle Hours



# 1.1.4.6 Route Miles

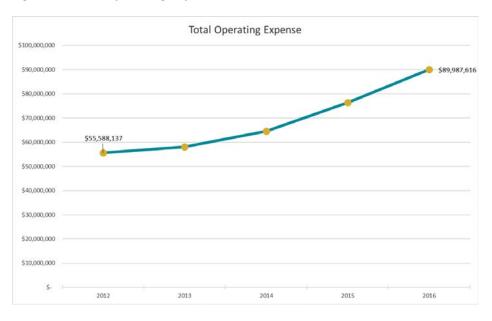
Figure 6: Route Miles





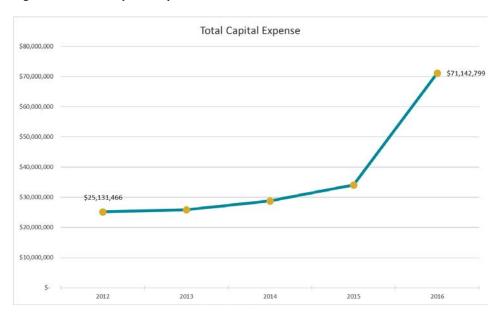
# 1.1.4.7 Operating Expenses

Figure 7: Total Operating Expense



# 1.1.4.8 Capital Expenses

Figure 8: Total Capital Expense





# 1.1.4.9 Operating Revenues

Figure 9: Passenger Fare Revenues



# 1.1.4.10 Vehicles Available for Maximum Service

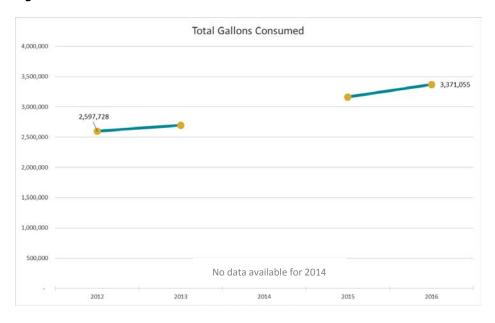
Figure 10: Vehicles Available for Maximum Service





# 1.1.4.11 Fuel Consumption

# Figure 11: Total Gallons Consumed

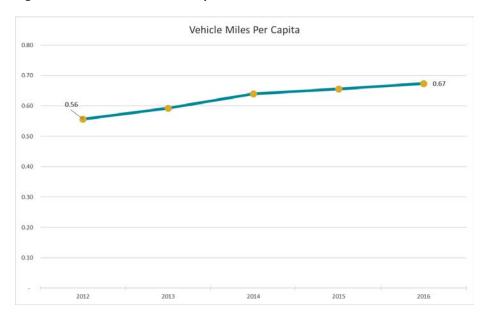




# 1.1.5 Effectiveness Measures

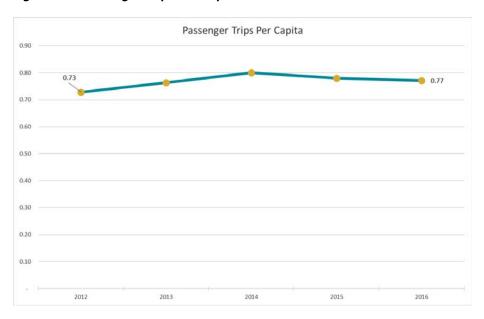
# 1.1.5.1 Vehicle Miles Per Capita

Figure 12: Vehicle Miles Per Capita



# 1.1.5.2 Passenger Trips Per Capita

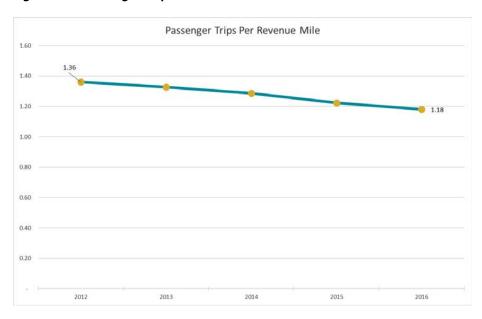
Figure 13: Passenger Trips Per Capita





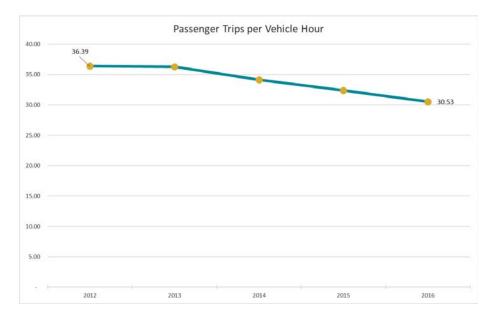
# 1.1.5.3 Passenger Trips Per Revenue Mile

Figure 14: Passenger Trips Per Revenue Mile



# 1.1.5.4 Passenger Trips Per Vehicle Hour

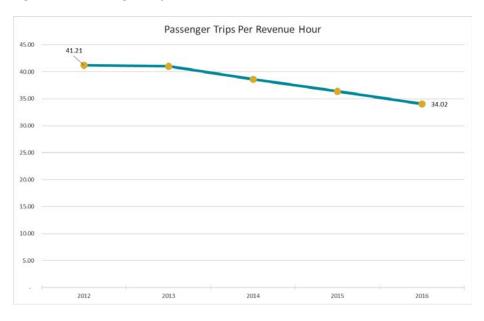
Figure 15: Passenger Trips Per Vehicle Hour





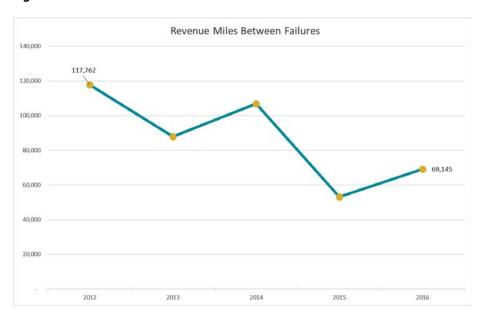
# 1.1.5.5 Passenger Trips Per Revenue Hour

Figure 16: Passenger Trips Per Revenue Hour



# 1.1.5.6 Revenue Mileage Between Failures

Figure 17: Revenue Miles Between Failures

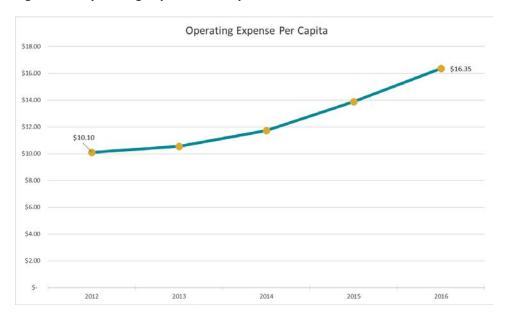




## 1.1.6 Efficiency Measures

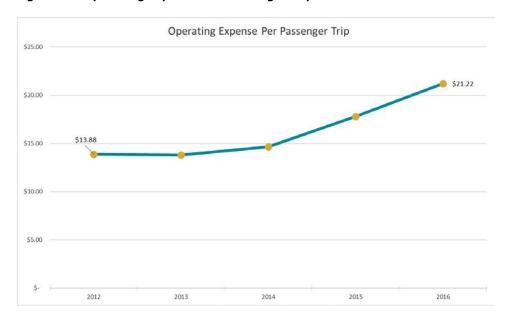
## 1.1.6.1 Operating Expenses Per Capita

Figure 18: Operating Expense Per Capita



## 1.1.6.2 Operating Expense Per Passenger Trip

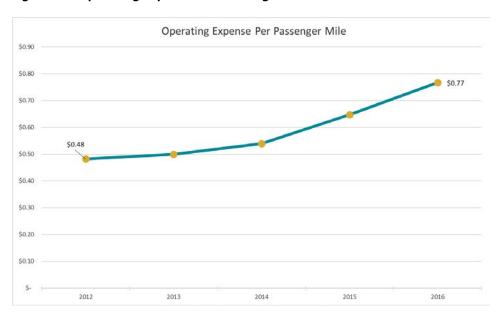
Figure 19: Operating Expense Per Passenger Trip





## 1.1.6.3 Operating Expenses Per Passenger Mile

Figure 20: Operating Expense Per Passenger Mile



## 1.1.6.4 Operating Expenses Per Revenue Mile

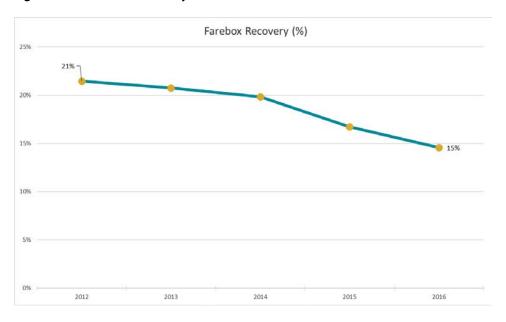
Figure 21: Operating Expense Per Revenue Mile





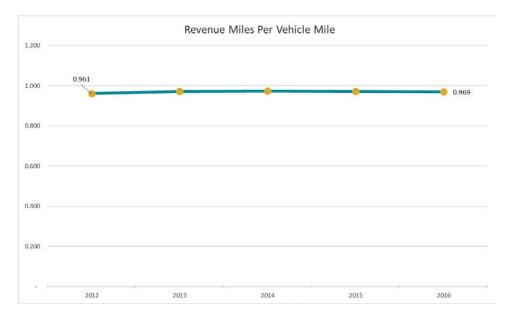
## 1.1.6.5 Farebox Recovery Ratio

Figure 22: Farebox Recovery Ratio



#### 1.1.6.6 Revenue Miles Per Vehicle Mile

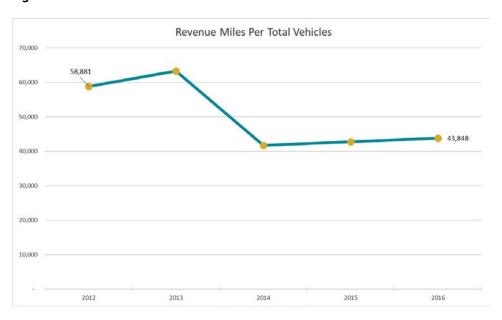
Figure 23: Revenue Miles Per Vehicle Mile





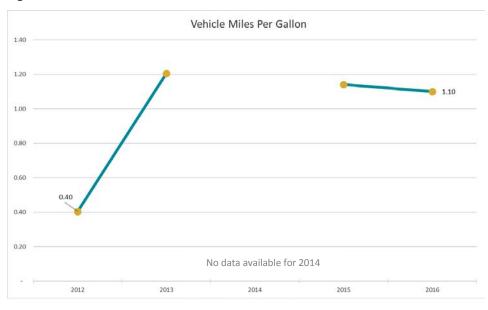
#### 1.1.6.7 Revenue Miles Per Total Vehicles

Figure 24: Revenue Miles Per Total Vehicles



#### 1.1.6.8 Vehicle Miles Per Gallon

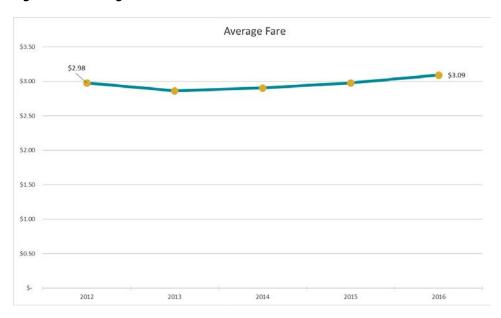
Figure 25: Vehicle Miles Per Gallon





## 1.1.6.9 Average Fare

#### Figure 26: Average Fare





## 1.2 Commuter Bus Analysis

#### 1.2.1 General Performance Indicators

General Performance Indicators (GPIs) are used to gauge SFRTA's Commuter Bus system performance. GPI measures include total passenger trips, vehicle miles, vehicle hours, and fuel consumption. The GPIs for SFRTA's Commuter Bus service are described in this section.

- Passenger trips on SFRTA's free station circulators increased from 936,000 to over 1.1 million an increase of 18 percent.
- Passenger miles grew at a similar rate, from 3.6 million to 4.2 million, a total growth of 17 percent.
- Vehicle miles increased seven percent, from 978,612 to 1.05 million.
- Revenue miles increased 13 percent from 745,000 to 841,000.
- Vehicle hours declined 9 percent, from 85,800 to 77,790.
- Route miles increased by five miles, from 167 to 172.
- Operating expenses have been reduced from \$3.28 million to \$2.78 million, a 15 percent reduction.
- Fuel consumption has increased from 161,000 gallons to 263,000 gallons, a 63 percent increase.

**Table 5: General Performance Indicators** 

Performance Indicators	2012	2013	2014	2015	2016	% Change 2012 - 2016
Passenger Trips	935,919	921,631	1,001,058	1,071,014	1,100,336	18%
Passenger Miles	3,673,894	3,617,807	3,900,333	4,173,398	4,283,650	17%
Vehicle Miles	978,612	877,240	920,765	986,766	1,051,280	<b>7</b> %
Revenue Miles	745,205	731,956	765,611	774,866	841,967	13%
Vehicle Hours	85,852	67,879	70,989	72,885	77,790	-9%
Route Miles	167	164	164	164	172	3%
Operating Expenses	\$3,288,804	\$3,012,062	\$3,747,214	\$3,321,264	\$2,780,180	-15%
Operating Revenues	n/a	n/a	n/a	n/a	n/a	
Total Employees	n/a	n/a	n/a	n/a	n/a	
Vehicles Available for Maximum Service	29	26	26	28	30	3%
Fuel Consumption	161,012	130,931	149,421	166,281	263,226	63%



#### 1.2.2 Effectiveness Measures

Effectiveness measures are evaluated under two general categories – service consumption (how many trips per capita, per revenue mile and revenue hour), and quality of service (number of system failures, and revenue miles between failures). Table 6 depicts a summary of SFRTA's Commuter Bus effectiveness measures.

- Commuter Bus Vehicle Miles per Capita increased 7 percent from 0.15 to 0.18.
- Passenger Trips per Capita increased from 0.17 to 0.2, an 18 percent change.
- Passenger Trips per Vehicle Hour grew 20 percent from 13.5 to 16.2.
- Revenue Miles Between Road calls dropped significantly from 74,000 to 15,000, an 80 percent drop.

**Table 6 : Commuter Bus Effectiveness Measures** 

Performance Indicators	2012	2013	2014	2015	2016	% Change 2016 - 2012
Vehicle Miles per Capita	0.15	0.18	0.16	0.17	0.18	<b>7</b> %
Passenger Trips per Capita	0.17	0.17	0.18	0.19	0.20	18%
Passenger Trips per Revenue Mile	1.26	1.26	1.31	1.38	1.31	4%
Passenger Trips per Vehicle Hour	13.5	16.0	16.4	17.2	16.2	20%
Revenue Miles between Incidents	n/a	n/a	n/a	n/a	n/a	n/a
Revenue Mileage between Road calls	74,520.50	30,498.17	29,446.58	16,143.04	15,035.13	-80%



### 1.2.3 Efficiency Measures

Efficiency measures evaluate SFRTA's efficiency in providing transit service. These can be summarized into broader categories, including cost efficiency (including operating expense per capita, per peak vehicles and per revenue hour), and energy utilization (vehicle miles per gallon). Efficiency Measures for the Commuter Bus are summarized here.

- Operating expenses per capita, per passenger trip, per passenger mile, and per revenue mile have all decreased significantly.
  - Operating Expenses per Capita have decreased 15 percent from 60 cents to 51 cents.
  - Operating Expenses per Passenger Trip were reduced from \$3.51 to \$2.53, a 28 percent reduction
  - o Operating Expenses per Passenger Mile came down 28 percent from 90 cents a mile to 65 cents.
  - Operating Expenses per Passenger Mile came down 25 percent from \$4.41 to \$3.50, a 25 percent drop
- Revenue Miles per Vehicle Miles increased 5 percent from 0.76 to 0.8.
- Revenue Miles per Vehicle increased 9 percent, to just over 28,000.
- Vehicle Miles Per Gallon has decreased 33 percent, from 6 to 4 vehicle miles per gallon.

**Table 7: Commuter Bus Efficiency Measures** 

Performance Indicators	2012	2013	2014	2015	2016	% Change 2016 - 2012
Operating Expense Per Capita	\$0.60	\$0.55	\$0.68	\$0.60	\$0.51	-15%
Operating Expense Per Capita (2012 \$)	\$0.60	\$0.54	\$0.66	\$0.58	\$0.48	-19%
Operating Expense Per Passenger Trip	\$3.51	\$3.27	\$3.74	\$3.10	\$2.53	-28%
Operating Expense Per Passenger Trip (2012 \$)	\$3.51	\$3.20	\$3.63	\$3.01	\$2.43	-31%
Operating Expense Per Passenger Mile	\$0.90	\$0.83	\$0.96	\$0.80	\$0.65	-28%
Operating Expense Per Passenger Mile (2012 \$)	\$0.90	\$0.82	\$0.93	\$0.77	\$0.62	-30%
Operating Expense Per Revenue Mile	\$4.41	\$4.12	\$4.89	\$4.29	\$3.30	-25%
Operating Expense Per Revenue Mile (2012 \$)	\$4.41	\$4.03	\$4.75	\$4.16	\$3.17	-28%



Performance Indicators	2012	2013	2014	2015	2016	% Change 2016 - 2012
Revenue Miles per Vehicle Mile	0.76	0.83	0.83	0.79	0.80	5%
Revenue Miles per Vehicle	25,697	28,152	29,447	27,674	28,066	9%
Vehicle Miles per Gallon	6.1	6.7	6.2	5.9	4.0	-34%



#### 1.2.4 General Performance Indicators - Charts

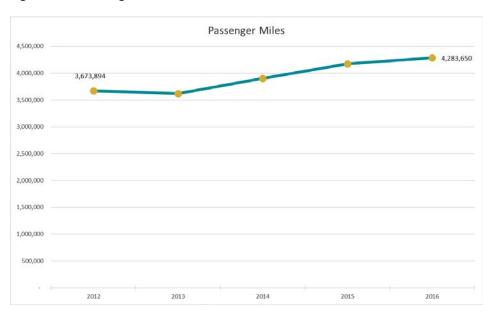
#### 1.2.4.1 Passenger Trips

#### Figure 27 Passenger Trips



## 1.2.4.2 Passenger Miles

Figure 28: Passenger Miles





#### 1.2.4.3 Vehicle Miles

#### Figure 29: Vehicle Miles



## 1.2.4.4 Revenue Miles

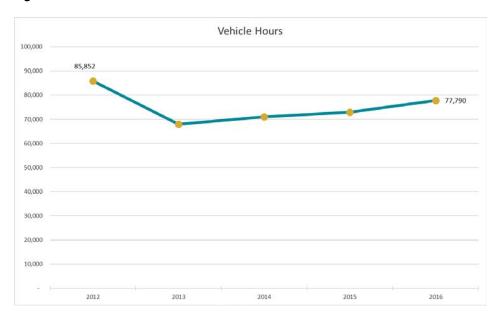
Figure 30: Revenue Miles





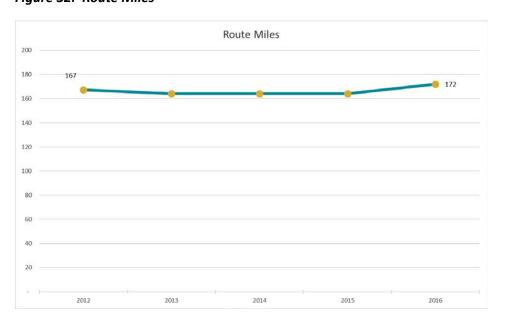
#### 1.2.4.5 Vehicle Hours

#### Figure 31: Vehicle Hours



#### 1.2.4.6 Route Miles

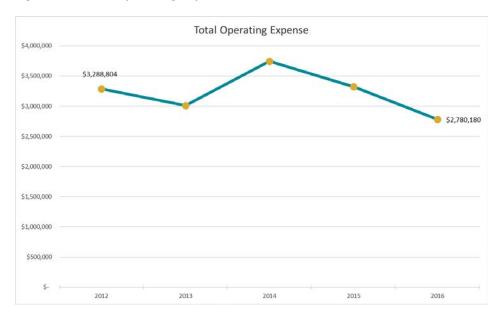
Figure 32: Route Miles





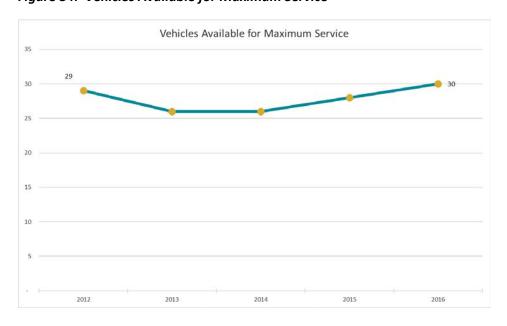
## 1.2.4.7 Operating Expenses

Figure 33: Total Operating Expenses



#### 1.2.4.8 Vehicles Available for Maximum Service

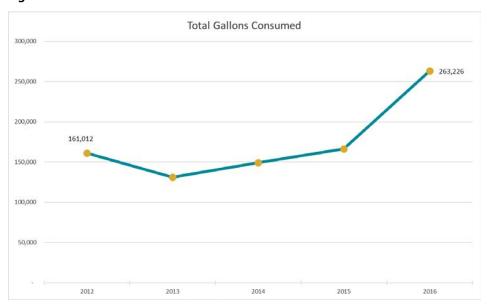
Figure 34: Vehicles Available for Maximum Service





## 1.2.4.9 Fuel Consumption

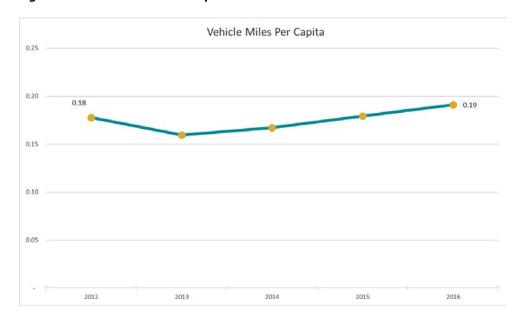
Figure 35: Total Gallons Consumed



#### 1.2.5 Effectiveness Measures - Charts

## 1.2.5.1 Vehicle Miles per Capita

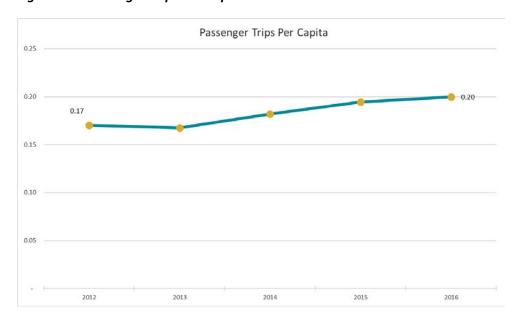
Figure 36: Vehicle Miles Per Capita





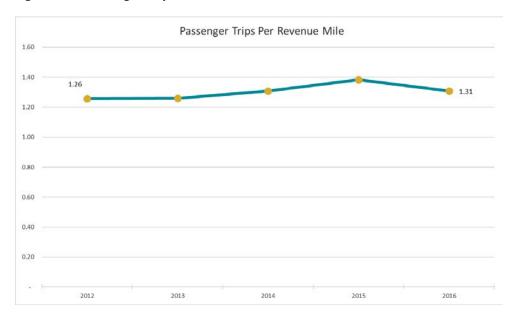
## 1.2.5.2 Passenger Trips per Capita

Figure 37: Passenger Trips Per Capita



# 1.2.5.3 Passenger Trips per Revenue Mile

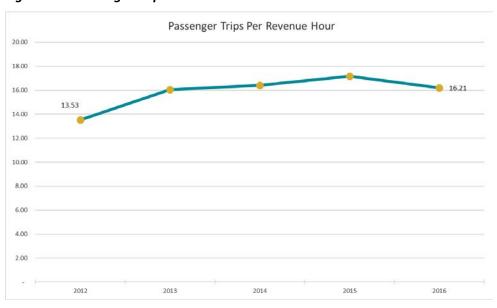
Figure 38: Passenger Trips Per Revenue Mile





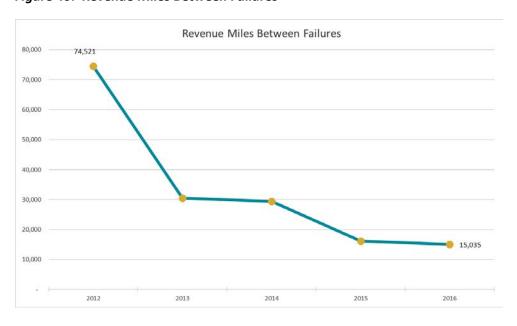
## 1.2.5.4 Passenger Trips per Revenue Hour

Figure 39: Passenger Trips Per Revenue Hour



## 1.2.5.5 Revenue Mileage between Road calls

Figure 40: Revenue Miles Between Failures





## 1.2.6 Efficiency Measures - Charts

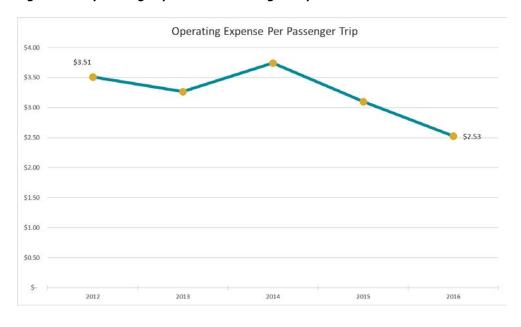
## 1.2.6.1 Operating Expenses per Capita

Figure 41: Operating Expense Per Capita



## 1.2.6.2 Operating Expenses per Passenger Trip

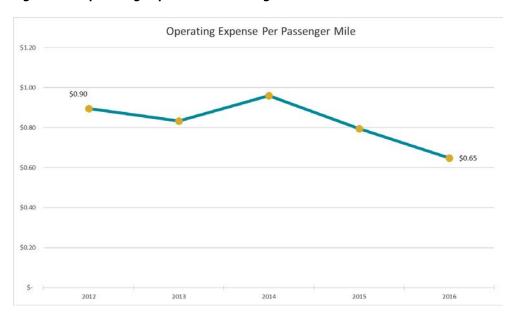
Figure 42: Operating Expense Per Passenger Trip





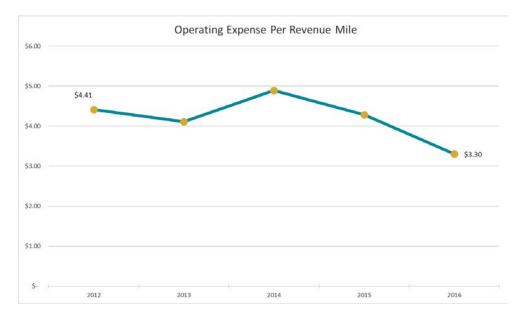
### 1.2.6.3 Operating Expenses per Passenger Mile

Figure 43: Operating Expense Per Passenger Mile



### 1.2.6.4 Operating Expenses per Revenue Mile

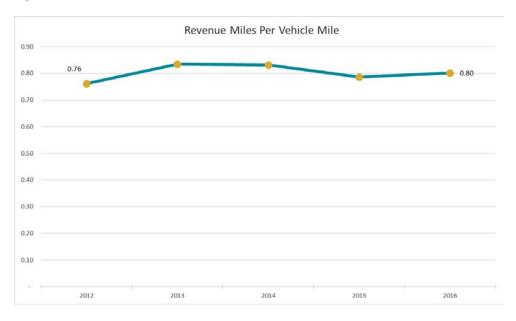
Figure 44: Operating Expense Per Revenue Mile





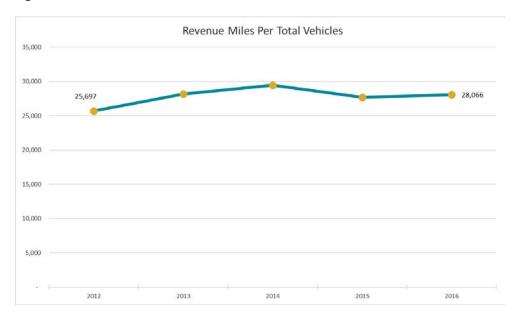
## 1.2.6.5 Revenue Miles per Vehicle Mile

Figure 45: Revenue Miles Per Vehicle Mile



## 1.2.6.6 Revenue Miles per Vehicle

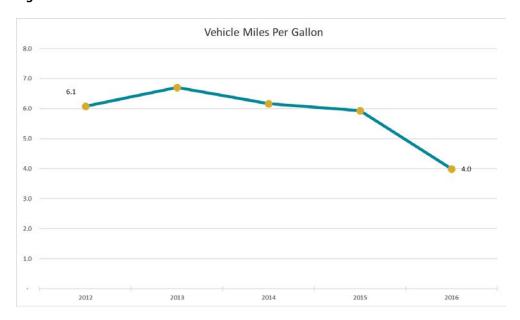
Figure 46: Revenue Miles Per Total Vehicles





## 1.2.6.7 Vehicle Miles per Gallon

#### Figure 47: Vehicle Miles Per Gallon





## 2 PEER REVIEW ANALYSIS

#### 2.1 Introduction

A peer review analysis is an opportunity for SFRTA to compare Tri-Rail's performance to that of other commuter rail systems. For this review, eleven transit agencies were selected based on their similarities to SFRTA. The peers were identified using FDOT's Florida Transit Information System (FTIS) database, which categorizes peer agencies based on several factors, such as urban area population, revenue miles, and operating costs for purposes of determining a total likeness score. The likeness score evaluates these factors in comparison to SFRTA which has a score set at zero. A peer agency's comparability can be determined by its likeness score – the closer that score is to zero, the more comparable that peer agency is to SFRTA. These scores are presented in Table 8.

SFRTA's previous TDP peer reviews typically analyzed ten agencies with similar characteristics to that of Tri-Rail's passenger service. The ten peers are identified as follows (the names and abbreviations in the parentheses are how the peers are identified in the subsequent graphs):

- Connecticut Department of Transportation (CDOT), Newington, CT
- Maryland Transit Administration (MTA), Baltimore, MD
- Virginia Railway Express (VRE), Alexandria, VA
- Central Puget Sound Regional Transit Authority (Puget Sound), Seattle, WA
- Northern Indiana Commuter Transportation District (NICTD), Chesterton, IN
- Dallas Area Rapid Transit (DART), Dallas, TX
- Rio Metro Regional Transit District (Rio Metro RTD), Albuquerque, NM
- Utah Transit Authority (UTA), Salt Lake City, UT
- North County Transit District (NCTD), Oceanside, CA
- Caltrain (Caltrain), San Carlos, CA

It was determined to include an additional commuter rail peer for purposes of this analysis: Metro Transit. Metro Transit operates the Northstar Line, a commuter rail line in the Minneapolis metropolitan area.

Metro Transit (Metro Transit), Minneapolis, MN

A table of the peer agencies and their respective likeness score in comparison to SFRTA is provided on the next page. Although Southeastern Pennsylvania Transportation Authority (SEPTA) and Massachusetts Bay Transportation Authority (MBTA) have a slightly lower likeness score than Metro Transit, it was determined that Metro Transit is more suitable as a peer for analysis given the commuter rail system size.

Table 9 summarizes some of the peer review measures provided in the subsequent pages of this peer review analysis.



Table 8: Peer Agency Likeness Scores

NTD ID	Agency Name	Location	State	Total Likeness Score
4077	South Florida Regional Transportation Authority	Pompano Beach	FL	0
3073	Virginia Railway Express	Alexandria	VA	0.32
9134	Peninsula Corridor Joint Powers Board dba: Caltrain	San Carlos	CA	0.44
9030	North County Transit District	Oceanside	CA	0.48
40	Central Puget Sound Regional Transit Authority	Seattle	WA	0.62
5104	Northern Indiana Commuter Transportation District	Chesterton	IN	0.66
6111	Rio Metro Regional Transit District	Albuquerque	NM	0.96
3034	Maryland Transit Administration	Baltimore	MD	1.06
6056	Dallas Area Rapid Transit	Dallas	TX	1.2
1102	Connecticut Department of Transportation	Newington	СТ	1.23
8001	Utah Transit Authority	Salt Lake City	UT	1.43
5027	Metro Transit	Minneapolis	MN	1.86
9182	Altamont Corridor Express	Stockton	CA	1.99



Table 9: Summary of SFRTA/Tri-Rail Peer Analysis

Performance Measure Metric	What is Measured?	Tri-Rail Rank Out of 12	Peer Median	Top Peer Performer	Least Peer Performer
Track Miles	Distance; Geographical Coverage	8 <sup>th</sup> (142)	159	MTA (400)	DART (72)
Annual Train Miles	Miles of Operational Service	5 <sup>th</sup> (3,708,779)	2,410,848	Caltrain (7,375,609)	Metro (550,196)
Annual Passenger Trips	Ridership	6 <sup>th</sup> (4,241,486)	3,872,783	Caltrain (18,355,641)	Metro (711,167)
Passenger Miles Traveled	Ridership; Passenger Trip Length	5 <sup>th</sup> (117,303,700)	109,861,464	Caltrain (488,208,148)	Metro (17,608,093)
Route Miles	Distance; Geographical Coverage	8 <sup>th</sup> (142)	159	MTA (400)	DART (72)
Vehicle Revenue Miles	Miles Traveled by Fleet	5 <sup>th</sup> (3,595,531)	2,056,299	Caltrain (7,215,731)	Metro (538,172)
Total Operating Cost	Extent of Service; Cost Efficiency	3 <sup>rd</sup> (\$89,987,616)	\$44,823,124	MTA (\$139,558,116)	Metro (\$16,677,279)
Vehicle Revenue Hours	Extent of Service	4 <sup>th</sup> (124,669)	65,473	Caltrain (204,318)	Metro (13,643)
Stations	Extent of Service	5 <sup>th</sup> (18)	15	MTA (42)	Metro (7)
Average Trip Length (miles)	Passenger Travel Patterns	6 <sup>th</sup> (27.7)	27.6	RTD (44.8)	DART (19.6)
Operating Cost per Revenue Hour	Cost Efficiency	7 <sup>th</sup> (721.8123)	\$735.55	UTA (\$289.71)	Metro (\$1,222.41)
Operating Cost per Passenger Trip	Cost Efficiency; Productivity	4 <sup>th</sup> (21.2161)	\$14.65	Caltrain (\$6.11)	CDOT (\$37.70)
Passenger Trips Per Revenue Hour	Cost Efficiency; Productivity	8 <sup>th</sup> (34)	43	Caltrain (90)	CDOT (21)
Annual Boardings per Station	Productivity	4 <sup>th</sup> (235,638)	209,389	Caltrain (573,614)	Rio Metro RTD (63,313)

Table 9 compares SFRTA's commuter rail performance against the top performing peer and the lowest performing peer. Overall, SFRTA's rankings out of the twelve total agencies evaluated ranges from third to eighth. SFRTA has the third highest operating costs of the peers evaluated; it is ranked fourth in vehicle revenue hours, operating cost per passenger trip, and annual boardings per station. SFRTA is ranked eighth in track miles, and passenger trips per revenue hour.



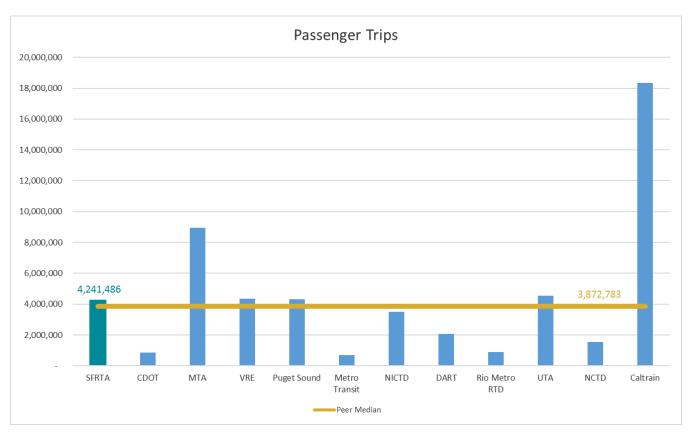
## 2.2 General Performance Indicators (GPI)

- Tri-Rail passengers completed over 4.2 million trips in 2016, which is slightly above the peer median of 3.87 million. Caltrain moved over 18 million riders, while Metro Transit carried fewer than 800,000.
- Tri-Rail's passenger miles are close to the peer median 117 million and 109 million, respectively.
   MTA, VRE, UTA and Caltrain also exceed the median.
- Tri-Rail's vehicle miles 3.7 million is considerably above the peer median at of 2.4 million.

#### 2.2.1 Passenger Trips

Passenger trips are the number of passengers that board transit and are counted each time they board a vehicle during travel from an origin to a destination. This measure is commonly used to identify the amount of ridership for a transit system. In 2016, SFRTA recorded 4.2 million passenger trips, which exceeds the peer mean of approximately 3.9 million passenger trips. The number of passenger trips for SFRTA is similar to three other commuter rail systems, UTA, VRE and Puget Sound, while passenger trips for both Caltrain (18.3 million) and MTA (9 million) skew the peer mean value due to their large number of passenger trips.

Figure 48: Passenger Trips

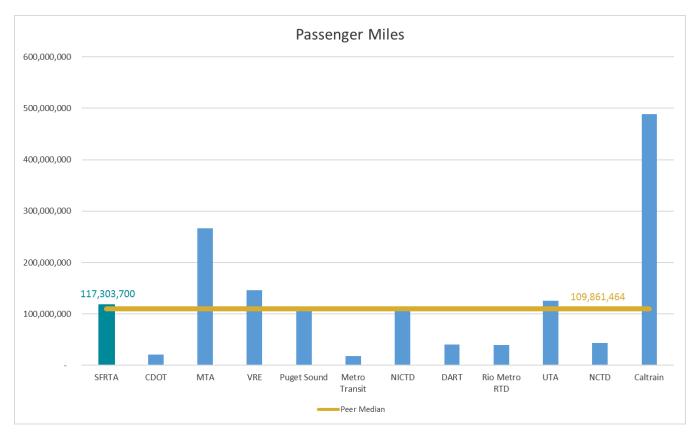




### 2.2.2 Passenger Miles

Passenger miles is defined as the cumulative distance travelled by each passenger on transit. SFRTA exceeds the peer mean of 110 million with 117 million passenger miles in 2016. Four out of the 12 peers had more passenger miles than SFRTA to include UTA, VRE, MTA and Caltrain.

Figure 49: Passenger Miles

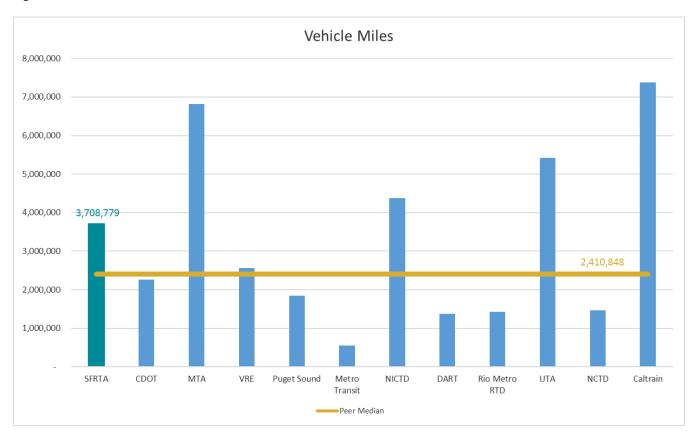




#### 2.2.3 Vehicle Miles

Vehicle miles are miles that a vehicle is scheduled to, or actually travels, from the time it begins revenue service until the time it ends revenue service. Actual train miles does not include train miles for vehicle maintenance testing and training exercises. SFRTA exceeds the peer mean of 2.4 million for vehicle miles with 3.7 million miles. This places SFRTA as 5<sup>th</sup> behind Caltrain, MTA, UTA, NICTD and VRE.

Figure 50: Vehicle Miles





#### 2.2.4 Revenue Miles

Revenue miles are defined as those total miles traveled by a train while providing passenger revenue service. Revenue miles do not include those miles when the train is not in service such as training and deadhead service, such as returning to the maintenance yard. As with vehicle miles, SFRTA exceeds the peer 2.1 million miles with 3.6 million miles and ranks 5<sup>th</sup> behind Caltrain, MTA, UTA and VRE.

Figure 51: Revenue Miles

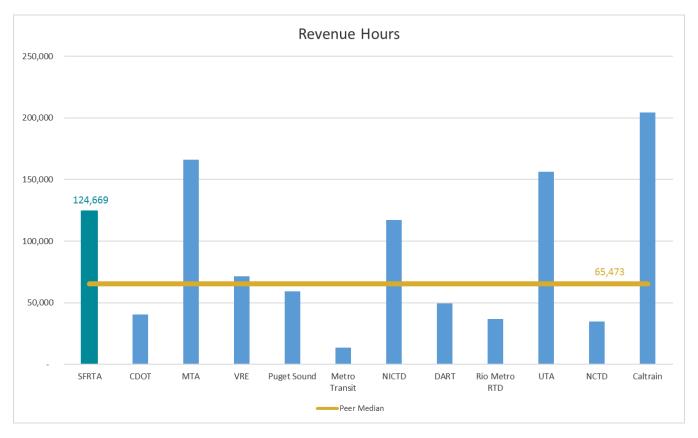




#### 2.2.5 Vehicle Revenue Hours

Vehicle revenue hours are defined as the amount of time a vehicle travels while providing passenger revenue service. Both layover and recovery time are included in revenue hours while deadhead and training are excluded. SFRTA ranks 4<sup>th</sup> among the peers analyzed, with only Caltrain, MTA and UTA recording more revenue hours. The peer mean is 65,000 revenue hours with SFRTA reporting nearly 139,000 revenue hours.

Figure 52: Vehicle Revenue Hours

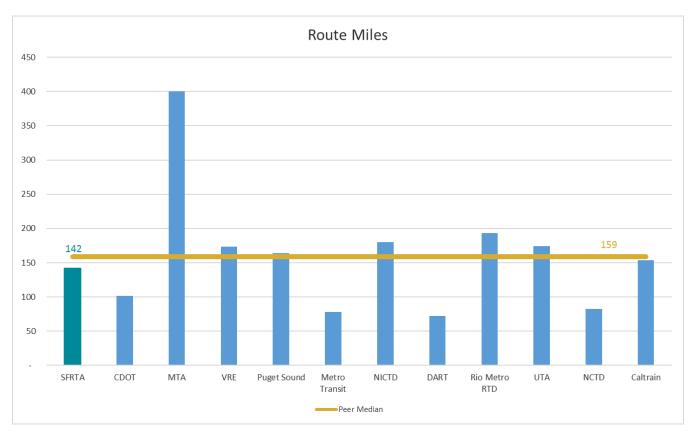




#### 2.2.6 Route Miles

Route miles are the total miles that mass transit vehicles travel in each direction while in passenger revenue service. Specifically, route miles are the directional measure of a route on a facility and not the amount of service within a facility such as revenue miles. This measure pertains to the specific route and does not account for the number of tracks or lanes within the right-of-way. Route miles typically defines the geographic coverage of a transit route between termini. SFRTA is just below the peer mean of 159 miles with 142 route miles but does offer similar service coverage in comparison to most peers.

Figure 53: Route Miles

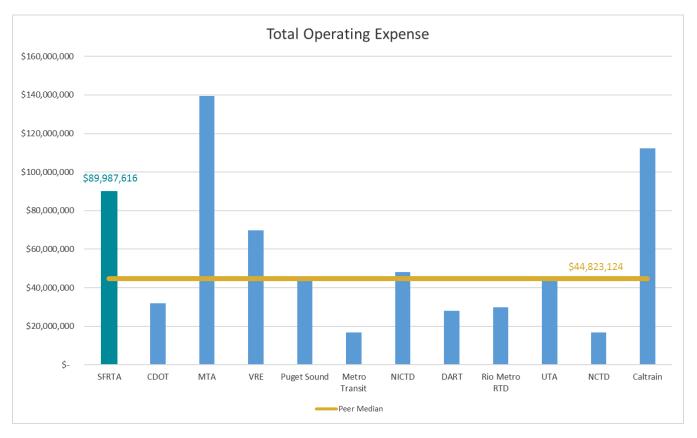




### 2.2.7 Operating Expenses

The expenses incurred to provide transit service are defined as operating expenses, which includes salaries and wages for maintenance, operations, general administration as well as fringe benefits. Expenses also include materials and supplies for operations and maintenance. Operating expenses exclude depreciation on facilities and equipment, those costs for services not available to the public, and financing expenses. The peer mean is nearly \$45million. SFRTA ranks 3<sup>rd</sup> among the peers with approximately \$90 million in operating expenses for 2016. MTA, Caltrain, VRE and NICTD are also well above the peer mean.







#### 2.2.8 Vehicles Available for Maximum Service

The number of vehicles available for maximum service represents the fleet of functioning vehicles that can be placed into passenger revenue service. The peer mean is 76 vehicles. SFRTA exceeds the peer mean, with 82 vehicles available for maximum service in 2016. SFRTA ranks 5<sup>th</sup> among peers, with MTA, Caltrain, VRE and NICTD having a greater number of vehicles for maximum service.

Figure 55: Vehicles Available for Maximum Service

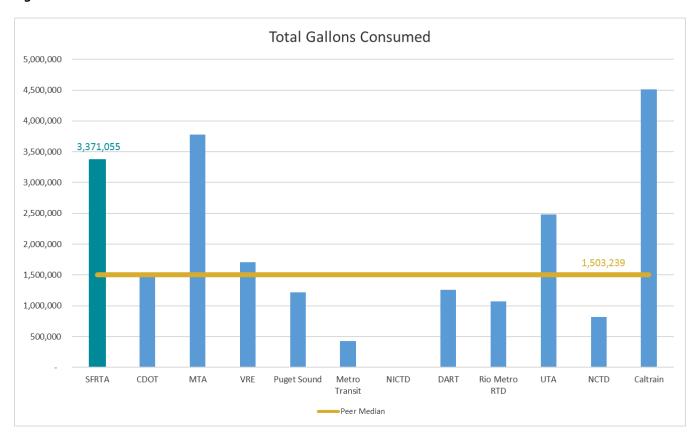




### 2.2.9 Fuel Consumption

At 3.3 million gallons, SFRTA ranks 3<sup>rd</sup> among peers in the amount of fuel consumed and greatly exceeds the peer mean of 1.8 million gallons. The amount of fuel consumption is consistent with the higher level of service that SFRTA provides, as evident from the number of service revenue hours and revenue miles as well as SFRTA's ranking among with those indicators.

Figure 56: Total Gallons Consumed



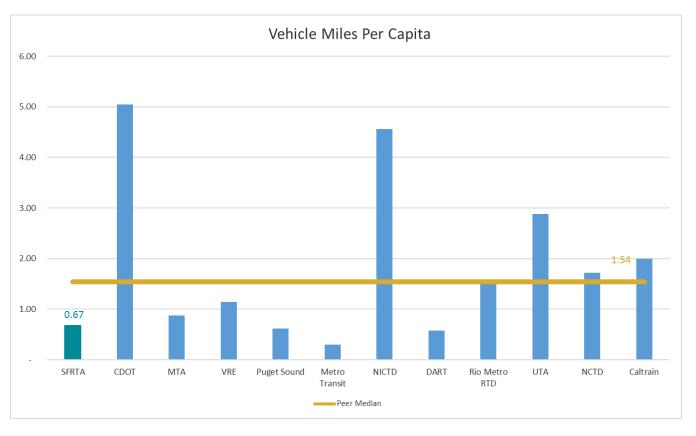


## 2.3 Effectiveness Measures

## 2.3.1 Vehicle Miles Per Capita

Vehicle miles per capita is determined by taking the amount of vehicle miles and dividing by the total population of an urbanized area. SFRTA is below the mean of 1.5 miles with .67 vehicle miles per capita. Three other peers were below SFRTA:Puget Sound, DART and Metro Transit.

Figure 57: Vehicle Miles Per Capita

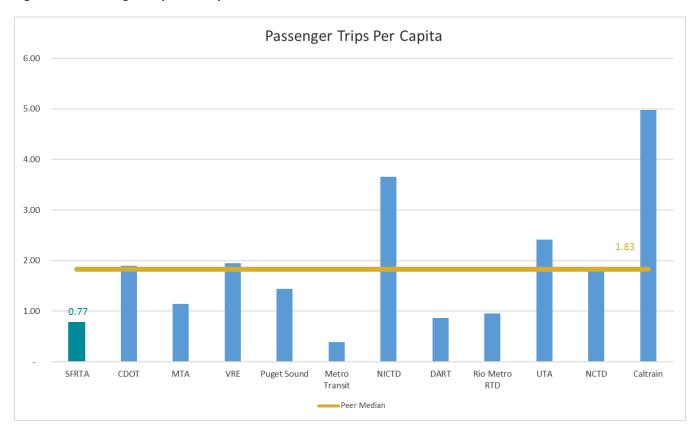




## 2.3.2 Passenger Trips Per Capita

This measure is defined as the number of trips per the service area population. The mean was 1.8 passenger trips and SFRTA was calculated at .77 passenger trips.

Figure 58: Passenger Trips Per Capita

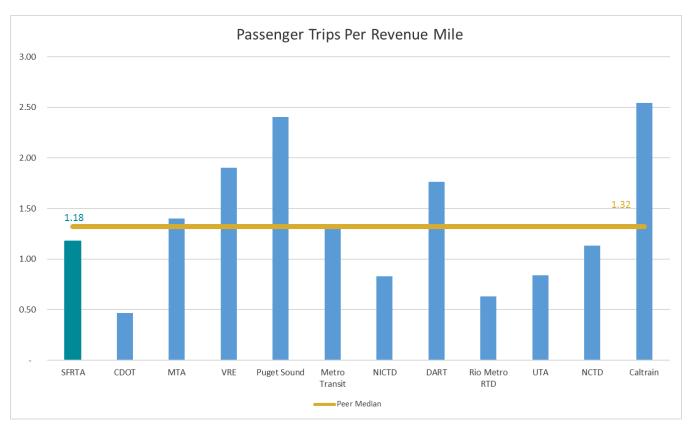




## 2.3.3 Passenger Trips Per Revenue Mile

Passenger trips by revenue mile is the total number of passenger trips divided by the total revenue miles. In 2016, SFRTA was at 1.2 passenger trips per revenue mile which is slightly lower than the peer mean of 1.3 passenger trips per revenue mile.

Figure 59: Passenger Trips Per Revenue Mile

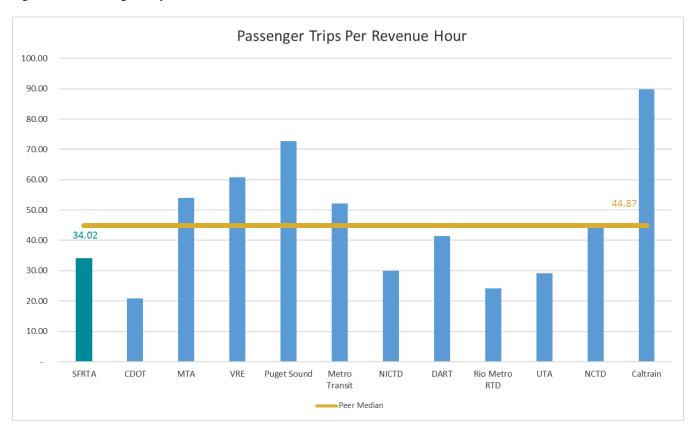




## 2.3.4 Passenger Trips Per Revenue Hour

The peer mean for this measure is about 45 passenger trips per revenue hour. SFRTA provides 34 passenger trips per revenue hour and ranks 9<sup>th</sup> out of the 12 peers.

Figure 60: Passenger Trips Per Revenue Hour

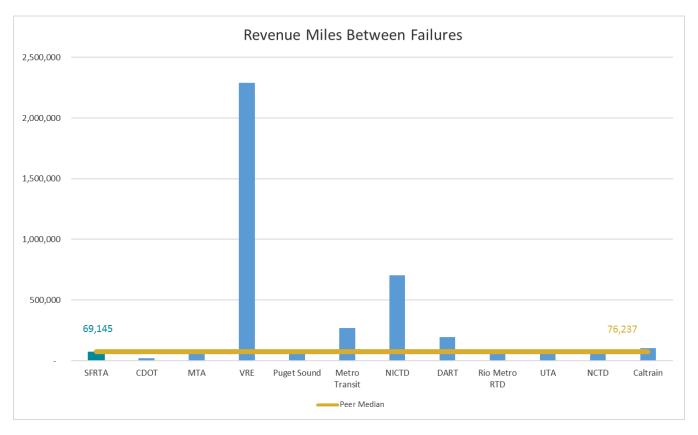




#### 2.3.5 Revenue Mileage Between Failures

In 2016, SFRTA reported to operate at 69,000 revenue miles between failures, which is below the peer mean of 76,000 revenue miles between failures.

Figure 61: Revenue Mileage Between Failures



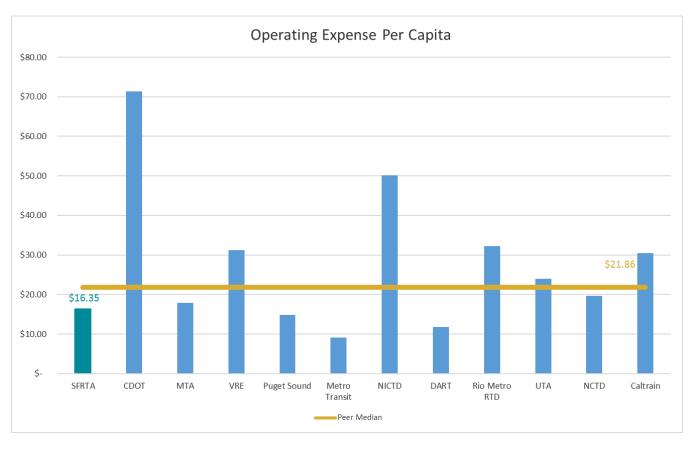


#### 2.4 Efficiency Measures

#### 2.4.1 Operating Expenses Per Capita

The operating expense per capita is the total operating expense dived by the service area population. \$21.86 per capita is the mean; SFRTA was below the mean with a reported \$16.35 per capita. In 2016, SFRTA is the fourth most efficient property among the 12 peers in this category.

Figure 62: Operating Expenses Per Capita

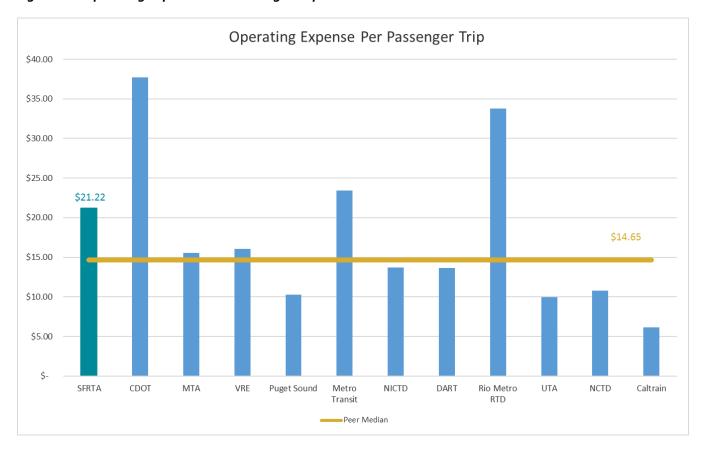




#### 2.4.2 Operating Expenses Per Passenger Trip

This measure is defined as the cost to provide transit service divided by the total number of unlinked passenger trips. In 2016, SFRTA reported a \$21.22 of operating expense per passenger trip which is above the \$14.65 average. Most of the peer agencies were just over or just below the peer mean, with Metro Transit, Rio Metro and CDOT having a notably higher operating expense per passenger trip.

Figure 63: Operating Expenses Per Passenger Trip

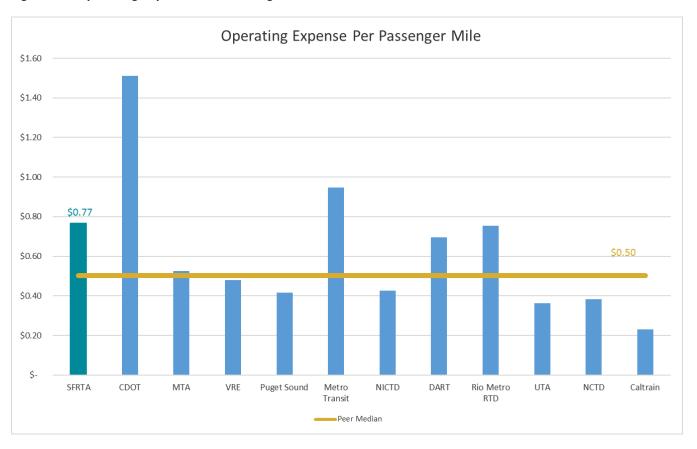




#### 2.4.3 Operating Expenses Per Passenger Mile

This is defined as the operating cost to provide a passenger mile of service. The average for operating costs per passenger mile is \$.50. SFRTA exceeds the average and reported \$.77 of expense per passenger mile.

Figure 64: Operating Expenses Per Passenger Mile

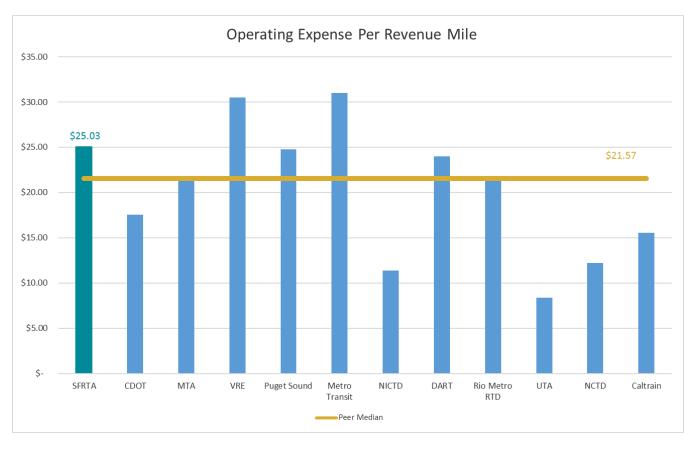




#### 2.4.4 Operating Expenses Per Revenue Mile

For 2016, it cost SFRTA \$25.00 for every revenue mile of passenger service. This was slightly higher than the average of \$21.57. SFRTA reported the 3rd highest operating expense per revenue mile, with Metro Transit and VRE being higher.

Figure 65: Operating Expenses Per Revenue Mile





#### 2.4.5 Farebox Recovery Ratio

The farebox recovery ratio is determined by the amount of passenger fare revenue that is used to offset operating expenses. The peer average is a 39 percent farebox recovery ratio with SFRA reporting a much lower farebox recovery ratio in 2016. The Florida Transportation Commission and SFRTA goal for Farebox Recovery is 25% for the Tri-Rail system. SFRTA continues to make progress towards that goal and has increased the year over year ratio by 0.3% to 21.2% in Fiscal Year (FY) 2015.

\*Note: In fiscal year 2015, SFRTA began providing maintenance of way (MOW) services on the South Florida Rail Corridor (SFRC), under contract to the State of Florida through the Florida Department of Transportation (FDOT), owner of the SFRC. These MOW services costs and revenues are not uniquely associated with Tri-Rail's operations, but rather, support all users of the SFRC corridor, including: CSXT freight movements as well as Amtrak. These added MOW costs have contributed to a lower SFRTA farebox recovery measure.

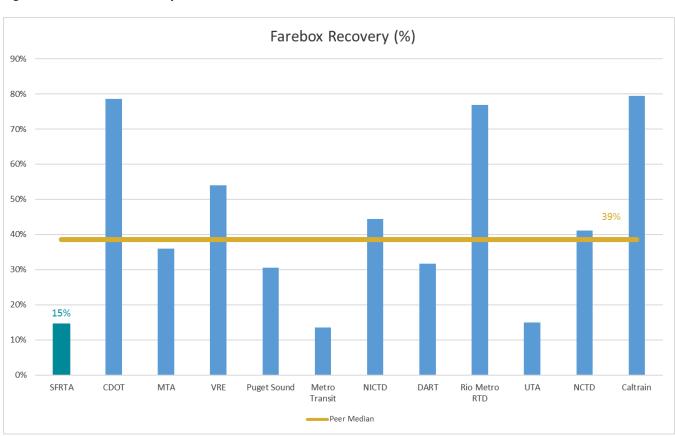


Figure 66: Farebox Recovery

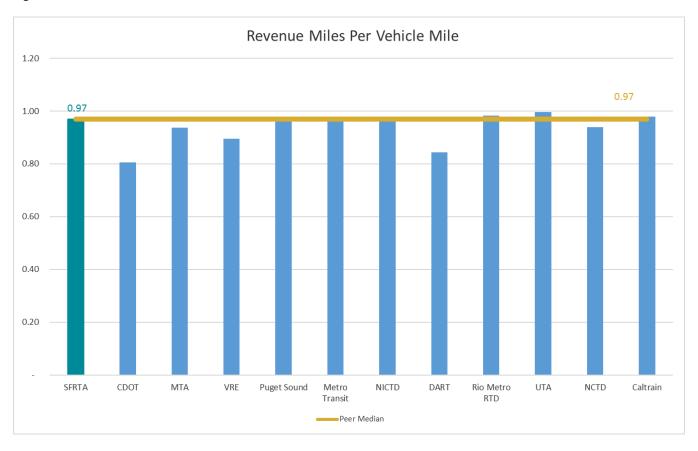
#### 2.4.6 Revenue Miles Per Vehicle Mile

The revenue miles per vehicle mile measure is determined by dividing the number of revenue miles by the



number of vehicle miles (revenue and non-revenue). SFRTA equals the peer average of .97 for the revenue miles per vehicle miles measure.

Figure 67: Revenue Miles Per Vehicle Mile

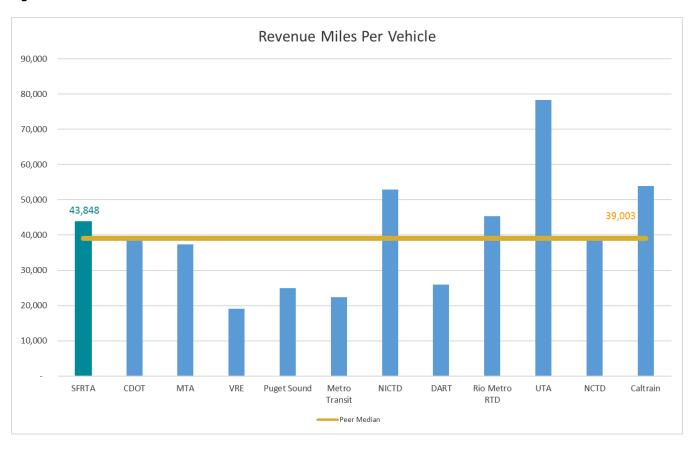




#### 2.4.7 Revenue Miles Per Vehicle

Revenue miles per vehicle is the annual amount of revenue service miles travelled by each rail car. In 2016, SFRTA reported 43,400 revenue miles per vehicle which exceeds the peer average of 39,000. SFRTA ranked 5<sup>th</sup> in this measure with RTD, NICTD, Caltrain and UTA having a higher number.

Figure 68: Revenue Miles Per Vehicle

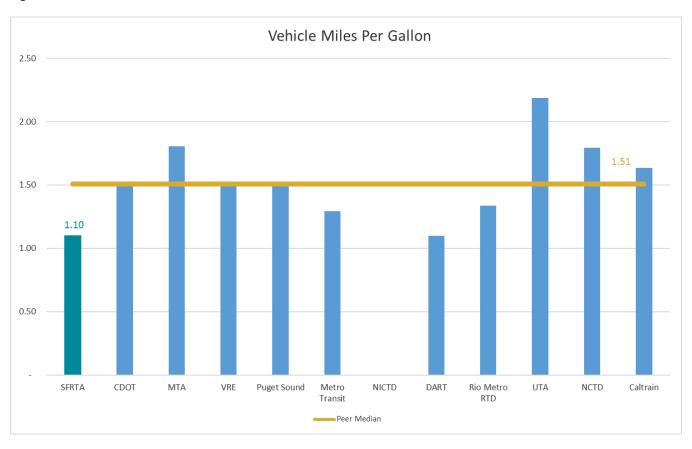




#### 2.4.8 Vehicle Miles Per Gallon

This is defined as the number of revenue and non-revenue vehicle miles that are travelled per gallon. In 2016, SFRTA reported 1.1 vehicle miles per gallon, which was below the peer average of \$1.51.

Figure 69: Vehicle Miles Per Gallon

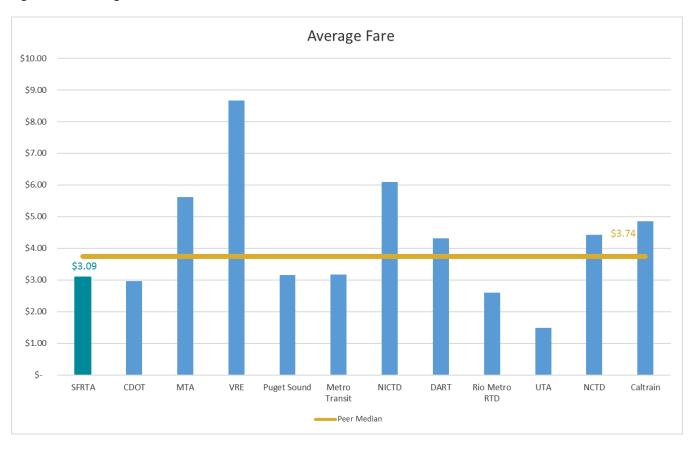




#### 2.4.9 Average Fare

SFRTA's average fare was \$3.09 in 2016, which is just below the \$3.74 peer average. VRE had the highest average fare at \$8.66.

Figure 70: Average Fare



## Appendix 2 SFRTA 2018 Major Update Public Involvement Plan



# TRANSIT DEVELOPMENT PLAN MAJOR UPDATE PUBLIC INVOLVEMENT PLAN

#### Prepared for:



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Prepared by:



WSP USA

7650 Corporate Center Drive, Suite 300 Miami FL 33126

January 2018




#### **Table of Contents**

1.0	INTR	INTRODUCTION		
2.0	PUBL	LIC INVO	LVEMENT PROGRAM	1
	2.1	PROJ	ECT TEAM	1
		2.1.1	Project Management Team	2
		2.1.2	Internal Review Committee (IRC)	2
		2.1.3	External Review Committee	2
		2.1.4	Stakeholders	2
	2.2	PLANI	NING AGENCIES PUBLIC INVOLVEMENT PLANS	3
		2.2.1	Broward MPO	3
		2.2.2	Miami-Dade TPO	4
		2.2.3	Palm Beach TPA	4
3.0	PUBL	LIC INVO	LVMENT OBJECTIVES	4
	3.1	PUBLI	C INVOLVEMENT ACTIVITIES	5
		3.1.1	Ongoing SFRTA Outreach Efforts	5
		3.1.2	Branding	5
		3.1.3	Stakeholder Database	5
		3.1.4	On-Board Survey Instrument and Results	6
		3.1.5	Intercept Surveys/Platform Interviews	6
		3.1.6	Presentation Boards	7
		3.1.7	TDP Major Update Website	7
		3.1.8	Electronic Communication	8
		3.1.9	OnBoard Newsletter	8
		3.1.10	Public Meetings, Workshops, Presentations	9
		3.1.11	Public Hearing	9
	3.2	DOCU	MENTATION	9
	3.3	SCHE	DULE	9
4.0	PUBL	LIC INVO	LVEMENT EVALUATION MEASURES	11
5.0	TITI F	= \/I/I IMIT	TED ENGLISH PROFICIENCY (LEP)	15

i



Tal	bl	e	S
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Table 2:	Public Involvement Evaluation Measure	12
Table 1:	Public Involvement Schedule	10

#### Appendices

Appendix A	Project Management Team
Appendix B	Internal Review Committee
Appendix C	TDP External Review Comittee



#### 1.0 INTRODUCTION

The South Florida Regional Transportation Authority (SFRTA) Planning Department is embarking on the FY 2019-2028 Major Update of the SFRTA TDP. The TDP Major Update is a comprehensive strategic planning, development and operational guidance document that is used as the basis for defining public transit needs and opportunities. The Plan covers a ten-year planning horizon, and includes an updated 10-year capital improvements and financial plan.

The TDP is prepared per the terms of The State of Florida Public Transit Block Grant Program, which requires public transit providers to develop and adopt a major TDP update every five years, and to prepare minor updates for the intervening years. Work to prepare the TDP Major Update entails extensive outreach, coordination, and technical analysis.

Consistent with the TDP preparation guidelines from Florida Department of Transportation (FDOT), it is understood that the initial five years of a TDP will be characterized by substantially greater detail than the subsequent five (5) years. The latter part of the planning horizon is intended to be more strategic in nature.

The purpose of the PIP is to identify the process of how and when interested parties can be involved during the TDP update. Information gathered from the public, stakeholder agencies/organizations, and other interested parties will be used to help identify and assess community perceptions of SFRTA service, as well as to identify issues and opportunities for SFRTA to consider during the development of this 10-year plan.

#### 2.0 PUBLIC INVOLVEMENT PROGRAM

The TDP PIP for SFRTA is developed to provide opportunities for public participation and to facilitate consensus building for this visioning document. Public involvement is a critical component of the public transportation planning process, which helps to ensure that decisions are made in consideration of public needs and concerns. The specific objectives of the public involvement process shall include the following:

- Educate and present information by promoting proactive and early public involvement.
- Solicit public input throughout the planning process by gathering full and complete information from the public.
- Integrate public feedback into the TDP.
- Monitor and improve the public involvement process.

#### 2.1 PROJECT TEAM

The Project Team for the development of the TDP comprises three (3) groups – Project Management Team, an Internal Review Committee, and external review process. Each member of the project team plays an important role during the document preparation as described in the following sections.



#### 2.1.1 Project Management Team

The Project Management Team will manage the project on behalf of SFRTA with a primary role to provide strategic direction and approval to the Consultant Team. The Project Management Team will coordinate with the Consultant Team on a bi-weekly basis, approve major deliverables, coordinate and review all materials for presentation to the TDP Internal Review Committee, and generally oversee the project's progression.

The SFRTA Project Manager will oversee the consultant team responsible for day-to-day study activities and manage the study schedule and budget. Appendix A, Table A-1 provides a list of Project Management Team members.

#### 2.1.2 Internal Review Committee (IRC)

The IRC will manage the project on behalf of SFRTA, with Vicki Gatanis serving as SFRTA's Project Manager. The IRC's primary role is to provide strategic direction and approval to the Consultant Team. The IRC will coordinate with the Consultant Team throughout the preparation of the TDP Major Update, approve major deliverables, coordinate and review all materials, and generally oversee the project's progression. Participants will be encouraged to provide input, comments, and recommendations throughout the TDP development process. The IRC will meet up to eight (8) times over the course of the project. The IRC members are listed in Appendix B, Table B-1.

#### 2.1.3 External Review Committee

Consistent with past SFRTA TDP updates, the Planning Technical Advisory Committee (PTAC), one of SFRTA's technical committees, will serve as the External Review Committee (ERC) and provide technical review during the TDP process. Presentations to the PTAC on the progress of the TDP will occur at three stages of the plan: Project Introduction, Needs Identification, and Final Recommendations.

The PTAC is comprised of one member each from the three county transit agencies: Miami Dade Department of Transportation and Public Works (DTPW), Broward County Transit, and Palm Tran; the Broward Metropolitan Planning Organization (MPO), Palm Beach Transportation Planning Agency (TPA) and the Miami Dade Transportation Planning Organization (TPO); the two Regional Planning Councils, South Florida RPC and Treasure Coast RPC; the two FDOT Districts (District 4 and 6), and SFRTA, for a total of 11 members.

As required by statute, FDOT, members of the three (3) regional workforce boards for the Tri-Rail service region (South Florida Workforce in Miami-Dade, Work Force One in Broward, and Workforce Alliance in Palm Beach) will be invited to join the PTAC meetings when the SFRTA FY 2019-2028 TDP Major Update is being reviewed. The PTAC members are listed in Appendix C, Table C-1.

#### 2.1.4 Stakeholders

Outreach efforts will focus on two distinct groups: stakeholders and the general public. Stakeholders are typically more informed regarding transportation issues and are viewed as having a particular stake in the decisions made with regard to transportation. Outreach to the general public ensures that there is opportunity for everyone to participate in shaping transportation decisions, whether they are identified as a particular stakeholder or not.



The term "stakeholders" refers to groups such as the following:

- Elected officials
- Workforce development boards
- City and county staff and agencies
- Neighborhood associations
- Service and community organizations
- Organizations representing the transportation disadvantaged (e.g., older adults, persons with disabilities, minority groups, the disenfranchised, etc.)
- Non-profit organizations
- Educational institutions
- Chambers of Commerce and economic development organizations
- Small and large business owners
- Professional associations
- Media representatives
- State and federal agencies (e.g., environmental, planning, or transportation agencies).

