

Transportation Improvement Program (TIP)
Fiscal Years 2019/2020 to 2023/2024

Transportation Performance Management

SYSTEM PERFORMANCE REPORT



Miami-Dade Transportation
Planning Organization

June 2019



This stand-alone report documents the Miami-Dade TPO efforts to address federal and state requirements for Highway and Transit Performance Measurement and Concurrence with FAST Act



INTRODUCTION

The Miami-Dade Transportation Planning Organization (TPO), formerly called the Metropolitan Planning Organization for the Miami Urbanized Area, guides the transportation planning process in Miami-Dade County. The TPO was created on March 2, 1977 as required under Section 163.01, Florida Statutes, and is established by an Interlocal Agreement between Miami-Dade County and the Florida Department of Transportation (FDOT).

A major role of the TPO is to ensure conformance with federal regulations requiring that highways, mass transit, and other transportation facilities and services are properly developed and deployed in relation to the overall plan of urban development and to approve plans for regional and state transportation network accessibility. In addition, federal guidelines require that the use of Federal Aid for transportation projects be consistent with TPO adopted plans and programs. Federal, state and local transportation planning funds are utilized on an ongoing basis to ensure the effectiveness of the TPO planning process.

The Miami-Dade TPO's Long Range Transportation Plan (LRTP) is the plan for implementing transportation system improvements within Miami-Dade County. The LRTP is focused on providing safe mobility options, and is guided by a comprehensive vision to:

“Provide mobility options for Miami-Dade County residents and visitors and promote economic competitiveness by investing in the County’s transportation infrastructure while protecting the environment and maximizing the efficiency of the existing transportation system”

WHAT is Performance Management?

Transportation Performance Management is a strategic approach that uses system information to make investment and policy decisions to achieve performance goals at the national, state, and local levels. In short, Transportation Performance Management:

- Is systematically applied on an ongoing basis;
- Provides key information to help decision makers understand the consequences of investment decisions across transportation assets or modes;
- Improves communication between decision makers, stakeholders, and the traveling public; and

- Ensures measures and targets are developed in a cooperative fashion and are based on objective data.

WHY is Performance Management required?

The “Moving Ahead for Progress in the 21st Century” Act (MAP-21), signed into law on July 6, 2012 (Pub. L. No. 112-141) established requirements for States and MPOs to conduct performance-based planning by tracking performance measures and setting data-driven targets to measure performance. Performance-based planning ensures the most efficient investment of transportation funds by increasing accountability, transparency, and providing for better investment decisions that focus on key outcomes related to the seven Federal Highway Program performance goals (National Goals) established under MAP-21:

- **Safety** - To achieve a significant reduction in traffic fatalities and serious injuries on all public roads;
 - **Infrastructure Condition** - To maintain the highway infrastructure asset system in a state of good repair;
 - **Congestion Reduction** -To achieve a significant reduction in congestion on the National Highway System;
 - **System Reliability** - To improve the efficiency of the surface transportation system;
 - **Freight Movement and Economic Vitality** - To improve the national freight network, strengthen the ability of rural communities to access national and international trade markets, and support regional economic development;
 - **Environmental Sustainability** - To enhance the performance of the transportation system while protecting and enhancing the natural environment; and
 - **Reduced Project Delivery Delays** - To reduce project costs, promote jobs and the economy, and expedite the movement of people and goods by accelerating project completion through eliminating delays in the project development and delivery process, including reducing regulatory burdens and improving agencies’ work practices.
- [23 USC 150(b)]

Performance Management has been integrated into the transportation planning framework of the Federal Planning Factors, MAP-21 National Goals, and Federal

WHAT are the National Performance Management Measures?

Planning Emphasis Areas (see **Figure 1: Federal and State Planning Requirements and Expectations**). The “Fixing America’s Surface Transportation” Act (FAST Act), signed December 4, 2015 (Pub. L. No. 114-94) builds upon the performance requirements enacted under MAP-21 by establishing timelines for State Departments of Transportation (DOTs) and MPOs to comply with the performance requirements.

Performance measures are indicators of progress toward attaining a goal, objective, or target (a desired level of future performance). A series of Federal Rulemakings have been issued by FHWA and FTA to establish National Performance Management Measures to address the performance requirements established in MAP-21 and the FAST Act. The National Performance Management Measures are:

- Highway Safety Improvement Program,
- Assessing Pavement Condition for the National Highway Performance Program and Bridge Condition for the National Highway Performance Program, and
- Assessing Performance of the National Highway System, Freight Movement on the Interstate System, and Congestion Mitigation and Air Quality Improvement Program.

For each category above, there are specific National Performance Management Measures that will be used to assess progress. Progress will be judged by how States and MPOs perform based on self-imposed targets, relative to baseline conditions. Performance measure targets are the benchmarks against which collected data is gauged. State DOTs will establish targets for the state, while MPOs will adopt targets that are appropriate for their urbanized areas. MPOs may adopt the state’s targets or establish their own.

HOW are performance measures used?

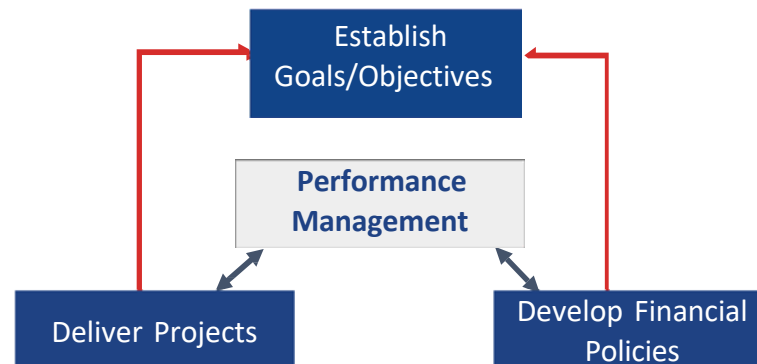
Because Florida’s transportation system improvement needs exceed available funding, resources are invested in the most strategic, effective and efficient ways possible. Performance measures provide useful “feedback” and are integrated into FDOT’s business practices on three levels:

At the strategic level – Performance measures help to establish and inform goals, objectives, and strategies as well as to monitor FDOT Mission attainment. Performance measures also communicate progress toward achieving goals in transportation plans and programs such as the Florida Transportation Plan, the Strategic Highway Safety Plan, and the Freight Mobility and Trade Plan.

At the decision-making level – Performance measures are used to inform and assess the financial policies for allocating funds among programs such as highway preservation, system expansion, and public transportation. These programs are defined in the Program and Resource Plan. Decision makers also consider various trends impacting transportation system performance.

At the project delivery level – After projects are selected, performance measures help to monitor the efficiency and effectiveness of projects and services in the Five Year Work Program and in relation to FDOT's Transportation Asset Management Plan. The measures also support organizational and operational improvements.

As shown in the **Performance-Based Planning and Programming Process** graphic below, performance management is at the heart of FDOT's planning and programming process.



FDOT uses performance measures to:

- Assess how well Florida's multimodal transportation system is functioning—including feedback from and collaboration with key stakeholder organizations

WHY do we use them?

- Provide information to support and inform decision-making
- Assess how effectively and efficiently transportation programs, projects and services are being delivered
- Determine customer satisfaction levels
- Demonstrate transparency and accountability to Florida's citizens and to foster collaboration with FDOT's transportation system stakeholders

WHAT is measured?

Each performance report is listed below along with some of the associated performance measures:

Safety – Fatal and serious injuries related to impaired driving, speeding and aggressive driving, distracted driving, at-risk drivers, vulnerable road users

Preservation – Percent of pavement and bridges meeting condition standards, percent of maintenance activities that meet department standards, roadway clearance times due to incidents and crashes

Mobility – Vehicle miles traveled, transit ridership, freight tonnage, freight and port access, hours of delay, travel time reliability, travel that is heavily congested

Economy – Return On Investment of FDOT programs, capacity funds for the SIS, Florida share of U.S. trade, Florida value of freight, construction projects completed on-time and within budget

Environment – Air quality, water quality, impacts to the physical, natural and cultural environment, vibrant and healthy communities, and customer satisfaction

HOW is Transportation Performance Management Being Implemented?

The Moving Ahead for Progress in the 21st Century Act (MAP-21) included several provisions that collectively are transforming the Federal surface transportation program to be focused on the achievement of performance outcomes.

The performance outcomes provisions, administered by different agencies within the U.S. Department of Transportation (USDOT), were implemented by rulemakings, including several under FHWA's purview. The provisions are organized by six performance management elements.

The Fixing America's Surface Transportation (FAST) Act, signed in 2015, built on the MAP-21 changes and provided long-term funding certainty for surface transportation infrastructure planning and investment.

TPM performance management outcomes are grouped into six elements to more effectively communicate the efforts under way to implement the statutory requirements.

1. **National Goals:** Congressionally established goals or program purpose to focus the Federal-aid highway program into specific areas of performance.
2. **Measures:** FHWA-established measures to assess performance/condition in carrying out performance-based Federal-aid highway programs.
3. **Targets:** Targets established by Federal-aid highway funding recipients for the measures to document future performance expectations
4. **Plans:** Development of strategic and/or tactical plans by Federal funding recipients to identify strategies and investments that address performance needs.
5. **Reports:** Development of reports by Federal funding recipients that document progress toward target achievement, including the effectiveness of Federal-aid highway investments.
6. **Accountability and Transparency:** FHWA-developed requirements for Federal funding recipients to use to achieve or make significant progress toward targets

What are the
Federal Planning
Requirements?

Per 23 CFR §450.306 Scopes of the metropolitan transportation planning process, the metropolitan transportation planning process shall be continuous, cooperative, and comprehensive; consider the Federal Planning Factors (See **Figure 1: Federal Planning Requirements and Expectations**), and provide a performance-based approach to decision making. Performance-based planning requires MPOs to establish performance targets that address the performance measures or standards of the National Performance Management Measures, Public Transportation Safety Program, and Transit Asset Management. **Figure 2: FHWA Performance Measures Implementation Requirements in Florida** outlines the schedule for the incorporation of the National Performance Management Measures into the planning process. MPOs shall also *“integrate into the metropolitan transportation planning processes, directly or by reference, the goals, objectives, performance measures, and targets* described in

other State transportation plans and processes as well as any plans developed under 49 USC chapter 53 by providers of public transportation, including:”

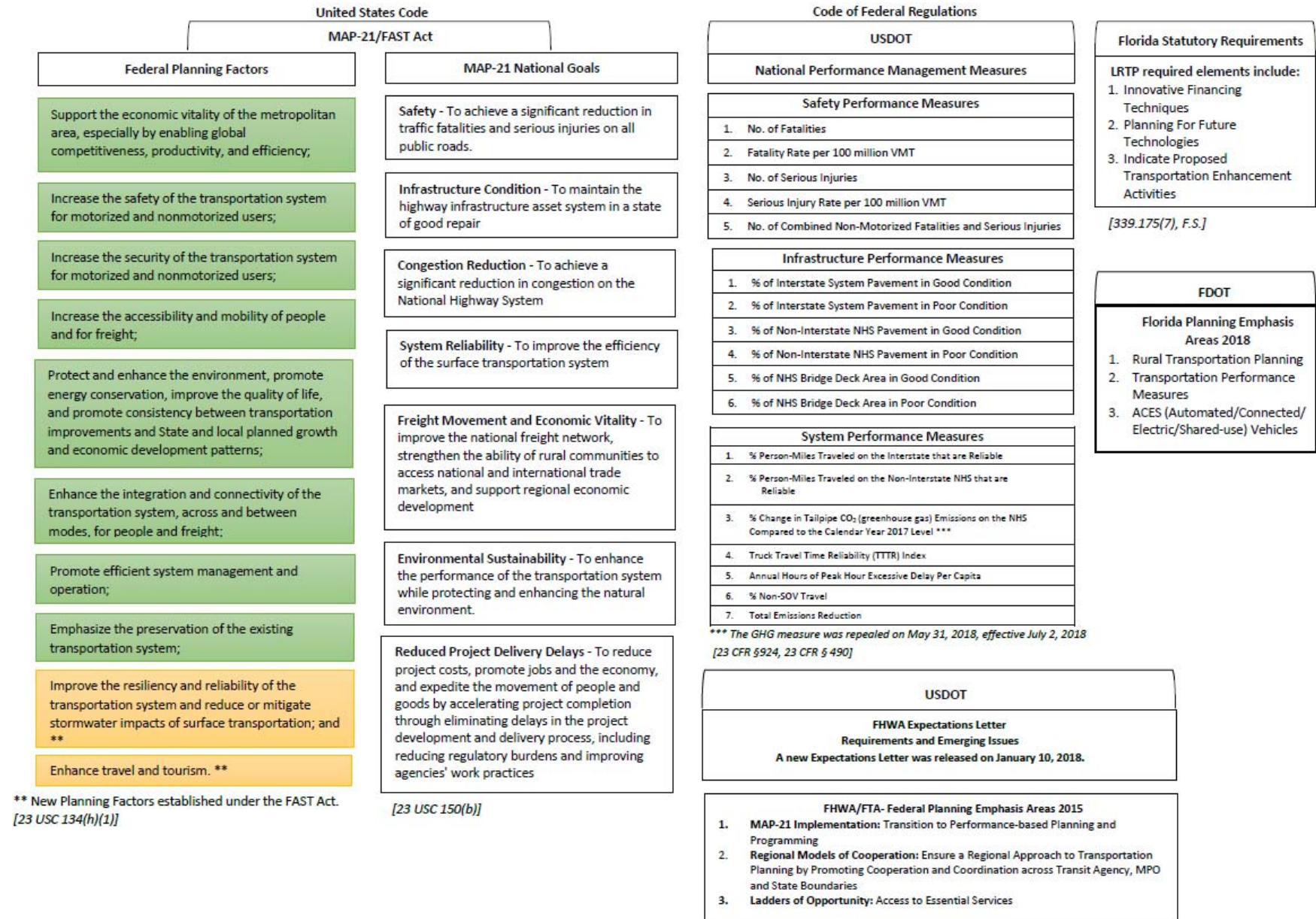
- State asset management plan and Transit asset management plan;
- Appropriate portions of the Strategic Highway Safety Plan;
- Public Transportation Agency Safety Plan;
- Other safety and security planning and review processes, plans, and programs;
- The CMAQ Program Performance Plan, if applicable;
- Appropriate portions of the State Freight Plan;
- The congestion management process, if applicable; and
- Other State transportation plans and processes required as part of a performance-based program.

Per 23 CFR §450.324 Development and content of the metropolitan transportation plan, the MPO Long Range Transportation Plan (LRTP) shall include the following for the National Performance Management Measures:

- A ***description of the National Performance Management Measures and established performance targets*** used in assessing the performance of the transportation system
- A ***System Performance Report*** evaluating the condition and performance of the transportation system, including progress achieved by the MPO in meeting performance targets.
- MPOs that voluntarily elect to conduct scenario planning shall describe how the preferred scenario has “improved” performance of the transportation system. 23 CFR §450.324

Additionally, per 23 CFR §450.326 Development and content of the transportation improvement program (TIP), the Transportation Improvement Program (TIP) shall make progress toward achieving performance targets and include a ***description of the anticipated effect of the TIP toward achieving the performance targets*** identified by the MPO in the LRTP, linking investment priorities in the TIP to those performance targets.

Figure 1: Federal Planning Requirements and Expectations



** New Planning Factors established under the FAST Act. *[23 USC 134(h)(1)]*

Figure 2: FHWA Performance Measures Implementation Requirements in Florida

Rev. 5/22/18 Prepared by FHWA/FL Division

*Technical correction on due date forthcoming.

Summary of FHWA Performance Measures Implementation Requirements in Florida							
Agency	Safety Measures	Freight Plan	Asset Management Plan ²	Planning Requirements	System Performance Measures*	Bridge Measures	Pavement Measures
FDOT Due Date (Target, Plan, etc)	Aug 31, 2017	Dec 4, 2017	Apr 30, 2018	May 27, 2018	May 20, 2018 Actual: May 18	May 20, 2018 Actual: May 18	May 20, 2018 Actual: May 18
MPO Due Date (Target)	Feb 27, 2018	N/A	N/A	May 27, 2018	Nov 16, 2018 Nov 14, 2018	Nov 16, 2018 Nov 14, 2018	Nov 16, 2018 Nov 14, 2018
L RTP and S/TIP Due Date for Performance Measures Requirements (2 Years After Effective Date)	Apr 18, 2018 ¹	N/A	N/A	May 27, 2018	May 20, 2019	May 20, 2019	May 20, 2019
L RTP							
L RTP	Safety Measures	Freight Plan	Asset Management Plan ²	Planning Requirements	System Performance Measures	Bridge Measures	Pavement Measures
Any L RTP Amended By May 26, 2018				N/A			
Any L RTP Amended Between May 27, 2018 and May 19, 2019	X	X	X	X			
Any L RTP Amended Between May 20, 2019 and the MPO's next L RTP adoption date 2019/2020/2021/2022 (First L RTPs Due Oct 2019)	X	X	X	X	X	X	X
Any L RTP Adopted 2019/2020/2021/2022	X	X	X	X	X	X	X
S/TIP ³							
S/TIP	Safety Measures	Freight Plan	Asset Management Plan ²	Planning Requirements	System Performance Measures	Bridge Measures	Pavement Measures
S/TIP Effective October 1, 2017				N/A			
Any S/TIP Amended Between October 1, 2017 and May 26, 2018				N/A			
Any S/TIP Amended Between May 27, 2018 and September 30, 2018	X	X	X	X			
S/TIP Effective October 1, 2018	X	X	X	X			
Any S/TIP Amended Between Oct 1, 2018 and May 19, 2019	X	X	X	X			
Any S/TIP Amended Between May 20, 2019 and September 30, 2019	X	X	X	X	X	X	X
S/TIP Effective October 1, 2019 and Beyond	X	X	X	X	X	X	X
Legend:							
Related to Performance Measures (Final Rules: 3/15/16, 1/18/17, 5/19/17)							
Related to Plans the MPO Needs to Integrate per 23 CFR 450.306(d)(4), which may or may not have Performance Measures (Federal Register Notice:10/14/16, Final Rule: 10/24/16)							
Related to New Planning Requirements (Final Rule: 5/27/16)							

¹The 2 year implementation date for the safety PM is Apr 2018. Since the planning rule is not effective until May 2018, that is when the Safety PM is required to be implemented.