#### 2.2 Planning Agencies Public Involvement Plans

The TDP rule requires that the transit agency develop its own PIP and have it approved by FDOT or use the Transportation Planning Organization's/Agency's and MPO PIPs. The Broward MPO, Miami-Dade TPO, and Palm Beach TPA each have developed a PIP to cover all Agency/MPO-related public involvement needs specific to their respective areas. SFRTA has elected to develop its own PIP to provide a more detailed description of the public involvement activities specifically to be undertaken during the preparation of the TDP. SFRTA intends to adhere to the greater objectives/policies of each Agency/MPO's PIP, which are summarized below, throughout the course of the TDP update process.

#### 2.2.1 Broward MPO

The Broward MPO's PIP objectives include the following:

- Inform the public of transportation meetings and other events.
- Educate the public regarding their role in the transportation planning and decision-making process.
- Involve the public by providing opportunities early and often in the transportation planning and decision-making process.
- Reach out to all communities in the planning area to inform, educate, and involve, with special emphasis on those communities with people who have been underrepresented and/or underserved.
- Improve the public involvement process.



#### 2.2.2 Miami-Dade TPO

The Miami-Dade TPO's PIP objectives include the following:

- Achieve adequate support for transportation related plans by providing timely and reliable information to the public.
- · Create a process tailored to local circumstances.
- Establish an adequate mechanism to evaluate the openness, fairness, and responsiveness of the process.
- Solicit informed public input to effectively develop transportation plans and programs.

#### 2.2.3 Palm Beach TPA

Palm Beach TPA's policy regarding public involvement includes the following:

- Public participation is a method to ensure high quality transportation planning, not a simple "add on."
- Effective transportation planning must include the participation of those whose everyday lives are critically affected by how they can get to work, home, school, stores, and services.
- It is essential to solicit participation, not just wait for it; and it is essential to respect and seriously consider input that is received, not just collect it.
- Public participation must be about meaningful opportunities for input, not just fulfilling regulations.
- Educating the public about the transportation planning process is key to real participation
- Additional emphasis should include underserved populations in the transportation planning process, including low-income, minority, and limited English proficiency populations.

In addition to adhering to the public involvement objectives/policies of each Agency's/MPO\*, a representative from each of the three (3) county Agency's/MPO serves on the PTAC.

\*(Name changes to these organizations have now formalized the names to: Palm Beach Transportation Planning Agency, the Miami-Dade Transportation Planning Organization with Broward County's name remaining the same).

The PIP is consistent with the FDOT TDP guidelines for public participation.

Section 3 describes the goals of the Public Involvement efforts for the SFRTA TDP and the public involvement activities to be undertaken during the TDP development process.

#### 3.0 PUBLIC INVOLVMENT OBJECTIVES

The public involvement objectives for the SFRTA TDP include the following:

- To develop a multi-faceted communication model that will keep the general public and all stakeholder agencies/organizations informed about the status of the project.
- To clearly define the TDP purpose and objectives early in the process.
- To identify and document the concerns, issues, and needs from the key stakeholders and the general public, including both users of Tri-Rail and non-users.
- To provide stakeholders and the general public with baseline information about the current state of SFRTA and keep them fully informed throughout the study.

#### TRANSIT DEVELOPMENT PLAN



- To encourage participation of all stakeholder agencies/organizations within the project area while paying special attention to underserved communities.
- To use established community infrastructure as an opportunity to engage the community and get community input.
- To provide frequent opportunities and a consistent access point for community input.
- To identify tools to provide information to and gather input from persons who do not use Tri-Rail, in order to gain insight into the "non-user's" perspective.
- To identify tools to provide information to, and gather input from persons representing stakeholder agencies/organizations, or those in the general public who cannot participate in meetings. These tools include the project website emails, newsletter, and Tri-Rail mobile application.

#### 3.1 Public Involvement Activities

One of the main goals of the PIP is to provide all segments of the public the opportunity to actively participate in the development and preparation of the TDP. The PIP utilizes various tools such as surveys and social media to facilitate communication with the public and gather input into TDP preparation.

The following public involvement activities will be undertaken during the TDP planning process. Each public involvement activity type listed includes the timeframe for its completion. These timeframes may be adjusted, in consultation with SFRTA staff, to ensure the most appropriate timing for these activities.

#### **3.1.1 Ongoing SFRTA Outreach Efforts**

SFRTA staff routinely attends community events that provide opportunities for public outreach throughout the tri-county region. These events include job fairs, Chamber of Commerce meetings, regional project-specific events, etc. As these events occur, the information gathered will be summarized and integrated into the TDP process, as appropriate.

Schedule: Continuous throughout project.

#### 3.1.2 Branding

A brand for the TDP will be developed early in the project. The brand will include a unique name, logo and color scheme that will assist individuals in recognizing materials related to the project. This type of recognition allows for more efficient communication between the project team and the public and stakeholders. The project name and logo will be developed in consultation with SFRTA staff. The branded name will be used on all TDP materials.

Schedule: Completed by end of February 2018.

#### 3.1.3 Stakeholder Database

A component of the public outreach plan is to create a stakeholder database for the TDP Major Update to communicate with and obtain feedback from stakeholder agencies/organizations and the public through the project website and email campaigns. To reach out to as many individuals as possible, a stakeholder database will be created early in the public outreach campaign and maintained throughout the project. To develop the initial project contact database, the IRC will provide an initial list of individuals for inclusion in the database.



The Consultant Team will work with the SFRTA Marketing and Customer Service departments to obtain access to existing customer databases such as the Employer Discount Program (EDP) email list and any other potential customer databases available from SFRTA such as the *OnBoard* newsletter email list

Potential customer mailing lists available from the following transportation partners and projects will also be incorporated to the extent possible:

- South Florida Commuter Services (SFCS)
- Palm Beach TPA, Broward MPO, and Miami-Dade TPO Public Information Officers.
- Broward County Transit (BCT), Palm Tran, and Miami-Dade DTPW Public Information Officers
- Treasure Coast Regional Planning Council (TCRPC)
- South Florida Regional Planning Council (SFRPC)
- South Florida Regional Business Alliance
- Regional Workforce Boards
- Ongoing transit projects in the tri-county region

The Project Management Team will attempt to identify an appropriate point of contact who can forward SFRTA TDP email campaigns to their internal contact lists. This will help to maximize the number of persons reached.

With every public outreach event, the Project Management Team will continue to ask for additions to the project contact database. Any interested person will be able to add themselves to the project contact database by submitting their email via the project website.

The project contact database will be used to initially advertise the project website and subsequently alert stakeholders of opportunities to provide input via methods allowable on the project website.

Schedule: Continuous throughout project.

#### 3.1.4 On-Board Survey Instrument and Results

A system-wide on-board survey (scheduled early March 2018) will be conducted separately from the TDP update. The results of this survey will be provided to the Consultant Team and reviewed as part of this TDP update. A TDP-specific summary analysis of the pertinent results from the on-board survey will be prepared and included in the TDP documentation.

Schedule: Completed by End of March 2018.

#### 3.1.5 Intercept Surveys/Platform Interviews

Intercept surveys (i.e., platform interviews) will be conducted at Tri-Rail station platforms to inquire about passengers satisfaction, needs, and issues. While these platform interviews are being conducted, the Project Management Team also will be available to obtain feedback and answer any questions the public may have about the TDP Major Update process, SFRTA operations, etc.



The intercept surveys/platform interviews will be conducted during the weekday morning and afternoon peak hours at the top six (6) Tri-Rail stations and during peak weekend hours at the top three (3) Tri-Rail stations, as measured by the greatest daily passenger activity. The survey process will be completed during two weekdays (Tuesday, Wednesday or Thursday) and one Saturday, on two consecutive weeks. Upon completion of this survey effort, the input results will be analyzed and a summarized for inclusion in the TDP documentation.

Schedule: Intercept surveys scheduled for early March 2018. Analysis and documentation completed by end of March 2018.

#### 3.1.6 Presentation Boards

Presentation boards will be prepared for display at the Tri-Rail station platforms during the intercept surveys to provide information on the TDP process and public involvement opportunities and to advertise the project website. The display boards also will be used to provide information about the TDP Update at other related meetings scheduled in the region, including:

- 2045 Long Range Transportation Plans for the three (3) Planning Agencies/MPOs
- 2045 Regional Transportation Plan for Southeast Florida
- Public Education Campaign: Implementing Broward's Transportation Plans and Projects (Transit Systems Plan)
- BCT Transit Development Plan, Major Update

SFRTA also may elect to loan the display boards for temporary exhibits at other venues such as churches, job fairs, civic associations, and community organization meetings as well as their ongoing outreach activities.

Schedule: Continuous throughout project.

#### 3.1.7 TDP Major Update Website

A website for the SFRTA TDP Major Update will be developed early in the project and be the principal information portal for the stakeholder agencies and the public. The website will be designed and hosted independent from the existing SFRTA site and will be consistent with the project brand. For ease of access, it can be made accessible from the homepage of the SFRTA website as well as by an independent URL. A link to the project website can also be provided on the websites of other agencies and organizations involved in this process. Via the website, users will be able to accomplish the following:

- Access the calendar of events, including alerts for upcoming public input opportunities.
- Provide their e-mail address to receive e-mail notices, newsletters, and other information electronically.
- Provide input via comments/questions, etc. The project website will consist of the following elements:
  - Landing page that provides a brief introduction to the project and include pictures and other visuals to attract the user. Opportunities for the public to provide input will be advertised prominently on this homepage.



- The About Page will provide a more detailed introduction to the project than is provided on the homepage and will be updated regularly to reflect progression of the project. This page also will include:
  - Project Background
  - o Project Schedule
  - o Links to websites for partner agencies
  - o Links to document libraries/websites for partner agencies
- The Get Involved Page will be the main source of public input for the project and will include:
  - Calendar of upcoming meetings/events.
  - Form to submit email to receive electronic communication about the project.
  - o Form to submit a question or comment to the Project Team regarding the TDP Update.
- The Project Documents Page will provide the latest documents and other project materials for viewing and download. Documents will be organized by subject area, such as the following:
  - Technical Documents
  - o Presentations
  - o Newsletters
- The Website Header will provide easy access to important information on each webpage to include:
  - Search function for the website.
  - o Contact information for the Project Team.

Schedule: The project website is anticipated to be "live" by March 2018 and will be updated continuously throughout the project.

#### 3.1.8 Electronic Communication

SFRTA will promote the TDP and encourage input through its recently launched Tri-Rail mobile application for iPhones and Android cellular telephones.

Schedule: Continuous throughout project.

#### 3.1.9 OnBoard Newsletter

The *OnBoard* newsletter is published 10 times per year by SFRTA. Content related to the TDP Update, including advertisements of upcoming public involvement activities (e.g., platform surveys, surveys available on the project website, etc.), the project website, and summaries of the overall project status/findings, will be developed for integration into the *OnBoard* publication up to four (4) times editions during the course of the TDP preparation.

Schedule: Continuous throughout project.



#### 3.1.10 Public Meetings, Workshops, Presentations

Throughout the course of the project, the Consultant Team will host up to 15 meetings and presentations. Following is a list of the Boards and Committees planned to receive one or more presentations related to the SFRTA TDP Major Update:

- PTAC (4)
- SFRTA Governing Board (2)
- Three (3) TPO/MPO Boards
- Three (3) TPO/MPO Technical Advisory Committees
- Three (3) TPO/MPO Citizens Advisory Committees
- Others as requested (e.g., the Southeast Florida Transportation Council (SEFTC), South Florida Regional Business Alliance, etc.)

Schedule: Continuous throughout project.

#### 3.1.11 Public Hearing

The TDP will be reviewed by and presented to the SFRTA Governing Board, as a public hearing item and later presented to the Governing Board for formal adoption prior to final submission of the TDP document to the FDOT for review and approval. The public hearing process will also allow members of the public to comment on the TDP.

Schedule: July 2018.

#### 3.2 Documentation

SFRTA is committed to better understanding and hearing the transportation needs of the community it serves. Therefore, as part of the TDP process comments and recommendations received from the TDP outreach opportunities will be properly logged, maintained, and responded to. A summary of each public involvement event will be completed after each event and properly logged. Requests received from the public are forwarded to the appropriate SFRTA department for follow-up and resolution.

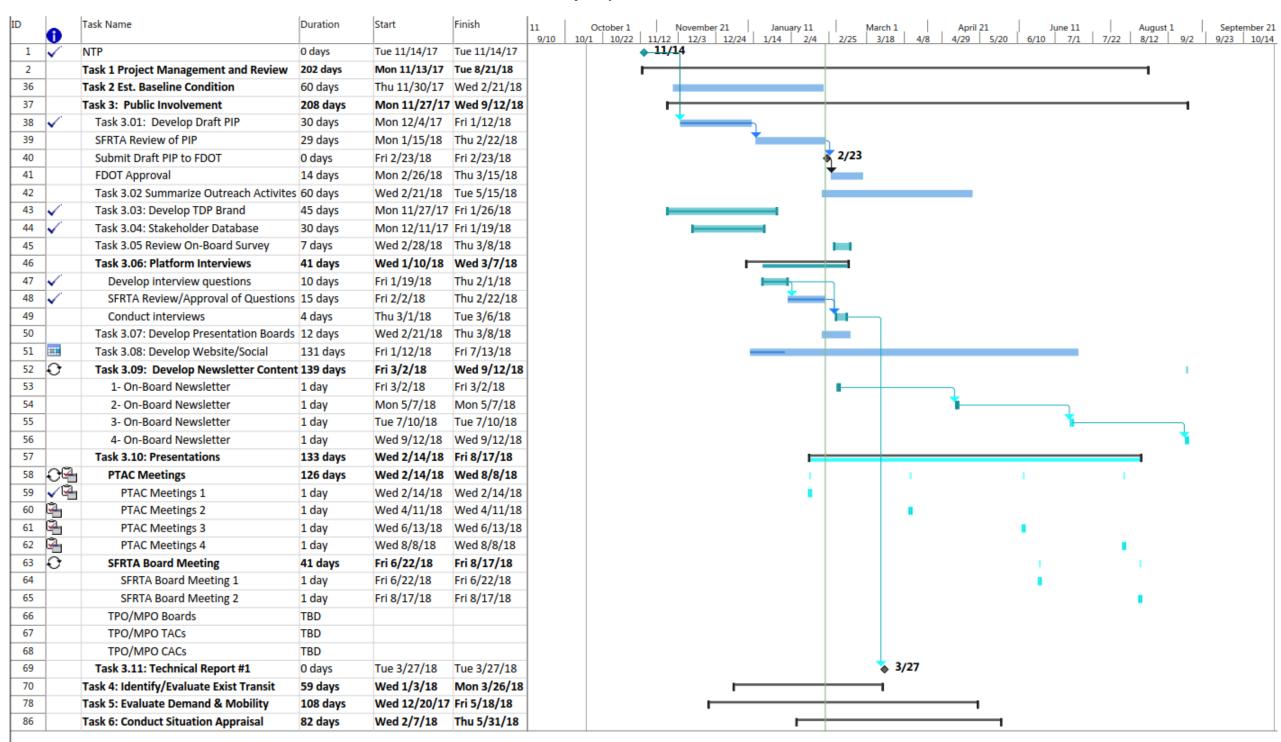
Schedule: Continuous throughout project.

#### 3.3 Schedule

Table 1 provides an overview of the schedule for public outreach. While efforts will be made to adhere to this schedule, it is expected that some items may shift to accommodate the needs of targeted groups and agenda requests by the various stakeholder groups.



Table 1: SFRTA TDP Major Update Public Involvement Schedule





#### 4.0 PUBLIC INVOLVEMENT EVALUATION MEASURES

The following performance measures will be used to measure the effectiveness of SFRTA's public involvement efforts with regard to the TDP.



**Table 2: Public Involvement Evaluation Measures** 

Public Involvement Goal	Strategy	Objectives	Measures	Targets
		<i>-</i>		<b>g</b> ee
Goal 1: Early and Consistent Involvement Involve passengers, the public, and stakeholders early and regularly	Provide opportunities for active participation in the project. Active participation occurs when a participant provides input. Examples include face-to-face communication with a TDP team member, completion of a TDP survey, emailing a question to the TDP team, etc.  Provide opportunities for	Catalog the number of interactions throughout the project. Interactions are defined as input received through face-to-face communication with a TDP team member, completion of a TDP survey, emailing a question, etc.      Catalog the amount of	Number of participants     who actively     participate      Number of participants	Greater than 1,000 interactions      Greater than 5,000
throughout the project.	passive participation in the project. Passive participation is defined as one-way communication from the TDP Team to the participant. Examples include posting material on a website, sending an email, etc.	passive participation throughout the project.	who passively participate (e.g., number of people who received the email, number of people viewing the website, etc.)	opportunities provided to participate



**Table 2: Public Involvement Evaluation Measures (Continued)** 

Public Involvement Goal	Strategy	Objectives	Measures	Targets
Goal 2: Opportunity  Provide all SFRTA/Tri-Rail	Provide multiple opportunities for input so that if a person cannot attend an event, he/she can still provide input via the website. In addition to obtaining printed material in all public libraries.	Establish project-specific email address so participants can submit comments and questions any time.	Establishment of a project-specific email address	Maintenance of a project-specific email address throughout the duration of the project. Review comments and questions received.
passengers, citizens, and stakeholders with the opportunity to participate throughout the project, including persons with disabilities, older adults, or those who have limited	Provide opportunity for feedback from participate throughout the tri-county region	Request participants to provide their work/home zip codes for purposes of analyzing the level of participation within each county.	Catalogue where     participants live and     work based on their     zip code information	Of the participants that provide their home zip code, a minimum of 20% should be from each county in the tricounty region.
English proficiency (LEP).	Provide opportunity for Limited English Proficiency individuals to participate	Provide materials in English, Spanish and Creole upon request	Track number of request for translation services	Greater than 12% of returned surveys are alternative language surveys
	Provide opportunity for persons with disabilities to participate	Ensure in-person events are held at locations accessible by at least one transit route and are ADA accessible	Percent of events held at locations accessible by at least one transit route and are ADA accessible	100% of all events are held at locations accessible by at least one transit route and are ADA accessible

#### TRANSIT DEVELOPMENT PLAN



**Table 2: Public Involvement Evaluation Measures (Continued)** 

Public Involvement Goal	Strategy	Objectives	Measures	Targets
Goal 3: Information and Communication	Provide information in accessible format	Provide printed copies of materials when requested by those who do not have access to the internet.	Number of individuals not provided printed copies when requested	Zero individuals not provided printed copies when requested
Provide all citizens and interested stakeholder agency groups with clear, timely, and accurate	Provide regular updates on the TDP's progress	Update the TDP website on a regular basis	Frequency of updates to the TDP website	Update the TDP website more than once per month
information relating to the project as it progresses.	Provide opportunities for the public to ask questions	Establish means for the public to submit questions via email and in person	Percent of questions responded to within two business days	Greater than 90% of questions responded to within two business days



#### 5.0 TITLE VI/LIMITED ENGLISH PROFICIENCY (LEP)

Under Title VI of the Civil Rights Act of 1964, as amended, SFRTA, as recipients of federal financial assistance, must operate and plan for transit services without regard to race, color, or national origin so that: transit benefits and services are available and provided equitably; transit services are adequate to provide access and mobility for all; opportunities to participate in the transit planning and decision- making process are open and accessible, and that remedial and corrective actions are taken to prevent discriminatory treatment of any beneficiary.

The following notification that includes the protections under Title VI of the Civil Rights Act of 1964, as amended, will be included at each outreach event and within all published TDP materials.

#### PROTECTIONS OF TITLE VI OF THE CIVIL RIGHTS ACT OF 1964 AS AMENDED

The South Florida Regional Transportation Authority (SFRTA/Tri-Rail) is committed to ensuring that no person is excluded from participation in, or denied the benefits of, its transit program or activity on the basis of race, color or national origin as protected by Title VI of the Civil Rights Act of 1964. If you believe you have been subjected to discrimination under Title VI, you may file a written complaint with the South Florida Regional Transportation Authority, Administration Department, 800 NW 33rd Street, Pompano Beach, FL, 33064; telephone number 954-942-7245.

The project website also will indicate that Limited English Proficiency (LEP) individuals may e-mail questions and comments in Spanish or Haitian Creole. Questions will be responded to in Spanish or Haitian Creole, and comments will be translated into English and recorded. The Project Management Team will also make patrons aware that the SFRTA TDP website uses Google Translate, which translate web-based content into the language of your choice.

## Appendix A Project Management Team

**Table A-1: Project Management Team** 

Name	Agency/Firm	Role
Vicki Gatanis	SFRTA	SFRTA Project Manager
Anthony Catalina	SFRTA	Director Planning and Capital Development
Loraine Cargill	SFRTA	Planning Manager
Natalie Yesbeck	SFRTA	Planning Manager
John Lafferty	WSP	Project Manager
Thomas Rodrigues	WSP	Deputy Project Manager
Nick Amrhein	WSP	Technical Lead
Zach Parnas	WSP	Support
Kathy Gonot	PMG Associates, Inc	Public Involvement Support
Phil Gonot	PMG Associates, Inc	Technical Support

## Appendix B Internal Review Committee

**Table B-1: TDP Internal Review Committee** 

Name	SFRTA Department
Efrain Bernal	Engineering
Loraine Cargill	Planning
Anthony Catalina	Planning
Elizabeth Walter	Finance
Victor Garcia	Corp and Community Outreach
Vicki Gatanis	Planning
Carla McKeever	Finance – Grants Manager
Lois Pittman	Operations
Ralph Rappa	Safety and Security
Natalie Yesbeck	Planning

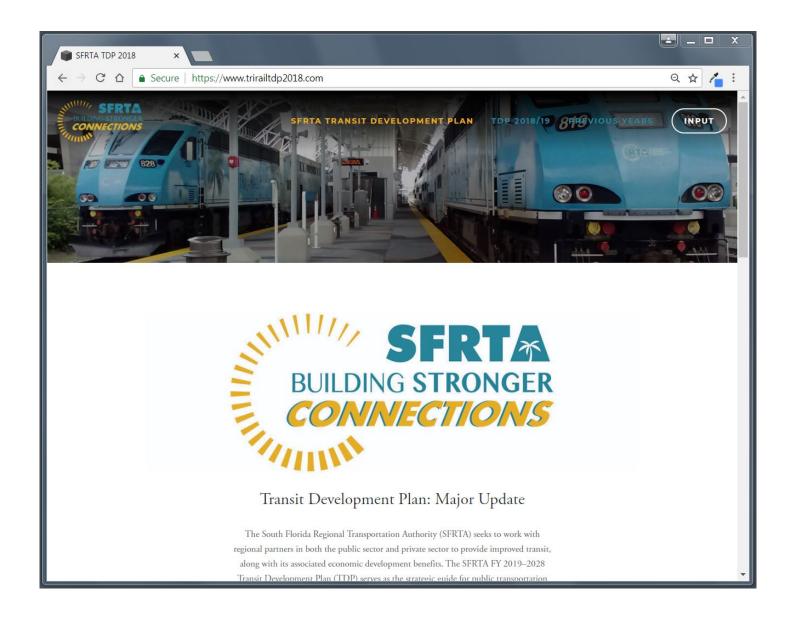
## Appendix C External Review Committee

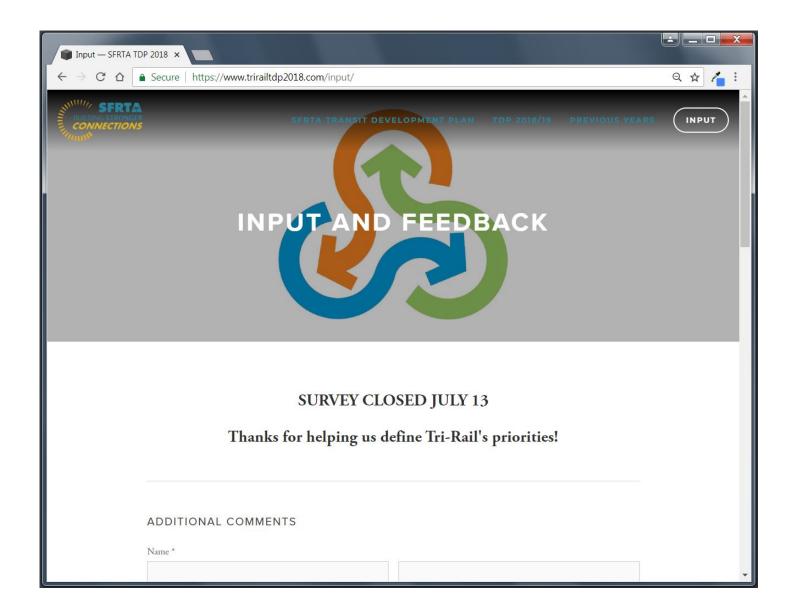
**Table C-1: TDP External Review Committee (PTAC)** 

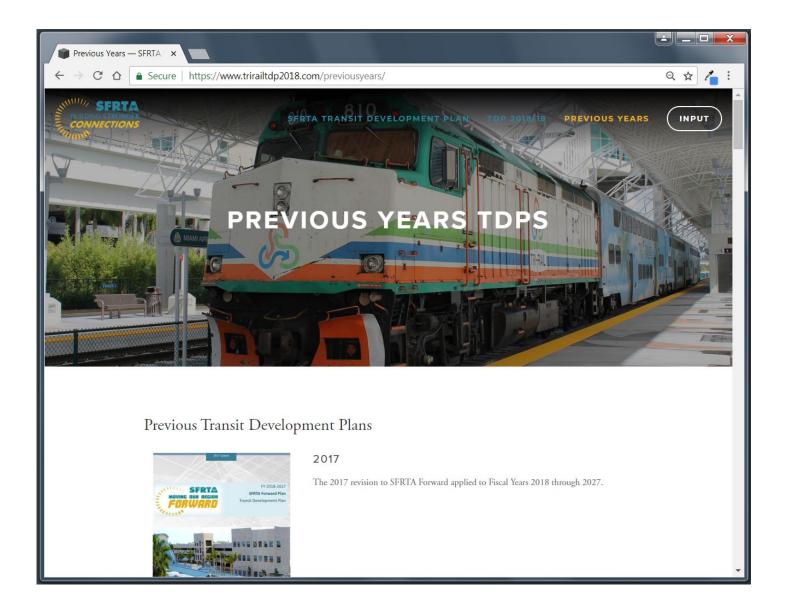
Name	Agency Stakeholder
Michael Busha	Treasure Coast Regional Planning Council
Anthony Catalina	SFRTA
Monica Cejas	Miami-Dade Department of Trans.& Public Works
Ken Jefferies	FDOT District 6
Isabel Cosio Carballo	South Florida Regional Planning Council
Jesus Guerra	Miami-Dade Transportation Planning Organization
Larry Merritt	FDOT District 4
Barney McCoy	Broward County Transit
Greg Stuart	Broward Metropolitan Planning Organization
Fred Stubbs	Palm Tran
Valerie Nelson	Palm Beach Transportation Planning Agency

# Appendix 3 Tri-Rail 2018 TDP Website









# Appendix 4 SFRTA Newsletters





SFRTA is preparing its Transit Development Plan (TDP) Major Update for 2019-2028, and seeks **your input** to identify Tri-Rail improvements for our trains, commuter buses, and stations.

The TDP Major Update is SFRTA's comprehensive strategic planning, development and operational guidance document that forms the basis for defining public transit needs and opportunities for the next 10 years.

Whether you're a regular or one-time rider, we want to hear from you.

#### Why do you use TRI-RAIL?

What improvements would you like to see?

Please participate by completing a brief survey at:

www.TriRailTDP2018.com/input.

Or email us with your comments at: TDP@sfrta.fl.gov

Thank you for helping us define Tri-Rail's priorities!

For more information about the TDP Major Update please contact Vicki Gatanis, Project Manager at (954) 788-7977.





The South Florida Regional Transportation Authority (SFRTA) continues to seek public input to prepare for the Transit Development Plan (TDP) Major Update for 2019-2028 titled:

#### "SFRTA: Building Stronger Connections"

The TDP is a strategic planning document that defines public transit needs and opportunities throughout the Tri-Rail service area for the next 10 years.

A brief online survey has recorded more than **43O** responses, and is still available for you to complete at www.TriRailTDP2O18.com/input.

Thank you for your input to identify Tri-Rail Improvements for our trains, commuter buses, and at stations! To date, the top ten improvements Tri-rail customers and survey-takers have identified are:

- 1 More frequent service
- 2 Add a mobile ticketing app for fare payment
- 3 Expand rail service onto the FEC railroad between West Palm Beach and Et Lauderdale
- 4 Improve cleanliness of trains
- 5 Expand rail service on the FEC railroad between Fort Lauderdale and Miami
- 6 Earlier / later train service hours
- **7** Expand service north into Jupiter
- 8 Expand rail service North to Martin County
- 9 Additional I new Tri-Rail station(s)
- 10 More weekend service

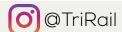
Please continue to inform SFRTA on how we can best plan for the future.

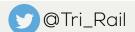
Whether you're a regular or one-time rider, we want to hear from you.

Comments can be emailed to us at: TDP@sfrta.fl.gov

Thank you for helping us define Tri-Rail's priorities!

For more information about the TDP Major Update please contact: Vicki Gatanis, Project Manager at (954) 788-7977.







# Appendix 5 TDP Presentations



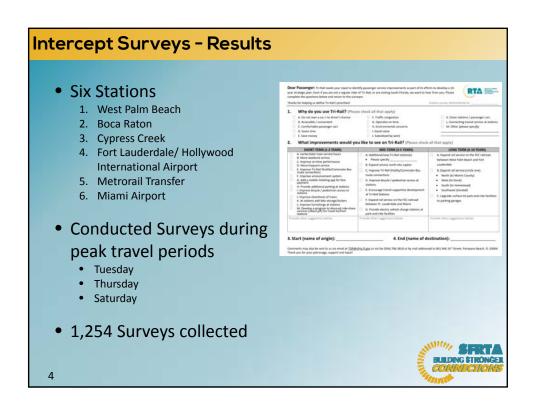


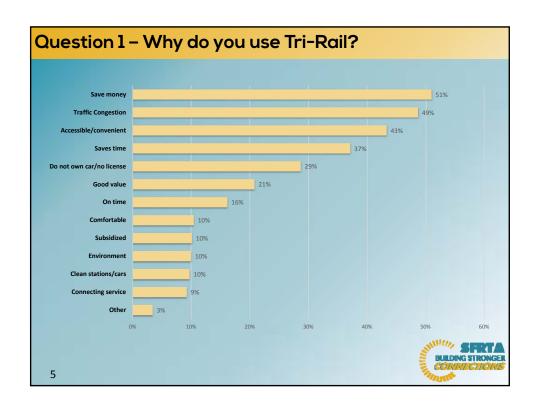
#### TDP Major Update – Major Elements

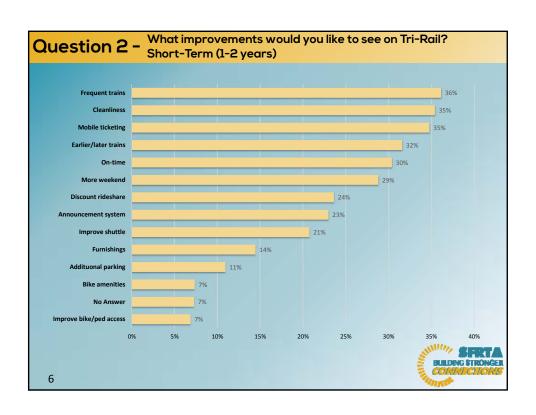
- Performance Evaluation
  - Peer Review
  - Trend analysis
- Situation Appraisal
- Estimation of Demand for Transit Service
- Ten-Year program of Strategies
- Ten-Year Financial Plan
- Performance Monitoring Program
- Submitted to FDOT by September 1

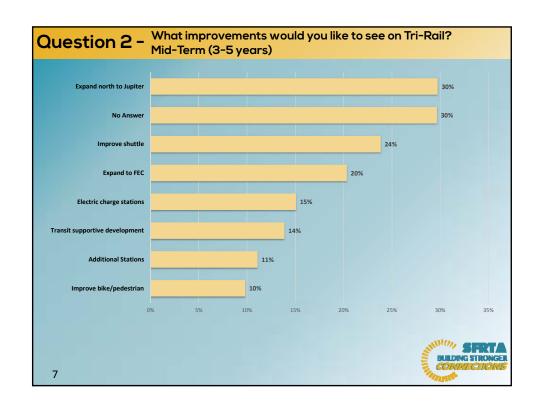


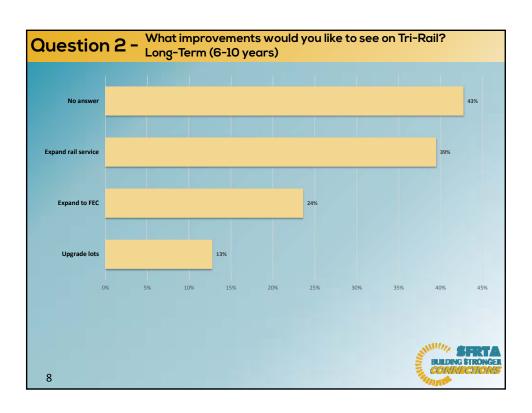


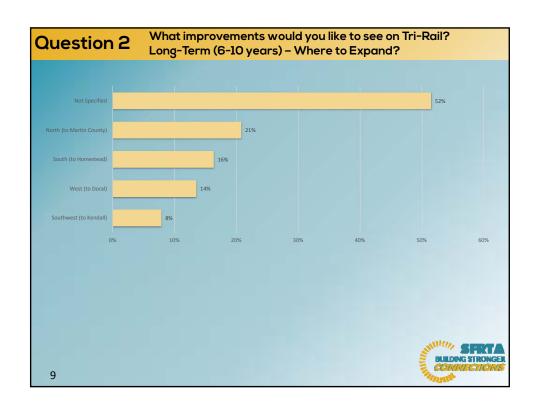


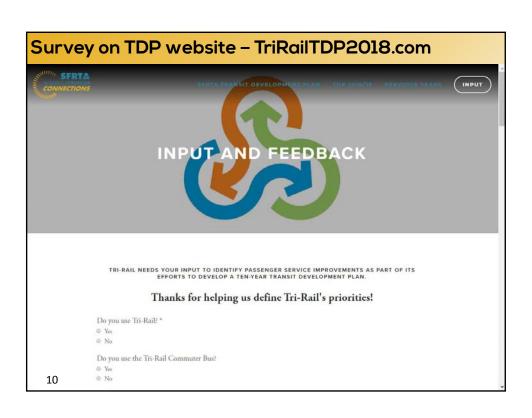


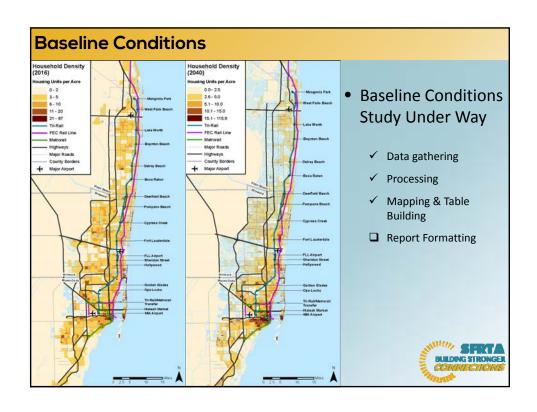


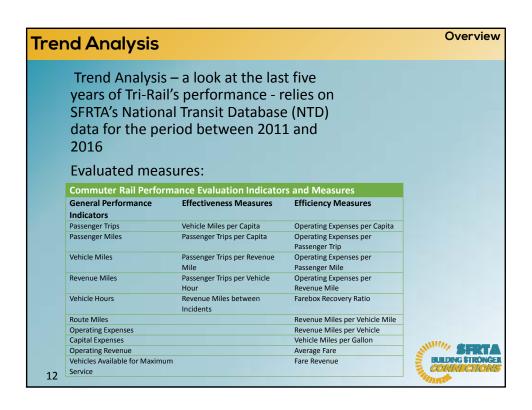


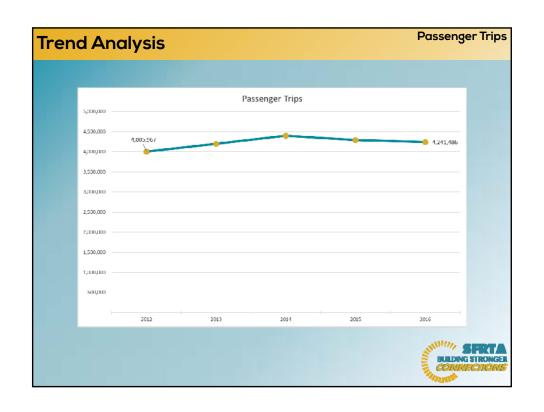


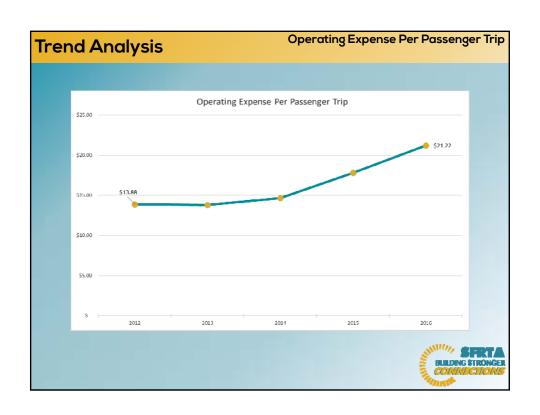


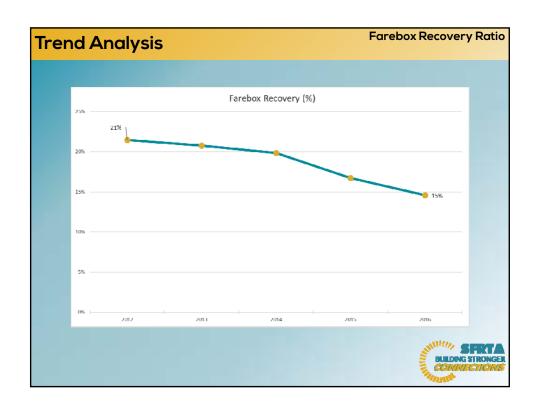




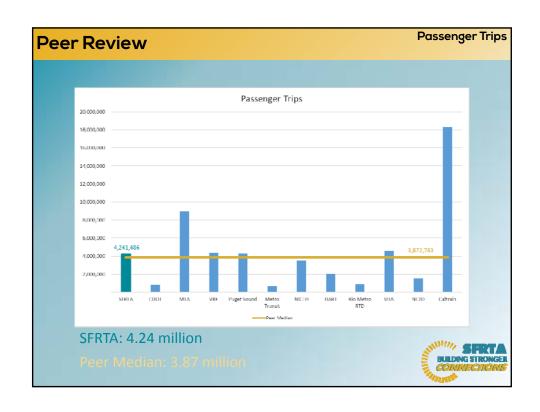




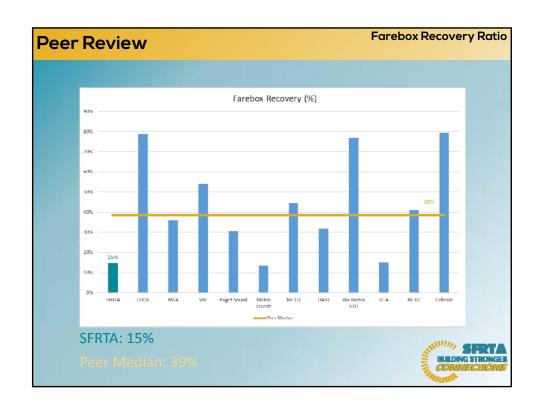


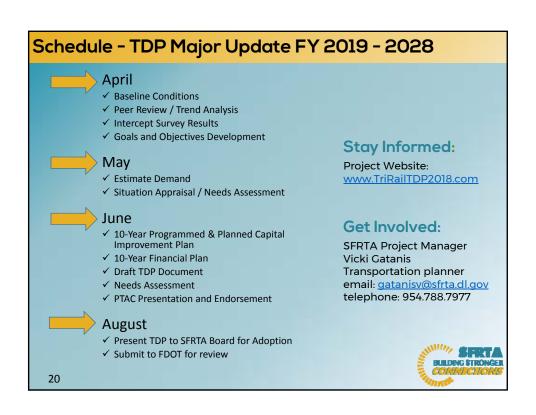


#### Overview **Peer Analysis** Eleven peer agencies used in **Connecticut Department of Transportation** (CDOT), Newington, CT review Maryland Transit Administration (MTA), Baltimore, MD Opportunity to compare Virginia Railway Express (VRE), Alexandria, SFRTA's operations with other commuter rail Central Puget Sound Regional Transit Authority (Puget Sound), Seattle, WA operations in the country. Northern Indiana Commuter Transportation District (NICTD), Peers Agencies are the same Chesterton, IN as last major update, plus Dallas Area Rapid Transit (DART), Dallas, one additional peer\* Rio Metro Regional Transit District (Rio Metro RTD), Albuquerque, NM Utah Transit Authority (UTA), Salt Lake City, UT North County Transit District (NCTD), Oceanside, CA Caltrain (Caltrain), San Carlos, CA \*Metro Transit, Minneapolis, MN\* BUILDING STRONGER 16











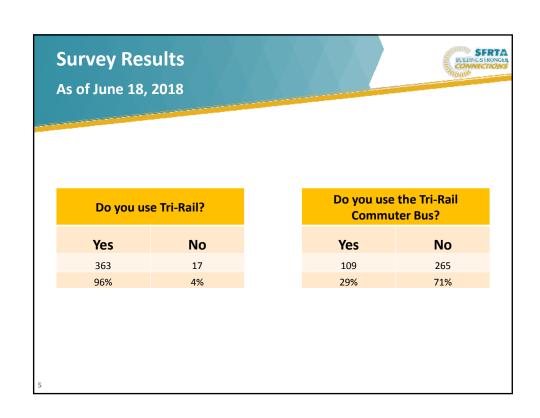
# **TDP Major Update Major Elements**

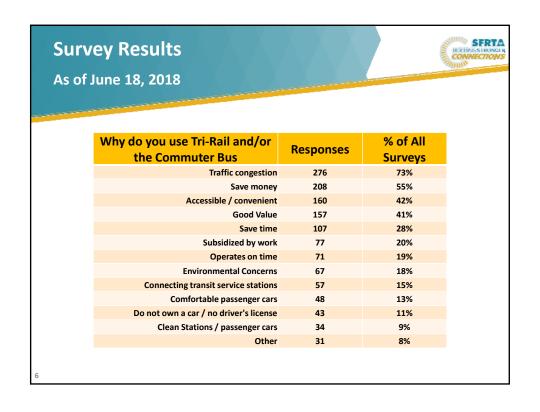


- Baseline Conditions
- Existing Services
- Performance Evaluation
  - Peer Review / Trend analysis
- Situation Appraisal
- Estimation of Demand for Transit Service
- Ten-Year Program of Strategies
- Ten-Year Financial Plan
- Performance Measures
- Submitted to FDOT by September 1st









## **Survey Results**



As of June 18, 2018

What SHORT TERM (1-2 years) improvements would you like to see on Tri-Rail	Responses	% of All Surveys
More frequent service	190	50%
Add a mobile ticketing app for fare payment	188	49%
Improve cleanliness of trains	178	47%
Earlier / later train service hours	170	45%
More weekend service	138	36%
Improve announcement system	127	33%
Develop a program to discount ride-share services (Uber/Lyft) for travel to/from stations	123	32%
Improve on-time performance	120	32%
Improve Tri-Rail Shuttle/Commuter Bus route connections	112	29%
Improve furnishings at stations	84	22%
Provide additional parking at stations	54	14%
Improve bicycle / pedestrian access to stations	44	12%
At stations add bike storage / lockers	24	6%

#### **Survey Results**



As of June 18, 2018

What MID-TERM (3-5 years) improvements would you like to see on TriRail	Responses	% of All Surveys
Expand rail service on the FEC railroad between Fort Lauderdale and Miami		47%
Expand service north into Jupiter	169	44%
Additional/new Tri-Rail station(s)	142	37%
Improve Tri-Rail Shuttle/Commuter Bus route connections	134	35%
Encourage transit supportive development at Tri-Rail Stations	119	31%
Provide electric vehicle charge stations at park-and-ride facilities	62	16%
Improve bicycle / pedestrian access at stations	49	13%

## **Survey Results**



As of June 18, 2018

What LONG-TERM (6-10 years) improvements would you like to see on Tri-Rail	Responses	% of All Surveys
Expand rail service on the FEC railroad between West Palm Beach and Fort Lauderdale		48%
Expand rail service North to Martin County	156	41%
Expand rail service South to Homestead	135	36%
Expand rail service West to Dora	132	35%
Expand rail service South to Kendal	130	34%
Upgrade surface park-and-ride facilities to parking garage	105	28%

9

### **Survey Results**

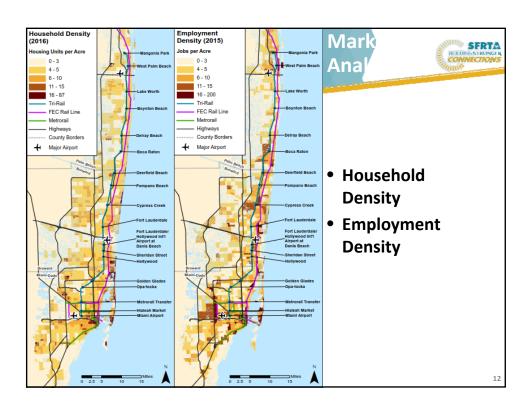


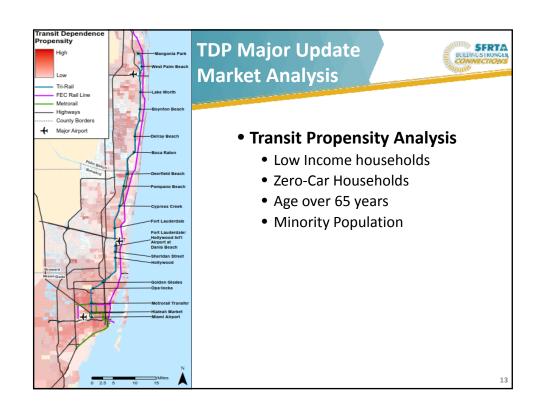
As of June 18, 2018		
All Improvements	Responses	% of All Surveys
More frequent service	190	50%
Add a mobile ticketing app for fare payment	188	49%
Expand rail service on the FEC railroad between West Palm Beach and Fort Lauderdale	184	48%
Improve cleanliness of trains	178	47%
Expand rail service on the FEC railroad between Ft. Lauderdale and Miami	178	47%
Earlier / later train service hours	170	45%
Expand service north into Jupiter	169	44%
Expand rail service North to Martin County	156	41%
Additional/new Tri-Rail station(s)	142	37%
More weekend service	138	36%
Expand rail service South to Homestead	135	36%
Improve Tri-Rail Shuttle/Commuter Bus route connections	134	35%
Expand rail service West to Doral	132	35%
Expand rail service South to Kendall	130	34%
Improve announcement system	127	33%
Develop a program to discount ride-share services (Uber/Lyft) for travel to/from stations	123	32%
Improve on-time performance	120	32%
Encourage transit supportive development at Tri-Rail Stations	119	31%
Improve Tri-Rail Shuttle/Commuter Bus route connections	112	29%
Upgrade surface park-and-ride facilities to parking garages	105	28%
Improve furnishings at stations	84	22%
Provide electric vehicle charge stations at park-and-ride facilities	62	16%
Provide additional parking at stations	54	14%
Improve bicycle / pedestrian access at stations	49	13%
Improve bicycle / pedestrian access to stations	44	12%
At stations add bike storage / lockers	24	6%

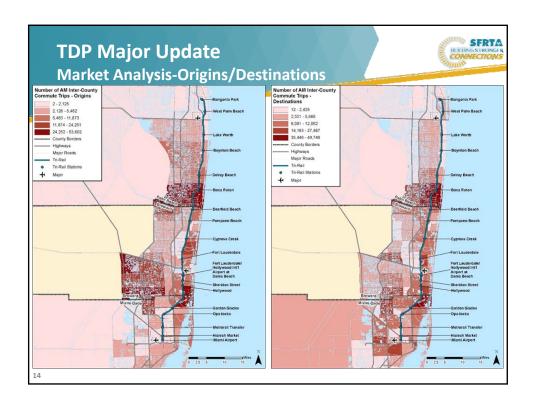
# TDP Major Update Outreach

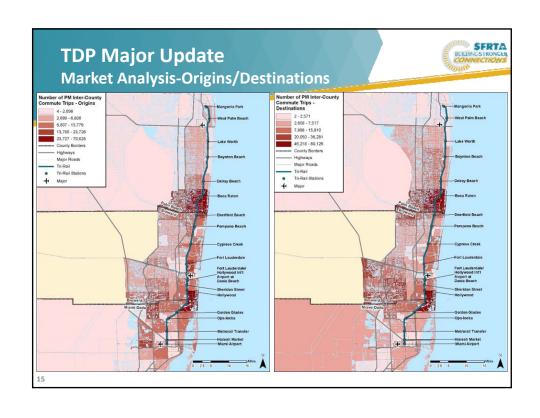


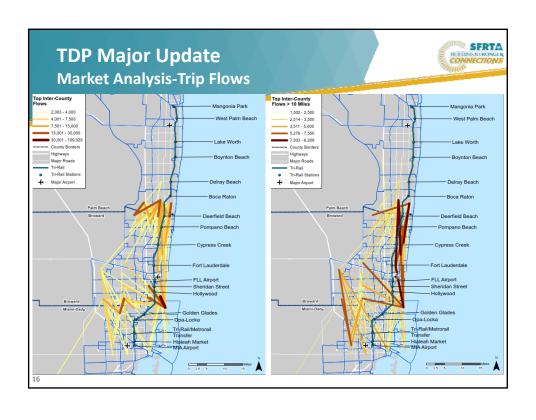
- SFRTA Events
- SFRTA Surveys
  - Intercept Survey
  - Commuter Connector Survey
  - Tri-Rail On-board Survey
- Workforce Boards
  - CareerSource Palm Beach
  - CareerSource Broward
  - CareerSource South Florida (Miami-Dade)

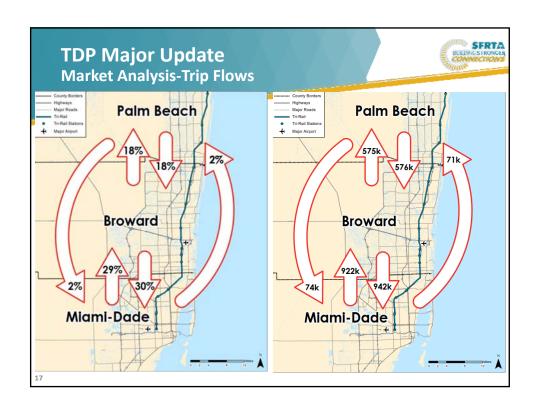














# TDP Major Update Goals Development



- VISION: Take a leadership role to expand and promote premium regional transit and multi-modal mobility.
- PARTNERSHIPS: Develop public and private sector partnerships to promote strategies that support and expand regional transit.
- SYSTEM PERFORMANCE: Maximize the performance, reliability, efficiency and capacity of the existing SFRTA/Tri-Rail system.
- **SYSTEM PERFORMANCE** Improve SFRTA's commuter bus service and connecting transit and transportation services.
- SYSTEM PERFORMANCE: Improve the Tri-Rail passenger experience.

19

# TDP Major Update Goals Development



- **SAFETY** Implement safety and security measures, procedures and practices for the Tri-Rail system and facilities that meet state and federal standards.
- SUSTAINABLE FUNDING Pursue funding opportunities to support both the existing SFRTA/Tri-Rail system and expanded premium transit in the region.
- ECONOMIC GROWTH/ENVIRONMENTAL SUSTAINABILITY:
   Facilitate economic growth and development throughout the region.
- ECONOMIC GROWTH/ENVIRONMENTAL SUSTAINABILITY
   Maximize environmentally sustainable practices for both: the
   current SFRTA/Tri-Rail system and expanded premium services
   in the region.

#### **TDP Major Update – Schedule**





- ✓ Estimate Demand
- ✓ Situation Appraisal

#### June

- ✓ Needs Assessment
- ✓ 10-Year Programmed/Planned Capital Improvement Plan **Get Involved**:
- ✓ 10-Year Financial Plan
- ✓ Draft TDP Document
- ✓ PTAC Presentation



- $\checkmark$  Present TDP to SFRTA Board for Adoption
- ✓ Submit to FDOT for review
- ✓ Present TDP to Planning Organizations

#### **Stay Informed:**

Project Website: www.TriRailTDP2018.com

SFRTA Project Manager Vicki Gatanis

Transportation Planner Email: gatanisv@sfrta.fl.gov Telephone: 954.788.7977





## Major Projects Completed in FY 18



- Improved On-Time Performance (OTP): 96 percent in April 2018
- Opa-locka Parking Lot Improvements
- Corridor-Wide Pedestrian Bridge Inspection
   Identified needed improvements; schedule developed for implementation
- MiamiCentral Station
- Iris/Little River Rail Connection to MiamiCentral Station
- MR MICCI Capacity Improvement
   NEPA completed; to be transferred to FDOT for final design
- Boca II New Station Planning
   PD&E completed; 100% design anticipated in Fall 2019

# Building Stronger Connections Overview



#### Major Update contains eight sections:

- 1. Introduction
- 2. Baseline Conditions
- 3. Evaluation of Existing Conditions
- 4. Public Involvement
- 5. Situation Appraisal
- 6. Goals and Objectives
- 7. 10-Year Plan
- 8. Financial





#### **Building Stronger Connections** Public Outreach Over 5,300 survey responses collected overall **Public Outreach Activities Participation** TDP Website - www.TriRailTDP2018.com 927 unique visitors; 442 online survey responses Platform Intercept Survey 1,254 responses On-Board Survey 3,366 responses Commuter Connector Bus Customer Survey 240 responses Community Events 52 meetings attended

# Top Priorities Public Outreach



#### Most Sought Improvements to Tri-Rail Service

(summarized from intercept and online survey instruments)

- 1. Increase train frequency
- 2. Release a mobile ticketing app
- 3. Improve train cleanliness
- 4. Run earlier and later trains
- 5. Expand service on FEC corridor between Miami and Ft. Lauderdale (mid-term)
- 6. Expand service on FEC corridor between Ft. Lauderdale and West Palm Beach (long-term)

## Goals Development



- Vision
- Partnerships
- System Performance
- Safety
- Sustainable Funding
- Economic Growth
- Environmental Sustainability

# Building Stronger Connections Goals



VISION: Take a leadership role and promote premium regional transit and multi-modal mobility

PARTNERSHIPS: Develop public and private sector partnerships to promote strategies that support and expand regional transit

SYSTEM PERFORMANCE: Maximize the performance, reliability, efficiency and capacity of the existing SFRTA/Tri-Rail system. Improve the Tri-Rail passenger experience

**SAFETY: Implement safety and security measures**, procedures and practices for the Tri-Rail system and facilities that meet state and federal standards

**SUSTAINABLE FUNDING: Pursue funding opportunities** to support both the existing SFRTA/Tri-Rail system and expanded premium transit in the region

ECONOMIC GROWTH/ENVIRONMENTAL SUSTAINABILITY: Facilitate economic growth and development throughout the region. Maximize environmentally sustainable practices.

### **Funded Improvement Projects**







- Downtown Miami Station
- MR-MICCI
- Boca II Station
- Rehab Rolling Stock
- Preventative Maintenance
- SFRC Capital Replacement Program



### **Unfunded Needs**





SFRTA Commuter Bus Comprehensive Analysis &



- Commuter Connector Bus Stop Construction/Enhancement
- Station Area Improvements
- Tri-Rail Coastal Link (TRCL) & Tri-Rail Extensions
  - TRCL Northeast Corridor (MiamiCentral to Aventura)
  - Palm Beach County & Jupiter TRCL Extension
  - Broward TRCL Section
  - Kendall/Homestead Tri-Rail Extension
  - CSX Dolphin Expressway Corridor Extension

11

# Capital Plan



- Ten Year Plan
- First Five Years (FY 2019 2023) consistent with SFRTA's adopted budget Funded or Partially Funded
- Second Five Years (FY 2024 2028) are unfunded.
   Serves as SFRTA's wish list of projects
- TDP is a living document
   Subsequent annual TDPs will update the ten year plan to reflect new funding opportunities and needs

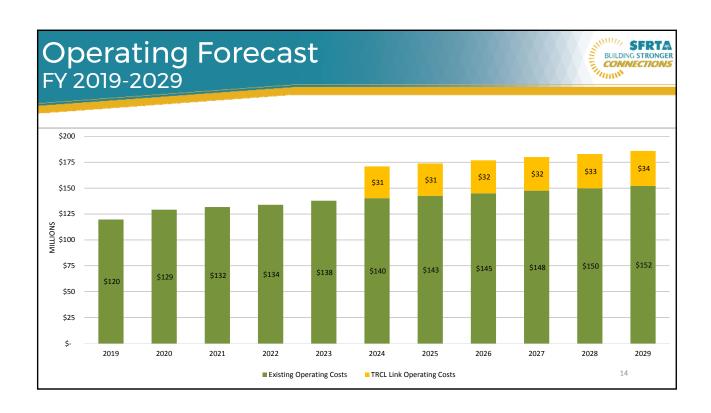
12

# **Operating Budget**



- Operating Costs
  - 1.8% annual increase anticipated
  - 2% annual increase to train, station and ROW maintenance
  - 3% annual increase to dispatch, personnel, and legal expenses
- Operating Revenues
  - 1.9% annual growth anticipated;
  - Identification of funding is needed to implement Tri-Rail Coastal Link in FY 2024

13



## Conclusions



**Building Stronger Connections** sets forth SFRTA's transportation vision for the next ten years

• Plan incorporates extensive public outreach efforts

**Building Stronger Connections** seeks to refocus SFRTA's mission to steadily

- Improve the passenger experience
- Grow ridership
- Foster collaborative relationships
- Promote and develop regional transit.



# SFRTA Building Stronger Connections 2019-2028



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http://www.TriRailTDP2018.com

John Lafferty Consultant Team Project Manager Office: 305-514-3100 John.Lafferty@wsp.com



### **Project Schedule**

PTAC Endorsement	August 15, 2018
SFRTA Board Adoption	August 24, 2018
Submit TDP to FDOT	By September 1, 2018
Address FDOT comments	October/November 2018
Final TDP to FDOT	By December 21, 2018



# Appendix 6 2018 Intercept Survey Report





### 1 INTERCEPT SURVEYS

### 1.1 Introduction

As input to the South Florida Regional Transportation Authority's (SFRTA) Major Transit Development Plan, intercept surveys of Tri-Rail passengers were conducted on the platforms of the Tri-Rail stations representing the highest daily ridership. For the Weekday service, six (6) stations were selected, and three (3) stations were surveyed representing Weekend service. These stations serve as a representative sample of the ridership of the entire Tri-Rail system. The six (6) stations selected are:

### Weekday:

- West Palm Beach
- Boca Raton
- Cypress Creek
- Fort Lauderdale / Hollywood International Airport Station at Dania Beach
- Metrorail Transfer
- Miami Airport

#### Weekend:

- West Palm Beach
- Fort Lauderdale / Hollywood International Airport Station at Dania Beach
- Miami Airport

### 1.2 Methodology

### 1.2.1 Survey Instrument:

The survey instrument was developed in a joint effort with SFRTA staff and the Consultant to derive pertinent information regarding the motivations of passenger riders and the desire for improvements to the system. Input was asked based upon two questions – 1.) Why do you use Tri-Rail? and, 2.) What Improvements would you like to see on Tri-Rail? Passenger surveys were prepared and available to passengers in English, Spanish and Creole.

### 1.2.2 Survey Dates:

The intercept / platform surveys were conducted over the course of three (3) days in early 2018. Weekday service days comprised two of the three survey days with surveys collected on Thursday, March 1st and Tuesday, March 6th. One weekend survey day was selected and intercept / surveys were collected on Saturday March 3rd.



### 1.2.3 Survey Time Frames:

Weekday surveys were conducted in the peak travel ridership times of 6:00 AM to 9:00 AM and 4:00 PM to 7:00 PM. Surveys on Saturday were conducted between 10:00 AM and 2:00 PM.

### 1.2.4 Survey Procedures:

Passengers were approached by survey personnel as they came onto the Tri-Rail station platform to await the next train. The survey concentrated on departing passengers that had the opportunity to complete the survey. Arriving passengers were in a rush to get to their destination and did not have the time to complete the survey. Surveys were completed by the passenger until their scheduled train departure was imminent. Surveys were ceased when the Tri-Rail train was approaching to allow the passenger to board the train.

Prospective survey respondents were asked to complete the survey which identified their perceptions of the best alternatives to improve the Tri-Rail service. Anyone who declined to participate was thanked and the survey personnel moved to another survey candidate.

A presentation board was placed in a central location on the station platform that described the survey effort and asked passengers to participate. This presentation board offered a sense of legitimacy to the survey personnel. All survey personnel wore identification badges reflecting that they represented SFRTA in the effort.

All completed surveys were collected according to the Tri-Rail by station surveyed and by time frame (morning or afternoon) at the end of each survey shift. The completed forms were retained by the survey Consultant for data entry and processing.

### 1.2.5 Data Entry:

All of the completed survey forms were entered into a database for analysis and data storage. Surveys were compiled for each Tri-Rail station separately for future reference. A combined database was also provided to SFRTA staff along with the individual Tri-Rail station records.

### 1.3 Summary of Results

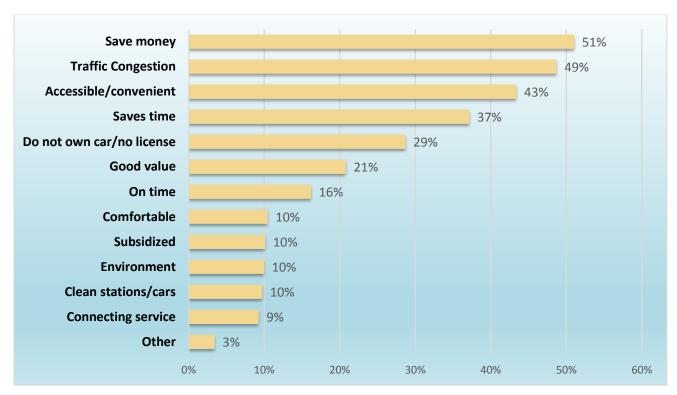
A total of 1,254 surveys were completed during the process (1,113 Weekday and 141 Weekend). Results are presented according to survey responses collected on weekdays and the weekend. The five (5) most frequent responses for each question are as follows. An overview of all results is also presented in the following subsequent figures.



1.3.1 Q1 Why do you use Tri-Rail?

Weekday	Weekend
Save money	Save money
Traffic Congestion	Accessible/convenient
Accessible/convenient	Traffic Congestion
Saves time	Saves time
Do not own car/no license	Do not own car/no license

Figure 1: Why do you use Tri-Rail?

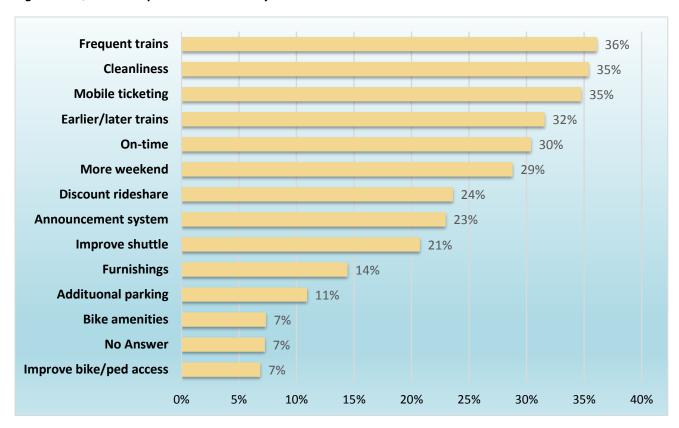




# 1.3.2 Q2 What Improvements would you like to see on Tri-Rail? Short Term (1 to 2 years) Improvements Requested

Weekday	Weekend
Improve cleanliness	More weekend service
More frequent trains	Earlier/later trains
Mobile ticketing	Mobile ticketing
Better on-time service	Improve shuttle service
Earlier/later trains	More frequent trains

Figure 2: Q2 What improvements would you like to see on Tri-Rail

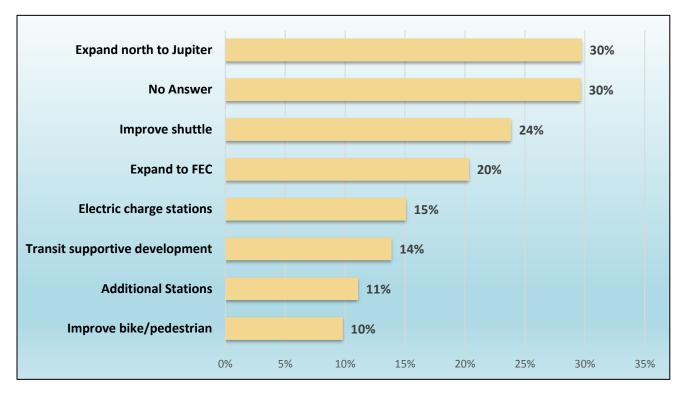




Mid-Term (3 to 5 years) Improvements Requested

Weekday	Weekend
Expand north to Jupiter	Expand north to Jupiter
Improve shuttle	Expand to FEC
Expand to FEC	Improve shuttle
Electric charge stations	Improve bike/pedestrian
Transit supportive development	Additional Stations

Figure 3: Mid-Term (3 to 5 years) Improvements Requested





### Long Term (6 to 10 years) Improvements Requested

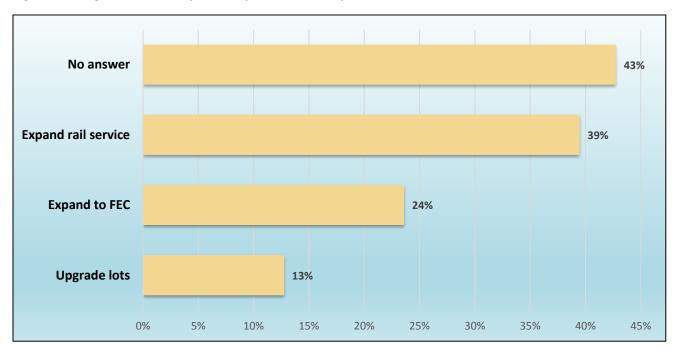
### Weekday and Weekend

**Expand Rail service** 

Expand to FEC

Upgrade lots

Figure 4: Long Term (6 to 10 years) Improvements Requested



### Requested Areas to Expand Service

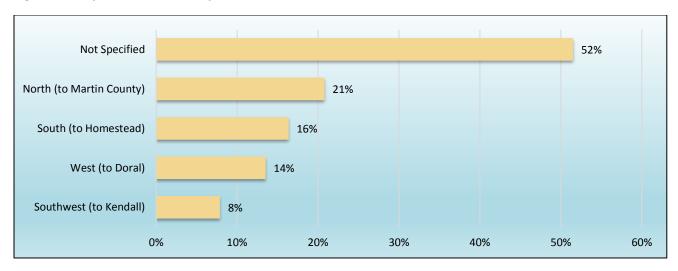
Weekday	Weekend
Not Specified	Not Specified
North	South
South	North
West	Southwest
Southwest	West



Requested Areas to Expand Service

Weekday	Weekend
Not Specified	Not Specified
North	South
South	North
West	Southwest
Southwest	West

Figure 5: Requested Areas to Expand Service



#### 1.3.2.1 Open-ended Questions

All respondents were offered the opportunity to write-in any additional improvements that were not provided on the survey form. The most prevalent responses were:

- Restrooms at the stations
- Express trains
- Improve cleanliness
- Provide electric charging outlets
- Better Security

### 1.4 Reliability:

The survey results met the standards of achieving a 95% Confidence Level with an Error Rate of +/-5%, which is appropriate for public input surveys. The basis of the validity conclusion was the ability to reach a significant amount of the overall ridership. Based on the standard of surveying departing passengers, the survey effort reached a total of 13.77% of all departing passengers from the targeted stations. Since the survey was only conducted during the morning and afternoon peak time frames, the actual percentage of departing passengers surveyed is higher than the 13.77%.



Based on a total survey set of 1,254, the 95% Confidence Level was achieved.

Table 1-1: Intercept / Platform Survey Results Summary

Station	Boarding Passengers	Surveys Completed	Percent
Weekday (Thursday/Tuesday)			
West Palm Beach	1,192	251	21.06%
Boca Raton	1,367	204	14.92%
Cypress Creek	1,199	219	18.27%
Fort Lauderdale-Hollywood International Airport	1,111	204	18.36%
Metrorail Transfer	1,130	91	8.05%
Miami Airport	1,120	144	12.86%
Weekend (Saturday)			
West Palm Beach	680	41	6.03%
Fort Lauderdale-Hollywood International Airport	590	77	13.05%
Miami Airport	718	23	3.20%
Total	9,107	1,254	13.77%



# Appendix Intercept Survey Instrument





complete the questions below and return to the surveyor. year strategic plan. Even if you are not a regular rider of Tri-Rail, or are visiting South Florida, we want to hear from you. Please **Dear Passenger:** Tri-Rail needs your input to identify passenger service improvements as part of its efforts to develop a 10-



Thank you for your patronage, support and input! Comments may also be sent to us via email at TDP@sfrta.fl.gov or via fax (954) 786.3818 or by mail addressed to 801 NW 33rd Street, Pompano Beach, FL 33064.