² 6/30/2019: FDOT Submits Asset Management Plan Meeting All Requirements; 11/23/2020: FDOT must prepare an evaluation to determine if there are reasonable alternatives to roads, highways, and bridges that have required repair and reconstruction activities on two or more occasions due to emergency events prior to including any project relating to such facility in the STIP. {23 CFR 667.7(b)}

³ If targets are set and effective, the S/TIP is expected to meet the associated performance measurement requirements even if the L RTP has not yet been updated.

Next L RTP Due Dates		
October 2019: Palm Beach (16); Miami-Dade (23)	October 2020: Gainesville (5); Charlotte-Punta Gorda (5); Space Coast (8)	Feb 2021: St. Lucie (3)
November 2019: Hillsborough (12); North Florida (13)	November 2020: Florida-Alabama (3); Capital Region (16); Ocala-Marion (24)	March 2021: Heartland (16)
December 2019: Hernando-Citrus (9); Pinellas (10); Broward (11); Pasco (11)	December 2020: METROPLAN (9); Lake Sumter (9); Indian River (9); Polk (10);	June 2021: Bay (22)
September 2020: River to Sea (23)	Collier (11); Martin (14); Sarasota-Manatee (14); Lee (18)	Feb 2022: Okaloosa-Walton (16)

Long Range
Transportation Plan
(LRTP) and
Transportation
Improvement
Program (TIP)
Compliance

The FDOT Highway Safety Plan, Highway Safety Improvement Program, Freight Mobility Plan, and Asset Management Plan have been incorporated, by reference, into the 2040 LRTP and 2020 TIP as part of LRTP and TIP amendments through Resolution #33-19 (June 20, 2019).

Transportation Improvement Program (TIP)
Fiscal Years 2019/2020 to 2023/2024

Transportation Performance Management

SYSTEM PERFORMANCE REPORT

SAFETY



Miami-Dade Transportation
Planning Organization

SAFETY PERFORMANCE MANAGEMENT MEASURES

Safety is the first National Goal identified in MAP-21 and maintained in the FAST Act. In March of 2016, the Highway Safety Improvement Program (HSIP) Final Rule and National Performance Management Measures: Highway Safety Improvement Program Final Rule (known as the Safety Performance Management Measures (Safety PM) Final Rule) were published in the Federal Register [23 CFR 924, 23 CFR 490]. The HSIP Final Rule was established to clarify requirements under the HSIP and address MAP-21 and the FAST Act for consistency. The objective of the HSIP is to “significantly reduce fatalities and serious injuries resulting from crashes on all public roads,” [23 CFR 924].

Performance Management Measures

The Safety PM Final Rule was developed to support the HSIP and requires State DOTs and MPOs to set targets for the following Safety Performance Management Measures (which apply to all public roads) and to report on progress toward achieving those targets to the State DOT.

- Number of Fatalities
- Fatality Rate per 100 million Vehicle Miles Traveled (VMT)
- Number of Serious Injuries
- Serious Injury Rate per 100 million VMT
- Number of Combined Non-Motorized Fatalities and Serious Injuries

Performance Targets

FDOT’s 2017 Highway Safety Improvement Program (HSIP) report includes a Target of zero for each of the five federal Safety Performance Management Measures. The Miami-Dade TPO coordinated with FDOT through the statewide Metropolitan Planning Organization Advisory Council (MPOAC) and is supporting the same targets. The Miami-Dade TPO originally adopted the Florida Department of Transportation’s (FDOT) target of zero traffic fatalities and serious injuries for Calendar Year 2018 per Resolution 05-18 on January 25, 2018. FDOT issued the same target of zero traffic fatalities and serious injuries for Calendar Year 2019, which the Miami-Dade TPO adopted (Per Resolution 08-19 on January 24, 2019 illustrated on the next page in **Figure 1: TPO Resolution**), which establishes the relationship between performance, plans, and programs, and provides the basis and foundation for this performance framework.

Figure 1: TPO Resolution

TPO RESOLUTION #08-19

Agenda Item 7.B.5

RESOLUTION ESTABLISHING THE FLORIDA DEPARTMENT OF TRANSPORTATION'S (FDOT) "VISION ZERO" SAFETY PERFORMANCE MEASURE TARGETS FOR TRAFFIC FATALITIES AND INJURIES FOR CALENDAR YEAR 2019

WHEREAS, the Interlocal Agreement creating and establishing the Miami-Dade Metropolitan Planning Organization (MPO), for the Miami Urbanized Area, now known as the Transportation Planning Organization (TPO), requires that the TPO provide a structure to evaluate the adequacy of the transportation planning and programming process; and

WHEREAS, the Transportation Planning Council (TPC) has been established and charged with the responsibility and duty of fulfilling the aforementioned functions; and

WHEREAS, the Moving Ahead for Progress in the 21st Century Act (MAP-21) required the USDOT to establish mobility performance measures for fatalities and serious injuries, both number and rate per vehicle mile traveled, on all public roads; and

WHEREAS, federal rules developed to implement MAP-21 require that state DOTs establish statewide targets each year for the traffic safety performance measures: number of fatalities, rate of fatalities, number of serious injuries, rate of serious injuries and number of non-motorized fatalities and non-motorized serious injuries; and

WHEREAS, MPOs have the option to support the statewide performance measure targets or establish their own; and

WHEREAS, the 2018 Florida Highway Safety Improvement Program includes "Vision Zero" targets for federal safety performance measures for 2019; and

WHEREAS, the TPO has coordinated the establishment of "Vision Zero" performance measure targets with FDOT through the statewide Metropolitan Planning Organization Advisory Council; and

WHEREAS, the TPC has reviewed the attached Florida Department of Transportation's (FDOT) 2019 "Vision Zero" Performance Measure Targets for Traffic Fatalities and Injuries, and finds them consistent with the goals and objectives of the Transportation Plan for the Miami Urbanized Area,

NOW, THEREFORE, BE IT RESOLVED BY THE GOVERNING BOARD OF THE TRANSPORTATION PLANNING ORGANIZATION IN ITS ROLE AS THE MPO FOR THE MIAMI URBANIZED AREA, that this Board hereby establishes the Florida Department of Transportation's (FDOT) "Vision Zero" Safety Performance Measure Targets for: fatalities; rate of fatalities; serious injuries; rate of serious injuries and non-motorized fatalities and serious injuries for calendar year 2019.

The adoption of the foregoing resolution was moved by Board Member Sally A. Heyman. The motion was seconded by Board Member Rebeca Sosa, and upon being put to a vote, the vote was as follows:

Chairman Esteban L. Bovo, Jr.-Aye
Vice Chairman Francis Suarez-Aye

Board Member Juan Carlos Bermudez	-Absent	Board Member Vince Lago	-Aye
Board Member Jose "Pepe" Diaz	-Absent	Board Member Daniella Levine Cava	-Aye
Board Member Audrey M. Edmonson	-Aye	Board Member Roberto Martell	-Aye
Board Member Dan Gelber	-Absent	Board Member Joe A. Martinez	-Absent
Board Member Oliver G. Gilbert, III	-Aye	Board Member Jean Monestime	-Aye
Board Member Perla T. Hantman	-Aye	Board Member Dennis C. Moss	-Aye
Board Member Carlos Hernandez	-Absent	Board Member Stephen R. Shelley	-Aye
Board Member Sally A. Heyman	-Aye	Board Member Shelly Smith Fano	-Aye
Board Member Eileen Higgins	-Aye	Board Member Rebeca Sosa	-Aye
Board Member Barbara J. Jordan	-Aye	Board Member Javier D. Souto	-Absent
Board Member Smith Joseph	-Absent	Board Member Xavier L. Suarez	-Aye

The Chairperson thereupon declared the resolution duly passed and approved this 24th day of January, 2019.

TRANSPORTATION PLANNING ORGANIZATION

By *Zainab Salim*
 Zainab Salim, Clerk
 Miami-Dade TPO



Safety Performance Management

In 2012, Florida adopted “Driving Down Fatalities,” their version of the national traffic safety vision “Toward Zero Deaths.” Understanding that zero fatalities cannot be reached within the 2018 Highway Safety Plan (HSP), Florida developed data models to forecast the number of fatalities and serious injuries that are statistically expected to occur to drive down fatalities and serious injuries with an ultimate vision of zero. [Source: SHSP, HSP] (2017 Florida Highway Safety Improvement Program). FDOT firmly believes that every life counts and established a 2019 target of zero for each of the Safety Performance Management Measures. The targets for the five Safety Performance Management Measures for FDOT and the Miami-Dade TPO for 2019 are shown in **Table 1: 2019 Safety Performance Management Measure Targets.**

Table 1: 2019 Safety Performance Management Measure Targets

Safety Performance Measure	2019 FDOT Statewide Safety Targets
Number of Fatalities	0
Fatality Rate per 100 million Vehicle Miles Traveled (VMT)	0
Number of Serious Injuries	0
Serious Injury Rate per 100 million Vehicle Miles Traveled (VMT)	0
Number of Combined Non-Motorized Fatalities and Serious Injuries	0

Safety Performance Management Measure targets are reestablished yearly. Annually in August, FDOT will report the next year’s targets in the HSIP Annual Report to FHWA. The following February, the TPO will adopt FDOT’s targets or establish their own.

Baseline Conditions

Safety Performance Management Measures are evaluated using a 5-year rolling average of traffic crash data and vehicle miles traveled. Baseline safety performance conditions are established based on the 5-year rolling average ending in the calendar year prior to the establishment of the State’s target. Florida (i.e., FDOT) established its target for Safety Performance Management Measures in 2018. Therefore, the baseline year for Florida MPOs is 2017 (the latest data that was available in 2018). The baseline performance for Florida and Miami-Dade County are shown in **Table 2: Baseline Safety Performance Management Measures** below.

**Table 2: Baseline Safety Performance Management Measures
(2013-2017 5-Year Average)**

Performance Measure	Florida	Miami-Dade County
Number of Fatalities	2,821.0	284.8
Fatality Rate per 100 million Vehicle Miles Traveled (VMT)	1.4	1.5
Number of Serious Injuries	20,910.0	1,807.0
Serious Injury Rate per 100 million Vehicle Miles Traveled (VMT)	10.1	9.3
Number of Combined Non-Motorized Fatalities and Serious Injuries	3,249.0	426.0

Source: Traffic counts are from FDOT Transportation Statistics Office document “Summary Since 1990”, “DVMT” tab, titled “Daily Vehicle Miles Traveled on Public Roads in Florida”, available from <http://www.dot.state.fl.us/planning/statistics/mileage-pts/public.shtm>. Turnpike figures are estimated from additional information provided by ISO. Fatal and serious injury counts are from FDOT Safety Office’s Crash Analysis Reporting (CAR) database as of 12-19-2018.

Trends for Miami-Dade – Statistics

The trends or patterns in the data over a period a time may provide information towards meeting a target. The 5-year rolling average performance measure data for Miami-Dade County for the last five years is shown in **Table 3: Miami-Dade Safety Performance Management Measure Data**.

**Table 3: Miami-Dade Safety Performance Management Measure Data
(5-Year Rolling Average)**

Performance Measure	2009 - 2013	2010 - 2014	2011 - 2015	2012 - 2016	2013- 2017
Number of Fatalities	242.8	246.6	265.0	273.8	284.8
Fatality Rate per 100 million Vehicle Miles Traveled (VMT)	1.263	1.284	1.378	1.417	1.452
Number of Serious Injuries	1959.0	1992.0	1992.2	1894.4	1,807.0
Serious Injury Rate per 100 million Vehicle Miles Traveled (VMT)	10.206	10.383	10.386	9.854	9.250
Number of Combined Non-Motorized Fatalities and Serious Injuries	411.8	425.8	446.0	436.0	426.0
VMT (100 MVMT)	192.083	191.912	191.876	192.652	INSERT

DATA SOURCES: fatality and serious injury counts from Florida Dept. of Transportation (FDOT) State Safety Office's Crash Analysis Reporting (CAR) database as of December 19, 2018; traffic volumes as published by the FDOT office of Transportation Data and Analytics at <http://www.fdot.gov/planning/statistics/mileage-rpts/>.

Figure 2: Number/Rate of Fatalities and Serious Injuries

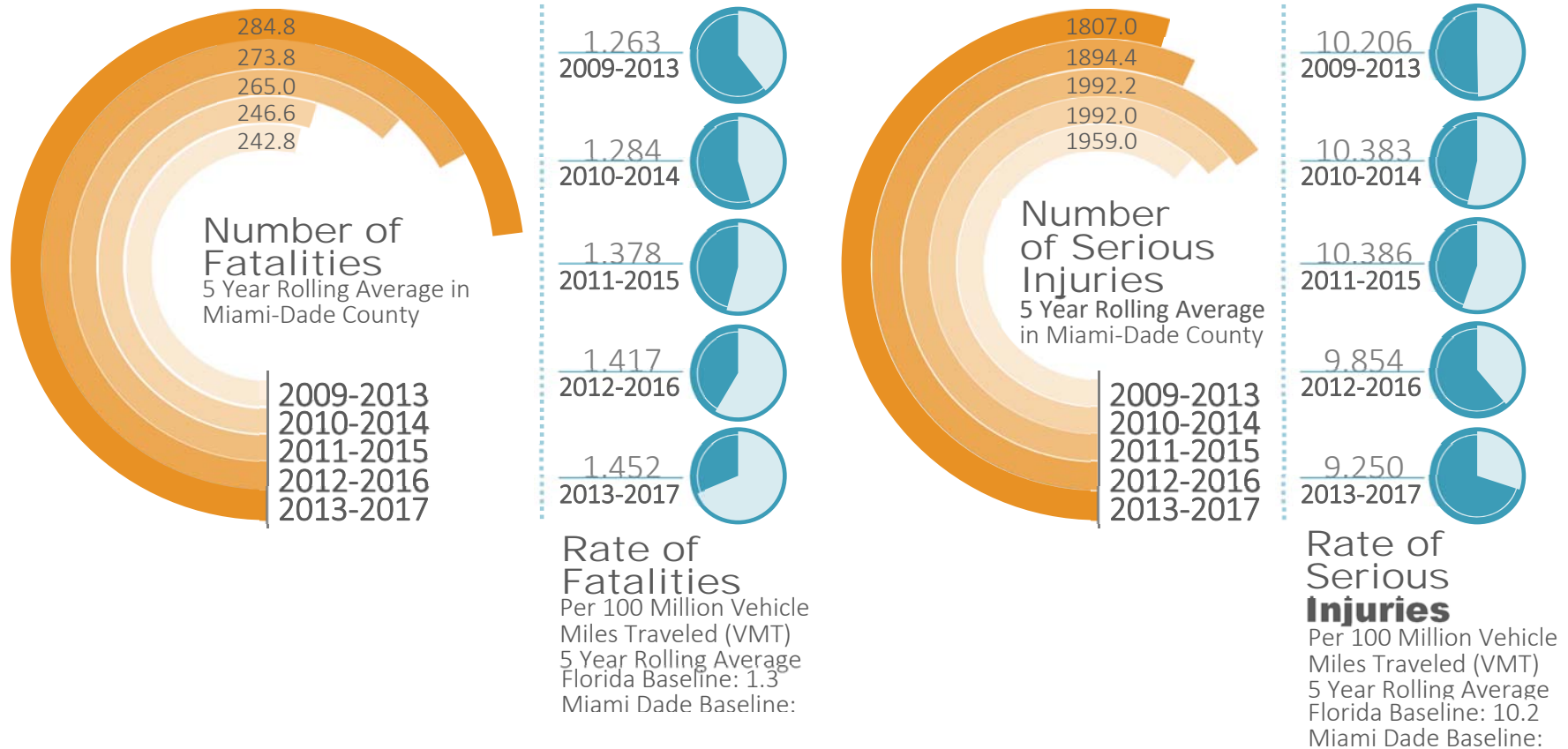


Figure 2: Number/Rate of Fatalities and Serious Injuries above shows the number of Miami-Dade County fatalities by a 5-year rolling average (shown in ending calendar year) and the rate of fatalities per 100 million VMT and the number of Miami-Dade County serious injuries by a 5-year rolling average (shown in ending calendar year) and the rate of serious injuries per 100 million VMT.

Figure 3: Number of Non-Motorized Fatalities and Serious Injuries

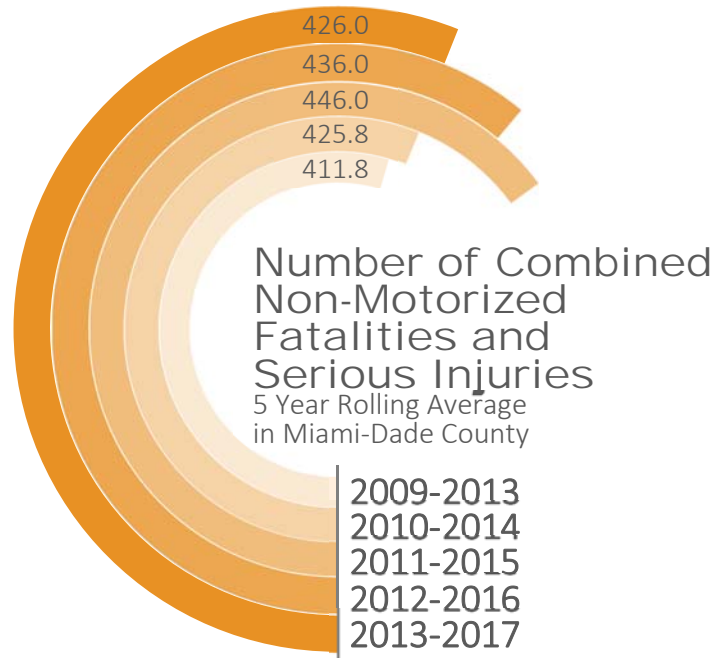


Figure 3: Number of Non-Motorized Fatalities and Serious Injuries above shows the number of Miami-Dade County combined bicycle and pedestrian fatalities and serious injuries by a 5-year rolling average (shown in ending calendar year).

Figure 4: Vehicle Miles Traveled

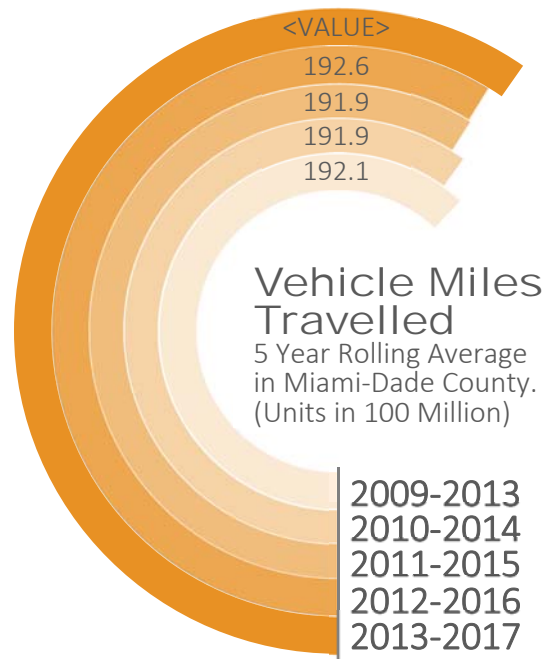
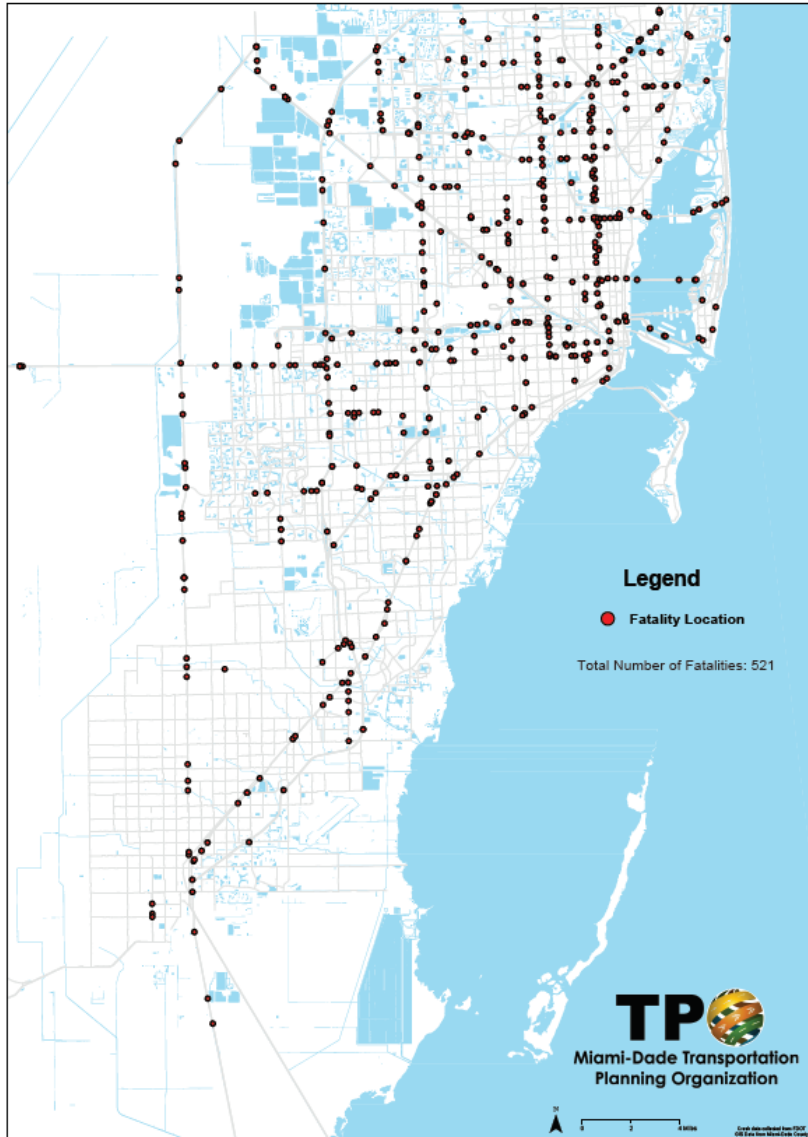


Figure 4: Vehicle Miles Traveled above shows Miami-Dade County vehicle miles traveled (in 100 million VMT) by a 5-year rolling average (shown in ending calendar year).

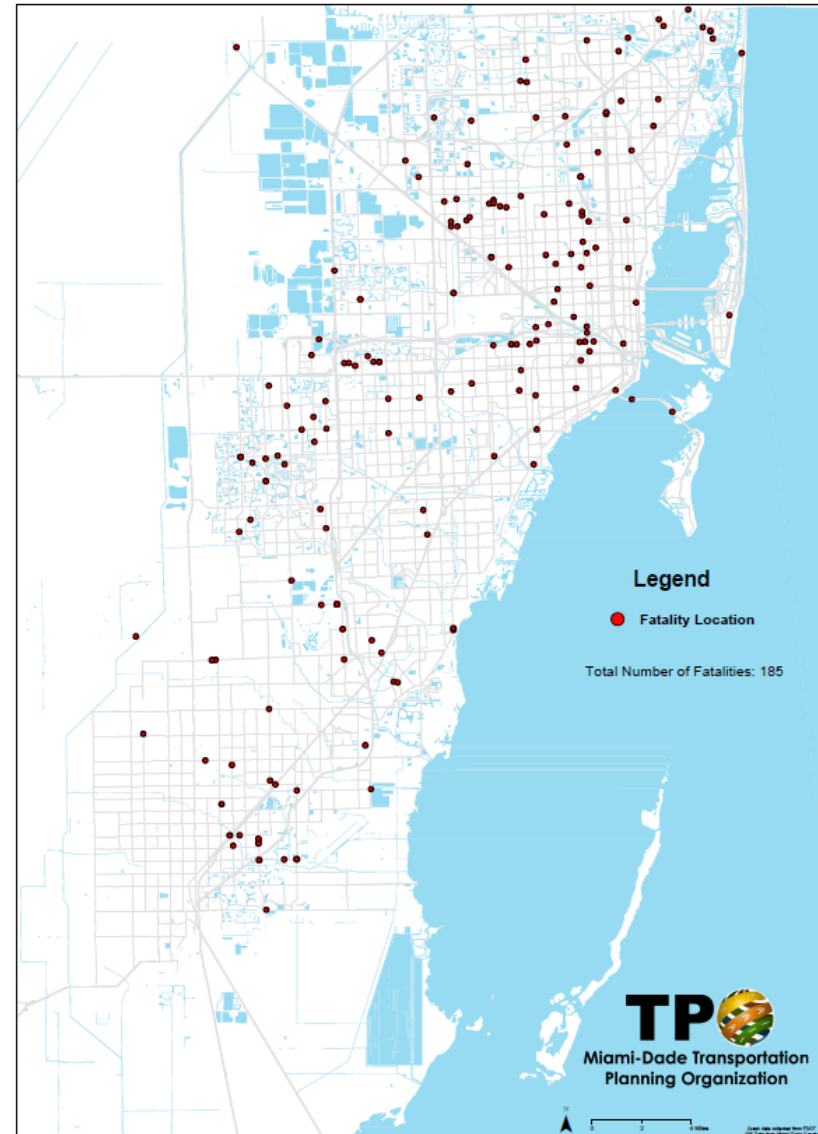
Maps identifying the fatalities in Miami-Dade County on the State Highway System and off the State Highway System for 2010 – 2014 and the high crash locations in Miami-Dade County on and off the State Highway System for 2010 – 2014 are depicted in the following 4 maps.

On State Highway System Fatalities 2010-2014



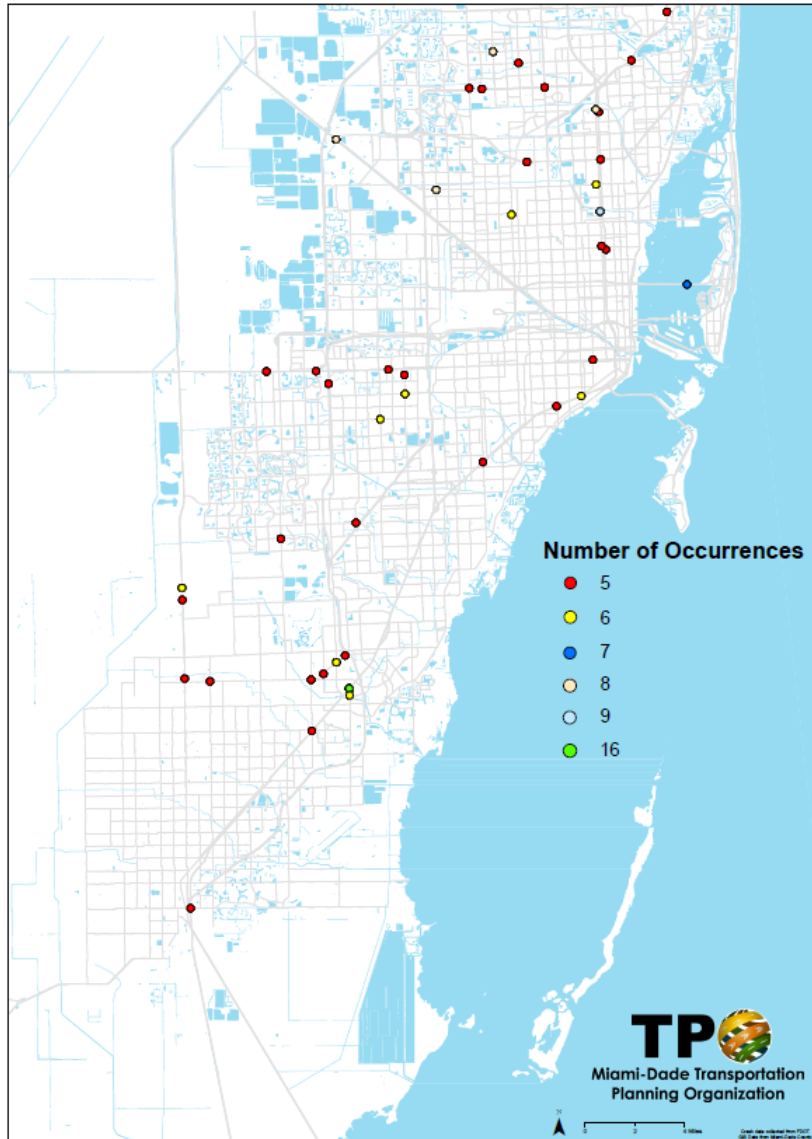
THE CORRADINO GROUP

Off State Highway System Fatalities 2010-2014



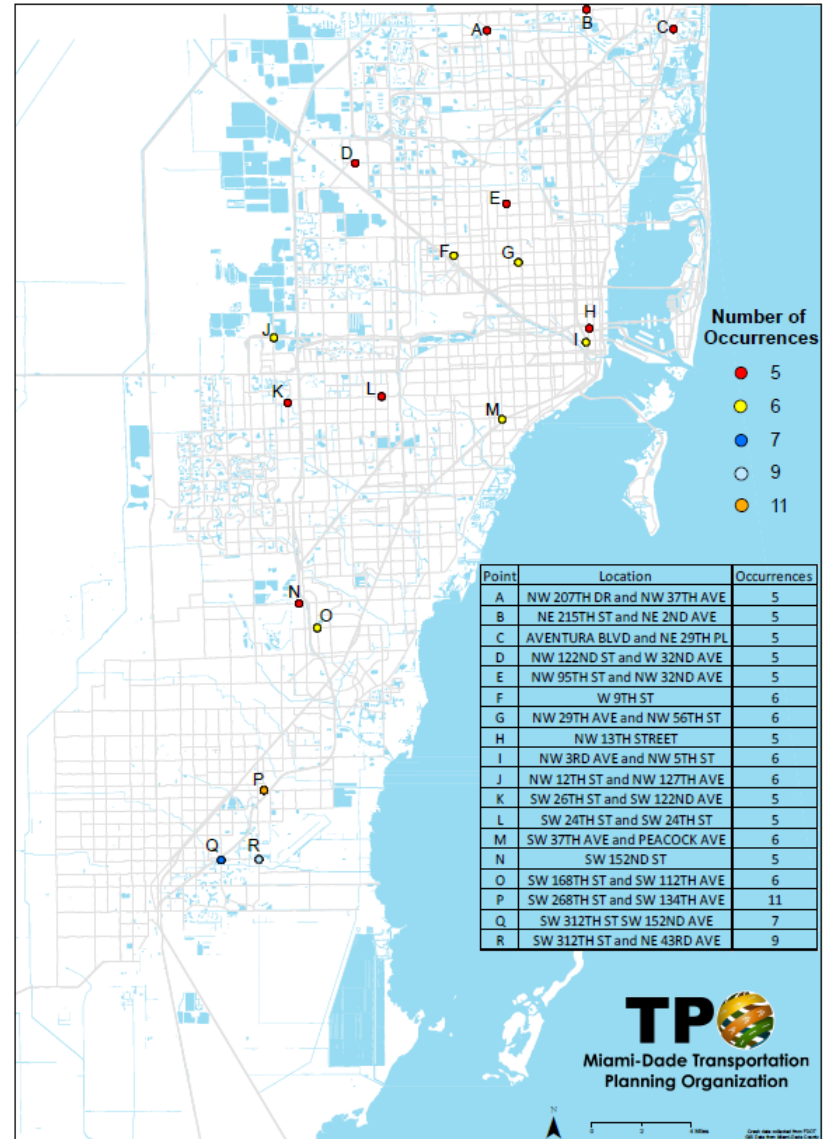
THE CORRADINO GROUP

On State Highway System High Crash Networks 2010-2014



THE
CORRADING
GROUP

Off State Highway System High Crash Networks 2010-2014



THE
CORRADING
GROUP

Assessment of Significant State Progress

Florida's performance on meeting the Safety Performance Management Measures will be assessed by FHWA by determining if the state's target has been met or if significant progress toward meeting the target was made. "A State DOT is determined to have met or made significant progress toward meeting its targets when the targets for at least 4 out of the 5 safety performance targets are met or the outcome for a performance measure is better than its baseline." (<http://safety.fhwa.dot.gov>; Let's Talk Performance Webinar FAQs, Safety Performance Management Measures; page 5).

The first assessment of significant progress will be conducted by FHWA in December 2019 to see if Florida met its 2014-2018 HISP targets. The 2012-2016 baseline data will be used to assess whether significant progress was made. Subsequent assessments will be conducted in December of each year for the next rolling 5-year period for targets and baseline data (i.e.: the assessment in December 2020 will determine if the targets for 2015-2019 were met or significant progress made toward the 2013-2017 baseline conditions).

Contributions to Achieving Safety Performance Targets

The Miami-Dade TPO and the Florida Department of Transportation (FDOT) are committed to making roadways safer in Miami-Dade County as a means to improve Florida's overall level of safety. The TPO has many programs, initiatives, and projects identified in the Miami-Dade Transportation Improvement Program (TIP) and the 2040 Long Range Transportation Plan to make transportation safer in Miami-Dade County. FDOT's key plan is its Work Program. The TPO and FDOT coordinate their plans and programs in order to improve the safety of the Miami-Dade transportation system.

"The TIP shall reflect the investment priorities established in the current metropolitan transportation plan . . ." (23 CFR 450.326). The transportation plan (LRTP) "shall include both long-range strategies/actions that provide for the development of an integrated multimodal system..." (23 CFR 450.24). The TIP considers potential projects that fall into specific investment priorities established by the MPO in the Long Range Transportation Plan (LRTP). The TIP includes specific investment priorities that support all of the MPOs goals including safety, using a prioritization and project selection process established in the LRTP. This process evaluates projects that have an anticipated effect of reducing both fatal and injury crashes.

Miami-Dade TPO

Transportation Improvement Plan

A preliminary review of the FY 2019/2020 to FY 2023/2024 Miami-Dade Transportation Improvement Program (TIP) includes 48 projects totaling \$99 million in Safety Improvement Projects. The projects identified as contributing to the achievement of Miami-Dade County's safety performance targets are on page PM-27 and PM-28. The FY 2019/2020 to FY 2023/2024 TIP is located on the internet at: http://www.interactip.com/?page_id=720. This includes Safe Routes to School projects, pedestrian safety projects,

intersection safety projects and safety pushbutton projects. The Safety Performance Management Measures are incorporated into the 2019/2020 to 2023/2024 TIP to continue to advance transportation safety and link our investments to achieve our safety targets.

Long Range Transportation Plan Priorities

The Miami-Dade 2040 LRTP emphasizes the TPO's commitment to safety through the goals identified in the plan. One of the LRTP's goals is to *Increase Safety*, which includes the following objectives:

- Reduce roadway & multimodal crashes,
- Improve safety on facilities & in operations, and
- Provide safe and easy pedestrian and non-motorized travel.

There are numerous projects listed in the 2040 LRTP that will help improve safety of the Miami-Dade transportation system, including: capacity and operational improvements, redesigns of roadway segments, grade separations, transportation systems management and operation (TSM&O), roadway and access improvements, adding truck lanes, and reconstruction projects. For a complete list of projects, please see Chapter 6 of the Miami-Dade 2040 LRTP; <http://www.miamidade2040lrtp.com/>.