ω

Inicio (código postal o nombre del origen):

esté de visita en el Sur de Florida. Sea tan amable de responder las preguntas a continuación y entregarlas al encuestador. esfuerzo para elaborar un plan estratégico a 10 años. Queremos saber su opinión aunque no sea un pasajero regular de Tri-Rail, o Estimado Pasajero: Tri-Rail necesita su opinión para identificar las mejoras para el servicio de pasajeros como parte de su

SOUTH FA RECIONAL TRANSPORT

P		Ö
Proporcione otras sugerencias a continuación:	1. ¿Por qué usa Tri-Rail? (Marque todo lo que corresponda)  A. No tengo un auto/no tengo licencia de conducir B. Accesible/conveniente C. Coches de pasajeros cómodos D. Ahorra tiempo E. Ahorra dinero  2. ¿Qué mejoras le gustaría ver en Tri-Rail? (Marque todo lo que corresponda) A corro plazo (1-2 años) A corro plazo (1-2 años) A corro plazo (1-2 años) B. Mais servicios durante los fines de semana C. Mejora de la puntualidad D. Mayor frecuencia del servicio de trenes anteriores o conexiones de las rutas del autobús interurbano E. Mejora del servicio de enlace de Tri-Rail/las conexiones de las rutas del autobús interurbano F. Mejora del sistema de anuncio G. Agregar una aplicación de venta de boletos para estaciones H. Proporcionar estacionamiento adicional en las estaciones. I. Mejorar la acceso para los peatones y/o los ciclistas a las estaciones. L. Mejorar el mobiliario de las estaciones K. Mejorar el mobiliario de las estaciones estaciones sestaciones de las roman para descontar los servicios en las instalacion disuasorio disuasorio disuasorio disuasorio	iGracias por avudarnos a definir las prioridades de Tri-Rail!
Proporcione otras sugerencias a continuación:	1. ¿Por qué usa Tri-Rail? (Marque todo lo que corresponda)  A. No tengo un auto/no tengo licencia G. F. Congestión del tráfico de conducir  B. Accesible/conveniente C. Coches de pasajeros cómodos D. Ahorra tiempo E. Ahorra dinero  2. ¿Qué mejoras le gustaría ver en Tri-Rail? (Marque todo lo que corresponda)  A CORTO PLAZO (1-2 AÑOS) A CERTORO PLAZO (1-2 AÑOS) A CERTOR	Raill
Proporcione otras sugerencias a continuación:	K. Estaciones limpias/coches de pasajeros limpios   L. Conexión del servicio de tránsito en las estaciones   M. Otros (especifique)    A LARGO PLAZO (6-10 AÑOS)   A Expandir el servicio ferroviario en el ferrocarril FEC entre West Palm Beach y Fort Lauderdale   B. Expandir el servicio ferroviario (marque una con un círculo):   Norte (al Condado Martin)   Oeste (a Doral)   Sur (a Homestead)   Sur (a Homestead)   C. Actualizar las instalaciones de los estacionamientos disuasorios para que sean estacionamientos cubiertos.   Auxordo PLAZO (6-10 AÑOS)	Station survey administered at:

4. Fin (código postal o nombre del destino):

NW 33rd Street, Pompano Beach, FL 33064. ¡Gracias por su patrocinio, apoyo y aportes! Puede enviarnos sus comentarios a través del correo electrónico a TDP @sfrta.fl.gov o por fax al (954) 786.3818, también puede hacerlo por correo postal a 801



yon plan estratejik sou dizan. Menm si ou pa yon pasaje ki pran Tri-Rail regilyèman, e menm si se vizite w ap vizite Sid Florid sèlman, nou vle tande sa w gen pou di. Tanpri reponn kesyon ki annapre yo epi remèt keksyonè an bay apantè an. Chè Pasaje: Tri-Rail bezwen opinyon ou pou I konnen kilès nan sèvis pasaje yo pou I amelyore, nan kad jefò I ap fè pou devlope



Station survey administered at:

Mèsi dèske w ap ede nou jwenn kisa Tri-Rail dwe bay priyorite!

non kote ou prale):	4. Rive (Kòd Zip oswa non kote ou	3. Soti (Kòd Zip oswa non kote ou soti):
Fè lòt sigjesyon:	Fè lòt sigjesyon:	Fè lòt sigjesyon:
		<ul> <li>M. Devlope yon pwogram rabè pou sèvis woulib pataje (Uber/Lyft) pou ale/vini nan estasyon yo</li> </ul>
		L. Amelyore mèb nan estasyon yo
		<ul> <li>K. Amelyore enstalasyon pou bisiklét yo (lôkě, rak, vagon pou bisiklét)</li> </ul>
	etablisman "park-and-ride" yo	J. Amelyore pwòpte tren yo
	Miami	<ul> <li>I. Amelyore akse pyeton &amp;/oswa bisiklet nan estasyon yo</li> </ul>
	F. Etann sèvis ray yo sou ray FEC ant Ft. Lauderdale ak	H. Ofriplis pakin nan estasyon yo
C. Renove sifas lotisman establisman "park-an-ride" yo pou kreye garaj pou pakin	E. Ankouraje devlòpman ki pou soutni transpò piblik nan Estasyon Tri-Rail yo	<ul> <li>G. Ajoute yon aplikasyon mobil pou achte tikè e peye pou trajè</li> </ul>
Sidwes (Kendall)	D. Amelyore akse bisiklet / pyeton nan estasyon yo	<ul> <li>F. Amelyore sistèm anons</li> </ul>
Sid (al Homestead)	Rail) /Commuter Bus (Otobis pou Pasaje Navět)	<ul> <li>E. Amelyore koneksyonwout Tri-Rail Shuttle (Navèt Tri-Rail) /Commuter Bus (Otobis pou Pasaje Navèt)</li> </ul>
<ul> <li>Onò (al Konte Martin)</li> <li>Wès (al Doral)</li> </ul>	C. Amelyore koneksyon woutTri-Rail Shuttle (Navèt Tri-	D. Sèvis ki disponib pi souvan
B. Etann sèvis ray (ansèkle youn):	B. Etann sèvis la pou l rive pi onò, nan Jupiter	C. Amelyorasyon pèfòmans onivo tan
ak Fort Lauderdale	Tanpri presize:	<ul> <li>B. Lôt sèvis pandan lewikenn</li> </ul>
A. Etann sèvis ray yo sou ray FEC ant West Palm Beach	A. Lòt estasyon Tri-Rail an plis	<ul> <li>A. Lè de sèvis tren yo pi bonè/pi ta</li> </ul>
ALONTÈM (6-10 AN)	A MWAYEN TÈM (3-5 AN)	AKOUTÈM (1-2 AN)
	Kisa ou ta renmen wè Tri-Rail amelyore? (Tanpri tcheke tout sa ki aplike)	2. Kisa ou ta renmen wè Tri-Rail am
	J. Travay mwen peye yon pati ladan	E. Ekonomize lajan
M. Lòt (tanpri presize)	<ul><li>I. Bon pou lajan m peye a</li></ul>	C. Vagon pou pasaje yo konfôtab
estasyon yo	<ul> <li>H. Enkyetid anviwonmantal</li> </ul>	B. Fasil pou jwenn / pratik
<ul> <li>L. Sèvis koneksyon transpò piblik nan</li> </ul>	☐ G. Ale-vini alè	pou m kondui
K. Estasyon yo / vagon yo pwòp	☐ F. Anbouteyaj	<ul> <li>A. M pa gen machin / m pa gen lisans</li> </ul>
	neke tout sa ki aplike)	L. Poukisa ou pran Tri-kail? (Tanpri tcheke tout sa ki aplike)
		Boukisa ou pran Tri Bail3 /Tanari to

33064. Mèsi pou patwonaj, soutyen, ak kômantè ou! Li posib tou pou ou voye kômantê pa imel nan TDP@sfrta.fl.gov oswa pa faks nan (954) 786.3818 oswa pa lapôs al nan 801 NW 33<sup>rd</sup> Street, Pompano Beach, FL



# Appendix Intercept Survey Results





	We	ekday	We	eekend	1	<b>Total</b>
Number	1,113		141		1,254	
Q1 Why do you use Tri-Rail						
Do not own car/no license	318	28.57%	42	29.79%	360	28.71%
Accessible/convenient	477	42.86%	67	47.52%	544	43.38%
Comfortable	107	9.61%	24	17.02%	131	10.45%
Saves time	415	37.29%	51	36.17%	466	37.16%
Save money	573	51.48%	67	47.52%	640	51.04%
Traffic Congestion	555	49.87%	56	39.72%	611	48.72%
On time	171	15.36%	32	22.70%	203	16.19%
Environment	110	9.88%	15	10.64%	125	9.97%
Good value	228	20.49%	33	23.40%	261	20.81%
Subsidized at work	124	11.14%	3	2.13%	127	10.13%
Clean stations/cars	95	8.54%	27	19.15%	122	9.73%
Connecting service	98	8.81%	18	12.77%	116	9.25%
Other	35	3.14%	8	5.67%	43	3.43%
Short Term Improvements Requested						
Earlier/later trains	355	31.90%	41	29.08%	396	31.58%
More weekend service	303	27.22%	58	41.13%	361	28.79%
Better on-time service	369	33.15%	12	8.51%	381	30.38%
More frequent trains	416	37.38%	37	26.24%	453	36.12%
Improve shuttle service	232	20.84%	28	19.86%	260	20.73%
Improve announcement system	277	24.89%	11	7.80%	288	22.97%
Mobile ticketing	398	35.76%	38	26.95%	436	34.77%
Additional parking	125	11.23%	12	8.51%	137	10.93%
Improve bike/pedestrian access	78	7.01%	8	5.67%	86	6.86%
Improve cleanliness	428	38.45%	16	11.35%	444	35.41%
Bike amenities	86	7.73%	6	4.26%	92	7.34%
Improve furnishings	171	15.36%	10	7.09%	181	14.43%
Provide discount rideshare	273	24.53%	23	16.31%	296	23.60%
No Answer	75	6.74%	16	11.35%	91	7.26%



	Weekday		Weekend		Total	
Number	1,113		141		1,254	
Mid Term Improvements Requested						
Additional Stations	123	11.05%	16	11.35%	139	11.08%
Expand north to Jupiter	344	30.91%	29	20.57%	373	29.74%
Improve shuttle	278	24.98%	21	14.89%	299	23.84%
Improve bike/pedestrian	106	9.52%	17	12.06%	123	9.81%
Transit supportive development	164	14.73%	10	7.09%	174	13.88%
Expand to FEC	229	20.58%	26	18.44%	255	20.33%
Electric charge stations	174	15.63%	15	10.64%	189	15.07%
No Answer	318	28.57%	54	38.30%	372	29.67%
Long Term Improvements Requested						
Expand to FEC	264	23.72%	32	22.70%	296	23.60%
Expand rail service	445	39.98%	50	35.46%	495	39.47%
Upgrade lots	141	12.67%	19	13.48%	160	12.76%
No answer	472	42.41%	64	45.39%	536	42.74%
Where to expand service						
North	94	21.12%	9	18.00%	103	20.81%
West	65	14.61%	2	4.00%	67	13.54%
South	69	15.51%	12	24.00%	81	16.36%
Southwest	36	8.09%	3	6.00%	39	7.88%
Not Specified	228	51.24%	27	54.00%	255	51.52%

# Appendix 7 SFRTA Commuter Bus Survey Summary Report





### Table of Contents

Executive Summary	3
Survey Methodology	4-5
Survey Results	6-12
Major Findings	13
Appendix A	14-16

### **EXEXUTIVE SUMMARY**

Between March 14, 2018 – March 22, 2018, the SFRTA Planning & Capital Development Department conducted an on-board commuter bus transit survey. The survey findings are summarized in this Executive Summary. The full survey findings are presented in detail in the SFRTA Commuter Bus Survey Summary Report.

### **Survey Purpose**

The survey was conducted by SFRTA Planning & Capital Development staff. Surveys were administered as on-board intercept surveys only. Surveyors boarded the buses and approached riders with surveys and pencils. A total of 240 surveys were received during the surveying period.

The survey included questions about trip characteristics, transit amenities, and customer satisfaction.

### **Major Findings**

Detailed findings and charts from the survey are presented in the report. Collectively, key findings are as follows:

### **General Trip Information**

More than half of the riders utilize the Tri-Rail Commuter Connector bus service to get to their place of employment. About half of the riders, ride the bus 5 days a week. Most of the riders, about 86%, are Tri-Rail riders and about 43% of riders have an Easy Card/Monthly/EDP/Student. Convenience and no bus fares are the top two reasons that riders use the Commuter Connector service. Bus Shelters and Benches are the top two transit amenities that the bus riders would like to see at their bus pick-up drop off location. More than half of the riders stated that they would not be inconvenienced if the Commuter Connector operated as "fixed stop" instead of as a "wave and ride" system.

### Satisfaction with the Commuter Bus Service

Overall, most of the riders are satisfied with SFRTA's commuter bus services. Some positive feedback given regarding the commuter bus services was "this service is excellent for short trips and a good connection to their place of employment" and "they like the routes and people working for this service". In terms of needed improvements to the commuter bus system, the top three choices selected were 1) Buses arriving on time at bus pick-up/drop-off locations 2) Real time tracking (Tri-Rail Tracker) information for bus timeliness and 3) More frequent bus service.

### SURVEY METHODOLOGY SUMMARY

The following methodology summarizes the approach to developing, administering, and reporting the survey.

### Survey Instrument

The survey instrument was developed by the SFRTA Planning & Capital Development Department and was translated into Spanish and Haitian Creole. The completed survey can be found in Appendix A.

The survey included questions about trip characteristics, transit amenities, and customer satisfaction.

### Sampling Plan

SFRTA developed a sampling plan to sample all routes (13 routes on weekdays, and 1 route on the weekend) during the morning peak period. Each route was surveyed at least once from March 14, 2018 – March 22, 2018. Survey shifts are listed on this chart:

Route	Survey Shift	Dates
WPB1	10:20 AM – 11:20 AM	March 21, Wednesday
LKW1	6:50 – 8:35 AM	March 15, Thursday
LKW1 – Shift 2	7:20 AM – 8:55 AM	March 16, Friday
BR1	7:05 – 9:10 AM	March 16, Friday
DB1	6:55 AM – 8:20 AM	March 20, Tuesday
DB2	7:35 AM – 8:15 AM	March 14, Wednesday
PB1	6:55 AM – 8:35 AM	March 14, Wednesday
CC1	7:22 AM – 8:37 AM	March 16, Friday
CC2	7:22 AM -8:35 AM	March 19 Monday
CC3	6:39 AM – 8:31 AM	March 16, Friday
FL1	7:10 AM – 8:35 AM	March 16, Friday
FL2	7:15 – 8:35 AM	March 13, Tuesday
FL3	3:10 -3:40 PM	March 17, Saturday
FLA	9:05 AM - 11:00 AM	March 21, Wednesday
SS1	7:20 AM - 9:20 AM	March 22, Thursday

#### Survey Administration

The survey was conducted by SFRTA Planning & Capital Development staff. The survey was administered on-board the buses in a paper format. All surveyors were supplied with surveying materials, which included surveys, pencils, envelopes, and bus route schedules and maps.

Surveyors boarded the buses and approached riders with surveys and pencils. Surveyors collected completed surveys and returned all materials at the end of their shifts.

A total of 240 surveys were received during the surveying period.

Data Processing

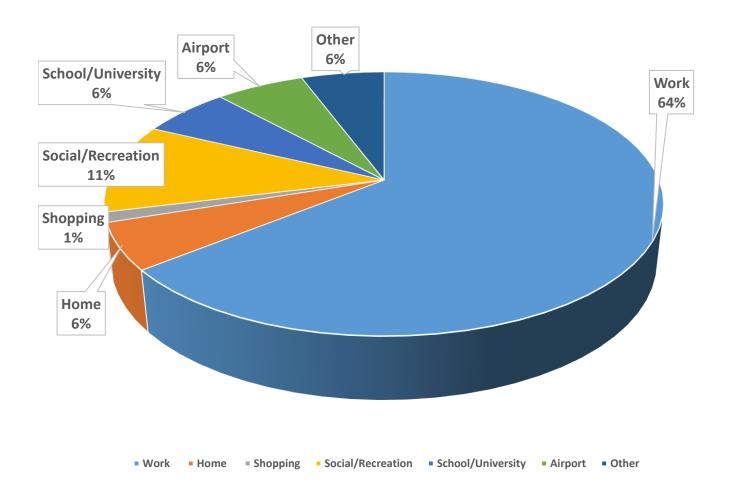
All of the survey responses were entered into Microsoft Excel for analysis.

### **SURVEY RESULTS**

### What is the purpose of your trip today?

### **Key Findings**

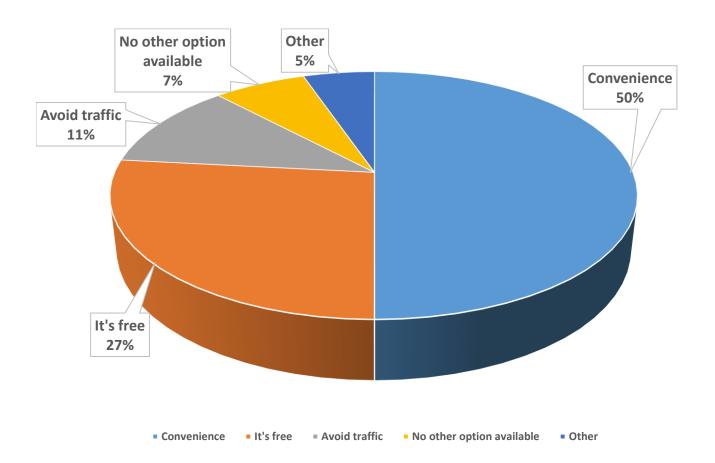
More than half of riders selected "Work" as the purpose for their trip. The surveys were administered in the am peak time. In the pm peak time, the assumption is that these same riders would mark "Home" as the purpose of their trip. "Social/Recreation" was marked as the primary trip purpose for the SFRTA Fort Lauderdale Airport route (FLA-1). For the "Other" category, primary reasons provided for trip purpose were either medical reasons or vacation.



### Why did you use Tri-Rail's Commuter Connector bus service today?

### **Key Findings**

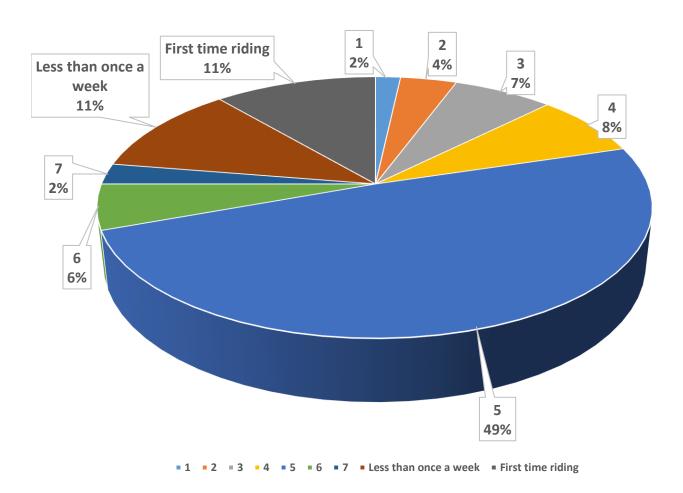
50% of riders marked that they use the commuter connector for "Convenience" and 27% of riders use it because "It's free".



### On average, how many days a week do you ride the bus?

### **Key Findings**

About 49% of riders selected that they use the commuter bus services "5" days a week. Most riders who selected the "Less than once a week" and "First time riding" options were riders on the Fort Lauderdale Airport (FLA-1) and the Palm Beach International Airport (WPB-1) routes.



### Have you used or will you use Tri-Rail during any part of your trip?

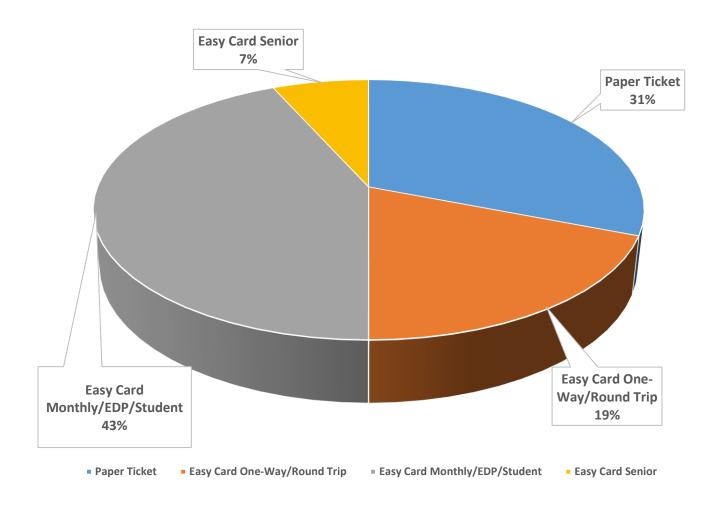
Yes - 86%

No - 14%

### If you use Tri-Rail what type of fare product do you use?

### **Key Findings**

Around 43% of riders selected that they use the "Easy Card Monthly/EDP/Student". About 32% of riders selected the "Paper Ticket" option. Most of the riders that chose "Paper Ticket" were the riders on Tri-Rail's airport routes FLA-1 and WPB-1. Only 19% riders selected that they use the "Easy Card One-Way/Round Trip".



If Tri-Rail's Commuter Connector bus service did not operate as a wave and ride and instead dropped off passengers at fixed stop locations along the route, would that be an inconvenience to you?

Yes - 43%

 $N_0 - 57\%$ 

#### **Key Findings**

For riders that selected "Yes", some common reasons provided were as follows:

- "would not stop at my school"
- "faster with wave and ride"
- "I would have to walk longer to my job"
- "a fixed stop may not be by my office"
- "wave and ride is faster"

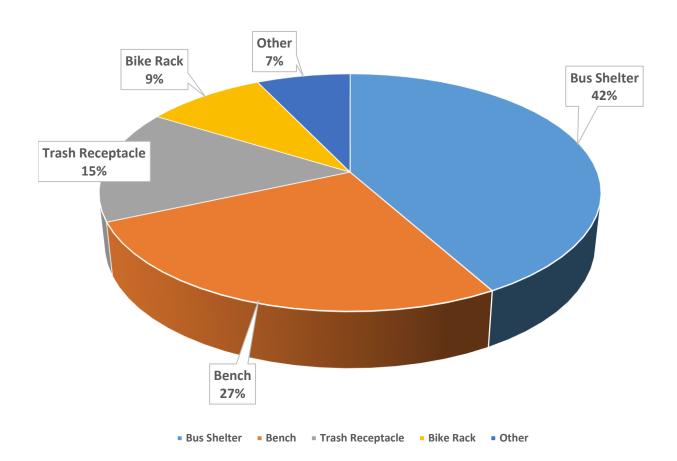
For riders that selected "No", some common reasons provided were as follows:

- "it should do that now"
- "it depends on fixed stop location"
- "it should stop only at designated stops"
- "it should not stop to drop off passengers before the train station"

# What type of transit amenities would you like to see at your bus pick up/drop off location?

#### **Key Findings**

About 42% of riders would like to see a "Bus Shelter" at their bus pick/up drop off location. 27% would like to see a "Bench", 15% selected a "Trash Receptacle", and 9% would like to see a "Bike Rack". For the "Other" category, the most popular comment was the need to have bathrooms at the train stations.



# Please circle the three (3) most important improvements needed to Tri-Rail's Commuter Connector bus service:

- 1. Buses arriving on time at your bus pick-up/drop-off location (22%)
- 2. Real time tracking (Tri-Rail Tracker) information for bus timeliness (19%)
- 3. More frequent bus service (15%)
- 4. Need for Tri-Rail signage at you bus pick-up/drop-off location (11%)
- 5. Availability of route schedule/map information (8%)
- 6. Responsiveness to concerns and complaints (7%)
- 7. Need for transit amenities at your bus pick-up/drop-off location (6%)
- 8. Improved on-board announcements (5%)
- 9. Bus service to new areas (5%)
- 10. Americans with Disabilities Act (ADA) accessibility at your bus pick-up/drop-off location (3%)

#### Examples of Additional Feedback:

<sup>&</sup>quot;Excellent for short trips"

<sup>&</sup>quot;Great job"

<sup>&</sup>quot;Glad service is available"

<sup>&</sup>quot;No complaints"

<sup>&</sup>quot;Love the routes and people working for this service"

<sup>&</sup>quot;Only had one complaint last month: Buses were not in sync with late train

<sup>&</sup>quot;Bus really needs to be on time"

<sup>&</sup>quot;Keep the bus drivers on time, throw people who are making a scene off the bus"

#### **MAJOR FINDINGS**

Collectively, key findings are as follows:

#### **General Trip Information**

More than half of the riders utilize the Tri-Rail Commuter Connector bus service to get to their place of employment. About half of the riders, ride the bus 5 days a week. Most of the riders, about 86%, are Tri-Rail riders and about 43% have an Easy Card/Monthly/EDP/Student. Convenience and no bus fares are the top two reasons that riders use the Commuter Connector service. Bus Shelters and Benches are the top two transit amenities that the bus riders would like to see at their bus pick-up drop off location. More than half of the riders stated that they would not be inconvenienced if the Commuter Connector operated as "fixed stop" instead of as a "wave and ride" system.

#### Satisfaction with the Commuter Bus Service

Overall, most of the riders are satisfied with SFRTA's commuter bus services. Some positive feedback given regarding the commuter bus services was "this service is excellent for short trips and a good connection to their place of employment" and "they like the routes and people working for this service". In terms of needed improvements to the commuter bus system, the top three choices selected were 1) Buses arriving on time at bus pick-up/drop-off locations 2) Real time tracking (Tri-Rail Tracker) information for bus timeliness and 3) More frequent bus service.

Appendix A – Survey Instrument



### How Are We Doing?

SFRTA/Tri-Rail is conducting a public opinion survey to evaluate the quality of our commuter connector bus services. You can help by filling out this survey. Please print clearly. Return the <u>completed</u> survey to SFRTA staff before leaving the bus. Your responses will remain confidential. THANK YOU for your participation. Your opinion is important to us!

General Trip Information		
1. What is the purpose of your trip tod	ay?	
□ Work	□ Home	☐ Shopping
☐ Social/Recreation	☐ School/University	☐ Airport
□ Other		
2.Why did you use Tri-Rail's Commute	r Connector bus service today?	
☐ Convenience	☐ It's free	☐ Avoid traffic
☐ No other option available	☐ Other	
3.On average, how many days a week	do you ride the bus?	
□1 □2 □3 □4 □5 □6 □7	☐ Less than once a week ☐ First time	e riding
4. Have you used or will you use Tri-Ra	il during any part of your trip today?	
☐ Yes   ☐ No		
If you use Tri-Rail, what type of fare p	roduct do you use?	
☐ Paper Ticket	☐ Easy Card One-Way/Round Trip	☐ Easy Card
Monthly/EDP/Student		
☐ Easy Card Senior		
	s service did not operate as a wave & ride	
dropped off passengers at fixed stop lo	ocations along the route, would that be ar	n inconvenience to you?
☐ Yes   ☐ No		
If Yes, please explain why		
6. What type of transit amenities wou	d you like to see at your bus pick-up/drop	o-off location?
☐ Bus Shelter	☐ Bench	☐ Trash Receptacle
☐ Bike Rack	☐ Other	

7. Please circle the three (3)	most important improveme	ents needed to Tri-R	ail's Commuter Co	onnector bus
service:				

- 1. Buses arriving on time at your bus pick-up/drop-off location
- 2. Need for Tri-Rail signage at your bus pick-up/drop-off location
- 3. Need for transit amenities at your bus pick-up/drop-off location
- 4. Improved On-board bus announcements
- 5. Americans with Disabilities Act (ADA) accessibility at your bus pick-up/drop-off location
- 6. Responsiveness to concerns or complaints
- 7. Availability of route schedule/map information
- 8. Real-time tracking (Tri-Rail Tracker) information for bus timeliness
- 9. Bus service to new areas:
- 10. More frequent bus service

Additional Feedback	
Please list any other comments regarding Tri-Rail's Commuter Connector bus service.	

# Appendix 8 2018 Tri-Rail On-Board Survey Draft











- 2018 -----

# TRI-RAIL ON-BOARD SURVEY

Final Report August 2018

**DRAFT** 

Prepared by:

JACOBS®





#### **TABLE OF CONTENTS**

EXECUTIVE SUMMARY	ES-1
1.0 INTRODUCTION	1
1.1 Tri-Rail System	1
1.2 Scope of the Survey Effort	3
1.3 Previous Tri-Rail On-Board Surveys	3
2.0 SURVEY DESIGN AND METHODOLOGY	4
2.1 Sampling Plan	4
2.2 Survey Instrument	5
2.3 Survey Pretest	7
2.4 Minimization of Non-Response Bias	7
3.0 SURVEY IMPLEMENTATION	9
3.1 Staff and Supervisor Training	9
3.2 Implementation of the On-Board Survey	9
4.0 SURVEY RESULTS AND DATA ANALYSIS	11
4.1 Survey Response	11
4.2 Passenger Counts	12
4.3 Raw Data Input	16
4.4 Data Editing and Processing	16
4.5 Trip Purpose and Access/Egress Modes	16
4.6 Station Origin-Destination Analysis	22
4.7 Non-Station Origin-Destination Results	26
4.8 Other Survey Question Results	55
4.9 Customer Opinions and Preferences	81
4.10 Parking Counts	86
4.11 Comparison with Previous Survey Efforts	87





#### **LIST OF TABLES**

Table 2-1: Survey Train Assignments	5
Table 4-1: Northbound Passenger Counts by Time of Day	12
Table 4-2: Southbound Passenger Counts by Time of Day	13
Table 4-3: Passenger Counts - Directional Splits	14
Table 4-4: Passenger Counts - Station Utilization	15
Table 4-5: Stations Ranked by Passenger Counts	15
Table 4-6: Trip Purpose to Tri-Rail by Station	17
Table 4-7: Mode of Station Access by Trip Purpose	18
Table 4-8: Mode of Access by Station	19
Table 4-9: Mode of Egress by Station	20
Table 4-10: Mode of Station Egress by Trip Purpose	21
Table 4-11: Trip Purpose from Tri-Rail by Station	22
Table 4-12: Control Totals - Southbound Trips	23
Table 4-13: Control Totals - Northbound Trips	23
Table 4-14: Expanded Origin-Destination Station Pairs (both directions)	25
Table 4-15: Response Rate Summary of Survey Questions	55
Table 4-16: Q1: I originally started this one-way trip at:	56
Table 4-17: Q3: To get to Tri-Rail I arrived by:	57
Table 4-18: Q6: I will leave the Tri-Rail station by:	58
Table 4-19: Q7a: Is this journey part of a round trip that you will make today?	59
Table 4-20: Q7b: If yes, please check all services that you will use on the return leg of the trip:	60
Table 4-21: Q8: I will finish this one-way trip at:	61
Table 4-22: Q10a: The fare I used for this one-way trip was: Fare	62
Table 4-23: Q10b: The fare I used for this one-way trip was: Fare Medium	63
Table 4-24: Q10c: The fare I used for this one-way trip was: Fare Type	64
Table 4-25: Q11: Are you traveling with other people that are not filling out the survey?	65
Table 4-26: Q12: I have been riding Tri-Rail:	66





Table 4-27: Q13a: I typically ride Tri-Rail: Times per Day	67
Table 4-28: Q13b: I typically ride Tri-Rail: Days per Week	68
Table 4-29: Q13c: I typically ride Tri-Rail: Days per Month	69
Table 4-30: Q15: I live/stay in South Florida:	70
Table 4-31: Q16: I am: Male or Female	71
Table 4-32: Q17: My age is:	72
Table 4-33: Q18: My race is best described as:	73
Table 4-34: Q19: Total vehicles own by people in my home:	74
Table 4-35: Q20: I could have traveled by car but chose to ride tri-rail instead:	75
Table 4-36: Q21: I have a driver's license	76
Table 4-37: Q22: I graduated:	77
Table 4-38: Q23: What is your current employment status?	78
Table 4-39: Q24: My household's total annual income is:	79
Table 4-40: Q25: I filled out another survey card earlier today:	80
Table 4-41: Response Rate Summary of Opinion Questions	81
Table 4-42: Likelihood to Recommend Tri-Rail	82
Table 4-43: Station Conditions	83
Table 4-44: Train Conditions	84
Table 4-45: Customer Service	85
Table 4-46: Station Parking Counts	86
Table 4-47: Comparison of Passenger Counts	87
Table 4-48: Comparison of Trip Length	88



#### 2018

## TRI-RAIL ON-BOARD SURVEY



#### LIST OF FIGURES

Figure 1-1: Tri-Rail System Map	2
Figure 4-1: Address/Intersection Origin Map for the Region	27
Figure 4-2: Address/Intersection Origin Map for Palm Beach County	28
Figure 4-3: Address/Intersection Origin Map for Broward County	29
Figure 4-4: Address/Intersection Origin Map for Miami-Dade County	30
Figure 4-5: Address/Intersection Destination Map for the Region	31
Figure 4-6: Address/Intersection Destination Map for Palm Beach County	32
Figure 4-7: Address/Intersection Destination Map for Broward County	33
Figure 4-8: Address/Intersection Destination Map for Miami-Dade County	34
Figure 4-9: Municipality Origin Map for the Region	35
Figure 4-10: Municipality Origin Map for Palm Beach County	36
Figure 4-11: Municipality Origin Map for Broward County	37
Figure 4-12: Municipality Origin Map for Miami-Dade County	38
Figure 4-13: Municipality Destination Map for the Region	39
Figure 4-14: Municipality Destination Map for Palm Beach County	40
Figure 4-15: Municipality Destination Map for Broward County	41
Figure 4-16: Municipality Destination Map for the Miami-Dade County	42
Figure 4-17: ZIP Code Origin Map for the Region	43
Figure 4-18: ZIP Code Origin Map for Palm Beach County	44
Figure 4-19: ZIP Code Origin Map for Broward County	45
Figure 4-20: ZIP Code Origin Map for Miami-Dade County	46
Figure 4-21: ZIP Code Destination Map for the Region	47
Figure 4-22: ZIP Code Destination Map for Palm Beach County	48
Figure 4-23: ZIP Code Destination Map for Broward County	49
Figure 4-24: ZIP Code Destination Map for Miami-Dade County	50
Figure 4-25: ZIP Code of Residence Map for the Region (Survey Question 14)	51
Figure 4-26: ZIP Code of Residence Map for Palm Beach County (Survey Question 14)	52





Figure	4-27:	ZIP Code of Residence Map for Broward County (Survey Question 14)	53
Figure	4-28:	ZIP Code of Residence Map for Miami-Dade County (Survey Question 14)	54
Figure	4-29:	Q1: I originally started this one-way trip at:	56
Figure	4-30:	Q3: To get to Tri-Rail I arrived by:	.57
Figure	4-31:	Q6: I will leave the Tri-Rail station by:	58
Figure	4-32:	Q7a: Is this journey part of a round trip that you will make today?	59
Figure	4-33:	Q7b: If yes, please check all services that you will use on the return leg of the trip:	60
Figure	4-34:	Q8: I will finish this one-way trip at:	61
Figure	4-35:	Q10a: The fare I used for this one-way trip was: Fare	62
Figure	4-36:	Q10b: The fare I used for this one-way trip was: Fare Medium	63
Figure	4-37:	Q10c: The fare I used for this one-way trip was: Fare Type	64
Figure	4-38:	Q11: Are you traveling with other people that are not filling out the survey?	65
Figure	4-39:	Q12: I have been riding Tri-Rail:	66
Figure	4-40:	Q13a: I typically ride Tri-Rail: Times per Day	67
Figure	4-41:	Q13b: I typically ride Tri-Rail: Days per Week	.68
Figure	4-42:	Q13c: I typically ride Tri-Rail: Days per Month	69
Figure	4-43:	Q15: I live/stay in South Florida:	.70
Figure	4-44:	Q16: I am: Male or Female	.71
Figure	4-45:	Q17: My age is:	.72
Figure	4-46:	Q18: My race is best described as:	.73
Figure	4-47:	Q19: Total vehicles own by people in my home:	.74
Figure	4-48:	Q20: I could have traveled by car but chose to ride tri-rail instead:	.75
Figure	4-49:	Q21: I have a driver's license	.76
Figure	4-50:	Q22: I graduated:	.77
Figure	4-51:	Q23: What is your current employment status?	.78
Figure	4-52:	Q24: My household's total annual income is:	.79
Figure	4-53:	Q25: I filled out another survey card earlier today:	.80





#### LIST OF APPENDICES

APPENDIX A – FULL TRI-RAIL OPERATING SCHEDULE

APPENDIX B – SURVEY INSTRUMENT (ENGLISH, SPANISH, AND CREOLE)

APPENDIX C – SURVEY STAFF TRAINING MANUAL/PRESENTATION

APPENDIX D – SAMPLE SURVEY LOG AND COUNT FORMS

APPENDIX E – ALL DAY PASSENGER DOOR COUNTS



#### **EXECUTIVE SUMMARY**

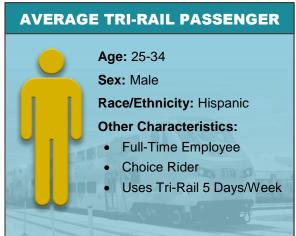
#### **Background**

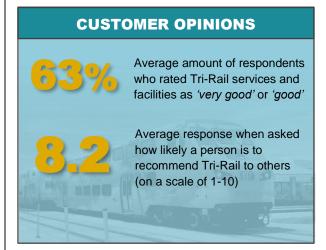
The South Florida Regional Transportation Authority (SFRTA) regularly conducts On-Board Passenger Surveys for its Tri-Rail trains at least once every five years or when major service changes occur. Data from these On-Board Survey efforts is critical to SRFTA planning initiatives. It is used to inform the agency's Transit Development Plan (TDP) updates, develop new service expansion scenarios, improve existing Tri-Rail service, and contribute to regional travel demand models for use by multiple transportation partners throughout South Florida.

On Wednesday, January 17, 2018, SFRTA conducted its most recent On-Board Survey. It consisted of distributing paper questionnaires in three languages to collect information about travel patterns, socioeconomic characteristics, and opinions on Tri-Rail service. It also included collecting passenger counts and parking counts at each Tri-Rail station.

#### **Summary of Survey Results**













### 1.0 INTRODUCTION

In late 2017 the South Florida Regional Transportation Authority (SFRTA) contracted with Jacobs Engineering Group Inc. to assist the agency with carrying out an On-Board Survey effort for its Tri-Rail passenger trains. The SFRTA conducts On-Board Surveys at least once every five years to be consistent with Federal Transit Administration (FTA) guidance. The most recent SFRTA On-Board Survey prior to this effort was conducted in 2013. As a result, SFRTA and Jacobs designed and implemented an updated On-Board Tri-Rail Passenger Survey on Wednesday, January 17, 2018.

The purpose of the 2018 On-Board Survey was to collect updated travel pattern data and feedback from Tri-Rail passengers. The collected data will be used to improve Tri-Rail service and inform multiple SFRTA planning initiatives, most importantly, the FY 2019-2028 Major Update to the agency's Transit Development Plan (TDP).

The 2018 On-Board Survey included three main areas of data collection on the day of the survey: on-board passenger counts of boardings (those getting on the train) and alightings (those getting off of the train) at each Tri-Rail station; parking utilization counts at each Tri-Rail station; and a paper survey questionnaire offered to passengers, which asked about various travel patterns, socioeconomic characteristics, and opinions about Tri-Rail service. The goal of the effort was to have every Tri-Rail passenger complete a survey questionnaire for every trip completed during the survey period.

#### 1.1 Tri-Rail System

The SFRTA is the public transit agency that owns, operates, and maintains the Tri-Rail commuter rail system, along with a fleet of Commuter Connector buses which connect Tri-Rail stations with key activity centers and other transit services. Tri-Rail service currently operates along more than 70 miles of the South Florida Rail Corridor (SFRC) from the Town of Mangonia Park in northern Palm Beach County to the Miami Intermodal Center at the Miami International Airport. As shown in Figure 1-1 below, the Tri-Rail system serves 18 stations including three with connections to major international airports. The SFRTA also currently operates 19 different Commuter Connector routes providing service to/from 11 different Tri-Rail stations to provide passengers with more options for making first/last-mile connections between Tri-Rail service and nearby activity centers.

On weekdays, Tri-Rail operations run approximately 50 trains beginning service at 4:00 am and ending service at 11:35 pm. On weekends and holidays, Tri-Rail provides approximately 30 trains per day, beginning service at 5:17 am and ending services at 11:45 pm. The full Tri-Rail operating schedule at the time of this survey effort can be found in *Appendix A* of this report.



Figure 1-1: Tri-Rail System Map







#### 1.2 Scope of the Survey Effort

The scope of the 2018 On-Board Survey consisted of developing the methodology for the survey, developing the survey instrument and forms needed for collecting data, training necessary staff, implementing the one-day survey, digitizing all data collected to create a master database, editing and processing survey data for analysis, analyzing the results, comparing to previous survey data, and documenting the results. The final product for the 2018 On-Board Survey is the master database of information collected during the survey, along with this final report containing the compiled tables, maps, and graphs showing the results of the data collection and analysis process.

#### 1.3 Previous Tri-Rail On-Board Surveys

The SFRTA conducted an On-Board Survey in March 2007 in preparation for its FY 2009-2018 TDP Major Update. Shortly after, in October 2008, the agency conducted another On-Board Survey to capture data as a result of operational changes and to help calibrate the Southeast Florida Regional Planning Model (SERPM). Finally, in February 2013 the agency conducted its most recent On-Board Survey. The scope of the 2018 On-Board Survey was intentionally kept similar to that of the 2013 On-Board Survey so that results from both could be directly compared, and because Tri-Rail operations have not changed significantly since 2013. As such, the methodology and survey instruments from previous survey efforts were analyzed and used as a starting point for the 2018 On-Board Survey, with modifications being made as necessary or beneficial to the survey effort.





### 2.0 SURVEY DESIGN AND METHODOLOGY

In developing the approach and methodology for conducting the 2018 On-Board Survey, the survey team reviewed the methodology used for the 2007, 2008, and 2013 On-Board Surveys, as well coordinated with SFRTA Operations to determine the best manner to conduct the survey so as to avoid complications and best use available resources.

#### 2.1 Sampling Plan

After determining that Tri-Rail operations were similar to those when the On-Board Survey was conducted in 2013, it was decided to use a similar sampling approach. The sampling plan for the 2018 On-Board Survey was designed to cover every Tri-Rail train in service on Wednesday, January 17, 2018 from 4:00 am when service begins until 2:00 pm. This sample of passengers ensured that at least the first leg of round trips made on Tri-Rail that day would be covered by the survey. Further, considerations were made to ensure that January 17 was a typical weekday for Tri-Rail, and that no major holidays or school breaks would fall on this day.

The full Tri-Rail operating schedule used to develop the survey sampling plan can be found in *Appendix A*. Table 2-1 below shows the trains covered by the survey and the schedule that was used to determine staffing assignments.

Note that due to unexpected circumstances on the day of the survey, the actual trains surveyed differ slightly from the original sampling plan described above. In actuality, the 2018 On-Board Survey covered all Tri-Rail trains which began service at or before 3:00 pm with the exception of train 612. This deviation from the sampling plan was a result of unexpected schedule delays caused by a track obstruction in West Palm Beach on the morning of the survey. To eventually make up for the delays, Tri-Rail Operations started train 612 at the Opa-Locka Station instead of the Miami Airport Station where the survey crew was waiting. Thus, train 612 was unable to have a survey crew. Once the train schedule was recovered, several survey crews needed to take an additional train back to the terminal stations where they had parked. They continued to implement the survey along the way, and effectively extended the planned survey period by roughly one hour.

As shown in Table 2-1, all trains during the survey period contained a survey crew appropriate for the number of train cars. Tri-Rail currently operates a combination of three- and four-car train sets, which were staffed with a survey crew consisting of:

- Two door counters for each train car (one for each door),
- Two survey questionnaire administrators for each train car (one for each level), and
- One train captain for each train.



# TRI-RAIL ON-BOARD SURVEY

To fill all roles for the survey, each three-car train set required a survey crew of 13 people and each four-car train set required a survey crew of 17 people. Additionally, there was one station captain at each of the two terminal stations, Mangonia Park at the northern end and the Miami Airport at the southern end. Half of the survey staff reported to each terminal station, and eventually returned to that station once their shift had ended.

**Table 2-1: Survey Train Assignments** 

Table 2-1: Survey Train Assignments							
SB	NB	SB	NB	SB	NB		
	600	611					
	4:15 - 6:05 AM	6:40 - 8:35 AM					
601	610						
4:00 - 5:50 AM	6:20 - 8:15 AM						
	602	613	618	625	628**		
	4:45 - 6:40 AM	7:00 - 8:55 AM	9:20 - 11:20 AM	12:00 - 2:00 PM	2:20 - 4:20 PM		
603	612*						
4:40 - 6:35 AM	7:00 - 8:55 AM						
	604	615					
	5:10 - 7:05 AM	7:30 - 9:25 AM					
605	614	621	624	631**			
5:20 - 7:15 AM	7:40 - 9:35 AM	10:00 - 12:00 PM	12:20 - 2:20 PM	3:00 - 5:02 PM			
	606	617	620	627			
	5:35 - 7:35 AM	8:00 - 9:55 AM	10:20 - 12:20 PM	1:00 - 3:00 PM			
607	616	623	626				
6:00 - 7:55 AM	8:20 - 10:20 AM	11:00 - 1:00 PM	1:20 - 3:20 PM				
	608	619	622	629			
	6:00 - 7:55 AM	9:00 - 11:00 AM	11:20 - 1:20 PM	2:00 - 4:02 PM			
609							
6:20 - 8:15 AM							

<sup>\*</sup> Train did not have a survey crew due to operational changes on day of survey

### 2.2 Survey Instrument

The questions comprising the survey instrument were based on the previous On-Board Survey instruments to ensure that data gathered could be compared with previous results to identify trends and changes in travel behavior to the greatest extent practicable. The survey instrument was reviewed with SFRTA to ensure that existing questions were still relevant, update response options to be consistent with Tri-Rail operational procedures, and add new questions that were desired for SFRTA



<sup>\*\*</sup> Train was added to survey period on the day of survey due to operational changes

# TRI-RAIL ON-BOARD SURVEY

planning purposes. Once the survey instrument was finalized, it was translated into a Spanish and Creole version to maximize responses and provide opportunities for those passengers with limited English proficiency to participate in the On-Board Survey. Each survey questionnaire had an English version on one side and Spanish version on the back, with separate Creole questionnaires provided to each survey crew to be given out as needed.

The final survey instrument contained questions divided into categories, asking passengers for information about travel patterns for the one-way trip, socioeconomic characteristics, and satisfaction with different aspects of Tri-Rail service and facilities. Questions were ordered so that the most important information sought from the On-Board Survey were placed at the beginning of the questionnaire, and the most critical questions, those related to the origin and destination of the one-way trip, being placed in boxes so that they stood out. Passengers were encouraged to complete the entire questionnaire, but, if not possible in all cases, were told that the questions in the boxes should be completed at a minimum.

Questions related to travel patterns included:

- Origin and destination of trip,
- · Purpose of trip,
- · Mode of station access and egress,
- · Boarding and alighting station, and
- Fare type used.

Questions related to socioeconomic characteristics included:

- Typical Tri-Rail usage,
- Visitor, full-time, or part-time resident,
- ZIP code of residence.
- Gender,
- Age,
- Race,
- Vehicle ownership and availability,
- Driver's license status,
- Education level,
- · Employment status, and
- Household income.

Questions related to customer satisfaction and opinions included:





- Likelihood to recommend Tri-Rail to others,
- Station conditions,
- Train conditions,
- Customer service, and
- Additional comments.

The survey questionnaires were printed, and each was given a unique serial number. This number was then linked to the train on which the survey questionnaire was distributed so that the information could be cross referenced and verified during the data analysis if necessary.

The copy of the final survey instrument in all three languages can be found in Appendix B of this report.

#### 2.3 Survey Pretest

A small-scale survey pretest was conducted on the morning of Thursday, November 2, 2018 to ensure no changes were necessary to the survey instrument prior to printing all copies and implementing the full On-Board Survey. Two survey team members rode train 618 from the Deerfield Beach to Lake Worth stations, and then returned on train 623. Along the way in both directions they approached passengers, offered them a copy of the survey instrument to complete, and helped with any questions or difficulties. A total of 30 passengers were asked to participate in the pretest, and of those, 16 agreed to complete a survey questionnaire.

Most of the surveys were fully completed without problem, and no difficulties with the questions were reported by Tri-Rail passengers. Upon further review, however, it was noticed that a few had misunderstood the instructions about providing information only for the current *one-way* trip when asked origin and destination questions. As a result, and because this is a commonly confused aspect of On-Board Surveys, an effort was made during the staff training sessions to reinforce this instruction when distributing and collecting surveys to avoid receiving data on *round-trips* instead.

#### 2.4 Minimization of Non-Response Bias

Non-response bias occurs in surveys when a data sample is not representative of the sampled population because of lack of participation amongst specific groups. In such cases, observed results can differ from the general population because of the differences between respondents and non-respondents. The survey methodology and questionnaire development process for the 2018 On-Board Survey included multiple steps to maximize the response rate and ensure that all Tri-Rail passengers were encouraged to participate in the On-Board Survey. These steps to minimize non-response bias and, as summarized below, can broadly be categorized into encouraging participation prior to the survey and encouraging responses during the survey implementation.



Encouraging Participation and Staff Training Efforts Prior to the Survey:

- The survey was advertised ahead of time via multi-lingual announcement at station platforms.
- Questions were thoroughly reviewed by multiple parties to ensure they were worded to be understood by a variety of people.
- A pretest was conducted amongst actual Tri-Rail passengers to ensure that questionnaires were easy to understand and complete.
- Staff was asked to be enthusiastic about the survey while assisting with the survey distribution and collection.
- Staff was trained in filling out the survey questionnaire and encouraging passengers to complete the survey in full.
- Staff was asked to not accept the first refusal to fill out the survey questionnaire, and was trained with responses to encourage reluctant passengers to participate.
- Staff was ethnically diverse with a high number of multi-language participants, and was made aware of three languages of the survey instrument (English, Spanish and Creole).
- Staff was provided with matching aprons so that they could be easily identified by passengers.
- Staff observed to be more outgoing and ambitious were selected to distribute and collect survey questionnaires to increase participation.

#### Encouraging Responses and Survey Quality Control During the Survey:

- Staff was encouraged to help riders fill out the survey to increase response rates.
- Train captains also circulated throughout the train cars to answer questions and further assist the staff in improving the passenger response rate.
- Staff reviewed survey questionnaires when returned to them for incomplete or incorrect responses, and asked the passengers to correct certain responses.
- Station captains and management staff at each end of the line helped assist survey staff and make sure that all trains were staffed with available resources.
- Train captains analyzed completed survey questionnaires and discussed issues with the staff during the trips, offering advice on improving responses from riders.
- Station captains analyzed completed survey questionnaires and discussed issues with the staff at the end of trips, offering advice on improving responses from riders.



#### 3.0 SURVEY IMPLEMENTATION

The execution of the 2018 On-Board Survey consisted of two major parts: training for the survey team and the implementation of the On-Board Survey itself, both of which took place during the third week of January 2018. All members of the survey team, which included temporary staff members and full-time employees of the SFRTA and consultant firms, participated in a roughly three-hour training session prior to assisting in the collection of data from Tri-Rail passengers.

#### 3.1 Staff and Supervisor Training

On Tuesday, January 16, 2018, the day before the On-Board Survey, two identical training sessions were offered at the SFRTA offices located at 801 NW 33<sup>rd</sup> Street in Pompano Beach, Florida. All team members participating in the On-Board Survey, regardless or role or experience, were required to attend either the morning or afternoon training session. Survey staff were given daily Tri-Rail passes and encouraged to take the train to their training session so that they would be familiar with system prior to the training and the survey day.

The training session consisted of a PowerPoint presentation, interactive role playing exercises, and multiple opportunities for questions and answers. Each team member was given a training manual, a copy of the survey questionnaire, and a Tri-Rail train schedule. The training allowed all survey staff to become familiarized with the goals and objectives of the survey, the different roles they would be asked to play, strategies for successful implementation, safety procedures, behavioral expectations, and logistical details necessary on survey day.

A copy of the PowerPoint presentation used during the training sessions can be found in *Appendix C* of this report.

#### 3.2 Implementation of the On-Board Survey

The 2018 On-Board Survey was conducted on Wednesday, January 17. Based on assignments, survey team members reported to either the northern terminus station at Mangonia Park or the southern terminus station at the Miami Airport. They arrived a half-hour prior to the scheduled departure of their first train to sign in with the station captain and received the necessary supplies for the survey implementation.

Survey staff were assigned to either a door counter role or a surveyor role, before joining their train captain to receive last-minute instructions and a designated spot on each train car. Door counters were posted by each train car door, and counted the passengers boarding and alighting the train through that door at each station. They then recorded the information on their log forms throughout the trip. Surveyors each received an envelope with a pre-counted number of blank survey questionnaires based on anticipated passenger loads for each train. They circulated throughout their



# TRI-RAIL ON-BOARD SURVEY

designated section of the train car, and once passengers were seated after boarding at each station, made an announcement about the survey and the availability of versions in multiple languages. Surveyors then distributed questionnaires and pencils to new passengers, assisted with any questions as needed, and collected and checked completed surveys before placing them in a separate envelope. Surveyors actively engaged with as many passengers as possible and used techniques learned during the training session to encourage as many completed questionnaires as possible. Surveyors also kept a log of the number of questionnaires distributed on each trip. Train captains circulated throughout the train cars during the trip providing additional supplies and answering questions from both the survey team and passengers. At the end of each trip, train captains collected questionnaires and log forms from the survey team, and provided them to the station captain who then distributed a new set up log forms and blank questionnaires for the upcoming trip. Each group had a platform meeting after every trip to discuss any problems that had occurred, unexpected questions, and potential strategies for improvement.

Each survey staff member made at least one round-trip journey as a part of the survey process, eventually returning to the station where they had reported that morning. Most completed two round trips before completing their shift for the day.

As a result of a broken down automobile on the southbound track 50 feet north of Old Okeechobee Road near the West Palm Beach station, Tri-Rail train service at one point fell to nearly an hour behind schedule on the morning of the On-Board Survey, beginning with train 603. The broken down automobile was eventually removed by a tow truck, and Tri-Rail Operations was eventually able to fully recover the schedule by mid-morning. One of the strategies employed to accomplish this, however, involved bringing train 612 directly from the Hialeah Maintenance Yard for a northbound run without first going south to the Miami Airport Station. As a result, the survey team waiting at the Miami Airport was not able to board 612. The surveyors instead boarded the next available northbound train, which caused each successive survey group to be on a later train than originally scheduled. The eventual effect for the survey effort was that the last two survey groups (one in each direction) had to take a later train back to their starting station, neither of which had originally been planned to be a part of the On-Board Survey. Due to the train schedules at the time of day when the survey ended, the track obstruction delay effectively extended the survey period by roughly one additional hour and two additional trains (628 and 631), and caused one train (612) to make a trip without a survey crew.



### 4.0 SURVEY RESULTS AND DATA ANALYSIS

Immediately after the survey implementation, all completed survey questionnaires, data logs, and count forms were promptly scanned to create digital PDF copies of all data collected. These digital copies were then used to begin the data entry, processing, tabulation, and analyses described further in the sections below.

#### 4.1 Survey Response

The survey response rate is used to determine the percentage of passengers that participated in the survey during the period in which it occurred. On the day of the On-Board Survey, a total of 14,769 passengers boarded all Tri-Rail trains while in service.

The thirty Tri-Rail trains that started service at or before 3:00 pm (shown in Figure 2-1), on which survey questionnaires were offered during the survey period, received a total of 8,252 passengers (3,873 northbound and 4,379 southbound). During this survey period, staff collected a total of 3,366 survey questionnaires. This period of the day will be referred to the 'morning period' whereas the remainder of the service day is referred to as the 'evening period.'

The response rate for the survey period is calculated as follows:

Response Rate % = Completed Surveys / Passenger Counts

Response Rate % = 3,366 / 8,252

The response rate for the 2018 On-Board Survey is therefore 41%

The overall 2018 On-Board Survey response rate indicates that 41% of all passengers during the survey period returned a survey questionnaire. Not all of these survey questionnaires, however, were fully completed. Therefore, the accuracy of the survey questions for being statistically representative of all Tri-Rail passengers on the day of the survey differs slightly for each question depending on the number of responses to that particular question. In general, to achieve a margin of error of +/- 3% at a 95% confidence level, a standard level of acceptable statistical accuracy, for a population size of roughly 15,000 Tri-Rail passengers, a given question would require a sample size of roughly 1,000 responses. This means that if 1,000 responses are provided, then 95% of the time the survey questionnaire response will be three percentage points above or below what the actual answer would be from any given Tri-Rail passenger on the day of the survey. Information related to response rates for individual survey questions is provided in greater detail in sections 4.8 and 4.9, but overall, no question in the 2018 On-Board Survey received less than 1,000 responses.





#### 4.2 Passenger Counts

Passengers counts of all boardings and alightings recorded for all Tri-Rail trains were summarized for the day of the survey. A total of 14,769 passenger-trips were taken on Tri-Rail with 7,449 northbound trips (Table 4-1) and 7,320 southbound trips (Table 4-2). As shown in Table 4-5, the five busiest stations in the Tri-Rail system for both northbound and southbound service are West Palm Beach, Mangonia Park, Boca Raton, Cypress Creek, and Miami Airport.

Table 4-1: Northbound Passenger Counts by Time of Day

Ctation	All	Total	Total	A	AM		M
Station	Activity	Boardings	Alightings	Boardings	Alightings	Boardings	Alightings
Miami Airport	1,065	1,065	0	393	0	672	0
Hialeah Market	227	227	0	94	0	133	0
Metrorail Transfer	1,016	1,006	10	367	1	639	9
Opa-Locka	298	247	51	137	7	110	44
Golden Glades	641	504	137	317	46	187	91
Hollywood	724	449	275	265	114	184	161
Sheridan Street	419	247	172	150	70	97	102
FLL at Dania Beach	894	502	392	236	170	266	222
Ft. Lauderdale	874	522	352	308	159	214	193
Cypress Creek	1,045	542	503	309	244	233	259
Pompano Beach	683	336	347	208	163	128	184
Deerfield Beach	755	368	387	232	195	136	192
Boca Raton	1,214	540	674	274	467	266	207
Delray Beach	772	376	396	280	200	96	196
Boynton Beach	765	314	451	274	173	40	278
Lake Worth	970	187	783	165	309	22	474
West Palm Beach	1,479	17	1,462	16	921	1	541
Mangonia Park	1,057	0	1,057	0	786	0	271
Total:	14,898	7,449	7,449	4,025	4,025	3,424	3,424





Table 4-2: Southbound Passenger Counts by Time of Day

04.41	All	Total	Total	A	M	PM	
Station	Activity	Boardings	Alightings	Boardings	Alightings	Boardings	Alightings
Mangonia Park	1,038	1,038	0	349	0	689	0
West Palm Beach	1,184	1,142	42	499	12	643	30
Lake Worth	952	769	183	456	56	313	127
Boynton Beach	818	486	332	295	75	191	257
Delray Beach	759	429	330	234	100	195	230
Boca Raton	1,452	851	601	217	300	634	301
Deerfield Beach	645	384	261	195	115	189	146
Pompano Beach	710	377	333	177	158	200	175
Cypress Creek	1,054	574	480	241	224	333	256
Ft. Lauderdale	810	360	450	222	189	138	261
FLL at Dania Beach	863	378	485	217	229	161	256
Sheridan Street	370	145	225	85	89	60	136
Hollywood	617	257	360	172	157	85	203
Golden Glades	524	74	450	50	186	24	264
Opa-Locka	303	51	252	44	134	7	118
Metrorail Transfer	905	4	901	2	555	2	346
Hialeah Market	240	1	239	1	149	0	90
Miami Airport	1,396	0	1,396	0	728	0	668
Total:	14,640	7,320	7,320	3,456	3,456	3,864	3,864

Table 4-3 summarizes information on the direction of travel and peak loads derived from the counts. The data shows the direction of travel across the day to be relatively evenly split between the northbound and southbound directions. In the morning period, 54% of the trips are northbound and 47% of the trips are southbound.





**Table 4-3: Passenger Counts - Directional Splits** 

Total Boardings: 14,769								
Total AM E	Boardings: 7,481	Total PM Boardings: 7,288						
AM Northbound 4,025 (54%)	AM Southbound 3,456 (46%)	PM Northbound 3,424 (47%)	PM Southbound 3,864 (53%)					
Total Northbou	nd Boardings: 7,449	Total Southb	ound Boardings: 7,320					
AM Northbound 4,025 (54%)	PM Northbound 3,424 (46%)	AM Southbound 3,456 (47%)	PM Southbound 3,864 (53%)					
Heaviest	NB Train: 608	Heavie	est SB Train: 633					
Arriving at Mang	iami Airport at 6:00 AM gonia Park at 7:55 AM Fotal Boardings	Departing from Mangonia Park at 3:30 PM Arriving at Miami Airport at 5:32 PM with 650 Total Boardings						
Northbound	Peak Load: 457	Southbound Peak Load: 455						
On Train 608	Departing Lake Worth	On Train 633	Departing West Palm Beach					

Consistent with the results of the previous survey conducted in 2013, the northbound train carrying the heaviest passenger volume is Train 608 which departs Miami Airport at 6:00 am and carried 685 passengers. The peak load across all northbound trains occurred on Train 608 as it carried 457 passengers arriving at West Palm Beach Station (departing from Lake Worth Station). The peak load point was also approaching West Palm Beach for the second busiest northbound train (610) serving 567 passengers; however, the location of the peak passenger load tended to be further south across the rest of the northbound morning period trains.

The heaviest southbound train, Train 633 departing from Mangonia Park at 3:30 pm, was also unchanged from the previous survey. The peak load across all southbound trains occurred on Train 633 as it carried 455 passengers departing from West Palm Beach Station (arriving at Lake Worth Station). For southbound trains during the morning period, the location of the peak passenger load varied across trains occurring between Delray Beach and Hollywood.

Table 4-4 shows the heaviest utilized stations by direction of service and period of the day. In the morning period, Miami Airport and West Palm Beach saw the most activity in terms of boardings and alightings. In the evening period, Mangonia Park served the most southbound boardings while West Palm Beach saw the greatest number of alightings.



# TRI-RAIL ON-BOARD SURVEY

**Table 4-4: Passenger Counts - Station Utilization** 

Heaviest Al	M Boardings	Heaviest PM Boardings			
Northbound	Southbound	Northbound	Southbound		
Miami Airport 393	West Palm Beach 499	Miami Airport 672	Mangonia Park 689		
Heaviest Al	M Alightings	Heaviest PM Alightings			
Northbound	Southbound	Northbound	Southbound		
West Palm Beach	Miami Airport	West Palm Beach	Miami Airport		
921	728	541	668		

The percent of all daily boardings served by any one station is between 2% and 10% as shown in Table 4-5. The Boca Raton Station achieves the greatest total boardings because of high utilization on both the origin (boarding) and destination (alighting) end of trips for travel in either direction.

**Table 4-5: Stations Ranked by Passenger Counts** 

Rank #	Station	Total Boardings	% of Total Boardings
1	Boca Raton	1,391	9%
2	West Palm Beach	1,159	8%
3	Cypress Creek	1,116	8%
4	Miami Airport	1,065	7%
5	Mangonia Park	1,038	7%
6	Metrorail Transfer	1,010	7%
7	Lake Worth	956	6%
8	Ft. Lauderdale	882	6%
9	FLL at Dania Beach	880	6%
10	Delray Beach	805	5%
11	Boynton Beach	800	5%
12	Deerfield Beach	752	5%
13	Pompano Beach	713	5%
14	Hollywood	706	5%
15	Golden Glades	578	4%
16	Sheridan Street	392	3%
17	Opa-locka	298	2%
18	Hialeah Market	228	2%
	Total:	14,769	100%



#### 4.3 Raw Data Input

Once the paper data sheets from the survey had been scanned, the next step was to enter all data fields collected into a compiled digital format that could be used to store, manipulate, cross-tabulate, and analyze the data. This was accomplished by creating a database in Microsoft Excel in which each row represents a completed survey questionnaire and each column represents a field of data collected. Each survey questionnaire was then manually entered into the Excel database.

Survey staff were trained to input raw data exactly as it appeared on survey questionnaires, including indicating data fields with no responses. A rigorous quality control process was followed during the data entry to ensure the integrity and accuracy of the results. Records were periodically spot checked by reviewers. If an excessive amount of errors were uncovered, batches of survey questionnaires were checked, corrected, and re-checked as many times a necessary.

#### 4.4 Data Editing and Processing

Next, the raw survey data was edited and post-processed so that it could be more readily and accurately used for tabulating and analyzing the results. This process involved standardizing all survey responses to account for inconsistencies in spelling or abbreviations. Survey responses received in Spanish and Creole also had to be changed to be consistent with the English version of the response so that results could be more easily calculated. The data was also cleaned for obvious errors and inconsistencies, such as outliers, incomplete responses, or illogical information. These data fields were corrected where possible using the original questionnaires, but in other cases, data fields or complete questionnaires were eliminated from certain analyses due to illogical responses.

#### 4.5 Trip Purpose and Access/Egress Modes

The information in the following tables (Table 4-6 through Table 4-11) is critical to SFRTA planning efforts and to understanding travel patterns. These tables summarize the survey results related to how passengers arrive to and leave specific Tri-Rail stations, as well as the purpose of their trip (general starting point and destination). This section contains a combination of the results to the following survey questions:

- Q1: Origin Location
- Q3: Mode of Station Access
- Q4: Boarding Station
- Q5: Alighting Station
- Q6: Mode of Station Egress
- Q8: Destination Location





Table 4-6: Trip Purpose to Tri-Rail by Station

Station	Work	Home	Shopping	Social / Recreational	Airport	School (K-12)	College / University	Other
Mangonia Park	19	161	1	11	0	2	1	19
West Palm Beach	32	144	2	8	5	7	6	21
Lake Worth	20	121	1	4	1	6	3	7
Boynton Beach	15	112	1	3	2	5	1	6
Delray Beach	9	98	3	6	1	3	0	5
Boca Raton	16	88	1	5	0	6	29	3
Deerfield Beach	11	85	1	3	0	4	1	4
Pompano Beach	14	74	0	3	0	2	4	3
Cypress Creek	21	114	2	6	1	1	2	4
Ft. Lauderdale	16	108	3	10	8	3	1	13
FLL at Dania Beach	15	47	1	2	71	1	1	5
Sheridan Street	4	62	0	1	0	0	1	5
Hollywood	26	91	1	2	2	3	6	8
Golden Glades	16	72	0	5	0	1	2	12
Opa-Locka	11	34	1	2	0	0	0	2
Metrorail Transfer	15	54	4	5	2	0	0	14
Hialeah Market	9	25	1	1	2	0	1	4
Miami Airport	39	44	1	5	130	0	6	6

The majority of Tri-Rail trips on the day of the On-Board Survey originated from passengers' homes. While there is no overwhelmingly dominant station for these, the home-based trips by origin station do tend to be concentrated on the northern end of the corridor. All stations that generated over 100 passengers coming from home are located at or north of the Ft. Lauderdale Station. Trips generating from work were next most common overall, and stations serving notable activity centers such as airports or universities show a noticeable bump for those specific trip purposes.





Table 4-7: Mode of Station Access by Trip Purpose

Mode	Work	Home	Shopping	Social / Recreational	Airport	School (K-12)	College / University	Other
Walking	49	107	1	5	36	4	7	13
Taxi	5	17	0	5	2	0	0	4
Rideshare (Uber, Lyft, etc.)	36	136	8	13	28	3	8	13
School Bus	1	4	0	2	0	5	0	0
Metrorail	9	21	1	5	18	0	1	6
Bike	22	68	1	2	3	2	1	1
Transit Bus	30	99	1	9	15	6	16	29
Tri-Rail Shuttle / Commuter Bus	11	23	1	3	52	0	6	7
Drove and Parked	73	572	2	11	19	4	10	17
Dropped Off	47	402	4	21	19	17	12	41
Other	6	10	2	1	17	0	0	2

The majority of trips to Tri-Rail stations were automobile-based, with passengers either driving and parking themselves or being dropped off. When the three modes of accessing Tri-Rail via transit (Transit Bus, Tri-Rail Shuttle, and Metrorail) are combined, they comprised the second most common way of arriving at a station. Interestingly, Rideshare services such as Uber and Lyft were the third most common mode of access, just behind walking. Ridesharing was not a transportation mode measured in the 2013 On-Board Survey, so it is difficult to determine exactly how fast it has grown in popularity over the past five years, but it does nonetheless currently hold a significant share of the passengers accessing Tri-Rail for almost all trip purposes.



**–** 2018 **–** 



**Table 4-8: Mode of Access by Station** 

Station	Walking	Taxi	Rideshare (Uber, Lyft, etc.)	School Bus	Metrorail	Bike	Transit Bus	Tri-Rail Shuttle / Commuter Bus	Drove & Parked	Dropped Off	Other
Mangonia Park	18	6	37	1	0	6	12	3	80	88	1
West Palm Beach	39	2	25	3	0	15	33	9	79	60	2
Lake Worth	19	4	22	4	0	17	24	6	55	51	0
Boynton Beach	14	1	16	0	0	7	7	1	72	62	0
Delray Beach	11	6	14	1	0	4	9	0	42	52	2
Boca Raton	10	1	14	6	0	5	19	6	40	60	1
Deerfield Beach	13	0	14	0	0	13	3	5	53	30	1
Pompano Beach	19	3	4	1	0	7	13	0	40	32	0
Cypress Creek	8	3	18	0	0	8	18	8	63	47	2
Ft. Lauderdale	11	2	21	1	0	7	12	16	68	50	0
FLL at Dania Beach	8	3	10	0	0	3	10	54	45	17	2
Sheridan Street	8	0	5	0	0	6	9	1	49	10	1
Hollywood	22	3	24	0	0	19	17	2	46	27	0
Golden Glades	12	6	17	2	0	2	39	1	27	29	1
Opa-Locka	12	0	5	0	0	7	4	2	15	13	0
Metrorail Transfer	12	0	11	1	45	4	14	4	16	17	1
Hialeah Market	6	1	7	1	2	4	4	0	22	9	2
Miami Airport	40	3	31	0	26	3	20	4	51	25	24



2018



Table 4-9: Mode of Egress by Station

Station	Walking	Taxi	Rideshare (Uber, Lyft, etc.)	School Bus	Metrorail	Bike	Transit Bus	Tri-Rail Shuttle / Commuter Bus	Parked Car	Picked Up	Other
Mangonia Park	12	0	17	53	0	8	9	3	13	45	7
West Palm Beach	102	3	19	2	0	11	34	7	19	33	8
Lake Worth	26	3	14	1	0	7	7	18	8	26	3
Boynton Beach	23	2	8	0	0	8	7	2	8	12	1
Delray Beach	27	1	15	1	0	7	15	8	3	15	3
Boca Raton	46	4	16	10	0	16	99	96	12	28	10
Deerfield Beach	37	1	17	1	0	14	6	15	11	17	2
Pompano Beach	25	4	17	0	0	13	20	16	16	25	2
Cypress Creek	55	2	17	1	0	11	28	59	17	30	4
Ft. Lauderdale	23	1	29	0	0	8	34	46	16	21	1
FLL at Dania Beach	35	1	11	0	0	6	21	84	18	11	4
Sheridan Street	16	2	3	0	0	6	5	4	10	9	9
Hollywood	29	0	16	1	0	11	13	1	13	13	2
Golden Glades	5	0	16	2	0	1	27	1	10	14	1
Opa-Locka	8	0	10	1	0	4	10	1	5	8	3
Metrorail Transfer	40	4	8	1	129	6	8	6	12	15	6
Hialeah Market	11	1	7	0	0	2	4	6	16	5	3
Miami Airport	119	8	48	0	32	6	22	16	40	19	28



Mode of accessing Tri-Rail by stations generally followed the same pattern as has been shown in previous On-Board Surveys with a majority of automobile-based trips at the northern end of the corridor. Walking, rideshare, and biking are more evenly distributed amongst the stations. Stations with the highest transit usage were those with connections to either Metrorail or major airports (MIA, FLL, or PBI). When removing those, the stations with the highest transit usage were Golden Glades, Lake Worth, and Ft. Lauderdale.

In terms of egress from Tri-Rail stations at the end of passengers' trips, the mode share is much more diverse in general. The highest number of trips walking from the station were at the Miami Airport and West Palm Beach, followed by Cypress Creek and Boca Raton. Again when accounting for the high transit connectivity at the Metrorail Transfer and airport stations, the highest amount of passengers taking transit from Tri-Rail occurred at the Boca Raton, Cypress Creek, and Ft. Lauderdale stations.

Table 4-10: Mode of Station Egress by Trip Purpose

Mode	Work Home		Shopping	Social / Recreational	Airport	School (K-12)		
Walking	256	66	10	16	96	38	15	26
Taxi	11	5	1	2	5	0	0	3
Rideshare (Uber, Lyft, etc.)	109	59	4	16	16	6	12	13
School Bus	4	3	0	0	0	47	9	1
Metrorail	77	14	1	5	14	0	6	12
Bike	65	18	0	3	2	1	8	7
Transit Bus	94	50	4	13	15	4	79	21
Tri-Rail Shuttle / Commuter Bus	167	26	2	6	73	7	23	5
Parked Car	101	65	2	0	17	3	7	4
Picked Up	88	82	7	27	12	11	4	41
Other	44	5	0	2	16	2	4	5

As a counterpart to the high number of home-based trips to Tri-Rail, the majority of trips from Tri-Rail on the day of the survey were to work. The most common mode of egress for these work trips was walking and Tri-Rail shuttle; however, rideshare also comprised a high number of trips. For those trips in which the destination was a college or university, transit represented a significant portion (just over 60%) of the mode share.





Table 4-11: Trip Purpose from Tri-Rail by Station

Station	Work	Home	Shopping	Social / Recreational	Airport	School (K-12)	College / University	Other
Mangonia Park	34	34	0	1	1	58	2	15
West Palm Beach	77	33	2	9	5	44	9	12
Lake Worth	40	28	2	5	0	7	7	6
Boynton Beach	24	16	2	3	1	0	0	2
Delray Beach	41	20	1	5	1	1	0	10
Boca Raton	133	22	1	5	2	7	108	9
Deerfield Beach	55	32	1	5	0	5	0	2
Pompano Beach	59	32	1	5	1	0	2	5
Cypress Creek	127	34	1	8	2	2	4	8
Ft. Lauderdale	69	42	1	14	0	2	4	12
FLL at Dania Beach	41	16	1	3	116	1	8	3
Sheridan Street	37	10	1	3	0	0	0	2
Hollywood	36	30	6	4	4	0	1	8
Golden Glades	26	20	3	2	0	2	4	6
Opa-Locka	19	8	1	2	0	1	6	6
Metrorail Transfer	106	26	7	13	0	0	14	30
Hialeah Market	29	6	1	3	0	1	1	2
Miami Airport	117	19	2	9	155	1	7	8

When examining work trips by Tri-Rail station, the majority of those going to work on the day of the survey egressed from the Boca Raton, Cypress Creek, or Miami Airport stations. A significant number of passengers used the Tri-Rail system for accessing the FLL and MIA airports, as well as used the Boca Raton station for college or university-bound trips and the Mangonia Park and West Palm Beach stations for trips to other schools (K-12), respectively.

#### 4.6 Station Origin-Destination Analysis

Survey responses and train conductors' door counts from the day of the survey were used to estimate daily origins and destinations between station pairs. The daily passenger counts, representing 100% of the total number of boardings at each station, were used to expand the reported origin-destination pairs to account for all trips occurring that day.

Passenger counts collected by the survey team on the day of the survey, train conductors' counts from the day of the survey and one month's worth of train conductors' counts (from before and after the survey) were compared and contrasted to explore the datasets and identify any areas of concern. Counts of boardings and alightings performed by the survey team and by train conductors on the day



of the survey were found to follow the same general pattern across trips for the day as well as across stations by direction of service. The day-of counts were also compared to the average and standard deviation of the train conductor's counts for the associated one-month period. In general, both the conductors' and survey team's day-of counts resided within +/- one standard deviation of the average (mean) for the month. Because the train conductors' counts cover the entire service day while the survey efforts ended in the early afternoon, the day-of conductors' counts were used for the origin-destination data expansion.

Of the 3,366 surveys returned, there were 2,973 with usable station pairs, or 83% of all returned surveys. Surveys were taken on trains beginning service on or before 3:00 pm, and mainly represent morning period trips that are generally from home to work. Tables 4-12 and 4-13 show the control totals used to grow the origin-destination pairs for all of the returned surveys, with Table 4-12 showing those for southbound morning period trips and Table 4-13 showing those for northbound morning period trips.

**Table 4-12: Control Totals - Southbound Trips** 

Table 4-12: Control 10	tais - South	bound Irips
Southbound	AM Ons	PM Ons
Mangonia Park	349	689
West Palm Beach	499	643
Lake Worth	456	313
Boynton Beach	295	191
Delray Beach	234	195
Boca Raton	217	634
Deerfield Beach	195	189
Pompano Beach	177	200
Cypress Creek	241	333
Ft. Lauderdale	222	138
FLL at Dania Beach	217	161
Sheridan Street	85	60
Hollywood	172	85
Golden Glades	50	24
Opa-Locka	44	7
Metrorail Transfer	2	2
Hialeah Market	1	0
Miami Airport	0	0
Total:	3456	3864

**Table 4-13: Control Totals - Northbound Trips** 

Northbound	AM Ons	PM Ons
Miami Airport	393	672
Hialeah Market	94	133
Metrorail Transfer	367	639
Opa-locka	137	110
Golden Glades	317	187
Hollywood	265	184
Sheridan Street	150	97
FLL at Dania Beach	236	266
Ft. Lauderdale	308	214
Cypress Creek	309	233
Pompano Beach	208	128
Deerfield Beach	232	136
Boca Raton	274	266
Delray Beach	280	96
Boynton Beach	274	40
Lake Worth	165	22
West Palm Beach	16	1
Mangonia Park	0	0
Total:	4025	3424



The next step in expanding the survey data was to generate the origin-destination data for evening period, or return trips, that are generally from work to home. It was assumed that the evening period origin-destination data was the mirror image of the morning period data. For example, the trips made from Mangonia Park to West Palm Beach (southbound) in the morning would be reversed in the evening from West Palm Beach to Mangonia Park. Steps were taking to eliminate obvious return trips that occurred towards the end of the survey before generating the evening period return trips.

The origin-destination data was then grown to represent all passengers' trips over the entire service day. The total counted station boardings by direction were used as the control totals for the morning and evening period matrices. The origin-destination data was factored up so that the sum of origins at a station for a period and direction of travel (e.g. morning period southbound direction) equaled the total boardings at the station for the period and direction. In this way, the door counts were used to control the number of trips originating at any one station in a given direction for either morning or evening period travel and the surveys were used to distribute the pairing between the stations.

Table 4-14 below contains the final station pairs with both northbound and southbound activity combined and expansion factors applied to account for all-day passenger counts. It shows the top three origin-destination pairs for the Tri-Rail system in both directions are:

- FLL at Dania Beach to Miami Airport
- Boca Raton to West Palm Beach
- West Palm Beach to Boca Raton

When compared to the top three stations pairs from the 2013 On-Board Survey, the only origindestination pair common to both is West Palm Beach to Boca Raton. In 2013, Metrorail Transfer to Cypress Creek and Ft. Lauderdale to Boca Raton were also among the station pairs with the highest connectivity. It should be noted, however, that the Miami Airport Station at the Miami Intermodal Center was not yet in service at the time of the 2013 survey.





Table 4-14: Expanded Origin-Destination Station Pairs (both directions)

	ible 4-14: Expanded								DESTINAT	ION STAT	ION									
	Station	Mangonia Park	West Palm Beach	Lake Worth	Boynton Beach	Delray Beach	Boca Raton	Deerfield Beach	Pompano Beach	Cypress Creek	Ft. Lauderdale	FLL at Dania Beach	Sheridan Street	Hollywood	Golden Glades	Opa- Locka	Metrorail Transfer	Hialeah Market	Miami Airport	
	Mangonia Park		28	34	120	106	169	53	32	54	74	93	16	32	18	16	45	29	120	
	West Palm Beach	17		62	76	77	179	54	65	90	98	52	16	55	52	8	91	34	132	
	Lake Worth	68	119		9	31	115	58	70	64	81	68	19	34	48	20	60	11	80	
	Boynton Beach	174	127	13		6	45	25	24	33	73	31	24	36	36	14	39	14	86	
	Delray Beach	171	151	44	9		15	19	39	52	64	69	22	27	20	7	32	10	52	
	Boca Raton	176	207	99	41	17		20	52	125	150	71	81	84	72	32	45	46	74	
NO	Deerfield Beach	89	103	80	31	32	33		10	24	47	43	31	24	44	7	51	4	98	
STATION	Pompano Beach	38	86	69	24	46	59	13		15	15	29	27	32	50	44	65	17	83	SOUTHBOUND
SZ	Cypress Creek	66	119	65	34	63	140	30	24		12	39	37	64	61	44	128	39	150	
ORIGIN	Ft. Lauderdale	67	92	61	56	56	121	42	16	11		0	3	14	32	31	128	17	134	
	FLL at Dania Beach	107	57	58	28	65	66	45	33	43	0		3	24	13	7	70	14	247	
	Sheridan Street	17	16	15	19	20	67	29	26	35	2	2		14	9	20	37	23	43	
	Hollywood	41	59	33	33	28	75	26	39	67	13	23	13		15	17	75	25	126	
	Golden Glades	22	60	47	33	22	66	49	62	65	37	16	9	16		4	16	6	48	
	Opa-Locka	18	9	18	11	7	25	7	45	40	29	7	16	13	4		2	0	49	
	Metrorail Transfer	72	116	63	47	36	44	63	80	143	130	80	36	74	19	3		1	3	
	Hialeah Market	19	30	9	14	9	26	5	14	34	13	11	18	18	6	0	0		1	
	Miami Airport	94	108	49	62	37	44	74	65	106	85	175	27	81	39	9	4	7		
									NORT	HBOUND										





#### 4.7 Non-Station Origin-Destination Results

In addition to questions about general trip purpose and station-to-station travel patterns, the survey questionnaire also asked passengers for more specific origin and destination locations for the beginning and end of their one-way trips, respectively. The information provided in responses to Questions 2 and 9 was standardized, geocoded, and then mapped using Geographic Information Systems (GIS) software. The results of these two questions were used to create the maps on the following pages showing the origins and destinations of Tri-Rail trips on the day of the survey. These locations were classified into three groups and mapped to the greatest degree of accuracy possible, depending on the level of information provided:

- 1. Street address or intersection of major roadways,
- 2. ZIP code
- 3. Municipality

Each of these three map series shows origins and destinations separately. Each contains a regional overview map and a separate, more detailed map for all three counties in which Tri-Rail provides service: Palm Beach, Broward, and Miami-Dade.

Additionally, Question 14 asked survey respondents for their ZIP code of residence. Results from this question were mapped similarly to create an another series of maps showing areas where Tri-Rail passengers live, regardless of where they began or ended the one-way survey trip.



Figure 4-1: Address/Intersection Origin Map for the Region

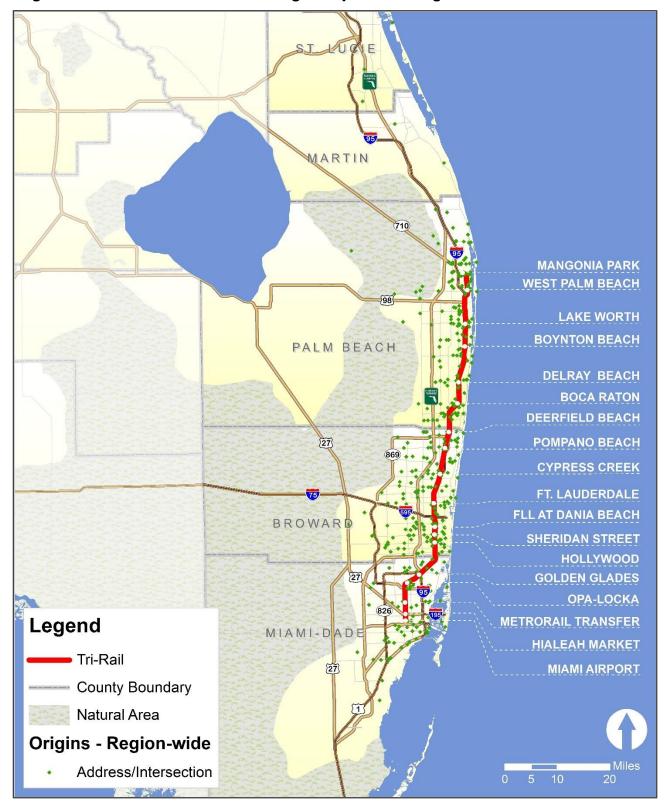




Figure 4-2: Address/Intersection Origin Map for Palm Beach County

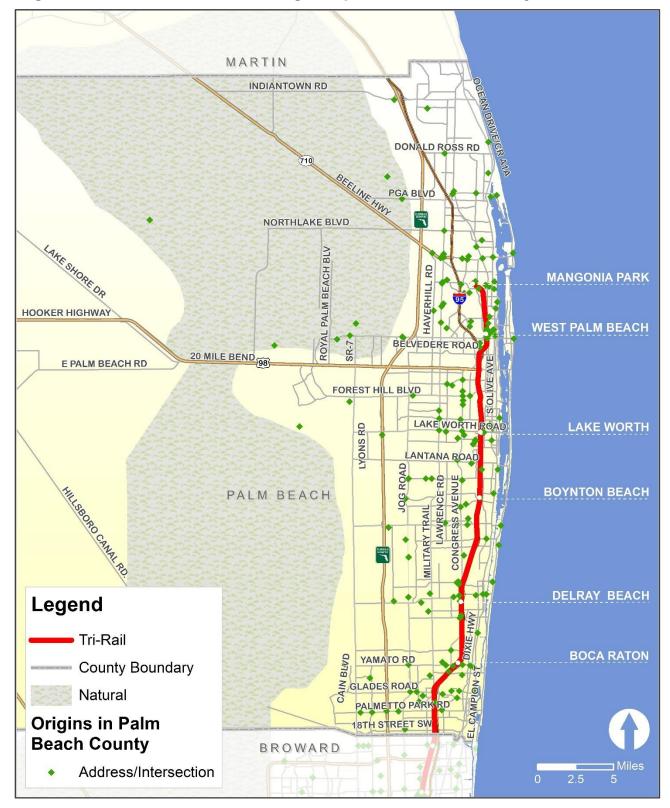




Figure 4-3: Address/Intersection Origin Map for Broward County





Figure 4-4: Address/Intersection Origin Map for Miami-Dade County



Figure 4-5: Address/Intersection Destination Map for the Region

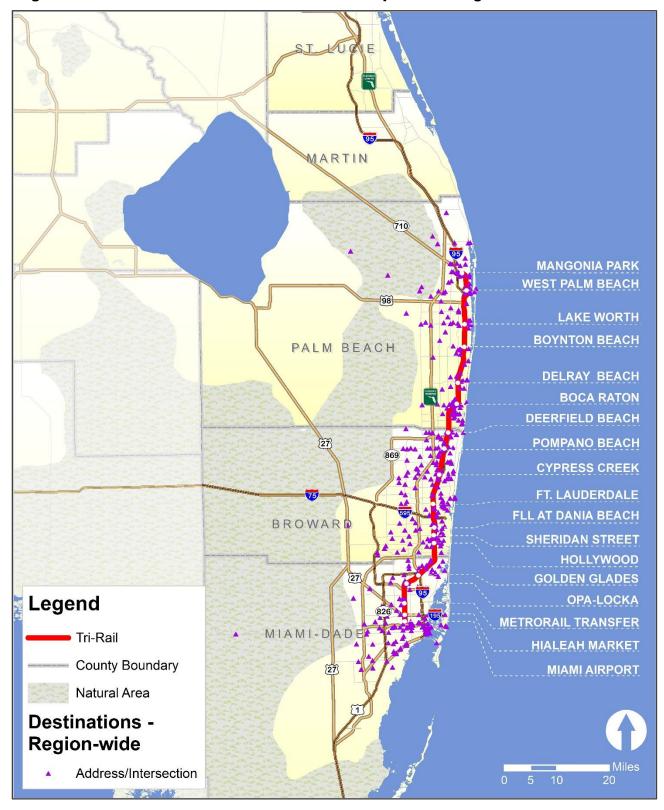




Figure 4-6: Address/Intersection Destination Map for Palm Beach County





Figure 4-7: Address/Intersection Destination Map for Broward County





Figure 4-8: Address/Intersection Destination Map for Miami-Dade County

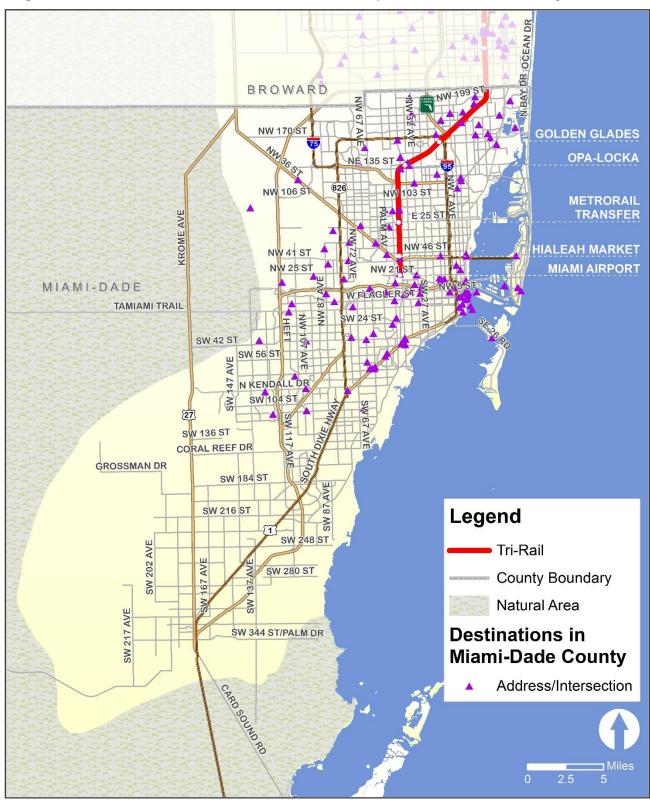




Figure 4-9: Municipality Origin Map for the Region

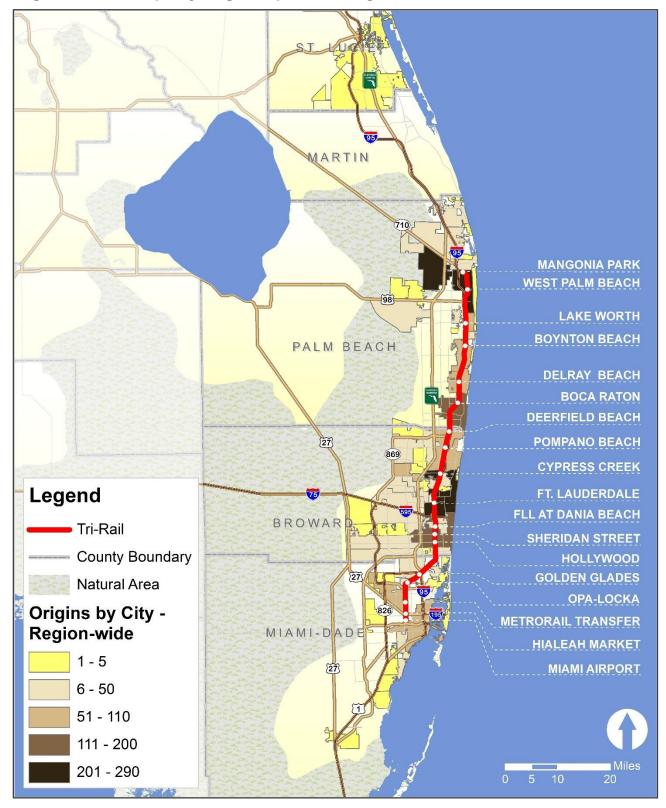




Figure 4-10: Municipality Origin Map for Palm Beach County

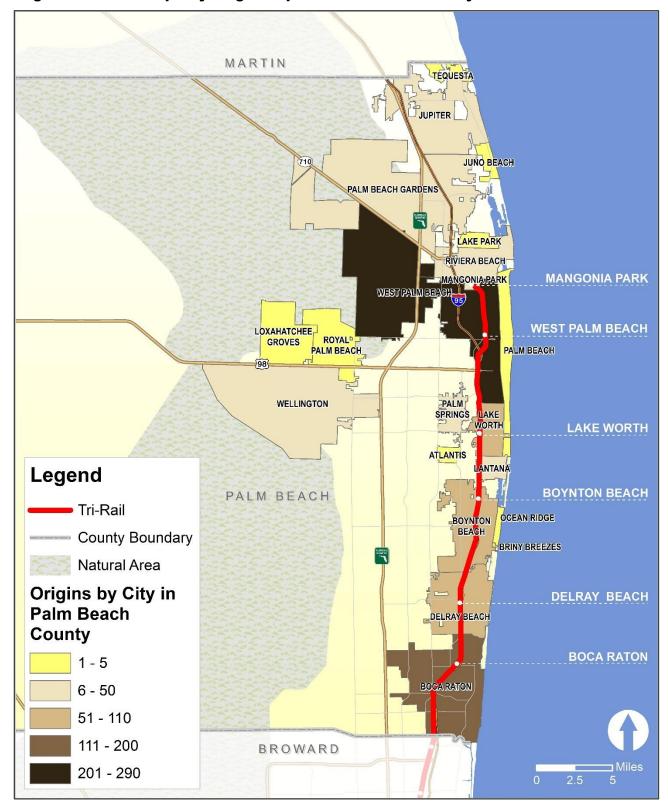




Figure 4-11: Municipality Origin Map for Broward County

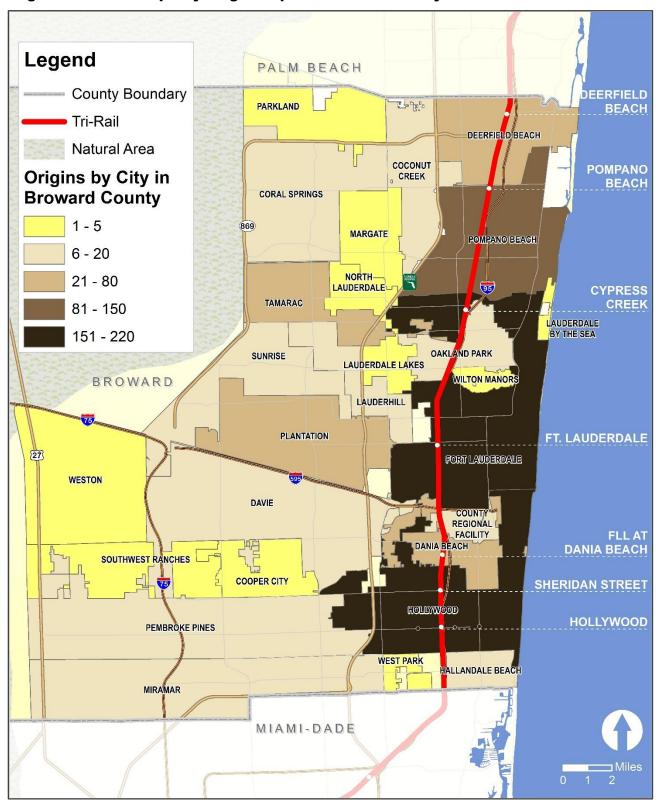




Figure 4-12: Municipality Origin Map for Miami-Dade County

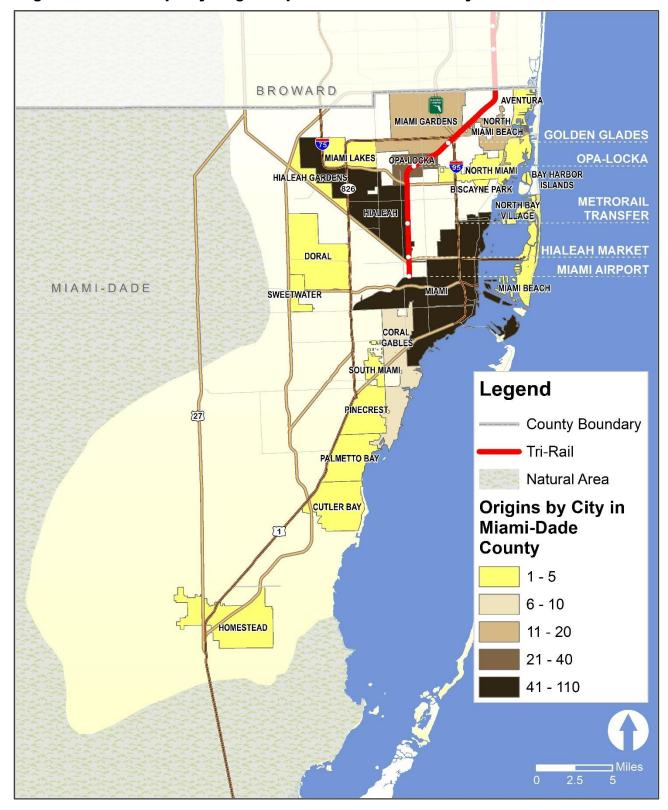




Figure 4-13: Municipality Destination Map for the Region

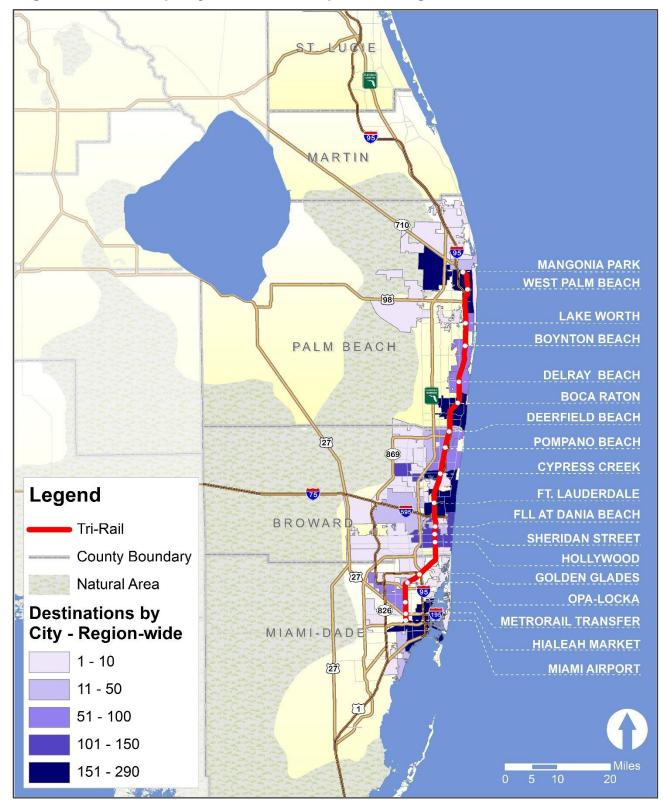




Figure 4-14: Municipality Destination Map for Palm Beach County

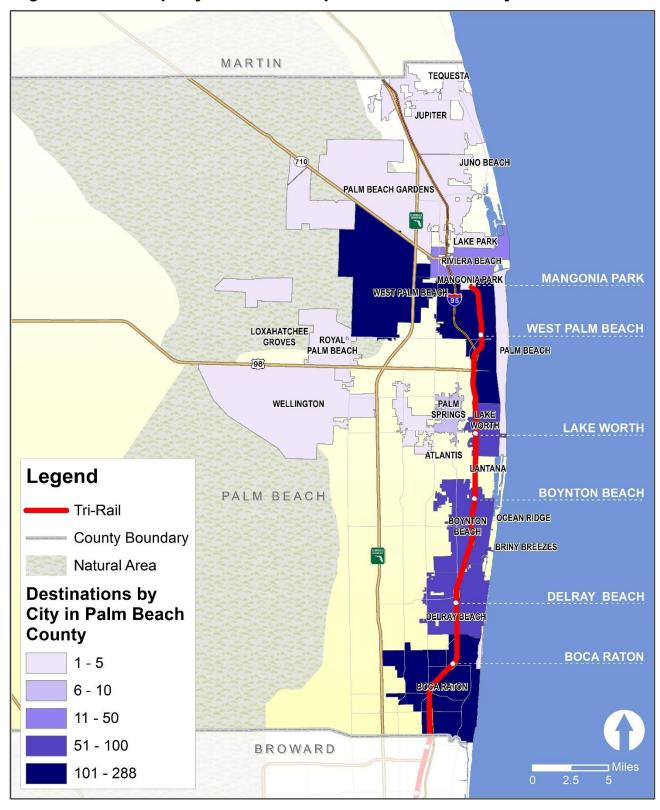




Figure 4-15: Municipality Destination Map for Broward County

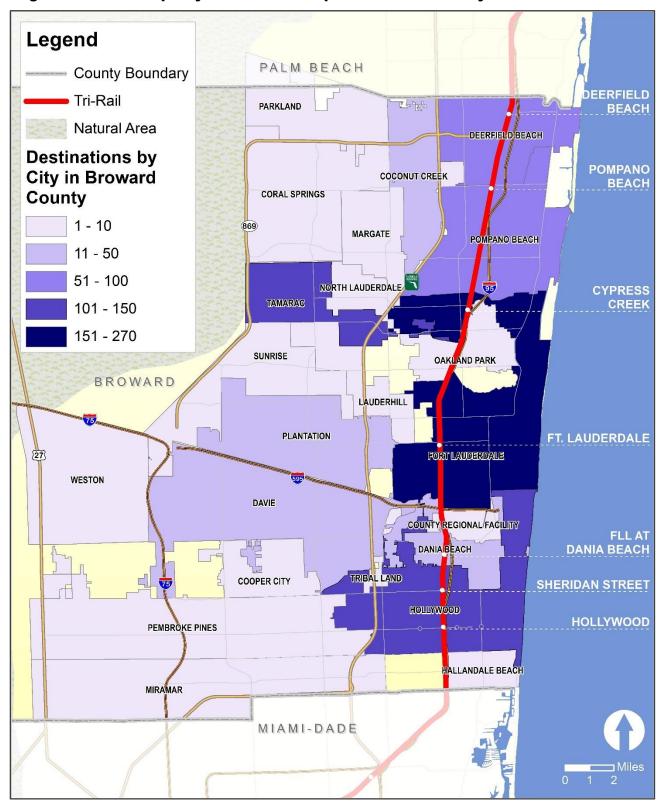




Figure 4-16: Municipality Destination Map for the Miami-Dade County

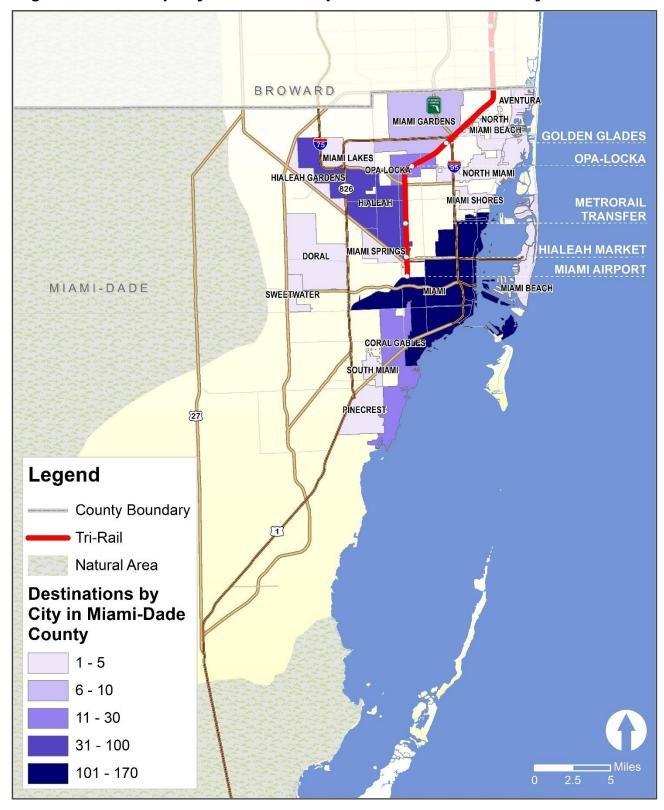




Figure 4-17: ZIP Code Origin Map for the Region

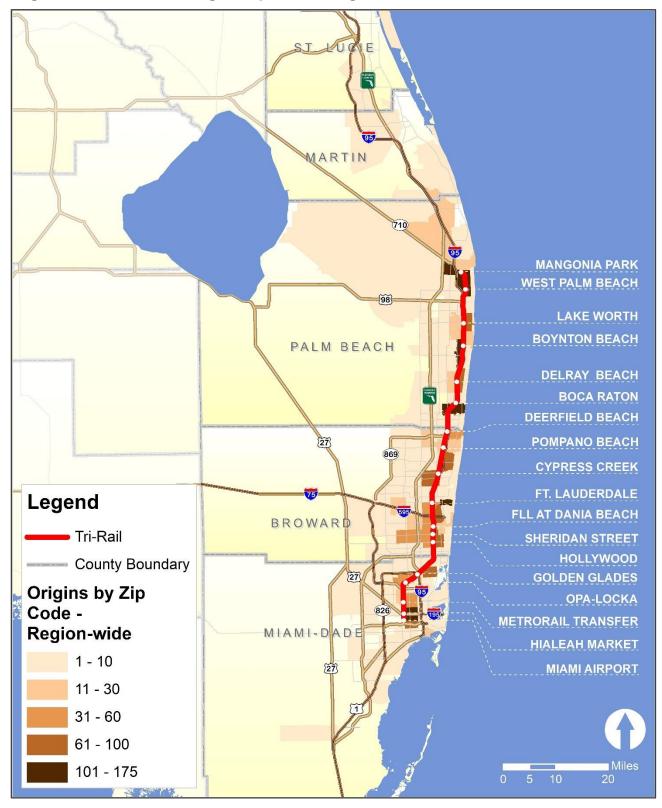




Figure 4-18: ZIP Code Origin Map for Palm Beach County

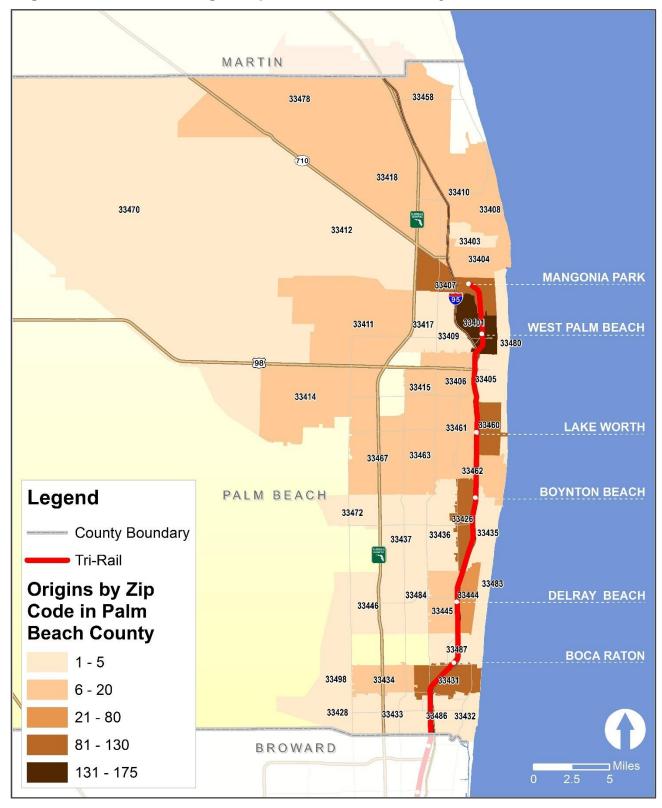




Figure 4-19: ZIP Code Origin Map for Broward County

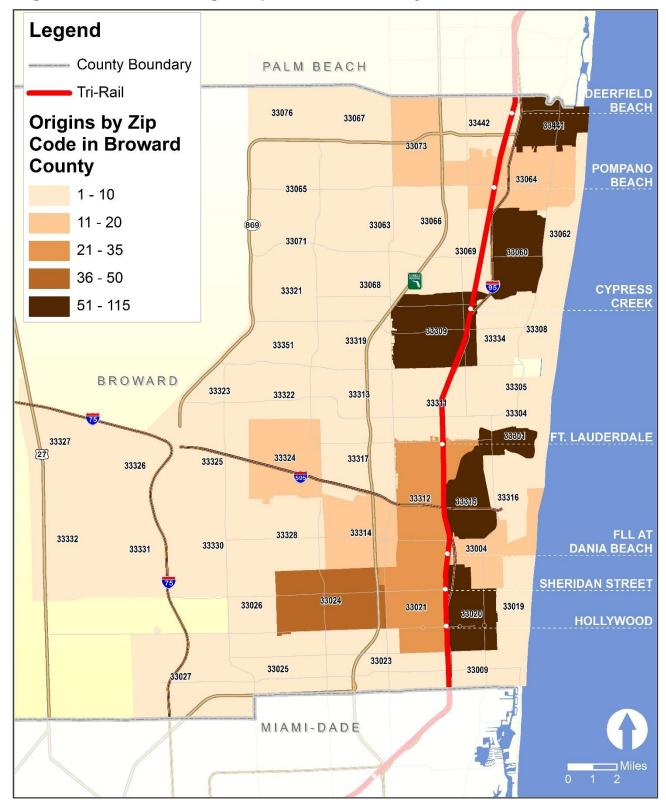




Figure 4-20: ZIP Code Origin Map for Miami-Dade County

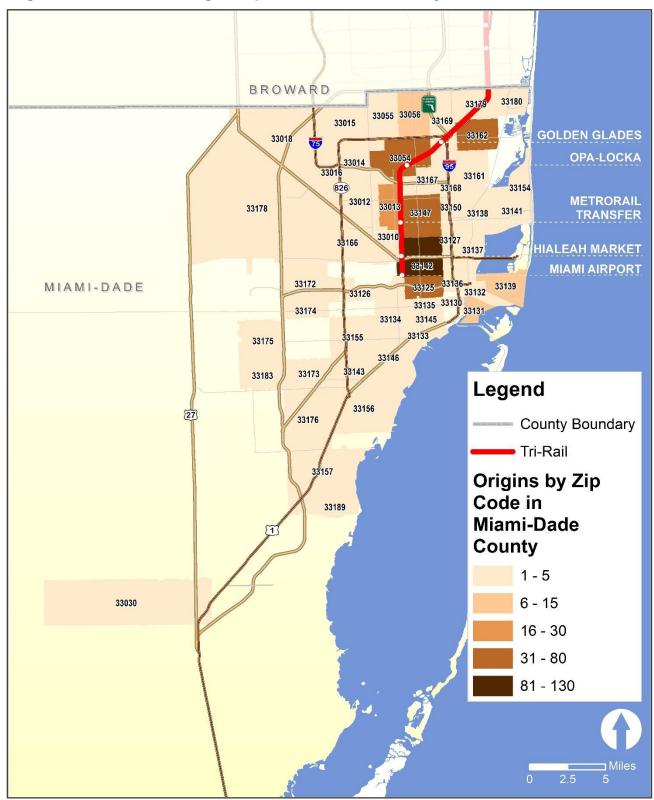




Figure 4-21: ZIP Code Destination Map for the Region

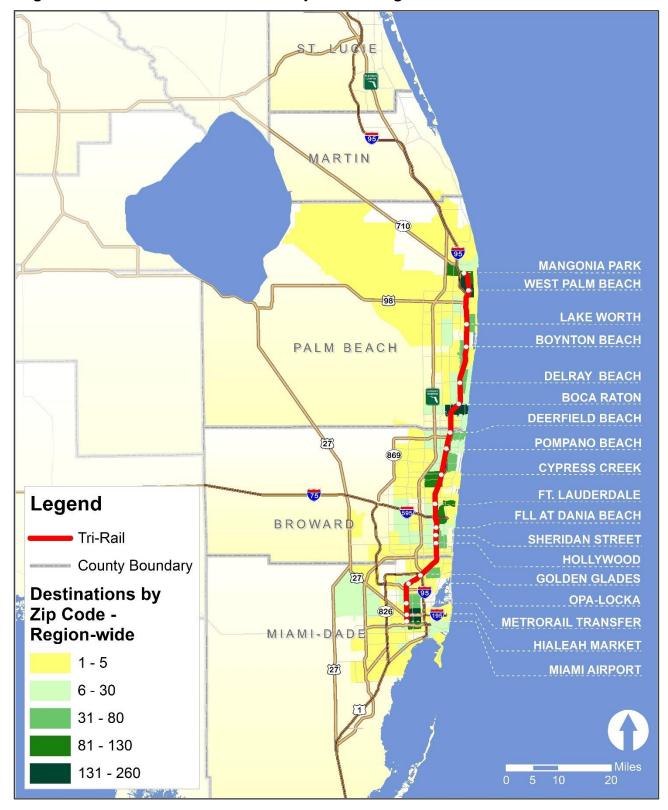




Figure 4-22: ZIP Code Destination Map for Palm Beach County

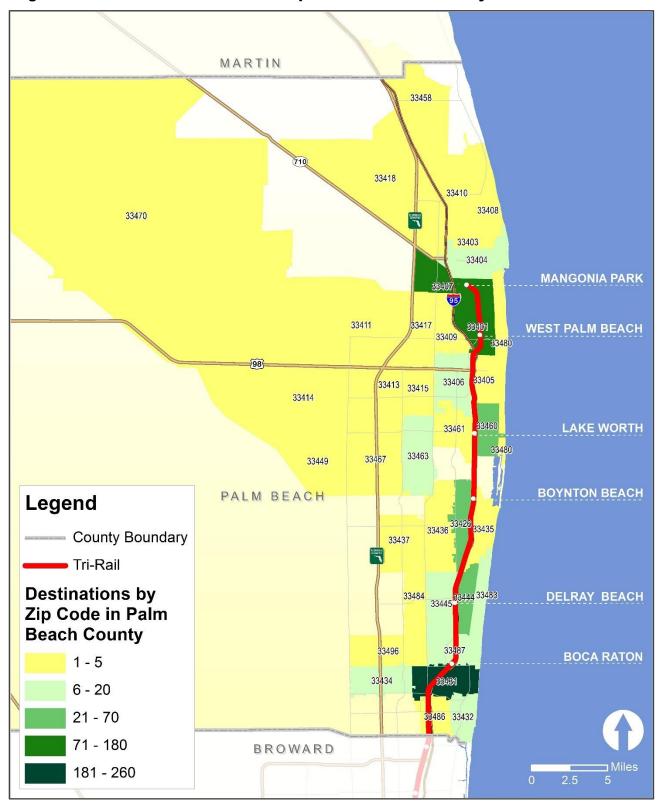


Figure 4-23: ZIP Code Destination Map for Broward County

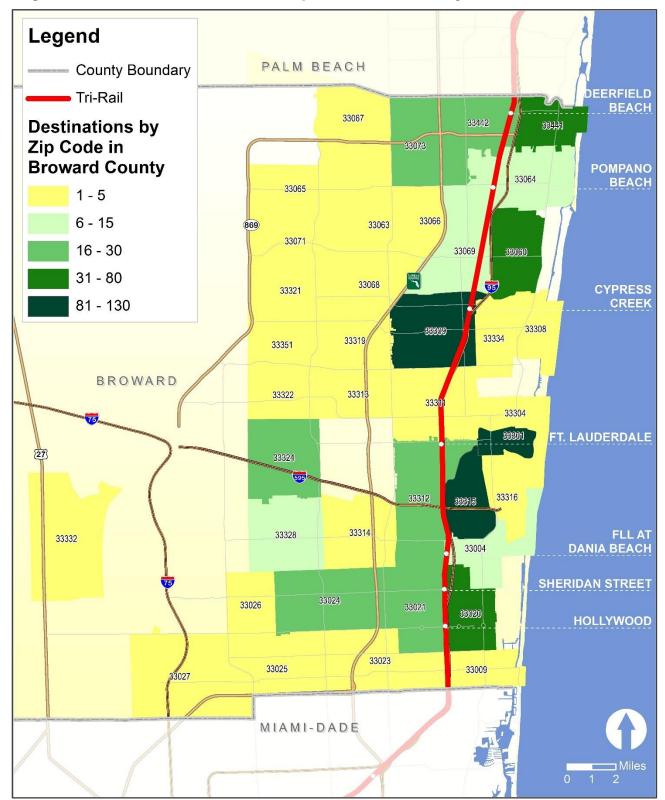




Figure 4-24: ZIP Code Destination Map for Miami-Dade County

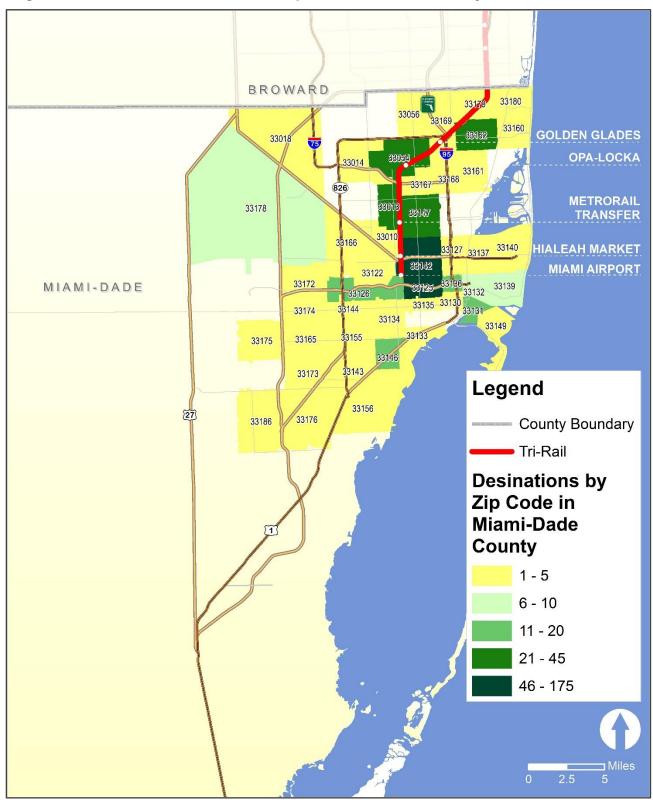




Figure 4-25: ZIP Code of Residence Map for the Region (Survey Question 14)

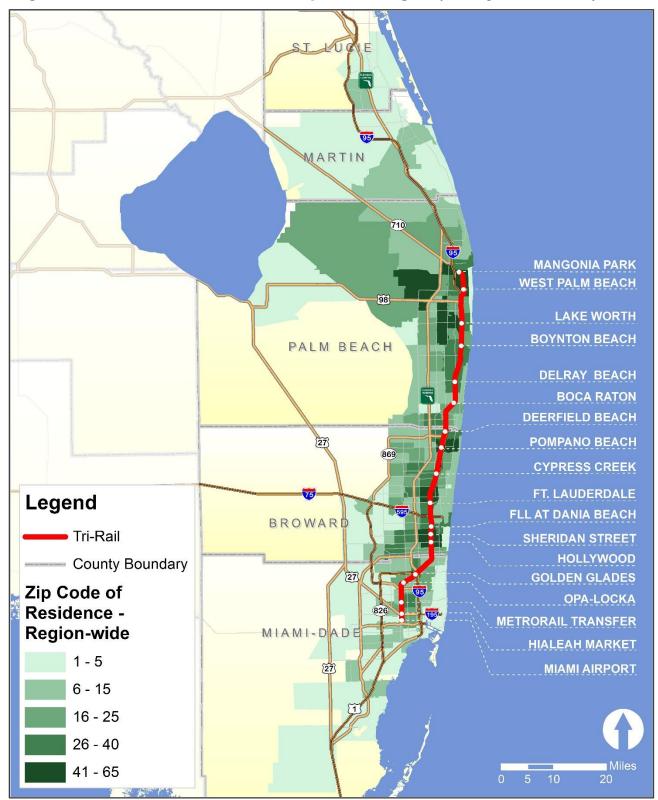




Figure 4-26: ZIP Code of Residence Map for Palm Beach County (Survey Question 14)

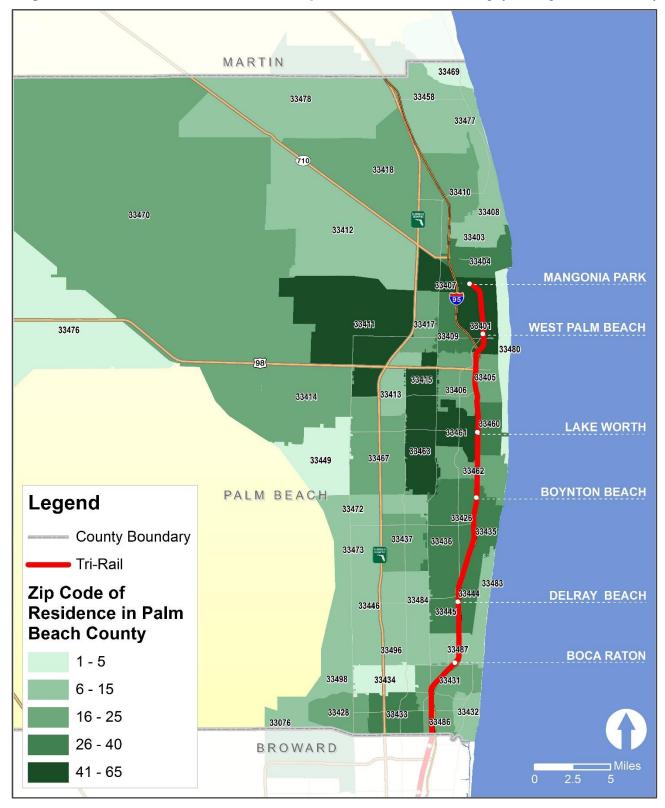




Figure 4-27: ZIP Code of Residence Map for Broward County (Survey Question 14)

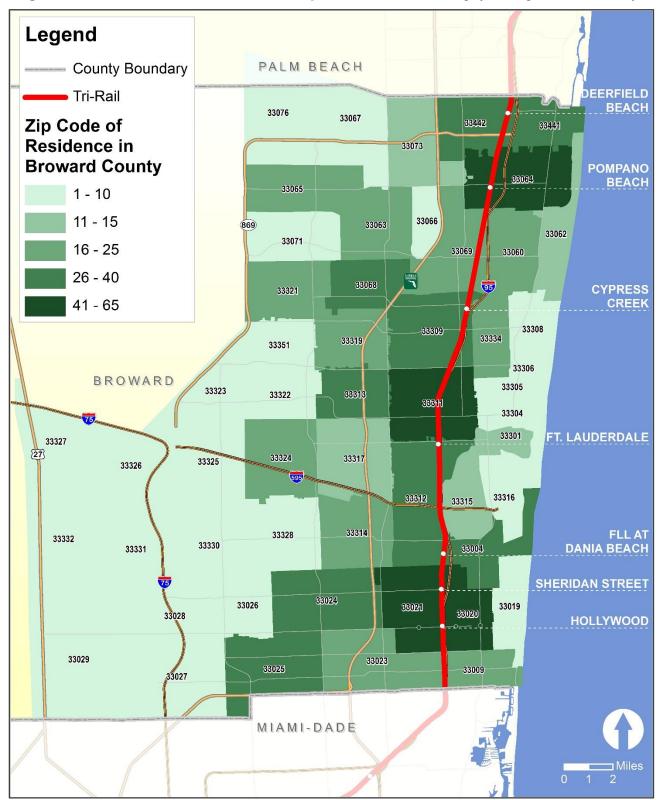
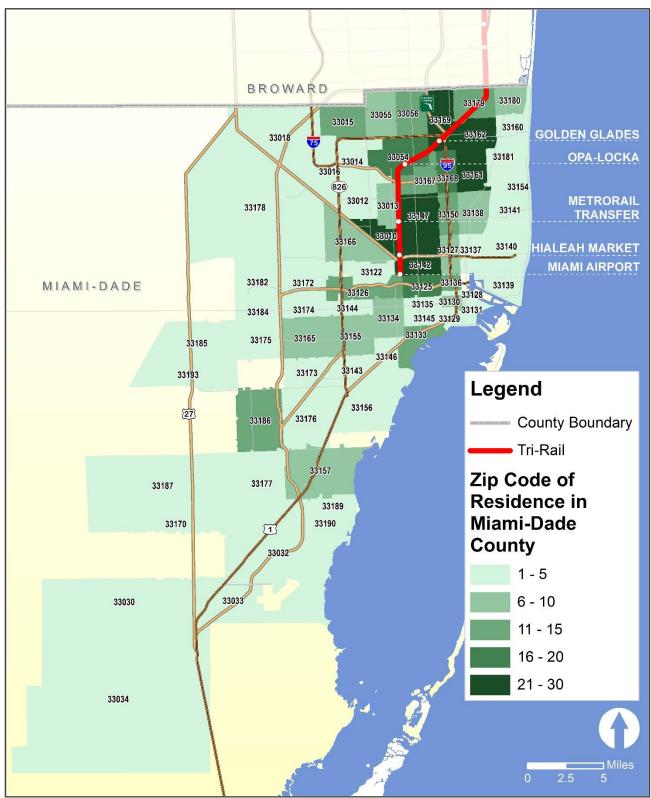




Figure 4-28: ZIP Code of Residence Map for Miami-Dade County (Survey Question 14)







#### 4.8 Other Survey Question Results

This section includes the results of the majority of the questions asked of Tri-Rail passengers during the On-Board Survey. Due to the fact that some passengers did not fully complete a survey questionnaire or may have skipped some questions, the response rate for each varies. In all cases, response rate is the total number of valid responses received for a given question divided by the total number of survey questionnaires received, which was 3,366. Table 4-15 below provides a summary of the questions in this section along with the response rate for each. The series of tables and figures on the following pages provides a more detailed look at the responses to the individual questions, along with some of the key takeaways from each.

**Table 4-15: Response Rate Summary of Survey Questions** 

Question	Response Rate
Q1: I originally started this one-way trip at:	72.0%
Q3: To get to Tri-Rail I arrived by:	83.9%
Q6: I will leave the Tri-Rail station by:	82.9%
Q7a: Is this journey part of a round trip that you will make today?	90.3%
Q7b: If yes, please check all services that you will use on the return leg of the trip:	53.7%
Q8: I will finish this one-way trip at:	70.5%
Q10a: The fare I used for this one-way trip was - Fare:	79.9%
Q10b: The fare I used for this one-way trip was - Fare Medium:	54.9%
Q10c: The fare I used for this one-way trip was - Fare Type:	48.3%
Q11: Are you traveling with other people that are not filling out the survey?	89.3%
Q12: I have been riding Tri-Rail:	89.0%
Q13a: I typically ride Tri-Rail - Times per Day:	55.2%
Q13b: I typically ride Tri-Rail - Days per Week:	56.7%
Q13c: I typically ride Tri-Rail - Days per Month:	35.5%
Q15: I live/stay in South Florida:	80.7%
Q16: I am - Male or Female:	88.8%
Q17: My age is:	89.6%
Q18: My race is best described as:	86.0%
Q19: Total vehicles owned by people in my home:	81.6%
Q20: I could have traveled today by car but chose to ride Tri-Rail instead:	86.8%
Q21: I have a Driver's license:	87.6%
Q22: I graduated:	85.4%
Q23: What is your current employment status?	87.4%
Q24: My household's total annual income is:	79.9%
Q25: I filled out another survey card earlier today:	77.3%
Average Response Rate:	75.7%





Figure 4-29: Q1: I originally started this one-way trip at:

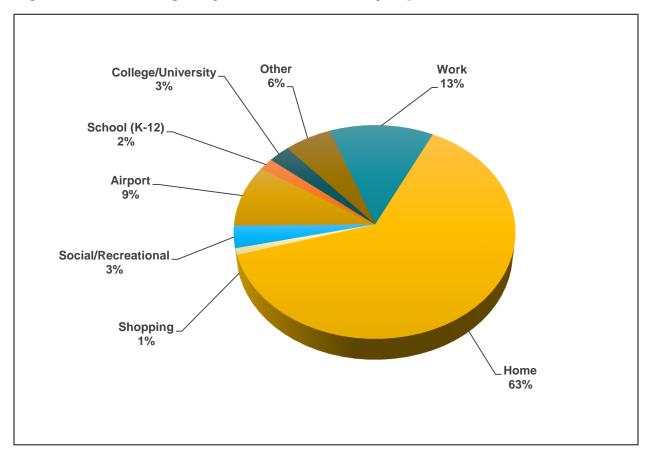


Table 4-16: Q1: I originally started this one-way trip at:

Description	Valid Responses	% of Total Respondents
Work	308	12.7%
Home	1,534	63.3%
Shopping	24	1.0%
Social/Recreational	82	3.4%
Airport	225	9.3%
School (K-12)	44	1.8%
College/University	65	2.7%
Other	141	5.8%
Total:	2,423	100%

- Response Rate = 72%
- Nearly two-thirds of all respondents were traveling from home





Figure 4-30: Q3: To get to Tri-Rail I arrived by:

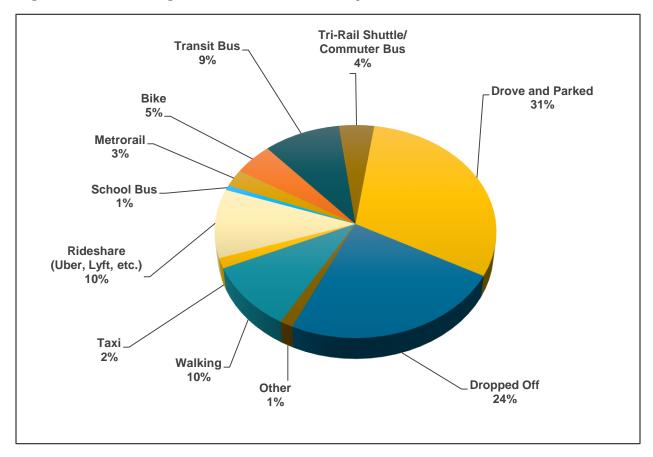


Table 4-17: Q3: To get to Tri-Rail I arrived by:

Description	Valid Responses	% of Total Respondents
Walking	282	10.0%
Taxi	44	1.6%
Rideshare (Uber, Lyft, etc.)	295	10.4%
School Bus	21	0.7%
Metrorail	73	2.6%
Bike	137	4.9%
Transit Bus	267	9.5%
Tri-Rail Shuttle/Commuter Bus	122	4.3%
Drove and Parked	863	30.6%
Dropped Off	679	24.1%
Other	40	1.4%
Total:	2,823	100%

- Response Rate = 83.9%
- Roughly one-third of respondents parked at the station, one-third were dropped off by a car, and one-third used transit or non-motorized transportation





Figure 4-31: Q6: I will leave the Tri-Rail station by:

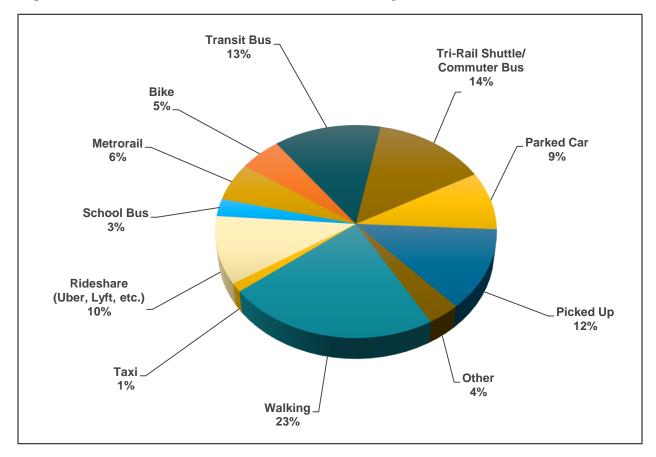


Table 4-18: Q6: I will leave the Tri-Rail station by:

Description	Valid Responses	% of Total Respondents
Walking	639	22.9%
Taxi	37	1.3%
Rideshare (Uber, Lyft, etc.)	288	10.3%
School Bus	74	2.7%
Metrorail	161	5.8%
Bike	145	5.2%
Transit Bus	369	13.2%
Tri-Rail Shuttle/Commuter Bus	389	13.9%
Parked Car	247	8.8%
Picked Up	346	12.4%
Other	97	3.5%
Total:	2,792	100%

- Response Rate = 82.9%
- Walk share and transit usage are considerably higher when leaving Tri-Rail stations





Figure 4-32: Q7a: Is this journey part of a round trip that you will make today?

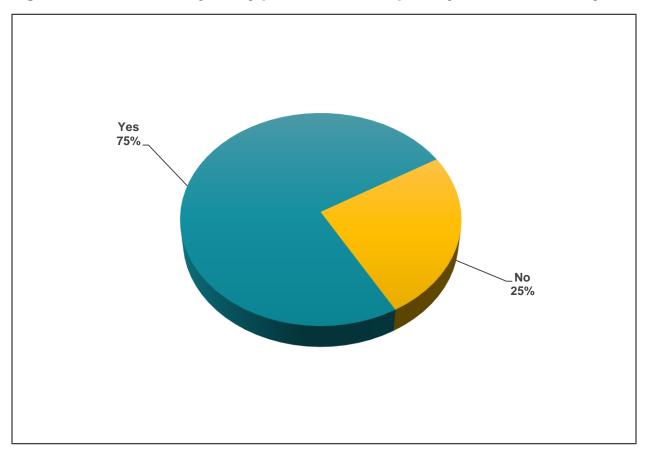


Table 4-19: Q7a: Is this journey part of a round trip that you will make today?

Description	Valid Responses	% of Total Respondents
Yes	2,272	74.7%
No	769	25.3%
Total:	3,041	100%

- Response Rate = 90.3%
- Three-quarters of respondents were making a round trip





Figure 4-33: Q7b: If yes, please check all services that you will use on the return leg of the trip:

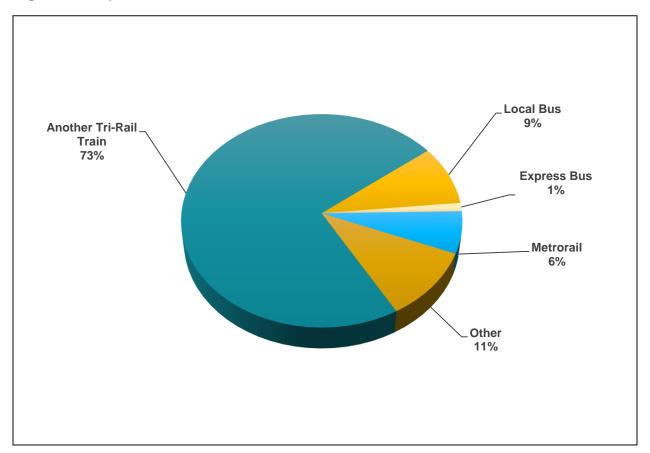


Table 4-20: Q7b: If yes, please check all services that you will use on the return leg of the trip:

Description	Valid Responses	% of Total Respondents
Another Tri-Rail Train	1,317	72.8%
Local Bus	162	9.0%
Express Bus	23	1.3%
Metrorail	115	6.4%
Other	192	10.6%
Total:	1,809	100%

- Response Rate = 53.7%
- Tri-Rail remains the most common return method for round trips (share has increased from 63% in 2013)





Figure 4-34: Q8: I will finish this one-way trip at:

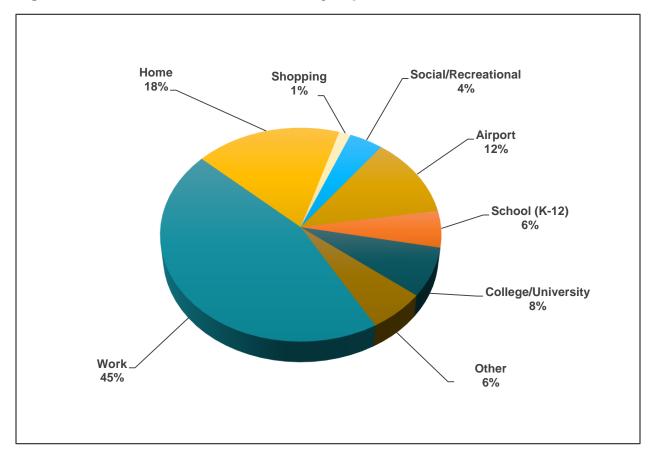


Table 4-21: Q8: I will finish this one-way trip at:

Description	Valid Responses	% of Total Respondents
Work	1,070	45.1%
Home	428	18.0%
Shopping	34	1.4%
Social/Recreational	99	4.2%
Airport	288	12.1%
School (K-12)	132	5.6%
College/University	177	7.5%
Other	146	6.1%
Total:	2,374	100%

- Response Rate = 70.5%
- Nearly half of all respondents were traveling to work
- 12% of one-way trips ended at the airport (up from just 3% in 2013)





Figure 4-35: Q10a: The fare I used for this one-way trip was - Fare:

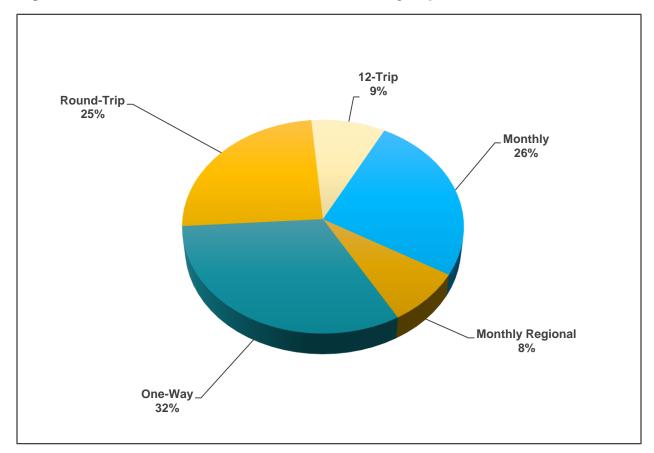


Table 4-22: Q10a: The fare I used for this one-way trip was - Fare:

Description	Valid Responses	% of Total Respondents
One-Way	868	32.3%
Round-Trip	662	24.6%
12-Trip	245	9.1%
Monthly	691	25.7%
Monthly Regional	222	8.3%
Total:	2,688	100%

- Response Rate = 79.9%
- One-way fares were most common amongst respondents despite the abundance of round trips on Tri-Rail





Figure 4-36: Q10b: The fare I used for this one-way trip was - Fare Medium:

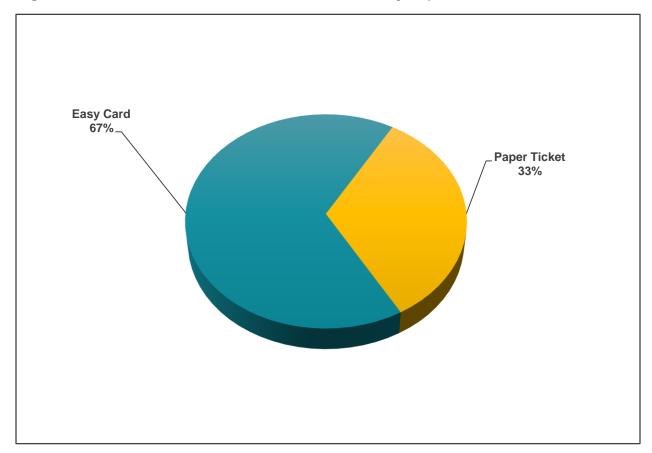


Table 4-23: Q10b: The fare I used for this one-way trip was - Fare Medium:

Description	Valid Responses	% of Total Respondents
Easy Card	1,234	66.7%
Paper Ticket	615	33.3%
Total:	1,849	100%

- Response Rate = 54.9%
- Two-thirds of all respondents used an Easy Card for fare payment





Figure 4-37: Q10c: The fare I used for this one-way trip was - Fare Type:

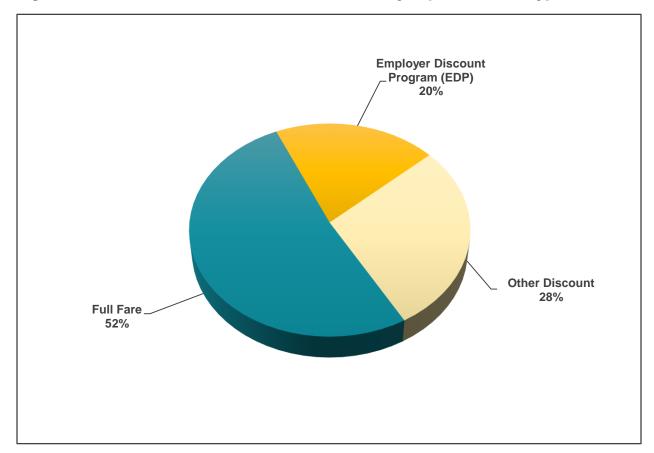


Table 4-24: Q10c: The fare I used for this one-way trip was - Fare Type:

Description	Valid Responses	% of Total Respondents
Full Fare	841	51.7%
Employer Discount Program (EDP)	326	20.0%
Other Discount	460	28.3%
Total:	1,627	100%

- Response Rate = 48.3%
- More than half of respondents paid a full fare
- Use of discount programs is down slightly since 2013





Figure 4-38: Q11: Are you traveling with other people not filling out the survey?

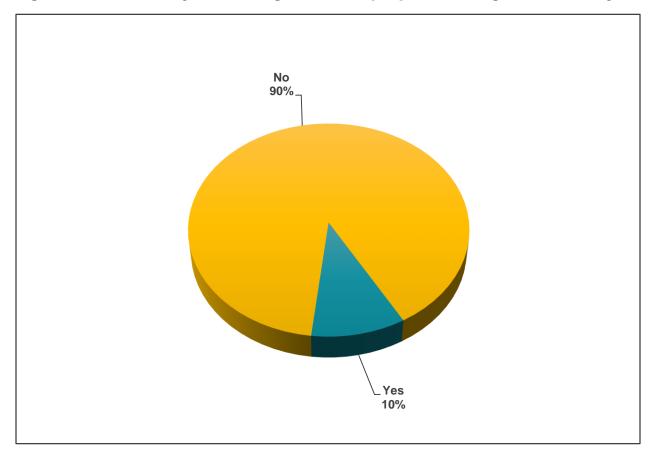


Table 4-25: Q11: Are you traveling with other people not filling out the survey?