The Miami-Dade 2040 Bicycle/Pedestrian Plan serves as the non-motorized transportation element of the 2040 LRTP. The vision of the Miami-Dade 2040 Bicycle/Pedestrian Plan is to enhance the accessibility, safety, public health, social equity, environment, and overall quality of life within Miami-Dade County by creating interconnected bicycle and pedestrian friendly communities throughout the county—with safety being a key component of the plan. A snapshot of the number of projects by Priority, improvement type, and funding allocation by priority and phase from the 2040 LRTP are summarized in **Figure 6: Bicycle/Pedestrian Projects by Improvement Type and Priority** and **Figure 7: Allocation of Bicycle/Pedestrian Funding by Priority and Phase (Thousands YOE \$)** on the next page.

Figure 6: Bicycle/Pedestrian Projects by Improvement Type and Priority

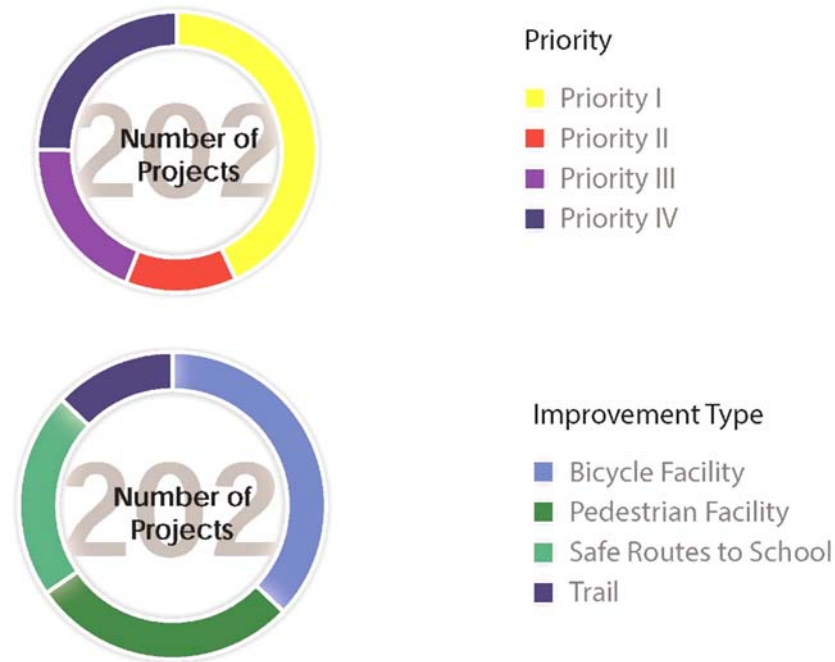


Figure 7: Allocation of Bicycle/Pedestrian Funding by Priority and Phase (Thousands YOE \$)



Note: Snapshot does not include the Improvements to Safety Through Public Outreach Initiatives.

Unified Planning Work Program (UPWP)

The Miami-Dade TPO Unified Planning Work Program (UPWP) for Transportation Planning Activities, Fiscal Years 2019/2020, outlines the planning projects the TPO will undertake to improve Miami-Dade County's multimodal transportation system. The UPWP identifies the planning projects budgets and activities that support the comprehensive and multimodal transportation improvement program approved for the metropolitan area in the 2040 LRTP. The planning efforts in the UPWP must implement the transportation priorities in the County Comprehensive Plan, which are based on the goals from the 2040 LRTP—inclusive of improving the safety of the transportation system for all users. Safety is addressed specifically in the Aging Road Users Strategic Safety Plan, Municipal Grant Program - South Miami Pedestrian Safety and Mobility Infrastructure Improvement Plan, and several Safe Routes to School tasks. Safety is also woven into many tasks that address safety improvements for trucking and goods movement and improving bicycle and pedestrian safety.

SMART Moves Program: Connecting SMART Ideas

The SMART Moves Program will be used by the TPO to prioritize and program planning studies in Miami-Dade that will support the delivery of projects including complete streets, first/last mile connections, connected and autonomous vehicles and other priority projects that enhance connectivity, accessibility, and integration of the entire transportation system.

The SMART Moves Program can potentially utilize federal funding that is the responsibility of the TPO (such as Metropolitan Planning Funds (PL), Federal Transit Administration Section 5305(d) Funds, Congestion Mitigation for Air Quality (CMAQ), Surface Transportation Block Grant Program, etc.). This process will involve a once-a-year call for all local roadway, transit, freight, bicycle and pedestrian projects, and will result in an annual portfolio of projects in the UPWP.

The SMART Moves Program has two components:

- 1) Call for SMART Ideas: Connecting SMART Ideas to collect the public's input.
- 2) Application from Municipalities, which provides a mechanism to partner with local agencies for the implementation of projects.

Program Objectives

- Provide a mechanism for the TPO to partner with local agencies in the implementation of projects that will support complete streets, first/last mile connections, connected and autonomous vehicles and the SMART Plan.
- Develop a holistic approach for identifying and prioritizing highly effective transportation projects.
- Assist local agencies with delivery of multimodal projects that support transportation priorities in Miami-Dade County.
- Create a tracking system to monitor project status and expenditure of programmed funds.

Vision Zero

The TPO is developing a plan for implementing safety countermeasures aimed at reducing the number of vehicular fatalities and serious injuries in Miami-Dade County, giving special emphasis to vulnerable road users (pedestrians, bicyclists, motorcyclists, transit riders, as well as construction workers and emergency services personnel) using a systematic safety planning process. A data-driven approach is being designed to identify and address high crash areas to reduce the number and severity of traffic crashes, and improve the environment for residents and visitors, especially critical populations such as children and the elderly. The Vision Zero Plan is currently expected to be complete by the Summer of 2018.

FDOT

Bicycle/Pedestrian Corridor Improvements

The bicycle/pedestrian network is a component of the overall transportation system. FDOT evaluates bicycle and pedestrian improvements in conjunction with capacity and resurfacing projects. Bicycle and pedestrian projects are also implemented by local agencies, who oversee construction and management. In addition, some projects are funded through the federally funded Transportation Alternatives Program (TAP) or the state funded Shared Use Non-motorized (SUN) Trail Program.

Safe Routes to School

Florida's Safe Routes to School (SRTS) program is designed to help communities address school transportation safety needs and to encourage students to walk or ride their bicycle to school. The program encourages children to walk and bike to school by making walking and biking safe and appealing. The SRTS program integrates safety, traffic relief, health, environmental awareness and physical activity and fitness within a single program that is aimed at increasing walking and bicycling to school safely.



Complete Streets Projects

FDOT's Complete Streets Policy, adopted in September 2014, promotes safety, quality of life, and economic development. FDOT developed the Complete Streets Implementation Plan in partnership with the national not-for-profit organization Smart Growth America to guide FDOT's efforts to implement its Complete Streets Policy. The Plan recommended a five-part implementation framework for integrating a Complete Streets approach into FDOT's practices to ensure that future transportation decisions and investments address the needs of all users of the transportation system and is responsive to community goals and context. The Plan also proposed a two-year schedule for Complete Streets Implementation, including: (1) revising guidance, standards, manuals, policies, and other documents; (2) updating decision-making processes; (3) modifying approaches for measuring performance; (4) managing internal and external communication and collaboration during implementation; and (5) providing ongoing education and training.

Figure 8: Summary of Safety Performance Management Measures

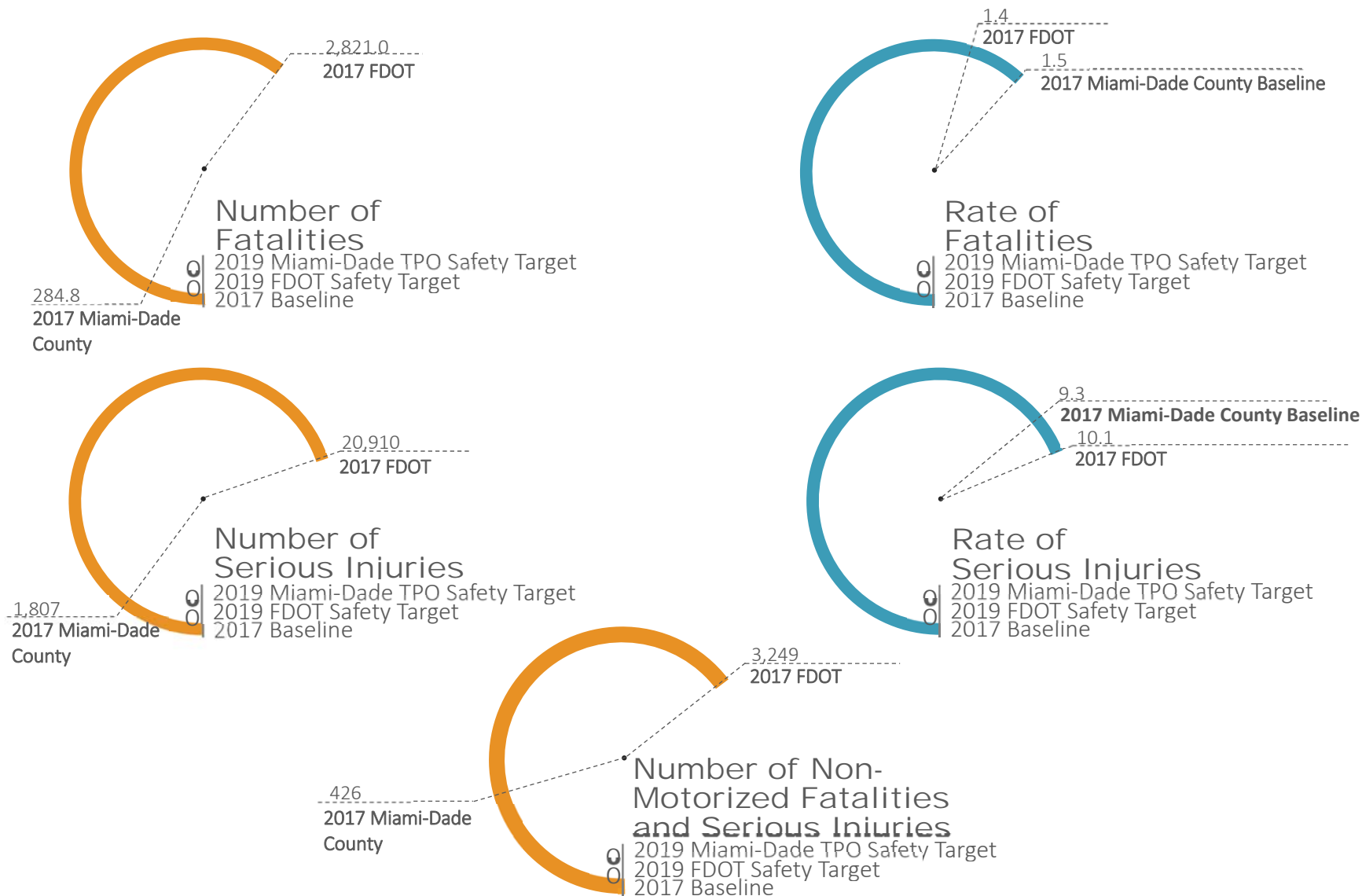


Figure 8: Summary of Safety Performance Management Measures shows a summary of the five Safety Performance Management Measures including: 2017 FDOT and Miami-Dade TPO baseline and 2019 FDOT and Miami-Dade TPO targets.

Safety Performance Management

D6 TIP Download 5 Year All Funds FY20-24 Safety Projects

Item Number:	Item Segment:	Project Description	Type of Work Description	Project Length	All Years	FY 2020-2024
249796	5	Districtwide Traffic Operations - Safety Studies Consultants	Safety Project		\$ 1,438,000	\$ 3,000
249796	8	Districtwide Traffic Operations - Safety Studies Consultants	Safety Project		\$ 1,135,000	\$ 1,130,000
249796	9	Districtwide Traffic Operations - Safety Studies Consultants	Safety Project		\$ 453,000	\$ 453,000
250650	4	Districtwide Traffic Operations - Safety Studies Consultants	Traffic Engineering Study		\$ 1,512,000	\$ 1,003,000
250650	5	Districtwide Traffic Operations - Safety Studies Consultants	Traffic Engineering Study		\$ 600,000	\$ 600,000
250654	1	Districtwide Community Safety	Safety Project		\$ 1,623,000	\$ 270,000
250662	4	Districtwide Traffic Operations - Safety Studies Consultants	Traffic Engineering Study		\$ 1,647,000	\$ 654,000
250662	5	Districtwide Traffic Operations - Safety Studies Consultants	Traffic Engineering Study		\$ 900,000	\$ 900,000
414052	3	Districtwide Traffic Operations - Safety Studies Consultants	Transportation Statistics		\$ 1,058,000	\$ 603,000
414052	4	Districtwide Traffic Operations - Safety Studies Consultants	Traffic OPS Improvement		\$ 600,000	\$ 600,000
429536	4	Districtwide (ADA) Pushbutton Construction	Pedestrian Safety Improvement		\$ 832,000	\$ 832,000
429536	6	Districtwide (ADA) Pushbutton Construction	Pedestrian Safety Improvement		\$ 902,000	\$ 902,000
431433	5	Pedestrian & Bicycle Safety Pushbutton Contract	Misc Construction		\$ 1,397,000	\$ 1,397,000
431433	7	Pedestrian & Bicycle Safety Pushbutton Contract	Misc Construction		\$ 1,436,000	\$ 1,436,000
431635	2	Districtwide Safety Pushbutton Contract	Safety Project		\$ 2,891,000	\$ 156,000
434664	1	Districtwide Traffic Operations - Safety Studies Consultants	Safety Project		\$ 1,505,000	\$ 1,200,000
434664	2	Districtwide Traffic Operations - Safety Studies Consultants	Safety Project		\$ 305,000	\$ 305,000
435573	2	Districtwide Pedestrian & Bicycle Safety Program Consultant	Traffic Engineering Study		\$ 1,510,000	\$ 800,000
435573	3	Pedestrian & Bicycle Safety Program Consultant - Continuing Contract	Traffic Engineering Study		\$ 1,200,000	\$ 1,200,000
437916	1	SR 934/Normandy Drive @ Rue Granville	Pedestrian Safety Improvement	0.105	\$ 861,000	\$ 620,000
437916	2	SR 934/Normandy Drive @ Rue Vendome	Pedestrian Safety Improvement	1.042	\$ 763,000	\$ 573,000
437922	1	SR 9/NW 27th Avenue (FROM NW 23 ST TO NW 26 ST)	Pedestrian Safety Improvement	0.153	\$ 1,148,000	\$ 893,000
439522	1	SR 916/NW 135th Street (Between Cairo Lane & Sesame Street)	Pedestrian Safety Improvement	0.191	\$ 624,000	\$ 539,000
439894	1	SRTS - Carrie Meek, Westvw, Flagami, H.O. Sibley & Shadowlwn	Sidewalk		\$ 783,000	\$ 686,000
439895	1	SRTS - Bunche Pk Elem, Miami Gardens Elem, Myrtle Grove K8 and Twin	Sidewalk		\$ 393,000	\$ 340,000
439896	1	SRTS - Florida City Elementary and Robert R Moton Elem	Sidewalk		\$ 459,000	\$ 398,000
439897	1	SRTS - Norman S Edclup K8 Center	Sidewalk		\$ 232,000	\$ 198,000
441234	1	SRTS - Rainbow Pk, Gldn GlDs, LK Stvns Ele, No. Co. K-8, Benfrnk K-8	Pedestrian Safety Improvement		\$ 1,380,000	\$ 1,380,000
441235	1	SRTS - Norwood, Dante Fascell, Chrls Hadley, Mae Walters, Reeves	Pedestrian Safety Improvement		\$ 215,000	\$ 215,000
441886	1	SR A1A/Collins Avenue (At 36th, 83rd, 87th Streets)	Pedestrian Safety Improvement	4.474	\$ 821,000	\$ 821,000
442368	1	SR 973/SW 87th Avenue at CSX RR XING #631078L	Rail Safety Project		\$ 508,000	\$ 508,000
442369	1	Palm Avenue at FEC RR XING #272742T	Rail Safety Project		\$ 494,000	\$ 494,000
442537	1	SR 25/NW 36th Street (Between NW 20th Ave & NW 19th Ave)	Pedestrian Safety Improvement	0.058	\$ 371,000	\$ 371,000
442538	1	SR 933/NW 12th Avenue (At NW 19th Street Traffic Signal)	Pedestrian Safety Improvement	0.094	\$ 717,000	\$ 717,000
442539	1	SR 944/NW 54th Street (at NW 14th Avenue)	Pedestrian Safety Improvement	0.495	\$ 299,000	\$ 293,000
442540	1	SR 7/US 441/NW 7th Avenue Emergency Traffic Signal (at Northside Police	Pedestrian Safety Improvement	0.946	\$ 247,000	\$ 215,000
442541	1	SR 973/SW 87th Avenue (at SW 28th Street Traffic Signal)	Pedestrian Safety Improvement	0.094	\$ 776,000	\$ 716,000
438147	1	SRTS - Arch Crk; E M Hartnrm Lakevw ES; N Miami; J Diego Middle	Bike Lane/Sidewalk		\$ 678,000	\$ 596,000
438160	1	SRTS - Coral Reef; Howard Drive and Perrine	Pedestrian Safety Improvement		\$ 922,000	\$ 852,000
438162	1	SRTS - Key Biscayne K8	Pedestrian Safety Improvement		\$ 848,000	\$ 759,000
438163	1	SRTS - Comstock ES; Gratgny ES; and Hibiscus ES	Pedestrian Safety Improvement		\$ 640,000	\$ 562,000
438165	1	SRTS - Crestview ES; Edison PK K8 CTR; Lorah PK ES; Sweetwater ES	Pedestrian Safety Improvement		\$ 795,000	\$ 699,000

Safety Performance Management

D6 TIP Download 5 Year All Funds FY20-24 Safety Projects

Item Number:	Item Segment:	Project Description	Type of Work Description	Project Length	All Years	FY 2020-2024
TP440423	2	SR 821 (HEFT) Safety Improvements: Mileposts 0.0 - 9.2	Guardrail	4.816	\$ 3,430,000	\$ 3,146,000
XA11212		SR 112 Ramp Improvements at NW 37th Avenue	Operational Improvement, Safety Enhancement		\$ 13,749,000	\$ 12,323,000
XA92408		SR 924 Partial Interchange at NW 67th Avenue	Safety Enhancement		\$ 27,191,000	\$ 25,991,000
PW000440		School Flashing Signals	Dynamic Speed Feedback Signs		\$ 14,735,000	\$ 943,000
PW000338		Street Light Retrofits	Lighting to meet new safety standards		\$ 6,118,000	\$ 1,556,000
436381	1	Positive Train Control (PTC) on SFRC and FEC	Rail Safety Project		\$ 57,650,000	\$ 27,200,000
TOTAL:					\$ 160,791,000	\$ 99,048,000

Transportation Improvement Program (TIP)
Fiscal Years 2019/2020 to 2023/2024

Transportation Performance Management

SYSTEM PERFORMANCE REPORT
INFRASTRUCTURE
(Pavement & Bridge)



Miami-Dade Transportation
Planning Organization

INFRASTRUCTURE (PAVEMENT & BRIDGE) PERFORMANCE MANAGEMENT MEASURES

Infrastructure Condition is the second National Goal identified in MAP-21 and maintained in the FAST Act. In 2016, the Federal Highway Administration published a Final Rule in the Federal Register entitled “National Performance Management Measures: Assessing Pavement Condition for the National Highway Performance Program and Bridge Condition for the National Highway Performance Program,” that included National Performance Management Measures to evaluate the pavement and bridge conditions on the National Highway System (NHS) [23 CFR § 490]. The Infrastructure Rule became effective on May 20, 2017.