Description	Valid	% of Total
	Responses	Respondents
Yes	306	10.2%
No	2,699	89.8%
Total:	3,005	100%

- Response Rate = 89.3%
- Only 10% of respondents were traveling with someone who did not fill out a survey questionnaire





Figure 4-39: Q12: I have been riding Tri-Rail:

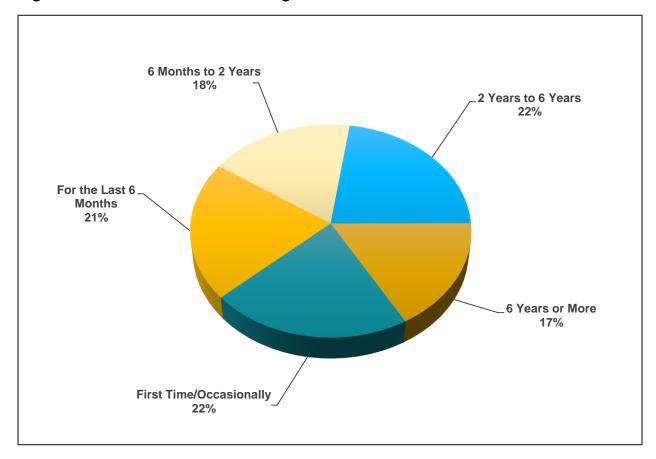


Table 4-26: Q12: I have been riding Tri-Rail:

Description	Valid Responses	% of Total Respondents
First Time/Occasionally	651	21.7%
For the Last 6 Months	632	21.1%
6 Months to 2 Years	535	17.9%
2 Years to 6 Years	678	22.6%
6 Years or More	501	16.7%
Total:	2,997	100%

- Response Rate = 89%
- History of Tri-Rail ridership is fairly evenly distributed
- The amount of first-time or occasional riders is slightly higher than in 2013





Figure 4-40: Q13a: I typically ride Tri-Rail - Times per Day:

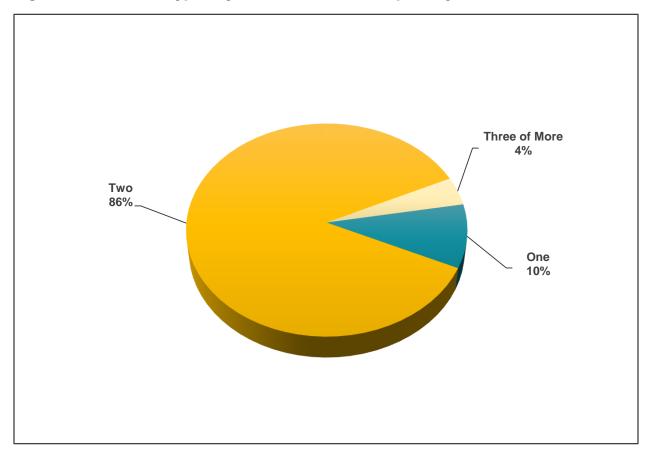


Table 4-27: Q13a: I typically ride Tri-Rail - Times per Day:

Description	Valid Responses	% of Total Respondents
One	179	9.6%
Two	1,599	86.1%
Three of More	79	4.3%
Total:	1,857	100%

- Response Rate = 55.2%
- A significant majority of respondents typically ride Tri-Rail twice per day





Figure 4-41: Q13b: I typically ride Tri-Rail - Days per Week:

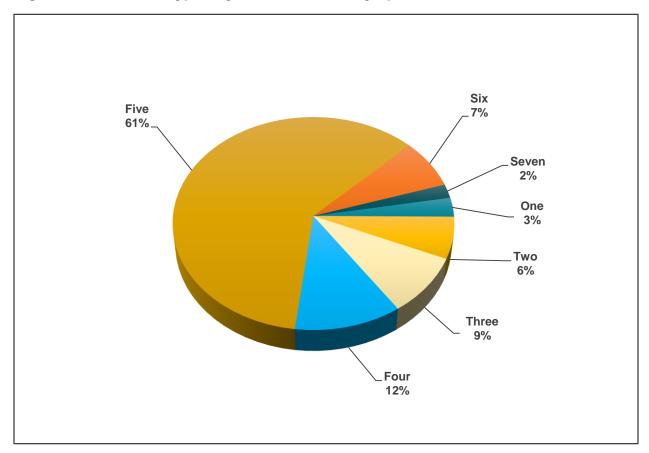


Table 4-28: Q13b: I typically ride Tri-Rail - Days per Week:

Description	Valid Responses	% of Total Respondents
One	55	2.9%
Two	121	6.3%
Three	171	9.0%
Four	220	11.5%
Five	1,159	60.8%
Six	141	7.4%
Seven	40	2.1%
Total:	1,907	100%

- Response Rate = 56.7%
- Nearly three-quarters of respondents ride Tri-Rail either four or five times per week





Figure 4-42: Q13c: I typically ride Tri-Rail - Days per Month:

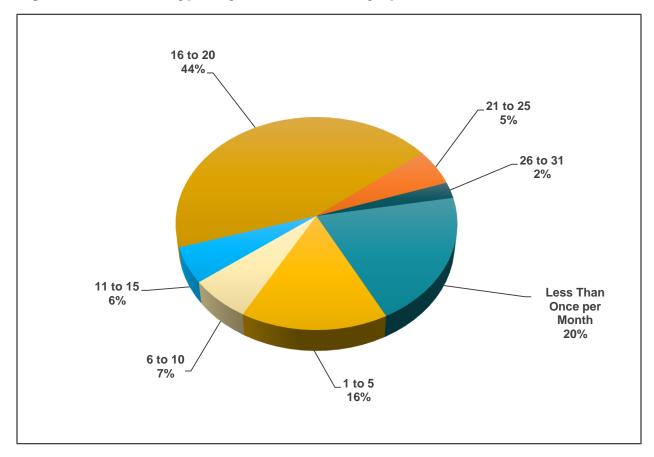


Table 4-29: Q13c: I typically ride Tri-Rail - Days per Month:

Description	Valid Responses	% of Total Respondents
Less Than Once per Month	240	20.1%
1 to 5	190	15.9%
6 to 10	79	6.6%
11 to 15	66	5.5%
16 to 20	527	44.1%
21 to 25	65	5.4%
26 to 31	29	2.4%
Total:	1,196	100%

- Response Rate = 35.5%
- Those responding they ride Tri-Rail less than once per month have grown from 10% to 20% since 2013





Figure 4-43: Q15: I live/stay in South Florida:

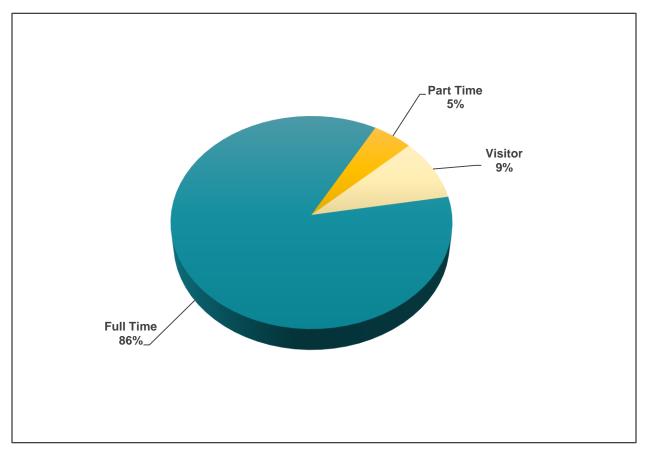


Table 4-30: Q15: I live/stay in South Florida:

Description	Valid Responses	% of Total Respondents
Full Time	2,332	85.8%
Part Time	134	4.9%
Visitor	251	9.2%
Total:	2,717	100%

- Response Rate = 80.7%
- Although the majority of Tri-Rail passengers are full-time residents, the share of parttime residents and visitors has nearly doubled since 2013





Figure 4-44: Q16: I am - Male or Female:

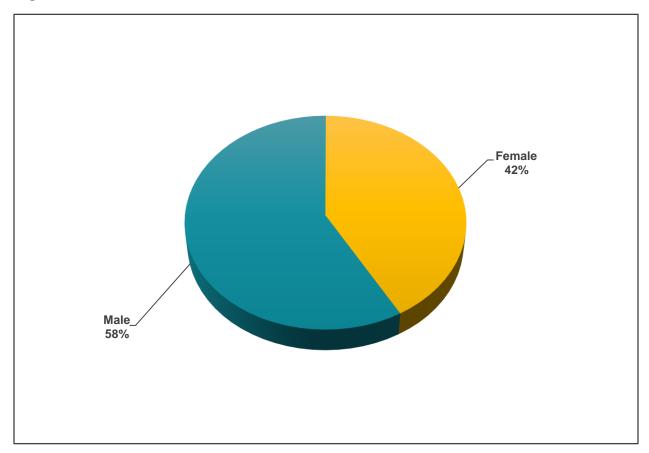


Table 4-31: Q16: I am - Male or Female:

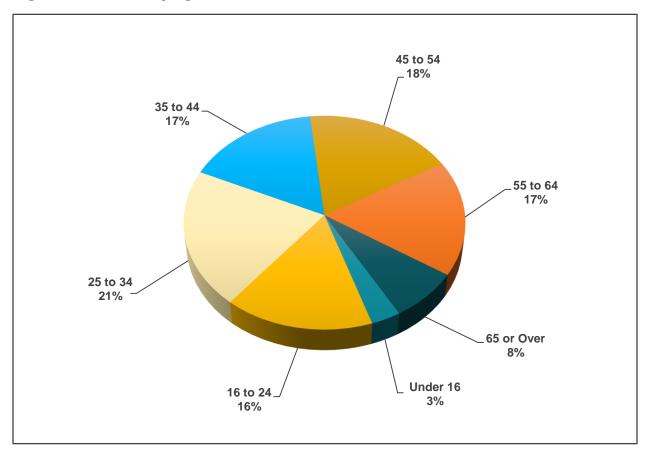
Description	Valid Responses	% of Total Respondents
Male	1,746	58.4%
Female	1,244	41.6%
Total:	2,990	100%

- Response Rate = 88.8%
- More than half of respondents were male





Figure 4-45: Q17: My age is:



**Table 4-32: Q17: My age is:** 

Description	Valid Responses	% of Total Respondents
Under 16	96	3.2%
16 to 24	485	16.1%
25 to 34	630	20.9%
35 to 44	496	16.4%
45 to 54	555	18.4%
55 to 64	526	17.4%
65 or Over	229	7.6%
Total:	3,017	100%

- Response Rate = 89.6%
- The age groups of respondents are fairly evenly distributed
- The share of riders over the age of 55 has increased slightly since 2013





Figure 4-46: Q18: My race is best described as:

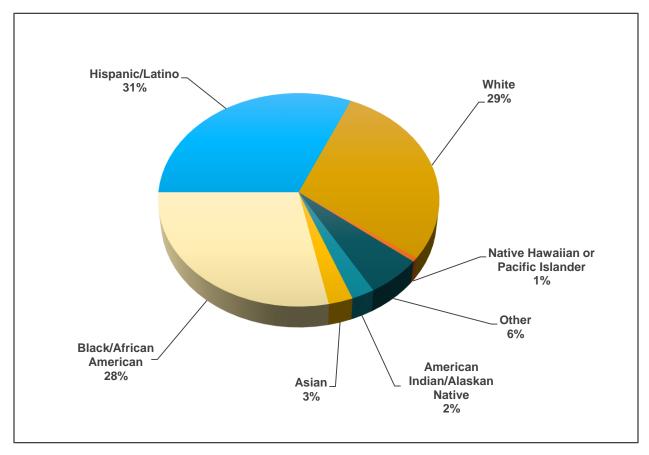


Table 4-33: Q18: My race is best described as:

Description	Valid Responses	% of Total Respondents
American Indian/ Alaskan Native	72	2.5%
Asian	76	2.6%
Black/African American	817	28.2%
Hispanic/Latino	912	31.5%
White	828	28.6%
Native Hawaiian or Pacific Islander	18	0.6%
Other	172	5.9%
Total:	2,895	100%

- Response Rate = 86%
- Hispanic/Latino was the most common racial/ethnic group amongst respondents
- Black/African American was the most common 2013, and has now fallen to third





Figure 4-47: Q19: Total vehicles own by people in my home:

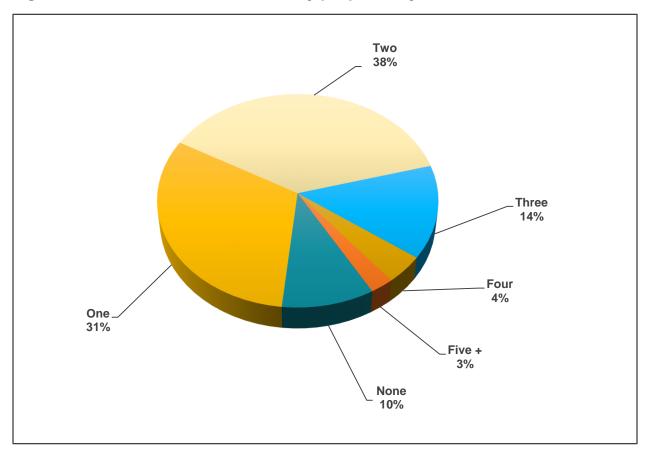


Table 4-34: Q19: Total vehicles own by people in my home:

Description	Valid Responses	% of Total Respondents
None	275	10.0%
One	866	31.5%
Two	1,032	37.6%
Three	388	14.1%
Four	116	4.2%
Five +	70	2.5%
Total:	2,747	100%

- Response Rate = 81.6%
- More than two-thirds of respondents live in a household with one or two vehicles
- The amount of respondents living in a two-vehicle household increased from 30% in 2013 to 38% in 2018





Figure 4-48: Q20: I could have traveled by car but chose to ride Tri-Rail instead:

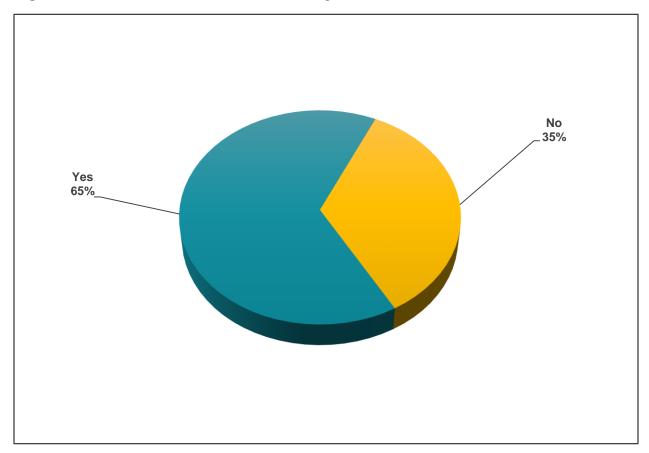


Table 4-35: Q20: I could have traveled by car but chose to ride Tri-Rail instead:

Description	Valid Responses	% of Total Respondents
Yes	1,907	65.2%
No	1,016	34.8%
Total:	2,923	100%

- Response Rate = 86.8%
- Almost two-thirds of respondents chose to ride Tri-Rail despite having the option to travel by automobile





Figure 4-49: Q21: I have a driver's license:

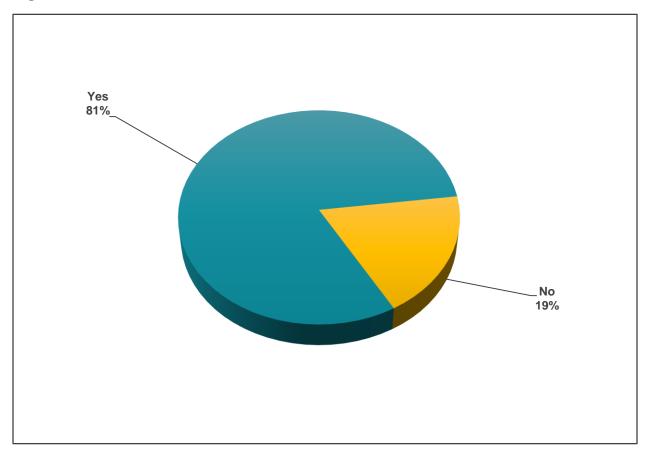


Table 4-36: Q21: I have a driver's license:

Description	Valid Responses	% of Total Respondents
Yes	2,397	81.3%
No	552	18.7%
Total:	2,949	100%

- Response Rate = 87.6%
- A significant majority of respondents currently have a driver's license





Figure 4-50: Q22: I graduated:

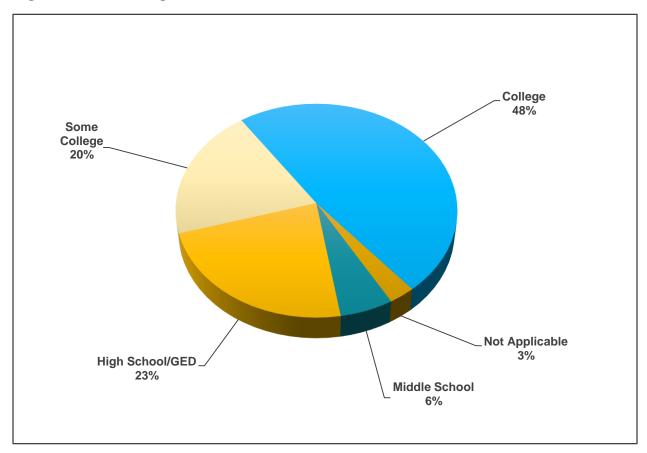


Table 4-37: Q22: I graduated:

Description	Valid Responses	% of Total Respondents
Middle School	165	5.7%
High School/GED	663	23.1%
Some College	573	19.9%
College	1,391	48.4%
Not Applicable	81	2.8%
Total:	2,873	100%

- Response Rate = 85.4%
- Just over two-thirds of respondents have some level of college education





Figure 4-51: Q23: What is your current employment status?

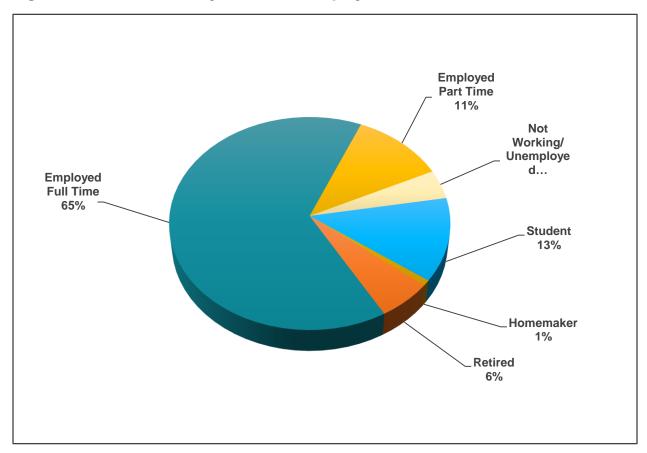


Table 4-38: Q23: What is your current employment status?

Description	Valid Responses	% of Total Respondents
Employed Full Time	1,904	64.7%
Employed Part Time	338	11.5%
Not Working/ Unemployed	129	4.4%
Student	373	12.7%
Homemaker	25	0.8%
Retired	173	5.9%
Total:	2,942	100%

- Response Rate = 87.4%
- Nearly two-thirds of all respondents are full-time employees





Figure 4-52: Q24: My household's total annual income is:

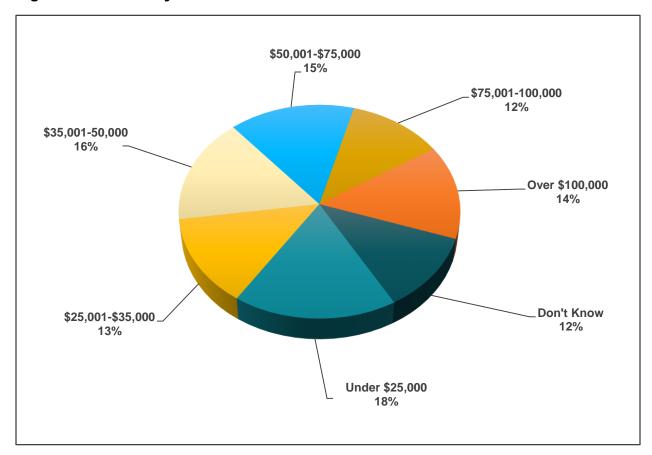


Table 4-39: Q24: My household's total annual income is:

Description	Valid Responses	% of Total Respondents
Under \$25,000	475	17.7%
\$25,001-\$35,000	361	13.4%
\$35,001-50,000	431	16.0%
\$50,001-\$75,000	416	15.5%
\$75,001-100,000	314	11.7%
Over \$100,000	383	14.2%
Don't Know	309	11.5%
Total:	2,689	100%

- Response Rate = 79.9%
- The share of those making less than \$25k and those making more than \$75k have both increased since 2013





Figure 4-53: Q25: I filled out another survey card earlier today:

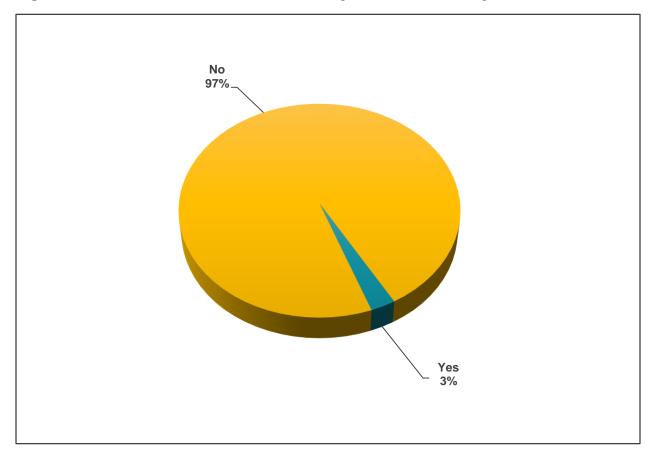


Table 4-40: Q25: I filled out another survey card earlier today:

Description	Valid Responses	% of Total Respondents		
Yes	70	2.7%		
No	2,532	97.3%		
Total:	2,602	100%		

- Response Rate = 77.3%
- Almost all of respondents had not filled out another survey card earlier in the day





#### 4.9 Customer Opinions and Preferences

Questions 26 and 27, as well as the space below them to provide additional written comments, were included to obtain the level of satisfaction related to Tri-Rail services and facilities. This part of the survey questionnaire asked specifically about nearly 20 different topic areas, which were grouped into the following categories:

- Likelihood to recommend Tri-Rail to others,
- Station conditions,
- Train conditions, and
- Customer service.

The tables below summarize the passenger opinions and preferences on the day of the survey:

**Table 4-41: Response Rate Summary of Opinion Questions** 

Question	Response Rate
Q26: How likely are you to recommend Tri-Rail to others?	79.1%
Q27: Please rate Tri-Rail on the following topics:	
Station Conditions	
Q27a: Station Announcements	70.8%
Q27b: Station Cleanliness	84.7%
Q27c: Station Security/Safety	83.7%
Q27d: Parking Availability	81.4%
Q27e: Ticket Vending Machines	82.7%
Train Conditions	
Q27f: Outside Cleanliness	84.7%
Q27g: Inside Cleanliness	84.1%
Q27h: On-Board Restrooms	79.6%
Q27i: On-Board Announcements	82.7%
Q27j: Air-Conditioning	83.4%
Q27k: On-Board Safety/Security	82.4%
Q27I: On-Board Experience	82.2%
Customer Service	
Q27m: Station Staff	82.2%
Q27n: On-Board Train Crew	81.5%
Q27o: Telephone Customer Service	75.4%
Q27p: Train On Time	82.0%
Q27q: Phone App	76.7%
Q27r: Website	76.6%
Average Response Rate:	80.8%





Table 4-42: Likelihood to Recommend Tri-Rail

Description		Valid Responses	% of Total Respondents
Not At All Likely	0	26	1.0%
	1	12	0.5%
	2	18	0.7%
	3	38	1.4%
	4	43	1.6%
	5	169	6.3%
	6	141	5.3%
	7	311	11.7%
	8	560	21.0%
	9	290	10.9%
Very Likely	10	1,055	39.6%
То	tal:	2,663	100%

Response Rate: 79.1% Average Response: 8.2 Median Response: 9

As shown in the following tables, the overall results from this series of questions were considerably positive. As a whole, at least 50% of respondents provided a rating of either 'good' or 'very good' for every category on the survey questionnaire with the exception of rating the on-board restrooms. When looking at these topics strictly by the percentage of respondents providing either 'good' or 'very good' the three areas with the highest ratings were on-board train crew, air-conditioning, and on-board safety/security. The three areas with the lowest ratings were on-board restrooms, inside cleanliness, and telephone customer service.



\_\_\_\_\_ 2018 \_\_\_\_\_

# **TRI-RAIL ON-BOARD SURVEY**



**Table 4-43: Station Conditions** 

Description		Station ncements	Q27b: Station Cleanliness		
Description	Valid	% of Total	Valid	% of Total	
	Responses	Respondents	Responses	Respondents	
Very Good	787	33.0%	766	26.9%	
Good	681	28.6%	908	31.9%	
Okay	582	24.4%	742	26.0%	
Poor	201	8.4%	261	9.2%	
Very Poor	114	4.8%	133	4.7%	
N/A	19	0.8%	40	1.4%	
Total Reponses:	2,384	100%	2,850	100%	
Response Rate:	70.8%		84.7%		

<b>D</b> ecember 4	Q27c: Station Security/Safety			Parking lability	Q27e: Ticket Vending Machines	
Description	Valid Responses	% of Total Respondents	Valid Responses	% of Total Respondents	Valid Responses	% of Total Respondents
Very Good	901	32.0%	1,056	38.6%	797	28.6%
Good	959	34.0%	900	32.9%	865	31.1%
Okay	649	23.0%	441	16.1%	690	24.8%
Poor	175	6.2%	107	3.9%	199	7.2%
Very Poor	88	3.1%	63	2.3%	97	3.5%
N/A	46	1.6%	172	6.3%	135	4.9%
Total Reponses:	2,818	100%	2,739	100%	2,783	100%
Response Rate:	83.7%		81.4%		82.7%	



\_\_\_\_\_ 2018 \_\_\_\_\_

# **TRI-RAIL ON-BOARD SURVEY**



**Table 4-44: Train Conditions** 

<b>D</b> anasis 4iau	Q27f: Outside Cleanliness			: Inside nliness	Q27h: On-Board Restrooms	
Description	Valid	% of Total	Valid	% of Total	Valid	% of Total
	Responses	Respondents	Responses	Respondents	Responses	Respondents
Very Good	684	24.0%	614	21.7%	465	17.4%
Good	888	31.2%	823	29.1%	490	18.3%
Okay	743	26.1%	786	27.8%	562	21.0%
Poor	305	10.7%	352	12.4%	409	15.3%
Very Poor	187	6.6%	214	7.6%	445	16.6%
N/A	43	1.5%	41	1.4%	307	11.5%
Total Reponses:	2,850	100%	2,830	100%	2,678	100%
Response Rate:	84.7%		84.1%		79.6%	

December 4 in the	-	Q27i: On-Board Announcements		Q27j: Air Conditioning		Q27k: On-Board Safety/Security		Q27I: On-Board Experience	
Description	Valid Responses	% of Total Respondents	Valid Responses	% of Total Respondents	Valid Responses	% of Total Respondents	Valid Responses	% of Total Respondents	
Very Good	1,021	36.7%	1,033	36.8%	1,032	37.2%	905	32.7%	
Good	977	35.1%	1,080	38.5%	1,022	36.9%	1,118	40.4%	
Okay	556	20.0%	519	18.5%	526	19.0%	577	20.9%	
Poor	100	3.6%	79	2.8%	77	2.8%	67	2.4%	
Very Poor	81	2.9%	50	1.8%	56	2.0%	53	1.9%	
N/A	49	1.8%	47	1.7%	60	2.2%	46	1.7%	
Total Reponses:	2,784	100%	2,808	100%	2,773	100%	2,766	100%	
Response Rate:	82.7%		83.4%		82.4%		82.2%		



\_\_\_\_\_ 2018 \_\_\_\_\_

# **TRI-RAIL ON-BOARD SURVEY**



**Table 4-45: Customer Service** 

Description	Q27m: Station Staff			On-Board n Crew	Q27o: Telephone Customer Service	
	Valid Responses	% of Total Respondents	Valid Responses	% of Total Respondents	Valid Responses	% of Total Respondents
Very Good	1,030	37.2%	1,133	41.3%	684	27.0%
Good	909	32.9%	967	35.3%	688	27.1%
Okay	512	18.5%	437	15.9%	457	18.0%
Poor	103	3.7%	52	1.9%	135	5.3%
Very Poor	79	2.9%	46	1.7%	84	3.3%
N/A	133	4.8%	107	3.9%	490	19.3%
Total Reponses:	2,766	100%	2,742	100%	2,538	100%
Response Rate:	82.2%		81.5%		75.4%	

Description	Q27p: Train On Time		Q27q: P	hone App	Q27r: Website		
	Valid Responses	% of Total Respondents	Valid Responses	% of Total Respondents	Valid Responses	% of Total Respondents	
Very Good	831	30.1%	793	30.7%	780	30.3%	
Good	815	29.5%	770	29.8%	807	31.3%	
Okay	653	23.7%	487	18.9%	509	19.7%	
Poor	253	9.2%	88	3.4%	80	3.1%	
Very Poor	136	4.9%	64	2.5%	56	2.2%	
N/A	71	2.6%	381	14.8%	346	13.4%	
Total Reponses:	2,759	100%	2,583	100%	2,578	100%	
Response Rate:	82.0%		76.7%		76.6%		



#### 4.10 Parking Counts

An additional component of the On-Board Survey consisted of counting parking spaces and vehicles parked at Tri-Rail stations to determine the occupancy rates on the day of the survey. Members of the survey team drove to each Tri-Rail station while the survey was in progress, roughly between 10:00 am and 2:00 pm, to conduct the station parking counts. Any person participating in the survey implementation who drove and parked at one of the terminal stations was asked to place a blank sheet of paper on their dashboard. Parking counters were then told to overlook these vehicles when conducting counts so as to avoid skewing the count data at these two stations with the unusually high number of parked survey staff.

Parking usage for the entire Tri-Rail system is just greater than 50% of existing capacity. At the station level, parking utilization at the Metrorail Transfer, Delray Beach, Hollywood, and West Palm Beach stations was close to capacity on the day of the survey, and may exceed capacity on given days or peak times. The parking occupancy rate for each station is shown in Table 4-46 below.

**Table 4-46: Station Parking Counts** 

Station	Parking Spaces	Vehicle Count	Occupancy Rate
Mangonia Park	256	172	67.2%
West Palm Beach	202	180	89.1%
Lake Worth	301	127	42.2%
Boynton Beach	314	161	51.3%
Delray Beach	119	112	94.1%
Boca Raton	158	122	77.2%
Deerfield Beach	231	81	35.1%
Pompano Beach	504	193	38.3%
Cypress Creek	336	69	20.5%
Ft. Lauderdale	305	185	60.7%
FLL at Dania Beach	443	203	45.8%
Sheridan Street	851	381	44.8%
Hollywood	113	104	92.0%
Golden Glades	591	450	76.1%
Opa-Locka	116	61	52.6%
Metrorail Transfer	42	40	95.2%
Hialeah Market	79	52	65.8%
Miami Airport	229	122	53.3%
Total:	5190	2815	54.2%



#### 4.11 Comparison with Previous Survey Efforts

This section provides a comparison of certain data points from the 2018 On-Board Survey with those from previous On-Board Survey efforts where comparable is available. Table 4-47 below shows the passenger counts collected on the day of the three most recent surveys.

**Table 4-47: Comparison of Passenger Counts** 

	2008 Su	rvey	2013 Su	rvey	2018 Survey	
Station	Boardings (NB & SB)	% of Total	Boardings (NB & SB)	% of Total	Boardings (NB & SB)	% of Total
Mangonia Park	1,189	7.6%	1,136	7.3%	1,038	7.0%
West Palm Beach	1,194	7.6%	1,324	8.5%	1,159	7.8%
Lake Worth	873	5.6%	977	6.2%	956	6.5%
Boynton Beach	819	5.2%	925	5.9%	800	5.4%
Delray Beach	653	4.2%	704	4.5%	805	5.5%
Boca Raton	1,196	7.6%	1,643	10.5%	1,391	9.4%
Deerfield Beach	809	5.2%	822	5.3%	752	5.1%
Pompano Beach	777	5.0%	819	5.2%	713	4.8%
Cypress Creek	1,101	7.0%	1,097	7.0%	1,116	7.6%
Ft. Lauderdale	982	6.3%	1,005	6.4%	882	6.0%
FLL at Dania Beach	828	5.3%	810	5.2%	880	6.0%
Sheridan Street	666	4.3%	452	2.9%	392	2.7%
Hollywood	695	4.4%	723	4.6%	706	4.8%
Golden Glades	678	4.3%	628	4.0%	578	3.9%
Opa-Locka	276	1.8%	383	2.4%	298	2.0%
Metrorail Transfer	1,767	11.3%	1,360	8.7%	1,010	6.8%
Hialeah Market	262	1.7%	847	5.4%	228	1.5%
Miami Airport	897	5.7%	-	-	1,065	7.2%
Total:	15,662	100.0%	15,655	100.0%	14,769	100.0%

<sup>\*</sup> The Miami Airport Station was not open at the time the 2013 On-Board Survey

Table 4-48 shows the number of stations traveled by Tri-Rail passengers. When comparing trip length over time, the results from the 2018 On-Board Survey seem to indicate that passengers using Tri-Rail for shorter trips (between two and four stations) have declined, while those using Tri-Rail to travel eight stations or more have increased. In 2008, the average trip length was 6.5 stations. This number dropped to 6.2 in 2013, and has now increased to 7.1 stations based on the 2018 survey data.





**Table 4-48: Comparison of Trip Length** 

# of Stations Traveled	2008	2013	2018
1	1.6%	3.3%	3.3%
2	6.8%	7.7%	5.6%
3	11.6%	11.3%	9.8%
4	13.8%	12.3%	11.3%
5	12.6%	10.2%	11.3%
6	17.0%	9.4%	9.3%
7	9.4%	8.6%	11.4%
8	8.0%	7.0%	7.9%
9	6.4%	4.2%	6.4%
10	4.0%	3.3%	4.7%
11	3.6%	2.7%	4.2%
12	2.9%	2.4%	3.2%
13	2.1%	2.2%	2.1%
14	2.2%	1.5%	3.0%
15	1.8%	2.6%	2.3%
16	0.9%	1.2%	2.4%
17	0.6%	-	1.8%

When comparing the results of questions related to passenger opinions and preferences, the overall trend seems to be that ratings have improved significantly since the 2013 On-Board Survey. In nearly every category, percentage of those passengers responding 'Very Good' has increased. On average, the amount of 'Very Good' responses is seven percentage points higher than in 2013. This growth is mostly accounted by the fact that the level of indifference has decreased over the same period, with the average amount of 'Okay' responses decreasing by four percentage points.

In general, comparisons reveal that questions related to Tri-Rail usage patterns and socioeconomic characteristics may have changed slightly since 2013, but still exhibit similar overall trends. Notable differences amongst passenger responses include:

- An almost eight percentage point increase of Hispanic passengers,
- An 11 percentage point increase in one-way fare purchases,
- A 10 percentage point decrease in monthly passes, and
- A five percentage point increase in walking as a mode of egress from Tri-Rail stations.





APPENDIX A - FULL TRI-RAIL OPERATING SCHEDULE

APPENDIX B - SURVEY INSTRUMENT (ENGLISH, SPANISH, AND CREOLE)

APPENDIX C - SURVEY STAFF TRAINING MANUAL/PRESENTATION

APPENDIX D - SAMPLE SURVEY LOG AND COUNT FORMS

APPENDIX E - ALL DAY PASSENGER DOOR COUNTS







# Appendix 9 Fiscal Year 2019 Capital and Operating Budgets





## **TABLE OF CONTENTS**

PROJECT	PAGE NUMBER
Capital Revenue Budget and Five Year Plan	1
Capital Projects Budget and Five Year Plan	2
Operations Department Capital Projects	_
Fleet Rehabilitation	3
Rail Yard Improvements	4
Station Improvements	5
Coach Wraps & Cameras	6
Station Beautification/Transit Enhancement	7
Purchase Rolling Stock	8
Decommission of Escalators	9
Finance Department Capital Projects	
Project Support/Administration	10
Preventative Maintenance	11
Debt Service-Downtown Miami Link PTC Loan	
Debt Service-Downtown Miami Station AAF Loan	13
Debt Service-SFRTA Operations Center	14
Transfer to Operating	
Purchase of West Palm Beach Parking Spaces	
Procurement Department Capital Projects	(4
Non-Revenue Fleet Vehicles	
Executive Capital Projects	
New Furniture and Replacement Program	
Safety and Security Capital Projects	
Portable Radios	
Information Technology Capital Projects	
Computer/Office Equipment/Software	20
Passenger Information System	21
TVMs and Networking	22
Audiovisual and Office Technology Equipment	23
Planning Capital Projects	
Planning/Capital Development	24
Transit Oriented Development (TOD II)	25
Miami River Intermodal Center (MR-MICCI)	
Cypress Creek Mobility Hub	27
Boca II	28
Transit Oriented Development Pilot Program	
Boca Trolleys	
Delray Beach Trolleys	31
PBIA Station Study	

### **TABLE OF CONTENTS**

**PAGE NUMBER** 

...... 57

**PROJECT** 

**GFOA** Distinguished Budget Presentation Award

Engineering Capital Projects	
On Board Cab Signal and E-ATC	
New Rolling Stock-Rotem Cars	
General Engineering Consultants	35
Environmental Mitigation	
Heavy Station Maintenance/Construction	
Opa Locka Parking Lot Improvements	
Northern Layover Facility	
Wayfinding	
Operations Center	41
Positive Train Control	42
Pompano Beach Tri-Rail Station Garage	43
Emergency Flagging Services	
Flagging Services for Construction Projects	45
Downtown Miami Station	
Waste Water Treatment Plant	47
Northwood Crossover	48
Downtown Miami Station Platform Buildout	
Grade Crossing and Signals	50
Downtown Miami Link PTC	51
Downtown Miami Station Level Boarding	52
Wheel Trueing Machine	53
Unfunded Capital Projects	
SFRC Capital Replacement Program	
MOW Oversight	55
Glossary	
Acronyms	56
Awards & Recognition	

## SOUTH FLORIDA REGIONAL TRANSPORTATION AUTHORITY FY 2018-2019 CAPITAL REVENUE BUDGET AND FIVE YEAR PLAN

FTA Section 5307 - Flex Funds FTA Section 5307 - Flex Funds FTA Section 5309 - Ger Program FTA Section 5309 - Sal Mod. FTA Section 5309 - Sal FTA (Edmark) FTA Section 5308 - TIGGER Funds FTA Section 5309 - Sal FTA (Edmark) FTA			FY 2018-2019			FIVE YEAR PLAN			
S109,182,232   \$18,560,578   \$18,560,578   \$18,560,578   \$18,560,578   \$18,560,578   \$22,545   \$18,560,578   \$18		PREVIOUS	CAPITAL	FY 2019-2020	FY 2020-2021	FY 2021-2022	FY 2022-2023	FY 2023-2024	TOTAL
FTA Section 5307 - Flex Funds FTA Section 5307 - Flex Funds FTA Section 5309 - Cal Program FTA Section 5309 - Sal FTA (Edinary) FTA Section 5308 - TIGGER Funds FTA Section 5308 - TIGGER Funds FTA Section 5309 - Sal FTA (Edinary) FTA (Ed		FUNDING	BUDGET	PROJECTED	PROJECTED	PROJECTED	PROJECTED	PROJECTED	
FTA Section 5307 - Flex Funds FTA Section 5307 - CIG Program FTA Section 5309 - SAFETA (Farmark) FTA SECTION 5300 - SAFETA (Farmark) FTA S	FTA Section 5307 - Formula Funds	\$109.182.232	\$18.560.578	\$18.560.578	\$18.560.578	\$18.560,578	\$18,560,578	\$18,560,578	\$ 220,545,700
1,250,000   15,305,611   16,101,684   16,1			21	,,,,	,, -	, , , , , , , , , , , , , , , , , , , ,			26,715,944
FTA Section S309 - Rail Mod. FTA Section S309 - SAFETEA (Earmark) FTA Section S309 - SAFETEA (Earmark) FTA Section S308 - SAFETEA (Earmark) FTA Section S308 - TIGGER Funds FTA Section S308 -									1,250,000
FTA Section 5309 - SAFETEA (Earmark) FTA Section 5309 - STETEA (Earmark) FTA Section 5308 - TIGGER fluds 1,800,000 FTA Section 3028 - PTC 31,633,176 American Recovery & Reinvestment Act 135,670 FDOT GMR Funds FDOT PTO 500,000 FDOT IPA'S 11,1007,815 FDOT JPA'S 11,1007,815 FDOT JPA'S-District 6 FDOT JPA'S-District 6 FDOT PAS-District 6 FDOT PRAS-District 6 FDOT PRAS-District 6 FDOT Railroad Reimbursement Flagging FDOT Railroad Reimbursement Grade Crossing FDOT Railroad Reimbursement Grade Crossing FDOT Trip Funds 13,250,000 13,250,000 2,500,000 2,500,000 2,500,000 2,500,000 2,500,000 2,500,000 2,500,000 2,500,000 2,500,000 2,500,000 2,500,000 2,500,000 2,500,000 2,500,000 2,500,000 2,500,000 3,000,000 2,500,0	-		20						15,305,611
FTA Section \$308 - TIGGER Funds FTA Section \$3028 - PTC 31,800,000 FTA Section \$3028 - PTC 31,633,176 American Recovery & Reinvestment Act FDOT GMR Funds FDOT PTO 500,000 FDOT JPA'S-District 6 FDOT Railroad Reimbursement Flagging FDOT Railroad Reimbursement Grade Crossing FDOT Trip Funds FDOT Trip Funds FDOT Trip Funds FDOT Trip Funds FOOT	FTA Section 5309 - SAFETEA (Earmark)								595,000
FTA Section 308 - TIGGER Funds FTA Section 308 - FTC 31,633,176 American Recovery & Reinvestment Act FDOT GMR Funds FDOT PTO 500,000 FDOT JPA'S FDOT JPA'S - District 6 FDOT JPA'S-District 6 FDOT JPA'S-District 6 FDOT PFD TRailroad Reimbursement Flagging FDOT Railroad Reimbursement Flagging FDOT Railroad Reimbursement Grade Crossing FDOT Trip Funds FDOT JPA'S-District 6 FDOT Railroad Reimbursement Flagging FDOT Railroad Reimbursement Grade Crossing FDOT Trip Funds 7,750,000 2,500,000 2,			16,101,684	16,101,684	16,101,684	16,101,684	16,101,684	16,101,684	179,446,255
FTA Section 3028 - PTC  American Recovery & Reinvestment Act 135,670 FDOT GMR funds 5,900,000 FDOT FDO FDOT FDOT FDOT GMR funds FDOT PTO 500,000 FDOT JPA'S-District 6 FDOT JPA'S-District 6 FDOT JPA-FIC FDOT Railroad Reimbursement Flagging FDOT Railroad Reimbursement Grade Crossing F	·								1,800,000
American Recovery & Reinvestment Act 135,670 5,900,000 5,000,000 5,000,000 5,000,000 5,000,000			- 2						31,633,176
FDOT GMR Funds   5,900,000   500,0	American Recovery & Reinvestment Act								135,670
FDOT PTO FDOT JPA'S FDOT JPA'S-District 6 FDOT Railroad Reimbursement Flagging FDOT Railroad Reimbursement Grade Crossing FDOT Railroad Reimbursement Grade Crossing FDOT Railroad Reimbursement Grade Crossing FDOT Trip Funds 7,750,000 Insurance Proceeds 2,598,618 CSX Contribution 3,3189,385 BMPO Funds BMPO Funds PTC Loan SEOPW CRA-Debt Service/Bonds All Aboard Florida Loan Omni CRA Omni CRA Omni CRA Sal,434,33 So6,6567 City of Miami DA Miami DDA T1,647,506 SFRTA Investment Account 718,512 County Gas Tax Primit Fees 727,000 Funding To Be Determined  500,000 2,					13,250,000	13,250,000			32,400,000
FDOT JPA'S FDOT JPA'S- I1,007,815 FDOT JPA'S-District 6 FDOT JPA-PTC FDOT Railroad Reimbursement Flagging FDOT Railroad Reimbursement Grade Crossing FDOT Trip Funds FDOT Trip					-,,				500,000
South   Sout			602.027.00						11,609,842
FDOT JPA-PTC FDOT Railroad Reimbursement Flagging FDOT Railroad Reimbursement Grade Crossing FDOT Railroad Reimbursement Grade Crossing FDOT Railroad Reimbursement Grade Crossing FDOT Trip Funds Insurance Proceeds CSX Contribution Insurance Proceeds CSX Contribution Insurance Proceeds SOMPO Funds PTC Loan SEOPW CRA-Debt Service/Bonds All Aboard Florida Loan Omni CRA City of Miami DDA									8,000,000
FDOT Railroad Reimbursement Flagging FDOT Railroad Reimbursement Grade Crossing FDOT Trip Funds Insurance Proceeds CSX Contribution BMPO Funds PTC Loan SEOPW CRA-Debt Service/Bonds All Aboard Florida Loan Omni CRA City of Miami DAA Miami DDA County Gas Tax Permit Fees Funding To Be Determined  7,750,000 2,500,000 2		11.060.478	30						11,060,478
FDOT Railroad Reimbursement Grade Crossing FDOT Trip Funds Insurance Proceeds CSX Contribution 3,189,385 BMPO Funds BMPO Funds PTC Loan SECPW CRA-Debt Service/Bonds All Aboard Florida Loan Omin CRA Omin CRA Omin CRA Omin DDA Miami DDA M	- 1		2,500,000	2,500,000	2,500,000	2,500,000	3,000,000	2,500,000	23,250,000
FDOT Trip Funds 7,750,000 Insurance Proceeds 2,598,618 CSX Contribution 3,189,385 BMPO Funds 800,000 PBMPO Funds 9,811 PTC Loan 5,531,977 11,077,588 3,680,435 17,528,049 17,528,049 17,528,049 17,528,049 17,528,049 17,528,049 17,528,049 17,528,049 17,528,049 17,528,049 17,528,049 17,528,049 17,528,049 17,528,049 17,528 18,970 18,9	55 5	3,1							50,879,289
Insurance Proceeds   2,598,618   3,189,385   3,189,385   3,189,385   6,376	·	7,750,000							11,916,735
SX Contribution   3,189,385   800,000   8,010,000   8,010,000   8,010,000   8,010,000   1,0373,666   19,162			3 3 3 3 3						2,598,618
BMPO Funds PBMPO Funds PBMPO Funds PTC Loan St.Opw CRA-Debt Service/Bonds All Aboard Florida Loan Omni CRA City of Miami DDA Miami DDA Miami Dade County SFRTA Investment Account County Gas Tax Permit Fees Funding To Be Determined  800,000 4,890,000 3,416,735 3,680,435 3,680,435 3,680,435 3,680,435 3,680,435 3,680,435 3,680,435 3,680,435 3,680,435 3,680,435 3,680,435 3,680,435 3,680,435 3,680,435 3,680,435 3,680,435 3,680,435 3,750 4,890,000 4,890,000 4,890,000 4,890,000 4,890,000 4,890,000 4,890,000 4,890,000 4,890,000 4,890,000 4,890,000 4,890,000 4,890,000 4,890,000 3,416,735 4,890,000 4,890,000 3,416,735 4,890,000 4,890,000 3,416,735 4,890,000 4,890,000 3,416,735 4,890,000 4	CSX Contribution		3.189.385						6,378,770
PBMPO Funds PTC Loan SEOPW CRA-Debt Service/Bonds All Aboard Florida Loan Omni CRA City of Miami Bayfront Park Trust Miami DDA Miami DAA Miami Dade County SFRTA Investment Account County Gas Tax Permit Fees Funding To Be Determined  1,505,000 4,890,000 3,416,735 3,680,435 3,6			3						800,000
PTC Loan  SEOPW CRA-Debt Service/Bonds All Aboard Florida Loan Omni CRA Omni CRA Official Coan Omni CRA Official Coan Omni CRA Om			1,505,000	4,890,000	3,416,735				9,811,735
SEOPW CRA-Debt Service/Bonds All Aboard Florida Loan Omni CRA Omni		5.531.977							20,290,000
All Aboard Florida Loan  Omni CRA  Omni CRA  3,143,433 606,567 City of Miami Bayfront Park Trust  0209,016 Miami DDA  Miami Dade County  SFRTA Investment Account  County Gas Tax  Permit Fees  Funding To Be Determined  14,688,481 2,839,569 3,750 3,750 3,750 40,984 40,984 205,528 1,267 40,984 205,528 1,267 205,528 1,267 205,528 2,252,494 2,252,494 3,100 8,010,000 8,									17,528,049
Omni CRA         3,143,433         606,567         3,750           City of Miami         6,786,865         1,310,165         8,097           Bayfront Park Trust         209,016         40,984         250           Miami DDA         1,061,472         205,528         1,267           Miami Dade County         11,647,506         2,252,494         13,900           SFRTA Investment Account         718,512         718           County Gas Tax         75,768,147         8,010,000         8,010,000         8,010,000         8,010,000         8,010,000         8,010,000         8,010,000         8,010,000         123,828           Funding To Be Determined         20,765,500         23,425,188         19,682,425         25,678,239         19,237,461         10,373,666         119,162	·	14.688.481							17,528,050
City of Miami         6,786,865         1,310,165         8,097           Bayfront Park Trust         209,016         40,984         250           Miami DDA         1,061,472         205,528         1,267           Miami Dade County         11,647,506         2,252,494         13,900           SFRTA Investment Account         718,512         718           County Gas Tax         75,768,147         8,010,000         8,010,000         8,010,000         8,010,000         8,010,000         8,010,000         8,010,000         8,010,000         123,828           Funding To Be Determined         20,765,500         23,425,188         19,682,425         25,678,239         19,237,461         10,373,666         119,162									3,750,000
Bayfront Park Trust Miami DDA Miami DDA Miami Dade County SFRTA Investment Account County Gas Tax Permit Fees Funding To Be Determined  209,016 1,061,472 205,528 2,252,494 2,252,494 2,252,494 2,252,494 2,252,494 3,010,000 8,010,000 8,010,000 8,010,000 8,010,000 8,010,000 8,010,000 8,010,000 8,010,000 8,010,000 8,010,000 8,010,000 8,010,000 8,010,000 123,828 207,655,500 23,425,188 19,682,425 25,678,239 19,237,461 10,373,666 119,162									8,097,030
Miami DDA       1,061,472       205,528       1,267         Miami Dade County       11,647,506       2,252,494       13,900         SFRTA Investment Account       718,512       718         County Gas Tax       75,768,147       8,010,000       8,010,000       8,010,000       8,010,000       8,010,000       8,010,000       8,010,000       8,010,000       123,828         Funding To Be Determined       20,765,500       23,425,188       19,682,425       25,678,239       19,237,461       10,373,666       119,162	·								250,000
Miami Dade County 11,647,506 718,512 718,512 718 County Gas Tax 75,768,147 8,010,000 8,010,000 8,010,000 8,010,000 8,010,000 8,010,000 123,828 Funding To Be Determined 20,765,500 23,425,188 19,682,425 25,678,239 19,237,461 10,373,666 119,162	·								1,267,000
SFRTA Investment Account         718,512         718,512         718 <th< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>13,900,000</td></th<>									13,900,000
County Gas Tax 75,768,147 8,010,000 8,010,000 8,010,000 8,010,000 8,010,000 123,828  Permit Fees 27,000 27,000 23,425,188 19,682,425 25,678,239 19,237,461 10,373,666 119,162	•								718,512
Permit Fees 27,000 20,765,500 23,425,188 19,682,425 25,678,239 19,237,461 10,373,666 119,162			8,010,000	8,010,000	8,010,000	8,010,000	8,010,000	8,010,000	123,828,147
Funding To Be Determined - 20,765,500 23,425,188 19,682,425 25,678,239 19,237,461 10,373,666 119,162	•		-,,	-,,	-,,,	, ,			27,000
			20,765,500	23.425.188	19.682,425	25,678,239	19,237,461	10,373,666	119,162,479
Total Capital Devianues 6 420 E02 490 6 117 554 119 6 02 414 420 6 02 502 246 6 06 242 992 6 75 014 006 6 55 545 029 6 077 076	. and the second tree		22,7 03,030	,,	,,,,,,	,5:,	,	,,	
	Total Capital Revenues	\$ 439,592,489	\$ 117,664,118	\$ 93,414,420	\$ 93,503,346	\$ 96 343,883	\$ 76,914,906	\$ 55,545,928	\$ 972,979,090

**Total Prior Year Funds Expended** 

\$ 288,632,859

**Remaining Prior Year Funds** 

150,959,630

## SOUTH FLORIDA REGIONAL TRANSPORTATION AUTHORITY FY 2018-2019 CAPITAL PROJECTS BUDGET AND FIVE YEAR PLAN

		FV 2018 2010			CHIEVE AD DI AAI			
	PRIOR	FY 2018-2019 CAPITAL	FY 2019-2020	FY 2020-2021	FIVE YEAR PLAN FY 2021-2022	FY 2022-2023	FY 2023-2024	TOTAL
	ALLOCATION	BUDGET	PROJECTED	PROJECTED	PROJECTED	PROJECTED	PROJECTED	JOHAL
Rehab Rolling Stock	12,479,181	3,911,826	1,438,582					17,829,589
Rail Yard Improvements	2,353,411		100,000				100,000	2,553,411
Station Improvements	1,650,000		500,000	500,000	500,000		500,000	3,650,000
Coach Wraps & Cameras	1,900,000							1,900,000
Station Beautification/Transit Enhancements	599,220							599,220
Purchase of Rolling Stock		500,000	10,037,500	10,037,500	10,337,500	10,337,500		41,250,000
Decommission of Escalators	404,205							404,205
Project Support/Administration	7,180,591	1,200,000		1,490,442	1,200,000		1,200,000	12,271,033
Preventive Maintenance	102,720,181	22,784,726	22,007,057	23,432,057	23,283,902	23,283,902	28,762,262	246,274,087
Debt Service-DTML PTC Commercial Loan	2,317,248	3,907,381	4,495,209	4,487,369	4,487,369	2,190,364		21,884,940
Debt Service-DTMS All Aboard Florida Loan	333,333	17,528,049						17,861,382
Debt Service-SIB Loan for Operations Center	6,697,508	2,872,100	4,709,519	2,763,250	2,500,000	878,664		20,421,041
Transfer to Operating	7,090,685	1,896,895	1,896,895	1,896,895	1,896,895	1,896,895	1,896,895	18,472,055
West Palm Beach Parking	*		1,000,000	1,000,000	1,000,000			3,000,000
Non-Revenue Fleet Vehicles	508,292	100,000	100,000	100,000	100,000	100,000		1,008,292
New Furniture and Replacement Program	402,352	100,000		100,000				602,352
Portable Radios	50,000	307			62,000			112,000
Computer/Office Equipment/Software	1,517,674	300,000	300,000	150,000	150,000			2,417,674
Passenger Information System	3,957,625	1,103,717	1,500,000					6,561,342
TVMs and Networking	9,366,120							9,366,120
Boardroom Audiovisual Equipment	955,257							955,257
Planning and Capital Development	7,325,000	1,000,000	1,125,000	1,000,000	1,150,000	1,000,000	2,200,000	14,800,000
Transit Oriented Development (TOD II)	1,775,000	200,000	200,000	200,000	200,000	200,000	200,000	2,975,000
Miami River Intermodal Center (MR-MICCI)	9,700,596	147,462		13,601,942	13,250,000			36,700,000
Cypress Creek Mobility Hub	800,000							800,000
Boca II	1,500,000		4,416,735	3,416,735	7,979,969	7,979,969		25,293,408
Transit Oriented Development Pilot Program	1,250,000	1.00						1,250,000
Boca Trolleys	7.1	1,505,000						1,505,000
Delray Beach Trolleys	:: 1	E	860,000					860,000
PBIA Station Study	*				250,000			250,000
Onboard Cab Signal and E-ATC	12,284,600							12,284,600
Rotern Cars-New Rolling Stock	42,810,525	4						42,810,525
General Engineering Consultants	10,122,304	2,648,155	2,800,000	2,800,000	1,500,000	1,500,000	1,500,000	22,870,459
Environmental Mitigation	500,000		l					500,000
Heavy Station Maintenance/Construction	1,803,782	500,000	500,000		290,442			3,094,224
Opa Locka Parking Lot Improvements	2,066,277							2,066,277
Northern Layover Facility	32,615,944	1,000,000	3,530,000					37,145,944
Wayfinding	3,069,216	- 323						3,069,216
Operations Center	21,520,391							21,520,391
Positive Train Control	48,873,242	3,189,384						52,062,626
Pompano Beach Tri-Rail Station Garage	13,435,303							13,435,303
Emergency Flagging Services	500,000					500,000		1,000,000
Flagging Services for Construction Projects	5,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	20,500,000
Downtown Miami Station	41,647,442	7,255,308						48,902,750
Waste Water Treatment Plant	350,000		1,636,000	1,500,000	612,000			4,098,000
Northwood Crossover	6,311,340	602,027	l					6,913,367
Downtown Miami Station-Platform Buildout	850,000							850,000
Grade Crossings and Signals	1,750,000	10,569,000	12,329,800	11,981,924	11,993,382	12,005,183		60,629,289
Downtown Miami Link PTC	5,531,977	11,077,588	3,680,435					20,290,000
Downtown Miami Station Level Boarding	1,616,667							1,616,667
Wheel True Machine	1,600,000							1,600,000
Unfunded Projects								9
SFRC Capital Replacement Program	37	17,465,500	9,951,688	8,734,688	8,674,688	6,819,688	8,573,666	60,219,918
MOW Oversight	9	1,800,000	1,800,000	1,800,000	1,800,000	1,800,000	1,800,000	10,800,000
-						. , -		3
Federal Funds Unallocated	3		l				200,000	200,000
County Gas Tax Funds Unallocated	3		l	10,544	625,736	3,922,741	6,113,105	10,672,126
			l					
Total Capital Fund allocation by Project:	\$ 439,592,489	\$ 117,664.11R	\$ 93,414.420	\$ 93,503,346	\$ 96,343,883	\$ 76,914,906	\$ 55,545,928	\$ 972,979,090
	,352,703	,, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,, ,,,,,,	,,-10	,,-,-,-		,,520	

\$ 288,632,859 \$ 150,959,630

Total Prior Year Funds Expended

Remaining Prior Year Funds

SOUTH FLORIDA REGIONAL TRANSPORTATION AUTHORITY CAPITAL IMPROVEMENT BUDGET FLEET REHABILITATION FY 2018/2019

PROJECT 204

FM 433611-1, 236854-2

#### **Operations Department**

DESCRIPTION: Rehabilitation of used rolling stock.

REVENUE SCHEDULE	PRIOR AMOUNTS	FY 18/19 AMOUNTS	FY 19/20 AMOUNTS	FY 20/21 AMOUNTS	FY 21/22 AMOUNTS	FY 22/23 AMOUNTS	FY 23/24 AMOUNTS	TOTAL AMOUNTS
FTA Section 5337- State of Good Repair Grant FY 16/17 Grant FY 18/19 Future Requests	4,470,600	1,863,122	732,559					4,470,600 1,863,122 732,559
FTA Section 5307- Formula Funds Grant FY 17/18 Grant FY 18/19 Future Requests	3,358,153	290,442	290,442					3,358,153 290,442 290,442
County Gas Tax Funds	1,333,298	1,758,262	415,581					3,507,141
SFRTA Investments	718,512							718,512
Insurance Proceeds	2,598,618							2,598,618
TOTAL REVENUE	\$ 12,479,181	3,911,826	1,438,582	100 marks		•//	NU. NU. +V	\$ 17,829,589
EXPENDITURE SCHEDULE	PRIOR AMOUNTS	FY 18/19 AMOUNTS	FY 19/20 AMOUNTS	FY 20/21 AMOUNTS	FY 21/22 AMOUNTS	FY 22/23 AMOUNTS	FY 23/24 AMOUNTS	TOTAL AMOUNTS
Fleet Rehabilitation Spare Parts Consultant Contingency	803,626	6,000,000 1,500,000 500,000 337,500	5,000,000	3,688,463				15,492,089 1,500,000 500,000 337,500
TOTAL EXPENDITURES	\$ 803,626	8,337,500	5,000,000	3,688,463	•	12 88/20-1		\$ 17,829,589
PROJECT BALANCE	\$ 11,675,555	7,249,881	3,688,463	(25,24\)				\$

SOUTH FLORIDA REGIONAL TRANSPORTATION AUTHORITY CAPITAL IMPROVEMENT BUDGET RAIL YARD IMPROVEMENTS FY 2018/2019

PROJECT 611

FM 433611-1, 236845-2

#### Operations Department

DESCRIPTION: To fund miscellaneous improvements at the SFRTA Rail Yards.

REVENUE SCHEDULE	PRIOR AMOUNTS	FY 18/19 AMOUNTS	FY 19/20 AMOUNTS	FY 20/21 AMOUNTS	FY 21/22 AMOUNTS	FY 22/23 AMOUNTS	FY 23/24 AMOUNTS	TOTAL AMOUNTS
FTA Section 5307-Formula Grant 942	1,025,979							1,025,979
FTA Section 5309 - Rail Mod Grant 096	620,781							620,781
FTA Section 5337 - State of Good Repair Grant 0008 Grant 0010 Grant FY 17-18 Future Requests	100,000 38,529 363,122		100,000				100,000	100,000 38,529 363,122 200,000
County Gas Tax Funds	205,000							205,000
Local 20% Match to FTA funds	(1)							
TOTAL REVENUE	\$ 2,353,411		100,000				100,000	\$ 2,553,411

EXPENDITURE SCHEDULE		PRIOR MOUNTS	FY 18/19 AMOUNTS	FY 19/20 AMOUNTS	FY 20/21 AMOUNTS	FY 21/22 AMOUNTS	FY 22/23 AMOUNTS	FY 23/24 AMOUNTS	AMOUNTS
Misc. Hialeah Yard Projects Fuel Spill		590,815 89,185	550,000	173,411	100,000	100,000	100,000	100,000	1,714,226 89,185
Train Wash			750,000						750,000
TOTAL EXPENDITURES	5	680,000	1,300,000	173,411	100,000	100,000	100,000	100,000	\$ 2,553,411
PROJECT BALANCE	\$	1,673,411	373,411	300,000	200,000	100,000			\$ -

<sup>(1)</sup> The 20% local match required by the FTA is satisfied by using FDOT Toll Revenue credits.

SOUTH FLORIDA REGIONAL TRANSPORTATION AUTHORITY CAPITAL IMPROVEMENT BUDGET
STATION IMPROVEMENTS
FY 2018/2019

PROJECT 779

FM 433611-1

#### **Operations Department**

DESCRIPTION: To fund miscellaneous rail station improvements that are not covered by Transit Enhancement funding.

	PRIOR	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	TOTAL
REVENUE SCHEDULE	AMOUNTS	AMOUNTS	AMOUNTS	AMOUNTS	AMOUNTS	AMOUNTS	AMOUNTS	AMOUNTS
FTA Section 5309 - SAFTEA								595,000
Grant 0031	595,000							595,000
FTA Section 5337 - State of Good Repair								
Grant 0012	100,000							100,000
Grant 0012	100,000							100,000
	100,000							100,000
Grant FY 16/17	•							500,000
Grant FY 17/18	500,000		500,000	500,000	500,000		500,000	2,000,000
Future Funds			300,000	300,000	300,000		300,000	2,000,000
County Gas Tax Funds	255,000							255,000
Local 20% Match to FTA funds [1]	)							
4							New York Test Spanish	TV
TOTAL REVENUE	\$ 1,650,000		500,000	500,000	500,000		500,000	\$ 3,650,000
	PRIOR	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	TOTAL
EXPENDITURE SCHEDULE	AMOUNTS	AMOUNTS	AMOUNTS	AMOUNTS	AMOUNTS	AMOUNTS	AMOUNTS	AMOUNTS
Misc. Station Improvements	757,304	150,000	333,905	400,000	250,000	150,000	450,000	2,491,209
Mangonia Paving	119,889	130,000	333,303	100,000	230,000		,	119,889
Station Upgrades	119,009	250,000	200,000	108,902	50,000	50,000	50,000	708,902
Flagging		60,000	50,000	100,502	33,333	,	•	110,000
CE&I		60,000	60,000					120,000
		50,000	50,000					100,000
Contingency		50,000	30,000					
TOTAL EXPENDITURES	\$ 877,193	570,000	693,905	508,902	300,000	200,000	500,000	\$ 3,650,000
PROJECT BALANCE	\$ 772,807	202,807	8,902		200,000			\$ -

<sup>(1)</sup> The 20% local match required by the FTA is satisfied by using FDOT Toll Revenue credits.

SOUTH FLORIDA REGIONAL TRANSPORTATION AUTHORITY CAPITAL IMPROVEMENT BUDGET COACH WRAPS AND CAMERAS FY 2018/2019

PROJECT 803

FM 236854-2

#### Operations Department

DESCRIPTION: Wrapping of Total Fleet with Tri-Rail logo, and installing cameras on trains.

REVENUE SCHEDULE	PRIOR AMOUNTS	FY 18/19 AMOUNTS	FY 19/20 AMOUNTS	FY 20/21 AMOUNTS	FY 21/22 AMOUNTS	FY 22/23 AMOUNTS	FY 23/24 AMOUNTS	AMOUNTS
FTA Section 5307 - Formula Grant 690 Grant 845	850,000 1,050,000							850,000 1,050,000
Local 20% Match to FTA funds	[1]							
TOTAL REVENUE	\$ 1,900,000	S			•			\$ 1,900,000
EXPENDITURE SCHEDULE	PRIOR AMOUNTS	FY 18/19 AMOUNTS	FY 19/20 AMOUNTS	FY 20/21 AMOUNTS	FY 21/22 AMOUNTS	FY 22/23 AMOUNTS	FY 23/24 AMOUNTS	TOTAL AMOUNTS
Coach Wraps On Board Cameras	1,192,707	707,293						1,192,707 707,293
TOTAL EXPENDITURES	\$ 1,192,707	707,293				1,45,126.0		\$ 1,900,000
PROJECT BALANCE	\$ 707,293							\$ .

<sup>(1)</sup> The 20% local match required by the FTA is satisfied by using FDOT Toll Revenue credits.

SOUTH FLORIDA REGIONAL TRANSPORTATION AUTHORITY CAPITAL IMPROVEMENT BUDGET STATION BEAUTIFICATION/TRANSIT ENHANCEMENT FY 2018/2019

PROJECT 825

FM 236854-2

#### **Operations Department**

DESCRIPTION: FTA funds that are set aside to fund miscellaneous Station Beautification and Transit Enhancement Projects. These funds can only be used for this purpose.

REVENUE SCHEDULE	PRIOR AMOUNTS	FY 18/19 AMOUNTS	FY 19/20 AMOUNTS	FY 20/21 AMOUNTS	FY 21/22 AMOUNTS	FY 22/23 AMOUNTS	FY 23/24 AMOUNTS	TOTAL
FTA Section 5307 - Formula Funds Grant 015 (ARRA) Grant 719 Grant 809 Grant 845 Grant 861 Grant 872	45,009 18,834 33,385 163,895 168,721 169,376							45,009 18,834 33,385 163,895 168,721 169,376
Local 20% Match to FTA funds  TOTAL REVENUE	(1) \$ 599,220							\$ 599,220
EXPENDITURE SCHEDULE	PRIOR AMOUNTS	FY 18/19 AMOUNTS	FY 19/20 AMOUNTS	FY 20/21 AMOUNTS	FY 21/22 AMOUNTS	FY 22/23 AMOUNTS	FY 23/24 AMOUNTS	TOTAL AMOUNTS
Station Beautification	343,388	255,832						599,220
TOTAL EXPENDITURES	\$ 343,388	255,832	E		06 3 3 3 3			\$ 599,220
PROJECT BALANCE	\$ 255,832	16-8 m = 121	16 VOIO \$ 84					\$ -

<sup>(1)</sup> The 20% local match required by the FTA is satisfied by using FDOT Toll Revenue credits.

SOUTH FLORIDA REGIONAL TRANSPORTATION AUTHORITY CAPITAL IMPROVEMENT BUDGET PURCHASE ROLLING STOCK FY 2018/2019

PROJECT

FM 236854-2, 433611-1

**Operations Departments** 

DESCRIPTION: Purchase of rolling stock.

REVENUE SCHEDULE	PRIOR AMOUNTS	FY 18/19 AMOUNTS	FY 19/20 AMOUNTS	FY 20/21 AMDUNTS	FY 21/22 AMOUNTS	FY 22/23 AMOUNTS	FY 23/24 AMOUNTS	TOTAL
FTA Section 5307- Formula Funds Future Requests					236,155	1,938,597		2,174,752
FTA Section 5337- State of Good Repair Future Requests				2,38⊊,763	3,489,763	5,761,099		11,640,625
Funding To Be Determined		500,000	10,037,500	7,647,737	6,611 582	2,637,804		27,434,623
TOTAL REVENUE	\$	500,000	10,037,500	10,037,500	10,337,500	10,337,500		\$ 41,250,000
EXPENDITURE SCHEDULE	PRIOR AMOUNTS	FY 18/19 AMOUNTS	FY 19/20 AMOUNTS	FY 20/21 AMOUNTS	FY 21/22 AMOUNTS	FY 22/23 AMOUNTS	FY 23/24 AMOUNTS	TOTAL AMOUNTS
RFP Development Procurement Contingency		500,000	10,037,500	10,037,500	10,037 500 300 000	10,037,500 300,000		500,000 40,150,000 600,000
TOTAL EXPENDITURES	\$	500,000	10,037,500	10,037,500	10,337,500	10,337,500		\$ 41,250,000
PROJECT BALANCE	\$ -							\$ -

<sup>(1)</sup> The 20% local match required by the FTA is satisfied by using FDOT Toll Revenue credits.

SOUTH FLORIDA REGIONAL TRANSPORTATION AUTHORITY CAPITAL IMPROVEMENT BUDGET DECOMMISSION OF ESCALATORS FY 2018/2019

**PROJECT** 

FM 433611-1

#### Operations Department

DESCRIPTION: Demolish escalators at Cypress Creek Station.

REVENUE SCHEDULE	PRIOR AMOUNTS	FY 18/19 AMOUNTS	FY 19/20 AMOUNTS	FY 20/21 AMOUNTS	FY 21/22 AMOUNTS	FY 22/23 AMOUNTS	FY 23/24 AMOUNTS	TOTAL AMOUNTS
FTA Section 5337 - Formula Funds Grant 942	404,205							404,205
TOTAL REVENUE	\$ 404,205						•	\$ 404,205
Demolition of Escalators	PRIOR AMOUNTS	FY 18/19 AMOUNTS 404,205	FY 19/20 AMOUNTS	FY 20/21 AMOUNTS	FY 21/22 AMOUNTS	FY 22/23 AMOUNTS	FY 23/24 AMOUNTS	AMOUNTS 404,205

SOUTH FLORIDA REGIONAL TRANSPORTATION AUTHORITY CAPITAL IMPROVEMENT BUDGET PROJECT SUPPORT/ADMINISTRATION FY 2018/2019

PROJECT 001

FM 236854-2

#### Finance Department

Description: Provides funding for the Planning Department, including payroll, training, and travel expenses, plus a portion of the Finance and Department's auditing, budgeting and grant administration costs.

ESTIMATED ANNUAL OPERATING IMPACT: These are FTA funds which are used for planning and grant related activities in the Operating Budget.

	PRIOR	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	TOTAL
REVENUE SCHEDULE	AMOUNTS	AMOUNTS	AMOUNTS	AMOUNTS	AMOUNTS	AMOUNTS	AMOUNTS	AMOUNTS
FTA Section 5307 - Formula								
Grant 809	1,750,000							1,750,000
Grant 845	1,100,000							1,100,000
Grant 861	1,200,000							1,200,000
Grant 872	1,100,000							1,100,000
Grant FY 16/17	1,000,000							1,000,000
Grant FY 17/18	1,030,591							1,030,591
Future Requests		1,200,000		1,490,442	1,200,000		1,200,000	5,090,442
Local 20% Match to FTA funds (1	1)							
TOTAL REVENUE	\$ 7,180,591	1,200,000		1,490,442	1,200,000		1,200,000	\$ 12,271,033
EXPENDITURE SCHEDULE	PRIOR AMOUNTS	FY 18/19 AMOUNTS	FY 19/20 AMOUNTS	FY 20/21 AMOUNTS	FY 21/22 AMOUNTS	FY 22/23 AMOUNTS	FY 23/24 AMOUNTS	TOTAL
Program Support	3,671,067	1,425,000	1,425,000	1,425,000	1,425,000	1,425,000	1,474,966	12,271,033
TOTAL EXPENDITURES	\$ 3,671,067	1,425,000	1,425,000	1,425,000	1,425,900	1,425,000	1,474,966	5 12,271,033
PROJECT BALANCE	\$ 3,509,524	3,284,524	1,859,524	1,924,966	1,699,966	274,966		\$

<sup>(1)</sup> The 20% local match required by the FTA is satisfied by using FDOT Toll Revenue credits.

## SOUTH FLORIDA REGIONAL TRANSPORTATION AUTHORITY CAPITAL IMPROVEMENT BUDGET PREVENTATIVE MAINTENANCE FY 2018/2019

PROJECT 007

#### Finance Department

#### FM 433611-1, 236854-2

DESCRIPTION: Funds received from the Federal Transit Administration to help offset maintenance costs in the Operating Budget.

REVENUE SCHEDULE	PRIOR AMOUNTS	FY 18/19 AMOUNTS	FY 19/20 AMOUNTS	FY 20/21 AMOUNTS	FY 21/22 AMOUNTS	FY 22/23 AMOUNTS	FY 23/24 AMOUNTS	TOTAL AMOUNTS
FTA Section 5307 - Formula Funds								
Grant 096	5,662,029							5,662,029
Grant 809	3,748,787							3,748,787
Grant 872	13,391,828							13,391,828
Grant 764	2,034,000							2,034,000
Grant 942	9,939,463							9,939,463
Grant FY 16/17	8,176,442							8,176,442
Grant FY 17/18	14,634,194							14,634,194
Future Funding		13,121,981	12,545,136	13,070,136	13,821,981	13,821,981	13,260,578	79,641,793
FTA Section 5337 - State of Good Repair								
Grant 012	9,317,949							9,317,949
Grant 010	10,863,309							10,863,309
Grant 024	9,844,640							9,844,640
Grant FY 16/17	8,527,131							8,527,131
Grant FY 17/18	6,580,409							6,580,409
Future Funding		9,662,745	9,461,921	10,361,921	9,461,921	9,461,921	15,501,684	63,912,113
Local 20% Match to FTA funds	(1)							
TOTAL REVENUE	\$ 102,720,181	22,784,726	22,907,057	23,432,057	23,283,902	23,283,902	28,762,262	\$ 246,274,087
			- 4		m - m - Inn	CV 22/22	EV 22/24	TOTAL

EXPENDITURE SCHEDULE	PRIOR AMOUNTS	FY 18/19 AMOUNTS	FY 19/20 AMOUNTS	FY 20/21 AMOUNTS	FY 21/22 AMOUNTS	FY 22/23 AMOUNTS	FY 23/24 AMOUNTS	AMOUNTS
Preventative Maintenance (Operating Budget) PTC Maintenance	92,571,113	22,414,406 1,052,263	22,500,000 2,045,560	23,400,000 2,050,000	23,500,000 2,050,000	23,878,483 2,050,000	26,712,262 2,050,000	234,976,264 11,297,823
TOTAL EXPENDITURES	\$ 92,571,113	23,466,669	24,545,560	25,450,000	25,550,000	25,928,483	28,762,262	\$ 245,274,087
PROJECT BALANCE	\$ 10,149,068	9,467,125	6,928,622	4,910,679	2,644,581		[988] • Z	\$ -

<sup>(1)</sup> The 20% local match required by the FTA is satisfied by using FDOT Toll Revenue credits.

SOUTH FLORIDA REGIONAL TRANSPORTATION AUTHORITY
CAPITAL IMPROVEMENT BUDGET
DEBT SERVICE-DOWNTOWN MIAMI LINK PTC-COMMERCIAL LOAN
FY 2018/2019

#### PROJECT 514

#### **Finance Department**

DESCRIPTION: Repayment of Commercial loan for Construction of Rail Infrastructure, PTC and Easement.

REVENUE SCHEDULE	PRIOR AMOUNTS	FY 18/19 AMOUNTS	FY 19/20 AMOUNTS	FY 20/21 AMOUNTS	FY 21/22 AMOUNTS	FY 22/23 AMOUNTS	FY 23/24 AMOUNTS	TOTAL AMOUNTS
County Gas Tax	2,317,248	3,907,381	4,495,209	4,487,369	4,487,369	2,190,364		21,884,940
TOTAL REVENUE	\$ 2,317,248	3,907,381	4,495,209	4,487,369	4,487,369	2,190,364		\$ 21,884,940

EXPENDITURE SCHEDULE	PRIOR AMOUNTS	FY 18/19 AMOUNTS	FY 19/20 AMOUNTS	FY 20/21 AMOUNTS	FY 21/22 AMOUNTS	FY 22/23 AMOUNTS	FY 23/24 AMOUNTS	TOTAL AMOUNTS
Repayment of Commercial Loan Payment of Interest on Commercial Loan	76,316	1,604,472 244,014	1,657,257 191,230	1,711,778 136,710	1,768,092 80,394	1,364,138 22,227		8,105,737 750,891
TOTAL EXPENDITURES	\$ 76,316	1,848,486	1,848,487	1,848,488	1,848,486	1,386,365		\$ 8,856,628
PROJECT BALANCE	\$ 2,240,932	4,299,827	6,946,549	9,585,430	12,224,313	13,028,312	13,028,312	13,028,312

SOUTH FLORIDA REGIONAL TRANSPORTATION AUTHORITY CAPITAL IMPROVEMENT BUDGET DEBT SERVICE-DOWNTOWN MIAMI STATION-ALL ABOARD FLORIDA LOAN FY 2018/2019

#### PROJECT

#### Finance Department

DESCRIPTION: Repayment of All Aboard Florida loan for construction of Miami Station.

REVENUE SCHEDULE	PRIOR AMOUNTS	FY 18/19 AMOUNTS	FY 19/20 AMOUNTS	FY 20/21 AMOUNTS	FY 21/22 AMOUNTS	FY 22/23 AMOUNTS	FY 23/24 AMOUNTS	TOTAL AMOUNTS
SEOPW CRA County Gas Tax for Interest Payments	333,333	17,528,049						17,528,049 333,333
TOTAL REVENUE	\$ 333,333	17,528,049			5	*		\$ 17,861,382
	PRIOR	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	TOTAL
EXPENDITURE SCHEDULE	AMOUNTS	AMOUNTS	AMOUNTS	AMOUNTS	AMOUNTS	AMOUNTS	AMOUNTS	AMOUNTS
Repayment of AAF Loan Payment of Interest on AAF Loan		17,528,049 333,333						17,528,049 333,333
TOTAL EXPENDITURES	\$	17,861,382			•			\$ 17,861,382
PROJECT BALANCE	\$ 333,333							\$ -

SOUTH FLORIDA REGIONAL TRANSPORTATION AUTHORITY CAPITAL IMPROVEMENT BUDGET DEBT SERVICE-SFRTA OPERATIONS CENTER FY 2018/2019

#### PROJECT

#### Finance Department

DESCRIPTION: Repayment of SIB Loan for construction of the Operations Center.

REVENUE SCHEDULE	PRIOR AMOUNTS	FY 18/19 AMOUNTS	FY 19/20 AMOUNTS	FY 20/21 AMOUNTS	FY 21/22 AMOUNTS	FY 22/23 AMOUNTS	FY 23/24 AMOUNTS	TOTAL
FTA Section 5337 - State of Good Repair Grant FY 16/17	3,842,032							3,842,032 2,500,000
Grant FY 17/18 Future Funding	2,500,000	2,572,100	4,507,204	2,500,000	2,500,000	878,664		12,957,968
County Gas Tax For Interest Payments	355,476	300,000	202,315	263,250				1,121,041
TOTAL REVENUE	\$ 6,697,508	2,872,100	4,709,519	2,763,250	2,500,000	878,664		\$ 20,421,041
EXPENDITURE SCHEDULE	PRIOR AMOUNTS	FY 18/19 AMOUNTS	FY 19/20 AMOUNTS	FY 20/21 AMOUNTS	FY 21/22 AMOUNTS	FY 22/23 AMOUNTS	FY 23/24 AMOUNTS	TOTAL AMOUNTS
Repayment of SIB Loan Payment of Interest on SIB Loan		2,997,744 343,881	3,088,940 252,685	3,136,819 204,806	3,185,439 156,186	3,234,814 106,811	3,656,244 56,672	19,300,000 1,121,041
TOTAL EXPENDITURES	\$ -	3,341,625	3,341,625	3,341,625	3,341,625	3,341,625	3,712,916	\$ 20,421,041
PROJECT BALANCE	\$ 6,697,508	6,227,983	7,595,877	7,017,502	6,175,877	3,712,916		\$ -

SOUTH FLORIDA REGIONAL TRANSPORTATION AUTHORITY CAPITAL IMPROVEMENT BUDGET TRANSFER TO OPERATING FY 2018/2019

**PROJECT** 

#### Finance Department

DESCRIPTION: To cover additional cost of MOW.

ESTIMATED ANNUAL OPERATING IMPACT: - 0 -

REVENUE SCHEDULE	PRIOR AMOUNTS	FY 18/19 AMOUNTS	FY 19/20 AMOUNTS	FY 20/21 AMOUNTS	FY 21/22 AMOUNTS	FY 22/23 AMOUNTS	FY 23/24 AMOUNTS	TOTAL AMOUNTS
County Gas Tax Funds FY 14-15 County Gas Tax Funds FY 15-16 County Gas Tax Funds FY 16-17 County Gas Tax Funds FY 17-18	1,400,000 1,896,895 1,896,895 1,896,895							1,400,000 1,896,895 1,896,895 1,896,895
County Gas Tax Funds Future		1,896,895	1,896,895	1,896,895	1,896,395	1,896,895	1,896,895	11,381,370
TOTAL REVENUE	\$ 7,090,685	1,896,895	1,896,895	1,896,895	1,896,895	1,896,895	1,896,895	\$ 18,472,055
EXPENDITURE SCHEDULE	PRIOR AMOUNTS	FY 18/19 AMOUNTS	FY 19/20 AMOUNTS	FY 20/21 AMOUNTS	FY 21/22 AMOUNTS	FY 22/23 AMOUNTS	FY 23/24 AMOUNTS	TOTAL AMOUNTS
MOW Costs	7,090,685	1,896,895	1,896,895	1,896,895	1,896,395	1,896,895	1,896,895	18,472,055
TOTAL EXPENDITURES	\$ 7,090,685	1,896,895	1,896,895	1,896,895	1,896,895	1,896,895	1,896,895	\$ 18,472,055
PROJECT BALANCE	\$ -							\$ -

15

Transfer to Operating

SOUTH FLORIDA REGIONAL TRANSPORTATION AUTHORITY CAPITAL IMPROVEMENT BUDGET PURCHASE OF WEST PALM BEACH PARKING SPACES FY 2018/2019

#### PROJECT

#### Finance Department

DESCRIPTION: Purchase of 250 parking spaces at the West Palm Beach TOD station.

REVENUE SCHEDULE	PRIOR AMOUNTS	FY 18/19 AMOUNTS	FY 19/20 AMOUNTS	FY 20/21 AMOUNTS	FY 21/22 AMOUNTS	FY 22/23 AMOUNTS	FY 23/24 AMOUNTS	TOTAL AMOUNTS
County Gas Tax Funds			1,000,000	1,000,000	1,000,000			3,000,000
TOTAL REVENUE	\$ -		1,000,000	1,000,000	1,000,000	- 18 - Was		\$ 3,000,000
	PRIOR	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	TOTAL
EXPENDITURE SCHEDULE	AMOUNTS	AMOUNTS	AMOUNTS	AMOUNTS	AMOUNTS	AMOUNTS	AMOUNTS	AMOUNTS
Acquisition of parking spaces	AMOUNTS			The state of the s				
	AMOUNTS \$			The state of the s	AMOUNTS			AMOUNTS

SOUTH FLORIDA REGIONAL TRANSPORTATION AUTHORITY CAPITAL IMPROVEMENT BUDGET NON-REVENUE FLEET VEHICLES FY 2018/2019

PROJECT 787

FM 236854-2, 433611-1

#### Procurement Department

DESCRIPTION: Purchase of new non-revenue fleet vehicles.

ESTIMATED ANNUAL OPERATING IMPACT: Potential savings due to a decrease in repair/maintenance costs and older, less fuel efficient autos are replaced with more fuel efficient vehicles.

REVENUE SCHEDULE		PRIOR AMOUNTS	FY 18/19 AMOUNTS	FY 19/20 AMOUNTS	FY 20/21 AMOUNTS	FY 21/22 AMOUNTS	FY 22/23 AMOUNTS		OTAL OUNTS
FTA Section 5307 - Formula									
Grant 845		100,000							100,000
Grant 872		100,000							100,000
Grant 942		208,292							208,292
Future Requests			100,000	100,000		100,000	100,000		400,000
FTA Section 5337									
Grant FY 17-18		100,000							100,000
Future Requests					100,000				100,000
Local 20% Match to FTA funds	(1)								
TOTAL REVENUE	\$	508,292	100,000	100,000	100,000	100,000	100,000	- \$ 1	1,008,292

EXPENDITURE SCHEDULE	PRIOR AMOUNTS	FY 18/19 AMOUNTS	FY 19/20 AMOUNTS	FY 20/21 AMOUNTS	FY 21/22 AMOUNTS	FY 22/23 AMOUNTS	FY 23/24 AMOUNTS	AMOUNTS
Non-Revenue Fleet	376,758	100,000	100,000	100,000	100,000	100,000	131,534	1,008,292
TOTAL EXPENDITURES	\$ 376,758	100,000	100,000	100,000	100,000	100,000	131,534	\$ 1,008,292
PROJECT BALANCE	\$ 131,534	131,534	131,534	131,534	131,534	131,534		\$ -

<sup>(1)</sup> The 20% local match required by the FTA is satisfied by using FDOT Toll Revenue credits.

SOUTH FLORIDA REGIONAL TRANSPORTATION AUTHORITY CAPITAL IMPROVEMENT BUDGET
NEW FURNITURE AND REPLACEMENT PROGRAM
FY 2018/2019

PROJECT 830

FM 433611-1, 236854-2

#### Executive

DESCRIPTION: The purchase of office furniture for the initial move to the new building and occasional furniture replacement as necessary.

REVENUE SCHEDULE	PRIOR AMOUNTS	FY 18/19 AMOUNTS	FY 19/20 AMOUNTS	FY 20/21 AMOUNTS	FY 21/22 AMOUNTS	FY 22/23 AMOUNTS	FY 23/24 AMOUNTS	TOTAL AMOUNTS
FTA Section 5307 - Formula Grant 942	174,556							174,556
FTA Section 5337 - State of Good Repair Grant 024 Grant FY 18-19 Future Requests	227,796	100,000		100,000				227,796 100,000 100,000
Local 20% Match to FTA funds	(1)							
TOTAL REVENUE	\$ 402,352	100,000		100,000			[20]	\$ 602,352

EXPENDITURE SCHEDULE	PRIOR AMOUNTS	FY 18/19 AMOUNTS	FY 19/20 AMOUNTS	FY 20/21 AMOUNTS	FY 21/22 AMOUNTS	FY 22/23 AMOUNTS	FY 23/24 AMOUNTS	AMOUNTS
Office furniture and fixtures	206,216	150,000	75,000	75,000		96,136		602,352
TOTAL EXPENDITURES	\$ 206,216	150,000	75,000	75,000		96,136		\$ 602,352
PROJECT BALANCE	\$ 196,136	146,136	71,136	96,136	96,136			\$ .

<sup>(1)</sup> The 20% local match required by the FTA is satisfied by using FDOT Toll Revenue credits.

SOUTH FLORIDA REGIONAL TRANSPORTATION AUTHORITY CAPITAL IMPROVEMENT BUDGET PORTABLE RADIOS FY 2028/2019

**PROJECT** 

FM 236854-2

#### Safety and Security Department

DESCRIPTION: Portable Motorola radios communication between security personnel and train crews.

REVENUE SCHEDULE	PRIOR AMOUNTS	FY 18/19 AMOUNTS	FY 19/20 AMOUNTS	FY 20/21 AMOUNTS	FY 21/22 AMOUNTS	FY 22/23 AMOUNTS	FY 23/24 AMOUNTS	TOTAL AMOUNTS
FTA Section 5307 - Formula Funds Grant FY 16/17 Future Requests	50,000				62.000			50,000 62,000
TOTAL REVENUE	\$ 50,000				62,000		E-2003-E	\$ 112,000
EXPENDITURE SCHEDULE	PRIOR AMOUNTS	FY 18/19 AMOUNTS	FY 19/20 AMOUNTS	FY 20/21 AMOUNTS	FY 21/22 AMOUNTS	FY 22/23 AMOUNTS	FY 23/24 AMOUNTS	TOTAL
Communication Equipment		50,000					62,000	112,000
TOTAL EXPENDITURES	\$ -	50,000			•	[155] [158]	62,000	\$ 112,000
PROJECT BALANCE	\$ 50,000	ALL DESCRIPTION			62,000	62,000		\$ -

<sup>(1)</sup> The 20% local match required by the FTA is satisfied by using FDOT Toli Revenue credits.

SOUTH FLORIDA REGIONAL TRANSPORTATION AUTHORITY CAPITAL IMPROVEMENT BUDGET COMPUTER/OFFICE EQUIPMENT/SOFTWARE FY 2018/2019

PROJECT 003

FM 433611-1, 236854-2

PROJECT BALANCE

#### Information Technology Department

DESCRIPTION: The purchase of office computers, software, and telecommunication equipment.

ESTIMATED ANNUAL OPERATING IMPACT: Minimal since the cost to operate computers and telecommunication equipment has always been included in the SFRTA Operating budget.

REVENUE SCHEDULE	PRIOR AMOUNTS	FY 18/19 AMOUNTS	FY 19/20 AMOUNTS	FY 20/21 AMOUNTS	FY 21/22 AMOUNTS	FY 22/23 AMOUNTS	FY 23/24 AMOUNTS	TOTAL AMOUNTS
FTA Section 5307 - Formula Grant 942	147,000							147,000
FTA Section 5337 - State of Good Repair Grant 0010 Grant 0012 Grant 024 Future Requests	200,000 600,000 353,000	300,000	300,000	150,000	150,000			200,000 600,000 353,000 900,000
County Gas Tax Funds	217,674							217,674
Local 20% Match to FTA funds  TOTAL REVENUE	(1) \$ 1,517,674	300,000	300,000	150,000	150,000			\$ 2,417,674
EXPENDITURE SCHEDULE	PRIOR AMOUNTS	FY 18/19 AMOUNTS	FY 19/20 AMOUNTS	FY 20/21 AMOUNTS	FY 21/22 AMOUNTS	FY 22/23 AMOUNTS	FY 23/24 AMOUNTS	TOTAL
Misc. Office Equipment & Software Records Management Software Computers/Servers	283,015 418,251	50,000 50,000	50,000 200,000	50,000 300,000 75,000	25,000 200,000 75,000	25,000 167,680	25,000	508,015 500,000 985,931
Total expenditures	403,728 \$ 1,104,994	10,000	10,000	425,000	300,000	192,680	25,000	423,728 \$ 2,417,674

<sup>(1)</sup> The 20% local match required by the FTA is satisfied by using FDOT Toll Revenue credits.

412,680

642,680

602,680

367,680

217,680

25,000

#### SOUTH FLORIDA REGIONAL TRANSPORTATION AUTHORITY CAPITAL IMPROVEMENT BUDGET PASSENGER INFORMATION SYSTEM FY 2018/2019

PROJECT 780

FM 236854-2, 430298-1, 433611-1

#### Information Technology Department

DESCRIPTION: To replace the current GPS tracking system and Passenger Information System.

ESTIMATED ANNUAL OPERATING IMPACT: Approximately \$20,000 per year.

	PRIOR	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	AMOUNTS
REVENUE SCHEDULE	AMOUNTS	AMOUNTS	AMOUNTS	AMOUNTS	AMOUNTS	AMOUNTS	AMOUNTS	AMOUNIS
FTA Section 5307 - Formula Funds								
Grant 592	199,000							199,000
Grant 672	200,000					141		200,000
Grant 690	1,600,000							1,600,000
Grant 845	1,145,000							1,145,000
Grant 861	108,292							108,292
FTA Section 5337 - State of Good Repair								
Grant 024	205,333							205,333
Future Funds		1,103,717	1,500,000					2,603,717
FDOT JPA 95	500,000							500,000
Local 20% Match to FTA funds	(1)							
TOTAL REVENUE	\$ 3,957,625	1,103,717	1,500,000	D. I MICE .		16 February 1	\$	6,561,342
EXPENDITURE SCHEDULE	PRIOR AMOUNTS	FY 18/19 AMOUNTS	FY 19/20 AMOUNTS	FY 20/21 AMOUNTS	FY 21/22 AMOUNTS	FY 22/23 AMOUNTS	FY 23/24 AMOUNTS	TOTAL AMOUNTS
Digital Station Signage	868,737	500,000	1,500,000					2,868,737
GPS Train Tracking	24,000	100,000	-,,					124,000
PIS Software	,	500,000	1,000,000					1,500,000
Mobile Application	54,000	400,000	200,000					654,000
Consulting	250,000	378,755	425,363					1,054,118
Contingency		,	46,888					46,888
Miami Central Station Cabeling		68,890	,					68,890
Labor and Installation at Miami Central Station		244,709						244,709
		244,703						
TOTAL EXPENDITURES	\$ 1,196,737	2,192,354			->- # "6E	STATE STATES	5	6,561,342

<sup>(1)</sup> The 20% local match required by the FTA is satisfied by using FDOT Toll Revenue credits.

SOUTH FLORIDA REGIONAL TRANSPORTATION AUTHORITY CAPITAL IMPROVEMENT BUDGET TVMs AND NETWORKING FY 2018/2019

PROJECT 836

FM 433611-1, 236854-2

#### Information Technology Department

DESCRIPTION: To purchase TVMs and additional equipment for Tri-Rail Stations.

REVENUE SCHEDULE	PRIOR AMOUNTS	FY 18/19 AMOUNTS	FY 19/20 AMOUNTS	FY 20/21 AMOUNTS	FY 21/22 AMOUNTS	FY 22/23 AMOUNTS	FY 23/24 AMOUNTS	TOTAL AMOUNTS
FTA Section 5307 - Formula Funds Grant 942	1,025,000							1,025,000
FTA Section 5309 - Fixed Guideway Grant 0116	458,150							458,150
FTA Section 5337 - State of Good Repair Grant 0008 Grant 0012 Grant 024 Grant FY 17-18	1,000,000 668,000 1,195,518 2,700,000							1,000,000 668,000 1,195,518 2,700,000
County Gas Tax Funds	2,319,452							2,319,452
Local 20% Match to FTA funds	(1)							
TOTAL REVENUE	\$ 9,366,120					100/47U(2)8		\$ 9,366,120
	PRIOR	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	TOTAL

EXPENDITURE SCHEDULE	PRIOR AMOUNTS	FY 18/19 AMOUNTS	FY 19/20 AMOUNTS	FY 20/21 AMOUNTS	FY 21/22 AMOUNTS	FY 22/23 AMOUNTS	FY 23/24 AMOUNTS	TOTAL
EAF ENDITORE SCHEDOLE	Amodista	AMOUNTS	AMOUNTS	AMOUNTS	ratio sitis	75	100000000000000000000000000000000000000	
Purchase new TVMs	3,350,607	1,600,000	1,310,273					6,260,880
Upgrade Fare Collection System		2,200,000						2,200,000
Software Reconfiguration		100,000						100,000
Communications/Networking		183,760						183,760
Fiber Optics	125,000							125,000
MDT Network		75,000						75,000
Spare parts		100,000	100,000	100,000	75,000			375,000
Miami Central Station Cabeling		16,240						16,240
Labor and Installation at Miami Central Station		30,240						30,240
TOTAL EXPENDITURES	\$ 3,475,607	4,305,240	1,410,273	100,000	75,000			\$ 9,366,120
PROJECT BALANCE	\$ 5,890,513	1,585,273	175,000	75,000				\$ -

<sup>(1)</sup> The 20% local match required by the FTA is satisfied by using FDOT Toll Revenue credits.

SOUTH FLORIDA REGIONAL TRANSPORTATION AUTHORITY CAPITAL IMPROVEMENT BUDGET AUDIOVISUAL AND OFFICE TECHNOLOGY EQUIPMENT FY 2018/2019

PROJECT 849

FM # 236854-2, 433611-1

#### Information Technology Department

DESCRIPTION: Audiovisual equipment and office technology for the SFRTA operations building.

ESTIMATED ANNUAL OPERATING IMPACT: - 0 -

REVENUE SCHEDULE	PRIOR AMOUNTS	FY 18/19 AMOUNTS	FY 19/20 AMOUNTS	FY 20/21 AMOUNTS	FY 21/22 AMOUNTS	FY 22/23 AMOUNTS	FY 23/24 AMOUNTS	TOTAL AMOUNTS
FTA Section 5307 - Formula								
Grant 872	76,431							76,431
Grant 942	25,444							25,444
FTA Section 5337 - State of Good Repair								
Grant 0012	853,382							853,382
Local 20% Match to FTA funds	(1)							
TOTAL REVENUE	\$ 955,257	•						\$ 955,257

EXPENDITURE SCHEDULE	PRIOR AMOUNTS	FY 18/19 AMOUNTS	FY 19/20 AMOUNTS	FY 20/21 AMOUNTS	FY 21/22 AMOUNTS	FY 22/23 AMOUNTS	FY 23/24 AMOUNTS	AMOUNTS
Agency Audiovisual Equipment	582,704	45,000						627,704
Office Technology Equipment	186,123							186,123
Conference Rooms Audiovisual		30,000						30,000
Training Rooms Audiovisual		11,430						11,430
Consulting	100,000							100,000
TOTAL EXPENDITURES	\$ 868,827	86,430		*		ELEKE		\$ 955,257
PROJECT BALANCE	\$ 86,430		<u> </u>				Fig. Fig. 4	\$

23

Audiovisual Equipment

<sup>(1)</sup> The 20% local match required by the FTA is satisfied by using FDOT Toll Revenue credits.

# SOUTH FLORIDA REGIONAL TRANSPORTATION AUTHORITY CAPITAL IMPROVEMENT BUDGET PLANNING/CAPITAL DEVELOPMENT FY 2018/2019

PROJECT 108

FM 236854-2

#### **Planning Department**

DESCRIPTION: Provides funding for planning and capital development studies.

	PRIOR	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	AMOUNTS
REVENUE SCHEDULE	AMOUNTS	AMOUNTS	AMOUNTS	AMOUNTS	AMOUNTS	AMOUNTS	AMOUNTS	AMOUNTS
FTA Section 5307-Formula								
Grant 690	2,525,000							2,525,000 1,300,000
Grant 845	1,300,000 1,700,000							1,700,000
Grant 861 Grant 872	1,100,000							1,100,000
Future Funds	_,,	1,000,000	1,125,000	1,000,000	1,150,000	1,000,000	2,200,000	7,475,000
County Gas Tax Funds	700,000							700,000
Local 20% Match to FTA funds	(1)							
TOTAL REVENUE	\$ 7,325,000	1,000,000	1,125,000	1,000,000	1,150,000	1,000,000	2,200,000	\$ 14,800,000
	PRIOR	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	TOTAL
EXPENDITURE SCHEDULE	AMOUNTS	AMOUNTS	AMOUNTS	AMOUNTS	AMOUNTS	AMOUNTS	AMOUNTS	AMOUNTS
General Planning & Capital Development	1,200,000	750,000	750,000	750,000	750,000	750,000	750,000	5,700,000
Tri-Rail Coastal Link	276,525	400,000	375,000	400,000	800,000	400,000	400,000	3,051,525 1,000,000
Tri-Rail Downtown Miami Link	400,000 900,000	300,000 600,000	200,000 900,000	100,000 900,000	195,000	500,000	1,053,475	5,048,475
Consulting Services	300,000	000,000	300,000					
TOTAL EXPENDITURES	\$ 2,776,525	2,050,000	2,225,000	2,150,000	1,745,000	1,650,000	2,203,475	\$ 14,800,000
PROJECT BALANCE	\$ 4,548,475	3,498,475	2,398,475	1,248,475	653,475	3,475		\$ -

<sup>(1)</sup> The 20% local match required by the FTA is satisfied by using FDOT Toll Revenue credits.

SOUTH FLORIDA REGIONAL TRANSPORTATION AUTHORITY CAPITAL IMPROVEMENT BUDGET TRANSIT ORIENTED DEVELOPMENT (TOD II) FY 2017/2018

PROJECT 818

FM 433611-1, 236854-2

#### **Planning Department**

DESCRIPTION: Funding for the planning phase of the development of a station-area Transit Oriented Development (TOD) plan for 18 Tri-Rail stations.

REVENUE SCHEDULE	PRIOR AMOUNTS	FY 18/19 AMOUNTS	FY 19/20 AMOUNTS	FY 20/21 AMOUNTS	FY 21/22 AMOUNTS	FY 22/23 AMOUNTS	FY 23/24 AMOUNTS	TOTAL AMOUNTS
FTA Section 5307-Formula								
Grant 629	273,000							273,000
Grant 629 Grant FY 16/17	225,000							225,000
Grant FY 17/18	150,000							150,000
Future Funds	130,000	200,000	200,000	200,000	200,000	200,000	200,000	1,200,000
ruture runus		200,000	200,000		,	· ·		
FTA Section 5309 - Rail Mod								
Grant 110	200,000							200,000
FTA Section 5337 - State of Good Repair								650,000
Grant 0008	650,000							225,000
Grant 942	225,000							225,000
	***							26,000
FDOT JPA 70	26,000							26,000
County Gas Tax Funds Matched to JPA 70	26,000							,
Local 20% Match to FTA funds	(1)							
							200 000	A 2.07F.000
TOTAL REVENUE	\$ 1,775,000	200,000	200,000	200,000	200,000	200,000	200,000	\$ 2,975,000
	PRIOR	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	TOTAL
EXPENDITURE SCHEDULE	AMOUNTS	AMOUNTS	AMOUNTS	AMOUNTS	AMOUNTS	AMOUNTS	AMOUNTS	AMOUNTS
EXPENDITURE SCHEDULE	AMOUNTS	AMOUNTS	AMOUNTS	Amounts	1111001110			
Transit Oriented Development	1,775,000	200,000	200,000	200,000	200,000	200,000	200,000	2,975,000
manage of the participants	_,,		10401853					F
TOTAL EXPENDITURES	\$ 1,775,000	200,000	200,000	200,000	200,000	200,000	200,000	\$ 2,975,000
								\$ -
PROJECT BALANCE	\$ -	TON THE	THE STATE OF THE S	1 7 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	•			\$ -

<sup>(1)</sup> The 20% local match required by the FTA is satisfied by using FDOT Toll Revenue credits.

SOUTH FLORIDA REGIONAL TRANSPORTATION AUTHORITY
CAPITAL IMPROVEMENT BUDGET
MIAMI RIVER INTERMODAL CENTER CAPACITY IMPROVEMENT STUDY (MR-MICC!)
FY 2018/2019

PROJECT 832

FM 429487-1 / 2

#### **Planning Department**

PROJECT DESCRIPTION: The MR-MICCI study will evaluate rail capacity within the Miami River area, including bridge, track and signal upgrades. The estimated timeframe for this study is 24 to 30 months.

	PRIOR	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	TOTAL
REVENUE SCHEDULE	AMOUNTS	AMOUNTS	AMOUNTS	AMOUNTS	AMOUNTS	AMOUNTS	AMOUNTS	AMOUNTS
FDOT JPA 85	4,200,000					7		4,200,000
FDOT JPA 85 FDOT SIS Funds	4,200,000			13,250,000	13,250,000			26,500,000
County Gas Tax Funds	5,500,596	147,462		351,942				6,000,000
TOTAL REVENUE	\$ 9,700,596	147,462		13,601,942	13,250,008			\$ 36,700,000
TOTAL REVERIDE	\$ 9,700,590	147,402		25,002,542	20,200,000			
						EV 00 (03	FV 22/24	TOTAL
EXPENDITURE SCHEDULE	PRIOR	FY 18/19 AMOUNTS	FY 19/20 AMOUNTS	FY 20/21 AMOUNTS	FY 21/22 AMOUNTS	FY 22/23 AMOUNTS	FY 23/24 AMOUNTS	AMOUNTS
EXPENDITURE SCREDULE	AMOUNTS	AMOUNTS	AMOUNTS	AMOONIS	Autoonto		100007-515-0-	
Planning	2,224,413							2,224,413
Design	1,426,502							1,426,502
ROW		6,000,000						6,000,000
Construction					20,806,989			20,806,989
CEI					5,201,747			5,201,747
Contingency					1,040,349			1,040,349
TOTAL EXPENDITURES	\$ 3,650,915	6,000,000			27,049,085		(hell, -/-)	\$ 36,700,000
PROJECT BALANCE	\$ 6,049,681	197,143	197,143	13,799,085				\$ -

SOUTH FLORIDA REGIONAL TRANSPORTATION AUTHORITY CAPITAL IMPROVEMENT BUDGET
CYPRESS CREEK MOBILITY HUB
FY 2018/2019

PROJECT 843

FM 433427-1

#### Planning Department

DESCRIPTION: Planning, preliminary design and engineering work for a Mobility Hub at Cypress Creek.

REVENUE SCHEDULE	PRIOR AMOUNTS	FY 18/19 AMOUNTS	FY 19/20 AMOUNTS	FY 20/21 AMOUNTS	FY 21/22 AMOUNTS	FY 22/23 AMOUNTS	FY 23/24 AMOUNTS	TOTAL
BMPO Flex Grant 74	800,000							800,000
Local 25% Match to FTA funds TOTAL REVENUE	(1) \$ 800,000				•			\$ 800,000
EXPENDITURE SCHEDULE  Preliminary Planning	PRIOR AMOUNTS 616,850	FY 18/19 AMOUNTS 183,150	FY 19/20 AMOUNTS	FY 20/21 AMOUNTS	FY 21/22 AMOUNTS	FY 22/23 AMOUNTS	FY 23/24 AMOUNTS	TOTAL AMOUNTS 800,000

<sup>(1)</sup> The 25% local match required by the FTA is satisfied by using FDOT Toli Road credits.

SOUTH FLORIDA REGIONAL TRANSPORTATION AUTHORITY CAPITAL IMPROVEMENT BUDGET BOCA II FY 2018/2019

PROJECT 863

FM 430458-1

Planning Department

PROJECT BALANCE

DESCRIPTION: New Boca Raton Station.

ESTIMATED ANNUAL OPERATING IMPACT: - 0 -

PRIOR FY 18/19 FY 19/20 REVENUE SCHEDULE AMOUNTS AMOUNTS AMOUNTS	FY 20/21 AMOUNTS	FY 21/22 AMOUNTS	FY 22/23 AMOUNTS	FY 23/24 AMOUNTS	AMOUNTS
PBMPO Flex Funds 500,000	3,416,735				3,916,735
FDOT TRIP Funds 3,916,735					3,916,735
FDOT JPA 105 1,500,000					1,500,000
Funding to be Determined		7,979,969	7,979,969		15,959,938
TOTAL REVENUE \$ 1,500,000 - 4,416,735	3,416,735	7,979,969	7,979,969		\$ 25,293,408
PRIOR FY 18/19 FY 19/20  EXPENDITURE SCHEDULE AMOUNTS AMOUNTS AMOUNTS	FY 20/21 AMOUNTS	FY 21/22 AMOUNTS	FY 22/23 AMOUNTS	FY 23/24 AMOUNTS	TOTAL
30% Design 99,616 400,384					500,000
NEPA 400,000					400,000
ROW 4416735	3,416,735				7,833,470
Final Design 300,000 300,000					600,000
Construction		5,753,823	5,753,823		11,507,646
PTC		500,000	500,000		1,000,000
Flagging		575,382	575,382		1,150,764
Contingency		575,382	575,382		1,150,764
CEI		575,382	575,382		1,150,764
TOTAL EXPENDITURES \$ 99,616 1,100,384 4,716,735	3,416,735	7,979,969	7,979,969	*	\$ 25,293,408

300,000

1,400,384

SOUTH FLORIDA REGIONAL TRANSPORTATION AUTHORITY CAPITAL IMPROVEMENT BUDGET TRANSIT ORIENTED DEVELOPMENT PILOT PROGRAM FY 2018/2019

PROJECT 871

FM 439024-1

#### Planning Department

DESCRIPTION: Station planning along Tri-Rail Coastal Link Corridor.

REVENUE SCHEDULE	PRIOR AMOUNTS	FY 18/19 AMOUNTS	FY 19/20 AMOUNTS	FY 20/21 AMOUNTS	FY 21/22 AMOUNTS	FY 22/23 AMOUNTS	FY 23/24 AMOUNTS	AMOUNTS
FTA Section 5337 Grant 001	1,250,000							1,250,000
Local 20% Match to FTA funds	(1)							
TOTAL REVENUE	\$ 1,250,000				( · · · · · · · · · · · · · · · · · · ·			\$ 1,250,000
EXPENDITURE SCHEDULE	PRIOR AMOUNTS	FY 18/19 AMOUNTS	FY 19/20 AMOUNTS	FY 20/21 AMOUNTS	FY 21/22 AMOUNTS	FY 22/23 AMOUNTS	FY 23/24 AMOUNTS	TOTAL
Transit Oriented Development Consultants	105,000	525,000	620,000					1,250,000
TOTAL EXPENDITURES	\$ 105,000	525,000	620,000					\$ 1,250,000
PROJECT BALANCE	\$ 1,145,000	620,000	Zaridanga)			-0,0		\$ -

<sup>(1)</sup> Cash and in-kind expenses of the RPC's will be used as the match

SOUTH FLORIDA REGIONAL TRANSPORTATION AUTHORITY CAPITAL IMPROVEMENT BUDGET BOCA TROLLEYS
FY 2018/2019

PROJECT

FM 438399-1

#### Planning Department

DESCRIPTION: SFRTA to act as a passthrough agency for the purpose of drawing down Federal funds.

ESTIMATED ANNUAL OPERATING IMPACT: - 0 -

REVENUE SCHEDULE	PRIOR AMOUNTS	FY 18/19 AMOUNTS	FY 19/20 AMOUNTS	FY 20/21 AMOUNTS	FY 21/22 AMOUNTS	FY 22/23 AMOUNTS	FY 23/24 AMOUNTS	AMOUNTS
FTA Section 5307 - FHWA FLEX PBMPO Flex Funds		1,505,000						1,505,000
Local 20% Match to FTA funds	(1)							
TOTAL REVENUE	\$	1,505,000		(F)				\$ 1,505,000
EXPENDITURE SCHEDULE	PRIOR AMOUNTS	FY 18/19 AMOUNTS	FY 19/20 AMOUNTS	FY 29/21 AMOUNTS	FY 21/22 AMOUNTS	FY 22/23 AMOUNTS	FY 23/24 AMOUNTS	TOTAL AMOUNTS
EXPENDITURE SCHEDULE  Acquisition of Trolleys								
Lister Sensor Section			AMOUNTS					AMOUNTS

<sup>(1)</sup> The 20% local match required by the FTA is satisfied by using FDOT Toll Revenue credits.

**Boca Trolleys** 

SOUTH FLORIDA REGIONAL TRANSPORTATION AUTHORITY CAPITAL IMPROVEMENT BUDGET Delray Trolleys FY 2018/2019

**PROJECT** 

FM 438400-1

#### **Planning Department**

DESCRIPTION: SFRTA to act as a passthrough agency for the purpose of drawing down Federal funds.

ESTIMATED ANNUAL OPERATING IMPACT: - 0 -

REVENUE SCHEDULE	PRIOR AMOUNTS	FY 18/19 AMOUNTS	FY 19/20 AMOUNTS	FY 20/21 AMOUNTS	FY 21/22 AMOUNTS	FY 22/23 AMOUNTS	FY 23/24 AMOUNTS	AMOUNTS
FTA Section 5307 - FHWA FLEX PBMPO Flex Funds			860,000					860,000
Local 20% Match to FTA funds	(1)							
TOTAL REVENUE	\$		860,000					\$ 860,000
EXPENDITURE SCHEDULE	PRIOR AMOUNTS	FY 18/19 AMOUNTS	FY 19/20 AMOUNTS	FY 20/21 AMOUNTS	FY 21/22 AMOUNTS	FY 22/23 AMOUNTS	FY 23/24 AMOUNTS	TOTAL AMOUNTS
Acquisition of Trolleys				860,000				860,000
TOTAL EXPENDITURES	\$	Account to the second		860,000				\$ 860,000
PROJECT BALANCE			860,000					\$ .

<sup>(1)</sup> The 20% local match required by the FTA is satisfied by using FDOT Toll Revenue credits.

Delray Beach Trolleys

SOUTH FLORIDA REGIONAL TRANSPORTATION AUTHORITY CAPITAL IMPROVEMENT BUDGET PBIA STATION STUDY FY 2018/2019

PROJECT

FM # 437074-1

### **Planning Department**

DESCRIPTION: Tri-Rail station at Palm Beach International Airport feasability study.

REVENUE SCHEDULE	PRIOR AMOUNTS	FY 18/19 AMOUNTS	FY 19/20 AMOUNTS	FY 20/21 AMOUNTS	FY 21/22 AMOUNTS	FY 22/23 AMOUNTS	FY 23/24 AMOUNTS	TOTAL AMOUNTS
FDOT TRIP Funds					250,000			250,000
TOTAL REVENUE	\$ .				250,000			\$ 250,000
EXPENDITURE SCHEDULE	PRIOR AMOUNTS	FY 18/19 AMOUNTS	FY 19/20 AMOUNTS	FY 20/21 AMDUNTS	FY 21/22 AMOUNTS	FY 22/23 AMOUNTS	FY 23/24 AMOUNTS	TOTAL AMOUNTS
Planning Consultants					250,000			250,000
TOTAL EXPENDITURES	\$ -				250,000			\$ 250,000
PROJECT BALANCE	\$ -							\$

SOUTH FLORIDA REGIONAL TRANSPORTATION AUTHORITY CAPITAL IMPROVEMENT BUDGET ONBOARD CAB SIGNAL AND E-ATC FY 2018/2019

PROJECT 203

FM 433611-1, 236854-2

### **Engineering Department**

DESCRIPTION: PTC installation on rolling stock. Required to run into the Downtown Miami Station.

REVENUE SCHEDULE	PRIOR AMOUNTS	FY 18/19 AMOUNTS	FY 19/20 AMOUNTS	FY 20/21 AMOUNTS	FY 21/22 AMOUNTS	FY 22/23 AMOUNTS	FY 23/24 AMOUNTS	AMOUNTS
FTA Section 5307 - Formula Funds	2002							1,083,693
Grant 845	1,083,693							2,106,000
Grant 861	2,106,000							1,918,240
Grant 942	1,918,240							6,147,185
Grant FY 16/17	6,147,185							0,211,200
FTA Section 5337 - State of Good Repair								4 020 402
Grant 024	1,029,482							1,029,482
TOTAL REVENUE	\$ 12,284,600	KINESO-10						\$ 12,284,600
EXPENDITURE SCHEDULE	PRIOR AMOUNTS	FY 18/19 AMOUNTS	FY 19/20 AMOUNTS	FY 20/21 AMOUNTS	FY 21/22 AMOUNTS	FY 22/23 AMOUNTS	FY 23/24 AMOUNTS	TOTAL AMOUNTS
Project Management		1,007,500	604,500	403,000				2,015,000 1,275,000
Engineering & Design		1,275,000	1.000.000	265,000				1,325,000
Installation			1,060,000 1,619,200	404,800				2,024,000
Integration and Testing			1,019,200	404,000				3,145,600
Material		3 4 45 600						
		3,145,600	1 500 000	1 000 000				
Contingency		3,145,600	1,500,000	1,000,000				2,500,000
	\$	3,145,600 5,428,100	1,500,000 4,783,700	1,000,000 2,072,800		19. N. H. * 1		

SOUTH FLORIDA REGIONAL TRANSPORTATION AUTHORITY
CAPITAL IMPROVEMENT BUDGET
NEW ROLLING STOCK
ROTEM CARS
FY 2018/2019

PROJECT 784 & 817

FM 421871-1, 236854-2

### **Engineering Department**

DESCRIPTION: The purchase of additional Rotem Rail Cars.

REVENUE SCHEDULE	PRIOR AMOUNTS	FY 18/19 AMOUNTS	FY 19/20 AMOUNTS	FY 20/21 AMOUNTS	FY 21/22 AMOUNTS	FY 22/23 AMOUNTS	FY 23/24 AMOUNTS	TOTAL AMOUNTS
FTA Section 5309-Rail Mod								
Grant 109	2,490,000							2,490,000
Grant 110	2,184,000							2,184,000
Grant 116	3,400,000							3,400,000
FTA Section 5307 - Formula								
Grant 629	2,500,000							2,500,000
Grant 672	1,000,000							1,000,000
Grant 690	3,000,000							3,000,000
Grant 719	1,937,000							1,937,000
FDOT								
JPA 71 (TRIP Funds)	6,000,000							6,000,000
JPA 75 (TRIP Funds)	1,750,000							1,750,000
Local Match County Gas Tax Funds	7,750,000							7,750,000
County Gas Tax Funds	10,799,525							10,799,525
Local 20% Match to FTA funds	(1)							
TOTAL REVENUE	\$ 42,810,525	\$ -	\$ -	\$ -	\$ .	\$ -	\$ -	\$ 42,810,525
NAC-	4 17	recent to the second						

EXPENDITURE SCHEDULE	PRIOR AMOUNTS	Y 18/19 VIOUNTS	_	Y 19/20 MOUNTS	FY 20		_	21/22 OUNTS	_	22/23 IOUNTS	ni-	23/24 DUNTS	 TOTAL AMOUNTS
New Rail Cars Consultants Contingency	40,296,700 2,152,748	254,950		106,127									40,296,700 2,152,748 361,077
TOTAL EXPENDITURE	\$ 42,449,448	\$ 254,950	\$	106,127	\$		\$		\$	4	\$	2.1	\$ 42,810,525
PROJECT BALANCE	\$ 361,077	106,127	P	1/4 1/2	Dr. Till	7						TO VE	\$

<sup>(1)</sup> The 20% local match required by the FTA is satisfied by using FDOT Toll Revenue credits.

SOUTH FLORIDA REGIONAL TRANSPORTATION AUTHORITY CAPITAL IMPROVEMENT BUDGET GENERAL ENGINEERING CONSULTANTS FY 2018/2019

PROJECT 795

FM 236854-2

### **Engineering Department**

DESCRIPTION: To provide funding for General Engineering Consultants. All contracts will be work order based.

	PRIOR	FY 18/19	FY 19/20	FY 20/21 AMOUNTS	FY 21/22 AMOUNTS	FY 22/23 AMOUNTS	FY 23/24 AMOUNTS	AMOUNTS
REVENUE SCHEDULE	AMOUNTS	AMOUNTS	AMOUNTS	AMOUNTS	AWOUNTS	AMOUNTS	Amounts	Amooning
FTA Section 5307 - Formula Funds								
Grant 845	1,267,371							1,267,371 1,000,000
Grant 872	1,000,000							, ,
Grant 861	1,500,000							1,500,000 1,693,009
Grant 942	1,693,009							2,139,970
Grant FY 16/17	2,139,970							2,139,970
Grant FY 17/18	2,445,793				4 =00 000	4 500 000	1 500 000	12,748,155
Future Requests		2,648,155	2,800,000	2,800,000	1,500,000	1,500,000	1,500,000	12,746,155
County Gas Tax Funds	49,161			41				49,161
Permit Fee Collection	27,000							27,000
Local 20% Match to FTA funds  TOTAL REVENUE	(1) [\$ 10,122,304]	2,648,155	2,800,000	2,800,000	1,500,000	1,500,000	1,500,000	\$ 22,870,459
EXPENDITURE SCHEDULE	PRIOR AMOUNTS	FY 18/19 AMOUNTS	FY 19/20 AMOUNTS	FY 20/21 AMOUNTS	FY 21/22 AMOUNTS	FY 22/23 AMOUNTS	FY 23/24 AMOUNTS	TOTAL AMOUNTS
General Engineering Consultants	6,735,635	3,200,000	3,000,000	3,000,000	3,000,000	2,000,000	1,934,824	22,870,459
TOTAL EXPENDITURES	\$ 6,735,635	3,200,000	3,000,000	3,000,000	3,000,000	2,000,000	1,934,824	\$ 22,870,459
PROJECT BALANCE	\$ 3,386,669	2,834,824	2,634,824	2,434,824	934,824	434,824	MERIDINA	\$ -

<sup>(1)</sup> The 20% local match required by the FTA is satisfied by using FDOT Toll Revenue credits.

SOUTH FLORIDA REGIONAL TRANSPORTATION AUTHORITY CAPITAL IMPROVEMENT BUDGET ENVIRONMENTAL MITIGATION FY 2018/2019

PROJECT 804

FM # 236854-2

### **Engineering Department**

DESCRIPTION: Environmental Mitigation for parcels 104 & 105.

REVENUE SCHEDULE	PRIOR AMOUNTS	FY 18/19 AMOUNTS	FY 19/20 AMOUNTS	FY 20/21 AMOUNTS	FY 21/22 AMOUNTS	FY 22/23 AMOUNTS	FY 23/24 AMOUNTS	TOTAL AMOUNTS
FTA Section 5307 - Formula Funds Grant 942	500,000	ĕ						500,000
Local 20% Match to FTA funds	(1)			·				[4] [50,000]
TOTAL REVENUE	\$ 500,000				•	*		\$ 500,000
EXPENDITURE SCHEDULE	PRIOR AMOUNTS	FY 18/19 AMOUNTS	FY 19/20 AMOUNTS	FY 20/21 AMOUNTS	FY 21/22 AMOUNTS	FY 22/23 AMOUNTS	FY 23/24 AMOUNTS	TOTAL
Cleanup of parcels 104 & 105	3,230	100,000	100,000	100,000	100,000	96,770		500,000
TOTAL EXPENDITURES	\$ 3,230	100,000	100,000	100,000	100,000	96,770		\$ 500,000

<sup>(1)</sup> The 20% local match required by the FTA is satisfied by using FDOT Toll Revenue credits.

SOUTH FLORIDA REGIONAL TRANSPORTATION AUTHORITY **CAPITAL IMPROVEMENT BUDGET** HEAVY STATION MAINTENANCE/CONSTRUCTION FY 2018/2019

PROJECT 823

TOTAL EXPENDITURES

PROJECT BALANCE

FM 433611-1, 236854-2

**Engineering Department** 

DESCRIPTION: To fund major station improvement projects.

ESTIMATED ANNUAL OPERATING IMPACT: - 0 -

REVENUE SCHEDULE	PRIOR AMOUNTS	FY 18/19 AMOUNTS	FY 19/20 AMOUNTS	FY 20/21 AMOUNTS	FY 21/22 AMOUNTS	FY 22/23 AMOUNTS	FY 23/24 AMOUNTS	TOTAL
FTA Section 5307 - Formula Funds Grant 672 Grant 942 Grant FY 17/18 Future Requests	528,782 484,349 300,000				290,442			528,782 484,349 300,000 290,442
FTA Section 5309 - Rail Mod Grant 096	290,651							290,651
FTA Section 5337 - State of Good Repair Grant 0008 Future Requests	200,000	500,000	500,000					200,000 1,000,000
Local 20% Match to FTA funds [1 TOTAL REVENUE	\$ 1,803,782	500,000	500,000		290,442		*	\$ 3,094,224
EXPENDITURE SCHEDULE	PRIOR AMOUNTS	FY 18/19 AMOUNTS	FY 19/20 AMOUNTS	FY 20/21 AMOUNTS	FY 21/22 AMOUNTS	FY 22/23 AMOUNTS	FY 23/24 AMOUNTS	TOTAL
Heavy Maintenance Construction Pedestrian Overpass Lighting Delray/Dania Repairs Parking Lot Improvements	543,764 16,000 200,000 50,000 125,000	500,000	300,000	300,000	300,000	343,460		2,287,224 16,000 200,000 50,000 125,000
Flagging CE&I Contingency	,	27,000 27,000 50,000	27,000 27,000 50,000	27,000 27,000 50,000	27,000 27,000 50,000			108,000 108,000 200,000

934,764

869,018

3,094,224

404,000

861,018

604,000

765,018

404,000

457,018

404,000

343,460

343,460

<sup>(1)</sup> The 20% local match required by the FTA is satisfied by using FDOT Toll Revenue credits.

SOUTH FLORIDA REGIONAL TRANSPORTATION AUTHORITY CAPITAL IMPROVEMENT BUDGET OPA LOCKA PARKING LOT IMPROVEMENTS FY 2018/2019

PROJECT 826

FM 236854-2, 427625-1

### **Engineering Department**

PROJECT BALANCE

DESCRIPTION: For improvements at the Opa Locka parking lot.

ESTIMATED ANNUAL OPERATING IMPACT: - 0 -

REVENUE SCHEDULE	PRIOR AMOUNTS	FY 18/19 AMOUNTS	FY 19/20 AMOUNTS	FY 20/21 AMOUNTS	FY 21/22 AMOUNTS	FY 22/23 AMOUNTS	FY 23/24 AMOUNTS	TOTAL AMOUNTS
FDOT JPA 84 (District 6) County Gas Tax Funds Match	328,596 328,596					21/		328,596 328,596
FTA Section 5307-Formula Grant 861	1,321,708							1,321,708
Additional Gas Tax for Design	87,377							87,377
Local 20% Match to FTA funds	(1)							
TOTAL REVENUE	\$ 2,066,277							\$ 2,066,277
EXPENDITURE SCHEDULE	PRIOR AMOUNTS	FY 18/19 AMOUNTS	FY 19/20 AMOUNTS	FY 20/21 AMOUNTS	FY 21/22 AMOUNTS	FY 22/23 AMOUNTS	FY 23/24 AMOUNTS	TOTAL
Design Construction Contingency	334,712 1,211,183	356,426						334,712 1,211,183 356,426
CE & I	163,956							163,956
TOTAL EXPENDITURES	\$ 1,709,851	356,426						\$ 2,066,277

<sup>(1)</sup> The 20% local match required by the FTA is satisfied by using FDOT Toll Revenue credits.

356,426

SOUTH FLORIDA REGIONAL TRANSPORTATION AUTHORITY CAPITAL IMPROVEMENT BUDGET NORTHERN LAYOVER FACILITY FY 2018/2019

PROJECT 827

FM 429767-1

### **Engineering Department**

DESCRIPTION: To construct a new Layover Facility in Palm Beach County.

ESTIMATED ANNUAL OPERATING IMPACT: - 0 -

REVENUE SCHEDULE	PRIOR AMOUNTS	FY 18/19 AMOUNTS	FY 19/20 AMOUNTS	FY 20/21 AMOUNTS	FY 21/22 AMOUNTS	FY 22/23 AMOUNTS	FY 23/24 AMOUNTS	TOTAL AMOUNTS
FTA Section 5307 - FHWA FLEX Grant 056 Grant 132	1,500,000 25,215,944		3,530,000					1,500,000 28,745,944
FDOT (GMR) Funds	5,900,000							5,900,000
Funding TBD		1,000,000						1,000,000
Local 20% Match to FTA funds	1)							
TOTAL REVENUE	\$ 32,615,944	1,000,000	3,530,000		TO FREE S			\$ 37,145,944
EXPENDITURE SCHEDULE	PRIOR AMOUNTS	FY 18/19 AMOUNTS	FY 19/20 AMOUNTS	FY 20/21 AMOUNTS	FY 21/22 AMOUNTS	FY 22/23 AMOUNTS	FY 23/24 AMOUNTS	TOTAL AMOUNTS
Planning ROW DB Construction (c/w flagging) PTC Contingency CEI						The second secon		
Planning ROW DB Construction (c/w flagging) PTC Contingency	1,163,558	9,666,667 250,000 500,000	9,666,667 750,000 1,000,000	9,666,667 993,702		The second secon		1,163,558 340,000 29,000,000 1,000,000 2,493,702

<sup>(1)</sup> The 20% local match required by the FTA is satisfied by using FDOT Toll Revenue credits.

Nothern Layover Facility

SOUTH FLORIDA REGIONAL TRANSPORTATION AUTHORITY CAPITAL IMPROVEMENT BUDGET WAYFINDING FY 2018/2019

PROJECT 835

FM # 236854-2, 433611-1

**Engineering** 

DESCRIPTION: Station Signage upgrade.

ESTIMATED ANNUAL OPERATING IMPACT: - 0 -

REVENUE SCHEDULE	PRIOR AMOUNTS	FY 18/19 AMOUNTS	FY 19/20 AMOUNTS	FY 20/21 AMOUNTS	FY 21/22 AMOUNTS	FY 22/23 AMOUNTS	FY 23/24 AMOUNTS	TOTAL AMOUNTS
FTA Section 5307 - Formula Funds								
Grant 690	132,969							132,969
Grant 015 (ARRA)	90,661							90,661
Grant 719	113,672							113,672
Grant 764	132,328							132,328
Grant 809	99,586							99,586
FTA Section 5337 - Formula Funds								
Grant 0012	2,500,000							2,500,000
Local 20% Match to FTA funds	(1)							
TOTAL REVENUE	\$ 3,069,216				• 1			\$ 3,069,216
EVERTINE CONTRAINE	PRIOR	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	AMOUNTS
EXPENDITURE SCHEDULE	AMOUNTS	AMOUNTS	AMOUNTS	AMOUNTS	AMOUNTS	AMOUNTS	AMOUNTS	AMOUNTS
Station Signage		550,000						550,000
Consultant	651,284							651,284
Contingency		55,000						55,000
TOTAL EXPENDITURES	\$ 651,284	605,000						\$ 1,256,284
PROJECT BALANCE	\$ 2,417,932	1,812,932	1,812,932	1,812,932	1,812,932	1,812,932	1,812,932	\$ 1,812,932

(1) The 20% local match required by the FTA is satisfied by using FDOT Toll Revenue credits.

SOUTH FLORIDA REGIONAL TRANSPORTATION AUTHORITY CAPITAL IMPROVEMENT BUDGET OPERATIONS CENTER FY 2018/2019

PROJECT 839

FM 433611-1

### **Engineering Department**

DESCRIPTION: Construction of Administrative/Operations Center,

REVENUE SCHEDULE	PRIOR AMOUNTS	FY 18/19 AMOUNTS	FY 19/20 AMOUNTS	FY 20/21 AMOUNTS	FY 21/22 AMOUNTS	FY 22/23 AMOUNTS	FY 23/24 AMOUNTS	AMOUNTS
FTA Section 5337 - State of Good Repair Grant 0008 Grant 0010	3,155,662 1,049,417							3,155,662 1,049,417
SIB Loan	13,246,192							13,246,192
County Gas Tax Funds	4,069,120							4,069,120
Local 20% Match to FTA funds  TOTAL REVENUE	(1) \$ 21,520,391			<b>1</b>				\$ 21,520,391
EXPENDITURE SCHEDULE	PRIOR AMOUNTS	FY 18/19 AMOUNTS	FY 19/20 AMOUNTS	FY 20/21 AMOUNTS	FY 21/22 AMOUNTS	FY 22/23 AMOUNTS	FY 23/24 AMOUNTS	TOTAL
Consultants Construction Permitting and Plan Review Contingency	973,296 18,954,818 98,280	746,999	746,998					973,296 18,954,818 98,280 1,493,997
TOTAL EXPENDITURES	\$ 20,026,394	746,999	746,998					\$ 21,520,391
PROJECT BALANCE	\$ 1,493,997	746,998		TOTAL MALE				\$ -

<sup>(1)</sup> The 20% local match required by the FTA is satisfied by using FDOT Toll Revenue credits.

SOUTH FLORIDA REGIONAL TRANSPORTATION AUTHORITY CAPITAL IMPROVEMENT BUDGET POSITIVE TRAIN CONTROL FY 2018/2019

PROJECT 842

FM 436381-1, 433611-1, 236854-2

### **Engineering Department**

DESCRIPTION: Positive Train Control Installation, Engineering, Project Management, Testing and Systems for Tri-Rail fleet.

ESTIMATED ANNUAL OPERATING IMPACT: \$5.3 Million.

REVENUE SCHEDULE	PRIOR AMOUNTS	FY 18/19 AMOUNTS	FY 19/20 AMOUNTS	FY 20/21 AMOUNTS	FY 21/22 AMOUNTS	FY 22/23 AMOUNTS	FY 23/24 AMOUNTS	AMOUNTS
FDOT JPA	11,060,478							11,060,478
FTA Section 3028	24 633 476							31,633,176
Grant 025	31,633,176							31,033,170
FTA Section 5307 - Formula Funds								
Grant 845	506,307							506,307
Grant 942	81,760							81,760
CSX Contribution	3,189,385	3,189,384						6,378,769
County Gas Tax Funds	2,402,136							2,402,136
TOTAL REVENUE	\$ 48,873,242	3,189,384						\$ 52,062,626

	PRIOR	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	TOTAL
EXPENDITURE SCHEDULE	AMOUNTS	AMOUNTS	AMOUNTS	AMOUNTS	AMOUNTS	AMOUNTS	AMOUNTS	AMOUNTS
PTC System Engineering and PM	5,343,560	1,460,891						6,804,451
Wayside Segment	6,694,573							6,694,573
Communications Segment	6,815,144							6,815,144
Office Segment		6,983,073						6 <b>,9</b> 83,073
Locomotive Segment (I-ETMS - SFRC)	2,771,696	5,595,077	923,898					9,290,671
Employee in Charge Terminals			250,000					250,000
Commission, Training and Testing		1,873,069	1,873,068					3,746,137
PTC Deliverables (i.e. Plans, Reports, Schedules)			524,124					524,124
Project Oversight (PM, CEI, Flagging)	2,079,556	2,463,390	1,231,700	975,070				6,749,716
Project Planning Support	150,771							150,771
On-Board Contingency		803,562						803,562
Test Lab		1,615,994						1,615,994
TMDS/BOS Changes Post Cutover				1,041,450				1,041,450
Hy-Rail Vehicle & Equipment		400,000	192,960					592,960
TOTAL EXPENDITURES	\$ 23,855,300	21,195,056	4,995,750	2,016,520				\$ 52,062,626
PROJECT BALANCE	\$ 25,017,942	7,012,270	2,016,520			NEW TEREST		\$ -

<sup>(1)</sup> The 20% local match required by the FTA is satisfied by using FDOT Toll Revenue credits.

SOUTH FLORIDA REGIONAL TRANSPORTATION AUTHORITY CAPITAL IMPROVEMENT BUDGET POMPANO BEACH TRI-RAIL STATION GARAGE FY 2018/2019

PROJECT 845

FM 423119-1, 426862-1, 420344-1, 433611-1

### **Engineering Department**

DESCRIPTION: Parking and Station improvements at the Pompano Beach Tri-Rail Station.

REVENUE SCHEDULE	PRIOR AMOUNTS	FY 18/19 AMOUNTS	FY 19/20 AMOUNTS	FY 20/21 AMOUNTS	FY 21/22 AMOUNTS	FY 22/23 AMOUNTS	FY 23/24 AMOUNTS	TOTAL AMOUNTS
FTA Section 5308-TIGGER Funds Grant 0002	1,800,000							1,800,000
FTA Section 5337 - State of Good Repair Grant 0008 Grant 0010	1,442,208 479,607							1,442,208 479,607
FDOT JPA 74 Local Match-County Gas Tax Funds	900,000							900,000
SIB Loan	6,053,808							6,053,808
County Gas Tax Funds	1,859,680				9			1,859,680
TOTAL REVENUE	\$ 13,435,303	/ N. Co.,					[64,553]*	13,435,303
EXPENDITURE SCHEDULE	PRIOR AMOUNTS	FY 18/19 AMOUNTS	FY 19/20 AMOUNTS	FY 20/21 AMOUNTS	FY 21/22 AMOUNTS	FY 22/23 AMOUNTS	FY 23/24 AMOUNTS	TOTAL
Pompano Station Consultants Construction Permitting and Plan Review Contingency	784,688 11,523,319 44,916	504,000	578,380					784,688 11,523,319 44,916 1,082,380
TOTAL EXPENDITURES	\$ 12,352,923	504,000	578,380					\$ 13,435,303
PROJECT BALANCE	\$ 1,082,380	578,380						\$

SOUTH FLORIDA REGIONAL TRANSPORTATION AUTHORITY CAPITAL IMPROVEMENT BUDGET EMERGENCY FLAGGING SERVICES FY 2018/2019

PROJECT 846

FM # 437454-1

### **Engineering Department**

DESCRIPTION: Emergency flagging along the rail corridor.

REVENUE SCHEDULE	PRIOR AMOUNTS	FY 18/19 AMOUNTS	FY 19/20 AMOUNTS	FY 20/21 AMOUNTS	FY 21/22 AMOUNTS	FY 22/23 AMOUNTS	FY 23/24 AMOUNTS	TOTAL AMOUNTS
FDOT Railroad Reimbursement Agreement	500,000					500,000		1,000,000
TOTAL REVENUE	\$ 500,000	-				500,000		\$ 1,000,000
EXPENDITURE SCHEDULE	PRIOR AMOUNTS	FY 18/19 AMOUNTS	FY 19/20 AMOUNTS	FY 20/21 AMOUNTS	FY 21/22 AMOUNTS	FY 22/23 AMOUNTS	FY 23/24 AMOUNTS	TOTAL AMOUNTS
Corridor Flagging	49,950	100,000	100,000	100,000	100,000	100,000	100,000	649,950
TOTAL EXPENDITURES	\$ 49,950	100,000	100,000	100,000	100,000	100,000	100,000	\$ 649,950

SOUTH FLORIDA REGIONAL TRANSPORTATION AUTHORITY CAPITAL IMPROVEMENT BUDGET FLAGGING SERVICES FOR CONSTRUCTION PROJECTS FY 2018/2019

PROJECT 851

FM # 437454-1

### **Engineering Department**

DESCRIPTION: Flagging along the rail corridor.

REVENUE SCHEDULE	PRIOR AMOUNTS	FY 18/19 AMOUNTS	FY 19/20 AMOUNTS	FY 20/21 AMOUNTS	FY 21/22 AMOUNTS	FY 22/23 AMOUNTS	FY 23/24 AMOUNTS	TOTAL AMOUNTS
FDOT Railroad Reimbursement Agreement	5,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	20,500,000
TOTAL REVENUE	\$ 5,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	\$ 20,500,000
EXPENDITURE SCHEDULE	PRIOR AMOUNTS	FY 18/19 AMOUNTS	FY 19/20 AMOUNTS	FY 20/21 AMOUNTS	FY 21/22 AMOUNTS	FY 22/23 AMOUNTS	FY 23/24 AMOUNTS	AMOUNTS
EXPENDITURE SCHEDULE  Corridor Flagging								
	AMOUNTS	AMOUNTS	AMOUNTS	AMOUNTS	AMOUNTS	AMOUNTS	AMOUNTS	AMOUNTS

# SOUTH FLORIDA REGIONAL TRANSPORTATION AUTHORITY CAPITAL IMPROVEMENT BUDGET DOWNTOWN MIAMI STATION FY 2018/2019

PROJECT 858

### **Engineering Department**

DESCRIPTION: Tri-Rail portion of the Downtown Miami Station.

REVENUE SCHEDULE	PRIOR AMOUNTS	FY 18/19 AMOUNTS	FY 19/20 AMOUNTS	FY 20/21 AMOUNTS	FY 21/22 AMOUNTS	FY 22/23 AMOUNTS	FY 23/24 AMOUNTS	TOTAL
All Aboard Florida Loan	14,688,481	2,839,569						17,528,050
Omni CRA	3,143,433	606,567						3,750,000
City of Miami	6,786,865	1,310,165						8,097,030
Bayfront Park Trust	209.015	40,985						250,000
Miami DDA	1,061,472	205,528						1,267,000
Miami Dade County	11,647,506	2,252,494						13,900,000
SFRTA-County Gas Tax FY 15/16	2,097,650				×			2,097,650
SFRTA-County Gas Tax FY 16/17	1,984,239							1,984,239
SFRTA-County Gas Tax FY 17/18	28,780							28,780
TOTAL REVENUE	\$ 41,647,441	7,255,308			10 <b>5</b>	- 1 - N		\$ 48,902,749

EXPENDITURE SCHEDULE	PRIOR AMOUNTS	FY 18/19 AMOUNTS	FY 19/20 AMOUNTS	FY 20/21 AMOUNTS	FY 21/22 AMOUNTS	FY 22/23 AMOUNTS	FY 23/24 AMOUNTS	TOTAL AMOUNTS
Land & Entitlement	249,947	47,609						297,556
Infrastructure Development	502,276	85,812						588,088
Building Construction	36,597,844	6,441,238						43,039,082
FF & E		121,130						121,130
Site Improvements	26,675	453,919						480,594
Professional Fees	3,163,319	487,562						3,650,881
Finance & Administration	443,423	10,276						453,699
Insurance & Financing	-	271,719						271,719
TOTAL EXPENDITURES	\$ 40,983,484	7,919,265						\$ 48,902,749
PROJECT BALANCE	\$ 663,957						JE 10 10 10 10 10 10 10 10 10 10 10 10 10	\$ -

SOUTH FLORIDA REGIONAL TRANSPORTATION AUTHORITY CAPITAL IMPROVEMENT BUDGET WASTE WATER TREATMENT PLANT FY 2018/2019

PROJECT 860

FM 440145-1

### **Engineering Department**

DESCRIPTION: Rehab and upgrades to the waste water treatment plant at the Hialeah Yard.

REVENUE SCHEDULE	PRIOR AMOUNTS	FY 18/19 AMOUNTS	FY 19/20 AMOUNTS	FY 20/21 AMOUNTS	FY 21/22 AMOUNTS	FY 22/23 AMOUNTS	FY 23/24 AMOUNTS	AMOUNTS
FDOT JPA 102 Funding To Be Determined	350,000		1,636,000	1,500,000	612,000			350,000 3,748,000
TOTAL REVENUE	\$ 350,000		1,636,000	1,500,000	612,000			\$ 4,098,000
EXPENDITURE SCHEDULE	PRIOR AMOUNTS	FY 18/19 AMOUNTS	FY 19/20 AMOUNTS	FY 20/21 AMOUNTS	FY 21/22 AMOUNTS	FY 22/23 AMOUNTS	FY 23/24 AMOUNTS	TOTAL
Capital Improvements Track Mats Tank Replacement		350,000	199,000 258,000 309,000	57,000 133,000				606,000 391,000 309,000
Bird Waste Abatement			870,000	1,011,000	911,000			2,792,000
PROJECT BALANCE	\$ -	350,000	1,636,000	1,201,000 299,000	911,000			\$ 4,098,000

SOUTH FLORIDA REGIONAL TRANSPORTATION AUTHORITY CAPITAL IMPROVEMENT BUDGET NORTHWOOD CROSSOVER FY 2017/2019

PROJECT 861

FM 434948-1

### **Engineering Department**

DESCRIPTION: Construction of Crossovers for new service.

REVENUE SCHEDULE	PRIOR AMOUNTS	FY 18/19 AMOUNTS	FY 19/20 AMOUNTS	FY 20/21 AMOUNTS	FY 21/22 AMOUNTS	FY 22/23 AMOUNTS	FY 23/24 AMOUNTS	TOTAL AMOUNTS
FDOT JPA 92 County Gas Tax Funds FDOT Amendment to JPA	3,703,219 2,500,000	602,027						3,703,219 2,500,000 602,027
County Gas Tax	108,121							108,121
TOTAL REVENUE	\$ 6,311,340	602,027	aristni 🚯		•			\$ 6,913,367
	PRIOR	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	TOTAL
EXPENDITURE SCHEDULE	AMOUNTS	AMOUNTS	AMOUNTS	AMOUNTS	AMOUNTS	AMOUNTS	AMOUNTS	AMOUNTS
Design Construction Flagging	3,703,219 2,500,000 108,121	602,027						3,703,219 3,102,027 108,121
TOTAL EXPENDITURES	\$ 2,608,121	602,027						\$ 6,913,367
PROJECT BALANCE	\$ 3,703,219	3,703,219	3,703,219	3,703,219	3,703,219	3,703,219	3,703,219	\$ -

SOUTH FLORIDA REGIONAL TRANSPORTATION AUTHORITY CAPITAL IMPROVEMENT BUDGET DOWNTOWN MIAMI STATION PLATFORM BUILDOUT FY 2018/2019

PROJECT 862

### **Engineering Department**

DESCRIPTION: Tri-Rail portion of the Downtown Miami Station.

ESTIMATED ANNUAL OPERATING IMPACT: - TBD -

REVENUE SCHEDULE	PRIOR AMOUNTS	FY 18/19 AMOUNTS	FY 19/20 AMOUNTS	FY 20/21 AMOUNTS	FY 21/22 AMOUNTS	FY 22/23 AMOUNTS	FY 23/24 AMOUNTS	TOTAL AMOUNTS
County Gas Tax Funds	850,000							850,000
TOTAL REVENUE	\$ 850,000	(6)	•	*	•			\$ 850,000
EXPENDITURE SCHEDULE	PRIOR AMOUNTS	FY 18/19 AMOUNTS	FY 19/20 AMOUNTS	FY 20/21 AMOUNTS	FY 21/22 AMOUNTS	FY 22/23 AMOUNTS	FY 23/24 AMOUNTS	TOTAL AMOUNTS
EXPENDITURE SCHEDULE  Platform Buildout-DTMS								
	AMOUNTS	AMOUNTS						AMOUNTS

49 DTMS Platform

SOUTH FLORIDA REGIONAL TRANSPORTATION AUTHORITY CAPITAL IMPROVEMENT BUDGET GRADE CROSSING AND SIGNALS FY 2018/2019

**PROJECT 864** 

FM # - Work Order based.

### **Engineering Department**

DESCRIPTION: Road crossing rehabilitation and signal safety upgrades.

REVENUE SCHEDULE	PRIOR AMOUNTS	FY 18/19 AMOUNTS	FY 19/20 AMOUNTS	FY 20/21 AMOUNTS	FY 21/22 AMOUNTS	FY 22/23 AMOUNTS	FY 23/24 AMOUNTS	TOTAL AMOUNTS
FDOT Railroad Reimbursement Agreement FDOT D6 Future Funds (Downtown Lead) Future Funding	1,750,000	8,000,000 2,569,000	12,329,800	11,981,924	11,993,382	12,005,183		1,750,000 8,000,000 50,879,289
TOTAL REVENUE	\$ 1,750,000	\$ 10,569,000	\$ 12,329,800	\$ 11,981,924	\$ 11,993,382	\$ 12,005,183	\$ -	\$ 60,629,289
EXPENDITURE SCHEDULE	PRIOR AMOUNTS	FY 18/19 AMOUNTS	FY 19/20 AMOUNTS	FY 20/21 AMOUNTS	FY 21/22 AMOUNTS	FY 22/23 AMOUNTS	FY 23/24 AMOUNTS	TOTAL AMOUNTS
EXPENDITURE SCHEDULE  Road Crossing Rehab & Signal Upgrades  Design and CE & I								
Road Crossing Rehab & Signal Upgrades		11,600,000	11,600,000	11,600,000	11,600,000	11,600,000		<b>AMOUNTS</b> 58,000,000

SOUTH FLORIDA REGIONAL TRANSPORTATION AUTHORITY CAPITAL IMPROVEMENT BUDGET DOWNTOWN MIAMI LINK PTC FY 2018/2019

PROJECT 865

### **Engineering Department**

DESCRIPTION: Construction of Downtown Miam Link Rail Infrastructure, PTC and Easement.

REVENUE SCHEDULE	PRIOR AMOUNTS	FY 18/19 AMOUNTS	FY 19/20 AMOUNTS	FY 20/21 AMOUNTS	FY 21/22 AMOUNTS	FY 22/23 AMOUNTS	FY 23/24 AMOUNTS	TOTAL AMOUNTS
Commercial Loan	5,531,977	11,077,588	3,680,435					20,290,000
TOTAL REVENUE	\$ 5,531,977	11,077,588	3,680,435				•	20,290,000
EXPENDITURE SCHEDULE	PRIOR AMOUNTS	FY 18/19 AMOUNTS	FY 19/20 AMOUNTS	FY 20/21 AMOUNTS	FY 21/22 AMOUNTS	FY 22/23 AMOUNTS	FY 23/24 AMOUNTS	TOTAL AMOUNTS
Viaduct Rail Enhancements Rail Enhancements Positive Train Control E-ATC Corridor Access Fee	5,531,977	6,549,850 558,023 2,100,000 1,000,000	3,550,150 1,000,000					10,100,000 6,090,000 3,100,000 1,000,000
TOTAL EXPENDITURES	\$ 5,531,977	10,207,873	4,550,150		News			\$ 20,290,000
PROJECT BALANCE	\$ 0	869,715			STAR DESI			\$ -

SOUTH FLORIDA REGIONAL TRANSPORTATION AUTHORITY CAPITAL IMPROVEMENT BUDGET DOWNTOWN MIAMI STATION LEVEL BOARDING FY 2018/2019

PROJECT 873

FN# # 433611-1

### **Engineering Department**

DESCRIPTION: Implementation of Level Boarding Access at Downtown Miami Station.

REVENUE SCHEDULE	PRIOR AMOUNTS	FY 18/19 AMOUNTS	FY 19/20 AMOUNTS	FY 20/21 AMOUNTS	FY 21/22 AMOUNTS	FY 22/23 AMOUNTS	FY 23/24 AMOUNTS	TOTAL AMOUNTS
FTA Section 5337 - State of Good Repair Grant 024	1,616,667							1,616,667
TOTAL REVENUE	\$ 1,616,667							\$ 1,616,667
				EV 20/24				
EXPENDITURE SCHEDULE	PRIOR AMOUNTS	FY 18/19 AMOUNTS	FY 19/20 AMOUNTS	FY 20/21 AMOUNTS	FY 21/22 AMOUNTS	FY 22/23 AMOUNTS	FY 23/24 AMOUNTS	AMOUNTS
Maintenance options Manufacturing / Installation Contingency		and the second second second second	A STATE OF THE PARTY OF THE PAR					
Maintenance options Manufacturing / Installation		200,000	800,000					1,000,000 500,000

<sup>(1)</sup> The 20% local match required by the FTA is satisfied by using FDOT Toll Revenue credits.