Performance Management Measures

The Infrastructure Rule requires State DOTs and MPOs to set targets for the following Infrastructure Performance Management Measures for the Interstate System and Non-Interstate NHS, and to report on progress toward achieving those targets - State DOTs report progress to FHWA, while MPOs report progress to their State DOT. FDOT’s 2017 Initial Transportation Asset Management Plan (TAMP) was released on April 30, 2018, and is the basis for setting the Transportation Performance Measure targets for pavement and bridge condition required by the performance management regulations in 23 CFR 490. The performance targets for bridge condition, pavement condition, National Highway System performance and freight mobility were released on May 18, 2018.

FDOT released the following 2-year and 4-year targets for pavement and bridge condition:

National Performance Management Measures to Assess Pavement Condition (23 CFR 490.307)

Performance Measure	2-year Target	4-year Target
% of Interstate pavements in Good condition	n/a	≥ 60%
% of Interstate pavements in Poor condition	n/a	≤ 5%
% of non-Interstate NHS pavements in Good condition	≥ 40%	≥ 40%
% of non-Interstate NHS pavements in Poor condition	≤ 5%	≤ 5%

National Performance Management Measures to Assess Bridge Condition (23 CFR 490.407)

Performance Measure	2-year Target	4-year Target
% of NHS bridges classified as in Good condition by deck area	≥ 50%	≥ 50%
% of NHS bridges classified as in Poor condition by deck area	≤ 10%	≤ 10%

Performance Targets

The TPO Governing Board established the FDOT performance targets for bridge condition and pavement condition by Resolution 44-18 on October 25, 2018 (illustrated on the next page in **Figure 1: TPO Resolution**). The TPO will support achievement of the bridge and pavement condition targets through the development of the TIP and LRTP in coordination with FDOT.

Figure 1: TPO Resolution

TPO RESOLUTION #44-18

Agenda Item 5.B.2

RESOLUTION ESTABLISHING THE FLORIDA DEPARTMENT OF TRANSPORTATION'S PERFORMANCE MEASURE TARGETS FOR PAVEMENT CONDITION, BRIDGE CONDITION, NATIONAL HIGHWAY SYSTEM PERFORMANCE AND FREIGHT MOVEMENT

WHEREAS, the Interlocal Agreement creating and establishing the Miami-Dade Metropolitan Planning Organization (MPO), for the Miami Urbanized Area, now known as the Transportation Planning Organization (TPO), requires that the TPO provide a structure to evaluate the adequacy of the transportation planning and programming process; and

WHEREAS, the Transportation Planning Council (TPC) has been established and charged with the responsibility and duty of fulfilling the aforementioned functions; and

WHEREAS, the TPC has reviewed the Florida Department of Transportation's performance measure targets, made a part hereof, and finds it consistent with the goals and objectives of the Transportation Plan for the Miami Urbanized Area,

NOW, THEREFORE, BE IT RESOLVED BY THE GOVERNING BOARD OF THE TRANSPORTATION PLANNING ORGANIZATION IN ITS ROLE AS THE MPO FOR THE MIAMI URBANIZED AREA, that the attached Florida Department of Transportation's performance measure targets for pavement condition, bridge condition, national highway system performance and freight movement, are hereby established.

The adoption of the foregoing resolution was moved by Board Member Jose "Pepe" Diaz. The motion was seconded by Board Member Rebeca Sosa, and upon being put to a vote, the vote was as follows:

Chairman Esteban L. Bovo, Jr.-Aye
Vice Chairman Francis Suarez-Absent

Board Member Juan Carlos Bermudez	-Aye	Board Member Vince Lago	-Absent
Board Member Jose "Pepe" Diaz	-Aye	Board Member Daniella Levine Cava	-Absent
Board Member Audrey M. Edmonson	-Aye	Board Member Roberto Martell	-Aye
Board Member Dan Gelber	-Absent	Board Member Joe A. Martinez	-Aye
Board Member Oliver G. Gilbert, III	-Aye	Board Member Jean Monestime	-Absent
Board Member Perla T. Hantman	-Absent	Board Member Dennis C. Moss	-Aye
Board Member Carlos Hernandez	-Absent	Board Member Jeff Porter	-Absent
Board Member Sally A. Heyman	-Absent	Board Member Shelly Smith Fano	-Absent
Board Member Eileen Higgins	-Aye	Board Member Rebeca Sosa	-Aye
Board Member Barbara J. Jordan	-Aye	Board Member Javier D. Souto	-Aye
Board Member Smith Joseph	-Aye	Board Member Xavier L. Suarez	-Aye

The Chairperson thereupon declared the resolution duly passed and approved this 25th day of October, 2018.

TRANSPORTATION PLANNING ORGANIZATION

By Zainab Salim
Zainab Salim, Clerk
Miami-Dade TPO



Federal Performance Measures FDOT Initial Targets for Pavement, Bridge and System Performance May 18, 2018

Pavement Condition - National Highway System Performance Measure	2yr Target	4yr Target
% of Interstate pavements in Good condition	n/a	≥ 60%
% of Interstate pavements in Poor condition	n/a	≤ 5%
% of non-Interstate NHS pavements in Good condition	≥ 40%	≥ 40%
% of non-Interstate NHS pavements in Poor condition	≤ 5%	≤ 5%

Bridge Condition - National Highway System Performance Measure	2yr Target	4yr Target
% of NHS bridges classified as in Good condition by deck area	≥ 50%	≥ 50%
% of NHS bridges classified as in Poor condition by deck area	≤ 10%	≤ 10%

National Highway System and Freight Reliability Performance Measure	2yr Target	4yr Target
% of person-miles traveled on the Interstate that are reliable	75%	70%
% of person-miles traveled on the non-Interstate NHS that are reliable	n/a	50%
Truck travel time reliability ratio (TTR) on the Interstate	1.75	2

Assessing Pavement Condition for the National Highway Performance Program

State DOTs are required to collect performance measure data on the Interstate and Non-Interstate NHS and report it to the Highway Performance Monitoring System (HPMS). The Final Rule requires State DOTs to submit a Data Quality Management Program plan to FHWA for approval by May 20, 2018. The Data Quality Management Program plan must include the State's methods for identifying (i) how data collection equipment is calibrated and certified; (ii) how persons performing the data collection are certified; (iii) how quality control measures are implemented before, during and after the data is collected; (iv) how sampling, review and checking of the data is conducted; and (v) what procedures are used to resolve errors, along with criteria used to accept data [23 CFR § 490.319]. Once the State's Data Quality Management Program has been approved by FHWA, State DOTs shall use the program to collect and report performance measure data to assess the State's overall pavement condition. Performance ratings of Good, Fair, and Poor condition are assigned by FHWA using pavement condition metrics. The Pavement Condition Metrics used for the evaluation include: International Roughness Index (IRI), Rutting, Percent of Cracking, and Faulting in one or more directions for the Interstate System and in one direction for Non-Interstate NHS. On roadways with a posted speed limit of less than 40 Miles per Hour (MPH), a Present Serviceability Rating (PSR) can be used instead of an IRI. "These metrics collectively provide a way to quantify pavement condition in terms of roughness and cracking for all pavement types, rutting for asphalt pavement surfaces, and faulting (misalignment between concrete slabs) for jointed concrete pavement surfaces," [23 CFR § 490]. The Pavement Condition Metric Thresholds can be seen in **Figure 2: Pavement Condition Metric Thresholds**.

Figure 2: Pavement Condition Metric Thresholds

Rating	Good	Fair	Poor
IRI <i>(inches/mile)</i>	<95	95-170	>170
PSR* <i>(0.0-5.0 value)</i>	≥4.0	2.0-4.0	≤2.0
Cracking Percent <i>(%)</i>	<5	<i>CRCP: 5-10</i> <i>Jointed: 5-15</i> <i>Asphalt: 5-20</i>	<i>>10</i> <i>>15</i> <i>>20</i>
Rutting <i>(inches)</i>	<0.20	0.20-0.40	>0.40
Faulting <i>(inches)</i>	<0.10	0.10-0.15	>0.15

*PSR may be used only on routes with posted speed limit < 40mph.

Source: FHWAⁱ

Interstate System Pavement Performance

State DOTs began collecting data for Interstate pavement condition on January 1, 2018. State DOTs must submit their Interstate performance data, consistent with the requirements established under the Final Rule by April 15, 2019, and annually thereafter every April 15th.

If a state has greater than 5 percent of pavement lane miles in poor condition for a given year, the state must obligate funds from their National Highway Performance Program (NHPP) funds and transfer a portion of it to their Surface Transportation Program (STP) funds in order to improve their Interstate pavement condition.

Non-Interstate NHS Pavement Performance

Starting January 1, 2020, State DOTs will begin collecting performance data for Non-Interstate NHS pavement condition. State DOTs are required to submit their Non-Interstate NHS pavement condition data by June 15, 2021, and annually thereafter every June 15th.

Assessing Bridge Condition for the National Highway Performance Program

State DOTs, Federal agencies, and Tribal Governments are required to annually submit bridge inventory data to FHWA using the National Bridge Inspection Standards (NBIS). The data is reported in the National Bridge Inventory (NBI) Database, and includes data on bridge Deck, Superstructure, Substructure, and Culverts. State DOTs are required to submit their most recent NBI data by March 15th of each year. Under the Infrastructure National Performance Management Measures Final Rule, these metrics will be used to assess overall bridge condition. The Final Rule applies to all bridges on the NHS, including bridge on-ramps and off-ramps that are connected to the NHS. The condition metric thresholds used to evaluate bridges can be seen in **Figure 3: Bridge Condition Metric Thresholds**. If any of the metrics are less than or equal to 4 on the NBI rating scale, the bridge is considered structurally deficient. “FHWA shall calculate a ratio of the total deck area of all bridges classified as Structurally Deficient to the total deck area of all applicable bridges for each state,” [23 CFR § 490]. If 10 percent or less of the total deck area of bridges in the state are classified as structurally deficient, then the state has met the minimum condition level. If the state does not meet the minimum condition level for a period of 3 consecutive years, they must dedicate NHPP funds to eligible NHS bridge projects.ⁱ

Figure 3: Bridge Condition Metric Thresholds

NBI Rating Scale <i>(from 0 – 9)</i>	9	8	7	6	5	4	3	2	1	0
	Good			Fair		Poor				
Deck	≥ 7			5 or 6		≤ 4				
Superstructure	≥ 7			5 or 6		≤ 4				
Substructure	≥ 7			5 or 6		≤ 4				
Culvert	≥ 7			5 or 6		≤ 4				

Source: FHWAⁱ

Infrastructure (Pavement & Bridge) Performance Management

Baseline Conditions

On January 1, 2018, the first 4-year performance period for the Infrastructure Performance Management Measures began. State DOTs are required to report baseline performance data for Non-Interstate Pavement Performance Management Measures and Bridge Performance Management Measures on October 1, 2018, and must report on their progress for the 1st performance period on October 1, 2020. The baseline conditions for pavement condition for Florida and for Miami-Dade County are shown in **Table 1: Baseline Pavement Condition Performance Management Measures 2017**. The baseline conditions for bridge condition are shown in **Table 2: Baseline Bridge Condition Performance Management Measures 2017**.

Table 1: Baseline Pavement Condition Performance Management Measures 2017

Performance Measure	Florida	Miami-Dade County
% of Interstate pavements in Good condition	66%	68.6%
% of Interstate pavements in Poor condition	0.1%	0.0%
% of non-Interstate NHS pavements in Good condition	45%	45.7%
% of non-Interstate NHS pavements in Poor condition	0.4%	0.6%

Source: FDOT State Materials Office and Maintenance Office

Table 2: Baseline Bridge Condition Performance Management Measures 2017

Performance Measure	Florida	Miami-Dade County
% of NHS bridges classified as in Good condition by deck area	72%	68.4%
% of NHS bridges classified as in Poor condition by deck area	1%	0.2%

Source: FDOT State Materials Office and Maintenance Office

For the first performance period only, State DOTs are not required to report baseline condition/performance or 2-year targets for the Interstate System Pavement Performance Management Measures to the State's Baseline Performance Report. The implementation dates for the Infrastructure Performance Management Measures are depicted in **Table 3: Infrastructure Performance Management Measures-Implementation Schedule**.

Infrastructure (Pavement & Bridge) Performance Management

Table 3: Infrastructure Performance Management Measures- Implementation Schedule

Performance Management Measure Topic	First 4-Year Performance Period Begins	State DOT's Scheduled to Begin Data Collection	State DOT's Scheduled to Submit Data	FDOT established performance targets	Florida MPOs must establish performance targets	State DOT Baseline Performance Report Due	State DOT Mid Performance Period Progress Report Due	FHWA First Evaluation of Significant Progress	First 4-Year Performance Period Ends	First 4-Year Performance Period Progress Report Due
1. Interstate System Pavement Condition	January 1, 2018	January 1, 2018	April 15, 2019 (subsequent submissions due every April 15 th thereafter)	May 18, 2018	November 14, 2018	Subsequent Baseline reports due October 1 st every 4 years thereafter	October 1, 2020 (subsequent Mid Performance reports due October 1 st every 4 years thereafter)	October 1, 2022 (for the period of January 1, 2020 through December 31, 2021)	December 31, 2021	October 1, 2022
2. Non-Interstate NHS Pavement Condition		January 1, 2020	June 15, 2021 (subsequent submissions due every June 15 th thereafter)			October 1, 2018 (subsequent Baseline reports due October 1 st every 4 years thereafter)		October 1, 2020 (for the period of January 1, 2018 through December 31, 2019)		
3. NHS Bridge Condition		Annually	March 15, 2018 (subsequent submissions due every March 15 th thereafter)			October 1, 2018 (subsequent Baseline reports due October 1 st every 4 years thereafter)		October 1, 2020 (for the period of January 1, 2018 thru December 31, 2019)		

Source: Summary of FHWA Performance Measures Implementation Requirements in Florida. U.S. Department of Transportation, Federal Highway Administration, Florida Division. May 22, 2018
Source: Performance Measures & Asset Management Plan- Key Implementation Dates. U.S Department of Transportation, Federal Highway Administration. March 29, 2018.
<https://www.fhwa.dot.gov/tpm/rule/timeline.pdf>

Assessment of Significant State Progress

FHWA will not evaluate significant state progress toward achieving 2-year Interstate System Pavement Performance Targets for the Mid Performance Period Progress Report, due October 1, 2020. The 2-year condition identified between 2018 and 2020 will become the baseline condition for the first performance reporting period. However, FHWA will evaluate significant State progress toward achieving Non-Interstate NHS Pavement Performance Targets at the midpoint (January 1, 2018 through December 31, 2019 reporting period – which is to be reported to FHWA by October 1, 2020) and the end of the first performance period (January 1, 2020 through December 31, 2021 reporting period – which is to be reported to FHWA by October 1, 2022) [23 CFR § 490].

Contributions to Achieving Pavement & Bridge Performance Targets

The Miami-Dade TPO and the Florida Department of Transportation (FDOT) are committed to ensuring the pavement and bridge condition in Miami-Dade County achieves the identified targets. The TPO has many programs, initiatives, and projects identified in the Miami-Dade Transportation Improvement Program (TIP) and the 2040 Long Range Transportation Plan to address pavement and bridge condition in Miami-Dade County. FDOT's key plan is its Work Program. The TPO and FDOT coordinate their plans and programs to maintain an acceptable pavement and bridge condition of the Miami-Dade transportation system.

“The TIP shall reflect the investment priorities established in the current metropolitan transportation plan . . .” (23 CFR 450.326). The transportation plan (LRTP) “shall include both long-range strategies/actions that provide for the development of an integrated multimodal system...” (23 CFR 450.24). The TIP considers potential projects that fall into specific investment priorities established by the MPO in the Long Range Transportation Plan (LRTP). The TIP includes specific investment priorities that support the MPOs goals including preserving the existing system, using a prioritization and project selection process established in the LRTP. This process evaluates projects that have an anticipated effect on improving the pavement and bridge condition in Miami-Dade County. The projects identified as contributing to the achievement of Miami-Dade County's pavement and bridge performance targets are on the next page.