SOUTH FLORIDA REGIONAL TRANSPORTATION AUTHORITY CAPITAL IMPROVEMENT BUDGET WHEEL TRUE MACHINE FY 2018/2019

**PROJECT** 

FM # 433611-1

### **Engineering Department**

DESCRIPTION: Purchase of Wheel True Machine to accommodate Level Boarding at the DTMS.

ESTIMATED ANNUAL OPERATING IMPACT: - 0 -

REVENUE SCHEDULE	PRIOR AMOUNTS	FY 18/19 AMOUNTS	FY 19/20 AMOUNTS	FY 20/21 AMOUNTS	FY 21/22 AMOUNTS	FY 22/23 AMOUNTS	FY 23/24 AMOUNTS	TOTAL
FTA Section 5337 - State of Good Repair Grant 024	1,600,000							1,600,000
TOTAL REVENUE	\$ 1,600,000				8770 Tax 2			\$ 1,600,000
EXPENDITURE SCHEDULE	PRIOR AMOUNTS	FY 18/19 AMOUNTS	FY 19/20 AMOUNTS	FY 20/21 AMOUNTS	FY 21/22 AMOUNTS	FY 22/23 AMOUNTS	FY 23/24 AMOUNTS	TOTAL
Wheel Trueing		1,600,000						1,600,000
TOTAL EXPENDITURES	\$	1,600,000						\$ 1,600,000

53

Wheel True Machine

<sup>(1)</sup> The 20% local match required by the FTA is satisfied by using FDOT Toll Revenue credits.

SOUTH FLORIDA REGIONAL TRANSPORTATION AUTHORITY CAPITAL IMPROVEMENT BUDGET SFRC CAPITAL REPLACEMENT PROGRAM FY 2018/2019

PROJECT

FM

### **Engineering Department**

DESCRIPTION: Capital replacement along SFRC.

REVENUE SCHEDULE	PRIOR AMOUNTS	FY 18/19 AMOUNTS	FY 19/20 AMOUNTS	FY 20/21 AMOUNTS	FY 21/22 AMOUNTS	FY 22/23 AMOUNTS	FY 22/23 AMOUNTS	TOTAL AMOUNTS
Funding To Be Determined		17,465,500	9,951,688	8,734,688	8,674,683	6,819,688	8,573,666	60,219,918
TOTAL REVENUE	\$	17,465,500	9,951,688	8,734,688	8,674,688	6,819,688	8,573,666	\$ 60,219,918
EXPENDITURE SCHEDULE	PRIOR AMOUNTS	FY 18/19 AMOUNTS	FY 19/20 AMOUNTS	FY 20/21 AMOUNTS	FY 21/22 AMOUNTS	FY 22/23 AMOUNTS	FY 22/23 AMOUNTS	TOTAL
Mail Line Bridges-Culverts Safety Enhancements Other		10,876,800 4,501,615 432,600 1,654,485	3,806,880 4,362,759 432,600 1,349,449	3,806,880 3,675,749 432,600 819,459	3,806,880 4,128,949 432,600 306,259	3,806,880 2,398,549 432,600 181,659	3,806,880 2,398,549 432,600 1,935,637	29,911,200 21,466,168 2,595,600 6,246,950
TOTAL EXPENDITURES	\$	17,465,500	9,951,688	8,734,688	8,674,683	6,819,688	8,573,666	\$ 60,219,918

SOUTH FLORIDA REGIONAL TRANSPORTATION AUTHORITY CAPITAL IMPROVEMENT BUDGET MOW Oversight FY 2018/2019

**PROJECT** 

FM

### **Engineering Department**

DESCRIPTION: To provide oversight services for MOW.

REVENUE SCHEDULE	PRIOR AMOUNTS	FY 18/19 AMOUNTS	FY 19/20 AMOUNTS	FY 20/21 AMOUNTS	FY 21/22 AMOUNTS	FY 22/23 AMOUNTS	FY 23/24 TOTAL AMOUNTS
FTA Section 5337 - State Of Good Repair Future Requests							141
Funding To Be Determined		1,800,000	1,800,000	1,800,000	1,800,000	1,800,000	1,800,000 10,800,000
Local 20% Match to FTA funds	(1)						
TOTAL REVENUE	\$	1,800,000	1,800,000	1,800,000	1,800,000	1,800,000	1,800,000 \$ 10,800,000
EXPENDITURE SCHEDULE	PRIOR AMOUNTS	FY 18/19 AMOUNTS	FY 19/20 AMOUNTS	FY 20/21 AMOUNTS	FY 21/22 AMOUNTS	FY 22/23 AMOUNTS	FY 23/24 TOTAL AMOUNTS
MOW Oversight		1,800,000	1,800,000	1,800,000	1,800,000	1,800,000	1,800,000 10,800,000
TOTAL EXPENDITURES	\$ -	1,800,000	1,800,000	1,800,000	1,800,000	1,800,000	1,800,000 \$ 10,800,000
PROJECT BALANCE	\$						\$11H2180

<sup>(1)</sup> The 20% local match required by the FTA is satisfied by using FDOT Toll Revenue credits.

### **Acronym**

### **Definition**

AAF All Aboard Florida

ARRA American Recovery Reinvestment Act

BMPO Broward Metropolitan Planning Organization

CE&I Construction Engineering and Inspection

CO Change Order

CRA Community Redevelopment Agency
DDA Downtown Development Authority

DTML Downtown Miami Link
DTMS Downtown Miami Station

E-ATC Enhanced Automatic Train Control
FDOT Florida Department of Transportation
FHWA Federal Highway Administration

FM Financial Management

FTA Federal Transit Administration

FY Fiscal Year

GMR Growth Management Revenue
GPS Global Positioning System
JPA Joint Participation Agreement
MIC Miami Intermodal Center

MOW Maintenance of Way

MRMICCI Miami River Intermodal Center Capacity Improvement

NEPA National Environmental Policy Act
PBIA Palm Beach International Airport

PBMPO Palm Beach Metropolitan Planning Organization

PM Project Management

PMC Project Management Consultant

PTC Positive Train Control

PTO Public Transportation Office

RFP Request for Proposal

ROW Right of Way

SEOPW Southeast Overtown Park West
SFRC South Florida Rail Corridor

SFRTA South Florida Regional Transportation Authority

SIS Strategic Intermodal System

TOD Transportation Oriented Development

TRCL Tri Rail Coastal Link

TRIP Transportation Regional Incentive Program

TVM Ticket Vending Machines



GOVERNMENT FINANCE OFFICERS ASSOCIATION

# Distinguished Budget Presentation Award

PRESENTED TO

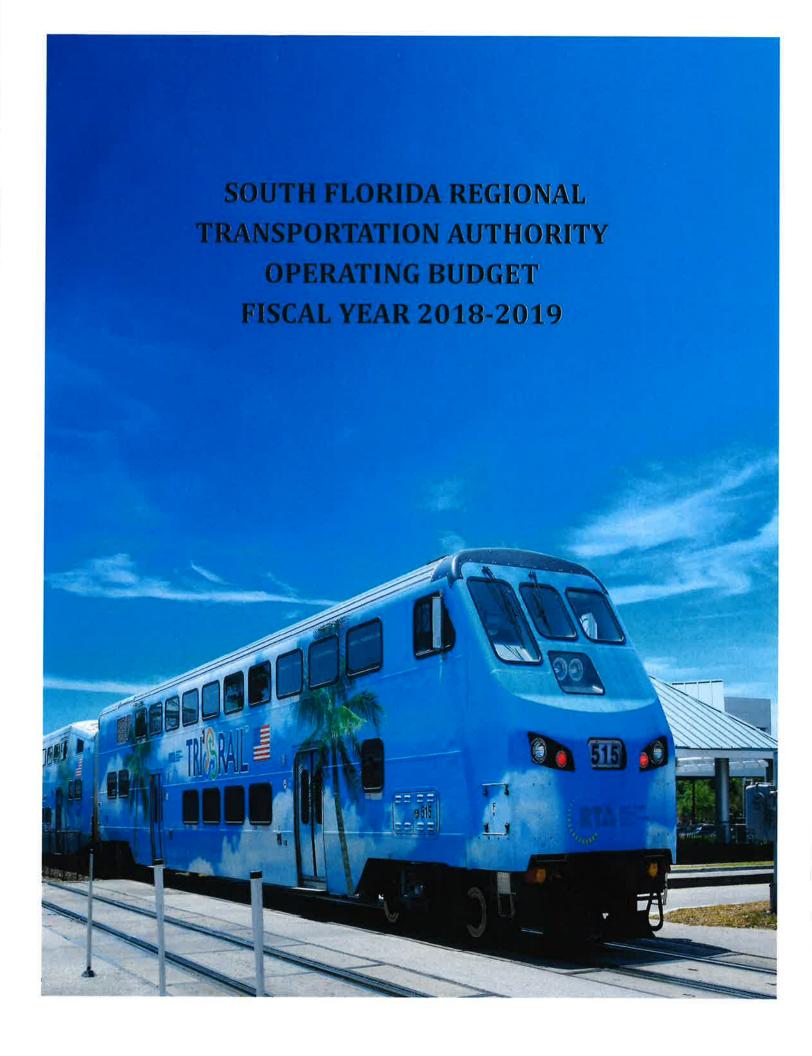
# South Florida Regional Transportation Authority Florida

For the Fiscal Year Beginning

July 1, 2017

Christopher P. Morrill

**Executive Director** 



### **TABLE OF CONTENTS**

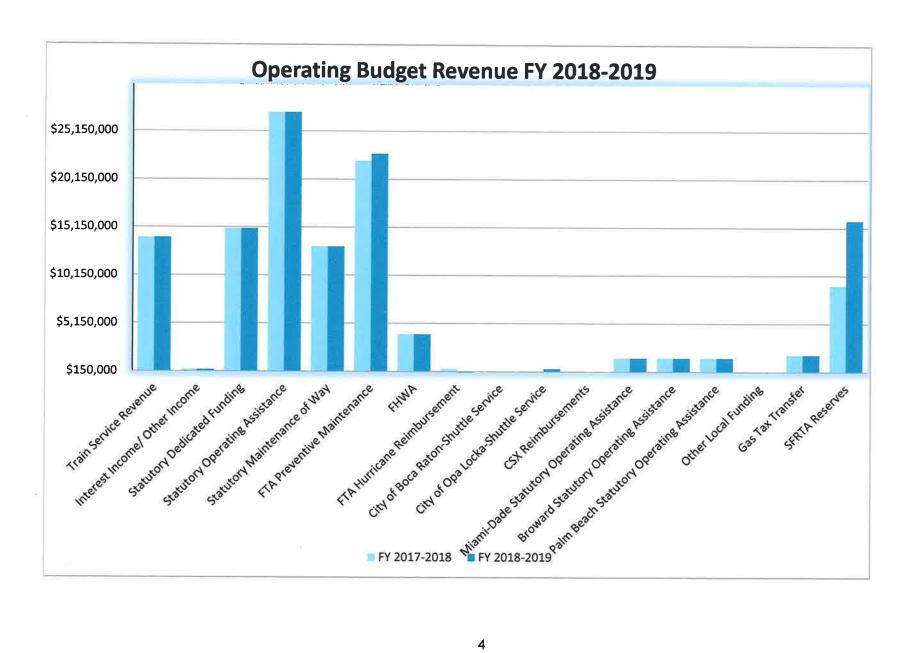
Table of Contents2
Section I – Budget Summary
Revenue Budget
Section II – Budget Details
Individual Department Budgets
Engineering Department       20         Executive Department       23         Finance Department       32         Human Resources Department       35         Information Technology Department       39         Legal Department       41         Operation Department       41         Planning and Capital Development Department       44         Procurement Department       47         Safety and Security Department       50
Select Line Item Detail
Office Business Expense
Awards and Recognition
GFOA Distinguished Budget Award71

# Budget Summary

# SOUTH FLORIDA REGIONAL TRANSPORTATION AUTHORITY FY 2018-2019 OPERATING BUDGET

### REVENUE

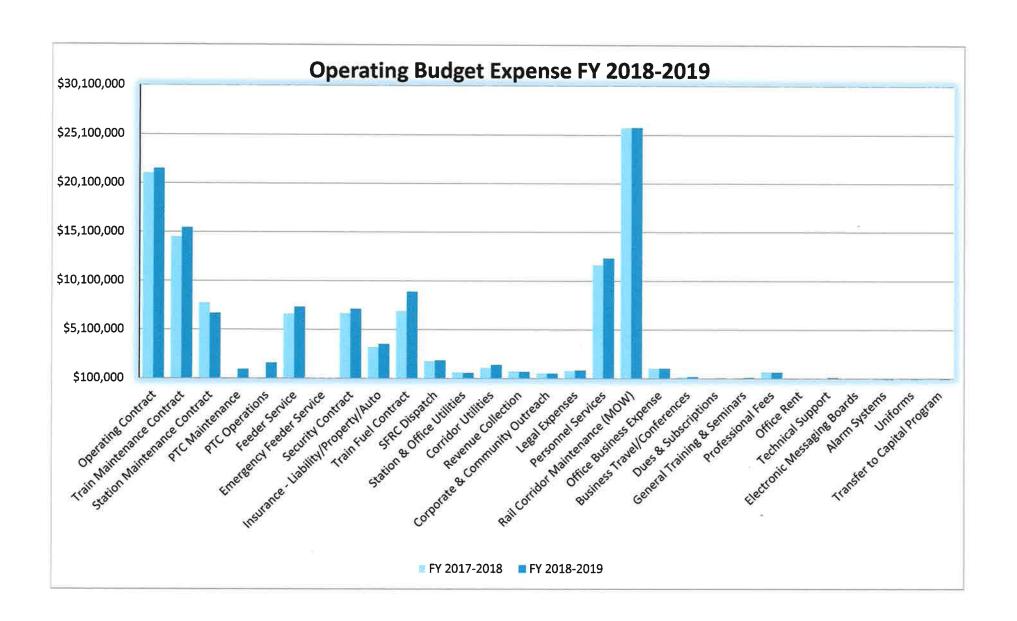
	FY 2017-2018		FY 2018-2019	Charas		
	,	APPROVED BUDGET	PROPOSED BUDGET	Change \$	%	
TRAIN REVENUE						
Train Service Revenue	\$	14,051,077	\$ 14,051,830	\$ 753	0.01%	
Interest Income/ Other Income		325,000	325,000		9#3	
TOTAL TRAIN REVENUE		14,376,077	14,376,830	753	0.01%	
OPERATING ASSISTANCE						
Statutory Dedicated Funding		15,000,000	15,000,000	ž.	<b>*</b>	
Statutory Operating Assistance		27,100,000	27,100,000		-	
Statutory Maintenance of Way		13,124,940	13,124,940	•		
FTA Preventive Maintenance		22,044,917	22,784,726	739,809	3.36%	
FHWA		4,000,000	4,000,000	Ę.	0.00%	
FTA Hurricane Reimbursement		425,000	3 <b>5</b> 2	(425,000)	-100.00%	
City of Boca Raton-Shuttle Service		172,081	176,821	4,740	2.75%	
City of Opa Locka-Shuttle Service		<b>:</b>	439,290	439,290	100.00%	
CSX Reimbursements		100,000	100,000	<b></b>	-	
Miami-Dade Statutory Operating Assistance		1,565,000	1,565,000	( <del>10</del> 0)	:15:	
Broward Statutory Operating Assistance		1,565,000	1,565,000	<del>20</del> 01		
Palm Beach Statutory Operating Assistance		1,565,000	1,565,000	æ8	5#	
Other Local Funding		100,000	100,000	: <del>=</del> 1	15	
Gas Tax Transfer		1,896,895	1,896,895	(#O	18	
SFRTA Reserves		9,105,082	15,878,266	6,773,184	74.39%	
TOTAL ASSISTANCE		97,763,915	105,295,938	7,532,023	7.70%	
TOTAL REVENUE	\$	112,139,992	\$ 119,672,768	\$ 7,532,776	6.72%	



# SOUTH FLORIDA REGIONAL TRANSPORTATION AUTHORITY FY 2018-2019 OPERATING BUDGET

### **EXPENSE COMPARISON**

	FY 2017-2018 APPROVED			FY 2018-2019 PROPOSED		Change	
9		BUDGET	_	BUDGET		\$	<u>%</u>
Operating Contract	\$	21,122,293	\$	21,593,921	\$	471,628	2.23%
Train Maintenance Contract	•	14,611,958	•	15,519,452	*	907,494	6.21%
Station Maintenance Contract		7,814,959		6,750,523		(1,064,436)	-13.62%
PTC Maintenance		.,		1,022,780		1,022,780	100.00%
PTC Operations		2		1,683,200		1,683,200	100.00%
Feeder Service		6.679.862		7,402,658		722,796	10.82%
Emergency Feeder Service		75,000		75,000		<b>\$6</b>	#
Security Contract		6,748,086		7,183,106		435,020	6.45%
Insurance - Liability/Property/Auto		3,300,000		3,603,276		303,276	9.19%
Train Fuel Contract		6,978,860		8,978,125		1,999,265	28.65%
SFRC Dispatch		1,845,048		1,949,937		104,889	5.68%
Station & Office Utilities		715,000		642,123		(72,877)	-10.19%
Corridor Utilities		1,169,610		1,475,148		305,538	26.12%
Revenue Collection		818,000		758,000		(60,000)	-7.33%
Corporate & Community Outreach		609,300		602,900		(6,400)	-1.05%
Legal Expenses		875,741		903,698		27,957	3.19%
Personnel Services		11,745,937		12,422,142		676,205	5.76%
Rail Corridor Maintenance (MOW)		25,819,892		25,842,099		22,207	0.09%
Office Business Expense		1,102,750		1,101,880		(870)	-0.08%
Business Travel/Conferences		222,360		253,893		31,533	14.18%
Dues & Subscriptions		158,578		157,152		(1,426)	-0.90%
General Training & Seminars		171,358		189,985		18,627	10.87%
Professional Fees		753,000		709,900		(43,100)	-5.72%
Office Rent		24,400		32,870		8,470	34.71%
Technical Support		100,000		189,500		89,500	89.50%
Electronic Messaging Boards		120,000		69,500		(50,500)	-42.08%
Alarm Systems		4,000		4,000		-	-
Uniforms		4,000		6,000		2,000	50.00%
Transfer to Capital Program		(1,450,000)		(1,450,000)			
TOTAL EXPENSES	\$	112,139,992	\$	119,672,768	\$	7,532,776	6.72%



## SOUTH FLORIDA REGIONAL TRANSPORTATION AUTHORITY EXPLANATION OF BUDGET VARIANCES

### **FISCAL YEAR 2018-2019**

### REVENUE

### Train Service Revenue:

During the first nine months of fiscal year 2017-2018, SFRTA's train service revenue fell short of anticipated figures by approximately \$568,169. Staff believed this decrease is due to eight days of not running service due to Hurricane Irma as well as not beginning service into the new Downtown Miami Central Station in January 2018 as originally planned. The Agency entered into a new operating and maintenance agreement with Herzog Transit Services effective July 1, 2017 and now plans to begin new service into the new Downtown Miami Station starting in April 2019. In light of these facts, SFRTA will slightly increase its anticipated train revenue figure for the fiscal year 2018-2019 budget.

### **REVENUE PROJECTIONS**

		2017-2018	RE	VENUE	PI	19 REVENUE		
	FY	2017-2018	FY 2017-2018			Y 2018-2019	F	/ 2018-2019
		BUDGET		<b>ACTUAL</b>	CHANGE			BUDGET
July	\$	1,016,410	\$	1,037,968	\$	31,139	\$	1,069,107
August		1,079,627		1,086,698		32,601		1,119,299
September		1,019,502		715,417		178,854		894,271
October		986,252		1,119,986		44,799		1,164,785
November		1,081,414		1,122,787		44,911		1,167,698
December		1,102,331		1,115,878		44,635		1,160,513
January		1,318,765		1,173,091		35,193		1,208,284
February		1,183,828		1,091,837		32,755		1,124,592
March		1,462,916		1,219,214		36,576		1,255,790
April*		1,315,270		1,086,661		217,332		1,303,993
May*		1,304,080		1,082,272		269,145		1,351,417
June*		1,180,682		985,663		246,416		1,232,080
	\$	14,051,077	\$	12,837,472	\$	1,214,357	\$	14,051,830

<sup>\*</sup>estimated revenue

## SOUTH FLORIDA REGIONAL TRANSPORTATION AUTHORITY EXPLANATION OF BUDGET VARIANCES

### **FISCAL YEAR 2018-2019**

### **REVENUE** cont.



### Interest Income/Other Income:

Interest income includes interest from over-night bank investments, investments in the Local Government Surplus Fund Trust Fund and other investments as allowed under Florida Statute 218.415. Other Income includes revenue from vending machines located at SFRTA stations, fare evasion fines and internet sales of SFRTA merchandise. For fiscal year 2018-2019, estimated Interest Income/Other Income will remain at \$325,000.

# Florida Dept. of Transportation (FDOT): Operating Assistance and Dedicated Funding

Subsequent to SFRTA assuming responsibility for maintaining and dispatching the South Florida Regional Corridor (SFRC) on March 29, 2015, Section 343.58(4)(a)2, Florida Statutes, changes the State Transportation Trust Fund (STTF) annual funding requirement for Tri-Rail. FDOT must now annually transfer \$15 million from the STTF to SFRTA for operations, maintenance, and dispatch and an additional amount of no less than \$27.1 million for operating assistance (\$42.1 million total annual funding).

### SOUTH FLORIDA REGIONAL TRANSPORTATION AUTHORITY EXPLANATION OF BUDGET VARIANCES

### **FISCAL YEAR 2018-2019**

### REVENUE cont.

### Maintenance of Way (MOW) Operating Assistance:

SFRTA and FDOT entered into an Operating Agreement June 13, 2013 to formalize SFRTA's responsibilities in assuming management, operation, maintenance and dispatch of all rail operations along the corridor. Currently FDOT contributes \$13,124,940 and the SFRTA contributes \$1,896,895.

### **FTA Preventative Maintenance:**

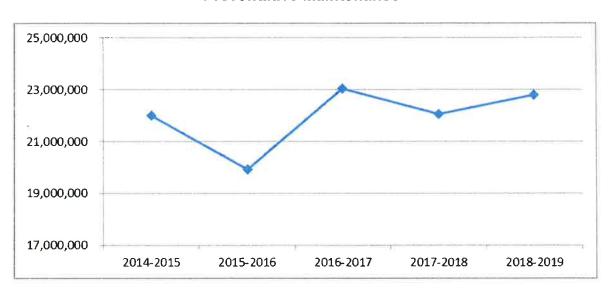
Although an operating expense, "Preventative Maintenance," which is defined as all maintenance costs, is an allowable expenditure of capital funds for operating purposes, under FTA guidelines. The FTA has no cap on the amount of formula funds a transit agency can use for preventive maintenance. The only limits are the amount of federal capital funds available and the total preventive maintenance expense a transit agency actually incurs.

For fiscal year 2018-2019, \$22,784,726 is programmed in FTA formula funds for eligible preventive maintenance costs. Eligible preventive maintenance costs include such items as rolling stock maintenance, station maintenance, fleet vehicle maintenance and ticket vending machine maintenance. The SFRTA is now including Positive Train Control (PTC) maintenance in this item. On the next page is a chart that represents SFRTA's Preventative Maintenance over the previous five years.

#### **FISCAL YEAR 2018-2019**

#### **REVENUE** cont.

#### **Preventative Maintenance**



# Federal Highway Administration (FHWA):

SFRTA receives FHWA funds as a pass-through from FDOT. SFRTA has received these funds since its inception in 1989 as part of a traffic mitigation project. Fiscal year 2018-2019 FHWA assistance will remain at \$4,000,000.

#### **Additional Shuttle Service:**

SFRTA is entering into a new contract with the city of Boca Raton as well as with the City of Opa-Locka to provide feeder bus connections to and from the Tri-Rail stations. SFRTA will be reimbursed \$176,821 for these services.

## **FISCAL YEAR 2018-2019**

**REVENUE** cont.

## **County Assistance:**

In June 2004, the Governor signed legislation guaranteeing that, on an annual basis, Miami-Dade, Broward and Palm Beach Counties would each provide \$1,565,500 in operating funds.

# Other Local Funding:

Other Local Funding consists of funds provided for feeder services by a private firm totaling \$100,000 for a dedicated feeder bus route. In addition, CSX will reimburse the Agency for costs associated with derailments at the maintenance yard, which is currently budgeted at \$100,000.

# Gas Tax and SFRTA Reserves:

SFRTA will be utilizing \$1,896,895 of additional county gas tax funds pursuant to F.S. 343.58 to offset the cost of corridor maintenance. SFRTA will also budget \$15,878,266 in reserve funds in fiscal year 2018-2019.

#### **FISCAL YEAR 2018-2019**

#### **EXPENSES**

# **Train Operations:**

The most significant expenses in the Train Operations line items are the base contracts. The base contracts for the last 10 years were with Bombardier Mass Transit, with whom the SFRTA had contracted to maintain rolling stock and facility equipment, and Veolia Transportation who operated the train service. Meridian Management Corporation was contracted to maintain the Agency's stations for the last seven years. Effective July 1, 2017, Herzog Transit Services won the bundled contract to run train operations, dispatch, and train and station maintenance.

Below is a breakout of the components of Train Operations.

ű.	FY 2017-2018 APPROVED		FY 2018-2019 PROPOSED		CHANGE		
	BUDGET		BUDGET		\$	%	
Train Maintenance	\$ 14,611,958	\$	15,519,452	\$	907,494	6.21%	
Train Operations	21,122,293		21,593,921		471,628	2.23%	
Station Maintenance	7,814,959		6,750,523		(1,064,436)	-13.62%	
Dispatch	1,845,048		1,949,937		104,889	5.68%	
Electronic Message Boards	120,000		69,500		(50,500)	-42.08%	
Alarm Systems	4,000		4,000		<b>₩</b> ?	3	
Uniforms	4,000		6,000		2,000	50.00%	
<b>Total Train Operations</b>	\$ 45,522,258	\$	45,893,333	\$	371,075	0.82%	

#### Feeder Service:

Feeder Bus Service expenses increased by \$722,796 in fiscal year 2018-2019 under a new five year base contract that went into effect March 1, 2016. SFRTA collaborates with various municipalities and agencies to help fund their bus routes that make a stop at Tri Rail stations. This year, SFRTA will be adding a new route in Opa-Locka.

Feeder bus expenses for fiscal year 2018-2019 are shown on the following page:

#### **FISCAL YEAR 2018-2019**

#### **EXPENSES** cont.

#### **Feeder Service Expenses**

v.	-	/ 2017-2018 APPROVED	FY 2018-2019 PROPOSED	CHANG	<del>-</del>
		BUDGET	BUDGET	\$	%
Base Contract	\$	4,999,449	\$ 5,717,505	\$ 718,056	14.36%
Palm Tran		666,666	666,666	<del>=</del>	-
MDTA		666,666	666,666	Α	353
Boca Center Route		172,081	176,821	4,740	2.75%
SFEC TMA		95,000	95,000	=	
Special Events		55,000	55,000	8	-
Incentive Bonus		15,000	15,000	*	(*)
Bus Wrap		10,000	10,000		
	\$	6,679,862	\$ 7,402,658	\$ 722,796	10.82%

# **Emergency Feeder Bus:**

This service is provided for customers in the event of a major train delay. Emergency service will remain at \$75,000 for the fiscal year.

# **Security Contract:**

SFRTA entered into a five-year contract with G4S Secure Solutions (formerly Wackenhut) for armed security, fare enforcement and revenue collection services effective November 1, 2015. The Security Contract and Miscellaneous Safety expenses for fiscal year 2018-2019 is budgeted at \$7,183,106.

#### Insurance:

The annual insurance premium expense increased by \$303,726 in fiscal year 2018-2019 due to the Agency now having to insure the PTC for the Downtown Miami Link. A detailed listing of SFRTA's insurance program is listed on the next page.

#### **FISCAL YEAR 2018-2019**

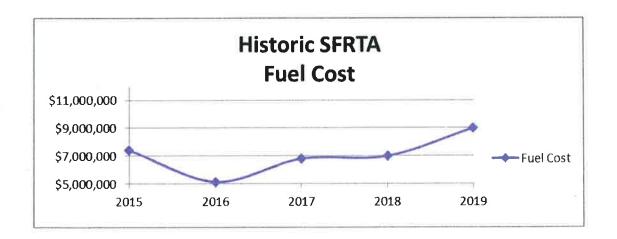
#### **EXPENSES** cont.

#### SFRTA INSURANCE PROGRAM

	FY 2017-2018 APPROVED		-	Y 2018-2019 PROPOSED	CHANGE			
		BUDGET		BUDGET	\$	%		
Rail Road Liability & Property	\$	3,075,000	\$	3,075,000	\$ -	:=		
PTC Insurance		•		303,726	303,726	100.00%		
Broker Fees		40,000		40,000	22	5945		
Auto		51,000		51,000	9	2		
D & O Insurance		42,000		42,000	77			
General Liability		35,000		35,000		=		
Wind Storm		47,000		47,000	200	=		
Crime Policy		10,000		10,000	:#00	-		
	\$	3,300,000	\$	3,603,726	\$ 303,726	9.20%		

#### **Train Fuel Contract:**

Train fuel costs for the fiscal year 2018-2019 are increasing as the Agency will begin service to the Downtown Miami Station beginning in April 2019. The cost of fuel for SFRTA will be budgeted at \$2.21/gallon. For this next fiscal year, the agency expects to use 4,062,500 gallons of fuel at a cost of \$8,978,125.



#### **FISCAL YEAR 2018-2019**

## **EXPENSES** cont.

#### Station/Office and Corridor Utilities:

Station and office utilities will decrease slightly to \$642,123 for fiscal year 2018-2019. However, with new service beginning to the DTMS, which now includes utility service on the IRIS and Northwood Crossovers, corridor utilities will be increasing and budgeted at \$1,475,148.

## **Revenue Collection:**

Revenue Collection includes expenses for fare collection including ticket printing and Ticket Vending Machine (TVM) maintenance of \$60,000 and \$73,000 respectively. SFRTA entered into a contract for a Regional Fare Collection System, installed in January and February of 2011. SFRTA will enter into negotiations for a new contract with Miami-Dade for their back office support and network support, which is estimated to be \$625,000 per year.

# Corporate and Community Outreach (CCO):

The CCO funding is used to promote Tri-Rail service throughout the region through special events, television and radio commercials, and various marketing campaigns. CCO details are listed below.

FY	2017-2018	FY 2018-2019						
Α	APPROVED		PROPOSED		CHANGE			
-	BUDGET		BUDGET		\$	%		
\$	500,000	\$	500,000			-		
	1,600		•		(1,600)	-100.00%		
	75,500		75,500		950	3.53		
	21,800		22,400		600	2.75%		
	10,400		5,000		(5,400)	-51.92%		
\$	609,300	\$	602,900	\$	(6,400)	-1.05%		
	A	\$ 500,000 1,600 75,500 21,800 10,400	* 500,000 \$ 1,600 75,500 21,800 10,400	APPROVED         PROPOSED           BUDGET         BUDGET           \$ 500,000         \$ 500,000           1,600         -           75,500         75,500           21,800         22,400           10,400         5,000	APPROVED         PROPOSED           BUDGET         BUDGET           \$ 500,000         \$ 500,000           1,600         -           75,500         75,500           21,800         22,400           10,400         5,000	APPROVED         PROPOSED         CHAN           BUDGET         BUDGET         \$           \$ 500,000         -         (1,600)           1,600         -         (1,600)           75,500         75,500         -           21,800         22,400         600           10,400         5,000         (5,400)		

#### **FISCAL YEAR 2018-2019**

#### **EXPENSES** cont.

# **Legal Expenses:**

On January 22, 2010, the SFRTA's Governing Board voted to employ full time, in house general counsel. General Counsel operates autonomously of the Executive Office and reports directly to the Governing Board. The fiscal year 2018-2019 budget for the Governing Board's Legal Department is below and detailed on page 39-40.

#### **Legal Department Budget**

¥	FY 2017-2018 APPROVED		-	Y 2018-2019 PROPOSED	CHANGE			
		BUDGET		BUDGET		\$	%	
Personnel Services-Salary	\$	495,428	\$	507,058	\$	11,630	2.35%	
Personnel Services-FICA		26,887		26,355		(532)	-1.98%	
Personnel Services-Insurance		54,028		53,929		(99)	-0.18%	
Personnel Services-Pension		65,317		79,964		14,647	22.42%	
Personnel Services-SUTA		491		507		16	3.26%	
Business Travel		9,350		11,400		2,050	21.93%	
Dues and Subscriptions		4,460		4,110		(350)	-7.85%	
Legal Fees		216,475		216,475		-		
General Training and Seminars		3,305		3,900		595	18.00%	
Department Total	\$	875,741	\$	903,698	903,698 \$ 2		3.19%	

#### Personnel Services:

The cost of personnel services is increasing in FY 2018-2019 by 5.7%. The increased cost of health insurance and the increase in the pension rate accounts for 54% of the overall increase. SFRTA will continue to freeze and unfund 4 professional level vacant positions, but will be adding 3.5 new Customer Service positions to work out of the new DTMS. Personnel Services line item includes the salaries, pension, taxes and health insurance payments of all SFRTA employees with the exception of legal personnel. A 3.0% merit increase is also included.

A listing of positions, by department, is on pages 68-70.

#### **FISCAL YEAR 2018-2019**

#### **EXPENSES** cont.

A table showing the components of Personnel Services is listed below.

	 ( 2017-2018 APPROVED	1	FY 2018-2019 PROPOSED	CHAN	GE
	BUDGET		BUDGET	\$	%
SALARIES	\$ 8,405,465	\$	8,691,572	\$ 286,107	3.40%
OVER TIME	71,500		71,750	250	0.35%
FICA	622,878		651,989	29,111	4.67%
HEALTH	1,688,695		1,940,435	251,740	14.91%
PENSION	863,923		978,883	114,960	13.31%
SUTA	8,476		8,763	287	3.39%
TEMP HELP/INTERN	#		3,750	3,750	100.00%
W/C	 85,000		75,000	(10,000)	-11.76%
	\$ 11,745,937	\$	12,422,142	\$ 676,205	5.76%

# Maintenance of Way (MOW) Operating Assistance:

In March 2015, SFRTA officially expanded its role on the CSX corridor by assuming responsibility for dispatch and maintenance. SFRTA anticipates this year's costs to be approximately \$25,842,099.

# Office Business Expense and General and Administrative Expenses:

An office business expense is an expense that is considered ordinary and necessary for the daily operations of a business. An example would be phone service and office supplies. The breakdown of these business expenses are on page 53-54.

## **Business Travel:**

The projected budget for Business Travel for fiscal year 2018-2019 is \$253,893. The Business Travel details are located on pages 55-58.

#### **FISCAL YEAR 2018-2019**

## **EXPENSES** cont.

# **Dues and Subscriptions:**

The agency is projecting Dues and Subscriptions at \$157,152. The Dues and Subscription budget is on pages 59-61.

# **General Training and Seminars:**

The projected budget for General Training and Seminars for fiscal year 2018-2019 is \$189,985. The Seminars and General Training budget details are on pages 62-65.

#### **Professional Fees:**

The Professional Fees line item consists of expenses paid for consultants, auditing services and software/hardware support. Page 67 contains a full list of SFRTA's Professional Fees by department. The following page contains a table listing all consultants and professional fees.

	FY 2017-2018 APPROVED			FY 2018-2019 PROPOSED		CHANGE		
		BUDGET	'	BUDGET		\$	%	
Legislative Assistance	\$	246,000	\$	246,000	\$	<b>(E</b>	-	
Federal Consultant		144,000		144,000		35	19	
Software Support-Financial System		76,000		79,000		3,000	3.95%	
Audit Fees		85,000		57,400		(27,600)	-32.47%	
Safety Consulting		55,000		45,000		(10,000)	-18.18%	
CUBIC Software Maintenance Agreement		53,500		45,000		(8,500)	-15.89%	
Drill Facilitation		35,000		45,000		10,000	28.57%	
GPS/PIS System		4		25,000		25,000	100.00%	
Website Support		20,000		10,000		(10,000)	-50.00%	
General Consultants		10,000		10,000		-	≌:	
EEO Workforce Analysis		3,500		3,500		120	₩.	
MDT Participation Agreement Audit		25,000		·		(25,000)	-100.00%	
Total	\$	753,000	\$	709,900	\$	(43,100)	-5.72%	

**FISCAL YEAR 2018-2019** 

**EXPENSES** cont.

# Office Rent/Property Management Fees:

SFRTA officially moved into its new administrative offices in February 2017. Although the Agency no longer pays rent, they are responsible for assessments, signage, and irrigation costs, payable to the Centerport Association. The projected expenses for FY 2018-2019 are \$32,870.

# **Transfer of Expenditures to Capital:**

The SFRTA will be maximizing the use of FTA funds for both capital projects as well as Preventive Maintenance. The agency plans to charge approximately \$1,450,000 in payroll expenses back to capital projects.

# Budget Details

## **ENGINEERING DEPARTMENT**

	FY 2017-2018		FY 2018-2019				
	APPROVED		PROPOSED	CHANGE			
	BUDGET		BUDGET		\$	%	
Personnel ServicesSalary/Wages	\$ 717,852	\$	747,840	\$	29,988		4.18%
Personnel ServicesOvertime	500		500		·		2
Personnel ServicesFICA Taxes	54,046		55,970		1,924		3.56%
Personnel ServicesGroup Insurance	105,355		132,310		26,955		25.58%
Personnel ServicesPension Expense	73,183		83,793		10,610		14.50%
Personnel ServicesSUTA	718		748		30		4.18%
Business Travel	16,460		24,070		7,610		46.23%
Dues/Subscriptions	2,724		3,342		618		22.69%
General Training and Seminars	4,075		12,450		8,375		205.52%
Printing and Advertising	5,100		5,100		/. <del>T</del> .		9
PTC Operations	::=:		1,683,200		1,683,200		-
PTC Maintenance	X		1,022,780		1,022,780		*
ROW Maintenance-DTMS	(2里)		173,914		173,914		
ROW Maintenance	25,819,892		25,668,185		(151,707)		-0.59%
FTA Meetings	800		800				
Department Total	\$ 26,800,705	\$	29,615,002	\$	2,814,297		10.50%

# **ENGINEERING DEPARTMENT**

AREMA Conference         3,320         5,280           PTC FRA Qtr /User Meetings         -         4,280           ASCE FL Conference         2,460         3,140           APTA Annual Meeting         1,760         1,760           APTA Rail Conference         -         1,760           APTA Rail Conference         1,760         1,760           REMSA Conference         -         1,760           ASME Conference         -         1,760           TTCI Conference         -         1,760           YMMATA Conference         -         1,380           FTA Wave Quarterly Meeting         -         1,380           FTA Wave Quarterly Meeting         -         1,380           FTA Tail Conference (Location TBD)         3,520         -           PTC Benchmark (Offsite Visit) 2 @ 1380         2,760         -           FTA Safety and Security Training Certificate         880         -           American Society of Civil Engineers license         915         945           Railway Engineering Maintenance Suppliers Assoc         675         975           AREMA Dues         340         549           American Society of Civil Engineers Renewal         151         302           Project Managem		FY 2017-2018 APPROVED BUDGET	PRO	018-2019 POSED IDGET
PTC FRA Qtr./User Meetings	Business Travel			
ASCE FL Conference         2,460         3,140           APTA Annual Meeting         1,760         1,760           APTA Rall Conference         -         1,760           REMSA Conference         1,760         1,760           ASME Conference         -         1,760           TTCI Conference         -         1,760           WMATA Conference         -         1,380           FTA Wave Quarterly Meeting         -         1,380           FTA Wave Quarterly Meeting         -         1,380           FTA Safety and Security Training Certificate         880         -           FTA Safety and Security Training Certificate         880         -           Proses and Subscriptions         880         -           American Society of Civil Engineers license         915         945           Railway Engineering Maintenance Suppliers Assoc         675         675           AREMA Dues         340         549           American Society of Cuality         318         318           American Society of Mechanical Engineers Renewal         151         302           Project Management Institute Membership         -         150           Project Management Professional (PMP) Course         -         3,000 <td>AREMA Conference</td> <td>3,320</td> <td></td> <td>5,280</td>	AREMA Conference	3,320		5,280
APTA Annual Meeting         1,760         1,760           APTA Rail Conference         -         1,760           REMSA Conference         1,760         1,760           ASME Conference         -         1,760           TTCI Conference         -         1,570           WMATA Conference         -         1,380           FTA Wave Quarterly Meeting         -         1,380           FDOT Rail Conference (Location TBD)         3,520         -           PTC Benchmark (Offsite Visit) 2 @ 1330         2,760         -           FTA Safety and Security Training Certificate         880         -           American Society of Civil Engineers license         915         945           Railway Engineering Maintenance Suppliers Assoc         675         675           AREMA Dues         340         549           American Society of Quality         318         318           American Society of Mechanical Engineers Renewal         151         302           Project Management Institute Membership         -         150           Professional Engineer Leense Renewal         151         302           AREMA Bridge Inspection Handbook         200         -           Project Management Professional (PMP) Course         -	PTC FRA Qtr./User Meetings			4,280
APTA Rail Conference         1,760         1,760           REMSA Conference         1,760         1,760           ASME Conference         -         1,570           TTCI Conference         -         1,380           FTA Wave Quarterly Meeting         -         1,380           FTO Rail Conference (Location TBD)         3,520         -           PTC Benchmark (Offsite Visit) 2 @ 1380         2,760         -           FTA Safety and Security Training Certificate         880         -           American Society of Civil Engineers license         880         -           Railway Engineering Maintenance Suppliers Assoc         675         675           Railway Engineering Maintenance Suppliers Assoc         675         675           AREMA Dues         340         548           American Society for Quality         318         318           American Society of Mechanical Engineers Renewal         151         302           Project Management Institute Membership         -         278           Professional Engineer License Renewal         125         125           AREMA Bridge Inspection Handbook         200         -           Project Management Professional (PMP) Course         -         3,000           AREMA Conference a	ASCE FL Conference	2,460		
REMSA Conference         1,760         1,780           ASME Conference         -         1,780           TTCI Conference         -         1,570           WMATA Conference         -         1,380           FTA Wave Quarterly Meeting         -         1,380           FDOT Rail Conference (Location TBD)         3,520         -           PTC Benchmark (Offsite Visit) 2 @ 1380         2,760         -           FTA Safety and Security Training Certificate         880         -           REMSA Conference         880         -           TAS afety and Security Training Certificate         880         -           REMSA Conference         915         945           Railway Engineering Maintenance Suppliers Assoc         675         675           AREMA Dues         340         549           American Society of Wachanical Engineers Renewal         151         302           American Society of Mechanical Engineers Renewal         151         302           Project Management Institute Membership         -         150           ACTR         152         125           ACTR         152         125           AREMA Bridge Inspection Handbook         200         -           Ceneral Training		1,760		
ASME Conference         1,760           TTCI Conference         1,570           WMATA Conference         -         1,380           FTA Wave Quarterly Meeting         -         1,380           FDOT Rail Conference (Location TBD)         3,520         -           PTC Benchmark (Offsite Visit) 2 @ 1380         2,760         -           FTA Safety and Security Training Certificate         880         -           Stafety and Security Training Certificate         880         -           American Society of Civil Engineers license         915         945           Railway Engineering Maintenance Suppliers Assoc         675         675           AREMA Dues         340         549           American Society for Quality         318         318           American Society for Quality         318         318           American Society for Mechanical Engineers Renewal         151         302           Project Management Institute Membership         -         278           Professional Engineer License Renewal         15         15           AREMA Bridge Inspection Handbook         200         -           Project Management Professional (PMP) Course         -         3,000           AREMA Conference and Committee         1,000				
TTCI Conference         -         1,380           FTA Wave Quarterly Meeting         -         1,380           FOOT Rail Conference (Location TBD)         3,520         -           PTC Benchmark (Offsite Visit) 2 @ 1380         2,760         -           FTA Safety and Security Training Certificate         880         -           American Society of Civil Engineers license         915         945           Railway Engineering Maintenance Suppliers Assoc         675         675           AREMA Dues         340         549           American Society for Quality         318         318           American Society of Mechanical Engineers Renewal         151         302           Professional Engineer License Renewal         151         302           American Society of Mechanical Engineers Renewal         151         302           Professional Engineer License Renewal         151         302           AREMA Bridge Inspection Handbook         200         -           Expressional Engineer License Renewal         100         2,400           AREMA Conference and Committee         1,000         2,400           FL Board of PE Exam         -         1,815           APTA Rail Conference         825         1,650           Am		1,760		· ·
WMATA Conference         1,380           FTA Wave Quarterly Meeting         3,520           FDOT Rail Conference (Location TBD)         3,520           PTC Benchmark (Offsite Visit) 2 @ 1380         2,760           FTA Safety and Security Training Certificate         880           TA Safety and Security Training Certificate         880           Toward Subscriptions           American Society of Civil Engineers license         915         945           Railway Engineering Maintenance Suppliers Assoc         675         675           AREMA Dues         340         549           American Society for Quality         318         318           American Society of Mechanical Engineers Renewal         151         302           Project Management Institute Membership         -         150           AAWRE License Renewal         125         125           AREMA Bridge Inspection Handbook         200         -           Togict Management Professional (PMP) Course         -         3,000           AREMA Conference and Committee         1,000         2,400           FL Board of PE Exam         -         1,815           APTA Rail Conference         825         1,650           American Society of Mechanical Engineers </td <td></td> <td>243</td> <td></td> <td></td>		243		
FTA Wave Quarterly Meeting				
FDOT Rail Conference (Location TBD)         3,520         -           PTC Benchmark (Offsite Visit) 2 @ 1380         2,760         -           FTA Safety and Security Training Certificate         880         -           \$ 16,460         \$ 24,070           Dues and Subscriptions           American Society of Civil Engineers license         915         945           Railway Engineering Maintenance Suppliers Assoc         675         675           AREMA Dues         340         549           American Society for Quality         318         318           American Society of Mechanical Engineers Renewal         151         302           Project Management Institute Membership         -         278           Professional Engineer License Renewal         125         125           AREMA Bridge Inspection Handbook         200         -           AREMA Bridge Inspection Handbook         200         -           General Training and Seminars         -         3,000           AREMA Conference and Committee         1,000         2,400           FL Board of PE Exam         -         3,000           AREMA Conference         825         1,850           American Society of Mechanical Engineers         -         850 </td <td></td> <td></td> <td></td> <td></td>				
PTC Benchmark (Offsite Visit) 2 @ 1380         2,760         -           FTA Safety and Security Training Certificate         880         -           \$ 16,460         \$ 24,070           Dues and Subscriptions           American Society of Civil Engineers license         915         945           Railway Engineering Maintenance Suppliers Assoc         675         675           AREMA Dues         340         549           American Society for Quality         318         318           American Society of Mechanical Engineers Renewal         151         302           Project Management Institute Membership         -         278           Professional Engineer License Renewal         155         150           AWWRE License Renewal         125         125           AREMA Bridge Inspection Handbook         200         -           Ceneral Training and Seminars           Project Management Professional (PMP) Course         -         3,000           AREMA Conference and Committee         1,000         2,400           FL Board of PE Exam         -         1,815           APTA Rail Conference         825         1,650           American Society of Mechanical Engineers         -         850 <td></td> <td></td> <td></td> <td>1,380</td>				1,380
Safety and Security Training Certificate   \$ 16,460   \$ 24,070	, , , , , , , , , , , , , , , , , , ,			340
Dues and Subscriptions         \$ 16,460         \$ 24,070           American Society of Civil Engineers license         915         945           Railway Engineering Maintenance Suppliers Assoc         675         675           AREMA Dues         340         549           American Society for Quality         318         318           American Society of Mechanical Engineers Renewal         151         302           Project Management Institute Membership         -         278           Professional Engineer License Renewal         125         150           AAWRE License Renewal         125         125           AREMA Bridge Inspection Handbook         200         -           Project Management Professional (PMP) Course         -         3,000           AREMA Conference and Committee         1,000         2,400           FL Board of PE Exam         -         1,815           APTA Rail Conference         825         1,650           American Society of Mechanical Engineers         -         850           Project Management Professional (PMP) Exam Fee         -         810           American Society of Civil Engineers Conference (ASCE)         1,050         700           Washington Metropolitan Area Transit Authority (WMATA)         -	, -			12
Dues and Subscriptions           American Society of Civil Engineers license         915         945           Railway Engineering Maintenance Suppliers Assoc         675         675           AREMA Dues         340         549           American Society for Quality         318         318           American Society of Mechanical Engineers Renewal         151         302           Project Management Institute Membership         -         278           Professional Engineer License Renewal         125         150           AAWRE License Renewal         125         125           AREMA Bridge Inspection Handbook         200         -           Start         \$ 2,724         \$ 3,002           AREMA Conference and Committee         1,000         2,400           FL Board of PE Exam         -         1,815           APTA Rail Conference         825         1,650           American Society of Mechanical Engineers         -         850           Project Management Professional (PMP) Exam Fee         -         810           American Society of Civil Engineers Conference (ASCE)         1,050         700           Vashington Metropolitan Area Transit Authority (WMATA)         -         500           Transportation Technology Cente	FTA Safety and Security Training Certificate			24.070
American Society of Civil Engineers license         915         945           Railway Engineering Maintenance Suppliers Assoc         675         675           AREMA Dues         340         549           American Society for Quality         318         318           American Society of Mechanical Engineers Renewal         151         302           Project Management Institute Membership         -         278           Project Management Institute Membership         -         150           AAWRE License Renewal         125         125           AREMA Bridge Inspection Handbook         200         -           REMA Bridge Inspection Handbook         200         -           Seneral Training and Seminars         200         -           Project Management Professional (PMP) Course         -         3,000           AREMA Conference and Committee         1,000         2,400           FL Board of PE Exam         -         1,815           APTA Rail Conference         825         1,650           American Society of Mechanical Engineers         -         850           Project Management Professional (PMP) Exam Fee         -         810           American Society of Civil Engineers Conference (ASCE)         1,050         700		\$ 16,460	\$	24,070
Railway Engineering Maintenance Suppliers Assoc         675         675           AREMA Dues         340         549           American Society for Quality         318         318           American Society of Mechanical Engineers Renewal         151         302           Project Management Institute Membership         -         278           Professional Engineer License Renewal         -         150           AAWRE License Renewal         125         125           AREMA Bridge Inspection Handbook         200         -           **         2,724         *         3,342           General Training and Seminars           Project Management Professional (PMP) Course         -         3,000           AREMA Conference and Committee         1,000         2,400           FL Board of PE Exam         -         1,815           APTA Rail Conference         825         1,650           American Society of Mechanical Engineers         -         850           Project Management Professional (PMP) Exam Fee         -         810           American Society of Civil Engineers Conference (ASCE)         1,050         700           Washington Metropolitan Area Transit Authority (WMATA)         -         500           T	<u>Dues and Subscriptions</u>			
AREMA Dues         340         549           American Society for Quality         318         318           American Society of Mechanical Engineers Renewal         151         302           Project Management Institute Membership         -         278           Professional Engineer License Renewal         -         150           AAWRE License Renewal         125         125           AREMA Bridge Inspection Handbook         200         -           REMA Bridge Inspection Handbook         200         -           Project Management Professional (PMP) Course         -         3,000           AREMA Conference and Committee         1,000         2,400           FL Board of PE Exam         -         1,815           APTA Rail Conference         825         1,650           American Society of Mechanical Engineers         -         850           Project Management Professional (PMP) Exam Fee         -         810           American Society of Civil Engineers Conference (ASCE)         1,050         700           Washington Metropolitan Area Transit Authority (WMATA)         -         500           Transportation Technology Center (TTCI, AAR) Conference         -         500           FL Board El Exam         -         225	American Society of Civil Engineers license	915		
American Society for Quality         318         318           American Society of Mechanical Engineers Renewal         151         302           Project Management Institute Membership         -         278           Professional Engineer License Renewal         -         150           AAWRE License Renewal         125         125           AREMA Bridge Inspection Handbook         200         -           English Bridge Inspection Handbook         200         -           Supplied Management Professional (PMP) Course         -         3,000           AREMA Conference and Committee         1,000         2,400           FL Board of PE Exam         -         1,815           APTA Rail Conference         825         1,850           American Society of Mechanical Engineers         -         850           Project Management Professional (PMP) Exam Fee         -         810           American Society of Civil Engineers Conference (ASCE)         1,050         700           Washington Metropolitan Area Transit Authority (WMATA)         -         500           Transportation Technology Center (TTCl, AAR) Conference         -         500           FL Board El Exam         -         225           Railway Engineering Maintenance Suppl	* *	675		
American Society of Mechanical Engineers Renewal         151         302           Project Management Institute Membership         -         278           Professional Engineer License Renewal         -         150           AAWRE License Renewal         125         125           AREMA Bridge Inspection Handbook         200         -           Start         2,724         \$ 3,342           General Training and Seminars           Project Management Professional (PMP) Course         -         3,000           AREMA Conference and Committee         1,000         2,400           FL Board of PE Exam         -         1,815           APTA Rail Conference         825         1,650           American Society of Mechanical Engineers         -         850           Project Management Professional (PMP) Exam Fee         -         810           American Society of Civil Engineers Conference (ASCE)         1,050         700           Washington Metropolitan Area Transit Authority (WMATA)         -         500           Transportation Technology Center (TTCI, AAR) Conference         -         500           FL Board El Exam         -         225           Railway Engineering Maintenance Suppliers Assoc Conf.         1,200				
Project Management Institute Membership         -         278           Professional Engineer License Renewal         -         150           AAWRE License Renewal         125         125           AREMA Bridge Inspection Handbook         200         -           \$ 2,724         \$ 3,342           General Training and Seminars           Project Management Professional (PMP) Course         -         3,000           AREMA Conference and Committee         1,000         2,400           FL Board of PE Exam         -         1,815           APTA Rail Conference         825         1,650           American Society of Mechanical Engineers         -         850           Project Management Professional (PMP) Exam Fee         -         810           American Society of Civil Engineers Conference (ASCE)         1,050         700           Washington Metropolitan Area Transit Authority (WMATA)         -         500           Transportation Technology Center (TTCI, AAR) Conference         -         500           FL Board El Exam         -         225           Railway Engineering Maintenance Suppliers Assoc Conf.         1,200         -				
Professional Engineer License Renewal				
AAWRE License Renewal 125 125 AREMA Bridge Inspection Handbook 200  \$ 2,724 \$ 3,342   General Training and Seminars  Project Management Professional (PMP) Course - 3,000 AREMA Conference and Committee 1,000 2,400 FL Board of PE Exam - 1,815 APTA Rail Conference 825 1,650 American Society of Mechanical Engineers - 850 Project Management Professional (PMP) Exam Fee - 810 American Society of Civil Engineers Conference (ASCE) 1,050 700 Washington Metropolitan Area Transit Authority (WMATA) - 500 Transportation Technology Center (TTCI, AAR) Conference - 500 FL Board El Exam - 225 Railway Engineering Maintenance Suppliers Assoc Conf. 1,200				
AREMA Bridge Inspection Handbook         200         -           \$ 2,724         \$ 3,342           General Training and Seminars           Project Management Professional (PMP) Course           AREMA Conference and Committee         1,000         2,400           FL Board of PE Exam         -         1,815           APTA Rail Conference         825         1,650           American Society of Mechanical Engineers         -         850           Project Management Professional (PMP) Exam Fee         -         810           American Society of Civil Engineers Conference (ASCE)         1,050         700           Washington Metropolitan Area Transit Authority (WMATA)         -         500           Transportation Technology Center (TTCI, AAR) Conference         -         500           FL Board El Exam         -         225           Railway Engineering Maintenance Suppliers Assoc Conf.         1,200         -	<del>_</del>			
\$ 2,724         \$ 3,342           General Training and Seminars           Project Management Professional (PMP) Course         -         3,000           AREMA Conference and Committee         1,000         2,400           FL Board of PE Exam         -         1,815           APTA Rail Conference         825         1,650           American Society of Mechanical Engineers         -         850           Project Management Professional (PMP) Exam Fee         -         810           American Society of Civil Engineers Conference (ASCE)         1,050         700           Washington Metropolitan Area Transit Authority (WMATA)         -         500           Transportation Technology Center (TTCI, AAR) Conference         -         500           FL Board El Exam         -         225           Railway Engineering Maintenance Suppliers Assoc Conf.         1,200         -				
Project Management Professional (PMP) Course - 3,000 AREMA Conference and Committee 1,000 2,400 FL Board of PE Exam - 1,815 APTA Rail Conference 825 1,650 American Society of Mechanical Engineers - 850 Project Management Professional (PMP) Exam Fee - 810 American Society of Civil Engineers Conference (ASCE) 1,050 700 Washington Metropolitan Area Transit Authority (WMATA) - 500 Transportation Technology Center (TTCI, AAR) Conference - 500 FL Board El Exam - 225 Railway Engineering Maintenance Suppliers Assoc Conf. 1,200	AREIMA Bridge inspection Handbook		•	
Project Management Professional (PMP) Course  AREMA Conference and Committee  1,000  2,400  FL Board of PE Exam  APTA Rail Conference  825  American Society of Mechanical Engineers  Project Management Professional (PMP) Exam Fee  American Society of Civil Engineers Conference (ASCE)  Washington Metropolitan Area Transit Authority (WMATA)  Transportation Technology Center (TTCI, AAR) Conference  FL Board El Exam  Railway Engineering Maintenance Suppliers Assoc Conf.  3,000  2,400  1,000  2,400  1,000  1,000  3,000  1,000  1,000  2,400  1,050  1,050  700  700  700  700  700  700  700		φ <u>2,12</u> 4	Ψ	3,342
AREMA Conference and Committee 1,000 2,400 FL Board of PE Exam - 1,815 APTA Rail Conference 825 1,650 American Society of Mechanical Engineers - 850 Project Management Professional (PMP) Exam Fee - 810 American Society of Civil Engineers Conference (ASCE) 1,050 700 Washington Metropolitan Area Transit Authority (WMATA) - 500 Transportation Technology Center (TTCI, AAR) Conference - 500 FL Board EI Exam 225 Railway Engineering Maintenance Suppliers Assoc Conf. 1,200 -	General Training and Seminars			
AREMA Conference and Committee 1,000 2,400 FL Board of PE Exam - 1,815 APTA Rail Conference 825 1,650 American Society of Mechanical Engineers - 850 Project Management Professional (PMP) Exam Fee - 810 American Society of Civil Engineers Conference (ASCE) 1,050 700 Washington Metropolitan Area Transit Authority (WMATA) - 500 Transportation Technology Center (TTCI, AAR) Conference - 500 FL Board El Exam 225 Railway Engineering Maintenance Suppliers Assoc Conf. 1,200 -	Project Management Professional (PMP) Course	*		3,000
APTA Rail Conference 825 1,650 American Society of Mechanical Engineers - 850 Project Management Professional (PMP) Exam Fee - 810 American Society of Civil Engineers Conference (ASCE) 1,050 700 Washington Metropolitan Area Transit Authority (WMATA) - 500 Transportation Technology Center (TTCI, AAR) Conference - 500 FL Board El Exam - 225 Railway Engineering Maintenance Suppliers Assoc Conf. 1,200 -		1,000		2,400
American Society of Mechanical Engineers - 850 Project Management Professional (PMP) Exam Fee - 810 American Society of Civil Engineers Conference (ASCE) 1,050 700 Washington Metropolitan Area Transit Authority (WMATA) - 500 Transportation Technology Center (TTCI, AAR) Conference - 500 FL Board El Exam - 225 Railway Engineering Maintenance Suppliers Assoc Conf. 1,200 -	FL Board of PE Exam	2		1,815
Project Management Professional (PMP) Exam Fee  American Society of Civil Engineers Conference (ASCE)  Washington Metropolitan Area Transit Authority (WMATA)  Transportation Technology Center (TTCI, AAR) Conference  FL Board EI Exam  Railway Engineering Maintenance Suppliers Assoc Conf.  810  700  700  700  700  700  700  700	APTA Rail Conference	825		1,650
American Society of Civil Engineers Conference (ASCE) 1,050 700 Washington Metropolitan Area Transit Authority (WMATA) 500 Transportation Technology Center (TTCI, AAR) Conference 500 FL Board El Exam 225 Railway Engineering Maintenance Suppliers Assoc Conf. 1,200 -	American Society of Mechanical Engineers	×.		850
Washington Metropolitan Area Transit Authority (WMATA) 500 Transportation Technology Center (TTCI, AAR) Conference 500 FL Board El Exam 225 Railway Engineering Maintenance Suppliers Assoc Conf. 1,200	<del>_</del>	<b>12</b> ()		810
Washington Metropolitan Area Transit Authority (WMATA) 500 Transportation Technology Center (TTCI, AAR) Conference 500 FL Board El Exam 225 Railway Engineering Maintenance Suppliers Assoc Conf. 1,200		1,050		700
Transportation Technology Center (TTCI, AAR) Conference 500 FL Board El Exam 225 Railway Engineering Maintenance Suppliers Assoc Conf. 1,200				500
FL Board El Exam - 225 Railway Engineering Maintenance Suppliers Assoc Conf. 1,200 -		3 <b>=</b> (c		500
Railway Engineering Maintenance Suppliers Assoc Conf. 1,200		<b>:</b> €0		225
		1,200		발
		\$ 4,075	\$	12,450

## **ENGINEERING DEPARTMENT**

	FY 2017-2018 APPROVED BUDGET	FY 2018-2019 PROPOSED BUDGET
Printing and Advertising		
Railroad Operations, Track and Safety Training Manuals Copies (Specialty Items)	5,000 100	5,000 100
	\$ 5,100	\$ 5,100
PTC		
PTC Operations	*	1,683,200
PTC Maintenance	\$ -	1,022,780 <b>\$ 2,705,980</b>
ROW Maintenance	-	
SFRC MOW Contract	23,035,339	23,035,339
SFRC Environmental Contract	1,585,673	1,585,673
Dispatch Maintenance	848,880	437,173
SFRC Environmental Contract- Emergency Services	4	250,000
SFRC MOW Emergency Services	Ē.	250,000
Corridor Maintenance-DTMS	400.000	102,348
Derailments PTMC	100,000	100,000
Undercutting-DTMS PTC Maintenance-DTMS	- -	42,083
SFRC Flagging	250,000	29,483 10,000
of No triagging	\$ 25,819,892	\$ 25,842,099
FTA Meetings		
FTA Meetings	\$ 800 \$ 800	\$ 800 \$ 800
	<del></del>	Ψ 000

		FY 2017-2018	FY 2018-2019				
	APPROVED		PROPOSED		CHANGE		
		BUDGET	BUDGET		\$	%	
Personnel ServicesSalary/Wages	\$	1,448,543	\$ 1,515,125	\$	66,582	4.60%	
Personnel ServicesOvertime		5,000	5,000		~	*	
Personnel ServicesFICA Taxes		93,163	96,781		3,618	3.88%	
Personnel ServicesGroup Insurance		214,565	252,447		37,882	17.66%	
Personnel ServicesPension Expense		200,443	227,995		27,552	13.75%	
Personnel ServicesSUTA		1,454	1,520		66	4.54%	
Business Travel		91,050	103,750		12,700	13.95%	
Civil Rights Business Travel		7,000	6,600		(400)	-5.71%	
Dues/Subscriptions		104,219	102,870		(1,349)	-1.29%	
Professional Fees		433,500	403,500		(30,000)	-6.92%	
General Training and Seminars		16,793	16,243		(550)	-3.28%	
EEO Training and Seminars		11,450	17,900		6,450	56.33%	
Printing and Advertising		18,050	18,275		225	1.25%	
Corporate and Community Outreach Contract		500,000	500,000		<u> -</u>	*:	
Special Programs		1,600	5		(1,600)	-100.00%	
Promotional Material		10,400	5,000		(5,400)	-51.92%	
Customer Information		75,500	75,500		-	20	
Distribution Services		21,800	22,400		600	2.75%	
Department Total	\$	3,254,530	\$ 3,370,906	\$	116,376	3.58%	

	FY 2017-2018 APPROVED BUDGET	FY 2018-2019 PROPOSED BUDGET
Business Travel		N ====================================
Legislative Session & Committee Weeks	9,200	18,000
Insurance Negotiations	8,800	8,800
Trips to Washington, D.C. (Executive Director)	7,000	7,000
Trips to Tallahassee (Executive Director)	6,000	6,000
APTA Rail Conference	6,000	6,000
Trips to Washington, D.C. (Govt. Affairs Manager)	4,000	6,000
APTA Legislative	4,000	6,000
Board Members Trips to Tallahassee	5,000	5,000
Board Members Trips to Washington D.C.	5,000	5,000
Board Member APTA/ Conference Travel	5,000	5,000
ΓΡΤΑ Quarterly Board of Directors	6,000	4,000
Florida Public Transit Association Annual	3,500	3,500
COMTO Annual	3,500	3,500
FTA Atlanta	3,000	3,000
APTA Marketing and Communication Workshop	4,500	2,400
APTA Annual	2,850	2,400
Floridians for Better Transportation Conference	1,100	2,000
ARMA Conference and Post Conference	1,800	1,800
FL League of Cities Annual Meeting	400	1,750
APTA Marketing and Communications Meeting-PIO	1,500	1,500
RailVolution	1,500	1,500
Government Affairs Mileage for General Travel	16.	1,200
COMTO Legislature	K <b>=</b> :	1,000
APTA CEO	1,000	1,000
Greater Miami Chamber of Commerce Transportation Summit	( <del>-</del> :	400
FL League of Cities Legislative Conference	400	
	\$ 91,050	\$ 103,750
Civil Rights Business Travel		
EEO Annual Conference	3,000	3,000
ADA Coordinators Conference	2,000	2,000
TD Conference	2,000	800
Civil Rights-DBE/Title VI	:-	800
Triennial Review Workshop		800
Transportation Civil Rights Symposium	1,200	-
Transportation Civil Rights Symposium	800	
	\$ 7,000	\$ 6,600

	FY 2017-2018 APPROVED BUDGET	FY 2018-2019 PROPOSED BUDGET
Dues and Subscriptions		
APTA Membership	40,000	40,000
Florida Public Transportation Association	20,000	20,000
Association of American Railroads	10,000	10,000
COMTO Support/Membership	7,900	7,200
Lobby Tools	4,900	4,900
Media/ Video Monitoring and News Clipping	4,500	4,500
WTS -Women in Transportation Memberships	3,654	2,700
Urban Land Institute	2,500	2,500
Palm Beach County League of Cities	1,200	1,200
Broward League of Cities	1,200	1,200
Miami Dade League of Cities	1,200	1,200
Ft. Lauderdale Chamber of Commerce	1,075	1,075
NTSB Reports	1,000	1,000
Regional Business Alliance	1,000	1,000
Greater Miami Chamber of Commerce	820	820
Palm Beach Post	450	580
Chamber of Commerce of the Palm Beaches	560	570
Boca Raton Chamber of Commerce	430	490
Sun-Sentinel	400	400
Miami Herald	300	300
FL Association of Professional Lobbyist	300	250
National Association of ADA Coordinators	225	225
Miami Today	180	180
ARMA National Membership	175	175
Broward Days-Impact Team	-	150
South Florida Business Journal	120	125
FL Association of Intergovernmental Relations	100	100
ARMA Palm Beach Chapter Membership	30	30
	\$ 104,219	\$ 102,870
Professional Fees		
ECI Consulting, Inc.	246,000	246,000
FTI Consulting, Inc.	144,000	144,000
General Consultants	40,000	10,000
EEO Annual Workforce Analysis	3,500	3,500
•	\$ 433,500	\$ 403,500

	FY 2017-2018 APPROVED BUDGET	FY 2018-2019 PROPOSED BUDGET		
General Training and Seminars				
APTA Rail Conference	2,900	2,700		
APTA Legislative	2,700	2,700		
COMTO Annual	1,500	2,250		
APTA Marketing Workshop	1,650	2,200		
APTA Annual	2,850	2,000		
FPTA Annual	1,750	1,750		
ARMA Conference & Post Conference Registration	899	899		
APTA CEO Seminar	745	745		
Information Governance Professional (IGP) Certification	599	599		
FL League of Cities Annual Mtg	400	250		
COMTO Legislature	·	150		
FL League of Cities Legislative Conference	400	_		
Floridians for Better Transportation Conference	400	-		
	\$ 16,793	\$ 16,243		
EEO Training and Seminars				
EEO Agency Wide Training	5,000	10,000		
ADA Coordinators Conference	4,000	4,000		
EEO Annual Conference	2,000	3,000		
TD Conference	(#)	450		
Civil Rights-DBE/Title VI	Ş	450		
Transportation Civil Rights Symposium	450	2 -		
	\$ 11,450	\$ 17,900		
Printing and Advertising				
Legal and Board Meeting Notices	10,000	10,000		
Records Storage Iron Mountain	3,400	3,400		
Open Text (Alchemy Maintenance)				
Document Disposal	2,300	2,300		
Kodak Alaris (Scanner Maintenance)	1,250	1,375		
Rodak Alalis (Scarifier Mairiteflatice)	1,100	1,200		
	\$ 18,050	\$ 18,275		
Corporate and Community Outreach				
Corporate and Community Outreach	500,000	500,000		
co.portion and community can basin	\$ 500,000	\$ 500,000		
Special Programs				
Chariel Funds	02:			
Special Events	1,600			
	\$ 1,600			

	FY 2017-2018 APPROVED BUDGET	FY 2018-2019 PROPOSED BUDGET
Promotional Material		
Promotional Materials	10,400 <b>\$ 10,400</b>	5,000 <b>\$</b> 5,000
Customer Information		
Brochures and Schedules Keolis Bus Interior Graphics Translation Services Newsletters	63,000 5,000 2,500 5,000 \$ <b>75,500</b>	68,000 5,000 2,500 * <b>75,500</b>
Distribution Services		
Distribution of TriRail Flyers	\$ 21,800 \$ 21,800	\$ 22,400 \$ 22,400

# SOUTH FLORIDA REGIONAL TRANSPORTATION AUTHORITY

# FY 2018-2019 BUDGET

	FY 2017-2018 APPROVED	FY 2018-2019 PROPOSED	CHANG	SF.
	BUDGET	BUDGET	\$	%
Personnel ServicesSalary/Wages	\$ 1,094,048	\$ 1,136,912	\$ 42,864	3.92%
Personnel ServicesOvertime	3,000	3,000	343	1811
Personnel ServicesFICA Taxes	82,310	85,187	2,877	3.50%
Personnel ServicesGroup Insurance	206,855	247,407	40,552	19.60%
Personnel ServicesPension Expense	103,236	118,017	14,781	14.32%
Personnel ServicesSUTA	1,097	1,140	43	3.92%
Business Travel	20,100	24,598	4,498	22.38%
Dues and Subscriptions	6,510	6,775	265	4.07%
General Training and Seminars	9,925	17,852	7,927	79.87%
Printing and Advertising	6,000	2,000	(4,000)	-66.67%
Insurance - Liability/Property/Auto	3,300,000	3,300,000	329	<b>12</b> 6
Insurance - Liability/Property-DTMS	U.S.	303,276	303,276	100.00%
Personnel ServicesWC (Company Wide)	85,000	75,000	(10,000)	-11.76%
Professional Fees	85,000	57,400	(27,600)	-32.47%
Telecommunications Expense	491,000	481,000	(10,000)	-2.04%
Office and Station Utilities	757,000	530,000	(227,000)	-29.99%
Office and Station Utilities-DTMS	55	112,123	112,123	100.00%
Corridor Utilities	1,127,610	1,433,390	305,780	27.12%
Corridor Utilities-DTMS	( <del>-</del>	41,758	41,758	100.00%
Revenue Collection/TVM Maintenance	120,000	60,000	(60,000)	-50.00%
Bank Charges	55,000	55,000	€.	<del>7</del> 1
Credit Card Charges	125,000	125,000	*	<b>T</b>
Credit Card Bank Charges-DTMS		2,905	2,905	100.00%
Office Supplies	122,000	130,000	8,000	6.56%
Office Rent	32,400	32,870	470	1.45%
Auto Allowance-Mileage	6,000	6,000	 	
Department Total	\$ 7,839,091	\$ 8,388,610	\$ 549,519	7.01%