Infrastructure (Pavement & Bridge) Performance Management

D6 TIP Download 5 Year All Funds FY20-24 NHS Pavement Projects

Item Number:	Item Segment:	Project Description	Type of Work Description	Project Length	All Years	FY 2020-2024
405575	1	SR 997/KROME AVENUE FROM SR 5/US-1 TO S.W. 296TH STREET	FLEXIBLE PAVEMENT RECONSTRUCT.	3.827	\$ 1,233,675	\$ -
405575	9	SR 997/KROME AVENUE FROM SW 312ST/CAMPBELL DR TO SW 296 ST (TRUCKBYPS)	ADD LANES & REHABILITATE PVMNT	.979	\$ 5,636,468	\$ 770,456
410646	1	SR 934/NE 79 & 82 ST FROM SR 5/BISCAYNE BLVD. TO BAY DRIVE	FLEXIBLE PAVEMENT RECONSTRUCT.	3.441	\$ 2,611	\$ -
412473	1	SR 5/BRICKELL AVENUE FROM S OF S.E. 25TH ROAD TO S.E. 4TH STREET	RIGID PAVEMENT REHABILITATION	1.689	\$ 13,156,515	\$ -
423251	4	SR 25/OKEECHOBEE RD FROM E. OF NW 116 WAY TO E. OF NW 87 AVE(CONCRETE)	ADD LANES & REHABILITATE PVMNT	1.390	\$ 355,948,138	\$ 33,990,318
423251	5	SR 25/OKEECHOBEE RD FROM E. OF NW 107 AVE TO E. OF NW 116 WAY(CNCRETE)	ADD LANES & REHABILITATE PVMNT	1.786	\$ 144,704,082	\$ 125,606,009
423251	6	SR 25/OKEECHOBEE RD FROM W. OF NW 138 ST TO E. OF NW 107 AVE (CNCRETE)	ADD LANES & REHABILITATE PVMNT	.828	\$ 3,117,700	\$ -
429300	1	SR 9A/I-95 FROM NW 79TH STREET TO NW 103RD STREET	RIGID PAVEMENT REHABILITATION	1.529	\$ 12,474,016	\$ -
429300	2	SR 9A/I-95 FROM NW 8 STREET TO NW 29 STREET	RIGID PAVEMENT RECONSTRUCTION	4.013	\$ 36,638,951	\$ 447,565
429300	3	SR 9A/I-95 FROM NW 29 STREET TO NW 131 STREET	RIGID PAVEMENT RECONSTRUCTION	10.311	\$ 102,984,758	\$ 34,654
443645	1	SR 25/OKEECHOBEE RD FROM W. OF NW 138 ST TO E. OF NW 107 AVE (CNCRETE)	ADD LANES & REHABILITATE PVMNT	.828	\$ 30,577,822	\$ -
443890	1	SR970/SR5/DOWNTOWN DISTRIBUTOR RAMPS FROM S.MIAMI AVE. TO SE 2 AVE.	RIGID PAVEMENT REHABILITATION	.856	\$ 1,753,784	\$ 1,753,784
443894	1	SR9A/I-95 RAMPS AT SR90/SW 8 STREET AND SW 7 STREET	RIGID PAVEMENT REHABILITATION	.556	\$ 1,842,950	\$ 1,842,950
443942	1	SR 9A/I-95 (SHOULDERS ONLY) FROM SOUTH DIXIE HIGHWAY TO SW 8TH STREET	RIGID PAVEMENT REHABILITATION	1.547	\$ 850,573	\$ 850,573
444444	2	SR-90/TAMIAMI TRAIL FROM PUMP STATION S-333 TO PUMP STATION S-334	FLEXIBLE PAVEMENT RECONSTRUCT.	10.570	\$ 43,244,000	\$ -
					\$ 754,166,043	\$ 165,296,309

D6 TIP Download 5 Year All Funds FY20-24 NHS Bridge Projects

Item Number:	Project Description	Type of Work Description	Project Length	All Years	FY 2020-2024
251688	SR 836/I-395 FROM WEST OF I-95 TO MACARTHUR CSWY BRIDGE	BRIDGE-REPLACE AND ADD LANES	1.693	\$ 804,904,148	\$ 3,329,512
423373	BRIDGE REPLACEMENTS AT GOLDEN GLADES INTCHG (MP 0.3X) (870038,870160)	BRIDGE REPLACEMENT	.700	\$ 146,742	\$ -
424407	SR 968/SW 1ST STREET AT MIAMI RIVER (BRIDGE #870660)	BRIDGE REPLACEMENT	.388	\$ 105,773,472	\$ 4,200,000
429996	SR 93/I-75 RAMP SB TO SR 826 AT NW 138 STREET REPAIR BRIDGE # 870604	BRIDGE-REPAIR/REHABILITATION	.102	\$ 2,099,418	\$ 2,005,333
436525	SR 826/SUNNY ISLES BLVD OVER INTRACOASTAL WTWY BASCULE BR 870592/0593	BRIDGE-REPAIR/REHABILITATION	.532	\$ 11,789,238	\$ 11,087,476
436526	SR 934/NE 79 ST OVER INTRACOASTAL CANAL 4 BRDGS: 870082;-554;-085;551	BRIDGE-REPAIR/REHABILITATION	1.900	\$ 8,468,948	\$ 7,798,334
436537	SR 9/NW 27 AVENUE OVER MIAMI RIVER BRIDGES 870731 & 870763	BRIDGE-REPAIR/REHABILITATION	.072	\$ 4,248,484	\$ 3,987,785
437053	GOLDEN GLADES INTERCHANGE BRIDGE IMPROVEMENT (870038)	BRIDGE REPLACEMENT	.228	\$ 10,892,092	\$ 10,150,461
441960	SR 886 PORT BLVD OVER INTERCOASTAL WATERWAY BRIDGES 875000/875001	BRIDGE-REPAIR/REHABILITATION	.474	\$ 1,876,614	\$ 1,876,614
441963	SR 924/GRATIGNY/NW 119 ST OVER RIO VISTA CANAL BRIDGE 870621	BRIDGE-REPAIR/REHABILITATION	.012	\$ 591,183	\$ 516,718
441965	SR 856 RAMP NB A1A TO SR 856 (BRIDGE 870603)	BRIDGE-REPAIR/REHABILITATION	.172	\$ 2,958,904	\$ 2,958,904
441967	SR 112/I 195 OVER WESTSHORE WATERWAY BRIDGE# 870314	BRIDGE-REPAIR/REHABILITATION	.030	\$ 1,685,685	\$ 1,496,908
444798	SR 90/US 41 OVER SPILLWAY 12-B BRIDGE# 870028	BRIDGE-REPAIR/REHABILITATION	.031	\$ 438,960	\$ 438,960
444799	SR 90/US 41 OVER SPILLWAY 12-D BRIDGE# 870031	BRIDGE-REPAIR/REHABILITATION	.032	\$ 497,304	\$ 497,304
444804	SR 934/NE 79 ST OVER INTRACOASTAL CANAL FENDER BRIDGE# 870085 & 870551	BRIDGE-REPAIR/REHABILITATION	.198	\$ 3,739,194	\$ 3,739,194
				\$ 960,110,386	\$ 54,083,503

Endnotes:

ⁱ National Performance Management Measures: Pavement and Bridge Condition to Assess the National Highway Performance Program.US Department of Transportation, Federal Highway Administration. May 31, 2017. <https://www.fhwa.dot.gov/tpm/rule/170531pm2.pdf>

Transportation Improvement Program (TIP)
Fiscal Years 2019/2020 to 2023/2024

Transportation Performance Management

SYSTEM PERFORMANCE REPORT
SYSTEM & FREIGHT



**Miami-Dade Transportation
Planning Organization**

SYSTEM & FREIGHT PERFORMANCE MANAGEMENT MEASURES

Congestion Reduction, System Reliability, and Freight Movement and Economic Vitality are three of the seven National Goals identified in MAP-21 and maintained in the FAST Act. In 2017, FHWA issued a Final Rule for system performance/freight/Congestion Mitigation Air Quality (CMAQ), entitled “National Performance Management Measures; Assessing Performance of the National Highway System, Freight Movement on the Interstate System, and Congestion Mitigation and Air Quality Improvement Program,” [23 CFR § 490]. The Rule went into effect on May 20, 2017, except for certain components of the greenhouse gas (GHG) measure, which went into effect as of September 28, 2017. Subsequently, FHWA repealed this performance management measure that assessed the percent change in tailpipe carbon dioxide (CO²) (Greenhouse Gas) emissions on the NHS Compared to the Calendar Year 2017, effective July 2, 2018.

Performance Management Measures

The Final Rule addresses the three areas as its name implies: performance, freight movement, and congestion/air quality. The Performance Management Measures under this rule will “assess the performance of the Interstate and non-Interstate National Highway System (NHS) for the purpose of carrying out the National Highway Performance Program (NHPP);” “freight movement on the Interstate System;” and “traffic congestion and on-road mobile source emissions for the purpose of carrying out the Congestion Mitigation and Air Quality (CMAQ) Program [23 CFR § 490]. State DOTs and MPOs are required to set targets for the Interstate System and Non-Interstate NHS, and to report on progress toward achieving those targets - State DOTs report progress to FHWA, while MPOs report progress to their State DOT. The CMAQ measures are limited to urbanized areas that are a part of a nonattainment or maintenance area for ozone, carbon monoxide, or particulate matter. Since Miami-Dade County and all of Florida is attainment for these three pollutants, the CMAQ Performance Management Measures do not apply.

On May 18, 2018, FDOT released the following 2-year and 4-year performance targets for the NHS and freight travel time reliability:

**National Performance Management Measures to Assess
Performance of the NHS and Freight (23 CFR 490.507 and 490.607)**

Performance Measure	2-year Target	4-year Target
% of person-miles traveled on the Interstate that are reliable	75%	70%
% of person-miles traveled on the non-Interstate NHS that are reliable	n/a	50%
Truck travel time reliability ratio (TTR) on the Interstate	1.75	2.0

Performance Targets

The TPO Governing Board established the FDOT performance targets for National Highway System performance and freight mobility by Resolution 44-18 on October 25, 2018 (illustrated on the next page in **Figure 1: TPO Resolution**). The TPO will support achievement of the NHS performance and freight mobility targets through the development of the TIP and LRTP in coordination with FDOT.

Figure 1: TPO Resolution

Agenda Item 5.B.2

TPO RESOLUTION #44-18

RESOLUTION ESTABLISHING THE FLORIDA DEPARTMENT OF TRANSPORTATION'S PERFORMANCE MEASURE TARGETS FOR PAVEMENT CONDITION, BRIDGE CONDITION, NATIONAL HIGHWAY SYSTEM PERFORMANCE AND FREIGHT MOVEMENT

WHEREAS, the Interlocal Agreement creating and establishing the Miami-Dade Metropolitan Planning Organization (MPO), for the Miami Urbanized Area, now known as the Transportation Planning Organization (TPO), requires that the TPO provide a structure to evaluate the adequacy of the transportation planning and programming process; and

WHEREAS, the Transportation Planning Council (TPC) has been established and charged with the responsibility and duty of fulfilling the aforementioned functions; and

WHEREAS, the TPC has reviewed the Florida Department of Transportation's performance measure targets, made a part hereof, and finds it consistent with the goals and objectives of the Transportation Plan for the Miami Urbanized Area,

NOW, THEREFORE, BE IT RESOLVED BY THE GOVERNING BOARD OF THE TRANSPORTATION PLANNING ORGANIZATION IN ITS ROLE AS THE MPO FOR THE MIAMI URBANIZED AREA, that the attached Florida Department of Transportation's performance measure targets for pavement condition, bridge condition, national highway system performance and freight movement, are hereby established.


The adoption of the foregoing resolution was moved by Board Member Jose "Pepe" Diaz. The motion was seconded by Board Member Rebeca Sosa, and upon being put to a vote, the vote was as follows:

Chairman Esteban L. Bovo, Jr.-Aye			
Vice Chairman Francis Suarez-Absent			
Board Member Juan Carlos Bermudez	-Aye	Board Member Vince Lago	-Absent
Board Member Jose "Pepe" Diaz	-Aye	Board Member Daniella Levine Cava	-Absent
Board Member Audrey M. Edmonson	-Aye	Board Member Roberto Martell	-Aye
Board Member Dan Gelber	-Absent	Board Member Joe A. Martinez	-Aye
Board Member Oliver G. Gilbert, III	-Aye	Board Member Jean Monestime	-Absent
Board Member Perla T. Hantman	-Absent	Board Member Dennis C. Moss	-Aye
Board Member Carlos Hernandez	-Absent	Board Member Jeff Porter	-Absent
Board Member Sally A. Heyman	-Absent	Board Member Shelly Smith Fano	-Absent
Board Member Eileen Higgins	-Aye	Board Member Rebeca Sosa	-Aye
Board Member Barbara J. Jordan	-Aye	Board Member Javier D. Souto	-Aye
Board Member Smith Joseph	-Aye	Board Member Xavier L. Suarez	-Aye

The Chairperson thereupon declared the resolution duly passed and approved this 25th day of October, 2018.

TRANSPORTATION PLANNING ORGANIZATION

By Zainab Salim
Zainab Salim, Clerk
Miami-Dade TPO



Federal Performance Measures
FDOT Initial Targets for Pavement, Bridge and System Performance
May 18, 2018

Pavement Condition - National Highway System Performance Measure	2yr Target	4yr Target
% of Interstate pavements in Good condition	n/a	≥ 60%
% of Interstate pavements in Poor condition	n/a	≤ 5%
% of non-Interstate NHS pavements in Good condition	≥ 40%	≥ 40%
% of non-Interstate NHS pavements in Poor condition	≤ 5%	≤ 5%

Bridge Condition - National Highway System Performance Measure	2yr Target	4yr Target
% of NHS bridges classified as in Good condition by deck area	≥ 50%	≥ 50%
% of NHS bridges classified as in Poor condition by deck area	≤ 10%	≤ 10%

National Highway System and Freight Reliability Performance Measure	2yr Target	4yr Target
% of person-miles traveled on the Interstate that are reliable	75%	70%
% of person-miles traveled on the non-Interstate NHS that are reliable	n/a	50%
Truck travel time reliability ratio (TTR) on the Interstate	1.75	2

Assessing Performance of the National Highway System

Travel Time Reliability is used to report the percent of person-miles traveled that are reliable on the Interstate and Non-Interstate NHS. “Data to reflect the users can include bus, auto, and truck occupancy levels.”ⁱⁱ The Level of Travel Time Reliability (LOTT) is defined as:

$$\frac{\text{Longer Travel Time (80th)}}{\text{Normal Travel Time (50th)}} = \frac{\# \text{ seconds}}{\# \text{ seconds}} = \text{Level of Travel Time Reliability Ratio}$$

Data for the LOTT metric is collected in 15-minute increments during four time periods for each reporting segment:ⁱⁱⁱ

- Monday - Friday
 - 6:00 AM – 10:00 AM
 - 10:00 AM – 4:00 PM
 - 4:00 PM – 8:00 PM
- 6:00 AM Saturday – 8:00 PM Sunday

States and MPOs in coordination will define the reporting segments, and they must be continuous on the mainline highway. Starting in 2018, State DOTs are required to report the “LOTTR metrics and the corresponding 80th and 50th percentile times for each time period and directional AADT for each reporting segment by June 15th of each year, for the previous year’s measures,”ⁱⁱⁱ to the Highway Performance Monitoring System (HPMS). The LOTTR ratio for each segment must be below a 1.50 during all four time periods, otherwise the segment is not considered reliable.ⁱⁱⁱ The Interstate Travel Time Reliability and Non-Interstate NHS Travel Time Reliability are reported to the nearest tenth of a percent. The formula for calculating Travel Time Reliability is:

$$100 \times \frac{\sum_{i=1}^R SL_i \times AV_i \times OF_j}{\sum_{i=1}^T SL_i \times AV_i \times OF_j}$$

Where:

R = total number of Interstate (Non-Interstate NHS) System reporting segments that are exhibiting an LOTTR below 1.50 during all of the time periods identified in § 490.511(b)(1)(i) through (iv);

I = Interstate (Non-Interstate NHS) System reporting segment “i”;

SL_i = length, to the nearest thousandth of a mile, of Interstate (Non-Interstate NHS) System reporting segment “i”;

AV_i = total annual traffic volume to the nearest single vehicle, of the Interstate (Non-Interstate) System reporting segment “i”;

J = geographic area in which the reporting segment “i” is located where a unique occupancy factor has been determined;

OF_i = occupancy factor for vehicles on the NHS within a specified geographic area within the State/Metropolitan planning area; and

T = total number of Interstate (Non-Interstate NHS) System reporting segments.

System & Freight Performance Management

Assessing Freight Movement on the Interstate System

Freight movement on the Interstate is assessed using the Truck Travel Time Reliability (TTTR) Index also known as the Freight Reliability Measure. The TTTR Index metric is defined as:

$$\frac{\text{Longer Truck Travel Time (95th)}}{\text{Normal Truck Travel Time (50th)}} = \frac{\# \text{ seconds}}{\# \text{ seconds}} = \text{Truck Travel Time Reliability (TTTR) Ratio}$$

Data for the Truck Travel Time Reliability (TTTR) metric is collected during five time periods for each reporting section:

- Monday - Friday
 - Morning peak (6:00 AM -10:00 AM)
 - Midday (10:00 AM – 4:00 PM)
 - Afternoon peak (4:00 PM – 8:00 PM)
- Weekends (6:00 AM – 8:00 PM)
- Overnights for all days (8:00 PM – 6:00 AM)

Starting in 2018, State DOTs are required to report the “TTTR metrics and the corresponding 95th and 50th percentile times for each time period and each reporting segment by June 15th of each year, for the previous year’s measures,”ⁱⁱⁱ to the HPMS. The Truck Travel Time Reliability is reported to the nearest hundredth. The formula for calculating Truck Travel Time Reliability is:

$$\frac{\sum_{i=1}^T (SL_i \times \max TTTR_i)}{\sum_{i=1}^T (SL_i)}$$

Where:

i = An Interstate System reporting segment;

$\max TTTR_i$ = The maximum TTTR of the five time periods in paragraphs (a)(1)(i) through (v) of § 490.611, to the nearest hundredth, of Interstate System reporting segment “ i ”;

SL_i = Segment length, to the nearest thousandth of a mile, of Interstate System reporting segment “ i ”; and

T = A total number of Interstate System reporting segments.

System & Freight Performance Management

Baseline Conditions

On January 1, 2018, the first 4-year performance period for the System & Freight National Performance Management Measures began. For the first performance period only, State DOTs are not required to report baseline condition/performance or 2-year targets for the non-Interstate NHS Reliability Performance Management Measure in the State's Baseline Performance Report due to FHWA on October 1, 2018. State DOTs do need to report the 2-year and 4-year targets for the Interstate System Reliability Performance Management Measure and the TTTR Index Performance Management Measure in the State's Baseline Performance Report [23 CFR § 490]. The baseline conditions for NHS and freight mobility for Florida and for Miami-Dade County are shown in **Table 1: Baseline NHS and Freight Mobility Performance Management Measures 2017**.

Table 1: Baseline NHS and Freight Mobility Performance Management Measures 2017

Performance Measure	Florida	Miami-Dade County
% of person-miles traveled on the Interstate that are reliable	82%	57%
% of person-miles traveled on the non-Interstate NHS that are reliable	84%	59%
Truck travel time reliability ratio (TTR) on the Interstate	1.43	2.98

Source: National Performance Management Research Data Set

The first 4-year performance period is scheduled to end on December 31, 2021. The full progress report for the first 4-year performance period is due on October 1, 2022, and the Baseline report for the second performance period is also due on that date. The implementation dates for the System and Freight Performance Management Measures are depicted in **Table 2: System & Freight Performance Management-Implementation Schedule**.

System & Freight Performance Management

Table 2: System & Freight Performance Management- Implementation Schedule

Performance Management Measure Topic	First 4-Year Performance Period Begins	State DOT's Scheduled to Submit Data	FDOT established performance targets	Florida MPOs must establish performance targets	State DOT Baseline Performance Report Due	State DOT Mid Performance Period Progress Report Due	FHWA First Evaluation of Significant Progress	First 4-Year Performance Period Ends	First 4-Year Performance Period Progress Report Due
1. Interstate System Reliability	January 1, 2018	June 15, 2018, and every following June 15th thereafter.	May 18, 2018	November 14, 2018	October 1, 2018 (subsequent Baseline reports due October 1 st every 4 years thereafter)	October 1, 2020 (subsequent Mid Performance reports due October 1 st every 4 years thereafter)	October 1, 2020 (for the period of January 1, 2018 through December 31, 2019)	December 31, 2021	October 1, 2022
2. Non-Interstate NHS Reliability					Does not need to be included in report due on October 1, 2018		Not until second performance period		
3. TTTR Index					October 1, 2018 (subsequent Baseline reports due October 1 st every 4 years thereafter)		October 1, 2020 (for the period of January 1, 2018 through December 31, 2019)		

Source: Performance Measures & Asset Management Plan- Key Implementation Dates. U.S Department of Transportation, Federal Highway Administration. March 29, 2018. <https://www.fhwa.dot.gov/tpm/rule/timeline.pdf>
 Source: Summary of FHWA Performance Measures Implementation Requirements in Florida. U.S. Department of Transportation, Federal Highway Administration, Florida Division. May 22, 2018

System & Freight Performance Management

Assessment of Significant State Progress

FHWA will not evaluate significant State progress toward achieving 2-year non-Interstate NHS Reliability Performance Targets for the Mid Performance Period Progress Report, due October 1, 2020. They will be reported in the second performance period, beginning January 1, 2022. FHWA will evaluate significant State progress toward achieving Interstate System Reliability Performance Targets and the TTTR Index Performance Targets at the midpoint (January 1, 2018 through December 31, 2019 reporting period – which is to be reported to FHWA by October 1, 2020) and the end of the first performance period (January 1, 2020 through December 31, 2021 reporting period – which is to be reported to FHWA by October 1, 2022).

Contributions to Achieving System & Freight Performance Targets

The Miami-Dade TPO and the Florida Department of Transportation (FDOT) are committed to ensuring the System and Freight performance in Miami-Dade County achieves the identified targets. The TPO has many programs, initiatives, and projects identified in the Miami-Dade Transportation Improvement Program (TIP) and the 2040 Long Range Transportation Plan to address system and freight performance in Miami-Dade County. FDOT's key plan is its Work Program. The TPO and FDOT coordinate their plans and programs to improve the reliability of the Miami-Dade transportation system.

“The TIP shall reflect the investment priorities established in the current metropolitan transportation plan . . .” (23 CFR 450.326). The transportation plan (LRTP) “shall include both long-range strategies/actions that provide for the development of an integrated multimodal system...” (23 CFR 450.24). The TIP considers potential projects that fall into specific investment priorities established by the MPO in the Long Range Transportation Plan (LRTP). The TIP includes specific investment priorities that support the MPOs goals including improving system and travel, using a prioritization and project selection process established in the LRTP. This process evaluates projects that have an anticipated effect on improving the reliability of the NHS, Non-Interstate NHS, and truck travel time in Miami-Dade County. The projects identified as contributing to the achievement of Miami-Dade County's system and freight performance targets are on the next few pages.

System & Freight Performance Management

D6 TIP Download 5 Year All Funds FY20-24 NHS Travel Time Reliability Projects

Item Number:	Item Segment:	Project Description	Type of Work Description	Length	All Years	FY 2020-2024
251688	1	SR 836/I-395 FROM WEST OF I-95 TO MACARTHUR CSWY BRIDGE	BRIDGE-REPLACE AND ADD LANES	1.693	\$ 804,904,148	\$ 3,329,512
415456	7	SR 9A/I-95 EXPRESS LANES ITS OPERATIONS CONSULTANT CONTRACT	TECHNICAL ASSISTANCE	17.260	\$ 18,606,849	\$ 7,057,130
420462	5	MDT - 95 EXPRESS DADE BROWARD EXPRESS (MIAMI CBD)	URBAN CORRIDOR IMPROVEMENTS	.000	\$ 7,250,576	\$ 4,000,000
423251	2	SR 25/OKEECHOBEE RD FROM BROWARD COUNTY LINE TO WEST OF HEFT	ADD LANES & RECONSTRUCT	4.591	\$ 63,243,974	\$ 56,154,696
423251	3	SR 25/OKEECHOBEE RD FROM EAST OF NW 87 AVE TO NW 79 AVE (CONCRETE)	ADD LANES & RECONSTRUCT	.667	\$ 78,244,797	\$ 73,035,831
423251	4	SR 25/OKEECHOBEE RD FROM E. OF NW 116 WAY TO E. OF NW 87 AVE(CONCRETE)	ADD LANES & REHABILITATE PVMNT	1.390	\$ 35,594,813	\$ 33,990,318
423251	5	SR 25/OKEECHOBEE RD FROM E. OF NW 107 AVE TO E. OF NW 116 WAY(CNCRETE)	ADD LANES & REHABILITATE PVMNT	1.786	\$ 144,704,082	\$ 125,606,009
424933	1	I-95 EXPRESS TOLL OPERATIONS DADE COUNTY	TOLL COLLECTION	.000	\$ 26,512,549	\$ 9,125,000
427369	1	SR 997/KROME AVENUE FROM SW 296 STREET TO S OF SW 232 STREET	ADD LANES & RECONSTRUCT	3.674	\$ 92,750,241	\$ 17,831,512
427369	2	SR 997/KROME AVENUE FROM SW 232 STREET TO S OF SW 184TH ST/EUREKA DR.	ADD LANES & RECONSTRUCT	3.251	\$ 62,972,517	\$ 6,220,000
427369	3	SR 997/KROME AVENUE FROM SW 184 STREET TO SOUTH OF SW 136 STREET	ADD LANES & RECONSTRUCT	3.039	\$ 32,522,762	\$ 1,661,572
428358	1	SR 826/PALMETTO EXPY - SR 826 EASTBOUND RAMP TO SR 9A/I-95 NORTHBOUND	INTERCHANGE RAMP (NEW)	4.448	\$ 187,756,323	\$ 148,317,114
428358	3	SR 826/PALMETTO XWAY FROM W. OF NW 17TH AVENUE TO I-95 (EXPRESS LANES)	ADD LANES & RECONSTRUCT	4.964	\$ 225,219,244	\$ 17,200,000
428358	4	GOLDEN GLADES INTERCHANGE VARIOUS RAMP IMPROVEMENTS	INTERCHANGE RAMP (NEW)	2.398	\$ 65,411,756	\$ 61,708,535
428358	5	SR 9A/I-95 FROM N. OF BISCAYNE CANAL TO SR 860/MIAMI GARDEN DR	WIDEN/RESURFACE EXIST LANES	2.193	\$ 65,193,837	\$ 62,071,329
428358	8	SR 826 CONNECTOR AT GOLDEN GLADES INTERCHG AND VARIOUS RAMP	ADD LANES & RECONSTRUCT	1.099	\$ 69,380,400	\$ 63,227,007
434676	1	SR 9A/I-95 EXPRESS OPERATIONS & MAINTENANCE INCIDENT MGMT/RD RANGERS	OTHER ITS	.000	\$ 18,893,240	\$ 14,546,284
434676	2	I-95 EXPRESS LANES INCIDENT MANAGEMENT ROAD RANGER SERVICE PATROLS	OTHER ITS	.000	\$ 4,123,900	\$ 4,123,900
435542	1	WIDEN HEFT- NW 106TH ST TO I-75 (MP34 TO MP39) 6TO10 LANES W/EXP LANES	ADD LANES & RECONSTRUCT	6.165	\$ 223,644,166	\$ 104,448,814
435543	1	WIDEN HEFT FROM SR836 TO NW 106TH ST (MP26-34) (6/8 LNS TO 10 INC EXP)	ADD LANES & RECONSTRUCT	6.025	\$ 268,312,244	\$ 9,000,716
435760	1	SR 826/PALMETTO EXPY FROM I-75 TO N.OF CANAL C-8 BRDG(APPROX NW 162ST)	ADD LANES & RECONSTRUCT	1.882	\$ 221,751,270	\$ 205,162,870
435760	2	SR 826/PALMETTO EXPY FROM N.OF CANAL C-8 BRDG(162ST) TO E.OF NW 67 AVE	ADD LANES & RECONSTRUCT	1.552	\$ 125,153,197	\$ 114,597,996
435760	3	SR 826/PALMETTO EXPY FROM E. OF NW 67 AVE TO E. OF NW 57 AVE	ADD LANES & RECONSTRUCT	0.963	\$ 109,822,604	\$ 32,122,209
435760	4	SR 826/PALMETTO EXPY FROM E. OF NW 57 AVE TO E. OF NW 42 AVE	ADD LANES & RECONSTRUCT	1.231	\$ 96,882,786	\$ 5,235,844
435760	5	SR 826/PALMETTO EXPY FROM E. OF NW 42 AVE TO E. OF NW 32 AVE	ADD LANES & RECONSTRUCT	0.9	\$ 93,556,076	\$ 4,688,890
435760	6	SR 826/PALMETTO EXPY FROM E. OF NW 32 AVE TO W. OF NW 17 AVE	ADD LANES & RECONSTRUCT	1.258	\$ 161,091,918	\$ 24,940,276
435760	7	SR 826/PALMETTO EXPWY EAST/WEST CORRIDOR PRELIMINARY ENGINEERING	PRELIMINARY ENGINEERING	7.768	\$ 4,930,885	\$ 2,000,000
435760	8	SR 826/PALMETTO EXPRESSWAY COMMUNICATIONS CONSULTANT CONTRACT	TRANSPORTATION PLANNING	7.768	\$ 317,430	\$ 100,000
436202	1	SR 9A/I-95 EXPRESS OPERATIONS & MAINTENANCE	OTHER ITS	.000	\$ 4,591,106	\$ 2,467,542
436202	2	I-95 EXPRESS LANES INFRASTRUCTURE MAINTENANCE & REPAIRS	OTHER ITS	.000	\$ 1,727,400	\$ 1,727,400
436204	1	SR 93/I-75 EXPRESS LANES ITS MAINTENANCE OF TOLLING EQUIPMENT	OTHER ITS	.000	\$ 3,408,350	\$ 2,756,480
436210	1	SR 93/I-75 EXPRESS LANES INCIDENT MANAGMNT/ROAD RANGER SERVICE PATROLS	OTHER ITS	.000	\$ 2,945,625	\$ 2,005,380
436210	2	SR 93/I-75 EXPRESS LANES INCIDENT MANAGMNT/ROAD RANGER SERVICE PATROLS	OTHER ITS	.000	\$ 618,600	\$ 618,600
436213	1	SR 93/I-75 EXPRESS LANES FHP ENHANCED ENFORCEMENT	OTHER ITS	.000	\$ 1,154,584	\$ 900,000
436213	2	I-75 EXPRESS LANES FHP ENHANCED ENFORCEMENT	OTHER ITS	.000	\$ 232,000	\$ 232,000
436565	1	SR 25/OKEECHOBEE RD. & SR 826/PALMETTO EXPRESSWAY INTERCHANGE	INTERCHANGE RAMP (NEW)	2.723	\$ 87,689,758	\$ 80,210,947
437053	1	GOLDEN GLADES INTERCHANGE IMPROVEMENTS (MAINLINE SPUR MP OX)	INTERCHANGE - ADD LANES	2.680	\$ 147,513,754	\$ 116,843,351
437053	2	GOLDEN GLADES INTERCHANGE BRIDGE IMPROVEMENT (870038)	BRIDGE REPLACEMENT	.228	\$ 10,892,092	\$ 10,150,461
437053	3	GOLDEN GLADES INTERCHANGE IMPROVEMENT-I95 SOUTHBOUND	INTERCHANGE IMPROVEMENT	1.147	\$ 68,224,232	\$ 62,510,408
437053	4	GOLDEN GLADES INTERCHANGE IMPROVEMENTS N/B DIRECT CONNECT BRIDGE	NEW BRIDGE CONSTRUCTION	.500	\$ 120,318,372	\$ 112,655,327
437053	5	GOLDEN GLADES INTERCHANGE IMPROVEMENTS - SPUR	INTERCHANGE IMPROVEMENT	.500	\$ 35,291,596	\$ 30,845,475

System & Freight Performance Management

D6 TIP Download 5 Year All Funds FY20-24 Interstate Highway Truck Travel Time Reliability Projects

Item Number:	Item Segment:	Project Description	Type of Work Description	Length	All Years	FY 2020-2024
251688	1	SR 836/I-395 FROM WEST OF I-95 TO MACARTHUR CSWY BRIDGE	BRIDGE-REPLACE AND ADD LANES	1.693	\$ 804,904,148	\$ 3,329,512
415456	7	SR 9A/I-95 EXPRESS LANES ITS OPERATIONS CONSULTANT CONTRACT	TECHNICAL ASSISTANCE	17.260	\$ 18,606,849	\$ 7,057,130
420462	5	MDT - 95 EXPRESS DADE BROWARD EXPRESS (MIAMI CBD)	URBAN CORRIDOR IMPROVEMENTS	.000	\$ 7,250,576	\$ 4,000,000
424933	1	I-95 EXPRESS TOLL OPERATIONS DADE COUNTY	TOLL COLLECTION	.000	\$ 26,512,549	\$ 9,125,000
428358	4	GOLDEN GLADES INTERCHANGE VARIOUS RAMP IMPROVEMENTS	INTERCHANGE RAMP (NEW)	2.398	\$ 65,411,756	\$ 61,708,535
428358	5	SR 9A/I-95 FROM N. OF BISCAYNE CANAL TO SR 860/MIAMI GARDEN DR	WIDEN/RESURFACE EXIST LANES	2.193	\$ 65,193,837	\$ 62,071,329
434676	1	SR 9A/I-95 EXPRESS OPERATIONS & MAINTENANCE INCIDENT MGMT/RD RANGERS	OTHER ITS	.000	\$ 18,893,240	\$ 14,546,284
434676	2	I-95 EXPRESS LANES INCIDENT MANAGEMENT ROAD RANGER SERVICE PATROLS	OTHER ITS	.000	\$ 4,123,900	\$ 4,123,900
436202	1	SR 9A/I-95 EXPRESS OPERATIONS & MAINTENANCE	OTHER ITS	.000	\$ 4,591,106	\$ 2,467,542
436202	2	I-95 EXPRESS LANES INFRASTRUCTURE MAINTENANCE & REPAIRS	OTHER ITS	.000	\$ 1,727,400	\$ 1,727,400
436204	1	SR 93/I-75 EXPRESS LANES ITS MAINTENANCE OF TOLLING EQUIPMENT	OTHER ITS	.000	\$ 3,408,350	\$ 2,756,480
436210	1	SR 93/I-75 EXPRESS LANES INCIDENT MANAGMNT/ROAD RANGER SERVICE PATROLS	OTHER ITS	.000	\$ 2,945,625	\$ 2,005,380
436210	2	SR 93/I-75 EXPRESS LANES INCIDENT MANAGMNT/ROAD RANGER SERVICE PATROLS	OTHER ITS	.000	\$ 618,600	\$ 618,600
436213	1	SR 93/I-75 EXPRESS LANES FHP ENHANCED ENFORCEMENT	OTHER ITS	.000	\$ 1,154,584	\$ 900,000
436213	2	I-75 EXPRESS LANES FHP ENHANCED ENFORCEMENT	OTHER ITS	.000	\$ 232,000	\$ 232,000
437053	1	GOLDEN GLADES INTERCHANGE IMPROVEMENTS (MAINLINE SPUR MP 0X)	INTERCHANGE - ADD LANES	2.680	\$ 147,513,754	\$ 116,843,351
437053	2	GOLDEN GLADES INTERCHANGE BRIDGE IMPROVEMENT (870038)	BRIDGE REPLACEMENT	.228	\$ 10,892,092	\$ 10,150,461
437053	3	GOLDEN GLADES INTERCHANGE IMPROVEMENT-I95 SOUTHBOUND	INTERCHANGE IMPROVEMENT	1.147	\$ 68,224,232	\$ 62,510,408
437053	4	GOLDEN GLADES INTERCHANGE IMPROVEMENTS N/B DIRECT CONNECT BRIDGE	NEW BRIDGE CONSTRUCTION	.500	\$ 120,318,372	\$ 112,655,327
437053	5	GOLDEN GLADES INTERCHANGE IMPROVEMENTS - SPUR	INTERCHANGE IMPROVEMENT	.500	\$ 35,291,596	\$ 30,845,475
442447	1	DTPW - I-95 EXPRESS TEN NEW BUS PURCHASE	PURCHASE VEHICLES/EQUIPMENT	.000	\$ 6,000,000	\$ 6,000,000
443988	1	MIAMI-DADE DTPW I-75 EXPRESS BUS SERVICE	TRANSIT SERVICE DEMONSTRATION	.000	\$ 6,230,000	\$ 5,730,000
443988	2	MIAMI-DADE DTPW I-75 EXPRESS - NEW BUS PURCHASES	PURCHASE VEHICLES/EQUIPMENT	.000	\$ 3,360,000	\$ 3,360,000
444622	1	SR 112/I-195/JULIA TUTTLE CSWY FR E. OF SR-5/BISCAYNE BLV TO ALTON RD	MISCELLANEOUS CONSTRUCTION	3.006	\$ 4,718,385	\$ 4,718,385
445023	1	I-95 EXPRESS LANES TOLLING & RAMP SIGNALING OPERATIONS	OTHER ITS	.000	\$ 9,743,407	\$ 9,743,407
445023	2	I-95 EXPRESS LANES INCIDENT RESPONSE VEHICLE SERVICES	OTHER ITS	.000	\$ 1,494,240	\$ 1,494,240
445023	5	I-75 EXPRESS LANES TOLLING & RAMP SIGNALING OPERATIONS	OTHER ITS	.000	\$ 1,200,683	\$ 1,200,683
445023	6	I-75 EXPRESS LANES INCIDENT RESPONSE VEHICLE SERVICE	OTHER ITS	.000	\$ 996,180	\$ 996,180
445025	1	I-95 EXPRESS LANES FHP ENHANCED ENFORCEMENT	OTHER ITS	.000	\$ 644,000	\$ 644,000
TOTAL:					\$ 1,442,201,461	\$ 543,561,009