	FY 2017-2018 APPROVED BUDGET	FY 2018-2019 PROPOSED BUDGET
Business Travel		
GFOA Annual Conference	4,080	5,370
FGFOA School of Government Finance	4,340	3,986
Budget Analytics-Management Concepts	1,580	3,300
EDEN End User Conference	3,600	3,200
Management Concepts	740	2,872
Transit Asset Management Training	1,920	2,220
American Payroll Association	1,620	1,600
FTA-NTD Updates and Training	960	1,050
FGFOA Annual Conference	2,000	1,000
	\$ 20,100	\$ 24,598
Dues and Subscriptions		
GFOA Membership	1,050	1,180
Management Assoc International	1,100	1,130
Award Fees-CAFR	580	580
Award Fees-Distinguished Budget	550	550
Federal Grants Management Reference Book	550	540
American Payroll Association Reference Book	350	350
FGFOA Memberships	245	280
AICPA Membership	235	265
Institute of Internal Auditors	150	240
National Black Public Administrators	235	235
American Payroll Association	195	220
National Association of Black Accountants	200	200
Chartered Global Management Accountant	200	200
FICPA	260	150
APTUSC	150	150
SFGFOCCA	100	150
Project Management Institute	125	130
American Women's Society of CPAs	195	100
NIGP	*	100
Women in Public Finance	2	25
CGFO Recertification	40	:
· · · <del>- · · · · · - · · · ·</del>	\$ 6,510	\$ 6,775

- 12 ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) (	
General Training and Seminars	
Management Concepts Classes	4,977
PMP Classes	2,500
	2,000
	1,710
	1,600
	1,200
	1,000
FGFOA School of Government Finance 320	960
FGFOA Annual Conference 750	900
Accounting Show 450	450
CGFO Registration and Exam	150
PMP Certification Test	405
Budget Analysis 820	-
\$ 9,925 \$ 1	7,852
Printing and Advertising	
CAFR and Other Financial Reports 6,000	1,000
	1,000
\$ 6,000	2,000
Insurance	
SFRTA Liability/Railroad Insurance 3,300,000 2,80	0,000
	0,000
	3,276
\$ 3,300,000 \$ 3,60	3,276
Workers Compensation Insurance	
Workers' Comp Insurance 85,000 7	5,000
	5,000
Professional Fees	
Audit85,0005	7,400
\$ 85,000 \$ 5	7,400

Telecommunication System	FY 2017-2018 APPROVED BUDGET	FY 2018-2019 PROPOSED BUDGET
Phone Expense Toll Free Number	270,000	270,000
New Service-DTMS	171,000 34,500	175,000 <u>3</u> 4,500
DISH Service	1,500	1,500
Technical Support-Inet	14,000	1,000
	\$ 491,000	\$ 481,000
Office and Station Utilities		
Office and Station Utilities	757,000	530,000
Office and Station Utilities-DTMS		112,123
	\$ 757,000	\$ 642,123
Corridor Utilities		<u> </u>
Corridor Utilities	1,127,610	1,433,390
Corridor Utilities-DTMS		41,758
	\$ 1,127,610	\$ 1,475,148
TVM Maintenance		
Ticket Printing-Easy Cards	120,000	60,000
Tional Timing Eddy Guide	\$ 120,000	\$ 60,000
P. corporation of the Corporatio		
Bank Charges		
Credit Card Processing Fees	125,000	125,000
Bank/Cash Fees	55,000	55,000
Credit Card Bank Charges-DTMS	400 000	2,905
	\$ 180,000	\$ 182,905
Office Supplies		
Agency Office Supplies	122,000	130,000
	\$ 122,000	\$ 130,000
Office Rent		
Center Port Irrigation and Assessment	22,400	22,400
Sign Rent	10,000	10,470
	\$ 32,400	\$ 32,870
Auto Allowance	-	
Mileage Reimbursement	6,000	6,000
	\$ 6,000	\$ 6,000

## **HUMAN RESOURCES DEPARTMENT**

	FY 2017-2018		ı	FY 2018-2019			
		APPROVED		PROPOSED		CHANG	E
		BUDGET		BUDGET		\$	%
Personnel ServicesSalary/Wages	\$	246,603	\$	266,350	\$	19,747	8.01%
Personnel ServicesOvertime		500		750		250	Ħ
Personnel ServicesFICA Taxes		18,575		19,763		1,188	6.40%
Personnel ServicesGroup Insurance		29,000		32,865		3,865	13.33%
Personnel ServicesPension Expense		36,466		42,493		6,027	16.53%
Personnel ServicesSUTA		247		267		20	8.10%
Business Travel		7,200		7,400		200	2.78%
Dues and Subscriptions		5,795		5,930		135	2.33%
General Training and Seminars		52,505		66,645		14,140	26.93%
Printing and Advertising		5,500		5,000		(500)	-9.09%
Miscellaneous Personnel Expense		8,800		8,800		:=:	
Tuition Reimbursement		42,000		30,000		(12,000)	-28.57%
Department Total	\$	453,191	\$	486,263	\$	33,072	7.30%

# **HUMAN RESOURCES DEPARTMENT**

	FY 2017-2018 APPROVED BUDGET	FY 2018-2019 PROPOSED BUDGET
Business Travel		
SHRM Conference	1,000	2,000
Tyler/Eden Training	1,500	1,500
APTA Annual Conference	1,500	1,500
ADA Conference	1,200	1,200
HR Florida Annual Conference	1,000	1,000
Florida Public HR Association Conference	1,000	200
	\$ 7,200	\$ 7,400
Dues and Subscriptions		-
NeoGov Annual Maintenance	4,500	5,000
SHRM Membership	400	420
HR Association of Broward County	200	200
HR Specialist Publication	300	175
Florida Public Personnel Association	150	135
World at Work (Comp & Benefits) Membership	245	2
	\$ 5,795	\$ 5,930
General Training and Seminars		
Agency Management Training	¥	50,000
Agency General Training		10,000
ADA Conference	1,995	1,995
SHRM Conference	2,000	1,750
APTA Annual Conference	850	850
Tyler/Eden Conference	800	800
FPHRA Conference	700	700
HR Association of Broward County Legal Conf		300
HR Association of Broward County	250	250
Employee General Training	44,500	2
HR Florida Conference	1,100	
Akerman/Senterfitt Annual Labor/Empl Law Sem	310	
	\$ 52,505	\$ 66,645

# **HUMAN RESOURCES DEPARTMENT**

	FY 2017-2018 APPROVED BUDGET		FY 2018-2019 PROPOSED BUDGET	
Printing and Advertising				
Specialty Postings (i.e. APTA, FAPPO, ISM, etc.)		4,000		4,000
Career Builder		1,500		1,000
	\$	5,500	\$	5,000
Miscellaneous Personnel Expenses				
Employee Wellness Program		5,000		5,000
Employee Driving Records		2,000		2,000
New Hire Background Checks		1,200		1,200
Drug Screening @ \$15 each		600_		600
	\$	8,800	\$	8,800
Tuition Reimbursement				
Tuition Reimbursement		42,000		30,000
	\$	42,000	\$	30,000

	FY 2017-2018 APPROVED	FY 2018-2019 PROPOSED	CHANG	iΕ
	BUDGET	BUDGET	\$	%
Personnel ServicesSalary/Wages	\$ 1,087,262	\$ 1,083,279	\$ (3,983)	-0.37%
Personnel ServicesOvertime	2,000	2,000	E34	
Personnel ServicesFICA Taxes	81,901	81,203	(698)	-0.85%
Personnel ServicesGroup Insurance	206,855	231,006	24,151	11.68%
Personnel ServicesPension Expense	102,216	113,008	10,792	10.56%
Personnel ServicesSUTA	1,089	1,085	(4)	-0.37%
Business Travel	21,500	20,500	(1,000)	-4.65%
Dues and Subscriptions	2,175	670	(1,505)	-69.20%
Professional Fees	159,500	159,000	(500)	-0.31%
General Training and Seminars	40,850	36,700	(4,150)	-10.16%
Electronic Messaging Boards	120,000	69,500	(50,500)	-42.08%
Technical Support	100,000	187,000	87,000	87.00%
Technical Support-DTMS	<b>2</b>	2,500	2,500	100.00%
TVM Maintenance	73,000	73,000	: <del>-</del>	*
TVM Revenue Collection	625,000	625,000		
Department Total	\$ 2,623,348	\$ 2,685,451	\$ 62,103	2.37%

APPROVED PRO	2018-2019 OPOSED UDGET
Business Travel	
CISCO 5,000	5,000
Information Security Training	3,500
APTA Revenue Conference 3,900	3,000
Cybersecurity Technical Workshop	3,000
Information Security Conference	2,500
Technology Conference and Expo 2,000	2,000
Institute of Internal Auditors Conference 1,000	1,500
Filmmaker Pro Conference 3,200	:(=:
EDEN Annual Conference 2,400	:=:
APTA Transit Tech 1,500	
COMTO Annual Conference 1,500	-
Florida Institute of Government Accounting1,000	
\$ 21,500 \$	20,500
Dues and Subscriptions	
Technology Conference Membership	325
Institute of Internal Auditors 140	160
FICPA 150	150
FGFOA Membership 35	35
IT Industry Memberships 1,000	≘
IT Manuals850	<u>=</u>
<u>\$ 2,175</u> <u>\$</u>	670
Professional Fees	
Eden Annual Support 76,000	79,000
Cubic Software Maintenance 53,500	45,000
Real-time Information System	25,000
Website Support/Mobile App Support 20,000	10,000
MDT Annual Participation Agreement Audit 10,000	
\$ 159,500 \$	159,000

	FY 2017-2018 APPROVED BUDGET	FY 2018-2019 PROPOSED BUDGET
General Training and Seminars		
CISCO	5,000	6,000
Information Security Training	924	5,000
Cybersecurity Technical Workshop	78	4,000
Information Security Conference	05	3,500
Web Development Training	19 <b>4</b> 2	3,000
Microsoft Server/Configuration	( <del>-</del>	3,000
Technical Project Management	12	3,000
Microsoft System Management	4.000	2,500
Technology Conference and Expo	1,600	1,600
Data Base Reporting APTA Revenue Management	1,500 1,675	1,500 1,400
Institute of Internal Auditors	1,000	1,000
FGFOA-CPE Credits	600	600
Florida Institute of Government-Accounting	600	600
IT Training	17,000	*
Filemaker Pro	3,000	
Eden Conference	1,500	375
COMTO Conference	800	: <del>*</del>
APTA Transit Tech	475	9 <b>8</b> 1
Eden Training/Support	6,100	
	\$ 40,850	\$ 36,700
Electronic Message Boards/GeoFocus		
Component Repairs	90,000	40,000
Controller Boards	10,000	10,000
Component Parts	10,000	10,000
LED Panels	10,000	7,500
Power Supplies		2,000
	\$ 120,000	\$ 69,500
Technical Support		
Software, License and Maintenance Support Agreements	52,000	90,000
Licensing and Support for GPS System	48,000	80,000
Technical Support-Inet		14,000
CAFR Online	*	3,000
Software, License and Maintenance -DTMS	*	2,500
	\$ 100,000	\$ 189,500

	FY 2017-2018 APPROVED		018-2019 OPOSED
	BUDGET	В	UDGET
TVM Maintenance	r.		
CUBIC RMA Repairs	45,000		45,000
Small Tools and Supplies	10,000		10,000
Minor Repairs	5,000		5,000
Spare Parts	5,000		5,000
Hand Held Upgrades	5,000		5,000
Equipment Rental	3,000_		3,000
	\$ 73,000	\$	73,000
TVM-Revenue Collection			
MDT Participation Agreement	500,000		500,000
MDT Network Service Agreement	125,000		125,000
	\$ 625,000	\$	625,000

## LEGAL DEPARTMENT

	FY 2017-2018 APPROVED	FY 2018-2019 PROPOSED	CHANGE	<u> </u>
	BUDGET	BUDGET	\$	%
Personnel ServicesSalary/Wages	\$ 495,428	\$ 507,058	\$ 11,630	2.35%
Personnel ServicesFICA Taxes	26,887	26,355	(532)	-1.98%
Personnel ServicesGroup Insurance	54,028	53,929	(99)	-0.18%
Personnel ServicesPension Expense	65,317	79,964	14,647	22.42%
Personnel ServicesSUTA	491	507	16	3.26%
Business Travel	9,350	11,400	2,050	21.93%
Dues and Subscriptions	<b>4</b> ,460	4,110	(350)	-7.85%
Legal Fees	216,475	216,475	<del>17</del> /2	) <del>_</del>
General Training and Seminars	3,305	3,900	595	18.00%
Department Total	\$ 875,741	\$ 903,698	\$ 27,957	3.19%

# LEGAL DEPARTMENT

	FY 2017-2018 APPROVED BUDGET	FY 2018-2019 PROPOSED BUDGET
Business Travel	-	· · · · · · · · · · · · · · · · · · ·
APTA Legal Affairs	3,150	3,400
APTA Annual	2,150	1,800
APTA Commuter Rail	2,000	4,200
General Business Travel	2,000	2,000
Practical Office Skills for Paralegals - FAU	\$ 9,3 <b>5</b> 0	\$ 11,400
	\$ 9,350	\$ 11,400
Dues and Subscriptions		
Lexis Nexis Advance Subscription	3,200	3,200
FL Bar Association Dues	800	750
NALA-The Association of Legal Assistants	160	160
Attorney Title Insurance Fund	300	-
	\$ 4,460	\$ 4,110
Legal Fees		
Outside Specialty Counsel	216,475	216,475
	\$ 216,475	\$ 216,475
General Training and Seminars		
APTA Rail Conference	900	1,800
APTA Legal Affairs	1,350	1,200
APTA Annual	900	900
Practical Office Skills for Paralegals - FAU	155	
	\$ 3,305	\$ 3,900

## **OPERATIONS DEPARTMENT**

	FY 2017-2018	FY 2018-2019	CHANG	_
	APPROVED BUDGET	PROPOSED BUDGET	\$	<u></u> %
Personnel ServicesSalary/Wages	\$ 1,928,170	\$ 1,964,595	\$ 36,425	1.89%
Personnel ServicesSalary/Wages-DTMS	747	26,451	26,451	100.00%
Personnel ServicesOvertime	60,000	60,000	-	-
Personnel ServicesFICA Taxes	150,196	160,497	10,301	6.86%
Personnel ServicesFICA Taxes-DTMS	94	4,760	4,760	100.00%
Personnel ServicesGroup Insurance	584,855	647,271	62,416	10.67%
Personnel Services-Group Insurance-DTMS	74	14,072	14,072	100.00%
Personnel ServicesPension Expense	170,735	189,022	18,287	10.71%
Personnel ServicesPension Expense-DTMS	7 <u>2</u> /	2,185	2,185	100.00%
Personnel ServicesSUTA	1,988	2,025	37	1.86%
Personnel ServicesSUTA-DTMS	( <del>4</del> )	26	26	100.00%
Personnel Services-Temporary Help	· *	3,750	3,750	100.00%
Business Travel	7,500	5,975	(1,525)	-20.33%
Dues and Subscriptions	255	255	<u> </u>	20
General Training and Seminars	4,375	3,400	(975)	-22.29%
Operating Contract	21,122,293	21,301,439	179,146	0.85%
Operating Contract-DTMS	18	292,482	292,482	100.00%
Train Operations Fuel	6,978,860	8,840,000	1,861,140	26.67%
Train Operations Fuel -DTMS	5 <del>16</del>	133,125	138,125	100.00%
Bridge Tender/Dispatcher	1,845,048	1,887,437	42,389	2.30%
Dispatcher-DTMS	5 🕶	62,500	62,500	100.00%
Train & Facility Maintenance	14,611,958	15,355,689	743,731	5.09%
Train Maintenance-DTMS	100	163,763	163,763	100.00%
Feeder Bus Service	6,679,862	7,402,658	722,796	10.82%
Emergency Bus Service	75,000	75,000	15	<del>2,</del> 2
Station Maintenance	7,814,959	6,705,355	(1,109,604)	-14.20%
Station Maintenance-DTMS	24	45,168	45,168	100.00%
Uniforms	4,000	4,000	73 <del>5</del> 2	<del>18</del> 21
Uniforms-DTMS		2,000	2,000	100.00%
Department Total	\$ 62,040,054	\$ 65,359,900	\$ 3,319,846	5.35%

# **OPERATIONS DEPARTMENT**

	AF	2017-2018 PPROVED BUDGET	PF	2018-2019 ROPOSED BUDGET
Business Travel				
APTA Rail Conference APTA Annual Meeting Bus Training Seminar Rail Training Workshops		1,600 5,100 800 	-\$	2,000 2,000 1,000 975 <b>5,975</b>
	8		-	
Dues & Subscription				
Umler Train Devices		255	-	255
	\$	255	\$	255
General Training and Seminars				
APTA Rail Conference		1,750		850
APTA Annual Meeting		320		850
Bus Training Seminar		875		850
Rail Training Workshops		1,750		850
	\$	4,375	\$	3,400
Train Operations				
Base Contract		20,928,140		20,725,819
Bundled Contract-Possible Incentives		192,203		565,000
Train Operations-DTMS		100		292,482
Special Events-Trains				10,620
FAID Fatigue software annual license	-	1,950		
	\$	21,122,293		21,593,921
Train Fuel				
Train Fuel		6,978,860		8,840,000
Train Fuel-DTMS				138,125
	\$	6,978,860	\$	8,978,125
Bridge Tender/Dispatch				
Dispatch Portion of Bundled Contract		1,837,248		1,887,437
Dispatch-DTMS		5 <del>8.</del>		62,500
Field Printer Maintenance	8	7,800		101000
	\$	1,845,048	\$	1,949,937

# **OPERATIONS DEPARTMENT**

Train Maintenance           Train Maintenance Base Contract         13,548,334         14,362,557           Facilities Maintenance-Hialeah Yard         698,664         713,719           Out of Scope Service         300,000         250,000           Train Maintenance-DTMS         -         163,763           Facilities Maintenance-West Palm Beach         28,960         29,413           Environmental Compliance         30,000         -           Environmental Compliance         30,000         -           Hialeah Yard Trailer Cleaning         6,000         -           Feeder Bus         -         16,000           Base Contract         4,999,449         5,717,505           Palm Tran         666,666         666,666           MDTA         666,666         666,666           Boca Center Route         172,081         176,821           SFEC TMA         95,000         95,000           Special Events         55,000         55,000           Incentive Bonus         15,000         15,000           Bus Wrappings         10,000         \$ 75,000           Emergency Bus Service         75,000         \$ 75,000           Emergency Bus Service         76,000         \$ 75,000		A	2017-2018 PPROVED BUDGET	P	2018-2019 ROPOSED BUDGET
Train Maintenance Base Contract         13,548,334         14,362,557           Facilities Maintenance-Hialeah Yard         698,684         713,719           Out of Scope Service         300,000         250,000           Train Maintenance-DTMS         -         163,763           Facilities Maintenance-West Palm Beach         28,960         29,413           Environmental Compliance         30,000         -           Hialeah Yard Trailer Cleaning         6,000         -           Feeder Bus         -         6,000           Base Contract         4,999,449         5,717,505           Palm Tran         666,666         666,666           MDTA         666,666         666,666           Boac Center Route         172,081         176,821           SFEC TMA         95,000         95,000           Special Events         55,000         55,000           Incentive Bonus         15,000         15,000           Incentive Bonus         15,000         10,000           Bus Wrappings         10,000         75,000           Station Maintenance         242,050         338,000           Out of Scope Service         400,000         250,000           MIC Common Area Maintenance Fee	Train Maintenance				
Out of Scope Service         300,000         250,000           Train Maintenance - DTMS         -         163,763           Facilities Maintenance-West Palm Beach         28,960         29,413           Environmental Compliance         30,000         -           Hialeah Yard Trailer Cleaning         6,000         -           Feeder Bus         **         **           Base Contract         4,999,449         5,717,505           Palm Tran         666,666         666,666           MDTA         666,666         666,666           Boca Center Route         172,081         176,821           SFEC TMA         95,000         95,000           Special Events         55,000         55,000           Incentive Bonus         15,000         15,000           Bus Wrappings         10,000         10,000           Bus Wrappings         75,000         75,000           Emergency Bus Service         75,000         75,000           Station Maintenance         242,050         338,000           Out of Scope Service         400,000         250,000           Misc. Expenses-Signs, Kiosks         150,000         250,000           Facilities Maintenance-DTMS         45,168			13,548,334		14,362,557
Train Maintenance - DTMS         -         163,763           Facilities Maintenance-West Palm Beach         28,960         29,413           Environmental Compliance         30,000         -           Hialeah Yard Trailer Cleaning         6,000         -           Feeder Bus         -         \$ 14,611,958         \$ 15,519,452           Base Contract         4,999,449         5,717,505           Palm Tran         666,666         666,666         666,666           MDTA         666,666         666,666         666,666           Boca Center Route         172,081         176,821         55,000           SPECIAL Secritive         55,000         55,000         55,000           Incentive Bonus         15,000         15,000         16,000           Bus Wrappings         10,000         10,000         10,000           Bus Wrappings         75,000         75,000         75,000           Station Maintenance         2         338,000           Qut of Scope Service         6,418,053         5,671,848           MIC Common Area Maintenance Fee         242,050         338,000           Out of Scope Service         400,000         250,000           Misc. Expenses-Signs, Kiosks         150,000	Facilities Maintenance-Hialeah Yard		698,664		713,719
Pacilities Maintenance-West Palm Beach   28,960   29,413     Environmental Compliance   30,000       Hialeah Yard Trailer Cleaning   6,000   -     \$ 14,611,958   \$ 15,519,452     Peeder Bus	Out of Scope Service		300,000		250,000
Environmental Compliance	Train Maintenance -DTMS		=		163,763
Feeder Bus   Sase Contract   Sase Contract	Facilities Maintenance-West Palm Beach		28,960		29,413
Feeder Bus         \$ 14,611,958         \$ 15,519,452           Base Contract         4,999,449         5,717,505           Palm Tran         666,666         666,666           MDTA         666,666         666,666           Boca Center Route         172,081         176,821           SFEC TMA         95,000         95,000           Special Events         55,000         55,000           Incentive Bonus         15,000         15,000           Bus Wrappings         10,000         10,000           Bus Wrappings         10,000         75,000           Emergency Bus Service         75,000         75,000           Emergency Bus Service         75,000         75,000           Station Maintenance         242,050         338,000           Out of Scope Service         400,000         250,000           Misc. Expenses-Signs, Kiosks         150,000         250,000           Facilities Maintenance-Pompano OC Garage         179,856         195,507           Stations Maintenance-DTMS         -         45,168           Hurricane Irma Work         425,000         -           Value         7,814,959         6,750,523           Stations Agent Uniforms -DTMS         - <td< td=""><td>Environmental Compliance</td><td></td><td>30,000</td><td></td><td></td></td<>	Environmental Compliance		30,000		
Feeder Bus           Base Contract         4,999,449         5,717,505           Palm Tran         666,666         666,666           MDTA         666,666         666,666           Boca Center Route         172,081         176,821           SFEC TMA         95,000         95,000           Special Events         55,000         55,000           Incentive Bonus         15,000         15,000           Bus Wrappings         10,000         10,000           Bus Wrappings         75,000         75,000           Emergency Bus Service         75,000         75,000           Emergency Bus Service         75,000         75,000           Emergency Bus Service         75,000         75,000           Station Maintenance         9         75,000           Station Maintenance         9         338,000           Out of Scope Service         400,000         250,000           Facilities Maintenance-Pompano OC Garage         179,856         195,507           Stations Maintenance-DTMS         -         45,168           Hurricane Irma Work         425,000         -           T,814,959         6,750,523           Uniforms         4,000         4,0	Hialeah Yard Trailer Cleaning	-	6,000		
Base Contract         4,999,449         5,717,505           Palm Tran         666,666         666,666           MDTA         666,666         666,666           Boca Center Route         172,081         176,821           SFEC TMA         95,000         95,000           Special Events         55,000         55,000           Incentive Bonus         15,000         15,000           Bus Wrappings         10,000         10,000           Bus Wrappings         10,000         75,000           Emergency Bus Service         75,000         75,000           Emergency Bus Service         75,000         75,000           Station Maintenance         8         7,800           Base Contract         6,418,053         5,671,848           MIC Common Area Maintenance Fee         242,050         338,000           Out of Scope Service         400,000         250,000           Misc. Expenses-Signs, Kiosks         150,000         250,000           Facilities Maintenance-Pompano OC Garage         179,856         195,507           Stations Maintenance-DTMS         -         45,168           Hurricane Irma Work         425,000         -           Uniforms         4,000         4,000		\$	14,611,958	\$	15,519,452
Base Contract         4,999,449         5,717,505           Palm Tran         666,666         666,666           MDTA         666,666         666,666           Boca Center Route         172,081         176,821           SFEC TMA         95,000         95,000           Special Events         55,000         55,000           Incentive Bonus         15,000         15,000           Bus Wrappings         10,000         10,000           Bus Wrappings         10,000         75,000           Emergency Bus Service         75,000         75,000           Emergency Bus Service         75,000         75,000           Station Maintenance         8         7,800           Base Contract         6,418,053         5,671,848           MIC Common Area Maintenance Fee         242,050         338,000           Out of Scope Service         400,000         250,000           Misc. Expenses-Signs, Kiosks         150,000         250,000           Facilities Maintenance-Pompano OC Garage         179,856         195,507           Stations Maintenance-DTMS         -         45,168           Hurricane Irma Work         425,000         -           Uniforms         4,000         4,000	Fooder Rue				
Palm Tran         666,666         666,666           MDTA         666,666         666,666           Boca Center Route         172,081         176,821           SFEC TMA         95,000         95,000           Special Events         55,000         55,000           Incentive Bonus         15,000         15,000           Bus Wrappings         10,000         10,000           \$ 6,679,862         \$ 7,402,658           Emergency Bus Service         75,000         75,000           Emergency Bus Service         75,000         \$ 75,000           \$ 75,000         \$ 75,000         \$ 75,000           Station Maintenance         8         \$ 75,000           Base Contract         6,418,053         5,671,848           MIC Common Area Maintenance Fee         242,050         338,000           Out of Scope Service         400,000         250,000           Misc. Expenses-Signs, Kiosks         150,000         250,000           Facilities Maintenance-Pompano OC Garage         179,856         195,507           Stations Maintenance-DTMS         -         45,168           Hurricane Irma Work         425,000         -           Value         7,814,959         6,750,523			4 000 440		5 717 50 <b>5</b>
MDTA         666,666         666,666           Boca Center Route         172,081         176,821           SFEC TMA         95,000         95,000           Special Events         55,000         55,000           Incentive Bonus         15,000         15,000           Bus Wrappings         10,000         10,000           Emergency Bus Service         75,000         75,000           Emergency Bus Service         75,000         75,000           Station Maintenance         8         75,000         75,000           Station Maintenance         242,050         338,000           Out of Scope Service         400,000         250,000           Misc. Expenses-Signs, Kiosks         150,000         250,000           Facilities Maintenance-Pompano OC Garage         179,856         195,507           Stations Maintenance-DTMS         425,000         -           Hurricane Irma Work         425,000         -           Stations Agent Uniforms         4,000         4,000           Stations Agent Uniforms-DTMS         -         2,000					
Boca Center Route			-		•
SFEC TMA         95,000         95,000           Special Events         55,000         55,000           Incentive Bonus         15,000         15,000           Bus Wrappings         10,000         10,000           \$ 6,679,862         \$ 7,402,658           Emergency Bus Service         75,000         75,000           Emergency Bus Service         75,000         \$ 75,000           Station Maintenance         8         75,000           Base Contract         6,418,053         5,671,848           MIC Common Area Maintenance Fee         242,050         338,000           Out of Scope Service         400,000         250,000           Misc. Expenses-Signs, Kiosks         150,000         250,000           Facilities Maintenance-Pompano OC Garage         179,856         195,507           Stations Maintenance-DTMS         -         45,168           Hurricane Irma Work         425,000         -           \$ 7,814,959         \$ 6,750,523           Uniforms         4,000         4,000           Stations Agent Uniforms-DTMS         -         2,000					
Special Events         55,000         55,000           Incentive Bonus         15,000         15,000           Bus Wrappings         10,000         10,000           \$ 6,679,862         \$ 7,402,658           Emergency Bus Service         75,000         75,000           Emergency Bus Service         75,000         75,000           \$ 75,000         \$ 75,000         \$ 75,000           Station Maintenance         8         \$ 75,000           Base Contract         6,418,053         5,671,848           MIC Common Area Maintenance Fee         242,050         338,000           Out of Scope Service         400,000         250,000           Misc. Expenses-Signs, Kiosks         150,000         250,000           Facilities Maintenance-Pompano OC Garage         179,856         195,507           Stations Maintenance-DTMS         -         45,168           Hurricane Irma Work         425,000         -           \$ 7,814,959         \$ 6,750,523           Uniforms         4,000         4,000           Stations Agent Uniforms-DTMS         -         2,000					· ·
Incentive Bonus			•		· ·
Bus Wrappings         10,000         \$ 7,402,658           Emergency Bus Service         75,000         75,000           Emergency Bus Service         75,000         \$ 75,000           Station Maintenance         8         75,000           Base Contract         6,418,053         5,671,848           MIC Common Area Maintenance Fee         242,050         338,000           Out of Scope Service         400,000         250,000           Misc. Expenses-Signs, Kiosks         150,000         250,000           Facilities Maintenance-Pompano OC Garage         179,856         195,507           Stations Maintenance-DTMS         -         45,168           Hurricane Irma Work         425,000         -           Ty,814,959         6,750,523           Uniforms         4,000         4,000           Stations Agent Uniforms-DTMS         -         2,000	·				
Emergency Bus Service         75,000         75,000           Emergency Bus Service         75,000         75,000           \$ 75,000         \$ 75,000           Station Maintenance         8           Base Contract         6,418,053         5,671,848           MIC Common Area Maintenance Fee         242,050         338,000           Out of Scope Service         400,000         250,000           Misc. Expenses-Signs, Kiosks         150,000         250,000           Facilities Maintenance-Pompano OC Garage         179,856         195,507           Stations Maintenance-DTMS         -         45,168           Hurricane Irma Work         425,000         -           \$ 7,814,959         \$ 6,750,523           Uniforms         4,000         4,000           Stations Agent Uniforms-DTMS         -         2,000			•		
Emergency Bus Service         75,000         75,000           \$ 75,000         \$ 75,000           Station Maintenance         \$ 75,000           Base Contract         6,418,053         5,671,848           MIC Common Area Maintenance Fee         242,050         338,000           Out of Scope Service         400,000         250,000           Misc. Expenses-Signs, Kiosks         150,000         250,000           Facilities Maintenance-Pompano OC Garage         179,856         195,507           Stations Maintenance-DTMS         -         45,168           Hurricane Irma Work         425,000         -           \$ 7,814,959         6,750,523           Uniforms         4,000         4,000           Stations Agent Uniforms-DTMS         -         2,000	Dus Wappings	\$		\$	
Emergency Bus Service         75,000         75,000           \$ 75,000         \$ 75,000           Station Maintenance         \$ 75,000           Base Contract         6,418,053         5,671,848           MIC Common Area Maintenance Fee         242,050         338,000           Out of Scope Service         400,000         250,000           Misc. Expenses-Signs, Kiosks         150,000         250,000           Facilities Maintenance-Pompano OC Garage         179,856         195,507           Stations Maintenance-DTMS         -         45,168           Hurricane Irma Work         425,000         -           \$ 7,814,959         \$ 6,750,523           Uniforms         4,000         4,000           Stations Agent Uniforms-DTMS         -         2,000				1	
Emergency Bus Service         75,000         75,000           \$ 75,000         \$ 75,000           Station Maintenance         \$ 75,000           Base Contract         6,418,053         5,671,848           MIC Common Area Maintenance Fee         242,050         338,000           Out of Scope Service         400,000         250,000           Misc. Expenses-Signs, Kiosks         150,000         250,000           Facilities Maintenance-Pompano OC Garage         179,856         195,507           Stations Maintenance-DTMS         -         45,168           Hurricane Irma Work         425,000         -           \$ 7,814,959         6,750,523           Uniforms         4,000         4,000           Stations Agent Uniforms-DTMS         -         2,000	Emergency Bus Service				
Station Maintenance         \$ 75,000         \$ 75,000           Base Contract         6,418,053         5,671,848           MIC Common Area Maintenance Fee         242,050         338,000           Out of Scope Service         400,000         250,000           Misc. Expenses-Signs, Kiosks         150,000         250,000           Facilities Maintenance-Pompano OC Garage         179,856         195,507           Stations Maintenance-DTMS         -         45,168           Hurricane Irma Work         425,000         -           \$ 7,814,959         \$ 6,750,523           Uniforms         4,000         4,000           Stations Agent Uniforms-DTMS         -         2,000			75,000		75,000
Base Contract       6,418,053       5,671,848         MIC Common Area Maintenance Fee       242,050       338,000         Out of Scope Service       400,000       250,000         Misc. Expenses-Signs, Kiosks       150,000       250,000         Facilities Maintenance-Pompano OC Garage       179,856       195,507         Stations Maintenance-DTMS       -       45,168         Hurricane Irma Work       425,000       -         \$ 7,814,959       \$ 6,750,523         Uniforms       4,000       4,000         Stations Agent Uniforms-DTMS       -       2,000		\$	75,000	\$	75,000
Base Contract       6,418,053       5,671,848         MIC Common Area Maintenance Fee       242,050       338,000         Out of Scope Service       400,000       250,000         Misc. Expenses-Signs, Kiosks       150,000       250,000         Facilities Maintenance-Pompano OC Garage       179,856       195,507         Stations Maintenance-DTMS       -       45,168         Hurricane Irma Work       425,000       -         \$ 7,814,959       \$ 6,750,523         Uniforms       4,000       4,000         Stations Agent Uniforms-DTMS       -       2,000	Station Maintanance				
MIC Common Area Maintenance Fee         242,050         338,000           Out of Scope Service         400,000         250,000           Misc. Expenses-Signs, Kiosks         150,000         250,000           Facilities Maintenance-Pompano OC Garage         179,856         195,507           Stations Maintenance-DTMS         -         45,168           Hurricane Irma Work         425,000         -           \$ 7,814,959         \$ 6,750,523           Uniforms         4,000         4,000           Stations Agent Uniforms-DTMS         -         2,000			6.418.053		5.671.848
Out of Scope Service         400,000         250,000           Misc. Expenses-Signs, Kiosks         150,000         250,000           Facilities Maintenance-Pompano OC Garage         179,856         195,507           Stations Maintenance-DTMS         -         45,168           Hurricane Irma Work         425,000         -           \$ 7,814,959         \$ 6,750,523           Uniforms         4,000         4,000           Stations Agent Uniforms-DTMS         -         2,000					
Misc. Expenses-Signs, Kiosks         150,000         250,000           Facilities Maintenance-Pompano OC Garage         179,856         195,507           Stations Maintenance-DTMS         -         45,168           Hurricane Irma Work         425,000         -           \$ 7,814,959         \$ 6,750,523           Uniforms         4,000         4,000           Stations Agent Uniforms-DTMS         -         2,000					
Facilities Maintenance-Pompano OC Garage         179,856         195,507           Stations Maintenance-DTMS         -         45,168           Hurricane Irma Work         425,000         -           \$ 7,814,959         \$ 6,750,523           Uniforms         \$ 4,000         4,000           Stations Agent Uniforms-DTMS         -         2,000	•				
Stations Maintenance-DTMS         -         45,168           Hurricane Irma Work         425,000         -           \$ 7,814,959         \$ 6,750,523           Uniforms         Stations Agent Uniforms         4,000         4,000           Stations Agent Uniforms-DTMS         -         2,000	•		· ·		
Uniforms         \$ 7,814,959         \$ 6,750,523           Stations Agent Uniforms         4,000         4,000           Stations Agent Uniforms-DTMS         -         2,000	Stations Maintenance-DTMS				
Uniforms         \$ 7,814,959         \$ 6,750,523           Stations Agent Uniforms         4,000         4,000           Stations Agent Uniforms-DTMS         -         2,000	Hurricane Irma Work		425,000		140
Stations Agent Uniforms 4,000 4,000 Stations Agent Uniforms-DTMS - 2,000		\$		\$	6,750,523
Stations Agent Uniforms 4,000 4,000 Stations Agent Uniforms-DTMS - 2,000	Haife and				
Stations Agent Uniforms-DTMS	<del></del>		4.000		4.000
			-,555		
		\$	4,000	\$	

# PLANNING DEPARTMENT

	FY 2017-2018	FY 2018-2019		
	APPROVED	PROPOSED	CHANGE	
	BUDGET	BUDGET	\$	%
Personnel ServicesSalary/Wages	\$ 786,276	\$ 804,332	\$ 18,056	2.30%
Personnel ServicesFICA Taxes	59,242	60,911	1,669	2.82%
Personnel ServicesGroup Insurance	148,855	165,986	17,131	11.51%
Personnel ServicesPension Expense	78,277	86,742	8,465	10.81%
Personnel ServicesSUTA	786	804	18	2.29%
Business Travel	28,800	37,400	8,600	29.86%
Dues and Subscriptions	16,800	17,100	300	1.79%
General Training and Seminars	6,500	9,350	2,850	43.85%
Printing and Advertising	1,500	1,500	*	·
Auto Allowance-Mileage	1,500	1,500	#	<b>(€</b> )
FTA Meetings	1,000	1,500	500	50.00%
Department Total	\$ 1,129,536	\$ 1,187,125	\$ 57,589	5.10%

#### **PLANNING DEPARTMENT**

	FY 2017-2018 APPROVED BUDGET	FY 2018-2019 PROPOSED BUDGET
Business Travel		
Rail Volution Conference	7,200	7,500
National Transit Institute (NTI) Training	6,300	6,000
Rail Volution Steering Committee	3,600	4,800
COMTO Conference	3,600	3,600
National American Planning Association	¥	3,000
Florida American Planning Association (FAPA)	2,400	2,000
APTA Rail Conference	2,000	2,000
COMTO Leadership Meetings	1,500	2,000
APTA National Conference	單	2,000
Training and Development Meetings	말	2,000
FPTA Conference	1,200	1,500
FTA Meetings	1,000	1,000
	\$ 28,800	\$ 37,400
Dues and Subscriptions  Rail Volution Membership  American Planning Association  AICP Certifications	15,000 1,500 300 \$ 16,800	15,000 1,500 600 \$ 17,100
General Training and Seminars		
Rail Volution Conference	1,800	1,800
Professional Development for Staff	750	1,100
NTI Transit Academy	500	1,000
National American Planning Association (APA)	-	1,000
APTA Rail Conference	850	900
APTA National Conference	-	900
COMTO Conference	800	800
FPTA Conference	700	700
FL American Planning Association	450	450
Safe Streets Summit	-	400
Urban Land Institute - Florida	300	300
Administrative Development	350_	#
	\$ 6,500	\$ 9,350

#### **PLANNING DEPARTMENT**

	FY 2017-2018 APPROVED BUDGET	FY 2018-2019 PROPOSED BUDGET
Printing and Advertising		
Miscellaneous	1,500 \$ 1,500	\$ 1,500 \$ 1,500
Auto Allowance-Mileage		
Local Business Travel	1,500 <b>\$ 1,500</b>	1,500 <b>\$ 1,500</b>
FTA Meetings		
FTA Meetings	1,000 <b>\$</b> 1,000	\$ 1,500 \$ 1,500

#### PROCUREMENT DEPARTMENT

	FY 2017-2018	FY 2018-2019		
	APPROVED	PROPOSED	Change	<del>!</del>
	BUDGET	BUDGET	\$	%
Personnel ServicesSalary/Wages	\$ 674,257	\$ 701,606	\$ 27,349	4.06%
Personnel ServicesFICA Taxes	51,089	52,830	1, <b>741</b>	3.41%
Personnel ServicesGroup Insurance	119,855	132,818	12,963	10.82%
Personnel ServicesPension Expense	68,902	78,823	9,921	14.40%
Personnel ServicesSUTA	674	702	28	4.15%
Business Travel	15,515	14,300	(1,215)	-7.83%
Dues and Subscriptions	3,235	2,510	(725)	-22.41%
General Training and Seminars	9,985	9,445	(540)	-5.41%
Printing and Advertising	2,000	2,000	÷ <b>*</b>	(#X)
Postage and Mass Mailings	500	500	( <del>=</del> )	(#):
Vehicle Maintenance	40,000	40,000		(#)
Building Maintenance	95,000	125,000	30,000	31.58%
Department Total	\$ 1,081,012	\$ 1,160,534	\$ 79,522	7.36%

#### PROCUREMENT DEPARTMENT

	FY 2017-2018 APPROVED BUDGET	FY 2018-2019 PROPOSED BUDGET
Business Travel	<del>*************************************</del>	
FTA/NIGP/State of FL Training	5,165	5,000
NIGP-Annual Forum	5,250	4,500
FAPPO Annual Conference	3,600	3,300
APTA Rail Conference	*	1,500
APTA Annual Conference	1,500	
	\$ 15,515	\$ 14,300
Dues and Subscriptions		
National Institute of Governmental Purchasing	750	765
Florida Association of Public Purchasing Officers	1,125	720
Institute for Supply Management	400	450
National Contract Management Association	485	350
NIGP-Local Chapter Dues	225	225
APICS	250	- 0.510
	\$ 3,235	\$ 2.510
General Training and Seminars		
NIGP Annual Forum	3,135	2,820
GWU Negotiation Strategies and Techniques	2,000	2,000
NIGP Sourcing In The Public Sector	1,300	1,300
FAPPO Annual Conference	1,050	1,050 875
APTA Rail Conference Med Week	500	500
Negotiation in the State of Florida	400	500
DBE Conference	400	400
APTA Annual	1,200	-
7. T.	\$ 9,985	\$ 9,445
Printing and Advertising		
Solicitation Packages	2,000	2,000
	\$ 2,000	\$ 2,000
Postage and Mass Mailings		
FedEx Solicitations/Addenda	500	500
	\$ 500	\$ 500

#### PROCUREMENT DEPARTMENT

	AP	2017-2018 PROVED UDGET	PR	2018-2019 OPOSED UDGET
Vehicle Maintenance	,			
Fuel		30,000		30,000
Repairs		10,000		10,000
	\$	40,000	\$	40,000
<b>Building Maintenance</b>				
Janitorial Services	<u> </u>	95,000	-	125,000
	\$	95,000	\$	125,000

#### **SAFETY and SECURITY**

	 ' 2017-2018 PPROVED	FY 2018-2019 PROPOSED	CHANGE	
	BUDGET	BUDGET	\$	<u></u> %
Personnel ServicesSalary/Wages	\$ 422,454	\$ 445,082	\$ 22,628	5.36%
Personnel ServicesOvertime	500	500		-
Personnel ServicesFICA Taxes	32,356	34,087	1,731	5.35%
Personnel ServicesGroup Insurance	72,500	84,253	11,753	16.21%
Personnel ServicesPension Expense	30,465	36,805	6,340	20.81%
Personnel ServicesSUTA	423	446	23	5.44%
Business Travel	9,300	9,300	5	₹
Dues and Subscriptions	17,700	17,700		
Professional Fees	75,000	90,000	15,000	20.00%
Printing and Advertising	80,000	60,000	(20,000)	-25.00%
Security	6,698,761	6,959,906	261,145	3.90%
Security Contract-DTMS	*	174,025	174,025	100.00%
Safety and Security Miscellaneous	49,325	49,175	(150)	-0.30%
Alarm Systems	4,000	4,000	<u> </u>	27
Department Total	\$ 7,492,784	\$ 7,965,279	\$ 472,495	6.31%

#### **SAFETY and SECURITY**

	FY 2017-2018 APPROVED BUDGET	FY 2018-2019 PROPOSED BUDGET
Business Travel		
FTA/FRA Safety and Security Meeting/Seminars FRA Rail Safety Advisory Committee Critical Incidents/Safety Meetings/Seminars	4,500 3,000 1,800 \$ 9,300	4,500 3,000 1,800 \$ 9,300
Dues and Subscriptions		
APTA Safety Operation Lifesaver	16,000 1,700 <b>\$ 17,700</b>	16,000 1,700 <b>\$</b> 17,700
Professional Fees		
Agency Staff Training/Coursework Contracts & Agency Staff Drill Facilitation/Consulting Fees	40,000 35,000 <b>\$ 75,000</b>	\$ 90,000
Printing and Advertising		
Public Safety Awareness Railroad Rulebooks, Timetables and Sl	40,000 40,000 <b>\$ 80,000</b>	\$ 50,000 10,000 \$ 60,000
Security		
Security Contract Security Contract-DTMS Security Overtime Security Communications Safety Incentive	6,528,761 150,000 10,000 10,000 \$ 6,698,761	6,789,906 174,025 150,000 10,000 10,000 \$ 7,133,931

#### **SAFETY and SECURITY**

	FY 2017-2018 APPROVED BUDGET	FY 2018-2019 PROPOSED BUDGET	_
Safety and Security Miscellaneous	-		
Misc. Security Required Equipment	20,000	20,000	)
Security Controls/Camera Install, Maintenance Repair	7,000	12,000	j
Agency Safety Supplies	10,000	10,000	)
Drone Replacement/Accessories	<b>=</b> :	5,000	)
Radio Case Replacement	2,175	2,175	í
Radio Maintenance, Repair and Replacement	5,800	≘	
Replacement Antennas/Batteries	4,350	¥	_
Handheld Upgrades for Fare Collection	\$ 49,325	\$ 49,175	=
Alarm Systems			
	4,000	4,000	_
Alarm Monitoring Service	\$ 4,000	\$ 4,000	

#### Office Business Expense

	FY 2017-2018 APPROVED BUDGET	FY 2018-2019 PROPOSED BUDGET
Telephones	491,000	481,000
Office Supplies	122,000	130,000
Banking Credit Card Fees	125,000	125,000
Printing and Advertising	118,650	94,375
Building Maintenance	95,000	125,000
Bank Charges	55,000	55,000
Vehicles-Mileage, Repairs, Fuel	47,500	47,500
Tuition Reimbursement	30,000	30,000
Misc. Personnel Expenses	8,800	8,800
FTA Meetings	1,800	2,300
Total Office Business Expense	\$ 1,094,750	\$ 1,098,975

#### **General and Administrative Expense**

	FY 2017-2018 APPROVED BUDGET		 FY 2018-2019 PROPOSED BUDGET
Office Business Expense	\$	1,094,750	\$ 1,098,975
Business Travel		224,425	253,893
Dues and Subscriptions		159,158	157,152
General Training and Seminars		156,458	189,985
Office Rent		32,400	32,870
<b>Total General and Administrative</b>	\$	1,667,191	\$ 1,732,875

#### FY 2018-2019 BUDGET

## Business Travel All Departments

	FY 2017-2018 APPROVED BUDGET	FY 2018-2019 PROPOSED BUDGET
ENGINEERING		
AREMA Conference	2 220	E 200
PTC FRA Qtr./User Meetings	3,320	5,280 4,280
ASCE FL Conference	2,460	3,140
APTA Annual Meeting	1,760	1,760
APTA Rail Conference	1,700	1,760
REMSA Conference	1,760	1,760
ASME Conference	-	1,760
TTCI Conference	_	1,570
WMATA Conference		1,380
FTA Wave Quarterly Meeting	-	1,380
FDOT Rail Conference (Location TBD)	3,520	
PTC Benchmark (Offsite Visit) 2 @ 1380	2,760	(W)
FTA Safety and Security Training Certificate	880	
•	\$ 16,460	\$ 24,070
EVEAUTIVE		
EXECUTIVE		
Legislative Session & Associated Committee Weeks (Government Affairs)	9,200	18,000
Insurance Negotiations	8,800	8,800
Trips to Washington, D.C. (Executive Director)	7,000	7,000
Trips to Tallahassee (Executive Director)	6,000	6,000
APTA Rail Conference	6,000	6,000
Trips to Washington, D.C. (Govt. Affairs Manager)	4,000	6,000
APTA Legislative	4,000	6,000
Board Members Trips to Tallahassee	5,000	5,000
Board Members Trips to Washington D.C.	5,000	5,000
Board Member APTA/ Conference Travel	5,000	5,000
FPTA Quarterly Board of Directors	6,000	4,000
Florida Public Transit Association Annual	3,500	3,500
COMTO Annual	3,500	3,500
FTA Atlanta	3,000	3,000
APTA Marketing and Communication Workshop	4,500	2,400
APTA Annual	2,850	2,400
FTC Floridians for Better Transportation Meeting	1,100	2,000
ARMA Conference and Post Conference	1,800	1,800
FL League of Cities Annual Meeting (Government Affairs)	400	1,750
APTA Marketing and Communications Meeting-PIO	1,500	1,500
RailVolution	1,500	1,500
Government Affairs Mileage for General Travel	*	1,200
COMTO Legislature	2	1,000
APTA CEO	1,000	1,000
Greater Miami Chamber of Commerce Transportation Summit	400	400
FL League of Cities Legislative Conference	400	A 100 TES
	<u>\$ 91,050</u>	\$ 103,750

#### FY 2018-2019 BUDGET

## **Business Travel All Departments**

*	FY 2017-2018 APPROVED BUDGET	FY 2018-2019 PROPOSED BUDGET
EEO EXECUTIVE		
EEO Annual Conference	3,000	3,000
ADA Coordinators Conference	2,000	2,000 800
Civil Rights-DBE/Title VI TD Conference	-	800
Triennial Review Workshop	1,200	-
Transportation Civil Rights Symposium	800	
	\$ 7,000	\$ 6,600
FINANCE	) <del></del> :	X <del></del>
GFOA Annual Conference	4,080	5,370
FGFOA School of Government Finance	4,340	3,986
Budget Analytics-Management Concepts	1,580	3,300
EDEN End User Conference	3,600	3,200
Management Concepts	::e:	2,872
Transit Asset Management Training	1,920	2,220
American Payroll Association	1,620	1,600
FTA-NTD Updates and Training	960	1,050
FGFOA Annual Conference	2,000 <b>\$ 20,100</b>	1,000 <b>\$ 24,598</b>
	- 20,100	- 1,000
HUMAN RESOURCES		
SHRM Conference	1,000	2,000
Tyler/Eden Training	1,500	1,500
APTA Annual Conference	1,500	1,500
ADA Conference	1,200	1,200
HR Florida Annual Conference	1,000	1,000
Florida Public HR Association Conference	1,000	200
	\$ 7,200	\$ 7,400

#### FY 2018-2019 BUDGET

## **Business Travel All Departments**

	FY 2017-2018 APPROVED BUDGET	FY 2018-2019 PROPOSED BUDGET
IT Department		
CISCO	5,000	5,000
Information Security Training	¥	3,500
APTA Revenue Conference	3,900	3,000
Cybersecurity Technical Workshop	量	3,000
Information Security Conference	σ.	2,500
Technology Conference and Expo	2,000	2,000
Institute of Internal Auditors Conference	1,000	1,500
Filmmaker Pro Conference	3,200	30
EDEN Annual Conference	2,400	: <del>=</del> 3
APTA Transit Tech	1,500	<b>:</b>
COMTO Annual Conference	1,500	=:
Florida Institute of Government Accounting	1,000	-
	\$ 21,500	\$ 20,500
<u>OPERATIONS</u>		
APTA Rail Conference	5,100	2,000
APTA Annual Meeting	1,600	2,000
Bus Training Seminar	800	1,000
Rall Training Workshops		975
	\$ 7,500	\$ 5,975
PLANNING		
Rail Volution Conference	7,200	7,500
National Transit Institute (NTI) Training	6,300	6,000
Rail Volution Steering Committee	3,600	4,800
COMTO Conference	3,600	3,600
National American Planning Association	*	3,000
Florida American Planning Association (FAPA)	2,400	2,000
APTA Rail Conference	2,000	2,000
COMTO Leadership Meetings	1,500	2,000
APTA National Conference	<b>44</b>	2,000
Training and Development Meetings FPTA Conference	4 000	2,000
FTA Meetings	1,200	1,500
I IV Meerings	1,000 <b>\$ 28,800</b>	1,000 <b>\$ 37,400</b>
	<del>Ψ</del> <u>20,000</u>	\$ 37,400

#### FY 2018-2019 BUDGET

## Business Travel All Departments

	FY 2017-2018 APPROVED BUDGET	FY 2018-2019 PROPOSED BUDGET
PROCUREMENT		
FTA/NIGP/State of FL Training	5,165	5,000
NIGP-Annual Forum	5,250	4,500
FAPPO Annual Conference	3,600	3,300
APTA Rail Conference		1,500
APTA Annual Conference	1,500	
	<u>\$ 15,515</u>	\$ 14,300
SAFETY AND SECURITY  FTA/FRA Safety and Security Meeting/Seminars FRA Rail Safety Advisory Committee Critical Incidents/Safety Meetings/Seminars	4,500 3,000 1,800 \$ 9,300	4,500 3,000 1,800 \$ 9,300
Total Business Travel	\$ 224,425	\$ 253,893

## Dues and Subscriptions All Departments

	FY 2017-2018 APPROVED	FY 2018-2019 PROPOSED
	BUDGET	BUDGET
ENGINEERING	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·
American Society of Civil Engineers license	915	945
Railway Engineering Maintenance Suppliers Assoc	675	675
AREMA Dues	340	549
American Society for Quality	318	318
American Society of Mechanical Engineers Renewal	151	302
Project Management Institute Membership	<b>12</b> (	278
Professional Engineer License Renewal	884	150
AAWRE License Renewal	125	125
AREMA Bridge Inspection Handbook	200	20
*	\$ 2,724	\$ 3,342
EXECUTIVE		8
APTA Membership	40,000	40,000
Florida Public Transportation Association	20,000	20,000
Association of American Railroads	10,000	10,000
COMTO Support/Membership	7,900	7,200
Lobby Tools	4,900	4,900
Media/ Video Monitoring and News Clipping	4,500	4,500
WTS -Women in Transportation Memberships	3,654	2,700
Urban Land Institute	2,500	2,500
Palm Beach County League of Cities	1,200	1,200
Broward League of Cities	1,200	1,200
Miami Dade League of Cities	1,200	1,200
Ft. Lauderdale Chamber of Commerce	1,075	1,075
NTSB Reports	1,000	1,000
Regional Business Alliance	1,000	1,000
Greater Miami Chamber of Commerce	820	820
Palm Beach Post	450	580
Chamber of Commerce of the Palm Beaches	560	570
Boca Raton Chamber of Commerce	430	490
Sun-Sentinel	400	400
Miami Herald	300	300
FL Association of Professional Lobbyist	300	250
National Association of ADA Coordinators	225	225
Miami Today	180	180
ARMA National Membership	175	175
Broward Days-Impact Team	14st	150
South Florida Business Journal	120	125
FL Association of Intergovernmental Relations	100	100
ARMA Palm Beach Chapter Membership	30	30
	\$ 104,219	\$ 102,870

## Dues and Subscriptions All Departments

	FY 2017-2018 APPROVED BUDGET	FY 2018-2019 PROPOSED BUDGET
<u>FINANCE</u>	·	
GFOA Membership	1,050	1,180
Management Assoc International	1,100	1,130
Award Fees-CAFR	580	580
Award Fees-Distinguished Budget	550	550
Federal Grants Management Reference Book	550	540
American Payroll Association Reference Book	350	350
FGFOA Memberships	245	280
AICPA Membership	235	265
Institute of Internal Auditors	150	240
National Black Public Administrators	235	235
American Payroll Association	195	220
National Association of Black Accountants	200	200
Chartered Global Management Accountant	200	200
FICPA	260	150
APTUSC	150	150
SFGFOCCA	100	150
Project Management Institute	125	130
American Women's Society of CPAs	195	100
NIGP	∪≣:	100
Women in Public Finance	·	25
CGFO Recertification	40_	2.552 Y
	\$ 6,510	\$ 6,775
HUMAN RESOURCES		
NeoGov Annual Maintenance	4,500	5,000
SHRM Membership	400	420
HR Association of Broward County	200	200
HR Specialist Publication	300	175
Florida Public Personnel Association	150	135
World at Work (Comp & Benefits) Membership	245	
	\$ 5,795	\$ 5,930

#### Dues and Subscriptions All Departments

	· op	
·	FY 2017-2018 APPROVED BUDGET	FY 2018-2019 PROPOSED BUDGET
IT DEPARTMENT		
Technology Conference Membership	-	325
Institute of Internal Auditors	140	160
FICPA FGFOA Membership	150 35	150 35
IT Industry Memberships	1,000	30
IT Manuals	850	1
	\$ 2,175	\$ 670
<u>OPERATIONS</u>		
Umler Train Devices required by FRA	\$ 255	\$ 255
PLANNING		
RailVolution Membership	15,000	15,000
American Planning Association	1,500	1,500
AICP Certifications	\$ 16,800	\$ 17,100
	- 10,000	4 11,100
PROCUREMENT		
National Institute of Governmental Purchasing	750	765
Florida Association of Public Purchasing Officers Institute for Supply Management	1,125 400	720 <b>4</b> 50
National Contract Management Association	485	350
APICS	250	-
NIGP-Local Chapter Dues	225	225
	\$ 3,235	\$ 2,510
SAFETY AND SECURITY		
APTA Safety	16,000	16,000
Operation Lifesaver	1,700	1,700
	\$ 17,700	\$ 17,700
Total Dues and Subscriptions	\$ 159,158	\$ 157,152

	FY 2017-2018 APPROVED BUDGET	FY 2018-2019 PROPOSED BUDGET
ENGINEERING		
Project Management Professional (PMP) Course	-	3,000
AREMA Conference and Committee	1,000	2,400
FL Board of PE Exam	<u>u</u>	1,815
APTA Rail Conference	825	1,650
American Society of Mechanical Engineers	-	850
Project Management Professional (PMP) Exam Fee	•	810
American Society of Civil Engineers Conference (ASCE)	1,050	700
Transportation Technology Center (TTCI, AAR) Conference	2	500
Washington Metropolitan Area Transit Authority	2.7	500
FL Board El Exam		225
Railway Engineering Maintenance Suppliers Assoc Conf.	1,200	40.450
	\$ 4,075	\$ 12,450
EXECUTIVE		
APTA Rail Conference	2,900	2,700
APTA Annual	2,850	2,000
APTA Legislative	2,700	2,700
FPTA Annual	1,750	1,750
APTA Marketing Workshop	1,650	2,200
COMTO Annual	1,500	2,250
ARMA Conference & Post Conference Registration	899	899
APTA CEO Seminar	745	745
Information Governance Professional (IGP) Certification	599	599
FL League of Cities Annual Mtg	400	250
FL League of Cities Legislative Conference	400	(#):
Floridians for Better Transportation Conference	400	<b>4</b> 9
COMTO Legislature		150_
	\$ 16,793	\$ 16,243
EEO Training and Seminars		
FFO A Wide Training	E 000	40.000
EEO Agency Wide Training	5,000	10,000
ADA Coordinators Conference	4,000	4,000
EEO Annual Conference	2,000	3,000
Transportation Civil Rights Symposium	450	#50
TD Conference	§ <b>.</b> •	450 450
Civil Rights-DBE/Title VI	A4 4F0	<u>450</u>
	\$ 11,450	\$ 17,900

	FY 2017-2018 APPROVED BUDGET	FY 2018-2019 PROPOSED BUDGET
<u>FINANCE</u>		<del>,</del>
Management Concepts Classes	,	4,977
Project Management Classes		2,500
CPE Credits	2,000	2,000
American Payroll Association Conference	1,710	1,710
EDEN Conference	1,600	1,600
GFOA Annual Conference	1,275	1,200
Financial Reporting/Accounting Training	1,000	1,000
FGFOA School of Government Finance	320	960
FGFOA Annual Conference	750	900
Accounting Show	450	450
CGFO Registration and Exam	342	150
PMP Certification Test	:=0	405
Budget Analysis	820	
	\$ 9,925	\$ 17,852
HUMAN RESOURCES		
Agency Management Training	<b>a</b> il	50,000
Agency General Training	44,500	10,000
ADA Conference	1,995	1,995
SHRM Conference	2,000	1,750
APTA Annual Conference	850	850
Tyler/Eden Conference	800	800
FPHRA Conference	700	700
HR Association of Broward County Legal Conference		300
HR Association of Broward County	250	250
HR Florida Conference	1,100	(9)
Akerman/Senterfitt Annual Labor/Empl Law Sem	310	(#):
	\$ 52,505	\$ 66,645

	FY 2017-2018 APPROVED BUDGET	FY 2018-2019 PROPOSED BUDGET
IT DEPARTMENT	BOBGET	
CISCO	5,000	6,000
Information Security Training	*	5,000
Cybersecurity Technical Workshop	( <del>-</del>	4,000
Information Security Conference	300	3,500
Web Development Training	(#)	3,000
Microsoft Server/Configuration		3,000
Technical Project Management	545	3,000
Microsoft System Management		2,500
Technology Conference and Expo	1,600	1,600
Data Base Reporting	1,500	1,500
APTA Revenue Management	1,675	1,400
Institute of Internal Auditors FGFOA-CPE Credits	1,000	1,000 600
Florida Institute of Government-Accounting	600 600	600
	17,000	000
IT Training Filemaker Pro	3,000	2
Eden Conference	1,500	20
COMTO Conference	800	
APTA Transit Tech	475	= = = = = = = = = = = = = = = = = = =
Eden Training/Support	6,100	
	\$ 40,850	\$ 36,700
OPERATIONS  APTA Rail Conference APTA Annual Meeting Bus Training Seminar Rail Training Workshops APTA Bus and Paratransit	1,750 - 1,750 <u>875</u>	850 850 850 850
	\$ 4,375	\$ 3,400
PLANNING		
Rail Volution Conference	1,800	1,800
Professional Development for Staff	750	1,100
NTI Transit Academy	500	1,000
National American Planning Association (APA)	( S	1,000
APTA Rail Conference	850	900
APTA National Conference		900
COMTO Conference	800	800
FPTA Conference	700	700
FL American Planning Association	450	450
Safe Streets Summit	:#	400
Urban Land Institute - Florida	300	300
Administrative Development	350	
•	\$ 6,500	\$ 9,350

	FY 2017-2018 APPROVED BUDGET	FY 2018-2019 PROPOSED BUDGET	
PROCUREMENT	-		
NIGP Annual Forum	3,135	2,820	
GWU Negotiation Strategies and Techniques	2,000	2,000	
NIGP Sourcing In The Public Sector	1,300	1,300	
FAPPO Annual Conference	1,050	1,050	
APTA Rail Conference	:E	875	
Med Week	500	500	
Negotiation in the State of Florida	400	500	
DBE Conference	400	400	
APTA Annual	1,200	2	
	\$ 9,985	\$ 9,445	
Total General Training and Seminars	<u>\$ 156,458</u>	\$ 189,985	

#### Office Rent

	FY 2017-2018 APPROVED BUDGET		PR	018-2019 OPOSED UDGET
Center Port Irrigation and Assessment		22,400		22,400
Sign Rent		10,000		10,470
Total Rent	\$	32,400	\$	32,870

## Professional Fees and Consultants All Departments

	FY 2017-2018 APPROVED BUDGET	FY 2018-2019 PROPOSED BUDGET	
EXECUTIVE			
ECI Consulting, Inc. FTI Consulting, Inc. General Consultants EEO Annual Workforce Analysis	246,000 144,000 40,000 3,500 \$ 433,500	246,000 144,000 10,000 3,500 \$ 403,500	
FINANCE			
Audit Fees	\$5,000 \$ 85,000	\$ 57,400 \$ 57,400	
IT DEPARTMENT			
Eden Annual Support Cubic Software Maintenance MDT Annual Participation Agreement Audit Real-time Information System Website Support/Mobile App Support	76,000 53,500 20,000 10,000 \$ 159,500	79,000 45,000 25,000 10,000 \$ 159,000	
Safety and Security			
Agency Staff Training/Coursework Contracts & Agency Staff Drill Facilitation/Consulting Fees	40,000 35,000 <b>\$ 75,000</b>	45,000 45,000 \$ <b>90,000</b>	
Total Professional Fees and Consultants	\$ 753,000	\$ 709,900	

#### **Budgeted Full-Time Equivalents**

	FY 2017-2018 BUDGETED POSITIONS	FY 2018-2019 ADDITIONS/ DELETIONS	FY 2018-2019 TOTAL POSITIONS	Note*
Engineering Dept.				
DIRECTOR OF ENGINEERING & CONSTRUCTION	1.0		1.0	
MANAGER OF ENGINEERING & CONSTRUCTION	1.0		1.0	F
QUALITY ASSURANCE MANAGER	1.0		1.0	
ENGINEERING PROJECT MANAGER	4.0		4.0	
ENGINEERING PROJECT MANAGER-MOW	1.0		1.0	
ADMINISTRATIVE ASSISTANT	1.0		1.0	
TOTAL	9.0	0.0	9.0	•
Executive Dept.				
EXECUTIVE DIRECTOR	1.0		1.0	
DEPUTY EXECUTIVE DIRECTOR	1.0		1.0	
DIRECTOR OF ADMINISTRATION/EEO OFF	1.0		1.0	
RECORDS MANAGER	1.0		1.0	
GOVERNMENT AFFAIRS MANAGER	1.0		1.0	
PUBLIC INFORMATION OFFICER	1.0		1.0	
CORPORATE & COMMUNITY RELATIONS MANAGER	1.0		1.0	
CORPORATE & COMMUNITY RELATIONS LIASON	2,0		2.0	
EDP COORDINATOR	1.0		1.0	
ADMINISTRATIVE ASSISTANT	1.0		1.0	
ADMINISTRATIVE COMPLIANCE OFFICER	1.0		1.0	
EXECUTIVE ASSISTANT	1.0		1.0	
EXECUTIVE ADMINISTRATIVE COORDINATOR	1.0		1.0	
RECEPTIONIST	1.0		1.0	
TOTAL	15.0	0.0	15.0	•
Finance Dept.				
DIRECTOR OF FINANCE	1.0		1.0	
BUDGET& GRANTS MANAGER	1.0		1.0	
ACCOUNTING MANAGER	1.0		1.0	
GRANTS ADMINISTRATOR	1.0		1.0	
SENIOR ACCOUNTANT	2.0		2.0	
ACCOUNTING SUPERVISOR	1.0		1.0	
ACCOUNTANT	1.0		1.0	
BUSINESS ANALYST	1.0		1.0	
BUDGET ANALYST	2.0		2.0	1 F
REVENUE SUPERVISOR	1.0		1.0	
REVENUE SPECIALIST	1.0		1.0	
ADMINISTRATIVE ASSISTANT	1.0		1.0	
REVENUE COLLECTOR	1.0		1.0	
ACCOUNTING CLERK	2.0		2.0	•
TOTAL	17.0	0.0	17.0	

#### **Budgeted Full-Time Equivalents**

	FY 2017-2018 BUDGETED POSITIONS	FY 2018-2019 ADDITIONS/ DELETIONS	FY 2018-2019 TOTAL POSITIONS	Note*
Human Resources Dept.		DELETIONS	roomono	11010
DIRECTOR OF HUMAN RESOURCES	1.0		1.0	
HUMAN RESOURCES MANAGER	1.0		1.0	
HUMAN RESOURCES ASSISTANT	1.0		1.0	
TOTAL	3.0	0.0	3.0	-
Information Technology Dept.				
DIRECTOR OF INFORMATION TECHNOLOGY/COMPTROLLER	1.0		1.0	
INFORMATION TECHNOLOGY MANAGER	1.0		1.0	
PROJECT MANAGER/SPECIAL PROJECTS	1.0		1.0	
ADMINISTRATIVE ASSISTANT	1.0		1.0	
NETWORK ADMINISTRATOR	3.0		3.0	
TECHNICAL FIELD SUPPORT SUPERVISOR	1.0		1.0	
WEB DEVELOPER	1.0		1.0	
GRAPHIC DESIGNER	1.0		1.0	
AFC TECHNICIAN SENIOR	1.0		1.0	
AFC TECHNICIAN	2.0		2.0	
DATABASE ANALYST	1.0		1.0	
TOTAL	14.0	0.0	14.0	3.
Y YE				
Legal Dept.	4.0		4.0	
GENERAL COUNSEL	1.0		1.0	
DEPUTY GENERAL COUNSEL	1.0		1.0	
EXECUTIVE ADMINISTRATIVE COORDINATOR  TOTAL:	1.0 3.0	0.0	1.0 3.0	•
IOIAL	3.0	0.0	3.0	
Operations Dept.				
DIRECTOR OF OPERATIONS	1.0		1.0	
OPERATIONS MANAGER	1.0		1.0	
OPERATIONS TECH PROJECT MANAGER	1.0		1.0	
OPERATIONS PROJECT MANAGER	1.0		1.0	
OPERATIONS PROJECT MANAGER: FLEET MTN	1.0		1.0	
OPERATIONS PROJECT MANAGER: BUS	1.0		1.0	
OPERATIONS COMPLIANCE OFFICER	1.0		1.0	
STATION AGENT SUPERVISOR	1.0		1.0	
ADMINISTRATIVE ASSISTANT	1.0		1.0	
CUSTOMER SERVICE SUPERVISOR	1.0		1.0	
CUSTOMER SERVICE LAISON	1.0		1.0	
LEAD CUSTOMER SERVICE REPRESENTATIVE	3.0		3.0	
CUSTOMER SERVICE REPRESENTATIVE-PT	3.5		3.5	
CUSTOMER SERVICE REPRESENTATIVE-FT	8.0		8.0	
LEAD STATION AGENT	1.0		1.0	
STATION AGENT-PT	2.0	0.5	2.5	
STATION AGENT-FT	12.0	3.0	15.0	
TOTAL	40.5	3.5	44.0	

#### **Budgeted Full-Time Equivalents**

		FY 2017-2018 BUDGETED POSITIONS	FY 2018-2019 ADDITIONS/ DELETIONS	FY 2018-2019 TOTAL POSITIONS	Note*
Planning & Capital Development	Dept.	λ.			
DIRECTOR OF PLANNING & CAP	ITAL DEVELOPMENT	1.0		1.0	
MANAGER OF PLANNING & CAPI	TAL DEVELOPMENT	1.0		1.0	
TRANSPORTATION PLANNING M	ANAGER.	4.0		4.0	1. F
TRANSPORTATION PLANNING M	ANAGER / EEO OFFICER	1.0		1.0	
TRANSPORTATION PLANNER		2.0		2.0	
ADMINISTRATIVE ASSISTANT		1.0		10	
PLANNING PROJECT MANAGER		1.0		1.0	
	TOTAL	11.0	0.0	11.0	•
Procurement Dept.					
DIRECTOR OF PROCUREMENT		1.0		1.0	
PROCUREMENT MANAGER		1.0		10	
PROCUREMENT CONTRACT MAI	NAGER	1.0		1.0	
CONTRACT SPECIALIST		3.0		3.0	1 F
PROCUREMENT SPECIALIST		1.0		1.Q	
PURCHASING SPECIALIST		2.0		2.0	
ADMINISTRATIVE ASSISTANT		1.0		1.0	
TOTAL		10.0	0.0	10.0	-
Safety & Security Dept.					
DIRECTOR OF SAFETY & SECUR	eITY	1.0		1.0	
SAFETY & SECURITY SPECIALIS		1.0	-1.0	0.0	
SAFETY & SECURITY COMPLIAN		1.0		1.0	
RULES MANAGER	02 011 10211	1.0		1.0	
ADMINISTRATIVE ASSISTANT		1.0		1.0	
SFRTA REPORTING OFFICER		0.0	1.0	1.0	
OF REPORTED OF FIGURE			1.0	1.0	•
	TOTAL	5.0	0.0	-5.0	
	TOTAL POSITIONS	127.5	3.5	131.0	

<sup>\*</sup> Frozen and unfunded position



GOVERNMENT FINANCE OFFICERS ASSOCIATION

# Distinguished Budget Presentation Award

PRESENTED TO

# South Florida Regional Transportation Authority Florida

For the Fiscal Year Beginning

July 1, 2017

Christopher P. Morrill

**Executive Director** 

# Appendix 10 Other Resources





- 1. Tri-Rail Coastal Link Study Website
- http://www.tri-railcoastallink.com/
- 2. Tri-Rail Coastal Link Study; Preliminary Project Development Report
- http://tri-railcoastallinkstudy.com/docs/Final%20Draft Appendix%204 April2014.pdf
- 3. 2018 On-Board Survey Report
- http://www.sfrta.fl.gov/studies-plans.aspx
- $_{-}$  Study will be available on SFRTA website in November 2018
- 4. Rail Fleet Management Plan
- http://www.sfrta.fl.gov/studies-plans.aspx
- $_{-}$  Study will be available on SFRTA website in November 2018



Produced for:

**South Florida Regional Transportation Authority** 

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