Endnotes:

ii Frequently Asked Questions: System Performance /Freight/CMAQ Performance Measures Final Rule. US Department of Transportation, Federal Highway Administration. <https://www.fhwa.dot.gov/tpm/rule/pm3/faqs.pdf>

iii National Performance Management Measures to Assess System Performance, Freight Movement, and CMAQ Improvement Program.US Department of Transportation, Federal Highway Administration. July 1, 2017. <https://www.fhwa.dot.gov/tpm/rule/170601pm3.pdf>

Transportation Improvement Program (TIP)
Fiscal Years 2019/2020 to 2023/2024

Transportation Performance Management

SYSTEM PERFORMANCE REPORT

TRANSIT ASSET MANAGEMENT



TRANSIT ASSET MANAGEMENT

In July of 2016, FTA published the “Transit Asset Management; National Transit Database” Final Rule. The Transit Asset Management (TAM) Final Rule requires grant recipients of FTA funds to develop asset management plans to inventory their public transportation assets. These assets include equipment, rolling stock, infrastructure, and facilities. The Final Rule also establishes performance measures and annual reporting requirements, and defines “state of good repair” (SGR).ⁱ The Rule went into effect as of October 1, 2016. [49 CFR § 625, 630].

SGR Performance Measures

The TAM Final Rule required “transit providers and group TAM plan sponsors” to set initial SGR performance targets of the following measures by January 1, 2017. The transit providers and group TAM plan sponsors must coordinate with the State DOTs and MPOs to establish regional TAM performance targets. The transit providers and group TAM plan sponsors were required to provide the TAM targets to the MPO by June 30, 2017.ⁱⁱ

Assets (only those for which the agency has capital responsibility)	SGR Performance Measure
Equipment: Non-revenue support -service and maintenance vehicles	Percentage of non-revenue vehicles met or exceeded Useful Life Benchmark
Rolling Stock: Revenue vehicles by mode	Percentage of revenue vehicles met or exceeded Useful Life Benchmark
Infrastructure: Only rail fixed-guideway, track, signals, and systems	Percentage of track segments with performance restrictions
Facilities: Maintenance and administrative facilities; and passenger stations (buildings) and parking facilities	Percentage of assets with condition rating below 3.0 on FTA TERM Scale

Source: [49 CFR § 625, 630]

Miami-Dade Department of Transportation and Public Works (DTPW) - Transit

Performance Targets

The Miami-Dade DTPW 2018 Transit Asset Management Plan was presented to the TPO Governing Board on July 19, 2018. The Miami-Dade TPO originally adopted the Miami-Dade Department of Transportation and Public Works SGR targets for Calendar Year 2018 per Resolution 06-18 on January 25, 2018. The Miami-Dade Department of Transportation and Public Works SGR targets were updated for Calendar Year 2019 and were adopted by the Miami-Dade TPO (Per Resolution #18-19 on February 21, 2019 illustrated on the next page in **Figure 1: TPO Resolution**), which establishes the

relationship between performance, plans, and programs, and provides the basis and foundation for this performance framework.

Figure 1: TPO Resolution

Agenda Item 6.B.6

TPO RESOLUTION #18-19

RESOLUTION APPROVING THE MIAMI-DADE DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS STATE OF GOOD REPAIR PERFORMANCE TARGETS FOR FISCAL YEAR 2019-2020

WHEREAS, the Interlocal Agreement creating and establishing the Miami-Dade Metropolitan Planning Organization (MPO), for the Miami Urbanized Area, now known as the Transportation Planning Organization (TPO), requires that the TPO provide a structure to evaluate the adequacy of the transportation planning and programming process; and

WHEREAS, the Transportation Planning Council (TPC) has been established and charged with the responsibility and duty of fulfilling the aforementioned functions; and

WHEREAS, the TPC has reviewed the Miami-Dade Department of Transportation and Public Works State of Good Repair Performance Targets for Fiscal Year 2019-2020, made a part hereof, and finds it consistent with the goals and objectives of the Transportation Plan for the Miami Urbanized Area,

NOW, THEREFORE, BE IT RESOLVED BY THE GOVERNING BOARD OF THE TRANSPORTATION PLANNING ORGANIZATION IN ITS ROLE AS THE MPO FOR THE MIAMI URBANIZED AREA, that the attached Miami-Dade Department of Transportation and Public Works State of Good Repair Performance Targets for Fiscal Year 2019-2020, is hereby approved.

The adoption of the foregoing resolution was moved by Board Member Rebeca Sosa. The motion was seconded by Board Member Audrey M. Edmonson, and upon being put to a vote, the vote was as follows:


Chairman Oliver G. Gilbert III- Aye
Vice Chairman Esteban L. Bovo, Jr. - Aye

Board Member Juan Carlos Bermudez	-Aye	Board Member Smith Joseph	-Aye
Board Member Daniella Levine Cava	-Aye	Board Member Vince Lago	-Absent
Board Member Jose "Pepe" Diaz	-Aye	Board Member Roberto Martell	-Aye
Board Member Audrey M. Edmonson	-Aye	Board Member Joe A. Martinez	-Aye
Board Member Shelley Smith Fano	-Aye	Board Member Jean Monestime	-Aye
Board Member Dan Gelber	-Absent	Board Member Dennis C. Moss	-Aye
Board Member Perla T. Hantman	-Aye	Board Member Stephen R. Shelley	-Absent
Board Member Carlos Hernandez	-Absent	Board Member Rebeca Sosa	-Aye
Board Member Sally A. Heyman	-Absent	Board Member Javier D. Souto	-Aye
Board Member Eileen Higgins	-Aye	Board Member Francis Suarez	-Absent
Board Member Barbara J. Jordan	-Aye	Board Member Xavier L. Suarez	-Absent

The Chairperson thereupon declared the resolution duly passed and approved this 21st day of February, 2019.

TRANSPORTATION PLANNING ORGANIZATION

By Zainab Salim
Zainab Salim, Clerk
Miami-Dade TPO



Transit Asset Management

The Miami-Dade DTPW has established the following SGR performance targets for Fiscal Year 2019/2020:

Asset Category: Rolling Stock

Asset Class/Asset Type	Fleet Size	Fleet Age	Useful Life (ULB)	FY19 Target	FY 19 Performance Metric (% exceeding ULB)	FY 20 Target
Minibus (BU)	9	12.2	10	68%	100%	0%
Over-The-Road (BU)	11	12.4	14	0%	60%	54%
40 Foot Bus (BU)	770	12.1	14	43%		
Articulated Bus (BU)	89	4.1	14	0%		
Metrorail (HR)	174	26.3	31	71%	78%	23%
Metromover (AG)	30	8.4	20	40%	.03%	0%

Asset Category: Non-Revenue Vehicles (Equipment)

Asset Class/Asset Type	Fleet Size	Fleet Age	Useful Life (ULB)	FY19 Target	FY 19 Performance Metric (% exceeding ULB)	FY 20 Target
Automobile	92	7.9	8	49%	36%	40%
Steel Wheel Vehicles	8	27.6	25	89%	63%	71%
Trucks & Other Rubber Tire Vehicles	164	15.8	14	49%	58%	55%

Asset Category: Infrastructure

Asset Class	System (Track Feet)	Total Performance Restrictions	FY 19 Performance Metric (% Performance Restrictions)	FY 20 Target
Rail Fixed Guideway	298,957	3	1%	0%
Mover Automated Guideway	46,464	0	0%	0%

Transit Asset Management

Asset Category: Facilities

Asset Class	Asset Class/Asset Type	Number of Reportable Facilities	Fleet Assessed	FY 19 Performance Metric (<3 on TERM Scale)	FY 20 Target
Maintenance and Administrative	Service & Inspection	5	0	0%	0%
	Heavy Maintenance & Overhaul	1	0		
	Administrative/ Sales Offices	2	0		
	Vehicle Washing	5	0		
	Revenue Collection	4	0		
	Combined Administrative & Maintenance	2	0		
	Vehicle Testing	1	0		
	Vehicle Blow-Down	3	0		
	Vehicle Fueling	4	0		
	General Purpose Maintenance Facility/Depot	4	0		
Other	10	0			
Passenger & Parking	Bus Transfer Center	28	19	0%	0%
	Elevated Fixed Guideway Station	44	23		
	Parking Structure	9	9		
	Surface Parking Lot	30	12		
	Other	6	6		

Transit Asset Management

Miami-Dade 2018/19-2022/23 TIP Contributions to Achieving TAM Performance Targets

Projects in the 2018/19-2022/23 TIP that contribute to achieving the TAM performance targets include:

TPO Project No	Facility/Project Name	Project Description
TA000106	MDT-Bus Purchase	Purchase of Vehicles/Equipment
TA000108	MDT-Park and Ride Lot Expansion at Southwest 152 nd St.	Reconstruction/expansion of the existing parking lot to make improvements such as adding additional parking spaces, sidewalks, bike parking, and upgrading pavement markings
TA11	FTA Section 5337 Federal Formula Funding	FTA Sec 5337 State of Good Repair Metromover/Metrorail
TA18	MDT Additional Elevators @ Dadeland North Metrorail Station	Construction of additional elevators at Dadeland North Metrorail Station
TA0000022	Rail Vehicle Replacement	Rail vehicle replacement of 136 car fleet
TA0000034	Metrorail and Metromover Fixed Guideway Bridge Inspection	Capital maintenance of existing guideway
TA0000006	Capitalization of Preventative Maintenance	Bus systems including security and emergency facilities and equipment
TA7	Bus Replacement	Replacement of buses to maintain the bus fleet replacement plan
TA0000076	Metromover Brickell Extension Guideway Painting	Painting and restoration of 1.1 miles of the existing rusted steel girders of the Metromover's Brickell extension
TA0000078	Metrorail Escalators Replacement and Elevators Refurbishment	Replace escalators and elevators at 22 Metrorail stations, and may also include bus garages and maintenance facilities

Transit Asset Management

TPO Project No	Facility/Project Name	Project Description
TA0000093	Track & Guideway Rehabilitation	Rehabilitate existing track and guideway equipment and fixtures
TA0000097	MDT Infrastructure Renewal Program	Replace and upgrade physical assets according to normal replacement cycles; program focuses on bus overhauls, rehabilitation of bus and rail facilities and system equipment
TAMDT290	Metromover Escalator Replacement and Elevator Refurbishment	Replace escalators and elevators at the 21 Metromover stations, and may also include bus garages and maintenance facilities

South Florida Regional Transportation Authority (SFRTA)

Performance Targets

The South Florida Regional Transportation Authority (SFRTA) 2018 Transit Asset Management Plan was submitted to the TPO on September 28, 2018. The Miami-Dade TPO adopted the SFRTA SGR targets for Fiscal Year 2018 (Per Resolution 19-19 on February 21, 2019 illustrated in **Figure 2: TPO Resolution**), which establishes the relationship between performance, plans, and programs, and provides the basis and foundation for this performance framework.

Figure 2: TPO Resolution

Agenda Item 6.B.7

TPO RESOLUTION #19-19

RESOLUTION APPROVING THE SOUTH FLORIDA REGIONAL TRANSPORTATION AUTHORITY (SFRTA) TRANSIT ASSET MANAGEMENT (TAM) PLAN STATE OF GOOD REPAIR TARGETS FOR FISCAL YEAR 2018

WHEREAS, the Interlocal Agreement creating and establishing the Miami-Dade Metropolitan Planning Organization (MPO), for the Miami Urbanized Area, now known as the Transportation Planning Organization (TPO), requires that the TPO provide a structure to evaluate the adequacy of the transportation planning and programming process; and

WHEREAS, the Transportation Planning Council (TPC) has been established and charged with the responsibility and duty of fulfilling the aforementioned functions; and

WHEREAS, the TPC has reviewed South Florida Regional Transportation Authority (SFRTA) Transit Asset Management (TAM) Plan State of Good Repair Targets for Fiscal Year 2018, made a part hereof, and finds it consistent with the goals and objectives of the Transportation Plan for the Miami Urbanized Area,

NOW, THEREFORE, BE IT RESOLVED BY THE GOVERNING BOARD OF THE TRANSPORTATION PLANNING ORGANIZATION IN ITS ROLE AS THE MPO FOR THE MIAMI URBANIZED AREA, that the attached South Florida Regional Transportation Authority (SFRTA) Transit Asset Management (TAM) Plan State of Good Repair targets for Fiscal Year 2018, is hereby approved.


The adoption of the foregoing resolution was moved by Board Member Rebeca Sosa. The motion was seconded by Board Member Audrey M. Edmonson, and upon being put to a vote, the vote was as follows:

Chairman Oliver G. Gilbert III- Aye			
Vice Chairman Esteban L. Bovo, Jr. - Aye			
Board Member Juan Carlos Bermudez	-Aye	Board Member Smith Joseph	-Aye
Board Member Daniella Levine Cava	-Aye	Board Member Vince Lago	-Absent
Board Member Jose "Pepe" Diaz	-Aye	Board Member Roberto Martell	-Aye
Board Member Audrey M. Edmonson	-Aye	Board Member Joe A. Martinez	-Aye
Board Member Shelley Smith Fano	-Aye	Board Member Jean Monestime	-Aye
Board Member Dan Gelber	-Absent	Board Member Dennis C. Moss	-Aye
Board Member Perla T. Hantman	-Aye	Board Member Stephen R. Shelley	-Absent
Board Member Carlos Hernandez	-Absent	Board Member Rebeca Sosa	-Aye
Board Member Sally A. Heyman	-Absent	Board Member Javier D. Souto	-Aye
Board Member Eileen Higgins	-Aye	Board Member Francis Suarez	-Absent
Board Member Barbara J. Jordan	-Aye	Board Member Xavier L. Suarez	-Absent

The Chairperson thereupon declared the resolution duly passed and approved this 21st day of February, 2019.

TRANSPORTATION PLANNING ORGANIZATION

By Zainab Salim
Zainab Salim, Clerk
Miami-Dade TPO



Transit Asset Management

The South Florida Regional Transit Authority (SFRTA) has established the following SGR performance targets for Fiscal Year 2018-2019:

FTA Asset Classes	Performance Measures	Targets (Failure)
Equipment Non-revenue support service and maintenance vehicles	Vehicles – 8 years Others (1-5 scale)	0% 0% (<2.5)
Rolling Stock Revenue Vehicles	Locomotives- 39 years Coach- 39 years Self-propelled- 39 years Bus (Cutaway) – 10 years	0% 0% 0% 0%
Infrastructure Rail fixed-guideway track	Performance restrictions	8%
Facilities Buildings and Structures	Passenger (1-5 scale) Maintenance (1-5 scale) Administrative (1-5 scale)	30% (<2.5) 30% (<2.5) 0%
Systems	Service (1-5 scale)	15% (<2.5)

Endnotes:

ⁱ TAM Rulemaking. U.S. Department of Transportation, Federal Transit Administration. <https://www.transit.dot.gov/regulations-and-guidance/asset-management/tam-rulemaking>

ⁱⁱ Performance-Based Planning Roundtable Webinar. June 20, 2017. U.S. Department of Transportation, Federal Transit Administration. <https://www.fhwa.dot.gov/fldiv/documents/FTA%20Performance%20Based%20Planning%20Webinar%20June%202017.pdf>